

STAT 652: Predicting Flight Delays Project

Vincent Chiu

11/26/2019

Contents

1	Introduction	1
2	Data	2
3	Methods	2
3.1	Data Preprocessing	2
3.2	Exploratory Analysis	2
3.3	Principal Component Analysis (PCA)	3
3.4	Validation	3
3.5	Models	3
4	Results	4
4.1	GBM	5
4.2	Linear Regression	5
4.3	Comparison	5
5	Conclusion and Discussion	6
5.1	Discussion	6
5.2	Conclusion	6
6	Code	7
6.1	Preparing the programming environment	7
6.2	Data Preprocessing	7
6.3	Feature Scaling	10
6.4	Exploratory Data Analysis	10
6.5	predicting 0	11
6.6	predicting the mean	11
6.7	predicting the median	11
6.8	linear regression with dest	11
6.9	GBM	12
7	test on final test data	17
References		409

1 Introduction

The goal of this project is to predict the response variable, departure delays, for a particular flight given the explanatory variables.

* Please note that you can click on a figure or table number to jump to that figure or table.

2 Data

The dataset consists of information about all the flights leaving from New York City in 2013. The dataset contains 43 variables in total. The dataset is an amalgamation of several datasets, including datasets containing information on weather, the airports, the flights, and the models of airplanes. The training dataset provided to us contains 200,000 observations. Please see table 2 to view a small sample of the data.

3 Methods

We will now outline the various methods used to clean and perform prediction on the data. We will discuss our techniques for data preprocessing and cross validation, and the different models that we tried.

3.1 Data Preprocessing

We performed data preprocessing on the nycflights13 dataset. Our data preprocessing steps included the following:

- Load the data from a csv.
- Set the random seed for reproducibility of results.
- Cast all the columns with the character data type into the factor data type.
- Convert the ‘sched_arr_time’ and ‘sched_dep_time’ columns into the POSIX time format, then take the difference between them to create the ‘sched_air_time’ (scheduled air time) column.
- Drop columns ‘dep_time’, ‘arr_time’, ‘air_time’, and ‘arr_delay’ which contain data from after the flights’ departures which might have leaked information about the response variable ‘dep_delay’.
- Drop column ‘year.x’ because all values were 2013.
- Drop column ‘tailnum’ because it produces too many dummy variable columns for one-hot encoding.
- Drop columns which consist of over 50% NAs, which includes the speed column
- Impute the missing values with the median or mode depending on the datatype of the column and created a flag column which indicates whether or not data was imputed for that variable and row.
- Normalize the data, to work well with methods like lasso regression.
- Exclude data which has a departure delay of more than 30 minutes late, which reduced the dataset from 200,000 rows to approximately 170,000.

3.2 Exploratory Analysis

3.2.1 Plots

We created some plots of ‘dep_delay’ versus the explanatory variables. Some plots such as Figure 3 show that there may be some non-linear relationship between variables like ‘dep_delay’ and ‘sched_dep_time_num_minute’. This suggests that a model such as GBM that can capture non-linear relationships would be a good idea.

3.2.2 Correlations

First, we created a correlation plot for the numeric variables to see if there any correlations between the variables. We see that there is very little correlation between the response variable dep_delay and any of the other variables. Some of the strongest correlations include the correlation between distance and longitude and time zone and a smaller correlation between distance and latitude. This makes sense as most of the planes are inter US flights from west to east or vice versa, there is not as much distance flown in the north south direction. Please see figure 1 for the correlation plot. (Please click on the figure number to jump to the plot).

3.3 Principal Component Analysis (PCA)

Next we performed Principal Component Analysis (PCA) on only the numeric variables as techniques to perform PCA on mixed datasets (numerical and categorical) were not covered in class. When looking at the contribution of each variable to the first principal component, we notice that the variables ‘lon’, ‘distance’, ‘tz’, ‘seats’, ‘alt’, ‘sched_air_time’ have the greatest absolute coefficients for the first principal component. The fact that the aforementioned variables have large coefficients in the first principal component suggests that they are highly correlated with each other. The fact that ‘dep_delay’ has a small coefficient in the first principal component suggests that ‘dep_delay’ is not highly correlated with any of the above variables.

As expected, it turns out that variables like ‘lon’, ‘distance’ and ‘tz’ are not important for predicting ‘dep_delay’ according to the GBM model. This maybe be because although variables like ‘lon’, ‘distance’ and ‘tz’ help explain most of the variance in the dataset, they have a weak relationship with ‘dep_delay’.

Please see table 3 for the proportion of variance explained by each principal component. Please see table 4 for the variable coefficients for each principal component ordered by the magnitude of the variable coefficient for the first principal component.

3.4 Validation

Initially, we used the most basic validation technique where we have a training dataset and a validation dataset. We reserved 2/3 of the original dataset’s observations for the training dataset and 1/3 of the observations for the validation dataset. There is an additional data which would be provided by the professor at a later date which we will use as the holdout test set. We believe that 2/3 of the data gives enough data for the models to train on while 1/3 is enough data for us to get an accurate assessment of the error. After the data preprocessing steps, which included removing all rows where ‘dep_delay’ was greater than 30 minutes, we were left with 170,645 observations. Of these 170,645 observations, 113,763 was used in the training dataset and 56,882 was used in the validation set. The training dataset and the validation dataset do not have any common observations. k-folds cross validation was not initially used in order to save on compute time as we were initially only exploring the models. k-folds cross validation would increase training time for the models by a factor of k. However, k-folds cross validation would lead to a more stable estimate of holdout test set error.

3.5 Models

We first explored some basic models to establish a baseline performance and compared it to our most sophisticated model, the Generalized Boosted Regression Model (GBM).

3.5.1 Basic Models

‘dep_delay’ is the number of minutes that the plane either departs early or late. Negative numbers are for early departures and positive numbers are for the number of minutes the plane is late. First, we used a basic model of simply predicting the ‘dep_delay’ to always be 0. This was done to establish baseline performance. This model had a root mean squared error (RMSE) of 8.30571. The model in which we predicted the median for all the predictions had an RMSE of 8.46926.

3.5.2 Linear Regression

A linear regression model assumes a linear relationship between the explanatory variables and the response variable. The model minimizes the squared loss function. This minimization process generates coefficients which are used for a linear combination of the explanatory variables. The linear combination is the prediction. Then we tried linear regression with ‘dep_delay’ as the response variables and all the other remaining

Table 1: benchmark on the validation set comparing all the models that we tried

model_description	rmse
predicting 0	8.30571
predicting the mean	8.29977
predicting the median	8.46926
linear regression	7.98999
GBM (tuned)	7.89071

variables as the explanatory variables. This model was better than predicting the mean with an RMSE of 7.98999. This suggests that there is some relationship between the ‘dep_delay’ and the explanatory variables.

3.5.3 Generalized Boosted Regression Model (GBM)

3.5.3.1 Explanation of Model

How boosted regression models work is we first start off with a baseline prediction. For example, we can use the mean as our baseline prediction. Then we use a base classifier to iteratively predict on the residuals multiplied by the shrinkage hyperparameter. Then this base classifier is added to the ensemble of base classifiers trained so far. A lower shrinkage effectively means a lower learning rate and therefore you need more iterations to reduce the train set residuals by the same amount. The benefit of a smaller shrinkage (with sufficient trees) is that you end up with a larger ensemble of trees that can reach a lower cross validation loss. This iterative prediction process is called boosting. In our case, our base classifiers are regressor trees. Each tree decides on its splitting criterion greedily by picking the split which results in the lowest mean squared error or some other splitting heuristic. We continue for n number of trees where n is specified by the user. Each iteration produces one tree, so the number of iterations is equal to the number of trees.

3.5.3.2 Tuning

Afterwards, we tried a Generalized Boosted Regression Model (GBM). This model with our best tuned hyperparameters had the lowest RMSE of 7.91635 on the validation set after it was tuned to have a shrinkage of 0.01 and 8,192 trees. Shrinkage is proportional to the learning rate. 8,192 is the number of trees used in the model. Each iteration uses 1 tree, so 8,192 trees also refers to the number of iterations. According to the vignette provided by the ‘GBM’ package, the RMSE can always be improved by decreasing shrinkage, but this provides diminishing returns. A good strategy would be to pick a small shrinkage that balances performance and compute time. Then with this fixed shrinkage value, increase the number of trees until you get diminishing returns. We decided to follow the aforementioned strategy. See figure 2 for a summary of our tuning experiments.

4 Results

In regression and GBM, we found different features to be important.

Please see table 1 below for all the models and their root mean squared error (RMSE) on the validation set.

4.1 GBM

4.1.1 Influence

For a GBM, the improvement in the splitting criterion (which is mean squared error for regression) for a given variable is calculated at each step. The relative influence for a given variable is the average of these improvements over all the trees where the aforementioned variable is used. Please see table 5 for a table of the relative influence of each explanatory variable. Here, you can see the relative influence for each variable for GBM. ‘dest’ is the destination airport code. ‘sched_dep_time_num_minute’ is the number of minutes since the beginning of a given day for that flight. ‘model’ is the plane model.

4.1.2 Dest

For the best GBM model, ‘dest’, which refers to which airport a given plane was flying to, was one of the most important features. Based on the relative influence scores provided by the best GBM, some of the most important feature variables include ‘dest’, ‘model’, and ‘sched_dep_time_num_minute’. The ‘dest’ column contains the airport code for where a given flight is flying to. Based on my run of GBM with a shrinkage of 0.01 and 8192 trees, ‘dest’ was the most important feature with 30.23130 relative influence. (“Gradient Boosting Machines · UC Business Analytics R Programming Guide” 2019).

4.1.3 Final Holdout Test Set Performance

When we tested our final GBM model on the final holdout test set, we achieved an RMSE of 7.88805. The improvement in performance over testing on the validation set could be because our final GBM model was trained on both the training set and the validation set, and then tested on the holdout test set.

4.2 Linear Regression

The one hot encoding versions of the variable ‘carrier’ were some of the most important features for regression. On the other hand, ‘dest’ does appear as an important feature in linear regression as well but it is not the most important feature. If we can somehow sum up all the contributions from each of the one-hot-encoded variables derived from ‘dest’, then, it might appear as the most important feature for linear regression as well. We use ANOVA to measure the statistical significance of ‘dest’. Performing ANOVA to compare linear regression models with and without ‘dest’ yielded a low p-value of 0.0001863 associated with having ‘dest’ meaning that keeping at least one of the one-hot-encoded variables derived from ‘dest’ is beneficial for the linear regression model with high statistical significance.

4.3 Comparison

‘dest’ was most one of the most important features in GBM. It is possible that ‘dest’ is important in combination with other variables which is something that the linear regression model without interaction terms cannot capture the relationship of, whereas GBM can discover these non-linear relationships.

5 Conclusion and Discussion

5.1 Discussion

5.1.1 Data Preprocessing

We considered removing outliers in terms of ‘dep_delay’ in train but not in validation, then use k-folds cross validation on test to determine how many outliers we should remove to boost performance on the cross-validation set. We considered removing highly influential points in order to train a better model. In this case, we consider highly influential points to be points with high cook’s distances. However, this was infeasible as we did not have enough computational resources available and it took too long. We compromised by excluding data which has a departure delay of more than 30 minutes late as a proxy for excluding outliers, which reduced the dataset from 200,000 rows to approximately 170,000. This is because we consider extreme delays of over 30 minutes late to be freak accidents which cannot be accurately predicted by the available explanatory variables. If we keep outliers, we would be learning relationships between the response variable and the explanatory variables for a particular outlier observation which do not generalize well to other observations. However, when we are removing 30,000 points, we are probably removing many points that would help the model generalize to new data if kept. The threshold of 30 minutes was probably too low, and we may have benefited from picking a higher threshold. We could have tuned the threshold by using validation sets that do not have points removed according to the threshold.

We drop columns which consist of over 50% NAs, which includes the speed column. However, it should be noted that a rule of thumb suggested by Professor McNeney is to drop any columns with over 5% NAs. We use a different threshold for dropping columns leading to us keeping columns such as model instead of dropping it.

We impute the missing values. However, there are limitations to this approach of imputing the missing values. It is possible, that the missingness of the plane model variable is related to ‘dep_delay’. In this scenario, we may be creating an inferior feature set by keeping the variable ‘model’ and imputing it. For example, say a highly unreliable plane model that frequently causes long delays has a high probability of being labeled as NA and represents the majority of NAs in the dataset. We would not be able to capture the relationship between this plane ‘model’ and ‘dep_delay’ if we imputed the model with the mode. To counteract this affect, we imputed NAs for the remaining columns using the ‘imputeMissings’ library, adding a boolean flag which indicates 0 if the associated value was present and 1 if the associated value was NA. For example, the ‘model_flag’ for a given row is 1 if the ‘model’ value was NA for that given row. Hence, no information is lost from our imputation.

5.2 Conclusion

None of the models that we tried performed particularly well. We surmise that this may be due to the explanatory variables having a weak relationship with the ‘dep_delay’ variable. There is a lack of information about the condition of a particular flight before it reaches New York City. Instead, we get information about where the flight is going next, which would reveal less information about the current condition of the plane and what kind of maintenance it would need, and therefore what ‘dep_delay’ it would have. Out of all the models, that we tried, gradient boosted regression models yielded the best performance based on having the lowest root mean squared error on the hold out test set. We believe that this makes sense because GBMs are able to capture non-linear relationships between the explanatory variables and ‘dep_delay’ whereas linear regression cannot.

6 Code

6.1 Preparing the programming environment

6.1.1 Loading Libraries

```
library(tidyverse)
```

6.2 Data Preprocessing

6.2.1 Loading the data

```
library(nycflights13)
library(Hmisc)

## Loading required package: lattice
## Loading required package: survival
## Loading required package: Formula
##
## Attaching package: 'Hmisc'
## The following objects are masked from 'package:dplyr':
## 
##     src, summarize
## The following objects are masked from 'package:base':
## 
##     format.pval, units
set.seed(42)
original_data <- read_csv("fltrain.csv.gz")

## Parsed with column specification:
## cols(
##   .default = col_double(),
##   carrier = col_character(),
##   tailnum = col_character(),
##   origin = col_character(),
##   dest = col_character(),
##   time_hour = col_datetime(format = ""),
##   name = col_character(),
##   dst = col_character(),
##   tzone = col_character(),
##   type = col_character(),
##   manufacturer = col_character(),
##   model = col_character(),
##   engine = col_character()
## )
## See spec(...) for full column specifications.
```

Table 2: A table of the first few rows of the nycflights13 data.

year.x	month	day	dep_time	sched_dep_time	dep_delay	arr_time	sched_arr_time	arr_delay	carrier	f
2013	11	7	600	600	0	826	825	1	WN	
2013	10	30	1252	1250	2	1356	1400	-4	AA	
2013	12	18	1723	1715	8	2008	2020	-12	DL	
2013	11	20	2029	2030	-1	2141	2205	-24	WN	
2013	10	21	1620	1625	-5	1818	1831	-13	DL	
2013	11	7	852	900	-8	1139	1157	-18	B6	

```
DF <- original_data
```

turning all columns with datatype characters to factors.

```
DF[sapply(DF, is.character)] <- lapply(DF[sapply(DF, is.character)],  
                                         as.factor)  
DF$flight <- as.factor(DF$flight)
```

```
library(lubridate)
```

```
##  
## Attaching package: 'lubridate'  
  
## The following object is masked from 'package:base':  
##  
##     date  
  
DF$sched_arr_time_posix <- as.POSIXct(str_pad(as.character(DF$sched_arr_time), 4, pad="0"),format="%H%M")  
DF$sched_arr_time_hour <- hour(DF$sched_arr_time_posix)  
DF$sched_arr_time_minute <- minute(DF$sched_arr_time_posix)  
  
#num minute is number of minutes since start of day for scheduled arrival time  
DF$sched_arr_time_num_minute <- 60*DF$sched_arr_time_hour + DF$sched_arr_time_minute  
  
DF$sched_dep_time_posix <- as.POSIXct(str_pad(as.character(DF$sched_dep_time), 4, pad="0"),format="%H%M")  
DF$sched_dep_time_hour <- hour(DF$sched_dep_time_posix)  
DF$sched_dep_time_minute <- minute(DF$sched_dep_time_posix)  
#num minute is number of minutes since start of day for scheduled depival time  
DF$sched_dep_time_num_minute <- 60*DF$sched_dep_time_hour + DF$sched_dep_time_minute  
  
select(original_data, time_hour, sched_dep_time, sched_arr_time, tz, tzone)  
select(DF, sched_arr_time, sched_arr_time_hour)  
  
DF$sched_air_time <- DF$sched_arr_time_posix - DF$sched_dep_time_posix  
drops <- c('sched_arr_time_posix', 'sched_arr_time_hour', 'sched_dep_time_posix', 'sched_dep_time_hour')  
DF <- DF[, !(names(DF) %in% drops)]  
  
drops <- c("dep_time", "arr_time", "air_time", "arr_delay", "year.x", 'tailnum')  
DF <- DF[, !(names(DF) %in% drops)]  
  
## Remove columns with more than 50% NA  
DF <- DF[, -which(colMeans(is.na(DF)) > 0.5)]  
  
DF$sched_air_time <- as.numeric(DF$sched_air_time)
```

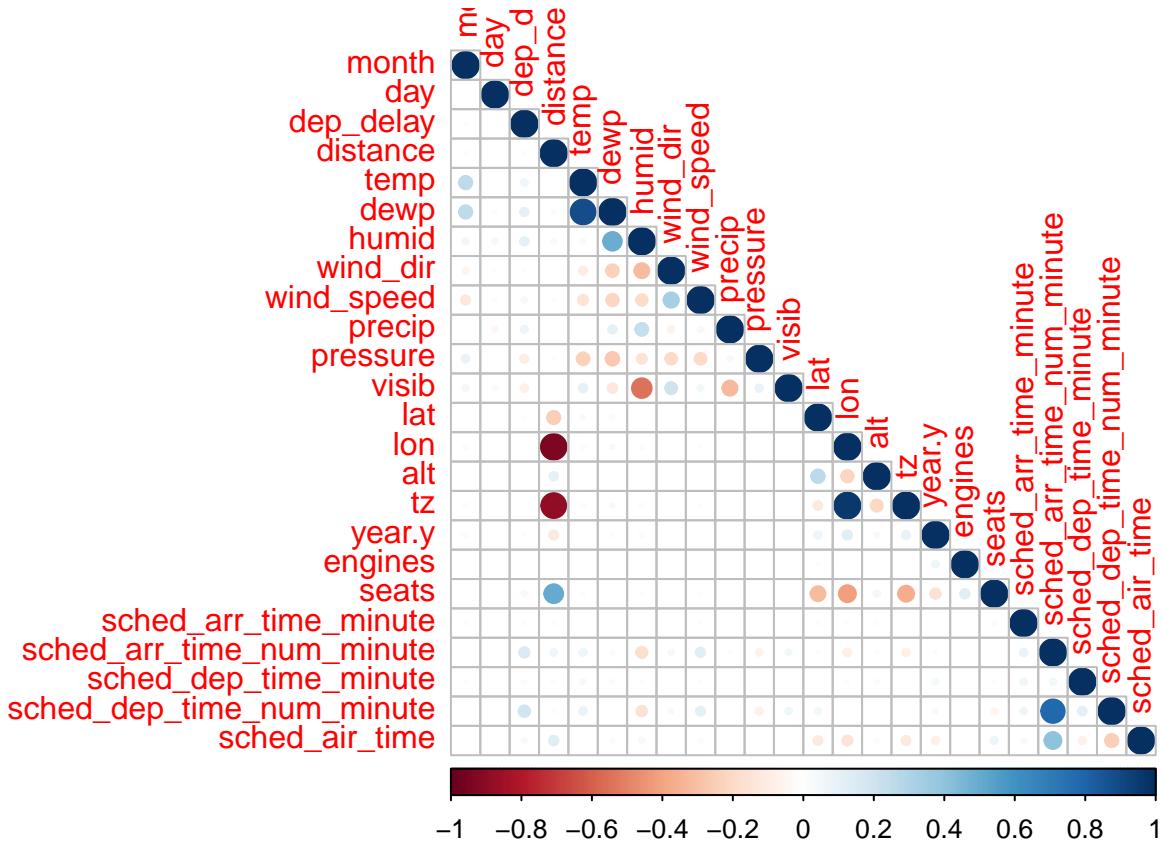


Figure 1: grid depicting correlation amongst all numerical variables

```

library(imputeMissing)

##
## Attaching package: 'imputeMissing'
## The following object is masked from 'package:Hmisc':
##
##     impute
## The following object is masked from 'package:dplyr':
##
##     compute
impute_model <- imputeMissing::compute(DF, method="median/mode")
DF <- impute(DF, object=impute_model, flag=TRUE)
DF <- DF[!duplicated(as.list(DF))] #remove all redundant flag columns that are identical to each other

numeric_only_df <- dplyr::select_if(DF, is.numeric)
library(corrplot)

## corrplot 0.84 loaded

```

Table 3: proportion of variance explained by each principal component

	x
PC1	0.135269
PC2	0.106195
PC3	0.086279
PC4	0.068886
PC5	0.060590
PC6	0.058295

6.3 Feature Scaling

```
dep_delay_vec <- DF$dep_delay
DF$dep_delay <- NULL
head(DF)

library(dplyr)
DF <- DF %>% mutate_if(is.numeric, scale)
head(DF)
DF$dep_delay <- dep_delay_vec
```

6.4 Exploratory Data Analysis

```
numeric_DF <- dplyr::select_if(DF, is.numeric) %>% scale()

prcomp_res <- prcomp(numeric_DF)
sdev <- prcomp_res$sdev
sdev
```

6.4.1 all four components at same time

proportion of variance explained by each component

```
pve <- colSums(prcomp_res$x^2)/sum(numeric_DF^2)

rotation <- as.data.frame(prcomp_res$rotation)
rotation[order(-abs(rotation$PC1)),]

pca_rotation <- head(rotation[order(-abs(rotation$PC1)),])
```

6.4.2 take out extreme departure delays

```
DF<-DF[DF$dep_delay < 30,]

set.seed(42)
DF$flight <- NULL
train_index <- sample(1:nrow(DF), size=2*nrow(DF)/3, replace=FALSE)
train_df <- DF[train_index,]
test_df <- DF[-train_index,]
```

Table 4: coefficients for each variable on each principal component

	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	P
lon	0.534262	0.008228	-0.011813	-0.007181	-0.141255	0.021195	0.014172	-0.023885	-0.0224
distance	-0.530322	-0.013673	0.042091	0.000606	-0.042942	-0.005943	-0.122736	0.043705	0.0200
tz	0.515232	0.003918	-0.003819	-0.009390	-0.207494	0.030490	0.001420	-0.017610	-0.0442
seats	-0.326797	-0.021807	0.092398	0.007581	-0.299155	-0.009582	-0.206563	-0.144397	0.0156
alt	-0.129118	0.001274	-0.022431	0.017906	0.466078	-0.062307	0.241778	-0.082761	-0.1384
sched_air_time	-0.126932	-0.059262	-0.046756	-0.053512	-0.299113	0.151635	0.696202	-0.179246	-0.1491

save entire dataset for later

```
train_and_validation_df <- DF
```

6.5 predicting 0

```
benchmark_df <- data.frame(model_description = character(), rmse = numeric(), stringsAsFactors = FALSE)
rmse = mean((test_df$dep_delay-0)^2) %>% sqrt()
model_description = "predicting 0"
benchmark_df <- rbind(benchmark_df, data.frame(model_description = model_description, rmse=rmse))
```

6.6 predicting the mean

```
rmse = mean((test_df$dep_delay-mean(train_df$dep_delay))^2)%>% sqrt()
rmse
model_description <- 'predicting the mean'
benchmark_df <- rbind(benchmark_df, data.frame(model_description = model_description, rmse=rmse))
benchmark_df
```

6.7 predicting the median

```
rmse = mean((test_df$dep_delay-median(train_df$dep_delay))^2)%>% sqrt()
rmse
model_description <- 'predicting the median'
benchmark_df <- rbind(benchmark_df, data.frame(model_description = model_description, rmse=rmse))
```

6.8 linear regression with dest

```
model <- lm(dep_delay ~ ., data=train_df)
model_without_dest <- lm(dep_delay ~ .-dest, data=train_df)
anova(model, model_without_dest)
summary <- round(summary(model)$coefficients,6)
sorteddf <- summary[order(summary[,ncol(summary)]),]
head(sorteddf)
```

```

lm_test_df <- test_df

in_test_but_not_train <- setdiff(unique(lm_test_df$model), unique(train_df$model))
lm_test_df <- lm_test_df[ !lm_test_df$model %in% in_test_but_not_train, ]

in_test_but_not_train <- setdiff(unique(lm_test_df$dest), unique(train_df$dest))
lm_test_df <- lm_test_df[ !lm_test_df$dest %in% in_test_but_not_train, ]

preds = predict(model, newdata=lm_test_df)

## Warning in predict.lm(model, newdata = lm_test_df): prediction from a rank-
## deficient fit may be misleading
rmse = sqrt(mean((lm_test_df$dep_delay - preds)^2))
rmse
model_description <- 'linear regression'
benchmark_df <- rbind(benchmark_df, data.frame(model_description = model_description, rmse=rmse))

```

6.9 GBM

```

library(gbm)

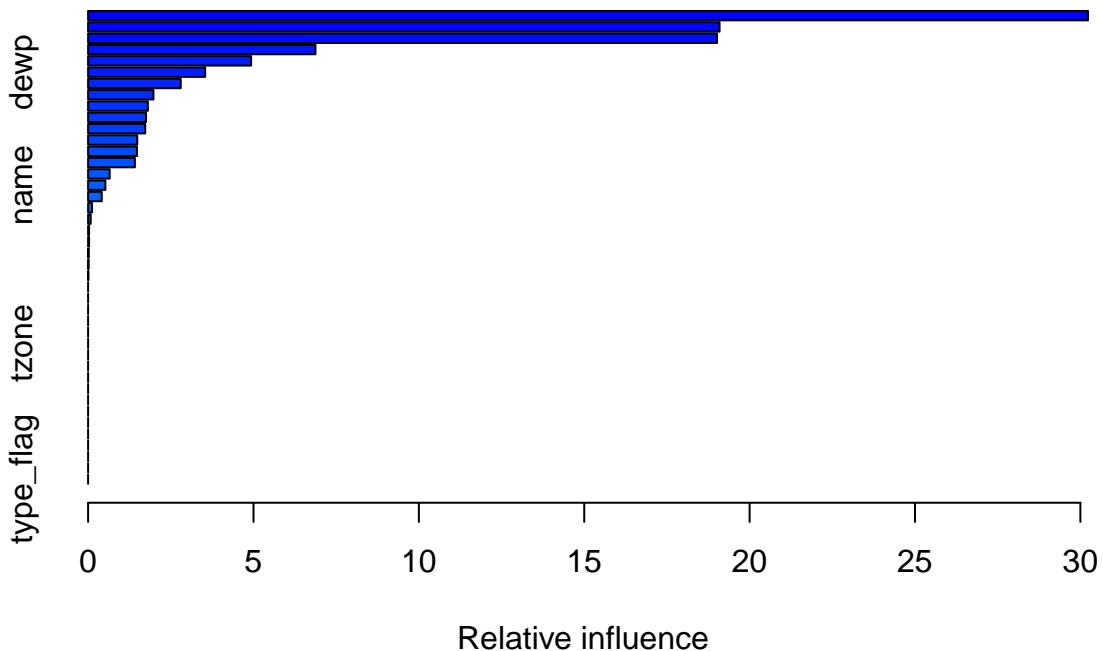
## Loaded gbm 2.1.5
train_gbm <- function(filename){
  num_trees <- 2^13
  set.seed(42)
  model <- gbm(dep_delay ~ ., data=train_df,
                n.trees=num_trees, shrinkage=0.01) # default shrinkage = 0.1
  preds = predict(model, newdata=test_df, n.trees=num_trees)
  rmse = sqrt(mean((test_df$dep_delay - preds)^2))
  summary(model)
  saveRDS(model, filename)
  return(model)
}

destfile <- "models2/gbm_shrinkage_0point01_ntrees_8192_v2.rds"
if (!file.exists(destfile)) {
  train_gbm(destfile)
}
model <- readRDS(destfile)

```

Table 5: gbm relative influence

	var	rel.inf
dest	dest	30.23130
model	model	19.09165
sched_dep_time_num_minute	sched_dep_time_num_minute	19.01377
month	month	6.87392
carrier	carrier	4.92863
dewp	dewp	3.54021



Chunk below takes 2+ hours to run on an average laptop.

```

library(gbm)
train_gbm_rmse_vs_num_trees <- function(shrinkage, rerun, num_trees_2_exp=16) {
  #rerun <- TRUE
  set.seed(42)
  x <- 2 ^ seq(5, num_trees_2_exp, by = 1)
  rmse_vec <- numeric(length(x))
  count <- 1
  filename_vec1 <- c("models2/gbm_shrinkage_")
  filename_vec1 <-
    append(filename_vec1, gsub('\\.', 'point', toString(shrinkage)))
  filename_vec1 <- append(filename_vec1, "_ntrees_")
  filename_prefix1 <- paste(filename_vec1, collapse = '')

  for (val in x) {
    filename_vec2 <- append(filename_prefix1, val)
    filename_vec2 <- append(filename_vec2, "_v2.rds")
    filename <- paste(filename_vec2, collapse = '')
    if (!file.exists(filename) | rerun) {
      hboost <- gbm(

```

```

    dep_delay ~ .,
    data = train_df,
    n.trees = val,
    shrinkage = shrinkage
) # default shrinkage = 0.1
saveRDS(hboost, filename)
hboost <- readRDS(filename)
} else {
  print("reading saved model")
  hboost <- readRDS(filename)
}

preds = predict(hboost, n.trees = val, newdata = test_df)
mse = mean((test_df$dep_delay - preds) ^ 2)
rmse <- sqrt(mse)
rmse_vec[count] <- rmse
print(val)
print(rmse)
count = count + 1
}

filename_vec1 <- c("performance2/gbm_shrinkage_")
filename_vec1 <-
  append(filename_vec1, gsub('\\.', 'point', toString(shrinkage)))
#filename_vec1 <- append(filename_vec1, "_ntrees_")
#filename_prefix1 <- paste(filename_vec1, collapse = '')
#filename_vec2 <- append(filename_prefix1, x[length(x)])

#summary filename
filename_vec_summary <- append(filename_vec1, "_v2_summary.csv")
filename_summary <- paste(filename_vec_summary, collapse = '')

#rmse_vs_num_trees filename
filename_vec_rmse_vs_num_trees <- append(filename_vec1, "_v2_rmse_vs_num_trees.csv")
filename_rmse_vs_num_trees <- paste(filename_vec_rmse_vs_num_trees, collapse = '')

summary <- summary(hboost)
write.csv(summary, filename_summary)

num_trees_vs_rmse <-
  data.frame("num_trees" = x, "rmse" = rmse_vec)
write.csv(
  num_trees_vs_rmse, filename_rmse_vs_num_trees
)
}

train_gbm_rmse_vs_num_trees(shrinkage = 0.01, rerun = FALSE, num_trees_2_exp=17)
train_gbm_rmse_vs_num_trees(shrinkage = 0.001, rerun = FALSE, num_trees_2_exp=17)

shrinkage_0point01_bench <- read.csv('performance2/gbm_shrinkage_0point01_v2_rmse_vs_num_trees.csv')
shrinkage_0point01_bench$X <- NULL
shrinkage_0point01_bench <- shrinkage_0point01_bench %>%
  dplyr::rename(
    "shrinkage_0point01_rmse" = rmse

```

GBM: RMSE vs. Number of Trees for Different Shrinkage

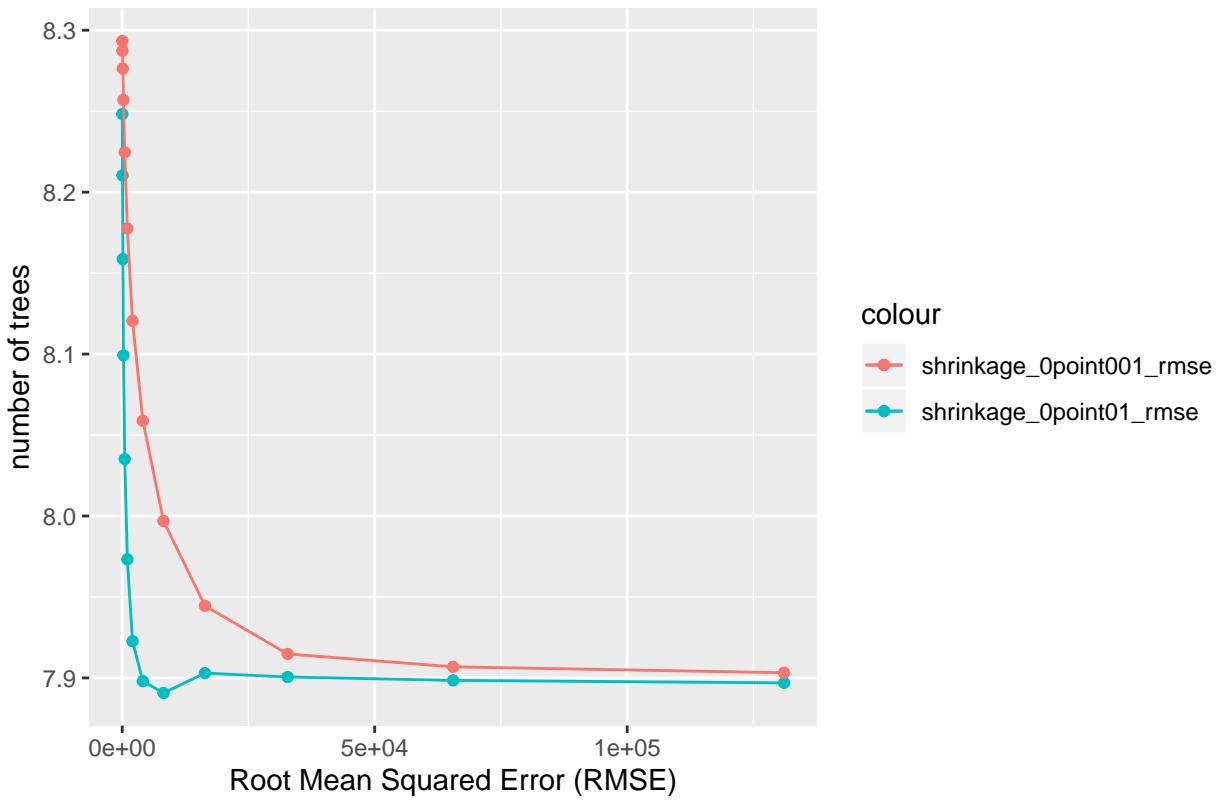


Figure 2: plot of RMSE vs number of trees for shrinkage = 0.01 and shrinkage = 0.001

```

        )
shrinkage_0point01_bench

shrinkage_0point01_bench <- read.csv('performance2/gbm_shrinkage_0point001_v2_rmse_vs_num_trees.csv')
shrinkage_0point01_bench$X <- NULL
shrinkage_0point01_bench <- shrinkage_0point01_bench %>%
  dplyr::rename(
    "shrinkage_0point001_rmse" = rmse
  )
shrinkage_0point01_bench

gbm_merge_df <- merge(shrinkage_0point01_bench, shrinkage_0point01_bench, all.x = TRUE)
gbm_merge_df

benchmark_df <- rbind(benchmark_df, data.frame(model_description = 'GBM (tuned)', rmse=7.89071))
write_csv(benchmark_df, 'performance/benchmark_df.csv')

```

Final training on entire dataset to prepare for test set.

```

library(gbm)
num_trees <- 2^13
train_final_gbm <- function(filename, num_trees){
  set.seed(42)
  model <- gbm(dep_delay ~ ., data=train_and_validation_df,
                n.trees=num_trees, shrinkage=0.01) # default shrinkage = 0.1

```

Table 6: RMSE on the validation set, benchmark comparing all the models that we tried

model_description	rmse
predicting 0	8.30571
predicting the mean	8.29977
predicting the median	8.46926
linear regression	7.98999
GBM (tuned)	7.89071

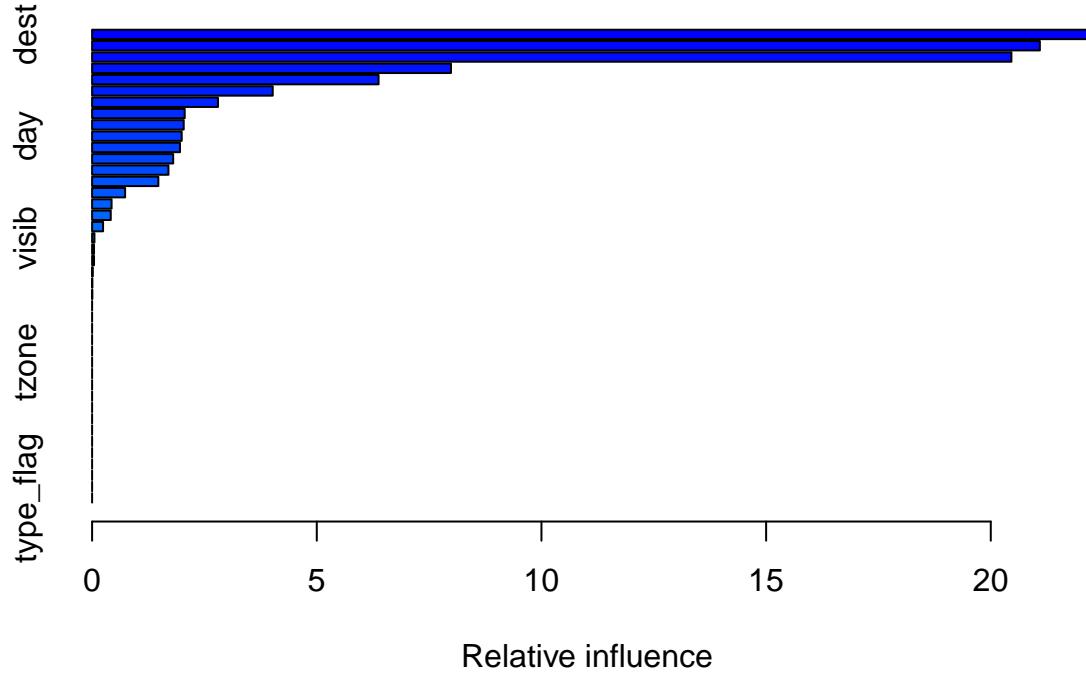
```

saveRDS(model, filename)
return(model)
}

destfile <- "models_ultimate/final_train_on_train_and_validation_gbm_v1.rds"
if (!file.exists(destfile)) {
  train_final_gbm(destfile)
}

final_model <- readRDS(destfile)
final_preds = predict(final_model, newdata=train_and_validation_df, n.trees=num_trees)
final_rmse = sqrt(mean((train_and_validation_df$dep_delay - final_preds)^2))
summary(final_model)

```



```

rmse
## [1] 7.98999

```

7 test on final test data

```
library(tidyverse)
library(nycflights13)
library(Hmisc)
library(lubridate)
library(imputeMissing)
library(dplyr)

preprocess_data <- function(filepath) {
  set.seed(42)
  original_data <- read_csv(filepath)
  DF <- original_data
  DF[sapply(DF, is.character)] <-
    lapply(DF[sapply(DF, is.character)], as.factor)
  DF$flight <- as.factor(DF$flight)
  DF$sched_arr_time_posix <-
    as.POSIXct(str_pad(as.character(DF$sched_arr_time), 4, pad = "0"), format =
      "%H%M")
  DF$sched_arr_time_hour <- hour(DF$sched_arr_time_posix)
  DF$sched_arr_time_minute <- minute(DF$sched_arr_time_posix)

  #num minute is number of minutes since start of day for scheduled arrival time
  DF$sched_arr_time_num_minute <-
    60 * DF$sched_arr_time_hour + DF$sched_arr_time_minute
  DF$sched_dep_time_posix <-
    as.POSIXct(str_pad(as.character(DF$sched_dep_time), 4 , pad = "0"), format =
      "%H%M")
  DF$sched_dep_time_hour <- hour(DF$sched_dep_time_posix)
  DF$sched_dep_time_minute <- minute(DF$sched_dep_time_posix)

  #num minute is number of minutes since start of day for scheduled depival time
  DF$sched_dep_time_num_minute <-
    60 * DF$sched_dep_time_hour + DF$sched_dep_time_minute
  DF$sched_air_time <-
    DF$sched_arr_time_posix - DF$sched_dep_time_posix
  drops <-
  c(
    'sched_arr_time_posix',
    'sched_arr_time_hour',
    'sched_dep_time_posix',
    'sched_dep_time_hour',
    'sched_dep_time',
    'sched_arr_time',
    'hour',
    'time',
    'minute',
    'time_hour',
    "dep_time",
    "arr_time",
    "air_time",
```

```

    "arr_delay",
    "year.x",
    'tailnum'
)
DF <- DF[, !(names(DF) %in% drops)]

## Remove columns with more than 50% NA
DF <- DF[, -which(colMeans(is.na(DF)) > 0.5)]

DF$sched_air_time <- as.numeric(DF$sched_air_time)

# impute
impute_model <- imputeMissings::compute(DF, method = "median/mode")
DF <- impute(DF, object = impute_model, flag = TRUE)
DF <-
  DF[!duplicated(as.list(DF))] #remove all redundant flag columns that are identical to each other.

# scale all but dep_delay
dep_delay_vec <- DF$dep_delay
DF$dep_delay <- NULL
DF <- DF %>% mutate_if(is.numeric, scale)
DF$dep_delay <- dep_delay_vec

# exclude dep_delay >= 30
DF <- DF[DF$dep_delay < 30,]
DF$flight <- NULL

return(DF)
}

final_test_df <- preprocess_data('fltest.csv.gz')

## Parsed with column specification:
## cols(
##   .default = col_double(),
##   carrier = col_character(),
##   tailnum = col_character(),
##   origin = col_character(),
##   dest = col_character(),
##   time_hour = col_datetime(format = ""),
##   name = col_character(),
##   dst = col_character(),
##   tzone = col_character(),
##   type = col_character(),
##   manufacturer = col_character(),
##   model = col_character(),
##   engine = col_character()
## )

## See spec(...) for full column specifications.
print(final_test_df)

##          month      day carrier origin dest  distance        temp       dewp

```

## 1	-1.62197	-1.677413	AA	JFK	MIA	0.06309615	-1.00266723	-0.7597368
## 2	-1.62197	-1.677413	UA	EWR	ORD	-0.43920534	-1.00266723	-0.7038719
## 3	-1.62197	-1.677413	B6	JFK	PBI	-0.01971572	-1.06282238	-0.7597368
## 4	-1.62197	-1.677413	UA	JFK	LAX	1.94469037	-1.06282238	-0.7597368
## 5	-1.62197	-1.677413	UA	EWR	SFO	2.06687181	-1.06282238	-0.7038719
## 6	-1.62197	-1.677413	B6	JFK	BOS	-1.16143342	-1.00266723	-0.7597368
## 7	-1.62197	-1.677413	UA	EWR	LAS	1.60801262	-1.06282238	-0.7038719
## 8	-1.62197	-1.677413	MQ	LGA	ATL	-0.38082976	-0.95253794	-0.8621557
## 9	-1.62197	-1.677413	DL	LGA	MSP	-0.03057629	-0.95253794	-0.8621557
## 10	-1.62197	-1.677413	B6	JFK	RSW	0.04273258	-1.06282238	-0.7597368
## 11	-1.62197	-1.677413	B6	JFK	SJU	0.75410009	-1.06282238	-0.7597368
## 12	-1.62197	-1.677413	AA	LGA	MIA	0.07259915	-0.95253794	-0.8621557
## 13	-1.62197	-1.677413	AA	JFK	SJU	0.75410009	-1.06282238	-0.7597368
## 14	-1.62197	-1.677413	UA	EWR	LAX	1.91618137	-1.06282238	-0.7038719
## 15	-1.62197	-1.677413	AA	LGA	ORD	-0.42019933	-0.95253794	-0.8621557
## 16	-1.62197	-1.677413	WN	LGA	BWI	-1.16414856	-0.95253794	-0.8621557
## 17	-1.62197	-1.677413	US	EWR	CLT	-0.69714394	-1.06282238	-0.7038719
## 18	-1.62197	-1.677413	EV	EWR	IAD	-1.12749413	-1.06282238	-0.7038719
## 19	-1.62197	-1.677413	B6	JFK	BOS	-1.16143342	-1.06282238	-0.7597368
## 20	-1.62197	-1.677413	UA	EWR	PBI	-0.02650357	-1.06282238	-0.7038719
## 21	-1.62197	-1.677413	US	EWR	CLT	-0.69714394	-1.06282238	-0.7038719
## 22	-1.62197	-1.677413	B6	JFK	BUF	-1.00667026	-1.06282238	-0.7597368
## 23	-1.62197	-1.677413	UA	LGA	DEN	0.78396666	-0.95253794	-0.8621557
## 24	-1.62197	-1.677413	B6	JFK	LAS	1.63652162	-1.06282238	-0.7597368
## 25	-1.62197	-1.677413	B6	JFK	MSY	0.18935031	-1.06282238	-0.7597368
## 26	-1.62197	-1.677413	DL	LGA	PBI	-0.01021271	-0.95253794	-0.8062908
## 27	-1.62197	-1.677413	DL	JFK	SLC	1.28626815	-1.06282238	-0.7597368
## 28	-1.62197	-1.677413	DL	JFK	SFO	2.09538082	-1.00266723	-0.7038719
## 29	-1.62197	-1.677413	AA	LGA	ORD	-0.42019933	-0.95253794	-0.8062908
## 30	-1.62197	-1.677413	AA	JFK	MCO	-0.13375173	-1.06282238	-0.7597368
## 31	-1.62197	-1.677413	MQ	LGA	XNA	0.14183530	-0.95253794	-0.8062908
## 32	-1.62197	-1.677413	AA	LGA	MIA	0.07259915	-0.95253794	-0.8062908
## 33	-1.62197	-1.677413	UA	EWR	RSW	0.03458715	-1.00266723	-0.7038719
## 34	-1.62197	-1.677413	UA	LGA	ORD	-0.42019933	-0.95253794	-0.8062908
## 35	-1.62197	-1.677413	B6	JFK	SJU	0.75410009	-1.00266723	-0.7038719
## 36	-1.62197	-1.677413	AA	JFK	FLL	0.03594472	-1.00266723	-0.7038719
## 37	-1.62197	-1.677413	FL	LGA	MKE	-0.41341148	-0.95253794	-0.8062908
## 38	-1.62197	-1.677413	UA	EWR	PBI	-0.02650357	-1.00266723	-0.7038719
## 39	-1.62197	-1.677413	AS	EWR	SEA	1.84558765	-1.00266723	-0.7038719
## 40	-1.62197	-1.677413	AA	EWR	DFW	0.44728891	-1.00266723	-0.7038719
## 41	-1.62197	-1.677413	UA	EWR	DEN	0.76360309	-1.00266723	-0.7038719
## 42	-1.62197	-1.677413	UA	LGA	IAH	0.50702206	-0.95253794	-0.8062908
## 43	-1.62197	-1.677413	VX	JFK	SFO	2.09538082	-1.00266723	-0.7038719
## 44	-1.62197	-1.677413	B6	JFK	SFO	2.09538082	-1.00266723	-0.7038719
## 45	-1.62197	-1.677413	UA	EWR	IAH	0.48530091	-1.00266723	-0.7038719
## 46	-1.62197	-1.677413	AA	JFK	LAX	1.94469037	-1.00266723	-0.7038719
## 47	-1.62197	-1.677413	AA	JFK	SFO	2.09538082	-1.00266723	-0.7038719
## 49	-1.62197	-1.677413	US	LGA	CLT	-0.67678036	-0.95253794	-0.8062908
## 50	-1.62197	-1.677413	AA	LGA	MIA	0.07259915	-0.95253794	-0.8062908
## 51	-1.62197	-1.677413	DL	LGA	ATL	-0.38082976	-0.95253794	-0.8062908
## 52	-1.62197	-1.677413	B6	EWR	MCO	-0.14325473	-0.95253794	-0.7038719
## 53	-1.62197	-1.677413	AA	JFK	BOS	-1.16143342	-0.95253794	-0.7597368
## 54	-1.62197	-1.677413	UA	JFK	SFO	2.09538082	-0.95253794	-0.7597368
## 55	-1.62197	-1.677413	MQ	LGA	CMH	-0.76502252	-0.95253794	-0.8062908

## 56	-1.62197 -1.677413	9E	JFK	MSP	-0.01835814	-0.95253794	-0.7597368
## 57	-1.62197 -1.677413	EV	EWR	CHS	-0.56274435	-0.95253794	-0.7038719
## 58	-1.62197 -1.677413	US	EWR	CLT	-0.69714394	-0.95253794	-0.7038719
## 59	-1.62197 -1.677413	EV	EWR	MEM	-0.13103659	-0.95253794	-0.7038719
## 60	-1.62197 -1.677413	DL	JFK	SJU	0.75410009	-0.95253794	-0.7597368
## 61	-1.62197 -1.677413	MQ	JFK	DCA	-1.12613656	-0.95253794	-0.7597368
## 62	-1.62197 -1.677413	US	JFK	CLT	-0.68085308	-0.95253794	-0.7597368
## 63	-1.62197 -1.677413	AA	LGA	STL	-0.20977574	-0.95253794	-0.8062908
## 64	-1.62197 -1.677413	B6	JFK	JAX	-0.29123003	-0.95253794	-0.7597368
## 66	-1.62197 -1.677413	B6	JFK	ORD	-0.41069633	-0.95253794	-0.7597368
## 67	-1.62197 -1.677413	UA	JFK	LAX	1.94469037	-0.95253794	-0.7597368
## 68	-1.62197 -1.677413	EV	EWR	MYR	-0.66863493	-0.95253794	-0.7038719
## 69	-1.62197 -1.677413	MQ	LGA	RDU	-0.83018595	-0.95253794	-0.8062908
## 70	-1.62197 -1.677413	F9	LGA	DEN	0.78396666	-0.95253794	-0.8062908
## 71	-1.62197 -1.677413	AA	LGA	DFW	0.47036763	-0.95253794	-0.8062908
## 72	-1.62197 -1.677413	MQ	LGA	CLE	-0.84647681	-0.95253794	-0.8062908
## 73	-1.62197 -1.677413	AA	JFK	SJU	0.75410009	-0.95253794	-0.7597368
## 75	-1.62197 -1.677413	UA	EWR	JAC	1.12878985	-0.95253794	-0.7038719
## 76	-1.62197 -1.677413	EV	EWR	RDU	-0.85054953	-0.95253794	-0.7038719
## 77	-1.62197 -1.677413	DL	EWR	DTW	-0.75280437	-0.95253794	-0.7038719
## 78	-1.62197 -1.677413	UA	EWR	SAN	1.87681179	-0.95253794	-0.7038719
## 79	-1.62197 -1.677413	B6	JFK	TPA	-0.05093986	-0.95253794	-0.7597368
## 80	-1.62197 -1.677413	UA	EWR	PBI	-0.02650357	-0.95253794	-0.7038719
## 81	-1.62197 -1.677413	DL	LGA	DTW	-0.73379837	-0.95253794	-0.8062908
## 82	-1.62197 -1.677413	DL	EWR	ATL	-0.40255090	-0.95253794	-0.7038719
## 83	-1.62197 -1.677413	UA	EWR	ORD	-0.43920534	-0.95253794	-0.7038719
## 84	-1.62197 -1.677413	UA	EWR	DEN	0.76360309	-0.95253794	-0.7038719
## 86	-1.62197 -1.677413	UA	EWR	STT	0.80297267	-0.95253794	-0.7038719
## 87	-1.62197 -1.677413	AA	EWR	DFW	0.44728891	-0.95253794	-0.7038719
## 88	-1.62197 -1.677413	AA	LGA	DFW	0.47036763	-0.95253794	-0.8062908
## 89	-1.62197 -1.677413	B6	JFK	RDU	-0.83561624	-0.95253794	-0.7597368
## 90	-1.62197 -1.677413	B6	JFK	IAD	-1.10577299	-0.95253794	-0.7597368
## 91	-1.62197 -1.677413	DL	JFK	LAX	1.94469037	-0.95253794	-0.7597368
## 92	-1.62197 -1.677413	UA	EWR	EGE	0.92786925	-0.95253794	-0.7038719
## 93	-1.62197 -1.677413	UA	EWR	TPA	-0.06180044	-0.95253794	-0.7038719
## 94	-1.62197 -1.677413	B6	LGA	FLL	0.04544772	-0.95253794	-0.8062908
## 95	-1.62197 -1.677413	UA	LGA	ORD	-0.42019933	-0.95253794	-0.8062908
## 96	-1.62197 -1.677413	VX	JFK	LAS	1.63652162	-0.95253794	-0.7597368
## 97	-1.62197 -1.677413	B6	JFK	BUF	-1.00667026	-0.95253794	-0.7597368
## 98	-1.62197 -1.677413	B6	JFK	LAX	1.94469037	-0.95253794	-0.7597368
## 99	-1.62197 -1.677413	EV	EWR	AVL	-0.62383507	-0.95253794	-0.7038719
## 100	-1.62197 -1.677413	DL	LGA	ATL	-0.38082976	-0.95253794	-0.8062908
## 101	-1.62197 -1.677413	DL	LGA	FLL	0.04544772	-0.95253794	-0.8062908
## 102	-1.62197 -1.677413	US	LGA	CLT	-0.67678036	-0.95253794	-0.8062908
## 103	-1.62197 -1.677413	DL	JFK	LAS	1.63652162	-0.89238279	-0.7038719
## 104	-1.62197 -1.677413	EV	EWR	BUF	-1.03246412	-0.89238279	-0.7038719
## 106	-1.62197 -1.677413	UA	LGA	IAH	0.50702206	-0.95253794	-0.8062908
## 107	-1.62197 -1.677413	UA	EWR	FLL	0.03051443	-0.89238279	-0.7038719
## 108	-1.62197 -1.677413	EV	EWR	IND	-0.53966563	-0.89238279	-0.7038719
## 109	-1.62197 -1.677413	UA	EWR	BOS	-1.14378499	-0.89238279	-0.7038719
## 110	-1.62197 -1.677413	AA	LGA	ORD	-0.42019933	-0.95253794	-0.8062908
## 111	-1.62197 -1.677413	B6	JFK	MCO	-0.13375173	-0.89238279	-0.7038719
## 112	-1.62197 -1.677413	UA	EWR	IAH	0.48530091	-0.89238279	-0.7038719
## 113	-1.62197 -1.677413	MQ	LGA	DTW	-0.73379837	-0.95253794	-0.8062908

## 114	-1.62197	-1.677413	DL	LGA	ATL	-0.38082976	-0.95253794	-0.8062908
## 115	-1.62197	-1.677413	EV	EWR	PWM	-1.02974898	-0.89238279	-0.7038719
## 116	-1.62197	-1.677413	WN	LGA	BWI	-1.16414856	-0.95253794	-0.8062908
## 117	-1.62197	-1.677413	UA	EWR	LAS	1.60801262	-0.89238279	-0.7038719
## 118	-1.62197	-1.677413	B6	EWR	PBI	-0.02650357	-0.89238279	-0.7038719
## 119	-1.62197	-1.677413	MQ	LGA	CMH	-0.76502252	-0.95253794	-0.8062908
## 120	-1.62197	-1.677413	AA	LGA	MIA	0.07259915	-0.95253794	-0.8062908
## 121	-1.62197	-1.677413	DL	LGA	DTW	-0.73379837	-0.95253794	-0.8062908
## 122	-1.62197	-1.677413	WN	LGA	STL	-0.20977574	-0.95253794	-0.8062908
## 123	-1.62197	-1.677413	DL	LGA	RSW	0.05087801	-0.95253794	-0.8062908
## 124	-1.62197	-1.677413	UA	JFK	LAX	1.94469037	-0.89238279	-0.7597368
## 125	-1.62197	-1.677413	UA	EWR	PBI	-0.02650357	-0.89238279	-0.7597368
## 126	-1.62197	-1.677413	UA	EWR	TPA	-0.06180044	-0.89238279	-0.7597368
## 127	-1.62197	-1.677413	AA	LGA	ORD	-0.42019933	-0.95253794	-0.8062908
## 128	-1.62197	-1.677413	DL	LGA	MSP	-0.03057629	-0.95253794	-0.8062908
## 129	-1.62197	-1.677413	MQ	LGA	CLE	-0.84647681	-0.95253794	-0.8062908
## 130	-1.62197	-1.677413	AA	EWR	MIA	0.05766586	-0.89238279	-0.7597368
## 131	-1.62197	-1.677413	DL	LGA	PBI	-0.01021271	-0.95253794	-0.8062908
## 132	-1.62197	-1.677413	EV	EWR	ATL	-0.40255090	-0.89238279	-0.7597368
## 133	-1.62197	-1.677413	FL	LGA	CAK	-0.87634339	-0.95253794	-0.8062908
## 134	-1.62197	-1.677413	EV	EWR	CMH	-0.78674366	-0.89238279	-0.7597368
## 136	-1.62197	-1.677413	B6	EWR	BOS	-1.14378499	0.00994442	0.0596146
## 137	-1.62197	-1.677413	EV	EWR	ROC	-1.08133670	-0.89238279	-0.7597368
## 138	-1.62197	-1.677413	WN	EWR	BWI	-1.18586971	0.00994442	0.0596146
## 139	-1.62197	-1.677413	UA	LGA	ORD	-0.42019933	-1.06282238	-0.6852503
## 140	-1.62197	-1.677413	UA	EWR	SJU	0.76767580	-0.89238279	-0.7597368
## 141	-1.62197	-1.677413	UA	EWR	IAH	0.48530091	0.00994442	0.0596146
## 142	-1.62197	-1.677413	B6	JFK	HOU	0.52331292	-0.89238279	-0.7597368
## 143	-1.62197	-1.677413	EV	EWR	CLT	-0.69714394	0.00994442	0.0596146
## 144	-1.62197	-1.677413	UA	EWR	SFO	2.06687181	0.00994442	0.0596146
## 145	-1.62197	-1.677413	AA	LGA	STL	-0.20977574	-1.06282238	-0.6852503
## 146	-1.62197	-1.677413	DL	LGA	MSY	0.19070788	-1.06282238	-0.6852503
## 147	-1.62197	-1.677413	EV	EWR	JAX	-0.30209061	-0.89238279	-0.7597368
## 148	-1.62197	-1.677413	EV	EWR	DTW	-0.75280437	0.00994442	0.0596146
## 149	-1.62197	-1.677413	UA	EWR	FLL	0.03051443	0.00994442	0.0596146
## 150	-1.62197	-1.677413	AA	JFK	BOS	-1.16143342	0.00994442	0.0596146
## 151	-1.62197	-1.677413	WN	LGA	MKE	-0.41341148	-1.06282238	-0.6852503
## 152	-1.62197	-1.677413	EV	EWR	DTW	-0.75280437	0.00994442	0.0596146
## 153	-1.62197	-1.677413	AA	LGA	MIA	0.07259915	-1.06282238	-0.6852503
## 154	-1.62197	-1.677413	AA	LGA	DFW	0.47036763	-1.06282238	-0.6852503
## 155	-1.62197	-1.677413	DL	LGA	ATL	-0.38082976	-1.06282238	-0.8621557
## 156	-1.62197	-1.677413	US	LGA	BOS	-1.16550614	-1.06282238	-0.8621557
## 157	-1.62197	-1.677413	MQ	LGA	CMH	-0.76502252	-1.06282238	-0.8621557
## 158	-1.62197	-1.677413	AA	EWR	DFW	0.44728891	0.00994442	0.0596146
## 160	-1.62197	-1.677413	UA	EWR	MIA	0.05766586	-0.99264137	-0.6852503
## 162	-1.62197	-1.677413	B6	JFK	ROC	-1.05690041	0.00994442	0.0596146
## 163	-1.62197	-1.677413	MQ	LGA	DTW	-0.73379837	-1.06282238	-0.8621557
## 164	-1.62197	-1.677413	AA	JFK	MIA	0.06309615	0.00994442	0.0596146
## 165	-1.62197	-1.677413	WN	EWR	HOU	0.50023420	-0.99264137	-0.6852503
## 166	-1.62197	-1.677413	MQ	LGA	RDU	-0.83018595	-1.06282238	-0.8621557
## 167	-1.62197	-1.677413	B6	LGA	MCO	-0.12560630	-1.06282238	-0.8621557
## 168	-1.62197	-1.677413	UA	EWR	LAX	1.91618137	-0.99264137	-0.6852503
## 169	-1.62197	-1.677413	DL	EWR	SLC	1.25775915	-0.99264137	-0.6852503
## 170	-1.62197	-1.677413	EV	EWR	IND	-0.53966563	-0.99264137	-0.6852503

## 172	-1.62197	-1.677413	AA	JFK	LAX	1.94469037	-1.06282238	-0.7783584
## 173	-1.62197	-1.677413	AA	LGA	DFW	0.47036763	-1.06282238	-0.8621557
## 174	-1.62197	-1.677413	WN	EWR	PHX	1.48040089	-0.99264137	-0.6852503
## 175	-1.62197	-1.677413	EV	EWR	CHS	-0.56274435	-0.99264137	-0.6852503
## 176	-1.62197	-1.677413	DL	JFK	BOS	-1.16143342	-1.06282238	-0.7783584
## 177	-1.62197	-1.677413	WN	LGA	MDW	-0.43105991	-1.06282238	-0.8621557
## 178	-1.62197	-1.677413	UA	LGA	ORD	-0.42019933	-1.06282238	-0.8621557
## 179	-1.62197	-1.677413	UA	EWR	IAH	0.48530091	-0.99264137	-0.6852503
## 181	-1.62197	-1.677413	FL	LGA	ATL	-0.38082976	-1.00266723	-0.9087097
## 183	-1.62197	-1.677413	UA	EWR	SEA	1.84558765	-1.00266723	-0.9087097
## 184	-1.62197	-1.677413	B6	JFK	BOS	-1.16143342	-1.00266723	-0.9087097
## 185	-1.62197	-1.677413	DL	LGA	RSW	0.05087801	-1.00266723	-0.9087097
## 186	-1.62197	-1.677413	UA	JFK	SFO	2.09538082	-1.00266723	-0.9087097
## 187	-1.62197	-1.677413	EV	LGA	IAD	-1.10441541	-1.00266723	-0.9087097
## 190	-1.62197	-1.677413	UA	LGA	IAH	0.50702206	-1.00266723	-0.9087097
## 191	-1.62197	-1.677413	DL	JFK	SFO	2.09538082	-1.00266723	-0.9087097
## 192	-1.62197	-1.677413	EV	EWR	IAD	-1.12749413	-1.00266723	-0.9087097
## 193	-1.62197	-1.677413	AA	LGA	ORD	-0.42019933	-1.00266723	-0.9087097
## 194	-1.62197	-1.677413	AA	JFK	MIA	0.06309615	-1.00266723	-0.9087097
## 195	-1.62197	-1.677413	9E	JFK	BUF	-1.00667026	-1.00266723	-0.9087097
## 196	-1.62197	-1.677413	MQ	JFK	CLE	-0.83833138	-1.00266723	-0.9087097
## 197	-1.62197	-1.677413	US	LGA	DCA	-1.12477899	-1.00266723	-1.0204395
## 198	-1.62197	-1.677413	DL	LGA	PBI	-0.01021271	-1.00266723	-1.0204395
## 199	-1.62197	-1.677413	UA	EWR	AUS	0.62648836	-1.00266723	-0.9087097
## 200	-1.62197	-1.677413	US	EWR	CLT	-0.69714394	-1.06282238	-0.9087097
## 201	-1.62197	-1.677413	MQ	LGA	CMH	-0.76502252	-1.00266723	-1.0204395
## 202	-1.62197	-1.677413	UA	EWR	FLL	0.03051443	-1.06282238	-0.9087097
## 203	-1.62197	-1.677413	MQ	LGA	RDU	-0.83018595	-1.00266723	-1.0204395
## 204	-1.62197	-1.677413	AA	LGA	DFW	0.47036763	-1.00266723	-1.0204395
## 205	-1.62197	-1.677413	UA	LGA	DEN	0.78396666	-1.00266723	-1.0204395
## 206	-1.62197	-1.677413	9E	JFK	ROC	-1.05690041	-1.00266723	-0.9645746
## 207	-1.62197	-1.677413	MQ	JFK	IND	-0.51251420	-1.00266723	-0.9645746
## 208	-1.62197	-1.677413	UA	EWR	MCO	-0.14325473	-1.00266723	-0.9087097
## 209	-1.62197	-1.677413	DL	LGA	ATL	-0.38082976	-1.00266723	-1.0204395
## 210	-1.62197	-1.677413	EV	EWR	CLT	-0.69714394	-1.06282238	-0.9087097
## 211	-1.62197	-1.677413	MQ	JFK	PIT	-0.95372497	-1.00266723	-0.9645746
## 212	-1.62197	-1.677413	MQ	JFK	DCA	-1.12613656	-1.00266723	-0.9645746
## 213	-1.62197	-1.677413	UA	EWR	MCO	-0.14325473	-1.06282238	-0.9087097
## 214	-1.62197	-1.677413	MQ	JFK	CMH	-0.75959223	-1.00266723	-0.9645746
## 215	-1.62197	-1.677413	UA	EWR	LAX	1.91618137	-1.06282238	-0.9087097
## 217	-1.62197	-1.677413	WN	EWR	MDW	-0.45006591	-1.06282238	-0.9087097
## 218	-1.62197	-1.677413	EV	EWR	STL	-0.23149688	-1.00266723	-0.9087097
## 219	-1.62197	-1.677413	AA	LGA	STL	-0.20977574	-1.00266723	-1.0204395
## 220	-1.62197	-1.677413	UA	EWR	DEN	0.76360309	-1.06282238	-0.9087097
## 221	-1.62197	-1.677413	EV	EWR	GRR	-0.59396850	-1.06282238	-0.9087097
## 222	-1.62197	-1.677413	WN	LGA	MKE	-0.41341148	-1.00266723	-1.0204395
## 223	-1.62197	-1.677413	DL	JFK	MCO	-0.13375173	-1.00266723	-0.9645746
## 224	-1.62197	-1.677413	AA	JFK	LAX	1.94469037	-1.00266723	-0.9645746
## 226	-1.62197	-1.677413	DL	JFK	SAN	1.90532080	-1.00266723	-0.9645746
## 227	-1.62197	-1.677413	9E	JFK	ORD	-0.41069633	-1.00266723	-0.9645746
## 228	-1.62197	-1.677413	UA	EWR	MIA	0.05766586	-1.06282238	-0.9087097
## 229	-1.62197	-1.677413	9E	JFK	IND	-0.51251420	-1.00266723	-0.9645746
## 230	-1.62197	-1.677413	FL	LGA	ATL	-0.38082976	-1.06282238	-1.0669935
## 231	-1.62197	-1.677413	AA	JFK	DFW	0.47308277	-1.06282238	-1.2252773

## 232	-1.62197	-1.677413	DL	JFK	RSW	0.04273258	-1.06282238	-1.2252773
## 233	-1.62197	-1.677413	UA	LGA	ORD	-0.42019933	-1.06282238	-1.0669935
## 234	-1.62197	-1.677413	B6	EWR	FLL	0.03051443	-1.11295167	-1.1228584
## 235	-1.62197	-1.677413	9E	JFK	PHL	-1.28768758	-1.06282238	-1.2252773
## 236	-1.62197	-1.677413	EV	EWR	BUF	-1.03246412	-1.06282238	-0.9087097
## 237	-1.62197	-1.677413	B6	JFK	ORD	-0.41069633	-1.00266723	-0.9645746
## 238	-1.62197	-1.677413	WN	EWR	DEN	0.76360309	-1.11295167	-1.1228584
## 239	-1.62197	-1.677413	B6	JFK	SYR	-1.13156685	-1.00266723	-0.9645746
## 240	-1.62197	-1.677413	AA	LGA	MIA	0.07259915	-1.06282238	-1.0669935
## 241	-1.62197	-1.677413	DL	JFK	FLL	0.03594472	-1.06282238	-1.2252773
## 242	-1.62197	-1.677413	DL	LGA	MSP	-0.03057629	-1.06282238	-1.0669935
## 245	-1.62197	-1.677413	DL	JFK	DEN	0.79211209	-1.06282238	-1.2252773
## 247	-1.62197	-1.677413	B6	JFK	PBI	-0.01971572	-1.06282238	-1.2252773
## 248	-1.62197	-1.677413	EV	EWR	DCA	-1.14514256	-1.11295167	-1.1228584
## 249	-1.62197	-1.677413	US	EWR	PHX	1.48040089	-1.11295167	-1.1228584
## 251	-1.62197	-1.677413	MQ	LGA	DTW	-0.73379837	-1.06282238	-1.0669935
## 252	-1.62197	-1.677413	EV	EWR	GSO	-0.81117995	-1.11295167	-1.1228584
## 253	-1.62197	-1.677413	EV	EWR	ATL	-0.40255090	-1.11295167	-1.1228584
## 254	-1.62197	-1.677413	B6	JFK	SAN	1.90532080	-1.06282238	-1.2252773
## 255	-1.62197	-1.677413	AA	LGA	DFW	0.47036763	-1.06282238	-1.0669935
## 256	-1.62197	-1.677413	EV	EWR	MHT	-1.13156685	-1.11295167	-1.1228584
## 257	-1.62197	-1.677413	AA	JFK	LAS	1.63652162	-1.11295167	-1.2718314
## 258	-1.62197	-1.677413	AA	JFK	AUS	0.64956708	-1.11295167	-1.2718314
## 259	-1.62197	-1.677413	UA	LGA	IAH	0.50702206	-1.17310682	-1.2718314
## 260	-1.62197	-1.677413	US	LGA	CLT	-0.67678036	-1.17310682	-1.2718314
## 261	-1.62197	-1.677413	UA	EWR	LAX	1.91618137	-1.17310682	-1.1694124
## 263	-1.62197	-1.677413	UA	LGA	DEN	0.78396666	-1.17310682	-1.2718314
## 264	-1.62197	-1.677413	UA	EWR	SAT	0.71473051	-1.17310682	-1.1694124
## 265	-1.62197	-1.677413	AA	LGA	ORD	-0.42019933	-1.17310682	-1.2718314
## 266	-1.62197	-1.677413	B6	JFK	SJU	0.75410009	-1.11295167	-1.2718314
## 267	-1.62197	-1.677413	MQ	LGA	RDU	-0.83018595	-1.17310682	-1.2718314
## 268	-1.62197	-1.677413	UA	EWR	IAH	0.48530091	-1.17310682	-1.1694124
## 269	-1.62197	-1.677413	AA	JFK	MIA	0.06309615	-1.11295167	-1.2718314
## 270	-1.62197	-1.677413	UA	JFK	SFO	2.09538082	-1.11295167	-1.2718314
## 271	-1.62197	-1.677413	AA	JFK	SAN	1.90532080	-1.11295167	-1.2718314
## 273	-1.62197	-1.677413	UA	EWR	SFO	2.06687181	-1.17310682	-1.1694124
## 275	-1.62197	-1.677413	DL	LGA	DTW	-0.73379837	-1.17310682	-1.2718314
## 276	-1.62197	-1.677413	DL	LGA	MCO	-0.12560630	-1.17310682	-1.2718314
## 277	-1.62197	-1.677413	DL	LGA	TPA	-0.04415200	-1.17310682	-1.2718314
## 278	-1.62197	-1.677413	WN	LGA	MDW	-0.43105991	-1.17310682	-1.2718314
## 279	-1.62197	-1.677413	B6	LGA	MCO	-0.12560630	-1.17310682	-1.2718314
## 281	-1.62197	-1.677413	UA	EWR	ORD	-0.43920534	-1.17310682	-1.1694124
## 282	-1.62197	-1.677413	B6	JFK	RDU	-0.83561624	-1.22323611	-1.4301151
## 283	-1.62197	-1.677413	UA	EWR	PDX	1.88902994	-1.17310682	-1.1694124
## 284	-1.62197	-1.677413	MQ	LGA	BNA	-0.37811462	-1.28339125	-1.3276962
## 285	-1.62197	-1.677413	UA	EWR	DFW	0.44728891	-1.17310682	-1.1694124
## 286	-1.62197	-1.677413	MQ	LGA	CMH	-0.76502252	-1.28339125	-1.3276962
## 287	-1.62197	-1.677413	UA	EWR	LAS	1.60801262	-1.28339125	-1.3742503
## 288	-1.62197	-1.677413	DL	JFK	MSP	-0.01835814	-1.22323611	-1.4301151
## 289	-1.62197	-1.677413	9E	JFK	DTW	-0.72429537	-1.22323611	-1.4301151
## 290	-1.62197	-1.677413	AA	LGA	MIA	0.07259915	-1.28339125	-1.3276962
## 291	-1.62197	-1.677413	DL	JFK	SEA	1.87273908	-1.22323611	-1.4301151
## 292	-1.62197	-1.677413	EV	LGA	CLE	-0.84647681	-1.28339125	-1.3276962
## 294	-1.62197	-1.677413	UA	JFK	SFO	2.09538082	-1.22323611	-1.4301151

## 297	-1.62197	-1.677413	EV	JFK	IAD	-1.10577299	-1.33352054	-1.4301151
## 298	-1.62197	-1.677413	9E	JFK	MSY	0.18935031	-1.22323611	-1.4301151
## 299	-1.62197	-1.677413	US	LGA	DCA	-1.12477899	-1.33352054	-1.4301151
## 300	-1.62197	-1.677413	B6	JFK	MCO	-0.13375173	-1.22323611	-1.4301151
## 301	-1.62197	-1.677413	DL	JFK	ATL	-0.38354490	-1.22323611	-1.4301151
## 302	-1.62197	-1.677413	DL	JFK	TPA	-0.05093986	-1.33352054	-1.4301151
## 303	-1.62197	-1.677413	B6	JFK	SLC	1.28626815	-1.33352054	-1.4301151
## 304	-1.62197	-1.677413	MQ	LGA	RDU	-0.83018595	-1.33352054	-1.4301151
## 305	-1.62197	-1.677413	UA	EWR	PHX	1.48040089	-1.33352054	-1.4859800
## 306	-1.62197	-1.677413	DL	JFK	SLC	1.28626815	-1.33352054	-1.4301151
## 307	-1.62197	-1.677413	UA	EWR	SFO	2.06687181	-1.33352054	-1.4859800
## 308	-1.62197	-1.677413	DL	JFK	PHX	1.50755232	-1.33352054	-1.4301151
## 310	-1.62197	-1.677413	EV	LGA	IAD	-1.10441541	-1.33352054	-1.4301151
## 311	-1.62197	-1.677413	DL	JFK	LAX	1.94469037	-1.33352054	-1.4301151
## 312	-1.62197	-1.677413	AA	EWR	DFW	0.44728891	-1.33352054	-1.4859800
## 313	-1.62197	-1.677413	UA	EWR	BQN	0.73645166	-1.33352054	-1.4859800
## 316	-1.62197	-1.677413	EV	EWR	OMA	0.12418687	-1.33352054	-1.4859800
## 317	-1.62197	-1.677413	AA	JFK	TPA	-0.05093986	-1.33352054	-1.4301151
## 318	-1.62197	-1.677413	B6	LGA	FLL	0.04544772	-1.33352054	-1.4301151
## 319	-1.62197	-1.677413	9E	JFK	JAX	-0.29123003	-1.33352054	-1.4301151
## 320	-1.62197	-1.677413	EV	EWR	CHS	-0.56274435	-1.33352054	-1.4859800
## 321	-1.62197	-1.677413	VX	JFK	LAX	1.94469037	-1.39367569	-1.4301151
## 322	-1.62197	-1.677413	UA	EWR	SEA	1.84558765	-1.33352054	-1.4859800
## 323	-1.62197	-1.677413	UA	EWR	DFW	0.44728891	-1.39367569	-1.3742503
## 324	-1.62197	-1.677413	UA	EWR	IAH	0.48530091	-1.39367569	-1.3742503
## 328	-1.62197	-1.677413	MQ	LGA	CMH	-0.76502252	-1.39367569	-1.3742503
## 330	-1.62197	-1.677413	UA	EWR	CLE	-0.86684039	-1.39367569	-1.3742503
## 332	-1.62197	-1.677413	UA	EWR	RSW	0.03458715	-1.39367569	-1.3742503
## 333	-1.62197	-1.677413	B6	JFK	AUS	0.64956708	-1.39367569	-1.4301151
## 336	-1.62197	-1.677413	DL	JFK	FLL	0.03594472	-1.39367569	-1.4301151
## 339	-1.62197	-1.677413	AA	LGA	ORD	-0.42019933	-1.39367569	-1.3742503
## 340	-1.62197	-1.677413	B6	JFK	HOU	0.52331292	-1.39367569	-1.4301151
## 341	-1.62197	-1.677413	UA	EWR	IAH	0.48530091	-1.39367569	-1.3742503
## 342	-1.62197	-1.677413	UA	EWR	LAX	1.91618137	-1.39367569	-1.3742503
## 343	-1.62197	-1.677413	B6	JFK	PDX	1.91618137	-1.39367569	-1.4301151
## 344	-1.62197	-1.677413	UA	EWR	PBI	-0.02650357	-1.50396013	-1.4859800
## 346	-1.62197	-1.677413	WN	LGA	MDW	-0.43105991	-1.50396013	-1.4301151
## 347	-1.62197	-1.677413	B6	JFK	BOS	-1.16143342	-1.39367569	-1.4301151
## 348	-1.62197	-1.677413	DL	JFK	LAS	1.63652162	-1.50396013	-1.5883989
## 349	-1.62197	-1.677413	B6	JFK	LAX	1.94469037	-1.39367569	-1.4301151
## 350	-1.62197	-1.677413	UA	EWR	SFO	2.06687181	-1.39367569	-1.3742503
## 351	-1.62197	-1.677413	EV	EWR	PVD	-1.19808785	-1.50396013	-1.4859800
## 352	-1.62197	-1.677413	B6	LGA	FLL	0.04544772	-1.50396013	-1.4301151
## 353	-1.62197	-1.677413	MQ	JFK	DCA	-1.12613656	-1.50396013	-1.5883989
## 354	-1.62197	-1.677413	B6	JFK	MCO	-0.13375173	-1.50396013	-1.5883989
## 355	-1.62197	-1.677413	B6	JFK	RDU	-0.83561624	-1.50396013	-1.5883989
## 356	-1.62197	-1.677413	B6	JFK	SJU	0.75410009	-1.56411528	-1.5883989
## 358	-1.62197	-1.677413	B6	JFK	PWM	-1.04468226	-1.56411528	-1.5883989
## 359	-1.62197	-1.677413	B6	JFK	ROC	-1.05690041	-1.56411528	-1.5883989
## 365	-1.62197	-1.677413	B6	JFK	PSE	0.77989395	-1.67439971	-1.7373719
## 366	-1.62197	-1.677413	B6	JFK	BQN	0.72423351	-1.67439971	-1.7373719
## 367	-1.62197	-1.563526	US	EWR	CLT	-0.69714394	-1.83481344	-1.6908178
## 368	-1.62197	-1.563526	UA	LGA	IAH	0.50702206	-1.83481344	-1.6349530
## 369	-1.62197	-1.563526	B6	JFK	FLL	0.03594472	-1.89496859	-1.6908178

## 370	-1.62197	-1.563526	B6	LGA	FLL	0.04544772	-1.83481344	-1.6349530
## 371	-1.62197	-1.563526	AA	LGA	DFW	0.47036763	-1.83481344	-1.6349530
## 372	-1.62197	-1.563526	DL	LGA	DTW	-0.73379837	-1.83481344	-1.6349530
## 373	-1.62197	-1.563526	UA	EWR	LAS	1.60801262	-1.83481344	-1.6908178
## 374	-1.62197	-1.563526	UA	EWR	MIA	0.05766586	-1.83481344	-1.6908178
## 375	-1.62197	-1.563526	MQ	LGA	DTW	-0.73379837	-1.83481344	-1.6349530
## 376	-1.62197	-1.563526	UA	LGA	ORD	-0.42019933	-1.83481344	-1.6349530
## 377	-1.62197	-1.563526	UA	EWR	LAX	1.91618137	-1.83481344	-1.6908178
## 378	-1.62197	-1.563526	DL	JFK	ATL	-0.38354490	-1.89496859	-1.6908178
## 379	-1.62197	-1.563526	DL	LGA	MSP	-0.03057629	-1.83481344	-1.6349530
## 380	-1.62197	-1.563526	DL	EWR	ATL	-0.40255090	-1.83481344	-1.6908178
## 381	-1.62197	-1.563526	WN	EWR	MDW	-0.45006591	-1.83481344	-1.6908178
## 382	-1.62197	-1.563526	B6	JFK	SJU	0.75410009	-1.89496859	-1.6908178
## 383	-1.62197	-1.563526	UA	LGA	IAH	0.50702206	-1.83481344	-1.6349530
## 384	-1.62197	-1.563526	UA	EWR	DFW	0.44728891	-1.83481344	-1.6908178
## 385	-1.62197	-1.563526	US	EWR	CLT	-0.69714394	-1.83481344	-1.6908178
## 386	-1.62197	-1.563526	DL	LGA	TPA	-0.04415200	-1.83481344	-1.6349530
## 387	-1.62197	-1.563526	WN	EWR	BWI	-1.18586971	-1.83481344	-1.6908178
## 388	-1.62197	-1.563526	EV	EWR	IAD	-1.12749413	-1.83481344	-1.6908178
## 389	-1.62197	-1.563526	EV	EWR	CVG	-0.64284107	-1.83481344	-1.6908178
## 390	-1.62197	-1.563526	UA	EWR	LAX	1.91618137	-1.83481344	-1.6908178
## 391	-1.62197	-1.563526	AA	LGA	ORD	-0.42019933	-1.83481344	-1.6349530
## 392	-1.62197	-1.563526	UA	EWR	AUS	0.62648836	-1.83481344	-1.6908178
## 393	-1.62197	-1.563526	US	JFK	PHX	1.50755232	-1.89496859	-1.6908178
## 394	-1.62197	-1.563526	UA	EWR	CLE	-0.86684039	-1.83481344	-1.6908178
## 395	-1.62197	-1.563526	EV	EWR	ATL	-0.40255090	-1.83481344	-1.6908178
## 396	-1.62197	-1.563526	AA	LGA	DFW	0.47036763	-1.83481344	-1.6349530
## 397	-1.62197	-1.563526	B6	LGA	MCO	-0.12560630	-1.83481344	-1.6349530
## 398	-1.62197	-1.563526	US	LGA	CLT	-0.67678036	-1.83481344	-1.6349530
## 399	-1.62197	-1.563526	UA	LGA	DEN	0.78396666	-1.83481344	-1.6349530
## 400	-1.62197	-1.563526	DL	JFK	SLC	1.28626815	-1.89496859	-1.6908178
## 401	-1.62197	-1.563526	UA	EWR	MCO	-0.14325473	-1.83481344	-1.6908178
## 402	-1.62197	-1.563526	UA	EWR	FLL	0.03051443	-1.83481344	-1.6908178
## 403	-1.62197	-1.563526	B6	JFK	LAS	1.63652162	-1.89496859	-1.6908178
## 404	-1.62197	-1.563526	DL	LGA	PBI	-0.01021271	-1.83481344	-1.6908178
## 405	-1.62197	-1.563526	US	LGA	DCA	-1.12477899	-1.83481344	-1.6908178
## 406	-1.62197	-1.563526	VX	JFK	LAX	1.94469037	-1.89496859	-1.6908178
## 407	-1.62197	-1.563526	DL	LGA	DTW	-0.73379837	-1.83481344	-1.6908178
## 408	-1.62197	-1.563526	UA	EWR	SJU	0.76767580	-1.78468415	-1.6349530
## 410	-1.62197	-1.563526	MQ	EWR	ORD	-0.43920534	-1.78468415	-1.6349530
## 411	-1.62197	-1.563526	AA	JFK	MIA	0.06309615	-1.89496859	-1.6908178
## 412	-1.62197	-1.563526	B6	JFK	LAX	1.94469037	-1.89496859	-1.6908178
## 413	-1.62197	-1.563526	DL	LGA	ATL	-0.38082976	-1.83481344	-1.6908178
## 414	-1.62197	-1.563526	UA	LGA	ORD	-0.42019933	-1.83481344	-1.6908178
## 415	-1.62197	-1.563526	AA	JFK	FLL	0.03594472	-1.89496859	-1.6908178
## 416	-1.62197	-1.563526	B6	JFK	MCO	-0.13375173	-1.89496859	-1.6908178
## 418	-1.62197	-1.563526	AS	EWR	SEA	1.84558765	-1.78468415	-1.6349530
## 420	-1.62197	-1.563526	UA	EWR	DEN	0.76360309	-1.78468415	-1.6349530
## 421	-1.62197	-1.563526	DL	JFK	SEA	1.87273908	-1.89496859	-1.6908178
## 422	-1.62197	-1.563526	UA	LGA	IAH	0.50702206	-1.83481344	-1.6908178
## 423	-1.62197	-1.563526	AA	LGA	ORD	-0.42019933	-1.83481344	-1.6908178
## 424	-1.62197	-1.563526	AA	JFK	SFO	2.09538082	-1.89496859	-1.6908178
## 425	-1.62197	-1.563526	UA	EWR	MCO	-0.14325473	-1.78468415	-1.6349530
## 426	-1.62197	-1.563526	WN	LGA	DEN	0.78396666	-1.83481344	-1.6908178

## 427	-1.62197	-1.563526	UA	LGA	DEN	0.78396666	-1.83481344	-1.6908178
## 428	-1.62197	-1.563526	DL	EWR	ATL	-0.40255090	-1.78468415	-1.6349530
## 429	-1.62197	-1.563526	EV	EWR	BTV	-1.05418527	-1.78468415	-1.6349530
## 430	-1.62197	-1.563526	UA	EWR	IAH	0.48530091	-1.78468415	-1.6349530
## 432	-1.62197	-1.563526	B6	JFK	FLL	0.03594472	-1.78468415	-1.7373719
## 433	-1.62197	-1.563526	DL	JFK	MIA	0.06309615	-1.78468415	-1.7373719
## 434	-1.62197	-1.563526	US	LGA	CLT	-0.67678036	-1.83481344	-1.6908178
## 435	-1.62197	-1.563526	DL	JFK	MCO	-0.13375173	-1.78468415	-1.7373719
## 436	-1.62197	-1.563526	UA	EWR	PDX	1.88902994	-1.78468415	-1.6349530
## 437	-1.62197	-1.563526	AA	JFK	STT	0.78803938	-1.78468415	-1.7373719
## 438	-1.62197	-1.563526	B6	JFK	PIT	-0.95372497	-1.78468415	-1.7373719
## 439	-1.62197	-1.563526	DL	LGA	MSP	-0.03057629	-1.78468415	-1.6349530
## 440	-1.62197	-1.563526	DL	LGA	PBI	-0.01021271	-1.78468415	-1.6349530
## 442	-1.62197	-1.563526	9E	JFK	ORD	-0.41069633	-1.78468415	-1.7373719
## 443	-1.62197	-1.563526	AA	JFK	BOS	-1.16143342	-1.78468415	-1.7373719
## 444	-1.62197	-1.563526	B6	JFK	SAN	1.90532080	-1.78468415	-1.7373719
## 445	-1.62197	-1.563526	DL	JFK	LAS	1.63652162	-1.78468415	-1.7373719
## 446	-1.62197	-1.563526	B6	JFK	SJU	0.75410009	-1.78468415	-1.7373719
## 447	-1.62197	-1.563526	AA	LGA	ORD	-0.42019933	-1.78468415	-1.6349530
## 448	-1.62197	-1.563526	AA	LGA	STL	-0.20977574	-1.78468415	-1.6349530
## 450	-1.62197	-1.563526	F9	LGA	DEN	0.78396666	-1.78468415	-1.6349530
## 451	-1.62197	-1.563526	MQ	LGA	ATL	-0.38082976	-1.78468415	-1.6349530
## 452	-1.62197	-1.563526	9E	JFK	DCA	-1.12613656	-1.78468415	-1.7373719
## 453	-1.62197	-1.563526	UA	JFK	LAX	1.94469037	-1.78468415	-1.7373719
## 455	-1.62197	-1.563526	9E	JFK	RDU	-0.83561624	-1.78468415	-1.7373719
## 457	-1.62197	-1.563526	MQ	LGA	CLE	-0.84647681	-1.78468415	-1.6349530
## 458	-1.62197	-1.563526	9E	JFK	DTW	-0.72429537	-1.78468415	-1.7373719
## 459	-1.62197	-1.563526	UA	EWR	DEN	0.76360309	-1.78468415	-1.6349530
## 460	-1.62197	-1.563526	EV	EWR	CHS	-0.56274435	-1.78468415	-1.6349530
## 462	-1.62197	-1.563526	B6	EWR	RSW	0.03458715	-1.78468415	-1.6349530
## 463	-1.62197	-1.563526	DL	EWR	DTW	-0.75280437	-1.78468415	-1.6349530
## 464	-1.62197	-1.563526	AA	JFK	MIA	0.06309615	-1.67439971	-1.7373719
## 465	-1.62197	-1.563526	UA	EWR	LAX	1.91618137	-1.78468415	-1.6349530
## 466	-1.62197	-1.563526	UA	EWR	JAC	1.12878985	-1.78468415	-1.6349530
## 467	-1.62197	-1.563526	B6	JFK	IAD	-1.10577299	-1.67439971	-1.7373719
## 468	-1.62197	-1.563526	UA	EWR	IAH	0.48530091	-1.67439971	-1.6349530
## 469	-1.62197	-1.563526	MQ	LGA	CLT	-0.67678036	-1.67439971	-1.6349530
## 470	-1.62197	-1.563526	B6	JFK	BOS	-1.16143342	-1.67439971	-1.7373719
## 471	-1.62197	-1.563526	AA	EWR	DFW	0.44728891	-1.67439971	-1.6349530
## 472	-1.62197	-1.563526	B6	EWR	SJU	0.76767580	-1.67439971	-1.6349530
## 473	-1.62197	-1.563526	B6	JFK	RDU	-0.83561624	-1.67439971	-1.7373719
## 474	-1.62197	-1.563526	B6	LGA	FLL	0.04544772	-1.67439971	-1.6349530
## 475	-1.62197	-1.563526	UA	EWR	EGE	0.92786925	-1.67439971	-1.6349530
## 476	-1.62197	-1.563526	WN	EWR	DEN	0.76360309	-1.67439971	-1.6349530
## 477	-1.62197	-1.563526	WN	LGA	MKE	-0.41341148	-1.67439971	-1.6349530
## 479	-1.62197	-1.563526	B6	JFK	PBI	-0.01971572	-1.67439971	-1.7373719
## 480	-1.62197	-1.563526	EV	EWR	DCA	-1.14514256	-1.67439971	-1.6349530
## 481	-1.62197	-1.563526	AA	LGA	ORD	-0.42019933	-1.67439971	-1.6349530
## 482	-1.62197	-1.563526	B6	JFK	PWM	-1.04468226	-1.67439971	-1.7373719
## 483	-1.62197	-1.563526	9E	JFK	ROC	-1.05690041	-1.67439971	-1.7373719
## 484	-1.62197	-1.563526	WN	LGA	MDW	-0.43105991	-1.67439971	-1.6349530
## 485	-1.62197	-1.563526	B6	EWR	FLL	0.03051443	-1.56411528	-1.5883989
## 486	-1.62197	-1.563526	MQ	EWR	ORD	-0.43920534	-1.56411528	-1.5883989
## 487	-1.62197	-1.563526	US	EWR	CLT	-0.69714394	-1.56411528	-1.5883989

## 488	-1.62197	-1.563526	FL	LGA	ATL	-0.38082976	-1.61424456	-1.5883989
## 489	-1.62197	-1.563526	US	JFK	PHX	1.50755232	-1.67439971	-1.7373719
## 490	-1.62197	-1.563526	DL	LGA	ATL	-0.38082976	-1.61424456	-1.5883989
## 491	-1.62197	-1.563526	B6	JFK	BOS	-1.16143342	-1.56411528	-1.6908178
## 492	-1.62197	-1.563526	DL	EWR	ATL	-0.40255090	-1.56411528	-1.5883989
## 493	-1.62197	-1.563526	VX	JFK	SFO	2.09538082	-1.56411528	-1.6908178
## 494	-1.62197	-1.563526	EV	EWR	BUF	-1.03246412	-1.56411528	-1.5883989
## 495	-1.62197	-1.563526	B6	JFK	MCO	-0.13375173	-1.56411528	-1.6908178
## 496	-1.62197	-1.563526	UA	EWR	FLL	0.03051443	-1.56411528	-1.5883989
## 497	-1.62197	-1.563526	AA	JFK	LAX	1.94469037	-1.56411528	-1.6908178
## 498	-1.62197	-1.563526	MQ	LGA	DTW	-0.73379837	-1.61424456	-1.5883989
## 499	-1.62197	-1.563526	DL	JFK	SLC	1.28626815	-1.56411528	-1.6908178
## 501	-1.62197	-1.563526	UA	EWR	LAS	1.60801262	-1.45383084	-1.5325340
## 502	-1.62197	-1.563526	WN	LGA	BWI	-1.16414856	-1.56411528	-1.5325340
## 503	-1.62197	-1.563526	AA	LGA	MIA	0.07259915	-1.56411528	-1.5325340
## 504	-1.62197	-1.563526	DL	JFK	MCO	-0.13375173	-1.50396013	-1.6349530
## 506	-1.62197	-1.563526	DL	LGA	RSW	0.05087801	-1.56411528	-1.5325340
## 507	-1.62197	-1.563526	WN	LGA	STL	-0.20977574	-1.56411528	-1.5325340
## 508	-1.62197	-1.563526	MQ	JFK	DCA	-1.12613656	-1.45383084	-1.6349530
## 509	-1.62197	-1.563526	AA	LGA	DFW	0.47036763	-1.45383084	-1.4859800
## 510	-1.62197	-1.563526	B6	EWR	MCO	-0.14325473	-1.39367569	-1.4859800
## 511	-1.62197	-1.563526	B6	JFK	HOU	0.52331292	-1.50396013	-1.6349530
## 512	-1.62197	-1.563526	DL	JFK	LAX	1.94469037	-1.45383084	-1.6349530
## 514	-1.62197	-1.563526	DL	LGA	FLL	0.04544772	-1.45383084	-1.4859800
## 515	-1.62197	-1.563526	UA	EWR	IAH	0.48530091	-1.39367569	-1.4859800
## 516	-1.62197	-1.563526	AA	JFK	LAX	1.94469037	-1.45383084	-1.6349530
## 517	-1.62197	-1.563526	EV	EWR	BUF	-1.03246412	-1.39367569	-1.4859800
## 518	-1.62197	-1.563526	UA	EWR	MCO	-0.14325473	-1.45383084	-1.5325340
## 519	-1.62197	-1.563526	EV	EWR	DTW	-0.75280437	-1.39367569	-1.4859800
## 520	-1.62197	-1.563526	DL	LGA	DTW	-0.73379837	-1.45383084	-1.4859800
## 523	-1.62197	-1.563526	WN	EWR	BWI	-1.18586971	-1.39367569	-1.4859800
## 524	-1.62197	-1.563526	DL	JFK	SLC	1.28626815	-1.45383084	-1.6349530
## 525	-1.62197	-1.563526	EV	EWR	DTW	-0.75280437	-1.39367569	-1.4859800
## 526	-1.62197	-1.563526	DL	JFK	SJU	0.75410009	-1.45383084	-1.6349530
## 527	-1.62197	-1.563526	AA	JFK	BOS	-1.16143342	-1.45383084	-1.6349530
## 528	-1.62197	-1.563526	9E	EWR	CVG	-0.64284107	-1.28339125	-1.4859800
## 529	-1.62197	-1.563526	US	LGA	CLT	-0.67678036	-1.45383084	-1.4859800
## 530	-1.62197	-1.563526	B6	JFK	FLL	0.03594472	-1.45383084	-1.6349530
## 531	-1.62197	-1.563526	EV	EWR	DCA	-1.14514256	-1.28339125	-1.4859800
## 532	-1.62197	-1.563526	DL	EWR	ATL	-0.40255090	-1.28339125	-1.4859800
## 533	-1.62197	-1.563526	WN	LGA	DEN	0.78396666	-1.45383084	-1.4859800
## 534	-1.62197	-1.563526	UA	EWR	MIA	0.05766586	-1.28339125	-1.4859800
## 535	-1.62197	-1.563526	B6	JFK	PBI	-0.01971572	-1.33352054	-1.5883989
## 536	-1.62197	-1.563526	US	EWR	CLT	-0.69714394	-1.28339125	-1.4859800
## 537	-1.62197	-1.563526	EV	EWR	GSO	-0.81117995	-1.28339125	-1.4859800
## 538	-1.62197	-1.563526	B6	LGA	MCO	-0.12560630	-1.39367569	-1.4859800
## 539	-1.62197	-1.563526	UA	EWR	LAX	1.91618137	-1.28339125	-1.4859800
## 540	-1.62197	-1.563526	WN	EWR	HOU	0.50023420	-1.28339125	-1.4859800
## 541	-1.62197	-1.563526	B6	EWR	FLL	0.03051443	-1.28339125	-1.4859800
## 542	-1.62197	-1.563526	EV	EWR	ALB	-1.22116657	-1.28339125	-1.4859800
## 543	-1.62197	-1.563526	EV	EWR	OMA	0.12418687	-1.28339125	-1.4859800
## 544	-1.62197	-1.563526	B6	LGA	SRQ	0.00607814	-1.39367569	-1.4859800
## 545	-1.62197	-1.563526	AA	JFK	LAX	1.94469037	-1.33352054	-1.5883989
## 546	-1.62197	-1.563526	AA	LGA	MIA	0.07259915	-1.39367569	-1.4859800

## 547	-1.62197	-1.563526	DL	LGA	MCO	-0.12560630	-1.39367569	-1.4859800
## 548	-1.62197	-1.563526	MQ	LGA	CLT	-0.67678036	-1.39367569	-1.4859800
## 549	-1.62197	-1.563526	US	EWR	PHX	1.48040089	-1.28339125	-1.4859800
## 551	-1.62197	-1.563526	B6	JFK	MCO	-0.13375173	-1.33352054	-1.5883989
## 553	-1.62197	-1.563526	EV	EWR	MSN	-0.33059961	-1.28339125	-1.4859800
## 554	-1.62197	-1.563526	UA	EWR	ORD	-0.43920534	-1.28339125	-1.5883989
## 555	-1.62197	-1.563526	UA	EWR	PBI	-0.02650357	-1.28339125	-1.4859800
## 556	-1.62197	-1.563526	UA	LGA	IAH	0.50702206	-1.28339125	-1.4301151
## 558	-1.62197	-1.563526	DL	LGA	RSW	0.05087801	-1.28339125	-1.4301151
## 559	-1.62197	-1.563526	DL	JFK	DCA	-1.12613656	-1.22323611	-1.5883989
## 560	-1.62197	-1.563526	9E	JFK	CLT	-0.68085308	-1.22323611	-1.5883989
## 561	-1.62197	-1.563526	B6	JFK	MSY	0.18935031	-1.22323611	-1.5883989
## 562	-1.62197	-1.563526	DL	LGA	MCI	0.08753244	-1.28339125	-1.4301151
## 563	-1.62197	-1.563526	B6	JFK	PIT	-0.95372497	-1.22323611	-1.5883989
## 564	-1.62197	-1.563526	UA	EWR	MCO	-0.14325473	-1.28339125	-1.5883989
## 565	-1.62197	-1.563526	9E	JFK	ORF	-1.02160355	-1.28339125	-1.6349530
## 566	-1.62197	-1.563526	AA	LGA	ORD	-0.42019933	-1.28339125	-1.4301151
## 567	-1.62197	-1.563526	DL	LGA	ATL	-0.38082976	-1.33352054	-1.4859800
## 569	-1.62197	-1.563526	EV	EWR	GSP	-0.60890178	-1.28339125	-1.5883989
## 570	-1.62197	-1.563526	MQ	JFK	DCA	-1.12613656	-1.28339125	-1.6349530
## 571	-1.62197	-1.563526	UA	JFK	LAX	1.94469037	-1.28339125	-1.6349530
## 572	-1.62197	-1.563526	B6	JFK	MCO	-0.13375173	-1.28339125	-1.6349530
## 573	-1.62197	-1.563526	AA	JFK	FLL	0.03594472	-1.28339125	-1.6349530
## 574	-1.62197	-1.563526	AA	JFK	SFO	2.09538082	-1.28339125	-1.6349530
## 576	-1.62197	-1.563526	MQ	LGA	RDU	-0.83018595	-1.33352054	-1.4859800
## 577	-1.62197	-1.563526	9E	JFK	ROC	-1.05690041	-1.28339125	-1.6349530
## 578	-1.62197	-1.563526	B6	JFK	SJU	0.75410009	-1.28339125	-1.6349530
## 579	-1.62197	-1.563526	DL	LGA	MCO	-0.12560630	-1.33352054	-1.4859800
## 580	-1.62197	-1.563526	AA	LGA	DFW	0.47036763	-1.33352054	-1.4859800
## 581	-1.62197	-1.563526	DL	EWR	ATL	-0.40255090	-1.28339125	-1.5325340
## 582	-1.62197	-1.563526	9E	JFK	MSP	-0.01835814	-1.28339125	-1.6349530
## 584	-1.62197	-1.563526	B6	JFK	ORD	-0.41069633	-1.28339125	-1.6349530
## 585	-1.62197	-1.563526	DL	JFK	ATL	-0.38354490	-1.28339125	-1.6349530
## 586	-1.62197	-1.563526	B6	LGA	PBI	-0.01021271	-1.33352054	-1.3742503
## 587	-1.62197	-1.563526	DL	JFK	RSW	0.04273258	-1.39367569	-1.5883989
## 588	-1.62197	-1.563526	UA	EWR	FLL	0.03051443	-1.28339125	-1.5325340
## 589	-1.62197	-1.563526	MQ	JFK	CVG	-0.61568964	-1.39367569	-1.5883989
## 590	-1.62197	-1.563526	9E	JFK	BNA	-0.37675704	-1.39367569	-1.5883989
## 591	-1.62197	-1.563526	UA	EWR	BOS	-1.14378499	-1.28339125	-1.5325340
## 593	-1.62197	-1.563526	DL	JFK	LAS	1.63652162	-1.39367569	-1.5883989
## 594	-1.62197	-1.563526	DL	LGA	ATL	-0.38082976	-1.33352054	-1.4859800
## 596	-1.62197	-1.563526	9E	JFK	RDU	-0.83561624	-1.39367569	-1.5883989
## 597	-1.62197	-1.563526	WN	EWR	DEN	0.76360309	-1.39367569	-1.4859800
## 598	-1.62197	-1.563526	UA	EWR	IAH	0.48530091	-1.39367569	-1.4859800
## 599	-1.62197	-1.563526	DL	LGA	DTW	-0.73379837	-1.33352054	-1.3742503
## 600	-1.62197	-1.563526	UA	EWR	RSW	0.03458715	-1.39367569	-1.4859800
## 601	-1.62197	-1.563526	B6	JFK	LAX	1.94469037	-1.39367569	-1.5883989
## 602	-1.62197	-1.563526	DL	JFK	DTW	-0.72429537	-1.39367569	-1.5883989
## 603	-1.62197	-1.563526	UA	EWR	CLE	-0.86684039	-1.39367569	-1.4859800
## 604	-1.62197	-1.563526	VX	JFK	SFO	2.09538082	-1.39367569	-1.5883989
## 605	-1.62197	-1.563526	DL	JFK	DEN	0.79211209	-1.39367569	-1.5883989
## 607	-1.62197	-1.563526	AA	LGA	DFW	0.47036763	-1.33352054	-1.3742503
## 608	-1.62197	-1.563526	B6	JFK	CLT	-0.68085308	-1.39367569	-1.5883989
## 609	-1.62197	-1.563526	B6	EWR	BOS	-1.14378499	-1.39367569	-1.4859800

## 610	-1.62197	-1.563526	DL	JFK	AUS	0.64956708	-1.39367569	-1.5883989
## 611	-1.62197	-1.563526	9E	JFK	CVG	-0.61568964	-1.39367569	-1.5883989
## 612	-1.62197	-1.563526	WN	EWR	STL	-0.23149688	-1.39367569	-1.4859800
## 613	-1.62197	-1.563526	MQ	LGA	DTW	-0.73379837	-1.33352054	-1.3742503
## 614	-1.62197	-1.563526	UA	LGA	ORD	-0.42019933	-1.39367569	-1.4301151
## 615	-1.62197	-1.563526	US	LGA	CLT	-0.67678036	-1.39367569	-1.4301151
## 616	-1.62197	-1.563526	AA	EWR	DFW	0.44728891	-1.39367569	-1.4859800
## 617	-1.62197	-1.563526	AA	JFK	AUS	0.64956708	-1.39367569	-1.5883989
## 618	-1.62197	-1.563526	AA	JFK	ORD	-0.41069633	-1.39367569	-1.5883989
## 619	-1.62197	-1.563526	UA	EWR	PDX	1.88902994	-1.39367569	-1.4859800
## 621	-1.62197	-1.563526	F9	LGA	DEN	0.78396666	-1.39367569	-1.4301151
## 622	-1.62197	-1.563526	UA	EWR	DFW	0.44728891	-1.39367569	-1.4859800
## 624	-1.62197	-1.563526	UA	EWR	SAN	1.87681179	-1.39367569	-1.4859800
## 625	-1.62197	-1.563526	DL	JFK	PDX	1.91618137	-1.39367569	-1.5883989
## 626	-1.62197	-1.563526	MQ	LGA	XNA	0.14183530	-1.39367569	-1.4301151
## 628	-1.62197	-1.563526	UA	JFK	LAX	1.94469037	-1.39367569	-1.5883989
## 630	-1.62197	-1.563526	B6	JFK	BOS	-1.16143342	-1.45383084	-1.5325340
## 631	-1.62197	-1.563526	WN	LGA	MDW	-0.43105991	-1.39367569	-1.4301151
## 635	-1.62197	-1.563526	B6	JFK	RDU	-0.83561624	-1.45383084	-1.5325340
## 636	-1.62197	-1.563526	DL	LGA	MSP	-0.03057629	-1.39367569	-1.4301151
## 637	-1.62197	-1.563526	UA	EWR	CLE	-0.86684039	-1.39367569	-1.4859800
## 638	-1.62197	-1.563526	MQ	LGA	BNA	-0.37811462	-1.39367569	-1.4301151
## 639	-1.62197	-1.563526	MQ	LGA	CMH	-0.76502252	-1.39367569	-1.4301151
## 641	-1.62197	-1.563526	AA	LGA	MIA	0.07259915	-1.39367569	-1.4301151
## 643	-1.62197	-1.563526	MQ	LGA	CLE	-0.84647681	-1.39367569	-1.4301151
## 644	-1.62197	-1.563526	DL	JFK	MSP	-0.01835814	-1.45383084	-1.5325340
## 645	-1.62197	-1.563526	UA	EWR	SNA	1.88902994	-1.45383084	-1.4859800
## 646	-1.62197	-1.563526	B6	JFK	SJC	2.07230210	-1.45383084	-1.5325340
## 648	-1.62197	-1.563526	DL	LGA	PIT	-0.96051283	-1.39367569	-1.4301151
## 649	-1.62197	-1.563526	B6	JFK	BUR	1.93111466	-1.45383084	-1.5325340
## 650	-1.62197	-1.563526	AA	JFK	SEA	1.87273908	-1.45383084	-1.5325340
## 651	-1.62197	-1.563526	WN	EWR	BWI	-1.18586971	-1.45383084	-1.4859800
## 652	-1.62197	-1.563526	UA	JFK	SFO	2.09538082	-1.45383084	-1.5325340
## 654	-1.62197	-1.563526	9E	JFK	DFW	0.47308277	-1.45383084	-1.5325340
## 655	-1.62197	-1.563526	AA	LGA	STL	-0.20977574	-1.39367569	-1.4301151
## 656	-1.62197	-1.563526	VX	JFK	SFO	2.09538082	-1.45383084	-1.5325340
## 657	-1.62197	-1.563526	AA	JFK	SJU	0.75410009	-1.45383084	-1.5325340
## 658	-1.62197	-1.563526	DL	JFK	ATL	-0.38354490	-1.45383084	-1.5325340
## 659	-1.62197	-1.563526	WN	LGA	MKE	-0.41341148	-1.45383084	-1.4301151
## 660	-1.62197	-1.563526	B6	JFK	MCO	-0.13375173	-1.45383084	-1.5325340
## 661	-1.62197	-1.563526	US	LGA	CLT	-0.67678036	-1.39367569	-1.4301151
## 662	-1.62197	-1.563526	B6	JFK	BUF	-1.00667026	-1.45383084	-1.5325340
## 663	-1.62197	-1.563526	AA	EWR	DFW	0.44728891	-1.45383084	-1.4301151
## 664	-1.62197	-1.563526	EV	EWR	BNA	-0.39983576	-1.45383084	-1.4301151
## 665	-1.62197	-1.563526	AA	JFK	LAX	1.94469037	-1.45383084	-1.4859800
## 666	-1.62197	-1.563526	UA	EWR	SFO	2.06687181	-1.45383084	-1.4301151
## 667	-1.62197	-1.563526	B6	JFK	SMF	2.00713866	-1.45383084	-1.5325340
## 668	-1.62197	-1.563526	B6	JFK	SLC	1.28626815	-1.45383084	-1.4859800
## 669	-1.62197	-1.563526	9E	JFK	ORD	-0.41069633	-1.45383084	-1.4859800
## 670	-1.62197	-1.563526	UA	EWR	PHX	1.48040089	-1.45383084	-1.4301151
## 671	-1.62197	-1.563526	DL	JFK	PHX	1.50755232	-1.45383084	-1.4859800
## 672	-1.62197	-1.563526	MQ	LGA	RDU	-0.83018595	-1.45383084	-1.4301151
## 673	-1.62197	-1.563526	EV	EWR	DSM	-0.03464900	-1.45383084	-1.4301151
## 674	-1.62197	-1.563526	DL	LGA	TPA	-0.04415200	-1.45383084	-1.4301151

## 675	-1.62197	-1.563526	B6	JFK	PBI	-0.01971572	-1.45383084	-1.4859800
## 676	-1.62197	-1.563526	9E	JFK	SAT	0.73916680	-1.45383084	-1.4859800
## 677	-1.62197	-1.563526	DL	LGA	PBI	-0.01021271	-1.45383084	-1.4301151
## 678	-1.62197	-1.563526	MQ	JFK	CMH	-0.75959223	-1.45383084	-1.4859800
## 680	-1.62197	-1.563526	UA	EWR	BOS	-1.14378499	-1.45383084	-1.4301151
## 682	-1.62197	-1.563526	UA	EWR	SEA	1.84558765	-1.45383084	-1.4301151
## 683	-1.62197	-1.563526	9E	JFK	JAX	-0.29123003	-1.45383084	-1.4859800
## 684	-1.62197	-1.563526	UA	EWR	IAH	0.48530091	-1.45383084	-1.4301151
## 686	-1.62197	-1.563526	9E	LGA	TYS	-0.53695049	-1.45383084	-1.4301151
## 687	-1.62197	-1.563526	DL	LGA	ATL	-0.38082976	-1.45383084	-1.4301151
## 689	-1.62197	-1.563526	UA	LGA	ORD	-0.42019933	-1.45383084	-1.4301151
## 690	-1.62197	-1.563526	9E	JFK	PHL	-1.28768758	-1.45383084	-1.4859800
## 691	-1.62197	-1.563526	UA	EWR	MIA	0.05766586	-1.45383084	-1.4301151
## 693	-1.62197	-1.563526	EV	EWR	DCA	-1.14514256	-1.45383084	-1.4301151
## 694	-1.62197	-1.563526	WN	EWR	MDW	-0.45006591	-1.45383084	-1.4301151
## 695	-1.62197	-1.563526	UA	EWR	CLE	-0.86684039	-1.50396013	-1.4301151
## 696	-1.62197	-1.563526	AA	JFK	BOS	-1.16143342	-1.45383084	-1.4859800
## 697	-1.62197	-1.563526	MQ	LGA	CMH	-0.76502252	-1.45383084	-1.4301151
## 698	-1.62197	-1.563526	9E	JFK	PIT	-0.95372497	-1.45383084	-1.4859800
## 699	-1.62197	-1.563526	B6	JFK	FLL	0.03594472	-1.45383084	-1.4859800
## 700	-1.62197	-1.563526	DL	JFK	FLL	0.03594472	-1.45383084	-1.4859800
## 702	-1.62197	-1.563526	UA	EWR	LAX	1.91618137	-1.50396013	-1.4301151
## 703	-1.62197	-1.563526	AA	LGA	ORD	-0.42019933	-1.45383084	-1.4301151
## 704	-1.62197	-1.563526	B6	JFK	RSW	0.04273258	-1.45383084	-1.4859800
## 706	-1.62197	-1.563526	B6	JFK	LAX	1.94469037	-1.45383084	-1.4859800
## 707	-1.62197	-1.563526	MQ	LGA	DTW	-0.73379837	-1.45383084	-1.4301151
## 709	-1.62197	-1.563526	B6	LGA	MCO	-0.12560630	-1.45383084	-1.3276962
## 710	-1.62197	-1.563526	WN	LGA	MDW	-0.43105991	-1.45383084	-1.3276962
## 711	-1.62197	-1.563526	UA	EWR	PBI	-0.02650357	-1.50396013	-1.4301151
## 712	-1.62197	-1.563526	DL	JFK	LAX	1.94469037	-1.45383084	-1.4301151
## 713	-1.62197	-1.563526	MQ	LGA	CLT	-0.67678036	-1.45383084	-1.3276962
## 714	-1.62197	-1.563526	UA	EWR	IAH	0.48530091	-1.50396013	-1.4301151
## 715	-1.62197	-1.563526	UA	EWR	FLL	0.03051443	-1.50396013	-1.4301151
## 716	-1.62197	-1.563526	UA	EWR	TPA	-0.06180044	-1.50396013	-1.4301151
## 717	-1.62197	-1.563526	UA	EWR	BOS	-1.14378499	-1.50396013	-1.4301151
## 719	-1.62197	-1.563526	B6	EWR	MCO	-0.14325473	-1.50396013	-1.4301151
## 720	-1.62197	-1.563526	MQ	LGA	BNA	-0.37811462	-1.45383084	-1.3276962
## 721	-1.62197	-1.563526	B6	JFK	DEN	0.79211209	-1.45383084	-1.4301151
## 722	-1.62197	-1.563526	EV	EWR	PVD	-1.19808785	-1.50396013	-1.4301151
## 723	-1.62197	-1.563526	B6	JFK	LAS	1.63652162	-1.45383084	-1.4301151
## 725	-1.62197	-1.563526	AA	JFK	LAX	1.94469037	-1.45383084	-1.4301151
## 726	-1.62197	-1.563526	B6	JFK	SJU	0.75410009	-1.45383084	-1.4301151
## 727	-1.62197	-1.563526	UA	EWR	RSW	0.03458715	-1.50396013	-1.4301151
## 729	-1.62197	-1.563526	B6	JFK	FLL	0.03594472	-1.50396013	-1.4301151
## 730	-1.62197	-1.563526	DL	LGA	PWM	-1.05011255	-1.45383084	-1.3276962
## 737	-1.62197	-1.563526	B6	JFK	PSE	0.77989395	-1.50396013	-1.4301151
## 738	-1.62197	-1.563526	EV	EWR	MHT	-1.13156685	-1.28339125	-1.4859800
## 739	-1.62197	-1.563526	EV	EWR	ATL	-0.40255090	-1.28339125	-1.5883989
## 743	-1.62197	-1.449639	UA	EWR	IAH	0.48530091	-1.72452900	-1.3742503
## 744	-1.62197	-1.449639	EV	JFK	IAD	-1.10577299	-1.72452900	-1.4301151
## 745	-1.62197	-1.449639	EV	EWR	IAD	-1.12749413	-1.72452900	-1.3276962
## 746	-1.62197	-1.449639	B6	LGA	FLL	0.04544772	-1.72452900	-1.3742503
## 747	-1.62197	-1.449639	DL	LGA	ATL	-0.38082976	-1.72452900	-1.3742503
## 748	-1.62197	-1.449639	MQ	LGA	DTW	-0.73379837	-1.72452900	-1.3742503

