Zeppelin

class2

default

FINISHED

```
%spark
import org.apache.spark.sql.functions._
import org.joda.time.format.DateTimeFormat
```

```
import org.apache.spark.sql.functions._
import org.joda.time.format.DateTimeFormat
```

Took 27 sec. Last updated by anonymous at January 20 2017, 11:29:29 AM.

FINISHED

```
val inputPath =  "/Users/jyothi/Downloads/data/*.csv"
val airTraffic = sqlContext.read
        .format("com.databricks.spark.csv")
        .option("header", "true") // Use first line of all files as header
        .option("delimiter", ",")
        .option("inferSchema", "true") // Automatically infer data types
        .load(inputPath)
```

```
inputPath: String = /Users/jyothi/Downloads/data/*.csv
airTraffic: org.apache.spark.sql.DataFrame = [Year: int, Month: int ... 27 more fields]
```

Took 3 min 28 sec. Last updated by anonymous at January 20 2017, 11:36:15 AM.

FINISHED

```
val calcDayOfYear = udf(
    (dayOfMonth: Int, month: Int, year: Int) => {
        val dateFormat = DateTimeFormat.forPattern("dd/MM/yyyy")
        dateFormat.parseDateTime(s"$dayOfMonth/$month/$year").getDayOfYear()
    }
)
```

```
warning: Class org.joda.convert.FromString not found - continuing with a stub.
warning: Class org.joda.convert.ToString not found - continuing with a stub.
warning: Class org.joda.convert.ToString not found - continuing with a stub.
calcDayOfYear: org.apache.spark.sql.expressions.UserDefinedFunction = UserDefinedFunction(<fun
ction3>,IntegerType,Some(List(IntegerType, IntegerType, IntegerType)))
```

Took 4 sec. Last updated by anonymous at January 20 2017, 11:37:01 AM.

FINISHED

```
val calcRoute = udf(
    (origin: String, dest: String) => s"$origin - $dest"
)
val calcHourOfArrival = udf(
    (arrTime: String) => arrTime.slice(0,arrTime.size-2)
)
```

```
calcRoute: org.apache.spark.sql.expressions.UserDefinedFunction = UserDefinedFunction(<functio
n2>,StringType,Some(List(StringType, StringType)))
calcHourOfArrival: org.apache.spark.sql.expressions.UserDefinedFunction = UserDefinedFunction
(<function1>,StringType,Some(List(StringType)))
```

Took 4 sec. Last updated by anonymous at January 20 2017, 11:37:07 AM.

FINISHED

```
val featuredTraffic = airTraffic
    .withColumn("DayOfYear", calcDayOfYear(airTraffic("DayOfMonth"), airTraffic("Month"), air
    .withColumn("HourOfArr", calcHourOfArrival(airTraffic("ArrTime")))
    .withColumn("Route", calcRoute(airTraffic("Origin"), airTraffic("Dest")))
```

```
featuredTraffic: org.apache.spark.sql.DataFrame = [Year: int, Month: int ... 30 more fields]
```

Took 2 sec. Last updated by anonymous at January 20 2017, 11:37:10 AM.

FINISHED

```
featuredTraffic.registerTempTable("air_traffic")
```

```
warning: there was one deprecation warning; re-run with -deprecation for details
```

Took 3 sec. Last updated by anonymous at January 20 2017, 11:37:17 AM.

FINISHED

```
%sql
select DayOfYear, count(*) as NrOfFlights, avg(DepDelay) as AvgDepDelay, avg(ArrDelay) as Avg
DayOfYear having NrOfFlights > 100000
```

DayOfYear	NrOfFlights	AvgDepDelay
148	197,353	7.59018
243	201,007	6.73581
31	200,810	8.38126
85	204,282	7.78211
137	203,693	8.61366
251	199,315	4.20382
65	206,041	9.45782
53	204,590	11.6728
255	201,085	4.60038

Took 3 min 6 sec. Last updated by anonymous at January 20 2017, 10:39:35 AM.

FINISHED

```
%sql
select HourOfArr, count(*) as NrFlights, avg(ArrDelay) as AvgArrDelay from air_traffic where I
)|3(Wednesday)|4(Thursday)|5(Friday)|6(Saturday)|7(Sunday)} and Origin = "${org=ATL,ATL|PHX|P
```

org

ATL

day

class2 |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled

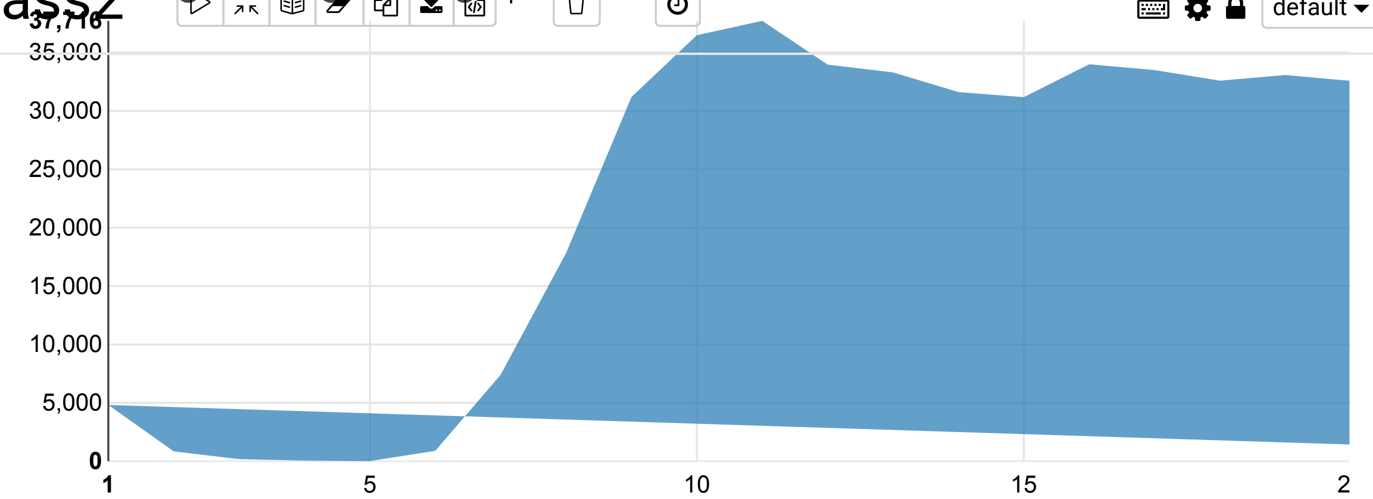
Zeppelin

settings ▾

class2

○ Stacked ○ Stream ○ Expanded

default ▾



Took 1 min 59 sec. Last updated by anonymous at January 20 2017, 11:21:12 AM.

FINISHED ▷

```
%pyspark
```

Took 17 sec. Last updated by anonymous at January 20 2017, 6:44:44 AM. (outdated)

FINISHED ▷

```
%pyspark
import seaborn as sns
```

Took 10 sec. Last updated by anonymous at January 20 2017, 11:37:41 AM.

FINISHED ▷

```
%pyspark

import matplotlib
matplotlib.use('Agg')
import matplotlib.pyplot as plt
```

```
/Users/jyothi/anaconda/lib/python3.5/site-packages/matplotlib/__init__.py:1357: UserWarning:
 This call to matplotlib.use() has no effect
because the backend has already been chosen;
matplotlib.use() must be called *before* pylab, matplotlib.pyplot,
or matplotlib.backends is imported for the first time.
  warnings.warn(_use_error_msg)
```

Took 0 sec. Last updated by anonymous at January 20 2017, 11:38:11 AM.

