

RminiProjectSsegawaAbdulKarim

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```
library(readr)
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.1 --
```

```
## v ggplot2 3.3.4    v dplyr   1.0.7
## v tibble  3.1.2    v stringr 1.4.0
## v tidyr   1.1.3    v forcats 0.5.1
## v purrr   0.3.4
```

```
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(table1)
```

```
##
## Attaching package: 'table1'
```

```
## The following objects are masked from 'package:base':
##
##     units, units<-
```

```
library(readr)
library(readxl)
library(stats)
library(Stat2Data)
library(ggplot2)
library(phyloseq)
library(rmarkdown)
library(DESeq2)
```

```
## Loading required package: S4Vectors
```

```
## Loading required package: stats4
```

```
## Loading required package: BiocGenerics
```

```

## Loading required package: parallel

##
## Attaching package: 'BiocGenerics'

## The following objects are masked from 'package:parallel':
##
##   clusterApply, clusterApplyLB, clusterCall, clusterEvalQ,
##   clusterExport, clusterMap, parApply, parCapply, parLapply,
##   parLapplyLB, parRapply, parSapply, parSapplyLB

## The following objects are masked from 'package:dplyr':
##
##   combine, intersect, setdiff, union

## The following objects are masked from 'package:stats':
##
##   IQR, mad, sd, var, xtabs

## The following objects are masked from 'package:base':
##
##   anyDuplicated, append, as.data.frame, basename, cbind, colnames,
##   dirname, do.call, duplicated, eval, evalq, Filter, Find, get, grep,
##   grepl, intersect, is.unsorted, lapply, Map, mapply, match, mget,
##   order, paste, pmax, pmax.int, pmin, pmin.int, Position, rank,
##   rbind, Reduce, rownames, sapply, setdiff, sort, table, tapply,
##   union, unique, unsplit, which.max, which.min

##
## Attaching package: 'S4Vectors'

## The following objects are masked from 'package:dplyr':
##
##   first, rename

## The following object is masked from 'package:tidyr':
##
##   expand

## The following object is masked from 'package:base':
##
##   expand.grid

## Loading required package: IRanges

##
## Attaching package: 'IRanges'

## The following object is masked from 'package:phyloseq':
##
##   distance

```

```

## The following objects are masked from 'package:dplyr':
##
##     collapse, desc, slice

## The following object is masked from 'package:purrr':
##
##     reduce

## Loading required package: GenomicRanges

## Loading required package: GenomeInfoDb

## Loading required package: SummarizedExperiment

## Loading required package: MatrixGenerics

## Loading required package: matrixStats

##
## Attaching package: 'matrixStats'

## The following object is masked from 'package:dplyr':
##
##     count

##
## Attaching package: 'MatrixGenerics'

## The following objects are masked from 'package:matrixStats':
##
##     colAlls, colAnyNAs, colAnys, colAvgPerRowSet, colCollapse,
##     colCounts, colCummaxs, colCummins, colCumprods, colCumsums,
##     colDiffs, colIQRDiffs, colIQRs, colLogSumExps, colMadDiffs,
##     colMads, colMaxs, colMeans2, colMedians, colMins, colOrderStats,
##     colProds, colQuantiles, colRanges, colRanks, colSdDiffs, colSds,
##     colSums2, colTabulates, colVarDiffs, colVars, colWeightedMads,
##     colWeightedMeans, colWeightedMedians, colWeightedSds,
##     colWeightedVars, rowAlls, rowAnyNAs, rowAnys, rowAvgPerColSet,
##     rowCollapse, rowCounts, rowCummaxs, rowCummins, rowCumprods,
##     rowCumsums, rowDiffs, rowIQRDiffs, rowIQRs, rowLogSumExps,
##     rowMadDiffs, rowMads, rowMaxs, rowMeans2, rowMedians, rowMins,
##     rowOrderStats, rowProds, rowQuantiles, rowRanges, rowRanks,
##     rowSdDiffs, rowSds, rowSums2, rowTabulates, rowVarDiffs, rowVars,
##     rowWeightedMads, rowWeightedMeans, rowWeightedMedians,
##     rowWeightedSds, rowWeightedVars

## Loading required package: Biobase

## Welcome to Bioconductor
##
##     Vignettes contain introductory material; view with
##     'browseVignettes()'. To cite Bioconductor, see
##     'citation("Biobase")', and for packages 'citation("pkgname")'.

```

```
##
## Attaching package: 'Biobase'

## The following object is masked from 'package:MatrixGenerics':
##
##      rowMedians

## The following objects are masked from 'package:matrixStats':
##
##      anyMissing, rowMedians

## The following object is masked from 'package:phyloseq':
##
##      sampleNames
```

```
library(tinytex)
```

```
render("Ssegawa.Rmd", output_format = "PDF")
```

```
data1 <- read.csv("diabimmune_16s_t1d_metadata.csv",
  stringsAsFactors = FALSE)
```

Change structure of categorical variables to factors

```
#Descriptive Statistics
```

```
summary(data1)
```

```
##      Sample_ID      Subject_ID      Case_Control      Gender
## Length:777      Length:777      case      :260      female:412
## Class :character Class :character control:517      male  :365
## Mode  :character Mode  :character
##
##
##      Delivery_Route Age_at_Collection
## cesarian: 66      Min.      : 6.0
## vaginal :711      1st Qu.: 229.0
##                                     Median : 452.0
##                                     Mean   : 482.9
##                                     3rd Qu.: 702.0
##                                     Max.    :1233.0
```

```
count <- table(data1$Case_Control, data1$Gender)
totalprop <- prop.table(count)
rowprop <- prop.table(count,1)
columnprop <- prop.table(count,2)
```

```
list(Count=count,"Total Percentage"=round(totalprop,3),"Row Percentage"=round(rowprop,3),"Column Percentage"=round(columnprop,3))
```

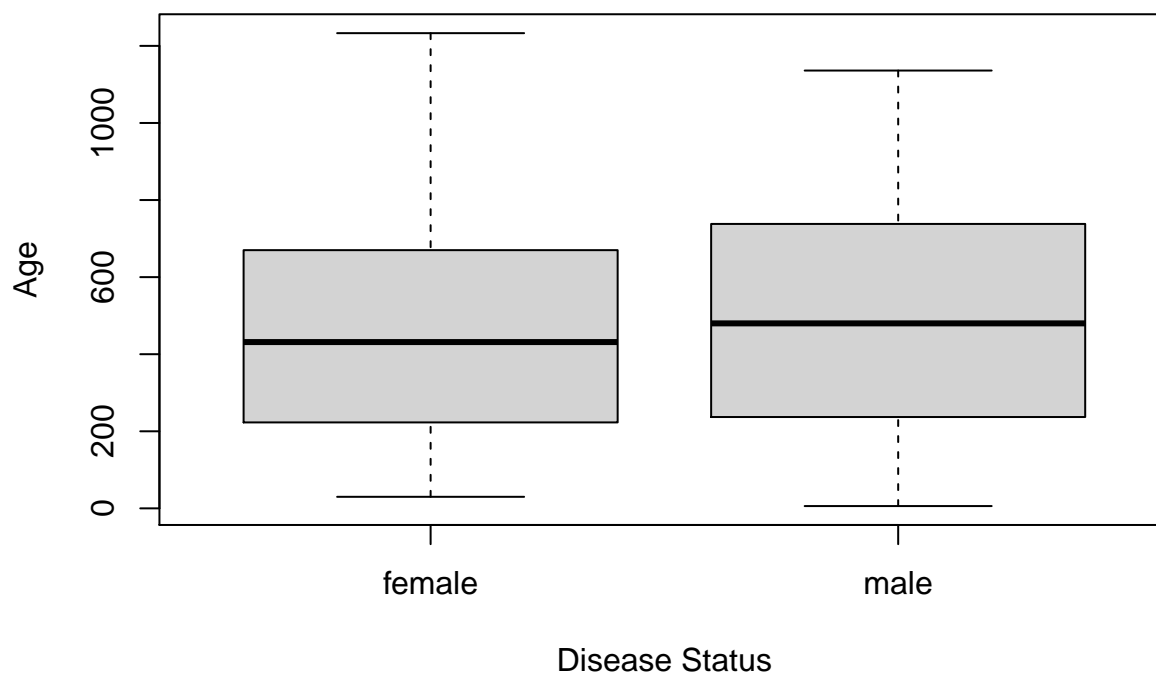
```
table1(~ Gender + Delivery_Route + Age_at_Collection | Case_Control, data=data1)
```