## 749	-1.62197	-1.449639	B6	JFK	PBI	-0.01971572	-1.72452900	-1.4301151
## 750	-1.62197	-1.449639	B6	JFK	TPA	-0.05093986	-1.72452900	-1.4301151
## 751	-1.62197	-1.449639	DL	EWR	DTW	-0.75280437	-1.72452900	-1.3276962
## 752	-1.62197	-1.449639	FL	LGA	ATL	-0.38082976	-1.72452900	-1.3742503
## 753	-1.62197	-1.449639	AA	LGA	ORD	-0.42019933	-1.72452900	-1.3742503
## 754	-1.62197	-1.449639	WN	LGA	MDW	-0.43105991	-1.72452900	-1.3742503
## 755	-1.62197	-1.449639	WN	EWR	BWI	-1.18586971	-1.72452900	-1.3276962
## 756	-1.62197	-1.449639	AA	EWR	MIA	0.05766586	-1.72452900	-1.3276962
## 757	-1.62197	-1.449639	B6	JFK	RSW	0.04273258	-1.72452900	-1.4301151
## 758	-1.62197	-1.449639	DL	EWR	ATL	-0.40255090	-1.72452900	-1.3276962
## 759	-1.62197	-1.449639	DL	JFK	ATL	-0.38354490	-1.72452900	-1.4301151
## 760	-1.62197	-1.449639	MQ	LGA	RDU	-0.83018595	-1.72452900	-1.3742503
## 761	-1.62197	-1.449639	DL	LGA	MSP	-0.03057629	-1.72452900	-1.3742503
## 762	-1.62197	-1.449639	UA	JFK	LAX	1.94469037	-1.67439971	-1.3742503
## 763	-1.62197	-1.449639	AA	JFK	SJU	0.75410009	-1.72452900	-1.4301151
## 764	-1.62197	-1.449639	UA	EWR	PBI	-0.02650357	-1.72452900	-1.3276962
## 765	-1.62197	-1.449639	DL	LGA	MSY	0.19070788	-1.72452900	-1.3742503
## 766	-1.62197	-1.449639	US	EWR	CLT	-0.69714394	-1.72452900	-1.3276962
## 767	-1.62197	-1.449639	EV	EWR	CLT	-0.69714394	-1.72452900	-1.3276962
## 768	-1.62197	-1.449639	EV	EWR	RDU	-0.85054953	-1.72452900	-1.3276962
## 769	-1.62197	-1.449639	MQ	LGA	CLT	-0.67678036	-1.72452900	-1.3742503
## 770	-1.62197	-1.449639	EV	EWR	PIT	-0.98223397	-1.72452900	-1.3276962
## 771	-1.62197	-1.449639	US	EWR	PHX	1.48040089	-1.72452900	-1.3276962
## 772	-1.62197	-1.449639	UA	EWR	AUS	0.62648836	-1.72452900	-1.3276962
## 773	-1.62197	-1.449639	EV	EWR	IND	-0.53966563	-1.72452900	-1.3276962
## 774	-1.62197	-1.449639	UA	LGA	IAH	0.50702206	-1.72452900	-1.3742503
## 775	-1.62197	-1.449639	UA	LGA	DEN	0.78396666	-1.72452900	-1.3742503
## 776	-1.62197	-1.449639	UA	EWR	LAS	1.60801262	-1.72452900	-1.3276962
## 777	-1.62197	-1.449639	AA	JFK	MCO	-0.13375173	-1.72452900	-1.4301151
## 778	-1.62197	-1.449639	B6	JFK	LAS	1.63652162	-1.72452900	-1.4301151
## 779	-1.62197	-1.449639	EV	EWR	DTW	-0.75280437	-1.72452900	-1.3276962
## 780	-1.62197	-1.449639	UA	EWR	SNA	1.88902994	-1.72452900	-1.3276962
## 781	-1.62197	-1.449639	UA	EWR	LAX	1.91618137	-1.72452900	-1.3276962
## 782	-1.62197	-1.449639	AA	JFK	FLL	0.03594472	-1.72452900	-1.4301151
## 784	-1.62197	-1.449639	UA	EWR	RSW	0.03458715	-1.72452900	-1.3276962
## 785	-1.62197	-1.449639	DL	LGA	DTW	-0.73379837	-1.72452900	-1.3742503
## 786	-1.62197	-1.449639	UA	JFK	SFO	2.09538082	-1.72452900	-1.4301151
## 787	-1.62197	-1.449639	AS	EWR	SEA	1.84558765	-1.72452900	-1.3276962
## 788	-1.62197	-1.449639	DL	EWR	ATL	-0.40255090	-1.72452900	-1.3276962
## 789	-1.62197	-1.449639	AA	JFK	LAX	1.94469037	-1.72452900	-1.4301151
## 790	-1.62197	-1.449639	B6	JFK	SYR	-1.13156685	-1.72452900	-1.4301151
## 791	-1.62197	-1.449639	DL	JFK	SEA	1.87273908	-1.72452900	-1.4301151
## 792	-1.62197	-1.449639	UA	LGA	IAH	0.50702206	-1.72452900	-1.3742503
## 793	-1.62197	-1.449639	AA	JFK	SFO	2.09538082	-1.72452900	-1.4301151
## 794	-1.62197	-1.449639	B6	LGA	TPA	-0.04415200	-1.72452900	-1.3742503
## 795	-1.62197	-1.449639	9E	JFK	PIT	-0.95372497	-1.72452900	-1.4301151
## 796	-1.62197	-1.449639	WN	LGA	DEN	0.78396666	-1.72452900	-1.3742503
## 797	-1.62197	-1.449639	DL	JFK	FLL	0.03594472	-1.61424456	-1.4301151
## 798	-1.62197	-1.449639	MQ	JFK	RDU	-0.83561624	-1.61424456	-1.4301151
## 799	-1.62197	-1.449639	B6	JFK	SRQ	-0.00206729	-1.72452900	-1.4301151
## 800	-1.62197	-1.449639	B6	EWR	BOS	-1.14378499	-1.67439971	-1.2718314
## 801	-1.62197	-1.449639	DL	LGA	TPA	-0.04415200	-1.72452900	-1.3742503
## 802	-1.62197	-1.449639	DL	JFK	LAS	1.63652162	-1.61424456	-1.4301151
## 803	-1.62197	-1.449639	US	EWR	CLT	-0.69714394	-1.67439971	-1.2718314

## 804	-1.62197	-1.449639	US	JFK	CLT	-0.68085308	-1.61424456	-1.4301151
## 805	-1.62197	-1.449639	EV	EWR	GSO	-0.81117995	-1.67439971	-1.2718314
## 806	-1.62197	-1.449639	EV	EWR	RDU	-0.85054953	-1.67439971	-1.2718314
## 807	-1.62197	-1.449639	EV	EWR	RIC	-1.03925198	-1.67439971	-1.2718314
## 808	-1.62197	-1.449639	B6	JFK	SAN	1.90532080	-1.61424456	-1.4301151
## 809	-1.62197	-1.449639	UA	EWR	SFO	2.06687181	-1.67439971	-1.2718314
## 810	-1.62197	-1.449639	UA	EWR	BOS	-1.14378499	-1.67439971	-1.2718314
## 811	-1.62197	-1.449639	UA	EWR	SAN	1.87681179	-1.67439971	-1.2718314
## 812	-1.62197	-1.449639	EV	EWR	IND	-0.53966563	-1.67439971	-1.2718314
## 813	-1.62197	-1.449639	EV	EWR	PWM	-1.02974898	-1.67439971	-1.2718314
## 815	-1.62197	-1.449639	AA	JFK	LAX	1.94469037	-1.56411528	-1.4301151
## 816	-1.62197	-1.449639	DL	JFK	LAX	1.94469037	-1.56411528	-1.4301151
## 817	-1.62197	-1.449639	DL	LGA	MCO	-0.12560630	-1.72452900	-1.3742503
## 818	-1.62197	-1.449639	MQ	LGA	DTW	-0.73379837	-1.72452900	-1.3742503
## 819	-1.62197	-1.449639	VX	JFK	LAX	1.94469037	-1.56411528	-1.4301151
## 821	-1.62197	-1.449639	AA	JFK	MIA	0.06309615	-1.56411528	-1.4301151
## 822	-1.62197	-1.449639	UA	EWR	TPA	-0.06180044	-1.61424456	-1.2718314
## 823	-1.62197	-1.449639	UA	EWR	LAS	1.60801262	-1.61424456	-1.2718314
## 824	-1.62197	-1.449639	DL	LGA	DTW	-0.73379837	-1.72452900	-1.3742503
## 825	-1.62197	-1.449639	UA	EWR	STT	0.80297267	-1.61424456	-1.2718314
## 826	-1.62197	-1.449639	UA	LGA	IAH	0.50702206	-1.72452900	-1.3742503
## 828	-1.62197	-1.449639	B6	JFK	BOS	-1.16143342	-1.56411528	-1.4301151
## 829	-1.62197	-1.449639	UA	EWR	CLE	-0.86684039	-1.61424456	-1.2718314
## 831	-1.62197	-1.449639	EV	EWR	ATL	-0.40255090	-1.61424456	-1.2718314
## 832	-1.62197	-1.449639	B6	LGA	FLL	0.04544772	-1.72452900	-1.3742503
## 833	-1.62197	-1.449639	B6	EWR	SJU	0.76767580	-1.61424456	-1.2718314
## 834	-1.62197	-1.449639	EV	EWR	STL	-0.23149688	-1.61424456	-1.2718314
## 835	-1.62197	-1.449639	B6	JFK	BUF	-1.00667026	-1.56411528	-1.4301151
## 837	-1.62197	-1.449639	B6	JFK	PBI	-0.01971572	-1.56411528	-1.4301151
## 839	-1.62197	-1.449639	WN	LGA	MKE	-0.41341148	-1.72452900	-1.3742503
## 840	-1.62197	-1.449639	B6	EWR	FLL	0.03051443	-1.45383084	-1.3742503
## 841	-1.62197	-1.449639	9E	LGA	GRR	-0.57632007	-1.72452900	-1.3742503
## 843	-1.62197	-1.449639	MQ	LGA	BNA	-0.37811462	-1.72452900	-1.3742503
## 844	-1.62197	-1.449639	US	JFK	PHX	1.50755232	-1.56411528	-1.4301151
## 845	-1.62197	-1.449639	US	EWR	PHX	1.48040089	-1.45383084	-1.3742503
## 846	-1.62197	-1.449639	UA	EWR	SEA	1.84558765	-1.45383084	-1.3742503
## 848	-1.62197	-1.449639	MQ	EWR	ORD	-0.43920534	-1.45383084	-1.3742503
## 849	-1.62197	-1.449639	US	JFK	CLT	-0.68085308	-1.45383084	-1.3742503
## 850	-1.62197	-1.449639	UA	LGA	IAH	0.50702206	-1.67439971	-1.3742503
## 852	-1.62197	-1.449639	DL	LGA	SRQ	0.00607814	-1.67439971	-1.3742503
## 853	-1.62197	-1.449639	US	EWR	CLT	-0.69714394	-1.45383084	-1.3742503
## 855	-1.62197	-1.449639	FL	LGA	ATL	-0.38082976	-1.67439971	-1.3742503
## 856	-1.62197	-1.449639	EV	EWR	DTW	-0.75280437	-1.45383084	-1.3742503
## 857	-1.62197	-1.449639	EV	EWR	CHS	-0.56274435	-1.45383084	-1.3742503
## 858	-1.62197	-1.449639	AA	JFK	SFO	2.09538082	-1.45383084	-1.3742503
## 859	-1.62197	-1.449639	VX	JFK	SFO	2.09538082	-1.45383084	-1.3742503
## 860	-1.62197	-1.449639	EV	EWR	MKE	-0.43105991	-1.45383084	-1.3742503
## 861	-1.62197	-1.449639	DL	LGA	MEM	-0.10795787	-1.67439971	-1.3742503
## 862	-1.62197	-1.449639	B6	LGA	FLL	0.04544772	-1.67439971	-1.3742503
## 863	-1.62197	-1.449639	EV	EWR	RDU	-0.85054953	-1.45383084	-1.3742503
## 864	-1.62197	-1.449639	UA	EWR	RSW	0.03458715	-1.45383084	-1.3742503
## 865	-1.62197	-1.449639	UA	EWR	LAS	1.60801262	-1.45383084	-1.3742503
## 866	-1.62197	-1.449639	MQ	JFK	DCA	-1.12613656	-1.50396013	-1.5325340
## 867	-1.62197	-1.449639	B6	JFK	SFO	2.09538082	-1.50396013	-1.5325340

## 868	-1.62197	-1.449639	MQ	LGA	CMH	-0.76502252	-1.56411528	-1.4301151
## 869	-1.62197	-1.449639	AA	LGA	DFW	0.47036763	-1.67439971	-1.3742503
## 870	-1.62197	-1.449639	EV	EWR	MCI	0.06716887	-1.45383084	-1.4301151
## 871	-1.62197	-1.449639	UA	LGA	DEN	0.78396666	-1.56411528	-1.4301151
## 872	-1.62197	-1.449639	DL	JFK	SJU	0.75410009	-1.50396013	-1.5325340
## 873	-1.62197	-1.449639	VX	JFK	LAX	1.94469037	-1.50396013	-1.5325340
## 874	-1.62197	-1.449639	DL	JFK	MCO	-0.13375173	-1.50396013	-1.5325340
## 875	-1.62197	-1.449639	UA	EWR	MCO	-0.14325473	-1.45383084	-1.4301151
## 876	-1.62197	-1.449639	UA	EWR	DEN	0.76360309	-1.45383084	-1.4301151
## 877	-1.62197	-1.449639	B6	JFK	RSW	0.04273258	-1.50396013	-1.5325340
## 878	-1.62197	-1.449639	MQ	LGA	CLE	-0.84647681	-1.56411528	-1.4301151
## 879	-1.62197	-1.449639	DL	LGA	PBI	-0.01021271	-1.56411528	-1.4301151
## 880	-1.62197	-1.449639	B6	JFK	BTW	-1.05418527	-1.50396013	-1.5325340
## 881	-1.62197	-1.449639	DL	LGA	TPA	-0.04415200	-1.56411528	-1.4301151
## 882	-1.62197	-1.449639	MQ	LGA	MSP	-0.03057629	-1.56411528	-1.4301151
## 883	-1.62197	-1.449639	DL	EWR	ATL	-0.40255090	-1.45383084	-1.4301151
## 884	-1.62197	-1.449639	UA	EWR	TPA	-0.06180044	-1.45383084	-1.4301151
## 885	-1.62197	-1.449639	FL	LGA	CAK	-0.87634339	-1.56411528	-1.4301151
## 886	-1.62197	-1.449639	EV	EWR	JAX	-0.30209061	-1.45383084	-1.4301151
## 887	-1.62197	-1.449639	B6	JFK	HOU	0.52331292	-1.50396013	-1.5325340
## 888	-1.62197	-1.449639	WN	EWR	STL	-0.23149688	-1.45383084	-1.4301151
## 891	-1.62197	-1.449639	AA	LGA	DFW	0.47036763	-1.45383084	-1.4859800
## 892	-1.62197	-1.449639	EV	EWR	PWM	-1.02974898	-1.33352054	-1.4859800
## 893	-1.62197	-1.449639	UA	EWR	PHX	1.48040089	-1.33352054	-1.4859800
## 894	-1.62197	-1.449639	WN	EWR	MDW	-0.45006591	-1.33352054	-1.4859800
## 895	-1.62197	-1.449639	B6	JFK	BUF	-1.00667026	-1.33352054	-1.4859800
## 896	-1.62197	-1.449639	EV	EWR	CLT	-0.69714394	-1.33352054	-1.4859800
## 897	-1.62197	-1.449639	DL	JFK	SLC	1.28626815	-1.33352054	-1.4859800
## 898	-1.62197	-1.449639	AA	EWR	DFW	0.44728891	-1.33352054	-1.4859800
## 899	-1.62197	-1.449639	WN	LGA	MKE	-0.41341148	-1.45383084	-1.4859800
## 900	-1.62197	-1.449639	AA	JFK	BOS	-1.16143342	-1.33352054	-1.4859800
## 901	-1.62197	-1.449639	DL	LGA	MCO	-0.12560630	-1.45383084	-1.4859800
## 902	-1.62197	-1.449639	UA	EWR	DFW	0.44728891	-1.33352054	-1.4859800
## 903	-1.62197	-1.449639	B6	JFK	BOS	-1.16143342	-1.33352054	-1.4859800
## 904	-1.62197	-1.449639	B6	JFK	ROC	-1.05690041	-1.33352054	-1.4859800
## 905	-1.62197	-1.449639	UA	EWR	MCO	-0.14325473	-1.33352054	-1.4859800
## 906	-1.62197	-1.449639	UA	EWR	ORD	-0.43920534	-1.28339125	-1.4859800
## 907	-1.62197	-1.449639	EV	EWR	DCA	-1.14514256	-1.28339125	-1.4859800
## 910	-1.62197	-1.449639	DL	LGA	ATL	-0.38082976	-1.39367569	-1.5325340
## 911	-1.62197	-1.449639	B6	JFK	LGB	1.93111466	-1.33352054	-1.4859800
## 913	-1.62197	-1.449639	EV	EWR	STL	-0.23149688	-1.28339125	-1.4859800
## 914	-1.62197	-1.449639	VX	JFK	LAX	1.94469037	-1.33352054	-1.4859800
## 915	-1.62197	-1.449639	B6	JFK	BUR	1.93111466	-1.33352054	-1.4859800
## 916	-1.62197	-1.449639	AA	JFK	LAX	1.94469037	-1.33352054	-1.4859800
## 917	-1.62197	-1.449639	B6	LGA	SRQ	0.00607814	-1.39367569	-1.5325340
## 918	-1.62197	-1.449639	US	EWR	PHX	1.48040089	-1.28339125	-1.4859800
## 919	-1.62197	-1.449639	EV	JFK	IAD	-1.10577299	-1.33352054	-1.4859800
## 920	-1.62197	-1.449639	AA	LGA	MIA	0.07259915	-1.39367569	-1.5325340
## 921	-1.62197	-1.449639	B6	JFK	MCO	-0.13375173	-1.33352054	-1.4859800
## 923	-1.62197	-1.449639	DL	LGA	ATL	-0.38082976	-1.33352054	-1.5325340
## 924	-1.62197	-1.449639	B6	JFK	SEA	1.87273908	-1.33352054	-1.4859800
## 926	-1.62197	-1.449639	UA	EWR	FLL	0.03051443	-1.28339125	-1.4859800
## 927	-1.62197	-1.449639	DL	EWR	ATL	-0.40255090	-1.28339125	-1.4859800
## 928	-1.62197	-1.449639	UA	EWR	ORD	-0.43920534	-1.28339125	-1.4859800

## 929	-1.62197	-1.449639	MQ	EWR	ORD	-0.43920534	-1.28339125	-1.4859800
## 930	-1.62197	-1.449639	UA	EWR	PBI	-0.02650357	-1.28339125	-1.4859800
## 931	-1.62197	-1.449639	EV	EWR	CHS	-0.56274435	-1.28339125	-1.4859800
## 932	-1.62197	-1.449639	B6	JFK	BOS	-1.16143342	-1.33352054	-1.5325340
## 934	-1.62197	-1.449639	AA	EWR	DFW	0.44728891	-1.28339125	-1.4859800
## 935	-1.62197	-1.449639	DL	LGA	MCI	0.08753244	-1.33352054	-1.5325340
## 936	-1.62197	-1.449639	DL	LGA	MSP	-0.03057629	-1.33352054	-1.5325340
## 937	-1.62197	-1.449639	US	LGA	CLT	-0.67678036	-1.33352054	-1.5325340
## 939	-1.62197	-1.449639	UA	EWR	MIA	0.05766586	-1.28339125	-1.4859800
## 940	-1.62197	-1.449639	UA	EWR	DEN	0.76360309	-1.28339125	-1.4859800
## 941	-1.62197	-1.449639	9E	JFK	BOS	-1.16143342	-1.33352054	-1.5325340
## 942	-1.62197	-1.449639	MQ	JFK	RDU	-0.83561624	-1.33352054	-1.5325340
## 943	-1.62197	-1.449639	UA	EWR	BOS	-1.14378499	-1.28339125	-1.4859800
## 944	-1.62197	-1.449639	EV	EWR	DCA	-1.14514256	-1.28339125	-1.4859800
## 945	-1.62197	-1.449639	US	LGA	DCA	-1.12477899	-1.33352054	-1.5325340
## 946	-1.62197	-1.449639	DL	JFK	SFO	2.09538082	-1.33352054	-1.5325340
## 947	-1.62197	-1.449639	AA	LGA	ORD	-0.42019933	-1.33352054	-1.5325340
## 948	-1.62197	-1.449639	DL	JFK	LAX	1.94469037	-1.39367569	-1.4859800
## 949	-1.62197	-1.449639	B6	LGA	FLL	0.04544772	-1.33352054	-1.5325340
## 950	-1.62197	-1.449639	UA	LGA	IAH	0.50702206	-1.33352054	-1.5325340
## 951	-1.62197	-1.449639	EV	EWR	PWM	-1.02974898	-1.28339125	-1.4859800
## 952	-1.62197	-1.449639	B6	JFK	BUF	-1.00667026	-1.33352054	-1.5325340
## 953	-1.62197	-1.449639	US	EWR	CLT	-0.69714394	-1.33352054	-1.4301151
## 954	-1.62197	-1.449639	EV	EWR	IAD	-1.12749413	-1.33352054	-1.4301151
## 955	-1.62197	-1.449639	DL	LGA	ATL	-0.38082976	-1.33352054	-1.5325340
## 956	-1.62197	-1.449639	9E	JFK	BUF	-1.00667026	-1.33352054	-1.5325340
## 957	-1.62197	-1.449639	UA	LGA	DEN	0.78396666	-1.33352054	-1.5325340
## 958	-1.62197	-1.449639	UA	EWR	AUS	0.62648836	-1.28339125	-1.4859800
## 959	-1.62197	-1.449639	AA	JFK	MCO	-0.13375173	-1.33352054	-1.5325340
## 960	-1.62197	-1.449639	MQ	LGA	CLT	-0.67678036	-1.33352054	-1.5325340
## 961	-1.62197	-1.449639	EV	EWR	BNA	-0.39983576	-1.33352054	-1.4301151
## 962	-1.62197	-1.449639	B6	JFK	TPA	-0.05093986	-1.33352054	-1.5325340
## 963	-1.62197	-1.449639	WN	LGA	MKE	-0.41341148	-1.33352054	-1.5325340
## 964	-1.62197	-1.449639	UA	EWR	MCO	-0.14325473	-1.33352054	-1.4301151
## 965	-1.62197	-1.449639	EV	EWR	MKE	-0.43105991	-1.33352054	-1.4301151
## 966	-1.62197	-1.449639	UA	EWR	LAX	1.91618137	-1.33352054	-1.4301151
## 967	-1.62197	-1.449639	EV	EWR	GRR	-0.59396850	-1.33352054	-1.4301151
## 968	-1.62197	-1.449639	AA	JFK	FLL	0.03594472	-1.39367569	-1.4859800
## 969	-1.62197	-1.449639	WN	EWR	MDW	-0.45006591	-1.33352054	-1.4301151
## 971	-1.62197	-1.449639	UA	EWR	IAH	0.48530091	-1.33352054	-1.4301151
## 972	-1.62197	-1.449639	EV	EWR	ORF	-1.02974898	-1.33352054	-1.4301151
## 973	-1.62197	-1.449639	9E	JFK	ROC	-1.05690041	-1.39367569	-1.4859800
## 974	-1.62197	-1.449639	AA	JFK	LAX	1.94469037	-1.39367569	-1.4859800
## 975	-1.62197	-1.449639	B6	JFK	ORD	-0.41069633	-1.39367569	-1.4859800
## 976	-1.62197	-1.449639	B6	JFK	SJU	0.75410009	-1.39367569	-1.4859800
## 977	-1.62197	-1.449639	9E	JFK	IND	-0.51251420	-1.39367569	-1.4859800
## 978	-1.62197	-1.449639	UA	EWR	BOS	-1.14378499	-1.33352054	-1.4301151
## 979	-1.62197	-1.449639	DL	LGA	ATL	-0.38082976	-1.33352054	-1.4859800
## 980	-1.62197	-1.449639	UA	EWR	LAS	1.60801262	-1.39367569	-1.4301151
## 981	-1.62197	-1.449639	DL	JFK	ATL	-0.38354490	-1.39367569	-1.4859800
## 984	-1.62197	-1.449639	EV	EWR	GSO	-0.81117995	-1.39367569	-1.4301151
## 985	-1.62197	-1.449639	B6	JFK	LAX	1.94469037	-1.45383084	-1.3742503
## 987	-1.62197	-1.449639	DL	LGA	DTW	-0.73379837	-1.33352054	-1.4859800
## 988	-1.62197	-1.449639	UA	EWR	SAT	0.71473051	-1.39367569	-1.4301151

## 989	-1.62197	-1.449639	9E	JFK	RDU	-0.83561624	-1.45383084	-1.3742503
## 990	-1.62197	-1.449639	EV	EWR	DAY	-0.69171365	-1.39367569	-1.4301151
## 991	-1.62197	-1.449639	EV	EWR	DTW	-0.75280437	-1.39367569	-1.4301151
## 992	-1.62197	-1.449639	9E	EWR	CVG	-0.64284107	-1.39367569	-1.4301151
## 993	-1.62197	-1.449639	AA	LGA	DFW	0.47036763	-1.33352054	-1.4859800
## 994	-1.62197	-1.449639	MQ	LGA	BNA	-0.37811462	-1.33352054	-1.4859800
## 995	-1.62197	-1.449639	DL	JFK	AUS	0.64956708	-1.45383084	-1.3742503
## 996	-1.62197	-1.449639	UA	EWR	LAS	1.60801262	-1.39367569	-1.4301151
## 997	-1.62197	-1.449639	EV	EWR	SAV	-0.45413862	-1.39367569	-1.4301151
## 998	-1.62197	-1.449639	DL	EWR	ATL	-0.40255090	-1.50396013	-1.3742503
## 1000	-1.62197	-1.449639	MQ	LGA	DTW	-0.73379837	-1.33352054	-1.4859800
## 1001	-1.62197	-1.449639	DL	JFK	LAX	1.94469037	-1.45383084	-1.3742503
## 1002	-1.62197	-1.449639	UA	LGA	ORD	-0.42019933	-1.39367569	-1.4301151
## 1003	-1.62197	-1.449639	AA	JFK	LAS	1.63652162	-1.45383084	-1.3742503
## 1004	-1.62197	-1.449639	DL	LGA	ATL	-0.38082976	-1.39367569	-1.4301151
## 1005	-1.62197	-1.449639	AA	EWR	DFW	0.44728891	-1.50396013	-1.3742503
## 1006	-1.62197	-1.449639	US	LGA	CLT	-0.67678036	-1.39367569	-1.4301151
## 1007	-1.62197	-1.449639	MQ	JFK	DCA	-1.12613656	-1.45383084	-1.3742503
## 1008	-1.62197	-1.449639	EV	EWR	BWI	-1.18586971	-1.50396013	-1.3742503
## 1009	-1.62197	-1.449639	UA	EWR	BOS	-1.14378499	-1.39367569	-1.4301151
## 1010	-1.62197	-1.449639	UA	LGA	DEN	0.78396666	-1.39367569	-1.4301151
## 1013	-1.62197	-1.449639	AA	EWR	MIA	0.05766586	-1.50396013	-1.3742503
## 1014	-1.62197	-1.449639	VX	JFK	LAX	1.94469037	-1.45383084	-1.3742503
## 1016	-1.62197	-1.449639	MQ	LGA	RDU	-0.83018595	-1.39367569	-1.4301151
## 1017	-1.62197	-1.449639	UA	EWR	IAH	0.48530091	-1.50396013	-1.3742503
## 1018	-1.62197	-1.449639	UA	EWR	TPA	-0.06180044	-1.50396013	-1.3742503
## 1020	-1.62197	-1.449639	B6	JFK	PHX	1.50755232	-1.45383084	-1.3742503
## 1021	-1.62197	-1.449639	AA	JFK	ORD	-0.41069633	-1.45383084	-1.3742503
## 1022	-1.62197	-1.449639	EV	EWR	CVG	-0.64284107	-1.50396013	-1.3742503
## 1024	-1.62197	-1.449639	UA	EWR	FLL	0.03051443	-1.50396013	-1.3742503
## 1026	-1.62197	-1.449639	B6	JFK	FLL	0.03594472	-1.45383084	-1.3742503
## 1028	-1.62197	-1.449639	UA	EWR	CLE	-0.86684039	-1.45383084	-1.3742503
## 1029	-1.62197	-1.449639	WN	LGA	BWI	-1.16414856	-1.39367569	-1.4301151
## 1030	-1.62197	-1.449639	9E	JFK	ORF	-1.02160355	-1.45383084	-1.3742503
## 1031	-1.62197	-1.449639	UA	EWR	LAS	1.60801262	-1.45383084	-1.3742503
## 1032	-1.62197	-1.449639	EV	EWR	MSP	-0.04686715	-1.45383084	-1.3742503
## 1033	-1.62197	-1.449639	AA	EWR	LAX	1.91618137	-1.45383084	-1.3742503
## 1034	-1.62197	-1.449639	EV	EWR	DTW	-0.75280437	-1.45383084	-1.3742503
## 1035	-1.62197	-1.449639	US	EWR	CLT	-0.69714394	-1.45383084	-1.3742503
## 1036	-1.62197	-1.449639	B6	JFK	BUR	1.93111466	-1.45383084	-1.3742503
## 1037	-1.62197	-1.449639	UA	EWR	LAX	1.91618137	-1.45383084	-1.3742503
## 1038	-1.62197	-1.449639	AA	JFK	SEA	1.87273908	-1.45383084	-1.3742503
## 1040	-1.62197	-1.449639	9E	JFK	DTW	-0.72429537	-1.45383084	-1.3742503
## 1042	-1.62197	-1.449639	AA	LGA	STL	-0.20977574	-1.39367569	-1.4301151
## 1044	-1.62197	-1.449639	DL	JFK	MIA	0.06309615	-1.45383084	-1.3742503
## 1046	-1.62197	-1.449639	DL	JFK	TPA	-0.05093986	-1.45383084	-1.3742503
## 1047	-1.62197	-1.449639	US	LGA	CLT	-0.67678036	-1.39367569	-1.4301151
## 1048	-1.62197	-1.449639	WN	LGA	MKE	-0.41341148	-1.33352054	-1.4301151
## 1049	-1.62197	-1.449639	DL	JFK	LAX	1.94469037	-1.39367569	-1.3742503
## 1050	-1.62197	-1.449639	EV	EWR	RIC	-1.03925198	-1.45383084	-1.3742503
## 1051	-1.62197	-1.449639	MQ	LGA	RDU	-0.83018595	-1.33352054	-1.4301151
## 1053	-1.62197	-1.449639	DL	JFK	LAS	1.63652162	-1.39367569	-1.3742503
## 1054	-1.62197	-1.449639	DL	JFK	FLL	0.03594472	-1.39367569	-1.3742503
## 1055	-1.62197	-1.449639	UA	EWR	ORD	-0.43920534	-1.45383084	-1.3742503

## 1056 -1.62197 -1.449639	DL	JFK	PHX	1.50755232	-1.39367569	-1.3742503
## 1057 -1.62197 -1.449639	DL	JFK	SLC	1.28626815	-1.39367569	-1.3742503
## 1058 -1.62197 -1.449639	DL	LGA	TPA	-0.04415200	-1.33352054	-1.4301151
## 1059 -1.62197 -1.449639	EV	EWR	CHS	-0.56274435	-1.45383084	-1.3742503
## 1061 -1.62197 -1.449639	9E	JFK	IAD	-1.10577299	-1.39367569	-1.3742503
## 1063 -1.62197 -1.449639	9E	JFK	BWI	-1.16550614	-1.39367569	-1.3742503
## 1065 -1.62197 -1.449639	UA	EWR	SJU	0.76767580	-1.45383084	-1.3742503
## 1068 -1.62197 -1.449639	UA	EWR	TPA	-0.06180044	-1.45383084	-1.3742503
## 1069 -1.62197 -1.449639	UA	EWR	CLE	-0.86684039	-1.45383084	-1.3742503
## 1071 -1.62197 -1.449639	UA	EWR	RSW	0.03458715	-1.45383084	-1.3742503
## 1076 -1.62197 -1.449639	AA	JFK	BOS	-1.16143342	-1.39367569	-1.3276962
## 1077 -1.62197 -1.449639	VX	JFK	LAX	1.94469037	-1.39367569	-1.3276962
## 1078 -1.62197 -1.449639	MQ	LGA	ATL	-0.38082976	-1.33352054	-1.4301151
## 1079 -1.62197 -1.449639	9E	JFK	PHL	-1.28768758	-1.39367569	-1.3276962
## 1080 -1.62197 -1.449639	UA	EWR	PBI	-0.02650357	-1.45383084	-1.3742503
## 1085 -1.62197 -1.449639	B6	JFK	BOS	-1.16143342	-1.39367569	-1.3276962
## 1086 -1.62197 -1.449639	UA	EWR	IAH	0.48530091	-1.45383084	-1.3742503
## 1091 -1.62197 -1.449639	EV	EWR	MHT	-1.13156685	-1.45383084	-1.3742503
## 1092 -1.62197 -1.449639	EV	EWR	RIC	-1.03925198	-1.45383084	-1.3276962
## 1093 -1.62197 -1.449639	MQ	LGA	CLT	-0.67678036	-1.33352054	-1.3742503
## 1096 -1.62197 -1.449639	B6	EWR	MCO	-0.14325473	-1.45383084	-1.3276962
## 1097 -1.62197 -1.449639	B6	JFK	LAS	1.63652162	-1.39367569	-1.2718314
## 1098 -1.62197 -1.449639	UA	EWR	BOS	-1.14378499	-1.45383084	-1.3276962
## 1099 -1.62197 -1.449639	EV	EWR	PVD	-1.19808785	-1.45383084	-1.3276962
## 1100 -1.62197 -1.449639	AA	JFK	LAX	1.94469037	-1.39367569	-1.2718314
## 1101 -1.62197 -1.449639	B6	EWR	FLL	0.03051443	-1.45383084	-1.3276962
## 1103 -1.62197 -1.449639	EV	EWR	BTW	-1.05418527	-1.45383084	-1.3276962
## 1104 -1.62197 -1.449639	EV	EWR	PWM	-1.02974898	-1.45383084	-1.3276962
## 1106 -1.62197 -1.449639	B6	JFK	PWM	-1.04468226	-1.39367569	-1.2718314
## 1107 -1.62197 -1.449639	B6	JFK	ROC	-1.05690041	-1.39367569	-1.2718314
## 1108 -1.62197 -1.449639	B6	JFK	BUF	-1.00667026	-1.39367569	-1.2718314
## 1109 -1.62197 -1.449639	EV	EWR	DCA	-1.14514256	-1.72452900	-1.3276962
## 1110 -1.62197 -1.449639	AA	LGA	DFW	0.47036763	-1.72452900	-1.3742503
## 1111 -1.62197 -1.449639	AA	LGA	DFW	0.47036763	-1.72452900	-1.3742503
## 1112 -1.62197 -1.449639	MQ	LGA	MSP	-0.03057629	-1.72452900	-1.3742503
## 1113 -1.62197 -1.449639	UA	EWR	MIA	0.05766586	-1.67439971	-1.2718314
## 1114 -1.62197 -1.335752	B6	JFK	PBI	-0.01971572	-1.33352054	-1.0669935
## 1115 -1.62197 -1.335752	EV	JFK	IAD	-1.10577299	-1.33352054	-1.0669935
## 1116 -1.62197 -1.335752	EV	EWR	MKE	-0.43105991	-1.33352054	-1.0669935
## 1117 -1.62197 -1.335752	B6	JFK	MCO	-0.13375173	-1.33352054	-1.0669935
## 1118 -1.62197 -1.335752	UA	JFK	SFO	2.09538082	-1.33352054	-1.0669935
## 1119 -1.62197 -1.335752	MQ	LGA	DTW	-0.73379837	-1.22323611	-1.1228584
## 1120 -1.62197 -1.335752	FL	LGA	ATL	-0.38082976	-1.22323611	-1.1228584
## 1121 -1.62197 -1.335752	WN	LGA	MDW	-0.43105991	-1.22323611	-1.1228584
## 1122 -1.62197 -1.335752	EV	LGA	IAD	-1.10441541	-1.22323611	-1.1228584
## 1123 -1.62197 -1.335752	UA	EWR	CLE	-0.86684039	-1.33352054	-1.0669935
## 1124 -1.62197 -1.335752	AA	EWR	MIA	0.05766586	-1.33352054	-1.0669935
## 1125 -1.62197 -1.335752	B6	JFK	RSW	0.04273258	-1.33352054	-1.0669935
## 1126 -1.62197 -1.335752	AA	LGA	ORD	-0.42019933	-1.22323611	-1.1228584
## 1127 -1.62197 -1.335752	DL	LGA	MSP	-0.03057629	-1.22323611	-1.1228584
## 1128 -1.62197 -1.335752	UA	JFK	LAX	1.94469037	-1.33352054	-1.0669935
## 1129 -1.62197 -1.335752	EV	EWR	IAD	-1.12749413	-1.33352054	-1.0669935
## 1130 -1.62197 -1.335752	MQ	LGA	RDU	-0.83018595	-1.22323611	-1.1228584
## 1131 -1.62197 -1.335752	B6	JFK	SJU	0.75410009	-1.33352054	-1.0669935

## 1132 -1.62197 -1.335752	US	JFK	CLT	-0.68085308	-1.33352054	-1.0669935
## 1133 -1.62197 -1.335752	9E	JFK	ATL	-0.38354490	-1.33352054	-1.0669935
## 1134 -1.62197 -1.335752	US	EWR	CLT	-0.69714394	-1.33352054	-1.0669935
## 1135 -1.62197 -1.335752	EV	EWR	CVG	-0.64284107	-1.33352054	-1.0669935
## 1136 -1.62197 -1.335752	US	EWR	PHX	1.48040089	-1.33352054	-1.0669935
## 1137 -1.62197 -1.335752	MQ	LGA	MSP	-0.03057629	-1.22323611	-1.1228584
## 1138 -1.62197 -1.335752	EV	EWR	CLT	-0.69714394	-1.33352054	-1.0669935
## 1139 -1.62197 -1.335752	UA	EWR	PHX	1.48040089	-1.33352054	-1.0669935
## 1140 -1.62197 -1.335752	UA	EWR	AUS	0.62648836	-1.33352054	-1.0669935
## 1141 -1.62197 -1.335752	AA	LGA	ORD	-0.42019933	-1.22323611	-1.1228584
## 1142 -1.62197 -1.335752	EV	EWR	SDF	-0.54373835	-1.33352054	-1.0669935
## 1143 -1.62197 -1.335752	DL	LGA	MSY	0.19070788	-1.22323611	-1.1228584
## 1144 -1.62197 -1.335752	B6	JFK	BUF	-1.00667026	-1.33352054	-1.0669935
## 1145 -1.62197 -1.335752	EV	EWR	DCA	-1.14514256	-1.33352054	-1.0669935
## 1146 -1.62197 -1.335752	DL	JFK	SLC	1.28626815	-1.33352054	-1.0669935
## 1147 -1.62197 -1.335752	DL	LGA	FLL	0.04544772	-1.22323611	-1.1694124
## 1148 -1.62197 -1.335752	B6	JFK	MSY	0.18935031	-1.33352054	-1.0669935
## 1149 -1.62197 -1.335752	DL	LGA	ATL	-0.38082976	-1.22323611	-1.1228584
## 1150 -1.62197 -1.335752	B6	JFK	LAS	1.63652162	-1.33352054	-1.0669935
## 1151 -1.62197 -1.335752	DL	LGA	MIA	0.07259915	-1.22323611	-1.1694124
## 1152 -1.62197 -1.335752	VX	JFK	LAX	1.94469037	-1.28339125	-1.0204395
## 1153 -1.62197 -1.335752	WN	EWR	HOU	0.50023420	-1.28339125	-1.0204395
## 1154 -1.62197 -1.335752	MQ	LGA	XNA	0.14183530	-1.22323611	-1.1694124
## 1155 -1.62197 -1.335752	UA	EWR	LAS	1.60801262	-1.33352054	-1.0669935
## 1156 -1.62197 -1.335752	UA	EWR	ORD	-0.43920534	-1.28339125	-1.0204395
## 1157 -1.62197 -1.335752	AA	LGA	MIA	0.07259915	-1.22323611	-1.1694124
## 1158 -1.62197 -1.335752	UA	EWR	SNA	1.88902994	-1.28339125	-1.0204395
## 1159 -1.62197 -1.335752	UA	JFK	SFO	2.09538082	-1.28339125	-1.0204395
## 1160 -1.62197 -1.335752	AA	JFK	MIA	0.06309615	-1.28339125	-1.0204395
## 1161 -1.62197 -1.335752	AA	JFK	FLL	0.03594472	-1.28339125	-1.0204395
## 1162 -1.62197 -1.335752	DL	LGA	DTW	-0.73379837	-1.22323611	-1.1694124
## 1163 -1.62197 -1.335752	DL	JFK	LAX	1.94469037	-1.28339125	-1.0204395
## 1164 -1.62197 -1.335752	FL	LGA	MKE	-0.41341148	-1.22323611	-1.1694124
## 1165 -1.62197 -1.335752	DL	JFK	SFO	2.09538082	-1.28339125	-1.0204395
## 1166 -1.62197 -1.335752	B6	JFK	LAX	1.94469037	-1.28339125	-1.0204395
## 1167 -1.62197 -1.335752	VX	JFK	SFO	2.09538082	-1.28339125	-1.0204395
## 1168 -1.62197 -1.335752	DL	JFK	SEA	1.87273908	-1.28339125	-1.0204395
## 1169 -1.62197 -1.335752	B6	LGA	RSW	0.05087801	-1.22323611	-1.1694124
## 1170 -1.62197 -1.335752	B6	JFK	SRQ	-0.00206729	-1.28339125	-1.0204395
## 1171 -1.62197 -1.335752	9E	EWR	CVG	-0.64284107	-1.28339125	-1.0204395
## 1172 -1.62197 -1.335752	UA	EWR	SJU	0.76767580	-1.28339125	-1.0204395
## 1173 -1.62197 -1.335752	EV	EWR	PWM	-1.02974898	-1.28339125	-1.0204395
## 1174 -1.62197 -1.335752	AA	LGA	MIA	0.07259915	-1.22323611	-1.1694124
## 1175 -1.62197 -1.335752	WN	LGA	DEN	0.78396666	-1.22323611	-1.1694124
## 1176 -1.62197 -1.335752	DL	JFK	MIA	0.06309615	-1.22323611	-1.0669935
## 1177 -1.62197 -1.335752	UA	EWR	DFW	0.44728891	-1.28339125	-1.0204395
## 1178 -1.62197 -1.335752	EV	EWR	MSP	-0.04686715	-1.22323611	-1.0204395
## 1179 -1.62197 -1.335752	UA	JFK	SFO	2.09538082	-1.28339125	-1.0204395
## 1180 -1.62197 -1.335752	EV	EWR	MHT	-1.13156685	-1.28339125	-1.0204395
## 1181 -1.62197 -1.335752	MQ	JFK	RDU	-0.83561624	-1.22323611	-1.0669935
## 1182 -1.62197 -1.335752	B6	JFK	FLL	0.03594472	-1.22323611	-1.0669935
## 1183 -1.62197 -1.335752	DL	JFK	LAS	1.63652162	-1.22323611	-1.0669935
## 1184 -1.62197 -1.335752	DL	JFK	MCO	-0.13375173	-1.22323611	-1.0669935
## 1185 -1.62197 -1.335752	MQ	LGA	CMH	-0.76502252	-1.22323611	-1.1228584

## 1187 -1.62197 -1.335752	FL	LGA	ATL	-0.38082976	-1.22323611	-1.1228584
## 1188 -1.62197 -1.335752	EV	EWR	OMA	0.12418687	-1.22323611	-1.0204395
## 1189 -1.62197 -1.335752	AA	JFK	STT	0.78803938	-1.22323611	-1.0669935
## 1190 -1.62197 -1.335752	EV	EWR	DAY	-0.69171365	-1.22323611	-1.0204395
## 1191 -1.62197 -1.335752	DL	LGA	DEN	0.78396666	-1.22323611	-1.1228584
## 1192 -1.62197 -1.335752	EV	EWR	MYR	-0.66863493	-1.22323611	-1.0204395
## 1193 -1.62197 -1.335752	DL	LGA	PBI	-0.01021271	-1.22323611	-1.1228584
## 1194 -1.62197 -1.335752	MQ	JFK	DCA	-1.12613656	-1.22323611	-1.0669935
## 1195 -1.62197 -1.335752	EV	EWR	GRR	-0.59396850	-1.22323611	-1.0204395
## 1196 -1.62197 -1.335752	US	JFK	CLT	-0.68085308	-1.22323611	-1.0669935
## 1197 -1.62197 -1.335752	9E	JFK	BWI	-1.16550614	-1.22323611	-1.0669935
## 1198 -1.62197 -1.335752	DL	JFK	SJU	0.75410009	-1.22323611	-1.0669935
## 1199 -1.62197 -1.335752	UA	EWR	FLL	0.03051443	-1.22323611	-1.0204395
## 1200 -1.62197 -1.335752	MQ	LGA	RDU	-0.83018595	-1.22323611	-1.1228584
## 1201 -1.62197 -1.335752	DL	JFK	ATL	-0.38354490	-1.22323611	-1.0669935
## 1202 -1.62197 -1.335752	UA	JFK	LAX	1.94469037	-1.22323611	-1.0669935
## 1203 -1.62197 -1.335752	EV	EWR	JAX	-0.30209061	-1.22323611	-1.0204395
## 1204 -1.62197 -1.335752	UA	EWR	BOS	-1.14378499	-1.22323611	-1.0204395
## 1205 -1.62197 -1.335752	9E	JFK	BOS	-1.16143342	-1.22323611	-1.0669935
## 1206 -1.62197 -1.335752	AA	LGA	ORD	-0.42019933	-1.22323611	-1.1228584
## 1207 -1.62197 -1.335752	B6	EWR	RSW	0.03458715	-1.22323611	-1.0204395
## 1208 -1.62197 -1.335752	UA	EWR	SAN	1.87681179	-1.22323611	-1.0204395
## 1209 -1.62197 -1.335752	B6	JFK	ORD	-0.41069633	-1.22323611	-1.0669935
## 1210 -1.62197 -1.335752	UA	EWR	ORD	-0.43920534	-1.17310682	-1.0669935
## 1211 -1.62197 -1.335752	EV	EWR	MCI	0.06716887	-1.22323611	-1.0204395
## 1212 -1.62197 -1.335752	AA	LGA	DFW	0.47036763	-1.22323611	-1.1228584
## 1213 -1.62197 -1.335752	DL	LGA	ATL	-0.38082976	-1.22323611	-1.1228584
## 1214 -1.62197 -1.335752	UA	EWR	TPA	-0.06180044	-1.17310682	-1.0669935
## 1215 -1.62197 -1.335752	AA	JFK	MIA	0.06309615	-1.17310682	-1.0669935
## 1216 -1.62197 -1.335752	DL	JFK	LAX	1.94469037	-1.17310682	-1.0669935
## 1217 -1.62197 -1.335752	DL	LGA	DTW	-0.73379837	-1.22323611	-1.0669935
## 1218 -1.62197 -1.335752	HA	JFK	HNL	5.34947991	-1.17310682	-1.0669935
## 1219 -1.62197 -1.335752	DL	LGA	FLL	0.04544772	-1.22323611	-1.0669935
## 1220 -1.62197 -1.335752	UA	EWR	LAS	1.60801262	-1.17310682	-1.0669935
## 1221 -1.62197 -1.335752	EV	EWR	XNA	0.12011416	-1.22323611	-1.0204395
## 1222 -1.62197 -1.335752	UA	LGA	ORD	-0.42019933	-1.22323611	-1.0669935
## 1223 -1.62197 -1.335752	UA	EWR	STT	0.80297267	-1.17310682	-1.0669935
## 1224 -1.62197 -1.335752	UA	EWR	LAX	1.91618137	-1.17310682	-1.0669935
## 1225 -1.62197 -1.335752	B6	JFK	BTW	-1.05418527	-1.17310682	-1.0669935
## 1226 -1.62197 -1.335752	B6	LGA	FLL	0.04544772	-1.22323611	-1.0669935
## 1227 -1.62197 -1.335752	9E	JFK	ROC	-1.05690041	-1.17310682	-1.0669935
## 1228 -1.62197 -1.335752	B6	JFK	BOS	-1.16143342	-1.17310682	-1.0669935
## 1229 -1.62197 -1.335752	AA	LGA	MIA	0.07259915	-1.22323611	-1.0669935
## 1230 -1.62197 -1.335752	B6	EWR	SJU	0.76767580	-1.17310682	-1.0669935
## 1231 -1.62197 -1.335752	B6	LGA	PBI	-0.01021271	-1.22323611	-1.0669935
## 1232 -1.62197 -1.335752	B6	JFK	BUF	-1.00667026	-1.17310682	-1.0669935
## 1233 -1.62197 -1.335752	WN	LGA	MDW	-0.43105991	-1.22323611	-1.0669935
## 1235 -1.62197 -1.335752	WN	LGA	MKE	-0.41341148	-1.22323611	-1.0669935
## 1236 -1.62197 -1.335752	9E	JFK	PHL	-1.28768758	-1.17310682	-1.0669935
## 1237 -1.62197 -1.335752	AA	LGA	ORD	-0.42019933	-1.22323611	-1.0669935
## 1238 -1.62197 -1.335752	WN	EWR	DEN	0.76360309	-1.17310682	-1.0669935
## 1239 -1.62197 -1.335752	UA	LGA	ORD	-0.42019933	-1.22323611	-1.0669935
## 1240 -1.62197 -1.335752	EV	JFK	IAD	-1.10577299	-1.17310682	-1.0669935
## 1241 -1.62197 -1.335752	MQ	LGA	BNA	-0.37811462	-1.22323611	-1.0669935

## 1242 -1.62197 -1.335752	UA	EWR	FLL	0.03051443	-1.11295167	-1.1694124
## 1243 -1.62197 -1.335752	US	EWR	PHX	1.48040089	-1.11295167	-1.1694124
## 1244 -1.62197 -1.335752	US	JFK	PHX	1.50755232	-1.17310682	-1.0669935
## 1245 -1.62197 -1.335752	B6	JFK	LAX	1.94469037	-1.17310682	-1.0669935
## 1246 -1.62197 -1.335752	DL	LGA	MSP	-0.03057629	-1.17310682	-1.1694124
## 1247 -1.62197 -1.335752	MQ	EWR	ORD	-0.43920534	-1.11295167	-1.1694124
## 1248 -1.62197 -1.335752	US	EWR	CLT	-0.69714394	-1.11295167	-1.1694124
## 1249 -1.62197 -1.335752	DL	LGA	SRQ	0.00607814	-1.17310682	-1.1694124
## 1250 -1.62197 -1.335752	B6	JFK	PWM	-1.04468226	-1.17310682	-1.0669935
## 1251 -1.62197 -1.335752	9E	EWR	DTW	-0.75280437	-1.11295167	-1.1694124
## 1252 -1.62197 -1.335752	MQ	LGA	RDU	-0.83018595	-1.17310682	-1.1694124
## 1253 -1.62197 -1.335752	VX	JFK	SFO	2.09538082	-1.17310682	-1.1228584
## 1254 -1.62197 -1.335752	EV	EWR	IAD	-1.12749413	-1.11295167	-1.1694124
## 1255 -1.62197 -1.335752	AA	JFK	SFO	2.09538082	-1.17310682	-1.1228584
## 1257 -1.62197 -1.335752	EV	EWR	CHS	-0.56274435	-1.11295167	-1.1694124
## 1258 -1.62197 -1.335752	B6	EWR	PBI	-0.02650357	-1.11295167	-1.1694124
## 1259 -1.62197 -1.335752	EV	EWR	BUF	-1.03246412	-1.11295167	-1.1694124
## 1260 -1.62197 -1.335752	EV	EWR	MKE	-0.43105991	-1.11295167	-1.1694124
## 1261 -1.62197 -1.335752	DL	LGA	MEM	-0.10795787	-1.17310682	-1.1694124
## 1263 -1.62197 -1.335752	B6	LGA	FLL	0.04544772	-1.17310682	-1.1694124
## 1264 -1.62197 -1.335752	EV	EWR	RDU	-0.85054953	-1.11295167	-1.1694124
## 1265 -1.62197 -1.335752	DL	LGA	MIA	0.07259915	-1.17310682	-1.2252773
## 1266 -1.62197 -1.335752	UA	JFK	SFO	2.09538082	-1.17310682	-1.1228584
## 1268 -1.62197 -1.335752	DL	LGA	ATL	-0.38082976	-1.17310682	-1.2252773
## 1269 -1.62197 -1.335752	MQ	LGA	DTW	-0.73379837	-1.17310682	-1.1694124
## 1270 -1.62197 -1.335752	MQ	LGA	CMH	-0.76502252	-1.17310682	-1.2252773
## 1272 -1.62197 -1.335752	UA	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1273 -1.62197 -1.335752	DL	JFK	SJU	0.75410009	-1.17310682	-1.1228584
## 1274 -1.62197 -1.335752	DL	JFK	MCO	-0.13375173	-1.17310682	-1.1228584
## 1275 -1.62197 -1.335752	DL	LGA	MSP	-0.03057629	-1.17310682	-1.2252773
## 1276 -1.62197 -1.335752	VX	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1277 -1.62197 -1.335752	UA	EWR	MCO	-0.14325473	-1.11295167	-1.1694124
## 1278 -1.62197 -1.335752	UA	EWR	SJU	0.76767580	-1.11295167	-1.1694124
## 1279 -1.62197 -1.335752	DL	LGA	FLL	0.04544772	-1.17310682	-1.2252773
## 1280 -1.62197 -1.335752	DL	LGA	TPA	-0.04415200	-1.17310682	-1.2252773
## 1281 -1.62197 -1.335752	DL	EWR	ATL	-0.40255090	-1.11295167	-1.1694124
## 1282 -1.62197 -1.335752	MQ	JFK	DCA	-1.12613656	-1.11295167	-1.1228584
## 1284 -1.62197 -1.335752	DL	JFK	LAX	1.94469037	-1.11295167	-1.1228584
## 1285 -1.62197 -1.335752	AA	JFK	LAX	1.94469037	-1.11295167	-1.1228584
## 1286 -1.62197 -1.335752	AA	LGA	DFW	0.47036763	-1.11295167	-1.1694124
## 1287 -1.62197 -1.335752	B6	JFK	HOU	0.52331292	-1.17310682	-1.1228584
## 1288 -1.62197 -1.335752	VX	JFK	SFO	2.09538082	-1.11295167	-1.1228584
## 1290 -1.62197 -1.335752	AA	LGA	STL	-0.20977574	-1.11295167	-1.1694124
## 1291 -1.62197 -1.335752	UA	EWR	PHX	1.48040089	-0.95253794	-1.1228584
## 1292 -1.62197 -1.335752	EV	EWR	PWM	-1.02974898	-0.95253794	-1.1228584
## 1293 -1.62197 -1.335752	DL	JFK	SLC	1.28626815	-1.11295167	-1.1228584
## 1294 -1.62197 -1.335752	WN	EWR	MDW	-0.45006591	-0.95253794	-1.1228584
## 1295 -1.62197 -1.335752	WN	EWR	BWI	-1.18586971	-0.95253794	-1.1228584
## 1296 -1.62197 -1.335752	EV	EWR	ATL	-0.40255090	-1.06282238	-1.1694124
## 1297 -1.62197 -1.335752	B6	JFK	PBI	-0.01971572	-1.11295167	-1.1228584
## 1298 -1.62197 -1.335752	AA	LGA	ORD	-0.42019933	-1.06282238	-1.2252773
## 1299 -1.62197 -1.335752	B6	JFK	BOS	-1.16143342	-1.11295167	-1.1228584
## 1300 -1.62197 -1.335752	UA	EWR	DFW	0.44728891	-0.95253794	-1.1228584
## 1303 -1.62197 -1.335752	UA	EWR	MSY	0.16898673	-1.06282238	-1.1694124

## 1304 -1.62197 -1.335752	EV	EWR	DCA	-1.14514256	-1.06282238	-1.1694124
## 1305 -1.62197 -1.335752	MQ	LGA	DTW	-0.73379837	-1.06282238	-1.2252773
## 1306 -1.62197 -1.335752	B6	EWR	FLL	0.03051443	-1.06282238	-1.1694124
## 1308 -1.62197 -1.335752	UA	EWR	LAX	1.91618137	-1.06282238	-1.1694124
## 1309 -1.62197 -1.335752	MQ	LGA	RDU	-0.83018595	-1.06282238	-1.2252773
## 1310 -1.62197 -1.335752	DL	JFK	ATL	-0.38354490	-1.06282238	-1.1694124
## 1311 -1.62197 -1.335752	VX	JFK	LAX	1.94469037	-1.06282238	-1.1694124
## 1312 -1.62197 -1.335752	WN	EWR	PHX	1.48040089	-1.06282238	-1.1694124
## 1313 -1.62197 -1.335752	B6	LGA	MCO	-0.12560630	-1.06282238	-1.2252773
## 1314 -1.62197 -1.335752	AA	JFK	LAX	1.94469037	-1.06282238	-1.1694124
## 1315 -1.62197 -1.335752	B6	EWR	MCO	-0.14325473	-1.06282238	-1.1694124
## 1317 -1.62197 -1.335752	AA	LGA	MIA	0.07259915	-1.06282238	-1.2252773
## 1318 -1.62197 -1.335752	B6	JFK	JAX	-0.29123003	-1.06282238	-1.1694124
## 1319 -1.62197 -1.335752	MQ	LGA	CLE	-0.84647681	-1.06282238	-1.1694124
## 1320 -1.62197 -1.335752	FL	LGA	ATL	-0.38082976	-1.06282238	-1.1694124
## 1322 -1.62197 -1.335752	B6	JFK	SEA	1.87273908	-1.06282238	-1.1694124
## 1323 -1.62197 -1.335752	EV	EWR	MSP	-0.04686715	-1.06282238	-1.1228584
## 1325 -1.62197 -1.335752	DL	LGA	MSP	-0.03057629	-1.06282238	-1.1694124
## 1327 -1.62197 -1.335752	DL	LGA	PBI	-0.01021271	-1.06282238	-1.1694124
## 1328 -1.62197 -1.335752	UA	EWR	AUS	0.62648836	-1.06282238	-1.1228584
## 1329 -1.62197 -1.335752	US	LGA	CLT	-0.67678036	-1.06282238	-1.1694124
## 1330 -1.62197 -1.335752	9E	JFK	ORF	-1.02160355	-1.06282238	-1.1228584
## 1331 -1.62197 -1.335752	EV	EWR	MCI	0.06716887	-1.06282238	-1.1228584
## 1332 -1.62197 -1.335752	MQ	JFK	RDU	-0.83561624	-1.06282238	-1.1228584
## 1333 -1.62197 -1.335752	UA	LGA	IAH	0.50702206	-1.06282238	-1.1694124
## 1334 -1.62197 -1.335752	B6	JFK	FLL	0.03594472	-1.06282238	-1.1228584
## 1335 -1.62197 -1.335752	B6	JFK	PIT	-0.95372497	-1.06282238	-1.1228584
## 1336 -1.62197 -1.335752	US	LGA	DCA	-1.12477899	-1.06282238	-1.1694124
## 1338 -1.62197 -1.335752	DL	LGA	ATL	-0.38082976	-1.06282238	-1.1694124
## 1340 -1.62197 -1.335752	9E	JFK	DCA	-1.12613656	-1.11295167	-1.1228584
## 1341 -1.62197 -1.335752	DL	JFK	LAX	1.94469037	-1.11295167	-1.1228584
## 1342 -1.62197 -1.335752	US	EWR	CLT	-0.69714394	-1.06282238	-1.1228584
## 1343 -1.62197 -1.335752	EV	EWR	PWM	-1.02974898	-1.06282238	-1.1228584
## 1344 -1.62197 -1.335752	AA	LGA	DFW	0.47036763	-1.06282238	-1.1694124
## 1346 -1.62197 -1.335752	EV	EWR	CLT	-0.69714394	-1.06282238	-1.1228584
## 1347 -1.62197 -1.335752	9E	JFK	BUF	-1.00667026	-1.06282238	-1.1228584
## 1348 -1.62197 -1.335752	EV	EWR	RDU	-0.85054953	-1.06282238	-1.1228584
## 1349 -1.62197 -1.335752	MQ	LGA	RDU	-0.83018595	-1.06282238	-1.1694124
## 1350 -1.62197 -1.335752	DL	LGA	MIA	0.07259915	-1.06282238	-1.1694124
## 1351 -1.62197 -1.335752	9E	JFK	IAD	-1.10577299	-1.11295167	-1.1228584
## 1352 -1.62197 -1.335752	UA	EWR	IAH	0.48530091	-1.06282238	-1.1228584
## 1353 -1.62197 -1.335752	UA	EWR	LAX	1.91618137	-1.06282238	-1.1228584
## 1354 -1.62197 -1.335752	WN	EWR	MDW	-0.45006591	-1.06282238	-1.1228584
## 1356 -1.62197 -1.335752	B6	JFK	MCO	-0.13375173	-1.11295167	-1.1228584
## 1357 -1.62197 -1.335752	UA	EWR	FLL	0.03051443	-1.06282238	-1.1228584
## 1358 -1.62197 -1.335752	DL	EWR	ATL	-0.40255090	-1.06282238	-1.1228584
## 1359 -1.62197 -1.335752	UA	JFK	LAX	1.94469037	-1.11295167	-1.1228584
## 1360 -1.62197 -1.335752	DL	LGA	TPA	-0.04415200	-1.06282238	-1.1694124
## 1361 -1.62197 -1.335752	UA	EWR	ORD	-0.43920534	-1.06282238	-1.1228584
## 1362 -1.62197 -1.335752	DL	JFK	DTW	-0.72429537	-1.11295167	-1.1228584
## 1364 -1.62197 -1.335752	DL	JFK	MCO	-0.13375173	-1.17310682	-1.1228584
## 1366 -1.62197 -1.335752	B6	JFK	SYR	-1.13156685	-1.11295167	-1.1228584
## 1367 -1.62197 -1.335752	DL	LGA	ATL	-0.38082976	-1.11295167	-1.1694124
## 1368 -1.62197 -1.335752	EV	LGA	PIT	-0.96051283	-1.11295167	-1.1694124

## 1369 -1.62197 -1.335752	UA	EWR	LAS	1.60801262	-1.11295167	-1.1228584
## 1370 -1.62197 -1.335752	DL	LGA	MSP	-0.03057629	-1.11295167	-1.1694124
## 1371 -1.62197 -1.335752	EV	EWR	DAY	-0.69171365	-1.11295167	-1.1228584
## 1372 -1.62197 -1.335752	EV	EWR	ALB	-1.22116657	-1.11295167	-1.1228584
## 1374 -1.62197 -1.335752	MQ	LGA	ATL	-0.38082976	-1.11295167	-1.1694124
## 1375 -1.62197 -1.335752	US	JFK	PHX	1.50755232	-1.17310682	-1.1228584
## 1376 -1.62197 -1.335752	AA	JFK	DFW	0.47308277	-1.17310682	-1.1228584
## 1377 -1.62197 -1.335752	B6	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1378 -1.62197 -1.335752	UA	EWR	IAH	0.48530091	-1.11295167	-1.1228584
## 1379 -1.62197 -1.335752	DL	LGA	MEM	-0.10795787	-1.11295167	-1.1694124
## 1380 -1.62197 -1.335752	EV	EWR	DTW	-0.75280437	-1.11295167	-1.1228584
## 1381 -1.62197 -1.335752	AA	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1382 -1.62197 -1.335752	AA	JFK	BOS	-1.16143342	-1.17310682	-1.1228584
## 1383 -1.62197 -1.335752	B6	JFK	SAN	1.90532080	-1.17310682	-1.1228584
## 1385 -1.62197 -1.335752	B6	EWR	BOS	-1.14378499	-1.11295167	-1.1228584
## 1387 -1.62197 -1.335752	DL	JFK	SJU	0.75410009	-1.17310682	-1.1228584
## 1388 -1.62197 -1.335752	AA	JFK	LAS	1.63652162	-1.17310682	-1.1228584
## 1389 -1.62197 -1.335752	DL	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1390 -1.62197 -1.335752	DL	JFK	SFO	2.09538082	-1.17310682	-1.1228584
## 1391 -1.62197 -1.335752	WN	EWR	HOU	0.50023420	-1.17310682	-1.0669935
## 1392 -1.62197 -1.335752	DL	EWR	ATL	-0.40255090	-1.17310682	-1.0669935
## 1393 -1.62197 -1.335752	B6	JFK	RSW	0.04273258	-1.17310682	-1.1228584
## 1394 -1.62197 -1.335752	UA	EWR	LAX	1.91618137	-1.17310682	-1.0669935
## 1395 -1.62197 -1.335752	DL	LGA	MCO	-0.12560630	-1.11295167	-1.1228584
## 1396 -1.62197 -1.335752	VX	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1397 -1.62197 -1.335752	MQ	LGA	RDU	-0.83018595	-1.11295167	-1.1228584
## 1398 -1.62197 -1.335752	AA	JFK	ORD	-0.41069633	-1.17310682	-1.1228584
## 1399 -1.62197 -1.335752	FL	LGA	ATL	-0.38082976	-1.11295167	-1.1228584
## 1400 -1.62197 -1.335752	UA	EWR	MCO	-0.14325473	-1.17310682	-1.0669935
## 1402 -1.62197 -1.335752	B6	JFK	TPA	-0.05093986	-1.17310682	-1.1228584
## 1403 -1.62197 -1.335752	AA	JFK	MIA	0.06309615	-1.17310682	-1.1228584
## 1404 -1.62197 -1.335752	AA	LGA	DFW	0.47036763	-1.11295167	-1.1228584
## 1405 -1.62197 -1.335752	AA	EWR	MIA	0.05766586	-1.17310682	-1.0669935
## 1406 -1.62197 -1.335752	B6	LGA	MCO	-0.12560630	-1.11295167	-1.1228584
## 1407 -1.62197 -1.335752	DL	JFK	PDX	1.91618137	-1.17310682	-1.1228584
## 1408 -1.62197 -1.335752	UA	EWR	SEA	1.84558765	-1.17310682	-1.0669935
## 1409 -1.62197 -1.335752	UA	EWR	PDX	1.88902994	-1.17310682	-1.0669935
## 1410 -1.62197 -1.335752	UA	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1411 -1.62197 -1.335752	US	JFK	CLT	-0.68085308	-1.17310682	-1.0669935
## 1412 -1.62197 -1.335752	B6	EWR	PBI	-0.02650357	-1.17310682	-1.0669935
## 1413 -1.62197 -1.335752	UA	EWR	CLE	-0.86684039	-1.22323611	-1.0669935
## 1414 -1.62197 -1.335752	9E	JFK	ORF	-1.02160355	-1.17310682	-1.0669935
## 1415 -1.62197 -1.335752	B6	EWR	MCO	-0.14325473	-1.17310682	-1.0669935
## 1416 -1.62197 -1.335752	AA	LGA	MIA	0.07259915	-1.11295167	-1.1228584
## 1419 -1.62197 -1.335752	AA	LGA	ORD	-0.42019933	-1.11295167	-1.1228584
## 1420 -1.62197 -1.335752	UA	EWR	LAS	1.60801262	-1.22323611	-1.0669935
## 1421 -1.62197 -1.335752	US	EWR	CLT	-0.69714394	-1.22323611	-1.0669935
## 1422 -1.62197 -1.335752	B6	JFK	RDU	-0.83561624	-1.17310682	-1.0669935
## 1423 -1.62197 -1.335752	UA	EWR	SNA	1.88902994	-1.22323611	-1.0669935
## 1425 -1.62197 -1.335752	DL	JFK	SEA	1.87273908	-1.17310682	-1.0669935
## 1426 -1.62197 -1.335752	UA	EWR	PBI	-0.02650357	-1.22323611	-1.0669935
## 1427 -1.62197 -1.335752	DL	JFK	MIA	0.06309615	-1.17310682	-1.0669935
## 1428 -1.62197 -1.335752	EV	EWR	PWM	-1.02974898	-1.22323611	-1.0669935
## 1429 -1.62197 -1.335752	B6	JFK	BUR	1.93111466	-1.17310682	-1.0669935

## 1430 -1.62197 -1.335752	US	LGA	CLT	-0.67678036	-1.11295167	-1.1228584
## 1431 -1.62197 -1.335752	MQ	LGA	MSP	-0.03057629	-1.11295167	-1.1228584
## 1432 -1.62197 -1.335752	DL	LGA	ATL	-0.38082976	-1.11295167	-1.1694124
## 1433 -1.62197 -1.335752	DL	JFK	LAX	1.94469037	-1.17310682	-1.0669935
## 1434 -1.62197 -1.335752	UA	LGA	IAH	0.50702206	-1.11295167	-1.1228584
## 1435 -1.62197 -1.335752	UA	EWR	SFO	2.06687181	-1.22323611	-1.0669935
## 1436 -1.62197 -1.335752	WN	LGA	MKE	-0.41341148	-1.11295167	-1.1694124
## 1438 -1.62197 -1.335752	EV	EWR	DSM	-0.03464900	-1.22323611	-1.0669935
## 1439 -1.62197 -1.335752	9E	JFK	MSY	0.18935031	-1.17310682	-1.0669935
## 1440 -1.62197 -1.335752	DL	JFK	PHX	1.50755232	-1.17310682	-1.0669935
## 1441 -1.62197 -1.335752	FL	LGA	ATL	-0.38082976	-1.11295167	-1.1694124
## 1442 -1.62197 -1.335752	AA	LGA	ORD	-0.42019933	-1.11295167	-1.1694124
## 1443 -1.62197 -1.335752	UA	EWR	SJU	0.76767580	-1.22323611	-1.0669935
## 1444 -1.62197 -1.335752	DL	LGA	MIA	0.07259915	-1.11295167	-1.1694124
## 1445 -1.62197 -1.335752	DL	LGA	PBI	-0.01021271	-1.11295167	-1.1694124
## 1446 -1.62197 -1.335752	DL	JFK	SLC	1.28626815	-1.17310682	-1.0669935
## 1447 -1.62197 -1.335752	9E	JFK	CLT	-0.68085308	-1.17310682	-1.0669935
## 1448 -1.62197 -1.335752	9E	JFK	IAD	-1.10577299	-1.17310682	-1.0669935
## 1449 -1.62197 -1.335752	DL	JFK	FLL	0.03594472	-1.17310682	-1.0669935
## 1450 -1.62197 -1.335752	EV	LGA	CLE	-0.84647681	-1.11295167	-1.1694124
## 1451 -1.62197 -1.335752	EV	EWR	CHS	-0.56274435	-1.22323611	-1.0669935
## 1452 -1.62197 -1.335752	EV	EWR	OKC	0.38348305	-1.22323611	-1.0669935
## 1455 -1.62197 -1.335752	MQ	JFK	CMH	-0.75959223	-1.17310682	-1.0669935
## 1457 -1.62197 -1.335752	B6	JFK	SFO	2.09538082	-1.17310682	-1.0669935
## 1460 -1.62197 -1.335752	9E	JFK	JAX	-0.29123003	-1.17310682	-1.0669935
## 1461 -1.62197 -1.335752	WN	EWR	MDW	-0.45006591	-1.22323611	-1.0669935
## 1462 -1.62197 -1.335752	MQ	JFK	RDU	-0.83561624	-1.17310682	-1.0669935
## 1463 -1.62197 -1.335752	DL	JFK	BOS	-1.16143342	-1.17310682	-1.1228584
## 1464 -1.62197 -1.335752	EV	EWR	GSO	-0.81117995	-1.22323611	-1.1228584
## 1466 -1.62197 -1.335752	VX	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1467 -1.62197 -1.335752	UA	EWR	CLE	-0.86684039	-1.22323611	-1.1228584
## 1468 -1.62197 -1.335752	B6	JFK	MSY	0.18935031	-1.17310682	-1.1228584
## 1469 -1.62197 -1.335752	UA	EWR	PBI	-0.02650357	-1.22323611	-1.1228584
## 1472 -1.62197 -1.335752	AA	LGA	ORD	-0.42019933	-1.17310682	-1.1694124
## 1473 -1.62197 -1.335752	9E	JFK	DCA	-1.12613656	-1.17310682	-1.1228584
## 1474 -1.62197 -1.335752	B6	JFK	PDX	1.91618137	-1.17310682	-1.1228584
## 1475 -1.62197 -1.335752	B6	JFK	LAX	1.94469037	-1.17310682	-1.1228584
## 1476 -1.62197 -1.335752	B6	JFK	JAX	-0.29123003	-1.17310682	-1.1228584
## 1477 -1.62197 -1.335752	MQ	LGA	CLT	-0.67678036	-1.17310682	-1.1694124
## 1478 -1.62197 -1.335752	MQ	LGA	RDU	-0.83018595	-1.17310682	-1.1694124
## 1480 -1.62197 -1.335752	B6	LGA	FLL	0.04544772	-1.17310682	-1.1694124
## 1481 -1.62197 -1.335752	UA	EWR	BOS	-1.14378499	-1.22323611	-1.1228584
## 1482 -1.62197 -1.335752	MQ	LGA	DTW	-0.73379837	-1.17310682	-1.1694124
## 1483 -1.62197 -1.335752	MQ	JFK	DCA	-1.12613656	-1.22323611	-1.1228584
## 1484 -1.62197 -1.335752	UA	EWR	IAH	0.48530091	-1.22323611	-1.1228584
## 1486 -1.62197 -1.335752	B6	JFK	SJU	0.75410009	-1.22323611	-1.1228584
## 1487 -1.62197 -1.335752	B6	JFK	TPA	-0.05093986	-1.22323611	-1.1228584
## 1488 -1.62197 -1.335752	B6	JFK	RDU	-0.83561624	-1.22323611	-1.1228584
## 1489 -1.62197 -1.335752	B6	JFK	FLL	0.03594472	-1.22323611	-1.1228584
## 1490 -1.62197 -1.335752	EV	EWR	BTW	-1.05418527	-1.22323611	-1.1228584
## 1493 -1.62197 -1.335752	B6	JFK	SYR	-1.13156685	-1.28339125	-1.1228584
## 1494 -1.62197 -1.335752	B6	JFK	BUF	-1.00667026	-1.28339125	-1.1228584
## 1495 -1.62197 -1.335752	B6	JFK	BOS	-1.16143342	-1.28339125	-1.1228584
## 1497 -1.62197 -1.335752	AA	LGA	DFW	0.47036763	-1.11295167	-1.1694124

## 1498	-1.62197	-1.221865	US	EWR	CLT	-0.69714394	-1.39367569	-1.2718314
## 1499	-1.62197	-1.221865	AA	JFK	MIA	0.06309615	-1.33352054	-1.2252773
## 1500	-1.62197	-1.221865	B6	JFK	PBI	-0.01971572	-1.33352054	-1.2252773
## 1501	-1.62197	-1.221865	UA	EWR	FLL	0.03051443	-1.33352054	-1.2252773
## 1502	-1.62197	-1.221865	B6	EWR	PBI	-0.02650357	-1.33352054	-1.2252773
## 1503	-1.62197	-1.221865	B6	JFK	TPA	-0.05093986	-1.33352054	-1.2252773
## 1504	-1.62197	-1.221865	UA	EWR	PBI	-0.02650357	-1.33352054	-1.2252773
## 1505	-1.62197	-1.221865	B6	JFK	BQN	0.72423351	-1.33352054	-1.2252773
## 1506	-1.62197	-1.221865	B6	JFK	RSW	0.04273258	-1.33352054	-1.2252773
## 1507	-1.62197	-1.221865	AA	EWR	MIA	0.05766586	-1.33352054	-1.2252773
## 1508	-1.62197	-1.221865	WN	EWR	BWI	-1.18586971	-1.33352054	-1.2252773
## 1509	-1.62197	-1.221865	DL	JFK	ATL	-0.38354490	-1.33352054	-1.2252773
## 1510	-1.62197	-1.221865	DL	EWR	ATL	-0.40255090	-1.33352054	-1.2252773
## 1511	-1.62197	-1.221865	B6	JFK	BOS	-1.16143342	-1.33352054	-1.2252773
## 1512	-1.62197	-1.221865	B6	JFK	SJU	0.75410009	-1.33352054	-1.2252773
## 1513	-1.62197	-1.221865	AA	JFK	MCO	-0.13375173	-1.33352054	-1.2252773
## 1514	-1.62197	-1.221865	UA	LGA	DEN	0.78396666	-1.28339125	-1.2718314
## 1515	-1.62197	-1.221865	DL	JFK	SLC	1.28626815	-1.33352054	-1.2252773
## 1516	-1.62197	-1.221865	DL	JFK	SFO	2.09538082	-1.33352054	-1.1694124
## 1517	-1.62197	-1.221865	DL	LGA	MCO	-0.12560630	-1.28339125	-1.2252773
## 1518	-1.62197	-1.221865	WN	EWR	HOU	0.50023420	-1.39367569	-1.1694124
## 1519	-1.62197	-1.221865	MQ	EWR	ORD	-0.43920534	-1.39367569	-1.1694124
## 1520	-1.62197	-1.221865	UA	EWR	LAS	1.60801262	-1.39367569	-1.1694124
## 1521	-1.62197	-1.221865	UA	EWR	LAX	1.91618137	-1.39367569	-1.1694124
## 1522	-1.62197	-1.221865	DL	LGA	DTW	-0.73379837	-1.28339125	-1.2252773
## 1523	-1.62197	-1.221865	UA	EWR	STT	0.80297267	-1.39367569	-1.1694124
## 1524	-1.62197	-1.221865	FL	LGA	MKE	-0.41341148	-1.28339125	-1.2252773
## 1525	-1.62197	-1.221865	UA	EWR	MCO	-0.14325473	-1.39367569	-1.1694124
## 1526	-1.62197	-1.221865	DL	EWR	ATL	-0.40255090	-1.39367569	-1.1694124
## 1527	-1.62197	-1.221865	B6	JFK	MCO	-0.13375173	-1.33352054	-1.1694124
## 1528	-1.62197	-1.221865	DL	JFK	SEA	1.87273908	-1.33352054	-1.1694124
## 1529	-1.62197	-1.221865	B6	LGA	TPA	-0.04415200	-1.28339125	-1.2252773
## 1530	-1.62197	-1.221865	B6	LGA	RSW	0.05087801	-1.28339125	-1.2252773
## 1531	-1.62197	-1.221865	AA	JFK	SFO	2.09538082	-1.33352054	-1.1694124
## 1533	-1.62197	-1.221865	EV	EWR	BUF	-1.03246412	-1.39367569	-1.1694124
## 1534	-1.62197	-1.221865	DL	JFK	MIA	0.06309615	-1.22323611	-1.1228584
## 1535	-1.62197	-1.221865	EV	EWR	MSP	-0.04686715	-1.22323611	-1.1228584
## 1536	-1.62197	-1.221865	B6	EWR	MCO	-0.14325473	-1.22323611	-1.1228584
## 1537	-1.62197	-1.221865	US	LGA	CLT	-0.67678036	-1.28339125	-1.2252773
## 1538	-1.62197	-1.221865	US	LGA	DCA	-1.12477899	-1.17310682	-1.1694124
## 1539	-1.62197	-1.221865	9E	JFK	MSP	-0.01835814	-1.22323611	-1.1228584
## 1540	-1.62197	-1.221865	AA	JFK	BOS	-1.16143342	-1.22323611	-1.1228584
## 1541	-1.62197	-1.221865	DL	JFK	MCO	-0.13375173	-1.22323611	-1.1228584
## 1542	-1.62197	-1.221865	MQ	JFK	RDU	-0.83561624	-1.22323611	-1.1228584
## 1543	-1.62197	-1.221865	EV	EWR	ROC	-1.08133670	-1.22323611	-1.1228584
## 1544	-1.62197	-1.221865	AA	JFK	STT	0.78803938	-1.22323611	-1.1228584
## 1545	-1.62197	-1.221865	DL	JFK	TPA	-0.05093986	-1.22323611	-1.1228584
## 1546	-1.62197	-1.221865	EV	EWR	MHT	-1.13156685	-1.39367569	-1.1694124
## 1547	-1.62197	-1.221865	9E	JFK	RDU	-0.83561624	-1.22323611	-1.1228584
## 1548	-1.62197	-1.221865	MQ	JFK	DCA	-1.12613656	-1.22323611	-1.1228584
## 1549	-1.62197	-1.221865	US	JFK	CLT	-0.68085308	-1.22323611	-1.1228584
## 1550	-1.62197	-1.221865	DL	LGA	PBI	-0.01021271	-1.17310682	-1.1694124
## 1551	-1.62197	-1.221865	DL	JFK	SJU	0.75410009	-1.22323611	-1.1228584
## 1552	-1.62197	-1.221865	UA	EWR	HDN	0.93058440	-1.22323611	-1.1228584

## 1553	-1.62197	-1.221865	EV	EWR	RDU	-0.85054953	-1.22323611	-1.1228584
## 1554	-1.62197	-1.221865	MQ	LGA	ATL	-0.38082976	-1.17310682	-1.1694124
## 1555	-1.62197	-1.221865	MQ	LGA	RDU	-0.83018595	-1.17310682	-1.1694124
## 1556	-1.62197	-1.221865	EV	EWR	BOS	-1.14378499	-1.22323611	-1.1228584
## 1557	-1.62197	-1.221865	F9	LGA	DEN	0.78396666	-1.17310682	-1.1694124
## 1558	-1.62197	-1.221865	EV	EWR	DTW	-0.75280437	-1.22323611	-1.1228584
## 1559	-1.62197	-1.221865	UA	JFK	LAX	1.94469037	-1.22323611	-1.1228584
## 1560	-1.62197	-1.221865	UA	EWR	SFO	2.06687181	-1.22323611	-1.1228584
## 1561	-1.62197	-1.221865	9E	JFK	DCA	-1.12613656	-1.22323611	-1.1228584
## 1562	-1.62197	-1.221865	B6	JFK	TPA	-0.05093986	-1.22323611	-1.1228584
## 1564	-1.62197	-1.221865	UA	EWR	SAN	1.87681179	-1.22323611	-1.1228584
## 1565	-1.62197	-1.221865	EV	EWR	DTW	-0.75280437	-1.22323611	-1.1228584
## 1566	-1.62197	-1.221865	EV	EWR	ATL	-0.40255090	-1.06282238	-1.0669935
## 1567	-1.62197	-1.221865	EV	EWR	MCI	0.06716887	-1.22323611	-1.1228584
## 1568	-1.62197	-1.221865	DL	JFK	LAX	1.94469037	-1.11295167	-1.1228584
## 1569	-1.62197	-1.221865	VX	JFK	LAX	1.94469037	-1.11295167	-1.1228584
## 1570	-1.62197	-1.221865	HA	JFK	HNL	5.34947991	-1.11295167	-1.1228584
## 1571	-1.62197	-1.221865	B6	JFK	AUS	0.64956708	-1.11295167	-1.1228584
## 1572	-1.62197	-1.221865	DL	EWR	ATL	-0.40255090	-1.06282238	-1.0669935
## 1573	-1.62197	-1.221865	US	LGA	CLT	-0.67678036	-1.17310682	-1.1694124
## 1574	-1.62197	-1.221865	UA	EWR	STT	0.80297267	-1.06282238	-1.0669935
## 1575	-1.62197	-1.221865	DL	JFK	STT	0.78803938	-1.11295167	-1.1228584
## 1576	-1.62197	-1.221865	B6	JFK	BOS	-1.16143342	-1.11295167	-1.1228584
## 1577	-1.62197	-1.221865	VX	JFK	LAS	1.63652162	-1.11295167	-1.1228584
## 1578	-1.62197	-1.221865	WN	LGA	MDW	-0.43105991	-1.06282238	-1.1694124
## 1579	-1.62197	-1.221865	AA	LGA	MIA	0.07259915	-1.06282238	-1.1694124
## 1580	-1.62197	-1.221865	AA	EWR	DFW	0.44728891	-1.06282238	-1.0669935
## 1581	-1.62197	-1.221865	UA	EWR	LAX	1.91618137	-1.06282238	-1.0669935
## 1582	-1.62197	-1.221865	AA	LGA	ORD	-0.42019933	-1.06282238	-1.1694124
## 1583	-1.62197	-1.221865	B6	JFK	BUF	-1.00667026	-1.11295167	-1.1228584
## 1584	-1.62197	-1.221865	B6	LGA	PBI	-0.01021271	-1.06282238	-1.1694124
## 1586	-1.62197	-1.221865	DL	LGA	ATL	-0.38082976	-0.95253794	-1.0669935
## 1587	-1.62197	-1.221865	US	EWR	PHX	1.48040089	-0.89238279	-1.0669935
## 1588	-1.62197	-1.221865	UA	EWR	MIA	0.05766586	-0.89238279	-1.0669935
## 1589	-1.62197	-1.221865	UA	EWR	EGE	0.92786925	-0.89238279	-1.0669935
## 1590	-1.62197	-1.221865	EV	JFK	IAD	-1.10577299	-0.89238279	-1.1228584
## 1591	-1.62197	-1.221865	US	JFK	CLT	-0.68085308	-0.89238279	-1.1228584
## 1593	-1.62197	-1.221865	DL	LGA	MSY	0.19070788	-0.95253794	-1.0669935
## 1594	-1.62197	-1.221865	DL	LGA	SRQ	0.00607814	-0.95253794	-1.0669935
## 1595	-1.62197	-1.221865	FL	LGA	ATL	-0.38082976	-0.95253794	-1.0669935
## 1596	-1.62197	-1.221865	EV	EWR	IAD	-1.12749413	-0.89238279	-1.0669935
## 1597	-1.62197	-1.221865	9E	JFK	PHL	-1.28768758	-1.11295167	-1.1228584
## 1598	-1.62197	-1.221865	AA	LGA	DFW	0.47036763	-0.95253794	-1.0669935
## 1599	-1.62197	-1.221865	AA	JFK	LAX	1.94469037	-0.89238279	-1.1228584
## 1600	-1.62197	-1.221865	B6	EWR	PBI	-0.02650357	-0.89238279	-1.0669935
## 1601	-1.62197	-1.221865	B6	JFK	MCO	-0.13375173	-0.89238279	-1.1228584
## 1602	-1.62197	-1.221865	DL	LGA	EYW	0.22328960	-0.95253794	-1.0669935
## 1603	-1.62197	-1.221865	UA	JFK	SFO	2.09538082	-0.78209836	-1.1694124
## 1604	-1.62197	-1.221865	AA	LGA	ORD	-0.42019933	-0.89238279	-1.0669935
## 1606	-1.62197	-1.221865	UA	EWR	SEA	1.84558765	-0.89238279	-1.0669935
## 1607	-1.62197	-1.221865	WN	LGA	BWI	-1.16414856	-0.89238279	-1.0669935
## 1608	-1.62197	-1.221865	UA	JFK	LAX	1.94469037	-0.78209836	-1.1694124
## 1609	-1.62197	-1.221865	WN	EWR	STL	-0.23149688	-0.83222765	-1.1228584
## 1610	-1.62197	-1.221865	DL	LGA	MSP	-0.03057629	-0.89238279	-1.0669935

## 1611 -1.62197 -1.221865	EV	EWR	BTV	-1.05418527	-0.83222765	-1.1228584
## 1612 -1.62197 -1.221865	WN	LGA	DEN	0.78396666	-0.89238279	-1.0669935
## 1613 -1.62197 -1.221865	FL	LGA	CAK	-0.87634339	-0.89238279	-1.0669935
## 1614 -1.62197 -1.221865	EV	EWR	PHL	-1.30669358	-0.78209836	-1.1228584
## 1615 -1.62197 -1.221865	B6	EWR	MCO	-0.14325473	-0.78209836	-1.1228584
## 1616 -1.62197 -1.221865	WN	EWR	BWI	-1.18586971	-0.78209836	-1.1228584
## 1617 -1.62197 -1.221865	MQ	JFK	DCA	-1.12613656	-0.72194321	-1.1228584
## 1618 -1.62197 -1.221865	MQ	EWR	ORD	-0.43920534	-0.78209836	-1.1228584
## 1619 -1.62197 -1.221865	EV	EWR	ATL	-0.40255090	-0.78209836	-1.1228584
## 1620 -1.62197 -1.221865	EV	EWR	BUF	-1.03246412	-0.78209836	-1.1228584
## 1622 -1.62197 -1.221865	DL	EWR	SLC	1.25775915	-0.72194321	-1.1228584
## 1623 -1.62197 -1.221865	B6	JFK	FLL	0.03594472	-0.72194321	-1.1228584
## 1624 -1.62197 -1.221865	DL	LGA	ATL	-0.38082976	-0.78209836	-1.0204395
## 1626 -1.62197 -1.221865	UA	EWR	ORD	-0.43920534	-0.72194321	-1.1228584
## 1627 -1.62197 -1.221865	MQ	LGA	CMH	-0.76502252	-0.78209836	-1.0204395
## 1628 -1.62197 -1.221865	UA	EWR	LAX	1.91618137	-0.72194321	-1.1228584
## 1629 -1.62197 -1.221865	MQ	LGA	RDU	-0.83018595	-0.78209836	-1.0204395
## 1630 -1.62197 -1.221865	WN	EWR	HOU	0.50023420	-0.72194321	-1.1228584
## 1631 -1.62197 -1.221865	US	EWR	CLT	-0.69714394	-0.72194321	-1.1228584
## 1632 -1.62197 -1.221865	EV	EWR	BDL	-1.25782100	-0.72194321	-1.1228584
## 1633 -1.62197 -1.221865	AA	LGA	DFW	0.47036763	-0.78209836	-1.0204395
## 1634 -1.62197 -1.221865	UA	EWR	MIA	0.05766586	-0.72194321	-1.1228584
## 1635 -1.62197 -1.221865	UA	EWR	HNL	5.32232848	-0.72194321	-1.1228584
## 1636 -1.62197 -1.221865	DL	JFK	ATL	-0.38354490	-0.72194321	-1.1694124
## 1638 -1.62197 -1.221865	EV	EWR	MHT	-1.13156685	-0.72194321	-1.1228584
## 1640 -1.62197 -1.221865	UA	EWR	IAH	0.48530091	-0.72194321	-1.1228584
## 1641 -1.62197 -1.221865	DL	EWR	ATL	-0.40255090	-0.72194321	-1.1228584
## 1642 -1.62197 -1.221865	UA	EWR	LAS	1.60801262	-0.72194321	-1.1228584
## 1643 -1.62197 -1.221865	UA	LGA	IAH	0.50702206	-0.78209836	-1.1228584
## 1646 -1.62197 -1.221865	EV	EWR	CHS	-0.56274435	-0.72194321	-1.1228584
## 1647 -1.62197 -1.221865	DL	LGA	MSP	-0.03057629	-0.78209836	-1.1228584
## 1648 -1.62197 -1.221865	UA	EWR	PBI	-0.02650357	-0.72194321	-1.1228584
## 1649 -1.62197 -1.221865	US	LGA	CLT	-0.67678036	-0.78209836	-1.1228584
## 1650 -1.62197 -1.221865	EV	EWR	IAD	-1.12749413	-0.72194321	-1.1228584
## 1651 -1.62197 -1.221865	EV	EWR	DTW	-0.75280437	-0.72194321	-1.1228584
## 1652 -1.62197 -1.221865	9E	JFK	RIC	-1.02431869	-0.72194321	-1.1694124
## 1653 -1.62197 -1.221865	EV	LGA	CLE	-0.84647681	-0.78209836	-1.1228584
## 1654 -1.62197 -1.221865	9E	JFK	BOS	-1.16143342	-0.72194321	-1.1694124
## 1655 -1.62197 -1.221865	DL	JFK	SFO	2.09538082	-0.72194321	-1.1694124
## 1656 -1.62197 -1.221865	B6	JFK	MSY	0.18935031	-0.72194321	-1.1694124
## 1657 -1.62197 -1.221865	DL	LGA	ATL	-0.38082976	-0.78209836	-1.1694124
## 1658 -1.62197 -1.221865	MQ	LGA	CMH	-0.76502252	-0.78209836	-1.1694124
## 1659 -1.62197 -1.221865	DL	LGA	MCO	-0.12560630	-0.78209836	-1.1694124
## 1660 -1.62197 -1.221865	B6	JFK	PBI	-0.01971572	-0.72194321	-1.1694124
## 1661 -1.62197 -1.221865	US	EWR	CLT	-0.69714394	-0.78209836	-1.1694124
## 1662 -1.62197 -1.221865	9E	JFK	DCA	-1.12613656	-0.83222765	-1.1694124
## 1663 -1.62197 -1.221865	UA	EWR	MCO	-0.14325473	-0.78209836	-1.1694124
## 1664 -1.62197 -1.221865	UA	EWR	IAH	0.48530091	-0.78209836	-1.1694124
## 1665 -1.62197 -1.221865	EV	EWR	CVG	-0.64284107	-0.78209836	-1.1694124
## 1666 -1.62197 -1.221865	US	LGA	CLT	-0.67678036	-0.78209836	-1.1694124
## 1667 -1.62197 -1.221865	MQ	JFK	IND	-0.51251420	-0.83222765	-1.1694124
## 1668 -1.62197 -1.221865	EV	EWR	MKE	-0.43105991	-0.78209836	-1.1694124
## 1669 -1.62197 -1.221865	MQ	JFK	PIT	-0.95372497	-0.83222765	-1.1694124
## 1670 -1.62197 -1.221865	AA	JFK	SFO	2.09538082	-0.83222765	-1.1694124

## 1671	-1.62197	-1.221865	DL	JFK	ATL	-0.38354490	-0.83222765	-1.1694124
## 1672	-1.62197	-1.221865	UA	EWR	RSW	0.03458715	-0.78209836	-1.1694124
## 1673	-1.62197	-1.221865	US	LGA	PHL	-1.28497244	-0.78209836	-1.1694124
## 1674	-1.62197	-1.221865	WN	EWR	MDW	-0.45006591	-0.78209836	-1.1694124
## 1675	-1.62197	-1.221865	9E	JFK	ROC	-1.05690041	-0.83222765	-1.1694124
## 1676	-1.62197	-1.221865	AA	LGA	STL	-0.20977574	-0.78209836	-1.1694124
## 1677	-1.62197	-1.221865	DL	JFK	DEN	0.79211209	-1.00266723	-1.0669935
## 1678	-1.62197	-1.221865	DL	JFK	MCO	-0.13375173	-1.00266723	-1.0669935
## 1679	-1.62197	-1.221865	AA	LGA	MIA	0.07259915	-0.83222765	-1.0669935
## 1680	-1.62197	-1.221865	AA	JFK	SJU	0.75410009	-0.83222765	-1.1694124
## 1681	-1.62197	-1.221865	B6	EWR	FLL	0.03051443	-0.89238279	-1.1228584
## 1682	-1.62197	-1.221865	DL	LGA	TPA	-0.04415200	-0.83222765	-1.0669935
## 1683	-1.62197	-1.221865	DL	JFK	LAS	1.63652162	-1.00266723	-1.0669935
## 1684	-1.62197	-1.221865	DL	JFK	MIA	0.06309615	-1.00266723	-1.0669935
## 1685	-1.62197	-1.221865	AA	LGA	ORD	-0.42019933	-0.83222765	-1.0669935
## 1686	-1.62197	-1.221865	9E	JFK	RDU	-0.83561624	-1.00266723	-1.0669935
## 1687	-1.62197	-1.221865	EV	EWR	MSP	-0.04686715	-0.89238279	-1.1228584
## 1688	-1.62197	-1.221865	B6	LGA	TPA	-0.04415200	-0.83222765	-1.0669935
## 1689	-1.62197	-1.221865	DL	LGA	DTW	-0.73379837	-0.83222765	-1.0669935
## 1690	-1.62197	-1.221865	MQ	LGA	BNA	-0.37811462	-0.83222765	-1.0669935
## 1691	-1.62197	-1.221865	UA	EWR	IAH	0.48530091	-0.89238279	-1.1228584
## 1692	-1.62197	-1.221865	AA	JFK	LAX	1.94469037	-1.00266723	-1.0669935
## 1693	-1.62197	-1.221865	US	EWR	PHX	1.48040089	-0.89238279	-1.1228584
## 1694	-1.62197	-1.221865	B6	JFK	RSW	0.04273258	-1.00266723	-1.0669935
## 1695	-1.62197	-1.221865	WN	EWR	STL	-0.23149688	-0.89238279	-1.1228584
## 1696	-1.62197	-1.221865	DL	JFK	SFO	2.09538082	-1.06282238	-1.0669935
## 1697	-1.62197	-1.221865	MQ	JFK	DCA	-1.12613656	-1.06282238	-1.0669935
## 1698	-1.62197	-1.221865	US	LGA	CLT	-0.67678036	-0.89238279	-1.1694124
## 1699	-1.62197	-1.221865	AA	JFK	AUS	0.64956708	-1.06282238	-1.0669935
## 1701	-1.62197	-1.221865	EV	EWR	RIC	-1.03925198	-0.95253794	-1.1228584
## 1702	-1.62197	-1.221865	B6	JFK	SJU	0.75410009	-1.06282238	-1.0669935
## 1703	-1.62197	-1.221865	DL	LGA	MCO	-0.12560630	-0.89238279	-1.1694124
## 1704	-1.62197	-1.221865	DL	LGA	FLL	0.04544772	-0.89238279	-1.1694124
## 1705	-1.62197	-1.221865	MQ	JFK	BNA	-0.37675704	-1.06282238	-1.0669935
## 1706	-1.62197	-1.221865	FL	LGA	ATL	-0.38082976	-0.89238279	-1.1694124
## 1707	-1.62197	-1.221865	AA	JFK	SAN	1.90532080	-1.06282238	-1.0669935
## 1708	-1.62197	-1.221865	WN	EWR	BWI	-1.18586971	-0.95253794	-1.1228584
## 1709	-1.62197	-1.221865	UA	EWR	MCO	-0.14325473	-0.95253794	-1.1228584
## 1710	-1.62197	-1.221865	UA	EWR	PBI	-0.02650357	-0.95253794	-1.1228584
## 1711	-1.62197	-1.221865	UA	JFK	SFO	2.09538082	-1.06282238	-1.0669935
## 1712	-1.62197	-1.221865	B6	JFK	TPA	-0.05093986	-1.06282238	-1.0669935
## 1713	-1.62197	-1.221865	UA	EWR	FLL	0.03051443	-0.95253794	-1.1228584
## 1714	-1.62197	-1.221865	UA	EWR	IAH	0.48530091	-0.95253794	-1.1228584
## 1715	-1.62197	-1.221865	B6	JFK	BTW	-1.05418527	-1.06282238	-1.0669935
## 1716	-1.62197	-1.221865	DL	LGA	MSP	-0.03057629	-0.95253794	-1.0204395
## 1717	-1.62197	-1.221865	EV	EWR	MCI	0.06716887	-0.95253794	-1.1228584
## 1718	-1.62197	-1.221865	B6	JFK	FLL	0.03594472	-1.17310682	-0.8621557
## 1719	-1.62197	-1.221865	B6	EWR	PBI	-0.02650357	-0.95253794	-1.1228584
## 1720	-1.62197	-1.221865	MQ	LGA	BNA	-0.37811462	-0.95253794	-1.0204395
## 1721	-1.62197	-1.221865	DL	LGA	TPA	-0.04415200	-0.95253794	-1.0204395
## 1722	-1.62197	-1.221865	AS	EWR	SEA	1.84558765	-1.00266723	-1.0204395
## 1723	-1.62197	-1.221865	9E	JFK	ORF	-1.02160355	-1.17310682	-0.8621557
## 1724	-1.62197	-1.221865	WN	LGA	MDW	-0.43105991	-0.95253794	-1.0204395
## 1726	-1.62197	-1.221865	AA	EWR	LAX	1.91618137	-1.00266723	-1.0204395

## 1728 -1.62197 -1.221865	DL	LGA	PWM	-1.05011255	-0.95253794	-1.0204395
## 1729 -1.62197 -1.221865	MQ	LGA	CLE	-0.84647681	-0.95253794	-1.0204395
## 1730 -1.62197 -1.221865	EV	EWR	BDL	-1.25782100	-1.00266723	-1.0204395
## 1731 -1.62197 -1.221865	EV	EWR	GSO	-0.81117995	-1.00266723	-1.0204395
## 1733 -1.62197 -1.221865	UA	EWR	ORD	-0.43920534	-1.00266723	-1.0204395
## 1734 -1.62197 -1.221865	AA	LGA	MIA	0.07259915	-0.95253794	-1.0204395
## 1735 -1.62197 -1.221865	AA	JFK	SEA	1.87273908	-1.17310682	-0.8621557
## 1736 -1.62197 -1.221865	UA	EWR	PDX	1.88902994	-1.00266723	-1.0204395
## 1737 -1.62197 -1.221865	B6	JFK	LGB	1.93111466	-1.17310682	-0.8621557
## 1738 -1.62197 -1.221865	B6	JFK	BUF	-1.00667026	-1.17310682	-0.8621557
## 1739 -1.62197 -1.221865	DL	JFK	DTW	-0.72429537	-1.17310682	-0.8621557
## 1740 -1.62197 -1.221865	US	LGA	CLT	-0.67678036	-0.95253794	-1.0204395
## 1741 -1.62197 -1.221865	B6	JFK	LAS	1.63652162	-1.17310682	-0.8621557
## 1742 -1.62197 -1.221865	UA	JFK	LAX	1.94469037	-1.22323611	-0.9645746
## 1743 -1.62197 -1.221865	B6	JFK	MCO	-0.13375173	-1.17310682	-0.8621557
## 1744 -1.62197 -1.221865	EV	EWR	CLT	-0.69714394	-1.00266723	-1.0204395
## 1745 -1.62197 -1.221865	AA	JFK	LAX	1.94469037	-1.22323611	-0.9645746
## 1746 -1.62197 -1.221865	9E	JFK	ORD	-0.41069633	-1.22323611	-0.9645746
## 1747 -1.62197 -1.221865	DL	JFK	FLL	0.03594472	-1.22323611	-0.9645746
## 1748 -1.62197 -1.221865	UA	EWR	SJU	0.76767580	-1.17310682	-1.0204395
## 1749 -1.62197 -1.221865	WN	LGA	MDW	-0.43105991	-0.95253794	-1.0669935
## 1751 -1.62197 -1.221865	UA	EWR	SFO	2.06687181	-1.17310682	-1.0204395
## 1753 -1.62197 -1.221865	9E	JFK	JAX	-0.29123003	-1.22323611	-0.9645746
## 1755 -1.62197 -1.221865	MQ	JFK	CMH	-0.75959223	-1.22323611	-0.9645746
## 1756 -1.62197 -1.221865	AA	JFK	TPA	-0.05093986	-1.22323611	-0.9645746
## 1757 -1.62197 -1.221865	9E	JFK	IAD	-1.10577299	-1.22323611	-0.9645746
## 1758 -1.62197 -1.221865	EV	EWR	ALB	-1.22116657	-1.28339125	-1.0204395
## 1759 -1.62197 -1.221865	DL	JFK	BOS	-1.16143342	-1.28339125	-0.9645746
## 1760 -1.62197 -1.221865	UA	EWR	MCO	-0.14325473	-1.28339125	-1.0204395
## 1761 -1.62197 -1.221865	AA	LGA	MIA	0.07259915	-0.95253794	-1.0669935
## 1762 -1.62197 -1.221865	AA	JFK	BOS	-1.16143342	-1.28339125	-0.9645746
## 1763 -1.62197 -1.221865	B6	JFK	FLL	0.03594472	-1.28339125	-0.9645746
## 1764 -1.62197 -1.221865	9E	JFK	PHL	-1.28768758	-1.28339125	-0.9645746
## 1765 -1.62197 -1.221865	B6	JFK	MSY	0.18935031	-1.28339125	-0.9645746
## 1766 -1.62197 -1.221865	UA	EWR	TPA	-0.06180044	-1.28339125	-1.0204395
## 1767 -1.62197 -1.221865	B6	JFK	RSW	0.04273258	-1.28339125	-0.9645746
## 1768 -1.62197 -1.221865	UA	EWR	BQN	0.73645166	-1.28339125	-1.0204395
## 1769 -1.62197 -1.221865	B6	LGA	MCO	-0.12560630	-1.00266723	-1.0669935
## 1771 -1.62197 -1.221865	B6	JFK	SJU	0.75410009	-1.28339125	-0.9087097
## 1772 -1.62197 -1.221865	B6	EWR	FLL	0.03051443	-1.33352054	-0.9645746
## 1774 -1.62197 -1.221865	B6	JFK	TPA	-0.05093986	-1.28339125	-0.9087097
## 1776 -1.62197 -1.221865	B6	JFK	BUF	-1.00667026	-1.28339125	-0.9087097
## 1779 -1.62197 -1.221865	B6	JFK	SJU	0.75410009	-1.22323611	-0.8621557
## 1780 -1.62197 -1.221865	EV	JFK	IAD	-1.10577299	-0.72194321	-1.1694124
## 1781 -1.62197 -1.107978	UA	EWR	IAH	0.48530091	-1.29341711	-0.5921422
## 1782 -1.62197 -1.107978	AA	JFK	MIA	0.06309615	-1.33352054	-0.5548989
## 1783 -1.62197 -1.107978	UA	JFK	SFO	2.09538082	-1.33352054	-0.5548989
## 1784 -1.62197 -1.107978	B6	JFK	PBI	-0.01971572	-1.28339125	-0.4990341
## 1785 -1.62197 -1.107978	AA	LGA	DFW	0.47036763	0.00994442	0.0596146
## 1786 -1.62197 -1.107978	B6	EWR	PBI	-0.02650357	-1.28339125	-0.5548989
## 1787 -1.62197 -1.107978	B6	JFK	TPA	-0.05093986	-1.28339125	-0.4990341
## 1788 -1.62197 -1.107978	B6	LGA	FLL	0.04544772	0.00994442	0.0596146
## 1789 -1.62197 -1.107978	AA	LGA	MIA	0.07259915	0.00994442	0.0596146
## 1790 -1.62197 -1.107978	DL	JFK	ATL	-0.38354490	-1.28339125	-0.4990341

## 1791	-1.62197	-1.107978	B6	JFK	SJU	0.75410009	-1.28339125	-0.4990341
## 1792	-1.62197	-1.107978	US	EWR	CLT	-0.69714394	-1.28339125	-0.5548989
## 1793	-1.62197	-1.107978	UA	EWR	MIA	0.05766586	-1.28339125	-0.5548989
## 1794	-1.62197	-1.107978	AA	LGA	ORD	-0.42019933	0.00994442	0.0596146
## 1795	-1.62197	-1.107978	UA	EWR	PHX	1.48040089	-1.28339125	-0.5548989
## 1796	-1.62197	-1.107978	AA	LGA	DFW	0.47036763	0.00994442	0.0596146
## 1797	-1.62197	-1.107978	US	EWR	CLT	-0.69714394	-1.28339125	-0.5548989
## 1798	-1.62197	-1.107978	B6	LGA	MCO	-0.12560630	0.00994442	0.0596146
## 1799	-1.62197	-1.107978	B6	JFK	BUF	-1.00667026	-1.28339125	-0.4990341
## 1800	-1.62197	-1.107978	AA	JFK	MCO	-0.13375173	-1.28339125	-0.4990341
## 1801	-1.62197	-1.107978	B6	JFK	MSY	0.18935031	-1.28339125	-0.4990341
## 1802	-1.62197	-1.107978	DL	LGA	MCO	-0.12560630	-1.17310682	-0.5548989
## 1803	-1.62197	-1.107978	DL	JFK	SFO	2.09538082	-1.19315853	-0.4059260
## 1804	-1.62197	-1.107978	UA	EWR	LAS	1.60801262	-1.28339125	-0.5548989
## 1806	-1.62197	-1.107978	AA	JFK	MIA	0.06309615	-1.19315853	-0.4059260
## 1807	-1.62197	-1.107978	UA	EWR	RSW	0.03458715	-1.22323611	-0.4990341
## 1808	-1.62197	-1.107978	UA	EWR	MCO	-0.14325473	-1.22323611	-0.4990341
## 1809	-1.62197	-1.107978	AA	JFK	FLL	0.03594472	-1.19315853	-0.4059260
## 1810	-1.62197	-1.107978	B6	JFK	MCO	-0.13375173	-1.19315853	-0.4059260
## 1811	-1.62197	-1.107978	MQ	EWR	ORD	-0.43920534	-1.22323611	-0.4990341
## 1812	-1.62197	-1.107978	AS	EWR	SEA	1.84558765	-1.22323611	-0.4990341
## 1813	-1.62197	-1.107978	VX	JFK	SFO	2.09538082	-1.19315853	-0.4059260
## 1814	-1.62197	-1.107978	UA	EWR	TPA	-0.06180044	-1.22323611	-0.4990341
## 1815	-1.62197	-1.107978	AA	LGA	ORD	-0.42019933	-1.17310682	-0.5548989
## 1816	-1.62197	-1.107978	UA	EWR	SJU	0.76767580	-1.22323611	-0.4990341
## 1818	-1.62197	-1.107978	AA	LGA	MIA	0.07259915	-1.17310682	-0.5548989
## 1819	-1.62197	-1.107978	DL	LGA	MSP	-0.03057629	-1.17310682	-0.5548989
## 1820	-1.62197	-1.107978	EV	EWR	MEM	-0.13103659	-1.22323611	-0.4990341
## 1821	-1.62197	-1.107978	US	LGA	CLT	-0.67678036	-1.17310682	-0.5548989
## 1822	-1.62197	-1.107978	DL	LGA	ATL	-0.38082976	-1.17310682	-0.5548989
## 1823	-1.62197	-1.107978	B6	LGA	RSW	0.05087801	-1.17310682	-0.5548989
## 1824	-1.62197	-1.107978	MQ	JFK	RDU	-0.83561624	-1.17310682	-0.4059260
## 1825	-1.62197	-1.107978	WN	EWR	PHX	1.48040089	-1.17310682	-0.4990341
## 1826	-1.62197	-1.107978	EV	EWR	RDU	-0.85054953	-1.17310682	-0.4990341
## 1827	-1.62197	-1.107978	US	EWR	CLT	-0.69714394	-1.17310682	-0.4990341
## 1828	-1.62197	-1.107978	B6	EWR	BOS	-1.14378499	-1.17310682	-0.4990341
## 1829	-1.62197	-1.107978	9E	JFK	BWI	-1.16550614	-1.17310682	-0.4059260
## 1830	-1.62197	-1.107978	DL	JFK	TPA	-0.05093986	-1.17310682	-0.4059260
## 1831	-1.62197	-1.107978	MQ	JFK	DCA	-1.12613656	-1.17310682	-0.4059260
## 1832	-1.62197	-1.107978	EV	EWR	BTW	-1.05418527	-1.22323611	-0.4990341
## 1833	-1.62197	-1.107978	DL	JFK	SJU	0.75410009	-1.17310682	-0.4059260
## 1834	-1.62197	-1.107978	US	JFK	CLT	-0.68085308	-1.17310682	-0.4059260
## 1835	-1.62197	-1.107978	B6	JFK	JAX	-0.29123003	-1.17310682	-0.4059260
## 1836	-1.62197	-1.107978	MQ	LGA	ATL	-0.38082976	-1.17310682	-0.5548989
## 1837	-1.62197	-1.107978	9E	JFK	BOS	-1.16143342	-1.17310682	-0.4059260
## 1838	-1.62197	-1.107978	UA	JFK	LAX	1.94469037	-1.17310682	-0.4059260
## 1839	-1.62197	-1.107978	WN	EWR	MDW	-0.45006591	-1.17310682	-0.4990341
## 1840	-1.62197	-1.107978	UA	EWR	SAN	1.87681179	-1.17310682	-0.4990341
## 1841	-1.62197	-1.107978	DL	LGA	MCO	-0.12560630	-1.11295167	-0.6014530
## 1842	-1.62197	-1.107978	DL	LGA	DTW	-0.73379837	-1.11295167	-0.6014530
## 1843	-1.62197	-1.107978	AA	JFK	MIA	0.06309615	-1.11295167	-0.4990341
## 1844	-1.62197	-1.107978	AA	JFK	LAX	1.94469037	-1.11295167	-0.4990341
## 1845	-1.62197	-1.107978	B6	JFK	BTW	-1.05418527	-1.11295167	-0.4990341
## 1846	-1.62197	-1.107978	UA	EWR	STT	0.80297267	-1.09289995	-0.4990341

## 1847 -1.62197 -1.107978	UA	EWR	ORD	-0.43920534	-1.09289995	-0.4990341
## 1848 -1.62197 -1.107978	EV	EWR	STL	-0.23149688	-1.09289995	-0.4990341
## 1849 -1.62197 -1.107978	AA	LGA	DFW	0.47036763	-1.11295167	-0.6014530
## 1850 -1.62197 -1.107978	UA	EWR	CLE	-0.86684039	-1.09289995	-0.4990341
## 1851 -1.62197 -1.107978	AA	EWR	DFW	0.44728891	-1.09289995	-0.4990341
## 1852 -1.62197 -1.107978	B6	JFK	BOS	-1.16143342	-1.11295167	-0.4990341
## 1853 -1.62197 -1.107978	B6	LGA	FLL	0.04544772	-1.11295167	-0.6014530
## 1854 -1.62197 -1.107978	B6	LGA	PBI	-0.01021271	-1.11295167	-0.6014530
## 1855 -1.62197 -1.107978	WN	EWR	DEN	0.76360309	-1.09289995	-0.4990341
## 1856 -1.62197 -1.107978	B6	JFK	PBI	-0.01971572	-1.11295167	-0.4990341
## 1857 -1.62197 -1.107978	EV	EWR	DCA	-1.14514256	-1.09289995	-0.4990341
## 1859 -1.62197 -1.107978	AA	LGA	MIA	0.07259915	-1.11295167	-0.6014530
## 1860 -1.62197 -1.107978	VX	JFK	LAS	1.63652162	-1.11295167	-0.4990341
## 1862 -1.62197 -1.107978	B6	JFK	BUF	-1.00667026	-1.11295167	-0.4990341
## 1864 -1.62197 -1.107978	MQ	LGA	ATL	-0.38082976	-1.11295167	-0.6014530
## 1865 -1.62197 -1.107978	DL	LGA	MIA	0.07259915	-0.99264137	-0.6014530
## 1866 -1.62197 -1.107978	US	JFK	PHX	1.50755232	-1.11295167	-0.4990341
## 1867 -1.62197 -1.107978	B6	JFK	PWM	-1.04468226	-1.11295167	-0.4990341
## 1868 -1.62197 -1.107978	EV	EWR	IND	-0.53966563	-0.95253794	-0.5548989
## 1869 -1.62197 -1.107978	US	EWR	CLT	-0.69714394	-0.95253794	-0.5548989
## 1870 -1.62197 -1.107978	DL	LGA	MSP	-0.03057629	-0.99264137	-0.6014530
## 1871 -1.62197 -1.107978	DL	LGA	SRQ	0.00607814	-0.99264137	-0.6014530
## 1872 -1.62197 -1.107978	EV	EWR	BNA	-0.39983576	-0.95253794	-0.5548989
## 1873 -1.62197 -1.107978	EV	EWR	DTW	-0.75280437	-0.95253794	-0.5548989
## 1874 -1.62197 -1.107978	UA	EWR	RSW	0.03458715	-0.95253794	-0.5548989
## 1875 -1.62197 -1.107978	DL	EWR	ATL	-0.40255090	-0.95253794	-0.5548989
## 1876 -1.62197 -1.107978	AA	JFK	LAX	1.94469037	-0.99264137	-0.4059260
## 1878 -1.62197 -1.107978	DL	LGA	PBI	-0.01021271	-0.99264137	-0.6014530
## 1880 -1.62197 -1.107978	B6	LGA	FLL	0.04544772	-0.99264137	-0.6014530
## 1881 -1.62197 -1.107978	UA	EWR	IAH	0.48530091	-0.95253794	-0.5548989
## 1882 -1.62197 -1.107978	WN	LGA	MDW	-0.43105991	-0.99264137	-0.6014530
## 1883 -1.62197 -1.107978	UA	JFK	SFO	2.09538082	-0.95253794	-0.4990341
## 1885 -1.62197 -1.107978	AA	LGA	MIA	0.07259915	-0.89238279	-0.6573179
## 1887 -1.62197 -1.107978	DL	LGA	DTW	-0.73379837	-0.89238279	-0.6573179
## 1888 -1.62197 -1.107978	MQ	LGA	CMH	-0.76502252	-0.89238279	-0.6573179
## 1889 -1.62197 -1.107978	EV	LGA	PIT	-0.96051283	-0.89238279	-0.6573179
## 1890 -1.62197 -1.107978	AA	LGA	ORD	-0.42019933	-0.89238279	-0.6573179
## 1891 -1.62197 -1.107978	MQ	LGA	CLE	-0.84647681	-0.89238279	-0.6573179
## 1892 -1.62197 -1.107978	UA	EWR	DEN	0.76360309	-0.78209836	-0.6014530
## 1893 -1.62197 -1.107978	VX	JFK	LAX	1.94469037	-0.95253794	-0.4990341
## 1894 -1.62197 -1.107978	WN	EWR	STL	-0.23149688	-0.78209836	-0.6014530
## 1895 -1.62197 -1.107978	UA	EWR	MCO	-0.14325473	-0.78209836	-0.6014530
## 1896 -1.62197 -1.107978	FL	LGA	CAK	-0.87634339	-0.89238279	-0.6573179
## 1897 -1.62197 -1.107978	UA	EWR	TPA	-0.06180044	-0.78209836	-0.6014530
## 1898 -1.62197 -1.107978	EV	EWR	JAX	-0.30209061	-0.78209836	-0.6014530
## 1899 -1.62197 -1.107978	DL	LGA	TPA	-0.04415200	-0.89238279	-0.6573179
## 1900 -1.62197 -1.107978	DL	JFK	LAX	1.94469037	-0.83222765	-0.4990341
## 1901 -1.62197 -1.107978	MQ	LGA	BNA	-0.37811462	-0.78209836	-0.7597368
## 1902 -1.62197 -1.107978	EV	EWR	PWM	-1.02974898	-0.61165877	-0.6573179
## 1903 -1.62197 -1.107978	B6	JFK	HOU	0.52331292	-0.95253794	-0.4990341
## 1904 -1.62197 -1.107978	AA	LGA	DFW	0.47036763	-0.78209836	-0.7597368
## 1905 -1.62197 -1.107978	DL	LGA	ATL	-0.38082976	-0.78209836	-0.7597368
## 1906 -1.62197 -1.107978	VX	JFK	SFO	2.09538082	-0.83222765	-0.4990341
## 1907 -1.62197 -1.107978	US	JFK	CLT	-0.68085308	-0.83222765	-0.4990341