FINISHED ▷

```
%pyspark
from io import StringIO
```

class2 |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled

Zeppelin

sec. Last updated by anonymous at January 20 2017, 11:38:39 AM.

class2

FINISHED default

```
%pyspark
def show(p):
  img = StringIO.StringIO()
  p.savefig(img, format='svg')
  img.seek(0)
  print( "%html " + img.buf)
df = sqlContext.sql("SELECT Dest, Month, count(*) as NrOfFlights, avg(ArrDelay) as AvgArrDela
Month")
data = df.toPandas()
```

Took 2 min 14 sec. Last updated by anonymous at January 20 2017, 11:41:07 AM.

FINISHED

```
%pyspark

value = "AvgArrDelay"
x = "Dest"
grouping = ["Month"]

heatmap_data = data.pivot_table(values=value, index=x, columns=grouping)
heatmap_data = heatmap_data[0:100]
```

Took 0 sec. Last updated by anonymous at January 20 2017, 11:53:52 AM.

FINISHED

```
%pyspark
a4_dims = (len(heatmap_data.columns),50)
fig, ax = plt.subplots(figsize=a4_dims)
ax.set_title("Avg Arrival Delay")
sns.heatmap(heatmap_data, ax=ax, annot=True, fmt=".02f")
```

```
<matplotlib.axes._subplots.AxesSubplot object at 0x11400ef60>
```

Took 2 sec. Last updated by anonymous at January 20 2017, 11:54:02 AM.

FINISHED

```
%pyspark
def show(p):
  img = StringIO()
  p.savefig(img, format='svg')
  img.seek(0)
  print( "%html " + img.read())
```

Took 0 sec. Last updated by anonymous at January 20 2017, 11:54:09 AM.