```
# Graphics
```

```
'''r
```

```
boxplot1 <- boxplot(data1$Age_at_Collection~ data1$Gender, main="A graph showing Age at Collection by D  
ylab="Age")
```

A graph showing Age at Collection by Disease Status



```
boxplot1
```

```
## $stats
```

```
##      [,1] [,2]
```

```
## [1,]  30.0   6
```

```
## [2,] 223.0 237
```

```
## [3,] 431.5 480
```

```
## [4,] 670.0 738
```

```
## [5,] 1233.0 1136
```

```
## attr("class")
```

```
##   female
```

```
## "integer"
```

```
##
```

```
## $n
```

```
## [1] 412 365
```

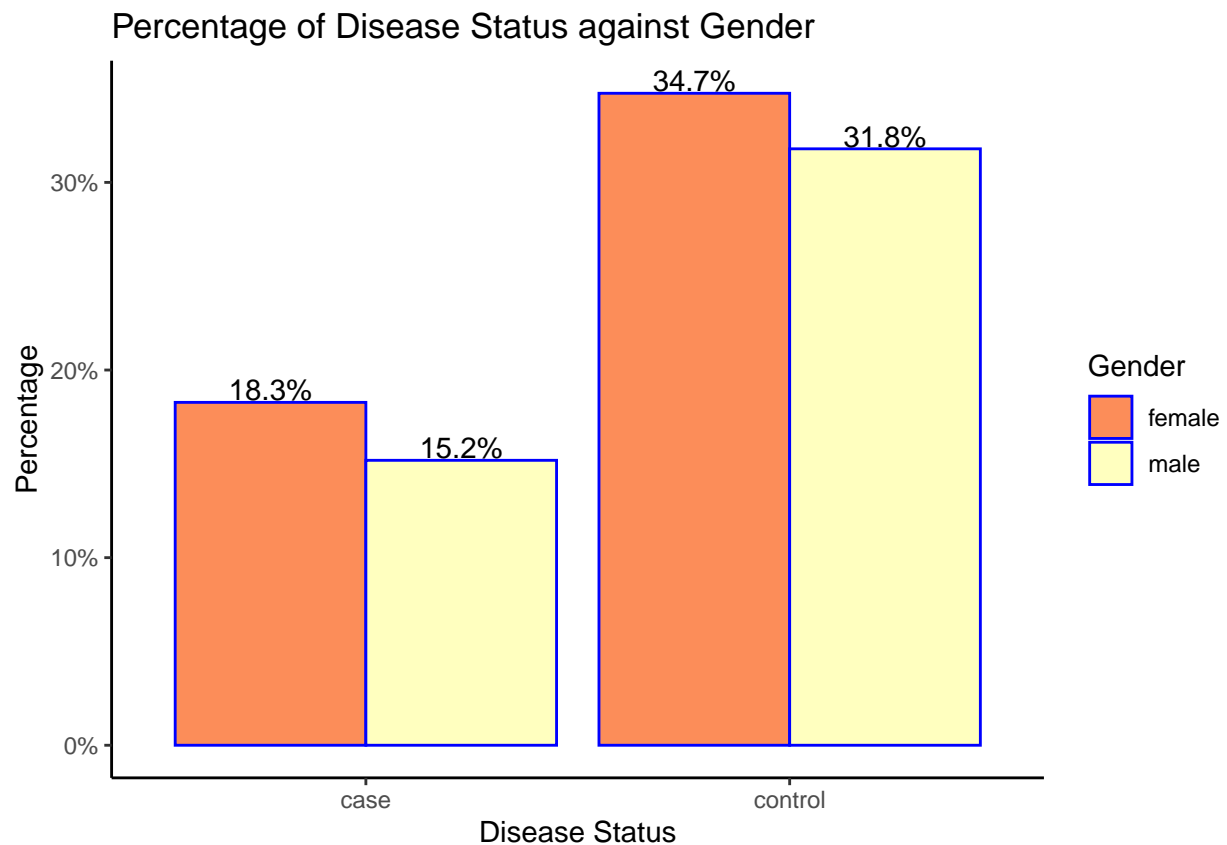
```
##
```

```
## $conf
```

```
##      [,1]      [,2]
```

```
## [1,] 396.7051 438.5668
## [2,] 466.2949 521.4332
##
## $out
## numeric(0)
##
## $group
## numeric(0)
##
## $names
## [1] "female" "male"
```

```
ggplot(data1, aes(x =Case_Control ,y= (..count..)/sum(..count..), fill= Gender)) +
  geom_bar(position = "dodge", color= "Blue")+
  scale_y_continuous(labels=scales::percent)+
  labs(title = "Percentage of Disease Status against Gender",
       y= "Percentage", x= "Disease Status" )+
  geom_text(stat= "count", aes(label= scales::percent((..count..)/sum(..count..))), position = position_dodge2)+
  theme_classic()+
  scale_fill_brewer(palette = "Spectral")
```

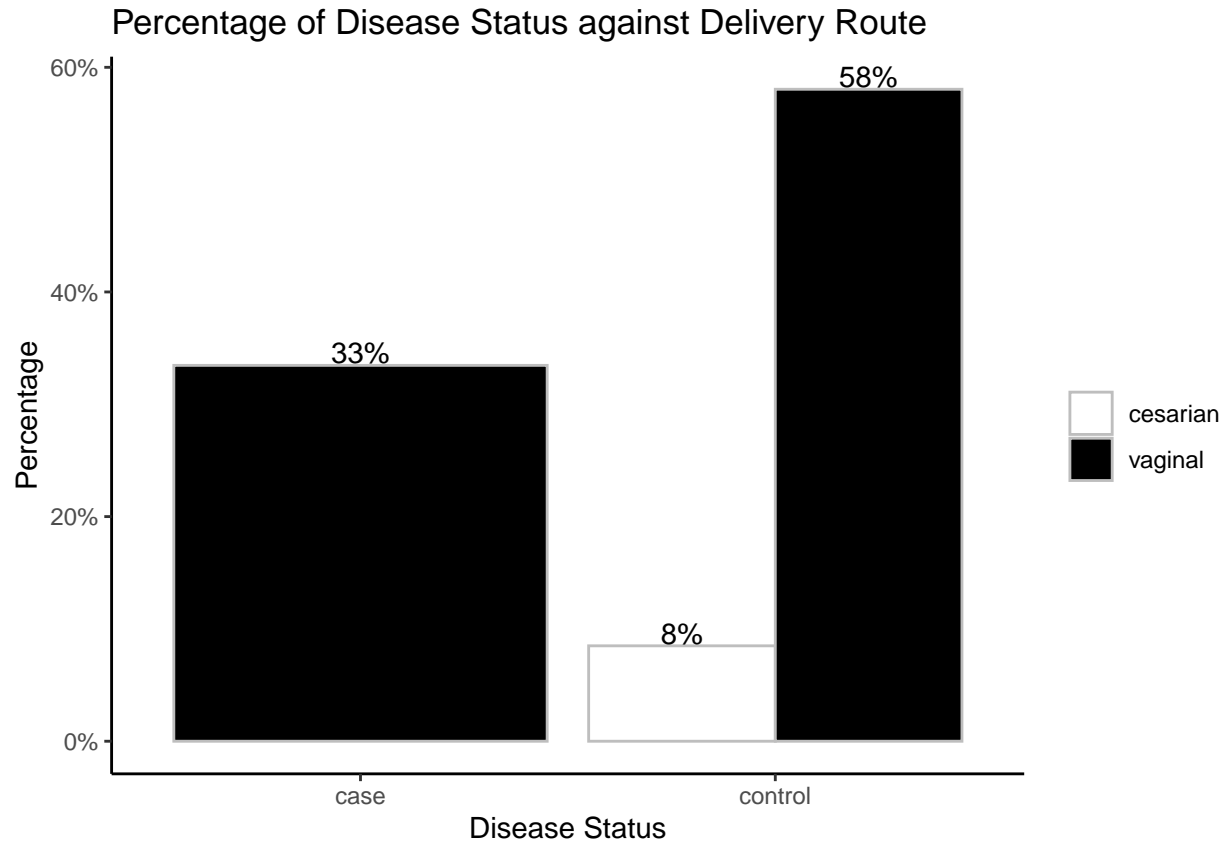


```
ggplot(data1, aes(x =Case_Control ,y= (..count..)/sum(..count..), fill= Delivery_Route)) +
  geom_bar(position = "dodge", color= "Gray")+
  scale_y_continuous(labels=scales::percent)+
  labs(title = "Percentage of Disease Status against Delivery Route",
```

```

    y= "Percentage", x= "Disease Status" )+
  geom_text(stat= "count", aes(label= scales::percent(..count../sum(..count..))), position = position,
  theme_classic()+
  scale_fill_manual(name = "", values = c("White", "Black"))