## 1908 -1.62197 -1.107978	B6	EWR	BOS	-1.14378499	-0.61165877	-0.6573179
## 1909 -1.62197 -1.107978	B6	JFK	LAX	1.94469037	-0.83222765	-0.4990341
## 1910 -1.62197 -1.107978	MQ	EWR	ORD	-0.43920534	-0.61165877	-0.6573179
## 1911 -1.62197 -1.107978	UA	EWR	PHX	1.48040089	-0.61165877	-0.6573179
## 1912 -1.62197 -1.107978	WN	EWR	MDW	-0.45006591	-0.61165877	-0.6573179
## 1913 -1.62197 -1.107978	MQ	JFK	RDU	-0.83561624	-0.83222765	-0.4990341
## 1914 -1.62197 -1.107978	DL	LGA	DTW	-0.73379837	-0.78209836	-0.7597368
## 1915 -1.62197 -1.107978	UA	EWR	MIA	0.05766586	-0.61165877	-0.6573179
## 1916 -1.62197 -1.107978	AA	EWR	DFW	0.44728891	-0.61165877	-0.6573179
## 1917 -1.62197 -1.107978	EV	EWR	DTW	-0.75280437	-0.61165877	-0.6573179
## 1918 -1.62197 -1.107978	DL	LGA	MCO	-0.12560630	-0.78209836	-0.7597368
## 1919 -1.62197 -1.107978	WN	LGA	DEN	0.78396666	-0.78209836	-0.7597368
## 1920 -1.62197 -1.107978	9E	JFK	PHL	-1.28768758	-0.78209836	-0.5548989
## 1921 -1.62197 -1.107978	B6	JFK	PBI	-0.01971572	-0.78209836	-0.5548989
## 1922 -1.62197 -1.107978	AA	LGA	ORD	-0.42019933	-0.67181392	-0.7597368
## 1923 -1.62197 -1.107978	MQ	LGA	CMH	-0.76502252	-0.67181392	-0.7597368
## 1924 -1.62197 -1.107978	WN	EWR	HOU	0.50023420	-0.56152948	-0.7597368
## 1925 -1.62197 -1.107978	EV	EWR	BUF	-1.03246412	-0.56152948	-0.7597368
## 1926 -1.62197 -1.107978	MQ	LGA	DTW	-0.73379837	-0.67181392	-0.7597368
## 1927 -1.62197 -1.107978	EV	EWR	IAD	-1.12749413	-0.56152948	-0.7597368
## 1928 -1.62197 -1.107978	B6	JFK	BUR	1.93111466	-0.78209836	-0.5548989
## 1929 -1.62197 -1.107978	DL	JFK	ATL	-0.38354490	-0.78209836	-0.5548989
## 1930 -1.62197 -1.107978	B6	EWR	MCO	-0.14325473	-0.56152948	-0.7597368
## 1931 -1.62197 -1.107978	WN	EWR	PHX	1.48040089	-0.56152948	-0.7597368
## 1932 -1.62197 -1.107978	EV	EWR	BWI	-1.18586971	-0.56152948	-0.7597368
## 1933 -1.62197 -1.107978	B6	JFK	SJU	0.75410009	-0.78209836	-0.5548989
## 1934 -1.62197 -1.107978	US	EWR	PHX	1.48040089	-0.56152948	-0.7597368
## 1935 -1.62197 -1.107978	B6	JFK	MCO	-0.13375173	-0.78209836	-0.5548989
## 1936 -1.62197 -1.107978	DL	LGA	FLL	0.04544772	-0.67181392	-0.7597368
## 1937 -1.62197 -1.107978	UA	EWR	FLL	0.03051443	-0.56152948	-0.7597368
## 1938 -1.62197 -1.107978	EV	EWR	CHS	-0.56274435	-0.56152948	-0.7597368
## 1940 -1.62197 -1.107978	UA	EWR	PBI	-0.02650357	-0.56152948	-0.7597368
## 1941 -1.62197 -1.107978	FL	LGA	ATL	-0.38082976	-0.61165877	-0.7597368
## 1942 -1.62197 -1.107978	UA	EWR	TPA	-0.06180044	-0.50137433	-0.8621557
## 1943 -1.62197 -1.107978	AA	EWR	DFW	0.44728891	-0.50137433	-0.8621557
## 1944 -1.62197 -1.107978	UA	EWR	ORD	-0.43920534	-0.50137433	-0.8621557
## 1945 -1.62197 -1.107978	EV	EWR	MSP	-0.04686715	-0.50137433	-0.8621557
## 1946 -1.62197 -1.107978	9E	JFK	BOS	-1.16143342	-0.67181392	-0.6014530
## 1947 -1.62197 -1.107978	EV	EWR	MCI	0.06716887	-0.50137433	-0.8621557
## 1948 -1.62197 -1.107978	EV	EWR	DTW	-0.75280437	-0.50137433	-0.8621557
## 1949 -1.62197 -1.107978	AA	JFK	MCO	-0.13375173	-0.67181392	-0.6014530
## 1951 -1.62197 -1.107978	B6	JFK	BOS	-1.16143342	-0.67181392	-0.6014530
## 1952 -1.62197 -1.107978	UA	EWR	RSW	0.03458715	-0.50137433	-0.8621557
## 1953 -1.62197 -1.107978	EV	EWR	GSP	-0.60890178	-0.50137433	-0.8621557
## 1954 -1.62197 -1.107978	DL	LGA	DTW	-0.73379837	-0.61165877	-0.7597368
## 1955 -1.62197 -1.107978	UA	EWR	BOS	-1.14378499	-0.50137433	-0.8621557
## 1957 -1.62197 -1.107978	US	EWR	CLT	-0.69714394	-0.56152948	-0.9087097
## 1959 -1.62197 -1.107978	B6	JFK	PBI	-0.01971572	-0.67181392	-0.6014530
## 1960 -1.62197 -1.107978	B6	JFK	TPA	-0.05093986	-0.67181392	-0.6014530
## 1961 -1.62197 -1.107978	UA	LGA	DEN	0.78396666	-0.61165877	-0.8621557
## 1962 -1.62197 -1.107978	B6	JFK	BUF	-1.00667026	-0.67181392	-0.6014530
## 1963 -1.62197 -1.107978	EV	EWR	RDU	-0.85054953	-0.56152948	-0.9087097
## 1964 -1.62197 -1.107978	EV	EWR	JAX	-0.30209061	-0.56152948	-0.9087097
## 1965 -1.62197 -1.107978	DL	LGA	MIA	0.07259915	-0.61165877	-0.8621557

## 1966 -1.62197 -1.107978	AA	LGA	STL	-0.20977574	-0.61165877	-0.8621557
## 1968 -1.62197 -1.107978	9E	JFK	IAD	-1.10577299	-0.72194321	-0.6573179
## 1969 -1.62197 -1.107978	MQ	JFK	DCA	-1.12613656	-0.72194321	-0.6573179
## 1970 -1.62197 -1.107978	AA	LGA	DFW	0.47036763	-0.61165877	-0.8621557
## 1971 -1.62197 -1.107978	UA	LGA	CLE	-0.84647681	-0.61165877	-0.8621557
## 1972 -1.62197 -1.107978	9E	JFK	ROC	-1.05690041	-0.72194321	-0.6573179
## 1973 -1.62197 -1.107978	UA	EWR	IAH	0.48530091	-0.56152948	-0.9087097
## 1975 -1.62197 -1.107978	DL	EWR	ATL	-0.40255090	-0.56152948	-0.9087097
## 1976 -1.62197 -1.107978	DL	JFK	FLL	0.03594472	-0.72194321	-0.6573179
## 1977 -1.62197 -1.107978	AA	JFK	LAX	1.94469037	-0.72194321	-0.6573179
## 1978 -1.62197 -1.107978	9E	JFK	BWI	-1.16550614	-0.72194321	-0.6573179
## 1979 -1.62197 -1.107978	DL	LGA	ATL	-0.38082976	-0.61165877	-0.9645746
## 1980 -1.62197 -1.107978	MQ	LGA	RDU	-0.83018595	-0.61165877	-0.9645746
## 1981 -1.62197 -1.107978	DL	JFK	MCO	-0.13375173	-0.89238279	-0.7038719
## 1982 -1.62197 -1.107978	DL	JFK	DEN	0.79211209	-0.89238279	-0.7038719
## 1983 -1.62197 -1.107978	DL	JFK	MIA	0.06309615	-0.89238279	-0.7038719
## 1984 -1.62197 -1.107978	AA	LGA	ORD	-0.42019933	-0.61165877	-0.9645746
## 1985 -1.62197 -1.107978	EV	EWR	DAY	-0.69171365	-0.67181392	-0.8062908
## 1986 -1.62197 -1.107978	B6	JFK	MCO	-0.13375173	-0.89238279	-0.7038719
## 1988 -1.62197 -1.107978	9E	JFK	RDU	-0.83561624	-0.89238279	-0.7038719
## 1989 -1.62197 -1.107978	MQ	LGA	BNA	-0.37811462	-0.61165877	-0.9645746
## 1990 -1.62197 -1.107978	US	JFK	PHX	1.50755232	-0.89238279	-0.7038719
## 1991 -1.62197 -1.107978	VX	JFK	SFO	2.09538082	-0.89238279	-0.7038719
## 1992 -1.62197 -1.107978	UA	EWR	CLE	-0.86684039	-0.67181392	-0.8062908
## 1993 -1.62197 -1.107978	WN	EWR	DEN	0.76360309	-0.67181392	-0.8062908
## 1995 -1.62197 -1.107978	MQ	LGA	DTW	-0.73379837	-0.61165877	-0.9645746
## 1997 -1.62197 -1.107978	UA	EWR	MCO	-0.14325473	-0.67181392	-0.8062908
## 1998 -1.62197 -1.107978	EV	EWR	MEM	-0.13103659	-0.67181392	-0.8062908
## 1999 -1.62197 -1.107978	UA	EWR	ORD	-0.43920534	-0.67181392	-0.8062908
## 2000 -1.62197 -1.107978	DL	JFK	AUS	0.64956708	-0.89238279	-0.7038719
## 2001 -1.62197 -1.107978	AA	JFK	BOS	-1.16143342	-0.89238279	-0.7038719
## 2002 -1.62197 -1.107978	VX	JFK	LAX	1.94469037	-0.89238279	-0.7038719
## 2003 -1.62197 -1.107978	AA	EWR	DFW	0.44728891	-0.72194321	-0.8062908
## 2004 -1.62197 -1.107978	EV	EWR	DCA	-1.14514256	-0.72194321	-0.8062908
## 2005 -1.62197 -1.107978	EV	EWR	BWI	-1.18586971	-0.72194321	-0.8062908
## 2006 -1.62197 -1.107978	DL	JFK	SAN	1.90532080	-0.89238279	-0.6573179
## 2007 -1.62197 -1.107978	US	LGA	CLT	-0.67678036	-0.67181392	-0.9087097
## 2008 -1.62197 -1.107978	MQ	LGA	RDU	-0.83018595	-0.67181392	-0.9087097
## 2012 -1.62197 -1.107978	WN	EWR	STL	-0.23149688	-0.72194321	-0.8062908
## 2013 -1.62197 -1.107978	F9	LGA	DEN	0.78396666	-0.67181392	-0.9087097
## 2014 -1.62197 -1.107978	AA	LGA	ORD	-0.42019933	-0.67181392	-0.9087097
## 2015 -1.62197 -1.107978	WN	LGA	BNA	-0.37811462	-0.67181392	-0.9087097
## 2016 -1.62197 -1.107978	AA	LGA	DFW	0.47036763	-0.67181392	-0.9087097
## 2019 -1.62197 -1.107978	EV	EWR	RIC	-1.03925198	-0.72194321	-0.8062908
## 2020 -1.62197 -1.107978	DL	JFK	PDX	1.91618137	-0.89238279	-0.6573179
## 2022 -1.62197 -1.107978	B6	JFK	FLL	0.03594472	-0.78209836	-0.8062908
## 2023 -1.62197 -1.107978	DL	LGA	ATL	-0.38082976	-0.67181392	-0.9087097
## 2024 -1.62197 -1.107978	B6	JFK	MCO	-0.13375173	-0.89238279	-0.6573179
## 2025 -1.62197 -1.107978	MQ	LGA	CMH	-0.76502252	-0.67181392	-0.9087097
## 2027 -1.62197 -1.107978	B6	EWR	MCO	-0.14325473	-0.72194321	-0.8062908
## 2028 -1.62197 -1.107978	AS	EWR	SEA	1.84558765	-0.72194321	-0.8621557
## 2030 -1.62197 -1.107978	9E	JFK	DTW	-0.72429537	-0.78209836	-0.8062908
## 2031 -1.62197 -1.107978	UA	EWR	CLE	-0.86684039	-0.72194321	-0.8621557
## 2032 -1.62197 -1.107978	B6	JFK	SJC	2.07230210	-0.78209836	-0.8062908

## 2033 -1.62197 -1.107978	9E	EWR	DTW	-0.75280437	-0.72194321	-0.8621557
## 2034 -1.62197 -1.107978	AA	JFK	SEA	1.87273908	-0.78209836	-0.8062908
## 2035 -1.62197 -1.107978	UA	EWR	SEA	1.84558765	-0.72194321	-0.8621557
## 2036 -1.62197 -1.107978	US	EWR	CLT	-0.69714394	-0.72194321	-0.8621557
## 2037 -1.62197 -1.107978	B6	JFK	BUF	-1.00667026	-0.78209836	-0.8062908
## 2038 -1.62197 -1.107978	UA	EWR	SNA	1.88902994	-0.72194321	-0.8621557
## 2039 -1.62197 -1.107978	EV	EWR	CAE	-0.59804121	-0.72194321	-0.8621557
## 2040 -1.62197 -1.107978	MQ	LGA	MSP	-0.03057629	-0.67181392	-0.9087097
## 2041 -1.62197 -1.107978	AA	LGA	STL	-0.20977574	-0.67181392	-0.9087097
## 2042 -1.62197 -1.107978	US	LGA	CLT	-0.67678036	-0.67181392	-0.9087097
## 2043 -1.62197 -1.107978	UA	EWR	BOS	-1.14378499	-0.72194321	-0.8621557
## 2044 -1.62197 -1.107978	AA	JFK	SJU	0.75410009	-0.78209836	-0.8062908
## 2045 -1.62197 -1.107978	DL	LGA	PIT	-0.96051283	-0.72194321	-0.9087097
## 2046 -1.62197 -1.107978	DL	JFK	LAX	1.94469037	-0.78209836	-0.8621557
## 2047 -1.62197 -1.107978	DL	JFK	SFO	2.09538082	-0.78209836	-0.8621557
## 2048 -1.62197 -1.107978	MQ	LGA	RDU	-0.83018595	-0.72194321	-0.9087097
## 2049 -1.62197 -1.107978	EV	EWR	RIC	-1.03925198	-0.78209836	-0.8621557
## 2050 -1.62197 -1.107978	EV	EWR	OMA	0.12418687	-0.78209836	-0.8621557
## 2051 -1.62197 -1.107978	DL	JFK	ATL	-0.38354490	-0.78209836	-0.8062908
## 2052 -1.62197 -1.107978	DL	LGA	MIA	0.07259915	-0.72194321	-0.9087097
## 2053 -1.62197 -1.107978	DL	LGA	FLL	0.04544772	-0.72194321	-0.9087097
## 2055 -1.62197 -1.107978	UA	EWR	LAS	1.60801262	-0.78209836	-0.8621557
## 2056 -1.62197 -1.107978	AA	JFK	TPA	-0.05093986	-0.78209836	-0.8621557
## 2057 -1.62197 -1.107978	WN	EWR	MDW	-0.45006591	-0.78209836	-0.8621557
## 2058 -1.62197 -1.107978	B6	JFK	PBI	-0.01971572	-0.78209836	-0.8621557
## 2059 -1.62197 -1.107978	EV	LGA	IAD	-1.10441541	-0.72194321	-0.9087097
## 2060 -1.62197 -1.107978	B6	JFK	SFO	2.09538082	-0.78209836	-0.8621557
## 2062 -1.62197 -1.107978	9E	JFK	BWI	-1.16550614	-0.78209836	-0.8621557
## 2063 -1.62197 -1.107978	EV	EWR	OKC	0.38348305	-0.78209836	-0.8621557
## 2064 -1.62197 -1.107978	9E	LGA	TYS	-0.53695049	-0.72194321	-0.8621557
## 2065 -1.62197 -1.107978	9E	JFK	CVG	-0.61568964	-0.78209836	-0.8621557
## 2066 -1.62197 -1.107978	9E	JFK	BUF	-1.00667026	-0.78209836	-0.8621557
## 2067 -1.62197 -1.107978	9E	JFK	JAX	-0.29123003	-0.78209836	-0.8621557
## 2068 -1.62197 -1.107978	DL	JFK	BOS	-1.16143342	-0.78209836	-0.8621557
## 2069 -1.62197 -1.107978	EV	EWR	TYS	-0.55867164	-0.78209836	-0.8062908
## 2070 -1.62197 -1.107978	EV	EWR	BUF	-1.03246412	-0.78209836	-0.8621557
## 2071 -1.62197 -1.107978	UA	EWR	MIA	0.05766586	-0.78209836	-0.8062908
## 2072 -1.62197 -1.107978	EV	EWR	GSO	-0.81117995	-0.78209836	-0.8062908
## 2074 -1.62197 -1.107978	MQ	LGA	CMH	-0.76502252	-0.72194321	-0.8621557
## 2076 -1.62197 -1.107978	UA	JFK	LAX	1.94469037	-0.78209836	-0.8621557
## 2077 -1.62197 -1.107978	UA	EWR	TPA	-0.06180044	-0.78209836	-0.8062908
## 2078 -1.62197 -1.107978	UA	EWR	FLL	0.03051443	-0.78209836	-0.8062908
## 2079 -1.62197 -1.107978	FL	LGA	CAK	-0.87634339	-0.72194321	-0.8621557
## 2080 -1.62197 -1.107978	AA	LGA	ORD	-0.42019933	-0.72194321	-0.8621557
## 2081 -1.62197 -1.107978	9E	JFK	DCA	-1.12613656	-0.78209836	-0.8621557
## 2083 -1.62197 -1.107978	DL	JFK	LAX	1.94469037	-0.78209836	-0.8062908
## 2085 -1.62197 -1.107978	MQ	LGA	BNA	-0.37811462	-0.72194321	-0.8062908
## 2086 -1.62197 -1.107978	EV	EWR	PHL	-1.30669358	-0.83222765	-0.8062908
## 2087 -1.62197 -1.107978	EV	EWR	SDF	-0.54373835	-0.83222765	-0.8062908
## 2088 -1.62197 -1.107978	MQ	LGA	RDU	-0.83018595	-0.72194321	-0.8062908
## 2089 -1.62197 -1.107978	B6	LGA	FLL	0.04544772	-0.72194321	-0.8062908
## 2090 -1.62197 -1.107978	B6	JFK	SJU	0.75410009	-0.78209836	-0.8062908
## 2091 -1.62197 -1.107978	AA	JFK	LAX	1.94469037	-0.78209836	-0.8062908
## 2092 -1.62197 -1.107978	EV	EWR	PWM	-1.02974898	-0.83222765	-0.8062908

## 2093 -1.62197 -1.107978	EV	EWR	PVD	-1.19808785	-0.83222765	-0.8062908
## 2094 -1.62197 -1.107978	DL	LGA	PWM	-1.05011255	-0.72194321	-0.8062908
## 2095 -1.62197 -1.107978	B6	JFK	FLL	0.03594472	-0.78209836	-0.8062908
## 2096 -1.62197 -1.107978	EV	EWR	BTW	-1.05418527	-0.83222765	-0.8062908
## 2099 -1.62197 -1.107978	B6	JFK	SYR	-1.13156685	-0.78209836	-0.8062908
## 2100 -1.62197 -1.107978	B6	JFK	BUF	-1.00667026	-0.78209836	-0.8062908
## 2102 -1.62197 -1.107978	B6	JFK	BOS	-1.16143342	-0.78209836	-0.8062908
## 2105 -1.62197 -0.994091	AA	JFK	MIA	0.06309615	-1.00266723	-0.7597368
## 2106 -1.62197 -0.994091	B6	JFK	BQN	0.72423351	-1.00266723	-0.7597368
## 2107 -1.62197 -0.994091	UA	LGA	IAH	0.50702206	-0.95253794	-0.7038719
## 2108 -1.62197 -0.994091	EV	EWR	DTW	-0.75280437	-1.17310682	-0.7038719
## 2109 -1.62197 -0.994091	B6	EWR	FLL	0.03051443	-1.17310682	-0.7038719
## 2110 -1.62197 -0.994091	AA	LGA	DFW	0.47036763	-1.00266723	-0.7038719
## 2111 -1.62197 -0.994091	DL	LGA	ATL	-0.38082976	-1.00266723	-0.7038719
## 2112 -1.62197 -0.994091	DL	LGA	DTW	-0.73379837	-1.00266723	-0.7038719
## 2113 -1.62197 -0.994091	MQ	LGA	ATL	-0.38082976	-1.00266723	-0.7038719
## 2114 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-1.00266723	-0.7038719
## 2115 -1.62197 -0.994091	UA	EWR	BOS	-1.14378499	-1.17310682	-0.7038719
## 2116 -1.62197 -0.994091	DL	LGA	MSP	-0.03057629	-1.00266723	-0.7038719
## 2117 -1.62197 -0.994091	AA	LGA	MIA	0.07259915	-1.00266723	-0.7038719
## 2118 -1.62197 -0.994091	US	JFK	PHL	-1.28768758	-1.06282238	-0.7597368
## 2119 -1.62197 -0.994091	MQ	LGA	RDU	-0.83018595	-1.00266723	-0.7038719
## 2120 -1.62197 -0.994091	US	JFK	CLT	-0.68085308	-1.06282238	-0.7597368
## 2121 -1.62197 -0.994091	EV	EWR	CVG	-0.64284107	-1.17310682	-0.7038719
## 2122 -1.62197 -0.994091	B6	JFK	MCO	-0.13375173	-1.06282238	-0.7597368
## 2123 -1.62197 -0.994091	US	LGA	CLT	-0.67678036	-1.00266723	-0.7038719
## 2124 -1.62197 -0.994091	UA	EWR	PBI	-0.02650357	-1.17310682	-0.7038719
## 2125 -1.62197 -0.994091	EV	EWR	IND	-0.53966563	-1.17310682	-0.7038719
## 2126 -1.62197 -0.994091	WN	LGA	DEN	0.78396666	-1.00266723	-0.7038719
## 2127 -1.62197 -0.994091	AA	JFK	SJU	0.75410009	-1.06282238	-0.7597368
## 2128 -1.62197 -0.994091	B6	JFK	TPA	-0.05093986	-1.06282238	-0.7597368
## 2129 -1.62197 -0.994091	UA	EWR	SFO	2.06687181	-1.17310682	-0.7038719
## 2130 -1.62197 -0.994091	AA	LGA	ORD	-0.42019933	-1.00266723	-0.7038719
## 2131 -1.62197 -0.994091	UA	EWR	PHX	1.48040089	-1.17310682	-0.7038719
## 2132 -1.62197 -0.994091	UA	EWR	AUS	0.62648836	-1.17310682	-0.7038719
## 2133 -1.62197 -0.994091	EV	EWR	DCA	-1.14514256	-1.17310682	-0.7038719
## 2134 -1.62197 -0.994091	VX	JFK	LAX	1.94469037	-1.06282238	-0.7597368
## 2135 -1.62197 -0.994091	B6	JFK	MSY	0.18935031	-1.06282238	-0.7597368
## 2136 -1.62197 -0.994091	US	LGA	BOS	-1.16550614	-0.95253794	-0.6573179
## 2137 -1.62197 -0.994091	DL	LGA	FLL	0.04544772	-0.95253794	-0.6573179
## 2138 -1.62197 -0.994091	MQ	LGA	XNA	0.14183530	-0.95253794	-0.6573179
## 2139 -1.62197 -0.994091	DL	JFK	LAX	1.94469037	-1.06282238	-0.7597368
## 2140 -1.62197 -0.994091	EV	EWR	RDU	-0.85054953	-1.17310682	-0.7038719
## 2141 -1.62197 -0.994091	EV	EWR	MSY	0.16898673	-1.06282238	-0.6573179
## 2142 -1.62197 -0.994091	DL	JFK	SFO	2.09538082	-1.06282238	-0.7597368
## 2143 -1.62197 -0.994091	B6	LGA	MCO	-0.12560630	-0.95253794	-0.6573179
## 2144 -1.62197 -0.994091	UA	EWR	ORD	-0.43920534	-1.06282238	-0.6573179
## 2145 -1.62197 -0.994091	B6	JFK	FLL	0.03594472	-1.06282238	-0.7597368
## 2146 -1.62197 -0.994091	MQ	EWR	ORD	-0.43920534	-1.06282238	-0.6573179
## 2147 -1.62197 -0.994091	UA	LGA	ORD	-0.42019933	-0.95253794	-0.6573179
## 2148 -1.62197 -0.994091	UA	JFK	SFO	2.09538082	-1.06282238	-0.7597368
## 2149 -1.62197 -0.994091	UA	EWR	SNA	1.88902994	-1.06282238	-0.6573179
## 2151 -1.62197 -0.994091	AA	JFK	FLL	0.03594472	-1.06282238	-0.7597368
## 2152 -1.62197 -0.994091	DL	LGA	DTW	-0.73379837	-0.95253794	-0.6573179

## 2153 -1.62197 -0.994091	AA	JFK	MCO	-0.13375173	-1.06282238	-0.7597368
## 2154 -1.62197 -0.994091	AA	JFK	LAX	1.94469037	-1.06282238	-0.7597368
## 2155 -1.62197 -0.994091	AS	EWR	SEA	1.84558765	-1.06282238	-0.6573179
## 2156 -1.62197 -0.994091	DL	JFK	SEA	1.87273908	-1.06282238	-0.7597368
## 2157 -1.62197 -0.994091	UA	LGA	IAH	0.50702206	-0.95253794	-0.6573179
## 2158 -1.62197 -0.994091	AA	LGA	ORD	-0.42019933	-0.95253794	-0.6573179
## 2159 -1.62197 -0.994091	AA	JFK	SFO	2.09538082	-1.06282238	-0.7597368
## 2160 -1.62197 -0.994091	EV	EWR	STL	-0.23149688	-1.06282238	-0.6573179
## 2161 -1.62197 -0.994091	EV	EWR	MHT	-1.13156685	-1.06282238	-0.6573179
## 2162 -1.62197 -0.994091	UA	EWR	TPA	-0.06180044	-1.06282238	-0.6573179
## 2163 -1.62197 -0.994091	DL	JFK	MIA	0.06309615	-0.83222765	-0.7597368
## 2164 -1.62197 -0.994091	B6	EWR	MCO	-0.14325473	-0.95253794	-0.6573179
## 2165 -1.62197 -0.994091	EV	EWR	OMA	0.12418687	-0.95253794	-0.6573179
## 2166 -1.62197 -0.994091	AA	JFK	STT	0.78803938	-0.83222765	-0.7597368
## 2167 -1.62197 -0.994091	9E	JFK	MSP	-0.01835814	-0.83222765	-0.7597368
## 2168 -1.62197 -0.994091	B6	JFK	CLT	-0.68085308	-0.83222765	-0.7597368
## 2169 -1.62197 -0.994091	DL	JFK	ATL	-0.38354490	-0.83222765	-0.7597368
## 2170 -1.62197 -0.994091	US	EWR	CLT	-0.69714394	-0.95253794	-0.6573179
## 2171 -1.62197 -0.994091	DL	LGA	TPA	-0.04415200	-0.89238279	-0.7038719
## 2172 -1.62197 -0.994091	WN	EWR	PHX	1.48040089	-0.95253794	-0.6573179
## 2173 -1.62197 -0.994091	DL	LGA	DEN	0.78396666	-0.89238279	-0.7038719
## 2174 -1.62197 -0.994091	9E	JFK	BWI	-1.16550614	-0.83222765	-0.7597368
## 2175 -1.62197 -0.994091	MQ	LGA	BNA	-0.37811462	-0.89238279	-0.7038719
## 2176 -1.62197 -0.994091	EV	EWR	DAY	-0.69171365	-0.95253794	-0.6573179
## 2177 -1.62197 -0.994091	EV	EWR	MYR	-0.66863493	-0.95253794	-0.6573179
## 2178 -1.62197 -0.994091	MQ	JFK	DCA	-1.12613656	-0.83222765	-0.7597368
## 2179 -1.62197 -0.994091	EV	EWR	MEM	-0.13103659	-0.95253794	-0.6573179
## 2180 -1.62197 -0.994091	B6	JFK	SAN	1.90532080	-0.83222765	-0.7597368
## 2182 -1.62197 -0.994091	EV	EWR	PWM	-1.02974898	-0.95253794	-0.6573179
## 2183 -1.62197 -0.994091	9E	JFK	RDU	-0.83561624	-0.83222765	-0.7597368
## 2184 -1.62197 -0.994091	US	LGA	CLT	-0.67678036	-0.89238279	-0.7038719
## 2185 -1.62197 -0.994091	F9	LGA	DEN	0.78396666	-0.89238279	-0.7038719
## 2186 -1.62197 -0.994091	DL	JFK	SJU	0.75410009	-0.83222765	-0.7597368
## 2187 -1.62197 -0.994091	EV	EWR	BTW	-1.05418527	-0.95253794	-0.6573179
## 2188 -1.62197 -0.994091	UA	EWR	MCO	-0.14325473	-0.95253794	-0.6573179
## 2189 -1.62197 -0.994091	WN	EWR	MDW	-0.45006591	-0.95253794	-0.6573179
## 2190 -1.62197 -0.994091	UA	EWR	SFO	2.06687181	-0.95253794	-0.6573179
## 2191 -1.62197 -0.994091	UA	EWR	FLL	0.03051443	-0.95253794	-0.6573179
## 2192 -1.62197 -0.994091	EV	EWR	RIC	-1.03925198	-0.95253794	-0.6573179
## 2193 -1.62197 -0.994091	9E	JFK	DCA	-1.12613656	-0.83222765	-0.7597368
## 2194 -1.62197 -0.994091	AA	JFK	SJU	0.75410009	-0.83222765	-0.7597368
## 2195 -1.62197 -0.994091	B6	JFK	TPA	-0.05093986	-0.83222765	-0.7597368
## 2196 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-0.83222765	-0.7597368
## 2197 -1.62197 -0.994091	UA	EWR	IAH	0.48530091	-0.95253794	-0.6573179
## 2198 -1.62197 -0.994091	MQ	LGA	DTW	-0.73379837	-0.83222765	-0.7597368
## 2199 -1.62197 -0.994091	B6	JFK	AUS	0.64956708	-0.83222765	-0.7597368
## 2200 -1.62197 -0.994091	DL	EWR	ATL	-0.40255090	-0.72194321	-0.7597368
## 2201 -1.62197 -0.994091	AA	JFK	MIA	0.06309615	-0.72194321	-0.7597368
## 2202 -1.62197 -0.994091	UA	EWR	TPA	-0.06180044	-0.95253794	-0.6573179
## 2203 -1.62197 -0.994091	EV	EWR	XNA	0.12011416	-0.95253794	-0.6573179
## 2204 -1.62197 -0.994091	DL	JFK	LAX	1.94469037	-0.72194321	-0.7597368
## 2205 -1.62197 -0.994091	9E	JFK	DTW	-0.72429537	-0.83222765	-0.7597368
## 2206 -1.62197 -0.994091	DL	LGA	FLL	0.04544772	-0.83222765	-0.7597368
## 2207 -1.62197 -0.994091	B6	JFK	ROC	-1.05690041	-0.72194321	-0.7597368

## 2208 -1.62197 -0.994091	AA	JFK	LAX	1.94469037	-0.72194321	-0.7597368
## 2209 -1.62197 -0.994091	MQ	LGA	CLT	-0.67678036	-0.83222765	-0.7597368
## 2210 -1.62197 -0.994091	UA	EWR	LAS	1.60801262	-0.72194321	-0.7597368
## 2211 -1.62197 -0.994091	B6	LGA	FLL	0.04544772	-0.83222765	-0.7597368
## 2212 -1.62197 -0.994091	EV	EWR	STL	-0.23149688	-0.72194321	-0.7597368
## 2215 -1.62197 -0.994091	B6	JFK	BTW	-1.05418527	-0.72194321	-0.7597368
## 2216 -1.62197 -0.994091	EV	EWR	DTW	-0.75280437	-0.95253794	-0.6573179
## 2217 -1.62197 -0.994091	UA	EWR	LAX	1.91618137	-0.72194321	-0.7597368
## 2218 -1.62197 -0.994091	B6	JFK	BUF	-1.00667026	-0.72194321	-0.7597368
## 2219 -1.62197 -0.994091	B6	JFK	FLL	0.03594472	-0.72194321	-0.7597368
## 2220 -1.62197 -0.994091	B6	LGA	PBI	-0.01021271	-0.83222765	-0.7597368
## 2221 -1.62197 -0.994091	VX	JFK	LAS	1.63652162	-0.72194321	-0.7597368
## 2222 -1.62197 -0.994091	AA	LGA	MIA	0.07259915	-0.83222765	-0.7597368
## 2223 -1.62197 -0.994091	WN	LGA	BNA	-0.37811462	-0.83222765	-0.7597368
## 2224 -1.62197 -0.994091	EV	EWR	DCA	-1.14514256	-0.72194321	-0.7597368
## 2225 -1.62197 -0.994091	B6	JFK	PWM	-1.04468226	-0.72194321	-0.7597368
## 2226 -1.62197 -0.994091	9E	LGA	GRR	-0.57632007	-0.83222765	-0.7597368
## 2227 -1.62197 -0.994091	WN	LGA	MKE	-0.41341148	-0.83222765	-0.7597368
## 2228 -1.62197 -0.994091	US	LGA	BOS	-1.16550614	-0.78209836	-0.8062908
## 2229 -1.62197 -0.994091	US	JFK	PHX	1.50755232	-0.72194321	-0.7597368
## 2230 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-0.78209836	-0.8062908
## 2231 -1.62197 -0.994091	DL	JFK	SFO	2.09538082	-0.61165877	-0.8621557
## 2232 -1.62197 -0.994091	US	LGA	CLT	-0.67678036	-0.78209836	-0.8062908
## 2233 -1.62197 -0.994091	B6	JFK	LAS	1.63652162	-0.72194321	-0.7597368
## 2235 -1.62197 -0.994091	EV	EWR	BNA	-0.39983576	-0.72194321	-0.7597368
## 2236 -1.62197 -0.994091	MQ	EWR	ORD	-0.43920534	-0.67181392	-0.9087097
## 2237 -1.62197 -0.994091	UA	EWR	MCO	-0.14325473	-0.67181392	-0.9087097
## 2238 -1.62197 -0.994091	UA	EWR	SEA	1.84558765	-0.67181392	-0.9087097
## 2239 -1.62197 -0.994091	DL	LGA	SRQ	0.00607814	-0.78209836	-0.8062908
## 2240 -1.62197 -0.994091	US	JFK	CLT	-0.68085308	-0.61165877	-0.8621557
## 2241 -1.62197 -0.994091	UA	LGA	IAH	0.50702206	-0.78209836	-0.8062908
## 2242 -1.62197 -0.994091	EV	EWR	DTW	-0.75280437	-0.67181392	-0.9087097
## 2243 -1.62197 -0.994091	VX	JFK	SFO	2.09538082	-0.61165877	-0.8621557
## 2244 -1.62197 -0.994091	AA	LGA	ORD	-0.42019933	-0.78209836	-0.8062908
## 2245 -1.62197 -0.994091	B6	JFK	MCO	-0.13375173	-0.61165877	-0.8621557
## 2246 -1.62197 -0.994091	DL	LGA	MEM	-0.10795787	-0.78209836	-0.8062908
## 2247 -1.62197 -0.994091	EV	EWR	MKE	-0.43105991	-0.67181392	-0.9087097
## 2248 -1.62197 -0.994091	AA	LGA	DFW	0.47036763	-0.78209836	-0.8062908
## 2249 -1.62197 -0.994091	B6	LGA	FLL	0.04544772	-0.78209836	-0.8062908
## 2250 -1.62197 -0.994091	UA	JFK	SFO	2.09538082	-0.61165877	-0.9645746
## 2251 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-0.78209836	-0.9087097
## 2252 -1.62197 -0.994091	WN	LGA	MDW	-0.43105991	-0.78209836	-0.9087097
## 2253 -1.62197 -0.994091	MQ	JFK	DCA	-1.12613656	-0.61165877	-0.9645746
## 2254 -1.62197 -0.994091	MQ	LGA	DTW	-0.73379837	-0.78209836	-0.8062908
## 2255 -1.62197 -0.994091	UA	EWR	BOS	-1.14378499	-0.67181392	-0.9087097
## 2256 -1.62197 -0.994091	B6	JFK	BTW	-1.05418527	-0.61165877	-0.9645746
## 2257 -1.62197 -0.994091	DL	LGA	ATL	-0.38082976	-0.78209836	-0.9087097
## 2259 -1.62197 -0.994091	MQ	LGA	CLE	-0.84647681	-0.78209836	-0.9087097
## 2260 -1.62197 -0.994091	B6	EWR	MCO	-0.14325473	-0.61165877	-0.9645746
## 2261 -1.62197 -0.994091	B6	JFK	LAX	1.94469037	-0.61165877	-0.9645746
## 2262 -1.62197 -0.994091	DL	LGA	MSP	-0.03057629	-0.78209836	-0.9087097
## 2263 -1.62197 -0.994091	UA	EWR	MCO	-0.14325473	-0.61165877	-0.9645746
## 2264 -1.62197 -0.994091	B6	JFK	RSW	0.04273258	-0.61165877	-0.9645746
## 2265 -1.62197 -0.994091	DL	JFK	SJU	0.75410009	-0.61165877	-0.9645746

## 2266 -1.62197 -0.994091	AA	EWR	MIA	0.05766586	-0.61165877	-0.9645746
## 2267 -1.62197 -0.994091	FL	LGA	CAK	-0.87634339	-0.78209836	-0.9087097
## 2268 -1.62197 -0.994091	DL	LGA	TPA	-0.04415200	-0.78209836	-0.9087097
## 2269 -1.62197 -0.994091	DL	EWR	ATL	-0.40255090	-0.61165877	-0.9645746
## 2270 -1.62197 -0.994091	B6	EWR	BOS	-1.14378499	-0.56152948	-1.0204395
## 2271 -1.62197 -0.994091	US	LGA	BOS	-1.16550614	-0.72194321	-1.0669935
## 2272 -1.62197 -0.994091	AA	JFK	LAX	1.94469037	-0.61165877	-1.0669935
## 2273 -1.62197 -0.994091	MQ	LGA	ATL	-0.38082976	-0.72194321	-1.0669935
## 2274 -1.62197 -0.994091	US	JFK	CLT	-0.68085308	-0.61165877	-1.0669935
## 2275 -1.62197 -0.994091	B6	JFK	SYR	-1.13156685	-0.61165877	-1.0669935
## 2276 -1.62197 -0.994091	MQ	EWR	ORD	-0.43920534	-0.56152948	-1.0204395
## 2277 -1.62197 -0.994091	UA	EWR	SFO	2.06687181	-0.56152948	-1.0204395
## 2278 -1.62197 -0.994091	MQ	JFK	RDU	-0.83561624	-0.61165877	-1.0669935
## 2279 -1.62197 -0.994091	WN	LGA	MKE	-0.41341148	-0.72194321	-1.0669935
## 2280 -1.62197 -0.994091	UA	EWR	MIA	0.05766586	-0.56152948	-1.0204395
## 2281 -1.62197 -0.994091	AA	JFK	BOS	-1.16143342	-0.61165877	-1.0669935
## 2282 -1.62197 -0.994091	EV	EWR	ATL	-0.40255090	-0.56152948	-1.0204395
## 2283 -1.62197 -0.994091	DL	LGA	MCO	-0.12560630	-0.72194321	-1.0669935
## 2285 -1.62197 -0.994091	UA	LGA	IAH	0.50702206	-0.72194321	-1.0669935
## 2286 -1.62197 -0.994091	9E	EWR	CVG	-0.64284107	-0.61165877	-1.1228584
## 2287 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-0.67181392	-1.0204395
## 2288 -1.62197 -0.994091	US	LGA	CLT	-0.67678036	-0.72194321	-1.0669935
## 2289 -1.62197 -0.994091	EV	EWR	RIC	-1.03925198	-0.56152948	-1.0204395
## 2290 -1.62197 -0.994091	DL	LGA	ATL	-0.38082976	-0.67181392	-1.0204395
## 2291 -1.62197 -0.994091	WN	EWR	HOU	0.50023420	-0.61165877	-1.1228584
## 2292 -1.62197 -0.994091	B6	JFK	PBI	-0.01971572	-0.61165877	-1.0669935
## 2293 -1.62197 -0.994091	B6	JFK	FLL	0.03594472	-0.61165877	-1.1228584
## 2294 -1.62197 -0.994091	EV	EWR	DCA	-1.14514256	-0.56152948	-1.0204395
## 2295 -1.62197 -0.994091	FL	LGA	ATL	-0.38082976	-0.67181392	-1.0204395
## 2296 -1.62197 -0.994091	MQ	LGA	DTW	-0.73379837	-0.67181392	-1.0204395
## 2297 -1.62197 -0.994091	UA	EWR	DFW	0.44728891	-0.56152948	-1.0204395
## 2298 -1.62197 -0.994091	EV	EWR	STL	-0.23149688	-0.61165877	-1.1228584
## 2300 -1.62197 -0.994091	EV	EWR	BWI	-1.18586971	-0.61165877	-1.1228584
## 2301 -1.62197 -0.994091	VX	JFK	LAX	1.94469037	-0.61165877	-1.1228584
## 2302 -1.62197 -0.994091	UA	EWR	HNL	5.32232848	-0.61165877	-1.1228584
## 2303 -1.62197 -0.994091	EV	EWR	MSN	-0.33059961	-0.61165877	-1.1228584
## 2304 -1.62197 -0.994091	EV	EWR	CHS	-0.56274435	-0.61165877	-1.1228584
## 2305 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-0.67181392	-1.0204395
## 2306 -1.62197 -0.994091	EV	JFK	IAD	-1.10577299	-0.61165877	-1.1228584
## 2307 -1.62197 -0.994091	DL	LGA	MSY	0.19070788	-0.67181392	-1.0204395
## 2308 -1.62197 -0.994091	MQ	EWR	ORD	-0.43920534	-0.56152948	-1.1228584
## 2309 -1.62197 -0.994091	UA	JFK	SFO	2.09538082	-0.61165877	-1.1228584
## 2310 -1.62197 -0.994091	EV	EWR	DCA	-1.14514256	-0.56152948	-1.1228584
## 2312 -1.62197 -0.994091	EV	EWR	MSP	-0.04686715	-0.56152948	-1.1228584
## 2313 -1.62197 -0.994091	B6	JFK	PBI	-0.01971572	-0.61165877	-1.1228584
## 2314 -1.62197 -0.994091	UA	EWR	BOS	-1.14378499	-0.56152948	-1.1228584
## 2315 -1.62197 -0.994091	US	LGA	CLT	-0.67678036	-0.67181392	-1.0204395
## 2316 -1.62197 -0.994091	AA	JFK	MCO	-0.13375173	-0.61165877	-1.1228584
## 2317 -1.62197 -0.994091	DL	LGA	PBI	-0.01021271	-0.67181392	-1.0204395
## 2318 -1.62197 -0.994091	9E	JFK	ORF	-1.02160355	-0.61165877	-1.1228584
## 2319 -1.62197 -0.994091	9E	JFK	BUF	-1.00667026	-0.61165877	-1.1228584
## 2320 -1.62197 -0.994091	AA	JFK	MIA	0.06309615	-0.61165877	-1.1228584
## 2321 -1.62197 -0.994091	AA	LGA	MIA	0.07259915	-0.67181392	-1.1694124
## 2322 -1.62197 -0.994091	DL	LGA	ATL	-0.38082976	-0.67181392	-1.1694124

## 2323 -1.62197 -0.994091	UA	LGA	IAH	0.50702206	-0.67181392	-1.0204395
## 2324 -1.62197 -0.994091	US	EWR	CLT	-0.69714394	-0.67181392	-1.2252773
## 2325 -1.62197 -0.994091	UA	EWR	RSW	0.03458715	-0.56152948	-1.1228584
## 2326 -1.62197 -0.994091	UA	EWR	DEN	0.76360309	-0.56152948	-1.1228584
## 2327 -1.62197 -0.994091	B6	LGA	MCO	-0.12560630	-0.67181392	-1.0204395
## 2328 -1.62197 -0.994091	EV	EWR	PWM	-1.02974898	-0.67181392	-1.2252773
## 2329 -1.62197 -0.994091	9E	JFK	DCA	-1.12613656	-0.67181392	-1.1694124
## 2330 -1.62197 -0.994091	AA	LGA	DFW	0.47036763	-0.67181392	-1.1694124
## 2331 -1.62197 -0.994091	UA	EWR	LAX	1.91618137	-0.67181392	-1.2252773
## 2332 -1.62197 -0.994091	MQ	JFK	IND	-0.51251420	-0.67181392	-1.1694124
## 2334 -1.62197 -0.994091	UA	EWR	SFO	2.06687181	-0.56152948	-1.1228584
## 2335 -1.62197 -0.994091	WN	LGA	MKE	-0.41341148	-0.67181392	-1.1694124
## 2336 -1.62197 -0.994091	9E	LGA	RIC	-1.01888840	-0.67181392	-1.1694124
## 2337 -1.62197 -0.994091	EV	EWR	GRR	-0.59396850	-0.67181392	-1.2252773
## 2338 -1.62197 -0.994091	MQ	JFK	DCA	-1.12613656	-0.67181392	-1.1694124
## 2339 -1.62197 -0.994091	MQ	JFK	CMH	-0.75959223	-0.67181392	-1.1694124
## 2340 -1.62197 -0.994091	EV	EWR	MKE	-0.43105991	-0.67181392	-1.2252773
## 2341 -1.62197 -0.994091	B6	EWR	TPA	-0.06180044	-0.67181392	-1.2252773
## 2343 -1.62197 -0.994091	UA	LGA	DEN	0.78396666	-0.67181392	-1.1694124
## 2344 -1.62197 -0.994091	AA	JFK	SFO	2.09538082	-0.67181392	-1.1694124
## 2345 -1.62197 -0.994091	EV	EWR	BNA	-0.39983576	-0.67181392	-1.2252773
## 2346 -1.62197 -0.994091	EV	EWR	MSP	-0.04686715	-0.67181392	-1.2252773
## 2347 -1.62197 -0.994091	9E	JFK	ROC	-1.05690041	-0.67181392	-1.1694124
## 2348 -1.62197 -0.994091	UA	EWR	FLL	0.03051443	-0.67181392	-1.2252773
## 2349 -1.62197 -0.994091	AA	JFK	LAX	1.94469037	-0.67181392	-1.1694124
## 2350 -1.62197 -0.994091	DL	JFK	SLC	1.28626815	-0.67181392	-1.1694124
## 2351 -1.62197 -0.994091	DL	JFK	ATL	-0.38354490	-0.67181392	-1.1694124
## 2352 -1.62197 -0.994091	9E	JFK	MSP	-0.01835814	-0.67181392	-1.1694124
## 2353 -1.62197 -0.994091	US	LGA	BOS	-1.16550614	-0.78209836	-1.0204395
## 2354 -1.62197 -0.994091	FL	LGA	ATL	-0.38082976	-0.78209836	-1.0204395
## 2355 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-0.78209836	-1.0204395
## 2356 -1.62197 -0.994091	B6	LGA	TPA	-0.04415200	-0.78209836	-1.0204395
## 2357 -1.62197 -0.994091	AA	JFK	DFW	0.47308277	-0.89238279	-1.1694124
## 2358 -1.62197 -0.994091	DL	LGA	MCO	-0.12560630	-0.67181392	-1.1694124
## 2359 -1.62197 -0.994091	UA	EWR	ORD	-0.43920534	-0.78209836	-1.2252773
## 2360 -1.62197 -0.994091	B6	JFK	ORD	-0.41069633	-0.67181392	-1.1694124
## 2363 -1.62197 -0.994091	9E	JFK	BWI	-1.16550614	-0.67181392	-1.1694124
## 2364 -1.62197 -0.994091	9E	JFK	BNA	-0.37675704	-0.89238279	-1.1694124
## 2365 -1.62197 -0.994091	DL	JFK	MIA	0.06309615	-0.89238279	-1.1694124
## 2366 -1.62197 -0.994091	MQ	LGA	BNA	-0.37811462	-0.78209836	-1.0204395
## 2367 -1.62197 -0.994091	EV	EWR	DCA	-1.14514256	-0.78209836	-1.2252773
## 2368 -1.62197 -0.994091	MQ	LGA	ATL	-0.38082976	-0.78209836	-1.0204395
## 2369 -1.62197 -0.994091	9E	JFK	RDU	-0.83561624	-0.89238279	-1.1694124
## 2370 -1.62197 -0.994091	B6	JFK	LAX	1.94469037	-0.89238279	-1.1694124
## 2371 -1.62197 -0.994091	9E	JFK	PHL	-1.28768758	-0.89238279	-1.1694124
## 2372 -1.62197 -0.994091	US	JFK	PHX	1.50755232	-0.89238279	-1.1694124
## 2373 -1.62197 -0.994091	B6	EWR	BOS	-1.14378499	-0.78209836	-1.2252773
## 2375 -1.62197 -0.994091	US	EWR	PHX	1.48040089	-0.78209836	-1.2252773
## 2376 -1.62197 -0.994091	AA	LGA	DFW	0.47036763	-0.78209836	-1.0204395
## 2378 -1.62197 -0.994091	9E	EWR	CVG	-0.64284107	-0.78209836	-1.2252773
## 2379 -1.62197 -0.994091	UA	EWR	LAS	1.60801262	-0.78209836	-1.2252773
## 2380 -1.62197 -0.994091	DL	JFK	AUS	0.64956708	-0.89238279	-1.1694124
## 2381 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-0.89238279	-1.0669935
## 2383 -1.62197 -0.994091	DL	LGA	ATL	-0.38082976	-0.89238279	-1.0669935

## 2384 -1.62197 -0.994091	B6	JFK	SAN	1.90532080	-0.89238279	-1.1694124
## 2385 -1.62197 -0.994091	DL	JFK	LAX	1.94469037	-1.06282238	-1.1228584
## 2386 -1.62197 -0.994091	WN	EWR	STL	-0.23149688	-0.83222765	-1.2252773
## 2387 -1.62197 -0.994091	AA	JFK	BOS	-1.16143342	-0.89238279	-1.1694124
## 2388 -1.62197 -0.994091	B6	JFK	ROC	-1.05690041	-1.06282238	-1.1228584
## 2389 -1.62197 -0.994091	B6	JFK	BUR	1.93111466	-0.89238279	-1.1694124
## 2390 -1.62197 -0.994091	UA	EWR	BOS	-1.14378499	-0.78209836	-1.2252773
## 2391 -1.62197 -0.994091	EV	EWR	BWI	-1.18586971	-0.83222765	-1.2252773
## 2392 -1.62197 -0.994091	DL	LGA	MCO	-0.12560630	-0.89238279	-1.0669935
## 2395 -1.62197 -0.994091	UA	LGA	IAH	0.50702206	-0.89238279	-1.0669935
## 2396 -1.62197 -0.994091	MQ	JFK	DCA	-1.12613656	-1.06282238	-1.1228584
## 2397 -1.62197 -0.994091	US	LGA	CLT	-0.67678036	-0.89238279	-1.0669935
## 2398 -1.62197 -0.994091	AA	JFK	ORD	-0.41069633	-1.06282238	-1.1228584
## 2399 -1.62197 -0.994091	DL	EWR	SLC	1.25775915	-0.83222765	-1.2252773
## 2401 -1.62197 -0.994091	UA	JFK	SFO	2.09538082	-1.06282238	-1.1228584
## 2402 -1.62197 -0.994091	UA	EWR	IAH	0.48530091	-0.83222765	-1.2252773
## 2403 -1.62197 -0.994091	B6	JFK	BTV	-1.05418527	-1.06282238	-1.1228584
## 2404 -1.62197 -0.994091	WN	EWR	MDW	-0.45006591	-0.83222765	-1.2252773
## 2405 -1.62197 -0.994091	WN	LGA	BNA	-0.37811462	-0.89238279	-1.0669935
## 2406 -1.62197 -0.994091	EV	EWR	PIT	-0.98223397	-0.83222765	-1.2252773
## 2407 -1.62197 -0.994091	MQ	LGA	XNA	0.14183530	-0.89238279	-1.0669935
## 2408 -1.62197 -0.994091	B6	EWR	PBI	-0.02650357	-0.83222765	-1.2252773
## 2409 -1.62197 -0.994091	UA	EWR	SEA	1.84558765	-0.83222765	-1.2252773
## 2410 -1.62197 -0.994091	AA	JFK	SFO	2.09538082	-1.06282238	-1.1228584
## 2411 -1.62197 -0.994091	WN	EWR	BWI	-1.18586971	-0.89238279	-1.1694124
## 2412 -1.62197 -0.994091	US	LGA	DCA	-1.12477899	-0.95253794	-1.0669935
## 2413 -1.62197 -0.994091	US	LGA	BOS	-1.16550614	-0.95253794	-1.0669935
## 2414 -1.62197 -0.994091	B6	JFK	FLL	0.03594472	-0.95253794	-1.1228584
## 2415 -1.62197 -0.994091	MQ	LGA	CMH	-0.76502252	-0.95253794	-1.0669935
## 2416 -1.62197 -0.994091	B6	JFK	MCO	-0.13375173	-0.95253794	-1.1228584
## 2417 -1.62197 -0.994091	AA	LGA	MIA	0.07259915	-0.95253794	-1.0669935
## 2418 -1.62197 -0.994091	B6	JFK	SJC	2.07230210	-0.95253794	-1.1228584
## 2419 -1.62197 -0.994091	EV	EWR	MSP	-0.04686715	-0.89238279	-1.1694124
## 2420 -1.62197 -0.994091	WN	LGA	MDW	-0.43105991	-0.95253794	-1.0669935
## 2421 -1.62197 -0.994091	B6	JFK	LGB	1.93111466	-0.95253794	-1.1228584
## 2422 -1.62197 -0.994091	UA	EWR	LAS	1.60801262	-0.89238279	-1.1694124
## 2423 -1.62197 -0.994091	B6	JFK	IAD	-1.10577299	-1.06282238	-1.1228584
## 2425 -1.62197 -0.994091	9E	JFK	RIC	-1.02431869	-0.95253794	-1.1228584
## 2426 -1.62197 -0.994091	UA	EWR	ORD	-0.43920534	-0.83222765	-1.2252773
## 2427 -1.62197 -0.994091	UA	EWR	CLE	-0.86684039	-0.89238279	-1.1694124
## 2428 -1.62197 -0.994091	AA	LGA	ORD	-0.42019933	-0.95253794	-1.0669935
## 2429 -1.62197 -0.994091	US	LGA	PHL	-1.28497244	-0.95253794	-1.0669935
## 2430 -1.62197 -0.994091	EV	EWR	DTW	-0.75280437	-0.89238279	-1.1694124
## 2431 -1.62197 -0.994091	UA	EWR	SNA	1.88902994	-0.89238279	-1.1694124
## 2432 -1.62197 -0.994091	UA	JFK	SFO	2.09538082	-0.95253794	-1.1228584
## 2434 -1.62197 -0.994091	DL	LGA	DTW	-0.73379837	-0.95253794	-1.0669935
## 2435 -1.62197 -0.994091	B6	EWR	MCO	-0.14325473	-0.89238279	-1.1694124
## 2436 -1.62197 -0.994091	DL	JFK	SEA	1.87273908	-0.95253794	-1.1228584
## 2437 -1.62197 -0.994091	MQ	JFK	BWI	-1.16550614	-0.95253794	-1.1228584
## 2438 -1.62197 -0.994091	MQ	LGA	CRW	-0.81253752	-0.95253794	-1.0669935
## 2439 -1.62197 -0.994091	DL	JFK	MIA	0.06309615	-0.95253794	-1.1228584
## 2440 -1.62197 -0.994091	9E	JFK	MSY	0.18935031	-0.95253794	-1.1228584
## 2441 -1.62197 -0.994091	AA	LGA	STL	-0.20977574	-0.95253794	-1.0669935
## 2442 -1.62197 -0.994091	FL	LGA	ATL	-0.38082976	-0.89238279	-1.1694124

## 2443 -1.62197 -0.994091	DL	JFK	ATL	-0.38354490	-0.95253794	-1.1228584
## 2444 -1.62197 -0.994091	9E	JFK	PIT	-0.95372497	-1.11295167	-1.1228584
## 2445 -1.62197 -0.994091	EV	EWR	DSM	-0.03464900	-0.95253794	-1.0669935
## 2446 -1.62197 -0.994091	WN	LGA	MKE	-0.41341148	-0.89238279	-1.1694124
## 2447 -1.62197 -0.994091	MQ	LGA	RDU	-0.83018595	-0.89238279	-1.1694124
## 2448 -1.62197 -0.994091	AA	EWR	DFW	0.44728891	-0.95253794	-1.0669935
## 2449 -1.62197 -0.994091	B6	JFK	SLC	1.28626815	-1.11295167	-1.1228584
## 2450 -1.62197 -0.994091	B6	JFK	MCO	-0.13375173	-1.11295167	-1.1228584
## 2451 -1.62197 -0.994091	9E	JFK	ORD	-0.41069633	-1.11295167	-1.1228584
## 2452 -1.62197 -0.994091	B6	JFK	SMF	2.00713866	-0.95253794	-1.1228584
## 2453 -1.62197 -0.994091	EV	EWR	GRR	-0.59396850	-0.89238279	-1.1694124
## 2454 -1.62197 -0.994091	DL	LGA	ATL	-0.38082976	-0.89238279	-1.1694124
## 2455 -1.62197 -0.994091	9E	JFK	RDU	-0.83561624	-1.11295167	-1.1228584
## 2456 -1.62197 -0.994091	DL	JFK	PHX	1.50755232	-1.11295167	-1.1228584
## 2457 -1.62197 -0.994091	DL	JFK	SLC	1.28626815	-1.11295167	-1.1228584
## 2458 -1.62197 -0.994091	EV	EWR	OKC	0.38348305	-0.95253794	-1.0669935
## 2459 -1.62197 -0.994091	AA	JFK	TPA	-0.05093986	-1.11295167	-1.1228584
## 2460 -1.62197 -0.994091	WN	EWR	MDW	-0.45006591	-0.95253794	-1.0669935
## 2461 -1.62197 -0.994091	9E	JFK	BWI	-1.16550614	-1.11295167	-1.1228584
## 2462 -1.62197 -0.994091	UA	EWR	IAH	0.48530091	-0.95253794	-1.0669935
## 2463 -1.62197 -0.994091	EV	EWR	DCA	-1.14514256	-0.95253794	-1.0669935
## 2464 -1.62197 -0.994091	9E	LGA	TYS	-0.53695049	-0.89238279	-1.1228584
## 2465 -1.62197 -0.994091	DL	JFK	BOS	-1.16143342	-1.11295167	-1.0204395
## 2466 -1.62197 -0.994091	9E	JFK	BUF	-1.00667026	-1.11295167	-1.0204395
## 2467 -1.62197 -0.994091	UA	EWR	TPA	-0.06180044	-0.95253794	-1.0669935
## 2469 -1.62197 -0.994091	AA	JFK	BOS	-1.16143342	-1.11295167	-1.0204395
## 2470 -1.62197 -0.994091	UA	EWR	PBI	-0.02650357	-0.95253794	-1.0669935
## 2471 -1.62197 -0.994091	MQ	LGA	CMH	-0.76502252	-0.89238279	-1.1228584
## 2472 -1.62197 -0.994091	EV	EWR	GSP	-0.60890178	-0.95253794	-1.0669935
## 2475 -1.62197 -0.994091	B6	JFK	MSY	0.18935031	-1.11295167	-1.0204395
## 2476 -1.62197 -0.994091	EV	EWR	STL	-0.23149688	-0.95253794	-1.0669935
## 2477 -1.62197 -0.994091	B6	JFK	MCO	-0.13375173	-1.11295167	-1.0204395
## 2480 -1.62197 -0.994091	MQ	EWR	ORD	-0.43920534	-1.11295167	-0.9087097
## 2481 -1.62197 -0.994091	WN	LGA	MDW	-0.43105991	-0.95253794	-1.0669935
## 2482 -1.62197 -0.994091	EV	EWR	RIC	-1.03925198	-1.11295167	-0.9087097
## 2483 -1.62197 -0.994091	EV	EWR	JAX	-0.30209061	-1.11295167	-0.9087097
## 2486 -1.62197 -0.994091	EV	EWR	PVD	-1.19808785	-1.11295167	-0.9087097
## 2487 -1.62197 -0.994091	B6	JFK	SJU	0.75410009	-1.39367569	-1.0204395
## 2489 -1.62197 -0.994091	B6	JFK	LAS	1.63652162	-1.39367569	-1.0204395
## 2492 -1.62197 -0.994091	B6	JFK	PWM	-1.04468226	-1.33352054	-0.9087097
## 2495 -1.62197 -0.994091	B6	JFK	BOS	-1.16143342	-1.33352054	-0.9087097
## 2496 -1.62197 -0.994091	B6	JFK	BQN	0.72423351	-1.28339125	-0.8062908
## 2497 -1.62197 -0.994091	AA	LGA	STL	-0.20977574	-0.72194321	-1.0669935
## 2498 -1.62197 -0.994091	9E	JFK	BUF	-1.00667026	-0.83222765	-0.7597368
## 2499 -1.62197 -0.880204	AA	LGA	DFW	0.47036763	-1.11295167	-0.8062908
## 2500 -1.62197 -0.880204	FL	LGA	ATL	-0.38082976	-1.11295167	-0.8062908
## 2501 -1.62197 -0.880204	DL	LGA	DTW	-0.73379837	-1.11295167	-0.8062908
## 2502 -1.62197 -0.880204	MQ	LGA	ATL	-0.38082976	-1.11295167	-0.8062908
## 2503 -1.62197 -0.880204	EV	JFK	IAD	-1.10577299	-1.22323611	-0.7038719
## 2504 -1.62197 -0.880204	B6	EWR	FLL	0.03051443	-1.45383084	-0.8621557
## 2505 -1.62197 -0.880204	MQ	LGA	DTW	-0.73379837	-1.11295167	-0.8062908
## 2506 -1.62197 -0.880204	EV	EWR	IAD	-1.12749413	-1.45383084	-0.8621557
## 2507 -1.62197 -0.880204	UA	EWR	BOS	-1.14378499	-1.45383084	-0.8621557
## 2508 -1.62197 -0.880204	AA	LGA	MIA	0.07259915	-1.11295167	-0.8062908

## 2509 -1.62197 -0.880204	WN	EWR	MDW	-0.45006591	-1.45383084	-0.8621557
## 2510 -1.62197 -0.880204	UA	JFK	SFO	2.09538082	-1.22323611	-0.7038719
## 2511 -1.62197 -0.880204	DL	EWR	ATL	-0.40255090	-1.45383084	-0.8621557
## 2512 -1.62197 -0.880204	US	EWR	CLT	-0.69714394	-1.45383084	-0.8621557
## 2513 -1.62197 -0.880204	B6	JFK	MCO	-0.13375173	-1.22323611	-0.7038719
## 2514 -1.62197 -0.880204	US	LGA	CLT	-0.67678036	-1.11295167	-0.8062908
## 2515 -1.62197 -0.880204	EV	EWR	CVG	-0.64284107	-1.45383084	-0.8621557
## 2516 -1.62197 -0.880204	EV	EWR	PIT	-0.98223397	-1.45383084	-0.8621557
## 2517 -1.62197 -0.880204	B6	JFK	BOS	-1.16143342	-1.22323611	-0.7038719
## 2518 -1.62197 -0.880204	EV	EWR	CLT	-0.69714394	-1.45383084	-0.8621557
## 2519 -1.62197 -0.880204	UA	EWR	MIA	0.05766586	-1.45383084	-0.8621557
## 2520 -1.62197 -0.880204	US	EWR	CLT	-0.69714394	-1.45383084	-0.8621557
## 2521 -1.62197 -0.880204	UA	EWR	SFO	2.06687181	-1.45383084	-0.8621557
## 2522 -1.62197 -0.880204	EV	EWR	DCA	-1.14514256	-1.45383084	-0.8621557
## 2523 -1.62197 -0.880204	UA	EWR	DFW	0.44728891	-1.45383084	-0.8621557
## 2524 -1.62197 -0.880204	AA	LGA	MIA	0.07259915	-1.06282238	-0.8062908
## 2525 -1.62197 -0.880204	DL	LGA	ATL	-0.38082976	-1.11295167	-0.8062908
## 2526 -1.62197 -0.880204	UA	EWR	DEN	0.76360309	-1.45383084	-0.8621557
## 2527 -1.62197 -0.880204	MQ	LGA	XNA	0.14183530	-1.06282238	-0.8062908
## 2528 -1.62197 -0.880204	DL	JFK	SFO	2.09538082	-1.17310682	-0.6573179
## 2529 -1.62197 -0.880204	DL	LGA	MIA	0.07259915	-1.06282238	-0.8062908
## 2530 -1.62197 -0.880204	DL	JFK	LAX	1.94469037	-1.17310682	-0.6573179
## 2531 -1.62197 -0.880204	EV	EWR	SDF	-0.54373835	-1.50396013	-0.8621557
## 2532 -1.62197 -0.880204	UA	EWR	MCO	-0.14325473	-1.50396013	-0.8621557
## 2533 -1.62197 -0.880204	UA	EWR	LAS	1.60801262	-1.50396013	-0.8621557
## 2534 -1.62197 -0.880204	US	LGA	BOS	-1.16550614	-1.06282238	-0.8062908
## 2535 -1.62197 -0.880204	B6	JFK	LAX	1.94469037	-1.17310682	-0.6573179
## 2536 -1.62197 -0.880204	B6	JFK	FLL	0.03594472	-1.17310682	-0.6573179
## 2537 -1.62197 -0.880204	UA	EWR	SNA	1.88902994	-1.50396013	-0.8621557
## 2538 -1.62197 -0.880204	UA	LGA	ORD	-0.42019933	-1.06282238	-0.8062908
## 2539 -1.62197 -0.880204	EV	EWR	BNA	-0.39983576	-1.50396013	-0.8621557
## 2540 -1.62197 -0.880204	VX	JFK	LAX	1.94469037	-1.17310682	-0.6573179
## 2541 -1.62197 -0.880204	AA	JFK	MIA	0.06309615	-1.17310682	-0.6573179
## 2542 -1.62197 -0.880204	DL	LGA	DTW	-0.73379837	-1.06282238	-0.8062908
## 2543 -1.62197 -0.880204	FL	LGA	MKE	-0.41341148	-1.06282238	-0.8062908
## 2544 -1.62197 -0.880204	UA	EWR	PBI	-0.02650357	-1.50396013	-0.8621557
## 2545 -1.62197 -0.880204	AS	EWR	SEA	1.84558765	-1.50396013	-0.8621557
## 2546 -1.62197 -0.880204	AA	JFK	LAX	1.94469037	-1.17310682	-0.6573179
## 2547 -1.62197 -0.880204	DL	EWR	ATL	-0.40255090	-1.50396013	-0.8621557
## 2548 -1.62197 -0.880204	EV	EWR	STL	-0.23149688	-1.50396013	-0.8621557
## 2549 -1.62197 -0.880204	UA	EWR	TPA	-0.06180044	-1.50396013	-0.8621557
## 2550 -1.62197 -0.880204	UA	EWR	IAH	0.48530091	-1.50396013	-0.8621557
## 2551 -1.62197 -0.880204	9E	EWR	CVG	-0.64284107	-1.50396013	-0.8621557
## 2552 -1.62197 -0.880204	EV	EWR	MHT	-1.13156685	-1.22323611	-0.7597368
## 2553 -1.62197 -0.880204	US	LGA	CLT	-0.67678036	-1.06282238	-0.8062908
## 2554 -1.62197 -0.880204	WN	LGA	MDW	-0.43105991	-1.06282238	-0.8062908
## 2555 -1.62197 -0.880204	UA	JFK	SFO	2.09538082	-1.00266723	-0.5548989
## 2556 -1.62197 -0.880204	B6	EWR	MCO	-0.14325473	-1.22323611	-0.7597368
## 2557 -1.62197 -0.880204	9E	JFK	MSP	-0.01835814	-1.00266723	-0.5548989
## 2558 -1.62197 -0.880204	FL	LGA	ATL	-0.38082976	-1.06282238	-0.7597368
## 2559 -1.62197 -0.880204	UA	LGA	DEN	0.78396666	-1.06282238	-0.8062908
## 2560 -1.62197 -0.880204	DL	JFK	MCO	-0.13375173	-1.00266723	-0.5548989
## 2561 -1.62197 -0.880204	B6	JFK	PIT	-0.95372497	-1.00266723	-0.5548989
## 2562 -1.62197 -0.880204	DL	JFK	LAS	1.63652162	-1.00266723	-0.5548989

## 2563	-1.62197	-0.880204	DL	JFK	TPA	-0.05093986	-1.00266723	-0.5548989
## 2564	-1.62197	-0.880204	DL	JFK	MIA	0.06309615	-1.00266723	-0.5548989
## 2565	-1.62197	-0.880204	DL	LGA	DEN	0.78396666	-1.06282238	-0.7597368
## 2566	-1.62197	-0.880204	US	EWR	CLT	-0.69714394	-1.22323611	-0.7597368
## 2567	-1.62197	-0.880204	MQ	LGA	BNA	-0.37811462	-1.06282238	-0.7597368
## 2568	-1.62197	-0.880204	9E	JFK	BUF	-1.00667026	-1.00266723	-0.5548989
## 2569	-1.62197	-0.880204	B6	JFK	SJU	0.75410009	-1.00266723	-0.5548989
## 2570	-1.62197	-0.880204	EV	EWR	SYR	-1.15057285	-1.50396013	-0.8621557
## 2571	-1.62197	-0.880204	EV	EWR	MSP	-0.04686715	-1.50396013	-0.8621557
## 2572	-1.62197	-0.880204	AA	LGA	ORD	-0.42019933	-1.06282238	-0.7597368
## 2573	-1.62197	-0.880204	DL	JFK	ATL	-0.38354490	-1.00266723	-0.5548989
## 2574	-1.62197	-0.880204	EV	EWR	GSO	-0.81117995	-1.22323611	-0.7597368
## 2575	-1.62197	-0.880204	EV	EWR	PWM	-1.02974898	-1.22323611	-0.7597368
## 2576	-1.62197	-0.880204	EV	EWR	GRR	-0.59396850	-1.22323611	-0.7597368
## 2577	-1.62197	-0.880204	AA	LGA	DFW	0.47036763	-1.06282238	-0.7597368
## 2578	-1.62197	-0.880204	UA	EWR	MCO	-0.14325473	-1.22323611	-0.7597368
## 2579	-1.62197	-0.880204	DL	JFK	SJU	0.75410009	-1.00266723	-0.5548989
## 2580	-1.62197	-0.880204	MQ	LGA	RDU	-0.83018595	-1.06282238	-0.7597368
## 2581	-1.62197	-0.880204	UA	JFK	LAX	1.94469037	-1.00266723	-0.5548989
## 2582	-1.62197	-0.880204	US	LGA	CLT	-0.67678036	-1.06282238	-0.7597368
## 2583	-1.62197	-0.880204	UA	EWR	SFO	2.06687181	-1.22323611	-0.7597368
## 2584	-1.62197	-0.880204	9E	JFK	DCA	-1.12613656	-1.00266723	-0.5548989
## 2585	-1.62197	-0.880204	AA	JFK	SJU	0.75410009	-1.00266723	-0.5548989
## 2586	-1.62197	-0.880204	EV	EWR	DTW	-0.75280437	-1.22323611	-0.7597368
## 2587	-1.62197	-0.880204	EV	EWR	XNA	0.12011416	-1.22323611	-0.7597368
## 2588	-1.62197	-0.880204	MQ	LGA	CLE	-0.84647681	-1.06282238	-0.7597368
## 2589	-1.62197	-0.880204	UA	EWR	MIA	0.05766586	-1.22323611	-0.7597368
## 2590	-1.62197	-0.880204	UA	EWR	SAN	1.87681179	-1.22323611	-0.7597368
## 2591	-1.62197	-0.880204	AA	JFK	LAX	1.94469037	-0.89238279	-0.5548989
## 2592	-1.62197	-0.880204	B6	JFK	AUS	0.64956708	-1.00266723	-0.5548989
## 2593	-1.62197	-0.880204	B6	JFK	TPA	-0.05093986	-0.89238279	-0.5548989
## 2594	-1.62197	-0.880204	UA	EWR	IAH	0.48530091	-1.22323611	-0.7597368
## 2595	-1.62197	-0.880204	DL	LGA	ATL	-0.38082976	-1.06282238	-0.7597368
## 2596	-1.62197	-0.880204	US	LGA	BOS	-1.16550614	-0.95253794	-0.7597368
## 2597	-1.62197	-0.880204	MQ	LGA	DTW	-0.73379837	-0.95253794	-0.7597368
## 2598	-1.62197	-0.880204	EV	EWR	CVG	-0.64284107	-1.00266723	-0.6573179
## 2599	-1.62197	-0.880204	UA	EWR	LAS	1.60801262	-1.00266723	-0.6573179
## 2600	-1.62197	-0.880204	UA	EWR	STT	0.80297267	-1.00266723	-0.6573179
## 2601	-1.62197	-0.880204	B6	JFK	RDU	-0.83561624	-0.89238279	-0.5548989
## 2602	-1.62197	-0.880204	AA	LGA	DFW	0.47036763	-0.95253794	-0.7597368
## 2603	-1.62197	-0.880204	AA	EWR	DFW	0.44728891	-1.00266723	-0.6573179
## 2604	-1.62197	-0.880204	9E	JFK	ROC	-1.05690041	-0.89238279	-0.5548989
## 2605	-1.62197	-0.880204	UA	EWR	PBI	-0.02650357	-1.00266723	-0.6573179
## 2606	-1.62197	-0.880204	B6	JFK	BUF	-1.00667026	-0.89238279	-0.5548989
## 2607	-1.62197	-0.880204	B6	JFK	BOS	-1.16143342	-0.89238279	-0.5548989
## 2608	-1.62197	-0.880204	VX	JFK	LAS	1.63652162	-0.89238279	-0.5548989
## 2609	-1.62197	-0.880204	B6	LGA	PBI	-0.01021271	-0.95253794	-0.7597368
## 2610	-1.62197	-0.880204	UA	EWR	EGE	0.92786925	-1.00266723	-0.6573179
## 2611	-1.62197	-0.880204	AA	LGA	ORD	-0.42019933	-0.95253794	-0.7597368
## 2612	-1.62197	-0.880204	WN	LGA	MKE	-0.41341148	-0.95253794	-0.7597368
## 2613	-1.62197	-0.880204	MQ	LGA	BNA	-0.37811462	-0.95253794	-0.7597368
## 2614	-1.62197	-0.880204	UA	EWR	MCO	-0.14325473	-0.72194321	-0.6573179
## 2615	-1.62197	-0.880204	DL	LGA	ATL	-0.38082976	-0.83222765	-0.8062908
## 2616	-1.62197	-0.880204	US	LGA	DCA	-1.12477899	-0.83222765	-0.8062908

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## 2617 -1.62197 -0.880204      EV     EWR  ATL -0.40255090 -1.00266723 -0.6573179
## 2618 -1.62197 -0.880204      B6     JFK  LAS  1.63652162 -0.89238279 -0.5548989
## 2619 -1.62197 -0.880204      DL     LGA  MSP -0.03057629 -0.83222765 -0.8062908
##          humid  wind_dir wind_speed   precip  pressure  visib
## 1      0.10705783  0.560192  0.6891804 -0.144053 -0.80700427  0.365368
## 2      0.24984275  0.560192  0.2760156 -0.144053 -0.83553305  0.365368
## 3      0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 4      0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 5      0.39160777  0.366496  0.0694332 -0.144053 -0.76421110  0.365368
## 6      0.10705783  0.560192  0.6891804 -0.144053 -0.80700427  0.365368
## 7      0.39160777  0.366496  0.0694332 -0.144053 -0.76421110  0.365368
## 8      -0.24072543  0.560192  0.8957627 -0.144053 -0.86406183  0.365368
## 9      -0.24072543  0.560192  0.8957627 -0.144053 -0.86406183  0.365368
## 10     0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 11     0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 12     -0.24072543  0.560192  0.8957627 -0.144053 -0.86406183  0.365368
## 13     0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 14     0.39160777  0.366496  0.0694332 -0.144053 -0.76421110  0.365368
## 15     -0.24072543  0.560192  0.8957627 -0.144053 -0.86406183  0.365368
## 16     -0.24072543  0.560192  0.8957627 -0.144053 -0.86406183  0.365368
## 17     0.39160777  0.366496  0.0694332 -0.144053 -0.76421110  0.365368
## 18     0.39160777  0.366496  0.0694332 -0.144053 -0.76421110  0.365368
## 19     0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 20     0.39160777  0.366496  0.0694332 -0.144053 -0.76421110  0.365368
## 21     0.39160777  0.366496  0.0694332 -0.144053 -0.76421110  0.365368
## 22     0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 23     -0.24072543  0.560192  0.8957627 -0.144053 -0.86406183  0.365368
## 24     0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 25     0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 26     -0.11221900  0.463344  0.6891804 -0.144053 -0.83553305  0.365368
## 27     0.24270350  0.560192  0.4825980 -0.144053 -0.73568232  0.365368
## 28     0.24984275  0.560192  0.4825980 -0.144053 -0.74994671  0.365368
## 29     -0.11221900  0.463344  0.6891804 -0.144053 -0.83553305  0.365368
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## 33     0.24984275  0.366496  0.6891804 -0.144053 -0.79273988  0.365368
## 34     -0.11221900  0.463344  0.6891804 -0.144053 -0.83553305  0.365368
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## 36     0.24984275  0.560192  0.4825980 -0.144053 -0.74994671  0.365368
## 37     -0.11221900  0.463344  0.6891804 -0.144053 -0.83553305  0.365368
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## 39     0.24984275  0.366496  0.6891804 -0.144053 -0.79273988  0.365368
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## 43     0.24984275  0.560192  0.4825980 -0.144053 -0.74994671  0.365368
## 44     0.24984275  0.560192  0.4825980 -0.144053 -0.74994671  0.365368
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## 47     0.24984275  0.560192  0.4825980 -0.144053 -0.74994671  0.365368
## 49     -0.11221900  0.463344  0.6891804 -0.144053 -0.83553305  0.365368
## 50     -0.11221900  0.463344  0.6891804 -0.144053 -0.83553305  0.365368
## 51     -0.11221900  0.463344  0.6891804 -0.144053 -0.83553305  0.365368

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## 52   0.13663471  0.463344 -0.1371492 -0.144053 -0.79273988  0.365368
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## 54  -0.00156069  0.560192  1.1023451 -0.144053 -0.73568232  0.365368
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## 62  -0.00156069  0.560192  1.1023451 -0.144053 -0.73568232  0.365368
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##	798	-0.22491710	1.044432	-0.1371492	-0.144053	0.67649224	0.365368
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## 1642 -1.10865375 1.044432 -0.3437315 -0.144053 0.89045809 0.365368
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## 1647 -1.02757231 1.044432 -0.3437315 -0.144053 0.87619370 0.365368
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## 1658 -1.10304434 0.560192 -0.5503139 -0.144053 0.84766492 0.365368
## 1659 -1.10304434 0.560192 -0.5503139 -0.144053 0.84766492 0.365368
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## 1664 -1.10304434 1.044432 -0.5503139 -0.144053 0.90472247 0.365368
## 1665 -1.10304434 1.044432 -0.5503139 -0.144053 0.90472247 0.365368
## 1666 -1.10304434 0.560192 -0.5503139 -0.144053 0.84766492 0.365368

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## 1720 -0.57728988 -1.957857 -1.9963906 -0.144053 0.94751564 0.365368
## 1721 -0.57728988 -1.957857 -1.9963906 -0.144053 0.94751564 0.365368

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## 1755 0.07901079 0.366496 -0.5503139 -0.144053 1.07589515 0.365368
## 1756 0.07901079 0.366496 -0.5503139 -0.144053 1.07589515 0.365368
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## 1785 -0.08927143 0.172800 -0.1371492 -0.144053 -0.03672724 0.365368
## 1786 1.47320352 0.075952 -0.9634787 -0.144053 0.36267567 -1.621729

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## 1796 -0.08927143 0.172800 -0.1371492 -0.144053 -0.03672724 0.365368
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## 1801 1.67412230 0.269648 -0.1371492 -0.144053 -0.03672724 -1.621729
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## 1816 1.70828869 0.269648 -0.3437315 -0.144053 -0.03672724 -1.621729
## 1818 1.13153961 0.269648 -0.1371492 -0.144053 -0.03672724 -0.628181
## 1819 1.13153961 0.269648 -0.1371492 -0.144053 -0.03672724 -0.628181
## 1820 1.70828869 0.269648 -0.3437315 -0.144053 -0.03672724 -1.621729
## 1821 1.13153961 0.269648 -0.1371492 -0.144053 -0.03672724 -0.628181
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## 1823 1.13153961 0.269648 -0.1371492 -0.144053 -0.03672724 -0.628181
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## 1837 1.71083842 0.560192 0.2760156 -0.144053 -0.03672724 -0.628181
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## 1845 1.37988338 0.463344 0.6891804 -0.144053 -0.03672724 -0.131406
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## 1847 1.37988338 0.269648 0.0694332 -0.144053 -0.03672724 -0.628181
## 1848 1.37988338 0.269648 0.0694332 -0.144053 -0.03672724 -0.628181
## 1849 0.81435312 0.366496 -0.7568963 -0.144053 0.26282494 -1.124955
## 1850 1.37988338 0.269648 0.0694332 -0.144053 -0.03672724 -0.628181
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## 1852 1.37988338 0.463344 0.6891804 -0.144053 -0.03672724 -0.131406
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## 1854 0.81435312 0.366496 -0.7568963 -0.144053 0.26282494 -1.124955
## 1855 1.37988338 0.269648 0.0694332 -0.144053 -0.03672724 -0.628181
## 1856 1.37988338 0.463344 0.6891804 -0.144053 -0.03672724 -0.131406
## 1857 1.37988338 0.269648 0.0694332 -0.144053 -0.03672724 -0.628181
## 1859 0.81435312 0.366496 -0.7568963 -0.144053 0.26282494 -1.124955
## 1860 1.37988338 0.463344 0.6891804 -0.144053 -0.03672724 -0.131406
## 1862 1.37988338 0.463344 0.6891804 -0.144053 -0.03672724 -0.131406
## 1864 0.81435312 0.366496 -0.7568963 -0.144053 0.26282494 -1.124955
## 1865 0.52674350 0.657040 -0.5503139 -0.144053 -0.03672724 -0.131406
## 1866 1.37988338 0.463344 0.6891804 -0.144053 -0.03672724 -0.131406
## 1867 1.37988338 0.463344 0.6891804 -0.144053 -0.03672724 -0.131406
## 1868 0.78783592 0.463344 0.0694332 -0.144053 -0.03672724 -0.131406
## 1869 0.78783592 0.463344 0.0694332 -0.144053 -0.03672724 -0.131406
## 1870 0.52674350 0.657040 -0.5503139 -0.144053 -0.03672724 -0.131406
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## 1872 0.78783592 0.463344 0.0694332 -0.144053 -0.03672724 -0.131406
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## 1875 0.78783592 0.463344 0.0694332 -0.144053 -0.03672724 -0.131406
## 1876 1.08411462 0.366496 0.0694332 -0.144053 -0.03672724 -0.131406
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## 1883 0.69094615 0.269648 0.2760156 -0.144053 0.00606593 -0.131406
## 1885 0.12031643 0.269648 -0.3437315 -0.144053 -0.09378479 -0.628181
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## 1899 0.12031643 0.269648 -0.3437315 -0.144053 -0.09378479 -0.628181
## 1900 0.39211772 0.269648 0.2760156 -0.144053 -0.13657796 -0.131406
## 1901 -0.33965498 0.657040 -0.1371492 -0.144053 -0.23642869 -0.628181
## 1902 -0.43348507 0.463344 -0.1371492 -0.144053 -0.20789991 0.365368
## 1903 0.69094615 0.269648 0.2760156 -0.144053 0.00606593 -0.131406

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## 1907 0.39211772 0.269648 0.2760156 -0.144053 -0.13657796 -0.131406
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## 1914 -0.33965498 0.657040 -0.1371492 -0.144053 -0.23642869 -0.628181
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## 2004 -0.54363343 0.657040 -0.5503139 -0.144053 -0.25069308 0.365368
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## 2020 0.12031643 0.366496 -0.1371492 -0.144053 -0.20789991 0.365368
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## 2023 -0.81798445 0.657040 0.8957627 -0.144053 -0.20789991 0.365368
## 2024 0.12031643 0.366496 -0.1371492 -0.144053 -0.20789991 0.365368
## 2025 -0.81798445 0.657040 0.8957627 -0.144053 -0.20789991 0.365368
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## 2590 0.63740181 0.366496 -0.7568963 -0.144053 1.81764341 -0.131406
## 2591 0.38548842 0.366496 0.0694332 -0.144053 1.88896535 0.365368
## 2592 0.65932949 0.269648 0.2760156 -0.144053 1.90322974 0.365368
## 2593 0.38548842 0.366496 0.0694332 -0.144053 1.88896535 0.365368
## 2594 0.63740181 0.366496 -0.7568963 -0.144053 1.81764341 -0.131406
## 2595 0.24270350 0.269648 -0.3437315 -0.144053 1.80337902 0.365368
## 2596 -0.00156069 0.172800 -0.1371492 -0.144053 1.77485024 0.365368
## 2597 -0.00156069 0.172800 -0.1371492 -0.144053 1.77485024 0.365368
## 2598 0.37324971 0.269648 -0.3437315 -0.144053 1.78911463 -0.131406
## 2599 0.37324971 0.269648 -0.3437315 -0.144053 1.78911463 -0.131406
## 2600 0.37324971 0.269648 -0.3437315 -0.144053 1.78911463 -0.131406
## 2601 0.38548842 0.366496 0.0694332 -0.144053 1.88896535 0.365368
## 2602 -0.00156069 0.172800 -0.1371492 -0.144053 1.77485024 0.365368
## 2603 0.37324971 0.269648 -0.3437315 -0.144053 1.78911463 -0.131406
## 2604 0.38548842 0.366496 0.0694332 -0.144053 1.88896535 0.365368
## 2605 0.37324971 0.269648 -0.3437315 -0.144053 1.78911463 -0.131406
## 2606 0.38548842 0.366496 0.0694332 -0.144053 1.88896535 0.365368
## 2607 0.38548842 0.366496 0.0694332 -0.144053 1.88896535 0.365368
## 2608 0.38548842 0.366496 0.0694332 -0.144053 1.88896535 0.365368
## 2609 -0.00156069 0.172800 -0.1371492 -0.144053 1.77485024 0.365368
## 2610 0.37324971 0.269648 -0.3437315 -0.144053 1.78911463 -0.131406
## 2611 -0.00156069 0.172800 -0.1371492 -0.144053 1.77485024 0.365368
## 2612 -0.00156069 0.172800 -0.1371492 -0.144053 1.77485024 0.365368

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## 2613 -0.00156069 0.172800 -0.1371492 -0.144053 1.77485024 0.365368
## 2614 -0.23001656 0.172800 0.4825980 -0.144053 1.70352829 -0.131406
## 2615 -0.34679423 0.269648 1.1023451 -0.144053 1.70352829 0.365368
## 2616 -0.34679423 0.269648 1.1023451 -0.144053 1.70352829 0.365368
## 2617 0.37324971 0.269648 -0.3437315 -0.144053 1.78911463 -0.131406
## 2618 0.38548842 0.366496 0.0694332 -0.144053 1.88896535 0.365368
## 2619 -0.34679423 0.269648 1.1023451 -0.144053 1.70352829 0.365368
##                                     name      lat      lon      alt
## 1                               Miami Intl -1.8123380 0.61269947 -0.6144832
## 2                               Chicago Ohare Intl 1.0526201 0.10082969 0.0937004
## 3                               Palm Beach Intl -1.6548155 0.62580611 -0.6026802
## 4                               Los Angeles Intl -0.3698385 -1.94974778 -0.4878686
## 5                               San Francisco Intl 0.2809249 -2.21641654 -0.6091182
## 6       General Edward Lawrence Logan Intl 1.1209004 1.23690808 -0.6026802
## 7                               Mc Carran Intl 0.0085224 -1.73087520 1.6742374
## 8       Hartsfield Jackson Atlanta Intl -0.4239710 0.33455562 0.4778363
## 9                               Minneapolis St Paul Intl 1.5665406 -0.25660018 0.2793303
## 10                              Southwest Florida Intl -1.6808348 0.51424111 -0.5908771
## 11                              Chicago Ohare Intl 0.0116544 0.40680076 -0.1584559
## 12                               Miami Intl -1.8123380 0.61269947 -0.6144832
## 13                              Chicago Ohare Intl 0.0116544 0.40680076 -0.1584559
## 14                               Los Angeles Intl -0.3698385 -1.94974778 -0.4878686
## 15                              Chicago Ohare Intl 1.0526201 0.10082969 0.0937004
## 16                              Baltimore Washington Intl 0.5564202 0.85620313 -0.4664085
## 17                               Charlotte Douglas Intl -0.1447776 0.56882963 0.1795408
## 18                               Washington Dulles Intl 0.5155615 0.80326498 -0.2872166
## 19       General Edward Lawrence Logan Intl 1.1209004 1.23690808 -0.6026802
## 20                               Palm Beach Intl -1.6548155 0.62580611 -0.6026802
## 21                               Charlotte Douglas Intl -0.1447776 0.56882963 0.1795408
## 22                               Buffalo Niagara Intl 1.2228893 0.71746205 0.1537887
## 23                               Denver Intl 0.6779008 -1.02642040 5.2044253
## 24                               Mc Carran Intl 0.0085224 -1.73087520 1.6742374
## 25       Louis Armstrong New Orleans Intl -1.0688743 -0.05736306 -0.6187752
## 26                               Palm Beach Intl -1.6548155 0.62580611 -0.6026802
## 27                               Salt Lake City Intl 0.8419412 -1.51747116 3.9125267
## 28                               San Francisco Intl 0.2809249 -2.21641654 -0.6091182
## 29                               Chicago Ohare Intl 1.0526201 0.10082969 0.0937004
## 30                               Orlando Intl -1.3457160 0.54423506 -0.5200587
## 31                               NW Arkansas Regional 0.0442452 -0.32954219 0.7578907
## 32                               Miami Intl -1.8123380 0.61269947 -0.6144832
## 33                              Southwest Florida Intl -1.6808348 0.51424111 -0.5908771
## 34                               Chicago Ohare Intl 1.0526201 0.10082969 0.0937004
## 35                               Chicago Ohare Intl 0.0116544 0.40680076 -0.1584559
## 36       Fort Lauderdale Hollywood Intl -1.7628935 0.62196347 -0.6134102
## 37                               General Mitchell Intl 1.2240747 0.10138490 0.1527157
## 38                               Palm Beach Intl -1.6548155 0.62580611 -0.6026802
## 39                               Seattle Tacoma Intl 2.0209313 -2.21200773 -0.1584559
## 40       Dallas Fort Worth Intl -0.5549386 -0.51314595 0.0282470
## 41                               Denver Intl 0.6779008 -1.02642040 5.2044253
## 42       George Bush Intercontinental -1.0704596 -0.39909517 -0.5189857
## 43                               San Francisco Intl 0.2809249 -2.21641654 -0.6091182
## 44                               San Francisco Intl 0.2809249 -2.21641654 -0.6091182
## 45       George Bush Intercontinental -1.0704596 -0.39909517 -0.5189857
## 46                               Los Angeles Intl -0.3698385 -1.94974778 -0.4878686

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## 47		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 49		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 50		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 51	Hartsfield Jackson Atlanta	Intl	-0.4239710	0.33455562	0.4778363
## 52		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 53	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 54		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 55		Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 56		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 57		Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 58		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 59		Memphis Intl	-0.1751494	-0.03844859	-0.2571724
## 60		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 61	Ronald Reagan Washington	Natl	0.4991970	0.83137098	-0.6069722
## 62		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 63		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 64		Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 66		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 67		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 68		Myrtle Beach Intl	-0.4163541	0.70427481	-0.5962421
## 69		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 70		Denver Intl	0.6779008	-1.02642040	5.2044253
## 71		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 72		Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 73		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 75		Jackson Hole Airport	1.3409206	-1.43411078	6.2988908
## 76		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 77		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 78		San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 79		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 80		Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 81		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 82	Hartsfield Jackson Atlanta	Intl	-0.4239710	0.33455562	0.4778363
## 83		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 84		Denver Intl	0.6779008	-1.02642040	5.2044253
## 86		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 87		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 88		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 89		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 90		Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 91		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 92		Eagle Co Rgnl	0.6391181	-1.17730781	6.3943883
## 93		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 94	Fort Lauderdale Hollywood	Intl	-1.7628935	0.62196347	-0.6134102
## 95		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 96		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 97		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 98		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 99		Asheville Regional Airport	-0.1054472	0.46135936	1.6999895
## 100	Hartsfield Jackson Atlanta	Intl	-0.4239710	0.33455562	0.4778363
## 101	Fort Lauderdale Hollywood	Intl	-1.7628935	0.62196347	-0.6134102
## 102		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 103		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 104		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887

## 106	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 107	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 108	Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 109	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 110	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 111	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 112	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 113	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 114	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 115	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 116	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 117	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 118	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 119	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 120	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 121	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 122	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 123	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 124	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 125	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 126	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 127	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 128	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 129	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 130	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 131	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 132	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 133	Akron Canton Regional Airport	0.8645443	0.53528067	0.6945834
## 134	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 136	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 137	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 138	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 139	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 140	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 141	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 142	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 143	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 144	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 145	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 146	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 147	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 148	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 149	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 150	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 151	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 152	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 153	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 154	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 155	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 156	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 157	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 158	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 160	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 162	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572

## 163	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 164	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 165	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 166	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 167	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 168	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 169	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 170	Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 172	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 173	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 174	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 175	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 176	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 177	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 178	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 179	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 181	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 183	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 184	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 185	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 186	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 187	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 190	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 191	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 192	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 193	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 194	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 195	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 196	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 197	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 198	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 199	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 200	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 201	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 202	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 203	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 204	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 205	Denver Intl	0.6779008	-1.02642040	5.2044253
## 206	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 207	Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 208	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 209	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 210	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 211	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 212	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 213	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 214	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 215	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 217	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 218	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 219	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 220	Denver Intl	0.6779008	-1.02642040	5.2044253
## 221	Gerald R Ford Intl	1.2123232	0.26096187	0.2288991
## 222	General Mitchell Intl	1.2240747	0.10138490	0.1527157

## 223		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 224		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 226		San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 227		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 228		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 229		Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 230	Hartsfield Jackson Atlanta Intl		-0.4239710	0.33455562	0.4778363
## 231	Dallas Fort Worth Intl		-0.5549386	-0.51314595	0.0282470
## 232	Southwest Florida Intl		-1.6808348	0.51424111	-0.5908771
## 233	Chicago Ohare Intl		1.0526201	0.10082969	0.0937004
## 234	Fort Lauderdale Hollywood Intl		-1.7628935	0.62196347	-0.6134102
## 235	Philadelphia Intl		0.6797219	0.95214614	-0.5844391
## 236	Buffalo Niagara Intl		1.2228893	0.71746205	0.1537887
## 237	Chicago Ohare Intl		1.0526201	0.10082969	0.0937004
## 238	Denver Intl		0.6779008	-1.02642040	5.2044253
## 239	Syracuse Hancock Intl		1.2530980	0.89398502	-0.1713320
## 240	Miami Intl		-1.8123380	0.61269947	-0.6144832
## 241	Fort Lauderdale Hollywood Intl		-1.7628935	0.62196347	-0.6134102
## 242	Minneapolis St Paul Intl		1.5665406	-0.25660018	0.2793303
## 245	Denver Intl		0.6779008	-1.02642040	5.2044253
## 247	Palm Beach Intl		-1.6548155	0.62580611	-0.6026802
## 248	Ronald Reagan Washington Natl		0.4991970	0.83137098	-0.6069722
## 249	Phoenix Sky Harbor Intl		-0.4598049	-1.51974410	0.5947939
## 251	Detroit Metro Wayne Co		1.0940122	0.40680076	0.0690213
## 252	Piedmont Triad		0.0116544	0.63644667	0.3694628
## 253	Hartsfield Jackson Atlanta Intl		-0.4239710	0.33455562	0.4778363
## 254	San Diego Intl		-0.5838393	-1.86784040	-0.6048262
## 255	Dallas Fort Worth Intl		-0.5549386	-0.51314595	0.0282470
## 256	Manchester Regional Airport		1.2214787	1.20796870	-0.3376478
## 257	Mc Carrahan Intl		0.0085224	-1.73087520	1.6742374
## 258	Austin Bergstrom Intl		-1.0332709	-0.55562484	-0.0414983
## 259	George Bush Intercontinental		-1.0704596	-0.39909517	-0.5189857
## 260	Charlotte Douglas Intl		-0.1447776	0.56882963	0.1795408
## 261	Los Angeles Intl		-0.3698385	-1.94974778	-0.4878686
## 263	Denver Intl		0.6779008	-1.02642040	5.2044253
## 264	San Antonio Intl		-1.1502446	-0.60939731	0.2449941
## 265	Chicago Ohare Intl		1.0526201	0.10082969	0.0937004
## 266	Chicago Ohare Intl		0.0116544	0.40680076	-0.1584559
## 267	Raleigh Durham Intl		-0.0273073	0.71374418	-0.1563099
## 268	George Bush Intercontinental		-1.0704596	-0.39909517	-0.5189857
## 269	Miami Intl		-1.8123380	0.61269947	-0.6144832
## 270	San Francisco Intl		0.2809249	-2.21641654	-0.6091182
## 271	San Diego Intl		-0.5838393	-1.86784040	-0.6048262
## 273	San Francisco Intl		0.2809249	-2.21641654	-0.6091182
## 275	Detroit Metro Wayne Co		1.0940122	0.40680076	0.0690213
## 276	Orlando Intl		-1.3457160	0.54423506	-0.5200587
## 277	Tampa Intl		-1.4260644	0.46193454	-0.5951691
## 278	Chicago Midway Intl		1.0185227	0.11107645	0.0421961
## 279	Orlando Intl		-1.3457160	0.54423506	-0.5200587
## 281	Chicago Ohare Intl		1.0526201	0.10082969	0.0937004
## 282	Raleigh Durham Intl		-0.0273073	0.71374418	-0.1563099
## 283	Portland Intl		1.6916448	-2.23138155	-0.5908771
## 284	Nashville Intl		0.0163844	0.18329100	0.0196630
## 285	Dallas Fort Worth Intl		-0.5549386	-0.51314595	0.0282470

## 286	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 287	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 288	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 289	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 290	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 291	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 292	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 294	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 297	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 298	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 299	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 300	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 301	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 302	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 303	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 304	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 305	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 306	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 307	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 308	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 310	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 311	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 312	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 313	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 316	Eppley Afld	0.9330617	-0.43624548	0.4327701
## 317	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 318	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 319	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 320	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 321	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 322	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 323	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 324	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 328	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 330	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 332	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 333	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 336	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 339	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 340	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 341	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 342	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 343	Portland Intl	1.6916448	-2.23138155	-0.5908771
## 344	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 346	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 347	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 348	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 349	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 350	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 351	Theodore Francis Green State	1.0090719	1.20899616	-0.5640520
## 352	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 353	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 354	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 355	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099

## 356	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 358	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 359	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 365	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 366	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 367	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 368	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 369	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 370	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 371	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 372	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 373	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 374	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 375	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 376	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 377	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 378	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 379	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 380	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 381	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 382	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 383	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 384	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 385	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 386	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 387	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 388	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 389	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 390	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 391	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 392	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 393	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 394	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 395	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 396	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 397	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 398	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 399	Denver Intl	0.6779008	-1.02642040	5.2044253
## 400	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 401	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 402	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 403	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 404	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 405	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 406	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 407	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 408	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 410	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 411	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 412	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 413	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 414	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 415	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 416	Orlando Intl	-1.3457160	0.54423506	-0.5200587

## 418	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 420	Denver Intl	0.6779008	-1.02642040	5.2044253
## 421	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 422	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 423	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 424	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 425	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 426	Denver Intl	0.6779008	-1.02642040	5.2044253
## 427	Denver Intl	0.6779008	-1.02642040	5.2044253
## 428	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 429	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 430	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 432	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 433	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 434	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 435	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 436	Portland Intl	1.6916448	-2.23138155	-0.5908771
## 437	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 438	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 439	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 440	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 442	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 443	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 444	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 445	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 446	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 447	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 448	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 450	Denver Intl	0.6779008	-1.02642040	5.2044253
## 451	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 452	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 453	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 455	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 457	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 458	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 459	Denver Intl	0.6779008	-1.02642040	5.2044253
## 460	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 462	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 463	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 464	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 465	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 466	Jackson Hole Airport	1.3409206	-1.43411078	6.2988908
## 467	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 468	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 469	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 470	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 471	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 472	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 473	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 474	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 475	Eagle Co Rgnl	0.6391181	-1.17730781	6.3943883
## 476	Denver Intl	0.6779008	-1.02642040	5.2044253
## 477	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 479	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802

## 480	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 481	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 482	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 483	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 484	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 485	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 486	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 487	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 488	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 489	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 490	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 491	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 492	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 493	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 494	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 495	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 496	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 497	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 498	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 499	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 501	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 502	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 503	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 504	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 506	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 507	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 508	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 509	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 510	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 511	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 512	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 514	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 515	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 516	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 517	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 518	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 519	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 520	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 523	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 524	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 525	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 526	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 527	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 528	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 529	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 530	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 531	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 532	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 533	Denver Intl	0.6779008	-1.02642040	5.2044253
## 534	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 535	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 536	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 537	Piedmont Triad	0.0116544	0.63644667	0.3694628
## 538	Orlando Intl	-1.3457160	0.54423506	-0.5200587

## 539	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 540	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 541	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 542	Albany Intl	1.1888578	1.04891285	-0.3172607
## 543	Eppley Afld	0.9330617	-0.43624548	0.4327701
## 544	Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771
## 545	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 546	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 547	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 548	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 549	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 551	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 553	Dane Co Rgnl Truax Fld	1.2581731	0.00451842	0.3286886
## 554	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 555	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 556	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 558	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 559	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 560	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 561	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 562	Kansas City Intl	0.5780587	-0.35690904	0.4778363
## 563	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 564	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 565	Norfolk Intl	0.1527062	0.88760463	-0.5951691
## 566	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 567	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 569	Greenville-Spartanburg International	-0.2011451	0.48306744	0.4113100
## 570	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 571	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 572	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 573	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 574	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 576	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 577	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 578	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 579	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 580	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 581	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 582	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 584	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 585	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 586	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 587	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 588	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 589	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 590	Nashville Intl	0.0163844	0.18329100	0.0196630
## 591	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 593	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 594	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 596	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 597	Denver Intl	0.6779008	-1.02642040	5.2044253
## 598	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 599	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 600	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771

## 601		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 602		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 603		Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 604		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 605		Denver Intl	0.6779008	-1.02642040	5.2044253
## 607		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 608		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 609	General	Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 610		Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 611	Cincinnati	Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 612		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 613		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 614		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 615		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 616		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 617		Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 618		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 619		Portland Intl	1.6916448	-2.23138155	-0.5908771
## 621		Denver Intl	0.6779008	-1.02642040	5.2044253
## 622		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 624		San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 625		Portland Intl	1.6916448	-2.23138155	-0.5908771
## 626		NW Arkansas Regional	0.0442452	-0.32954219	0.7578907
## 628		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 630	General	Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 631		Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 635		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 636		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 637		Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 638		Nashville Intl	0.0163844	0.18329100	0.0196630
## 639		Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 641		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 643		Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 644		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 645		John Wayne Arpt Orange Co	-0.4170768	-1.91345620	-0.5629789
## 646		Norman Y Mineta San Jose Intl	0.2355446	-2.18644317	-0.5565409
## 648		Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 649		Bob Hope	-0.3241470	-1.94642633	0.2117310
## 650		Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 651		Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 652		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 654		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 655		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 656		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 657		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 658	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363	
## 659		General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 660		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 661		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 662		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 663		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 664		Nashville Intl	0.0163844	0.18329100	0.0196630
## 665		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 666		San Francisco Intl	0.2809249	-2.21641654	-0.6091182

## 667	Sacramento Intl	0.4714656	-2.16370474	-0.5940961
## 668	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 669	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 670	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 671	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 672	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 673	Des Moines Intl	0.9739163	-0.28626762	0.4048720
## 674	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 675	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 676	San Antonio Intl	-1.1502446	-0.60939731	0.2449941
## 677	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 678	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 680	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 682	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 683	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 684	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 686	Mc Ghee Tyson	-0.0391080	0.36373385	0.4295511
## 687	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 689	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 690	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 691	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 693	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 694	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 695	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 696	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 697	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 698	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 699	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 700	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 702	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 703	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 704	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 706	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 707	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 709	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 710	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 711	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 712	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 713	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 714	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 715	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 716	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 717	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 719	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 720	Nashville Intl	0.0163844	0.18329100	0.0196630
## 721	Denver Intl	0.6779008	-1.02642040	5.2044253
## 722	Theodore Francis Green State	1.0090719	1.20899616	-0.5640520
## 723	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 725	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 726	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 727	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 729	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 730	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 737	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559

## 738	Manchester Regional Airport	1.2214787	1.20796870	-0.3376478
## 739	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 743	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 744	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 745	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 746	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 747	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 748	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 749	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 750	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 751	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 752	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 753	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 754	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 755	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 756	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 757	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 758	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 759	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 760	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 761	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 762	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 763	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 764	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 765	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 766	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 767	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 768	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 769	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 770	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 771	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 772	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 773	Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 774	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 775	Denver Intl	0.6779008	-1.02642040	5.2044253
## 776	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 777	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 778	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 779	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 780	John Wayne Arpt Orange Co	-0.4170768	-1.91345620	-0.5629789
## 781	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 782	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 784	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 785	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 786	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 787	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 788	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 789	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 790	Syracuse Hancock Intl	1.2530980	0.89398502	-0.1713320
## 791	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 792	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 793	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 794	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 795	Pittsburgh Intl	0.7893832	0.61657727	0.6688313

## 796		Denver Intl	0.6779008	-1.02642040	5.2044253
## 797	Fort Lauderdale	Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 798		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 799		Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771
## 800	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 801		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 802		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 803		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 804		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 805		Piedmont Triad	0.0116544	0.63644667	0.3694628
## 806		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 807		Richmond Intl	0.2607803	0.81241725	-0.4438753
## 808		San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 809		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 810	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 811		San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 812		Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 813		Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 815		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 816		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 817		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 818	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213	
## 819		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 821		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 822		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 823		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 824		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 825		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 826	George Bush Intercontinental		-1.0704596	-0.39909517	-0.5189857
## 828	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 829		Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 831	Hartsfield Jackson Atlanta	Intl	-0.4239710	0.33455562	0.4778363
## 832	Fort Lauderdale Hollywood	Intl	-1.7628935	0.62196347	-0.6134102
## 833		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 834		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 835		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 837		Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 839		General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 840	Fort Lauderdale Hollywood	Intl	-1.7628935	0.62196347	-0.6134102
## 841		Gerald R Ford Intl	1.2123232	0.26096187	0.2288991
## 843		Nashville Intl	0.0163844	0.18329100	0.0196630
## 844		Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 845		Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 846		Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 848		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 849		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 850	George Bush Intercontinental		-1.0704596	-0.39909517	-0.5189857
## 852		Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771
## 853		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 855	Hartsfield Jackson Atlanta	Intl	-0.4239710	0.33455562	0.4778363
## 856		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 857		Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 858		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 859		San Francisco Intl	0.2809249	-2.21641654	-0.6091182

## 860	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 861	Memphis Intl	-0.1751494	-0.03844859	-0.2571724
## 862	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 863	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 864	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 865	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 866	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 867	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 868	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 869	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 870	Kansas City Intl	0.5780587	-0.35690904	0.4778363
## 871	Denver Intl	0.6779008	-1.02642040	5.2044253
## 872	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 873	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 874	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 875	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 876	Denver Intl	0.6779008	-1.02642040	5.2044253
## 877	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 878	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 879	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 880	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 881	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 882	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 883	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 884	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 885	Akron Canton Regional Airport	0.8645443	0.53528067	0.6945834
## 886	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 887	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 888	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 891	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 892	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 893	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 894	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 895	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 896	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 897	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 898	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 899	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 900	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 901	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 902	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 903	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 904	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 905	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 906	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 907	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 910	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 911	Long Beach	-0.3919318	-1.93250701	-0.5586869
## 913	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 914	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 915	Bob Hope	-0.3241470	-1.94642633	0.2117310
## 916	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 917	Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771
## 918	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939

## 919	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 920	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 921	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 923	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 924	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 926	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 927	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 928	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 929	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 930	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 931	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 932	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 934	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 935	Kansas City Intl	0.5780587	-0.35690904	0.4778363
## 936	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 937	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 939	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 940	Denver Intl	0.6779008	-1.02642040	5.2044253
## 941	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 942	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 943	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 944	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 945	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 946	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 947	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 948	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 949	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 950	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 951	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 952	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 953	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 954	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 955	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 956	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 957	Denver Intl	0.6779008	-1.02642040	5.2044253
## 958	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 959	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 960	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 961	Nashville Intl	0.0163844	0.18329100	0.0196630
## 962	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 963	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 964	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 965	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 966	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 967	Gerald R Ford Intl	1.2123232	0.26096187	0.2288991
## 968	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 969	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 971	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 972	Norfolk Intl	0.1527062	0.88760463	-0.5951691
## 973	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 974	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 975	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 976	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 977	Indianapolis Intl	0.6523539	0.20909267	0.2321181

## 978	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 979	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 980	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 981	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 984	Piedmont Triad	0.0116544	0.63644667	0.3694628
## 985	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 987	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 988	San Antonio Intl	-1.1502446	-0.60939731	0.2449941
## 989	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 990	James M Cox Dayton Intl	0.6851084	0.34858492	0.4595952
## 991	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 992	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 993	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 994	Nashville Intl	0.0163844	0.18329100	0.0196630
## 995	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 996	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 997	Savannah Hilton Head Intl	-0.6911021	0.55141837	-0.5683440
## 998	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1000	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1001	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1002	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1003	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1004	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1005	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1006	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1007	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1008	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1009	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1010	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1013	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1014	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1016	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1017	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1018	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1020	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1021	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1022	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 1024	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1026	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1028	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1029	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1030	Norfolk Intl	0.1527062	0.88760463	-0.5951691
## 1031	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1032	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1033	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1034	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1035	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1036	Bob Hope	-0.3241470	-1.94642633	0.2117310
## 1037	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1038	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1040	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1042	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 1044	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1046	Tampa Intl	-1.4260644	0.46193454	-0.5951691

## 1047	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1048	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 1049	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1050	Richmond Intl	0.2607803	0.81241725	-0.4438753
## 1051	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1053	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1054	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1055	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1056	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1057	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 1058	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1059	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 1061	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1063	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1065	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1068	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1069	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1071	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1076	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1077	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1078	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1079	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 1080	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1085	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1086	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1091	Manchester Regional Airport	1.2214787	1.20796870	-0.3376478
## 1092	Richmond Intl	0.2607803	0.81241725	-0.4438753
## 1093	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1096	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1097	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1098	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1099	Theodore Francis Green State	1.0090719	1.20899616	-0.5640520
## 1100	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1101	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1103	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 1104	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1106	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1107	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 1108	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1109	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1110	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1111	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1112	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1113	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1114	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1115	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1116	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 1117	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1118	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1119	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1120	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1121	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1122	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1123	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800

## 1124		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1125		Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1126		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1127		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1128		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1129		Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1130		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1131		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1132		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1133		Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1134		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1135	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456	
## 1136		Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1137		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1138		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1139		Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1140		Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 1141		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1142	Louisville International Airport	0.3791852	0.24659638	-0.0854915	
## 1143	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752	
## 1144		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1145		Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1146		Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 1147		Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1148	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752	
## 1149	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363	
## 1150		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1151		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1152		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1153		William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 1154		NW Arkansas Regional	0.0442452	-0.32954219	0.7578907
## 1155		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1156		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1157		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1158	John Wayne Arpt Orange Co	-0.4170768	-1.91345620	-0.5629789	
## 1159		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1160		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1161	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102	
## 1162		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1163		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1164		General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 1165		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1166		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1167		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1168		Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1170	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771	
## 1171	Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771	
## 1172	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456	
## 1173		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1174		Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1175		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1176		Denver Intl	0.6779008	-1.02642040	5.2044253
## 1177		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1178	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470	

## 1179	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1180	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1181	Manchester Regional Airport	1.2214787	1.20796870	-0.3376478
## 1182	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1183	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1184	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1185	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1186	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 1187	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1188	Eppley Afld	0.9330617	-0.43624548	0.4327701
## 1189	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1190	James M Cox Dayton Intl	0.6851084	0.34858492	0.4595952
## 1191	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1192	Myrtle Beach Intl	-0.4163541	0.70427481	-0.5962421
## 1193	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1194	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1195	Gerald R Ford Intl	1.2123232	0.26096187	0.2288991
## 1196	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1197	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1198	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1199	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1200	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1201	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1202	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1203	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 1204	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1205	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1206	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1207	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1208	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 1209	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1210	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1211	Kansas City Intl	0.5780587	-0.35690904	0.4778363
## 1212	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1213	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1214	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1215	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1216	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1217	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1218	Honolulu Intl	-2.6043784	-4.60609709	-0.6091182
## 1219	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1220	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1221	NW Arkansas Regional	0.0442452	-0.32954219	0.7578907
## 1222	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1223	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1224	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1225	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 1226	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1227	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 1228	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1229	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1230	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1231	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1232	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887