FINISHED

```
%pyspark
show(plt)
```

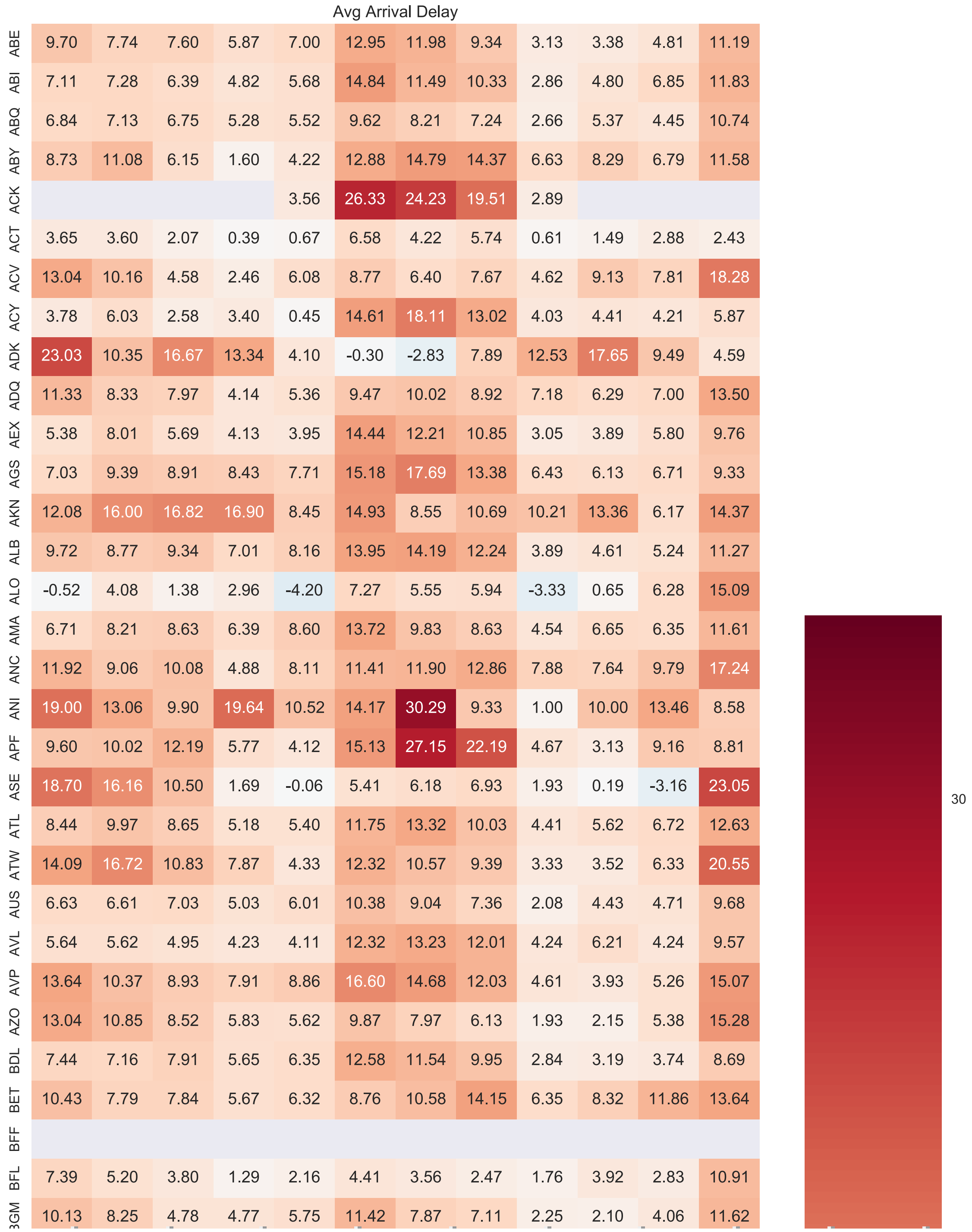
class2

class2 |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled |Untitled

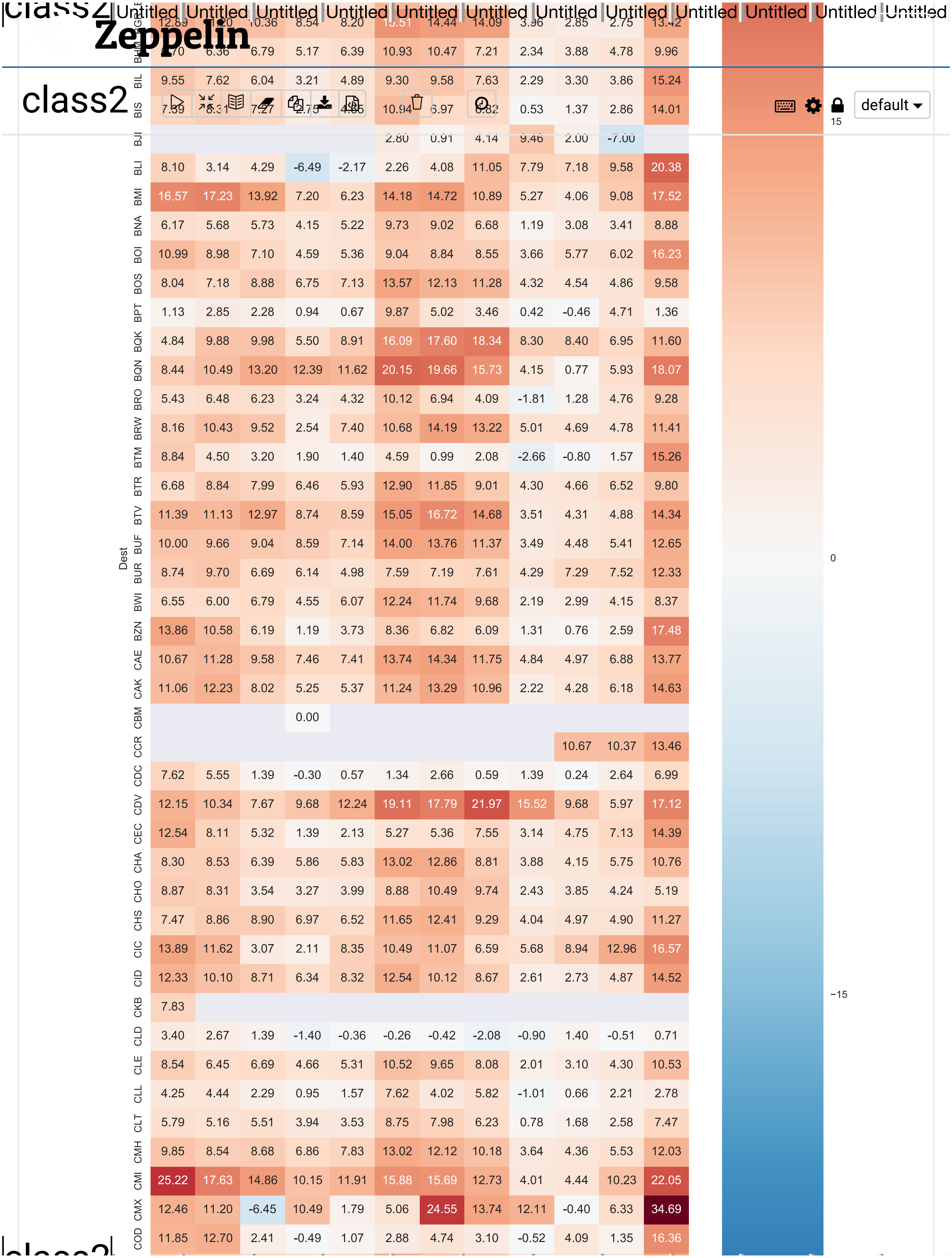
Zeppelin

class2

default



ABE	9.70	7.74	7.60	5.87	7.00	12.95	11.98	9.34	3.13	3.38	4.81	11.19
ABI	7.11	7.28	6.39	4.82	5.68	14.84	11.49	10.33	2.86	4.80	6.85	11.83
ABQ	6.84	7.13	6.75	5.28	5.52	9.62	8.21	7.24	2.66	5.37	4.45	10.74
ABY	8.73	11.08	6.15	1.60	4.22	12.88	14.79	14.37	6.63	8.29	6.79	11.58
ACK					3.56	26.33	24.23	19.51	2.89			
ACT	3.65	3.60	2.07	0.39	0.67	6.58	4.22	5.74	0.61	1.49	2.88	2.43
ACV	13.04	10.16	4.58	2.46	6.08	8.77	6.40	7.67	4.62	9.13	7.81	18.28
ACY	3.78	6.03	2.58	3.40	0.45	14.61	18.11	13.02	4.03	4.41	4.21	5.87
ADK	23.03	10.35	16.67	13.34	4.10	-0.30	-2.83	7.89	12.53	17.65	9.49	4.59
ADQ	11.33	8.33	7.97	4.14	5.36	9.47	10.02	8.92	7.18	6.29	7.00	13.50
AEX	5.38	8.01	5.69	4.13	3.95	14.44	12.21	10.85	3.05	3.89	5.80	9.76
AGS	7.03	9.39	8.91	8.43	7.71	15.18	17.69	13.38	6.43	6.13	6.71	9.33
AKN	12.08	16.00	16.82	16.90	8.45	14.93	8.55	10.69	10.21	13.36	6.17	14.37
ALB	9.72	8.77	9.34	7.01	8.16	13.95	14.19	12.24	3.89	4.61	5.24	11.27
ALO	-0.52	4.08	1.38	2.96	-4.20	7.27	5.55	5.94	-3.33	0.65	6.28	15.09
AMA	6.71	8.21	8.63	6.39	8.60	13.72	9.83	8.63	4.54	6.65	6.35	11.61
ANC	11.92	9.06	10.08	4.88	8.11	11.41	11.90	12.86	7.88	7.64	9.79	17.24
ANI	19.00	13.06	9.90	19.64	10.52	14.17	30.29	9.33	1.00	10.00	13.46	8.58
APF	9.60	10.02	12.19	5.77	4.12	15.13	27.15	22.19	4.67	3.13	9.16	8.81
ASE	18.70	16.16	10.50	1.69	-0.06	5.41	6.18	6.93	1.93	0.19	-3.16	23.05
ATL	8.44	9.97	8.65	5.18	5.40	11.75	13.32	10.03	4.41	5.62	6.72	12.63
ATW	14.09	16.72	10.83	7.87	4.33	12.32	10.57	9.39	3.33	3.52	6.33	20.55
AUS	6.63	6.61	7.03	5.03	6.01	10.38	9.04	7.36	2.08	4.43	4.71	9.68
AVL	5.64	5.62	4.95	4.23	4.11	12.32	13.23	12.01	4.24	6.21	4.24	9.57
AVP	13.64	10.37	8.93	7.91	8.86	16.60	14.68	12.03	4.61	3.93	5.26	15.07
AZO	13.04	10.85	8.52	5.83	5.62	9.87	7.97	6.13	1.93	2.15	5.38	15.28
BDL	7.44	7.16	7.91	5.65	6.35	12.58	11.54	9.95	2.84	3.19	3.74	8.69
BET	10.43	7.79	7.84	5.67	6.32	8.76	10.58	14.15	6.35	8.32	11.86	13.64
BFF												
BFL	7.39	5.20	3.80	1.29	2.16	4.41	3.56	2.47	1.76	3.92	2.83	10.91
BGM	10.13	8.25	4.78	4.77	5.75	11.42	7.87	7.11	2.25	2.10	4.06	11.62