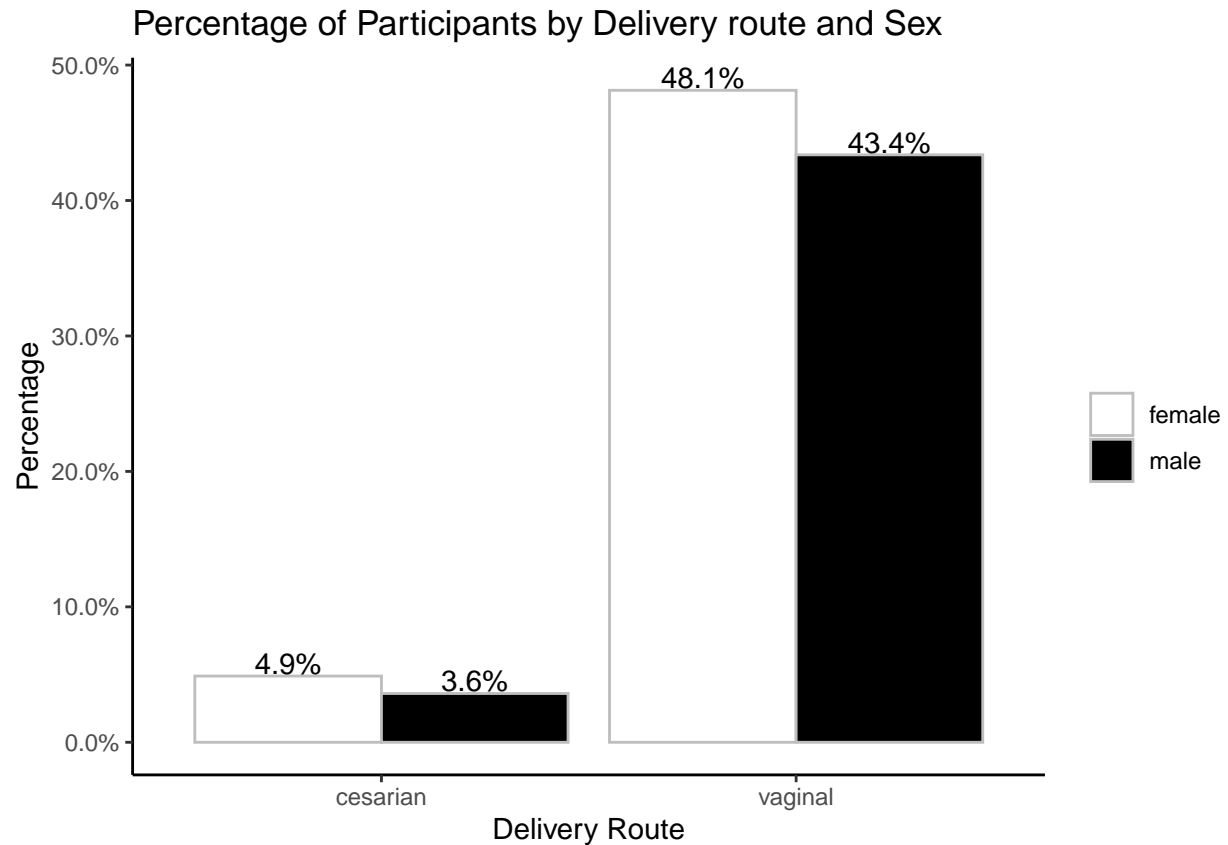
```



```

ggplot(data1, aes(x =Delivery_Route ,y= (..count../sum(..count..), fill= Gender)) +
  geom_bar(position = "dodge",color= "Grey")+
  scale_y_continuous(labels=scales::percent)+
  labs(title = "Percentage of Participants by Delivery route and Sex",
    y= "Percentage", x= "Delivery Route")+
  geom_text(stat= "count", aes(label= scales::percent(..count../sum(..count..))), position = position,
  theme_classic()+
  scale_fill_manual(name = "", values = c("White", "Black"))

```



#Test for Associations

```
##
## Fisher's Exact Test for Count Data
##
## data: data1$Case_Control and data1$Gender
## p-value = 0.543
## alternative hypothesis: true odds ratio is not equal to 1
## 95 percent confidence interval:
##  0.8074825 1.5018846
## sample estimates:
## odds ratio
##  1.100742
```

```
##
## Fisher's Exact Test for Count Data
##
## data: data1$Case_Control and data1$Delivery_Route
## p-value = 6.86e-13
## alternative hypothesis: true odds ratio is not equal to 1
## 95 percent confidence interval:
##  0.0000000 0.1010148
## sample estimates:
## odds ratio
##          0
```



```
##
## Welch Two Sample t-test
##
## data: data1$Age_at_Collection by data1$Case_Control
## t = 1.0195, df = 502.81, p-value = 0.3085
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -21.43301 67.66969
## sample estimates:
## mean in group case mean in group control
## 498.2731 475.1547

##
## Call:
## glm(formula = data1$Case_Control ~ data1$Gender + data1$Delivery_Route +
## data1$Age_at_Collection, family = binomial)
##
## Deviance Residuals:
## Min 1Q Median 3Q Max
## -1.5032 -1.3854 0.9051 0.9596 1.0564
##
## Coefficients:
## Estimate Std. Error z value Pr(>|z|)
## (Intercept) 1.763e+01 4.862e+02 0.036 0.971
## data1$Gendermale 1.375e-01 1.566e-01 0.878 0.380
## data1$Delivery_Routevaginal -1.702e+01 4.862e+02 -0.035 0.972
## data1$Age_at_Collection -2.614e-04 2.648e-04 -0.987 0.324
##
## (Dispersion parameter for binomial family taken to be 1)
##
## Null deviance: 990.52 on 776 degrees of freedom
## Residual deviance: 932.07 on 773 degrees of freedom
## AIC: 940.07
##
## Number of Fisher Scoring iterations: 16
```

```
#Import data to create Phyloseq Object
```

```
#Required to have similar row names in OTU and taxonomy table
```

```
Taxonomy <- column_to_rownames(Taxonomy, var = "#OTU ID")
OTU1 <- column_to_rownames(OTU, var = "#OTU ID")
sampledata <- column_to_rownames(sampledata, var = "Sample_ID")
```

Change OTU and taxonomy dataframes to matrices

```
OTUmat <- as.matrix(OTU1)
taxmat <- as.matrix(Taxonomy)
```

create phyloseq object

```
OTUtd <- otu_table(OTUmat, taxa_are_rows = TRUE)
Taxonomytable <- tax_table(taxmat)
sampledata1 <- sample_data(sampledata)
physeqData = phyloseq(OTUtd, Taxonomytable, sampledata1)
```

#Validity checks