## 1233	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1235	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 1236	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 1237	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1238	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1239	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1240	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1241	Nashville Intl	0.0163844	0.18329100	0.0196630
## 1242	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1243	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1244	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1245	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1246	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1247	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1248	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1249	Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771
## 1250	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1251	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1252	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1253	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1254	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1255	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1257	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 1258	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1259	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1260	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 1261	Memphis Intl	-0.1751494	-0.03844859	-0.2571724
## 1263	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1264	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1265	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1266	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1268	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1269	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1270	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 1272	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1273	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1274	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1275	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1276	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1277	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1278	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1279	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1280	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1281	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1282	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1284	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1285	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1286	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1287	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 1288	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1290	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 1291	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1292	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1293	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267

## 1294	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1295	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1296	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1297	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1298	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1299	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1300	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1303	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 1304	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1305	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1306	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1308	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1309	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1310	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1311	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1312	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1313	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1314	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1315	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1317	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1318	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 1319	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1320	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1322	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1323	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1325	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1327	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1328	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 1329	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1330	Norfolk Intl	0.1527062	0.88760463	-0.5951691
## 1331	Kansas City Intl	0.5780587	-0.35690904	0.4778363
## 1332	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1333	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1334	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1335	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 1336	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1338	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1340	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1341	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1342	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1343	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1344	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1346	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1347	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1348	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1349	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1350	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1351	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1352	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1353	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1354	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1356	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1357	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1358	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363

## 1359	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1360	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1361	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1362	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1364	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1366	Syracuse Hancock Intl	1.2530980	0.89398502	-0.1713320
## 1367	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1368	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 1369	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1370	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1371	James M Cox Dayton Intl	0.6851084	0.34858492	0.4595952
## 1372	Albany Intl	1.1888578	1.04891285	-0.3172607
## 1374	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1375	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1376	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1377	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1378	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1379	Memphis Intl	-0.1751494	-0.03844859	-0.2571724
## 1380	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1381	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1382	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1383	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 1385	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1387	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1388	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1389	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1390	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1391	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 1392	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1393	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1394	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1395	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1396	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1397	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1398	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1399	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1400	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1402	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1403	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1404	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1405	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1406	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1407	Portland Intl	1.6916448	-2.23138155	-0.5908771
## 1408	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1409	Portland Intl	1.6916448	-2.23138155	-0.5908771
## 1410	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1411	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1412	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1413	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1414	Norfolk Intl	0.1527062	0.88760463	-0.5951691
## 1415	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1416	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1419	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1420	Mc Carran Intl	0.0085224	-1.73087520	1.6742374

## 1421	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1422	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1423	John Wayne Arpt Orange Co	-0.4170768	-1.91345620	-0.5629789
## 1425	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1426	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1427	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1428	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1429	Bob Hope	-0.3241470	-1.94642633	0.2117310
## 1430	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1431	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1432	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1433	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1434	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1435	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1436	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 1438	Des Moines Intl	0.9739163	-0.28626762	0.4048720
## 1439	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 1440	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1441	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1442	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1443	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1444	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1445	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1446	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 1447	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1448	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1449	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1450	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1451	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 1452	Will Rogers World	-0.1130772	-0.55097583	0.7664748
## 1455	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 1457	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1460	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 1461	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1462	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1463	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1464	Piedmont Triad	0.0116544	0.63644667	0.3694628
## 1466	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1467	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1468	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 1469	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1472	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1473	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1474	Portland Intl	1.6916448	-2.23138155	-0.5908771
## 1475	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1476	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 1477	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1478	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1480	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1481	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1482	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1483	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1484	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1486	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559

## 1487		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1488		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1489		Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1490		Burlington Intl	1.4939500	1.09250243	-0.2636104
## 1493		Syracuse Hancock Intl	1.2530980	0.89398502	-0.1713320
## 1494		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1495	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 1497	Dallas Fort Worth	Intl	-0.5549386	-0.51314595	0.0282470
## 1498	Charlotte Douglas	Intl	-0.1447776	0.56882963	0.1795408
## 1499	Miami	Intl	-1.8123380	0.61269947	-0.6144832
## 1500	Palm Beach	Intl	-1.6548155	0.62580611	-0.6026802
## 1501	Fort Lauderdale Hollywood	Intl	-1.7628935	0.62196347	-0.6134102
## 1502	Palm Beach	Intl	-1.6548155	0.62580611	-0.6026802
## 1503	Tampa	Intl	-1.4260644	0.46193454	-0.5951691
## 1504	Palm Beach	Intl	-1.6548155	0.62580611	-0.6026802
## 1505	Chicago Ohare	Intl	0.0116544	0.40680076	-0.1584559
## 1506	Southwest Florida	Intl	-1.6808348	0.51424111	-0.5908771
## 1507	Miami	Intl	-1.8123380	0.61269947	-0.6144832
## 1508	Baltimore Washington	Intl	0.5564202	0.85620313	-0.4664085
## 1509	Hartsfield Jackson Atlanta	Intl	-0.4239710	0.33455562	0.4778363
## 1510	Hartsfield Jackson Atlanta	Intl	-0.4239710	0.33455562	0.4778363
## 1511	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 1512	Chicago Ohare	Intl	0.0116544	0.40680076	-0.1584559
## 1513	Orlando	Intl	-1.3457160	0.54423506	-0.5200587
## 1514	Denver	Intl	0.6779008	-1.02642040	5.2044253
## 1515	Salt Lake City	Intl	0.8419412	-1.51747116	3.9125267
## 1516	San Francisco	Intl	0.2809249	-2.21641654	-0.6091182
## 1517	Orlando	Intl	-1.3457160	0.54423506	-0.5200587
## 1518	William P Hobby		-1.1304683	-0.39489005	-0.5737090
## 1519	Chicago Ohare	Intl	1.0526201	0.10082969	0.0937004
## 1520	Mc Carran	Intl	0.0085224	-1.73087520	1.6742374
## 1521	Los Angeles	Intl	-0.3698385	-1.94974778	-0.4878686
## 1522	Detroit Metro Wayne Co		1.0940122	0.40680076	0.0690213
## 1523	Chicago Ohare	Intl	0.0116544	0.40680076	-0.1584559
## 1524	General Mitchell	Intl	1.2240747	0.10138490	0.1527157
## 1525	Orlando	Intl	-1.3457160	0.54423506	-0.5200587
## 1526	Hartsfield Jackson Atlanta	Intl	-0.4239710	0.33455562	0.4778363
## 1527	Orlando	Intl	-1.3457160	0.54423506	-0.5200587
## 1528	Seattle Tacoma	Intl	2.0209313	-2.21200773	-0.1584559
## 1529	Tampa	Intl	-1.4260644	0.46193454	-0.5951691
## 1530	Southwest Florida	Intl	-1.6808348	0.51424111	-0.5908771
## 1531	San Francisco	Intl	0.2809249	-2.21641654	-0.6091182
## 1533	Buffalo Niagara	Intl	1.2228893	0.71746205	0.1537887
## 1534	Miami	Intl	-1.8123380	0.61269947	-0.6144832
## 1535	Minneapolis St Paul	Intl	1.5665406	-0.25660018	0.2793303
## 1536	Orlando	Intl	-1.3457160	0.54423506	-0.5200587
## 1537	Charlotte Douglas	Intl	-0.1447776	0.56882963	0.1795408
## 1538	Ronald Reagan Washington Natl		0.4991970	0.83137098	-0.6069722
## 1539	Minneapolis St Paul	Intl	1.5665406	-0.25660018	0.2793303
## 1540	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 1541	Orlando	Intl	-1.3457160	0.54423506	-0.5200587
## 1542	Raleigh Durham	Intl	-0.0273073	0.71374418	-0.1563099
## 1543	Greater Rochester	Intl	1.2544573	0.78870554	-0.0232572
## 1544	Chicago Ohare	Intl	0.0116544	0.40680076	-0.1584559

## 1545	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1546	Manchester Regional Airport	1.2214787	1.20796870	-0.3376478
## 1547	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1548	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1549	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1550	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1551	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1552	Yampa Valley	0.7875625	-1.19747300	6.4609146
## 1553	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1554	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1555	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1556	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1557	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1558	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1559	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1560	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1561	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1562	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1564	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 1565	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1566	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1567	Kansas City Intl	0.5780587	-0.35690904	0.4778363
## 1568	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1569	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1570	Honolulu Intl	-2.6043784	-4.60609709	-0.6091182
## 1571	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 1572	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1573	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1574	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1575	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1576	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1577	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1578	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1579	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1580	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1581	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1582	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1583	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1584	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1586	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1587	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1588	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1589	Eagle Co Rgnl	0.6391181	-1.17730781	6.3943883
## 1590	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1591	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1593	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 1594	Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771
## 1595	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1596	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1597	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 1598	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1599	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1600	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1601	Orlando Intl	-1.3457160	0.54423506	-0.5200587

## 1602		Key West Intl	-2.0313232	0.51394606	-0.6198482
## 1603		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1604		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1606		Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1607		Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1608		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1609		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 1610		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1611		Burlington Intl	1.4939500	1.09250243	-0.2636104
## 1612		Denver Intl	0.6779008	-1.02642040	5.2044253
## 1613		Akron Canton Regional Airport	0.8645443	0.53528067	0.6945834
## 1614		Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 1615		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1616		Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1617		Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1618		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1619		Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1620		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1622		Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 1623		Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1624		Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1626		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1627		Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 1628		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1629		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1630		William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 1631		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1632		Bradley Intl	1.0455904	1.12410191	-0.4374373
## 1633		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1634		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1635		Honolulu Intl	-2.6043784	-4.60609709	-0.6091182
## 1636		Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1638		Manchester Regional Airport	1.2214787	1.20796870	-0.3376478
## 1640		George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1641		Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1642		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1643		George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1646		Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 1647		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1648		Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1649		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1650		Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1651		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1652		Richmond Intl	0.2607803	0.81241725	-0.4438753
## 1653		Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1654	General Edward Lawrence Logan Intl		1.1209004	1.23690808	-0.6026802
## 1655		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1656	Louis Armstrong New Orleans Intl		-1.0688743	-0.05736306	-0.6187752
## 1657	Hartsfield Jackson Atlanta Intl		-0.4239710	0.33455562	0.4778363
## 1658		Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 1659		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1660		Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1661		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1662	Ronald Reagan Washington Natl		0.4991970	0.83137098	-0.6069722

## 1663		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1664		George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1665	Cincinnati	Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 1666		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1667		Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 1668		General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 1669		Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 1670		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1671	Hartsfield	Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1672		Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1673		Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 1674		Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1675		Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 1676		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 1677		Denver Intl	0.6779008	-1.02642040	5.2044253
## 1678		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1679		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1680		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1681	Fort Lauderdale	Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1682		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1683		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1684		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1685		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1686		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1687		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1688		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1689		Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1690		Nashville Intl	0.0163844	0.18329100	0.0196630
## 1691		George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1692		Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1693		Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1694		Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1695		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 1696		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1697	Ronald Reagan	Washington Natl	0.4991970	0.83137098	-0.6069722
## 1698		Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1699		Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 1701		Richmond Intl	0.2607803	0.81241725	-0.4438753
## 1702		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1703		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1704	Fort Lauderdale	Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1705		Nashville Intl	0.0163844	0.18329100	0.0196630
## 1706	Hartsfield	Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1707		San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 1708		Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1709		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1710		Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1711		San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1712		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1713	Fort Lauderdale	Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1714		George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1715		Burlington Intl	1.4939500	1.09250243	-0.2636104
## 1716		Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1717		Kansas City Intl	0.5780587	-0.35690904	0.4778363

## 1718	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1719	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1720	Nashville Intl	0.0163844	0.18329100	0.0196630
## 1721	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1722	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1723	Norfolk Intl	0.1527062	0.88760463	-0.5951691
## 1724	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1726	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1728	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1729	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1730	Bradley Intl	1.0455904	1.12410191	-0.4374373
## 1731	Piedmont Triad	0.0116544	0.63644667	0.3694628
## 1733	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1734	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1735	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1736	Portland Intl	1.6916448	-2.23138155	-0.5908771
## 1737	Long Beach	-0.3919318	-1.93250701	-0.5586869
## 1738	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1739	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1740	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1741	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1742	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1743	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1744	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1745	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1746	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1747	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1748	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1749	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1751	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1753	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 1755	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 1756	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1757	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1758	Albany Intl	1.1888578	1.04891285	-0.3172607
## 1759	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1760	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1761	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1762	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1763	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1764	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 1765	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 1766	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1767	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1768	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1769	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1771	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1772	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1774	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1776	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1779	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1780	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1781	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1782	Miami Intl	-1.8123380	0.61269947	-0.6144832

## 1783	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1784	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1785	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1786	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1787	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1788	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1789	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1790	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1791	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1792	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1793	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1794	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1795	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1796	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1797	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1798	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1799	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1800	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1801	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 1802	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1803	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1804	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1806	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1807	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1808	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1809	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1810	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1811	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1812	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 1813	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1814	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1815	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1816	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1818	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1819	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1820	Memphis Intl	-0.1751494	-0.03844859	-0.2571724
## 1821	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1822	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1823	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1824	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1825	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1826	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1827	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1828	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1829	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1830	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1831	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1832	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 1833	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1834	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1835	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 1836	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1837	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1838	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686

## 1839	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1840	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 1841	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1842	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1843	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1844	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1845	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 1846	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1847	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1848	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 1849	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1850	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1851	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1852	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1853	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1854	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1855	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1856	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1857	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1859	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1860	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 1862	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1864	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1865	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1866	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1867	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1868	Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 1869	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1870	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1871	Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771
## 1872	Nashville Intl	0.0163844	0.18329100	0.0196630
## 1873	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1874	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1875	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1876	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1878	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1880	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1881	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1882	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1883	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1885	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1887	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1888	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 1889	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 1890	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1891	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1892	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1893	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1894	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 1895	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1896	Akron Canton Regional Airport	0.8645443	0.53528067	0.6945834
## 1897	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1898	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 1899	Tampa Intl	-1.4260644	0.46193454	-0.5951691

## 1900	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1901	Nashville Intl	0.0163844	0.18329100	0.0196630
## 1902	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 1903	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 1904	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1905	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1906	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1907	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1908	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1909	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1910	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1911	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1912	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 1913	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1914	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1915	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1916	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1917	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1918	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1919	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1920	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 1921	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1922	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1923	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 1924	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 1925	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1926	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1927	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1928	Bob Hope	-0.3241470	-1.94642633	0.2117310
## 1929	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1930	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1931	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1932	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1933	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 1934	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1935	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1936	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1937	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1938	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 1940	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1941	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1942	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1943	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1944	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1945	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 1946	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1947	Kansas City Intl	0.5780587	-0.35690904	0.4778363
## 1948	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1949	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1951	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 1952	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 1953	Greenville-Spartanburg International	-0.2011451	0.48306744	0.4113100
## 1954	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1955	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802

## 1957	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 1959	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 1960	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 1961	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1962	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 1963	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1964	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 1965	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1966	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 1968	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 1969	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 1970	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 1971	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1972	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 1973	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 1975	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1976	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 1977	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 1978	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 1979	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 1980	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1981	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1982	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1983	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 1984	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 1985	James M Cox Dayton Intl	0.6851084	0.34858492	0.4595952
## 1986	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1988	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 1989	Nashville Intl	0.0163844	0.18329100	0.0196630
## 1990	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 1991	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 1992	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 1993	Denver Intl	0.6779008	-1.02642040	5.2044253
## 1995	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 1997	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 1998	Memphis Intl	-0.1751494	-0.03844859	-0.2571724
## 1999	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2000	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 2001	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2002	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2003	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2004	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2005	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2006	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 2007	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2008	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2012	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2013	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2014	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2015	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2016	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2019	Richmond Intl	0.2607803	0.81241725	-0.4438753
## 2020	Portland Intl	1.6916448	-2.23138155	-0.5908771
## 2022	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102

## 2023	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2024	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2025	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 2027	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2028	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2030	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2031	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 2032	Norman Y Mineta San Jose Intl	0.2355446	-2.18644317	-0.5565409
## 2033	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2034	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2035	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2036	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2037	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2038	John Wayne Arpt Orange Co	-0.4170768	-1.91345620	-0.5629789
## 2039	Columbia Metropolitan	-0.3704940	0.55697189	-0.3698380
## 2040	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2041	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2042	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2043	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2044	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2045	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 2046	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2047	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2048	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2049	Richmond Intl	0.2607803	0.81241725	-0.4438753
## 2050	Eppley Afld	0.9330617	-0.43624548	0.4327701
## 2051	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2052	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2053	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2055	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2056	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2057	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 2058	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2059	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 2060	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2062	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2063	Will Rogers World	-0.1130772	-0.55097583	0.7664748
## 2064	Mc Ghee Tyson	-0.0391080	0.36373385	0.4295511
## 2065	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 2066	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2067	Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 2068	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2069	Mc Ghee Tyson	-0.0391080	0.36373385	0.4295511
## 2070	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2071	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2072	Piedmont Triad	0.0116544	0.63644667	0.3694628
## 2074	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 2076	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2077	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2078	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2079	Akron Canton Regional Airport	0.8645443	0.53528067	0.6945834
## 2080	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2081	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2083	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686

## 2085	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2086	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 2087	Louisville International Airport	0.3791852	0.24659638	-0.0854915
## 2088	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2089	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2090	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2091	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2092	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 2093	Theodore Francis Green State	1.0090719	1.20899616	-0.5640520
## 2094	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 2095	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2096	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 2099	Syracuse Hancock Intl	1.2530980	0.89398502	-0.1713320
## 2100	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2102	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2105	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2106	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2107	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2108	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2109	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2110	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2111	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2112	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2113	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2114	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2115	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2116	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2117	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2118	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 2119	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2120	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2121	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 2122	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2123	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2124	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2125	Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 2126	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2127	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2128	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2129	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2130	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2131	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 2132	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 2133	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2134	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2135	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 2136	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2137	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2138	NW Arkansas Regional	0.0442452	-0.32954219	0.7578907
## 2139	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2140	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2141	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 2142	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2143	Orlando Intl	-1.3457160	0.54423506	-0.5200587

## 2144	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2145	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2146	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2147	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2148	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2149	John Wayne Arpt Orange Co	-0.4170768	-1.91345620	-0.5629789
## 2151	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2152	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2153	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2154	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2155	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2156	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2157	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2158	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2159	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2160	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2161	Manchester Regional Airport	1.2214787	1.20796870	-0.3376478
## 2162	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2163	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2164	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2165	Eppley Afld	0.9330617	-0.43624548	0.4327701
## 2166	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2167	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2168	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2169	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2170	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2171	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2172	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 2173	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2174	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2175	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2176	James M Cox Dayton Intl	0.6851084	0.34858492	0.4595952
## 2177	Myrtle Beach Intl	-0.4163541	0.70427481	-0.5962421
## 2178	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2179	Memphis Intl	-0.1751494	-0.03844859	-0.2571724
## 2180	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 2182	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 2183	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2184	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2185	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2186	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2187	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 2188	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2189	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 2190	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2191	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2192	Richmond Intl	0.2607803	0.81241725	-0.4438753
## 2193	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2194	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2195	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2196	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2197	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2198	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2199	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983

## 2200	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2201	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2202	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2203	NW Arkansas Regional	0.0442452	-0.32954219	0.7578907
## 2204	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2205	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2206	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2207	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 2208	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2209	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2210	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2211	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2212	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2215	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 2216	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2217	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2218	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2219	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2220	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2221	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2222	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2223	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2224	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2225	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 2226	Gerald R Ford Intl	1.2123232	0.26096187	0.2288991
## 2227	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 2228	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2229	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 2230	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2231	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2232	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2233	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2235	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2236	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2237	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2238	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2239	Sarasota Bradenton Intl	-1.5287348	0.46051347	-0.5908771
## 2240	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2241	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2242	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2243	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2244	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2245	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2246	Memphis Intl	-0.1751494	-0.03844859	-0.2571724
## 2247	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 2248	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2249	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2250	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2251	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2252	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 2253	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2254	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2255	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2256	Burlington Intl	1.4939500	1.09250243	-0.2636104

## 2257	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2259	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 2260	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2261	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2262	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2263	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2264	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 2265	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2266	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2267	Akron Canton Regional Airport	0.8645443	0.53528067	0.6945834
## 2268	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2269	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2270	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2271	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2272	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2273	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2274	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2275	Syracuse Hancock Intl	1.2530980	0.89398502	-0.1713320
## 2276	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2277	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2278	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2279	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 2280	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2281	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2282	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2283	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2285	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2286	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 2287	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2288	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2289	Richmond Intl	0.2607803	0.81241725	-0.4438753
## 2290	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2291	William P Hobby	-1.1304683	-0.39489005	-0.5737090
## 2292	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2293	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2294	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2295	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2296	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2297	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2298	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2300	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2301	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2302	Honolulu Intl	-2.6043784	-4.60609709	-0.6091182
## 2303	Dane Co Rgnl Truax Fld	1.2581731	0.00451842	0.3286886
## 2304	Charleston Afb Intl	-0.5546166	0.62950758	-0.5747820
## 2305	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2306	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 2307	Louis Armstrong New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 2308	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2309	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2310	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2312	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2313	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2314	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802

## 2315	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2316	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2317	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2318	Norfolk Intl	0.1527062	0.88760463	-0.5951691
## 2319	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2320	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2321	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2322	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2323	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2324	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2325	Southwest Florida Intl	-1.6808348	0.51424111	-0.5908771
## 2326	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2327	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2328	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 2329	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2330	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2331	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2332	Indianapolis Intl	0.6523539	0.20909267	0.2321181
## 2334	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2335	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 2336	Richmond Intl	0.2607803	0.81241725	-0.4438753
## 2337	Gerald R Ford Intl	1.2123232	0.26096187	0.2288991
## 2338	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2339	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 2340	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 2341	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2343	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2344	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2345	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2346	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2347	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 2348	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2349	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2350	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 2351	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2352	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2353	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2354	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2355	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2356	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2357	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2358	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2359	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2360	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2363	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2364	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2365	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2366	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2367	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2368	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2369	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2370	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2371	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 2372	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939

## 2373	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2375	Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 2376	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2378	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 2379	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2380	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 2381	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2383	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2384	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 2385	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2386	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2387	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2388	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 2389	Bob Hope	-0.3241470	-1.94642633	0.2117310
## 2390	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2391	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2392	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2395	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2396	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2397	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2398	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2399	Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 2401	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2402	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2403	Burlington Intl	1.4939500	1.09250243	-0.2636104
## 2404	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 2405	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2406	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 2407	NW Arkansas Regional	0.0442452	-0.32954219	0.7578907
## 2408	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2409	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2410	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2411	Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2412	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2413	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2414	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2415	Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 2416	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2417	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2418	Norman Y Mineta San Jose Intl	0.2355446	-2.18644317	-0.5565409
## 2419	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2420	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 2421	Long Beach	-0.3919318	-1.93250701	-0.5586869
## 2422	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2423	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 2425	Richmond Intl	0.2607803	0.81241725	-0.4438753
## 2426	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2427	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 2428	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2429	Philadelphia Intl	0.6797219	0.95214614	-0.5844391
## 2430	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2431	John Wayne Arpt Orange Co	-0.4170768	-1.91345620	-0.5629789
## 2432	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2434	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213

## 2435		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2436		Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2437		Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2438		Yeager	0.4144209	0.52513007	0.4295511
## 2439		Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2440	Louis Armstrong	New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 2441		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2442	Hartsfield Jackson	Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2443	Hartsfield Jackson	Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2444		Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 2445		Des Moines Intl	0.9739163	-0.28626762	0.4048720
## 2446		General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 2447		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2448		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2449		Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 2450		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2451		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2452		Sacramento Intl	0.4714656	-2.16370474	-0.5940961
## 2453		Gerald R Ford Intl	1.2123232	0.26096187	0.2288991
## 2454	Hartsfield Jackson	Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2455		Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2456		Phoenix Sky Harbor Intl	-0.4598049	-1.51974410	0.5947939
## 2457		Salt Lake City Intl	0.8419412	-1.51747116	3.9125267
## 2458		Will Rogers World	-0.1130772	-0.55097583	0.7664748
## 2459		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2460		Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 2461		Baltimore Washington Intl	0.5564202	0.85620313	-0.4664085
## 2462		George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2463		Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2464		Mc Ghee Tyson	-0.0391080	0.36373385	0.4295511
## 2465	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 2466		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2467		Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2469	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 2470		Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2471		Port Columbus Intl	0.7020300	0.43782506	0.2514322
## 2472	Greenville-Spartanburg	International	-0.2011451	0.48306744	0.4113100
## 2475	Louis Armstrong	New Orleans Intl	-1.0688743	-0.05736306	-0.6187752
## 2476		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2477		Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2480		Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2481		Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 2482		Richmond Intl	0.2607803	0.81241725	-0.4438753
## 2483		Jacksonville Intl	-0.9802516	0.51876575	-0.5908771
## 2486	Theodore Francis Green State		1.0090719	1.20899616	-0.5640520
## 2487		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2489		Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2492		Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 2495	General Edward Lawrence Logan	Intl	1.1209004	1.23690808	-0.6026802
## 2496		Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2497		Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2498		Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2499		Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2500	Hartsfield Jackson	Atlanta Intl	-0.4239710	0.33455562	0.4778363

## 2501	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2502	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2503	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 2504	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2505	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2506	Washington Dulles Intl	0.5155615	0.80326498	-0.2872166
## 2507	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2508	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2509	Chicago Midway Intl	1.0185227	0.11107645	0.0421961
## 2510	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2511	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2512	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2513	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2514	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2515	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 2516	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 2517	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2518	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2519	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2520	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2521	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2522	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2523	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2524	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2525	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2526	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2527	NW Arkansas Regional	0.0442452	-0.32954219	0.7578907
## 2528	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2529	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2530	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2531	Louisville International Airport	0.3791852	0.24659638	-0.0854915
## 2532	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2533	Mc Caran Intl	0.0085224	-1.73087520	1.6742374
## 2534	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2535	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2536	Fort Lauderdale Hollywood Intl	-1.7628935	0.62196347	-0.6134102
## 2537	John Wayne Arpt Orange Co	-0.4170768	-1.91345620	-0.5629789
## 2538	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2539	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2540	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2541	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2542	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2543	General Mitchell Intl	1.2240747	0.10138490	0.1527157
## 2544	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2545	Seattle Tacoma Intl	2.0209313	-2.21200773	-0.1584559
## 2546	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2547	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2548	Lambert St Louis Intl	0.4808967	-0.06489225	0.0400501
## 2549	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2550	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2551	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 2552	Manchester Regional Airport	1.2214787	1.20796870	-0.3376478
## 2553	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2554	Chicago Midway Intl	1.0185227	0.11107645	0.0421961

## 2555	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2556	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2557	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2558	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2559	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2560	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2561	Pittsburgh Intl	0.7893832	0.61657727	0.6688313
## 2562	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2563	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2564	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2565	Denver Intl	0.6779008	-1.02642040	5.2044253
## 2566	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2567	Nashville Intl	0.0163844	0.18329100	0.0196630
## 2568	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2569	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2570	Syracuse Hancock Intl	1.2530980	0.89398502	-0.1713320
## 2571	Minneapolis St Paul Intl	1.5665406	-0.25660018	0.2793303
## 2572	Chicago Ohare Intl	1.0526201	0.10082969	0.0937004
## 2573	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2574	Piedmont Triad	0.0116544	0.63644667	0.3694628
## 2575	Portland Intl Jetport	1.3477934	1.28368991	-0.5404458
## 2576	Gerald R Ford Intl	1.2123232	0.26096187	0.2288991
## 2577	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2578	Orlando Intl	-1.3457160	0.54423506	-0.5200587
## 2579	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2580	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2581	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2582	Charlotte Douglas Intl	-0.1447776	0.56882963	0.1795408
## 2583	San Francisco Intl	0.2809249	-2.21641654	-0.6091182
## 2584	Ronald Reagan Washington Natl	0.4991970	0.83137098	-0.6069722
## 2585	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2586	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2587	NW Arkansas Regional	0.0442452	-0.32954219	0.7578907
## 2588	Cleveland Hopkins Intl	0.9522711	0.50787982	0.2256800
## 2589	Miami Intl	-1.8123380	0.61269947	-0.6144832
## 2590	San Diego Intl	-0.5838393	-1.86784040	-0.6048262
## 2591	Los Angeles Intl	-0.3698385	-1.94974778	-0.4878686
## 2592	Austin Bergstrom Intl	-1.0332709	-0.55562484	-0.0414983
## 2593	Tampa Intl	-1.4260644	0.46193454	-0.5951691
## 2594	George Bush Intercontinental	-1.0704596	-0.39909517	-0.5189857
## 2595	Hartsfield Jackson Atlanta Intl	-0.4239710	0.33455562	0.4778363
## 2596	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2597	Detroit Metro Wayne Co	1.0940122	0.40680076	0.0690213
## 2598	Cincinnati Northern Kentucky Intl	0.5340241	0.31843810	0.3383456
## 2599	Mc Carran Intl	0.0085224	-1.73087520	1.6742374
## 2600	Chicago Ohare Intl	0.0116544	0.40680076	-0.1584559
## 2601	Raleigh Durham Intl	-0.0273073	0.71374418	-0.1563099
## 2602	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2603	Dallas Fort Worth Intl	-0.5549386	-0.51314595	0.0282470
## 2604	Greater Rochester Intl	1.2544573	0.78870554	-0.0232572
## 2605	Palm Beach Intl	-1.6548155	0.62580611	-0.6026802
## 2606	Buffalo Niagara Intl	1.2228893	0.71746205	0.1537887
## 2607	General Edward Lawrence Logan Intl	1.1209004	1.23690808	-0.6026802
## 2608	Mc Carran Intl	0.0085224	-1.73087520	1.6742374

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## 2609          Palm Beach Intl -1.6548155  0.62580611 -0.6026802
## 2610          Eagle Co Rgnl  0.6391181 -1.17730781  6.3943883
## 2611          Chicago Ohare Intl  1.0526201  0.10082969  0.0937004
## 2612          General Mitchell Intl  1.2240747  0.10138490  0.1527157
## 2613          Nashville Intl   0.0163844  0.18329100  0.0196630
## 2614          Orlando Intl   -1.3457160  0.54423506 -0.5200587
## 2615          Hartsfield Jackson Atlanta Intl -0.4239710  0.33455562  0.4778363
## 2616          Ronald Reagan Washington Natl  0.4991970  0.83137098 -0.6069722
## 2617          Hartsfield Jackson Atlanta Intl -0.4239710  0.33455562  0.4778363
## 2618          Mc Carran Intl   0.0085224 -1.73087520  1.6742374
## 2619          Minneapolis St Paul Intl  1.5665406 -0.25660018  0.2793303
##           tz dst      tzone    year.y      type
## 1     0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 2    -0.242399 A America/Chicago  1.8110816 Fixed wing multi engine
## 3     0.686322 A America/New_York  1.6384612 Fixed wing multi engine
## 4    -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 5    -2.099842 A America/Los_Angeles  0.0848777 Fixed wing multi engine
## 6     0.686322 A America/New_York  1.1206000 Fixed wing multi engine
## 7    -2.099842 A America/Los_Angeles  1.1206000 Fixed wing multi engine
## 8     0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 9    -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 10    0.686322 A America/New_York  0.7753593 Fixed wing multi engine
## 11    0.686322 A America/New_York  1.6384612 Fixed wing multi engine
## 12    0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 13    0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 14    -2.099842 A America/Los_Angeles  0.4301185 Fixed wing multi engine
## 15    -0.242399 A America/Chicago  0.0848777 Fixed wing multi engine
## 16     0.686322 A America/New_York  0.9479797 Fixed wing multi engine
## 17     0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 18     0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 19     0.686322 A America/New_York  1.8110816 Fixed wing multi engine
## 20     0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 21     0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 22     0.686322 A America/New_York  1.8110816 Fixed wing multi engine
## 23    -1.171121 A America/Denver -1.6413261 Fixed wing multi engine
## 24    -2.099842 A America/Los_Angeles  0.2574981 Fixed wing multi engine
## 25    -0.242399 A America/Chicago  0.6027389 Fixed wing multi engine
## 26     0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 27    -1.171121 A America/Denver -0.0877426 Fixed wing multi engine
## 28    -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 29    -0.242399 A America/Chicago  0.0848777 Fixed wing multi engine
## 30     0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 31    -0.242399 A America/Chicago  0.0848777 Fixed wing multi engine
## 32     0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 33     0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 34    -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 35     0.686322 A America/New_York  0.9479797 Fixed wing multi engine
## 36     0.686322 A America/New_York  0.0848777 Fixed wing multi engine
## 37    -0.242399 A America/Chicago  0.0848777 Fixed wing multi engine
## 38     0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 39    -2.099842 A America/Los_Angeles  1.1206000 Fixed wing multi engine
## 40    -0.242399 A America/Chicago  0.0848777 Fixed wing multi engine
## 41    -1.171121 A America/Denver  1.8110816 Fixed wing multi engine
## 42    -0.242399 A America/Chicago  0.0848777 Fixed wing multi engine

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## 43	-2.099842	A America/Los_Angeles	1.1206000	Fixed wing multi engine
## 44	-2.099842	A America/Los_Angeles	0.6027389	Fixed wing multi engine
## 45	-0.242399	A America/Chicago	-0.0877426	Fixed wing multi engine
## 46	-2.099842	A America/Los_Angeles	-2.5044280	Fixed wing multi engine
## 47	-2.099842	A America/Los_Angeles	-2.5044280	Fixed wing multi engine
## 49	0.686322	A America/New_York	1.6384612	Fixed wing multi engine
## 50	0.686322	A America/New_York	0.0848777	Fixed wing multi engine
## 51	0.686322	A America/New_York	-2.1591872	Fixed wing multi engine
## 52	0.686322	A America/New_York	0.7753593	Fixed wing multi engine
## 53	0.686322	A America/New_York	0.0848777	Fixed wing multi engine
## 54	-2.099842	A America/Los_Angeles	-1.9865668	Fixed wing multi engine
## 55	0.686322	A America/New_York	0.0848777	Fixed wing multi engine
## 56	-0.242399	A America/Chicago	0.9479797	Fixed wing multi engine
## 57	0.686322	A America/New_York	0.6027389	Fixed wing multi engine
## 58	0.686322	A America/New_York	-0.4329834	Fixed wing multi engine
## 59	-0.242399	A America/Chicago	0.0848777	Fixed wing multi engine
## 60	0.686322	A America/New_York	-0.7782242	Fixed wing multi engine
## 61	0.686322	A America/New_York	0.0848777	Fixed wing multi engine
## 62	0.686322	A America/New_York	-0.4329834	Fixed wing multi engine
## 63	-0.242399	A America/Chicago	-1.8139464	Fixed wing multi engine
## 64	0.686322	A America/New_York	1.1206000	Fixed wing multi engine
## 66	-0.242399	A America/Chicago	0.9479797	Fixed wing multi engine
## 67	-2.099842	A America/Los_Angeles	-1.6413261	Fixed wing multi engine
## 68	0.686322	A America/New_York	-0.4329834	Fixed wing multi engine
## 69	0.686322	A America/New_York	0.0848777	Fixed wing multi engine
## 70	-1.171121	A America/Denver	0.0848777	Fixed wing multi engine
## 71	-0.242399	A America/Chicago	0.0848777	Fixed wing multi engine
## 72	0.686322	A America/New_York	-4.4032522	Fixed wing multi engine
## 73	0.686322	A America/New_York	0.0848777	Fixed wing multi engine
## 75	-1.171121	A America/Denver	-0.4329834	Fixed wing multi engine
## 76	0.686322	A America/New_York	-0.4329834	Fixed wing multi engine
## 77	0.686322	A America/New_York	0.2574981	Fixed wing multi engine
## 78	-2.099842	A America/Los_Angeles	0.6027389	Fixed wing multi engine
## 79	0.686322	A America/New_York	0.6027389	Fixed wing multi engine
## 80	0.686322	A America/New_York	0.0848777	Fixed wing multi engine
## 81	0.686322	A America/New_York	-0.0877426	Fixed wing multi engine
## 82	0.686322	A America/New_York	0.2574981	Fixed wing multi engine
## 83	-0.242399	A America/Chicago	-0.6056038	Fixed wing multi engine
## 84	-1.171121	A America/Denver	-0.2603630	Fixed wing multi engine
## 86	0.686322	A America/New_York	-0.6056038	Fixed wing multi engine
## 87	-0.242399	A America/Chicago	0.0848777	Fixed wing single engine
## 88	-0.242399	A America/Chicago	-1.6413261	Fixed wing multi engine
## 89	0.686322	A America/New_York	0.7753593	Fixed wing multi engine
## 90	0.686322	A America/New_York	1.6384612	Fixed wing multi engine
## 91	-2.099842	A America/Los_Angeles	-0.7782242	Fixed wing multi engine
## 92	-1.171121	A America/Denver	-0.4329834	Fixed wing multi engine
## 93	0.686322	A America/New_York	1.2932204	Fixed wing multi engine
## 94	0.686322	A America/New_York	0.9479797	Fixed wing single engine
## 95	-0.242399	A America/Chicago	-0.0877426	Fixed wing multi engine
## 96	-2.099842	A America/Los_Angeles	1.1206000	Fixed wing multi engine
## 97	0.686322	A America/New_York	-0.4329834	Fixed wing multi engine
## 98	-2.099842	A America/Los_Angeles	1.8110816	Fixed wing multi engine
## 99	0.686322	A America/New_York	-0.0877426	Fixed wing multi engine
## 100	0.686322	A America/New_York	-1.9865668	Fixed wing multi engine

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## 101 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 102 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 103 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 104 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 106 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 107 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 108 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 109 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 110 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 111 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 112 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 113 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 114 0.686322 A America/New_York -1.4687057 Fixed wing multi engine
## 115 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 116 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 117 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 118 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 119 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 120 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 121 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 122 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 123 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 124 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 125 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 126 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 127 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 128 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 129 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 130 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 131 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 132 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 133 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 134 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 136 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 137 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 138 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 139 -0.242399 A America/Chicago -1.4687057 Fixed wing multi engine
## 140 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 141 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 142 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 143 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 144 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 145 -0.242399 A America/Chicago -4.4032522 Fixed wing single engine
## 146 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 147 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 148 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 149 0.686322 A America/New_York -1.4687057 Fixed wing multi engine
## 150 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 151 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 152 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 153 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 154 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 155 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 156 0.686322 A America/New_York 1.1206000 Fixed wing multi engine

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## 157	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 158	-0.242399	A	America/Chicago	0.9479797	Fixed wing single engine
## 160	0.686322	A	America/New_York	1.1206000	Fixed wing multi engine
## 162	0.686322	A	America/New_York	1.6384612	Fixed wing multi engine
## 163	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 164	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 165	-0.242399	A	America/Chicago	-0.2603630	Fixed wing multi engine
## 166	0.686322	A	America/New_York	-4.4032522	Fixed wing multi engine
## 167	0.686322	A	America/New_York	1.8110816	Rotorcraft
## 168	-2.099842	A	America/Los_Angeles	-1.2960853	Fixed wing multi engine
## 169	-1.171121	A	America/Denver	-0.2603630	Fixed wing multi engine
## 170	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 172	-2.099842	A	America/Los_Angeles	-2.3318076	Fixed wing multi engine
## 173	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 174	-1.171121	N	America/Phoenix	0.9479797	Fixed wing multi engine
## 175	0.686322	A	America/New_York	0.2574981	Fixed wing multi engine
## 176	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 177	-0.242399	A	America/Chicago	0.4301185	Fixed wing multi engine
## 178	-0.242399	A	America/Chicago	-0.0877426	Fixed wing multi engine
## 179	-0.242399	A	America/Chicago	1.8110816	Fixed wing multi engine
## 181	0.686322	A	America/New_York	0.4301185	Fixed wing multi engine
## 183	-2.099842	A	America/Los_Angeles	1.8110816	Fixed wing multi engine
## 184	0.686322	A	America/New_York	0.9479797	Fixed wing multi engine
## 185	0.686322	A	America/New_York	-1.6413261	Fixed wing multi engine
## 186	-2.099842	A	America/Los_Angeles	-2.1591872	Fixed wing multi engine
## 187	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 190	-0.242399	A	America/Chicago	-0.4329834	Fixed wing multi engine
## 191	-2.099842	A	America/Los_Angeles	-0.4329834	Fixed wing multi engine
## 192	0.686322	A	America/New_York	-0.0877426	Fixed wing multi engine
## 193	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 194	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 195	0.686322	A	America/New_York	1.1206000	Fixed wing multi engine
## 196	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 197	0.686322	A	America/New_York	0.9479797	Fixed wing multi engine
## 198	0.686322	A	America/New_York	-1.6413261	Fixed wing multi engine
## 199	-0.242399	A	America/Chicago	-0.6056038	Fixed wing multi engine
## 200	0.686322	A	America/New_York	1.2932204	Fixed wing multi engine
## 201	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 202	0.686322	A	America/New_York	-1.2960853	Fixed wing multi engine
## 203	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 204	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 205	-1.171121	A	America/Denver	-1.9865668	Fixed wing multi engine
## 206	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 207	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 208	0.686322	A	America/New_York	1.4658408	Fixed wing multi engine
## 209	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 210	0.686322	A	America/New_York	-0.0877426	Fixed wing multi engine
## 211	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 212	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 213	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine
## 214	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 215	-2.099842	A	America/Los_Angeles	-1.1234649	Fixed wing multi engine
## 217	-0.242399	A	America/Chicago	0.9479797	Fixed wing multi engine
## 218	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine

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## 219 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 220 -1.171121 A America/Denver -1.9865668 Fixed wing multi engine
## 221 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 222 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 223 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 224 -2.099842 A America/Los_Angeles -2.8496687 Fixed wing multi engine
## 226 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 227 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 228 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 229 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 230 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 231 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 232 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 233 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 234 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 235 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 236 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 237 -0.242399 A America/Chicago 1.2932204 Fixed wing multi engine
## 238 -1.171121 A America/Denver 1.6384612 Fixed wing multi engine
## 239 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 240 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 241 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 242 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 245 -1.171121 A America/Denver -1.6413261 Fixed wing multi engine
## 247 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 248 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 249 -1.171121 N America/Phoenix -0.6056038 Fixed wing multi engine
## 251 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 252 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 253 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 254 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 255 -0.242399 A America/Chicago -2.5044280 Fixed wing multi engine
## 256 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 257 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 258 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 259 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 260 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 261 -2.099842 A America/Los_Angeles -1.8139464 Fixed wing multi engine
## 263 -1.171121 A America/Denver -1.6413261 Fixed wing multi engine
## 264 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 265 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 266 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 267 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 268 -0.242399 A America/Chicago -0.7782242 Fixed wing multi engine
## 269 0.686322 A America/New_York -1.2960853 Fixed wing multi engine
## 270 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 271 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing single engine
## 273 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 275 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 276 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 277 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 278 -0.242399 A America/Chicago 1.8110816 Fixed wing multi engine
## 279 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 281 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine