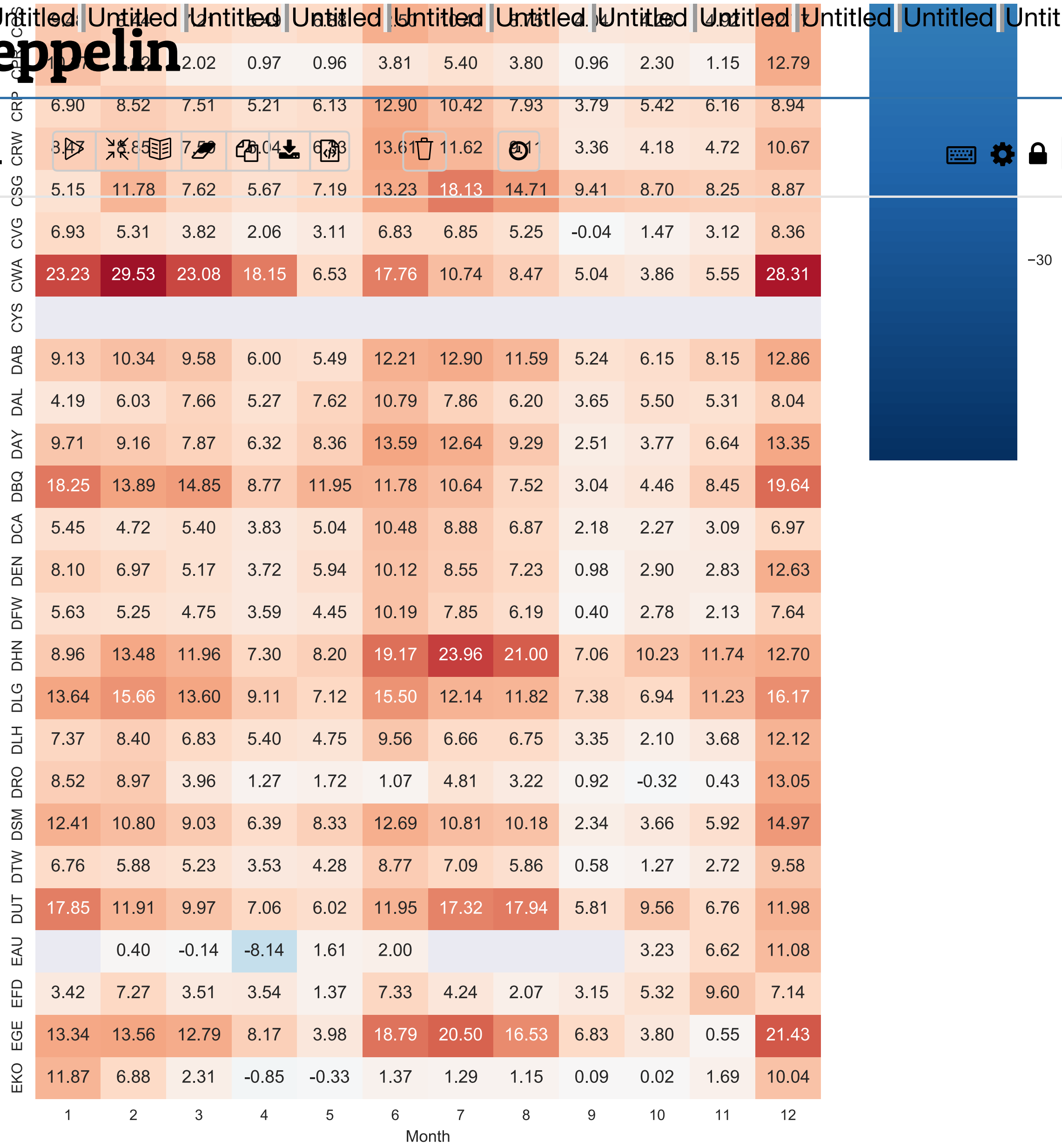
Dest												
BGR	12.89	11.20	10.36	8.54	8.20	15.51	14.44	14.09	3.96	2.85	2.75	13.42
BHM	6.70	6.36	6.79	5.17	6.39	10.93	10.47	7.21	2.34	3.88	4.78	9.96
BIL	9.55	7.62	6.04	3.21	4.89	9.30	9.58	7.63	2.29	3.30	3.86	15.24
BIS	7.39	8.31	7.27	2.75	4.65	10.94	6.97	6.82	0.53	1.37	2.86	14.01
BJI						2.80	0.91	4.14	9.46	2.00	-7.00	
BLI	8.10	3.14	4.29	-6.49	-2.17	2.26	4.08	11.05	7.79	7.18	9.58	20.38
BMI	16.57	17.23	13.92	7.20	6.23	14.18	14.72	10.89	5.27	4.06	9.08	17.52
BNA	6.17	5.68	5.73	4.15	5.22	9.73	9.02	6.68	1.19	3.08	3.41	8.88
BOI	10.99	8.98	7.10	4.59	5.36	9.04	8.84	8.55	3.66	5.77	6.02	16.23
BOS	8.04	7.18	8.88	6.75	7.13	13.57	12.13	11.28	4.32	4.54	4.86	9.58
BPT	1.13	2.85	2.28	0.94	0.67	9.87	5.02	3.46	0.42	-0.46	4.71	1.36
BQK	4.84	9.88	9.98	5.50	8.91	16.09	17.60	18.34	8.30	8.40	6.95	11.60
BQN	8.44	10.49	13.20	12.39	11.62	20.15	19.66	15.73	4.15	0.77	5.93	18.07
BRO	5.43	6.48	6.23	3.24	4.32	10.12	6.94	4.09	-1.81	1.28	4.76	9.28
BRW	8.16	10.43	9.52	2.54	7.40	10.68	14.19	13.22	5.01	4.69	4.78	11.41
BTM	8.84	4.50	3.20	1.90	1.40	4.59	0.99	2.08	-2.66	-0.80	1.57	15.26
BTR	6.68	8.84	7.99	6.46	5.93	12.90	11.85	9.01	4.30	4.66	6.52	9.80
BTV	11.39	11.13	12.97	8.74	8.59	15.05	16.72	14.68	3.51	4.31	4.88	14.34
BUF	10.00	9.66	9.04	8.59	7.14	14.00	13.76	11.37	3.49	4.48	5.41	12.65
BUR	8.74	9.70	6.69	6.14	4.98	7.59	7.19	7.61	4.29	7.29	7.52	12.33
BWI	6.55	6.00	6.79	4.55	6.07	12.24	11.74	9.68	2.19	2.99	4.15	8.37
BZN	13.86	10.58	6.19	1.19	3.73	8.36	6.82	6.09	1.31	0.76	2.59	17.48
CAE	10.67	11.28	9.58	7.46	7.41	13.74	14.34	11.75	4.84	4.97	6.88	13.77
CAK	11.06	12.23	8.02	5.25	5.37	11.24	13.29	10.96	2.22	4.28	6.18	14.63
CBM				0.00								
CCR										10.67	10.37	13.46
CDC	7.62	5.55	1.39	-0.30	0.57	1.34	2.66	0.59	1.39	0.24	2.64	6.99
CDV	12.15	10.34	7.67	9.68	12.24	19.11	17.79	21.97	15.52	9.68	5.97	17.12
CEC	12.54	8.11	5.32	1.39	2.13	5.27	5.36	7.55	3.14	4.75	7.13	14.39
CHA	8.30	8.53	6.39	5.86	5.83	13.02	12.86	8.81	3.88	4.15	5.75	10.76
CHO	8.87	8.31	3.54	3.27	3.99	8.88	10.49	9.74	2.43	3.85	4.24	5.19
CHS	7.47	8.86	8.90	6.97	6.52	11.65	12.41	9.29	4.04	4.97	4.90	11.27
CIC	13.89	11.62	3.07	2.11	8.35	10.49	11.07	6.59	5.68	8.94	12.96	16.57
CID	12.33	10.10	8.71	6.34	8.32	12.54	10.12	8.67	2.61	2.73	4.87	14.52
CKB	7.83											
CLD	3.40	2.67	1.39	-1.40	-0.36	-0.26	-0.42	-2.08	-0.90	1.40	-0.51	0.71
CLE	8.54	6.45	6.69	4.66	5.31	10.52	9.65	8.08	2.01	3.10	4.30	10.53
CLL	4.25	4.44	2.29	0.95	1.57	7.62	4.02	5.82	-1.01	0.66	2.21	2.78
CLT	5.79	5.16	5.51	3.94	3.53	8.75	7.98	6.23	0.78	1.68	2.58	7.47
CMH	9.85	8.54	8.68	6.86	7.83	13.02	12.12	10.18	3.64	4.36	5.53	12.03
CMI	25.22	17.63	14.86	10.15	11.91	15.88	15.69	12.73	4.01	4.44	10.23	22.05
CMX	12.46	11.20	-6.45	10.49	1.79	5.06	24.55	13.74	12.11	-0.40	6.33	34.69
COD	11.85	12.70	2.41	-0.49	1.07	2.88	4.74	3.10	-0.52	4.09	1.35	16.36

class2 Untitled Untitled Untitled Untitled Untitled Untitled Untitled Untitled Untitled Untitled Untitled Untitled