```
rank_names(physeqData)
```

```
## [1] "Domain" "Phylum" "Class" "Order" "Family" "Genus" "Species"
```

```
taxa_names(physeqData)
```

```
##      [1] "4333897" "190162" "134726" "679245" "289734" "302049" "197991"
##      [8] "3903651" "184922" "193946" "189592" "3211875" "175261" "197970"
##     [15] "4390365" "186624" "4366867" "175612" "175184" "4454531" "198422"
##     [22] "4448492" "194101" "730906" "1740283" "172777" "3583645" "355975"
##     [29] "189920" "798581" "193672" "3275562" "4391262" "2762219" "176067"
##     [36] "184990" "4439360" "1504042" "306299" "196957" "2017729" "3141094"
##     [43] "4446902" "1142029" "4354235" "198646" "941096" "1076969" "536866"
##     [50] "197930" "782953" "174818" "176306" "3472078" "1992" "4372612"
##     [57] "593043" "2565100" "4425571" "179826" "184037" "365621" "4481861"
##     [64] "197072" "192684" "368490" "2700883" "198909" "175729" "308544"
##     [71] "4424598" "4375664" "271159" "4385326" "344525" "192958" "3926480"
##     [78] "365536" "194177" "180999" "4316928" "4480189" "186687" "196990"
##     [85] "72820" "342397" "197552" "4297695" "197364" "577294" "2544615"
##     [92] "173863" "825808" "4401580" "4060124" "198183" "4372625" "187447"
##     [99] "187569" "197481" "4342104" "196246" "4395096" "2683271" "4437515"
##    [106] "535955" "174672" "1860112" "4364745" "198947" "3943182" "4419459"
##    [113] "292735" "313593" "3134492" "4020046" "182289" "59563" "182886"
##    [120] "656881" "4381553" "197022" "1141218" "1508541" "340876" "676211"
##    [127] "349431" "225919" "212532" "4278525" "190490" "403701" "4467447"
##    [134] "3801267" "12574" "2920309" "3154070" "199702" "4433947" "198071"
##    [141] "2157225" "192127" "577170" "302746" "1839271" "523140" "2876801"
##    [148] "588471" "180509" "175485" "4469576" "4435664" "198209" "189450"
##    [155] "4103317" "3272764" "198930" "312882" "3537197" "4426298" "187126"
##    [162] "179961" "223059" "2283862" "191361" "4416025" "191081" "174288"
##    [169] "199694" "162491" "4372382" "184209" "192308" "4439469" "4339832"
##    [176] "174862" "851715" "188079" "3327894" "192536" "4438116" "193528"
##    [183] "192406" "4449054" "180462" "4372528" "174763" "526804" "195651"
##    [190] "180826" "189997" "146554" "4458959" "170462" "4329132" "3907189"
##    [197] "177111" "4468234" "181139" "4325509" "184760" "587933" "291090"
##    [204] "211706" "178238" "4315974" "4473788" "4425214" "367176" "187882"
##    [211] "187883" "194151" "4414476" "4472399" "340474" "3805518" "199145"
##    [218] "174010" "178439" "4144205" "188735" "199761" "4457427" "193233"
##    [225] "3439402" "187945" "3931537" "2714942" "4436046" "190502" "4453501"
##    [232] "192444" "180037" "180216" "2497335" "4094866" "175535" "198449"
##    [239] "4256470" "493391" "211935" "4450010" "4442130" "328472" "3887769"
##    [246] "161423" "4393532" "4483015" "186888" "4424239" "192383" "3600504"
```

##	[253]	"4309301"	"305318"	"199293"	"195508"	"185607"	"197004"	"471180"
##	[260]	"195465"	"180606"	"175751"	"4477696"	"190058"	"716984"	"190301"
##	[267]	"4381338"	"178799"	"183604"	"199430"	"4183249"	"177581"	"182073"
##	[274]	"191601"	"4464173"	"4420408"	"4411295"	"3393191"	"322114"	"194686"
##	[281]	"4447072"	"187077"	"2415144"	"180414"	"196664"	"3709990"	"259772"
##	[288]	"578016"	"54794"	"553611"	"48084"	"1751298"	"179657"	"4396426"
##	[295]	"4472091"	"324894"	"4378683"	"197760"	"4383953"	"4434334"	"2575651"
##	[302]	"4451899"	"2549971"	"4439603"	"328617"	"365385"	"2986828"	"4437814"
##	[309]	"358798"	"4347159"	"179200"	"189208"	"359314"	"3251419"	"2979308"
##	[316]	"181864"	"4331782"	"2724175"	"4481613"	"176753"	"356745"	"4306048"
##	[323]	"190761"	"4306262"	"3475269"	"182383"	"197490"	"184925"	"180563"
##	[330]	"288810"	"326482"	"4465907"	"1830364"	"357261"	"4357811"	"4457268"
##	[337]	"199054"	"2309802"	"3265161"	"162623"	"180123"	"295146"	"180552"
##	[344]	"176967"	"187210"	"335577"	"4419650"	"348304"	"179911"	"193075"
##	[351]	"367456"	"194899"	"4473596"	"4344860"	"3039313"	"363735"	"193887"
##	[358]	"4232045"	"4390319"	"190100"	"4111715"	"4379957"	"186921"	"4335781"
##	[365]	"4381555"	"177175"	"193667"	"197334"	"187952"	"2061739"	"193174"
##	[372]	"2298935"	"332185"	"176604"	"292521"	"189630"	"183970"	"194659"
##	[379]	"2148365"	"4439690"	"4404220"	"4004991"	"177561"	"191874"	"191872"
##	[386]	"175704"	"182911"	"4413347"	"185411"	"1848900"	"180352"	"3443092"
##	[393]	"173135"	"2704013"	"177237"	"174614"	"4383922"	"194053"	"207390"
##	[400]	"4445673"	"2177184"	"182506"	"179472"	"3531225"	"183496"	"180289"
##	[407]	"307113"	"231952"	"198740"	"350832"	"186263"	"4370024"	"2654263"
##	[414]	"191595"	"197864"	"189647"	"177754"	"3195500"	"180528"	"180529"
##	[421]	"3450454"	"208739"	"188127"	"362765"	"191399"	"1096610"	"354850"
##	[428]	"206574"	"3413566"	"177222"	"593422"	"194670"	"1917420"	"197458"
##	[435]	"851938"	"304047"	"4079463"	"182245"	"302932"	"196307"	"2072645"
##	[442]	"4354477"	"340113"	"3943186"	"192711"	"216111"	"193666"	"3576174"
##	[449]	"185235"	"350865"	"1145098"	"4456252"	"4345850"	"170652"	"191928"
##	[456]	"182054"	"199677"	"178763"	"141145"	"193477"	"189271"	"183662"
##	[463]	"177986"	"787663"	"183030"	"184864"	"16513"	"567960"	"3014082"
##	[470]	"4383924"	"189150"	"178015"	"2250985"	"4375000"	"193968"	"193763"
##	[477]	"4447950"	"199190"	"184910"	"4340358"	"192735"	"186955"	"1654474"
##	[484]	"176057"	"681370"	"349257"	"267718"	"185192"	"4326080"	"1142110"
##	[491]	"199279"	"183849"	"1085832"	"195929"	"178151"	"4373152"	"198956"
##	[498]	"190980"	"187782"	"182517"	"363029"	"4452633"	"196518"	"4422456"
##	[505]	"192461"	"4094259"	"194758"	"3713805"	"2689396"	"191442"	"3203801"
##	[512]	"2656868"	"177515"	"4337755"	"566243"	"179905"	"287514"	"183340"
##	[519]	"195015"	"2132002"	"199490"	"842594"	"4444262"	"311820"	"360660"
##	[526]	"182643"	"198198"	"1100972"	"4377328"	"4045882"	"358008"	"181754"
##	[533]	"3244992"	"173996"	"299837"	"4388775"	"334336"	"189403"	"181899"
##	[540]	"3588390"	"182874"	"318970"	"175550"	"724120"	"566976"	"178462"
##	[547]	"152485"	"3756485"	"355197"	"184477"	"347529"	"3563235"	"176865"
##	[554]	"4426877"	"181140"	"3929758"	"4296424"	"175168"	"196100"	"511378"
##	[561]	"317677"	"3633129"	"1146349"	"955102"	"4432433"	"864465"	"176300"
##	[568]	"299267"	"185420"	"1928156"	"179267"	"176244"	"2123717"	"189782"
##	[575]	"175145"	"184897"	"28914"	"193367"	"3265556"	"2686384"	"191214"
##	[582]	"210542"	"183698"	"189708"	"340547"	"187051"	"964220"	"3715618"
##	[589]	"579851"	"181560"	"2840201"	"210371"	"3857426"	"174497"	"3799784"
##	[596]	"301578"	"4326219"	"178885"	"538000"	"4455308"	"4323124"	"195646"
##	[603]	"255367"	"270382"	"352347"	"1046997"	"4376828"	"191043"	"306704"
##	[610]	"178928"	"187623"	"4343631"	"138389"	"334459"	"181155"	"342110"
##	[617]	"192625"	"4451251"	"157327"	"337538"	"175560"	"360636"	"180468"
##	[624]	"188930"	"177349"	"2318497"	"1062051"	"661266"	"3439403"	"265871"

##	[631]	"245625"	"392887"	"357046"	"174840"	"2365946"	"2617854"	"176704"
##	[638]	"45363"	"3028273"	"188008"	"328105"	"4473295"	"192046"	"4332082"
##	[645]	"3794053"	"316732"	"188856"	"186478"	"358939"	"3424669"	"178001"
##	[652]	"290281"	"212698"	"193551"	"189205"	"196219"	"4307484"	"163243"
##	[659]	"187385"	"209760"	"4301298"	"196315"	"194383"	"192963"	"3225199"
##	[666]	"4329571"	"194104"	"146935"	"3090117"	"1919007"	"193644"	"3321163"
##	[673]	"181422"	"4331360"	"187212"	"192720"	"2235671"	"181756"	"365717"
##	[680]	"186997"	"186723"	"177520"	"4339831"	"190076"	"668514"	"180171"
##	[687]	"181485"	"4353757"	"84709"	"4433823"	"3430935"	"3244896"	"4430843"
##	[694]	"187178"	"3924627"	"183579"	"359872"	"182052"	"4374302"	"300235"
##	[701]	"182577"	"186732"	"4356065"	"354574"	"211907"	"177567"	"180312"
##	[708]	"321453"	"195436"	"4449236"	"539819"	"175844"	"196371"	"3609545"
##	[715]	"4335815"	"175586"	"194660"	"354334"	"4381430"	"4474255"	"185021"
##	[722]	"184000"	"186255"	"4343627"	"192983"	"4452051"	"191395"	"194733"
##	[729]	"182255"	"182854"	"1950496"	"193709"	"194287"	"191483"	"190320"
##	[736]	"4318671"	"2237211"	"186866"	"329313"	"4380191"	"324163"	"191110"
##	[743]	"312586"	"179384"	"206233"	"2018038"	"366794"	"179677"	"328544"
##	[750]	"4440670"	"1108007"	"194534"	"4393568"	"195123"	"186077"	"319687"
##	[757]	"4370025"	"4386317"	"4346677"	"4321810"	"3138798"	"3544699"	"1103978"
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##	[778]	"171559"	"517754"	"1820513"	"816702"	"1756274"	"174439"	"177040"