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## 282 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 283 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 284 -0.242399 A America/Chicago -4.4032522 Fixed wing multi engine
## 285 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 286 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 287 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 288 -0.242399 A America/Chicago -1.6413261 Fixed wing multi engine
## 289 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 290 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 291 -2.099842 A America/Los_Angeles 1.4658408 Fixed wing multi engine
## 292 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 294 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 297 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 298 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 299 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 300 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 301 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 302 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 303 -1.171121 A America/Denver 0.2574981 Fixed wing multi engine
## 304 0.686322 A America/New_York -4.2306318 Fixed wing single engine
## 305 -1.171121 N America/Phoenix -0.9508445 Fixed wing multi engine
## 306 -1.171121 A America/Denver -2.5044280 Fixed wing multi engine
## 307 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 308 -1.171121 N America/Phoenix -0.6056038 Fixed wing multi engine
## 310 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 311 -2.099842 A America/Los_Angeles -1.4687057 Fixed wing multi engine
## 312 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 313 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 316 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 317 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 318 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 319 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 320 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 321 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 322 -2.099842 A America/Los_Angeles 1.4658408 Fixed wing multi engine
## 323 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 324 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 328 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 330 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 332 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 333 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 336 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 339 -0.242399 A America/Chicago -4.4032522 Fixed wing single engine
## 340 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 341 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 342 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 343 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 344 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 346 -0.242399 A America/Chicago -1.9865668 Fixed wing multi engine
## 347 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 348 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 349 -2.099842 A America/Los_Angeles 1.2932204 Fixed wing multi engine
## 350 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 351 0.686322 A America/New_York -0.0877426 Fixed wing multi engine

```

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## 352 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 353 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 354 0.686322 A America/New_York 1.8110816 Rotorcraft
## 355 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 356 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 358 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 359 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 365 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 366 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 367 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 368 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 369 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 370 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 371 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 372 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 373 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 374 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 375 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 376 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 377 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 378 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 379 -0.242399 A America/Chicago -1.4687057 Fixed wing multi engine
## 380 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 381 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 382 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 383 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 384 -0.242399 A America/Chicago -0.7782242 Fixed wing multi engine
## 385 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 386 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 387 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 388 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 389 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 390 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 391 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 392 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 393 -1.171121 N America/Phoenix 1.6384612 Fixed wing multi engine
## 394 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 395 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 396 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 397 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 398 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 399 -1.171121 A America/Denver -1.4687057 Fixed wing multi engine
## 400 -1.171121 A America/Denver -0.6056038 Fixed wing multi engine
## 401 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 402 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 403 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 404 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 405 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 406 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 407 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 408 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 410 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 411 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 412 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine

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## 413 0.686322 A America/New_York -0.9508445 Fixed wing multi engine
## 414 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 415 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 416 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 418 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 420 -1.171121 A America/Denver -1.2960853 Fixed wing multi engine
## 421 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 422 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 423 -0.242399 A America/Chicago 0.0848777 Fixed wing single engine
## 424 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 425 0.686322 A America/New_York -0.9508445 Fixed wing multi engine
## 426 -1.171121 A America/Denver 0.4301185 Fixed wing multi engine
## 427 -1.171121 A America/Denver -1.8139464 Fixed wing multi engine
## 428 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 429 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 430 -0.242399 A America/Chicago -0.9508445 Fixed wing multi engine
## 432 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 433 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 434 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 435 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 436 -2.099842 A America/Los_Angeles -1.8139464 Fixed wing multi engine
## 437 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 438 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 439 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 440 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 442 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 443 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 444 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 445 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 446 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 447 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 448 -0.242399 A America/Chicago -2.5044280 Fixed wing multi engine
## 450 -1.171121 A America/Denver 1.6384612 Fixed wing multi engine
## 451 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 452 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 453 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 455 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 457 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 458 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 459 -1.171121 A America/Denver -0.6056038 Fixed wing multi engine
## 460 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 462 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 463 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 464 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 465 -2.099842 A America/Los_Angeles -1.4687057 Fixed wing multi engine
## 466 -1.171121 A America/Denver -0.6056038 Fixed wing multi engine
## 467 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 468 -0.242399 A America/Chicago -1.6413261 Fixed wing multi engine
## 469 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 470 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 471 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 472 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 473 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 474 0.686322 A America/New_York 0.4301185 Fixed wing multi engine

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## 475	-1.171121	A	America/Denver	-0.6056038	Fixed wing multi engine
## 476	-1.171121	A	America/Denver	0.4301185	Fixed wing multi engine
## 477	-0.242399	A	America/Chicago	1.1206000	Fixed wing multi engine
## 479	0.686322	A	America/New_York	-0.2603630	Fixed wing multi engine
## 480	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine
## 481	-0.242399	A	America/Chicago	-4.4032522	Fixed wing single engine
## 482	0.686322	A	America/New_York	1.8110816	Fixed wing multi engine
## 483	0.686322	A	America/New_York	0.6027389	Fixed wing multi engine
## 484	-0.242399	A	America/Chicago	-0.0877426	Fixed wing multi engine
## 485	0.686322	A	America/New_York	0.6027389	Fixed wing multi engine
## 486	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 487	0.686322	A	America/New_York	1.8110816	Fixed wing multi engine
## 488	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 489	-1.171121	N	America/Phoenix	1.6384612	Fixed wing multi engine
## 490	0.686322	A	America/New_York	-1.9865668	Fixed wing multi engine
## 491	0.686322	A	America/New_York	0.6027389	Fixed wing multi engine
## 492	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 493	-2.099842	A	America/Los_Angeles	1.8110816	Fixed wing multi engine
## 494	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 495	0.686322	A	America/New_York	0.9479797	Fixed wing multi engine
## 496	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine
## 497	-2.099842	A	America/Los_Angeles	-2.6770484	Fixed wing multi engine
## 498	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 499	-1.171121	A	America/Denver	-1.6413261	Fixed wing multi engine
## 501	-2.099842	A	America/Los_Angeles	-0.2603630	Fixed wing multi engine
## 502	0.686322	A	America/New_York	-0.7782242	Fixed wing multi engine
## 503	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 504	0.686322	A	America/New_York	-1.8139464	Fixed wing multi engine
## 506	0.686322	A	America/New_York	-1.6413261	Fixed wing multi engine
## 507	-0.242399	A	America/Chicago	0.7753593	Fixed wing multi engine
## 508	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 509	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 510	0.686322	A	America/New_York	0.6027389	Fixed wing multi engine
## 511	-0.242399	A	America/Chicago	0.6027389	Fixed wing multi engine
## 512	-2.099842	A	America/Los_Angeles	-1.4687057	Fixed wing multi engine
## 514	0.686322	A	America/New_York	-2.5044280	Fixed wing multi engine
## 515	-0.242399	A	America/Chicago	-0.4329834	Fixed wing multi engine
## 516	-2.099842	A	America/Los_Angeles	-2.8496687	Fixed wing multi engine
## 517	0.686322	A	America/New_York	0.4301185	Fixed wing multi engine
## 518	0.686322	A	America/New_York	-1.2960853	Fixed wing multi engine
## 519	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 520	0.686322	A	America/New_York	-2.3318076	Fixed wing multi engine
## 523	0.686322	A	America/New_York	1.2932204	Fixed wing multi engine
## 524	-1.171121	A	America/Denver	-0.0877426	Fixed wing multi engine
## 525	0.686322	A	America/New_York	-0.0877426	Fixed wing multi engine
## 526	0.686322	A	America/New_York	-1.6413261	Fixed wing multi engine
## 527	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 528	0.686322	A	America/New_York	-0.2603630	Fixed wing multi engine
## 529	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 530	0.686322	A	America/New_York	1.8110816	Fixed wing multi engine
## 531	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine
## 532	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 533	-1.171121	A	America/Denver	0.9479797	Fixed wing multi engine
## 534	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine

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## 535 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 536 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 537 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 538 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 539 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 540 -0.242399 A America/Chicago 1.4658408 Fixed wing multi engine
## 541 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 542 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 543 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 544 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 545 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 546 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 547 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 548 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 549 -1.171121 N America/Phoenix -0.4329834 Fixed wing multi engine
## 551 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 553 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 554 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 555 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 556 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 558 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 559 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 560 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 561 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 562 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 563 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 564 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 565 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 566 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 567 0.686322 A America/New_York -2.6770484 Fixed wing multi engine
## 569 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 570 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 571 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 572 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 573 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 574 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 576 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 577 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 578 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 579 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 580 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 581 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 582 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 584 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 585 0.686322 A America/New_York -0.9508445 Fixed wing multi engine
## 586 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 587 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 588 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 589 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 590 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 591 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 593 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 594 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 596 0.686322 A America/New_York 1.1206000 Fixed wing multi engine

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## 597	-1.171121	A	America/Denver	1.2932204	Fixed wing multi engine
## 598	-0.242399	A	America/Chicago	-1.1234649	Fixed wing multi engine
## 599	0.686322	A	America/New_York	-1.8139464	Fixed wing multi engine
## 600	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 601	-2.099842	A	America/Los_Angeles	1.2932204	Fixed wing multi engine
## 602	0.686322	A	America/New_York	-1.6413261	Fixed wing multi engine
## 603	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 604	-2.099842	A	America/Los_Angeles	1.4658408	Fixed wing multi engine
## 605	-1.171121	A	America/Denver	-1.6413261	Fixed wing multi engine
## 607	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 608	0.686322	A	America/New_York	1.2932204	Fixed wing multi engine
## 609	0.686322	A	America/New_York	1.1206000	Fixed wing multi engine
## 610	-0.242399	A	America/Chicago	0.2574981	Fixed wing multi engine
## 611	0.686322	A	America/New_York	0.9479797	Fixed wing multi engine
## 612	-0.242399	A	America/Chicago	0.2574981	Fixed wing multi engine
## 613	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 614	-0.242399	A	America/Chicago	-0.2603630	Fixed wing multi engine
## 615	0.686322	A	America/New_York	1.2932204	Fixed wing multi engine
## 616	-0.242399	A	America/Chicago	-1.4687057	Fixed wing single engine
## 617	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 618	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 619	-2.099842	A	America/Los_Angeles	-0.7782242	Fixed wing multi engine
## 621	-1.171121	A	America/Denver	1.1206000	Fixed wing multi engine
## 622	-0.242399	A	America/Chicago	-0.7782242	Fixed wing multi engine
## 624	-2.099842	A	America/Los_Angeles	-0.4329834	Fixed wing multi engine
## 625	-2.099842	A	America/Los_Angeles	-0.0877426	Fixed wing multi engine
## 626	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 628	-2.099842	A	America/Los_Angeles	-1.9865668	Fixed wing multi engine
## 630	0.686322	A	America/New_York	0.7753593	Fixed wing multi engine
## 631	-0.242399	A	America/Chicago	1.8110816	Fixed wing multi engine
## 635	0.686322	A	America/New_York	1.6384612	Fixed wing multi engine
## 636	-0.242399	A	America/Chicago	-2.3318076	Fixed wing multi engine
## 637	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine
## 638	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 639	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 641	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 643	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 644	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 645	-2.099842	A	America/Los_Angeles	-0.6056038	Fixed wing multi engine
## 646	-2.099842	A	America/Los_Angeles	0.0848777	Fixed wing multi engine
## 648	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 649	-2.099842	A	America/Los_Angeles	0.9479797	Fixed wing multi engine
## 650	-2.099842	A	America/Los_Angeles	0.0848777	Fixed wing multi engine
## 651	0.686322	A	America/New_York	0.4301185	Fixed wing multi engine
## 652	-2.099842	A	America/Los_Angeles	-1.9865668	Fixed wing multi engine
## 654	-0.242399	A	America/Chicago	1.1206000	Fixed wing multi engine
## 655	-0.242399	A	America/Chicago	-1.8139464	Fixed wing multi engine
## 656	-2.099842	A	America/Los_Angeles	0.9479797	Fixed wing multi engine
## 657	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 658	0.686322	A	America/New_York	-0.2603630	Fixed wing multi engine
## 659	-0.242399	A	America/Chicago	-0.4329834	Fixed wing multi engine
## 660	0.686322	A	America/New_York	1.1206000	Fixed wing multi engine
## 661	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 662	0.686322	A	America/New_York	0.6027389	Fixed wing multi engine

## 663	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 664	-0.242399	A	America/Chicago	-0.0877426	Fixed wing multi engine
## 665	-2.099842	A	America/Los_Angeles	-2.3318076	Fixed wing multi engine
## 666	-2.099842	A	America/Los_Angeles	0.6027389	Fixed wing multi engine
## 667	-2.099842	A	America/Los_Angeles	-0.2603630	Fixed wing multi engine
## 668	-1.171121	A	America/Denver	1.2932204	Fixed wing multi engine
## 669	-0.242399	A	America/Chicago	1.1206000	Fixed wing multi engine
## 670	-1.171121	N	America/Phoenix	-0.0877426	Fixed wing multi engine
## 671	-1.171121	N	America/Phoenix	-0.0877426	Fixed wing multi engine
## 672	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 673	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 674	0.686322	A	America/New_York	-1.6413261	Fixed wing multi engine
## 675	0.686322	A	America/New_York	0.9479797	Fixed wing multi engine
## 676	-0.242399	A	America/Chicago	0.9479797	Fixed wing multi engine
## 677	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 678	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 680	0.686322	A	America/New_York	-1.2960853	Fixed wing multi engine
## 682	-2.099842	A	America/Los_Angeles	-0.0877426	Fixed wing multi engine
## 683	0.686322	A	America/New_York	0.9479797	Fixed wing multi engine
## 684	-0.242399	A	America/Chicago	-0.6056038	Fixed wing multi engine
## 686	0.686322	A	America/New_York	-0.0877426	Fixed wing multi engine
## 687	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 689	-0.242399	A	America/Chicago	-2.1591872	Fixed wing multi engine
## 690	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 691	0.686322	A	America/New_York	1.4658408	Fixed wing multi engine
## 693	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine
## 694	-0.242399	A	America/Chicago	-0.6056038	Fixed wing multi engine
## 695	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 696	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 697	0.686322	A	America/New_York	-4.2306318	Fixed wing single engine
## 698	0.686322	A	America/New_York	1.1206000	Fixed wing multi engine
## 699	0.686322	A	America/New_York	-0.0877426	Fixed wing multi engine
## 700	0.686322	A	America/New_York	-0.2603630	Fixed wing multi engine
## 702	-2.099842	A	America/Los_Angeles	-0.6056038	Fixed wing multi engine
## 703	-0.242399	A	America/Chicago	-2.3318076	Fixed wing multi engine
## 704	0.686322	A	America/New_York	0.6027389	Fixed wing multi engine
## 706	-2.099842	A	America/Los_Angeles	0.4301185	Fixed wing multi engine
## 707	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 709	0.686322	A	America/New_York	0.6027389	Fixed wing multi engine
## 710	-0.242399	A	America/Chicago	0.2574981	Fixed wing multi engine
## 711	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 712	-2.099842	A	America/Los_Angeles	-0.7782242	Fixed wing multi engine
## 713	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 714	-0.242399	A	America/Chicago	-0.4329834	Fixed wing multi engine
## 715	0.686322	A	America/New_York	-0.6056038	Fixed wing multi engine
## 716	0.686322	A	America/New_York	1.4658408	Fixed wing multi engine
## 717	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine
## 719	0.686322	A	America/New_York	1.1206000	Fixed wing multi engine
## 720	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 721	-1.171121	A	America/Denver	0.4301185	Fixed wing multi engine
## 722	0.686322	A	America/New_York	0.0848777	Fixed wing multi engine
## 723	-2.099842	A	America/Los_Angeles	1.8110816	Fixed wing multi engine
## 725	-2.099842	A	America/Los_Angeles	0.0848777	Fixed wing multi engine
## 726	0.686322	A	America/New_York	1.1206000	Fixed wing multi engine

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## 727 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 729 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 730 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 737 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 738 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 739 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 743 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 744 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 745 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 746 0.686322 A America/New_York 0.9479797 Fixed wing single engine
## 747 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 748 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 749 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 750 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 751 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 752 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 753 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 754 -0.242399 A America/Chicago 1.8110816 Fixed wing multi engine
## 755 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 756 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 757 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 758 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 759 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 760 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 761 -0.242399 A America/Chicago -1.6413261 Fixed wing multi engine
## 762 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 763 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 764 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 765 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 766 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 767 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 768 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 769 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 770 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 771 -1.171121 N America/Phoenix -0.6056038 Fixed wing multi engine
## 772 -0.242399 A America/Chicago -1.4687057 Fixed wing multi engine
## 773 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 774 -0.242399 A America/Chicago -1.2960853 Fixed wing multi engine
## 775 -1.171121 A America/Denver -1.8139464 Fixed wing multi engine
## 776 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 777 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 778 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 779 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 780 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 781 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 782 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 784 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 785 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 786 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 787 -2.099842 A America/Los_Angeles 1.6384612 Fixed wing multi engine
## 788 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 789 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 790 0.686322 A America/New_York 0.0848777 Fixed wing single engine
## 791 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine

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## 792 -0.242399 A America/Chicago -1.6413261 Fixed wing multi engine
## 793 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 794 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 795 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 796 -1.171121 A America/Denver -0.4329834 Fixed wing multi engine
## 797 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 798 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 799 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 800 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 801 0.686322 A America/New_York -0.9508445 Fixed wing multi engine
## 802 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 803 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 804 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 805 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 806 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 807 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 808 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 809 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 810 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 811 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 812 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 813 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 815 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 816 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 817 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 818 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 819 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 821 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 822 0.686322 A America/New_York -0.9508445 Fixed wing multi engine
## 823 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 824 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 825 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 826 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 828 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 829 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 831 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 832 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 833 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 834 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 835 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 837 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 839 -0.242399 A America/Chicago 1.2932204 Fixed wing multi engine
## 840 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 841 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 843 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 844 -1.171121 N America/Phoenix 1.6384612 Fixed wing multi engine
## 845 -1.171121 N America/Phoenix 0.6027389 Fixed wing multi engine
## 846 -2.099842 A America/Los_Angeles -0.9508445 Fixed wing multi engine
## 848 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 849 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 850 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 852 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 853 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 855 0.686322 A America/New_York -0.2603630 Fixed wing multi engine

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## 856 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 857 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 858 -2.099842 A America/Los_Angeles -2.3318076 Fixed wing multi engine
## 859 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 860 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 861 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 862 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 863 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 864 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 865 -2.099842 A America/Los_Angeles 0.2574981 Fixed wing multi engine
## 866 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 867 -2.099842 A America/Los_Angeles 0.6027389 Fixed wing multi engine
## 868 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 869 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 870 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 871 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 872 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 873 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 874 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 875 0.686322 A America/New_York -1.2960853 Fixed wing multi engine
## 876 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 877 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 878 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 879 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 880 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 881 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 882 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 883 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 884 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 885 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 886 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 887 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 888 -0.242399 A America/Chicago -1.2960853 Fixed wing multi engine
## 889 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 890 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 891 -1.171121 N America/Phoenix -0.0877426 Fixed wing multi engine
## 892 0.686322 A America/Chicago -0.6056038 Fixed wing multi engine
## 893 -1.171121 A America/New_York 0.7753593 Fixed wing multi engine
## 894 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 895 -0.242399 A America/New_York 0.2574981 Fixed wing multi engine
## 896 -0.242399 A America/New_York -0.2603630 Fixed wing multi engine
## 897 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 898 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 899 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 900 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 901 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 902 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 903 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 904 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 905 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 906 -0.242399 A America/Chicago -1.2960853 Fixed wing multi engine
## 907 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 908 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 909 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 910 0.686322 A America/Chicago 0.2574981 Fixed wing multi engine
## 911 -0.242399 A America/Los_Angeles 0.7753593 Fixed wing multi engine

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## 915 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 916 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 917 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 918 -1.171121 N America/Phoenix 0.6027389 Fixed wing multi engine
## 919 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 920 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 921 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 923 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 924 -2.099842 A America/Los_Angeles 0.6027389 Fixed wing multi engine
## 926 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 927 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 928 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 929 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 930 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 931 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 932 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 934 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 935 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 936 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 937 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 939 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 940 -1.171121 A America/Denver -1.8139464 Fixed wing multi engine
## 941 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 942 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 943 0.686322 A America/New_York -1.2960853 Fixed wing multi engine
## 944 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 945 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 946 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 947 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 948 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 949 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 950 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 951 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 952 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 953 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 954 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 955 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 956 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 957 -1.171121 A America/Denver -1.4687057 Fixed wing multi engine
## 958 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 959 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 960 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 961 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 962 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 963 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 964 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 965 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 966 -2.099842 A America/Los_Angeles -1.1234649 Fixed wing multi engine
## 967 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 968 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 969 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 971 -0.242399 A America/Chicago -0.7782242 Fixed wing multi engine
## 972 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 973 0.686322 A America/New_York 0.4301185 Fixed wing multi engine

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## 974 -2.099842 A America/Los_Angeles -2.8496687 Fixed wing multi engine
## 975 -0.242399 A America/Chicago 1.4658408 Fixed wing multi engine
## 976 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 977 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 978 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 979 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 980 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 981 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 984 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 985 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 987 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 988 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 989 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 990 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 991 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 992 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 993 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 994 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 995 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 996 -2.099842 A America/Los_Angeles -1.1234649 Fixed wing multi engine
## 997 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 998 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1000 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1001 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1002 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 1003 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1004 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1005 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 1006 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1007 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1008 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1009 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1010 -1.171121 A America/Denver -0.0877426 Fixed wing multi engine
## 1013 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1014 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 1016 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1017 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 1018 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1020 -1.171121 N America/Phoenix 0.7753593 Fixed wing multi engine
## 1021 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1022 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1024 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1026 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1028 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1029 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1030 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1031 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1032 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1033 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1034 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1035 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 1036 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 1037 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 1038 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine

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## 1040 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1042 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 1044 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 1046 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 1047 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1048 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 1049 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1050 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1051 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1053 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 1054 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1055 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1056 -1.171121 N America/Phoenix 0.0848777 Fixed wing multi engine
## 1057 -1.171121 A America/Denver 0.0848777 Fixed wing multi engine
## 1058 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1059 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1061 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1063 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1065 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1068 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1069 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1071 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1076 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1077 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1078 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1079 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1080 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1085 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1086 -0.242399 A America/Chicago 1.4658408 Fixed wing multi engine
## 1091 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1092 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1093 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1096 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1097 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 1098 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 1099 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1100 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 1101 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 1103 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1104 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1106 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1107 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1108 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1109 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1110 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1111 -0.242399 A America/Chicago -7.3377986 Fixed wing single engine
## 1112 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1113 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1114 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1115 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1116 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1117 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1118 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 1119 0.686322 A America/New_York 0.0848777 Fixed wing multi engine

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## 1120 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1121 -0.242399 A America/Chicago 1.8110816 Fixed wing multi engine
## 1122 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1123 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 1124 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1125 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1126 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1127 -0.242399 A America/Chicago -1.4687057 Fixed wing multi engine
## 1128 -2.099842 A America/Los_Angeles -0.9508445 Fixed wing multi engine
## 1129 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1130 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1131 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1132 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1133 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1134 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1135 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1136 -1.171121 N America/Phoenix -0.0877426 Fixed wing multi engine
## 1137 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1138 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1139 -1.171121 N America/Phoenix -1.1234649 Fixed wing multi engine
## 1140 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1141 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1142 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1143 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1144 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1145 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1146 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 1147 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1148 -0.242399 A America/Chicago 1.2932204 Fixed wing multi engine
## 1149 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1150 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1151 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 1152 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 1153 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 1154 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1155 -2.099842 A America/Los_Angeles 1.2932204 Fixed wing multi engine
## 1156 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1157 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1158 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 1159 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1160 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1161 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1162 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1163 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 1164 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1165 -2.099842 A America/Los_Angeles -0.9508445 Fixed wing multi engine
## 1166 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1167 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 1168 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1170 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1171 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1172 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1173 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1174 0.686322 A America/New_York 0.0848777 Fixed wing multi engine

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## 1175 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1176 -1.171121 A America/Denver 0.9479797 Fixed wing multi engine
## 1177 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1178 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1179 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 1180 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1181 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1182 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1183 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1184 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 1185 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1186 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1187 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1188 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 1189 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1190 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1191 -1.171121 A America/Denver -0.6056038 Fixed wing multi engine
## 1192 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1193 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 1194 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1195 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1196 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1197 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1198 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1199 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1200 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1201 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1202 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 1203 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1204 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1205 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1206 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1207 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1208 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 1209 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 1210 -0.242399 A America/Chicago -0.7782242 Fixed wing multi engine
## 1211 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 1212 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1213 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1214 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 1215 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1216 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1217 0.686322 A America/New_York -1.4687057 Fixed wing multi engine
## 1218 -3.957285 N Pacific/Honolulu 1.6384612 Fixed wing multi engine
## 1219 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1220 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 1221 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 1222 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1223 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1224 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 1225 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1226 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1227 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1228 0.686322 A America/New_York 0.7753593 Fixed wing multi engine

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## 1229 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1230 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1231 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1232 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1233 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 1235 -0.242399 A America/Chicago -0.7782242 Fixed wing multi engine
## 1236 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1237 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1238 -1.171121 A America/Denver -0.6056038 Fixed wing multi engine
## 1239 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 1240 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1241 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1242 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1243 -1.171121 N America/Phoenix 0.0848777 Fixed wing multi engine
## 1244 -1.171121 N America/Phoenix 1.2932204 Fixed wing multi engine
## 1245 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1246 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 1247 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1248 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1249 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 1250 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1251 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1252 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1253 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 1254 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1255 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 1257 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1258 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1259 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1260 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 1261 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1263 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1264 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1265 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 1266 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 1268 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 1269 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1270 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1272 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 1273 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1274 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1275 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 1276 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 1277 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1278 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1279 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1280 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 1281 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1282 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1284 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1285 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1286 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 1287 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 1288 -2.099842 A America/Los_Angeles 1.4658408 Fixed wing multi engine

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## 1290 -0.242399 A America/Chicago -2.5044280 Fixed wing multi engine
## 1291 -1.171121 N America/Phoenix -0.0877426 Fixed wing multi engine
## 1292 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1293 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 1294 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 1295 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1296 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1297 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1298 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 1299 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1300 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1303 -0.242399 A America/Chicago 1.4658408 Fixed wing multi engine
## 1304 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1305 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1306 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1308 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 1309 0.686322 A America/New_York -4.2306318 Fixed wing single engine
## 1310 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1311 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 1312 -1.171121 N America/Phoenix 0.9479797 Fixed wing multi engine
## 1313 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1314 -2.099842 A America/Los_Angeles -2.8496687 Fixed wing multi engine
## 1315 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1317 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1318 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1319 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1320 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1322 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 1323 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1325 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 1327 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1328 -0.242399 A America/Chicago -0.9508445 Fixed wing multi engine
## 1329 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1330 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1331 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 1332 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1333 -0.242399 A America/Chicago -0.7782242 Fixed wing multi engine
## 1334 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1335 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1336 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1338 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1340 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1341 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1342 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1343 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1344 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1346 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1347 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1348 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1349 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1350 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 1351 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1352 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1353 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine

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## 1354 -0.242399 A America/Chicago 1.2932204 Fixed wing multi engine
## 1356 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1357 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1358 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1359 -2.099842 A America/Los_Angeles -1.1234649 Fixed wing multi engine
## 1360 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 1361 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 1362 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1364 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1366 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1367 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1368 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1369 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 1370 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1371 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1372 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1374 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1375 -1.171121 N America/Phoenix 1.2932204 Fixed wing multi engine
## 1376 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1377 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1378 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1379 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 1380 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1381 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 1382 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1383 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 1385 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 1387 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1388 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1389 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 1390 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 1391 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1392 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1393 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1394 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 1395 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 1396 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 1397 0.686322 A America/New_York -4.4032522 Fixed wing multi engine
## 1398 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1399 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1400 0.686322 A America/New_York -1.2960853 Fixed wing multi engine
## 1402 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1403 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 1404 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1405 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1406 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1407 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 1408 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 1409 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 1410 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 1411 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 1412 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1413 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1414 0.686322 A America/New_York 0.6027389 Fixed wing multi engine

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## 1415 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1416 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1419 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1420 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 1421 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1422 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1423 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 1425 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 1426 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1427 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1428 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1429 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 1430 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1431 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1432 0.686322 A America/New_York -2.8496687 Fixed wing multi engine
## 1433 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1434 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 1435 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 1436 -0.242399 A America/Chicago 1.6384612 Fixed wing multi engine
## 1438 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 1439 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 1440 -1.171121 N America/Phoenix 0.0848777 Fixed wing multi engine
## 1441 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1442 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1443 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1444 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 1445 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1446 -1.171121 A America/Denver 0.0848777 Fixed wing multi engine
## 1447 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1448 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1449 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1450 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1451 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1452 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 1455 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1457 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1460 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1461 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 1462 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1463 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1464 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1466 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1467 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1468 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 1469 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1472 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 1473 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1474 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1475 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 1476 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1477 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1478 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1480 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1481 0.686322 A America/New_York -0.0877426 Fixed wing multi engine

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## 1482 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1483 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1484 -0.242399 A America/Chicago 1.2932204 Fixed wing multi engine
## 1486 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1487 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1488 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1489 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1490 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1493 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1494 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1495 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1497 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1498 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1499 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1500 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1501 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1502 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1503 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1504 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1505 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1506 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1507 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1508 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1509 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1510 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1511 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1512 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1513 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1514 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 1515 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 1516 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1517 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1518 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 1519 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1520 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1521 -2.099842 A America/Los_Angeles 0.2574981 Fixed wing multi engine
## 1522 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1523 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1524 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1525 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1526 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1527 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1528 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 1529 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1530 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1531 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 1533 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1534 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 1535 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 1536 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1537 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 1538 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1539 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 1540 0.686322 A America/New_York 0.0848777 Fixed wing multi engine

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## 1541 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1542 0.686322 A America/New_York -4.7484929 Fixed wing multi engine
## 1543 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1544 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1545 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1546 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1547 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1548 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1549 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1550 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1551 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 1552 -1.171121 A America/Denver -0.0877426 Fixed wing multi engine
## 1553 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1554 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1555 0.686322 A America/New_York -4.4032522 Fixed wing multi engine
## 1556 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1557 -1.171121 A America/Denver 1.1206000 Fixed wing multi engine
## 1558 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1559 -2.099842 A America/Los_Angeles -0.9508445 Fixed wing multi engine
## 1560 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 1561 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1562 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1564 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 1565 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1566 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1567 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 1568 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1569 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 1570 -3.957285 N Pacific/Honolulu 1.4658408 Fixed wing multi engine
## 1571 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 1572 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1573 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1574 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1575 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1576 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1577 -2.099842 A America/Los_Angeles 1.6384612 Fixed wing multi engine
## 1578 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1579 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1580 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1581 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 1582 -0.242399 A America/Chicago -2.5044280 Fixed wing multi engine
## 1583 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1584 0.686322 A America/New_York 0.9479797 Fixed wing single engine
## 1586 0.686322 A America/New_York -0.9508445 Fixed wing multi engine
## 1587 -1.171121 N America/Phoenix -0.6056038 Fixed wing multi engine
## 1588 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1589 -1.171121 A America/Denver -0.4329834 Fixed wing multi engine
## 1590 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 1591 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1593 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 1594 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1595 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1596 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1597 0.686322 A America/New_York 0.4301185 Fixed wing multi engine

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## 1598 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1599 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1600 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1601 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1602 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1603 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 1604 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1606 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 1607 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1608 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1609 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1610 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1611 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1612 -1.171121 A America/Denver 1.1206000 Fixed wing multi engine
## 1613 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1614 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1615 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1616 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 1617 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1618 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1619 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1620 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1622 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 1623 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1624 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1626 -0.242399 A America/Chicago -1.2960853 Fixed wing multi engine
## 1627 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1628 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 1629 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1630 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1631 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1632 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1633 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 1634 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1635 -3.957285 N Pacific/Honolulu 0.0848777 Fixed wing multi engine
## 1636 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1638 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1640 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1641 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1642 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1643 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 1646 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1647 -0.242399 A America/Chicago -1.6413261 Fixed wing multi engine
## 1648 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1649 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1650 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1651 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1652 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1653 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1654 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1655 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1656 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 1657 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1658 0.686322 A America/New_York -4.2306318 Fixed wing single engine

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## 1659 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1660 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1661 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1662 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1663 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 1664 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1665 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1666 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1667 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1668 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 1669 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1670 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1671 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 1672 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1673 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1674 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 1675 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1676 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1677 -1.171121 A America/Denver -0.4329834 Fixed wing multi engine
## 1678 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1679 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1680 0.686322 A America/New_York -5.9568356 Fixed wing multi engine
## 1681 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1682 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1683 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 1684 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1685 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1686 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1687 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 1688 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1689 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1690 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1691 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1692 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 1693 -1.171121 N America/Phoenix -0.7782242 Fixed wing multi engine
## 1694 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1695 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 1696 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 1697 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1698 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1699 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1701 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1702 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1703 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1704 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1705 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1706 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1707 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 1708 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1709 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1710 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1711 -2.099842 A America/Los_Angeles -2.1591872 Fixed wing multi engine
## 1712 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1713 0.686322 A America/New_York -0.0877426 Fixed wing multi engine

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## 1714 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 1715 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1716 -0.242399 A America/Chicago -1.6413261 Fixed wing multi engine
## 1717 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 1718 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1719 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1720 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1721 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 1722 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1723 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1724 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1726 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1728 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1729 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1730 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1731 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1733 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1734 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1735 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1736 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 1737 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 1738 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1739 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1740 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1741 -2.099842 A America/Los_Angeles 1.8110816 Rotorcraft
## 1742 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 1743 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1744 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1745 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 1746 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 1747 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1748 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1749 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 1751 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 1753 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1755 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1756 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1757 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1758 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1759 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1760 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1761 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1762 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1763 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1764 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1765 -0.242399 A America/Chicago 1.8110816 Fixed wing multi engine
## 1766 0.686322 A America/New_York -1.1234649 Fixed wing multi engine
## 1767 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1768 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1769 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1771 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 1772 0.686322 A America/New_York 1.4658408 Fixed wing multi engine
## 1774 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1776 0.686322 A America/New_York 1.8110816 Fixed wing multi engine

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## 1779 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1780 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 1781 -0.242399 A America/Chicago -0.7782242 Fixed wing multi engine
## 1782 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1783 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 1784 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1785 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1786 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1787 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1788 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1789 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1790 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1791 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1792 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1793 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1794 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1795 -1.171121 N America/Phoenix -0.4329834 Fixed wing multi engine
## 1796 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1797 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1798 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1799 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1800 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1801 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 1802 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1803 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1804 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 1806 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1807 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1808 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 1809 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1810 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1811 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1812 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 1813 -2.099842 A America/Los_Angeles 1.4658408 Fixed wing multi engine
## 1814 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 1815 -0.242399 A America/Chicago 0.0848777 Fixed wing single engine
## 1816 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1818 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1819 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1820 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1821 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1822 0.686322 A America/New_York -2.6770484 Fixed wing multi engine
## 1823 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1824 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1825 -1.171121 N America/Phoenix 0.7753593 Fixed wing multi engine
## 1826 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1827 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1828 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 1829 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1830 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1831 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1832 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1833 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1834 0.686322 A America/New_York -0.6056038 Fixed wing multi engine

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## 1835 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1836 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1837 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1838 -2.099842 A America/Los_Angeles -0.9508445 Fixed wing multi engine
## 1839 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 1840 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 1841 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 1842 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1843 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1844 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 1845 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1846 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1847 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1848 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 1849 -0.242399 A America/Chicago -6.6473171 Fixed wing single engine
## 1850 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 1851 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1852 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1853 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1854 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1855 -1.171121 A America/Denver 0.0848777 Fixed wing multi engine
## 1856 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1857 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1859 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1860 -2.099842 A America/Los_Angeles 1.6384612 Fixed wing multi engine
## 1862 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1864 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1865 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1866 -1.171121 N America/Phoenix 1.6384612 Fixed wing multi engine
## 1867 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1868 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1869 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1870 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 1871 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1872 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1873 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1874 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1875 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1876 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 1878 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1880 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1881 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 1882 -0.242399 A America/Chicago 1.8110816 Fixed wing multi engine
## 1883 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 1885 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1887 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1888 0.686322 A America/New_York -4.4032522 Fixed wing multi engine
## 1889 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1890 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1891 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1892 -1.171121 A America/Denver -1.2960853 Fixed wing multi engine
## 1893 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 1894 -0.242399 A America/Chicago 1.6384612 Fixed wing multi engine
## 1895 0.686322 A America/New_York -0.6056038 Fixed wing multi engine

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## 1896 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1897 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1898 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1899 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1900 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 1901 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1902 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1903 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 1904 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1905 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1906 -2.099842 A America/Los_Angeles 1.6384612 Fixed wing multi engine
## 1907 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1908 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 1909 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 1910 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1911 -1.171121 N America/Phoenix 1.2932204 Fixed wing multi engine
## 1912 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 1913 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1914 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1915 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1916 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 1917 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1918 0.686322 A America/New_York -1.4687057 Fixed wing multi engine
## 1919 -1.171121 A America/Denver -0.0877426 Fixed wing multi engine
## 1920 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1921 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1922 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 1923 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1924 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 1925 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1926 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1927 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1928 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 1929 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1930 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1931 -1.171121 N America/Phoenix 0.2574981 Fixed wing multi engine
## 1932 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1933 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1934 -1.171121 N America/Phoenix -0.4329834 Fixed wing multi engine
## 1935 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1936 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 1937 0.686322 A America/New_York -1.4687057 Fixed wing multi engine
## 1938 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1940 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 1941 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1942 0.686322 A America/New_York -1.2960853 Fixed wing multi engine
## 1943 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 1944 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 1945 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1946 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1947 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 1948 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1949 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1951 0.686322 A America/New_York 0.6027389 Fixed wing multi engine

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## 1952 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 1953 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1954 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 1955 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1957 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1959 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 1960 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1961 -1.171121 A America/Denver 0.0848777 Fixed wing multi engine
## 1962 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1963 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1964 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1965 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 1966 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1968 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1969 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1970 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1971 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 1972 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 1973 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1975 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1976 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1977 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 1978 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1979 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 1980 0.686322 A America/New_York -4.4032522 Fixed wing multi engine
## 1981 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1982 -1.171121 A America/Denver -0.4329834 Fixed wing multi engine
## 1983 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 1984 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 1985 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 1986 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 1988 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 1989 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1990 -1.171121 N America/Phoenix 1.6384612 Fixed wing multi engine
## 1991 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 1992 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 1993 -1.171121 A America/Denver 0.4301185 Fixed wing multi engine
## 1995 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 1997 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 1998 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 1999 -0.242399 A America/Chicago -0.7782242 Fixed wing multi engine
## 2000 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2001 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2002 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 2003 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2004 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2005 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2006 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 2007 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2008 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2012 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 2013 -1.171121 A America/Denver 1.6384612 Fixed wing multi engine
## 2014 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2015 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine

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## 2016 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2019 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2020 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 2022 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2023 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 2024 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2025 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2027 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2028 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 2030 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2031 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2032 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 2033 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2034 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 2035 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 2036 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 2037 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2038 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 2039 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2040 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2041 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2042 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2043 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2044 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2045 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2046 -2.099842 A America/Los_Angeles -0.9508445 Fixed wing multi engine
## 2047 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 2048 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2049 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2050 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 2051 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2052 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 2053 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2055 -2.099842 A America/Los_Angeles -0.2603630 Fixed wing multi engine
## 2056 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2057 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2058 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2059 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2060 -2.099842 A America/Los_Angeles 1.2932204 Fixed wing multi engine
## 2062 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2063 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2064 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2065 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2066 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2067 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2068 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2069 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2070 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2071 0.686322 A America/New_York -1.2960853 Fixed wing multi engine
## 2072 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2074 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2076 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 2077 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2078 0.686322 A America/New_York -0.0877426 Fixed wing multi engine

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## 2079 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2080 -0.242399 A America/Chicago -2.8496687 Fixed wing single engine
## 2081 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2083 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 2085 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2086 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2087 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2088 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2089 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2090 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 2091 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 2092 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2093 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2094 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 2095 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2096 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2099 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2100 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2102 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2105 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2106 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2107 -0.242399 A America/Chicago -1.2960853 Fixed wing multi engine
## 2108 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2109 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2110 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2111 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 2112 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2113 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2114 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2115 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2116 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2117 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2118 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 2119 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2120 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2121 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2122 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2123 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2124 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2125 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2126 -1.171121 A America/Denver 0.4301185 Fixed wing multi engine
## 2127 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2128 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2129 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 2130 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2131 -1.171121 N America/Phoenix -0.6056038 Fixed wing multi engine
## 2132 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 2133 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2134 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 2135 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 2136 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2137 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2138 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2139 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine

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## 2140 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2141 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2142 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 2143 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2144 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 2145 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2146 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2147 -0.242399 A America/Chicago -1.1234649 Fixed wing multi engine
## 2148 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 2149 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 2151 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2152 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 2153 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 2154 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 2155 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 2156 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 2157 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 2158 -0.242399 A America/Chicago -1.6413261 Fixed wing multi engine
## 2159 -2.099842 A America/Los_Angeles -2.8496687 Fixed wing multi engine
## 2160 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 2161 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2162 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2163 0.686322 A America/New_York -1.4687057 Fixed wing multi engine
## 2164 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2165 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 2166 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2167 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 2168 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 2169 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2170 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2171 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2172 -1.171121 N America/Phoenix 1.4658408 Fixed wing multi engine
## 2173 -1.171121 A America/Denver -0.6056038 Fixed wing multi engine
## 2174 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2175 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2176 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2177 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2178 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2179 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 2180 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 2182 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2183 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2184 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2185 -1.171121 A America/Denver 1.6384612 Fixed wing multi engine
## 2186 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 2187 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2188 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2189 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 2190 -2.099842 A America/Los_Angeles 0.6027389 Fixed wing multi engine
## 2191 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2192 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2193 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2194 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2195 0.686322 A America/New_York 1.1206000 Fixed wing multi engine

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## 2196 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2197 -0.242399 A America/Chicago 1.2932204 Fixed wing multi engine
## 2198 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2199 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 2200 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 2201 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2202 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2203 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2204 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 2205 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2206 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2207 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2208 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 2209 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2210 -2.099842 A America/Los_Angeles -1.4687057 Fixed wing multi engine
## 2211 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2212 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 2215 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2216 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2217 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 2218 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2219 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2220 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2221 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 2222 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2223 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 2224 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2225 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2226 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2227 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 2228 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2229 -1.171121 N America/Phoenix -0.2603630 Fixed wing multi engine
## 2230 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2231 -2.099842 A America/Los_Angeles -0.9508445 Fixed wing multi engine
## 2232 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2233 -2.099842 A America/Los_Angeles 0.6027389 Fixed wing multi engine
## 2235 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2236 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2237 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2238 -2.099842 A America/Los_Angeles -0.9508445 Fixed wing multi engine
## 2239 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 2240 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2241 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 2242 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2243 -2.099842 A America/Los_Angeles 1.6384612 Fixed wing multi engine
## 2244 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 2245 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2246 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2247 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 2248 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2249 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2250 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 2251 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2252 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine

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## 2253 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2254 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2255 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2256 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 2257 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 2259 0.686322 A America/New_York -4.2306318 Fixed wing single engine
## 2260 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2261 -2.099842 A America/Los_Angeles 1.2932204 Fixed wing multi engine
## 2262 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2263 0.686322 A America/New_York -1.1234649 Fixed wing multi engine
## 2264 0.686322 A America/New_York 1.8110816 Rotorcraft
## 2265 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2266 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2267 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2268 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 2269 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2270 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2271 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2272 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 2273 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2274 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2275 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2276 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2277 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 2278 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2279 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 2280 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2281 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2282 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2283 0.686322 A America/New_York -0.9508445 Fixed wing multi engine
## 2285 -0.242399 A America/Chicago -1.1234649 Fixed wing multi engine
## 2286 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2287 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2288 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2289 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2290 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 2291 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 2292 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 2293 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2294 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2295 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2296 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2297 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 2298 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 2300 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2301 -2.099842 A America/Los_Angeles 1.6384612 Fixed wing multi engine
## 2302 -3.957285 N Pacific/Honolulu 0.0848777 Fixed wing multi engine
## 2303 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 2304 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2305 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2306 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2307 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 2308 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2309 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine

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## 2310 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2312 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 2313 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2314 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2315 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2316 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2317 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2318 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2319 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2320 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2321 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2322 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 2323 -0.242399 A America/Chicago -1.2960853 Fixed wing multi engine
## 2324 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2325 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2326 -1.171121 A America/Denver -1.6413261 Fixed wing multi engine
## 2327 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2328 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2329 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2330 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2331 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 2332 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2334 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 2335 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 2336 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2337 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2338 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2339 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2340 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2341 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2343 -1.171121 A America/Denver -1.9865668 Fixed wing multi engine
## 2344 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 2345 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2346 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 2347 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2348 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2349 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 2350 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 2351 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2352 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 2353 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2354 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2355 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2356 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2357 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2358 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2359 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 2360 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 2363 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2364 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 2365 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 2366 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2367 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2368 0.686322 A America/New_York 0.0848777 Fixed wing multi engine

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## 2369 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2370 -2.099842 A America/Los_Angeles 1.8110816 Fixed wing multi engine
## 2371 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2372 -1.171121 N America/Phoenix 1.2932204 Fixed wing multi engine
## 2373 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2375 -1.171121 N America/Phoenix -0.9508445 Fixed wing multi engine
## 2376 -0.242399 A America/Chicago -1.8139464 Fixed wing multi engine
## 2378 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2379 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 2380 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2381 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2383 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2384 -2.099842 A America/Los_Angeles 0.9479797 Fixed wing multi engine
## 2385 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 2386 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 2387 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2388 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2389 -2.099842 A America/Los_Angeles 0.6027389 Fixed wing multi engine
## 2390 0.686322 A America/New_York -1.4687057 Fixed wing multi engine
## 2391 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2392 0.686322 A America/New_York -1.9865668 Fixed wing multi engine
## 2395 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 2396 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2397 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2398 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2399 -1.171121 A America/Denver -0.2603630 Fixed wing multi engine
## 2401 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 2402 -0.242399 A America/Chicago -1.2960853 Fixed wing multi engine
## 2403 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2404 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 2405 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 2406 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2407 -0.242399 A America/Chicago -4.4032522 Fixed wing multi engine
## 2408 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2409 -2.099842 A America/Los_Angeles -1.4687057 Fixed wing multi engine
## 2410 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 2411 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2412 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2413 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2414 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2415 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2416 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2417 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2418 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 2419 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2420 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2421 -2.099842 A America/Los_Angeles 1.1206000 Fixed wing multi engine
## 2422 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 2423 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2425 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2426 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2427 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2428 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2429 0.686322 A America/New_York -0.4329834 Fixed wing multi engine

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## 2430 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2431 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 2432 -2.099842 A America/Los_Angeles -2.1591872 Fixed wing multi engine
## 2434 0.686322 A America/New_York -1.4687057 Fixed wing multi engine
## 2435 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2436 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 2437 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2438 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2439 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2440 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 2441 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 2442 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2443 0.686322 A America/New_York -1.1234649 Fixed wing multi engine
## 2444 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2445 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2446 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 2447 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2448 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2449 -1.171121 A America/Denver 0.7753593 Fixed wing multi engine
## 2450 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2451 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine
## 2452 -2.099842 A America/Los_Angeles 0.2574981 Fixed wing multi engine
## 2453 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2454 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2455 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2456 -1.171121 N America/Phoenix -0.2603630 Fixed wing multi engine
## 2457 -1.171121 A America/Denver 0.0848777 Fixed wing multi engine
## 2458 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2459 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2460 -0.242399 A America/Chicago 0.2574981 Fixed wing multi engine
## 2461 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2462 -0.242399 A America/Chicago -0.4329834 Fixed wing multi engine
## 2463 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2464 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2465 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2466 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2467 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2469 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2470 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2471 0.686322 A America/New_York -4.2306318 Fixed wing single engine
## 2472 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2475 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 2476 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2477 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2480 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2481 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 2482 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2483 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2486 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2487 0.686322 A America/New_York 1.6384612 Fixed wing multi engine
## 2489 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 2492 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2495 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2496 0.686322 A America/New_York 1.8110816 Fixed wing multi engine

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## 2497 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2498 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2499 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2500 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2501 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2502 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2503 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 2504 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2505 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2506 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2507 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2508 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2509 -0.242399 A America/Chicago 0.4301185 Fixed wing multi engine
## 2510 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 2511 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2512 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2513 0.686322 A America/New_York 0.4301185 Fixed wing multi engine
## 2514 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2515 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2516 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2517 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2518 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2519 0.686322 A America/New_York -1.6413261 Fixed wing multi engine
## 2520 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2521 -2.099842 A America/Los_Angeles 0.0848777 Fixed wing multi engine
## 2522 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2523 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 2524 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2525 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2526 -1.171121 A America/Denver -0.0877426 Fixed wing multi engine
## 2527 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2528 -2.099842 A America/Los_Angeles -0.7782242 Fixed wing multi engine
## 2529 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 2530 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 2531 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2532 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2533 -2.099842 A America/Los_Angeles -0.0877426 Fixed wing multi engine
## 2534 0.686322 A America/New_York 0.7753593 Fixed wing multi engine
## 2535 -2.099842 A America/Los_Angeles 1.2932204 Fixed wing multi engine
## 2536 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2537 -2.099842 A America/Los_Angeles -0.4329834 Fixed wing multi engine
## 2538 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 2539 -0.242399 A America/Chicago -0.2603630 Fixed wing multi engine
## 2540 -2.099842 A America/Los_Angeles 1.6384612 Fixed wing multi engine
## 2541 0.686322 A America/New_York -2.5044280 Fixed wing multi engine
## 2542 0.686322 A America/New_York -2.1591872 Fixed wing multi engine
## 2543 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2544 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2545 -2.099842 A America/Los_Angeles 0.7753593 Fixed wing multi engine
## 2546 -2.099842 A America/Los_Angeles -2.5044280 Fixed wing multi engine
## 2547 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2548 -0.242399 A America/Chicago -0.0877426 Fixed wing multi engine
## 2549 0.686322 A America/New_York -1.1234649 Fixed wing multi engine
## 2550 -0.242399 A America/Chicago 1.1206000 Fixed wing multi engine

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## 2551 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2552 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2553 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 2554 -0.242399 A America/Chicago 0.7753593 Fixed wing multi engine
## 2555 -2.099842 A America/Los_Angeles -1.6413261 Fixed wing multi engine
## 2556 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2557 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 2558 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2559 -1.171121 A America/Denver 0.0848777 Fixed wing multi engine
## 2560 0.686322 A America/New_York -2.3318076 Fixed wing multi engine
## 2561 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2562 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 2563 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2564 0.686322 A America/New_York -0.9508445 Fixed wing multi engine
## 2565 -1.171121 A America/Denver -1.6413261 Fixed wing multi engine
## 2566 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2567 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2568 0.686322 A America/New_York 0.9479797 Fixed wing multi engine
## 2569 0.686322 A America/New_York 1.8110816 Fixed wing multi engine
## 2570 0.686322 A America/New_York -0.2603630 Fixed wing multi engine
## 2571 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 2572 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 2573 0.686322 A America/New_York 0.2574981 Fixed wing multi engine
## 2574 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2575 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2576 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2577 -0.242399 A America/Chicago 0.0848777 Fixed wing multi engine
## 2578 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2579 0.686322 A America/New_York -0.7782242 Fixed wing multi engine
## 2580 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2581 -2.099842 A America/Los_Angeles -1.2960853 Fixed wing multi engine
## 2582 0.686322 A America/New_York -0.4329834 Fixed wing multi engine
## 2583 -2.099842 A America/Los_Angeles -0.6056038 Fixed wing multi engine
## 2584 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2585 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2586 0.686322 A America/New_York 1.2932204 Fixed wing multi engine
## 2587 -0.242399 A America/Chicago 0.6027389 Fixed wing multi engine
## 2588 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2589 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2590 -2.099842 A America/Los_Angeles 0.4301185 Fixed wing multi engine
## 2591 -2.099842 A America/Los_Angeles -2.6770484 Fixed wing multi engine
## 2592 -0.242399 A America/Chicago 0.9479797 Fixed wing multi engine
## 2593 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2594 -0.242399 A America/Chicago -0.6056038 Fixed wing multi engine
## 2595 0.686322 A America/New_York -1.8139464 Fixed wing multi engine
## 2596 0.686322 A America/New_York 1.1206000 Fixed wing multi engine
## 2597 0.686322 A America/New_York 0.0848777 Fixed wing multi engine
## 2598 0.686322 A America/New_York -0.0877426 Fixed wing multi engine
## 2599 -2.099842 A America/Los_Angeles -1.9865668 Fixed wing multi engine
## 2600 0.686322 A America/New_York -0.6056038 Fixed wing multi engine
## 2601 0.686322 A America/New_York 0.6027389 Fixed wing multi engine
## 2602 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 2603 -0.242399 A America/Chicago -2.3318076 Fixed wing multi engine
## 2604 0.686322 A America/New_York -0.2603630 Fixed wing multi engine

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## 2605	0.686322	A	America/New_York	-0.0877426	Fixed wing multi engine