Zeppelin

class2

default



	1	2	3	4	5	6	7	8	9	10	11	12
COS	[illegible]	8.44	[illegible]	6.49	6.88	[illegible]	10.41	8.75	[illegible]	4.26	4.92	[illegible]
CPR	10.37	[illegible]	2.02	0.97	0.96	3.81	5.40	3.80	0.96	2.30	1.15	12.79
CRP	6.90	8.52	7.51	5.21	6.13	12.90	10.42	7.93	3.79	5.42	6.16	8.94
CRW	3.47	8.85	7.50	6.04	6.33	13.61	11.62	9.11	3.36	4.18	4.72	10.67
CSG	5.15	11.78	7.62	5.67	7.19	13.23	18.13	14.71	9.41	8.70	8.25	8.87
CVG	6.93	5.31	3.82	2.06	3.11	6.83	6.85	5.25	-0.04	1.47	3.12	8.36
CWA	23.23	29.53	23.08	18.15	6.53	17.76	10.74	8.47	5.04	3.86	5.55	28.31
CYS												
DAB	9.13	10.34	9.58	6.00	5.49	12.21	12.90	11.59	5.24	6.15	8.15	12.86
DAL	4.19	6.03	7.66	5.27	7.62	10.79	7.86	6.20	3.65	5.50	5.31	8.04
DAY	9.71	9.16	7.87	6.32	8.36	13.59	12.64	9.29	2.51	3.77	6.64	13.35
DBQ	18.25	13.89	14.85	8.77	11.95	11.78	10.64	7.52	3.04	4.46	8.45	19.64
DCA	5.45	4.72	5.40	3.83	5.04	10.48	8.88	6.87	2.18	2.27	3.09	6.97
DEN	8.10	6.97	5.17	3.72	5.94	10.12	8.55	7.23	0.98	2.90	2.83	12.63
DFW	5.63	5.25	4.75	3.59	4.45	10.19	7.85	6.19	0.40	2.78	2.13	7.64
DHN	8.96	13.48	11.96	7.30	8.20	19.17	23.96	21.00	7.06	10.23	11.74	12.70
DLG	13.64	15.66	13.60	9.11	7.12	15.50	12.14	11.82	7.38	6.94	11.23	16.17
DLH	7.37	8.40	6.83	5.40	4.75	9.56	6.66	6.75	3.35	2.10	3.68	12.12
DRO	8.52	8.97	3.96	1.27	1.72	1.07	4.81	3.22	0.92	-0.32	0.43	13.05
DSM	12.41	10.80	9.03	6.39	8.33	12.69	10.81	10.18	2.34	3.66	5.92	14.97
DTW	6.76	5.88	5.23	3.53	4.28	8.77	7.09	5.86	0.58	1.27	2.72	9.58
DUT	17.85	11.91	9.97	7.06	6.02	11.95	17.32	17.94	5.81	9.56	6.76	11.98
EAU		0.40	-0.14	-8.14	1.61	2.00				3.23	6.62	11.08
EFD	3.42	7.27	3.51	3.54	1.37	7.33	4.24	2.07	3.15	5.32	9.60	7.14
EGE	13.34	13.56	12.79	8.17	3.98	18.79	20.50	16.53	6.83	3.80	0.55	21.43
EKO	11.87	6.88	2.31	-0.85	-0.33	1.37	1.29	1.15	0.09	0.02	1.69	10.04

Took 5 sec. Last updated by anonymous at January 20 2017, 11:54:17 AM.

FINISHED

class2

FINISHED

```
%pyspark
from wordcloud import WordCloud
```

Took 0 sec. Last updated by anonymous at January 20 2017, 12:12:07 PM.

FINISHED

```
%pyspark
from io import StringIO
def show(p):
  img = StringIO()
  p.savefig(img, format='svg')
  img.seek(0)
  print( "%html " + img.read())
routes = sqlContext.sql("SELECT Route, count(*) as Count FROM air_traffic GROUP BY Route").co
route_freq = [(x[0],x[1]) for x in routes]
wordcloud = WordCloud().generate_from_frequencies(route_freq)
image = wordcloud.to_image()
image.show()
```

Took 2 min 24 sec. Last updated by anonymous at January 20 2017, 12:04:35 PM.

FINISHED

```
%pyspark
from io import StringIO
def show(p):
  img =StringIO()
  p.savefig(img, format='svg')
  img.seek(0)
  print( "%html " + img.read())
```

Took 0 sec. Last updated by anonymous at January 20 2017, 12:14:30 PM.

FINISHED

```
%pyspark
import matplotlib.pyplot as plt

#define some data
x = [1,2,3,4]
y = [20, 21, 20.5, 20.8]
```

Took 0 sec. Last updated by anonymous at January 20 2017, 12:14:32 PM.

FINISHED

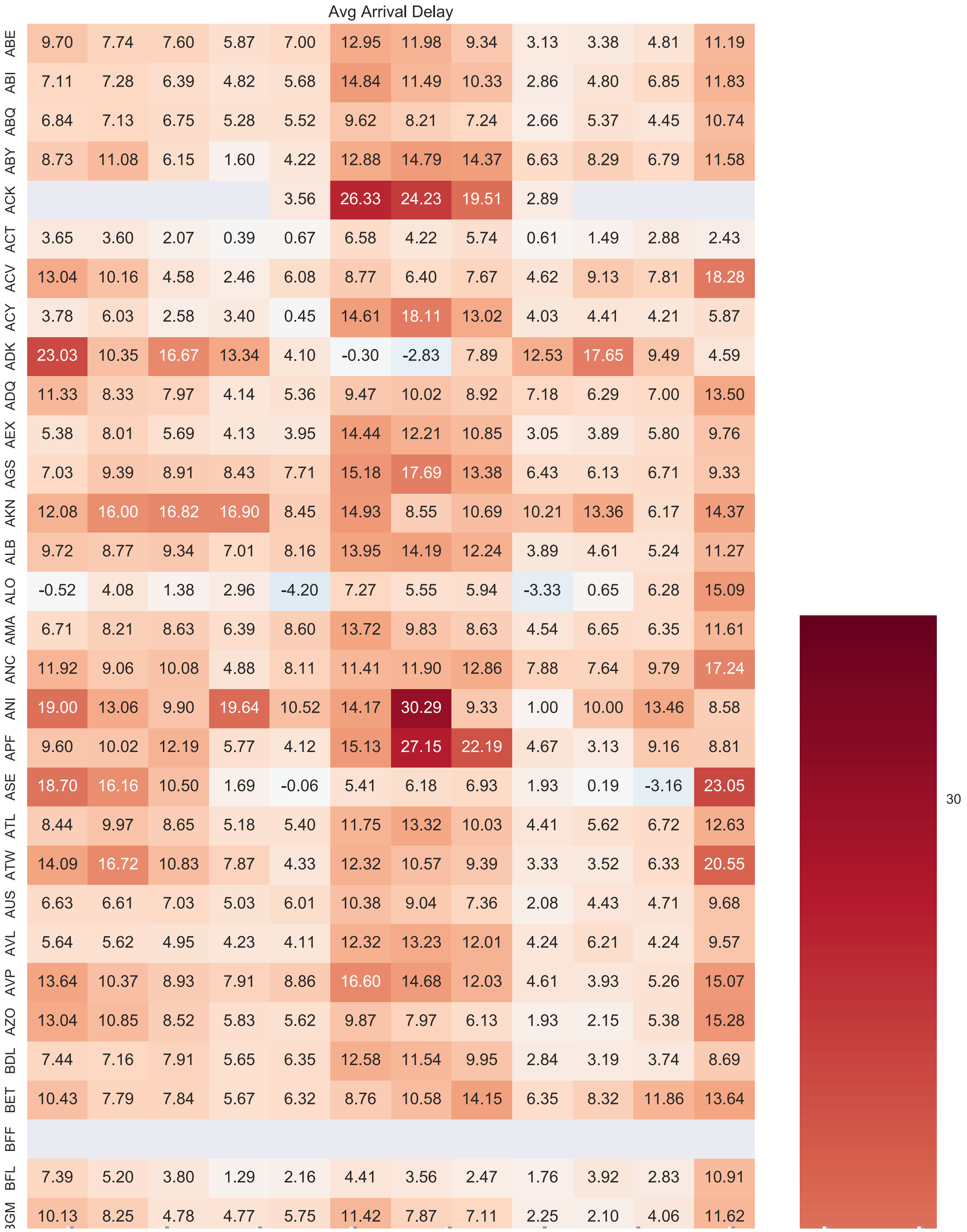
```
%pyspark
plt.plot(x, y, linestyle="dashed", marker="o", color="green")
show(plt)
```