##	[785]	"193534"	"188863"	"192231"	"1918929"	"4365130"	"875735"	"4326452"
##	[792]	"176507"	"195716"	"187035"	"193744"	"195681"	"193452"	"3426658"
##	[799]	"347639"	"186416"	"663649"	"4471251"	"198119"	"4430639"	"194672"
##	[806]	"188753"	"4466616"	"195805"	"701221"	"2119418"	"73609"	"4396235"
##	[813]	"4479397"	"4469359"	"339087"	"4436552"	"191251"	"184339"	"149614"
##	[820]	"181918"	"315846"	"197675"	"189459"	"586141"	"525215"	"195004"
##	[827]	"3450453"	"184174"	"2281172"	"191412"	"304779"	"189755"	"759349"
##	[834]	"192424"	"175559"	"1065569"	"194824"	"177037"	"526682"	"322580"
##	[841]	"176269"	"4329112"	"340219"	"355424"	"180629"	"186030"	"3851391"
##	[848]	"208479"	"4339144"	"163494"	"302352"	"266210"	"3272632"	"183829"
##	[855]	"849535"	"4396292"	"4463108"	"4318208"	"174516"	"311950"	"176062"
##	[862]	"545299"	"4476780"	"2201995"	"4458576"	"562244"	"189083"	"191153"
##	[869]	"4020502"	"178211"	"177172"	"3236435"	"4372003"	"301253"	"4434579"
##	[876]	"4331760"	"580629"	"213566"	"179400"	"753638"	"288651"	"3754778"
##	[883]	"197988"	"4453609"	"4470870"	"329693"	"2740953"	"192263"	"181539"
##	[890]	"179583"	"16054"	"1943669"	"757622"	"363264"	"132892"	"4431545"
##	[897]	"4410166"	"130103"	"4362300"	"195937"	"305141"	"181432"	"208539"
##	[904]	"183932"	"367889"	"4281639"	"41229"	"4368216"	"2943548"	"4412022"
##	[911]	"4397092"	"215269"	"193873"	"187946"	"198786"	"174831"	"184342"
##	[918]	"4395075"	"179508"	"177230"	"4379449"	"332929"	"174611"	"184525"
##	[925]	"181003"	"4473509"	"4408801"	"190453"	"851704"	"184464"	"2037235"
##	[932]	"230578"	"292057"	"2210028"	"215670"	"187751"	"174625"	"148279"
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##	[946]	"190577"	"186022"	"2424737"	"185763"	"4364747"	"177100"	"178420"
##	[953]	"2831841"	"4465072"	"187356"	"558839"	"563572"	"975306"	"194654"
##	[960]	"196382"	"178485"	"167373"	"192015"	"194129"	"296442"	"357449"
##	[967]	"1105984"	"308333"	"4217963"	"196296"	"306499"	"180083"	"346938"
##	[974]	"180155"	"184465"	"4462107"	"772282"	"184678"	"4420669"	"4344207"
##	[981]	"2280817"	"135956"	"270094"	"885437"	"4413447"	"2058521"	"198128"
##	[988]	"189610"	"198696"	"186090"	"1000547"	"619140"	"4483337"	"4421070"
##	[995]	"4295707"	"360000"	"4396688"	"188676"	"194586"	"360730"	"4316391"
##	[1002]	"189860"	"189092"	"193053"	"307238"	"190676"	"292921"	"194667"

##	[1009]	"195186"	"4416763"	"199448"	"176113"	"362568"	"1868703"	"264967"
##	[1016]	"2160415"	"4472130"	"4331364"	"193863"	"1602805"	"3747551"	"312969"
##	[1023]	"196054"	"4401375"	"4410401"	"4417708"	"4318122"	"186468"	"213394"
##	[1030]	"174752"	"366147"	"111135"	"185859"	"331253"	"196139"	"2170530"
##	[1037]	"571642"	"561171"	"342380"	"187780"	"166637"	"184238"	"2532173"
##	[1044]	"4449055"	"182167"	"179695"	"4437024"	"553080"	"589329"	"1835779"
##	[1051]	"192419"	"4443574"	"258550"	"3562626"	"1061772"	"194089"	"191792"
##	[1058]	"362608"	"4458306"	"2438203"	"196200"	"198587"	"186549"	"185113"
##	[1065]	"4432431"	"188832"	"923098"	"1736067"	"182089"	"4391625"	"192676"
##	[1072]	"4318125"	"4418787"	"182196"	"4309636"	"355510"	"3318103"	"147969"
##	[1079]	"180874"	"4323555"	"4301511"	"195556"	"1607319"	"178760"	"191180"
##	[1086]	"4347520"	"866280"	"279107"	"1952"	"168439"	"819353"	"760967"
##	[1093]	"238205"	"186133"	"207126"	"2307779"	"190639"	"195207"	"184394"
##	[1100]	"4459634"	"179486"	"193191"	"13986"	"185034"	"2506486"	"186748"
##	[1107]	"91557"	"336559"	"207994"	"4302904"	"4453304"	"91962"	"177792"
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##	[1121]	"122049"	"110060"	"125624"	"189334"	"4458758"	"3569942"	"797229"
##	[1128]	"3825935"	"4362337"	"198503"	"4356080"	"4387246"	"4479443"	"378660"
##	[1135]	"4390330"	"2331530"	"4379889"	"4386018"	"293307"	"226338"	"4391009"
##	[1142]	"4334770"	"73000"	"230232"	"344154"	"2500766"	"4420570"	"237081"
##	[1149]	"3997242"	"1646259"	"208790"	"299302"	"3462224"	"4471279"	"191355"
##	[1156]	"319197"	"368486"	"183147"	"3186216"	"2407149"	"606927"	"173965"
##	[1163]	"4481195"	"2816372"	"194110"	"592616"	"4459196"	"207487"	"175373"
##	[1170]	"322835"	"4346374"	"4404577"	"363442"	"529979"	"4464445"	"189067"
##	[1177]	"4373156"	"309391"	"196526"	"190864"	"177421"	"2498994"	"190991"
##	[1184]	"197581"	"189381"	"288362"	"185148"	"4381092"	"4431803"	"195548"
##	[1191]	"90487"	"1679707"	"519746"	"1838560"	"4408423"	"510295"	"865469"
##	[1198]	"307680"	"1860111"	"199421"	"4468891"	"1763286"	"1624383"	"2063400"
##	[1205]	"193915"	"175520"	"4476065"	"4029584"	"3197419"	"188077"	"289927"
##	[1212]	"2555599"	"261590"	"109413"	"2272791"	"177910"	"4454025"	"3040024"
##	[1219]	"193831"	"430191"	"191999"	"4345285"	"4343184"	"191779"	"524848"
##	[1226]	"369635"	"3671383"	"3186388"	"195522"	"4380813"	"180401"	"338177"
##	[1233]	"4294457"	"356360"	"4449458"	"4377715"	"45296"	"4474951"	"505670"
##	[1240]	"4337431"	"185570"	"637546"	"4352349"	"4367187"	"144814"	"4481624"
##	[1247]	"4365141"	"3359884"	"743082"	"192342"	"203579"	"3441309"	"119010"
##	[1254]	"67813"	"4310208"	"4475758"	"4473664"	"366451"	"345540"	"1023075"
##	[1261]	"1115481"	"1024529"	"1130824"	"746679"	"228556"	"370086"	"495451"
##	[1268]	"4409962"	"1823053"	"4469007"	"628226"	"1888072"	"4345397"	"125270"
##	[1275]	"197499"	"583656"	"181161"	"192070"	"193679"	"174885"	"194320"
##	[1282]	"185864"	"1099710"	"260414"	"174147"	"539581"	"188047"	"194219"
##	[1289]	"179319"	"3300804"	"4393172"	"4346675"	"194001"	"370225"	"189524"
##	[1296]	"196982"	"188194"	"197343"	"195294"	"269386"	"197624"	"3697034"
##	[1303]	"4468892"	"169364"	"181174"	"181008"	"166869"	"2768843"	"174571"
##	[1310]	"110562"	"188707"	"2985051"	"184770"	"4326869"	"4477861"	"173876"
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##	[1324]	"192323"	"329703"	"193769"	"190649"	"185141"	"4472721"	"186463"
##	[1331]	"2996838"	"230421"	"187038"	"198190"	"4425495"	"187868"	"198221"
##	[1338]	"175148"	"181176"	"300952"	"179785"	"197750"	"194559"	"1906635"
##	[1345]	"192818"	"1135084"	"353615"	"182033"	"534957"	"2388088"	"192370"
##	[1352]	"192839"	"2487129"	"185428"	"3325758"	"189176"	"328659"	"179663"
##	[1359]	"130663"	"197661"	"188333"	"332732"	"2170526"	"538322"	"188851"
##	[1366]	"185861"	"2430693"	"266274"	"191833"	"179729"	"1722623"	"4386507"
##	[1373]	"176008"	"2200896"	"134174"	"113069"	"1126851"	"187689"	"199710"
##	[1380]	"2658061"	"3474081"	"189478"	"357305"	"4435655"	"185583"	"297182"

##	[1387]	"4465472"	"194258"	"186896"	"755148"	"521795"	"4429335"	"495017"
##	[1394]	"25461"	"194761"	"181269"	"15728"	"494906"	"181853"	"1077373"
##	[1401]	"183824"	"179609"	"183210"	"4331723"	"1100471"	"189828"	"360238"
##	[1408]	"4476950"	"3507744"	"182653"	"180421"	"306066"	"181871"	"178965"
##	[1415]	"1646171"	"186981"	"300374"	"232900"	"207340"	"553150"	"187404"
##	[1422]	"211720"	"178852"	"4421273"	"186448"	"2256425"	"3841096"	"216599"
##	[1429]	"185164"	"564334"	"190913"	"1076818"	"4349946"	"360890"	"315223"
##	[1436]	"179847"	"178712"	"145856"	"718358"	"2442706"	"839684"	"197890"
##	[1443]	"151870"	"186352"	"234443"	"4449427"	"4466707"	"4335484"	"586453"
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##	[1471]	"2877100"	"288138"	"175508"	"300378"	"1146771"	"110192"	"188966"