## 2606	0.686322	A	America/New_York	1.6384612	Fixed wing multi engine
## 2607	0.686322	A	America/New_York	0.4301185	Fixed wing multi engine
## 2608	-2.099842	A	America/Los_Angeles	1.4658408	Fixed wing multi engine
## 2609	0.686322	A	America/New_York	0.4301185	Fixed wing multi engine
## 2610	-1.171121	A	America/Denver	-0.6056038	Fixed wing multi engine
## 2611	-0.242399	A	America/Chicago	-2.8496687	Fixed wing single engine
## 2612	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 2613	-0.242399	A	America/Chicago	0.0848777	Fixed wing multi engine
## 2614	0.686322	A	America/New_York	-0.2603630	Fixed wing multi engine
## 2615	0.686322	A	America/New_York	-1.8139464	Fixed wing multi engine
## 2616	0.686322	A	America/New_York	-0.4329834	Fixed wing multi engine
## 2617	0.686322	A	America/New_York	-0.0877426	Fixed wing multi engine
## 2618	-2.099842	A	America/Los_Angeles	1.1206000	Fixed wing multi engine
## 2619	-0.242399	A	America/Chicago	-2.3318076	Fixed wing multi engine
##			manufacturer	model	engines seats
## 1			BOEING	757-223	0.0573826 0.5916775
## 2			BOEING	737-924ER	0.0573826 0.7878896
## 3			AIRBUS	A320-232	0.0573826 0.9237287
## 4			BOEING	757-224	0.0573826 0.5916775
## 5			BOEING	737-924ER	0.0573826 0.7878896
## 6			AIRBUS	A320-232	0.0573826 0.9237287
## 7			BOEING	737-824	0.0573826 0.1539737
## 8			BOEING	A320-232	0.0573826 0.1539737
## 9	MCDONNELL DOUGLAS AIRCRAFT CO			MD-88	0.0573826 0.0483211
## 10			AIRBUS	A320-232	0.0573826 0.9237287
## 11			AIRBUS	A320-232	0.0573826 0.9237287
## 12			BOEING	A320-232	0.0573826 0.1539737
## 13			BOEING	A320-232	0.0573826 0.1539737
## 14			BOEING	737-824	0.0573826 0.1539737
## 15			BOEING	A320-232	0.0573826 0.1539737
## 16			BOEING	737-7H4	0.0573826 0.0181346
## 17			BOEING	A320-232	0.0573826 0.1539737
## 18			EMBRAER	EMB-145LR	0.0573826 -1.2647904
## 19			AIRBUS	A320-232	0.0573826 0.9237287
## 20			AIRBUS	A320-232	0.0573826 0.9237287
## 21		AIRBUS INDUSTRIE		A321-211	0.0573826 0.9086355
## 22			AIRBUS	A320-232	0.0573826 0.9237287
## 23			BOEING	757-222	0.0573826 0.5916775
## 24			AIRBUS	A320-232	0.0573826 0.9237287
## 25			EMBRAER	ERJ 190-100 IGW	0.0573826 -1.7930536
## 26		AIRBUS INDUSTRIE		A320-211	0.0573826 0.6520505
## 27			BOEING	737-832	0.0573826 0.7577031
## 28			BOEING	757-231	0.0573826 0.5916775
## 29			BOEING	A320-232	0.0573826 0.1539737
## 30			BOEING	A320-232	0.0573826 0.1539737
## 31			BOEING	A320-232	0.0573826 0.1539737
## 32			BOEING	A320-232	0.0573826 0.1539737
## 33		AIRBUS INDUSTRIE		A319-131	0.0573826 0.6067708
## 34			BOEING	737-824	0.0573826 0.1539737
## 35			AIRBUS	A320-232	0.0573826 0.9237287
## 36			BOEING	A320-232	0.0573826 0.1539737
## 37			BOEING	717-200	0.0573826 -0.5855948
## 38			BOEING	757-222	0.0573826 0.5916775

## 39		BOEING	737-890	0.0573826	0.1539737
## 40		BOEING	A320-232	0.0573826	0.1539737
## 41		BOEING	737-924ER	0.0573826	0.7878896
## 42	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 43	AIRBUS		A320-214	0.0573826	0.6520505
## 44	AIRBUS		A320-232	0.0573826	0.9237287
## 45	BOEING		737-924	0.0573826	0.7878896
## 46	BOEING		767-223	0.0573826	1.7538567
## 47	BOEING		767-223	0.0573826	1.7538567
## 49	AIRBUS		A321-231	0.0573826	3.6254178
## 50	BOEING		A320-232	0.0573826	0.1539737
## 51	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 52		AIRBUS	A320-232	0.0573826	0.9237287
## 53		BOEING	A320-232	0.0573826	0.1539737
## 54		BOEING	757-222	0.0573826	0.5916775
## 55		BOEING	A320-232	0.0573826	0.1539737
## 56	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 57		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 58	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 59		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 60		BOEING	757-26D	0.0573826	0.5916775
## 61		BOEING	A320-232	0.0573826	0.1539737
## 62	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 63	MCDONNELL DOUGLAS		DC-9-82(MD-82)	0.0573826	0.5011181
## 64		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 66		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 67		BOEING	757-222	0.0573826	0.5916775
## 68		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 69		BOEING	A320-232	0.0573826	0.1539737
## 70	AIRBUS INDUSTRIE		A320-214	0.0573826	0.6520505
## 71		BOEING	A320-232	0.0573826	0.1539737
## 72	GULFSTREAM AEROSPACE		G1159B	0.0573826	-1.7628672
## 73		BOEING	A320-232	0.0573826	0.1539737
## 75		BOEING	737-724	0.0573826	0.1539737
## 76		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 77		AIRBUS	A319-114	0.0573826	0.0936008
## 78		BOEING	737-824	0.0573826	0.1539737
## 79		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 80		BOEING	737-924ER	0.0573826	0.7878896
## 81	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 82		AIRBUS	A319-114	0.0573826	0.0936008
## 83	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 84		BOEING	757-224	0.0573826	0.5916775
## 86		BOEING	737-724	0.0573826	0.1539737
## 87	HURLEY JAMES LARRY		FALCON-XP	-11.5529141	-2.0647319
## 88	MCDONNELL DOUGLAS		DC-9-83(MD-83)	0.0573826	0.5011181
## 89		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 90		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 91		BOEING	757-2Q8	0.0573826	0.5916775
## 92		BOEING	737-724	0.0573826	0.1539737
## 93		BOEING	737-924ER	0.0573826	0.7878896
## 94	CIRRUS DESIGN CORP		SR22	-11.5529141	-2.0345454
## 95	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 96	AIRBUS		A320-214	0.0573826	0.6520505

## 97	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 98	AIRBUS	A320-232	0.0573826	0.9237287
## 99	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 100	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 101	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 102	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 103	BOEING	737-832	0.0573826	0.7577031
## 104	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 106	BOEING	737-824	0.0573826	0.1539737
## 107	BOEING	737-824	0.0573826	0.1539737
## 108	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 109	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 110	MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 111	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 112	BOEING	767-322	0.0573826	2.8858493
## 113	BOEING	A320-232	0.0573826	0.1539737
## 114	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 115	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 116	BOEING	737-5H4	0.0573826	0.1539737
## 117	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 118	AIRBUS	A320-232	0.0573826	0.9237287
## 119	BOEING	A320-232	0.0573826	0.1539737
## 120	BOEING	A320-232	0.0573826	0.1539737
## 121	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 122	BOEING	737-7H4	0.0573826	0.0181346
## 123	AIRBUS	A320-212	0.0573826	0.6520505
## 124	BOEING	757-222	0.0573826	0.5916775
## 125	BOEING	757-224	0.0573826	0.5916775
## 126	AIRBUS	A320-232	0.0573826	0.9237287
## 127	BOEING	A320-232	0.0573826	0.1539737
## 128	AIRBUS	A319-114	0.0573826	0.0936008
## 129	BOEING	A320-232	0.0573826	0.1539737
## 130	BOEING	A320-232	0.0573826	0.1539737
## 131	MCDONNELL DOUGLAS CORPORATION	MD-88	0.0573826	0.0483211
## 132	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 133	BOEING	717-200	0.0573826	-0.5855948
## 134	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 136	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 137	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 138	BOEING	737-7H4	0.0573826	0.0181346
## 139	BOEING	757-222	0.0573826	0.5916775
## 140	BOEING	737-924	0.0573826	0.7878896
## 141	BOEING	737-924ER	0.0573826	0.7878896
## 142	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 143	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 144	BOEING	757-222	0.0573826	0.5916775
## 145	PIPER	PA-32R-300	-11.5529141	-1.9892657
## 146	AIRBUS	A319-114	0.0573826	0.0936008
## 147	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 148	BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595
## 149	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 150	BOEING	A320-232	0.0573826	0.1539737
## 151	BOEING	737-7H4	0.0573826	0.0181346
## 152	EMBRAER	EMB-145LR	0.0573826	-1.2647904

## 153		BOEING	A320-232	0.0573826	0.1539737
## 154		BOEING	A320-232	0.0573826	0.1539737
## 155		BOEING	757-232	0.0573826	0.5916775
## 156		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 157		BOEING	A320-232	0.0573826	0.1539737
## 158	FRIEDEMANN JON	VANS	AIRCRAFT RV6	-11.5529141	-2.0647319
## 160		BOEING	737-824	0.0573826	0.1539737
## 162		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 163		BOEING	A320-232	0.0573826	0.1539737
## 164		BOEING	A320-232	0.0573826	0.1539737
## 165		BOEING	737-7H4	0.0573826	0.0181346
## 166	GULFSTREAM AEROSPACE		G1159B	0.0573826	-1.7628672
## 167	ROBINSON HELICOPTER CO		R66	-11.5529141	-2.0194522
## 168		BOEING	757-224	0.0573826	0.5916775
## 169		BOEING	737-832	0.0573826	0.7577031
## 170		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 172		BOEING	767-223	0.0573826	1.7538567
## 173		BOEING	A320-232	0.0573826	0.1539737
## 174		BOEING	737-7H4	0.0573826	0.0181346
## 175		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 176		AIRBUS	A319-114	0.0573826	0.0936008
## 177		BOEING	737-7BD	0.0573826	0.1539737
## 178	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 179		BOEING	787-8	0.0573826	1.8293228
## 181		BOEING	717-200	0.0573826	-0.5855948
## 183		BOEING	737-924ER	0.0573826	0.7878896
## 184		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 185	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 186		BOEING	757-222	0.0573826	0.5916775
## 187	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 190	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 191		BOEING	757-231	0.0573826	0.5916775
## 192		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 193		BOEING	A320-232	0.0573826	0.1539737
## 194		BOEING	A320-232	0.0573826	0.1539737
## 195	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 196		BOEING	A320-232	0.0573826	0.1539737
## 197		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 198	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 199		BOEING	737-824	0.0573826	0.1539737
## 200		AIRBUS	A321-231	0.0573826	3.6254178
## 201		BOEING	A320-232	0.0573826	0.1539737
## 202	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 203		BOEING	A320-232	0.0573826	0.1539737
## 204		BOEING	A320-232	0.0573826	0.1539737
## 205		BOEING	757-222	0.0573826	0.5916775
## 206	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 207		BOEING	A320-232	0.0573826	0.1539737
## 208		BOEING	737-824	0.0573826	0.1539737
## 209		BOEING	757-232	0.0573826	0.5916775
## 210		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 211		BOEING	A320-232	0.0573826	0.1539737
## 212		BOEING	A320-232	0.0573826	0.1539737
## 213		BOEING	737-724	0.0573826	0.1539737

## 214		BOEING	A320-232	0.0573826	0.1539737
## 215		BOEING	757-224	0.0573826	0.5916775
## 217		BOEING	737-7H4	0.0573826	0.0181346
## 218		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 219	MCDONNELL	DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 220		BOEING	757-222	0.0573826	0.5916775
## 221		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 222		BOEING	737-7H4	0.0573826	0.0181346
## 223		BOEING	737-832	0.0573826	0.7577031
## 224		BOEING	767-223	0.0573826	1.7538567
## 226		BOEING	737-832	0.0573826	0.7577031
## 227		BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 228		BOEING	737-824	0.0573826	0.1539737
## 229		BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 230		BOEING	717-200	0.0573826	-0.5855948
## 231		BOEING	A320-232	0.0573826	0.1539737
## 232	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 233		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 234		AIRBUS	A320-232	0.0573826	0.9237287
## 235		BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 236		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 237		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 238		BOEING	737-7H4	0.0573826	0.0181346
## 239		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 240		BOEING	A320-232	0.0573826	0.1539737
## 241	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 242		AIRBUS	A319-114	0.0573826	0.0936008
## 245		AIRBUS INDUSTRIE	A320-211	0.0573826	0.6520505
## 247		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 248		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 249		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 251		BOEING	A320-232	0.0573826	0.1539737
## 252		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 253		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 254		AIRBUS	A320-232	0.0573826	0.9237287
## 255	MCDONNELL	DOUGLAS	DC-9-83(MD-83)	0.0573826	0.5011181
## 256		EMBRAER	EMB-145	0.0573826	-1.2647904
## 257		BOEING	A320-232	0.0573826	0.1539737
## 258		BOEING	A320-232	0.0573826	0.1539737
## 259		BOEING	A320-232	0.0573826	0.1539737
## 260		AIRBUS	A321-211	0.0573826	0.9086355
## 261		BOEING	757-222	0.0573826	0.5916775
## 263		BOEING	757-222	0.0573826	0.5916775
## 264		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 265		BOEING	A320-232	0.0573826	0.1539737
## 266		BOEING	A320-232	0.0573826	0.1539737
## 267		BOEING	A320-232	0.0573826	0.1539737
## 268		BOEING	757-224	0.0573826	0.5916775
## 269		BOEING	767-323	0.0573826	2.8858493
## 270		BOEING	757-222	0.0573826	0.5916775
## 271		PAIR MIKE E	FALCON XP	-11.5529141	-2.0647319
## 273		BOEING	757-224	0.0573826	0.5916775
## 275	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 276	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211

## 277	MCDONNELL DOUGLAS CORPORATION		MD-88	0.0573826	0.0483211
## 278		BOEING	737-8H4	0.0573826	0.0181346
## 279		AIRBUS	A320-232	0.0573826	0.9237287
## 281		BOEING	737-824	0.0573826	0.1539737
## 282		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 283		BOEING	737-924ER	0.0573826	0.7878896
## 284	GULFSTREAM AEROSPACE		G1159B	0.0573826	-1.7628672
## 285	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 286		BOEING	A320-232	0.0573826	0.1539737
## 287		BOEING	757-222	0.0573826	0.5916775
## 288	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 289	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 290		BOEING	A320-232	0.0573826	0.1539737
## 291		BOEING	737-832	0.0573826	0.7577031
## 292		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 294		BOEING	757-222	0.0573826	0.5916775
## 297	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 298	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 299		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 300	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 301		BOEING	767-332	0.0573826	2.8858493
## 302	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 303		AIRBUS	A320-232	0.0573826	0.9237287
## 304		CESSNA	172N -11.5529141	-2.0345454	
## 305	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 306		BOEING	757-232	0.0573826	0.5916775
## 307		BOEING	737-824	0.0573826	0.1539737
## 308		BOEING	737-832	0.0573826	0.7577031
## 310	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 311		BOEING	757-2Q8	0.0573826	0.5916775
## 312		BOEING	A320-232	0.0573826	0.1539737
## 313		BOEING	737-824	0.0573826	0.1539737
## 316		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 317		BOEING	A320-232	0.0573826	0.1539737
## 318		AIRBUS	A320-232	0.0573826	0.9237287
## 319	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 320		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 321		AIRBUS	A320-214	0.0573826	0.6520505
## 322		BOEING	737-824	0.0573826	0.1539737
## 323	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 324		BOEING	737-824	0.0573826	0.1539737
## 328		BOEING	A320-232	0.0573826	0.1539737
## 330		BOEING	737-724	0.0573826	0.1539737
## 332		BOEING	737-724	0.0573826	0.1539737
## 333		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 336		BOEING	737-832	0.0573826	0.7577031
## 339		PIPER	PA-32R-300 -11.5529141	-1.9892657	
## 340		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 341	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 342		BOEING	737-824	0.0573826	0.1539737
## 343		AIRBUS	A320-232	0.0573826	0.9237287
## 344	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 346		BOEING	737-5H4	0.0573826	0.1539737
## 347		AIRBUS	A320-232	0.0573826	0.9237287

## 348		BOEING	737-832	0.0573826	0.7577031
## 349		AIRBUS	A320-232	0.0573826	0.9237287
## 350		BOEING	737-824	0.0573826	0.1539737
## 351		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 352		AIRBUS	A320-232	0.0573826	0.9237287
## 353		BOEING	A320-232	0.0573826	0.1539737
## 354	ROBINSON HELICOPTER CO		R66	-11.5529141	-2.0194522
## 355		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 356		AIRBUS	A320-232	0.0573826	0.9237287
## 358		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 359		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 365		AIRBUS	A320-232	0.0573826	0.9237287
## 366		AIRBUS	A320-232	0.0573826	0.9237287
## 367	AIRBUS INDUSTRIE		A321-211	0.0573826	0.9086355
## 368		AIRBUS	A320-232	0.0573826	0.9237287
## 369		AIRBUS	A320-232	0.0573826	0.9237287
## 370		AIRBUS	A320-232	0.0573826	0.9237287
## 371		BOEING	A320-232	0.0573826	0.1539737
## 372		AIRBUS	A319-114	0.0573826	0.0936008
## 373	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 374		BOEING	737-824	0.0573826	0.1539737
## 375		BOEING	A320-232	0.0573826	0.1539737
## 376		BOEING	A320-232	0.0573826	0.1539737
## 377		BOEING	737-824	0.0573826	0.1539737
## 378		BOEING	737-832	0.0573826	0.7577031
## 379	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 380		BOEING	737-732	0.0573826	0.1539737
## 381		BOEING	737-7H4	0.0573826	0.0181346
## 382		AIRBUS	A320-232	0.0573826	0.9237287
## 383	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 384	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 385		BOEING	A320-232	0.0573826	0.1539737
## 386	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 387		BOEING	737-7H4	0.0573826	0.0181346
## 388		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 389		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 390		BOEING	757-222	0.0573826	0.5916775
## 391		BOEING	A320-232	0.0573826	0.1539737
## 392		BOEING	737-724	0.0573826	0.1539737
## 393		AIRBUS	A321-231	0.0573826	3.6254178
## 394		BOEING	737-824	0.0573826	0.1539737
## 395		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 396		BOEING	A320-232	0.0573826	0.1539737
## 397		AIRBUS	A320-232	0.0573826	0.9237287
## 398		AIRBUS	A321-231	0.0573826	3.6254178
## 399		BOEING	757-222	0.0573826	0.5916775
## 400		BOEING	737-832	0.0573826	0.7577031
## 401	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 402		BOEING	737-824	0.0573826	0.1539737
## 403		AIRBUS	A320-232	0.0573826	0.9237287
## 404		AIRBUS	A320-211	0.0573826	0.6520505
## 405		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 406		AIRBUS	A320-214	0.0573826	0.6520505
## 407	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211

## 408		BOEING	737-924ER	0.0573826	0.7878896
## 410		BOEING	A320-232	0.0573826	0.1539737
## 411		BOEING	A320-232	0.0573826	0.1539737
## 412		AIRBUS	A320-232	0.0573826	0.9237287
## 413		BOEING	757-251	0.0573826	0.5916775
## 414		BOEING	737-824	0.0573826	0.1539737
## 415		BOEING	A320-232	0.0573826	0.1539737
## 416		AIRBUS	A320-232	0.0573826	0.9237287
## 418		BOEING	737-890	0.0573826	0.1539737
## 420	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 421		BOEING	737-832	0.0573826	0.7577031
## 422		BOEING	737-824	0.0573826	0.1539737
## 423	LAMBERT RICHARD		FALCON XP	-11.5529141	-2.0647319
## 424		BOEING	767-223	0.0573826	1.7538567
## 425		BOEING	757-224	0.0573826	0.5916775
## 426		BOEING	737-7H4	0.0573826	0.0181346
## 427		BOEING	757-222	0.0573826	0.5916775
## 428	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 429		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 430	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 432	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 433	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 434		AIRBUS	A321-231	0.0573826	3.6254178
## 435	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 436		BOEING	757-222	0.0573826	0.5916775
## 437		BOEING	A320-232	0.0573826	0.1539737
## 438		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 439	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 440	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 442	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 443		BOEING	A320-232	0.0573826	0.1539737
## 444		AIRBUS	A320-232	0.0573826	0.9237287
## 445		BOEING	737-832	0.0573826	0.7577031
## 446		BOEING	A320-232	0.0573826	0.1539737
## 447	MCDONNELL DOUGLAS	DC-9-83(MD-83)	DC-9-83(MD-83)	0.0573826	0.5011181
## 448	MCDONNELL DOUGLAS	DC-9-83(MD-83)	DC-9-83(MD-83)	0.0573826	0.5011181
## 450		AIRBUS	A320-214	0.0573826	0.6520505
## 451		BOEING	A320-232	0.0573826	0.1539737
## 452	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 453		BOEING	A320-232	0.0573826	0.1539737
## 455	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 457		BOEING	A320-232	0.0573826	0.1539737
## 458	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 459		BOEING	757-224	0.0573826	0.5916775
## 460		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 462	AIRBUS		A320-232	0.0573826	0.9237287
## 463	AIRBUS		A319-114	0.0573826	0.0936008
## 464	BOEING		A320-232	0.0573826	0.1539737
## 465	BOEING		757-222	0.0573826	0.5916775
## 466	BOEING		737-724	0.0573826	0.1539737
## 467	EMBRAER	ERJ 190-100 IGW	ERJ 190-100 IGW	0.0573826	-1.7930536
## 468	BOEING		757-222	0.0573826	0.5916775
## 469	BOEING		A320-232	0.0573826	0.1539737
## 470	AIRBUS		A320-232	0.0573826	0.9237287

## 471		BOEING	A320-232	0.0573826	0.1539737
## 472		AIRBUS	A320-232	0.0573826	0.9237287
## 473		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 474		AIRBUS	A320-232	0.0573826	0.9237287
## 475		BOEING	737-724	0.0573826	0.1539737
## 476		BOEING	737-7H4	0.0573826	0.0181346
## 477		BOEING	737-7H4	0.0573826	0.0181346
## 479	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 480		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 481		PIPER	PA-32R-300	-11.5529141	-1.9892657
## 482		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 483	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 484		BOEING	737-7H4	0.0573826	0.0181346
## 485		AIRBUS	A320-232	0.0573826	0.9237287
## 486		BOEING	A320-232	0.0573826	0.1539737
## 487		AIRBUS	A321-231	0.0573826	3.6254178
## 488		BOEING	717-200	0.0573826	-0.5855948
## 489		AIRBUS	A321-231	0.0573826	3.6254178
## 490	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 491		AIRBUS	A320-232	0.0573826	0.9237287
## 492	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 493		AIRBUS	A320-214	0.0573826	0.6520505
## 494		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 495		AIRBUS	A320-232	0.0573826	0.9237287
## 496		BOEING	737-724	0.0573826	0.1539737
## 497		BOEING	767-223	0.0573826	1.7538567
## 498		BOEING	A320-232	0.0573826	0.1539737
## 499		BOEING	757-232	0.0573826	0.5916775
## 501		BOEING	737-824	0.0573826	0.1539737
## 502		BOEING	737-7H4	0.0573826	0.0181346
## 503		BOEING	A320-232	0.0573826	0.1539737
## 504	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 506	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 507		BOEING	737-7H4	0.0573826	0.0181346
## 508		BOEING	A320-232	0.0573826	0.1539737
## 509		BOEING	A320-232	0.0573826	0.1539737
## 510		AIRBUS	A320-232	0.0573826	0.9237287
## 511		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 512		BOEING	757-2Q8	0.0573826	0.5916775
## 514	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 515		BOEING	737-724	0.0573826	0.1539737
## 516		BOEING	767-223	0.0573826	1.7538567
## 517		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 518		BOEING	757-224	0.0573826	0.5916775
## 519	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 520	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 523		BOEING	737-7H4	0.0573826	0.0181346
## 524		BOEING	737-832	0.0573826	0.7577031
## 525		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 526		BOEING	757-232	0.0573826	0.5916775
## 527		BOEING	A320-232	0.0573826	0.1539737
## 528	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 529	AIRBUS INDUSTRIE		A321-211	0.0573826	0.9086355
## 530		AIRBUS	A320-232	0.0573826	0.9237287

## 531		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 532		BOEING	737-732	0.0573826	0.1539737
## 533		BOEING	737-7H4	0.0573826	0.0181346
## 534		BOEING	737-824	0.0573826	0.1539737
## 535	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 536	AIRBUS		A321-231	0.0573826	3.6254178
## 537		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 538	AIRBUS		A320-232	0.0573826	0.9237287
## 539		BOEING	757-224	0.0573826	0.5916775
## 540		BOEING	737-7H4	0.0573826	0.0181346
## 541	AIRBUS		A320-232	0.0573826	0.9237287
## 542		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 543		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 544	AIRBUS		A320-232	0.0573826	0.9237287
## 545		BOEING	767-223	0.0573826	1.7538567
## 546		BOEING	A320-232	0.0573826	0.1539737
## 547	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 548		BOEING	A320-232	0.0573826	0.1539737
## 549	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 551		AIRBUS	A320-232	0.0573826	0.9237287
## 553		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 554		BOEING	737-724	0.0573826	0.1539737
## 555		BOEING	737-824	0.0573826	0.1539737
## 556	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 558		AIRBUS	A320-211	0.0573826	0.6520505
## 559	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 560	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 561		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 562		AIRBUS	A319-114	0.0573826	0.0936008
## 563		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 564		BOEING	737-824	0.0573826	0.1539737
## 565	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 566	MCDONNELL DOUGLAS		DC-9-82(MD-82)	0.0573826	0.5011181
## 567		BOEING	757-251	0.0573826	0.5916775
## 569		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 570		BOEING	A320-232	0.0573826	0.1539737
## 571		BOEING	A320-232	0.0573826	0.1539737
## 572		AIRBUS	A320-232	0.0573826	0.9237287
## 573		BOEING	A320-232	0.0573826	0.1539737
## 574	GULFSTREAM AEROSPACE		G-IV	0.0573826	-1.7628672
## 576		BOEING	A320-232	0.0573826	0.1539737
## 577	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 578		AIRBUS	A320-232	0.0573826	0.9237287
## 579	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 580		BOEING	A320-232	0.0573826	0.1539737
## 581	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 582	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 584		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 585		BOEING	757-2Q8	0.0573826	0.5916775
## 586	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 587	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 588		BOEING	737-724	0.0573826	0.1539737
## 589		BOEING	A320-232	0.0573826	0.1539737
## 590	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610

## 591	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 593	BOEING		737-832	0.0573826	0.7577031
## 594	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 596	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610	
## 597	BOEING	737-7H4	0.0573826	0.0181346	
## 598	BOEING	757-224	0.0573826	0.5916775	
## 599	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 600	BOEING		737-824	0.0573826	0.1539737
## 601	AIRBUS		A320-232	0.0573826	0.9237287
## 602	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 603	BOEING		737-724	0.0573826	0.1539737
## 604	AIRBUS		A320-214	0.0573826	0.6520505
## 605	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 607	BOEING		A320-232	0.0573826	0.1539737
## 608	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536	
## 609	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536	
## 610	AIRBUS		A319-114	0.0573826	0.0936008
## 611	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610	
## 612	BOEING	737-7H4	0.0573826	0.0181346	
## 613	BOEING	A320-232	0.0573826	0.1539737	
## 614	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 615	AIRBUS		A321-231	0.0573826	3.6254178
## 616	MARZ BARRY	KITFOX IV -11.5529141		-2.0647319	
## 617	BOEING		A320-232	0.0573826	0.1539737
## 618	BOEING		A320-232	0.0573826	0.1539737
## 619	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 621	AIRBUS		A320-214	0.0573826	0.6520505
## 622	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 624	BOEING	737-724	0.0573826	0.1539737	
## 625	BOEING	737-832	0.0573826	0.7577031	
## 626	BOEING	A320-232	0.0573826	0.1539737	
## 628	BOEING	757-222	0.0573826	0.5916775	
## 630	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536	
## 631	BOEING	737-8H4	0.0573826	0.0181346	
## 635	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536	
## 636	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 637	BOEING	737-724	0.0573826	0.1539737	
## 638	BOEING	A320-232	0.0573826	0.1539737	
## 639	BOEING	A320-232	0.0573826	0.1539737	
## 641	BOEING	A320-232	0.0573826	0.1539737	
## 643	BOEING	A320-232	0.0573826	0.1539737	
## 644	AIRBUS	A319-114	0.0573826	0.0936008	
## 645	BOEING	737-824	0.0573826	0.1539737	
## 646	AIRBUS	A320-232	0.0573826	0.9237287	
## 648	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 649	AIRBUS		A320-232	0.0573826	0.9237287
## 650	BOEING		A320-232	0.0573826	0.1539737
## 651	BOEING	737-7H4	0.0573826	0.0181346	
## 652	BOEING	757-222	0.0573826	0.5916775	
## 654	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610	
## 655	MCDONNELL DOUGLAS	DC-9-83(MD-83)	0.0573826	0.5011181	
## 656	AIRBUS	A320-214	0.0573826	0.6520505	
## 657	BOEING	A320-232	0.0573826	0.1539737	
## 658	BOEING	767-332	0.0573826	2.8858493	

## 659		BOEING	737-7H4	0.0573826	0.0181346
## 660		AIRBUS	A320-232	0.0573826	0.9237287
## 661	AIRBUS INDUSTRIE		A321-211	0.0573826	0.9086355
## 662	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 663	BOEING	A320-232		0.0573826	0.1539737
## 664	EMBRAER	EMB-145LR		0.0573826	-1.2647904
## 665	BOEING	767-223		0.0573826	1.7538567
## 666	BOEING	737-824		0.0573826	0.1539737
## 667	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 668	AIRBUS	A320-232		0.0573826	0.9237287
## 669	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 670	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 671	BOEING	737-832		0.0573826	0.7577031
## 672	BOEING	A320-232		0.0573826	0.1539737
## 673	EMBRAER	EMB-145XR		0.0573826	-1.2647904
## 674	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 675	AIRBUS	A320-232		0.0573826	0.9237287
## 676	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 677	AIRBUS	A319-114		0.0573826	0.0936008
## 678	BOEING	A320-232		0.0573826	0.1539737
## 680	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 682	BOEING	737-824		0.0573826	0.1539737
## 683	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 684	BOEING	737-724		0.0573826	0.1539737
## 686	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 687	BOEING	757-232		0.0573826	0.5916775
## 689	BOEING	757-222		0.0573826	0.5916775
## 690	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 691	BOEING	737-824		0.0573826	0.1539737
## 693	EMBRAER	EMB-145LR		0.0573826	-1.2647904
## 694	BOEING	737-7H4		0.0573826	0.0181346
## 695	BOEING	737-724		0.0573826	0.1539737
## 696	BOEING	A320-232		0.0573826	0.1539737
## 697	CESSNA		172N -11.5529141		-2.0345454
## 698	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 699	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 700	BOEING	737-832		0.0573826	0.7577031
## 702	BOEING	737-824		0.0573826	0.1539737
## 703	MCDONNELL DOUGLAS	DC-9-82(MD-82)		0.0573826	0.5011181
## 704	AIRBUS	A320-232		0.0573826	0.9237287
## 706	AIRBUS	A320-232		0.0573826	0.9237287
## 707	BOEING	A320-232		0.0573826	0.1539737
## 709	AIRBUS	A320-232		0.0573826	0.9237287
## 710	BOEING	737-7H4		0.0573826	0.0181346
## 711	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 712	BOEING	757-231		0.0573826	0.5916775
## 713	BOEING	A320-232		0.0573826	0.1539737
## 714	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 715	BOEING	737-724		0.0573826	0.1539737
## 716	BOEING	737-824		0.0573826	0.1539737
## 717	BOEING	737-824		0.0573826	0.1539737
## 719	AIRBUS	A320-232		0.0573826	0.9237287
## 720	BOEING	A320-232		0.0573826	0.1539737
## 721	AIRBUS	A320-232		0.0573826	0.9237287

## 722		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 723		AIRBUS	A320-232	0.0573826	0.9237287
## 725		BOEING	A320-232	0.0573826	0.1539737
## 726		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 727		BOEING	737-824	0.0573826	0.1539737
## 729		AIRBUS	A320-232	0.0573826	0.9237287
## 730		AIRBUS	A320-211	0.0573826	0.6520505
## 737		AIRBUS	A320-232	0.0573826	0.9237287
## 738		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 739		BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595
## 743		BOEING	737-824	0.0573826	0.1539737
## 744		CANADAIR	CL-600-2B19	0.0573826	-1.2647904
## 745		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 746		CIRRUS DESIGN CORP	SR22	-11.5529141	-2.0345454
## 747		BOEING	757-232	0.0573826	0.5916775
## 748		BOEING	A320-232	0.0573826	0.1539737
## 749		AIRBUS	A320-232	0.0573826	0.9237287
## 750		AIRBUS	A320-232	0.0573826	0.9237287
## 751		AIRBUS	A319-114	0.0573826	0.0936008
## 752		BOEING	717-200	0.0573826	-0.5855948
## 753		BOEING	A320-232	0.0573826	0.1539737
## 754		BOEING	737-8H4	0.0573826	0.0181346
## 755		BOEING	737-7H4	0.0573826	0.0181346
## 756		BOEING	A320-232	0.0573826	0.1539737
## 757		AIRBUS	A320-232	0.0573826	0.9237287
## 758		AIRBUS	A319-114	0.0573826	0.0936008
## 759		BOEING	757-2Q8	0.0573826	0.5916775
## 760		BOEING	A320-232	0.0573826	0.1539737
## 761		AIRBUS INDUSTRIE	A320-211	0.0573826	0.6520505
## 762		BOEING	757-224	0.0573826	0.5916775
## 763		BOEING	A320-232	0.0573826	0.1539737
## 764		AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 765		AIRBUS	A319-114	0.0573826	0.0936008
## 766		BOEING	737-4B7	0.0573826	0.1539737
## 767		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 768		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 769		BOEING	A320-232	0.0573826	0.1539737
## 770		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 771		AIRBUS INDUSTRIE	A319-132	0.0573826	0.6067708
## 772		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 773		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 774		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 775		BOEING	757-222	0.0573826	0.5916775
## 776		BOEING	737-924ER	0.0573826	0.7878896
## 777		BOEING	A320-232	0.0573826	0.1539737
## 778		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 779		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 780		BOEING	737-724	0.0573826	0.1539737
## 781		BOEING	757-222	0.0573826	0.5916775
## 782		BOEING	A320-232	0.0573826	0.1539737
## 784		BOEING	737-824	0.0573826	0.1539737
## 785	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 786		BOEING	A320-232	0.0573826	0.1539737
## 787		BOEING	737-890	0.0573826	0.1539737

## 788	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 789	BOEING		767-223	0.0573826	1.7538567
## 790	BARKER JACK L	ZODIAC 601HDS	-11.5529141	-2.0647319	
## 791	BOEING		757-232	0.0573826	0.5916775
## 792	BOEING		757-222	0.0573826	0.5916775
## 793	BOEING		767-223	0.0573826	1.7538567
## 794	AIRBUS		A320-232	0.0573826	0.9237287
## 795	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904	
## 796	BOEING		737-7H4	0.0573826	0.0181346
## 797	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 798	BOEING		A320-232	0.0573826	0.1539737
## 799	AIRBUS		A320-232	0.0573826	0.9237287
## 800	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536	
## 801	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 802	BOEING		737-832	0.0573826	0.7577031
## 803	AIRBUS		A320-232	0.0573826	0.9237287
## 804	AIRBUS		A320-232	0.0573826	0.9237287
## 805	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 806	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 807	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 808	AIRBUS		A320-232	0.0573826	0.9237287
## 809	BOEING		737-824	0.0573826	0.1539737
## 810	BOEING		737-824	0.0573826	0.1539737
## 811	BOEING		737-824	0.0573826	0.1539737
## 812	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 813	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 815	BOEING		767-223	0.0573826	1.7538567
## 816	BOEING		757-231	0.0573826	0.5916775
## 817	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 818	BOEING		A320-232	0.0573826	0.1539737
## 819	AIRBUS		A320-214	0.0573826	0.6520505
## 821	BOEING		757-223	0.0573826	0.5916775
## 822	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 823	BOEING		A320-232	0.0573826	0.1539737
## 824	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 825	BOEING		737-724	0.0573826	0.1539737
## 826	BOEING		737-824	0.0573826	0.1539737
## 828	AIRBUS		A320-232	0.0573826	0.9237287
## 829	BOEING		737-724	0.0573826	0.1539737
## 831	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 832	AIRBUS		A320-232	0.0573826	0.9237287
## 833	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 834	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 835	AIRBUS		A320-232	0.0573826	0.9237287
## 837	AIRBUS		A320-232	0.0573826	0.9237287
## 839	BOEING		737-7H4	0.0573826	0.0181346
## 840	AIRBUS		A320-232	0.0573826	0.9237287
## 841	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904	
## 843	BOEING		A320-232	0.0573826	0.1539737
## 844	AIRBUS		A321-231	0.0573826	3.6254178
## 845	AIRBUS		A320-232	0.0573826	0.9237287
## 846	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 848	BOEING		A320-232	0.0573826	0.1539737
## 849	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708

## 850	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 852	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 853	AIRBUS		A321-231	0.0573826	3.6254178
## 855	BOEING		717-200	0.0573826	-0.5855948
## 856	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 857	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 858	BOEING		767-223	0.0573826	1.7538567
## 859	AIRBUS		A320-214	0.0573826	0.6520505
## 860	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 861	AIRBUS		A320-212	0.0573826	0.6520505
## 862	AIRBUS		A320-232	0.0573826	0.9237287
## 863	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 864	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 865	BOEING		737-824	0.0573826	0.1539737
## 866	BOEING		A320-232	0.0573826	0.1539737
## 867	AIRBUS		A320-232	0.0573826	0.9237287
## 868	BOEING		A320-232	0.0573826	0.1539737
## 869	BOEING		A320-232	0.0573826	0.1539737
## 870	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 871	BOEING		737-824	0.0573826	0.1539737
## 872	BOEING		737-832	0.0573826	0.7577031
## 873	AIRBUS		A320-214	0.0573826	0.6520505
## 874	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 875	BOEING		757-224	0.0573826	0.5916775
## 876	BOEING		737-824	0.0573826	0.1539737
## 877	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 878	BOEING		A320-232	0.0573826	0.1539737
## 879	AIRBUS		A319-114	0.0573826	0.0936008
## 880	AIRBUS		A320-232	0.0573826	0.9237287
## 881	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 882	BOEING		A320-232	0.0573826	0.1539737
## 883	BOEING		737-732	0.0573826	0.1539737
## 884	BOEING		737-824	0.0573826	0.1539737
## 885	BOEING		717-200	0.0573826	-0.5855948
## 886	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 887	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 888	BOEING		737-3H4	0.0573826	0.1539737
## 891	BOEING		A320-232	0.0573826	0.1539737
## 892	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 893	BOEING		737-824	0.0573826	0.1539737
## 894	BOEING		737-7H4	0.0573826	0.0181346
## 895	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 896	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 897	BOEING		737-832	0.0573826	0.7577031
## 898	BOEING		A320-232	0.0573826	0.1539737
## 899	BOEING		737-7H4	0.0573826	0.0181346
## 900	BOEING		A320-232	0.0573826	0.1539737
## 901	BOEING		737-832	0.0573826	0.7577031
## 902	BOEING		737-724	0.0573826	0.1539737
## 903	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 904	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 905	BOEING		737-824	0.0573826	0.1539737
## 906	BOEING		757-224	0.0573826	0.5916775
## 907	EMBRAER		EMB-145LR	0.0573826	-1.2647904

## 910	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 911		AIRBUS	A320-232	0.0573826	0.9237287
## 913		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 914		AIRBUS	A320-214	0.0573826	0.6520505
## 915		AIRBUS	A320-232	0.0573826	0.9237287
## 916		BOEING	767-223	0.0573826	1.7538567
## 917		AIRBUS	A320-232	0.0573826	0.9237287
## 918		AIRBUS	A320-232	0.0573826	0.9237287
## 919		CANADAIR	CL-600-2B19	0.0573826	-1.2647904
## 920		BOEING	A320-232	0.0573826	0.1539737
## 921		AIRBUS	A320-232	0.0573826	0.9237287
## 923		BOEING	757-251	0.0573826	0.5916775
## 924		AIRBUS	A320-232	0.0573826	0.9237287
## 926		BOEING	757-224	0.0573826	0.5916775
## 927	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 928	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 929		BOEING	A320-232	0.0573826	0.1539737
## 930		BOEING	757-222	0.0573826	0.5916775
## 931		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 932		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 934		BOEING	A320-232	0.0573826	0.1539737
## 935		AIRBUS	A319-114	0.0573826	0.0936008
## 936	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 937		AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 939		BOEING	737-924	0.0573826	0.7878896
## 940		BOEING	757-222	0.0573826	0.5916775
## 941	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 942		BOEING	A320-232	0.0573826	0.1539737
## 943	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 944		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 945		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 946		BOEING	757-2Q8	0.0573826	0.5916775
## 947		BOEING	A320-232	0.0573826	0.1539737
## 948		BOEING	757-231	0.0573826	0.5916775
## 949		AIRBUS	A320-232	0.0573826	0.9237287
## 950		AIRBUS	A320-232	0.0573826	0.9237287
## 951		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 952		AIRBUS	A320-232	0.0573826	0.9237287
## 953		AIRBUS	A321-211	0.0573826	0.9086355
## 954		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 955		BOEING	757-232	0.0573826	0.5916775
## 956	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 957		BOEING	757-222	0.0573826	0.5916775
## 958	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 959		BOEING	A320-232	0.0573826	0.1539737
## 960		BOEING	A320-232	0.0573826	0.1539737
## 961		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 962		AIRBUS	A320-232	0.0573826	0.9237287
## 963		BOEING	737-7H4	0.0573826	0.0181346
## 964		BOEING	757-222	0.0573826	0.5916775
## 965		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 966		BOEING	757-224	0.0573826	0.5916775
## 967		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 968		BOEING	A320-232	0.0573826	0.1539737

## 969	BOEING	737-7H4	0.0573826	0.0181346
## 971	BOEING	757-224	0.0573826	0.5916775
## 972	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 973	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 974	BOEING	767-223	0.0573826	1.7538567
## 975	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 976	AIRBUS	A320-232	0.0573826	0.9237287
## 977	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 978	BOEING	737-824	0.0573826	0.1539737
## 979	BOEING	757-232	0.0573826	0.5916775
## 980	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 981	BOEING	737-832	0.0573826	0.7577031
## 984	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 985	AIRBUS	A320-232	0.0573826	0.9237287
## 987	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 988	BOEING	737-824	0.0573826	0.1539737
## 989	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 990	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 991	BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595
## 992	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 993	BOEING	A320-232	0.0573826	0.1539737
## 994	BOEING	A320-232	0.0573826	0.1539737
## 995	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 996	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 997	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 998	BOEING	737-732	0.0573826	0.1539737
## 1000	BOEING	A320-232	0.0573826	0.1539737
## 1001	BOEING	757-2Q8	0.0573826	0.5916775
## 1002	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 1003	BOEING	A320-232	0.0573826	0.1539737
## 1004	BOEING	757-232	0.0573826	0.5916775
## 1005	MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 1006	AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 1007	BOEING	A320-232	0.0573826	0.1539737
## 1008	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1009	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1010	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1013	BOEING	757-223	0.0573826	0.5916775
## 1014	AIRBUS	A320-214	0.0573826	0.6520505
## 1016	BOEING	A320-232	0.0573826	0.1539737
## 1017	BOEING	757-224	0.0573826	0.5916775
## 1018	BOEING	737-824	0.0573826	0.1539737
## 1020	AIRBUS	A320-232	0.0573826	0.9237287
## 1021	BOEING	A320-232	0.0573826	0.1539737
## 1022	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1024	BOEING	737-924ER	0.0573826	0.7878896
## 1026	AIRBUS	A320-232	0.0573826	0.9237287
## 1028	BOEING	737-724	0.0573826	0.1539737
## 1029	BOEING	737-7H4	0.0573826	0.0181346
## 1030	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1031	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 1032	BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595
## 1033	BOEING	A320-232	0.0573826	0.1539737
## 1034	BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595

## 1035		BOEING	737-401	0.0573826	0.1539737
## 1036		AIRBUS	A320-232	0.0573826	0.9237287
## 1037		BOEING	737-824	0.0573826	0.1539737
## 1038		BOEING	A320-232	0.0573826	0.1539737
## 1040	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 1042	MCDONNELL DOUGLAS		DC-9-82(MD-82)	0.0573826	0.5011181
## 1044	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1046	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 1047		AIRBUS	A321-231	0.0573826	3.6254178
## 1048		BOEING	737-7H4	0.0573826	0.0181346
## 1049		BOEING	757-231	0.0573826	0.5916775
## 1050		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1051		BOEING	A320-232	0.0573826	0.1539737
## 1053		BOEING	737-832	0.0573826	0.7577031
## 1054		BOEING	737-832	0.0573826	0.7577031
## 1055		AIRBUS	A319-131	0.0573826	0.6067708
## 1056		BOEING	737-832	0.0573826	0.7577031
## 1057		BOEING	737-832	0.0573826	0.7577031
## 1058	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1059		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1061	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1063	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1065		BOEING	737-824	0.0573826	0.1539737
## 1068	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1069		BOEING	737-724	0.0573826	0.1539737
## 1071		BOEING	737-824	0.0573826	0.1539737
## 1076		BOEING	A320-232	0.0573826	0.1539737
## 1077		AIRBUS	A320-214	0.0573826	0.6520505
## 1078		BOEING	A320-232	0.0573826	0.1539737
## 1079	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1080		BOEING	737-724	0.0573826	0.1539737
## 1085		AIRBUS	A320-232	0.0573826	0.9237287
## 1086		BOEING	737-824	0.0573826	0.1539737
## 1091		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1092		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1093		BOEING	A320-232	0.0573826	0.1539737
## 1096		BOEING	A320-232	0.0573826	0.1539737
## 1097		AIRBUS	A320-232	0.0573826	0.9237287
## 1098	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1099		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1100		BOEING	767-223	0.0573826	1.7538567
## 1101		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1103		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1104		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1106		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1107		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1108	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1109		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1110		BOEING	A320-232	0.0573826	0.1539737
## 1111		CESSNA	150 -11.5529141	-2.0647319	
## 1112		BOEING	A320-232	0.0573826	0.1539737
## 1113		BOEING	A320-232	0.0573826	0.1539737
## 1114	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1115	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904

## 1116	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1117	AIRBUS	A320-232	0.0573826	0.9237287
## 1118	BOEING	757-222	0.0573826	0.5916775
## 1119	BOEING	A320-232	0.0573826	0.1539737
## 1120	BOEING	717-200	0.0573826	-0.5855948
## 1121	BOEING	737-8H4	0.0573826	0.0181346
## 1122	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1123	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 1124	BOEING	A320-232	0.0573826	0.1539737
## 1125	AIRBUS	A320-232	0.0573826	0.9237287
## 1126	BOEING	A320-232	0.0573826	0.1539737
## 1127	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1128	BOEING	757-224	0.0573826	0.5916775
## 1129	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1130	BOEING	A320-232	0.0573826	0.1539737
## 1131	AIRBUS	A320-232	0.0573826	0.9237287
## 1132	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 1133	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 1134	BOEING	737-401	0.0573826	0.1539737
## 1135	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1136	AIRBUS INDUSTRIE	A319-132	0.0573826	0.6067708
## 1137	BOEING	A320-232	0.0573826	0.1539737
## 1138	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1139	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1140	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 1141	BOEING	A320-232	0.0573826	0.1539737
## 1142	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1143	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 1144	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1145	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1146	BOEING	737-832	0.0573826	0.7577031
## 1147	AIRBUS	A320-211	0.0573826	0.6520505
## 1148	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1149	BOEING	757-232	0.0573826	0.5916775
## 1150	AIRBUS	A320-232	0.0573826	0.9237287
## 1151	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 1152	AIRBUS	A320-214	0.0573826	0.6520505
## 1153	BOEING	737-7H4	0.0573826	0.0181346
## 1154	BOEING	A320-232	0.0573826	0.1539737
## 1155	BOEING	737-924ER	0.0573826	0.7878896
## 1156	BOEING	737-824	0.0573826	0.1539737
## 1157	BOEING	A320-232	0.0573826	0.1539737
## 1158	BOEING	737-724	0.0573826	0.1539737
## 1159	BOEING	A320-232	0.0573826	0.1539737
## 1160	BOEING	A320-232	0.0573826	0.1539737
## 1161	BOEING	A320-232	0.0573826	0.1539737
## 1162	MCDONNELL DOUGLAS CORPORATION	MD-88	0.0573826	0.0483211
## 1163	BOEING	757-231	0.0573826	0.5916775
## 1164	BOEING	717-200	0.0573826	-0.5855948
## 1165	BOEING	757-2Q8	0.0573826	0.5916775
## 1166	AIRBUS	A320-232	0.0573826	0.9237287
## 1167	AIRBUS	A320-214	0.0573826	0.6520505
## 1168	BOEING	757-2Q8	0.0573826	0.5916775
## 1170	AIRBUS	A320-232	0.0573826	0.9237287

## 1171	AIRBUS	A320-232	0.0573826	0.9237287
## 1172	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1173	BOEING	757-324	0.0573826	2.0557214
## 1174	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1175	BOEING	A320-232	0.0573826	0.1539737
## 1176	BOEING	737-7H4	0.0573826	0.0181346
## 1177	AIRBUS INDUSTRIE	A320-211	0.0573826	0.6520505
## 1178	BOEING	737-724	0.0573826	0.1539737
## 1179	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1180	BOEING	A320-232	0.0573826	0.1539737
## 1181	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1182	BOEING	A320-232	0.0573826	0.1539737
## 1183	AIRBUS	A320-232	0.0573826	0.9237287
## 1184	BOEING	737-832	0.0573826	0.7577031
## 1185	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 1186	BOEING	A320-232	0.0573826	0.1539737
## 1187	BOEING	717-200	0.0573826	-0.5855948
## 1188	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1189	BOEING	A320-232	0.0573826	0.1539737
## 1190	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1191	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1192	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1193	AIRBUS INDUSTRIE	A320-211	0.0573826	0.6520505
## 1194	BOEING	A320-232	0.0573826	0.1539737
## 1195	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1196	AIRBUS	A320-232	0.0573826	0.9237287
## 1197	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1198	BOEING	757-232	0.0573826	0.5916775
## 1199	BOEING	737-824	0.0573826	0.1539737
## 1200	BOEING	A320-232	0.0573826	0.1539737
## 1201	AIRBUS	A319-114	0.0573826	0.0936008
## 1202	BOEING	757-224	0.0573826	0.5916775
## 1203	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1204	BOEING	737-824	0.0573826	0.1539737
## 1205	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 1206	BOEING	A320-232	0.0573826	0.1539737
## 1207	AIRBUS	A320-232	0.0573826	0.9237287
## 1208	BOEING	737-924ER	0.0573826	0.7878896
## 1209	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1210	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1211	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1212	BOEING	A320-232	0.0573826	0.1539737
## 1213	BOEING	757-251	0.0573826	0.5916775
## 1214	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1215	BOEING	A320-232	0.0573826	0.1539737
## 1216	BOEING	757-231	0.0573826	0.5916775
## 1217	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1218	AIRBUS	A330-243	0.0573826	3.5952314
## 1219	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 1220	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1221	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1222	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1223	BOEING	737-724	0.0573826	0.1539737
## 1224	BOEING	757-324	0.0573826	2.0557214

## 1225	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1226	AIRBUS		A320-232	0.0573826	0.9237287
## 1227	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1228	AIRBUS		A320-232	0.0573826	0.9237287
## 1229	BOEING		A320-232	0.0573826	0.1539737
## 1230	AIRBUS		A320-232	0.0573826	0.9237287
## 1231	AIRBUS		A320-232	0.0573826	0.9237287
## 1232	AIRBUS		A320-232	0.0573826	0.9237287
## 1233	BOEING		737-7BD	0.0573826	0.1539737
## 1235	BOEING		737-3H4	0.0573826	0.1539737
## 1236	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1237	BOEING		A320-232	0.0573826	0.1539737
## 1238	BOEING		737-7H4	0.0573826	0.0181346
## 1239	BOEING		737-824	0.0573826	0.1539737
## 1240	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1241	BOEING		A320-232	0.0573826	0.1539737
## 1242	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1243	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1244	AIRBUS		A321-231	0.0573826	3.6254178
## 1245	AIRBUS		A320-232	0.0573826	0.9237287
## 1246	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1247	BOEING		A320-232	0.0573826	0.1539737
## 1248	AIRBUS INDUSTRIE		A321-211	0.0573826	0.9086355
## 1249	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1250	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 1251	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1252	BOEING		A320-232	0.0573826	0.1539737
## 1253	AIRBUS		A320-214	0.0573826	0.6520505
## 1254	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1255	BOEING		767-223	0.0573826	1.7538567
## 1257	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 1258	AIRBUS		A320-232	0.0573826	0.9237287
## 1259	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1260	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 1261	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1263	AIRBUS		A320-232	0.0573826	0.9237287
## 1264	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1265	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1266	BOEING		757-222	0.0573826	0.5916775
## 1268	BOEING		757-232	0.0573826	0.5916775
## 1269	BOEING		A320-232	0.0573826	0.1539737
## 1270	BOEING		A320-232	0.0573826	0.1539737
## 1272	BOEING		757-222	0.0573826	0.5916775
## 1273	BOEING		737-832	0.0573826	0.7577031
## 1274	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1275	AIRBUS		A319-114	0.0573826	0.0936008
## 1276	AIRBUS		A320-214	0.0573826	0.6520505
## 1277	BOEING		757-224	0.0573826	0.5916775
## 1278	BOEING		737-924ER	0.0573826	0.7878896
## 1279	AIRBUS		A319-114	0.0573826	0.0936008
## 1280	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1281	BOEING		737-732	0.0573826	0.1539737
## 1282	BOEING		A320-232	0.0573826	0.1539737
## 1284	BOEING		757-2Q8	0.0573826	0.5916775

## 1285		BOEING	A320-232	0.0573826	0.1539737
## 1286	MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181	
## 1287		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1288		AIRBUS	A320-214	0.0573826	0.6520505
## 1290	MCDONNELL DOUGLAS	DC-9-83(MD-83)	0.0573826	0.5011181	
## 1291		BOEING	737-824	0.0573826	0.1539737
## 1292		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1293		BOEING	737-832	0.0573826	0.7577031
## 1294		BOEING	737-7H4	0.0573826	0.0181346
## 1295		BOEING	737-7H4	0.0573826	0.0181346
## 1296	BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595	
## 1297		AIRBUS	A320-232	0.0573826	0.9237287
## 1298	MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181	
## 1299		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1300		BOEING	737-724	0.0573826	0.1539737
## 1303		BOEING	737-824	0.0573826	0.1539737
## 1304		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1305		BOEING	A320-232	0.0573826	0.1539737
## 1306		AIRBUS	A320-232	0.0573826	0.9237287
## 1308		BOEING	757-324	0.0573826	2.0557214
## 1309		CESSNA	172N	-11.5529141	-2.0345454
## 1310		BOEING	737-832	0.0573826	0.7577031
## 1311		AIRBUS	A320-214	0.0573826	0.6520505
## 1312		BOEING	737-7H4	0.0573826	0.0181346
## 1313		AIRBUS	A320-232	0.0573826	0.9237287
## 1314		BOEING	767-223	0.0573826	1.7538567
## 1315		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1317		BOEING	A320-232	0.0573826	0.1539737
## 1318		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1319		BOEING	A320-232	0.0573826	0.1539737
## 1320		BOEING	717-200	0.0573826	-0.5855948
## 1322		AIRBUS	A320-232	0.0573826	0.9237287
## 1323	BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595	
## 1325	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211	
## 1327		AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 1328		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1329		AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 1330	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904	
## 1331		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1332		BOEING	A320-232	0.0573826	0.1539737
## 1333	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287	
## 1334		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1335		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1336		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1338		BOEING	757-232	0.0573826	0.5916775
## 1340	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610	
## 1341		BOEING	757-2Q8	0.0573826	0.5916775
## 1342		AIRBUS	A321-231	0.0573826	3.6254178
## 1343		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1344		BOEING	A320-232	0.0573826	0.1539737
## 1346		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1347	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610	
## 1348		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1349		BOEING	A320-232	0.0573826	0.1539737

## 1350	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 1351	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1352	BOEING		767-424ER	0.0573826	2.3123064
## 1353	BOEING		757-224	0.0573826	0.5916775
## 1354	BOEING		737-7H4	0.0573826	0.0181346
## 1356	AIRBUS		A320-232	0.0573826	0.9237287
## 1357	BOEING		737-824	0.0573826	0.1539737
## 1358	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1359	BOEING		757-224	0.0573826	0.5916775
## 1360	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 1361	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 1362	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1364	BOEING		737-832	0.0573826	0.7577031
## 1366	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 1367	BOEING		757-251	0.0573826	0.5916775
## 1368	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 1369	BOEING		737-824	0.0573826	0.1539737
## 1370	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 1371	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 1372	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1374	BOEING		A320-232	0.0573826	0.1539737
## 1375	AIRBUS		A321-231	0.0573826	3.6254178
## 1376	BOEING		A320-232	0.0573826	0.1539737
## 1377	AIRBUS		A320-232	0.0573826	0.9237287
## 1378	BOEING		A320-232	0.0573826	0.1539737
## 1379	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1380	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 1381	BOEING		767-223	0.0573826	1.7538567
## 1382	BOEING		A320-232	0.0573826	0.1539737
## 1383	AIRBUS		A320-232	0.0573826	0.9237287
## 1385	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 1387	BOEING		737-832	0.0573826	0.7577031
## 1388	BOEING		A320-232	0.0573826	0.1539737
## 1389	BOEING		757-231	0.0573826	0.5916775
## 1390	BOEING		757-231	0.0573826	0.5916775
## 1391	BOEING		737-7Q8	0.0573826	0.1539737
## 1392	BOEING		737-732	0.0573826	0.1539737
## 1393	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 1394	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 1395	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1396	AIRBUS		A320-214	0.0573826	0.6520505
## 1397	GULFSTREAM AEROSPACE		G1159B	0.0573826	-1.7628672
## 1398	BOEING		A320-232	0.0573826	0.1539737
## 1399	BOEING		717-200	0.0573826	-0.5855948
## 1400	BOEING		757-224	0.0573826	0.5916775
## 1402	AIRBUS		A320-232	0.0573826	0.9237287
## 1403	BOEING		767-323	0.0573826	2.8858493
## 1404	BOEING		A320-232	0.0573826	0.1539737
## 1405	BOEING		A320-232	0.0573826	0.1539737
## 1406	AIRBUS		A320-232	0.0573826	0.9237287
## 1407	BOEING		737-832	0.0573826	0.7577031
## 1408	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1409	BOEING		757-222	0.0573826	0.5916775
## 1410	BOEING		757-222	0.0573826	0.5916775

## 1411	AIRBUS	A321-231	0.0573826	3.6254178
## 1412	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1413	BOEING	737-724	0.0573826	0.1539737
## 1414	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1415	AIRBUS	A320-232	0.0573826	0.9237287
## 1416	BOEING	A320-232	0.0573826	0.1539737
## 1419	BOEING	A320-232	0.0573826	0.1539737
## 1420	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 1421	BOEING	737-4B7	0.0573826	0.1539737
## 1422	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1423	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 1425	BOEING	737-832	0.0573826	0.7577031
## 1426	BOEING	737-724	0.0573826	0.1539737
## 1427	AIRBUS	A320-212	0.0573826	0.6520505
## 1428	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1429	AIRBUS	A320-232	0.0573826	0.9237287
## 1430	AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 1431	BOEING	A320-232	0.0573826	0.1539737
## 1432	BOEING	757-232	0.0573826	0.5916775
## 1433	BOEING	757-231	0.0573826	0.5916775
## 1434	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1435	BOEING	737-824	0.0573826	0.1539737
## 1436	BOEING	737-7H4	0.0573826	0.0181346
## 1438	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1439	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 1440	BOEING	737-832	0.0573826	0.7577031
## 1441	BOEING	717-200	0.0573826	-0.5855948
## 1442	BOEING	A320-232	0.0573826	0.1539737
## 1443	BOEING	737-824	0.0573826	0.1539737
## 1444	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 1445	AIRBUS	A319-114	0.0573826	0.0936008
## 1446	BOEING	737-832	0.0573826	0.7577031
## 1447	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1448	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1449	AIRBUS INDUSTRIE	A320-211	0.0573826	0.6520505
## 1450	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1451	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1452	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1455	BOEING	A320-232	0.0573826	0.1539737
## 1457	AIRBUS	A320-232	0.0573826	0.9237287
## 1460	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 1461	BOEING	737-7H4	0.0573826	0.0181346
## 1462	BOEING	A320-232	0.0573826	0.1539737
## 1463	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 1464	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1466	AIRBUS	A320-214	0.0573826	0.6520505
## 1467	BOEING	737-724	0.0573826	0.1539737
## 1468	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1469	BOEING	737-724	0.0573826	0.1539737
## 1472	MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 1473	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 1474	AIRBUS	A320-232	0.0573826	0.9237287
## 1475	AIRBUS	A320-232	0.0573826	0.9237287
## 1476	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536

## 1477		BOEING	A320-232	0.0573826	0.1539737
## 1478		BOEING	A320-232	0.0573826	0.1539737
## 1480		AIRBUS	A320-232	0.0573826	0.9237287
## 1481		BOEING	737-824	0.0573826	0.1539737
## 1482		BOEING	A320-232	0.0573826	0.1539737
## 1483		BOEING	A320-232	0.0573826	0.1539737
## 1484		BOEING	737-924ER	0.0573826	0.7878896
## 1486		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1487		AIRBUS	A320-232	0.0573826	0.9237287
## 1488		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1489		AIRBUS	A320-232	0.0573826	0.9237287
## 1490		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1493		AIRBUS	A320-232	0.0573826	0.9237287
## 1494		AIRBUS	A320-232	0.0573826	0.9237287
## 1495	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1497		BOEING	A320-232	0.0573826	0.1539737
## 1498		AIRBUS	A321-231	0.0573826	3.6254178
## 1499		BOEING	A320-232	0.0573826	0.1539737
## 1500		AIRBUS	A320-232	0.0573826	0.9237287
## 1501		BOEING	737-824	0.0573826	0.1539737
## 1502		AIRBUS	A320-232	0.0573826	0.9237287
## 1503		AIRBUS	A320-232	0.0573826	0.9237287
## 1504		BOEING	737-824	0.0573826	0.1539737
## 1505		AIRBUS	A320-232	0.0573826	0.9237287
## 1506		AIRBUS	A320-232	0.0573826	0.9237287
## 1507		BOEING	A320-232	0.0573826	0.1539737
## 1508		BOEING	737-7H4	0.0573826	0.0181346
## 1509	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1510		AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 1511		AIRBUS	A320-232	0.0573826	0.9237287
## 1512	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1513		BOEING	A320-232	0.0573826	0.1539737
## 1514		BOEING	737-824	0.0573826	0.1539737
## 1515		BOEING	737-832	0.0573826	0.7577031
## 1516		BOEING	757-2Q8	0.0573826	0.5916775
## 1517	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1518		BOEING	737-7H4	0.0573826	0.0181346
## 1519		BOEING	A320-232	0.0573826	0.1539737
## 1520		BOEING	A320-232	0.0573826	0.1539737
## 1521		BOEING	737-824	0.0573826	0.1539737
## 1522	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1523		BOEING	737-724	0.0573826	0.1539737
## 1524		BOEING	717-200	0.0573826	-0.5855948
## 1525		BOEING	A320-232	0.0573826	0.1539737
## 1526		AIRBUS	A319-114	0.0573826	0.0936008
## 1527		AIRBUS	A320-232	0.0573826	0.9237287
## 1528		BOEING	767-332	0.0573826	2.8858493
## 1529		AIRBUS	A320-232	0.0573826	0.9237287
## 1530		AIRBUS	A320-232	0.0573826	0.9237287
## 1531		BOEING	767-223	0.0573826	1.7538567
## 1533		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1534	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 1535		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1536		AIRBUS	A320-232	0.0573826	0.9237287

## 1537	AIRBUS		A321-231	0.0573826	3.6254178
## 1538	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536	
## 1539	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 1540	BOEING		A320-232	0.0573826	0.1539737
## 1541	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1542	CANADAIR LTD		CF-5D	23.2779759	-2.0647319
## 1543	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1544	BOEING		A320-232	0.0573826	0.1539737
## 1545	BOEING		737-732	0.0573826	0.1539737
## 1546	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1547	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1548	BOEING		A320-232	0.0573826	0.1539737
## 1549	AIRBUS		A320-232	0.0573826	0.9237287
## 1550	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 1551	BOEING		757-232	0.0573826	0.5916775
## 1552	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 1553	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1554	BOEING		A320-232	0.0573826	0.1539737
## 1555	GULFSTREAM AEROSPACE		G1159B	0.0573826	-1.7628672
## 1556	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1557	AIRBUS		A320-214	0.0573826	0.6520505
## 1558	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 1559	BOEING		757-224	0.0573826	0.5916775
## 1560	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1561	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 1562	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536	
## 1564	BOEING		737-924ER	0.0573826	0.7878896
## 1565	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 1566	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1567	EMBRAER		EMB-145XR	0.0573826	-1.2647904
## 1568	BOEING		757-231	0.0573826	0.5916775
## 1569	AIRBUS		A320-214	0.0573826	0.6520505
## 1570	AIRBUS		A330-243	0.0573826	3.5952314
## 1571	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536	
## 1572	BOEING		737-732	0.0573826	0.1539737
## 1573	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 1574	BOEING		737-724	0.0573826	0.1539737
## 1575	BOEING		757-232	0.0573826	0.5916775
## 1576	AIRBUS		A320-232	0.0573826	0.9237287
## 1577	AIRBUS		A320-214	0.0573826	0.6520505
## 1578	BOEING		737-76Q	0.0573826	0.1539737
## 1579	BOEING		A320-232	0.0573826	0.1539737
## 1580	BOEING		A320-232	0.0573826	0.1539737
## 1581	BOEING		757-33N	0.0573826	2.0557214
## 1582	MCDONNELL DOUGLAS	DC-9-83(MD-83)	0.0573826	0.5011181	
## 1583	AIRBUS		A320-232	0.0573826	0.9237287
## 1584	CIRRUS DESIGN CORP		SR22 -11.5529141	-2.0345454	
## 1586	BOEING		757-251	0.0573826	0.5916775
## 1587	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1588	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 1589	BOEING		737-724	0.0573826	0.1539737
## 1590	CANADAIR	CL-600-2B19	0.0573826	-1.2647904	
## 1591	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 1593	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008

## 1594	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1595		BOEING	717-200	0.0573826	-0.5855948
## 1596		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1597	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1598		BOEING	A320-232	0.0573826	0.1539737
## 1599		BOEING	A320-232	0.0573826	0.1539737
## 1600		AIRBUS	A320-232	0.0573826	0.9237287
## 1601		AIRBUS	A320-232	0.0573826	0.9237287
## 1602		BOEING	737-732	0.0573826	0.1539737
## 1603		BOEING	757-222	0.0573826	0.5916775
## 1604		BOEING	A320-232	0.0573826	0.1539737
## 1606		BOEING	757-222	0.0573826	0.5916775
## 1607		BOEING	737-3H4	0.0573826	0.1539737
## 1608		BOEING	A320-232	0.0573826	0.1539737
## 1609		BOEING	737-7H4	0.0573826	0.0181346
## 1610		AIRBUS	A319-114	0.0573826	0.0936008
## 1611		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1612		BOEING	737-7H4	0.0573826	0.0181346
## 1613		BOEING	717-200	0.0573826	-0.5855948
## 1614		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1615		AIRBUS	A320-232	0.0573826	0.9237287
## 1616		BOEING	737-3H4	0.0573826	0.1539737
## 1617		BOEING	A320-232	0.0573826	0.1539737
## 1618		BOEING	A320-232	0.0573826	0.1539737
## 1619	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 1620		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1622		BOEING	737-832	0.0573826	0.7577031
## 1623		AIRBUS	A320-232	0.0573826	0.9237287
## 1624		BOEING	757-251	0.0573826	0.5916775
## 1626		BOEING	757-224	0.0573826	0.5916775
## 1627		BOEING	A320-232	0.0573826	0.1539737
## 1628		BOEING	757-224	0.0573826	0.5916775
## 1629		BOEING	A320-232	0.0573826	0.1539737
## 1630		BOEING	A320-232	0.0573826	0.1539737
## 1631	AIRBUS INDUSTRIE		A321-211	0.0573826	0.9086355
## 1632		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1633	MCDONNELL DOUGLAS		DC-9-82(MD-82)	0.0573826	0.5011181
## 1634		BOEING	737-824	0.0573826	0.1539737
## 1635		BOEING	767-424ER	0.0573826	2.3123064
## 1636		BOEING	737-832	0.0573826	0.7577031
## 1638		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1640		BOEING	757-224	0.0573826	0.5916775
## 1641		AIRBUS	A319-114	0.0573826	0.0936008
## 1642		BOEING	A320-232	0.0573826	0.1539737
## 1643		BOEING	737-824	0.0573826	0.1539737
## 1646		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1647	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 1648	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1649		AIRBUS	A321-231	0.0573826	3.6254178
## 1650		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1651		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1652	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1653		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1654	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610

## 1655	BOEING	757-2Q8	0.0573826	0.5916775
## 1656	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1657	BOEING	757-232	0.0573826	0.5916775
## 1658	CESSNA	172N	-11.5529141	-2.0345454
## 1659	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 1660	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1661	AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 1662	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 1663	BOEING	757-222	0.0573826	0.5916775
## 1664	BOEING	767-424ER	0.0573826	2.3123064
## 1665	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1666	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 1667	BOEING	A320-232	0.0573826	0.1539737
## 1668	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1669	BOEING	A320-232	0.0573826	0.1539737
## 1670	BOEING	A320-232	0.0573826	0.1539737
## 1671	BOEING	757-2Q8	0.0573826	0.5916775
## 1672	BOEING	737-824	0.0573826	0.1539737
## 1673	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 1674	BOEING	737-7H4	0.0573826	0.0181346
## 1675	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1676	BOEING	A320-232	0.0573826	0.1539737
## 1677	BOEING	737-832	0.0573826	0.7577031
## 1678	BOEING	737-832	0.0573826	0.7577031
## 1679	BOEING	A320-232	0.0573826	0.1539737
## 1680	BEECH	65-A90	0.0573826	-1.9590792
## 1681	AIRBUS	A320-232	0.0573826	0.9237287
## 1682	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1683	BOEING	737-832	0.0573826	0.7577031
## 1684	AIRBUS INDUSTRIE	A320-211	0.0573826	0.6520505
## 1685	BOEING	A320-232	0.0573826	0.1539737
## 1686	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1687	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1688	AIRBUS	A320-232	0.0573826	0.9237287
## 1689	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1690	BOEING	A320-232	0.0573826	0.1539737
## 1691	BOEING	767-224	0.0573826	1.7538567
## 1692	BOEING	767-223	0.0573826	1.7538567
## 1693	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1694	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1695	BOEING	737-7H4	0.0573826	0.0181346
## 1696	BOEING	757-231	0.0573826	0.5916775
## 1697	BOEING	A320-232	0.0573826	0.1539737
## 1698	AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 1699	BOEING	A320-232	0.0573826	0.1539737
## 1701	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1702	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1703	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 1704	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1705	BOEING	A320-232	0.0573826	0.1539737
## 1706	BOEING	717-200	0.0573826	-0.5855948
## 1707	BOEING	767-323	0.0573826	2.8858493
## 1708	BOEING	737-76N	0.0573826	0.1539737
## 1709	BOEING	757-224	0.0573826	0.5916775

## 1710		BOEING	737-824	0.0573826	0.1539737
## 1711		BOEING	757-222	0.0573826	0.5916775
## 1712		AIRBUS	A320-232	0.0573826	0.9237287
## 1713		BOEING	737-924	0.0573826	0.7878896
## 1714		BOEING	757-224	0.0573826	0.5916775
## 1715		AIRBUS	A320-232	0.0573826	0.9237287
## 1716	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 1717		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1718		AIRBUS	A320-232	0.0573826	0.9237287
## 1719		AIRBUS	A320-232	0.0573826	0.9237287
## 1720		BOEING	A320-232	0.0573826	0.1539737
## 1721	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1722		BOEING	737-890	0.0573826	0.1539737
## 1723	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1724		BOEING	737-7H4	0.0573826	0.0181346
## 1726		BOEING	A320-232	0.0573826	0.1539737
## 1728	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1729		BOEING	A320-232	0.0573826	0.1539737
## 1730		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1731		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1733	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1734		BOEING	A320-232	0.0573826	0.1539737
## 1735		BOEING	A320-232	0.0573826	0.1539737
## 1736		BOEING	737-824	0.0573826	0.1539737
## 1737	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1738		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1739		AIRBUS	A319-114	0.0573826	0.0936008
## 1740		AIRBUS	A321-231	0.0573826	3.6254178
## 1741	ROBINSON HELICOPTER CO		R66	-11.5529141	-2.0194522
## 1742		BOEING	757-222	0.0573826	0.5916775
## 1743		AIRBUS	A320-232	0.0573826	0.9237287
## 1744		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1745		BOEING	767-223	0.0573826	1.7538567
## 1746	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 1747		BOEING	737-832	0.0573826	0.7577031
## 1748		BOEING	737-824	0.0573826	0.1539737
## 1749		BOEING	737-7H4	0.0573826	0.0181346
## 1751		BOEING	737-824	0.0573826	0.1539737
## 1753	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 1755		BOEING	A320-232	0.0573826	0.1539737
## 1756		BOEING	A320-232	0.0573826	0.1539737
## 1757	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1758		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1759	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1760		BOEING	737-924ER	0.0573826	0.7878896
## 1761		BOEING	A320-232	0.0573826	0.1539737
## 1762		BOEING	A320-232	0.0573826	0.1539737
## 1763		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1764	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1765		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1766	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1767		AIRBUS	A320-232	0.0573826	0.9237287
## 1768		BOEING	737-824	0.0573826	0.1539737
## 1769		AIRBUS	A320-232	0.0573826	0.9237287

## 1771		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1772		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1774		AIRBUS	A320-232	0.0573826	0.9237287
## 1776		AIRBUS	A320-232	0.0573826	0.9237287
## 1779		AIRBUS	A320-232	0.0573826	0.9237287
## 1780		CANADAIR	CL-600-2B19	0.0573826	-1.2647904
## 1781	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 1782		BOEING	757-223	0.0573826	0.5916775
## 1783		BOEING	757-222	0.0573826	0.5916775
## 1784		AIRBUS	A320-232	0.0573826	0.9237287
## 1785		BOEING	A320-232	0.0573826	0.1539737
## 1786		AIRBUS	A320-232	0.0573826	0.9237287
## 1787		AIRBUS	A320-232	0.0573826	0.9237287
## 1788		AIRBUS	A320-232	0.0573826	0.9237287
## 1789		BOEING	A320-232	0.0573826	0.1539737
## 1790		BOEING	737-832	0.0573826	0.7577031
## 1791		AIRBUS	A320-232	0.0573826	0.9237287
## 1792		BOEING	A320-232	0.0573826	0.1539737
## 1793		BOEING	757-222	0.0573826	0.5916775
## 1794		BOEING	A320-232	0.0573826	0.1539737
## 1795	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1796		BOEING	A320-232	0.0573826	0.1539737
## 1797	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 1798	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1799		AIRBUS	A320-232	0.0573826	0.9237287
## 1800		BOEING	A320-232	0.0573826	0.1539737
## 1801		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1802		AIRBUS	A319-114	0.0573826	0.0936008
## 1803		BOEING	757-2Q8	0.0573826	0.5916775
## 1804		BOEING	737-924ER	0.0573826	0.7878896
## 1806		BOEING	A320-232	0.0573826	0.1539737
## 1807		BOEING	737-924	0.0573826	0.7878896
## 1808		BOEING	757-222	0.0573826	0.5916775
## 1809		BOEING	A320-232	0.0573826	0.1539737
## 1810		AIRBUS	A320-232	0.0573826	0.9237287
## 1811		BOEING	A320-232	0.0573826	0.1539737
## 1812		BOEING	737-890	0.0573826	0.1539737
## 1813		AIRBUS	A320-214	0.0573826	0.6520505
## 1814	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1815	AMERICAN AIRCRAFT INC		FALCON XP -11.5529141	-2.0647319	
## 1816		BOEING	757-33N	0.0573826	2.0557214
## 1818		BOEING	A320-232	0.0573826	0.1539737
## 1819		AIRBUS	A319-114	0.0573826	0.0936008
## 1820		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1821	AIRBUS INDUSTRIE		A321-211	0.0573826	0.9086355
## 1822		BOEING	757-232	0.0573826	0.5916775
## 1823	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1824		BOEING	A320-232	0.0573826	0.1539737
## 1825		BOEING	737-7H4	0.0573826	0.0181346
## 1826		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1827	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1828		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1829	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1830		BOEING	737-732	0.0573826	0.1539737

## 1831		BOEING	A320-232	0.0573826	0.1539737
## 1832		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1833		BOEING	737-832	0.0573826	0.7577031
## 1834	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1835		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1836		BOEING	A320-232	0.0573826	0.1539737
## 1837	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 1838		BOEING	757-224	0.0573826	0.5916775
## 1839		BOEING	737-7H4	0.0573826	0.0181346
## 1840		BOEING	737-824	0.0573826	0.1539737
## 1841	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1842		AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1843		BOEING	A320-232	0.0573826	0.1539737
## 1844		BOEING	767-223	0.0573826	1.7538567
## 1845		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1846		BOEING	737-724	0.0573826	0.1539737
## 1847		AIRBUS	A319-131	0.0573826	0.6067708
## 1848		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1849		CESSNA	210-5(205)	-11.5529141	-2.0043589
## 1850		BOEING	737-824	0.0573826	0.1539737
## 1851		BOEING	A320-232	0.0573826	0.1539737
## 1852	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1853		AIRBUS	A320-232	0.0573826	0.9237287
## 1854		AIRBUS	A320-232	0.0573826	0.9237287
## 1855		BOEING	737-7BX	0.0573826	0.1539737
## 1856		AIRBUS	A320-232	0.0573826	0.9237287
## 1857		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1859		BOEING	A320-232	0.0573826	0.1539737
## 1860		AIRBUS	A320-214	0.0573826	0.6520505
## 1862		AIRBUS	A320-232	0.0573826	0.9237287
## 1864		BOEING	A320-232	0.0573826	0.1539737
## 1865	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1866		AIRBUS	A321-231	0.0573826	3.6254178
## 1867		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1868		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1869	AIRBUS INDUSTRIE		A320-214	0.0573826	0.6520505
## 1870	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1871	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1872		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1873	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 1874		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 1875		AIRBUS	A319-114	0.0573826	0.0936008
## 1876		BOEING	767-223	0.0573826	1.7538567
## 1878	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1880	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1881		BOEING	767-322	0.0573826	2.8858493
## 1882		BOEING	737-8H4	0.0573826	0.0181346
## 1883		BOEING	757-222	0.0573826	0.5916775
## 1885		BOEING	A320-232	0.0573826	0.1539737
## 1887	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 1888	GULFSTREAM AEROSPACE		G1159B	0.0573826	-1.7628672
## 1889	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 1890		BOEING	A320-232	0.0573826	0.1539737
## 1891		BOEING	A320-232	0.0573826	0.1539737

## 1892	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1893	AIRBUS		A320-214	0.0573826	0.6520505
## 1894	BOEING		737-7H4	0.0573826	0.0181346
## 1895	BOEING		757-224	0.0573826	0.5916775
## 1896	BOEING		717-200	0.0573826	-0.5855948
## 1897	BOEING		737-824	0.0573826	0.1539737
## 1898	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1899	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1900	BOEING		757-231	0.0573826	0.5916775
## 1901	BOEING		A320-232	0.0573826	0.1539737
## 1902	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1903	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 1904	BOEING		A320-232	0.0573826	0.1539737
## 1905	BOEING		757-251	0.0573826	0.5916775
## 1906	AIRBUS		A320-214	0.0573826	0.6520505
## 1907	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 1908	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 1909	AIRBUS		A320-232	0.0573826	0.9237287
## 1910	BOEING		A320-232	0.0573826	0.1539737
## 1911	BOEING		737-924ER	0.0573826	0.7878896
## 1912	BOEING		737-7H4	0.0573826	0.0181346
## 1913	BOEING		A320-232	0.0573826	0.1539737
## 1914	AIRBUS		A319-114	0.0573826	0.0936008
## 1915	BOEING		757-222	0.0573826	0.5916775
## 1916	MCDONNELL DOUGLAS		DC-9-82(MD-82)	0.0573826	0.5011181
## 1917	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 1918	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 1919	BOEING		737-7H4	0.0573826	0.0181346
## 1920	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 1921	AIRBUS		A320-232	0.0573826	0.9237287
## 1922	MCDONNELL DOUGLAS		DC-9-82(MD-82)	0.0573826	0.5011181
## 1923	BOEING		A320-232	0.0573826	0.1539737
## 1924	BOEING		737-7H4	0.0573826	0.0181346
## 1925	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1926	BOEING		A320-232	0.0573826	0.1539737
## 1927	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1928	AIRBUS		A320-232	0.0573826	0.9237287
## 1929	BOEING		737-832	0.0573826	0.7577031
## 1930	EMBRAER	ERJ 190-100 IGW		0.0573826	-1.7930536
## 1931	BOEING		737-7H4	0.0573826	0.0181346
## 1932	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1933	AIRBUS		A320-232	0.0573826	0.9237287
## 1934	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 1935	AIRBUS		A320-232	0.0573826	0.9237287
## 1936	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 1937	BOEING		757-222	0.0573826	0.5916775
## 1938	EMBRAER		EMB-145LR	0.0573826	-1.2647904
## 1940	BOEING		737-924ER	0.0573826	0.7878896
## 1941	BOEING		717-200	0.0573826	-0.5855948
## 1942	BOEING		757-224	0.0573826	0.5916775
## 1943	MCDONNELL DOUGLAS		DC-9-83(MD-83)	0.0573826	0.5011181
## 1944	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 1945	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 1946	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610

## 1947	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1948	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1949	BOEING	A320-232	0.0573826	0.1539737
## 1951	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 1952	BOEING	737-824	0.0573826	0.1539737
## 1953	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1954 MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1955	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 1957	AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 1959	AIRBUS	A320-232	0.0573826	0.9237287
## 1960	AIRBUS	A320-232	0.0573826	0.9237287
## 1961	BOEING	A320-232	0.0573826	0.1539737
## 1962	AIRBUS	A320-232	0.0573826	0.9237287
## 1963	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1964	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1965	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1966	BOEING	A320-232	0.0573826	0.1539737
## 1968	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1969	BOEING	A320-232	0.0573826	0.1539737
## 1970	BOEING	A320-232	0.0573826	0.1539737
## 1971	BOEING	737-824	0.0573826	0.1539737
## 1972	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1973	BOEING	767-424ER	0.0573826	2.3123064
## 1975	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 1976	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 1977	BOEING	767-223	0.0573826	1.7538567
## 1978	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 1979	BOEING	757-232	0.0573826	0.5916775
## 1980	GULFSTREAM AEROSPACE	G1159B	0.0573826	-1.7628672
## 1981	BOEING	737-832	0.0573826	0.7577031
## 1982	BOEING	737-832	0.0573826	0.7577031
## 1983 MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 1984	MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 1985	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 1986	AIRBUS	A320-232	0.0573826	0.9237287
## 1988	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 1989	BOEING	A320-232	0.0573826	0.1539737
## 1990	AIRBUS	A321-231	0.0573826	3.6254178
## 1991	AIRBUS	A320-214	0.0573826	0.6520505
## 1992	BOEING	737-824	0.0573826	0.1539737
## 1993	BOEING	737-7H4	0.0573826	0.0181346
## 1995	BOEING	A320-232	0.0573826	0.1539737
## 1997	BOEING	737-924ER	0.0573826	0.7878896
## 1998	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 1999	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 2000	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 2001	BOEING	A320-232	0.0573826	0.1539737
## 2002	AIRBUS	A320-214	0.0573826	0.6520505
## 2003	BOEING	A320-232	0.0573826	0.1539737
## 2004	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2005	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2006	BOEING	737-832	0.0573826	0.7577031
## 2007	AIRBUS	A321-211	0.0573826	0.9086355
## 2008	BOEING	A320-232	0.0573826	0.1539737

## 2012		BOEING	737-7H4	0.0573826	0.0181346
## 2013		AIRBUS	A320-214	0.0573826	0.6520505
## 2014		BOEING	A320-232	0.0573826	0.1539737
## 2015		BOEING	737-7H4	0.0573826	0.0181346
## 2016		BOEING	A320-232	0.0573826	0.1539737
## 2019		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2020		BOEING	737-832	0.0573826	0.7577031
## 2022		AIRBUS	A320-232	0.0573826	0.9237287
## 2023		BOEING	757-232	0.0573826	0.5916775
## 2024		AIRBUS	A320-232	0.0573826	0.9237287
## 2025		BOEING	A320-232	0.0573826	0.1539737
## 2027	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2028		BOEING	737-890	0.0573826	0.1539737
## 2030	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2031		BOEING	737-724	0.0573826	0.1539737
## 2032		AIRBUS	A320-232	0.0573826	0.9237287
## 2033	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2034		BOEING	A320-232	0.0573826	0.1539737
## 2035		BOEING	737-924ER	0.0573826	0.7878896
## 2036		BOEING	737-401	0.0573826	0.1539737
## 2037		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2038		BOEING	737-724	0.0573826	0.1539737
## 2039		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2040		BOEING	A320-232	0.0573826	0.1539737
## 2041		BOEING	A320-232	0.0573826	0.1539737
## 2042	AIRBUS INDUSTRIE		A321-211	0.0573826	0.9086355
## 2043		BOEING	737-824	0.0573826	0.1539737
## 2044		BOEING	A320-232	0.0573826	0.1539737
## 2045		AIRBUS	A319-114	0.0573826	0.0936008
## 2046		BOEING	757-2Q8	0.0573826	0.5916775
## 2047		BOEING	757-231	0.0573826	0.5916775
## 2048		BOEING	A320-232	0.0573826	0.1539737
## 2049		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2050		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2051		BOEING	767-332	0.0573826	2.8858493
## 2052	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 2053		AIRBUS	A319-114	0.0573826	0.0936008
## 2055	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2056		BOEING	A320-232	0.0573826	0.1539737
## 2057		BOEING	737-7H4	0.0573826	0.0181346
## 2058		AIRBUS	A320-232	0.0573826	0.9237287
## 2059		CANADAIR	CL-600-2B19	0.0573826	-1.2647904
## 2060		AIRBUS	A320-232	0.0573826	0.9237287
## 2062	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2063		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2064	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2065	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2066	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2067	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2068	AIRBUS INDUSTRIE		A319-114	0.0573826	0.0936008
## 2069		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2070		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2071	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2072		EMBRAER	EMB-145LR	0.0573826	-1.2647904

## 2074		BOEING	A320-232	0.0573826	0.1539737
## 2076		BOEING	757-222	0.0573826	0.5916775
## 2077	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2078		BOEING	737-824	0.0573826	0.1539737
## 2079		BOEING	717-200	0.0573826	-0.5855948
## 2080	LEBLANC GLENN T		FALCON XP	-11.5529141	-2.0647319
## 2081	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2083		BOEING	757-231	0.0573826	0.5916775
## 2085		BOEING	A320-232	0.0573826	0.1539737
## 2086		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2087		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2088		BOEING	A320-232	0.0573826	0.1539737
## 2089		AIRBUS	A320-232	0.0573826	0.9237287
## 2090		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2091		BOEING	767-223	0.0573826	1.7538567
## 2092		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2093		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2094	AIRBUS INDUSTRIE		A320-211	0.0573826	0.6520505
## 2095		AIRBUS	A320-232	0.0573826	0.9237287
## 2096		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2099		AIRBUS	A320-232	0.0573826	0.9237287
## 2100		AIRBUS	A320-232	0.0573826	0.9237287
## 2102		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2105		BOEING	A320-232	0.0573826	0.1539737
## 2106		AIRBUS	A320-232	0.0573826	0.9237287
## 2107	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2108	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 2109	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2110		BOEING	A320-232	0.0573826	0.1539737
## 2111		BOEING	757-232	0.0573826	0.5916775
## 2112		AIRBUS	A319-114	0.0573826	0.0936008
## 2113		BOEING	A320-232	0.0573826	0.1539737
## 2114	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 2115	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 2116		AIRBUS	A320-211	0.0573826	0.6520505
## 2117		BOEING	A320-232	0.0573826	0.1539737
## 2118		AIRBUS	A321-231	0.0573826	3.6254178
## 2119		BOEING	A320-232	0.0573826	0.1539737
## 2120	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 2121		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2122		AIRBUS	A320-232	0.0573826	0.9237287
## 2123	AIRBUS INDUSTRIE		A321-211	0.0573826	0.9086355
## 2124		BOEING	737-724	0.0573826	0.1539737
## 2125		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2126		BOEING	737-7H4	0.0573826	0.0181346
## 2127		BOEING	A320-232	0.0573826	0.1539737
## 2128	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2129	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 2130		BOEING	A320-232	0.0573826	0.1539737
## 2131	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2132	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 2133		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2134		AIRBUS	A320-214	0.0573826	0.6520505
## 2135		AIRBUS	A320-232	0.0573826	0.9237287

## 2136		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2137		AIRBUS	A320-211	0.0573826	0.6520505
## 2138		BOEING	A320-232	0.0573826	0.1539737
## 2139		BOEING	757-231	0.0573826	0.5916775
## 2140		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2141		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2142		BOEING	757-2Q8	0.0573826	0.5916775
## 2143		AIRBUS	A320-232	0.0573826	0.9237287
## 2144		BOEING	737-824	0.0573826	0.1539737
## 2145		AIRBUS	A320-232	0.0573826	0.9237287
## 2146		BOEING	A320-232	0.0573826	0.1539737
## 2147	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2148		BOEING	757-222	0.0573826	0.5916775
## 2149		BOEING	737-724	0.0573826	0.1539737
## 2151		BOEING	A320-232	0.0573826	0.1539737
## 2152	MCDONNELL DOUGLAS CORPORATION		MD-88	0.0573826	0.0483211
## 2153		BOEING	757-223	0.0573826	0.5916775
## 2154		BOEING	767-223	0.0573826	1.7538567
## 2155		BOEING	737-890	0.0573826	0.1539737
## 2156		BOEING	757-231	0.0573826	0.5916775
## 2157		BOEING	737-824	0.0573826	0.1539737
## 2158	MCDONNELL DOUGLAS	DC-9-83(MD-83)		0.0573826	0.5011181
## 2159		BOEING	767-223	0.0573826	1.7538567
## 2160		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2161		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2162		BOEING	737-824	0.0573826	0.1539737
## 2163	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 2164		AIRBUS	A320-232	0.0573826	0.9237287
## 2165		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2166		BOEING	A320-232	0.0573826	0.1539737
## 2167	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2168		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2169		AIRBUS	A319-114	0.0573826	0.0936008
## 2170		AIRBUS	A320-232	0.0573826	0.9237287
## 2171	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 2172		BOEING	737-7H4	0.0573826	0.0181346
## 2173	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 2174	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2175		BOEING	A320-232	0.0573826	0.1539737
## 2176		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2177		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2178		BOEING	A320-232	0.0573826	0.1539737
## 2179		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2180	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2182		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2183	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2184		AIRBUS	A321-231	0.0573826	3.6254178
## 2185		AIRBUS	A320-214	0.0573826	0.6520505
## 2186		BOEING	757-232	0.0573826	0.5916775
## 2187		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2188		BOEING	737-924ER	0.0573826	0.7878896
## 2189		BOEING	737-7H4	0.0573826	0.0181346
## 2190		BOEING	737-824	0.0573826	0.1539737
## 2191		BOEING	737-824	0.0573826	0.1539737

## 2192		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2193		BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2194		BOEING	A320-232	0.0573826	0.1539737
## 2195		AIRBUS	A320-232	0.0573826	0.9237287
## 2196		AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2197		BOEING	737-924ER	0.0573826	0.7878896
## 2198		BOEING	A320-232	0.0573826	0.1539737
## 2199		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2200		BOEING	737-732	0.0573826	0.1539737
## 2201		BOEING	A320-232	0.0573826	0.1539737
## 2202		AIRBUS	A320-232	0.0573826	0.9237287
## 2203		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2204		BOEING	757-231	0.0573826	0.5916775
## 2205		BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2206		AIRBUS	A319-114	0.0573826	0.0936008
## 2207		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2208		BOEING	767-223	0.0573826	1.7538567
## 2209		BOEING	A320-232	0.0573826	0.1539737
## 2210		BOEING	757-222	0.0573826	0.5916775
## 2211		AIRBUS	A320-232	0.0573826	0.9237287
## 2212		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2215		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2216		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2217		BOEING	757-33N	0.0573826	2.0557214
## 2218		AIRBUS	A320-232	0.0573826	0.9237287
## 2219		AIRBUS	A320-232	0.0573826	0.9237287
## 2220		AIRBUS	A320-232	0.0573826	0.9237287
## 2221		AIRBUS	A320-214	0.0573826	0.6520505
## 2222		BOEING	A320-232	0.0573826	0.1539737
## 2223		BOEING	737-7H4	0.0573826	0.0181346
## 2224		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2225		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2226		BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 2227		BOEING	737-7H4	0.0573826	0.0181346
## 2228		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2229		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2230		AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2231		BOEING	757-2Q8	0.0573826	0.5916775
## 2232		AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2233		AIRBUS	A320-232	0.0573826	0.9237287
## 2235		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2236		BOEING	A320-232	0.0573826	0.1539737
## 2237		BOEING	737-824	0.0573826	0.1539737
## 2238		AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2239	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 2240		AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2241		BOEING	737-824	0.0573826	0.1539737
## 2242		BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595
## 2243		AIRBUS	A320-214	0.0573826	0.6520505
## 2244	MCDONNELL DOUGLAS		DC-9-82(MD-82)	0.0573826	0.5011181
## 2245		AIRBUS	A320-232	0.0573826	0.9237287
## 2246		AIRBUS	A319-114	0.0573826	0.0936008
## 2247		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2248		BOEING	A320-232	0.0573826	0.1539737

## 2249	AIRBUS	A320-232	0.0573826	0.9237287
## 2250	BOEING	A320-232	0.0573826	0.1539737
## 2251	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2252	BOEING	737-7H4	0.0573826	0.0181346
## 2253	BOEING	A320-232	0.0573826	0.1539737
## 2254	BOEING	A320-232	0.0573826	0.1539737
## 2255	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 2256	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2257	BOEING	757-232	0.0573826	0.5916775
## 2259	CESSNA	172N	-11.5529141	-2.0345454
## 2260	AIRBUS	A320-232	0.0573826	0.9237287
## 2261	AIRBUS	A320-232	0.0573826	0.9237287
## 2262	AIRBUS	A319-114	0.0573826	0.0936008
## 2263	BOEING	757-224	0.0573826	0.5916775
## 2264	ROBINSON HELICOPTER CO	R66	-11.5529141	-2.0194522
## 2265	BOEING	737-832	0.0573826	0.7577031
## 2266	BOEING	A320-232	0.0573826	0.1539737
## 2267	BOEING	717-200	0.0573826	-0.5855948
## 2268	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 2269	AIRBUS	A319-114	0.0573826	0.0936008
## 2270	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2271	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2272	BOEING	767-223	0.0573826	1.7538567
## 2273	BOEING	A320-232	0.0573826	0.1539737
## 2274	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2275	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2276	BOEING	A320-232	0.0573826	0.1539737
## 2277	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2278	BOEING	A320-232	0.0573826	0.1539737
## 2279	BOEING	737-7H4	0.0573826	0.0181346
## 2280	BOEING	737-824	0.0573826	0.1539737
## 2281	BOEING	A320-232	0.0573826	0.1539737
## 2282	BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595
## 2283	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 2285	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2286	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 2287	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2288	AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 2289	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2290	BOEING	757-232	0.0573826	0.5916775
## 2291	BOEING	737-7H4	0.0573826	0.0181346
## 2292	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2293	AIRBUS	A320-232	0.0573826	0.9237287
## 2294	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2295	BOEING	717-200	0.0573826	-0.5855948
## 2296	BOEING	A320-232	0.0573826	0.1539737
## 2297	BOEING	737-724	0.0573826	0.1539737
## 2298	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2300	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2301	AIRBUS	A320-214	0.0573826	0.6520505
## 2302	BOEING	767-424ER	0.0573826	2.3123064
## 2303	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2304	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2305	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708

## 2306		CANADAIR	CL-600-2B19	0.0573826	-1.2647904
## 2307	AIRBUS INDUSTRIE	BOEING	A319-114	0.0573826	0.0936008
## 2308		BOEING	A320-232	0.0573826	0.1539737
## 2309		BOEING	757-222	0.0573826	0.5916775
## 2310		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2312	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 2313		AIRBUS	A320-232	0.0573826	0.9237287
## 2314	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 2315		AIRBUS	A321-231	0.0573826	3.6254178
## 2316		BOEING	A320-232	0.0573826	0.1539737
## 2317		AIRBUS	A319-114	0.0573826	0.0936008
## 2318	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2319	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2320		BOEING	A320-232	0.0573826	0.1539737
## 2321		BOEING	A320-232	0.0573826	0.1539737
## 2322		BOEING	757-232	0.0573826	0.5916775
## 2323	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2324		AIRBUS	A321-231	0.0573826	3.6254178
## 2325		BOEING	757-224	0.0573826	0.5916775
## 2326		BOEING	757-222	0.0573826	0.5916775
## 2327		AIRBUS	A320-232	0.0573826	0.9237287
## 2328		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2329	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2330		BOEING	A320-232	0.0573826	0.1539737
## 2331		BOEING	757-224	0.0573826	0.5916775
## 2332		BOEING	A320-232	0.0573826	0.1539737
## 2334		BOEING	737-824	0.0573826	0.1539737
## 2335		BOEING	737-7H4	0.0573826	0.0181346
## 2336	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2337		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2338		BOEING	A320-232	0.0573826	0.1539737
## 2339		BOEING	A320-232	0.0573826	0.1539737
## 2340		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2341	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2343		BOEING	757-222	0.0573826	0.5916775
## 2344		BOEING	767-323	0.0573826	2.8858493
## 2345		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2346		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2347	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2348		BOEING	737-824	0.0573826	0.1539737
## 2349		BOEING	767-223	0.0573826	1.7538567
## 2350		BOEING	737-832	0.0573826	0.7577031
## 2351		BOEING	737-832	0.0573826	0.7577031
## 2352	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2353		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2354		BOEING	717-200	0.0573826	-0.5855948
## 2355	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 2356		AIRBUS	A320-232	0.0573826	0.9237287
## 2357		BOEING	A320-232	0.0573826	0.1539737
## 2358	AIRBUS INDUSTRIE		A320-212	0.0573826	0.6520505
## 2359	AIRBUS INDUSTRIE		A319-131	0.0573826	0.6067708
## 2360		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2363	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2364	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610

## 2365	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 2366		BOEING	A320-232	0.0573826	0.1539737
## 2367		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2368		BOEING	A320-232	0.0573826	0.1539737
## 2369	BOMBARDIER INC		CL-600-2D24	0.0573826	-0.6610610
## 2370		AIRBUS	A320-232	0.0573826	0.9237287
## 2371	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2372		AIRBUS	A321-231	0.0573826	3.6254178
## 2373		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2375	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2376	MCDONNELL DOUGLAS		DC-9-82(MD-82)	0.0573826	0.5011181
## 2378	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904
## 2379	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2380		AIRBUS	A319-114	0.0573826	0.0936008
## 2381	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 2383		BOEING	757-232	0.0573826	0.5916775
## 2384		AIRBUS	A320-232	0.0573826	0.9237287
## 2385		BOEING	757-231	0.0573826	0.5916775
## 2386		BOEING	737-7H4	0.0573826	0.0181346
## 2387		BOEING	A320-232	0.0573826	0.1539737
## 2388		AIRBUS	A320-232	0.0573826	0.9237287
## 2389		AIRBUS	A320-232	0.0573826	0.9237287
## 2390	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2391		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2392	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
## 2395		BOEING	737-724	0.0573826	0.1539737
## 2396		BOEING	A320-232	0.0573826	0.1539737
## 2397		AIRBUS	A321-231	0.0573826	3.6254178
## 2398		BOEING	A320-232	0.0573826	0.1539737
## 2399		BOEING	737-832	0.0573826	0.7577031
## 2401		BOEING	757-222	0.0573826	0.5916775
## 2402		BOEING	757-224	0.0573826	0.5916775
## 2403		AIRBUS	A320-232	0.0573826	0.9237287
## 2404		BOEING	737-7H4	0.0573826	0.0181346
## 2405		BOEING	737-7H4	0.0573826	0.0181346
## 2406		EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2407	GULFSTREAM AEROSPACE		G1159B	0.0573826	-1.7628672
## 2408		AIRBUS	A320-232	0.0573826	0.9237287
## 2409	AIRBUS INDUSTRIE		A320-232	0.0573826	0.9237287
## 2410		BOEING	767-223	0.0573826	1.7538567
## 2411		BOEING	737-705	0.0573826	0.1539737
## 2412	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 2413		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2414		AIRBUS	A320-232	0.0573826	0.9237287
## 2415		BOEING	A320-232	0.0573826	0.1539737
## 2416		AIRBUS	A320-232	0.0573826	0.9237287
## 2417		BOEING	A320-232	0.0573826	0.1539737
## 2418		BOEING	A320-232	0.0573826	0.1539737
## 2419	BOMBARDIER INC		CL-600-2C10	0.0573826	-0.8874595
## 2420		BOEING	737-7H4	0.0573826	0.0181346
## 2421		AIRBUS	A320-232	0.0573826	0.9237287
## 2422		BOEING	737-724	0.0573826	0.1539737
## 2423		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2425	BOMBARDIER INC		CL-600-2B19	0.0573826	-1.2647904

## 2426	BOEING	737-824	0.0573826	0.1539737
## 2427	BOEING	737-724	0.0573826	0.1539737
## 2428	BOEING	A320-232	0.0573826	0.1539737
## 2429	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2430	BOMBARDIER INC	CL-600-2C10	0.0573826	-0.8874595
## 2431	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 2432	BOEING	757-222	0.0573826	0.5916775
## 2434	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 2435	AIRBUS	A320-232	0.0573826	0.9237287
## 2436	BOEING	737-832	0.0573826	0.7577031
## 2437	BOEING	A320-232	0.0573826	0.1539737
## 2438	BOEING	A320-232	0.0573826	0.1539737
## 2439	AIRBUS	A320-211	0.0573826	0.6520505
## 2440	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2441	MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 2442	BOEING	717-200	0.0573826	-0.5855948
## 2443	BOEING	767-332	0.0573826	2.8858493
## 2444	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2445	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2446	BOEING	737-7H4	0.0573826	0.0181346
## 2447	BOEING	A320-232	0.0573826	0.1539737
## 2448	BOEING	A320-232	0.0573826	0.1539737
## 2449	AIRBUS	A320-232	0.0573826	0.9237287
## 2450	AIRBUS	A320-232	0.0573826	0.9237287
## 2451	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2452	AIRBUS	A320-232	0.0573826	0.9237287
## 2453	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2454	BOEING	757-232	0.0573826	0.5916775
## 2455	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2456	BOEING	737-832	0.0573826	0.7577031
## 2457	BOEING	737-832	0.0573826	0.7577031
## 2458	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2459	BOEING	A320-232	0.0573826	0.1539737
## 2460	BOEING	737-7H4	0.0573826	0.0181346
## 2461	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 2462	BOEING	737-724	0.0573826	0.1539737
## 2463	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2464	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 2465	AIRBUS	A319-114	0.0573826	0.0936008
## 2466	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2467	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 2469	BOEING	A320-232	0.0573826	0.1539737
## 2470	BOEING	737-724	0.0573826	0.1539737
## 2471	CESSNA	172N	-11.5529141	-2.0345454
## 2472	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2475	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2476	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2477	AIRBUS	A320-232	0.0573826	0.9237287
## 2480	BOEING	A320-232	0.0573826	0.1539737
## 2481	BOEING	737-7H4	0.0573826	0.0181346
## 2482	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2483	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2486	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2487	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536

## 2489	AIRBUS	A320-232	0.0573826	0.9237287
## 2492	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2495	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2496	AIRBUS	A320-232	0.0573826	0.9237287
## 2497	BOEING	A320-232	0.0573826	0.1539737
## 2498	BOEING	A320-232	0.0573826	0.1539737
## 2499	BOEING	A320-232	0.0573826	0.1539737
## 2500	BOEING	717-200	0.0573826	-0.5855948
## 2501	AIRBUS	A319-114	0.0573826	0.0936008
## 2502	BOEING	A320-232	0.0573826	0.1539737
## 2503	CANADAIR	CL-600-2B19	0.0573826	-1.2647904
## 2504	AIRBUS	A320-232	0.0573826	0.9237287
## 2505	BOEING	A320-232	0.0573826	0.1539737
## 2506	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2507	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2508	BOEING	A320-232	0.0573826	0.1539737
## 2509	BOEING	737-7H4	0.0573826	0.0181346
## 2510	BOEING	757-222	0.0573826	0.5916775
## 2511	AIRBUS	A319-114	0.0573826	0.0936008
## 2512	AIRBUS	A321-211	0.0573826	0.9086355
## 2513	AIRBUS	A320-232	0.0573826	0.9237287
## 2514	AIRBUS INDUSTRIE	A321-211	0.0573826	0.9086355
## 2515	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2516	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2517	AIRBUS	A320-232	0.0573826	0.9237287
## 2518	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2519	BOEING	757-222	0.0573826	0.5916775
## 2520	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2521	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 2522	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2523	BOEING	737-724	0.0573826	0.1539737
## 2524	BOEING	A320-232	0.0573826	0.1539737
## 2525	BOEING	757-232	0.0573826	0.5916775
## 2526	BOEING	737-824	0.0573826	0.1539737
## 2527	BOEING	A320-232	0.0573826	0.1539737
## 2528	BOEING	757-231	0.0573826	0.5916775
## 2529	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 2530	BOEING	757-231	0.0573826	0.5916775
## 2531	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2532	BOEING	737-924	0.0573826	0.7878896
## 2533	BOEING	737-924	0.0573826	0.7878896
## 2534	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2535	AIRBUS	A320-232	0.0573826	0.9237287
## 2536	AIRBUS	A320-232	0.0573826	0.9237287
## 2537	BOEING	737-724	0.0573826	0.1539737
## 2538	AIRBUS INDUSTRIE	A319-131	0.0573826	0.6067708
## 2539	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2540	AIRBUS	A320-214	0.0573826	0.6520505
## 2541	BOEING	767-223	0.0573826	1.7538567
## 2542	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 2543	BOEING	717-200	0.0573826	-0.5855948
## 2544	BOEING	737-824	0.0573826	0.1539737
## 2545	BOEING	737-890	0.0573826	0.1539737
## 2546	BOEING	767-223	0.0573826	1.7538567

## 2547	AIRBUS INDUSTRIE	A319-114	0.0573826	0.0936008
## 2548	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2549	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2550	BOEING	737-924ER	0.0573826	0.7878896
## 2551	BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 2552	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2553	AIRBUS	A321-231	0.0573826	3.6254178
## 2554	BOEING	737-7BD	0.0573826	0.1539737
## 2555	BOEING	757-222	0.0573826	0.5916775
## 2556	AIRBUS	A320-232	0.0573826	0.9237287
## 2557	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2558	BOEING	717-200	0.0573826	-0.5855948
## 2559	BOEING	A320-232	0.0573826	0.1539737
## 2560	MCDONNELL DOUGLAS AIRCRAFT CO	MD-88	0.0573826	0.0483211
## 2561	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2562	BOEING	757-232	0.0573826	0.5916775
## 2563	BOEING	737-732	0.0573826	0.1539737
## 2564	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 2565	AIRBUS INDUSTRIE	A320-212	0.0573826	0.6520505
## 2566	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2567	BOEING	A320-232	0.0573826	0.1539737
## 2568	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2569	AIRBUS	A320-232	0.0573826	0.9237287
## 2570	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2571	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2572	MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 2573	AIRBUS	A320-211	0.0573826	0.6520505
## 2574	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2575	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2576	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2577	BOEING	A320-232	0.0573826	0.1539737
## 2578	BOEING	737-924ER	0.0573826	0.7878896
## 2579	BOEING	757-26D	0.0573826	0.5916775
## 2580	BOEING	A320-232	0.0573826	0.1539737
## 2581	BOEING	757-224	0.0573826	0.5916775
## 2582	AIRBUS INDUSTRIE	A319-112	0.0573826	0.6067708
## 2583	BOEING	737-824	0.0573826	0.1539737
## 2584	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2585	BOEING	A320-232	0.0573826	0.1539737
## 2586	BOMBARDIER INC	CL-600-2D24	0.0573826	-0.6610610
## 2587	EMBRAER	EMB-145XR	0.0573826	-1.2647904
## 2588	BOEING	A320-232	0.0573826	0.1539737
## 2589	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2590	BOEING	737-824	0.0573826	0.1539737
## 2591	BOEING	767-223	0.0573826	1.7538567
## 2592	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2593	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2594	AIRBUS INDUSTRIE	A320-232	0.0573826	0.9237287
## 2595	BOEING	757-232	0.0573826	0.5916775
## 2596	EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2597	BOEING	A320-232	0.0573826	0.1539737
## 2598	EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2599	BOEING	757-222	0.0573826	0.5916775
## 2600	BOEING	737-724	0.0573826	0.1539737

## 2601		EMBRAER	ERJ 190-100 IGW	0.0573826	-1.7930536
## 2602		MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 2603		MCDONNELL DOUGLAS	DC-9-82(MD-82)	0.0573826	0.5011181
## 2604		BOMBARDIER INC	CL-600-2B19	0.0573826	-1.2647904
## 2605		BOEING	737-824	0.0573826	0.1539737
## 2606		AIRBUS	A320-232	0.0573826	0.9237287
## 2607		AIRBUS	A320-232	0.0573826	0.9237287
## 2608		AIRBUS	A320-214	0.0573826	0.6520505
## 2609		AIRBUS	A320-232	0.0573826	0.9237287
## 2610		BOEING	737-724	0.0573826	0.1539737
## 2611	LEBLANC	GLENN T	FALCON XP	-11.5529141	-2.0647319
## 2612		BOEING	737-7H4	0.0573826	0.0181346
## 2613		BOEING	A320-232	0.0573826	0.1539737
## 2614		BOEING	737-824	0.0573826	0.1539737
## 2615		BOEING	757-232	0.0573826	0.5916775
## 2616	AIRBUS INDUSTRIE		A319-112	0.0573826	0.6067708
## 2617		EMBRAER	EMB-145LR	0.0573826	-1.2647904
## 2618		AIRBUS	A320-232	0.0573826	0.9237287
## 2619	MCDONNELL DOUGLAS AIRCRAFT CO		MD-88	0.0573826	0.0483211
##		engine	sched_arr_time_minute	sched_arr_time_num_minute	
## 1	Turbo-fan		1.20547743		-1.34997330
## 2	Turbo-fan		-0.05530377		-1.62455043
## 3	Turbo-fan		1.26278567		-1.34662479
## 4	Turbo-jet		-0.68569437		-1.25956375
## 5	Turbo-fan		0.46047036		-1.19259372
## 6	Turbo-fan		-1.31608498		-1.69821746
## 7	Turbo-fan		-1.54531792		-1.30979128
## 8	Turbo-fan		-0.22722848		-1.43368584
## 9	Turbo-fan		-0.51376966		-1.45042834
## 10	Turbo-fan		-0.45646143		-1.24616974
## 11	Turbo-fan		-1.65993439		-0.91466808
## 12	Turbo-fan		-0.80031085		-1.26626075
## 13	Turbo-fan		0.63239507		-0.78072802
## 14	Turbo-fan		1.03355272		-1.15910870
## 15	Turbo-fan		-1.08685203		-1.48391336
## 16	Turbo-fan		0.63239507		-1.58436841
## 17	Turbo-fan		0.23123741		-1.40689782
## 18	Turbo-fan		-0.05530377		-1.62455043
## 19	Turbo-fan		1.14816919		-1.55423189
## 20	Turbo-fan		0.63239507		-1.18254821
## 21	Turbo-jet		1.09086096		-1.35667030
## 22	Turbo-fan		-1.08685203		-1.48391336
## 23	Turbo-jet		-0.74300261		-1.26291225
## 24	Turbo-fan		0.74701154		-1.17585121
## 25	Turbo-fan		-0.45646143		-1.24616974
## 26	Turbo-jet		-1.14416027		-1.08544167
## 27	Turbo-jet		0.05931270		-1.01512313
## 28	Turbo-fan		0.91893625		-0.96489561
## 29	Turbo-fan		1.20547743		-1.34997330
## 30	Turbo-fan		1.72125156		-1.11892668
## 31	Turbo-fan		0.63239507		-1.18254821
## 32	Turbo-fan		-0.80031085		-1.06535066
## 33	Turbo-jet		-1.20146850		-1.08879017
## 34	Turbo-fan		0.17392917		-1.41024632

## 35	Turbo-fan	-1.31608498	-0.69366698
## 36	Turbo-fan	0.34585388	-0.99838062
## 37	Turbo-fan	0.63239507	-1.38345831
## 38	Turbo-jet	-0.68569437	-1.05865365
## 39	Turbo-fan	0.05931270	-1.01512313
## 40	Turbo-fan	0.63239507	-0.98163812
## 41	Turbo-fan	1.32009390	-1.14236619
## 42	Turbo-fan	0.51777859	-0.98833512
## 43	Turbo-fan	-0.80031085	-0.86444056
## 44	Turbo-fan	-0.91492732	-0.87113756
## 45	Turbo-fan	0.51777859	-0.98833512
## 46	Turbo-fan	-1.65993439	-0.91466808
## 47	Turbo-fan	-0.22722848	-0.83095554
## 49	Turbo-fan	1.72125156	-1.11892668
## 50	Turbo-fan	-1.08685203	-0.88118307
## 51	Turbo-fan	0.68970330	-0.97828961
## 52	Turbo-fan	1.43471038	-0.93475909
## 53	Turbo-fan	-0.22722848	-1.23277574
## 54	Turbo-jet	0.86162801	-0.76733401
## 55	Turbo-fan	-1.08685203	-1.08209316
## 56	Turbo-fan	0.46047036	-0.99168362
## 57	Turbo-fan	0.17392917	-1.00842613
## 58	Turbo-fan	-0.74300261	-1.06200216
## 59	Turbo-fan	-0.68569437	-1.05865365
## 60	Turbo-jet	0.00200446	-0.41574134
## 61	Turbo-fan	0.91893625	-1.16580571
## 62	Turbo-fan	-0.28453672	-1.03521414
## 63	Turbo-fan	-0.22722848	-1.03186564
## 64	Turbo-fan	-1.37339321	-0.89792558
## 66	Turbo-fan	-0.97223556	-1.07539616
## 67	Turbo-jet	-1.65993439	-0.71375799
## 68	Turbo-fan	0.57508683	-0.98498662
## 69	Turbo-fan	0.05931270	-1.01512313
## 70	Turbo-fan	-1.54531792	-0.90797108
## 71	Turbo-fan	1.20547743	-0.74724300
## 72	Turbo-jet	0.34585388	-0.99838062
## 73	Turbo-fan	1.20547743	-0.34542281
## 75	Turbo-jet	0.40316212	-0.79412202
## 76	Turbo-fan	0.40316212	-0.99503212
## 77	Turbo-fan	-1.37339321	-0.89792558
## 78	Turbo-fan	-1.31608498	-0.69366698
## 79	Turbo-fan	0.91893625	-0.76398551
## 80	Turbo-fan	-1.48800968	-0.70371248
## 81	Turbo-fan	-0.51376966	-0.84769805
## 82	Turbo-fan	0.23123741	-0.80416753
## 83	Turbo-jet	0.91893625	-0.96489561
## 84	Turbo-jet	-0.22722848	-0.83095554
## 86	Turbo-jet	-0.74300261	-0.25836176
## 87	Reciprocating	0.63239507	-0.57981792
## 88	Turbo-fan	0.91893625	-0.56307541
## 89	Turbo-fan	-1.20146850	-0.88788007
## 90	Turbo-fan	-0.22722848	-1.03186564
## 91	Turbo-fan	-0.11261201	-0.62334844
## 92	Turbo-jet	-0.51376966	-0.64678795

## 93	Turbo-fan	-1.14416027	-0.68362147
## 94	Reciprocating	0.51777859	-0.58651492
## 95	Turbo-fan	-1.20146850	-0.88788007
## 96	Turbo-fan	-0.22722848	-0.63004545
## 97	Turbo-fan	-1.54531792	-0.90797108
## 98	Turbo-fan	1.66394332	-0.51954489
## 99	Turbo-fan	-1.54531792	-0.70706098
## 100	Turbo-fan	0.68970330	-0.57646942
## 101	Turbo-fan	-0.57107790	-0.44922636
## 102	Turbo-fan	-1.31608498	-0.69366698
## 103	Turbo-jet	-1.25877674	-0.48940838
## 104	Turbo-fan	1.20547743	-0.74724300
## 106	Turbo-fan	0.57508683	-0.38225632
## 107	Turbo-fan	0.28854565	-0.39899883
## 108	Turbo-fan	1.20547743	-0.54633290
## 109	Turbo-jet	0.40316212	-0.79412202
## 110	Turbo-fan	-1.08685203	-0.68027297
## 111	Turbo-fan	-0.16992025	-0.42578685
## 112	Turbo-fan	1.26278567	-0.34207430
## 113	Turbo-fan	1.20547743	-0.54633290
## 114	Turbo-fan	0.57508683	-0.38225632
## 115	Turbo-fan	-1.14416027	-0.68362147
## 116	Turbo-jet	-0.80031085	-0.66353046
## 117	Turbo-fan	1.26278567	-0.34207430
## 118	Turbo-fan	0.17392917	-0.40569584
## 119	Turbo-fan	-1.08685203	-0.47936287
## 120	Turbo-fan	-0.22722848	-0.22822525
## 121	Turbo-fan	-0.80031085	-0.46262036
## 122	Turbo-fan	-0.22722848	-0.42913535
## 123	Turbo-fan	0.91893625	-0.16125522
## 124	Turbo-jet	1.09086096	-0.15120971
## 125	Turbo-jet	-0.22722848	-0.22822525
## 126	Turbo-fan	0.46047036	-0.18804323
## 127	Turbo-fan	-1.37339321	-0.49610538
## 128	Turbo-fan	0.74701154	-0.37221082
## 129	Turbo-fan	0.05931270	-0.41239284
## 130	Turbo-fan	0.91893625	-0.16125522
## 131	Turbo-jet	1.26278567	-0.14116421
## 132	Turbo-fan	-1.02954379	-0.27510427
## 133	Turbo-fan	-0.11261201	-0.42243834
## 134	Turbo-fan	0.68970330	-0.37555932
## 136	Turbo-fan	-1.31608498	-0.49275688
## 137	Turbo-fan	-0.80031085	-0.46262036
## 138	Turbo-fan	-1.65993439	-0.51284789
## 139	Turbo-jet	0.11662094	-0.40904434
## 140	Turbo-fan	1.37740214	0.26735299
## 141	Turbo-fan	-1.37339321	-0.09428518
## 142	Turbo-fan	-1.54531792	-0.10433069
## 143	Turbo-fan	-0.91492732	-0.26840727
## 144	Turbo-jet	0.00200446	-0.01392115
## 145	Reciprocating	-0.80031085	-0.26171027
## 146	Turbo-fan	-1.65993439	-0.11102769
## 147	Turbo-fan	0.00200446	-0.21483124
## 148	Turbo-fan	0.51777859	-0.18469473

## 149	Turbo-fan	0.00200446	-0.01392115
## 150	Turbo-fan	1.20547743	-0.34542281
## 151	Turbo-fan	-1.37339321	-0.29519528
## 152	Turbo-fan	-0.05530377	-0.21817974
## 153	Turbo-fan	-1.65993439	0.08988241
## 154	Turbo-fan	1.20547743	0.05639739
## 155	Turbo-fan	0.46047036	0.01286687
## 156	Turbo-fan	-1.14416027	-0.28180128
## 157	Turbo-fan	1.20547743	-0.14451271
## 158	Reciprocating	0.63239507	0.02291237
## 160	Turbo-fan	-1.60262616	0.09323091
## 162	Turbo-fan	-0.62838614	-0.25166476
## 163	Turbo-fan	-0.51376966	-0.04405766
## 164	Turbo-fan	1.49201861	0.07313990
## 165	Turbo-fan	-1.08685203	0.12336742
## 166	Turbo-jet	-1.37339321	-0.09428518
## 167	Turbo-shaft	-1.37339321	0.10662491
## 168	Turbo-jet	0.40316212	0.21042846
## 169	Turbo-jet	-1.20146850	0.11667042
## 170	Turbo-fan	0.40316212	0.00951837
## 172	Turbo-fan	-1.37339321	0.30753501
## 173	Turbo-fan	0.63239507	0.22382247
## 174	Turbo-fan	-1.08685203	0.32427752
## 175	Turbo-fan	-1.65993439	0.08988241
## 176	Turbo-fan	-0.85761908	-0.06414867
## 177	Turbo-fan	-0.80031085	-0.06080017
## 178	Turbo-jet	-0.16992025	-0.02396665
## 179	Turbo-fan	0.63239507	0.22382247
## 181	Turbo-fan	0.63239507	0.22382247
## 183	Turbo-fan	0.17392917	0.39794456
## 184	Turbo-fan	0.34585388	0.00616986
## 185	Turbo-jet	1.32009390	0.46491459
## 186	Turbo-jet	1.72125156	0.48835410
## 187	Turbo-fan	1.20547743	0.05639739
## 190	Turbo-fan	0.86162801	0.43812657
## 191	Turbo-fan	-0.51376966	0.55867263
## 192	Turbo-fan	-1.54531792	0.09657941
## 193	Turbo-fan	0.91893625	0.24056498
## 194	Turbo-fan	-0.22722848	0.57541514
## 195	Turbo-fan	0.57508683	0.22047397
## 196	Turbo-fan	0.91893625	0.24056498
## 197	Turbo-fan	-0.51376966	0.15685244
## 198	Turbo-fan	-1.08685203	0.52518762
## 199	Turbo-fan	-0.91492732	0.53523312
## 200	Turbo-fan	1.54932685	0.27739850
## 201	Turbo-fan	1.49201861	0.27404999
## 202	Turbo-fan	-1.31608498	0.51179361
## 203	Turbo-fan	1.49201861	0.27404999
## 204	Turbo-fan	-0.51376966	0.55867263
## 205	Turbo-jet	0.68970330	0.42808107
## 206	Turbo-fan	1.54932685	0.27739850
## 207	Turbo-fan	0.91893625	0.44147508
## 208	Turbo-fan	1.03355272	0.44817208
## 209	Turbo-fan	0.74701154	0.43142957

## 210	Turbo-fan	-1.48800968	0.30083801
## 211	Turbo-fan	-1.65993439	0.29079250
## 212	Turbo-fan	1.49201861	0.27404999
## 213	Turbo-jet	-0.74300261	0.54527863
## 214	Turbo-fan	-0.22722848	0.37450504
## 215	Turbo-jet	-0.05530377	0.58546065
## 217	Turbo-fan	1.20547743	0.25730749
## 218	Turbo-fan	1.03355272	0.24726198
## 219	Turbo-fan	-0.22722848	0.37450504
## 220	Turbo-jet	1.20547743	0.45821758
## 221	Turbo-fan	0.34585388	0.40799006
## 222	Turbo-fan	1.20547743	0.25730749
## 223	Turbo-jet	1.26278567	0.66247618
## 224	Turbo-fan	-1.08685203	0.72609771
## 226	Turbo-jet	-0.91492732	0.73614322
## 227	Turbo-fan	1.09086096	0.45152058
## 228	Turbo-fan	1.72125156	0.68926420
## 229	Turbo-fan	0.11662094	0.59550615
## 230	Turbo-fan	-0.51376966	0.55867263
## 231	Turbo-fan	-0.80031085	0.74284022
## 232	Turbo-fan	0.57508683	0.82320426
## 233	Turbo-fan	0.74701154	0.43142957
## 234	Turbo-fan	-1.48800968	0.70265820
## 235	Turbo-fan	0.00200446	0.38789905
## 236	Turbo-fan	-1.20146850	0.31758052
## 237	Turbo-fan	0.57508683	0.42138407
## 238	Turbo-fan	0.05931270	0.59215765
## 239	Turbo-fan	-0.80031085	0.34102003
## 240	Turbo-fan	-0.22722848	0.77632524
## 241	Turbo-fan	1.09086096	0.85334078
## 242	Turbo-fan	0.05931270	0.59215765
## 245	Turbo-jet	-0.34184495	0.76962824
## 247	Turbo-fan	0.80431978	0.83659827
## 248	Turbo-fan	-0.11261201	0.38120205
## 249	Turbo-fan	-1.65993439	0.89352280
## 251	Turbo-fan	1.20547743	0.65912768
## 252	Turbo-fan	-0.74300261	0.54527863
## 253	Turbo-fan	-1.02954379	0.72944622
## 254	Turbo-fan	-1.43070145	0.90691680
## 255	Turbo-fan	1.49201861	0.87678029
## 256	Turbo-jet	1.37740214	0.46826309
## 257	Turbo-fan	1.49201861	0.87678029
## 258	Turbo-fan	-0.80031085	0.94375032
## 259	Turbo-fan	-0.05530377	0.98728084
## 260	Turbo-fan	-0.80031085	0.74284022
## 261	Turbo-jet	-1.65993439	0.89352280
## 263	Turbo-jet	1.66394332	0.88682579
## 264	Turbo-fan	0.40316212	1.01406885
## 265	Turbo-fan	-1.08685203	0.72609771
## 266	Turbo-fan	-1.60262616	1.29869149
## 267	Turbo-fan	-1.37339321	0.70935521
## 268	Turbo-jet	-0.45646143	0.96384133
## 269	Turbo-fan	1.20547743	1.06094788
## 270	Turbo-jet	-1.65993439	1.09443289

## 271	Reciprocating	0.63239507	1.02746286
## 273	Turbo-jet	1.49201861	1.07769039
## 275	Turbo-fan	1.37740214	0.87008328
## 276	Turbo-fan	1.32009390	1.06764488
## 277	Turbo-jet	1.72125156	1.09108439
## 278	Turbo-fan	-0.80031085	0.74284022
## 279	Turbo-fan	0.46047036	1.01741736
## 281	Turbo-fan	0.80431978	0.83659827
## 282	Turbo-fan	1.26278567	0.86338628
## 283	Turbo-fan	-0.57107790	1.15805442
## 284	Turbo-jet	0.91893625	0.84329527
## 285	Turbo-fan	-0.62838614	1.15470592
## 286	Turbo-fan	1.49201861	0.87678029
## 287	Turbo-jet	1.20547743	1.06094788
## 288	Turbo-fan	1.49201861	1.07769039
## 289	Turbo-fan	1.37740214	1.07099338
## 290	Turbo-fan	0.05931270	1.19488794
## 291	Turbo-fan	-1.25877674	1.31878250
## 292	Turbo-fan	1.26278567	0.86338628
## 294	Turbo-jet	-0.16992025	1.38240403
## 297	Turbo-fan	-0.74300261	0.94709882
## 298	Turbo-fan	0.68970330	1.23172146
## 299	Turbo-fan	-0.62838614	0.95379583
## 300	Turbo-fan	1.49201861	1.27860048
## 301	Turbo-fan	0.74701154	1.23506996
## 302	Turbo-fan	0.86162801	1.44267706
## 303	Turbo-fan	0.46047036	1.41923755
## 304	Reciprocating	1.49201861	1.07769039
## 305	Turbo-fan	1.60663509	1.48620758
## 306	Turbo-fan	1.60663509	1.48620758
## 307	Turbo-fan	0.97624448	1.44937407
## 308	Turbo-jet	-0.57107790	1.55987462
## 310	Turbo-fan	1.20547743	1.06094788
## 311	Turbo-fan	0.51777859	1.42258605
## 312	Turbo-fan	-0.80031085	1.34557052
## 313	Turbo-fan	-1.25877674	-3.10123965
## 316	Turbo-fan	0.80431978	1.23841846
## 317	Turbo-fan	0.63239507	1.42928306
## 318	Turbo-fan	0.68970330	1.43263156
## 319	Turbo-fan	0.11662094	1.39914654
## 320	Turbo-fan	0.28854565	1.20828195
## 321	Turbo-fan	-0.22722848	1.57996563
## 322	Turbo-fan	1.26278567	1.46611657
## 323	Turbo-jet	-1.08685203	1.52973811
## 324	Turbo-fan	-1.25877674	1.51969260
## 328	Turbo-fan	-1.08685203	1.32882801
## 330	Turbo-jet	1.66394332	1.28864599
## 332	Turbo-jet	-0.28453672	1.57661713
## 333	Turbo-fan	0.68970330	1.63354166
## 336	Turbo-jet	1.09086096	1.65698117
## 339	Reciprocating	-0.22722848	1.37905553
## 340	Turbo-fan	0.74701154	1.63689016
## 341	Turbo-jet	0.34585388	1.61345065
## 342	Turbo-fan	-1.37339321	-3.10793665

## 343	Turbo-fan	1.20547743	1.66367817
## 344	Turbo-fan	1.49201861	1.68042068
## 346	Turbo-jet	0.05931270	1.39579804
## 347	Turbo-fan	-1.54531792	1.30203999
## 348	Turbo-jet	-0.68569437	-3.06775463
## 349	Turbo-fan	1.72125156	1.69381469
## 350	Turbo-fan	0.57508683	-2.99408760
## 351	Turbo-fan	-0.97223556	1.33552501
## 352	Turbo-fan	-0.62838614	-3.06440613
## 353	Turbo-fan	0.63239507	1.42928306
## 354	Turbo-shaft	0.68970330	-2.98739059
## 355	Turbo-fan	0.46047036	1.62014765
## 356	Turbo-fan	-0.80031085	-2.47172134
## 358	Turbo-fan	1.54932685	1.68376918
## 359	Turbo-fan	-1.37339321	-3.10793665
## 365	Turbo-fan	0.91893625	-2.17035619
## 366	Turbo-fan	0.46047036	-2.19714421
## 367	Turbo-jet	1.20547743	-1.75179349
## 368	Turbo-fan	-0.05530377	-1.42364033
## 369	Turbo-fan	-1.60262616	-1.31313978
## 370	Turbo-fan	1.66394332	-1.32318528
## 371	Turbo-fan	-1.08685203	-1.28300326
## 372	Turbo-fan	1.60663509	-1.52744388
## 373	Turbo-fan	-1.60262616	-1.31313978
## 374	Turbo-fan	-1.25877674	-1.29304877
## 375	Turbo-fan	-1.37339321	-1.50065587
## 376	Turbo-fan	0.34585388	-1.60111092
## 377	Turbo-fan	-0.74300261	-1.26291225
## 378	Turbo-jet	0.91893625	-1.36671580
## 379	Turbo-fan	-0.51376966	-1.45042834
## 380	Turbo-fan	0.86162801	-1.37006431
## 381	Turbo-fan	-0.22722848	-1.63459593
## 382	Turbo-fan	-1.65993439	-0.91466808
## 383	Turbo-fan	0.28854565	-1.20263922
## 384	Turbo-jet	0.97624448	-1.16245720
## 385	Turbo-fan	0.23123741	-1.40689782
## 386	Turbo-fan	0.17392917	-1.20933623
## 387	Turbo-fan	-0.80031085	-1.66808095
## 388	Turbo-fan	0.34585388	-1.60111092
## 389	Turbo-fan	-0.11261201	-1.42698883
## 390	Turbo-jet	0.63239507	-1.18254821
## 391	Turbo-fan	-1.08685203	-1.48391336
## 392	Turbo-jet	1.49201861	-1.13232069
## 393	Turbo-fan	-0.62838614	-1.05530515
## 394	Turbo-fan	-0.80031085	-1.46717085
## 395	Turbo-fan	-0.68569437	-1.25956375
## 396	Turbo-fan	0.63239507	-1.18254821
## 397	Turbo-fan	0.34585388	-1.19929072
## 398	Turbo-fan	0.68970330	-1.38010981
## 399	Turbo-jet	-0.74300261	-1.26291225
## 400	Turbo-jet	0.05931270	-1.01512313
## 401	Turbo-fan	0.97624448	-1.16245720
## 402	Turbo-fan	1.49201861	-1.13232069
## 403	Turbo-fan	0.74701154	-1.17585121

## 404	Turbo-fan	-1.14416027	-1.08544167
## 405	Turbo-fan	-1.14416027	-1.48726186
## 406	Turbo-fan	-0.22722848	-1.03186564
## 407	Turbo-fan	-0.91492732	-1.27295776
## 408	Turbo-fan	1.43471038	-0.73384900
## 410	Turbo-fan	1.20547743	-1.34997330
## 411	Turbo-fan	0.91893625	-0.96489561
## 412	Turbo-fan	-0.85761908	-1.06869916
## 413	Turbo-jet	0.68970330	-1.17919971
## 414	Turbo-fan	0.17392917	-1.41024632
## 415	Turbo-fan	0.34585388	-0.99838062
## 416	Turbo-fan	-0.97223556	-1.07539616
## 418	Turbo-fan	0.05931270	-1.01512313
## 420	Turbo-fan	1.32009390	-1.14236619
## 421	Turbo-jet	1.54932685	-0.92806209
## 422	Turbo-fan	0.63239507	-0.98163812
## 423	Reciprocating	0.05931270	-1.21603323
## 424	Turbo-fan	-0.22722848	-0.83095554
## 425	Turbo-jet	0.11662094	-1.01177463
## 426	Turbo-fan	-0.80031085	-1.06535066
## 427	Turbo-jet	-0.57107790	-1.05195665
## 428	Turbo-fan	-1.25877674	-1.09213867
## 429	Turbo-fan	-0.62838614	-1.25621525
## 430	Turbo-fan	0.74701154	-0.97494111
## 432	Turbo-fan	-1.31608498	-0.89457707
## 433	Turbo-fan	-0.11261201	-0.82425854
## 434	Turbo-fan	1.72125156	-1.11892668
## 435	Turbo-fan	-0.74300261	-0.86109206
## 436	Turbo-jet	-1.08685203	-0.88118307
## 437	Turbo-fan	-0.80031085	-0.46262036
## 438	Turbo-fan	1.09086096	-1.15576020
## 439	Turbo-fan	-0.85761908	-1.06869916
## 440	Turbo-fan	-0.05530377	-0.82091004
## 442	Turbo-fan	-1.25877674	-1.09213867
## 443	Turbo-fan	-0.22722848	-1.23277574
## 444	Turbo-fan	0.00200446	-0.81756154
## 445	Turbo-jet	-1.48800968	-0.90462258
## 446	Turbo-fan	-1.08685203	-0.47936287
## 447	Turbo-fan	-0.80031085	-1.06535066
## 448	Turbo-fan	-0.22722848	-1.03186564
## 450	Turbo-fan	-1.54531792	-0.90797108
## 451	Turbo-fan	-1.37339321	-0.89792558
## 452	Turbo-fan	-1.25877674	-1.09213867
## 453	Turbo-fan	-1.65993439	-0.71375799
## 455	Turbo-fan	0.40316212	-0.99503212
## 457	Turbo-fan	0.34585388	-0.99838062
## 458	Turbo-fan	1.66394332	-0.92136509
## 459	Turbo-jet	-0.22722848	-0.83095554
## 460	Turbo-fan	1.72125156	-0.91801659
## 462	Turbo-fan	-1.37339321	-0.69701548
## 463	Turbo-fan	-1.37339321	-0.89792558
## 464	Turbo-fan	-0.51376966	-0.64678795
## 465	Turbo-jet	-0.68569437	-0.65683346
## 466	Turbo-jet	0.86162801	-0.76733401

## 467	Turbo-fan	-0.22722848	-1.03186564
## 468	Turbo-jet	-0.80031085	-0.66353046
## 469	Turbo-fan	-0.22722848	-0.83095554
## 470	Turbo-fan	0.05931270	-1.01512313
## 471	Turbo-fan	0.63239507	-0.57981792
## 472	Turbo-fan	-0.45646143	-0.24161926
## 473	Turbo-fan	-1.20146850	-0.88788007
## 474	Turbo-fan	0.51777859	-0.58651492
## 475	Turbo-jet	-0.51376966	-0.64678795
## 476	Turbo-fan	1.49201861	-0.73050049
## 477	Turbo-fan	-0.51376966	-0.84769805
## 479	Turbo-fan	-0.57107790	-0.65013645
## 480	Turbo-fan	0.74701154	-0.97494111
## 481	Reciprocating	0.05931270	-0.81421303
## 482	Turbo-fan	-1.08685203	-0.88118307
## 483	Turbo-fan	-0.39915319	-0.84100105
## 484	Turbo-fan	-0.80031085	-0.86444056
## 485	Turbo-fan	-1.08685203	-0.47936287
## 486	Turbo-fan	0.63239507	-0.78072802
## 487	Turbo-fan	-1.08685203	-0.68027297
## 488	Turbo-fan	1.32009390	-0.53963590
## 489	Turbo-fan	0.00200446	-0.41574134
## 490	Turbo-fan	0.68970330	-0.57646942
## 491	Turbo-fan	0.00200446	-0.81756154
## 492	Turbo-fan	1.32009390	-0.53963590
## 493	Turbo-fan	-0.80031085	-0.26171027
## 494	Turbo-fan	1.43471038	-0.73384900
## 495	Turbo-fan	-0.16992025	-0.42578685
## 496	Turbo-jet	0.80431978	-0.36886232
## 497	Turbo-fan	0.63239507	-0.37890782
## 498	Turbo-fan	1.20547743	-0.54633290
## 499	Turbo-fan	-1.08685203	-0.27845277
## 501	Turbo-fan	-1.65993439	-0.31193779
## 502	Turbo-fan	-0.80031085	-0.66353046
## 503	Turbo-fan	-0.22722848	-0.22822525
## 504	Turbo-fan	0.05931270	-0.21148274
## 506	Turbo-jet	1.49201861	-0.12777020
## 507	Turbo-fan	-0.22722848	-0.42913535
## 508	Turbo-fan	-0.80031085	-0.46262036
## 509	Turbo-fan	-0.51376966	-0.04405766
## 510	Turbo-fan	1.09086096	-0.15120971
## 511	Turbo-fan	-1.54531792	-0.10433069
## 512	Turbo-fan	0.00200446	-0.01392115
## 514	Turbo-fan	-0.57107790	-0.04740616
## 515	Turbo-jet	-1.37339321	-0.09428518
## 516	Turbo-fan	-1.08685203	-0.07754268
## 517	Turbo-fan	-0.05530377	-0.41908984
## 518	Turbo-jet	1.32009390	-0.13781571
## 519	Turbo-fan	0.51777859	-0.18469473
## 520	Turbo-fan	0.97624448	-0.15790672
## 523	Turbo-fan	-0.51376966	-0.44587786
## 524	Turbo-jet	-0.74300261	0.14345843
## 525	Turbo-fan	-0.05530377	-0.21817974
## 526	Turbo-fan	-1.65993439	0.49170260

## 527	Turbo-fan	1.20547743	-0.34542281
## 528	Turbo-fan	-1.20146850	-0.08423968
## 529	Turbo-jet	-1.54531792	-0.10433069
## 530	Turbo-fan	1.49201861	0.07313990
## 531	Turbo-fan	-1.02954379	-0.27510427
## 532	Turbo-fan	-0.11261201	-0.02061815
## 533	Turbo-fan	0.34585388	0.00616986
## 534	Turbo-fan	-1.60262616	0.09323091
## 535	Turbo-fan	1.43471038	0.06979140
## 536	Turbo-fan	-1.37339321	-0.09428518
## 537	Turbo-fan	1.32009390	-0.13781571
## 538	Turbo-fan	-1.37339321	0.10662491
## 539	Turbo-jet	0.40316212	0.21042846
## 540	Turbo-fan	-0.80031085	0.14010993
## 541	Turbo-fan	-1.02954379	0.12671592
## 542	Turbo-fan	0.23123741	-0.20143724
## 543	Turbo-fan	0.74701154	0.02960938
## 544	Turbo-fan	0.11662094	0.19368596
## 545	Turbo-fan	-1.37339321	0.30753501
## 546	Turbo-fan	-1.37339321	0.30753501
## 547	Turbo-fan	0.97624448	0.24391348
## 548	Turbo-fan	0.91893625	0.03965488
## 549	Turbo-fan	-0.80031085	0.34102003
## 551	Turbo-fan	1.20547743	0.25730749
## 553	Turbo-fan	-0.22722848	-0.02731515
## 554	Turbo-jet	1.20547743	0.05639739
## 555	Turbo-fan	1.49201861	0.27404999
## 556	Turbo-jet	0.86162801	0.43812657
## 558	Turbo-fan	1.32009390	0.46491459
## 559	Turbo-fan	-0.91492732	0.13341293
## 560	Turbo-fan	-0.68569437	0.34771703
## 561	Turbo-fan	0.05931270	0.39124755
## 562	Turbo-fan	-0.45646143	0.36111104
## 563	Turbo-fan	0.91893625	0.24056498
## 564	Turbo-fan	-0.11261201	0.38120205
## 565	Turbo-fan	0.74701154	0.23051947
## 566	Turbo-fan	0.91893625	0.24056498
## 567	Turbo-jet	0.74701154	0.43142957
## 569	Turbo-fan	1.60663509	0.28074700
## 570	Turbo-fan	1.49201861	0.27404999
## 571	Turbo-fan	1.49201861	0.67587019
## 572	Turbo-fan	-0.34184495	0.56871814
## 573	Turbo-fan	1.49201861	0.67587019
## 574	Turbo-fan	-1.08685203	0.72609771
## 576	Turbo-fan	1.49201861	0.27404999
## 577	Turbo-fan	1.54932685	0.27739850
## 578	Turbo-fan	0.57508683	1.02411436
## 579	Turbo-fan	1.20547743	0.65912768
## 580	Turbo-fan	1.20547743	0.65912768
## 581	Turbo-fan	-0.80031085	0.54193013
## 582	Turbo-fan	-0.57107790	0.55532413
## 584	Turbo-fan	0.57508683	0.42138407
## 585	Turbo-fan	0.05931270	0.59215765
## 586	Turbo-fan	1.60663509	0.68256719

## 587	Turbo-fan	0.57508683	0.82320426
## 588	Turbo-jet	-1.31608498	0.71270371
## 589	Turbo-fan	-0.51376966	0.55867263
## 590	Turbo-fan	1.60663509	0.48165710
## 591	Turbo-jet	-1.08685203	0.32427752
## 593	Turbo-jet	-0.97223556	0.73279472
## 594	Turbo-fan	0.68970330	0.62899117
## 596	Turbo-fan	-0.57107790	0.55532413
## 597	Turbo-fan	0.63239507	0.62564267
## 598	Turbo-jet	-0.39915319	0.76627973
## 599	Turbo-fan	-0.22722848	0.57541514
## 600	Turbo-fan	-0.57107790	0.75623423
## 601	Turbo-fan	1.32009390	0.86673478
## 602	Turbo-jet	1.37740214	0.66917319
## 603	Turbo-jet	-1.08685203	0.52518762
## 604	Turbo-fan	-0.51376966	0.96049283
## 605	Turbo-jet	-0.34184495	0.76962824
## 607	Turbo-fan	1.49201861	0.87678029
## 608	Turbo-fan	0.91893625	0.64238517
## 609	Turbo-fan	1.49201861	0.47496009
## 610	Turbo-fan	0.28854565	1.00737185
## 611	Turbo-fan	-0.51376966	0.75958273
## 612	Turbo-fan	1.20547743	0.65912768
## 613	Turbo-fan	1.20547743	0.65912768
## 614	Turbo-jet	0.63239507	0.62564267
## 615	Turbo-fan	-0.80031085	0.74284022
## 616	Reciprocating	-1.08685203	0.92700781
## 617	Turbo-fan	-0.80031085	0.94375032
## 618	Turbo-fan	-0.80031085	0.74284022
## 619	Turbo-fan	0.63239507	1.02746286
## 621	Turbo-fan	1.37740214	0.87008328
## 622	Turbo-jet	1.09086096	1.05425087
## 624	Turbo-jet	-1.48800968	1.10447840
## 625	Turbo-jet	-0.97223556	1.13461491
## 626	Turbo-fan	-0.51376966	0.96049283
## 628	Turbo-jet	-0.80031085	1.14466042
## 630	Turbo-fan	-0.68569437	0.74953723
## 631	Turbo-fan	-0.22722848	0.77632524
## 635	Turbo-fan	1.26278567	0.86338628
## 636	Turbo-fan	-0.11261201	0.98393234
## 637	Turbo-jet	1.37740214	0.87008328
## 638	Turbo-fan	0.91893625	0.84329527
## 639	Turbo-fan	1.49201861	0.87678029
## 641	Turbo-fan	0.05931270	1.19488794
## 643	Turbo-fan	-0.80031085	0.94375032
## 644	Turbo-fan	1.49201861	1.07769039
## 645	Turbo-fan	0.86162801	1.24176697
## 646	Turbo-fan	1.26278567	1.26520648
## 648	Turbo-fan	-0.85761908	0.94040182
## 649	Turbo-fan	1.60663509	1.28529749
## 650	Turbo-fan	-1.37339321	1.31208550
## 651	Turbo-fan	0.63239507	0.82655276
## 652	Turbo-jet	-0.16992025	1.38240403
## 654	Turbo-fan	1.26278567	1.26520648

## 655	Turbo-fan	1.20547743	1.06094788
## 656	Turbo-fan	0.63239507	1.42928306
## 657	Turbo-fan	1.49201861	1.68042068
## 658	Turbo-fan	0.74701154	1.23506996
## 659	Turbo-fan	0.34585388	1.01072035
## 660	Turbo-fan	1.49201861	1.27860048
## 661	Turbo-jet	-1.48800968	1.10447840
## 662	Turbo-fan	-1.08685203	0.92700781
## 663	Turbo-fan	-0.80031085	1.34557052
## 664	Turbo-fan	0.97624448	1.04755387
## 665	Turbo-fan	-0.22722848	1.37905553
## 666	Turbo-fan	1.32009390	1.46946508
## 667	Turbo-fan	0.28854565	1.40919205
## 668	Turbo-fan	0.46047036	1.41923755
## 669	Turbo-fan	-1.25877674	1.11787241
## 670	Turbo-fan	1.60663509	1.48620758
## 671	Turbo-jet	-0.57107790	1.55987462
## 672	Turbo-fan	1.49201861	1.07769039
## 673	Turbo-fan	-0.80031085	1.14466042
## 674	Turbo-fan	0.74701154	1.43598006
## 675	Turbo-fan	0.00200446	1.39244954
## 676	Turbo-fan	-1.31608498	1.51634410
## 677	Turbo-fan	0.80431978	1.43932856
## 678	Turbo-fan	-0.22722848	1.17814543
## 680	Turbo-fan	-0.11261201	0.98393234
## 682	Turbo-fan	1.37740214	1.47281358
## 683	Turbo-fan	0.11662094	1.39914654
## 684	Turbo-jet	0.68970330	1.43263156
## 686	Turbo-fan	-0.74300261	1.34891902
## 687	Turbo-fan	0.80431978	1.43932856
## 689	Turbo-jet	-0.05530377	1.18819094
## 690	Turbo-fan	-0.22722848	1.17814543
## 691	Turbo-fan	-1.31608498	1.51634410
## 693	Turbo-fan	-1.65993439	1.09443289
## 694	Turbo-fan	0.05931270	1.19488794
## 695	Turbo-jet	1.66394332	1.28864599
## 696	Turbo-fan	0.05931270	1.19488794
## 697	Reciprocating	-1.08685203	1.32882801
## 698	Turbo-fan	1.26278567	1.26520648
## 699	Turbo-fan	-0.45646143	1.56657162
## 700	Turbo-jet	1.09086096	1.65698117
## 702	Turbo-fan	1.72125156	1.69381469
## 703	Turbo-fan	-0.22722848	1.37905553
## 704	Turbo-fan	1.72125156	1.69381469
## 706	Turbo-fan	1.72125156	1.69381469
## 707	Turbo-fan	1.20547743	1.46276807
## 709	Turbo-fan	0.80431978	1.64023866
## 710	Turbo-fan	0.05931270	1.39579804
## 711	Turbo-fan	1.14816919	1.66032967
## 712	Turbo-fan	0.11662094	-3.02087561
## 713	Turbo-fan	1.20547743	1.46276807
## 714	Turbo-fan	0.63239507	1.63019315
## 715	Turbo-jet	1.32009390	1.67037517
## 716	Turbo-fan	1.72125156	1.69381469

## 717	Turbo-fan	-1.43070145	1.30873700
## 719	Turbo-fan	1.60663509	1.68711768
## 720	Turbo-fan	1.20547743	1.46276807
## 721	Turbo-fan	1.26278567	1.66702667
## 722	Turbo-fan	-0.97223556	1.33552501
## 723	Turbo-fan	-0.62838614	-3.06440613
## 725	Turbo-fan	1.20547743	-2.95725408
## 726	Turbo-fan	-0.28453672	-2.64249492
## 727	Turbo-fan	0.23123741	-3.01417860
## 729	Turbo-fan	-0.45646143	-2.85345053
## 730	Turbo-fan	0.63239507	1.63019315
## 737	Turbo-fan	0.91893625	-2.17035619
## 738	Turbo-fan	1.72125156	-0.11437619
## 739	Turbo-fan	0.86162801	0.23721648
## 743	Turbo-fan	-0.51376966	-1.45042834
## 744	Turbo-fan	-0.80031085	-1.66808095
## 745	Turbo-fan	-0.74300261	-1.66473245
## 746	Reciprocating	1.66394332	-1.32318528
## 747	Turbo-fan	0.46047036	-1.39350382
## 748	Turbo-fan	-1.37339321	-1.50065587
## 749	Turbo-fan	1.26278567	-1.34662479
## 750	Turbo-fan	1.54932685	-1.32988229
## 751	Turbo-fan	-1.54531792	-1.51070137
## 752	Turbo-fan	-0.80031085	-1.46717085
## 753	Turbo-fan	0.91893625	-1.56762590
## 754	Turbo-fan	0.05931270	-1.61785343
## 755	Turbo-fan	-1.37339321	-1.70156597
## 756	Turbo-fan	-1.08685203	-1.28300326
## 757	Turbo-fan	-0.45646143	-1.24616974
## 758	Turbo-fan	0.74701154	-1.37676131
## 759	Turbo-fan	1.20547743	-1.34997330
## 760	Turbo-fan	1.20547743	-1.55088339
## 761	Turbo-jet	-0.68569437	-1.46047385
## 762	Turbo-jet	-0.74300261	-1.26291225
## 763	Turbo-fan	0.63239507	-0.78072802
## 764	Turbo-jet	-0.22722848	-1.23277574
## 765	Turbo-fan	1.72125156	-1.31983678
## 766	Turbo-fan	0.23123741	-1.40689782
## 767	Turbo-fan	0.91893625	-1.36671580
## 768	Turbo-fan	-0.91492732	-1.47386786
## 769	Turbo-fan	0.05931270	-1.41694333
## 770	Turbo-fan	-1.48800968	-1.50735287
## 771	Turbo-jet	-0.85761908	-1.06869916
## 772	Turbo-fan	1.32009390	-1.14236619
## 773	Turbo-fan	1.03355272	-1.36001880
## 774	Turbo-fan	0.17392917	-1.20933623
## 775	Turbo-jet	-0.62838614	-1.25621525
## 776	Turbo-fan	0.74701154	-1.17585121
## 777	Turbo-fan	1.72125156	-1.11892668
## 778	Turbo-fan	0.74701154	-1.17585121
## 779	Turbo-fan	1.72125156	-1.31983678
## 780	Turbo-jet	0.28854565	-1.00172913
## 781	Turbo-jet	-0.62838614	-1.05530515
## 782	Turbo-fan	0.34585388	-0.99838062

## 784	Turbo-fan	-0.11261201	-1.02516864
## 785	Turbo-fan	-0.05530377	-1.22273023
## 786	Turbo-fan	0.63239507	-0.98163812
## 787	Turbo-fan	0.05931270	-1.01512313
## 788	Turbo-fan	-1.43070145	-1.10218417
## 789	Turbo-fan	-1.65993439	-0.91466808
## 790	Reciprocating	1.20547743	-1.34997330
## 791	Turbo-fan	-1.37339321	-0.89792558
## 792	Turbo-jet	0.68970330	-0.97828961
## 793	Turbo-fan	-0.22722848	-0.83095554
## 794	Turbo-fan	0.40316212	-0.99503212
## 795	Turbo-fan	0.63239507	-1.18254821
## 796	Turbo-fan	0.05931270	-1.01512313
## 797	Turbo-fan	-0.39915319	-0.84100105
## 798	Turbo-fan	1.49201861	-1.13232069
## 799	Turbo-fan	1.43471038	-0.93475909
## 800	Turbo-fan	-0.57107790	-1.25286675
## 801	Turbo-fan	-0.11261201	-0.82425854
## 802	Turbo-jet	-0.62838614	-0.85439505
## 803	Turbo-fan	-0.74300261	-1.06200216
## 804	Turbo-fan	-0.28453672	-1.03521414
## 805	Turbo-fan	-0.97223556	-1.07539616
## 806	Turbo-fan	-0.28453672	-1.03521414
## 807	Turbo-fan	1.66394332	-1.12227518
## 808	Turbo-fan	0.00200446	-0.81756154
## 809	Turbo-fan	-0.80031085	-0.66353046
## 810	Turbo-fan	1.72125156	-1.11892668
## 811	Turbo-fan	0.80431978	-0.77068251
## 812	Turbo-fan	0.97624448	-0.96154711
## 813	Turbo-fan	1.37740214	-1.13901769
## 815	Turbo-fan	-0.51376966	-0.64678795
## 816	Turbo-fan	-0.11261201	-0.62334844
## 817	Turbo-fan	-1.37339321	-0.69701548
## 818	Turbo-fan	-1.08685203	-0.88118307
## 819	Turbo-fan	-0.22722848	-0.63004545
## 821	Turbo-fan	-0.51376966	-0.64678795
## 822	Turbo-fan	-1.65993439	-0.71375799
## 823	Turbo-fan	0.97624448	-0.76063701
## 824	Turbo-jet	-0.74300261	-0.86109206
## 825	Turbo-jet	-1.14416027	-0.28180128
## 826	Turbo-fan	-0.74300261	-0.66018196
## 828	Turbo-fan	0.05931270	-1.01512313
## 829	Turbo-jet	1.37740214	-0.93810759
## 831	Turbo-fan	-1.31608498	-0.69366698
## 832	Turbo-fan	0.51777859	-0.58651492
## 833	Turbo-fan	-0.45646143	-0.24161926
## 834	Turbo-fan	-0.34184495	-0.83765255
## 835	Turbo-fan	-1.54531792	-0.90797108
## 837	Turbo-fan	-0.57107790	-0.65013645
## 839	Turbo-fan	-0.51376966	-0.84769805
## 840	Turbo-fan	-1.08685203	-0.47936287
## 841	Turbo-fan	-1.08685203	-0.68027297
## 843	Turbo-fan	0.00200446	-0.81756154
## 844	Turbo-fan	0.00200446	-0.41574134

## 845	Turbo-fan	-0.22722848	-0.42913535
## 846	Turbo-fan	-0.45646143	-0.44252935
## 848	Turbo-fan	0.63239507	-0.78072802
## 849	Turbo-fan	-0.85761908	-0.66687896
## 850	Turbo-fan	0.17392917	-0.40569584
## 852	Turbo-fan	0.74701154	-0.37221082
## 853	Turbo-fan	-1.08685203	-0.68027297
## 855	Turbo-fan	1.32009390	-0.53963590
## 856	Turbo-fan	0.11662094	-0.60995444
## 857	Turbo-fan	0.63239507	-0.57981792
## 858	Turbo-fan	1.49201861	-0.32868030
## 859	Turbo-fan	-0.80031085	-0.26171027
## 860	Turbo-fan	-1.31608498	-0.69366698
## 861	Turbo-fan	1.32009390	-0.53963590
## 862	Turbo-fan	1.66394332	-0.31863479
## 863	Turbo-fan	-0.11261201	-0.62334844
## 864	Turbo-fan	-0.85761908	-0.26505877
## 865	Turbo-fan	0.63239507	-0.37890782
## 866	Turbo-fan	-0.80031085	-0.66353046
## 867	Turbo-fan	0.11662094	-0.20813424
## 868	Turbo-fan	-1.08685203	-0.47936287
## 869	Turbo-fan	-1.37339321	-0.29519528
## 870	Turbo-fan	0.40316212	-0.39230183
## 871	Turbo-fan	0.91893625	-0.36216531
## 872	Turbo-jet	-0.51376966	0.15685244
## 873	Turbo-fan	1.20547743	-0.14451271
## 874	Turbo-fan	0.05931270	-0.21148274
## 875	Turbo-jet	-0.39915319	-0.23827075
## 876	Turbo-fan	1.37740214	-0.33537730
## 877	Turbo-fan	0.46047036	-0.18804323
## 878	Turbo-fan	0.05931270	-0.41239284
## 879	Turbo-fan	1.37740214	-0.13446720
## 880	Turbo-fan	-0.16992025	-0.62669694
## 881	Turbo-fan	1.43471038	-0.13111870
## 882	Turbo-fan	0.91893625	-0.36216531
## 883	Turbo-fan	-1.08685203	-0.27845277
## 884	Turbo-fan	0.91893625	-0.16125522
## 885	Turbo-fan	-0.11261201	-0.42243834
## 886	Turbo-fan	0.11662094	-0.20813424
## 887	Turbo-fan	-1.54531792	-0.10433069
## 888	Turbo-fan	0.34585388	-0.39565033
## 891	Turbo-fan	-0.51376966	-0.04405766
## 892	Turbo-fan	-0.05530377	-0.41908984
## 893	Turbo-fan	1.54932685	0.07648840
## 894	Turbo-fan	0.63239507	-0.37890782
## 895	Turbo-fan	1.09086096	-0.35211981
## 896	Turbo-fan	-0.11261201	-0.22152825
## 897	Turbo-jet	-1.31608498	0.10997341
## 898	Turbo-fan	0.63239507	0.02291237
## 899	Turbo-fan	-1.37339321	-0.29519528
## 900	Turbo-fan	1.20547743	-0.34542281
## 901	Turbo-jet	1.20547743	0.05639739
## 902	Turbo-jet	-1.25877674	0.11332192
## 903	Turbo-fan	-1.43070145	-0.29854378

## 904	Turbo-fan	-0.62838614	-0.25166476
## 905	Turbo-fan	1.49201861	0.07313990
## 906	Turbo-jet	0.46047036	-0.18804323
## 907	Turbo-fan	-1.43070145	-0.29854378
## 910	Turbo-fan	0.57508683	0.01956387
## 911	Turbo-fan	-1.08685203	0.12336742
## 913	Turbo-fan	-1.20146850	-0.08423968
## 914	Turbo-fan	1.49201861	0.27404999
## 915	Turbo-fan	0.68970330	0.22717097
## 916	Turbo-fan	-1.37339321	0.30753501
## 917	Turbo-fan	0.11662094	0.19368596
## 918	Turbo-fan	-0.80031085	0.34102003
## 919	Turbo-fan	-0.68569437	-0.05410316
## 920	Turbo-fan	-1.37339321	0.30753501
## 921	Turbo-fan	1.20547743	0.25730749
## 923	Turbo-jet	0.40316212	0.21042846
## 924	Turbo-fan	-1.14416027	0.32092902
## 926	Turbo-jet	-1.48800968	0.30083801
## 927	Turbo-fan	0.51777859	0.21712547
## 928	Turbo-jet	1.32009390	0.06309439
## 929	Turbo-fan	1.20547743	0.05639739
## 930	Turbo-jet	-0.80031085	0.34102003
## 931	Turbo-fan	1.54932685	0.07648840
## 932	Turbo-fan	0.34585388	0.00616986
## 934	Turbo-fan	0.34585388	0.40799006
## 935	Turbo-fan	-1.60262616	0.29414100
## 936	Turbo-fan	0.74701154	0.23051947
## 937	Turbo-jet	1.03355272	0.24726198
## 939	Turbo-fan	0.97624448	0.44482358
## 940	Turbo-jet	-1.37339321	0.30753501
## 941	Turbo-fan	-1.31608498	0.10997341
## 942	Turbo-fan	0.63239507	0.22382247
## 943	Turbo-fan	1.43471038	0.06979140
## 944	Turbo-fan	0.80431978	0.03295788
## 945	Turbo-fan	-0.51376966	0.15685244
## 946	Turbo-fan	-0.80031085	0.54193013
## 947	Turbo-fan	0.91893625	0.24056498
## 948	Turbo-fan	0.46047036	0.61559716
## 949	Turbo-fan	-1.31608498	0.51179361
## 950	Turbo-fan	1.60663509	0.48165710
## 951	Turbo-fan	-0.97223556	0.13006442
## 952	Turbo-fan	-0.05530377	0.18364045
## 953	Turbo-fan	1.54932685	0.27739850
## 954	Turbo-fan	-0.68569437	0.14680693
## 955	Turbo-fan	0.74701154	0.43142957
## 956	Turbo-fan	0.46047036	0.21377697
## 957	Turbo-jet	0.28854565	0.40464156
## 958	Turbo-fan	-1.54531792	0.49839960
## 959	Turbo-fan	1.49201861	0.47496009
## 960	Turbo-fan	-1.08685203	0.32427752
## 961	Turbo-fan	-1.65993439	0.29079250
## 962	Turbo-fan	-1.37339321	0.50844511
## 963	Turbo-fan	1.20547743	0.25730749
## 964	Turbo-jet	-1.60262616	0.49505110

## 965	Turbo-fan	0.86162801	0.23721648
## 966	Turbo-jet	-0.57107790	0.55532413
## 967	Turbo-fan	-0.11261201	0.38120205
## 968	Turbo-fan	1.49201861	0.67587019
## 969	Turbo-fan	1.20547743	0.25730749
## 971	Turbo-jet	-1.37339321	0.50844511
## 972	Turbo-fan	0.63239507	0.22382247
## 973	Turbo-fan	-0.74300261	0.34436853
## 974	Turbo-fan	-1.08685203	0.72609771
## 975	Turbo-fan	0.57508683	0.42138407
## 976	Turbo-fan	0.57508683	1.02411436
## 977	Turbo-fan	-0.16992025	0.57876364
## 978	Turbo-fan	-1.25877674	0.31423201
## 979	Turbo-fan	0.63239507	0.62564267
## 980	Turbo-fan	1.14816919	0.65577918
## 981	Turbo-jet	0.05931270	0.59215765
## 984	Turbo-fan	-1.31608498	0.51179361
## 985	Turbo-fan	1.32009390	0.86673478
## 987	Turbo-fan	0.51777859	0.61894566
## 988	Turbo-fan	-1.31608498	0.91361381
## 989	Turbo-fan	-0.80031085	0.54193013
## 990	Turbo-fan	-0.91492732	0.53523312
## 991	Turbo-fan	1.37740214	0.66917319
## 992	Turbo-fan	-1.31608498	0.71270371
## 993	Turbo-fan	1.49201861	0.87678029
## 994	Turbo-fan	1.20547743	0.45821758
## 995	Turbo-fan	0.00200446	0.99062934
## 996	Turbo-fan	0.40316212	0.81315876
## 997	Turbo-fan	1.54932685	0.67921869
## 998	Turbo-fan	0.34585388	0.80981026
## 1000	Turbo-fan	1.20547743	0.65912768
## 1001	Turbo-fan	0.40316212	1.01406885
## 1002	Turbo-jet	0.57508683	0.62229416
## 1003	Turbo-fan	1.49201861	0.87678029
## 1004	Turbo-fan	0.80431978	0.83659827
## 1005	Turbo-fan	-1.08685203	0.92700781
## 1006	Turbo-jet	-0.80031085	0.74284022
## 1007	Turbo-fan	0.05931270	0.59215765
## 1008	Turbo-fan	-0.51376966	0.55867263
## 1009	Turbo-fan	-0.39915319	0.56536964
## 1010	Turbo-fan	0.05931270	0.79306775
## 1013	Turbo-fan	0.63239507	1.02746286
## 1014	Turbo-fan	0.05931270	0.99397785
## 1016	Turbo-fan	-1.37339321	0.70935521
## 1017	Turbo-jet	-0.34184495	0.97053833
## 1018	Turbo-fan	-0.34184495	0.97053833
## 1020	Turbo-fan	-1.08685203	1.12791791
## 1021	Turbo-fan	-0.80031085	0.74284022
## 1022	Turbo-fan	0.23123741	0.80311325
## 1024	Turbo-fan	-1.14416027	1.12456941
## 1026	Turbo-fan	-1.08685203	1.12791791
## 1028	Turbo-jet	1.20547743	0.86003778
## 1029	Turbo-fan	-0.51376966	0.75958273
## 1030	Turbo-fan	1.32009390	0.86673478

## 1031	Turbo-jet	-1.43070145	1.10782690
## 1032	Turbo-fan	0.17392917	1.00067485
## 1033	Turbo-fan	1.20547743	1.26185798
## 1034	Turbo-fan	0.86162801	1.04085687
## 1035	Turbo-jet	0.17392917	1.00067485
## 1036	Turbo-fan	1.60663509	1.28529749
## 1037	Turbo-fan	1.09086096	1.25516097
## 1038	Turbo-fan	-1.37339321	1.31208550
## 1040	Turbo-fan	0.46047036	1.01741736
## 1042	Turbo-fan	1.20547743	1.06094788
## 1044	Turbo-fan	-0.28453672	1.37570703
## 1046	Turbo-jet	-1.08685203	1.32882801
## 1047	Turbo-fan	-1.48800968	1.10447840
## 1048	Turbo-fan	0.34585388	1.01072035
## 1049	Turbo-fan	0.51777859	1.42258605
## 1050	Turbo-fan	-0.16992025	0.98058384
## 1051	Turbo-fan	1.49201861	1.07769039
## 1053	Turbo-jet	0.05931270	1.39579804
## 1054	Turbo-jet	0.97624448	1.44937407
## 1055	Turbo-jet	0.63239507	1.02746286
## 1056	Turbo-jet	-0.80031085	1.54648061
## 1057	Turbo-jet	1.66394332	1.48955609
## 1058	Turbo-fan	0.80431978	1.43932856
## 1059	Turbo-fan	0.00200446	1.19153944
## 1061	Turbo-fan	0.91893625	1.04420537
## 1063	Turbo-fan	-1.31608498	1.11452390
## 1065	Turbo-fan	-1.25877674	-3.10123965
## 1068	Turbo-fan	-1.02954379	1.53308661
## 1069	Turbo-jet	0.57508683	1.22502446
## 1071	Turbo-fan	-1.02954379	1.53308661
## 1076	Turbo-fan	0.05931270	1.19488794
## 1077	Turbo-fan	-0.22722848	1.57996563
## 1078	Turbo-fan	0.91893625	1.44602556
## 1079	Turbo-fan	0.63239507	1.22837296
## 1080	Turbo-jet	0.51777859	1.62349615
## 1085	Turbo-fan	-1.54531792	1.30203999
## 1086	Turbo-fan	0.57508683	1.62684465
## 1091	Turbo-fan	-1.37339321	1.31208550
## 1092	Turbo-fan	-0.68569437	1.35226752
## 1093	Turbo-fan	1.20547743	1.46276807
## 1096	Turbo-fan	1.60663509	1.68711768
## 1097	Turbo-fan	-0.62838614	-3.06440613
## 1098	Turbo-fan	0.23123741	1.40584355
## 1099	Turbo-fan	-0.68569437	1.35226752
## 1100	Turbo-fan	1.20547743	-2.95725408
## 1101	Turbo-fan	0.57508683	-2.99408760
## 1103	Turbo-fan	-0.80031085	1.54648061
## 1104	Turbo-fan	-1.31608498	1.51634410
## 1106	Turbo-fan	1.54932685	1.68376918
## 1107	Turbo-fan	-1.37339321	-3.10793665
## 1108	Turbo-fan	-0.80031085	-3.07445163
## 1109	Turbo-fan	1.60663509	-1.52744388
## 1110	Turbo-fan	1.20547743	-0.74724300
## 1111	Reciprocating	0.91893625	-0.56307541

## 1112	Turbo-fan	0.05931270	-1.41694333
## 1113	Turbo-fan	-1.14416027	-0.68362147
## 1114	Turbo-fan	1.26278567	-1.34662479
## 1115	Turbo-fan	-0.80031085	-1.66808095
## 1116	Turbo-fan	-0.22722848	-1.63459593
## 1117	Turbo-fan	0.97624448	-1.36336730
## 1118	Turbo-jet	-0.22722848	-1.23277574
## 1119	Turbo-fan	-1.37339321	-1.50065587
## 1120	Turbo-fan	-0.80031085	-1.46717085
## 1121	Turbo-fan	0.05931270	-1.61785343
## 1122	Turbo-fan	-0.28453672	-1.63794444
## 1123	Turbo-jet	1.49201861	-1.53414088
## 1124	Turbo-fan	-1.08685203	-1.28300326
## 1125	Turbo-fan	-0.45646143	-1.24616974
## 1126	Turbo-fan	0.91893625	-1.56762590
## 1127	Turbo-fan	-0.68569437	-1.46047385
## 1128	Turbo-jet	-0.74300261	-1.26291225
## 1129	Turbo-fan	-0.74300261	-1.66473245
## 1130	Turbo-fan	1.20547743	-1.55088339
## 1131	Turbo-fan	-1.65993439	-0.91466808
## 1132	Turbo-fan	-0.68569437	-1.46047385
## 1133	Turbo-fan	1.49201861	-1.33323079
## 1134	Turbo-jet	0.23123741	-1.40689782
## 1135	Turbo-fan	-0.57107790	-1.45377685
## 1136	Turbo-jet	-0.85761908	-1.06869916
## 1137	Turbo-fan	0.05931270	-1.41694333
## 1138	Turbo-fan	0.91893625	-1.36671580
## 1139	Turbo-fan	-0.57107790	-1.05195665
## 1140	Turbo-jet	1.60663509	-1.12562369
## 1141	Turbo-fan	-1.08685203	-1.48391336
## 1142	Turbo-fan	-1.65993439	-1.31648828
## 1143	Turbo-fan	1.72125156	-1.31983678
## 1144	Turbo-fan	-1.08685203	-1.48391336
## 1145	Turbo-fan	1.60663509	-1.52744388
## 1146	Turbo-jet	0.05931270	-1.01512313
## 1147	Turbo-fan	-0.85761908	-1.06869916
## 1148	Turbo-fan	-0.45646143	-1.24616974
## 1149	Turbo-fan	0.51777859	-1.18924522
## 1150	Turbo-fan	0.74701154	-1.17585121
## 1151	Turbo-fan	-0.57107790	-1.05195665
## 1152	Turbo-fan	-0.22722848	-1.03186564
## 1153	Turbo-fan	-0.22722848	-1.03186564
## 1154	Turbo-fan	0.63239507	-1.18254821
## 1155	Turbo-fan	0.74701154	-1.17585121
## 1156	Turbo-fan	0.40316212	-1.39685232
## 1157	Turbo-fan	-0.80031085	-1.06535066
## 1158	Turbo-jet	0.28854565	-1.00172913
## 1159	Turbo-fan	0.63239507	-0.98163812
## 1160	Turbo-fan	0.91893625	-0.96489561
## 1161	Turbo-fan	0.34585388	-0.99838062
## 1162	Turbo-jet	-0.05530377	-1.22273023
## 1163	Turbo-fan	0.28854565	-1.00172913
## 1164	Turbo-fan	0.63239507	-1.38345831
## 1165	Turbo-fan	0.91893625	-0.96489561

## 1166	Turbo-fan	-0.85761908	-1.06869916
## 1167	Turbo-fan	-0.80031085	-0.86444056
## 1168	Turbo-fan	-1.37339321	-0.89792558
## 1170	Turbo-fan	0.57508683	-0.98498662
## 1171	Turbo-fan	1.43471038	-0.93475909
## 1172	Turbo-fan	-0.97223556	-1.07539616
## 1173	Turbo-fan	0.28854565	-0.59990893
## 1174	Turbo-fan	-0.22722848	-1.23277574
## 1175	Turbo-fan	-1.08685203	-0.88118307
## 1176	Turbo-fan	0.05931270	-1.01512313
## 1177	Turbo-jet	-0.28453672	-0.83430404
## 1178	Turbo-jet	-0.80031085	-0.86444056
## 1179	Turbo-fan	-1.02954379	-1.07874466
## 1180	Turbo-fan	-0.28453672	-0.83430404
## 1181	Turbo-fan	-1.14416027	-1.28635176
## 1182	Turbo-fan	1.49201861	-1.13232069
## 1183	Turbo-fan	-1.31608498	-0.89457707
## 1184	Turbo-jet	-0.62838614	-0.85439505
## 1185	Turbo-fan	-0.74300261	-0.86109206
## 1186	Turbo-fan	-1.08685203	-1.08209316
## 1187	Turbo-fan	0.05931270	-1.01512313
## 1188	Turbo-fan	-0.22722848	-1.03186564
## 1189	Turbo-fan	-0.80031085	-0.46262036
## 1190	Turbo-fan	-0.57107790	-1.05195665
## 1191	Turbo-fan	1.66394332	-0.92136509
## 1192	Turbo-fan	0.11662094	-1.01177463
## 1193	Turbo-jet	0.63239507	-0.78072802
## 1194	Turbo-fan	0.91893625	-1.16580571
## 1195	Turbo-fan	0.28854565	-1.00172913
## 1196	Turbo-fan	-0.28453672	-1.03521414
## 1197	Turbo-fan	0.57508683	-1.18589672
## 1198	Turbo-fan	0.34585388	-0.39565033
## 1199	Turbo-fan	0.91893625	-0.76398551
## 1200	Turbo-fan	0.05931270	-1.01512313
## 1201	Turbo-fan	0.74701154	-0.97494111
## 1202	Turbo-jet	1.37740214	-0.73719750
## 1203	Turbo-fan	-0.91492732	-0.87113756
## 1204	Turbo-fan	1.72125156	-1.11892668
## 1205	Turbo-fan	-1.48800968	-1.10553268
## 1206	Turbo-fan	-0.80031085	-1.06535066
## 1207	Turbo-fan	-1.37339321	-0.69701548
## 1208	Turbo-fan	0.80431978	-0.77068251
## 1209	Turbo-fan	-0.97223556	-1.07539616
## 1210	Turbo-fan	1.09086096	-0.95485010
## 1211	Turbo-fan	-0.62838614	-0.85439505
## 1212	Turbo-fan	1.20547743	-0.74724300
## 1213	Turbo-jet	0.91893625	-0.76398551
## 1214	Turbo-fan	-1.65993439	-0.71375799
## 1215	Turbo-fan	-0.51376966	-0.64678795
## 1216	Turbo-fan	-0.11261201	-0.62334844
## 1217	Turbo-fan	-0.74300261	-0.86109206
## 1218	Turbo-fan	0.05931270	-0.01057264
## 1219	Turbo-fan	-0.16992025	-0.62669694
## 1220	Turbo-fan	1.32009390	-0.74054600

## 1221	Turbo-fan	-0.91492732	-0.87113756
## 1222	Turbo-fan	0.57508683	-0.98498662
## 1223	Turbo-jet	-1.14416027	-0.28180128
## 1224	Turbo-fan	0.23123741	-0.60325743
## 1225	Turbo-fan	-0.11261201	-1.02516864
## 1226	Turbo-fan	0.51777859	-0.58651492
## 1227	Turbo-fan	-1.48800968	-0.90462258
## 1228	Turbo-fan	0.05931270	-1.01512313
## 1229	Turbo-fan	1.20547743	-0.54633290
## 1230	Turbo-fan	-0.45646143	-0.24161926
## 1231	Turbo-fan	0.34585388	-0.59656043
## 1232	Turbo-fan	-1.54531792	-0.90797108
## 1233	Turbo-fan	-1.37339321	-0.89792558
## 1235	Turbo-fan	-0.51376966	-0.84769805
## 1236	Turbo-fan	-1.65993439	-0.91466808
## 1237	Turbo-fan	0.05931270	-0.81421303
## 1238	Turbo-fan	1.20547743	-0.74724300
## 1239	Turbo-fan	0.51777859	-0.78742502
## 1240	Turbo-fan	-0.85761908	-0.86778906
## 1241	Turbo-fan	0.00200446	-0.81756154
## 1242	Turbo-fan	-1.08685203	-0.47936287
## 1243	Turbo-fan	-0.22722848	-0.42913535
## 1244	Turbo-fan	0.00200446	-0.41574134
## 1245	Turbo-fan	1.66394332	-0.51954489
## 1246	Turbo-fan	0.05931270	-0.61330294
## 1247	Turbo-fan	0.63239507	-0.78072802
## 1248	Turbo-jet	-1.08685203	-0.68027297
## 1249	Turbo-fan	0.74701154	-0.37221082
## 1250	Turbo-fan	-1.08685203	-0.88118307
## 1251	Turbo-fan	0.11662094	-0.60995444
## 1252	Turbo-fan	-0.80031085	-0.66353046
## 1253	Turbo-fan	-0.80031085	-0.26171027
## 1254	Turbo-fan	0.11662094	-0.81086453
## 1255	Turbo-fan	1.49201861	-0.32868030
## 1257	Turbo-fan	0.63239507	-0.57981792
## 1258	Turbo-fan	0.17392917	-0.40569584
## 1259	Turbo-fan	-1.48800968	-0.70371248
## 1260	Turbo-fan	-1.31608498	-0.69366698
## 1261	Turbo-fan	1.32009390	-0.53963590
## 1263	Turbo-fan	1.66394332	-0.31863479
## 1264	Turbo-fan	-0.11261201	-0.62334844
## 1265	Turbo-fan	-0.28453672	-0.23157375
## 1266	Turbo-jet	-0.22722848	-0.22822525
## 1268	Turbo-fan	0.51777859	-0.38560483
## 1269	Turbo-fan	1.20547743	-0.54633290
## 1270	Turbo-fan	-1.08685203	-0.47936287
## 1272	Turbo-jet	0.91893625	-0.16125522
## 1273	Turbo-jet	-0.51376966	0.15685244
## 1274	Turbo-fan	0.05931270	-0.21148274
## 1275	Turbo-fan	0.91893625	-0.36216531
## 1276	Turbo-fan	1.20547743	-0.14451271
## 1277	Turbo-jet	-0.39915319	-0.23827075
## 1278	Turbo-fan	-0.68569437	0.14680693
## 1279	Turbo-fan	1.20547743	-0.14451271

## 1280	Turbo-fan	1.43471038	-0.13111870
## 1281	Turbo-fan	-1.08685203	-0.27845277
## 1282	Turbo-fan	-0.80031085	-0.46262036
## 1284	Turbo-fan	0.00200446	-0.01392115
## 1285	Turbo-fan	-1.08685203	-0.07754268
## 1286	Turbo-fan	-0.51376966	-0.04405766
## 1287	Turbo-fan	-1.54531792	-0.10433069
## 1288	Turbo-fan	0.91893625	0.03965488
## 1290	Turbo-fan	-0.80031085	-0.26171027
## 1291	Turbo-fan	1.54932685	0.07648840
## 1292	Turbo-fan	0.80431978	-0.36886232
## 1293	Turbo-jet	-1.31608498	0.10997341
## 1294	Turbo-fan	0.63239507	-0.37890782
## 1295	Turbo-fan	-0.22722848	-0.42913535
## 1296	Turbo-fan	0.00200446	-0.01392115
## 1297	Turbo-fan	1.14816919	0.05304889
## 1298	Turbo-fan	0.63239507	-0.17799773
## 1299	Turbo-fan	-1.43070145	-0.29854378
## 1300	Turbo-jet	-1.14416027	0.12001892
## 1303	Turbo-fan	0.17392917	-0.00387564
## 1304	Turbo-fan	-1.43070145	-0.29854378
## 1305	Turbo-fan	-0.51376966	-0.04405766
## 1306	Turbo-fan	-1.02954379	0.12671592
## 1308	Turbo-fan	0.23123741	0.20038296
## 1309	Reciprocating	-1.37339321	-0.09428518
## 1310	Turbo-jet	-1.37339321	0.10662491
## 1311	Turbo-fan	1.49201861	0.27404999
## 1312	Turbo-fan	-1.08685203	0.32427752
## 1313	Turbo-fan	-1.37339321	0.10662491
## 1314	Turbo-fan	-1.37339321	0.30753501
## 1315	Turbo-fan	-0.16992025	0.17694345
## 1317	Turbo-fan	-1.37339321	0.30753501
## 1318	Turbo-fan	-1.20146850	0.11667042
## 1319	Turbo-fan	1.49201861	0.07313990
## 1320	Turbo-fan	0.63239507	0.22382247
## 1322	Turbo-fan	-1.14416027	0.32092902
## 1323	Turbo-fan	0.05931270	0.19033745
## 1325	Turbo-fan	0.74701154	0.23051947
## 1327	Turbo-fan	0.74701154	0.43142957
## 1328	Turbo-fan	-1.54531792	0.49839960
## 1329	Turbo-jet	1.03355272	0.24726198
## 1330	Turbo-fan	-0.28453672	0.17024644
## 1331	Turbo-fan	1.66394332	0.28409550
## 1332	Turbo-fan	