class2 | Untitled | Untitled | Untitled | Untitled | Untitled | Untitled | Untitled | Untitled | Untitled | Untitled | Untitled | Untitled

Zeppelin

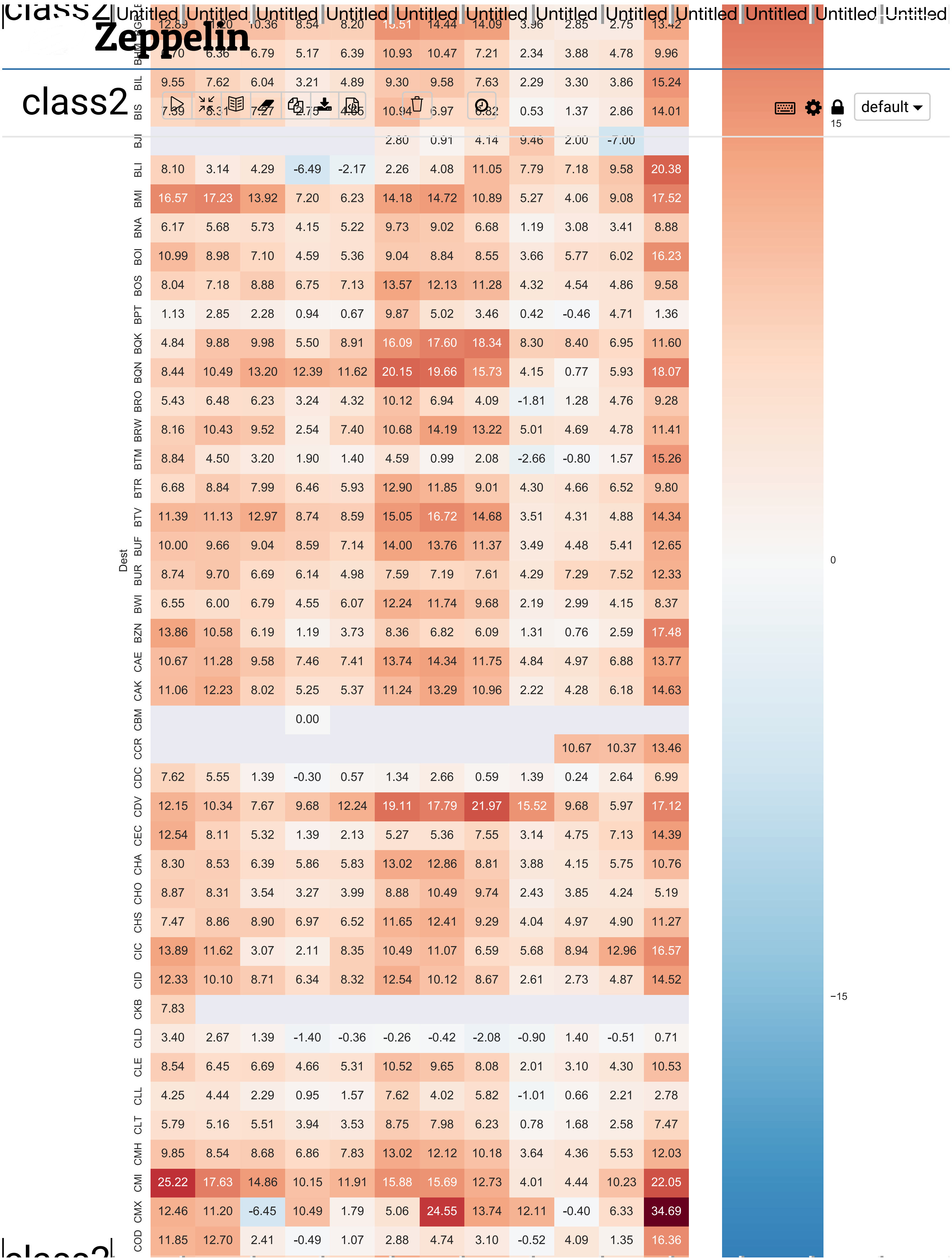
class2

default



ABE	9.70	7.74	7.60	5.87	7.00	12.95	11.98	9.34	3.13	3.38	4.81	11.19
ABI	7.11	7.28	6.39	4.82	5.68	14.84	11.49	10.33	2.86	4.80	6.85	11.83
ABQ	6.84	7.13	6.75	5.28	5.52	9.62	8.21	7.24	2.66	5.37	4.45	10.74
ABY	8.73	11.08	6.15	1.60	4.22	12.88	14.79	14.37	6.63	8.29	6.79	11.58
ACK					3.56	26.33	24.23	19.51	2.89			
ACT	3.65	3.60	2.07	0.39	0.67	6.58	4.22	5.74	0.61	1.49	2.88	2.43
ACV	13.04	10.16	4.58	2.46	6.08	8.77	6.40	7.67	4.62	9.13	7.81	18.28
ACY	3.78	6.03	2.58	3.40	0.45	14.61	18.11	13.02	4.03	4.41	4.21	5.87
ADK	23.03	10.35	16.67	13.34	4.10	-0.30	-2.83	7.89	12.53	17.65	9.49	4.59
ADQ	11.33	8.33	7.97	4.14	5.36	9.47	10.02	8.92	7.18	6.29	7.00	13.50
AEX	5.38	8.01	5.69	4.13	3.95	14.44	12.21	10.85	3.05	3.89	5.80	9.76
AGS	7.03	9.39	8.91	8.43	7.71	15.18	17.69	13.38	6.43	6.13	6.71	9.33
AKN	12.08	16.00	16.82	16.90	8.45	14.93	8.55	10.69	10.21	13.36	6.17	14.37
ALB	9.72	8.77	9.34	7.01	8.16	13.95	14.19	12.24	3.89	4.61	5.24	11.27
ALO	-0.52	4.08	1.38	2.96	-4.20	7.27	5.55	5.94	-3.33	0.65	6.28	15.09
AMA	6.71	8.21	8.63	6.39	8.60	13.72	9.83	8.63	4.54	6.65	6.35	11.61
ANC	11.92	9.06	10.08	4.88	8.11	11.41	11.90	12.86	7.88	7.64	9.79	17.24
ANI	19.00	13.06	9.90	19.64	10.52	14.17	30.29	9.33	1.00	10.00	13.46	8.58
APF	9.60	10.02	12.19	5.77	4.12	15.13	27.15	22.19	4.67	3.13	9.16	8.81
ASE	18.70	16.16	10.50	1.69	-0.06	5.41	6.18	6.93	1.93	0.19	-3.16	23.05
ATL	8.44	9.97	8.65	5.18	5.40	11.75	13.32	10.03	4.41	5.62	6.72	12.63
ATW	14.09	16.72	10.83	7.87	4.33	12.32	10.57	9.39	3.33	3.52	6.33	20.55
AUS	6.63	6.61	7.03	5.03	6.01	10.38	9.04	7.36	2.08	4.43	4.71	9.68
AVL	5.64	5.62	4.95	4.23	4.11	12.32	13.23	12.01	4.24	6.21	4.24	9.57
AVP	13.64	10.37	8.93	7.91	8.86	16.60	14.68	12.03	4.61	3.93	5.26	15.07
AZO	13.04	10.85	8.52	5.83	5.62	9.87	7.97	6.13	1.93	2.15	5.38	15.28
BDL	7.44	7.16	7.91	5.65	6.35	12.58	11.54	9.95	2.84	3.19	3.74	8.69
BET	10.43	7.79	7.84	5.67	6.32	8.76	10.58	14.15	6.35	8.32	11.86	13.64
BFF												
BFL	7.39	5.20	3.80	1.29	2.16	4.41	3.56	2.47	1.76	3.92	2.83	10.91
BGM	10.13	8.25	4.78	4.77	5.75	11.42	7.87	7.11	2.25	2.10	4.06	11.62

class2



Dest												
BGR	12.89	11.20	10.36	8.54	8.20	15.51	14.44	14.09	3.96	2.85	2.75	13.42
BHM	[illegible]	6.36	6.79	5.17	6.39	10.93	10.47	7.21	2.34	3.88	4.78	9.96
BIL	9.55	7.62	6.04	3.21	4.89	9.30	9.58	7.63	2.29	3.30	3.86	15.24
BIS	7.39	8.31	7.27	2.75	4.65	10.94	6.97	6.82	0.53	1.37	2.86	14.01