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##	[1485]	"527988"	"563803"	"324015"	"341730"	"339566"	"2066056"	"3390534"
##	[1492]	"193148"	"4460786"	"193654"	"197052"	"174792"	"4456702"	"3648884"
##	[1499]	"340711"	"181452"	"191476"	"3797933"	"178708"	"4212012"	"193129"
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##	[1513]	"4387453"	"177134"	"189588"	"198117"	"4404731"	"54563"	"180136"
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##	[1534]	"4435784"	"183532"	"4347652"	"184320"	"3141342"	"4350477"	"178183"
##	[1541]	"185059"	"368236"	"2391105"	"193480"	"2403301"	"4476561"	"4466220"
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##	[1562]	"3692427"	"293511"	"4474759"	"213870"	"4455767"	"4460021"	"365167"
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##	[1576]	"842786"	"182116"	"4354486"	"2420187"	"4450214"	"157453"	"199534"
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##	[1590]	"181059"	"175642"	"191551"	"175036"	"840376"	"4412540"	"4450194"
##	[1597]	"2530636"	"4442899"	"4437359"	"196513"	"2368865"	"147702"	"4439398"
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##	[1646]	"4456027"	"300662"	"4468805"	"288004"	"304973"	"360311"	"4403113"
##	[1653]	"176381"	"181217"	"4451907"	"178082"	"317814"	"575768"	"198626"
##	[1660]	"198127"	"194995"	"179291"	"189624"	"194339"	"4375889"	"3544569"
##	[1667]	"194443"	"161007"	"197708"	"4484075"	"177062"	"198866"	"190679"
##	[1674]	"308081"	"180842"	"193987"	"322571"	"194868"	"4360055"	"191391"
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##	[1688]	"522433"	"130763"	"175180"	"358781"	"192462"	"180572"	"363646"
##	[1695]	"183457"	"185575"	"183054"	"319275"	"190987"	"583134"	"184114"
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##	[1716]	"185814"	"194471"	"194324"	"176469"	"307984"	"179572"	"3807411"
##	[1723]	"208901"	"199256"	"192438"	"186011"	"201772"	"3235048"	"188449"
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##	[1751]	"187180"	"4390972"	"186906"	"184980"	"341920"	"4232048"	"180215"
##	[1758]	"182036"	"175836"	"4443094"	"327218"	"4469032"	"166848"	"232828"

##	[1765]	"192437"	"3302038"	"189877"	"305288"	"199344"	"322505"	"3302039"
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##	[1800]	"4454257"	"182483"	"4318284"	"4363066"	"1811927"	"4387092"	"289925"
##	[1807]	"4405869"	"196391"	"4396656"	"1105376"	"4041792"	"300297"	"237444"
##	[1814]	"191783"	"196176"	"248126"	"303161"	"287813"	"351020"	"4352805"
##	[1821]	"134671"	"4328189"	"189292"	"174499"	"4352747"	"194925"	"184729"
##	[1828]	"368175"	"342666"	"4477719"	"174738"	"4428544"	"174360"	"179576"
##	[1835]	"544419"	"212686"	"325850"	"4433417"	"49088"	"305224"	"178242"
##	[1842]	"352852"	"157054"	"577710"	"189793"	"175932"	"195947"	"182933"
##	[1849]	"4070490"	"342231"	"176157"	"193061"	"1986324"	"4411138"	"552376"
##	[1856]	"184036"	"258375"	"175650"	"289452"	"156357"	"136518"	"348009"
##	[1863]	"187384"	"4469233"	"688923"	"4442508"	"182735"	"176104"	"4420417"
##	[1870]	"4358921"	"688800"	"336063"	"179861"	"192592"	"157772"	"4319899"
##	[1877]	"4335578"	"2229500"	"110625"	"4406616"	"4450415"	"3598692"	"196831"
##	[1884]	"193829"	"192696"	"4429239"	"179436"	"4448928"	"4351284"	"173810"
##	[1891]	"296420"	"4475469"	"849642"	"4315658"	"71165"	"3610691"	"4468384"
##	[1898]	"518820"	"4437746"	"198468"	"195029"	"4352494"	"4349261"	"1667433"
##	[1905]	"4427290"	"315958"	"1107755"	"178849"	"348863"	"174045"	"4434268"
##	[1912]	"331150"	"4304475"	"181826"	"321517"	"2800178"	"4415649"	"4459414"
##	[1919]	"182588"	"4374853"	"695909"	"1124877"	"1959881"	"3889756"	"528628"
##	[1926]	"4418165"	"242298"	"3680006"	"174960"	"12562"	"147195"	"64384"
##	[1933]	"4102199"	"199555"	"308444"	"3270612"	"193975"	"181047"	"519763"
##	[1940]	"372146"	"352747"	"178994"	"177828"	"891034"	"311402"	"165118"
##	[1947]	"187917"	"181718"	"333114"	"195358"	"287700"	"338301"	"191250"
##	[1954]	"186381"	"179715"	"196581"	"304757"	"4306587"	"4424063"	"306412"
##	[1961]	"4405482"	"4437748"	"3096648"	"361702"	"196381"	"128382"	"103166"
##	[1968]	"4428313"	"4397402"	"1108437"	"137026"	"4354103"	"12564"	"275237"
##	[1975]	"198928"	"4393073"	"3221787"	"294794"	"363731"	"214031"	"4415390"
##	[1982]	"363997"	"188044"	"4072210"	"225088"	"4305372"	"350503"	"4202174"
##	[1989]	"180974"	"4332078"	"4428676"	"129692"	"290241"	"158722"	"230479"
##	[1996]	"190863"	"175336"	"3696710"	"2182669"	"146086"	"192255"	"4326084"
##	[2003]	"308157"	"181466"	"192654"	"193314"	"180857"	"221429"	"198248"
##	[2010]	"189936"	"2978122"	"186272"	"2399341"	"1986406"	"102471"	"3693042"
##	[2017]	"759816"	"294254"	"19611"	"4429608"	"4397439"	"179018"	"4451906"
##	[2024]	"842193"	"4355379"	"191718"	"4297222"	"319411"	"4004998"	"1068836"
##	[2031]	"4371463"	"168071"	"357930"	"189754"	"175967"	"303269"	"129401"
##	[2038]	"3278416"	"183925"	"183804"	"348642"	"186851"	"113581"	"1657491"
##	[2045]	"309107"	"3438642"	"293594"	"4396298"	"4153054"	"190961"	"185802"
##	[2052]	"4336943"	"1111522"	"3579831"	"176980"	"1012948"	"179744"	"847934"
##	[2059]	"3806695"	"4425663"	"183439"	"4483045"	"540055"	"239863"	"179435"
##	[2066]	"364563"	"329820"	"4422405"	"2932557"	"181167"	"584176"	"232696"
##	[2073]	"317286"	"3228684"	"556126"	"3101394"	"1147925"	"4480176"	"186358"
##	[2080]	"190241"	"179392"	"178713"	"326936"	"298937"	"2883968"	"4453773"
##	[2087]	"4472551"	"136526"	"320888"	"193868"	"4407747"	"178970"	"815422"
##	[2094]	"1034960"	"849393"	"522595"	"158113"	"544996"	"4307265"	"196590"
##	[2101]	"4473883"	"564290"	"386273"	"178253"	"4178726"	"185914"	"366722"
##	[2108]	"174943"	"179989"	"305946"	"1028036"	"4480359"	"181961"	"4154872"
##	[2115]	"548503"	"4308811"	"177301"	"4357713"	"302333"	"2699610"	"2829179"
##	[2122]	"4381422"	"4416614"	"663500"	"178064"	"547913"	"3465233"	"2024346"
##	[2129]	"185972"	"195723"	"710275"	"178809"	"4423553"	"190772"	"195081"
##	[2136]	"177758"	"185603"	"179402"	"182416"	"302321"	"4459940"	"363430"

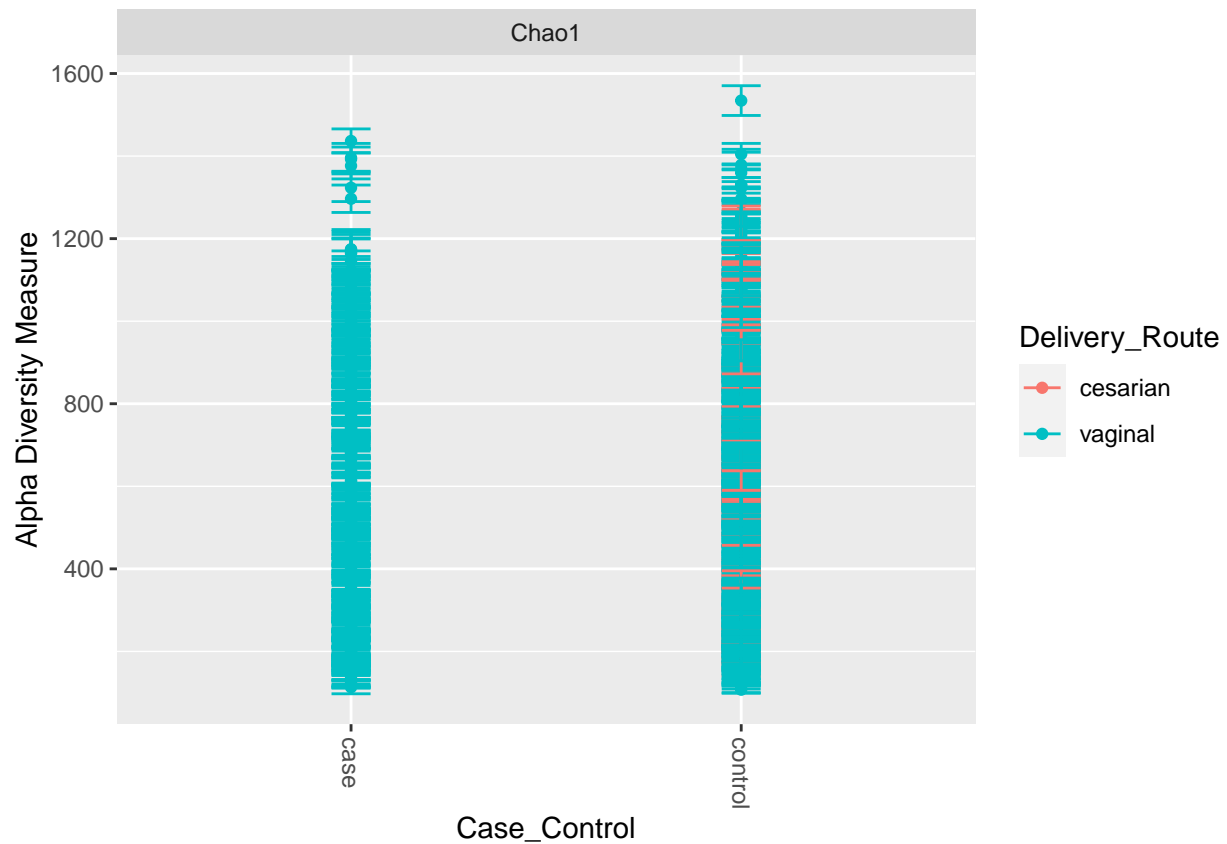
```
## [2143] "186233" "351163" "327851" "174019" "368412" "158027" "4404507"
## [2150] "130048" "3409355" "4368575" "815573" "840961" "358712" "4358599"
## [2157] "685156" "3550973" "179662" "3609803" "316728" "2232355" "14920"
## [2164] "2134134" "333768" "579541" "292758" "4333921" "2820255" "353330"
## [2171] "178773" "4474760" "361864" "4397098" "182142" "288258" "610111"
## [2178] "105409" "725198" "4012414" "302880" "184314" "268506" "960871"
## [2185] "4480861" "4415965" "724147" "646800" "4338624" "107044" "4307122"
## [2192] "304088" "195871" "214682" "1106254" "347783" "205613" "846798"
## [2199] "177518" "158423" "16340" "414949" "4310326" "4353913" "180982"
## [2206] "1145262" "747563" "157470" "1131759" "2423305" "4300690" "342844"
## [2213] "296858" "279048" "511229" "300618" "109633" "4465124" "308386"
## [2220] "191278" "1148151" "113542" "158215" "2377731" "41128" "4352875"
## [2227] "320915" "3785400" "574720" "2965498" "4399109" "4299126" "185593"
## [2234] "158270" "342777" "842596" "144395" "229348" "187121" "208972"
```