0.63239507	0.22382247
## 1333	Turbo-fan	1.60663509	0.48165710
## 1334	Turbo-fan	-1.02954379	0.52853612
## 1335	Turbo-fan	0.91893625	0.24056498
## 1336	Turbo-fan	-0.51376966	0.15685244
## 1338	Turbo-fan	0.74701154	0.43142957
## 1340	Turbo-fan	0.46047036	0.21377697
## 1341	Turbo-fan	0.46047036	0.61559716
## 1342	Turbo-fan	1.54932685	0.27739850
## 1343	Turbo-fan	-0.91492732	0.13341293
## 1344	Turbo-fan	-0.51376966	0.55867263

## 1346	Turbo-fan	-1.43070145	0.30418651
## 1347	Turbo-fan	0.46047036	0.21377697
## 1348	Turbo-fan	0.40316212	0.21042846
## 1349	Turbo-fan	1.49201861	0.27404999
## 1350	Turbo-jet	0.74701154	0.63233967
## 1351	Turbo-fan	1.43471038	0.27070149
## 1352	Turbo-jet	-1.37339321	0.50844511
## 1353	Turbo-jet	-0.57107790	0.55532413
## 1354	Turbo-fan	1.20547743	0.25730749
## 1356	Turbo-fan	-0.34184495	0.56871814
## 1357	Turbo-fan	0.46047036	0.61559716
## 1358	Turbo-fan	-0.80031085	0.54193013
## 1359	Turbo-jet	-1.65993439	0.69261270
## 1360	Turbo-jet	-1.25877674	0.71605221
## 1361	Turbo-jet	0.11662094	0.39459605
## 1362	Turbo-fan	-0.68569437	0.54862713
## 1364	Turbo-jet	-0.97223556	0.73279472
## 1366	Turbo-fan	-0.80031085	0.34102003
## 1367	Turbo-jet	0.63239507	0.62564267
## 1368	Turbo-fan	1.54932685	0.47830859
## 1369	Turbo-fan	1.26278567	0.66247618
## 1370	Turbo-fan	0.11662094	0.59550615
## 1371	Turbo-fan	-0.91492732	0.53523312
## 1372	Turbo-fan	-0.34184495	0.36780804
## 1374	Turbo-fan	1.49201861	0.67587019
## 1375	Turbo-fan	1.72125156	0.89017429
## 1376	Turbo-fan	-0.80031085	0.74284022
## 1377	Turbo-fan	1.32009390	0.86673478
## 1378	Turbo-fan	-0.22722848	0.77632524
## 1379	Turbo-fan	-1.65993439	0.69261270
## 1380	Turbo-fan	1.37740214	0.66917319
## 1381	Turbo-fan	-1.37339321	0.91026530
## 1382	Turbo-fan	-0.51376966	0.55867263
## 1383	Turbo-fan	-1.43070145	0.90691680
## 1385	Turbo-fan	1.49201861	0.47496009
## 1387	Turbo-jet	-1.43070145	1.30873700
## 1388	Turbo-fan	1.49201861	0.87678029
## 1389	Turbo-fan	0.40316212	1.01406885
## 1390	Turbo-fan	1.14816919	1.05759938
## 1391	Turbo-fan	-1.37339321	0.91026530
## 1392	Turbo-fan	0.34585388	0.80981026
## 1393	Turbo-fan	-1.60262616	0.89687130
## 1394	Turbo-jet	-0.28453672	0.97388684
## 1395	Turbo-fan	-0.57107790	0.95714433
## 1396	Turbo-fan	0.05931270	0.99397785
## 1397	Turbo-jet	-1.37339321	0.70935521
## 1398	Turbo-fan	-0.80031085	0.74284022
## 1399	Turbo-fan	1.72125156	0.89017429
## 1400	Turbo-jet	-0.68569437	0.95044732
## 1402	Turbo-fan	-0.22722848	0.97723534
## 1403	Turbo-fan	1.14816919	1.05759938
## 1404	Turbo-fan	1.49201861	1.07769039
## 1405	Turbo-fan	0.63239507	1.02746286
## 1406	Turbo-fan	0.46047036	1.01741736

## 1407	Turbo-jet	-0.68569437	1.15135742
## 1408	Turbo-fan	0.51777859	1.02076586
## 1409	Turbo-jet	0.97624448	1.04755387
## 1410	Turbo-jet	-1.37339321	1.11117540
## 1411	Turbo-fan	-1.60262616	0.89687130
## 1412	Turbo-fan	0.74701154	1.03415986
## 1413	Turbo-jet	1.14816919	0.85668928
## 1414	Turbo-fan	1.32009390	0.86673478
## 1415	Turbo-fan	0.91893625	1.04420537
## 1416	Turbo-fan	0.05931270	1.19488794
## 1419	Turbo-fan	-1.37339321	0.91026530
## 1420	Turbo-jet	-1.43070145	1.10782690
## 1421	Turbo-fan	0.17392917	1.00067485
## 1422	Turbo-fan	1.26278567	0.86338628
## 1423	Turbo-jet	0.51777859	1.22167596
## 1425	Turbo-jet	-0.97223556	1.33552501
## 1426	Turbo-jet	-0.62838614	1.15470592
## 1427	Turbo-fan	-0.45646143	1.36566153
## 1428	Turbo-fan	0.17392917	0.79976475
## 1429	Turbo-fan	1.60663509	1.28529749
## 1430	Turbo-jet	-1.48800968	1.10447840
## 1431	Turbo-fan	-1.65993439	1.09443289
## 1432	Turbo-fan	0.97624448	1.24846397
## 1433	Turbo-fan	0.51777859	1.42258605
## 1434	Turbo-fan	-1.43070145	1.30873700
## 1435	Turbo-fan	0.34585388	1.41254055
## 1436	Turbo-fan	0.34585388	1.01072035
## 1438	Turbo-fan	-0.91492732	1.13796342
## 1439	Turbo-fan	0.46047036	1.21832745
## 1440	Turbo-jet	-0.80031085	1.54648061
## 1441	Turbo-fan	0.00200446	1.19153944
## 1442	Turbo-fan	-1.65993439	1.09443289
## 1443	Turbo-fan	-1.25877674	-3.10123965
## 1444	Turbo-fan	1.03355272	1.45272257
## 1445	Turbo-fan	0.34585388	1.41254055
## 1446	Turbo-jet	1.66394332	1.48955609
## 1447	Turbo-fan	1.26278567	1.26520648
## 1448	Turbo-fan	0.91893625	1.04420537
## 1449	Turbo-jet	0.97624448	1.44937407
## 1450	Turbo-fan	-0.80031085	1.14466042
## 1451	Turbo-fan	0.00200446	1.19153944
## 1452	Turbo-fan	-0.85761908	1.34222201
## 1455	Turbo-fan	-0.22722848	1.17814543
## 1457	Turbo-fan	0.00200446	1.59335964
## 1460	Turbo-fan	0.68970330	1.43263156
## 1461	Turbo-fan	-0.51376966	1.16140293
## 1462	Turbo-fan	0.86162801	1.24176697
## 1463	Turbo-fan	0.80431978	1.23841846
## 1464	Turbo-fan	0.46047036	1.21832745
## 1466	Turbo-fan	-0.22722848	1.57996563
## 1467	Turbo-jet	0.57508683	1.22502446
## 1468	Turbo-fan	1.66394332	1.48955609
## 1469	Turbo-jet	0.51777859	1.62349615
## 1472	Turbo-fan	-0.22722848	1.37905553

## 1473	Turbo-fan	-0.74300261	1.34891902
## 1474	Turbo-fan	1.20547743	1.66367817
## 1475	Turbo-fan	1.72125156	1.69381469
## 1476	Turbo-fan	-0.85761908	1.54313211
## 1477	Turbo-fan	1.20547743	1.46276807
## 1478	Turbo-fan	0.34585388	1.41254055
## 1480	Turbo-fan	-0.62838614	-3.06440613
## 1481	Turbo-fan	0.28854565	1.40919205
## 1482	Turbo-fan	1.20547743	1.46276807
## 1483	Turbo-fan	0.63239507	1.42928306
## 1484	Turbo-fan	-0.57107790	-3.06105763
## 1486	Turbo-fan	-0.28453672	-2.64249492
## 1487	Turbo-fan	0.46047036	-3.00078460
## 1488	Turbo-fan	0.46047036	1.62014765
## 1489	Turbo-fan	-1.65993439	-2.92376906
## 1490	Turbo-fan	-0.80031085	1.54648061
## 1493	Turbo-fan	1.72125156	1.69381469
## 1494	Turbo-fan	-0.80031085	-3.07445163
## 1495	Turbo-fan	1.72125156	1.69381469
## 1497	Turbo-fan	1.20547743	0.05639739
## 1498	Turbo-fan	1.20547743	-1.75179349
## 1499	Turbo-fan	1.20547743	-1.34997330
## 1500	Turbo-fan	1.26278567	-1.34662479
## 1501	Turbo-fan	-1.25877674	-1.29304877
## 1502	Turbo-fan	1.20547743	-1.34997330
## 1503	Turbo-fan	1.54932685	-1.32988229
## 1504	Turbo-fan	1.66394332	-1.32318528
## 1505	Turbo-fan	-0.39915319	-1.04191115
## 1506	Turbo-fan	-0.45646143	-1.24616974
## 1507	Turbo-fan	-1.08685203	-1.28300326
## 1508	Turbo-fan	-0.80031085	-1.66808095
## 1509	Turbo-fan	1.26278567	-1.34662479
## 1510	Turbo-fan	0.74701154	-1.37676131
## 1511	Turbo-fan	-0.28453672	-1.63794444
## 1512	Turbo-fan	-1.65993439	-0.91466808
## 1513	Turbo-fan	1.72125156	-1.11892668
## 1514	Turbo-fan	-0.39915319	-1.24282124
## 1515	Turbo-jet	0.05931270	-1.01512313
## 1516	Turbo-fan	0.91893625	-0.96489561
## 1517	Turbo-fan	1.32009390	-1.14236619
## 1518	Turbo-fan	-1.08685203	-1.08209316
## 1519	Turbo-fan	1.20547743	-1.34997330
## 1520	Turbo-fan	1.60663509	-1.12562369
## 1521	Turbo-fan	0.11662094	-1.01177463
## 1522	Turbo-fan	-0.22722848	-1.23277574
## 1523	Turbo-jet	-0.39915319	-0.64009095
## 1524	Turbo-fan	0.74701154	-1.37676131
## 1525	Turbo-fan	-1.48800968	-1.10553268
## 1526	Turbo-fan	-1.43070145	-1.10218417
## 1527	Turbo-fan	-0.97223556	-1.07539616
## 1528	Turbo-fan	-1.14416027	-0.88453157
## 1529	Turbo-fan	0.40316212	-0.99503212
## 1530	Turbo-fan	0.57508683	-0.98498662
## 1531	Turbo-fan	-0.22722848	-0.83095554

## 1533	Turbo-fan	-0.74300261	-1.26291225
## 1534	Turbo-jet	-0.28453672	-0.83430404
## 1535	Turbo-fan	-1.20146850	-1.08879017
## 1536	Turbo-fan	1.43471038	-0.93475909
## 1537	Turbo-fan	1.72125156	-1.11892668
## 1538	Turbo-fan	-0.85761908	-1.26960926
## 1539	Turbo-fan	-0.11261201	-1.02516864
## 1540	Turbo-fan	-0.51376966	-1.24951825
## 1541	Turbo-fan	-0.74300261	-0.86109206
## 1542	Turbo-jet	1.49201861	-1.13232069
## 1543	Turbo-fan	0.05931270	-1.21603323
## 1544	Turbo-fan	-0.80031085	-0.46262036
## 1545	Turbo-fan	0.11662094	-0.81086453
## 1546	Turbo-fan	-1.14416027	-1.28635176
## 1547	Turbo-fan	-0.45646143	-1.04525965
## 1548	Turbo-fan	0.91893625	-1.16580571
## 1549	Turbo-fan	-0.28453672	-1.03521414
## 1550	Turbo-fan	0.63239507	-0.78072802
## 1551	Turbo-fan	0.34585388	-0.39565033
## 1552	Turbo-jet	-1.02954379	-0.87783457
## 1553	Turbo-fan	-0.22722848	-1.03186564
## 1554	Turbo-fan	-1.37339321	-0.89792558
## 1555	Turbo-jet	0.05931270	-1.01512313
## 1556	Turbo-fan	1.66394332	-1.12227518
## 1557	Turbo-fan	-1.54531792	-0.90797108
## 1558	Turbo-fan	0.86162801	-0.96824411
## 1559	Turbo-jet	1.43471038	-0.73384900
## 1560	Turbo-fan	-1.08685203	-0.68027297
## 1561	Turbo-fan	-0.91492732	-1.07204766
## 1562	Turbo-fan	0.91893625	-0.76398551
## 1564	Turbo-fan	1.32009390	-0.74054600
## 1565	Turbo-fan	-1.65993439	-0.91466808
## 1566	Turbo-fan	0.46047036	-0.79077352
## 1567	Turbo-fan	-0.85761908	-0.86778906
## 1568	Turbo-fan	-0.11261201	-0.62334844
## 1569	Turbo-fan	-0.22722848	-0.63004545
## 1570	Turbo-fan	0.05931270	-0.01057264
## 1571	Turbo-fan	0.00200446	-0.61665144
## 1572	Turbo-fan	0.34585388	-0.79747053
## 1573	Turbo-fan	-1.37339321	-0.89792558
## 1574	Turbo-jet	-1.02954379	-0.27510427
## 1575	Turbo-fan	1.09086096	-0.15120971
## 1576	Turbo-fan	0.05931270	-1.01512313
## 1577	Turbo-fan	-0.22722848	-0.63004545
## 1578	Turbo-fan	-0.80031085	-0.86444056
## 1579	Turbo-fan	1.20547743	-0.54633290
## 1580	Turbo-fan	0.63239507	-0.57981792
## 1581	Turbo-jet	0.23123741	-0.60325743
## 1582	Turbo-fan	0.05931270	-0.81421303
## 1583	Turbo-fan	-1.54531792	-0.90797108
## 1584	Reciprocating	0.34585388	-0.59656043
## 1586	Turbo-jet	0.57508683	-0.58316642
## 1587	Turbo-fan	-0.22722848	-0.42913535
## 1588	Turbo-jet	-0.97223556	-0.47266587

## 1589	Turbo-jet	1.26278567	-0.54298440
## 1590	Turbo-fan	-0.45646143	-0.84434955
## 1591	Turbo-fan	-0.85761908	-0.66687896
## 1593	Turbo-fan	1.26278567	-0.54298440
## 1594	Turbo-fan	0.74701154	-0.37221082
## 1595	Turbo-fan	1.32009390	-0.53963590
## 1596	Turbo-fan	0.11662094	-0.81086453
## 1597	Turbo-fan	1.72125156	-0.91801659
## 1598	Turbo-fan	0.05931270	-0.41239284
## 1599	Turbo-fan	0.63239507	-0.37890782
## 1600	Turbo-fan	0.17392917	-0.40569584
## 1601	Turbo-fan	-0.16992025	-0.42578685
## 1602	Turbo-fan	1.66394332	-0.31863479
## 1603	Turbo-jet	-0.22722848	-0.22822525
## 1604	Turbo-fan	-1.37339321	-0.49610538
## 1606	Turbo-jet	-0.91492732	-0.26840727
## 1607	Turbo-fan	0.63239507	-0.57981792
## 1608	Turbo-fan	0.91893625	-0.16125522
## 1609	Turbo-fan	-0.51376966	-0.44587786
## 1610	Turbo-fan	0.91893625	-0.36216531
## 1611	Turbo-fan	1.54932685	-0.52624189
## 1612	Turbo-fan	-0.22722848	-0.22822525
## 1613	Turbo-fan	-0.68569437	-0.45592336
## 1614	Turbo-fan	-1.31608498	-0.49275688
## 1615	Turbo-fan	1.09086096	-0.15120971
## 1616	Turbo-fan	-1.65993439	-0.51284789
## 1617	Turbo-fan	-0.80031085	-0.46262036
## 1618	Turbo-fan	1.20547743	-0.34542281
## 1619	Turbo-fan	1.60663509	-0.12107320
## 1620	Turbo-fan	-0.57107790	-0.24831626
## 1622	Turbo-jet	-1.20146850	0.11667042
## 1623	Turbo-fan	1.49201861	0.07313990
## 1624	Turbo-jet	0.46047036	0.01286687
## 1626	Turbo-jet	0.46047036	-0.18804323
## 1627	Turbo-fan	1.20547743	-0.14451271
## 1628	Turbo-jet	-0.34184495	0.16689794
## 1629	Turbo-fan	-1.37339321	-0.09428518
## 1630	Turbo-fan	-0.22722848	0.17359495
## 1631	Turbo-jet	-1.37339321	-0.09428518
## 1632	Turbo-fan	-0.45646143	-0.24161926
## 1633	Turbo-fan	0.91893625	0.24056498
## 1634	Turbo-fan	0.00200446	0.18698895
## 1635	Turbo-jet	0.34585388	0.80981026
## 1636	Turbo-jet	-1.48800968	0.09992791
## 1638	Turbo-fan	-1.08685203	-0.07754268
## 1640	Turbo-jet	1.54932685	0.27739850
## 1641	Turbo-fan	0.51777859	0.21712547
## 1642	Turbo-fan	1.03355272	0.24726198
## 1643	Turbo-fan	-0.51376966	0.35776254
## 1646	Turbo-fan	0.11662094	0.19368596
## 1647	Turbo-jet	0.57508683	0.22047397
## 1648	Turbo-fan	-0.11261201	0.38120205
## 1649	Turbo-fan	1.03355272	0.24726198
## 1650	Turbo-fan	-1.60262616	0.09323091

## 1651	Turbo-fan	0.74701154	0.23051947
## 1652	Turbo-fan	-0.16992025	0.17694345
## 1653	Turbo-fan	0.05931270	0.19033745
## 1654	Turbo-fan	-1.43070145	0.10327641
## 1655	Turbo-fan	-0.80031085	0.54193013
## 1656	Turbo-fan	0.05931270	0.39124755
## 1657	Turbo-fan	0.63239507	0.42473257
## 1658	Reciprocating	1.49201861	0.27404999
## 1659	Turbo-fan	-1.25877674	0.51514211
## 1660	Turbo-fan	-1.60262616	0.49505110
## 1661	Turbo-jet	1.54932685	0.27739850
## 1662	Turbo-fan	0.34585388	0.20707996
## 1663	Turbo-jet	-1.08685203	0.52518762
## 1664	Turbo-jet	-1.08685203	0.52518762
## 1665	Turbo-fan	0.46047036	0.41468706
## 1666	Turbo-fan	0.46047036	0.41468706
## 1667	Turbo-fan	0.91893625	0.44147508
## 1668	Turbo-fan	1.09086096	0.25061048
## 1669	Turbo-fan	-1.65993439	0.29079250
## 1670	Turbo-fan	-1.08685203	0.72609771
## 1671	Turbo-fan	0.00200446	0.58880915
## 1672	Turbo-fan	1.60663509	0.68256719
## 1673	Turbo-fan	1.49201861	0.27404999
## 1674	Turbo-fan	-1.37339321	0.30753501
## 1675	Turbo-fan	-0.85761908	0.33767153
## 1676	Turbo-fan	-0.22722848	0.37450504
## 1677	Turbo-jet	1.20547743	0.65912768
## 1678	Turbo-jet	-0.97223556	0.73279472
## 1679	Turbo-fan	-0.22722848	0.77632524
## 1680	Turbo-prop	1.20547743	1.06094788
## 1681	Turbo-fan	-1.48800968	0.70265820
## 1682	Turbo-fan	-0.91492732	0.73614322
## 1683	Turbo-jet	-0.68569437	0.74953723
## 1684	Turbo-jet	0.05931270	0.79306775
## 1685	Turbo-fan	-1.65993439	0.49170260
## 1686	Turbo-fan	-0.91492732	0.53523312
## 1687	Turbo-fan	-1.43070145	0.50509661
## 1688	Turbo-fan	-0.91492732	0.73614322
## 1689	Turbo-fan	0.51777859	0.61894566
## 1690	Turbo-fan	-1.65993439	0.49170260
## 1691	Turbo-jet	-0.22722848	0.77632524
## 1692	Turbo-fan	-1.37339321	0.91026530
## 1693	Turbo-fan	-1.65993439	0.89352280
## 1694	Turbo-fan	-1.60262616	0.89687130
## 1695	Turbo-fan	0.63239507	0.62564267
## 1696	Turbo-fan	1.14816919	1.05759938
## 1697	Turbo-fan	0.05931270	0.59215765
## 1698	Turbo-jet	-0.80031085	0.74284022
## 1699	Turbo-fan	-0.80031085	0.94375032
## 1701	Turbo-fan	0.63239507	0.62564267
## 1702	Turbo-fan	-1.60262616	1.29869149
## 1703	Turbo-fan	-0.57107790	0.95714433
## 1704	Turbo-fan	0.23123741	1.00402335
## 1705	Turbo-fan	1.49201861	0.67587019

## 1706	Turbo-fan	1.72125156	0.89017429
## 1707	Turbo-fan	0.63239507	1.02746286
## 1708	Turbo-fan	-0.80031085	0.54193013
## 1709	Turbo-jet	-0.45646143	0.96384133
## 1710	Turbo-fan	-0.11261201	0.98393234
## 1711	Turbo-jet	1.49201861	1.07769039
## 1712	Turbo-fan	-0.22722848	0.97723534
## 1713	Turbo-fan	0.63239507	1.02746286
## 1714	Turbo-jet	-0.34184495	0.97053833
## 1715	Turbo-fan	1.32009390	0.66582469
## 1716	Turbo-jet	-0.85761908	0.94040182
## 1717	Turbo-fan	-0.85761908	0.94040182
## 1718	Turbo-fan	-1.08685203	1.12791791
## 1719	Turbo-fan	0.74701154	1.03415986
## 1720	Turbo-fan	0.91893625	0.84329527
## 1721	Turbo-fan	-0.57107790	1.15805442
## 1722	Turbo-fan	0.05931270	1.19488794
## 1723	Turbo-fan	1.20547743	0.86003778
## 1724	Turbo-fan	0.05931270	0.79306775
## 1726	Turbo-fan	1.20547743	1.26185798
## 1728	Turbo-fan	0.51777859	0.81985576
## 1729	Turbo-fan	-0.80031085	0.94375032
## 1730	Turbo-fan	0.05931270	0.79306775
## 1731	Turbo-fan	-1.31608498	0.91361381
## 1733	Turbo-fan	-1.14416027	0.92365931
## 1734	Turbo-fan	0.05931270	1.19488794
## 1735	Turbo-fan	-1.37339321	1.31208550
## 1736	Turbo-fan	1.32009390	1.26855498
## 1737	Turbo-fan	0.17392917	1.20158495
## 1738	Turbo-fan	-1.08685203	0.92700781
## 1739	Turbo-fan	1.03355272	1.05090237
## 1740	Turbo-fan	-1.48800968	1.10447840
## 1741	Turbo-shaft	1.37740214	1.27190348
## 1742	Turbo-jet	-0.51376966	1.36231302
## 1743	Turbo-fan	1.49201861	1.27860048
## 1744	Turbo-fan	-1.43070145	1.10782690
## 1745	Turbo-fan	-0.22722848	1.37905553
## 1746	Turbo-fan	-1.08685203	1.12791791
## 1747	Turbo-jet	0.97624448	1.44937407
## 1748	Turbo-fan	-1.20146850	-3.09789115
## 1749	Turbo-fan	-1.65993439	1.09443289
## 1751	Turbo-fan	-1.60262616	1.49960159
## 1753	Turbo-fan	0.68970330	1.43263156
## 1755	Turbo-fan	-0.22722848	1.17814543
## 1756	Turbo-fan	0.63239507	1.42928306
## 1757	Turbo-fan	0.80431978	1.03750837
## 1758	Turbo-fan	-1.43070145	1.10782690
## 1759	Turbo-fan	0.80431978	1.23841846
## 1760	Turbo-fan	1.60663509	1.48620758
## 1761	Turbo-fan	-1.08685203	1.52973811
## 1762	Turbo-fan	0.05931270	1.19488794
## 1763	Turbo-fan	-0.45646143	1.56657162
## 1764	Turbo-fan	0.57508683	1.22502446
## 1765	Turbo-fan	1.66394332	1.48955609

## 1766	Turbo-fan	-0.05530377	1.59001113
## 1767	Turbo-fan	1.72125156	1.69381469
## 1768	Turbo-fan	-0.16992025	-2.83670802
## 1769	Turbo-fan	0.80431978	1.64023866
## 1771	Turbo-fan	-0.28453672	-2.64249492
## 1772	Turbo-fan	0.57508683	-2.99408760
## 1774	Turbo-fan	0.46047036	-3.00078460
## 1776	Turbo-fan	-0.80031085	-3.07445163
## 1779	Turbo-fan	0.74701154	-2.18040170
## 1780	Turbo-fan	-0.62838614	-0.05075466
## 1781	Turbo-jet	-0.57107790	-1.45377685
## 1782	Turbo-fan	1.20547743	-1.34997330
## 1783	Turbo-jet	0.05931270	-1.21603323
## 1784	Turbo-fan	1.26278567	-1.34662479
## 1785	Turbo-fan	-1.08685203	-1.28300326
## 1786	Turbo-fan	1.20547743	-1.34997330
## 1787	Turbo-fan	1.54932685	-1.32988229
## 1788	Turbo-fan	1.66394332	-1.32318528
## 1789	Turbo-fan	-0.80031085	-1.26626075
## 1790	Turbo-jet	1.09086096	-1.35667030
## 1791	Turbo-fan	-1.65993439	-0.91466808
## 1792	Turbo-fan	0.23123741	-1.40689782
## 1793	Turbo-jet	0.57508683	-1.18589672
## 1794	Turbo-fan	-1.08685203	-1.48391336
## 1795	Turbo-fan	-0.85761908	-1.06869916
## 1796	Turbo-fan	0.63239507	-1.18254821
## 1797	Turbo-fan	1.09086096	-1.35667030
## 1798	Turbo-fan	0.34585388	-1.19929072
## 1799	Turbo-fan	-1.08685203	-1.48391336
## 1800	Turbo-fan	1.72125156	-1.11892668
## 1801	Turbo-fan	-0.45646143	-1.24616974
## 1802	Turbo-fan	1.32009390	-1.14236619
## 1803	Turbo-fan	0.91893625	-0.96489561
## 1804	Turbo-fan	0.46047036	-1.19259372
## 1806	Turbo-fan	0.91893625	-0.96489561
## 1807	Turbo-fan	-0.45646143	-1.04525965
## 1808	Turbo-jet	-1.48800968	-1.10553268
## 1809	Turbo-fan	0.34585388	-0.99838062
## 1810	Turbo-fan	-0.97223556	-1.07539616
## 1811	Turbo-fan	1.20547743	-1.34997330
## 1812	Turbo-fan	0.05931270	-1.01512313
## 1813	Turbo-fan	-0.80031085	-0.86444056
## 1814	Turbo-fan	0.63239507	-0.98163812
## 1815	Reciprocating	0.05931270	-1.21603323
## 1816	Turbo-jet	0.28854565	-0.59990893
## 1818	Turbo-fan	-1.08685203	-0.88118307
## 1819	Turbo-fan	-1.31608498	-1.09548717
## 1820	Turbo-fan	1.54932685	-1.12897219
## 1821	Turbo-jet	1.72125156	-1.11892668
## 1822	Turbo-fan	0.63239507	-0.98163812
## 1823	Turbo-fan	0.57508683	-0.98498662
## 1824	Turbo-fan	1.49201861	-1.13232069
## 1825	Turbo-fan	0.63239507	-0.78072802
## 1826	Turbo-fan	-1.65993439	-1.11557818

## 1827	Turbo-fan	-0.74300261	-1.06200216
## 1828	Turbo-fan	-0.57107790	-1.25286675
## 1829	Turbo-fan	0.57508683	-1.18589672
## 1830	Turbo-fan	0.11662094	-0.81086453
## 1831	Turbo-fan	0.91893625	-1.16580571
## 1832	Turbo-fan	-0.85761908	-1.26960926
## 1833	Turbo-jet	0.34585388	-0.39565033
## 1834	Turbo-fan	-0.28453672	-1.03521414
## 1835	Turbo-fan	-1.37339321	-0.89792558
## 1836	Turbo-fan	-1.37339321	-0.89792558
## 1837	Turbo-fan	-1.48800968	-1.10553268
## 1838	Turbo-jet	1.43471038	-0.73384900
## 1839	Turbo-fan	1.20547743	-1.14906320
## 1840	Turbo-fan	1.26278567	-0.74389450
## 1841	Turbo-fan	-1.25877674	-0.69031847
## 1842	Turbo-fan	-0.74300261	-0.86109206
## 1843	Turbo-fan	-0.51376966	-0.64678795
## 1844	Turbo-fan	-0.51376966	-0.64678795
## 1845	Turbo-fan	-0.11261201	-1.02516864
## 1846	Turbo-jet	-1.14416027	-0.28180128
## 1847	Turbo-jet	1.09086096	-0.95485010
## 1848	Turbo-fan	-1.20146850	-0.88788007
## 1849	Reciprocating	0.91893625	-0.56307541
## 1850	Turbo-fan	1.72125156	-0.91801659
## 1851	Turbo-fan	0.63239507	-0.57981792
## 1852	Turbo-fan	0.05931270	-1.01512313
## 1853	Turbo-fan	0.51777859	-0.58651492
## 1854	Turbo-fan	0.34585388	-0.59656043
## 1855	Turbo-fan	1.20547743	-0.74724300
## 1856	Turbo-fan	-0.57107790	-0.65013645
## 1857	Turbo-fan	0.63239507	-0.98163812
## 1859	Turbo-fan	1.20547743	-0.54633290
## 1860	Turbo-fan	-0.22722848	-0.63004545
## 1862	Turbo-fan	-1.54531792	-0.90797108
## 1864	Turbo-fan	-0.51376966	-0.64678795
## 1865	Turbo-fan	-0.45646143	-0.44252935
## 1866	Turbo-fan	0.00200446	-0.41574134
## 1867	Turbo-fan	-1.08685203	-0.88118307
## 1868	Turbo-fan	-0.57107790	-0.65013645
## 1869	Turbo-fan	-1.08685203	-0.68027297
## 1870	Turbo-fan	0.05931270	-0.61330294
## 1871	Turbo-fan	0.74701154	-0.37221082
## 1872	Turbo-fan	-0.05530377	-0.82091004
## 1873	Turbo-fan	0.11662094	-0.60995444
## 1874	Turbo-fan	0.11662094	-0.40904434
## 1875	Turbo-fan	1.32009390	-0.53963590
## 1876	Turbo-fan	0.63239507	-0.37890782
## 1878	Turbo-fan	1.20547743	-0.34542281
## 1880	Turbo-fan	1.66394332	-0.31863479
## 1881	Turbo-fan	0.86162801	-0.36551382
## 1882	Turbo-fan	0.34585388	-0.59656043
## 1883	Turbo-jet	-0.22722848	-0.22822525
## 1885	Turbo-fan	-0.22722848	-0.22822525
## 1887	Turbo-fan	-0.80031085	-0.46262036

## 1888	Turbo-jet	-1.08685203	-0.47936287
## 1889	Turbo-fan	1.60663509	-0.52289339
## 1890	Turbo-fan	-1.37339321	-0.49610538
## 1891	Turbo-fan	0.05931270	-0.41239284
## 1892	Turbo-fan	0.91893625	-0.36216531
## 1893	Turbo-fan	1.20547743	-0.14451271
## 1894	Turbo-fan	-0.80031085	-0.46262036
## 1895	Turbo-jet	-0.39915319	-0.23827075
## 1896	Turbo-fan	-0.45646143	-0.44252935
## 1897	Turbo-fan	0.57508683	-0.18134623
## 1898	Turbo-fan	-0.28453672	-0.23157375
## 1899	Turbo-fan	1.43471038	-0.13111870
## 1900	Turbo-fan	0.00200446	-0.01392115
## 1901	Turbo-fan	0.05931270	-0.41239284
## 1902	Turbo-fan	-0.62838614	-0.45257486
## 1903	Turbo-fan	-1.54531792	-0.10433069
## 1904	Turbo-fan	-0.51376966	-0.04405766
## 1905	Turbo-jet	0.51777859	-0.18469473
## 1906	Turbo-fan	0.91893625	0.03965488
## 1907	Turbo-fan	1.54932685	-0.32533180
## 1908	Turbo-fan	-1.31608498	-0.49275688
## 1909	Turbo-fan	0.11662094	-0.00722414
## 1910	Turbo-fan	1.20547743	-0.34542281
## 1911	Turbo-fan	1.49201861	0.07313990
## 1912	Turbo-fan	-0.22722848	-0.42913535
## 1913	Turbo-fan	-0.80031085	-0.26171027
## 1914	Turbo-fan	0.91893625	-0.16125522
## 1915	Turbo-jet	-0.68569437	-0.05410316
## 1916	Turbo-fan	0.63239507	0.02291237
## 1917	Turbo-fan	1.14816919	-0.14786121
## 1918	Turbo-fan	1.20547743	0.05639739
## 1919	Turbo-fan	-0.51376966	-0.04405766
## 1920	Turbo-fan	-1.31608498	-0.29184678
## 1921	Turbo-fan	1.43471038	0.06979140
## 1922	Turbo-fan	0.63239507	-0.17799773
## 1923	Turbo-fan	1.20547743	-0.14451271
## 1924	Turbo-fan	-1.08685203	0.12336742
## 1925	Turbo-fan	-0.11261201	-0.22152825
## 1926	Turbo-fan	-0.51376966	-0.04405766
## 1927	Turbo-fan	0.40316212	-0.19139173
## 1928	Turbo-fan	0.68970330	0.22717097
## 1929	Turbo-jet	-1.37339321	0.10662491
## 1930	Turbo-fan	-0.16992025	0.17694345
## 1931	Turbo-fan	-1.37339321	0.30753501
## 1932	Turbo-fan	0.28854565	-0.19808873
## 1933	Turbo-fan	-1.08685203	0.52518762
## 1934	Turbo-fan	-0.80031085	0.34102003
## 1935	Turbo-fan	1.20547743	0.25730749
## 1936	Turbo-fan	-1.20146850	0.31758052
## 1937	Turbo-jet	1.60663509	0.28074700
## 1938	Turbo-fan	-1.65993439	0.08988241
## 1940	Turbo-fan	1.72125156	0.28744400
## 1941	Turbo-fan	1.20547743	0.25730749
## 1942	Turbo-jet	-0.91492732	0.33432302

## 1943	Turbo-fan	0.34585388	0.40799006
## 1944	Turbo-jet	-1.02954379	0.12671592
## 1945	Turbo-fan	0.05931270	0.19033745
## 1946	Turbo-fan	-1.31608498	0.10997341
## 1947	Turbo-fan	1.54932685	0.27739850
## 1948	Turbo-fan	0.63239507	0.22382247
## 1949	Turbo-fan	1.49201861	0.47496009
## 1951	Turbo-fan	0.34585388	0.00616986
## 1952	Turbo-fan	1.32009390	0.46491459
## 1953	Turbo-fan	1.43471038	0.27070149
## 1954	Turbo-fan	1.49201861	0.27404999
## 1955	Turbo-jet	1.09086096	0.04970039
## 1957	Turbo-jet	1.54932685	0.27739850
## 1959	Turbo-fan	-1.60262616	0.49505110
## 1960	Turbo-fan	-1.37339321	0.50844511
## 1961	Turbo-fan	0.63239507	0.42473257
## 1962	Turbo-fan	-0.05530377	0.18364045
## 1963	Turbo-fan	0.63239507	0.22382247
## 1964	Turbo-fan	0.46047036	0.41468706
## 1965	Turbo-fan	0.74701154	0.63233967
## 1966	Turbo-fan	-0.22722848	0.37450504
## 1968	Turbo-fan	1.43471038	0.27070149
## 1969	Turbo-fan	1.49201861	0.27404999
## 1970	Turbo-fan	1.20547743	0.65912768
## 1971	Turbo-fan	0.11662094	0.39459605
## 1972	Turbo-fan	-0.74300261	0.34436853
## 1973	Turbo-jet	-1.25877674	0.51514211
## 1975	Turbo-fan	-0.80031085	0.54193013
## 1976	Turbo-fan	-1.14416027	0.72274921
## 1977	Turbo-fan	-1.08685203	0.72609771
## 1978	Turbo-fan	-1.48800968	0.30083801
## 1979	Turbo-fan	0.63239507	0.62564267
## 1980	Turbo-jet	1.20547743	0.45821758
## 1981	Turbo-jet	-0.97223556	0.73279472
## 1982	Turbo-jet	1.20547743	0.65912768
## 1983	Turbo-fan	0.23123741	0.80311325
## 1984	Turbo-fan	-1.65993439	0.49170260
## 1985	Turbo-fan	-1.02954379	0.52853612
## 1986	Turbo-fan	-1.08685203	0.72609771
## 1988	Turbo-fan	-0.80031085	0.54193013
## 1989	Turbo-fan	1.20547743	0.45821758
## 1990	Turbo-fan	1.72125156	0.89017429
## 1991	Turbo-fan	-0.51376966	0.96049283
## 1992	Turbo-fan	-0.85761908	0.53858162
## 1993	Turbo-fan	0.91893625	0.64238517
## 1995	Turbo-fan	1.20547743	0.65912768
## 1997	Turbo-fan	-0.57107790	0.75623423
## 1998	Turbo-fan	0.46047036	0.61559716
## 1999	Turbo-jet	-0.28453672	0.57206664
## 2000	Turbo-fan	0.00200446	0.99062934
## 2001	Turbo-fan	-0.51376966	0.55867263
## 2002	Turbo-fan	0.05931270	0.99397785
## 2003	Turbo-fan	-1.08685203	0.92700781
## 2004	Turbo-fan	-0.80031085	0.54193013

## 2005	Turbo-fan	-1.20146850	0.51849061
## 2006	Turbo-jet	0.63239507	1.02746286
## 2007	Turbo-fan	-0.80031085	0.74284022
## 2008	Turbo-fan	-1.37339321	0.70935521
## 2012	Turbo-fan	-1.37339321	0.70935521
## 2013	Turbo-fan	1.37740214	0.87008328
## 2014	Turbo-fan	-1.08685203	0.72609771
## 2015	Turbo-fan	-0.22722848	0.77632524
## 2016	Turbo-fan	1.49201861	1.07769039
## 2019	Turbo-fan	0.86162801	0.63903667
## 2020	Turbo-jet	-0.68569437	1.15135742
## 2022	Turbo-fan	-1.08685203	1.12791791
## 2023	Turbo-fan	0.80431978	1.03750837
## 2024	Turbo-fan	0.63239507	1.02746286
## 2025	Turbo-fan	1.49201861	0.87678029
## 2027	Turbo-fan	0.91893625	1.04420537
## 2028	Turbo-fan	0.05931270	1.19488794
## 2030	Turbo-fan	0.46047036	1.01741736
## 2031	Turbo-jet	1.32009390	0.86673478
## 2032	Turbo-fan	1.26278567	1.26520648
## 2033	Turbo-fan	0.86162801	1.04085687
## 2034	Turbo-fan	-1.37339321	1.31208550
## 2035	Turbo-fan	-0.39915319	1.16809993
## 2036	Turbo-jet	0.17392917	1.00067485
## 2037	Turbo-fan	-1.08685203	0.92700781
## 2038	Turbo-jet	0.63239507	1.22837296
## 2039	Turbo-fan	0.11662094	0.99732635
## 2040	Turbo-fan	-1.65993439	1.09443289
## 2041	Turbo-fan	1.20547743	1.06094788
## 2042	Turbo-jet	-1.48800968	1.10447840
## 2043	Turbo-fan	1.49201861	0.87678029
## 2044	Turbo-fan	1.49201861	1.68042068
## 2045	Turbo-fan	1.26278567	1.06429638
## 2046	Turbo-fan	0.51777859	1.42258605
## 2047	Turbo-fan	-1.60262616	1.49960159
## 2048	Turbo-fan	1.49201861	1.07769039
## 2049	Turbo-fan	0.51777859	1.02076586
## 2050	Turbo-fan	0.46047036	1.21832745
## 2051	Turbo-fan	0.74701154	1.23506996
## 2052	Turbo-fan	1.03355272	1.45272257
## 2053	Turbo-fan	1.03355272	1.45272257
## 2055	Turbo-fan	-1.43070145	1.30873700
## 2056	Turbo-fan	0.63239507	1.42928306
## 2057	Turbo-fan	-1.65993439	1.09443289
## 2058	Turbo-fan	0.00200446	1.39244954
## 2059	Turbo-fan	1.20547743	1.06094788
## 2060	Turbo-fan	0.00200446	1.59335964
## 2062	Turbo-fan	-1.31608498	1.11452390
## 2063	Turbo-fan	-0.80031085	1.34557052
## 2064	Turbo-fan	0.05931270	1.39579804
## 2065	Turbo-fan	-0.28453672	1.37570703
## 2066	Turbo-fan	1.03355272	1.25181247
## 2067	Turbo-fan	0.68970330	1.43263156
## 2068	Turbo-fan	0.80431978	1.23841846

## 2069	Turbo-fan	-1.20146850	1.32213100
## 2070	Turbo-fan	-0.97223556	1.13461491
## 2071	Turbo-fan	-0.62838614	1.55652612
## 2072	Turbo-fan	0.46047036	1.21832745
## 2074	Turbo-fan	-1.08685203	1.32882801
## 2076	Turbo-jet	0.00200446	1.59335964
## 2077	Turbo-fan	-1.02954379	1.53308661
## 2078	Turbo-fan	0.68970330	1.63354166
## 2079	Turbo-fan	-1.31608498	1.31543400
## 2080	Reciprocating	-0.22722848	1.37905553
## 2081	Turbo-fan	-0.74300261	1.34891902
## 2083	Turbo-fan	0.11662094	-3.02087561
## 2085	Turbo-fan	1.20547743	1.46276807
## 2086	Turbo-fan	-0.28453672	1.37570703
## 2087	Turbo-fan	-0.68569437	1.55317762
## 2088	Turbo-fan	0.34585388	1.41254055
## 2089	Turbo-fan	-0.62838614	-3.06440613
## 2090	Turbo-fan	-0.28453672	-2.64249492
## 2091	Turbo-fan	1.20547743	-2.95725408
## 2092	Turbo-fan	-1.31608498	1.51634410
## 2093	Turbo-fan	-0.28453672	1.37570703
## 2094	Turbo-jet	-0.74300261	1.54982912
## 2095	Turbo-fan	-1.65993439	-2.92376906
## 2096	Turbo-fan	-0.80031085	1.54648061
## 2099	Turbo-fan	1.72125156	1.69381469
## 2100	Turbo-fan	-0.80031085	-3.07445163
## 2102	Turbo-fan	1.72125156	1.69381469
## 2105	Turbo-fan	1.20547743	-1.34997330
## 2106	Turbo-fan	-0.68569437	-1.05865365
## 2107	Turbo-fan	0.00200446	-1.42029183
## 2108	Turbo-fan	-1.60262616	-1.51404988
## 2109	Turbo-fan	1.72125156	-1.31983678
## 2110	Turbo-fan	-1.08685203	-1.28300326
## 2111	Turbo-fan	0.46047036	-1.39350382
## 2112	Turbo-fan	1.72125156	-1.52074688
## 2113	Turbo-fan	-0.22722848	-1.43368584
## 2114	Turbo-fan	1.72125156	-1.72165698
## 2115	Turbo-jet	-0.22722848	-1.63459593
## 2116	Turbo-fan	-0.68569437	-1.46047385
## 2117	Turbo-fan	-0.80031085	-1.26626075
## 2118	Turbo-fan	-1.65993439	-1.71830847
## 2119	Turbo-fan	1.20547743	-1.55088339
## 2120	Turbo-fan	-0.51376966	-1.45042834
## 2121	Turbo-fan	-0.57107790	-1.45377685
## 2122	Turbo-fan	-0.74300261	-1.26291225
## 2123	Turbo-jet	0.80431978	-1.37341281
## 2124	Turbo-jet	0.28854565	-1.20263922
## 2125	Turbo-fan	1.03355272	-1.36001880
## 2126	Turbo-fan	-1.37339321	-1.29974577
## 2127	Turbo-fan	0.63239507	-0.78072802
## 2128	Turbo-fan	-0.11261201	-1.22607874
## 2129	Turbo-jet	-1.54531792	-1.10888118
## 2130	Turbo-fan	-1.08685203	-1.48391336
## 2131	Turbo-fan	-0.57107790	-1.05195665

## 2132	Turbo-jet	1.60663509	-1.12562369
## 2133	Turbo-fan	1.60663509	-1.52744388
## 2134	Turbo-fan	-0.22722848	-1.03186564
## 2135	Turbo-fan	-0.11261201	-1.22607874
## 2136	Turbo-fan	-1.25877674	-1.49395887
## 2137	Turbo-fan	-0.85761908	-1.06869916
## 2138	Turbo-fan	0.63239507	-1.18254821
## 2139	Turbo-fan	0.28854565	-1.00172913
## 2140	Turbo-fan	-0.91492732	-1.47386786
## 2141	Turbo-fan	0.17392917	-1.20933623
## 2142	Turbo-fan	0.91893625	-0.96489561
## 2143	Turbo-fan	-1.54531792	-1.10888118
## 2144	Turbo-fan	0.40316212	-1.39685232
## 2145	Turbo-fan	-0.45646143	-1.04525965
## 2146	Turbo-fan	1.20547743	-1.34997330
## 2147	Turbo-fan	0.57508683	-1.38680681
## 2148	Turbo-jet	0.63239507	-0.98163812
## 2149	Turbo-jet	0.28854565	-1.00172913
## 2151	Turbo-fan	0.34585388	-0.99838062
## 2152	Turbo-jet	-0.05530377	-1.22273023
## 2153	Turbo-fan	1.72125156	-1.11892668
## 2154	Turbo-fan	-1.65993439	-0.91466808
## 2155	Turbo-fan	0.05931270	-1.01512313
## 2156	Turbo-fan	-1.37339321	-0.89792558
## 2157	Turbo-fan	0.91893625	-0.96489561
## 2158	Turbo-fan	0.05931270	-1.21603323
## 2159	Turbo-fan	-0.22722848	-0.83095554
## 2160	Turbo-fan	-0.11261201	-1.22607874
## 2161	Turbo-fan	-1.14416027	-1.28635176
## 2162	Turbo-fan	0.91893625	-0.96489561
## 2163	Turbo-fan	-0.28453672	-0.83430404
## 2164	Turbo-fan	1.43471038	-0.93475909
## 2165	Turbo-fan	-0.22722848	-1.03186564
## 2166	Turbo-fan	-0.80031085	-0.46262036
## 2167	Turbo-fan	0.00200446	-1.01847163
## 2168	Turbo-fan	-1.08685203	-1.08209316
## 2169	Turbo-fan	0.74701154	-0.97494111
## 2170	Turbo-fan	-0.80031085	-1.06535066
## 2171	Turbo-fan	-0.11261201	-0.82425854
## 2172	Turbo-fan	0.63239507	-0.78072802
## 2173	Turbo-fan	1.66394332	-0.92136509
## 2174	Turbo-fan	0.57508683	-1.18589672
## 2175	Turbo-fan	1.49201861	-1.13232069
## 2176	Turbo-fan	-0.57107790	-1.05195665
## 2177	Turbo-fan	0.11662094	-1.01177463
## 2178	Turbo-fan	0.91893625	-1.16580571
## 2179	Turbo-fan	-1.25877674	-1.09213867
## 2180	Turbo-fan	0.46047036	-0.79077352
## 2182	Turbo-fan	1.49201861	-1.13232069
## 2183	Turbo-fan	-0.34184495	-1.03856264
## 2184	Turbo-fan	1.03355272	-0.95819860
## 2185	Turbo-fan	-1.31608498	-0.89457707
## 2186	Turbo-fan	0.63239507	-0.37890782
## 2187	Turbo-fan	-0.62838614	-1.25621525

## 2188	Turbo-fan	0.46047036	-0.79077352
## 2189	Turbo-fan	1.20547743	-1.14906320
## 2190	Turbo-fan	-0.80031085	-0.66353046
## 2191	Turbo-fan	0.97624448	-0.76063701
## 2192	Turbo-fan	-1.31608498	-1.09548717
## 2193	Turbo-fan	-0.80031085	-1.06535066
## 2194	Turbo-fan	1.20547743	-0.34542281
## 2195	Turbo-fan	1.03355272	-0.75728851
## 2196	Turbo-fan	-0.39915319	-1.04191115
## 2197	Turbo-fan	-1.43070145	-0.70036398
## 2198	Turbo-fan	-1.08685203	-0.88118307
## 2199	Turbo-fan	-0.68569437	-0.65683346
## 2200	Turbo-fan	0.34585388	-0.79747053
## 2201	Turbo-fan	-0.51376966	-0.64678795
## 2202	Turbo-fan	1.72125156	-0.71710649
## 2203	Turbo-fan	-0.91492732	-0.87113756
## 2204	Turbo-fan	-0.11261201	-0.62334844
## 2205	Turbo-fan	-1.43070145	-0.90127408
## 2206	Turbo-fan	-0.16992025	-0.62669694
## 2207	Turbo-fan	0.00200446	-1.01847163
## 2208	Turbo-fan	-0.51376966	-0.64678795
## 2209	Turbo-fan	-0.22722848	-0.83095554
## 2210	Turbo-jet	0.97624448	-0.76063701
## 2211	Turbo-fan	0.97624448	-0.55972691
## 2212	Turbo-fan	-0.62838614	-0.85439505
## 2215	Turbo-fan	-0.34184495	-1.03856264
## 2216	Turbo-fan	-1.60262616	-0.91131958
## 2217	Turbo-jet	0.23123741	-0.60325743
## 2218	Turbo-fan	1.26278567	-0.94480460
## 2219	Turbo-fan	-0.22722848	-0.63004545
## 2220	Turbo-fan	0.51777859	-0.58651492
## 2221	Turbo-fan	-0.22722848	-0.63004545
## 2222	Turbo-fan	1.20547743	-0.54633290
## 2223	Turbo-fan	0.34585388	-0.79747053
## 2224	Turbo-fan	0.86162801	-0.96824411
## 2225	Turbo-fan	-1.43070145	-0.90127408
## 2226	Turbo-fan	-1.08685203	-0.68027297
## 2227	Turbo-fan	0.05931270	-0.81421303
## 2228	Turbo-fan	-1.20146850	-0.88788007
## 2229	Turbo-fan	0.23123741	-0.40234733
## 2230	Turbo-fan	-0.45646143	-0.84434955
## 2231	Turbo-fan	0.68970330	-0.37555932
## 2232	Turbo-fan	-1.14416027	-0.68362147
## 2233	Turbo-fan	1.09086096	-0.55302991
## 2235	Turbo-fan	-0.22722848	-0.83095554
## 2236	Turbo-fan	0.63239507	-0.78072802
## 2237	Turbo-fan	1.43471038	-0.53293890
## 2238	Turbo-fan	-0.45646143	-0.44252935
## 2239	Turbo-fan	0.74701154	-0.37221082
## 2240	Turbo-fan	-0.74300261	-0.66018196
## 2241	Turbo-fan	0.28854565	-0.39899883
## 2242	Turbo-fan	0.11662094	-0.60995444
## 2243	Turbo-fan	-0.80031085	-0.26171027
## 2244	Turbo-fan	-1.08685203	-0.68027297

## 2245	Turbo-fan	0.05931270	-0.41239284
## 2246	Turbo-fan	1.32009390	-0.53963590
## 2247	Turbo-fan	-1.31608498	-0.69366698
## 2248	Turbo-fan	-1.37339321	-0.29519528
## 2249	Turbo-fan	-1.37339321	-0.29519528
## 2250	Turbo-fan	-0.22722848	-0.22822525
## 2251	Turbo-fan	-0.85761908	-0.66687896
## 2252	Turbo-fan	0.91893625	-0.56307541
## 2253	Turbo-fan	-0.80031085	-0.66353046
## 2254	Turbo-fan	1.20547743	-0.54633290
## 2255	Turbo-jet	-1.25877674	-0.69031847
## 2256	Turbo-fan	-0.45646143	-0.64343945
## 2257	Turbo-fan	0.51777859	-0.38560483
## 2259	Reciprocating	0.05931270	-0.41239284
## 2260	Turbo-fan	-0.57107790	-0.24831626
## 2261	Turbo-fan	0.57508683	-0.18134623
## 2262	Turbo-fan	0.91893625	-0.36216531
## 2263	Turbo-jet	-0.39915319	-0.23827075
## 2264	Turbo-shaft	0.51777859	-0.18469473
## 2265	Turbo-jet	-0.51376966	0.15685244
## 2266	Turbo-fan	0.91893625	-0.16125522
## 2267	Turbo-fan	-0.45646143	-0.44252935
## 2268	Turbo-fan	1.43471038	-0.13111870
## 2269	Turbo-fan	-1.20146850	-0.28514978
## 2270	Turbo-fan	-1.43070145	-0.49945388
## 2271	Turbo-fan	-1.37339321	-0.49610538
## 2272	Turbo-fan	-1.08685203	-0.07754268
## 2273	Turbo-fan	0.05931270	-0.21148274
## 2274	Turbo-fan	-1.65993439	-0.31193779
## 2275	Turbo-fan	-0.34184495	-0.43583235
## 2276	Turbo-fan	1.20547743	-0.34542281
## 2277	Turbo-fan	1.49201861	0.07313990
## 2278	Turbo-fan	-0.80031085	-0.26171027
## 2279	Turbo-fan	-1.37339321	-0.29519528
## 2280	Turbo-fan	0.34585388	0.00616986
## 2281	Turbo-fan	1.20547743	-0.34542281
## 2282	Turbo-fan	-0.85761908	-0.06414867
## 2283	Turbo-fan	1.20547743	0.05639739
## 2285	Turbo-fan	-1.54531792	0.09657941
## 2286	Turbo-fan	-1.31608498	-0.09093668
## 2287	Turbo-fan	-1.25877674	-0.28849828
## 2288	Turbo-jet	1.54932685	-0.12442170
## 2289	Turbo-fan	-0.51376966	-0.24496776
## 2290	Turbo-fan	0.46047036	0.01286687
## 2291	Turbo-fan	-1.08685203	0.12336742
## 2292	Turbo-fan	1.54932685	0.07648840
## 2293	Turbo-fan	-1.31608498	0.10997341
## 2294	Turbo-fan	-1.54531792	-0.30524079
## 2295	Turbo-fan	0.74701154	0.02960938
## 2296	Turbo-fan	-0.51376966	-0.04405766
## 2297	Turbo-jet	-1.37339321	0.10662491
## 2298	Turbo-fan	-1.20146850	-0.08423968
## 2300	Turbo-fan	0.11662094	-0.20813424
## 2301	Turbo-fan	1.49201861	0.27404999

## 2302	Turbo-jet	0.34585388	0.80981026
## 2303	Turbo-fan	-0.62838614	-0.05075466
## 2304	Turbo-fan	1.54932685	0.07648840
## 2305	Turbo-fan	-1.14416027	-0.08089118
## 2306	Turbo-fan	-0.68569437	-0.05410316
## 2307	Turbo-fan	-0.05530377	0.18364045
## 2308	Turbo-fan	1.20547743	0.05639739
## 2309	Turbo-jet	1.43471038	0.47161159
## 2310	Turbo-fan	0.80431978	0.03295788
## 2312	Turbo-fan	0.05931270	0.19033745
## 2313	Turbo-fan	0.91893625	0.44147508
## 2314	Turbo-jet	1.14816919	0.05304889
## 2315	Turbo-fan	1.03355272	0.24726198
## 2316	Turbo-fan	1.49201861	0.47496009
## 2317	Turbo-fan	0.74701154	0.43142957
## 2318	Turbo-fan	-0.28453672	0.17024644
## 2319	Turbo-fan	0.46047036	0.21377697
## 2320	Turbo-fan	-0.22722848	0.57541514
## 2321	Turbo-fan	-0.22722848	0.57541514
## 2322	Turbo-fan	0.74701154	0.43142957
## 2323	Turbo-fan	1.60663509	0.48165710
## 2324	Turbo-fan	1.37740214	0.26735299
## 2325	Turbo-jet	1.32009390	0.46491459
## 2326	Turbo-jet	-1.37339321	0.30753501
## 2327	Turbo-fan	1.60663509	0.48165710
## 2328	Turbo-fan	-0.80031085	0.14010993
## 2329	Turbo-fan	0.46047036	0.21377697
## 2330	Turbo-fan	-0.51376966	0.55867263
## 2331	Turbo-jet	-0.57107790	0.55532413
## 2332	Turbo-fan	0.91893625	0.44147508
## 2334	Turbo-fan	-0.34184495	0.56871814
## 2335	Turbo-fan	1.20547743	0.25730749
## 2336	Turbo-fan	-1.02954379	0.32762602
## 2337	Turbo-fan	-0.11261201	0.38120205
## 2338	Turbo-fan	1.49201861	0.27404999
## 2339	Turbo-fan	-0.22722848	0.37450504
## 2340	Turbo-fan	0.86162801	0.23721648
## 2341	Turbo-fan	-0.74300261	0.54527863
## 2343	Turbo-jet	0.28854565	0.40464156
## 2344	Turbo-fan	-1.08685203	0.72609771
## 2345	Turbo-fan	-1.65993439	0.29079250
## 2346	Turbo-fan	0.86162801	0.43812657
## 2347	Turbo-fan	-0.74300261	0.34436853
## 2348	Turbo-fan	0.46047036	0.61559716
## 2349	Turbo-fan	-1.08685203	0.72609771
## 2350	Turbo-jet	-0.22722848	0.77632524
## 2351	Turbo-jet	0.05931270	0.59215765
## 2352	Turbo-fan	-0.51376966	0.55867263
## 2353	Turbo-fan	-0.97223556	0.33097452
## 2354	Turbo-fan	0.28854565	0.60555166
## 2355	Turbo-fan	-0.68569437	0.34771703
## 2356	Turbo-fan	-1.48800968	0.70265820
## 2357	Turbo-fan	-0.80031085	0.74284022
## 2358	Turbo-fan	1.20547743	0.65912768

## 2359	Turbo-jet	0.40316212	0.41133856
## 2360	Turbo-fan	1.14816919	0.45486908
## 2363	Turbo-fan	-1.48800968	0.30083801
## 2364	Turbo-fan	1.43471038	0.47161159
## 2365	Turbo-fan	0.23123741	0.80311325
## 2366	Turbo-fan	1.20547743	0.45821758
## 2367	Turbo-fan	-0.16992025	0.37785355
## 2368	Turbo-fan	1.49201861	0.67587019
## 2369	Turbo-fan	-0.80031085	0.54193013
## 2370	Turbo-fan	1.43471038	0.87343179
## 2371	Turbo-fan	0.17392917	0.39794456
## 2372	Turbo-fan	-1.48800968	0.90356830
## 2373	Turbo-fan	1.20547743	0.45821758
## 2375	Turbo-fan	-1.60262616	0.89687130
## 2376	Turbo-fan	1.49201861	0.87678029
## 2378	Turbo-fan	-1.31608498	0.71270371
## 2379	Turbo-fan	0.40316212	0.81315876
## 2380	Turbo-fan	0.00200446	0.99062934
## 2381	Turbo-fan	-0.68569437	0.54862713
## 2383	Turbo-fan	0.80431978	0.83659827
## 2384	Turbo-fan	-1.08685203	0.92700781
## 2385	Turbo-fan	0.40316212	1.01406885
## 2386	Turbo-fan	-1.37339321	0.70935521
## 2387	Turbo-fan	-0.51376966	0.55867263
## 2388	Turbo-fan	0.28854565	0.60555166
## 2389	Turbo-fan	-0.80031085	0.94375032
## 2390	Turbo-fan	-0.39915319	0.56536964
## 2391	Turbo-fan	-0.51376966	0.55867263
## 2392	Turbo-fan	-0.57107790	0.95714433
## 2395	Turbo-jet	-0.80031085	0.94375032
## 2396	Turbo-fan	0.05931270	0.59215765
## 2397	Turbo-fan	-0.97223556	0.73279472
## 2398	Turbo-fan	-0.80031085	0.74284022
## 2399	Turbo-jet	0.97624448	1.04755387
## 2401	Turbo-jet	1.20547743	1.06094788
## 2402	Turbo-jet	-0.34184495	0.97053833
## 2403	Turbo-fan	1.43471038	0.67252169
## 2404	Turbo-fan	1.49201861	0.67587019
## 2405	Turbo-fan	-0.22722848	0.77632524
## 2406	Turbo-fan	-1.54531792	0.69930970
## 2407	Turbo-jet	-0.51376966	0.96049283
## 2408	Turbo-fan	0.74701154	1.03415986
## 2409	Turbo-fan	0.51777859	1.02076586
## 2410	Turbo-fan	-0.51376966	1.16140293
## 2411	Turbo-fan	-1.08685203	0.72609771
## 2412	Turbo-fan	-0.91492732	0.73614322
## 2413	Turbo-fan	-0.91492732	0.73614322
## 2414	Turbo-fan	-0.85761908	1.14131192
## 2415	Turbo-fan	1.49201861	0.87678029
## 2416	Turbo-fan	1.66394332	1.08773589
## 2417	Turbo-fan	0.05931270	1.19488794
## 2418	Turbo-fan	0.74701154	1.23506996
## 2419	Turbo-fan	0.17392917	1.00067485
## 2420	Turbo-fan	0.34585388	0.80981026

## 2421	Turbo-fan	-0.05530377	1.18819094
## 2422	Turbo-jet	-1.31608498	1.11452390
## 2423	Turbo-fan	-1.20146850	0.71940071
## 2425	Turbo-fan	1.66394332	0.88682579
## 2426	Turbo-fan	0.40316212	0.81315876
## 2427	Turbo-jet	1.14816919	0.85668928
## 2428	Turbo-fan	-1.37339321	0.91026530
## 2429	Turbo-fan	0.34585388	0.80981026
## 2430	Turbo-fan	0.86162801	1.04085687
## 2431	Turbo-jet	0.51777859	1.22167596
## 2432	Turbo-jet	-1.54531792	1.30203999
## 2434	Turbo-fan	1.14816919	1.05759938
## 2435	Turbo-fan	-0.05530377	1.18819094
## 2436	Turbo-jet	-0.97223556	1.33552501
## 2437	Turbo-fan	1.20547743	0.86003778
## 2438	Turbo-fan	0.05931270	0.99397785
## 2439	Turbo-fan	-0.45646143	1.36566153
## 2440	Turbo-fan	0.46047036	1.21832745
## 2441	Turbo-fan	1.20547743	1.06094788
## 2442	Turbo-fan	0.28854565	1.20828195
## 2443	Turbo-fan	0.74701154	1.23506996
## 2444	Turbo-fan	1.60663509	1.08438739
## 2445	Turbo-fan	-0.91492732	1.13796342
## 2446	Turbo-fan	0.63239507	1.02746286
## 2447	Turbo-fan	1.49201861	1.07769039
## 2448	Turbo-fan	-0.80031085	1.34557052
## 2449	Turbo-fan	0.11662094	1.39914654
## 2450	Turbo-fan	-0.97223556	1.33552501
## 2451	Turbo-fan	-1.02954379	1.13126641
## 2452	Turbo-fan	-0.22722848	1.37905553
## 2453	Turbo-fan	1.20547743	1.06094788
## 2454	Turbo-fan	0.97624448	1.24846397
## 2455	Turbo-fan	-0.45646143	1.16475143
## 2456	Turbo-jet	-0.80031085	1.54648061
## 2457	Turbo-jet	1.66394332	1.48955609
## 2458	Turbo-fan	-0.51376966	1.36231302
## 2459	Turbo-fan	0.63239507	1.42928306
## 2460	Turbo-fan	-1.65993439	1.09443289
## 2461	Turbo-fan	-1.31608498	1.11452390
## 2462	Turbo-jet	0.23123741	1.40584355
## 2463	Turbo-fan	1.37740214	1.07099338
## 2464	Turbo-fan	0.05931270	1.39579804
## 2465	Turbo-fan	0.80431978	1.23841846
## 2466	Turbo-fan	1.03355272	1.25181247
## 2467	Turbo-jet	-1.02954379	1.53308661
## 2469	Turbo-fan	0.05931270	1.19488794
## 2470	Turbo-jet	0.46047036	1.62014765
## 2471	Reciprocating	-1.08685203	1.32882801
## 2472	Turbo-fan	-1.43070145	1.30873700
## 2475	Turbo-fan	-1.08685203	1.52973811
## 2476	Turbo-fan	0.11662094	1.39914654
## 2477	Turbo-fan	0.74701154	1.63689016
## 2480	Turbo-fan	-0.51376966	1.36231302
## 2481	Turbo-fan	-0.22722848	1.37905553

## 2482	Turbo-fan	-0.97223556	1.33552501
## 2483	Turbo-fan	0.17392917	1.60340514
## 2486	Turbo-fan	-0.28453672	1.37570703
## 2487	Turbo-fan	-0.62838614	-2.66258593
## 2489	Turbo-fan	-0.39915319	-3.05101212
## 2492	Turbo-fan	1.72125156	1.69381469
## 2495	Turbo-fan	1.43471038	1.67707218
## 2496	Turbo-fan	0.46047036	-2.19714421
## 2497	Turbo-fan	-0.80031085	-0.26171027
## 2498	Turbo-fan	1.66394332	-1.12227518
## 2499	Turbo-fan	-1.08685203	-1.28300326
## 2500	Turbo-fan	-0.80031085	-1.46717085
## 2501	Turbo-fan	1.72125156	-1.52074688
## 2502	Turbo-fan	-0.22722848	-1.43368584
## 2503	Turbo-fan	-0.80031085	-1.66808095
## 2504	Turbo-fan	1.72125156	-1.31983678
## 2505	Turbo-fan	-1.37339321	-1.50065587
## 2506	Turbo-fan	-0.74300261	-1.66473245
## 2507	Turbo-fan	-0.22722848	-1.63459593
## 2508	Turbo-fan	-0.80031085	-1.26626075
## 2509	Turbo-fan	0.34585388	-1.60111092
## 2510	Turbo-jet	-0.22722848	-1.23277574
## 2511	Turbo-fan	0.74701154	-1.37676131
## 2512	Turbo-fan	0.11662094	-1.41359483
## 2513	Turbo-fan	-0.74300261	-1.26291225
## 2514	Turbo-jet	0.80431978	-1.37341281
## 2515	Turbo-fan	0.74701154	-1.37676131
## 2516	Turbo-fan	-1.65993439	-1.51739838
## 2517	Turbo-fan	0.68970330	-1.58101991
## 2518	Turbo-fan	1.14816919	-1.35332180
## 2519	Turbo-jet	0.34585388	-1.19929072
## 2520	Turbo-fan	0.97624448	-1.36336730
## 2521	Turbo-jet	-1.54531792	-1.10888118
## 2522	Turbo-fan	1.60663509	-1.52744388
## 2523	Turbo-jet	1.43471038	-1.13566919
## 2524	Turbo-fan	-0.80031085	-1.06535066
## 2525	Turbo-fan	0.51777859	-1.18924522
## 2526	Turbo-fan	-0.68569437	-1.25956375
## 2527	Turbo-fan	0.63239507	-1.18254821
## 2528	Turbo-fan	0.91893625	-0.96489561
## 2529	Turbo-fan	-0.57107790	-1.05195665
## 2530	Turbo-fan	0.28854565	-1.00172913
## 2531	Turbo-fan	-0.51376966	-1.24951825
## 2532	Turbo-fan	-1.60262616	-1.11222968
## 2533	Turbo-fan	0.80431978	-1.17250271
## 2534	Turbo-fan	-1.25877674	-1.49395887
## 2535	Turbo-fan	-0.11261201	-1.02516864
## 2536	Turbo-fan	-0.45646143	-1.04525965
## 2537	Turbo-jet	0.28854565	-1.00172913
## 2538	Turbo-jet	0.57508683	-1.38680681
## 2539	Turbo-fan	0.17392917	-1.41024632
## 2540	Turbo-fan	0.34585388	-0.99838062
## 2541	Turbo-fan	0.91893625	-0.96489561
## 2542	Turbo-fan	-0.05530377	-1.22273023

## 2543	Turbo-fan	0.91893625	-1.36671580
## 2544	Turbo-fan	-0.34184495	-1.03856264
## 2545	Turbo-fan	0.05931270	-1.01512313
## 2546	Turbo-fan	-1.65993439	-0.91466808
## 2547	Turbo-fan	-1.43070145	-1.10218417
## 2548	Turbo-fan	-0.11261201	-1.22607874
## 2549	Turbo-fan	0.86162801	-0.96824411
## 2550	Turbo-fan	-1.54531792	-0.90797108
## 2551	Turbo-fan	-0.97223556	-1.07539616
## 2552	Turbo-fan	-0.80031085	-1.26626075
## 2553	Turbo-fan	-1.02954379	-1.07874466
## 2554	Turbo-fan	0.05931270	-1.21603323
## 2555	Turbo-jet	-0.22722848	-0.83095554
## 2556	Turbo-fan	1.43471038	-0.93475909
## 2557	Turbo-fan	0.00200446	-1.01847163
## 2558	Turbo-fan	0.86162801	-0.96824411
## 2559	Turbo-fan	-0.22722848	-1.03186564
## 2560	Turbo-fan	-0.74300261	-0.86109206
## 2561	Turbo-fan	1.20547743	-1.14906320
## 2562	Turbo-fan	-0.68569437	-0.85774356
## 2563	Turbo-fan	0.11662094	-0.81086453
## 2564	Turbo-fan	-0.28453672	-0.83430404
## 2565	Turbo-fan	1.66394332	-0.92136509
## 2566	Turbo-fan	-0.80031085	-1.06535066
## 2567	Turbo-fan	1.49201861	-1.13232069
## 2568	Turbo-fan	1.66394332	-1.12227518
## 2569	Turbo-fan	-1.25877674	-0.48940838
## 2570	Turbo-fan	-0.74300261	-1.26291225
## 2571	Turbo-fan	-1.08685203	-1.08209316
## 2572	Turbo-fan	-0.80031085	-1.06535066
## 2573	Turbo-fan	0.80431978	-0.97159261
## 2574	Turbo-fan	-0.97223556	-1.07539616
## 2575	Turbo-fan	1.49201861	-1.13232069
## 2576	Turbo-fan	0.57508683	-0.98498662
## 2577	Turbo-fan	1.20547743	-0.74724300
## 2578	Turbo-fan	0.46047036	-0.79077352
## 2579	Turbo-jet	0.63239507	-0.37890782
## 2580	Turbo-fan	0.05931270	-1.01512313
## 2581	Turbo-jet	1.43471038	-0.73384900
## 2582	Turbo-fan	1.60663509	-0.92471359
## 2583	Turbo-fan	-0.80031085	-0.66353046
## 2584	Turbo-fan	-0.80031085	-1.06535066
## 2585	Turbo-fan	1.20547743	-0.34542281
## 2586	Turbo-fan	-1.54531792	-0.90797108
## 2587	Turbo-fan	-0.91492732	-0.87113756
## 2588	Turbo-fan	0.34585388	-0.99838062
## 2589	Turbo-fan	-1.14416027	-0.68362147
## 2590	Turbo-fan	0.80431978	-0.77068251
## 2591	Turbo-fan	-0.51376966	-0.64678795
## 2592	Turbo-fan	-0.68569437	-0.65683346
## 2593	Turbo-fan	1.72125156	-0.71710649
## 2594	Turbo-fan	-1.54531792	-0.70706098
## 2595	Turbo-fan	0.91893625	-0.76398551
## 2596	Turbo-fan	-0.51376966	-1.04860815

## 2597	Turbo-fan	-0.80031085	-0.86444056
## 2598	Turbo-fan	-0.51376966	-0.84769805
## 2599	Turbo-jet	0.97624448	-0.76063701
## 2600	Turbo-jet	-1.14416027	-0.28180128
## 2601	Turbo-fan	-1.60262616	-0.91131958
## 2602	Turbo-fan	0.91893625	-0.56307541
## 2603	Turbo-fan	0.63239507	-0.57981792
## 2604	Turbo-fan	-1.48800968	-0.90462258
## 2605	Turbo-fan	-0.68569437	-0.65683346
## 2606	Turbo-fan	1.26278567	-0.94480460
## 2607	Turbo-fan	0.00200446	-1.01847163
## 2608	Turbo-fan	0.34585388	-0.59656043
## 2609	Turbo-fan	0.51777859	-0.58651492
## 2610	Turbo-jet	0.63239507	-0.57981792
## 2611	Reciprocating	0.05931270	-0.81421303
## 2612	Turbo-fan	0.05931270	-0.81421303
## 2613	Turbo-fan	0.00200446	-0.81756154
## 2614	Turbo-fan	1.43471038	-0.53293890
## 2615	Turbo-fan	0.57508683	-0.58316642
## 2616	Turbo-fan	-0.45646143	-0.84434955
## 2617	Turbo-fan	-0.05530377	-0.61999994
## 2618	Turbo-fan	1.09086096	-0.55302991
## 2619	Turbo-fan	0.05931270	-0.61330294
##	sched_dep_time_minute	sched_dep_time_num_minute	sched_air_time
## 1	0.7108879	-1.69987898	0.38275093
## 2	1.6414202	-1.63572507	-0.13597580
## 3	-1.3569616	-1.62859686	0.28419285
## 4	-1.3569616	-1.62859686	0.41906180
## 5	-1.3569616	-1.62859686	0.52280714
## 6	1.6931165	-1.63216097	-0.25528294
## 7	-1.3569616	-1.62859686	0.34125279
## 8	-1.3569616	-1.62859686	0.14932390
## 9	-0.8399993	-1.59295581	0.07151489
## 10	-0.8399993	-1.59295581	0.38793819
## 11	-0.5815181	-1.57513528	0.87554131
## 12	-0.8399993	-1.59295581	0.35681459
## 13	0.1939255	-1.52167369	1.00522299
## 14	0.1939255	-1.52167369	0.41906180
## 15	0.1939255	-1.52167369	-0.08410312
## 16	0.1939255	-1.52167369	-0.23972114
## 17	0.1939255	-1.52167369	0.03520402
## 18	-0.9433917	-1.60008402	-0.18784847
## 19	0.7108879	-1.48603264	-0.24490841
## 20	1.0210654	-1.46464800	0.29975465
## 21	0.9693691	-1.46821211	0.03520402
## 22	1.0727616	-1.46108390	-0.17228667
## 23	0.9693691	-1.46821211	0.18044750
## 24	1.4863315	-1.43257105	0.26344378
## 25	1.4863315	-1.43257105	0.15451117
## 26	-1.3569616	-1.41475052	0.37756366
## 27	1.4863315	-1.43257105	0.51243261
## 28	-1.3569616	-1.41475052	0.56430528
## 29	-1.3569616	-1.41475052	-0.03223045
## 30	1.6931165	-1.41831463	0.33087825

## 31	-1.0984805	-1.39692999	0.20119657
## 32	-1.3569616	-1.41475052	0.40868726
## 33	-1.3569616	-1.41475052	0.37237639
## 34	-1.3569616	-1.41475052	-0.12560126
## 35	-0.5815181	-1.36128894	0.90666491
## 36	-0.5815181	-1.36128894	0.43462360
## 37	-0.3230369	-1.34346841	-0.18784847
## 38	-0.0645557	-1.32564788	0.28938012
## 39	-0.0645557	-1.32564788	0.35681459
## 40	0.1939255	-1.30782735	0.38275093
## 41	0.1939255	-1.30782735	0.13376210
## 42	0.2973180	-1.30069914	0.36200186
## 43	0.1939255	-1.30782735	0.56430528
## 44	0.5557992	-1.28287861	0.51761987
## 45	0.6591917	-1.27575040	0.32569099
## 46	0.1939255	-1.30782735	0.48649627
## 47	0.9693691	-1.25436577	0.53836894
## 49	1.6931165	-1.20446829	0.01964222
## 50	1.4863315	-1.21872471	0.40868726
## 51	1.6931165	-1.20446829	0.23750744
## 52	-1.3569616	-1.20090418	0.29975465
## 53	-0.8399993	-1.16526313	-0.21378481
## 54	-1.3569616	-1.20090418	0.55911801
## 55	-0.5815181	-1.14744260	-0.00629412
## 56	-0.8399993	-1.16526313	0.15969843
## 57	-0.5815181	-1.14744260	0.10782576
## 58	-0.5815181	-1.14744260	0.02482949
## 59	-0.6332143	-1.15100670	0.03520402
## 60	-0.3230369	-1.12962207	1.00003572
## 61	-0.0645557	-1.11180154	-0.18784847
## 62	-0.0645557	-1.11180154	0.01445495
## 63	0.1939255	-1.09398101	-0.00629412
## 64	0.0388368	-1.10467333	0.21675837
## 66	0.1939255	-1.09398101	-0.07372859
## 67	0.1939255	-1.09398101	0.48649627
## 68	0.4524067	-1.07616049	0.04039129
## 69	0.7108879	-1.05833996	-0.03223045
## 70	0.4524067	-1.07616049	0.15969843
## 71	0.4524067	-1.07616049	0.40868726
## 72	1.2278503	-1.02269890	-0.05816679
## 73	0.9693691	-1.04051943	0.97928666
## 75	1.2795466	-1.01913480	0.25306924
## 76	1.2795466	-1.01913480	-0.05816679
## 77	1.6931165	-0.99062195	0.05076582
## 78	0.7108879	-1.05833996	0.46574720
## 79	0.9693691	-1.04051943	0.33087825
## 80	1.4863315	-1.00487837	0.37237639
## 81	-1.0984805	-0.96923732	0.09745123
## 82	-1.3569616	-0.98705784	0.19082204
## 83	-1.2018729	-0.97636553	-0.07372859
## 84	0.8659766	-1.04764764	0.23750744
## 86	-0.4264293	-0.92290394	0.94297579
## 87	-0.3230369	-0.91577573	0.43462360
## 88	-0.3230369	-0.91577573	0.46055993

## 89	-0.3230369	-0.91577573	-0.04260499
## 90	-1.0984805	-0.96923732	-0.18784847
## 91	-1.3569616	-0.98705784	0.47093447
## 92	0.0905331	-0.88726289	0.28938012
## 93	-1.0984805	-0.96923732	0.35162732
## 94	0.1939255	-0.88013467	0.37237639
## 95	0.1939255	-0.88013467	-0.09447766
## 96	0.1939255	-0.88013467	0.30494192
## 97	0.5557992	-0.85518594	-0.16191213
## 98	0.9693691	-0.82667309	0.39831273
## 99	1.6931165	-0.77677561	0.03520402
## 100	-1.3569616	-0.77321151	0.23232018
## 101	-1.2535692	-0.76608329	0.41906180
## 102	-1.3569616	-0.77321151	0.05076582
## 103	-0.5815181	-0.71974992	0.28938012
## 104	0.1422293	-0.66985244	-0.18266120
## 106	-0.0128594	-0.68054476	0.39831273
## 107	0.1939255	-0.66628834	0.35162732
## 108	0.4524067	-0.64846781	0.09745123
## 109	-0.4781256	-0.71262171	-0.19303574
## 110	0.1939255	-0.66628834	-0.08410312
## 111	0.7108879	-0.63064728	0.25825651
## 112	0.9693691	-0.61282675	0.36200186
## 113	1.2278503	-0.59500622	0.01964222
## 114	1.6931165	-0.56292927	0.22713291
## 115	1.6931165	-0.56292927	-0.23972114
## 116	-1.3569616	-0.55936517	-0.21378481
## 117	1.3829390	-0.58431391	0.32050372
## 118	0.8659766	-0.61995496	0.27381831
## 119	-0.5815181	-0.50590358	-0.00629412
## 120	-0.5815181	-0.50590358	0.38275093
## 121	-0.5815181	-0.50590358	0.01964222
## 122	-0.0645557	-0.47026252	0.01964222
## 123	-0.0645557	-0.47026252	0.43462360
## 124	0.1939255	-0.45244200	0.42424906
## 125	0.1422293	-0.45600610	0.31012918
## 126	0.1422293	-0.45600610	0.37237639
## 127	-0.0645557	-0.47026252	-0.08410312
## 128	0.2456218	-0.44887789	0.07670216
## 129	0.4524067	-0.43462147	-0.00629412
## 130	0.7108879	-0.41680094	0.35681459
## 131	0.7108879	-0.41680094	0.38793819
## 132	0.9693691	-0.39898041	0.15451117
## 133	1.4863315	-0.36333936	-0.12560126
## 134	1.6931165	-0.34908293	-0.07372859
## 136	-1.3569616	-0.34551883	-0.26047021
## 137	1.6414202	-0.35264704	-0.20341027
## 138	-1.3569616	-0.34551883	-0.29159381
## 139	-1.3569616	-0.34551883	-0.13078853
## 140	1.6931165	-0.34908293	0.92222672
## 141	-1.3569616	-0.34551883	0.35681459
## 142	1.6414202	-0.35264704	0.35162732
## 143	-0.5815181	-0.29205724	0.00926769
## 144	-0.4264293	-0.28136492	0.38793819

## 145	-0.3230369	-0.27423671	-0.00629412
## 146	-0.0645557	-0.25641619	0.20119657
## 147	1.6931165	-0.34908293	0.17526024
## 148	0.4524067	-0.22077513	0.03520402
## 149	0.1422293	-0.24215976	0.33087825
## 150	0.9693691	-0.18513407	-0.26565748
## 151	0.7108879	-0.20295460	-0.16191213
## 152	0.1422293	-0.24215976	0.01445495
## 153	0.9693691	-0.18513407	0.40868726
## 154	0.9693691	-0.18513407	0.35681459
## 155	-1.3569616	-0.13167249	0.21157111
## 156	-1.3569616	-0.13167249	-0.24490841
## 157	-1.3569616	-0.13167249	-0.03223045
## 158	0.7108879	-0.20295460	0.33087825
## 160	-1.3569616	-0.13167249	0.33606552
## 162	1.6931165	-0.13523659	-0.19303574
## 163	-0.5815181	-0.07821090	0.04557856
## 164	0.7108879	-0.20295460	0.40868726
## 165	-1.3569616	-0.13167249	0.38275093
## 166	-0.0645557	-0.04256985	-0.08410312
## 167	-0.5815181	-0.07821090	0.27900558
## 168	-0.3230369	-0.06039037	0.41387453
## 169	-1.3569616	-0.13167249	0.37237639
## 170	-0.2713406	-0.05682627	0.09745123
## 172	0.9693691	0.02871227	0.43462360
## 173	0.1939255	-0.02474932	0.38275093
## 174	0.1939255	-0.02474932	0.53836894
## 175	1.5380277	0.06791743	0.04039129
## 176	1.6931165	0.07860975	-0.21378481
## 177	1.2278503	0.04653280	-0.16191213
## 178	1.4346353	0.06078922	-0.12560126
## 179	1.2278503	0.04653280	0.27900558
## 181	-0.7883030	0.12137901	0.17007297
## 183	-0.3747331	0.14989186	0.39831273
## 184	-0.2196444	0.16058418	-0.22415934
## 185	0.1939255	0.18909702	0.44499813
## 186	-0.0645557	0.17127649	0.50724534
## 187	0.1939255	0.18909702	-0.18784847
## 190	0.1939255	0.18909702	0.40349999
## 191	0.4524067	0.20691755	0.56430528
## 192	0.9176729	0.23899450	-0.19822300
## 193	1.4863315	0.27819966	-0.03223045
## 194	1.4863315	0.27819966	0.48649627
## 195	1.4863315	0.27819966	-0.06335406
## 196	1.2278503	0.26037913	-0.00629412
## 197	-1.3569616	0.29602019	-0.18784847
## 198	-1.3569616	0.29602019	0.38275093
## 199	1.4863315	0.27819966	0.42424906
## 200	-1.3569616	0.29602019	-0.00110685
## 201	-1.3569616	0.29602019	-0.00629412
## 202	-1.3569616	0.29602019	0.36200186
## 203	-0.8399993	0.33166125	-0.05816679
## 204	-1.0984805	0.31384072	0.40868726
## 205	-0.7366068	0.33878946	0.17007297

## 206	-0.5815181	0.34948178	-0.07891586
## 207	-0.8399993	0.33166125	0.20119657
## 208	1.2278503	0.26037913	0.31531645
## 209	-1.3569616	0.29602019	0.23750744
## 210	-1.0984805	0.31384072	0.00926769
## 211	-0.5815181	0.34948178	-0.05816679
## 212	-0.0645557	0.38512283	-0.13597580
## 213	-0.3230369	0.36730230	0.31012918
## 214	0.1939255	0.40294336	-0.00629412
## 215	-0.5298218	0.35304588	0.39312546
## 217	0.1939255	0.40294336	-0.18784847
## 218	1.6931165	0.29245609	-0.04260499
## 219	0.1939255	0.40294336	-0.00629412
## 220	-0.3230369	0.36730230	0.17526024
## 221	0.1939255	0.40294336	0.04557856
## 222	-0.3230369	0.36730230	-0.13597580
## 223	0.7108879	0.43858442	0.38793819
## 224	0.9693691	0.45640495	0.46055993
## 226	0.9693691	0.45640495	0.47612174
## 227	0.7108879	0.43858442	0.06114036
## 228	1.1244578	0.46709726	0.38793819
## 229	1.2278503	0.47422547	0.23232018
## 230	-1.3569616	0.50986653	0.12338756
## 231	-1.3569616	0.50986653	0.40868726
## 232	-1.3569616	0.50986653	0.53318167
## 233	-1.3569616	0.50986653	-0.07372859
## 234	-1.3569616	0.50986653	0.34644005
## 235	-0.8399993	0.54550759	-0.19303574
## 236	1.0727616	0.46353316	-0.18266120
## 237	1.2278503	0.47422547	-0.03741772
## 238	-1.3569616	0.50986653	0.17526024
## 239	1.4863315	0.49204600	-0.18784847
## 240	-1.3569616	0.50986653	0.46055993
## 241	-0.5815181	0.56332812	0.50205807
## 242	-0.5815181	0.56332812	0.09745123
## 245	0.1939255	0.61678970	0.29456738
## 247	0.5041030	0.63817433	0.36718912
## 248	-0.4781256	0.57045633	-0.23972114
## 249	0.4524067	0.63461023	0.46055993
## 251	0.7108879	0.65243076	0.07151489
## 252	0.6591917	0.64886665	-0.09966493
## 253	0.6591917	0.64886665	0.18563477
## 254	1.2278503	0.68807181	0.40349999
## 255	0.7108879	0.65243076	0.40868726
## 256	0.9176729	0.66668718	-0.24490841
## 257	-1.3569616	0.72371287	0.30494192
## 258	-0.8399993	0.75935393	0.35681459
## 259	-1.3569616	0.72371287	0.47612174
## 260	-0.8399993	0.75935393	0.04557856
## 261	-1.3569616	0.72371287	0.33087825
## 263	-0.3747331	0.79143088	0.22194564
## 264	-1.3569616	0.72371287	0.51761987
## 265	-0.3230369	0.79499498	-0.03223045
## 266	-0.8399993	0.75935393	0.90666491

## 267	-0.3230369	0.79499498	-0.05816679
## 268	-0.3230369	0.79499498	0.33606552
## 269	0.1939255	0.83063604	0.43462360
## 270	0.1422293	0.82707193	0.49168354
## 271	-0.0645557	0.81281551	0.40868726
## 273	-0.4264293	0.78786677	0.52280714
## 275	0.9693691	0.88409762	0.06114036
## 276	1.0210654	0.88766173	0.36200186
## 277	0.9693691	0.88409762	0.40349999
## 278	0.9693691	0.88409762	-0.13597580
## 279	0.9693691	0.88409762	0.28938012
## 281	1.1761541	0.89835405	-0.01148138
## 282	-1.3569616	0.93755921	-0.02704319
## 283	1.5897240	0.92686689	0.44499813
## 284	-0.8399993	0.97320027	-0.11003946
## 285	1.6931165	0.93399510	0.42943633
## 286	-1.0984805	0.95537974	-0.03223045
## 287	-1.3569616	0.93755921	0.27900558
## 288	0.1939255	1.04448238	0.14932390
## 289	0.1422293	1.04091827	0.14413663
## 290	-0.8399993	0.97320027	0.43462360
## 291	0.1939255	1.04448238	0.52280714
## 292	-1.0984805	0.95537974	-0.05297952
## 294	0.9693691	1.09794396	0.54355621
## 297	-1.3569616	1.15140555	-0.20859754
## 298	1.2278503	1.11576449	0.28419285
## 299	-1.3569616	1.15140555	-0.19822300
## 300	1.6931165	1.14784144	0.31012918
## 301	1.4863315	1.13358502	0.26344378
## 302	-0.5815181	1.20486713	0.48130900
## 303	-0.7366068	1.19417482	0.46055993
## 304	-0.8399993	1.18704660	-0.05816679
## 305	-0.9433917	1.17991839	0.58505435
## 306	-0.3230369	1.22268766	0.52280714
## 307	-1.1501767	1.16566197	0.54874348
## 308	-0.3230369	1.22268766	0.63692702
## 310	0.1939255	1.25832872	-0.18784847
## 311	-1.3569616	1.15140555	0.52799441
## 312	-0.8399993	1.18704660	0.35681459
## 313	-0.3230369	1.22268766	-6.58374895
## 316	0.1939255	1.25832872	0.08707669
## 317	0.7108879	1.29396977	0.33087825
## 318	0.7108879	1.29396977	0.33606552
## 319	0.7108879	1.29396977	0.28419285
## 320	0.1939255	1.25832872	0.04039129
## 321	-1.3569616	1.36525189	0.46055993
## 322	0.1939255	1.25832872	0.43981086
## 323	-1.3569616	1.36525189	0.38275093
## 324	-1.3569616	1.36525189	0.36718912
## 328	-0.5815181	1.41871347	-0.00629412
## 330	-0.5298218	1.42227758	-0.07372859
## 332	-0.3230369	1.43653400	0.35162732
## 333	-0.0645557	1.45435453	0.41387453
## 336	0.1939255	1.47217506	0.42424906

## 339	0.9693691	1.52563664	-0.08410312
## 340	0.4524067	1.48999559	0.36718912
## 341	0.1939255	1.47217506	0.35681459
## 342	0.1939255	1.47217506	-6.95723219
## 343	0.1422293	1.46861095	0.43981086
## 344	-1.3569616	1.57909823	0.30494192
## 346	-1.3569616	1.57909823	-0.13597580
## 347	1.2278503	1.54345717	-0.22934661
## 348	-0.8399993	1.61473928	-7.10247568
## 349	0.7108879	1.50781611	0.42943633
## 350	1.5897240	1.56840591	-6.92092132
## 351	-0.8399993	1.61473928	-0.28121928
## 352	0.1939255	1.68602140	-7.20103375
## 353	-0.0645557	1.66820087	-0.21378481
## 354	1.4863315	1.77512404	-7.21140829
## 355	1.4863315	1.77512404	-0.07372859
## 356	0.1422293	1.89630363	-6.58893622
## 358	0.9693691	1.95332932	-0.23453387
## 359	0.9693691	1.95332932	-7.65751327
## 365	1.6931165	2.21707314	-6.58893622
## 366	1.6931165	2.21707314	-6.63043436
## 367	-1.3569616	-1.84244320	-0.03223045
## 368	0.1422293	-1.73908414	0.32569099
## 369	-1.3569616	-1.62859686	0.33606552
## 370	-1.3569616	-1.62859686	0.32050372
## 371	-1.3569616	-1.62859686	0.38275093
## 372	-1.3569616	-1.62859686	0.00408042
## 373	-1.3052654	-1.62503276	0.33087825
## 374	-1.3569616	-1.62859686	0.36718912
## 375	-1.0984805	-1.61077633	0.01964222
## 376	-1.3569616	-1.62859686	-0.11003946
## 377	1.6931165	-1.63216097	0.41906180
## 378	-0.8399993	-1.59295581	0.20119657
## 379	-0.8399993	-1.59295581	0.07151489
## 380	-0.5815181	-1.57513528	0.17007297
## 381	-1.3569616	-1.62859686	-0.16191213
## 382	-0.5815181	-1.57513528	0.87554131
## 383	0.1422293	-1.52523780	0.35681459
## 384	0.1939255	-1.52167369	0.41387453
## 385	0.1939255	-1.52167369	0.03520402
## 386	0.1939255	-1.52167369	0.34125279
## 387	-0.5815181	-1.57513528	-0.29159381
## 388	-0.5815181	-1.57513528	-0.18784847
## 389	-0.3230369	-1.55731475	0.05595309
## 390	0.1939255	-1.52167369	0.38275093
## 391	0.1939255	-1.52167369	-0.08410312
## 392	0.5557992	-1.49672495	0.42424906
## 393	0.1939255	-1.52167369	0.57986708
## 394	0.2456218	-1.51810959	-0.06335406
## 395	0.4524067	-1.50385316	0.23750744
## 396	0.4524067	-1.50385316	0.35681459
## 397	0.9693691	-1.46821211	0.27900558
## 398	0.1939255	-1.52167369	0.07670216
## 399	0.9693691	-1.46821211	0.18044750

## 400	1.4863315	-1.43257105	0.51243261
## 401	1.2795466	-1.44682747	0.30494192
## 402	1.2795466	-1.44682747	0.35162732
## 403	1.4863315	-1.43257105	0.26344378
## 404	-1.3569616	-1.41475052	0.37756366
## 405	-1.3569616	-1.41475052	-0.24490841
## 406	-1.3569616	-1.41475052	0.46055993
## 407	-1.0984805	-1.39692999	0.06114036
## 408	-1.3569616	-1.41475052	0.92222672
## 410	-0.8399993	-1.37910947	-0.08410312
## 411	-0.5815181	-1.36128894	0.48649627
## 412	-1.3569616	-1.41475052	0.40349999
## 413	-1.3569616	-1.41475052	0.23232018
## 414	-1.3569616	-1.41475052	-0.12560126
## 415	-0.5815181	-1.36128894	0.43462360
## 416	-0.2713406	-1.33990430	0.28419285
## 418	-0.0645557	-1.32564788	0.35681459
## 420	0.1939255	-1.30782735	0.13376210
## 421	0.1939255	-1.30782735	0.46574720
## 422	0.2973180	-1.30069914	0.37237639
## 423	0.9693691	-1.25436577	-0.05816679
## 424	0.9693691	-1.25436577	0.53836894
## 425	0.4524067	-1.29000683	0.31012918
## 426	0.7108879	-1.27218630	0.20119657
## 427	0.7108879	-1.27218630	0.22194564
## 428	0.1939255	-1.30782735	0.21157111
## 429	-1.3569616	-1.20090418	-0.19822300
## 430	0.9693691	-1.25436577	0.31531645
## 432	-1.3569616	-1.20090418	0.36200186
## 433	-1.3569616	-1.20090418	0.47093447
## 434	1.6931165	-1.20446829	0.01964222
## 435	-0.8399993	-1.16526313	0.36200186
## 436	-1.0984805	-1.18308366	0.35681459
## 437	-0.8399993	-1.16526313	0.97928666
## 438	-0.8399993	-1.16526313	-0.09447766
## 439	-1.3569616	-1.20090418	0.09226396
## 440	-0.5815181	-1.14744260	0.39831273
## 442	-0.3230369	-1.12962207	-0.04779225
## 443	-0.8399993	-1.16526313	-0.21378481
## 444	-0.3230369	-1.12962207	0.37756366
## 445	-1.3569616	-1.20090418	0.34644005
## 446	-0.3230369	-1.12962207	0.90147765
## 447	0.1939255	-1.09398101	-0.05816679
## 448	0.1939255	-1.09398101	-0.00629412
## 450	0.4524067	-1.07616049	0.15969843
## 451	0.4524067	-1.07616049	0.17526024
## 452	0.4524067	-1.07616049	-0.12560126
## 453	0.1939255	-1.09398101	0.48649627
## 455	0.7108879	-1.05833996	-0.00110685
## 457	1.2278503	-1.02269890	-0.05816679
## 458	0.9693691	-1.04051943	0.08707669
## 459	0.8659766	-1.04764764	0.23750744
## 460	0.8142804	-1.05121175	0.10782576
## 462	0.9693691	-1.04051943	0.43462360

## 463	1.6931165	-0.99062195	0.05076582
## 464	-1.3569616	-0.98705784	0.43462360
## 465	1.5897240	-0.99775016	0.43462360
## 466	1.6931165	-0.99062195	0.25306924
## 467	-1.0984805	-0.96923732	-0.18784847
## 468	-0.9433917	-0.95854500	0.36718912
## 469	-0.3230369	-0.91577573	0.04557856
## 470	-0.3747331	-0.91933984	-0.23453387
## 471	-0.3230369	-0.91577573	0.43462360
## 472	0.1422293	-0.88369878	0.91185218
## 473	-0.3230369	-0.91577573	-0.04260499
## 474	0.1939255	-0.88013467	0.37237639
## 475	0.0905331	-0.88726289	0.28938012
## 476	-0.0645557	-0.89795520	0.17526024
## 477	0.7108879	-0.84449362	-0.08410312
## 479	-0.2196444	-0.90864752	0.31531645
## 480	0.1422293	-0.88369878	-0.22415934
## 481	0.9693691	-0.82667309	-0.05816679
## 482	1.3829390	-0.79816024	-0.20341027
## 483	1.4863315	-0.79103203	-0.15153760
## 484	0.9693691	-0.82667309	-0.13597580
## 485	-1.3569616	-0.77321151	0.38275093
## 486	-0.8399993	-0.73757045	-0.13597580
## 487	-0.5815181	-0.71974992	-0.00629412
## 488	-0.1679481	-0.69123708	0.17007297
## 489	1.6931165	-0.77677561	0.48649627
## 490	-1.3569616	-0.77321151	0.23232018
## 491	-0.0645557	-0.68410886	-0.27084474
## 492	0.1939255	-0.66628834	0.13376210
## 493	0.1939255	-0.66628834	0.56430528
## 494	0.3490142	-0.65559602	-0.18266120
## 495	0.7108879	-0.63064728	0.25825651
## 496	0.6591917	-0.63421138	0.35162732
## 497	0.1939255	-0.66628834	0.38275093
## 498	1.2278503	-0.59500622	0.01964222
## 499	1.2278503	-0.59500622	0.43462360
## 501	-1.3569616	-0.55936517	0.33087825
## 502	-1.3569616	-0.55936517	-0.21378481
## 503	-0.5815181	-0.50590358	0.38275093
## 504	0.1939255	-0.45244200	0.33087825
## 506	0.4524067	-0.43462147	0.43462360
## 507	-0.0645557	-0.47026252	0.01964222
## 508	-1.3569616	-0.34551883	-0.21378481
## 509	-1.0984805	-0.32769830	0.40868726
## 510	-1.3569616	-0.34551883	0.26863105
## 511	1.6414202	-0.35264704	0.35162732
## 512	-1.3569616	-0.34551883	0.48130900
## 514	-1.3569616	-0.34551883	0.42943633
## 515	-1.3569616	-0.34551883	0.35681459
## 516	-1.3569616	-0.34551883	0.38275093
## 517	-0.8916955	-0.31344188	-0.19303574
## 518	1.5380277	-0.35977525	0.31012918
## 519	0.4524067	-0.22077513	0.03520402
## 520	0.6074954	-0.21008281	0.06114036

## 523	-0.3230369	-0.27423671	-0.29159381
## 524	0.9693691	-0.18513407	0.49168354
## 525	0.1422293	-0.24215976	0.01445495
## 526	1.1761541	-0.17087765	1.01041026
## 527	0.9693691	-0.18513407	-0.26565748
## 528	-1.3569616	-0.13167249	0.06114036
## 529	1.6931165	-0.13523659	0.03520402
## 530	1.3312428	-0.16018533	0.34644005
## 531	-1.2018729	-0.12098017	-0.25009568
## 532	-1.3569616	-0.13167249	0.15969843
## 533	1.4863315	-0.14949302	0.22713291
## 534	-1.3569616	-0.13167249	0.33606552
## 535	-1.3569616	-0.13167249	0.29975465
## 536	-0.5815181	-0.07821090	-0.03223045
## 537	-0.5815181	-0.07821090	-0.09966493
## 538	-0.5815181	-0.07821090	0.27900558
## 539	-0.3230369	-0.06039037	0.41387453
## 540	-1.0984805	-0.11385196	0.38275093
## 541	-0.5815181	-0.07821090	0.31012918
## 542	0.0388368	-0.03544163	-0.26047021
## 543	-0.0645557	-0.04256985	0.10782576
## 544	0.4524067	-0.00692879	0.31012918
## 545	0.9693691	0.02871227	0.43462360
## 546	0.9693691	0.02871227	0.43462360
## 547	0.9693691	0.02871227	0.33606552
## 548	1.2278503	0.04653280	-0.00629412
## 549	1.2278503	0.04653280	0.46055993
## 551	1.5380277	0.06791743	0.29975465
## 553	1.5897240	0.07148153	-0.14635033
## 554	-0.7883030	0.12137901	-0.08929039
## 555	1.6931165	0.07860975	0.31012918
## 556	0.1939255	0.18909702	0.40349999
## 558	0.1939255	0.18909702	0.44499813
## 559	0.9693691	0.24255861	-0.14635033
## 560	1.4863315	0.27819966	0.13376210
## 561	1.5897240	0.28532787	0.19082204
## 562	1.2278503	0.26037913	0.18044750
## 563	1.6931165	0.29245609	-0.05297952
## 564	0.1939255	0.18909702	0.31531645
## 565	-1.3569616	0.29602019	-0.07372859
## 566	1.4863315	0.27819966	-0.03223045
## 567	-1.3569616	0.29602019	0.23750744
## 569	1.6414202	0.28889198	0.01445495
## 570	-0.0645557	0.38512283	-0.13597580
## 571	0.1939255	0.40294336	0.46055993
## 572	-0.4264293	0.36017409	0.35681459
## 573	0.1939255	0.40294336	0.46055993
## 574	0.1939255	0.40294336	0.53836894
## 576	-0.8399993	0.33166125	-0.05816679
## 577	-0.5815181	0.34948178	-0.07891586
## 578	0.9693691	0.45640495	0.92222672
## 579	0.9693691	0.45640495	0.35681459
## 580	0.4524067	0.42076389	0.40868726
## 581	0.9693691	0.45640495	0.17526024

## 582	0.9693691	0.45640495	0.19600931
## 584	1.2278503	0.47422547	-0.03741772
## 585	1.1244578	0.46709726	0.23750744
## 586	-1.3569616	0.50986653	0.31531645
## 587	-1.3569616	0.50986653	0.53318167
## 588	1.6931165	0.50630242	0.36718912
## 589	-1.3569616	0.50986653	0.12338756
## 590	-1.3569616	0.50986653	0.00408042
## 591	1.3829390	0.48491779	-0.20341027
## 593	-1.0984805	0.52768706	0.36718912
## 594	1.6931165	0.50630242	0.23750744
## 596	-0.5815181	0.56332812	0.04039129
## 597	-0.8399993	0.54550759	0.17526024
## 598	-0.3230369	0.58114864	0.34125279
## 599	-0.5815181	0.56332812	0.07151489
## 600	-0.8399993	0.54550759	0.37756366
## 601	0.1939255	0.61678970	0.44499813
## 602	0.1939255	0.61678970	0.13894937
## 603	0.1939255	0.61678970	-0.08410312
## 604	0.1939255	0.61678970	0.59024161
## 605	0.1939255	0.61678970	0.29456738
## 607	0.7108879	0.65243076	0.40868726
## 608	0.4524067	0.63461023	0.07151489
## 609	0.6591917	0.64886665	-0.20859754
## 610	-1.3569616	0.72371287	0.50724534
## 611	-1.3569616	0.72371287	0.12338756
## 612	-1.3569616	0.72371287	-0.03223045
## 613	0.7108879	0.65243076	0.07151489
## 614	-1.3569616	0.72371287	-0.08410312
## 615	-0.8399993	0.75935393	0.04557856
## 616	-1.0984805	0.74153340	0.35681459
## 617	-0.8399993	0.75935393	0.35681459
## 618	-0.3230369	0.79499498	-0.00629412
## 619	-0.3230369	0.79499498	0.43462360
## 621	0.1939255	0.83063604	0.13894937
## 622	0.1422293	0.82707193	0.42943633
## 624	0.6074954	0.85914888	0.46055993
## 625	0.7108879	0.86627710	0.49687080
## 626	0.9693691	0.88409762	0.20119657
## 628	1.2278503	0.90191815	0.46055993
## 630	-1.3569616	0.93755921	-0.20341027
## 631	1.4863315	0.91973868	-0.13597580
## 635	-1.3569616	0.93755921	-0.02704319
## 636	-0.8399993	0.97320027	0.10782576
## 637	1.6931165	0.93399510	-0.01148138
## 638	-0.8399993	0.97320027	-0.11003946
## 639	-1.0984805	0.95537974	-0.03223045
## 641	-0.8399993	0.97320027	0.43462360
## 643	0.1939255	1.04448238	-0.05816679
## 644	0.1939255	1.04448238	0.14932390
## 645	0.0905331	1.03735417	0.41387453
## 646	-0.5815181	0.99102079	0.51761987
## 648	0.3490142	1.05517470	-0.07891586
## 649	0.4524067	1.06230291	0.44499813

## 650	0.1939255	1.04448238	0.51243261
## 651	-0.0645557	1.02666185	-0.21378481
## 652	0.9693691	1.09794396	0.54355621
## 654	0.7108879	1.08012343	0.38793819
## 655	1.2278503	1.11576449	0.01964222
## 656	1.2278503	1.11576449	0.59024161
## 657	1.4863315	1.13358502	0.95335032
## 658	1.4863315	1.13358502	0.26344378
## 659	-1.3569616	1.15140555	-0.11003946
## 660	1.6931165	1.14784144	0.31012918
## 661	1.4863315	1.13358502	0.06114036
## 662	0.5041030	1.06586701	-0.11522673
## 663	-0.8399993	1.18704660	0.35681459
## 664	-0.8916955	1.18348250	-0.09966493
## 665	-1.0984805	1.16922608	0.43462360
## 666	-0.8399993	1.18704660	0.54874348
## 667	1.6931165	1.14784144	0.51243261
## 668	-0.7366068	1.19417482	0.46055993
## 669	-0.8399993	1.18704660	0.00408042
## 670	-0.9433917	1.17991839	0.58505435
## 671	-0.3230369	1.22268766	0.63692702
## 672	-0.8399993	1.18704660	-0.05816679
## 673	-0.8916955	1.18348250	0.05076582
## 674	0.1422293	1.25476461	0.39831273
## 675	0.1939255	1.25832872	0.32569099
## 676	0.1939255	1.25832872	0.51761987
## 677	0.1939255	1.25832872	0.39831273
## 678	0.7108879	1.29396977	-0.05816679
## 680	-0.7883030	1.19061071	-0.20859754
## 682	0.2973180	1.26545693	0.43981086
## 683	0.7108879	1.29396977	0.28419285
## 684	0.7108879	1.29396977	0.33606552
## 686	-1.3569616	1.36525189	0.10263850
## 687	-1.3569616	1.36525189	0.24269471
## 689	-1.3569616	1.36525189	-0.14635033
## 690	-0.5815181	1.41871347	-0.23972114
## 691	1.4863315	1.34743136	0.38793819
## 693	1.2278503	1.32961083	-0.23972114
## 694	1.4863315	1.34743136	-0.11003946
## 695	-0.5298218	1.42227758	-0.07372859
## 696	-0.5815181	1.41871347	-0.21378481
## 697	-0.5815181	1.41871347	-0.00629412
## 698	-1.3569616	1.36525189	-0.02704319
## 699	-0.5815181	1.41871347	0.36200186
## 700	0.1939255	1.47217506	0.42424906
## 702	-0.1162519	1.45079042	0.51243261
## 703	0.9693691	1.52563664	-0.08410312
## 704	0.9693691	1.52563664	0.40349999
## 706	0.7108879	1.50781611	0.42943633
## 707	1.4863315	1.56127770	-0.00629412
## 709	-1.3569616	1.57909823	0.24269471
## 710	-1.3569616	1.57909823	-0.13597580
## 711	1.4346353	1.55771359	0.30494192
## 712	-1.3569616	1.57909823	-6.97798126

## 713	-1.3569616	1.57909823	-0.03223045
## 714	0.4524067	1.48999559	0.35681459
## 715	0.9693691	1.52563664	0.36718912
## 716	-1.3569616	1.57909823	0.32569099
## 717	1.2278503	1.54345717	-0.21897207
## 719	-0.5815181	1.63255981	0.23750744
## 720	-0.0645557	1.66820087	-0.16191213
## 721	-0.3230369	1.65038034	0.18044750
## 722	-0.8399993	1.61473928	-0.28121928
## 723	0.1939255	1.68602140	-7.20103375
## 725	0.4524067	1.70384192	-7.06097754
## 726	0.4524067	1.70384192	-6.57337442
## 727	0.1422293	1.68245729	-7.11803748
## 729	-0.3230369	1.86422668	-7.13359928
## 730	-0.0645557	1.88204721	-0.21378481
## 737	1.6931165	2.21707314	-6.58893622
## 738	1.4863315	0.06435332	-0.27084474
## 739	-0.3230369	0.15345596	0.14413663
## 743	-0.0645557	-1.75334056	0.30494192
## 744	-1.3569616	-1.62859686	-0.21378481
## 745	-1.3569616	-1.62859686	-0.20859754
## 746	-1.3569616	-1.62859686	0.32050372
## 747	-1.3569616	-1.62859686	0.21157111
## 748	-1.0984805	-1.61077633	0.01964222
## 749	-1.3569616	-1.62859686	0.28419285
## 750	-1.3569616	-1.62859686	0.31012918
## 751	-1.3569616	-1.62859686	0.03001675
## 752	-1.3569616	-1.62859686	0.09745123
## 753	-1.3569616	-1.62859686	-0.05816679
## 754	-1.3569616	-1.62859686	-0.13597580
## 755	-1.0984805	-1.61077633	-0.29159381
## 756	-0.8399993	-1.59295581	0.33087825
## 757	-0.8399993	-1.59295581	0.38793819
## 758	-0.5815181	-1.57513528	0.15969843
## 759	-0.5815181	-1.57513528	0.20119657
## 760	-0.5815181	-1.57513528	-0.11003946
## 761	-0.8399993	-1.59295581	0.05595309
## 762	1.6931165	-1.63216097	0.41906180
## 763	0.1939255	-1.52167369	1.00522299
## 764	-0.2196444	-1.55018654	0.34644005
## 765	0.1939255	-1.52167369	0.17007297
## 766	0.1939255	-1.52167369	0.03520402
## 767	0.1939255	-1.52167369	0.09745123
## 768	0.3490142	-1.51098138	-0.08410312
## 769	0.1939255	-1.52167369	0.01964222
## 770	0.3490142	-1.51098138	-0.13597580
## 771	0.1939255	-1.52167369	0.55911801
## 772	0.4007105	-1.50741727	0.42424906
## 773	0.1939255	-1.52167369	0.10782576
## 774	-0.0645557	-1.53949422	0.36718912
## 775	0.9693691	-1.46821211	0.19082204
## 776	1.6931165	-1.41831463	0.24269471
## 777	1.6931165	-1.41831463	0.33087825
## 778	1.4863315	-1.43257105	0.26344378

## 779	1.6931165	-1.41831463	0.01964222
## 780	-1.0984805	-1.39692999	0.48130900
## 781	-1.0984805	-1.39692999	0.39831273
## 782	-0.5815181	-1.36128894	0.43462360
## 784	-0.5815181	-1.36128894	0.39312546
## 785	-0.3230369	-1.34346841	0.06114036
## 786	-0.5815181	-1.36128894	0.46055993
## 787	-0.0645557	-1.32564788	0.35681459
## 788	0.1939255	-1.30782735	0.19600931
## 789	0.1939255	-1.30782735	0.48649627
## 790	0.5041030	-1.28644272	-0.21897207
## 791	0.7108879	-1.27218630	0.46055993
## 792	0.1939255	-1.30782735	0.38793819
## 793	0.9693691	-1.25436577	0.53836894
## 794	0.9693691	-1.25436577	0.28419285
## 795	1.2278503	-1.23654524	-0.03223045
## 796	1.4863315	-1.21872471	0.20119657
## 797	-1.3569616	-1.20090418	0.44499813
## 798	-0.8399993	-1.16526313	-0.05816679
## 799	1.1761541	-1.24010935	0.35681459
## 800	-1.0984805	-1.18308366	-0.21897207
## 801	-0.4781256	-1.14031439	0.38275093
## 802	-0.5815181	-1.14744260	0.34644005
## 803	-0.5815181	-1.14744260	0.02482949
## 804	-0.0645557	-1.11180154	0.01445495
## 805	0.1422293	-1.09754512	-0.06854132
## 806	0.4007105	-1.07972459	-0.03223045
## 807	0.5557992	-1.06903227	-0.18266120
## 808	-0.3230369	-1.12962207	0.37756366
## 809	0.4524067	-1.07616049	0.53836894
## 810	0.7108879	-1.05833996	-0.19303574
## 811	0.7108879	-1.05833996	0.34644005
## 812	0.1422293	-1.09754512	0.10782576
## 813	0.0388368	-1.10467333	-0.15672487
## 815	-1.3569616	-0.98705784	0.43462360
## 816	-1.3569616	-0.98705784	0.47093447
## 817	-1.3569616	-0.98705784	0.35681459
## 818	-1.3569616	-0.98705784	0.07151489
## 819	-1.3569616	-0.98705784	0.46055993
## 821	-1.3569616	-0.98705784	0.43462360
## 822	-1.3569616	-0.98705784	0.33087825
## 823	-1.2018729	-0.97636553	0.24269471
## 824	-1.3569616	-0.98705784	0.10263850
## 825	-0.9433917	-0.95854500	0.95853759
## 826	-1.3569616	-0.98705784	0.41387453
## 828	-0.3747331	-0.91933984	-0.23453387
## 829	-1.1501767	-0.97280142	-0.03741772
## 831	0.1422293	-0.88369878	0.21157111
## 832	0.1939255	-0.88013467	0.37237639
## 833	0.1422293	-0.88369878	0.91185218
## 834	0.1422293	-0.88369878	-0.01148138
## 835	0.5557992	-0.85518594	-0.16191213
## 837	-0.2196444	-0.90864752	0.31531645
## 839	0.7108879	-0.84449362	-0.08410312

## 840	-1.3569616	-0.77321151	0.38275093
## 841	1.2278503	-0.80885256	0.12338756
## 843	1.6931165	-0.77677561	-0.13597580
## 844	1.6931165	-0.77677561	0.48649627
## 845	-1.3569616	-0.77321151	0.46055993
## 846	-1.3569616	-0.77321151	0.43981086
## 848	-0.8399993	-0.73757045	-0.13597580
## 849	-0.5815181	-0.71974992	0.01445495
## 850	-0.5815181	-0.71974992	0.41906180
## 852	-0.2713406	-0.69836529	0.43981086
## 853	-0.5815181	-0.71974992	-0.00629412
## 855	-0.1679481	-0.69123708	0.17007297
## 856	-0.0645557	-0.68410886	0.05076582
## 857	0.2973180	-0.65916012	0.06114036
## 858	0.1939255	-0.66628834	0.46055993
## 859	0.1939255	-0.66628834	0.56430528
## 860	0.8142804	-0.62351907	-0.16709940
## 861	0.9693691	-0.61282675	0.05595309
## 862	1.2278503	-0.59500622	0.37237639
## 863	1.2278503	-0.59500622	-0.09966493
## 864	1.3312428	-0.58787801	0.44499813
## 865	1.2278503	-0.59500622	0.27900558
## 866	-1.3569616	-0.55936517	-0.21378481
## 867	-1.3569616	-0.55936517	0.49168354
## 868	-0.5815181	-0.50590358	-0.00629412
## 869	1.4863315	-0.57718569	0.38275093
## 870	-0.3230369	-0.48808305	0.10263850
## 871	-0.6332143	-0.50946769	0.18044750
## 872	-0.0645557	-0.47026252	0.92741398
## 873	0.1939255	-0.45244200	0.43462360
## 874	0.1939255	-0.45244200	0.33087825
## 875	0.1939255	-0.45244200	0.28938012
## 876	0.0388368	-0.46313431	0.15451117
## 877	0.1422293	-0.45600610	0.37237639
## 878	0.4524067	-0.43462147	-0.00629412
## 879	0.9693691	-0.39898041	0.37237639
## 880	-0.5815181	-0.50590358	-0.23453387
## 881	0.9693691	-0.39898041	0.37756366
## 882	1.2278503	-0.38115988	-0.00629412
## 883	0.9693691	-0.39898041	0.14932390
## 884	0.9176729	-0.40254452	0.33606552
## 885	1.4863315	-0.36333936	-0.12560126
## 886	1.6931165	-0.34908293	0.18563477
## 887	1.6414202	-0.35264704	0.35162732
## 888	0.9693691	-0.39898041	-0.03223045
## 891	-1.0984805	-0.32769830	0.40868726
## 892	-0.5815181	-0.29205724	-0.22415934
## 893	-0.4781256	-0.28492903	0.53318167
## 894	-0.3230369	-0.27423671	-0.18784847
## 895	-0.0645557	-0.25641619	-0.17228667
## 896	0.1939255	-0.23859566	0.00408042
## 897	0.4524067	-0.22077513	0.49168354
## 898	0.7108879	-0.20295460	0.33087825
## 899	0.7108879	-0.20295460	-0.16191213

## 900	0.9693691	-0.18513407	-0.26565748
## 901	1.2278503	-0.16731354	0.33087825
## 902	1.5897240	-0.14236480	0.38275093
## 903	1.6931165	-0.13523659	-0.26565748
## 904	1.6931165	-0.13523659	-0.19303574
## 905	1.3829390	-0.15662123	0.34125279
## 906	-1.3569616	-0.13167249	-0.09966493
## 907	-1.3052654	-0.12810838	-0.27603201
## 910	-1.3569616	-0.13167249	0.22194564
## 911	1.6414202	-0.13880070	0.39312546
## 913	-0.3230369	-0.06039037	-0.04260499
## 914	0.1939255	-0.02474932	0.46055993
## 915	0.1939255	-0.02474932	0.38793819
## 916	0.9693691	0.02871227	0.43462360
## 917	0.4524067	-0.00692879	0.31012918
## 918	1.2278503	0.04653280	0.46055993
## 919	1.6931165	0.07860975	-0.19822300
## 920	0.9693691	0.02871227	0.43462360
## 921	1.5380277	0.06791743	0.29975465
## 923	-1.3569616	0.08217385	0.20638384
## 924	1.4863315	0.06435332	0.40349999
## 926	0.9693691	0.02871227	0.42424906
## 927	-0.5815181	0.13563544	0.13894937
## 928	-0.4264293	0.14632775	-0.11522673
## 929	-0.3230369	0.15345596	-0.13597580
## 930	-0.4264293	0.14632775	0.31531645
## 931	1.5897240	0.07148153	0.01445495
## 932	-0.2196444	0.16058418	-0.22415934
## 934	0.1939255	0.18909702	0.35681459
## 935	0.4524067	0.20691755	0.15451117
## 936	0.1422293	0.18553292	0.08707669
## 937	0.9693691	0.24255861	0.03001675
## 939	0.7108879	0.22473808	0.36200186
## 940	0.9693691	0.24255861	0.12338756
## 941	0.9693691	0.24255861	-0.18266120
## 942	1.2278503	0.26037913	-0.03223045
## 943	0.9693691	0.24255861	-0.24490841
## 944	0.5041030	0.21048166	-0.25528294
## 945	-1.3569616	0.29602019	-0.18784847
## 946	0.1939255	0.18909702	0.56430528
## 947	1.4863315	0.27819966	-0.03223045
## 948	-1.3569616	0.29602019	0.52280714
## 949	1.6931165	0.29245609	0.36718912
## 950	1.0210654	0.24612271	0.38793819
## 951	1.6931165	0.29245609	-0.22415934
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## 954	-1.3569616	0.29602019	-0.20341027
## 955	-1.3569616	0.29602019	0.23750744
## 956	1.4863315	0.27819966	-0.07372859
## 957	-1.0984805	0.31384072	0.17007297
## 958	0.9176729	0.23899450	0.42424906
## 959	1.2278503	0.26037913	0.35681459
## 960	-0.8399993	0.33166125	0.01964222

## 961	0.0388368	0.39225104	-0.12041400
## 962	1.6931165	0.29245609	0.36200186
## 963	-0.3230369	0.36730230	-0.13597580
## 964	-0.8399993	0.33166125	0.28419285
## 965	-0.3230369	0.36730230	-0.16709940
## 966	-1.0467842	0.31740482	0.39831273
## 967	-0.2196444	0.37443052	0.04557856
## 968	0.1939255	0.40294336	0.46055993
## 969	0.1939255	0.40294336	-0.18784847
## 971	-0.5815181	0.34948178	0.27900558
## 972	0.0905331	0.39581515	-0.22934661
## 973	0.7108879	0.43858442	-0.10485219
## 974	0.9693691	0.45640495	0.46055993
## 975	1.2278503	0.47422547	-0.03741772
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## 977	1.2278503	0.47422547	0.20638384
## 978	1.2795466	0.47778958	-0.20859754
## 979	-1.3569616	0.50986653	0.22713291
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## 981	1.1244578	0.46709726	0.23750744
## 984	0.1422293	0.61322559	-0.09966493
## 985	0.1939255	0.61678970	0.44499813
## 987	0.1939255	0.61678970	0.06114036
## 988	0.1939255	0.61678970	0.51761987
## 989	-0.5815181	0.56332812	0.01964222
## 990	-0.5298218	0.56689222	0.00408042
## 991	0.9693691	0.67025128	0.06114036
## 992	0.9693691	0.67025128	0.12857483
## 993	0.7108879	0.65243076	0.40868726
## 994	-0.3230369	0.58114864	-0.13597580
## 995	1.4863315	0.70589234	0.50724534
## 996	1.2278503	0.68807181	0.25825651
## 997	0.4524067	0.63461023	0.12857483
## 998	-1.3569616	0.72371287	0.20119657
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## 1003	-1.3569616	0.72371287	0.30494192
## 1004	-1.3569616	0.72371287	0.24269471
## 1005	-1.0984805	0.74153340	0.35681459
## 1006	-0.8399993	0.75935393	0.04557856
## 1007	-1.0984805	0.74153340	-0.16191213
## 1008	-0.8399993	0.75935393	-0.23972114
## 1009	1.6931165	0.72014876	-0.17228667
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## 1013	-0.3230369	0.79499498	0.43462360
## 1014	1.4863315	0.70589234	0.51243261
## 1016	-0.3230369	0.79499498	-0.05816679
## 1017	-0.0645557	0.81281551	0.32050372
## 1018	0.1939255	0.83063604	0.29456738
## 1020	0.1939255	0.83063604	0.53836894
## 1021	-0.3230369	0.79499498	-0.00629412
## 1022	-0.0645557	0.81281551	0.06114036
## 1024	1.6931165	0.93399510	0.38275093

## 1026	-1.3569616	0.93755921	0.38275093
## 1028	-0.8916955	0.96963616	-0.07891586
## 1029	-1.0984805	0.95537974	-0.21378481
## 1030	-0.5815181	0.99102079	-0.09966493
## 1031	-0.8399993	0.97320027	0.29975465
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## 1033	-0.3230369	1.00884132	0.48649627
## 1034	0.1939255	1.04448238	0.09226396
## 1035	0.1422293	1.04091827	0.03520402
## 1036	0.4524067	1.06230291	0.44499813
## 1037	0.1939255	1.04448238	0.42424906
## 1038	0.1939255	1.04448238	0.51243261
## 1040	-0.5815181	0.99102079	0.13376210
## 1042	1.2278503	1.11576449	0.01964222
## 1044	0.9693691	1.09794396	0.53318167
## 1046	1.4863315	1.13358502	0.40868726
## 1047	1.4863315	1.13358502	0.06114036
## 1048	-1.3569616	1.15140555	-0.11003946
## 1049	-1.3569616	1.15140555	0.52799441
## 1050	-1.1501767	1.16566197	-0.17747393
## 1051	-0.8399993	1.18704660	-0.05816679
## 1053	-0.5815181	1.20486713	0.40868726
## 1054	-0.3230369	1.22268766	0.46574720
## 1055	-1.3569616	1.15140555	-0.08410312
## 1056	-0.3230369	1.22268766	0.61617795
## 1057	-0.3230369	1.22268766	0.52799441
## 1058	0.1939255	1.25832872	0.39831273
## 1059	0.0905331	1.25120051	0.02482949
## 1061	-0.0645557	1.24050819	-0.18784847
## 1063	0.7108879	1.29396977	-0.15672487
## 1065	-0.5815181	1.20486713	-6.55781262
## 1068	-1.0984805	1.38307242	0.36200186
## 1069	-1.3569616	1.36525189	-0.08929039
## 1071	-1.3569616	1.36525189	0.38793819
## 1076	-0.5815181	1.41871347	-0.21378481
## 1077	-1.3569616	1.36525189	0.46055993
## 1078	-0.3230369	1.43653400	0.14932390
## 1079	0.1422293	1.46861095	-0.23453387
## 1080	0.1939255	1.47217506	0.37237639
## 1085	1.2278503	1.54345717	-0.22934661
## 1086	0.9693691	1.52563664	0.29975465
## 1091	1.6414202	1.57197002	-0.25528294
## 1092	-1.0984805	1.59691875	-0.22934661
## 1093	-1.3569616	1.57909823	-0.03223045
## 1096	-0.5815181	1.63255981	0.23750744
## 1097	0.1939255	1.68602140	-7.20103375
## 1098	-0.0645557	1.66820087	-0.25009568
## 1099	-0.4264293	1.64325213	-0.29678108
## 1100	0.4524067	1.70384192	-7.06097754
## 1101	0.9693691	1.73948298	-7.16991015
## 1103	1.6931165	1.78938046	-0.20859754
## 1104	1.6931165	1.78938046	-0.25528294
## 1106	0.9693691	1.95332932	-0.23453387
## 1107	0.9693691	1.95332932	-7.65751327

## 1108	1.4863315	1.98897038	-7.65751327
## 1109	0.9693691	-1.46821211	-0.22934661
## 1110	0.4524067	-1.07616049	0.40868726
## 1111	-0.3230369	-0.91577573	0.46055993
## 1112	0.1939255	-1.52167369	0.01964222
## 1113	1.5897240	-0.99775016	0.39312546
## 1114	-1.3569616	-1.62859686	0.28419285
## 1115	-1.3569616	-1.62859686	-0.21378481
## 1116	-1.3052654	-1.62503276	-0.16709940
## 1117	-1.3569616	-1.62859686	0.25825651
## 1118	-1.3569616	-1.62859686	0.46055993
## 1119	-1.0984805	-1.61077633	0.01964222
## 1120	-1.3569616	-1.62859686	0.09745123
## 1121	-1.3569616	-1.62859686	-0.13597580
## 1122	-1.3569616	-1.62859686	-0.16709940
## 1123	-0.9433917	-1.60008402	-0.04779225
## 1124	-0.8399993	-1.59295581	0.33087825
## 1125	-0.8399993	-1.59295581	0.38793819
## 1126	-1.3569616	-1.62859686	-0.05816679
## 1127	-0.8399993	-1.59295581	0.05595309
## 1128	1.6931165	-1.63216097	0.41906180
## 1129	-1.3569616	-1.62859686	-0.20859754
## 1130	-0.5815181	-1.57513528	-0.11003946
## 1131	-0.5815181	-1.57513528	0.87554131
## 1132	-0.5815181	-1.57513528	0.03001675
## 1133	-0.5815181	-1.57513528	0.22713291
## 1134	0.1939255	-1.52167369	0.03520402
## 1135	-0.9950880	-1.60364812	0.08188943
## 1136	0.1939255	-1.52167369	0.55911801
## 1137	0.1939255	-1.52167369	0.01964222
## 1138	0.1939255	-1.52167369	0.09745123
## 1139	0.4524067	-1.50385316	0.55911801
## 1140	0.6591917	-1.48959674	0.42424906
## 1141	0.1939255	-1.52167369	-0.08410312
## 1142	0.7108879	-1.48603264	0.12338756
## 1143	0.1939255	-1.52167369	0.17007297
## 1144	1.0727616	-1.46108390	-0.17228667
## 1145	0.9693691	-1.46821211	-0.22934661
## 1146	1.4863315	-1.43257105	0.51243261
## 1147	-1.3569616	-1.41475052	0.40349999
## 1148	1.4863315	-1.43257105	0.15451117
## 1149	1.6931165	-1.41831463	0.22194564
## 1150	1.4863315	-1.43257105	0.26344378
## 1151	-1.3569616	-1.41475052	0.42943633
## 1152	-1.3569616	-1.41475052	0.46055993
## 1153	-1.3569616	-1.41475052	0.46055993
## 1154	-1.0984805	-1.39692999	0.20119657
## 1155	1.6931165	-1.41831463	0.24269471
## 1156	-1.3569616	-1.41475052	-0.10485219
## 1157	-1.3569616	-1.41475052	0.40868726
## 1158	-1.0984805	-1.39692999	0.48130900
## 1159	-0.5815181	-1.36128894	0.46055993
## 1160	-0.5815181	-1.36128894	0.48649627
## 1161	-0.5815181	-1.36128894	0.43462360

## 1162	-0.3230369	-1.34346841	0.06114036
## 1163	-1.3569616	-1.41475052	0.50724534
## 1164	-0.3230369	-1.34346841	-0.18784847
## 1165	-1.3569616	-1.41475052	0.56430528
## 1166	-1.3569616	-1.41475052	0.40349999
## 1167	0.1939255	-1.30782735	0.56430528
## 1168	0.7108879	-1.27218630	0.46055993
## 1170	0.1422293	-1.31139146	0.38275093
## 1171	1.1761541	-1.24010935	0.35681459
## 1172	1.4863315	-1.21872471	0.10782576
## 1173	0.9693691	-1.25436577	0.89629038
## 1174	1.6931165	-1.20446829	-0.15672487
## 1175	1.4863315	-1.21872471	0.40868726
## 1176	1.4863315	-1.21872471	0.20119657
## 1177	-1.3569616	-1.20090418	0.45537267
## 1178	1.6931165	-1.20446829	0.41387453
## 1179	-1.3569616	-1.20090418	0.07670216
## 1180	1.6931165	-1.20446829	0.46055993
## 1181	1.6931165	-1.20446829	-0.23972114
## 1182	-0.8399993	-1.16526313	-0.05816679
## 1183	-1.3569616	-1.20090418	0.36200186
## 1184	-0.5815181	-1.14744260	0.34644005
## 1185	-0.8399993	-1.16526313	0.36200186
## 1186	-0.5815181	-1.14744260	-0.00629412
## 1187	-0.8399993	-1.16526313	0.12338756
## 1188	-1.2018729	-1.19021187	0.13376210
## 1189	-0.8399993	-1.16526313	0.97928666
## 1190	-0.2196444	-1.12249386	0.00408042
## 1191	-0.4781256	-1.14031439	0.23232018
## 1192	0.0388368	-1.10467333	0.04039129
## 1193	0.0388368	-1.10467333	0.39831273
## 1194	-0.0645557	-1.11180154	-0.18784847
## 1195	0.1422293	-1.09754512	0.04557856
## 1196	-0.0645557	-1.11180154	0.01445495
## 1197	-0.3230369	-1.12962207	-0.19303574
## 1198	0.1939255	-1.09398101	0.97928666
## 1199	0.1422293	-1.09754512	0.41387453
## 1200	0.7108879	-1.05833996	-0.03223045
## 1201	-0.8399993	-1.16526313	0.18563477
## 1202	0.1422293	-1.09754512	0.45537267
## 1203	0.7625842	-1.05477585	0.18563477
## 1204	0.7108879	-1.05833996	-0.19303574
## 1205	0.7108879	-1.05833996	-0.17228667
## 1206	0.1939255	-1.09398101	-0.05816679
## 1207	0.9693691	-1.04051943	0.43462360
## 1208	0.7108879	-1.05833996	0.34644005
## 1209	0.1939255	-1.09398101	-0.07372859
## 1210	-1.3569616	-0.98705784	-0.04260499
## 1211	1.6414202	-0.99418606	0.12338756
## 1212	0.4524067	-1.07616049	0.40868726
## 1213	1.6931165	-0.99062195	0.25825651
## 1214	-1.3569616	-0.98705784	0.33087825
## 1215	-1.3569616	-0.98705784	0.43462360
## 1216	-1.3569616	-0.98705784	0.47093447

## 1217	-1.3569616	-0.98705784	0.10263850
## 1218	-1.3569616	-0.98705784	1.42020437
## 1219	-1.0984805	-0.96923732	0.43981086
## 1220	-1.2018729	-0.97636553	0.27381831
## 1221	1.2278503	-1.02269890	0.13894937
## 1222	-1.3569616	-0.98705784	-0.08929039
## 1223	-0.9433917	-0.95854500	0.95853759
## 1224	-0.3230369	-0.91577573	0.39831273
## 1225	-0.8399993	-0.95141679	-0.20341027
## 1226	0.1939255	-0.88013467	0.37237639
## 1227	0.1939255	-0.88013467	-0.12041400
## 1228	-0.3747331	-0.91933984	-0.23453387
## 1229	0.7108879	-0.84449362	0.38275093
## 1230	0.1422293	-0.88369878	0.91185218
## 1231	0.7108879	-0.84449362	0.30494192
## 1232	0.5557992	-0.85518594	-0.16191213
## 1233	0.4524067	-0.86231415	-0.13597580
## 1235	0.7108879	-0.84449362	-0.08410312
## 1236	1.4863315	-0.79103203	-0.26565748
## 1237	0.9693691	-0.82667309	-0.05816679
## 1238	-0.0645557	-0.89795520	0.14932390
## 1239	1.6414202	-0.78033972	-0.08410312
## 1240	1.6931165	-0.77677561	-0.21378481
## 1241	1.6931165	-0.77677561	-0.13597580
## 1242	-1.3569616	-0.77321151	0.38275093
## 1243	-1.3569616	-0.77321151	0.46055993
## 1244	1.6931165	-0.77677561	0.48649627
## 1245	0.9693691	-0.82667309	0.39831273
## 1246	-0.5298218	-0.71618581	0.09226396
## 1247	-0.8399993	-0.73757045	-0.13597580
## 1248	-0.5815181	-0.71974992	-0.00629412
## 1249	-0.2713406	-0.69836529	0.43981086
## 1250	1.3829390	-0.79816024	-0.20341027
## 1251	-0.0645557	-0.68410886	0.05076582
## 1252	0.1939255	-0.66628834	-0.05816679
## 1253	0.1939255	-0.66628834	0.56430528
## 1254	-0.5815181	-0.71974992	-0.20859754
## 1255	0.1939255	-0.66628834	0.46055993
## 1257	0.2973180	-0.65916012	0.06114036
## 1258	0.8659766	-0.61995496	0.27381831
## 1259	0.7108879	-0.63064728	-0.17228667
## 1260	0.8142804	-0.62351907	-0.16709940
## 1261	0.9693691	-0.61282675	0.05595309
## 1263	1.2278503	-0.59500622	0.37237639
## 1264	1.2278503	-0.59500622	-0.09966493
## 1265	-1.3569616	-0.55936517	0.45537267
## 1266	-1.3569616	-0.55936517	0.46055993
## 1268	-1.3569616	-0.55936517	0.21675837
## 1269	1.2278503	-0.59500622	0.01964222
## 1270	-0.5815181	-0.50590358	-0.00629412
## 1272	0.1939255	-0.45244200	0.40868726
## 1273	-0.0645557	-0.47026252	0.92741398
## 1274	0.1939255	-0.45244200	0.33087825
## 1275	0.4007105	-0.43818557	0.07670216

## 1276	0.1939255	-0.45244200	0.43462360
## 1277	0.1939255	-0.45244200	0.28938012
## 1278	-0.0645557	-0.47026252	0.91185218
## 1279	0.7108879	-0.41680094	0.38275093
## 1280	0.9693691	-0.39898041	0.37756366
## 1281	0.9693691	-0.39898041	0.14932390
## 1282	-1.3569616	-0.34551883	-0.21378481
## 1284	-1.3569616	-0.34551883	0.48130900
## 1285	-1.3569616	-0.34551883	0.38275093
## 1286	-1.0984805	-0.32769830	0.40868726
## 1287	1.6414202	-0.35264704	0.35162732
## 1288	-1.3569616	-0.34551883	0.56430528
## 1290	-0.3230369	-0.27423671	-0.00629412
## 1291	-0.4781256	-0.28492903	0.53318167
## 1292	0.1939255	-0.23859566	-0.22415934
## 1293	0.4524067	-0.22077513	0.49168354
## 1294	-0.3230369	-0.27423671	-0.18784847
## 1295	-0.0645557	-0.25641619	-0.29159381
## 1296	-1.3569616	-0.13167249	0.17007297
## 1297	1.4863315	-0.14949302	0.29975465
## 1298	-1.3569616	-0.13167249	-0.08410312
## 1299	1.6931165	-0.13523659	-0.26565748
## 1300	1.6931165	-0.13523659	0.38275093
## 1303	-1.0984805	-0.11385196	0.15969843
## 1304	-1.3052654	-0.12810838	-0.27603201
## 1305	-0.5815181	-0.07821090	0.04557856
## 1306	-0.5815181	-0.07821090	0.31012918
## 1308	-0.3230369	-0.06039037	0.39831273
## 1309	-0.0645557	-0.04256985	-0.08410312
## 1310	0.1939255	-0.02474932	0.20119657
## 1311	0.1939255	-0.02474932	0.46055993
## 1312	0.1939255	-0.02474932	0.53836894
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## 1314	0.9693691	0.02871227	0.43462360
## 1315	0.7108879	0.01089174	0.25825651
## 1317	0.9693691	0.02871227	0.43462360
## 1318	0.4524067	-0.00692879	0.19082204
## 1319	-0.8399993	0.11781491	-0.05816679
## 1320	-0.7883030	0.12137901	0.17007297
## 1322	1.4863315	0.06435332	0.40349999
## 1323	-0.0645557	0.17127649	0.04557856
## 1325	0.1422293	0.18553292	0.08707669
## 1327	0.4524067	0.20691755	0.36718912
## 1328	0.9176729	0.23899450	0.42424906
## 1329	0.9693691	0.24255861	0.03001675
## 1330	1.5380277	0.28176377	-0.14635033
## 1331	0.8142804	0.23186629	0.10263850
## 1332	1.2278503	0.26037913	-0.03223045
## 1333	1.0210654	0.24612271	0.38793819
## 1334	1.5897240	0.28532787	0.40349999
## 1335	1.6931165	0.29245609	-0.05297952
## 1336	-1.3569616	0.29602019	-0.18784847
## 1338	-1.3569616	0.29602019	0.23750744
## 1340	-1.0984805	0.31384072	-0.12560126

## 1341	-1.3569616	0.29602019	0.52280714
## 1342	-1.3569616	0.29602019	-0.00110685
## 1343	-1.3569616	0.29602019	-0.22415934
## 1344	-1.0984805	0.31384072	0.40868726
## 1346	-0.9950880	0.32096893	0.00408042
## 1347	1.4863315	0.27819966	-0.07372859
## 1348	-1.3569616	0.29602019	-0.10485219
## 1349	-0.8399993	0.33166125	-0.05816679
## 1350	-0.3230369	0.36730230	0.44499813
## 1351	-0.3230369	0.36730230	-0.11522673
## 1352	-0.5815181	0.34948178	0.27900558
## 1353	-1.0467842	0.31740482	0.39831273
## 1354	0.1939255	0.40294336	-0.18784847
## 1356	-0.4264293	0.36017409	0.35681459
## 1357	0.1422293	0.39937925	0.37237639
## 1358	0.9693691	0.45640495	0.17526024
## 1359	0.7108879	0.43858442	0.43462360
## 1360	1.4863315	0.49204600	0.39312546
## 1361	1.4863315	0.49204600	-0.10485219
## 1362	1.4863315	0.49204600	0.13376210
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## 1366	1.4863315	0.49204600	-0.18784847
## 1367	-1.3569616	0.50986653	0.22713291
## 1368	-0.8399993	0.54550759	-0.05297952
## 1369	-1.3569616	0.50986653	0.28419285
## 1370	-0.5815181	0.56332812	0.10263850
## 1371	-0.5298218	0.56689222	0.00408042
## 1372	-0.3747331	0.57758454	-0.27084474
## 1374	-0.0645557	0.59896917	0.17526024
## 1375	-0.3230369	0.58114864	0.53318167
## 1376	-1.3569616	0.50986653	0.40868726
## 1377	0.1939255	0.61678970	0.44499813
## 1378	0.1939255	0.61678970	0.30494192
## 1379	0.9693691	0.67025128	0.09745123
## 1380	0.9693691	0.67025128	0.06114036
## 1381	0.9693691	0.67025128	0.43462360
## 1382	1.2278503	0.68807181	-0.13597580
## 1383	1.2278503	0.68807181	0.40349999
## 1385	0.6591917	0.64886665	-0.20859754
## 1387	-1.3569616	0.72371287	0.97409939
## 1388	-1.3569616	0.72371287	0.30494192
## 1389	-1.3569616	0.72371287	0.51761987
## 1390	-1.3569616	0.72371287	0.58505435
## 1391	-1.3569616	0.72371287	0.35681459
## 1392	-1.3569616	0.72371287	0.20119657
## 1393	0.7108879	0.65243076	0.43981086
## 1394	-0.9433917	0.75222571	0.41387453
## 1395	-0.5815181	0.77717445	0.35162732
## 1396	1.4863315	0.70589234	0.51243261
## 1397	-0.3230369	0.79499498	-0.05816679
## 1398	-0.3230369	0.79499498	-0.00629412
## 1399	0.1939255	0.83063604	0.17007297
## 1400	-0.0645557	0.81281551	0.28938012
## 1402	-0.3230369	0.79499498	0.35681459

## 1403	0.1422293	0.82707193	0.43462360
## 1404	0.9693691	0.88409762	0.38275093
## 1405	-0.3230369	0.79499498	0.43462360
## 1406	0.9693691	0.88409762	0.28938012
## 1407	0.9693691	0.88409762	0.49687080
## 1408	0.0388368	0.81994372	0.38793819
## 1409	0.1939255	0.83063604	0.41387453
## 1410	1.3829390	0.91261047	0.39312546
## 1411	-1.3569616	0.93755921	0.02482949
## 1412	0.9693691	0.88409762	0.31531645
## 1413	-0.9433917	0.96607205	-0.07891586
## 1414	-0.5815181	0.99102079	-0.09966493
## 1415	1.2278503	0.90191815	0.30494192
## 1416	-0.8399993	0.97320027	0.43462360
## 1419	-0.3230369	1.00884132	-0.05816679
## 1420	-0.8399993	0.97320027	0.29975465
## 1421	0.1422293	1.04091827	0.03520402
## 1422	-1.3569616	0.93755921	-0.02704319
## 1423	-0.3747331	1.00527722	0.42943633
## 1425	0.4524067	1.06230291	0.52280714
## 1426	-0.3230369	1.00884132	0.32050372
## 1427	0.9693691	1.09794396	0.51761987
## 1428	-0.3747331	1.00527722	-0.22415934
## 1429	0.4524067	1.06230291	0.44499813
## 1430	1.4863315	1.13358502	0.06114036
## 1431	1.4863315	1.13358502	0.04557856
## 1432	-1.3569616	1.15140555	0.25825651
## 1433	-1.3569616	1.15140555	0.52799441
## 1434	1.5380277	1.13714913	0.37237639
## 1435	-1.0984805	1.16922608	0.48649627
## 1436	-1.3569616	1.15140555	-0.11003946
## 1438	-1.0984805	1.16922608	0.06114036
## 1439	0.9693691	1.09794396	0.28938012
## 1440	-0.3230369	1.22268766	0.61617795
## 1441	-1.3569616	1.15140555	0.17007297
## 1442	-0.3230369	1.22268766	-0.08410312
## 1443	-0.5815181	1.20486713	-6.55781262
## 1444	-0.0645557	1.24050819	0.44499813
## 1445	-0.0645557	1.24050819	0.38275093
## 1446	-0.3230369	1.22268766	0.52799441
## 1447	0.1939255	1.25832872	0.12857483
## 1448	-0.0645557	1.24050819	-0.18784847
## 1449	-0.3230369	1.22268766	0.46574720
## 1450	0.1939255	1.25832872	-0.05816679
## 1451	0.0905331	1.25120051	0.02482949
## 1452	0.1422293	1.25476461	0.25306924
## 1455	0.7108879	1.29396977	-0.05816679
## 1457	0.9693691	1.31179030	0.55911801
## 1460	0.9693691	1.31179030	0.31012918
## 1461	1.4863315	1.34743136	-0.16191213
## 1462	1.6931165	1.36168778	-0.05816679
## 1463	-1.3569616	1.36525189	-0.06854132
## 1464	-1.3569616	1.36525189	-0.09966493
## 1466	-1.3569616	1.36525189	0.46055993

## 1467	-1.3569616	1.36525189	-0.08929039
## 1468	0.1939255	1.47217506	0.16488570
## 1469	0.1939255	1.47217506	0.37237639
## 1472	0.9693691	1.52563664	-0.08410312
## 1473	0.9693691	1.52563664	-0.13078853
## 1474	0.1422293	1.46861095	0.43981086
## 1475	0.7108879	1.50781611	0.42943633
## 1476	0.7108879	1.50781611	0.19600931
## 1477	-1.3569616	1.57909823	-0.03223045
## 1478	-1.3569616	1.57909823	-0.11003946
## 1480	0.1939255	1.68602140	-7.20103375
## 1481	-0.0645557	1.66820087	-0.24490841
## 1482	1.4863315	1.56127770	-0.00629412
## 1483	-0.0645557	1.66820087	-0.21378481
## 1484	-0.0645557	1.66820087	-7.16991015
## 1486	0.4524067	1.70384192	-6.57337442
## 1487	0.7108879	1.72166245	-7.15434835
## 1488	1.4863315	1.77512404	-0.07372859
## 1489	1.6931165	1.78938046	-7.13359928
## 1490	1.6931165	1.78938046	-0.20859754
## 1493	1.2278503	1.97114985	-0.24490841
## 1494	1.4863315	1.98897038	-7.65751327
## 1495	1.4863315	1.98897038	-0.27084474
## 1497	0.9693691	-0.18513407	0.35681459
## 1498	-1.3569616	-1.84244320	-0.03223045
## 1499	0.7108879	-1.69987898	0.38275093
## 1500	-1.3569616	-1.62859686	0.28419285
## 1501	-1.3569616	-1.62859686	0.36718912
## 1502	-1.3569616	-1.62859686	0.27900558
## 1503	-1.3569616	-1.62859686	0.31012918
## 1504	-1.3569616	-1.62859686	0.32050372
## 1505	0.9693691	-1.68205845	0.83404317
## 1506	-0.8399993	-1.59295581	0.38793819
## 1507	-0.8399993	-1.59295581	0.33087825
## 1508	-0.8399993	-1.59295581	-0.26565748
## 1509	-0.5815181	-1.57513528	0.20638384
## 1510	-0.5815181	-1.57513528	0.15969843
## 1511	-0.5815181	-1.57513528	-0.24490841
## 1512	-0.5815181	-1.57513528	0.87554131
## 1513	1.6931165	-1.41831463	0.33087825
## 1514	0.9693691	-1.46821211	0.21157111
## 1515	1.4863315	-1.43257105	0.51243261
## 1516	-1.3569616	-1.41475052	0.56430528
## 1517	-1.3569616	-1.41475052	0.28938012
## 1518	-1.3569616	-1.41475052	0.38275093
## 1519	-0.8399993	-1.37910947	-0.08410312
## 1520	-0.7883030	-1.37554536	0.25825651
## 1521	-0.8399993	-1.37910947	0.43981086
## 1522	-0.3230369	-1.34346841	0.04557856
## 1523	-0.1679481	-1.33277609	0.94816305
## 1524	-0.3230369	-1.34346841	-0.17747393
## 1525	-0.8399993	-1.37910947	0.29456738
## 1526	0.1939255	-1.30782735	0.19600931
## 1527	-0.2713406	-1.33990430	0.28419285

## 1528	0.7108879	-1.27218630	0.48130900
## 1529	0.9693691	-1.25436577	0.28419285
## 1530	0.1422293	-1.31139146	0.38275093
## 1531	0.9693691	-1.25436577	0.53836894
## 1533	1.5897240	-1.21159650	-0.19303574
## 1534	-1.3569616	-1.20090418	0.45537267
## 1535	-1.3569616	-1.20090418	0.06114036
## 1536	-1.3569616	-1.20090418	0.29975465
## 1537	1.6931165	-1.20446829	0.01964222
## 1538	-1.3569616	-1.20090418	-0.21897207
## 1539	-1.0984805	-1.18308366	0.13376210
## 1540	-1.0984805	-1.18308366	-0.21378481
## 1541	-0.8399993	-1.16526313	0.36200186
## 1542	-0.8399993	-1.16526313	-0.05816679
## 1543	-0.8916955	-1.16882723	-0.18266120
## 1544	-0.8399993	-1.16526313	0.97928666
## 1545	-0.5815181	-1.14744260	0.41387453
## 1546	1.6931165	-1.20446829	-0.23972114
## 1547	0.1939255	-1.09398101	-0.02704319
## 1548	-0.0645557	-1.11180154	-0.18784847
## 1549	-0.0645557	-1.11180154	0.01445495
## 1550	0.0388368	-1.10467333	0.39831273
## 1551	0.1939255	-1.09398101	0.97928666
## 1552	0.1939255	-1.09398101	0.23232018
## 1553	0.4524067	-1.07616049	-0.03223045
## 1554	0.4524067	-1.07616049	0.17526024
## 1555	0.7108879	-1.05833996	-0.03223045
## 1556	0.7108879	-1.05833996	-0.19822300
## 1557	0.4524067	-1.07616049	0.15969843
## 1558	0.6074954	-1.06546817	0.05076582
## 1559	0.1939255	-1.09398101	0.45537267
## 1560	0.4007105	-1.07972459	0.51761987
## 1561	0.9693691	-1.04051943	-0.14635033
## 1562	0.9693691	-1.04051943	0.33087825
## 1564	0.7108879	-1.05833996	0.39312546
## 1565	1.4863315	-1.00487837	0.04557856
## 1566	-1.3569616	-0.98705784	0.21157111
## 1567	1.6414202	-0.99418606	0.10263850
## 1568	-1.3569616	-0.98705784	0.47093447
## 1569	-1.3569616	-0.98705784	0.46055993
## 1570	-1.3569616	-0.98705784	1.42020437
## 1571	-1.0984805	-0.96923732	0.45537267
## 1572	-1.3569616	-0.98705784	0.20119657
## 1573	1.6414202	-0.99418606	0.05595309
## 1574	-0.8399993	-0.95141679	0.95853759
## 1575	-0.3230369	-0.91577573	1.09859380
## 1576	-0.3747331	-0.91933984	-0.23453387
## 1577	0.1939255	-0.88013467	0.30494192
## 1578	0.1939255	-0.88013467	-0.05816679
## 1579	0.7108879	-0.84449362	0.38275093
## 1580	-0.3230369	-0.91577573	0.43462360
## 1581	-0.3230369	-0.91577573	0.39831273
## 1582	0.9693691	-0.82667309	-0.05816679
## 1583	0.5557992	-0.85518594	-0.16191213

## 1584	0.7108879	-0.84449362	0.30494192
## 1586	-1.3569616	-0.77321151	0.22194564
## 1587	-1.3569616	-0.77321151	0.46055993
## 1588	-1.3569616	-0.77321151	0.39312546
## 1589	-1.3569616	-0.77321151	0.28419285
## 1590	-1.0467842	-0.75182687	-0.21378481
## 1591	-0.5815181	-0.71974992	0.01445495
## 1593	-0.5815181	-0.71974992	0.20638384
## 1594	-0.2713406	-0.69836529	0.43981086
## 1595	-0.1679481	-0.69123708	0.17007297
## 1596	-0.5815181	-0.71974992	-0.20859754
## 1597	1.4863315	-0.79103203	-0.27084474
## 1598	-0.3230369	-0.70192939	0.38275093
## 1599	0.1939255	-0.66628834	0.38275093
## 1600	0.8659766	-0.61995496	0.27381831
## 1601	0.7108879	-0.63064728	0.25825651
## 1602	0.4524067	-0.64846781	0.45018540
## 1603	-1.3569616	-0.55936517	0.46055993
## 1604	-0.0645557	-0.47026252	-0.08410312
## 1606	1.4863315	-0.57718569	0.42424906
## 1607	-0.0645557	-0.47026252	-0.21378481
## 1608	0.1939255	-0.45244200	0.40868726
## 1609	0.1939255	-0.45244200	-0.03223045
## 1610	0.4007105	-0.43818557	0.07670216
## 1611	1.0210654	-0.39541631	-0.23972114
## 1612	0.9693691	-0.39898041	0.22713291
## 1613	0.9693691	-0.39898041	-0.12560126
## 1614	-1.3569616	-0.34551883	-0.26047021
## 1615	-1.3569616	-0.34551883	0.26863105
## 1616	-1.3569616	-0.34551883	-0.29159381
## 1617	-1.3569616	-0.34551883	-0.21378481
## 1618	-0.3230369	-0.27423671	-0.13597580
## 1619	0.1939255	-0.23859566	0.15969843
## 1620	1.6931165	-0.13523659	-0.18784847
## 1622	-1.3569616	-0.13167249	0.37237639
## 1623	1.3312428	-0.16018533	0.34644005
## 1624	-1.3569616	-0.13167249	0.21157111
## 1626	-1.3569616	-0.13167249	-0.09966493
## 1627	-1.3569616	-0.13167249	-0.03223045
## 1628	-0.5815181	-0.07821090	0.37237639
## 1629	-0.0645557	-0.04256985	-0.08410312
## 1630	-0.3230369	-0.06039037	0.35681459
## 1631	-0.5815181	-0.07821090	-0.03223045
## 1632	-0.0645557	-0.04256985	-0.31234288
## 1633	0.1939255	-0.02474932	0.40868726
## 1634	-0.0128594	-0.03900574	0.34644005
## 1635	0.4524067	-0.00692879	1.26458635
## 1636	0.1939255	-0.02474932	0.19082204
## 1638	-1.3569616	0.08217385	-0.23972114
## 1640	1.6931165	0.07860975	0.31531645
## 1641	-0.5815181	0.13563544	0.13894937
## 1642	-0.7366068	0.12494312	0.20119657
## 1643	-0.8399993	0.11781491	0.38275093
## 1646	0.1939255	0.18909702	0.02482949

## 1647	0.1422293	0.18553292	0.07151489
## 1648	0.0388368	0.17840470	0.33087825
## 1649	0.9693691	0.24255861	0.03001675
## 1650	0.9693691	0.24255861	-0.20859754
## 1651	1.0727616	0.24968682	-0.00629412
## 1652	1.2278503	0.26037913	-0.10485219
## 1653	0.9693691	0.24255861	-0.05816679
## 1654	0.9693691	0.24255861	-0.19303574
## 1655	0.1939255	0.18909702	0.56430528
## 1656	1.5897240	0.28532787	0.19082204
## 1657	-1.3569616	0.29602019	0.22713291
## 1658	-1.3569616	0.29602019	-0.00629412
## 1659	-1.3569616	0.29602019	0.36718912
## 1660	1.5897240	0.28532787	0.35162732
## 1661	-1.3569616	0.29602019	-0.00110685
## 1662	-1.0984805	0.31384072	-0.13597580
## 1663	-0.3230369	0.36730230	0.27900558
## 1664	-0.5815181	0.34948178	0.30494192
## 1665	0.1422293	0.39937925	0.06114036
## 1666	0.1939255	0.40294336	0.05595309
## 1667	-0.8399993	0.33166125	0.20119657
## 1668	-0.1162519	0.38155873	-0.16709940
## 1669	-0.5815181	0.34948178	-0.05816679
## 1670	0.1939255	0.40294336	0.53836894
## 1671	1.1244578	0.46709726	0.23232018
## 1672	0.9693691	0.45640495	0.39312546
## 1673	0.9693691	0.45640495	-0.23972114
## 1674	0.9693691	0.45640495	-0.18784847
## 1675	0.7108879	0.43858442	-0.11522673
## 1676	0.1939255	0.40294336	-0.00629412
## 1677	-1.3569616	0.50986653	0.27900558
## 1678	-1.3569616	0.50986653	0.39312546
## 1679	-1.3569616	0.50986653	0.46055993
## 1680	1.2278503	0.47422547	0.95335032
## 1681	-1.3569616	0.50986653	0.34644005
## 1682	-1.3569616	0.50986653	0.39831273
## 1683	-0.8399993	0.54550759	0.36718912
## 1684	-1.3569616	0.50986653	0.48649627
## 1685	-0.8399993	0.54550759	-0.03223045
## 1686	-0.5815181	0.56332812	0.00926769
## 1687	-1.3569616	0.50986653	0.04039129
## 1688	-0.5815181	0.56332812	0.32050372
## 1689	0.1939255	0.61678970	0.06114036
## 1690	0.1939255	0.61678970	-0.13597580
## 1691	0.2973180	0.62391791	0.29456738
## 1692	0.9693691	0.67025128	0.43462360
## 1693	0.4524067	0.63461023	0.46055993
## 1694	0.7108879	0.65243076	0.43981086
## 1695	1.2278503	0.68807181	-0.03223045
## 1696	-1.3569616	0.72371287	0.58505435
## 1697	-1.0984805	0.74153340	-0.16191213
## 1698	-0.8399993	0.75935393	0.04557856
## 1699	-0.8399993	0.75935393	0.35681459
## 1701	-0.4264293	0.78786677	-0.17747393

## 1702	-0.8399993	0.75935393	0.90666491
## 1703	-0.5815181	0.77717445	0.35162732
## 1704	-0.3230369	0.79499498	0.39831273
## 1705	-0.0645557	0.81281551	-0.13597580
## 1706	0.1939255	0.83063604	0.17007297
## 1707	-0.0645557	0.81281551	0.40868726
## 1708	-1.3569616	0.72371287	-0.21378481
## 1709	0.1422293	0.82707193	0.28938012
## 1710	0.1422293	0.82707193	0.32050372
## 1711	-0.0645557	0.81281551	0.48649627
## 1712	-0.3230369	0.79499498	0.35681459
## 1713	0.1422293	0.82707193	0.38793819
## 1714	-0.0645557	0.81281551	0.32050372
## 1715	0.4007105	0.84489246	-0.19822300
## 1716	-1.3569616	0.93755921	0.09226396
## 1717	1.6414202	0.93043100	0.10263850
## 1718	-1.3569616	0.93755921	0.38275093
## 1719	0.9693691	0.88409762	0.31531645
## 1720	-0.8399993	0.97320027	-0.11003946
## 1721	-1.0984805	0.95537974	0.40349999
## 1722	-0.5815181	0.99102079	0.40868726
## 1723	-0.5815181	0.99102079	-0.11003946
## 1724	-1.3569616	0.93755921	-0.13597580
## 1726	-0.3230369	1.00884132	0.48649627
## 1728	-0.3230369	1.00884132	-0.19822300
## 1729	0.1939255	1.04448238	-0.05816679
## 1730	0.1422293	1.04091827	-0.28640655
## 1731	0.1422293	1.04091827	-0.09966493
## 1733	0.1422293	1.04091827	-0.08410312
## 1734	-0.8399993	0.97320027	0.43462360
## 1735	0.1939255	1.04448238	0.51243261
## 1736	0.1422293	1.04091827	0.45018540
## 1737	-0.8399993	0.97320027	0.44499813
## 1738	0.5041030	1.06586701	-0.11522673
## 1739	0.1939255	1.04448238	0.10782576
## 1740	1.4863315	1.13358502	0.06114036
## 1741	1.6931165	1.14784144	0.29975465
## 1742	-1.3569616	1.15140555	0.43462360
## 1743	1.6931165	1.14784144	0.31012918
## 1744	1.6931165	1.14784144	0.04557856
## 1745	-1.0984805	1.16922608	0.43462360
## 1746	-0.5815181	1.20486713	-0.00629412
## 1747	-0.3230369	1.22268766	0.46574720
## 1748	-0.5815181	1.20486713	-6.55262535
## 1749	-0.0645557	1.24050819	-0.11003946
## 1751	0.1422293	1.25476461	0.49687080
## 1753	0.9693691	1.31179030	0.31012918
## 1755	0.7108879	1.29396977	-0.05816679
## 1756	0.7108879	1.29396977	0.33087825
## 1757	-0.0645557	1.24050819	-0.19822300
## 1758	-1.3569616	1.36525189	-0.27084474
## 1759	-1.3569616	1.36525189	-0.06854132
## 1760	-1.0984805	1.38307242	0.28938012
## 1761	1.4863315	1.34743136	0.40868726

## 1762	-0.5815181	1.41871347	-0.21378481
## 1763	-0.5815181	1.41871347	0.36200186
## 1764	0.1422293	1.46861095	-0.23972114
## 1765	0.1939255	1.47217506	0.16488570
## 1766	0.1422293	1.46861095	0.32569099
## 1767	0.9693691	1.52563664	0.40349999
## 1768	0.4524067	1.48999559	-6.56299988
## 1769	-1.3569616	1.57909823	0.24269471
## 1771	0.4524067	1.70384192	-6.57337442
## 1772	0.9693691	1.73948298	-7.16991015
## 1774	0.7108879	1.72166245	-7.15434835
## 1776	1.4863315	1.98897038	-7.65751327
## 1779	1.6931165	2.21707314	-6.60449802
## 1780	-1.3569616	0.08217385	-0.19822300
## 1781	-0.0645557	-1.75334056	0.29975465
## 1782	0.7108879	-1.69987898	0.38275093
## 1783	1.6931165	-1.63216097	0.49168354
## 1784	-1.3569616	-1.62859686	0.28419285
## 1785	-1.3569616	-1.62859686	0.38275093
## 1786	-1.3569616	-1.62859686	0.27900558
## 1787	-1.3569616	-1.62859686	0.31012918
## 1788	-1.3569616	-1.62859686	0.32050372
## 1789	-0.8399993	-1.59295581	0.35681459
## 1790	-0.5815181	-1.57513528	0.19082204
## 1791	-0.5815181	-1.57513528	0.87554131
## 1792	0.1939255	-1.52167369	0.03520402
## 1793	0.1939255	-1.52167369	0.37756366
## 1794	0.1939255	-1.52167369	-0.08410312
## 1795	0.1939255	-1.52167369	0.55911801
## 1796	0.4524067	-1.50385316	0.35681459
## 1797	0.9693691	-1.46821211	0.03520402
## 1798	0.9693691	-1.46821211	0.27900558
## 1799	1.0727616	-1.46108390	-0.17228667
## 1800	1.6931165	-1.41831463	0.33087825
## 1801	1.4863315	-1.43257105	0.15451117
## 1802	-1.3569616	-1.41475052	0.28938012
## 1803	-1.3569616	-1.41475052	0.56430528
## 1804	1.3829390	-1.43969926	0.24788198
## 1806	-0.5815181	-1.36128894	0.48649627
## 1807	-0.8916955	-1.38267357	0.39312546
## 1808	-0.8399993	-1.37910947	0.29456738
## 1809	-0.5815181	-1.36128894	0.43462360
## 1810	-0.2713406	-1.33990430	0.28419285
## 1811	-0.8399993	-1.37910947	-0.08410312
## 1812	-0.0645557	-1.32564788	0.35681459
## 1813	0.1939255	-1.30782735	0.56430528
## 1814	0.7108879	-1.27218630	0.33087825
## 1815	0.9693691	-1.25436577	-0.05816679
## 1816	0.9693691	-1.25436577	0.89629038
## 1818	1.4863315	-1.21872471	0.40868726
## 1819	1.3829390	-1.22585292	0.08707669
## 1820	1.6931165	-1.20446829	0.00408042
## 1821	1.6931165	-1.20446829	0.01964222
## 1822	-1.3569616	-1.20090418	0.22713291

## 1823	0.1422293	-1.31139146	0.38275093
## 1824	-0.8399993	-1.16526313	-0.05816679
## 1825	-1.3569616	-1.20090418	0.53836894
## 1826	-0.8399993	-1.16526313	-0.03223045
## 1827	-0.5815181	-1.14744260	0.02482949
## 1828	-1.0984805	-1.18308366	-0.21897207
## 1829	-0.3230369	-1.12962207	-0.19303574
## 1830	-0.5815181	-1.14744260	0.41387453
## 1831	-0.0645557	-1.11180154	-0.18784847
## 1832	1.6931165	-1.20446829	-0.21378481
## 1833	0.1939255	-1.09398101	0.97928666
## 1834	-0.0645557	-1.11180154	0.01445495
## 1835	0.0388368	-1.10467333	0.21675837
## 1836	0.4524067	-1.07616049	0.17526024
## 1837	0.7108879	-1.05833996	-0.17228667
## 1838	0.1939255	-1.09398101	0.45537267
## 1839	0.1939255	-1.09398101	-0.18784847
## 1840	0.7108879	-1.05833996	0.38793819
## 1841	-1.3569616	-0.98705784	0.36718912
## 1842	-1.3569616	-0.98705784	0.10263850
## 1843	-1.3569616	-0.98705784	0.43462360
## 1844	-1.3569616	-0.98705784	0.43462360
## 1845	-0.8399993	-0.95141679	-0.20341027
## 1846	-0.9433917	-0.95854500	0.95853759
## 1847	-1.3569616	-0.98705784	-0.04260499
## 1848	-0.6332143	-0.93716037	-0.01148138
## 1849	-0.3230369	-0.91577573	0.46055993
## 1850	-0.8399993	-0.95141679	-0.03741772
## 1851	-0.3230369	-0.91577573	0.43462360
## 1852	-0.3747331	-0.91933984	-0.23453387
## 1853	0.1939255	-0.88013467	0.37237639
## 1854	0.7108879	-0.84449362	0.30494192
## 1855	-0.0645557	-0.89795520	0.14932390
## 1856	-0.2196444	-0.90864752	0.31531645
## 1857	-0.0645557	-0.89795520	-0.21378481
## 1859	0.7108879	-0.84449362	0.38275093
## 1860	0.1939255	-0.88013467	0.30494192
## 1862	0.5557992	-0.85518594	-0.16191213
## 1864	1.4863315	-0.79103203	0.14932390
## 1865	-1.3569616	-0.77321151	0.43981086
## 1866	1.6931165	-0.776777561	0.48649627
## 1867	1.3829390	-0.79816024	-0.20341027
## 1868	-1.0467842	-0.75182687	0.08707669
## 1869	-0.5815181	-0.71974992	-0.00629412
## 1870	-0.5298218	-0.71618581	0.09226396
## 1871	-0.2713406	-0.69836529	0.43981086
## 1872	-1.3569616	-0.77321151	-0.14635033
## 1873	-0.0645557	-0.68410886	0.05076582
## 1874	-0.4264293	-0.70905760	0.39831273
## 1875	0.1939255	-0.66628834	0.13376210
## 1876	0.1939255	-0.66628834	0.38275093
## 1878	0.7108879	-0.63064728	0.38275093
## 1880	1.2278503	-0.59500622	0.37237639
## 1881	1.0727616	-0.60569854	0.31531645

## 1882	1.4863315	-0.57718569	-0.08410312
## 1883	-1.3569616	-0.55936517	0.46055993
## 1885	-0.5815181	-0.50590358	0.38275093
## 1887	-0.6332143	-0.50946769	0.02482949
## 1888	-0.5815181	-0.50590358	-0.00629412
## 1889	-0.5815181	-0.50590358	-0.07372859
## 1890	-0.0645557	-0.47026252	-0.08410312
## 1891	0.4524067	-0.43462147	-0.00629412
## 1892	-0.0128594	-0.46669842	0.11820030
## 1893	0.1939255	-0.45244200	0.43462360
## 1894	0.1939255	-0.45244200	-0.05816679
## 1895	0.1939255	-0.45244200	0.28938012
## 1896	0.9693691	-0.39898041	-0.10485219
## 1897	0.2973180	-0.44531379	0.36718912
## 1898	1.3312428	-0.37403167	0.18563477
## 1899	0.9693691	-0.39898041	0.37756366
## 1900	-1.3569616	-0.34551883	0.48130900
## 1901	-1.3569616	-0.34551883	-0.13597580
## 1902	-1.0984805	-0.32769830	-0.22415934
## 1903	1.6414202	-0.35264704	0.35162732
## 1904	-1.0984805	-0.32769830	0.40868726
## 1905	-1.3569616	-0.34551883	0.21675837
## 1906	-1.3569616	-0.34551883	0.56430528
## 1907	-1.3569616	-0.34551883	-0.00110685
## 1908	-1.3569616	-0.34551883	-0.26047021
## 1909	-0.3230369	-0.27423671	0.38793819
## 1910	-0.3230369	-0.27423671	-0.13597580
## 1911	-0.5298218	-0.28849314	0.53318167
## 1912	-1.0984805	-0.32769830	-0.18784847
## 1913	0.4524067	-0.22077513	-0.08410312
## 1914	0.7108879	-0.20295460	0.04557856
## 1915	-0.3230369	-0.27423671	0.31531645
## 1916	0.7108879	-0.20295460	0.33087825
## 1917	1.2278503	-0.16731354	0.01445495
## 1918	1.2278503	-0.16731354	0.33087825
## 1919	1.2278503	-0.16731354	0.17526024
## 1920	-1.3569616	-0.13167249	-0.26047021
## 1921	-1.3569616	-0.13167249	0.29975465
## 1922	-1.3569616	-0.13167249	-0.08410312
## 1923	-1.3569616	-0.13167249	-0.03223045
## 1924	-1.3569616	-0.13167249	0.38275093
## 1925	-0.8399993	-0.09603143	-0.20341027
## 1926	-0.5815181	-0.07821090	0.04557856
## 1927	-0.3230369	-0.06039037	-0.20859754
## 1928	0.1939255	-0.02474932	0.38793819
## 1929	0.1939255	-0.02474932	0.20119657
## 1930	0.7108879	0.01089174	0.25825651
## 1931	0.1939255	-0.02474932	0.51243261
## 1932	0.4524067	-0.00692879	-0.29678108
## 1933	-0.1162519	-0.04613395	0.88072858
## 1934	1.2278503	0.04653280	0.46055993
## 1935	1.5380277	0.06791743	0.29975465
## 1936	1.4863315	0.06435332	0.39831273
## 1937	1.2278503	0.04653280	0.36718912

## 1938	1.6931165	0.07860975	0.02482949
## 1940	1.6931165	0.07860975	0.33087825
## 1941	-0.5298218	0.13919954	0.19600931
## 1942	-0.3230369	0.15345596	0.29456738
## 1943	0.1939255	0.18909702	0.35681459
## 1944	0.4524067	0.20691755	-0.10485219
## 1945	-0.0645557	0.17127649	0.04557856
## 1946	0.9693691	0.24255861	-0.18266120
## 1947	0.7108879	0.22473808	0.10263850
## 1948	0.9693691	0.24255861	-0.00629412
## 1949	1.2278503	0.26037913	0.35681459
## 1951	-0.2196444	0.16058418	-0.22415934
## 1952	0.7108879	0.22473808	0.39312546
## 1953	1.4863315	0.27819966	0.01445495
## 1954	1.3312428	0.26750735	0.03520402
## 1955	0.7108879	0.22473808	-0.25009568
## 1957	-1.3569616	0.29602019	-0.00110685
## 1959	1.5897240	0.28532787	0.35162732
## 1960	1.6931165	0.29245609	0.36200186
## 1961	-0.7883030	0.33522535	0.17007297
## 1962	1.4863315	0.27819966	-0.12041400
## 1963	-1.1501767	0.31027661	-0.10485219
## 1964	-1.0984805	0.31384072	0.18563477
## 1965	-0.3230369	0.36730230	0.44499813
## 1966	0.1939255	0.40294336	-0.00629412
## 1968	-0.3230369	0.36730230	-0.11522673
## 1969	-0.0645557	0.38512283	-0.13597580
## 1970	0.4524067	0.42076389	0.40868726
## 1971	0.5041030	0.42432799	-0.00629412
## 1972	0.7108879	0.43858442	-0.10485219
## 1973	-0.5815181	0.34948178	0.28938012
## 1975	0.9693691	0.45640495	0.17526024
## 1976	0.7108879	0.43858442	0.48130900
## 1977	0.9693691	0.45640495	0.46055993
## 1978	0.9693691	0.45640495	-0.19822300
## 1979	-1.3569616	0.50986653	0.22713291
## 1980	-1.0984805	0.52768706	-0.05816679
## 1981	-1.3569616	0.50986653	0.39312546
## 1982	-1.3569616	0.50986653	0.27900558
## 1983	-1.3569616	0.50986653	0.50205807
## 1984	-0.8399993	0.54550759	-0.03223045
## 1985	-0.6332143	0.55976401	0.00408042
## 1986	-0.8916955	0.54194348	0.33606552
## 1988	-0.5815181	0.56332812	0.01964222
## 1989	-0.3230369	0.58114864	-0.13597580
## 1990	-0.3230369	0.58114864	0.53318167
## 1991	0.1939255	0.61678970	0.59024161
## 1992	0.3490142	0.62748202	-0.07891586
## 1993	-0.5815181	0.56332812	0.17526024
## 1995	0.7108879	0.65243076	0.07151489
## 1997	0.0388368	0.60609738	0.28938012
## 1998	0.4007105	0.63104612	0.03520402
## 1999	1.1244578	0.68094360	-0.10485219
## 2000	1.4863315	0.70589234	0.50724534

## 2001	1.2278503	0.68807181	-0.13597580
## 2002	1.4863315	0.70589234	0.51243261
## 2003	-1.0984805	0.74153340	0.35681459
## 2004	-0.9950880	0.74866161	-0.25009568
## 2005	-1.0467842	0.74509750	-0.28121928
## 2006	-0.5815181	0.77717445	0.46055993
## 2007	-0.8399993	0.75935393	0.04557856
## 2008	-0.3230369	0.79499498	-0.05816679
## 2012	-1.0984805	0.74153340	0.01964222
## 2013	0.1939255	0.83063604	0.13894937
## 2014	-0.3230369	0.79499498	-0.03223045
## 2015	0.4524067	0.84845657	-0.03223045
## 2016	0.9693691	0.88409762	0.38275093
## 2019	-0.2196444	0.80212319	-0.17747393
## 2020	0.9693691	0.88409762	0.49687080
## 2022	-1.3569616	0.93755921	0.38275093
## 2023	-1.3569616	0.93755921	0.24269471
## 2024	0.9693691	0.88409762	0.30494192
## 2025	-1.0984805	0.95537974	-0.03223045
## 2027	1.2278503	0.90191815	0.30494192
## 2028	-0.5815181	0.99102079	0.40868726
## 2030	-0.5815181	0.99102079	0.13376210
## 2031	-0.7883030	0.97676437	-0.07891586
## 2032	-0.5815181	0.99102079	0.51761987
## 2033	0.1939255	1.04448238	0.09226396
## 2034	0.1939255	1.04448238	0.51243261
## 2035	-0.5815181	0.99102079	0.36718912
## 2036	0.1422293	1.04091827	0.03520402
## 2037	0.5041030	1.06586701	-0.11522673
## 2038	-0.3747331	1.00527722	0.43981086
## 2039	0.5041030	1.06586701	-0.00629412
## 2040	1.4863315	1.13358502	0.04557856
## 2041	1.2278503	1.11576449	0.01964222
## 2042	1.4863315	1.13358502	0.06114036
## 2043	0.2456218	1.04804648	-0.16709940
## 2044	1.4863315	1.13358502	0.95335032
## 2045	-1.3569616	1.15140555	-0.02704319
## 2046	-1.3569616	1.15140555	0.52799441
## 2047	-1.3569616	1.15140555	0.64730155
## 2048	-0.8399993	1.18704660	-0.05816679
## 2049	-0.5298218	1.20843124	-0.17747393
## 2050	-0.5815181	1.20486713	0.13376210
## 2051	1.4863315	1.13358502	0.26344378
## 2052	-0.0645557	1.24050819	0.44499813
## 2053	0.1939255	1.25832872	0.41906180
## 2055	-0.8399993	1.18704660	0.29975465
## 2056	0.7108879	1.29396977	0.33087825
## 2057	0.7108879	1.29396977	-0.18784847
## 2058	0.1939255	1.25832872	0.32569099
## 2059	0.1939255	1.25832872	-0.18784847
## 2060	0.9693691	1.31179030	0.55911801
## 2062	0.7108879	1.29396977	-0.15672487
## 2063	0.1939255	1.25832872	0.25306924
## 2064	-1.0984805	1.38307242	0.14932390

## 2065	-1.3569616	1.36525189	0.14413663
## 2066	-1.3569616	1.36525189	-0.04779225
## 2067	0.9693691	1.31179030	0.31012918
## 2068	-1.3569616	1.36525189	-0.06854132
## 2069	-1.3569616	1.36525189	0.06114036
## 2070	1.0727616	1.31891851	-0.16191213
## 2071	-1.3569616	1.36525189	0.42424906
## 2072	-1.3569616	1.36525189	-0.09966493
## 2074	-0.5815181	1.41871347	-0.00629412
## 2076	-0.0645557	1.45435453	0.35162732
## 2077	-1.0984805	1.38307242	0.36200186
## 2078	0.1939255	1.47217506	0.38793819
## 2079	0.1939255	1.47217506	-0.10485219
## 2080	0.9693691	1.52563664	-0.08410312
## 2081	0.9693691	1.52563664	-0.13078853
## 2083	-1.3569616	1.57909823	-6.97798126
## 2085	-0.0645557	1.66820087	-0.16191213
## 2086	0.1422293	1.68245729	-0.31753015
## 2087	-1.2535692	1.58622644	0.09745123
## 2088	-1.3569616	1.57909823	-0.11003946
## 2089	0.1939255	1.68602140	-7.20103375
## 2090	0.4524067	1.70384192	-6.57337442
## 2091	0.4524067	1.70384192	-7.06097754
## 2092	1.6931165	1.78938046	-0.25528294
## 2093	-0.0645557	1.66820087	-0.29678108
## 2094	1.6931165	1.78938046	-0.20341027
## 2095	1.6931165	1.78938046	-7.13359928
## 2096	1.6931165	1.78938046	-0.20859754
## 2099	1.2278503	1.97114985	-0.24490841
## 2100	1.4863315	1.98897038	-7.65751327
## 2102	1.4863315	1.98897038	-0.27084474
## 2105	0.7108879	-1.69987898	0.38275093
## 2106	0.7108879	-1.69987898	0.83404317
## 2107	0.1939255	-1.73552003	0.32569099
## 2108	-1.3569616	-1.62859686	0.02482949
## 2109	-1.3569616	-1.62859686	0.32569099
## 2110	-1.3569616	-1.62859686	0.38275093
## 2111	-1.3569616	-1.62859686	0.21157111
## 2112	-1.3569616	-1.62859686	0.01445495
## 2113	-1.3569616	-1.62859686	0.14932390
## 2114	-1.3569616	-1.62859686	-0.29678108
## 2115	-0.9433917	-1.60008402	-0.20341027
## 2116	-0.8399993	-1.59295581	0.05595309
## 2117	-0.8399993	-1.59295581	0.35681459
## 2118	-1.3569616	-1.62859686	-0.29159381
## 2119	-0.5815181	-1.57513528	-0.11003946
## 2120	-0.5815181	-1.57513528	0.04557856
## 2121	-0.9950880	-1.60364812	0.08188943
## 2122	-0.0645557	-1.53949422	0.28419285
## 2123	0.1939255	-1.52167369	0.08707669
## 2124	0.1939255	-1.52167369	0.35162732
## 2125	0.1939255	-1.52167369	0.10782576
## 2126	0.1939255	-1.52167369	0.20119657
## 2127	0.1939255	-1.52167369	1.00522299

## 2128	0.1939255	-1.52167369	0.31531645
## 2129	0.4524067	-1.50385316	0.47093447
## 2130	0.1939255	-1.52167369	-0.08410312
## 2131	0.4524067	-1.50385316	0.55911801
## 2132	0.6591917	-1.48959674	0.42424906
## 2133	0.9693691	-1.46821211	-0.22934661
## 2134	-1.3569616	-1.41475052	0.46055993
## 2135	1.4863315	-1.43257105	0.18563477
## 2136	-1.3569616	-1.41475052	-0.25528294
## 2137	-1.3569616	-1.41475052	0.40349999
## 2138	-1.0984805	-1.39692999	0.20119657
## 2139	-1.3569616	-1.41475052	0.50724534
## 2140	0.3490142	-1.51098138	-0.08410312
## 2141	-1.1501767	-1.40049410	0.16488570
## 2142	-1.3569616	-1.41475052	0.56430528
## 2143	-1.0984805	-1.39692999	0.31531645
## 2144	-1.3569616	-1.41475052	-0.10485219
## 2145	-1.0984805	-1.39692999	0.41387453
## 2146	-0.8399993	-1.37910947	-0.08410312
## 2147	-1.3569616	-1.41475052	-0.08929039
## 2148	-0.5815181	-1.36128894	0.46055993
## 2149	-1.0984805	-1.39692999	0.48130900
## 2151	-0.5815181	-1.36128894	0.43462360
## 2152	-0.3230369	-1.34346841	0.06114036
## 2153	1.6931165	-1.41831463	0.33087825
## 2154	0.1939255	-1.30782735	0.48649627
## 2155	-0.0645557	-1.32564788	0.35681459
## 2156	0.7108879	-1.27218630	0.46055993
## 2157	0.1939255	-1.30782735	0.40868726
## 2158	0.9693691	-1.25436577	-0.05816679
## 2159	0.9693691	-1.25436577	0.53836894
## 2160	0.7108879	-1.27218630	-0.04779225
## 2161	1.6931165	-1.20446829	-0.23972114
## 2162	0.7108879	-1.27218630	0.35681459
## 2163	-1.3569616	-1.20090418	0.45537267
## 2164	-1.3569616	-1.20090418	0.29975465
## 2165	-1.2018729	-1.19021187	0.13376210
## 2166	-0.8399993	-1.16526313	0.97928666
## 2167	-1.0984805	-1.18308366	0.14413663
## 2168	-0.9950880	-1.17595544	0.03520402
## 2169	-0.8399993	-1.16526313	0.18563477
## 2170	-0.5815181	-1.14744260	0.01964222
## 2171	-0.4781256	-1.14031439	0.38275093
## 2172	-1.3569616	-1.20090418	0.53836894
## 2173	-0.4781256	-1.14031439	0.23232018
## 2174	-0.3230369	-1.12962207	-0.19303574
## 2175	-0.3230369	-1.12962207	-0.11003946
## 2176	-0.2196444	-1.12249386	0.00408042
## 2177	0.0388368	-1.10467333	0.04039129
## 2178	-0.0645557	-1.11180154	-0.18784847
## 2179	-0.8399993	-1.16526313	0.00408042
## 2180	-0.0645557	-1.11180154	0.39312546
## 2182	0.1422293	-1.09754512	-0.15672487
## 2183	0.1939255	-1.09398101	-0.01666865

## 2184	0.4524067	-1.07616049	0.08188943
## 2185	0.1939255	-1.09398101	0.20638384
## 2186	0.4524067	-1.07616049	0.97928666
## 2187	-1.2018729	-1.19021187	-0.21378481
## 2188	0.4007105	-1.07972459	0.34644005
## 2189	0.1939255	-1.09398101	-0.18784847
## 2190	0.4524067	-1.07616049	0.53836894
## 2191	0.1939255	-1.09398101	0.41387453
## 2192	0.9693691	-1.04051943	-0.18266120
## 2193	0.9693691	-1.04051943	-0.13597580
## 2194	0.9693691	-1.04051943	0.97928666
## 2195	1.0727616	-1.03339122	0.33087825
## 2196	-1.3569616	-0.98705784	-0.17747393
## 2197	1.5897240	-0.99775016	0.36718912
## 2198	-1.3569616	-0.98705784	0.07151489
## 2199	1.4863315	-1.00487837	0.44499813
## 2200	-1.3569616	-0.98705784	0.20119657
## 2201	-1.3569616	-0.98705784	0.43462360
## 2202	1.6931165	-0.99062195	0.33087825
## 2203	1.2278503	-1.02269890	0.13894937
## 2204	-1.3569616	-0.98705784	0.47093447
## 2205	1.4863315	-1.00487837	0.06632762
## 2206	-1.0984805	-0.96923732	0.43981086
## 2207	-1.0984805	-0.96923732	-0.16709940
## 2208	-1.3569616	-0.98705784	0.43462360
## 2209	-0.3230369	-0.91577573	0.04557856
## 2210	-1.2018729	-0.97636553	0.24269471
## 2211	0.1939255	-0.88013467	0.41387453
## 2212	-0.1162519	-0.90151931	-0.01148138
## 2215	-1.0984805	-0.96923732	-0.19822300
## 2216	1.4863315	-1.00487837	0.05076582
## 2217	-0.3230369	-0.91577573	0.39831273
## 2218	0.0905331	-0.88726289	-0.17228667
## 2219	-0.5815181	-0.93359626	0.38275093
## 2220	0.4524067	-0.86231415	0.34644005
## 2221	0.1939255	-0.88013467	0.30494192
## 2222	0.7108879	-0.84449362	0.38275093
## 2223	0.9693691	-0.82667309	-0.03223045
## 2224	0.1422293	-0.88369878	-0.21378481
## 2225	1.2278503	-0.80885256	-0.21897207
## 2226	1.2278503	-0.80885256	0.12338756
## 2227	1.2278503	-0.80885256	-0.08410312
## 2228	-1.3569616	-0.77321151	-0.25009568
## 2229	1.6931165	-0.77677561	0.50724534
## 2230	-1.3569616	-0.77321151	-0.18266120
## 2231	-1.3569616	-0.77321151	0.54355621
## 2232	-1.3569616	-0.77321151	0.06632762
## 2233	1.6931165	-0.77677561	0.27381831
## 2235	1.5897240	-0.78390382	-0.14635033
## 2236	-0.8399993	-0.73757045	-0.13597580
## 2237	-1.3569616	-0.77321151	0.29975465
## 2238	-1.3569616	-0.77321151	0.43981086
## 2239	-0.2713406	-0.69836529	0.43981086
## 2240	-0.5815181	-0.71974992	0.02482949

## 2241	-0.5815181	-0.71974992	0.42943633
## 2242	-0.0645557	-0.68410886	0.05076582
## 2243	0.1939255	-0.66628834	0.56430528
## 2244	0.1939255	-0.66628834	-0.08410312
## 2245	0.6591917	-0.63421138	0.28419285
## 2246	0.9693691	-0.61282675	0.05595309
## 2247	0.8142804	-0.62351907	-0.16709940
## 2248	1.4863315	-0.57718569	0.38275093
## 2249	1.2278503	-0.59500622	0.40868726
## 2250	-1.3569616	-0.55936517	0.46055993
## 2251	-1.3569616	-0.55936517	-0.21897207
## 2252	-1.0984805	-0.54154464	-0.08410312
## 2253	-1.3569616	-0.55936517	-0.21378481
## 2254	1.2278503	-0.59500622	0.01964222
## 2255	1.5380277	-0.57362159	-0.23453387
## 2256	-0.8399993	-0.52372411	-0.23453387
## 2257	-1.3569616	-0.55936517	0.21675837
## 2259	0.4524067	-0.43462147	-0.00629412
## 2260	0.1422293	-0.45600610	0.27900558
## 2261	-0.0645557	-0.47026252	0.40349999
## 2262	0.4007105	-0.43818557	0.07670216
## 2263	0.1939255	-0.45244200	0.28938012
## 2264	0.1422293	-0.45600610	0.37756366
## 2265	-0.0645557	-0.47026252	0.92741398
## 2266	0.7108879	-0.41680094	0.35681459
## 2267	0.9693691	-0.39898041	-0.10485219
## 2268	0.9693691	-0.39898041	0.37756366
## 2269	0.9693691	-0.39898041	0.13894937
## 2270	-1.3569616	-0.34551883	-0.27084474
## 2271	-1.3569616	-0.34551883	-0.26565748
## 2272	-1.3569616	-0.34551883	0.38275093
## 2273	-1.3569616	-0.34551883	0.17526024
## 2274	-1.3569616	-0.34551883	0.01964222
## 2275	-0.8399993	-0.30987777	-0.22415934
## 2276	-0.3230369	-0.27423671	-0.13597580
## 2277	-0.2713406	-0.27067261	0.50724534
## 2278	0.4524067	-0.22077513	-0.08410312
## 2279	0.1939255	-0.23859566	-0.11003946
## 2280	0.4524067	-0.22077513	0.33087825
## 2281	0.9693691	-0.18513407	-0.26565748
## 2282	0.9693691	-0.18513407	0.17007297
## 2283	1.2278503	-0.16731354	0.33087825
## 2285	1.2795466	-0.16374944	0.38793819
## 2286	-1.3569616	-0.13167249	0.05076582
## 2287	-1.3569616	-0.13167249	-0.25528294
## 2288	1.6931165	-0.13523659	0.00408042
## 2289	1.6931165	-0.13523659	-0.18266120
## 2290	-1.3569616	-0.13167249	0.21157111
## 2291	-1.3569616	-0.13167249	0.38275093
## 2292	1.6931165	-0.13523659	0.31531645
## 2293	-1.3569616	-0.13167249	0.36200186
## 2294	1.6931165	-0.13523659	-0.27603201
## 2295	-0.9433917	-0.10315964	0.19600931
## 2296	-0.5815181	-0.07821090	0.04557856

## 2297	1.4863315	-0.14949302	0.38275093
## 2298	-0.3230369	-0.06039037	-0.04260499
## 2300	0.1422293	-0.02831342	-0.28121928
## 2301	0.1939255	-0.02474932	0.46055993
## 2302	0.7625842	0.01445584	1.23346275
## 2303	1.2278503	0.04653280	-0.14635033
## 2304	1.5897240	0.07148153	0.01445495
## 2305	-1.3569616	0.08217385	-0.24490841
## 2306	1.6931165	0.07860975	-0.19822300
## 2307	1.2278503	0.04653280	0.21675837
## 2308	-0.3230369	0.15345596	-0.13597580
## 2309	0.1422293	0.18553292	0.46055993
## 2310	0.5041030	0.21048166	-0.25528294
## 2312	-0.0645557	0.17127649	0.04557856
## 2313	0.9176729	0.23899450	0.33606552
## 2314	0.7108879	0.22473808	-0.24490841
## 2315	0.9693691	0.24255861	0.03001675
## 2316	1.2278503	0.26037913	0.35681459
## 2317	0.4524067	0.20691755	0.36718912
## 2318	1.5380277	0.28176377	-0.14635033
## 2319	1.4863315	0.27819966	-0.07372859
## 2320	1.4863315	0.27819966	0.48649627
## 2321	-1.3569616	0.29602019	0.46055993
## 2322	-1.3569616	0.29602019	0.23750744
## 2323	1.0210654	0.24612271	0.38793819
## 2324	-1.3569616	0.29602019	-0.01666865
## 2325	0.7108879	0.22473808	0.39312546
## 2326	0.9693691	0.24255861	0.12338756
## 2327	1.6931165	0.29245609	0.32050372
## 2328	-1.2535692	0.30314840	-0.22415934
## 2329	-1.0984805	0.31384072	-0.12560126
## 2330	-1.0984805	0.31384072	0.40868726
## 2331	-1.0467842	0.31740482	0.39831273
## 2332	-0.8399993	0.33166125	0.20119657
## 2334	1.5897240	0.28532787	0.46574720
## 2335	-0.8399993	0.33166125	-0.08410312
## 2336	0.1939255	0.40294336	-0.07891586
## 2337	-0.2196444	0.37443052	0.04557856
## 2338	-0.0645557	0.38512283	-0.13597580
## 2339	0.1939255	0.40294336	-0.00629412
## 2340	-0.3230369	0.36730230	-0.16709940
## 2341	-0.4781256	0.35660999	0.32569099
## 2343	-1.0984805	0.31384072	0.17007297
## 2344	0.1939255	0.40294336	0.53836894
## 2345	0.0388368	0.39225104	-0.12041400
## 2346	0.7108879	0.43858442	0.04039129
## 2347	0.7108879	0.43858442	-0.10485219
## 2348	0.1422293	0.39937925	0.37237639
## 2349	0.9693691	0.45640495	0.46055993
## 2350	1.2278503	0.47422547	0.51243261
## 2351	1.1244578	0.46709726	0.23750744
## 2352	1.2278503	0.47422547	0.17526024
## 2353	-1.3569616	0.50986653	-0.22934661
## 2354	-1.3569616	0.50986653	0.19600931

## 2355	-1.3569616	0.50986653	-0.20341027
## 2356	-1.3569616	0.50986653	0.34644005
## 2357	-1.3569616	0.50986653	0.40868726
## 2358	0.9693691	0.45640495	0.35681459
## 2359	-1.3569616	0.50986653	-0.10485219
## 2360	1.4863315	0.49204600	-0.01148138
## 2363	0.9693691	0.45640495	-0.19822300
## 2364	-1.0984805	0.52768706	-0.03741772
## 2365	-1.3569616	0.50986653	0.50205807
## 2366	-0.3230369	0.58114864	-0.13597580
## 2367	-0.3747331	0.57758454	-0.25528294
## 2368	-0.0645557	0.59896917	0.17526024
## 2369	-0.5815181	0.56332812	0.01964222
## 2370	-0.0645557	0.59896917	0.48130900
## 2371	-0.8399993	0.54550759	-0.17747393
## 2372	-0.3230369	0.58114864	0.55393074
## 2373	0.4524067	0.63461023	-0.21378481
## 2375	0.4524067	0.63461023	0.46574720
## 2376	0.7108879	0.65243076	0.40868726
## 2378	0.9693691	0.67025128	0.12857483
## 2379	1.2278503	0.68807181	0.25825651
## 2380	1.4863315	0.70589234	0.50724534
## 2381	-1.3569616	0.72371287	-0.20341027
## 2383	-1.3569616	0.72371287	0.24269471
## 2384	1.4863315	0.70589234	0.40868726
## 2385	-1.3569616	0.72371287	0.51761987
## 2386	-1.0984805	0.74153340	0.01964222
## 2387	1.2278503	0.68807181	-0.13597580
## 2388	-1.0467842	0.74509750	-0.14635033
## 2389	1.4863315	0.70589234	0.43462360
## 2390	1.6931165	0.72014876	-0.17228667
## 2391	-0.8399993	0.75935393	-0.23972114
## 2392	-0.5815181	0.77717445	0.35162732
## 2395	-1.0984805	0.74153340	0.38275093
## 2396	-1.0984805	0.74153340	-0.16191213
## 2397	-0.8399993	0.75935393	0.03001675
## 2398	-0.3230369	0.79499498	-0.00629412
## 2399	0.1422293	0.82707193	0.41906180
## 2401	-0.0645557	0.81281551	0.46055993
## 2402	-0.0645557	0.81281551	0.32050372
## 2403	0.4007105	0.84489246	-0.18784847
## 2404	0.1939255	0.83063604	-0.16191213
## 2405	0.4524067	0.84845657	-0.03223045
## 2406	0.1422293	0.82707193	-0.12041400
## 2407	0.9693691	0.88409762	0.20119657
## 2408	0.9693691	0.88409762	0.31531645
## 2409	0.0388368	0.81994372	0.38793819
## 2410	0.9693691	0.88409762	0.51243261
## 2411	-1.3569616	0.93755921	-0.23972114
## 2412	-1.3569616	0.93755921	-0.22415934
## 2413	-1.3569616	0.93755921	-0.22415934
## 2414	-1.3569616	0.93755921	0.40349999
## 2415	-1.0984805	0.95537974	-0.03223045
## 2416	-1.3569616	0.93755921	0.32050372

## 2417	-0.8399993	0.97320027	0.43462360
## 2418	-0.8399993	0.97320027	0.49687080
## 2419	-0.5815181	0.99102079	0.10782576
## 2420	-1.0984805	0.95537974	-0.13597580
## 2421	-0.9950880	0.96250795	0.43981086
## 2422	-0.8399993	0.97320027	0.31012918
## 2423	1.2278503	0.90191815	-0.19822300
## 2425	-0.5815181	0.99102079	-0.06854132
## 2426	1.6414202	0.93043100	-0.09447766
## 2427	-0.9433917	0.96607205	-0.07891586
## 2428	-0.3230369	1.00884132	-0.05816679
## 2429	-0.0645557	1.02666185	-0.23972114
## 2430	0.1939255	1.04448238	0.09226396
## 2431	-0.3747331	1.00527722	0.42943633
## 2432	0.1939255	1.04448238	0.49687080
## 2434	0.7108879	1.08012343	0.06632762
## 2435	0.4524067	1.06230291	0.29456738
## 2436	0.4524067	1.06230291	0.52280714
## 2437	0.4524067	1.06230291	-0.21378481
## 2438	0.9693691	1.09794396	-0.05816679
## 2439	0.9693691	1.09794396	0.51761987
## 2440	0.9693691	1.09794396	0.28938012
## 2441	1.2278503	1.11576449	0.01964222
## 2442	-1.3569616	1.15140555	0.19600931
## 2443	1.4863315	1.13358502	0.26344378
## 2444	-1.3569616	1.15140555	0.00408042
## 2445	-1.0984805	1.16922608	0.06114036
## 2446	-1.0984805	1.16922608	-0.11003946
## 2447	-0.8399993	1.18704660	-0.05816679
## 2448	-0.8399993	1.18704660	0.35681459
## 2449	-0.8399993	1.18704660	0.43981086
## 2450	-0.5815181	1.20486713	0.31531645
## 2451	-0.5815181	1.20486713	-0.00110685
## 2452	1.6931165	1.14784144	0.46574720
## 2453	0.9693691	1.09794396	0.04557856
## 2454	-1.3569616	1.15140555	0.25825651
## 2455	-0.3230369	1.22268766	0.02482949
## 2456	-0.3230369	1.22268766	0.61617795
## 2457	-0.3230369	1.22268766	0.52799441
## 2458	0.4524067	1.27614925	0.25306924
## 2459	0.7108879	1.29396977	0.33087825
## 2460	0.7108879	1.29396977	-0.18784847
## 2461	0.7108879	1.29396977	-0.15672487
## 2462	0.4524067	1.27614925	0.32050372
## 2463	0.8659766	1.30466209	-0.23972114
## 2464	-1.0984805	1.38307242	0.14932390
## 2465	-1.3569616	1.36525189	-0.06854132
## 2466	-1.3569616	1.36525189	-0.04779225
## 2467	-1.0984805	1.38307242	0.36200186
## 2469	-0.5815181	1.41871347	-0.21378481
## 2470	0.1422293	1.46861095	0.37237639
## 2471	-0.5815181	1.41871347	-0.00629412
## 2472	-1.0984805	1.38307242	0.01445495
## 2475	0.9693691	1.52563664	0.14932390

## 2476	0.8142804	1.51494432	-0.03741772
## 2477	1.2278503	1.54345717	0.28938012
## 2480	-1.3569616	1.57909823	-0.18784847
## 2481	-1.3569616	1.57909823	-0.16191213
## 2482	-1.3569616	1.57909823	-0.22934661
## 2483	-1.3569616	1.57909823	0.18563477
## 2486	-0.0645557	1.66820087	-0.29678108
## 2487	0.1939255	1.68602140	-6.57856169
## 2489	0.4524067	1.70384192	-7.20622102
## 2492	1.2278503	1.97114985	-0.24490841
## 2495	1.2278503	1.97114985	-0.27084474
## 2496	1.6931165	2.21707314	-6.63043436
## 2497	-0.3230369	-0.27423671	-0.00629412
## 2498	-0.3230369	-1.12962207	-0.09447766
## 2499	-1.3569616	-1.62859686	0.38275093
## 2500	-1.3569616	-1.62859686	0.09745123
## 2501	-1.3569616	-1.62859686	0.01445495
## 2502	-1.3569616	-1.62859686	0.14932390
## 2503	-1.3569616	-1.62859686	-0.21378481
## 2504	-1.3569616	-1.62859686	0.32569099
## 2505	-1.0984805	-1.61077633	0.01964222
## 2506	-1.3569616	-1.62859686	-0.20859754
## 2507	-0.9433917	-1.60008402	-0.20341027
## 2508	-0.8399993	-1.59295581	0.35681459
## 2509	-0.8399993	-1.59295581	-0.16191213
## 2510	-1.3569616	-1.62859686	0.46055993
## 2511	-0.5815181	-1.57513528	0.15969843
## 2512	0.1939255	-1.52167369	0.02482949
## 2513	-0.0645557	-1.53949422	0.28419285
## 2514	0.1939255	-1.52167369	0.08707669
## 2515	0.1939255	-1.52167369	0.08188943
## 2516	0.1939255	-1.52167369	-0.13597580
## 2517	0.2456218	-1.51810959	-0.23972114
## 2518	0.4007105	-1.50741727	0.09745123
## 2519	0.4007105	-1.50741727	0.33606552
## 2520	0.9693691	-1.46821211	0.02482949
## 2521	0.4524067	-1.50385316	0.47093447
## 2522	0.9693691	-1.46821211	-0.22934661
## 2523	0.9693691	-1.46821211	0.37756366
## 2524	-1.3569616	-1.41475052	0.40868726
## 2525	1.6931165	-1.41831463	0.22194564
## 2526	1.6414202	-1.42187873	0.11820030
## 2527	-1.0984805	-1.39692999	0.20119657
## 2528	-1.3569616	-1.41475052	0.56430528
## 2529	-1.3569616	-1.41475052	0.42943633
## 2530	-1.3569616	-1.41475052	0.50724534
## 2531	-1.3569616	-1.41475052	0.12338756
## 2532	-1.0984805	-1.39692999	0.31012918
## 2533	-1.3569616	-1.41475052	0.24269471
## 2534	-1.3569616	-1.41475052	-0.25528294
## 2535	-1.3569616	-1.41475052	0.47093447
## 2536	-1.0984805	-1.39692999	0.41387453
## 2537	-1.0984805	-1.39692999	0.48130900
## 2538	-1.3569616	-1.41475052	-0.08929039

## 2539	-1.3569616	-1.41475052	-0.12560126
## 2540	-1.0984805	-1.39692999	0.48649627
## 2541	-0.5815181	-1.36128894	0.48649627
## 2542	-0.3230369	-1.34346841	0.06114036
## 2543	-0.3230369	-1.34346841	-0.16191213
## 2544	-0.3230369	-1.34346841	0.34644005
## 2545	-0.0645557	-1.32564788	0.35681459
## 2546	0.1939255	-1.30782735	0.48649627
## 2547	0.1939255	-1.30782735	0.19600931
## 2548	0.7108879	-1.27218630	-0.04779225
## 2549	0.7108879	-1.27218630	0.35162732
## 2550	1.3312428	-1.22941703	0.38275093
## 2551	1.4863315	-1.21872471	0.10782576
## 2552	-1.0984805	-1.18308366	-0.23972114
## 2553	1.6931165	-1.20446829	0.08188943
## 2554	1.4863315	-1.21872471	-0.11003946
## 2555	-1.3569616	-1.20090418	0.460555993
## 2556	-1.3569616	-1.20090418	0.29975465
## 2557	-1.0984805	-1.18308366	0.14413663
## 2558	-0.8399993	-1.16526313	0.19600931
## 2559	1.6931165	-1.20446829	0.15451117
## 2560	-0.8399993	-1.16526313	0.36200186
## 2561	-0.7366068	-1.15813492	-0.09447766
## 2562	-0.5815181	-1.14744260	0.34125279
## 2563	-0.5815181	-1.14744260	0.41387453
## 2564	-1.3569616	-1.20090418	0.45537267
## 2565	-0.4781256	-1.14031439	0.23232018
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## 2567	-0.3230369	-1.12962207	-0.11003946
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## 2569	-0.3747331	-1.13318618	0.89110311
## 2570	1.6931165	-1.20446829	-0.20341027
## 2571	1.6931165	-1.20446829	0.07670216
## 2572	0.1939255	-1.09398101	-0.05816679
## 2573	-0.8399993	-1.16526313	0.19082204
## 2574	0.1422293	-1.09754512	-0.06854132
## 2575	0.1422293	-1.09754512	-0.15672487
## 2576	0.4007105	-1.07972459	0.04557856
## 2577	0.4524067	-1.07616049	0.40868726
## 2578	0.4007105	-1.07972459	0.34644005
## 2579	0.4524067	-1.07616049	0.97928666
## 2580	0.7108879	-1.05833996	-0.03223045
## 2581	0.1939255	-1.09398101	0.45537267
## 2582	0.9693691	-1.04051943	0.08188943
## 2583	0.4524067	-1.07616049	0.53836894
## 2584	0.9693691	-1.04051943	-0.13597580
## 2585	0.9693691	-1.04051943	0.97928666
## 2586	1.4863315	-1.00487837	0.05595309
## 2587	1.2278503	-1.02269890	0.13894937
## 2588	1.2278503	-1.02269890	-0.05816679
## 2589	1.5897240	-0.99775016	0.39312546
## 2590	0.7108879	-1.05833996	0.34644005
## 2591	-1.3569616	-0.98705784	0.43462360
## 2592	1.4863315	-1.00487837	0.44499813

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## 2594      1.5897240     -0.99775016      0.35681459
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## 2598      -0.9433917     -0.95854500      0.08188943
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## 2604      0.1939255     -0.88013467     -0.12041400
## 2605      -1.0467842     -0.96567321      0.38793819
## 2606      0.0905331     -0.88726289     -0.17228667
## 2607      -0.2713406     -0.91221163     -0.25009568
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## 2617      1.2795466     -0.80528846      0.21157111
## 2618      1.6931165     -0.77677561      0.27381831
## 2619      -0.5298218     -0.71618581      0.09226396

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## 2398	0	0	0	0	0
## 2399	0	0	0	0	0
## 2401	0	0	0	0	0
## 2402	0	0	0	0	0
## 2403	0	0	0	0	0
## 2404	0	0	0	0	0
## 2405	0	0	0	0	0
## 2406	0	0	0	0	0
## 2407	0	0	0	0	0
## 2408	0	0	0	0	0
## 2409	0	0	0	0	0
## 2410	0	0	0	0	0
## 2411	0	0	0	0	0
## 2412	0	0	0	0	0

## 2413	0	0	0	0	0
## 2414	0	0	0	0	0
## 2415	0	0	0	0	0
## 2416	0	0	0	0	0
## 2417	0	0	0	0	0
## 2418	0	0	0	0	0
## 2419	0	0	0	0	0
## 2420	0	0	0	0	0
## 2421	0	0	0	0	0
## 2422	0	0	0	0	0
## 2423	0	0	0	0	0
## 2425	0	0	0	0	0
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## 2427	0	0	0	0	0
## 2428	0	0	0	0	0
## 2429	0	0	0	0	0
## 2430	0	0	0	0	0
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## 2435	0	0	0	0	0
## 2436	0	0	0	0	0
## 2437	0	0	0	0	0
## 2438	0	0	0	0	0
## 2439	0	0	0	0	0
## 2440	0	0	0	0	0
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## 2442	0	0	0	0	0
## 2443	0	0	0	0	0
## 2444	0	0	0	0	0
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## 2447	0	0	0	0	0
## 2448	0	0	0	0	0
## 2449	0	0	0	0	0
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## 2451	0	0	0	0	0
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## 2453	0	0	0	0	0
## 2454	0	0	0	0	0
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## 2463	0	0	0	0	0
## 2464	0	0	0	0	0
## 2465	0	0	0	0	0
## 2466	0	0	0	0	0
## 2467	0	0	0	0	0
## 2469	0	0	0	0	0

## 2470	0	0	0	0	0
## 2471	0	0	0	0	0
## 2472	0	0	0	0	0
## 2475	0	0	0	0	0
## 2476	0	0	0	0	0
## 2477	0	0	0	0	0
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## 2492	0	0	0	0	0
## 2495	0	0	0	0	0
## 2496	0	0	0	0	0
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## 2498	1	0	0	0	0
## 2499	0	0	0	0	0
## 2500	0	0	0	0	0
## 2501	0	0	0	0	0
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## 2508	0	0	0	0	0
## 2509	0	0	0	0	0
## 2510	0	0	0	0	0
## 2511	0	0	0	0	0
## 2512	0	0	0	0	0
## 2513	0	0	0	0	0
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## 2529	0	0	0	0	0
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## 2531	0	0	0	0	0
## 2532	0	0	0	0	0
## 2533	0	0	0	0	0
## 2534	0	0	0	0	0

## 2535	0	0	0	0	0
## 2536	0	0	0	0	0
## 2537	0	0	0	0	0
## 2538	0	0	0	0	0
## 2539	0	0	0	0	0
## 2540	0	0	0	0	0
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## 2575	0	0	0	0	0
## 2576	0	0	0	0	0
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## 2579	0	0	0	0	0
## 2580	0	0	0	0	0
## 2581	0	0	0	0	0
## 2582	0	0	0	0	0
## 2583	0	0	0	0	0
## 2584	0	0	0	0	0
## 2585	0	0	0	0	0
## 2586	0	0	0	0	0
## 2587	0	0	0	0	0
## 2588	0	0	0	0	0