BJI						2.80	0.91	4.14	9.46	2.00	-7.00	
BLI	8.10	3.14	4.29	-6.49	-2.17	2.26	4.08	11.05	7.79	7.18	9.58	20.38
BMI	16.57	17.23	13.92	7.20	6.23	14.18	14.72	10.89	5.27	4.06	9.08	17.52
BNA	6.17	5.68	5.73	4.15	5.22	9.73	9.02	6.68	1.19	3.08	3.41	8.88
BOI	10.99	8.98	7.10	4.59	5.36	9.04	8.84	8.55	3.66	5.77	6.02	16.23
BOS	8.04	7.18	8.88	6.75	7.13	13.57	12.13	11.28	4.32	4.54	4.86	9.58
BPT	1.13	2.85	2.28	0.94	0.67	9.87	5.02	3.46	0.42	-0.46	4.71	1.36
BQK	4.84	9.88	9.98	5.50	8.91	16.09	17.60	18.34	8.30	8.40	6.95	11.60
BQN	8.44	10.49	13.20	12.39	11.62	20.15	19.66	15.73	4.15	0.77	5.93	18.07
BRO	5.43	6.48	6.23	3.24	4.32	10.12	6.94	4.09	-1.81	1.28	4.76	9.28
BRW	8.16	10.43	9.52	2.54	7.40	10.68	14.19	13.22	5.01	4.69	4.78	11.41
BTM	8.84	4.50	3.20	1.90	1.40	4.59	0.99	2.08	-2.66	-0.80	1.57	15.26
BTR	6.68	8.84	7.99	6.46	5.93	12.90	11.85	9.01	4.30	4.66	6.52	9.80
BTV	11.39	11.13	12.97	8.74	8.59	15.05	16.72	14.68	3.51	4.31	4.88	14.34
BUF	10.00	9.66	9.04	8.59	7.14	14.00	13.76	11.37	3.49	4.48	5.41	12.65
BUR	8.74	9.70	6.69	6.14	4.98	7.59	7.19	7.61	4.29	7.29	7.52	12.33
BWI	6.55	6.00	6.79	4.55	6.07	12.24	11.74	9.68	2.19	2.99	4.15	8.37
BZN	13.86	10.58	6.19	1.19	3.73	8.36	6.82	6.09	1.31	0.76	2.59	17.48
CAE	10.67	11.28	9.58	7.46	7.41	13.74	14.34	11.75	4.84	4.97	6.88	13.77
CAK	11.06	12.23	8.02	5.25	5.37	11.24	13.29	10.96	2.22	4.28	6.18	14.63
CBM				0.00								
CCR										10.67	10.37	13.46
CDC	7.62	5.55	1.39	-0.30	0.57	1.34	2.66	0.59	1.39	0.24	2.64	6.99
CDV	12.15	10.34	7.67	9.68	12.24	19.11	17.79	21.97	15.52	9.68	5.97	17.12
CEC	12.54	8.11	5.32	1.39	2.13	5.27	5.36	7.55	3.14	4.75	7.13	14.39
CHA	8.30	8.53	6.39	5.86	5.83	13.02	12.86	8.81	3.88	4.15	5.75	10.76
CHO	8.87	8.31	3.54	3.27	3.99	8.88	10.49	9.74	2.43	3.85	4.24	5.19
CHS	7.47	8.86	8.90	6.97	6.52	11.65	12.41	9.29	4.04	4.97	4.90	11.27
CIC	13.89	11.62	3.07	2.11	8.35	10.49	11.07	6.59	5.68	8.94	12.96	16.57
CID	12.33	10.10	8.71	6.34	8.32	12.54	10.12	8.67	2.61	2.73	4.87	14.52
CKB	7.83											
CLD	3.40	2.67	1.39	-1.40	-0.36	-0.26	-0.42	-2.08	-0.90	1.40	-0.51	0.71
CLE	8.54	6.45	6.69	4.66	5.31	10.52	9.65	8.08	2.01	3.10	4.30	10.53
CLL	4.25	4.44	2.29	0.95	1.57	7.62	4.02	5.82	-1.01	0.66	2.21	2.78
CLT	5.79	5.16	5.51	3.94	3.53	8.75	7.98	6.23	0.78	1.68	2.58	7.47
CMH	9.85	8.54	8.68	6.86	7.83	13.02	12.12	10.18	3.64	4.36	5.53	12.03
CMI	25.22	17.63	14.86	10.15	11.91	15.88	15.69	12.73	4.01	4.44	10.23	22.05
CMX	12.46	11.20	-6.45	10.49	1.79	5.06	24.55	13.74	12.11	-0.40	6.33	34.69
COD	11.85	12.70	2.41	-0.49	1.07	2.88	4.74	3.10	-0.52	4.09	1.35	16.36