```
sample_variables(phseqData)
```

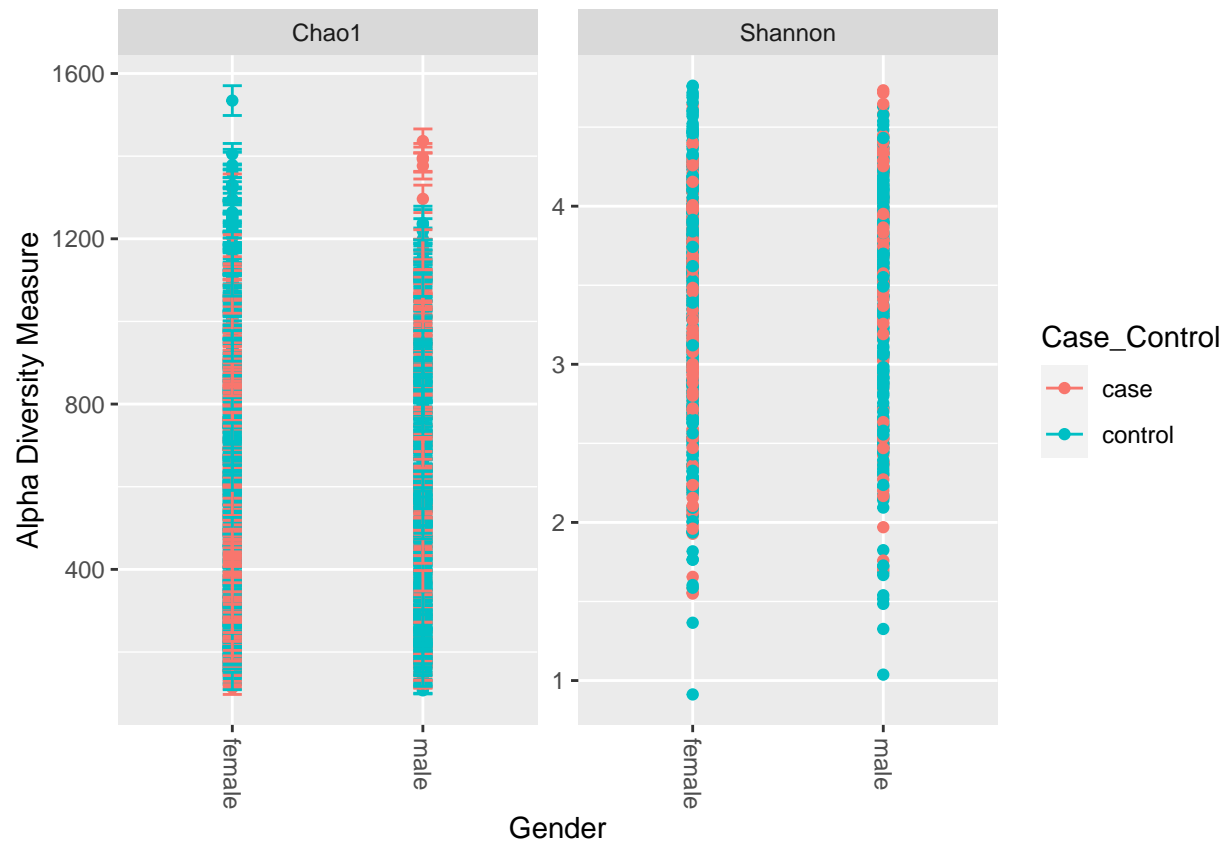
```
## [1] "Subject_ID"      "Case_Control"    "Gender"
## [4] "Delivery_Route"  "Age_at_Collection"
```