```

## 2589      0      0      0      0      0      0
## 2590      0      0      0      0      0      0
## 2591      0      0      0      0      0      0
## 2592      0      0      0      0      0      0
## 2593      0      0      0      0      0      0
## 2594      0      0      0      0      0      0
## 2595      0      0      0      0      0      0
## 2596      0      0      0      0      0      0
## 2597      0      0      0      0      0      0
## 2598      0      0      0      0      0      0
## 2599      0      0      0      0      0      0
## 2600      0      0      0      0      0      0
## 2601      0      0      0      0      0      0
## 2602      0      0      0      0      0      0
## 2603      0      0      0      0      0      0
## 2604      0      0      0      0      0      0
## 2605      0      0      0      0      0      0
## 2606      0      0      0      0      0      0
## 2607      0      0      0      0      0      0
## 2608      0      0      0      0      0      0
## 2609      0      0      0      0      0      0
## 2610      0      0      0      0      0      0
## 2611      0      0      0      0      0      0
## 2612      0      0      0      0      0      0
## 2613      0      0      0      0      0      0
## 2614      0      0      0      0      0      0
## 2615      0      0      0      0      0      0
## 2616      0      0      0      0      0      0
## 2617      0      0      0      0      0      0
## 2618      0      0      0      0      0      0
## 2619      0      0      0      0      0      0
##      pressure_flag name_flag year.y_flag type_flag dep_delay
## 1          0         0         0         0        2
## 2          0         0         0         0       -4
## 3          0         0         0         0       -2
## 4          0         0         0         0       -2
## 5          0         0         1         0       -2
## 6          0         0         0         0        0
## 7          0         0         0         0       -1
## 8          0         0         1         1        0
## 9          0         0         0         0       -8
## 10         0         0         0         0        3
## 11         0         1         0         0        0
## 12         0         0         1         1       13
## 13         0         1         1         1       -2
## 14         0         0         0         0       -2
## 15         0         0         1         1       -1
## 16         0         0         0         0       -1
## 17         0         0         1         1       -1
## 18         0         0         0         0       24
## 19         0         0         0         0       -1
## 20         0         0         0         0       -3
## 21         0         0         0         0       -2
## 22         0         0         0         0       -2

```

## 23	0	0	0	0	1
## 24	0	0	0	0	-4
## 25	0	0	0	0	-3
## 26	0	0	0	0	-7
## 27	0	0	0	0	0
## 28	0	0	0	0	-5
## 29	0	0	1	1	-4
## 30	0	0	1	1	-3
## 31	0	0	1	1	-9
## 32	0	0	1	1	-1
## 33	0	0	0	0	-1
## 34	0	0	0	0	9
## 35	0	1	0	0	-4
## 36	0	0	1	1	-3
## 37	0	0	0	0	-3
## 38	0	0	0	0	-2
## 39	0	0	0	0	-1
## 40	0	0	1	1	-5
## 41	0	0	0	0	-3
## 42	0	0	0	0	-4
## 43	0	0	0	0	-1
## 44	0	0	0	0	-3
## 45	0	0	0	0	0
## 46	0	0	0	0	13
## 47	0	0	0	0	0
## 49	0	0	0	0	-7
## 50	0	0	1	1	-2
## 51	0	0	0	0	-5
## 52	0	0	0	0	-2
## 53	0	0	1	1	-7
## 54	0	0	0	0	3
## 55	0	0	1	1	-10
## 56	0	0	0	0	0
## 57	0	0	0	0	-4
## 58	0	0	0	0	-4
## 59	0	0	0	0	-2
## 60	0	1	0	0	0
## 61	0	0	1	1	-4
## 62	0	0	0	0	-2
## 63	0	0	0	0	-6
## 64	0	0	0	0	-2
## 66	0	0	0	0	-2
## 67	0	0	0	0	-1
## 68	0	0	0	0	-4
## 69	0	0	1	1	-8
## 70	0	0	0	0	-2
## 71	0	0	1	1	0
## 72	0	0	0	0	-11
## 73	0	1	1	1	-5
## 75	0	0	0	0	-3
## 76	0	0	0	0	0
## 77	0	0	0	0	-8
## 78	0	0	0	0	11
## 79	0	0	0	0	8

## 80	0	0	1	0	1
## 81	0	0	0	0	-8
## 82	0	0	0	0	-3
## 83	0	0	0	0	-1
## 84	0	0	0	0	23
## 86	0	1	0	0	-5
## 87	0	0	1	0	-6
## 88	0	0	0	0	-3
## 89	0	0	0	0	-3
## 90	0	0	0	0	15
## 91	0	0	0	0	21
## 92	0	0	0	0	-2
## 93	0	0	0	0	25
## 94	0	0	0	0	1
## 95	0	0	0	0	1
## 96	0	0	0	0	2
## 97	0	0	0	0	-4
## 98	0	0	0	0	-4
## 99	0	0	0	0	-13
## 100	0	0	0	0	-4
## 101	0	0	0	0	-3
## 102	0	0	0	0	-1
## 103	0	0	0	0	-4
## 104	0	0	0	0	-5
## 106	0	0	0	0	2
## 107	0	0	0	0	1
## 108	0	0	0	0	-3
## 109	0	0	0	0	16
## 110	0	0	0	0	7
## 111	0	0	0	0	2
## 112	0	0	0	0	-1
## 113	0	0	1	1	-2
## 114	0	0	0	0	-5
## 115	0	0	0	0	-3
## 116	0	0	0	0	-1
## 117	0	0	0	0	6
## 118	0	0	0	0	18
## 119	0	0	1	1	-8
## 120	0	0	1	1	-6
## 121	0	0	0	0	-2
## 122	0	0	0	0	-5
## 123	0	0	0	0	-1
## 124	0	0	0	0	-3
## 125	0	0	0	0	-2
## 126	0	0	0	0	-1
## 127	0	0	1	1	5
## 128	0	0	0	0	-1
## 129	0	0	1	1	-3
## 130	0	0	1	1	-5
## 131	0	0	0	0	-3
## 132	0	0	0	0	-1
## 133	0	0	0	0	-8
## 134	0	0	0	0	-6
## 136	1	0	0	0	-6

## 137	0	0	0	0	-1
## 138	1	0	0	0	-2
## 139	1	0	0	0	-2
## 140	0	1	0	0	3
## 141	1	0	0	0	5
## 142	0	0	0	0	10
## 143	1	0	0	0	-4
## 144	1	0	0	0	-1
## 145	1	0	0	0	-1
## 146	1	0	0	0	-6
## 147	0	0	0	0	23
## 148	1	0	0	0	-5
## 149	1	0	0	0	2
## 150	1	0	1	1	-8
## 151	1	0	0	0	-2
## 152	1	0	0	0	11
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## 155	0	0	0	0	-5
## 156	0	0	0	0	-5
## 157	0	0	1	1	-3
## 158	1	0	0	0	21
## 160	1	0	0	0	2
## 162	1	0	0	0	5
## 163	0	0	1	1	-10
## 164	1	0	1	1	26
## 165	1	0	0	0	6
## 166	0	0	0	0	-8
## 167	0	0	0	0	5
## 168	1	0	0	0	0
## 169	1	0	0	0	23
## 170	1	0	1	0	9
## 172	1	0	0	0	-4
## 173	0	0	1	1	13
## 174	1	0	0	0	16
## 175	1	0	0	0	-2
## 176	1	0	0	0	-5
## 177	0	0	0	0	5
## 178	0	0	0	0	2
## 179	1	0	0	0	6
## 181	0	0	0	0	-3
## 183	0	0	0	0	-1
## 184	0	0	0	0	-1
## 185	0	0	0	0	-9
## 186	0	0	0	0	-3
## 187	0	0	0	0	-7
## 190	0	0	0	0	0
## 191	0	0	0	0	1
## 192	0	0	0	0	-1
## 193	0	0	1	1	-10
## 194	0	0	1	1	-9
## 195	0	0	0	0	-3
## 196	0	0	1	1	3
## 197	0	0	0	0	-7

## 198	0	0	0	0	-5
## 199	0	0	0	0	1
## 200	0	0	0	0	-3
## 201	0	0	1	1	-2
## 202	0	0	0	0	2
## 203	0	0	1	1	-5
## 204	0	0	1	1	1
## 205	0	0	0	0	-6
## 206	0	0	0	0	-8
## 207	0	0	1	1	-3
## 208	0	0	0	0	18
## 209	0	0	0	0	11
## 210	0	0	0	0	8
## 211	0	0	1	1	-2
## 212	0	0	1	1	-5
## 213	0	0	0	0	0
## 214	0	0	1	1	-8
## 215	0	0	0	0	7
## 217	0	0	0	0	-4
## 218	0	0	0	0	29
## 219	0	0	0	0	-2
## 220	0	0	0	0	11
## 221	0	0	0	0	4
## 222	0	0	0	0	16
## 223	0	0	0	0	-2
## 224	0	0	0	0	-6
## 226	0	0	0	0	-3
## 227	0	0	0	0	6
## 228	0	0	0	0	1
## 229	0	0	0	0	0
## 230	0	0	0	0	-8
## 231	0	0	1	1	-8
## 232	0	0	0	0	-3
## 233	0	0	0	0	-3
## 234	0	0	0	0	-2
## 235	0	0	0	0	-10
## 236	0	0	0	0	16
## 237	0	0	0	0	13
## 238	0	0	0	0	3
## 239	0	0	0	0	12
## 240	0	0	1	1	8
## 241	0	0	0	0	-5
## 242	0	0	0	0	-5
## 245	0	0	0	0	-2
## 247	0	0	0	0	-6
## 248	0	0	0	0	14
## 249	0	0	0	0	-4
## 251	0	0	1	1	0
## 252	0	0	0	0	6
## 253	0	0	0	0	10
## 254	0	0	0	0	1
## 255	0	0	0	0	12
## 256	0	0	0	0	10
## 257	0	0	1	1	-4

## 258	0	0	1	1	-9
## 259	0	0	1	1	2
## 260	0	0	0	0	-5
## 261	0	0	0	0	7
## 263	0	0	0	0	-7
## 264	0	0	0	0	12
## 265	0	0	1	1	-3
## 266	0	1	1	1	8
## 267	0	0	1	1	-1
## 268	0	0	0	0	5
## 269	0	0	0	0	-4
## 270	0	0	0	0	-3
## 271	0	0	1	0	2
## 273	0	0	0	0	11
## 275	0	0	0	0	-6
## 276	0	0	0	0	-4
## 277	0	0	0	0	-1
## 278	0	0	0	0	-1
## 279	0	0	0	0	8
## 281	0	0	0	0	9
## 282	0	0	0	0	0
## 283	0	0	0	0	8
## 284	0	0	0	0	-4
## 285	0	0	0	0	12
## 286	0	0	1	1	11
## 287	0	0	0	0	16
## 288	0	0	0	0	-7
## 289	0	0	0	0	-4
## 290	0	0	1	1	16
## 291	0	0	0	0	-4
## 292	0	0	0	0	23
## 294	0	0	0	0	-5
## 297	0	0	0	0	-10
## 298	0	0	0	0	0
## 299	0	0	0	0	-7
## 300	0	0	0	0	-3
## 301	0	0	0	0	1
## 302	0	0	0	0	-9
## 303	0	0	0	0	-3
## 304	0	0	0	0	1
## 305	0	0	0	0	4
## 306	0	0	0	0	-5
## 307	0	0	1	0	11
## 308	0	0	0	0	1
## 310	0	0	0	0	-5
## 311	0	0	0	0	25
## 312	0	0	1	1	16
## 313	0	1	0	0	9
## 316	0	0	0	0	5
## 317	0	0	1	1	-1
## 318	0	0	0	0	1
## 319	0	0	0	0	5
## 320	0	0	0	0	16
## 321	0	0	0	0	-8

## 322	0	0	0	0	22
## 323	0	0	0	0	-3
## 324	0	0	1	0	-1
## 328	0	0	1	1	-7
## 330	0	0	0	0	-4
## 332	0	0	0	0	-2
## 333	0	0	0	0	-4
## 336	0	0	0	0	-5
## 339	0	0	0	0	-15
## 340	0	0	0	0	-5
## 341	0	0	0	0	1
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## 343	0	0	0	0	23
## 344	0	0	0	0	-5
## 346	0	0	0	0	-2
## 347	0	0	0	0	11
## 348	0	0	0	0	-7
## 349	0	0	0	0	27
## 350	0	0	0	0	11
## 351	0	0	0	0	6
## 352	0	0	0	0	-10
## 353	0	0	1	1	3
## 354	0	0	0	0	2
## 355	0	0	0	0	14
## 356	0	1	0	0	-12
## 358	0	0	0	0	-5
## 359	0	0	0	0	21
## 365	0	1	0	0	-6
## 366	0	1	0	0	-3
## 367	0	0	0	0	-2
## 368	0	0	0	0	7
## 369	0	0	0	0	-6
## 370	0	0	0	0	-6
## 371	0	0	1	1	-5
## 372	0	0	0	0	-5
## 373	0	0	0	0	-2
## 374	0	0	0	0	-1
## 375	0	0	1	1	-5
## 376	0	0	1	1	0
## 377	0	0	0	0	4
## 378	0	0	0	0	-4
## 379	0	0	0	0	-4
## 380	0	0	0	0	-5
## 381	0	0	0	0	11
## 382	0	1	0	0	-3
## 383	0	0	0	0	-4
## 384	0	0	0	0	-5
## 385	0	0	1	1	-4
## 386	0	0	0	0	-2
## 387	0	0	0	0	13
## 388	0	0	1	0	14
## 389	0	0	0	0	9
## 390	0	0	0	0	2
## 391	0	0	1	1	4

## 392	0	0	0	0	-1
## 393	0	0	0	0	7
## 394	0	0	0	0	6
## 395	0	0	0	0	6
## 396	0	0	1	1	6
## 397	0	0	0	0	-4
## 398	0	0	0	0	12
## 399	0	0	0	0	2
## 400	0	0	0	0	-6
## 401	0	0	0	0	-2
## 402	0	0	0	0	3
## 403	0	0	0	0	0
## 404	0	0	0	0	-5
## 405	0	0	1	0	-3
## 406	0	0	0	0	-1
## 407	0	0	0	0	-1
## 408	0	1	0	0	4
## 410	0	0	1	1	-5
## 411	0	0	1	1	-8
## 412	0	0	0	0	9
## 413	0	0	0	0	12
## 414	0	0	0	0	12
## 415	0	0	1	1	-1
## 416	0	0	0	0	-6
## 418	0	0	0	0	-3
## 420	0	0	0	0	-2
## 421	0	0	0	0	-1
## 422	0	0	0	0	0
## 423	0	0	1	0	-7
## 424	0	0	0	0	-6
## 425	0	0	0	0	4
## 426	0	0	0	0	0
## 427	0	0	0	0	1
## 428	0	0	0	0	14
## 429	0	0	0	0	-8
## 430	0	0	0	0	7
## 432	0	0	0	0	-5
## 433	0	0	0	0	-3
## 434	0	0	0	0	-2
## 435	0	0	0	0	-10
## 436	0	0	0	0	-1
## 437	0	1	1	1	-4
## 438	0	0	0	0	-1
## 439	0	0	0	0	10
## 440	0	0	0	0	0
## 442	0	0	0	0	-3
## 443	0	0	1	1	7
## 444	0	0	0	0	-2
## 445	0	0	0	0	19
## 446	0	1	1	1	0
## 447	0	0	0	0	-5
## 448	0	0	0	0	-4
## 450	0	0	0	0	-8
## 451	0	0	1	1	-8

## 452	0	0	0	0	-7
## 453	0	0	1	1	-1
## 455	0	0	0	0	-4
## 457	0	0	1	1	-9
## 458	0	0	0	0	-2
## 459	0	0	0	0	1
## 460	0	0	0	0	3
## 462	0	0	0	0	0
## 463	0	0	0	0	-3
## 464	0	0	1	1	-2
## 465	0	0	0	0	2
## 466	0	0	0	0	1
## 467	0	0	0	0	8
## 468	0	0	0	0	5
## 469	0	0	1	1	-6
## 470	0	0	0	0	-3
## 471	0	0	1	1	-1
## 472	0	1	0	0	-6
## 473	0	0	0	0	5
## 474	0	0	0	0	-5
## 475	0	0	0	0	1
## 476	0	0	0	0	7
## 477	0	0	0	0	-2
## 479	0	0	0	0	18
## 480	0	0	0	0	15
## 481	0	0	0	0	0
## 482	0	0	0	0	-1
## 483	0	0	0	0	-2
## 484	0	0	0	0	9
## 485	0	0	0	0	0
## 486	0	0	1	1	4
## 487	0	0	0	0	-1
## 488	0	0	0	0	-3
## 489	0	0	0	0	21
## 490	0	0	0	0	21
## 491	0	0	0	0	-1
## 492	0	0	0	0	-2
## 493	0	0	0	0	-2
## 494	0	0	0	0	-2
## 495	0	0	0	0	-4
## 496	0	0	0	0	-2
## 497	0	0	0	0	8
## 498	0	0	1	1	-8
## 499	0	0	0	0	-4
## 501	0	0	0	0	-4
## 502	0	0	0	0	1
## 503	0	0	1	1	-13
## 504	0	0	0	0	-8
## 506	0	0	0	0	-9
## 507	0	0	0	0	1
## 508	0	0	1	1	-7
## 509	0	0	1	1	-9
## 510	0	0	0	0	-4
## 511	0	0	0	0	-2

## 512	0	0	0	0	-4
## 514	0	0	0	0	-1
## 515	0	0	0	0	0
## 516	0	0	0	0	4
## 517	0	0	0	0	-3
## 518	0	0	0	0	10
## 519	0	0	1	0	-5
## 520	0	0	0	0	-2
## 523	0	0	0	0	19
## 524	0	0	0	0	-5
## 525	0	0	0	0	14
## 526	0	1	0	0	-4
## 527	0	0	1	1	5
## 528	0	0	0	0	-7
## 529	0	0	0	0	-4
## 530	0	0	0	0	4
## 531	0	0	0	0	-6
## 532	0	0	1	0	-3
## 533	0	0	0	0	3
## 534	0	0	0	0	-2
## 535	0	0	0	0	0
## 536	0	0	0	0	-8
## 537	0	0	0	0	-3
## 538	0	0	0	0	3
## 539	0	0	0	0	-2
## 540	0	0	0	0	14
## 541	0	0	0	0	8
## 542	0	0	0	0	5
## 543	0	0	0	0	14
## 544	0	0	0	0	4
## 545	0	0	0	0	-4
## 546	0	0	1	1	-3
## 547	0	0	0	0	-2
## 548	0	0	1	1	-4
## 549	0	0	0	0	-4
## 551	0	0	0	0	-3
## 553	0	0	0	0	25
## 554	0	0	0	0	11
## 555	0	0	0	0	29
## 556	0	0	0	0	1
## 558	0	0	0	0	12
## 559	0	0	0	0	-3
## 560	0	0	0	0	-4
## 561	0	0	0	0	-5
## 562	0	0	0	0	4
## 563	0	0	0	0	-2
## 564	0	0	0	0	27
## 565	0	0	0	0	-2
## 566	0	0	0	0	3
## 567	0	0	0	0	-1
## 569	0	0	0	0	17
## 570	0	0	1	1	0
## 571	0	0	1	1	-5
## 572	0	0	0	0	8

## 573	0	0	1	1	-1
## 574	0	0	0	0	0
## 576	0	0	1	1	22
## 577	0	0	0	0	19
## 578	0	1	0	0	-5
## 579	0	0	0	0	-4
## 580	0	0	1	1	7
## 581	0	0	0	0	-3
## 582	0	0	0	0	-2
## 584	0	0	0	0	0
## 585	0	0	0	0	3
## 586	0	0	0	0	-4
## 587	0	0	0	0	-4
## 588	0	0	0	0	-3
## 589	0	0	1	1	-2
## 590	0	0	0	0	0
## 591	0	0	0	0	7
## 593	0	0	0	0	-3
## 594	0	0	0	0	6
## 596	0	0	0	0	-3
## 597	0	0	0	0	6
## 598	0	0	0	0	-2
## 599	0	0	0	0	4
## 600	0	0	0	0	14
## 601	0	0	0	0	-3
## 602	0	0	0	0	-3
## 603	0	0	0	0	-3
## 604	0	0	0	0	-2
## 605	0	0	0	0	-1
## 607	0	0	1	1	-4
## 608	0	0	0	0	13
## 609	0	0	0	0	14
## 610	0	0	0	0	-3
## 611	0	0	0	0	-2
## 612	0	0	0	0	-2
## 613	0	0	1	1	22
## 614	0	0	0	0	3
## 615	0	0	0	0	-4
## 616	0	0	0	0	2
## 617	0	0	1	1	6
## 618	0	0	1	1	-1
## 619	0	0	0	0	7
## 621	0	0	0	0	-2
## 622	0	0	0	0	-1
## 624	0	0	0	0	-3
## 625	0	0	0	0	-2
## 626	0	0	1	1	-5
## 628	0	0	0	0	-4
## 630	0	0	0	0	-11
## 631	0	0	0	0	-5
## 635	0	0	0	0	0
## 636	0	0	0	0	-7
## 637	0	0	0	0	4
## 638	0	0	1	1	-5

## 639	0	0	1	1	0
## 641	0	0	1	1	0
## 643	0	0	1	1	-9
## 644	0	0	0	0	-2
## 645	0	0	0	0	0
## 646	0	0	1	0	16
## 648	0	0	0	0	0
## 649	0	0	0	0	-1
## 650	0	0	1	1	5
## 651	0	0	0	0	10
## 652	0	0	0	0	-1
## 654	0	0	0	0	8
## 655	0	0	0	0	-1
## 656	0	0	0	0	-1
## 657	0	1	1	1	-3
## 658	0	0	0	0	-1
## 659	0	0	0	0	-4
## 660	0	0	0	0	-2
## 661	0	0	0	0	3
## 662	0	0	0	0	24
## 663	0	0	1	1	-7
## 664	0	0	0	0	-4
## 665	0	0	0	0	0
## 666	0	0	0	0	-2
## 667	0	0	0	0	12
## 668	0	0	0	0	2
## 669	0	0	0	0	7
## 670	0	0	0	0	9
## 671	0	0	0	0	-1
## 672	0	0	1	1	10
## 673	0	0	0	0	12
## 674	0	0	0	0	-5
## 675	0	0	0	0	-4
## 676	0	0	0	0	-3
## 677	0	0	0	0	-1
## 678	0	0	1	1	-7
## 680	0	0	0	0	26
## 682	0	0	0	0	8
## 683	0	0	0	0	6
## 684	0	0	0	0	10
## 686	0	0	0	0	-6
## 687	0	0	0	0	-4
## 689	0	0	0	0	2
## 690	0	0	0	0	-12
## 691	0	0	0	0	9
## 693	0	0	0	0	17
## 694	0	0	0	0	14
## 695	0	0	0	0	3
## 696	0	0	1	1	8
## 697	0	0	0	0	10
## 698	0	0	0	0	27
## 699	0	0	0	0	12
## 700	0	0	0	0	-2
## 702	0	0	0	0	13

## 703	0	0	0	0	-4
## 704	0	0	0	0	-4
## 706	0	0	0	0	7
## 707	0	0	1	1	-7
## 709	0	0	0	0	-6
## 710	0	0	0	0	-6
## 711	0	0	0	0	4
## 712	0	0	0	0	0
## 713	0	0	1	1	0
## 714	0	0	0	0	26
## 715	0	0	0	0	19
## 716	0	0	0	0	7
## 717	0	0	0	0	21
## 719	0	0	0	0	0
## 720	0	0	1	1	-10
## 721	0	0	0	0	-4
## 722	0	0	0	0	15
## 723	0	0	0	0	0
## 725	0	0	1	1	-1
## 726	0	1	0	0	2
## 727	0	0	0	0	16
## 729	0	0	0	0	-5
## 730	0	0	0	0	-7
## 737	0	1	0	0	-8
## 738	0	0	0	0	-2
## 739	0	0	0	0	-2
## 743	0	0	0	0	-5
## 744	0	0	0	0	-7
## 745	0	0	0	0	-4
## 746	0	0	0	0	-4
## 747	0	0	0	0	-4
## 748	0	0	1	1	-9
## 749	0	0	0	0	-3
## 750	0	0	0	0	-3
## 751	0	0	0	0	-1
## 752	0	0	0	0	0
## 753	0	0	1	1	0
## 754	0	0	0	0	1
## 755	0	0	0	0	-2
## 756	0	0	1	1	-4
## 757	0	0	0	0	-4
## 758	0	0	0	0	-3
## 759	0	0	0	0	-3
## 760	0	0	1	1	-1
## 761	0	0	0	0	5
## 762	0	0	0	0	17
## 763	0	1	1	1	-8
## 764	0	0	0	0	1
## 765	0	0	0	0	-5
## 766	0	0	0	0	-4
## 767	0	0	1	0	-2
## 768	0	0	0	0	-4
## 769	0	0	1	1	-1
## 770	0	0	0	0	-3

## 771	0	0	0	0	1
## 772	0	0	0	0	-1
## 773	0	0	0	0	5
## 774	0	0	0	0	11
## 775	0	0	0	0	-1
## 776	0	0	0	0	-5
## 777	0	0	1	1	-2
## 778	0	0	0	0	3
## 779	0	0	0	0	2
## 780	0	0	0	0	-4
## 781	0	0	0	0	-1
## 782	0	0	1	1	-3
## 784	0	0	0	0	0
## 785	0	0	0	0	-4
## 786	0	0	1	1	1
## 787	0	0	0	0	-1
## 788	0	0	0	0	-1
## 789	0	0	0	0	0
## 790	0	0	1	0	-3
## 791	0	0	0	0	-4
## 792	0	0	0	0	7
## 793	0	0	0	0	-3
## 794	0	0	0	0	-3
## 795	0	0	0	0	-5
## 796	0	0	0	0	2
## 797	0	0	0	0	-1
## 798	0	0	1	1	-9
## 799	0	0	1	0	15
## 800	0	0	0	0	0
## 801	0	0	0	0	-7
## 802	0	0	0	0	-4
## 803	0	0	0	0	-1
## 804	0	0	0	0	-4
## 805	0	0	0	0	-4
## 806	0	0	0	0	-2
## 807	0	0	1	0	-1
## 808	0	0	0	0	17
## 809	0	0	0	0	2
## 810	0	0	0	0	-1
## 811	0	0	0	0	6
## 812	0	0	0	0	21
## 813	0	0	0	0	24
## 815	0	0	0	0	-5
## 816	0	0	0	0	-5
## 817	0	0	0	0	-3
## 818	0	0	1	1	-3
## 819	0	0	0	0	-2
## 821	0	0	0	0	-1
## 822	0	0	0	0	0
## 823	0	0	1	1	-2
## 824	0	0	0	0	4
## 825	0	1	0	0	1
## 826	0	0	0	0	11
## 828	0	0	0	0	-7

## 829	0	0	0	0	9
## 831	0	0	0	0	-6
## 832	0	0	0	0	-7
## 833	0	1	0	0	-3
## 834	0	0	0	0	-2
## 835	0	0	0	0	-4
## 837	0	0	0	0	19
## 839	0	0	0	0	6
## 840	0	0	0	0	-13
## 841	0	0	0	0	-2
## 843	0	0	1	1	-5
## 844	0	0	0	0	-4
## 845	0	0	0	0	-3
## 846	0	0	0	0	2
## 848	0	0	1	1	0
## 849	0	0	0	0	-5
## 850	0	0	0	0	-3
## 852	0	0	0	0	-5
## 853	0	0	0	0	2
## 855	0	0	0	0	-3
## 856	0	0	0	0	-4
## 857	0	0	0	0	-7
## 858	0	0	0	0	-4
## 859	0	0	0	0	-4
## 860	0	0	0	0	-4
## 861	0	0	0	0	-4
## 862	0	0	0	0	-6
## 863	0	0	0	0	-4
## 864	0	0	0	0	-3
## 865	0	0	0	0	1
## 866	0	0	1	1	-2
## 867	0	0	0	0	4
## 868	0	0	1	1	-7
## 869	0	0	1	1	16
## 870	0	0	0	0	-3
## 871	0	0	0	0	7
## 872	0	1	0	0	-2
## 873	0	0	0	0	-6
## 874	0	0	0	0	-5
## 875	0	0	0	0	-4
## 876	0	0	0	0	-1
## 877	0	0	0	0	-1
## 878	0	0	1	1	-4
## 879	0	0	0	0	-2
## 880	0	0	0	0	29
## 881	0	0	0	0	0
## 882	0	0	1	1	-5
## 883	0	0	0	0	4
## 884	0	0	0	0	5
## 885	0	0	0	0	-4
## 886	0	0	1	0	-6
## 887	0	0	0	0	-2
## 888	0	0	0	0	15
## 891	0	0	1	1	0

## 892	0	0	0	0	-4
## 893	0	0	0	0	2
## 894	0	0	0	0	0
## 895	0	0	0	0	0
## 896	0	0	0	0	-3
## 897	0	0	0	0	-7
## 898	0	0	1	1	-1
## 899	0	0	0	0	-1
## 900	0	0	1	1	-5
## 901	0	0	0	0	-8
## 902	0	0	0	0	-4
## 903	0	0	0	0	-5
## 904	0	0	0	0	-2
## 905	0	0	0	0	5
## 906	0	0	0	0	3
## 907	0	0	0	0	6
## 910	0	0	0	0	9
## 911	0	0	0	0	15
## 913	0	0	0	0	1
## 914	0	0	0	0	-4
## 915	0	0	0	0	5
## 916	0	0	0	0	-5
## 917	0	0	0	0	11
## 918	0	0	0	0	-4
## 919	0	0	0	0	-6
## 920	0	0	1	1	9
## 921	0	0	0	0	2
## 923	0	0	0	0	4
## 924	0	0	0	0	13
## 926	0	0	0	0	28
## 927	0	0	0	0	-1
## 928	0	0	0	0	-3
## 929	0	0	1	1	-3
## 930	0	0	0	0	-1
## 931	0	0	0	0	21
## 932	0	0	0	0	-4
## 934	0	0	1	1	1
## 935	0	0	0	0	-3
## 936	0	0	0	0	7
## 937	0	0	0	0	-7
## 939	0	0	0	0	1
## 940	0	0	0	0	1
## 941	0	0	0	0	3
## 942	0	0	1	1	-2
## 943	0	0	0	0	4
## 944	0	0	0	0	14
## 945	0	0	0	0	-9
## 946	0	0	0	0	23
## 947	0	0	1	1	-1
## 948	0	0	0	0	-6
## 949	0	0	0	0	-4
## 950	0	0	0	0	9
## 951	0	0	0	0	-3
## 952	0	0	0	0	1

## 953	0	0	0	0	-4
## 954	0	0	0	0	-2
## 955	0	0	0	0	-2
## 956	0	0	0	0	5
## 957	0	0	0	0	-2
## 958	0	0	0	0	20
## 959	0	0	1	1	19
## 960	0	0	1	1	7
## 961	0	0	0	0	-8
## 962	0	0	1	0	20
## 963	0	0	0	0	-1
## 964	0	0	0	0	11
## 965	0	0	0	0	2
## 966	0	0	0	0	19
## 967	0	0	0	0	5
## 968	0	0	1	1	0
## 969	0	0	0	0	0
## 971	0	0	0	0	24
## 972	0	0	0	0	12
## 973	0	0	0	0	5
## 974	0	0	0	0	1
## 975	0	0	0	0	-4
## 976	0	1	0	0	3
## 977	0	0	0	0	1
## 978	0	0	0	0	3
## 979	0	0	0	0	-1
## 980	0	0	0	0	2
## 981	0	0	0	0	16
## 984	0	0	0	0	-4
## 985	0	0	0	0	-4
## 987	0	0	0	0	-1
## 988	0	0	0	0	0
## 989	0	0	0	0	20
## 990	0	0	0	0	21
## 991	0	0	0	0	-8
## 992	0	0	0	0	-7
## 993	0	0	1	1	3
## 994	0	0	1	1	24
## 995	0	0	0	0	-4
## 996	0	0	0	0	1
## 997	0	0	0	0	21
## 998	0	0	1	0	-3
## 1000	0	0	1	1	18
## 1001	0	0	0	0	-1
## 1002	0	0	0	0	-1
## 1003	0	0	1	1	0
## 1004	0	0	0	0	0
## 1005	0	0	0	0	-3
## 1006	0	0	0	0	-6
## 1007	0	0	1	1	1
## 1008	0	0	0	0	-3
## 1009	0	0	0	0	10
## 1010	0	0	0	0	9
## 1013	0	0	0	0	0

## 1014	0	0	0	0	26
## 1016	0	0	1	1	8
## 1017	0	0	0	0	5
## 1018	0	0	0	0	1
## 1020	0	0	0	0	2
## 1021	0	0	1	1	15
## 1022	0	0	0	0	23
## 1024	0	0	0	0	-2
## 1026	0	0	0	0	-2
## 1028	0	0	0	0	-5
## 1029	0	0	0	0	1
## 1030	0	0	0	0	-7
## 1031	0	0	0	0	-2
## 1032	0	0	0	0	0
## 1033	0	0	1	1	-1
## 1034	0	0	0	0	-10
## 1035	0	0	0	0	-7
## 1036	0	0	0	0	-5
## 1037	0	0	0	0	0
## 1038	0	0	1	1	2
## 1040	0	0	0	0	23
## 1042	0	0	0	0	-11
## 1044	0	0	0	0	-2
## 1046	0	0	0	0	-5
## 1047	0	0	0	0	0
## 1048	0	0	0	0	-4
## 1049	0	0	0	0	-2
## 1050	0	0	0	0	-2
## 1051	0	0	1	1	-6
## 1053	0	0	0	0	-5
## 1054	0	0	0	0	-2
## 1055	0	0	0	0	18
## 1056	0	0	0	0	-1
## 1057	0	0	0	0	0
## 1058	0	0	0	0	-4
## 1059	0	0	0	0	0
## 1061	0	0	0	0	8
## 1063	0	0	0	0	-1
## 1065	0	1	0	0	27
## 1068	0	0	0	0	-8
## 1069	0	0	0	0	-3
## 1071	0	0	0	0	4
## 1076	0	0	1	1	0
## 1077	0	0	0	0	19
## 1078	0	0	1	1	8
## 1079	0	0	0	0	1
## 1080	0	0	0	0	3
## 1085	0	0	0	0	-4
## 1086	0	0	0	0	1
## 1091	0	0	0	0	2
## 1092	0	0	0	0	-2
## 1093	0	0	1	1	6
## 1096	0	0	1	1	14
## 1097	0	0	0	0	-1

## 1098	0	0	0	0	4
## 1099	0	0	0	0	13
## 1100	0	0	0	0	2
## 1101	0	0	0	0	0
## 1103	0	0	0	0	-4
## 1104	0	0	0	0	-2
## 1106	0	0	0	0	12
## 1107	0	0	0	0	23
## 1108	0	0	0	0	22
## 1109	0	0	0	0	-2
## 1110	0	0	1	1	-2
## 1111	0	0	0	0	-2
## 1112	0	0	1	1	-2
## 1113	0	0	1	1	-2
## 1114	0	0	0	0	-7
## 1115	0	0	0	0	-4
## 1116	0	0	0	0	-4
## 1117	0	0	0	0	-3
## 1118	0	0	0	0	-1
## 1119	0	0	1	1	-5
## 1120	0	0	0	0	1
## 1121	0	0	0	0	2
## 1122	0	0	0	0	3
## 1123	0	0	0	0	-5
## 1124	0	0	1	1	-6
## 1125	0	0	0	0	-6
## 1126	0	0	1	1	6
## 1127	0	0	0	0	-4
## 1128	0	0	0	0	7
## 1129	0	0	0	0	9
## 1130	0	0	1	1	-6
## 1131	0	1	0	0	-5
## 1132	0	0	0	0	-4
## 1133	0	0	0	0	0
## 1134	0	0	0	0	-14
## 1135	0	0	0	0	11
## 1136	0	0	0	0	-8
## 1137	0	0	1	1	-7
## 1138	0	0	0	0	-1
## 1139	0	0	0	0	-2
## 1140	0	0	0	0	-6
## 1141	0	0	1	1	7
## 1142	0	0	0	0	-1
## 1143	0	0	0	0	10
## 1144	0	0	0	0	-4
## 1145	0	0	0	0	3
## 1146	0	0	0	0	-5
## 1147	0	0	0	0	-9
## 1148	0	0	0	0	-2
## 1149	0	0	0	0	-5
## 1150	0	0	0	0	0
## 1151	0	0	0	0	-3
## 1152	0	0	0	0	0
## 1153	0	0	0	0	0

## 1154	0	0	1	1	-4
## 1155	0	0	0	0	3
## 1156	0	0	0	0	3
## 1157	0	0	1	1	5
## 1158	0	0	0	0	2
## 1159	0	0	1	1	-7
## 1160	0	0	1	1	-3
## 1161	0	0	1	1	-3
## 1162	0	0	0	0	-8
## 1163	0	0	0	0	15
## 1164	0	0	0	0	-4
## 1165	0	0	0	0	19
## 1166	0	0	0	0	21
## 1167	0	0	0	0	-3
## 1168	0	0	0	0	-3
## 1170	0	0	0	0	12
## 1171	0	0	0	0	-5
## 1172	0	0	0	0	-10
## 1173	0	1	0	0	3
## 1174	0	0	0	0	-6
## 1175	0	0	1	1	-2
## 1176	0	0	0	0	-1
## 1177	0	0	0	0	-4
## 1178	0	0	0	0	-3
## 1179	0	0	0	0	-2
## 1180	0	0	1	1	0
## 1181	0	0	0	0	1
## 1182	0	0	1	1	-5
## 1183	0	0	0	0	7
## 1184	0	0	0	0	-8
## 1185	0	0	0	0	-2
## 1186	0	0	1	1	-6
## 1187	0	0	0	0	0
## 1188	0	0	0	0	9
## 1189	0	1	1	1	3
## 1190	0	0	0	0	-4
## 1191	0	0	0	0	1
## 1192	0	0	0	0	-7
## 1193	0	0	0	0	-7
## 1194	0	0	1	1	-5
## 1195	0	0	0	0	-8
## 1196	0	0	0	0	-1
## 1197	0	0	0	0	5
## 1198	0	1	0	0	-4
## 1199	0	0	0	0	-1
## 1200	0	0	1	1	-10
## 1201	0	0	0	0	21
## 1202	0	0	0	0	5
## 1203	0	0	0	0	-6
## 1204	0	0	1	0	-4
## 1205	0	0	0	0	-3
## 1206	0	0	1	1	7
## 1207	0	0	0	0	-4
## 1208	0	0	0	0	3

## 1209	0	0	0	0	14
## 1210	0	0	0	0	-7
## 1211	0	0	0	0	-4
## 1212	0	0	1	1	19
## 1213	0	0	0	0	-3
## 1214	0	0	0	0	-3
## 1215	0	0	1	1	-2
## 1216	0	0	0	0	-2
## 1217	0	0	0	0	-2
## 1218	0	0	0	0	0
## 1219	0	0	0	0	-5
## 1220	0	0	0	0	-3
## 1221	0	0	0	0	11
## 1222	0	0	0	0	7
## 1223	0	1	0	0	6
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## 1225	0	0	0	0	8
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## 1227	0	0	0	0	-5
## 1228	0	0	0	0	9
## 1229	0	0	1	1	-6
## 1230	0	1	0	0	5
## 1231	0	0	0	0	-6
## 1232	0	0	0	0	-2
## 1233	0	0	0	0	2
## 1235	0	0	0	0	2
## 1236	0	0	0	0	-10
## 1237	0	0	1	1	1
## 1238	0	0	0	0	21
## 1239	0	0	0	0	-8
## 1240	0	0	0	0	-8
## 1241	0	0	1	1	-7
## 1242	0	0	0	0	-5
## 1243	0	0	0	0	-5
## 1244	0	0	0	0	-2
## 1245	0	0	1	0	16
## 1246	0	0	0	0	-7
## 1247	0	0	1	1	-1
## 1248	0	0	1	0	-1
## 1249	0	0	0	0	-5
## 1250	0	0	0	0	25
## 1251	0	0	0	0	-5
## 1252	0	0	1	1	-9
## 1253	0	0	0	0	-4
## 1254	0	0	0	0	14
## 1255	0	0	0	0	1
## 1257	0	0	0	0	2
## 1258	0	0	0	0	-6
## 1259	0	0	0	0	-1
## 1260	0	0	0	0	-3
## 1261	0	0	0	0	-5
## 1263	0	0	0	0	-5
## 1264	0	0	0	0	-3
## 1265	0	0	0	0	-7

## 1266	0	0	0	0	-7
## 1268	0	0	0	0	1
## 1269	0	0	1	1	15
## 1270	0	0	1	1	-5
## 1272	0	0	0	0	-12
## 1273	0	1	0	0	-3
## 1274	0	0	0	0	-6
## 1275	0	0	0	0	-5
## 1276	0	0	0	0	0
## 1277	0	0	0	0	1
## 1278	0	1	0	0	6
## 1279	0	0	0	0	-4
## 1280	0	0	0	0	-6
## 1281	0	0	0	0	-4
## 1282	0	0	1	1	-11
## 1284	0	0	0	0	-6
## 1285	0	0	1	1	-3
## 1286	0	0	0	0	-4
## 1287	0	0	0	0	4
## 1288	0	0	0	0	5
## 1290	0	0	0	0	-3
## 1291	0	0	0	0	3
## 1292	0	0	0	0	-6
## 1293	0	0	0	0	-4
## 1294	0	0	0	0	12
## 1295	0	0	0	0	12
## 1296	0	0	1	0	-8
## 1297	0	0	0	0	-2
## 1298	0	0	0	0	-5
## 1299	0	0	0	0	-2
## 1300	0	0	0	0	-2
## 1303	0	0	0	0	2
## 1304	0	0	0	0	7
## 1305	0	0	1	1	-5
## 1306	0	0	0	0	0
## 1308	0	0	0	0	1
## 1309	0	0	0	0	-1
## 1310	0	0	0	0	-5
## 1311	0	0	0	0	-2
## 1312	0	0	0	0	-2
## 1313	0	0	0	0	19
## 1314	0	0	0	0	-5
## 1315	0	0	0	0	1
## 1317	0	0	1	1	9
## 1318	0	0	0	0	22
## 1319	0	0	1	1	-6
## 1320	0	0	0	0	-6
## 1322	0	0	0	0	19
## 1323	0	0	0	0	-2
## 1325	0	0	0	0	-1
## 1327	0	0	0	0	-6
## 1328	0	0	0	0	-6
## 1329	0	0	0	0	-6
## 1330	0	0	0	0	-10

## 1331	0	0	0	0	8
## 1332	0	0	1	1	0
## 1333	0	0	0	0	4
## 1334	0	0	0	0	-6
## 1335	0	0	0	0	-8
## 1336	0	0	0	0	-6
## 1338	0	0	0	0	-4
## 1340	0	0	0	0	-8
## 1341	0	0	0	0	-3
## 1342	0	0	0	0	-2
## 1343	0	0	0	0	-1
## 1344	0	0	1	1	-6
## 1346	0	0	0	0	-3
## 1347	0	0	0	0	9
## 1348	0	0	0	0	7
## 1349	0	0	1	1	-1
## 1350	0	0	0	0	-4
## 1351	0	0	0	0	0
## 1352	0	0	0	0	7
## 1353	0	0	0	0	18
## 1354	0	0	0	0	-1
## 1356	0	0	0	0	22
## 1357	0	0	1	0	13
## 1358	0	0	0	0	-2
## 1359	0	0	0	0	7
## 1360	0	0	0	0	-4
## 1361	0	0	0	0	-2
## 1362	0	0	0	0	-1
## 1364	0	0	0	0	-5
## 1366	0	0	0	0	5
## 1367	0	0	0	0	0
## 1368	0	0	0	0	-7
## 1369	0	0	0	0	5
## 1370	0	0	0	0	-5
## 1371	0	0	0	0	0
## 1372	0	0	0	0	-1
## 1374	0	0	1	1	-4
## 1375	0	0	0	0	1
## 1376	0	0	1	1	28
## 1377	0	0	0	0	-2
## 1378	0	0	1	1	6
## 1379	0	0	0	0	-5
## 1380	0	0	0	0	-4
## 1381	0	0	0	0	-1
## 1382	0	0	1	1	-4
## 1383	0	0	0	0	-3
## 1385	0	0	0	0	12
## 1387	0	1	0	0	-6
## 1388	0	0	1	1	-5
## 1389	0	0	0	0	-5
## 1390	0	0	0	0	-3
## 1391	0	0	1	0	-2
## 1392	0	0	0	0	-1
## 1393	0	0	0	0	27

## 1394	0	0	0	0	0
## 1395	0	0	0	0	-3
## 1396	0	0	0	0	19
## 1397	0	0	0	0	-5
## 1398	0	0	1	1	-4
## 1399	0	0	0	0	-6
## 1400	0	0	0	0	0
## 1402	0	0	0	0	13
## 1403	0	0	0	0	5
## 1404	0	0	1	1	-6
## 1405	0	0	1	1	24
## 1406	0	0	0	0	0
## 1407	0	0	0	0	0
## 1408	0	0	0	0	27
## 1409	0	0	0	0	25
## 1410	0	0	0	0	3
## 1411	0	0	0	0	2
## 1412	0	0	0	0	18
## 1413	0	0	0	0	-5
## 1414	0	0	0	0	-8
## 1415	0	0	0	0	18
## 1416	0	0	1	1	1
## 1419	0	0	1	1	0
## 1420	0	0	0	0	10
## 1421	0	0	0	0	-6
## 1422	0	0	0	0	26
## 1423	0	0	0	0	8
## 1425	0	0	0	0	-3
## 1426	0	0	0	0	14
## 1427	0	0	0	0	-3
## 1428	0	0	0	0	27
## 1429	0	0	0	0	17
## 1430	0	0	0	0	-2
## 1431	0	0	1	1	-1
## 1432	0	0	0	0	-5
## 1433	0	0	0	0	-1
## 1434	0	0	0	0	4
## 1435	0	0	0	0	-4
## 1436	0	0	0	0	2
## 1438	0	0	0	0	2
## 1439	0	0	0	0	22
## 1440	0	0	0	0	-6
## 1441	0	0	0	0	15
## 1442	0	0	1	1	-4
## 1443	0	1	0	0	1
## 1444	0	0	0	0	-8
## 1445	0	0	0	0	-5
## 1446	0	0	0	0	0
## 1447	0	0	0	0	-8
## 1448	0	0	0	0	-3
## 1449	0	0	0	0	7
## 1450	0	0	0	0	-2
## 1451	0	0	0	0	1
## 1452	0	0	0	0	6

## 1455	0	0	1	1	1
## 1457	0	0	0	0	-3
## 1460	0	0	0	0	7
## 1461	0	0	0	0	-3
## 1462	0	0	1	1	-7
## 1463	0	0	0	0	-6
## 1464	0	0	0	0	12
## 1466	0	0	0	0	17
## 1467	0	0	0	0	29
## 1468	0	0	0	0	0
## 1469	0	0	0	0	0
## 1472	0	0	0	0	-10
## 1473	0	0	0	0	-9
## 1474	0	0	0	0	16
## 1475	0	0	0	0	6
## 1476	0	0	0	0	8
## 1477	0	0	1	1	-5
## 1478	0	0	1	1	-4
## 1480	0	0	0	0	-10
## 1481	0	0	0	0	-5
## 1482	0	0	1	1	28
## 1483	0	0	1	1	-2
## 1484	0	0	0	0	3
## 1486	0	1	0	0	3
## 1487	0	0	0	0	3
## 1488	0	0	0	0	-6
## 1489	0	0	0	0	-3
## 1490	0	0	0	0	1
## 1493	0	0	0	0	0
## 1494	0	0	0	0	-2
## 1495	0	0	0	0	12
## 1497	0	0	1	1	-2
## 1498	0	0	0	0	-2
## 1499	0	0	1	1	-3
## 1500	0	0	0	0	-3
## 1501	0	0	0	0	-3
## 1502	0	0	0	0	-2
## 1503	0	0	0	0	-2
## 1504	0	0	0	0	-1
## 1505	0	1	0	0	17
## 1506	0	0	0	0	-5
## 1507	0	0	1	1	-4
## 1508	0	0	0	0	-4
## 1509	0	0	0	0	-5
## 1510	0	0	0	0	-5
## 1511	0	0	0	0	-1
## 1512	0	1	0	0	4
## 1513	0	0	1	1	-9
## 1514	0	0	0	0	6
## 1515	0	0	0	0	-2
## 1516	0	0	0	0	-4
## 1517	0	0	0	0	-4
## 1518	0	0	0	0	4
## 1519	0	0	1	1	-2

## 1520	0	0	1	1	-1
## 1521	0	0	0	0	0
## 1522	0	0	0	0	-8
## 1523	0	1	0	0	-5
## 1524	0	0	0	0	0
## 1525	0	0	1	1	14
## 1526	0	0	0	0	-3
## 1527	0	0	0	0	11
## 1528	0	0	0	0	-6
## 1529	0	0	0	0	-9
## 1530	0	0	0	0	13
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## 1533	0	0	0	0	-6
## 1534	0	0	0	0	-6
## 1535	0	0	0	0	-5
## 1536	0	0	0	0	-5
## 1537	0	0	0	0	-4
## 1538	0	0	0	0	0
## 1539	0	0	0	0	-4
## 1540	0	0	1	1	-4
## 1541	0	0	0	0	-7
## 1542	0	0	0	0	-6
## 1543	0	0	0	0	-4
## 1544	0	1	1	1	-5
## 1545	0	0	0	0	-6
## 1546	0	0	0	0	23
## 1547	0	0	0	0	-6
## 1548	0	0	1	1	-1
## 1549	0	0	0	0	0
## 1550	0	0	0	0	-1
## 1551	0	1	0	0	-4
## 1552	0	0	0	0	-1
## 1553	0	0	0	0	-2
## 1554	0	0	1	1	-1
## 1555	0	0	0	0	-6
## 1556	0	0	0	0	-5
## 1557	0	0	0	0	0
## 1558	0	0	0	0	-2
## 1559	0	0	0	0	6
## 1560	0	0	0	0	4
## 1561	0	0	0	0	-6
## 1562	0	0	0	0	-6
## 1564	0	0	0	0	5
## 1565	0	0	0	0	-7
## 1566	0	0	0	0	-4
## 1567	0	0	0	0	-2
## 1568	0	0	0	0	-3
## 1569	0	0	0	0	-3
## 1570	0	0	0	0	-2
## 1571	0	0	0	0	-6
## 1572	0	0	0	0	-1
## 1573	0	0	0	0	2
## 1574	0	1	0	0	-1
## 1575	0	1	0	0	-7

## 1576	0	0	0	0	-3
## 1577	0	0	0	0	-6
## 1578	0	0	0	0	-3
## 1579	0	0	1	1	-4
## 1580	0	0	1	1	18
## 1581	0	0	0	0	19
## 1582	0	0	0	0	-3
## 1583	0	0	0	0	7
## 1584	0	0	0	0	5
## 1586	0	0	0	0	-8
## 1587	0	0	0	0	-6
## 1588	0	0	0	0	-3
## 1589	0	0	0	0	-3
## 1590	0	0	0	0	-7
## 1591	0	0	0	0	-7
## 1593	0	0	0	0	-1
## 1594	0	0	0	0	-7
## 1595	0	0	0	0	-4
## 1596	0	0	0	0	7
## 1597	0	0	0	0	28
## 1598	0	0	1	1	3
## 1599	0	0	1	1	1
## 1600	0	0	0	0	-4
## 1601	0	0	0	0	-1
## 1602	0	0	0	0	13
## 1603	0	0	0	0	-3
## 1604	0	0	1	1	-9
## 1606	0	0	0	0	29
## 1607	0	0	0	0	0
## 1608	0	0	1	1	-2
## 1609	0	0	0	0	4
## 1610	0	0	0	0	2
## 1611	0	0	0	0	-5
## 1612	0	0	0	0	-2
## 1613	0	0	0	0	-1
## 1614	0	0	0	0	-5
## 1615	0	0	0	0	-5
## 1616	0	0	0	0	-5
## 1617	0	0	1	1	-4
## 1618	0	0	1	1	2
## 1619	0	0	0	0	-1
## 1620	0	0	0	0	-6
## 1622	0	0	0	0	-5
## 1623	0	0	0	0	5
## 1624	0	0	0	0	-3
## 1626	0	0	0	0	3
## 1627	0	0	1	1	5
## 1628	0	0	0	0	-4
## 1629	0	0	1	1	-7
## 1630	0	0	1	1	0
## 1631	0	0	0	0	6
## 1632	0	0	0	0	-2
## 1633	0	0	0	0	-5
## 1634	0	0	0	0	2

## 1635	0	0	0	0	-6
## 1636	0	0	0	0	1
## 1638	0	0	0	0	-4
## 1640	0	0	0	0	7
## 1641	0	0	0	0	-6
## 1642	0	0	1	1	-3
## 1643	0	0	0	0	0
## 1646	0	0	0	0	-3
## 1647	0	0	0	0	-2
## 1648	0	0	0	0	9
## 1649	0	0	0	0	-7
## 1650	0	0	0	0	-3
## 1651	0	0	0	0	-4
## 1652	0	0	0	0	-7
## 1653	0	0	0	0	-1
## 1654	0	0	0	0	-1
## 1655	0	0	0	0	14
## 1656	0	0	0	0	-5
## 1657	0	0	0	0	-8
## 1658	0	0	0	0	-7
## 1659	0	0	0	0	-3
## 1660	0	0	0	0	1
## 1661	0	0	1	0	-2
## 1662	0	0	0	0	2
## 1663	0	0	0	0	-4
## 1664	0	0	0	0	4
## 1665	0	0	0	0	-4
## 1666	0	0	0	0	-3
## 1667	0	0	1	1	18
## 1668	0	0	0	0	6
## 1669	0	0	1	1	21
## 1670	0	0	1	1	9
## 1671	0	0	0	0	-8
## 1672	0	0	0	0	-5
## 1673	0	0	0	0	-5
## 1674	0	0	0	0	-1
## 1675	0	0	0	0	10
## 1676	0	0	1	1	24
## 1677	0	0	0	0	-5
## 1678	0	0	0	0	-2
## 1679	0	0	1	1	0
## 1680	0	1	0	0	12
## 1681	0	0	0	0	3
## 1682	0	0	0	0	3
## 1683	0	0	0	0	-7
## 1684	0	0	0	0	3
## 1685	0	0	1	1	-5
## 1686	0	0	0	0	-8
## 1687	0	0	0	0	10
## 1688	0	0	0	0	0
## 1689	0	0	0	0	-4
## 1690	0	0	1	1	-4
## 1691	0	0	0	0	4
## 1692	0	0	0	0	-4

## 1693	0	0	0	0	7
## 1694	0	0	0	0	5
## 1695	0	0	0	0	-2
## 1696	0	0	0	0	0
## 1697	0	0	1	1	-2
## 1698	0	0	0	0	-7
## 1699	0	0	1	1	-6
## 1701	0	0	0	0	-8
## 1702	0	1	0	0	0
## 1703	0	0	0	0	-3
## 1704	0	0	0	0	-3
## 1705	0	0	1	1	-4
## 1706	0	0	0	0	-8
## 1707	0	0	0	0	1
## 1708	0	0	0	0	29
## 1709	0	0	0	0	0
## 1710	0	0	0	0	0
## 1711	0	0	0	0	6
## 1712	0	0	0	0	12
## 1713	0	0	0	0	12
## 1714	0	0	0	0	25
## 1715	0	0	0	0	17
## 1716	0	0	0	0	-5
## 1717	0	0	0	0	-2
## 1718	0	0	0	0	-3
## 1719	0	0	0	0	13
## 1720	0	0	1	1	-11
## 1721	0	0	0	0	-3
## 1722	0	0	0	0	-12
## 1723	0	0	0	0	-10
## 1724	0	0	0	0	11
## 1726	0	0	1	1	-5
## 1728	0	0	0	0	-3
## 1729	0	0	1	1	-10
## 1730	0	0	0	0	-7
## 1731	0	0	0	0	-6
## 1733	0	0	0	0	-5
## 1734	0	0	1	1	15
## 1735	0	0	1	1	-3
## 1736	0	0	0	0	-2
## 1737	0	0	0	0	19
## 1738	0	0	0	0	-5
## 1739	0	0	0	0	6
## 1740	0	0	0	0	-6
## 1741	0	0	0	0	-6
## 1742	0	0	0	0	-3
## 1743	0	0	0	0	-1
## 1744	0	0	0	0	1
## 1745	0	0	0	0	-2
## 1746	0	0	0	0	1
## 1747	0	0	0	0	-2
## 1748	0	1	0	0	5
## 1749	0	0	0	0	-2
## 1751	0	0	0	0	-1

## 1753	0	0	0	0	-8
## 1755	0	0	1	1	-1
## 1756	0	0	1	1	1
## 1757	0	0	0	0	17
## 1758	0	0	0	0	-1
## 1759	0	0	0	0	-1
## 1760	0	0	0	0	-3
## 1761	0	0	1	1	9
## 1762	0	0	1	1	-4
## 1763	0	0	0	0	-1
## 1764	0	0	0	0	-11
## 1765	0	0	0	0	-5
## 1766	0	0	0	0	0
## 1767	0	0	0	0	2
## 1768	0	1	0	0	19
## 1769	0	0	0	0	0
## 1771	0	1	0	0	-2
## 1772	0	0	0	0	-3
## 1774	0	0	0	0	27
## 1776	0	0	0	0	14
## 1779	0	1	0	0	-4
## 1780	0	0	0	0	-2
## 1781	1	0	0	0	1
## 1782	0	0	0	0	-6
## 1783	0	0	0	0	-4
## 1784	1	0	0	0	-3
## 1785	1	0	1	1	-2
## 1786	0	0	0	0	-2
## 1787	1	0	0	0	-1
## 1788	1	0	0	0	1
## 1789	1	0	1	1	-6
## 1790	1	0	0	0	-3
## 1791	1	1	0	0	0
## 1792	0	0	1	1	-8
## 1793	0	0	0	0	-7
## 1794	1	0	1	1	-5
## 1795	0	0	0	0	-2
## 1796	1	0	1	1	1
## 1797	0	0	0	0	-6
## 1798	1	0	0	0	-5
## 1799	1	0	0	0	-6
## 1800	1	0	1	1	-5
## 1801	1	0	0	0	-1
## 1802	1	0	0	0	-6
## 1803	1	0	0	0	-5
## 1804	0	0	0	0	5
## 1806	1	0	1	1	-7
## 1807	1	0	0	0	-1
## 1808	1	0	0	0	-1
## 1809	1	0	1	1	-4
## 1810	1	0	0	0	0
## 1811	1	0	1	1	11
## 1812	1	0	0	0	-3
## 1813	1	0	0	0	0

## 1814	1	0	0	0	-3
## 1815	1	0	1	0	-6
## 1816	1	1	0	0	1
## 1818	1	0	1	1	-7
## 1819	1	0	0	0	0
## 1820	1	0	0	0	-5
## 1821	1	0	0	0	-5
## 1822	0	0	0	0	-3
## 1823	1	0	0	0	29
## 1824	1	0	1	1	-7
## 1825	1	0	0	0	4
## 1826	1	0	0	0	1
## 1827	1	0	0	0	-2
## 1828	1	0	0	0	9
## 1829	1	0	0	0	-5
## 1830	1	0	0	0	0
## 1831	1	0	1	1	-6
## 1832	1	0	0	0	21
## 1833	1	1	0	0	-5
## 1834	1	0	0	0	0
## 1835	1	0	0	0	0
## 1836	0	0	1	1	-3
## 1837	1	0	0	0	-7
## 1838	1	0	0	0	8
## 1839	1	0	0	0	9
## 1840	1	0	1	0	1
## 1841	0	0	0	0	-5
## 1842	0	0	0	0	0
## 1843	1	0	1	1	4
## 1844	1	0	0	0	5
## 1845	1	0	0	0	-3
## 1846	1	1	0	0	-1
## 1847	1	0	0	0	8
## 1848	1	0	0	0	-1
## 1849	0	0	0	0	-5
## 1850	1	0	0	0	6
## 1851	1	0	1	1	-3
## 1852	1	0	0	0	-2
## 1853	0	0	0	0	-8
## 1854	0	0	0	0	-15
## 1855	1	0	0	0	0
## 1856	1	0	0	0	4
## 1857	1	0	0	0	3
## 1859	0	0	1	1	-8
## 1860	1	0	0	0	4
## 1862	1	0	0	0	0
## 1864	0	0	1	1	-1
## 1865	1	0	0	0	-1
## 1866	1	0	0	0	1
## 1867	1	0	0	0	8
## 1868	1	0	0	0	5
## 1869	1	0	0	0	-4
## 1870	1	0	0	0	-4
## 1871	1	0	0	0	-7

## 1872	1	0	0	0	19
## 1873	1	0	0	0	-6
## 1874	1	0	0	0	1
## 1875	1	0	0	0	-5
## 1876	1	0	0	0	-3
## 1878	1	0	0	0	-3
## 1880	1	0	0	0	-5
## 1881	1	0	0	0	0
## 1882	1	0	0	0	-2
## 1883	0	0	0	0	-7
## 1885	0	0	1	1	-8
## 1887	0	0	0	0	-5
## 1888	0	0	0	0	-3
## 1889	0	0	0	0	1
## 1890	0	0	1	1	-2
## 1891	0	0	1	1	-9
## 1892	0	0	0	0	3
## 1893	0	0	0	0	1
## 1894	0	0	0	0	1
## 1895	0	0	0	0	9
## 1896	0	0	0	0	-5
## 1897	0	0	0	0	9
## 1898	0	0	0	0	-7
## 1899	0	0	0	0	1
## 1900	0	0	0	0	-7
## 1901	0	0	1	1	-7
## 1902	0	0	0	0	-10
## 1903	0	0	0	0	-3
## 1904	0	0	1	1	-7
## 1905	0	0	0	0	-2
## 1906	0	0	0	0	2
## 1907	0	0	0	0	3
## 1908	0	0	0	0	4
## 1909	0	0	0	0	-5
## 1910	0	0	1	1	-4
## 1911	0	0	0	0	0
## 1912	0	0	0	0	12
## 1913	0	0	1	1	-10
## 1914	0	0	0	0	-6
## 1915	0	0	0	0	14
## 1916	0	0	0	0	-1
## 1917	0	0	0	0	-7
## 1918	0	0	0	0	-6
## 1919	0	0	0	0	1
## 1920	0	0	0	0	-5
## 1921	0	0	0	0	-5
## 1922	0	0	0	0	0
## 1923	0	0	1	1	0
## 1924	0	0	0	0	1
## 1925	0	0	0	0	-4
## 1926	0	0	1	1	-1
## 1927	0	0	0	0	-1
## 1928	0	0	0	0	-5
## 1929	0	0	0	0	-4

## 1930	0	0	0	0	-10
## 1931	0	0	0	0	1
## 1932	0	0	0	0	0
## 1933	0	1	0	0	16
## 1934	0	0	0	0	-5
## 1935	0	0	0	0	-5
## 1936	0	0	0	0	-4
## 1937	0	0	0	0	2
## 1938	0	0	0	0	-6
## 1940	0	0	0	0	2
## 1941	0	0	0	0	-2
## 1942	0	0	0	0	1
## 1943	0	0	0	0	-1
## 1944	0	0	0	0	-2
## 1945	0	0	0	0	9
## 1946	0	0	0	0	-5
## 1947	0	0	0	0	1
## 1948	0	0	0	0	0
## 1949	0	0	1	1	-5
## 1951	0	0	0	0	24
## 1952	0	0	0	0	8
## 1953	0	0	0	0	-4
## 1954	0	0	0	0	0
## 1955	0	0	0	0	12
## 1957	0	0	0	0	-4
## 1959	0	0	0	0	2
## 1960	0	0	0	0	4
## 1961	0	0	1	1	-6
## 1962	0	0	0	0	12
## 1963	0	0	0	0	4
## 1964	0	0	0	0	13
## 1965	0	0	0	0	-1
## 1966	0	0	1	1	-11
## 1968	0	0	0	0	4
## 1969	0	0	1	1	-1
## 1970	0	0	1	1	-7
## 1971	0	0	0	0	-6
## 1972	0	0	0	0	-6
## 1973	0	0	0	0	19
## 1975	0	0	0	0	-7
## 1976	0	0	0	0	-1
## 1977	0	0	0	0	-1
## 1978	0	0	0	0	7
## 1979	0	0	0	0	-7
## 1980	0	0	0	0	-11
## 1981	0	0	0	0	-5
## 1982	0	0	0	0	-4
## 1983	0	0	0	0	0
## 1984	0	0	0	0	-8
## 1985	0	0	0	0	-8
## 1986	0	0	0	0	-2
## 1988	0	0	0	0	-4
## 1989	0	0	1	1	-2
## 1990	0	0	0	0	2

## 1991	0	0	0	0	0
## 1992	0	0	0	0	1
## 1993	0	0	0	0	20
## 1995	0	0	1	1	-4
## 1997	0	0	0	0	14
## 1998	0	0	0	0	12
## 1999	0	0	0	0	-1
## 2000	0	0	0	0	-7
## 2001	0	0	1	1	-1
## 2002	0	0	0	0	-2
## 2003	0	0	1	1	-7
## 2004	0	0	1	0	-3
## 2005	0	0	0	0	0
## 2006	0	0	0	0	-5
## 2007	0	0	0	0	2
## 2008	0	0	1	1	-6
## 2012	0	0	0	0	16
## 2013	0	0	0	0	-8
## 2014	0	0	1	1	15
## 2015	0	0	0	0	3
## 2016	0	0	1	1	0
## 2019	0	0	0	0	28
## 2020	0	0	0	0	5
## 2022	0	0	0	0	-5
## 2023	0	0	0	0	-4
## 2024	0	0	0	0	13
## 2025	0	0	1	1	-7
## 2027	0	0	0	0	16
## 2028	0	0	0	0	2
## 2030	0	0	0	0	3
## 2031	0	0	0	0	7
## 2032	0	0	0	0	5
## 2033	0	0	0	0	-6
## 2034	0	0	1	1	-3
## 2035	0	0	0	0	15
## 2036	0	0	0	0	1
## 2037	0	0	0	0	-2
## 2038	0	0	0	0	16
## 2039	0	0	0	0	3
## 2040	0	0	1	1	-9
## 2041	0	0	1	1	-3
## 2042	0	0	0	0	-5
## 2043	0	0	0	0	20
## 2044	0	1	1	1	-2
## 2045	0	0	0	0	-4
## 2046	0	0	0	0	-2
## 2047	0	0	0	0	0
## 2048	0	0	1	1	-2
## 2049	0	0	0	0	-3
## 2050	0	0	0	0	-1
## 2051	0	0	0	0	20
## 2052	0	0	0	0	-1
## 2053	0	0	0	0	-3
## 2055	0	0	0	0	22

## 2056	0	0	1	1	-4
## 2057	0	0	0	0	-4
## 2058	0	0	0	0	7
## 2059	0	0	0	0	10
## 2060	0	0	0	0	-3
## 2062	0	0	0	0	5
## 2063	0	0	0	0	16
## 2064	0	0	0	0	-10
## 2065	0	0	0	0	-3
## 2066	0	0	0	0	-3
## 2067	0	0	0	0	14
## 2068	0	0	0	0	0
## 2069	0	0	0	0	2
## 2070	0	0	0	0	21
## 2071	0	0	0	0	8
## 2072	0	0	0	0	10
## 2074	0	0	1	1	-4
## 2076	0	0	0	0	-4
## 2077	0	0	0	0	19
## 2078	0	0	0	0	-2
## 2079	0	0	0	0	-1
## 2080	0	0	0	0	-10
## 2081	0	0	0	0	-1
## 2083	0	0	0	0	-7
## 2085	0	0	1	1	-6
## 2086	0	0	0	0	-4
## 2087	0	0	0	0	24
## 2088	0	0	1	1	27
## 2089	0	0	0	0	-2
## 2090	0	1	0	0	-1
## 2091	0	0	0	0	6
## 2092	0	0	0	0	-12
## 2093	0	0	0	0	23
## 2094	0	0	0	0	-9
## 2095	0	0	0	0	-5
## 2096	0	0	0	0	6
## 2099	0	0	0	0	-3
## 2100	0	0	0	0	-4
## 2102	0	0	0	0	18
## 2105	0	0	1	1	-9
## 2106	0	1	0	0	-4
## 2107	0	0	0	0	14
## 2108	0	0	0	0	-5
## 2109	0	0	0	0	-5
## 2110	0	0	1	1	-4
## 2111	0	0	0	0	-4
## 2112	0	0	0	0	-4
## 2113	0	0	1	1	-4
## 2114	0	0	0	0	-3
## 2115	0	0	0	0	-5
## 2116	0	0	0	0	-6
## 2117	0	0	1	1	-6
## 2118	0	0	0	0	10
## 2119	0	0	1	1	-2

## 2120	0	0	0	0	2
## 2121	0	0	0	0	12
## 2122	0	0	0	0	-5
## 2123	0	0	0	0	-7
## 2124	0	0	0	0	-6
## 2125	0	0	0	0	-3
## 2126	0	0	0	0	-3
## 2127	0	1	1	1	-2
## 2128	0	0	0	0	0
## 2129	0	0	0	0	-3
## 2130	0	0	1	1	4
## 2131	0	0	0	0	0
## 2132	0	0	0	0	0
## 2133	0	0	0	0	-1
## 2134	0	0	0	0	-8
## 2135	0	0	0	0	-2
## 2136	0	0	0	0	-7
## 2137	0	0	0	0	-5
## 2138	0	0	1	1	-9
## 2139	0	0	0	0	-2
## 2140	0	0	0	0	26
## 2141	0	0	0	0	-4
## 2142	0	0	0	0	0
## 2143	0	0	0	0	-3
## 2144	0	0	0	0	6
## 2145	0	0	0	0	2
## 2146	0	0	1	1	-3
## 2147	0	0	0	0	8
## 2148	0	0	0	0	-7
## 2149	0	0	0	0	7
## 2151	0	0	1	1	0
## 2152	0	0	0	0	-5
## 2153	0	0	0	0	19
## 2154	0	0	0	0	-6
## 2155	0	0	0	0	2
## 2156	0	0	0	0	-5
## 2157	0	0	0	0	8
## 2158	0	0	0	0	-5
## 2159	0	0	0	0	-4
## 2160	0	0	0	0	2
## 2161	0	0	0	0	-7
## 2162	0	0	0	0	12
## 2163	0	0	0	0	-3
## 2164	0	0	0	0	-1
## 2165	0	0	0	0	-2
## 2166	0	1	1	1	-9
## 2167	0	0	0	0	-3
## 2168	0	0	0	0	-4
## 2169	0	0	0	0	-7
## 2170	0	0	0	0	-7
## 2171	0	0	0	0	-7
## 2172	0	0	0	0	11
## 2173	0	0	0	0	-5
## 2174	0	0	0	0	-5

## 2175	0	0	1	1	-5
## 2176	0	0	0	0	-5
## 2177	0	0	0	0	-7
## 2178	0	0	1	1	-3
## 2179	0	0	0	0	13
## 2180	0	0	0	0	-2
## 2182	0	0	0	0	-2
## 2183	0	0	0	0	-3
## 2184	0	0	0	0	-8
## 2185	0	0	0	0	0
## 2186	0	1	0	0	-5
## 2187	0	0	0	0	28
## 2188	0	0	0	0	-3
## 2189	0	0	0	0	2
## 2190	0	0	0	0	-1
## 2191	0	0	0	0	4
## 2192	0	0	0	0	-4
## 2193	0	0	0	0	-4
## 2194	0	1	1	1	-2
## 2195	0	0	0	0	-2
## 2196	0	0	0	0	-10
## 2197	0	0	0	0	-5
## 2198	0	0	1	1	-6
## 2199	0	0	0	0	0
## 2200	0	0	0	0	-5
## 2201	0	0	1	1	-4
## 2202	0	0	0	0	-2
## 2203	0	0	0	0	8
## 2204	0	0	0	0	-2
## 2205	0	0	0	0	7
## 2206	0	0	0	0	-3
## 2207	0	0	0	0	-2
## 2208	0	0	0	0	4
## 2209	0	0	1	1	-9
## 2210	0	0	0	0	10
## 2211	0	0	0	0	-15
## 2212	0	0	0	0	-7
## 2215	0	0	0	0	13
## 2216	0	0	0	0	25
## 2217	0	0	0	0	1
## 2218	0	0	0	0	-5
## 2219	0	0	0	0	10
## 2220	0	0	0	0	-6
## 2221	0	0	0	0	5
## 2222	0	0	1	1	0
## 2223	0	0	0	0	-4
## 2224	0	0	0	0	14
## 2225	0	0	0	0	-7
## 2226	0	0	0	0	-6
## 2227	0	0	0	0	-2
## 2228	0	0	0	0	-9
## 2229	0	0	0	0	-5
## 2230	0	0	0	0	-5
## 2231	0	0	0	0	-3

## 2232	0	0	0	0	-2
## 2233	0	0	0	0	0
## 2235	0	0	0	0	10
## 2236	0	0	1	1	-1
## 2237	0	0	0	0	10
## 2238	0	0	0	0	13
## 2239	0	0	0	0	-7
## 2240	0	0	0	0	0
## 2241	0	0	0	0	2
## 2242	0	0	0	0	-2
## 2243	0	0	0	0	-2
## 2244	0	0	0	0	0
## 2245	0	0	0	0	0
## 2246	0	0	0	0	-3
## 2247	0	0	0	0	8
## 2248	0	0	1	1	-4
## 2249	0	0	0	0	2
## 2250	0	0	1	1	0
## 2251	0	0	0	0	1
## 2252	0	0	0	0	-3
## 2253	0	0	1	1	2
## 2254	0	0	1	1	14
## 2255	0	0	0	0	8
## 2256	0	0	0	0	-5
## 2257	0	0	0	0	13
## 2259	0	0	0	0	-13
## 2260	0	0	0	0	-6
## 2261	0	0	0	0	-2
## 2262	0	0	0	0	-9
## 2263	0	0	0	0	-5
## 2264	0	0	0	0	-2
## 2265	0	1	0	0	4
## 2266	0	0	1	1	-8
## 2267	0	0	0	0	-11
## 2268	0	0	0	0	-3
## 2269	0	0	0	0	0
## 2270	0	0	0	0	-10
## 2271	0	0	0	0	-9
## 2272	0	0	0	0	-7
## 2273	0	0	1	1	-3
## 2274	0	0	0	0	0
## 2275	0	0	0	0	-5
## 2276	0	0	1	1	-7
## 2277	0	0	0	0	5
## 2278	0	0	1	1	-8
## 2279	0	0	0	0	1
## 2280	0	0	0	0	-4
## 2281	0	0	1	1	-11
## 2282	0	0	0	0	-4
## 2283	0	0	0	0	-7
## 2285	0	0	0	0	-2
## 2286	0	0	0	0	-9
## 2287	0	0	0	0	-8
## 2288	0	0	0	0	-6

## 2289	0	0	0	0	-4
## 2290	0	0	0	0	-5
## 2291	0	0	0	0	-4
## 2292	0	0	0	0	0
## 2293	0	0	0	0	2
## 2294	0	0	0	0	4
## 2295	0	0	0	0	-3
## 2296	0	0	1	1	-5
## 2297	0	0	0	0	20
## 2298	0	0	0	0	-3
## 2300	0	0	0	0	-3
## 2301	0	0	0	0	-1
## 2302	0	0	0	0	-1
## 2303	0	0	0	0	-2
## 2304	0	0	0	0	-5
## 2305	0	0	0	0	-5
## 2306	0	0	0	0	-1
## 2307	0	0	0	0	27
## 2308	0	0	1	1	-1
## 2309	0	0	0	0	0
## 2310	0	0	0	0	-4
## 2312	0	0	0	0	13
## 2313	0	0	0	0	-5
## 2314	0	0	0	0	1
## 2315	0	0	0	0	-4
## 2316	0	0	1	1	-6
## 2317	0	0	0	0	10
## 2318	0	0	0	0	-6
## 2319	0	0	0	0	-3
## 2320	0	0	1	1	-2
## 2321	0	0	1	1	-7
## 2322	0	0	0	0	-6
## 2323	0	0	0	0	8
## 2324	0	0	0	0	-6
## 2325	0	0	0	0	15
## 2326	0	0	0	0	11
## 2327	0	0	0	0	-2
## 2328	0	0	0	0	-1
## 2329	0	0	0	0	-3
## 2330	0	0	1	1	-3
## 2331	0	0	0	0	-4
## 2332	0	0	1	1	-7
## 2334	0	0	0	0	7
## 2335	0	0	0	0	0
## 2336	0	0	0	0	-12
## 2337	0	0	0	0	-1
## 2338	0	0	1	1	-1
## 2339	0	0	1	1	-6
## 2340	0	0	0	0	6
## 2341	0	0	0	0	9
## 2343	0	0	0	0	26
## 2344	0	0	0	0	4
## 2345	0	0	0	0	8
## 2346	0	0	0	0	1

## 2347	0	0	0	0	1
## 2348	0	0	1	0	13
## 2349	0	0	0	0	0
## 2350	0	0	0	0	-3
## 2351	0	0	0	0	0
## 2352	0	0	0	0	1
## 2353	0	0	0	0	-9
## 2354	0	0	0	0	-8
## 2355	0	0	0	0	-7
## 2356	0	0	0	0	-4
## 2357	0	0	1	1	0
## 2358	0	0	0	0	15
## 2359	0	0	0	0	1
## 2360	0	0	0	0	11
## 2363	0	0	0	0	25
## 2364	0	0	0	0	11
## 2365	0	0	0	0	16
## 2366	0	0	1	1	-4
## 2367	0	0	0	0	-1
## 2368	0	0	1	1	-7
## 2369	0	0	0	0	5
## 2370	0	0	0	0	-2
## 2371	0	0	0	0	14
## 2372	0	0	0	0	4
## 2373	0	0	0	0	-3
## 2375	0	0	0	0	2
## 2376	0	0	0	0	-2
## 2378	0	0	0	0	-4
## 2379	0	0	0	0	-1
## 2380	0	0	0	0	-5
## 2381	0	0	0	0	-10
## 2383	0	0	0	0	-6
## 2384	0	0	0	0	1
## 2385	0	0	0	0	-3
## 2386	0	0	0	0	-7
## 2387	0	0	1	1	9
## 2388	0	0	0	0	-5
## 2389	0	0	0	0	8
## 2390	0	0	0	0	6
## 2391	0	0	0	0	-4
## 2392	0	0	0	0	-8
## 2395	0	0	0	0	7
## 2396	0	0	1	1	8
## 2397	0	0	0	0	3
## 2398	0	0	1	1	1
## 2399	0	0	0	0	-1
## 2401	0	0	0	0	3
## 2402	0	0	0	0	3
## 2403	0	0	0	0	-4
## 2404	0	0	0	0	2
## 2405	0	0	0	0	-1
## 2406	0	0	0	0	6
## 2407	0	0	0	0	-8
## 2408	0	0	0	0	-5

## 2409	0	0	0	0	14
## 2410	0	0	0	0	7
## 2411	0	0	0	0	-8
## 2412	0	0	0	0	-8
## 2413	0	0	0	0	-7
## 2414	0	0	0	0	-5
## 2415	0	0	1	1	-9
## 2416	0	0	0	0	-3
## 2417	0	0	1	1	-9
## 2418	0	0	1	1	-9
## 2419	0	0	1	0	-11
## 2420	0	0	0	0	-1
## 2421	0	0	0	0	-1
## 2422	0	0	0	0	-3
## 2423	0	0	0	0	18
## 2425	0	0	0	0	-5
## 2426	0	0	0	0	12
## 2427	0	0	0	0	3
## 2428	0	0	1	1	-5
## 2429	0	0	0	0	-8
## 2430	0	0	0	0	-9
## 2431	0	0	0	0	3
## 2432	0	0	0	0	-4
## 2434	0	0	0	0	-12
## 2435	0	0	0	0	-5
## 2436	0	0	0	0	-2
## 2437	0	0	1	1	-1
## 2438	0	0	1	1	-9
## 2439	0	0	0	0	-4
## 2440	0	0	0	0	-2
## 2441	0	0	0	0	-5
## 2442	0	0	1	0	-6
## 2443	0	0	0	0	3
## 2444	0	0	0	0	1
## 2445	0	0	0	0	-2
## 2446	0	0	0	0	-2
## 2447	0	0	1	1	-4
## 2448	0	0	1	1	-2
## 2449	0	0	0	0	-2
## 2450	0	0	0	0	-6
## 2451	0	0	0	0	-2
## 2452	0	0	0	0	14
## 2453	0	0	0	0	29
## 2454	0	0	0	0	14
## 2455	0	0	0	0	-2
## 2456	0	0	0	0	-1
## 2457	0	0	0	0	8
## 2458	0	0	0	0	-5
## 2459	0	0	1	1	-6
## 2460	0	0	0	0	-3
## 2461	0	0	0	0	-1
## 2462	0	0	0	0	4
## 2463	0	0	0	0	-1
## 2464	0	0	0	0	-11

## 2465	0	0	0	0	-4
## 2466	0	0	0	0	-2
## 2467	0	0	0	0	-3
## 2469	0	0	1	1	-1
## 2470	0	0	0	0	-7
## 2471	0	0	0	0	9
## 2472	0	0	0	0	25
## 2475	0	0	0	0	-3
## 2476	0	0	0	0	1
## 2477	0	0	0	0	-7
## 2480	0	0	1	1	-12
## 2481	0	0	0	0	-4
## 2482	0	0	0	0	-2
## 2483	0	0	0	0	0
## 2486	0	0	0	0	0
## 2487	0	1	0	0	-5
## 2489	0	0	0	0	23
## 2492	0	0	0	0	-6
## 2495	0	0	0	0	13
## 2496	0	1	0	0	0
## 2497	0	0	1	1	-2
## 2498	0	0	1	1	-2
## 2499	0	0	1	1	-10
## 2500	0	0	0	0	-7
## 2501	0	0	0	0	-5
## 2502	0	0	1	1	-3
## 2503	0	0	0	0	-2
## 2504	0	0	0	0	-1
## 2505	0	0	1	1	-4
## 2506	0	0	0	0	4
## 2507	0	0	0	0	-3
## 2508	0	0	1	1	-4
## 2509	0	0	0	0	-2
## 2510	0	0	0	0	13
## 2511	0	0	0	0	0
## 2512	0	0	0	0	-11
## 2513	0	0	0	0	-5
## 2514	0	0	0	0	-6
## 2515	0	0	0	0	-2
## 2516	0	0	0	0	-2
## 2517	0	0	0	0	-2
## 2518	0	0	0	0	-4
## 2519	0	0	0	0	-3
## 2520	0	0	0	0	-8
## 2521	0	0	0	0	6
## 2522	0	0	0	0	1
## 2523	0	0	0	0	5
## 2524	0	0	1	1	-8
## 2525	0	0	0	0	-4
## 2526	0	0	0	0	-3
## 2527	0	0	1	1	-9
## 2528	0	0	0	0	-2
## 2529	0	0	0	0	-2
## 2530	0	0	0	0	-1

## 2531	0	0	0	0	0
## 2532	0	0	0	0	-5
## 2533	0	0	0	0	0
## 2534	0	0	0	0	0
## 2535	0	0	0	0	3
## 2536	0	0	0	0	-1
## 2537	0	0	0	0	0
## 2538	0	0	0	0	8
## 2539	0	0	0	0	9
## 2540	0	0	0	0	6
## 2541	0	0	0	0	-2
## 2542	0	0	0	0	-5
## 2543	0	0	0	0	-4
## 2544	0	0	0	0	-2
## 2545	0	0	0	0	-6
## 2546	0	0	0	0	-1
## 2547	0	0	0	0	-1
## 2548	0	0	0	0	-6
## 2549	0	0	0	0	1
## 2550	0	0	0	0	-1
## 2551	0	0	0	0	-3
## 2552	0	0	0	0	-12
## 2553	0	0	0	0	-5
## 2554	0	0	0	0	2
## 2555	0	0	0	0	-1
## 2556	0	0	0	0	0
## 2557	0	0	0	0	-1
## 2558	0	0	0	0	-5
## 2559	0	0	1	1	6
## 2560	0	0	0	0	-4
## 2561	0	0	0	0	-4
## 2562	0	0	0	0	-6
## 2563	0	0	0	0	-5
## 2564	0	0	0	0	10
## 2565	0	0	0	0	-6
## 2566	0	0	0	0	-4
## 2567	0	0	1	1	-8
## 2568	0	0	0	0	-7
## 2569	0	1	0	0	-4
## 2570	0	0	0	0	19
## 2571	0	0	0	0	20
## 2572	0	0	0	0	-7
## 2573	0	0	0	0	13
## 2574	0	0	0	0	-5
## 2575	0	0	0	0	-3
## 2576	0	0	0	0	-5
## 2577	0	0	1	1	-6
## 2578	0	0	0	0	-5
## 2579	0	1	0	0	-3
## 2580	0	0	1	1	-5
## 2581	0	0	0	0	7
## 2582	0	0	0	0	-7
## 2583	0	0	0	0	5
## 2584	0	0	0	0	-4

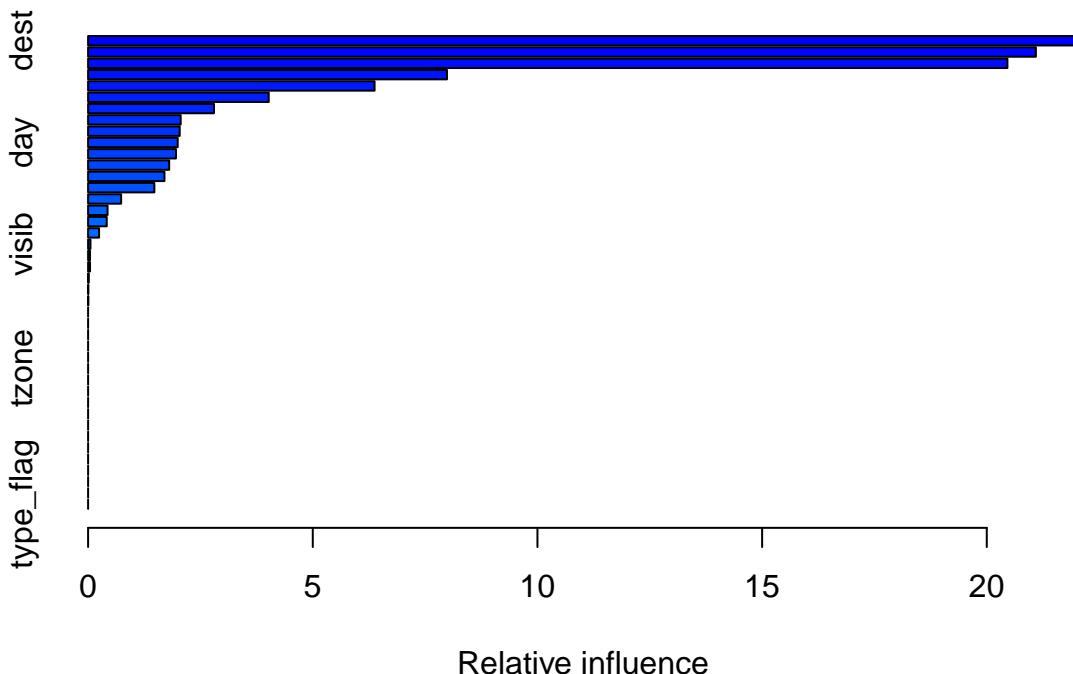
```

## 2585      0      1      1      1      1
## 2586      0      0      0      0     -8
## 2587      0      0      0      0     -3
## 2588      0      0      1      1     -2
## 2589      0      0      0      0     -8
## 2590      0      0      0      0     11
## 2591      0      0      0      0     -7
## 2592      0      0      0      0     -2
## 2593      0      0      0      0     -6
## 2594      0      0      0      0     -3
## 2595      0      0      0      0     -4
## 2596      0      0      0      0     -4
## 2597      0      0      1      1     -7
## 2598      0      0      0      0     -2
## 2599      0      0      0      0      5
## 2600      0      1      0      0      1
## 2601      0      0      0      0     -4
## 2602      0      0      0      0     -7
## 2603      0      0      0      0     -2
## 2604      0      0      0      0     -9
## 2605      0      0      0      0     15
## 2606      0      0      0      0     -1
## 2607      0      0      0      0      7
## 2608      0      0      0      0     -2
## 2609      0      0      0      0      1
## 2610      0      0      0      0     -8
## 2611      0      0      0      0     -3
## 2612      0      0      0      0      0
## 2613      0      0      1      1     -7
## 2614      0      0      0      0     -5
## 2615      0      0      0      0     -4
## 2616      0      0      0      0      2
## 2617      0      0      0      0     15
## 2618      0      0      0      0      7
## 2619      0      0      0      0     -6
## [ reached 'max' / getOption("max.print") -- omitted 114393 rows ]
num_trees <- 2^13
set.seed(42)

destfile <- "models_ultimate/final_train_on_train_and_validation_gbm_v1.rds"
if (!file.exists(destfile)) {
  train_final_gbm(destfile)
}

final_model <- readRDS(destfile)
final_preds = predict(final_model, newdata=final_test_df, n.trees=num_trees)
final_rmse = sqrt(mean((final_test_df$dep_delay - final_preds)^2))
summary(final_model)

```



```

##                                     var      rel.inf
## dest                               dest 22.25381765
## sched_dep_time_num_minute sched_dep_time_num_minute 21.09228564
## model                             model 20.45894347
## month                            month  7.98661863
## carrier                           carrier 6.37527061
## dewp                                dewp  4.01976517
## origin                             origin 2.80117601
## precip                            precip 2.06055864
## pressure                           pressure 2.03864363
## day                                 day   1.99401600
## sched_arr_time_num_minute sched_arr_time_num_minute 1.95561859
## dep_delay_flag                      dep_delay_flag 1.80418829
## humid                                humid 1.69910915
## temp                                 temp  1.47431690
## wind_speed                          wind_speed 0.73476017
## sched_dep_time_minute                sched_dep_time_minute 0.43305222
## name                                name  0.41477025
## pressure_flag                        pressure_flag 0.24412420
## visib                                visib 0.05216855
## sched_arr_time_minute                sched_arr_time_minute 0.04287644
## wind_dir                            wind_dir 0.04284273
## manufacturer                         manufacturer 0.01357422
## sched_air_time                        sched_air_time 0.00389522
## distance                            distance 0.00360764
## lat                                  lat  0.00000000
## lon                                  lon  0.00000000
## alt                                  alt  0.00000000
## tz                                   tz  0.00000000
## dst                                  dst  0.00000000
## tzzone                              tzzone 0.00000000
## year.y                             year.y 0.00000000

```

Departure Delay vs. Scheduled Departure Time in # Minutes Since Start of

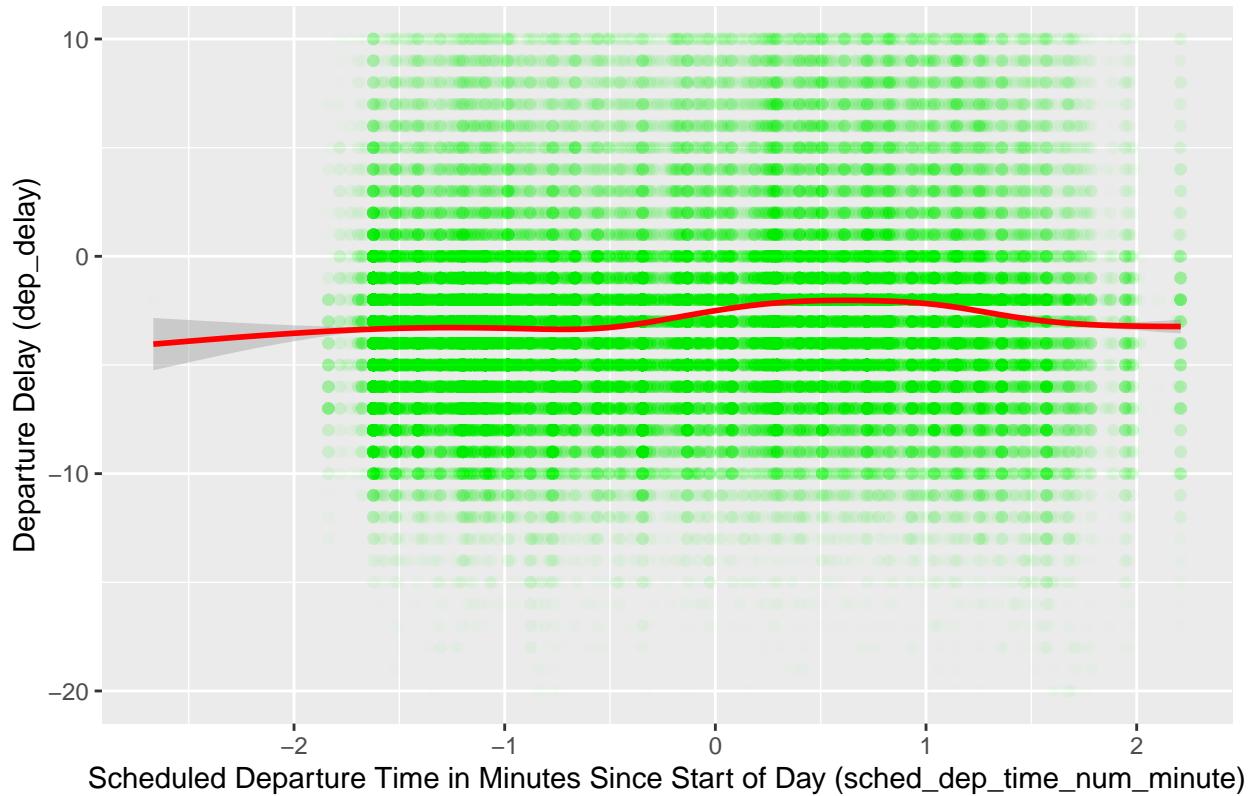


Figure 3: Departure Delay vs. Scheduled Departure Time in # Minutes Since Start of Day with Spline Plotted on Top Depicting Possible Non-Linear Relationship

```

## type                         type  0.00000000
## engines                       engines 0.00000000
## seats                          seats 0.00000000
## engine                         engine 0.00000000
## temp_flag                      temp_flag 0.00000000
## wind_dir_flag                  wind_dir_flag 0.00000000
## wind_speed_flag                wind_speed_flag 0.00000000
## precip_flag                    precip_flag 0.00000000
## name_flag                      name_flag 0.00000000
## year.y_flag                    year.y_flag 0.00000000
## type_flag                      type_flag 0.00000000

print(final_rmse)

## [1] 7.88805

## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
## Warning: Removed 19882 rows containing non-finite values (stat_smooth).
## Warning: Removed 19882 rows containing missing values (geom_point).
print("done")

## [1] "done"

```

References

“Gradient Boosting Machines · UC Business Analytics R Programming Guide.” 2019. http://uc-r.github.io/gbm_regression#h2o.