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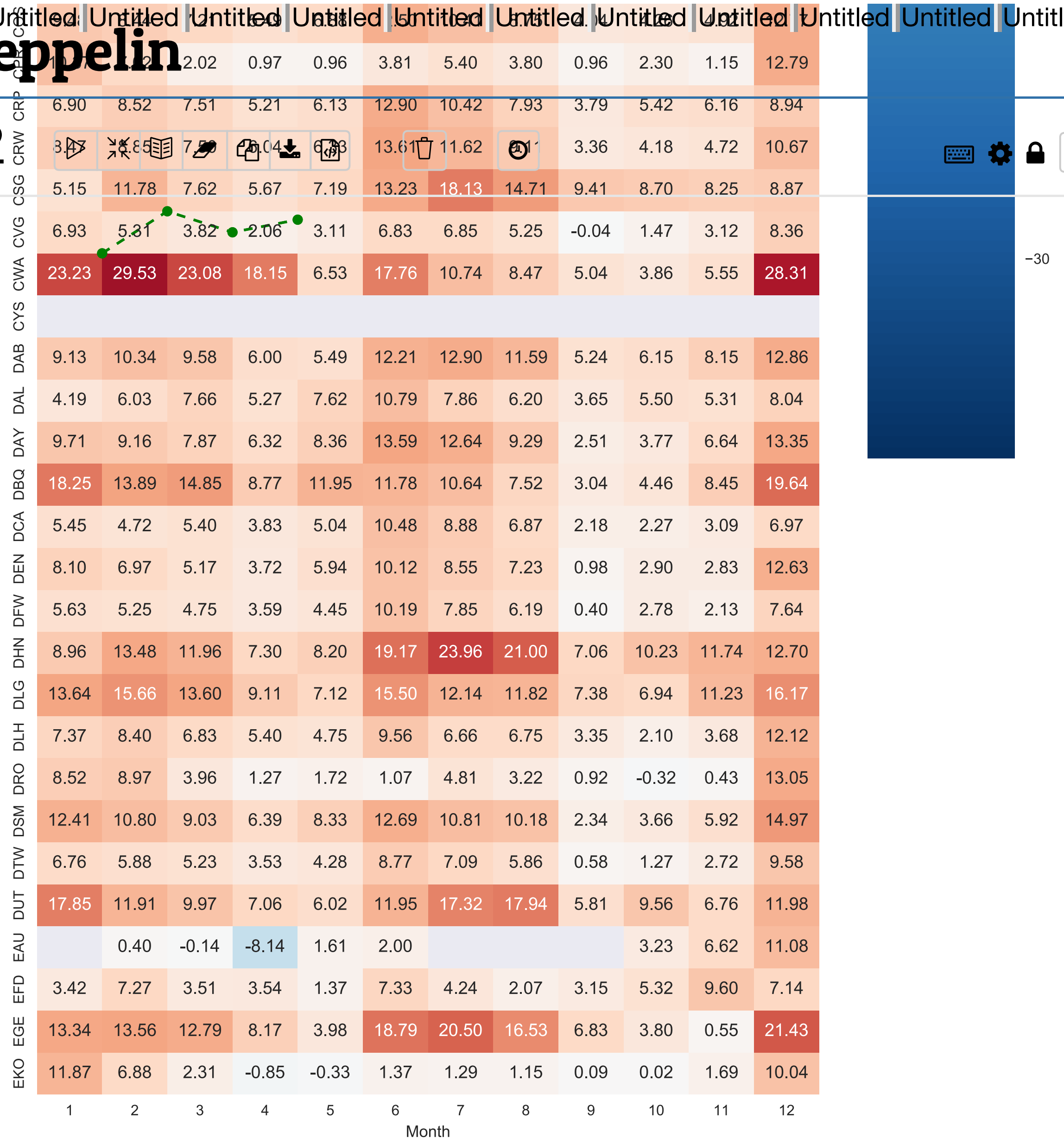
Zeppelin

class2

default



	1	2	3	4	5	6	7	8	9	10	11	12
COS	[illegible]	8.44	[illegible]	6.49	6.88	[illegible]	[illegible]	8.75	[illegible]	4.26	4.92	[illegible]
CPR	10.37	7.02	2.02	0.97	0.96	3.81	5.40	3.80	0.96	2.30	1.15	12.79
CRP	6.90	8.52	7.51	5.21	6.13	12.90	10.42	7.93	3.79	5.42	6.16	8.94
CRW	3.47	8.85	7.59	6.04	6.33	13.61	11.62	9.11	3.36	4.18	4.72	10.67
CSG	5.15	11.78	7.62	5.67	7.19	13.23	18.13	14.71	9.41	8.70	8.25	8.87
CVG	6.93	5.31	3.82	2.06	3.11	6.83	6.85	5.25	-0.04	1.47	3.12	8.36
CWA	23.23	29.53	23.08	18.15	6.53	17.76	10.74	8.47	5.04	3.86	5.55	28.31
CYS												
DAB	9.13	10.34	9.58	6.00	5.49	12.21	12.90	11.59	5.24	6.15	8.15	12.86
DAL	4.19	6.03	7.66	5.27	7.62	10.79	7.86	6.20	3.65	5.50	5.31	8.04
DAY	9.71	9.16	7.87	6.32	8.36	13.59	12.64	9.29	2.51	3.77	6.64	13.35
DBQ	18.25	13.89	14.85	8.77	11.95	11.78	10.64	7.52	3.04	4.46	8.45	19.64
DCA	5.45	4.72	5.40	3.83	5.04	10.48	8.88	6.87	2.18	2.27	3.09	6.97
DEN	8.10	6.97	5.17	3.72	5.94	10.12	8.55	7.23	0.98	2.90	2.83	12.63
DFW	5.63	5.25	4.75	3.59	4.45	10.19	7.85	6.19	0.40	2.78	2.13	7.64
DHN	8.96	13.48	11.96	7.30	8.20	19.17	23.96	21.00	7.06	10.23	11.74	12.70
DLG	13.64	15.66	13.60	9.11	7.12	15.50	12.14	11.82	7.38	6.94	11.23	16.17
DLH	7.37	8.40	6.83	5.40	4.75	9.56	6.66	6.75	3.35	2.10	3.68	12.12
DRO	8.52	8.97	3.96	1.27	1.72	1.07	4.81	3.22	0.92	-0.32	0.43	13.05
DSM	12.41	10.80	9.03	6.39	8.33	12.69	10.81	10.18	2.34	3.66	5.92	14.97
DTW	6.76	5.88	5.23	3.53	4.28	8.77	7.09	5.86	0.58	1.27	2.72	9.58
DUT	17.85	11.91	9.97	7.06	6.02	11.95	17.32	17.94	5.81	9.56	6.76	11.98
EAU		0.40	-0.14	-8.14	1.61	2.00				3.23	6.62	11.08
EFD	3.42	7.27	3.51	3.54	1.37	7.33	4.24	2.07	3.15	5.32	9.60	7.14
EGE	13.34	13.56	12.79	8.17	3.98	18.79	20.50	16.53	6.83	3.80	0.55	21.43
EKO	11.87	6.88	2.31	-0.85	-0.33	1.37	1.29	1.15	0.09	0.02	1.69	10.04

Took 5 sec. Last updated by anonymous at January 20 2017, 12:14:39 PM.

READY

Zeppelin

class2

default ▾