```
#Alpha Diversity
```

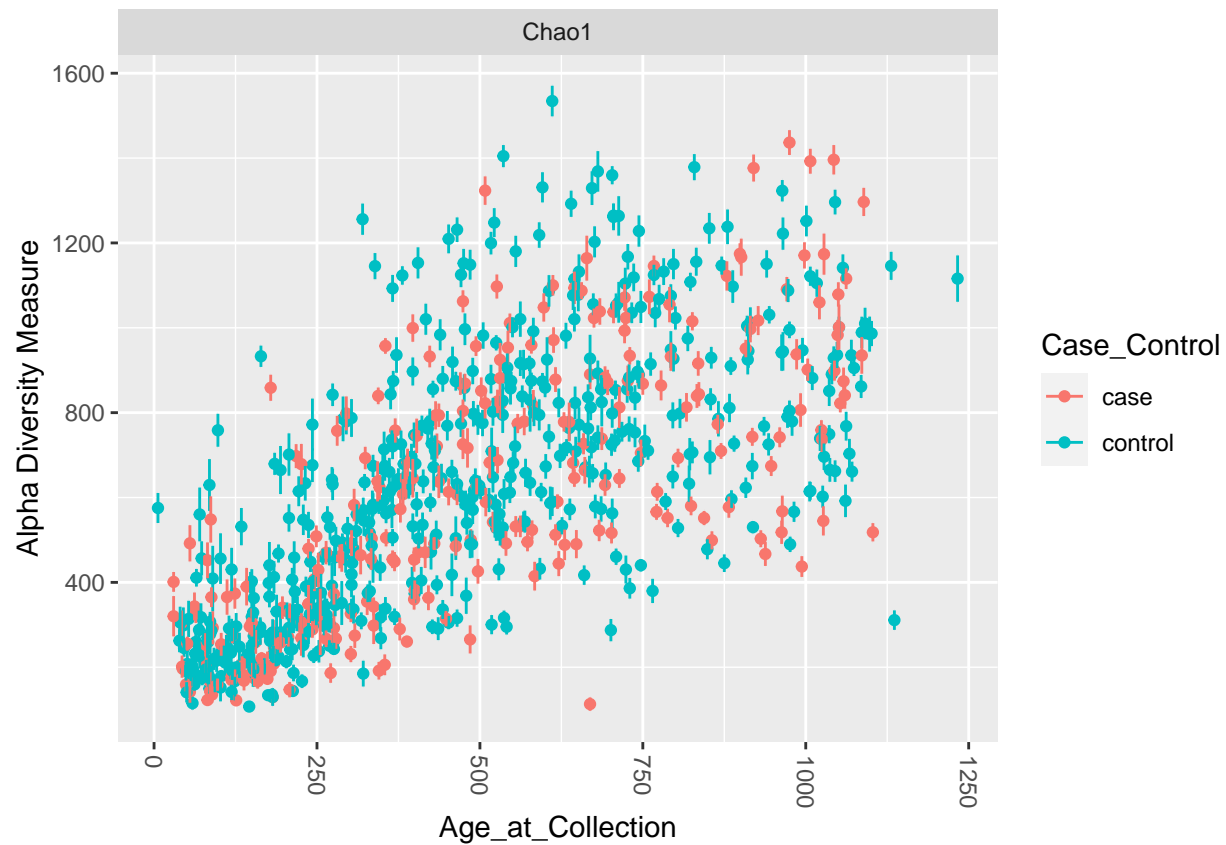
```
plot_richness(phseqData,x = "Case_Control", color="Delivery_Route", measures= "Chao1")
```



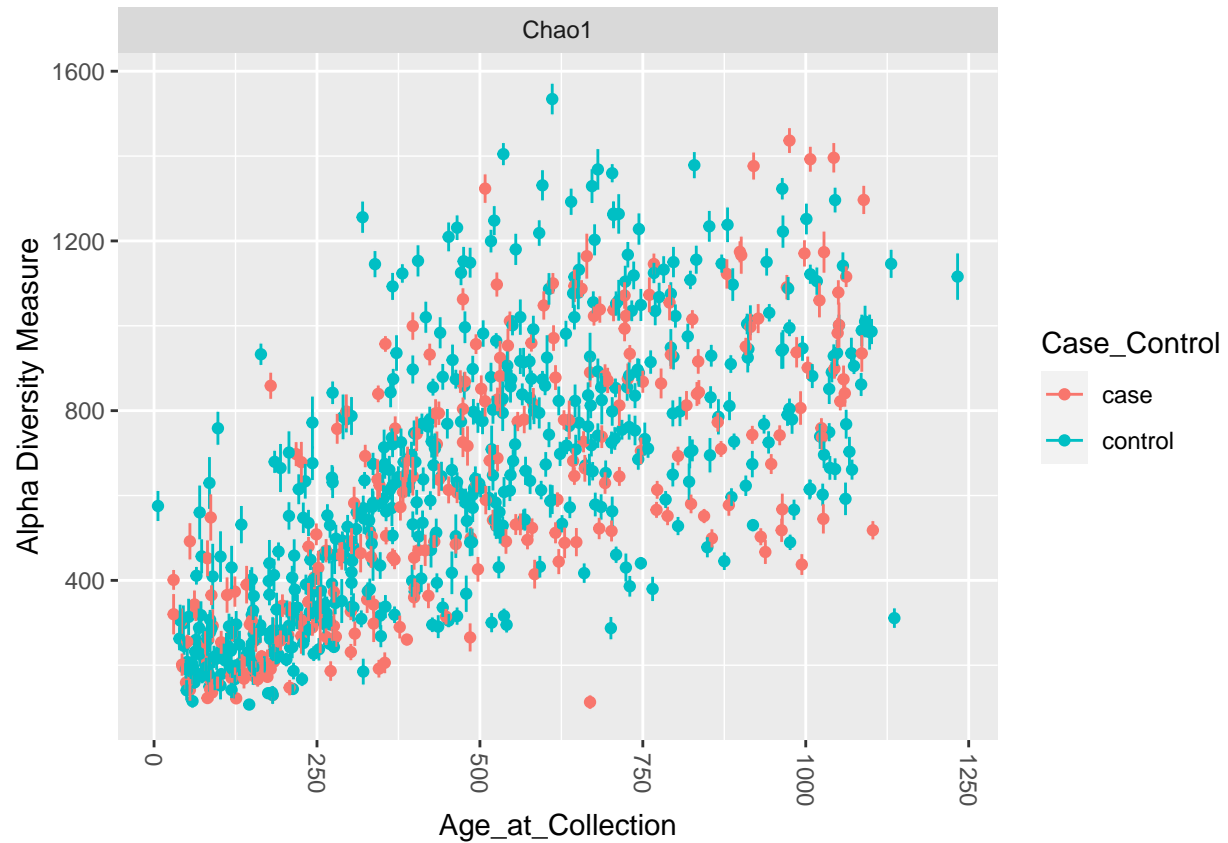

```
plot_richness(phseqData,x = "Gender", color="Case_Control", measures= c("Chao1", "shannon"))
```



```
plot_richness(phseqData,x = "Age_at_Collection", color="Case_Control", measures= "Chao1")
```



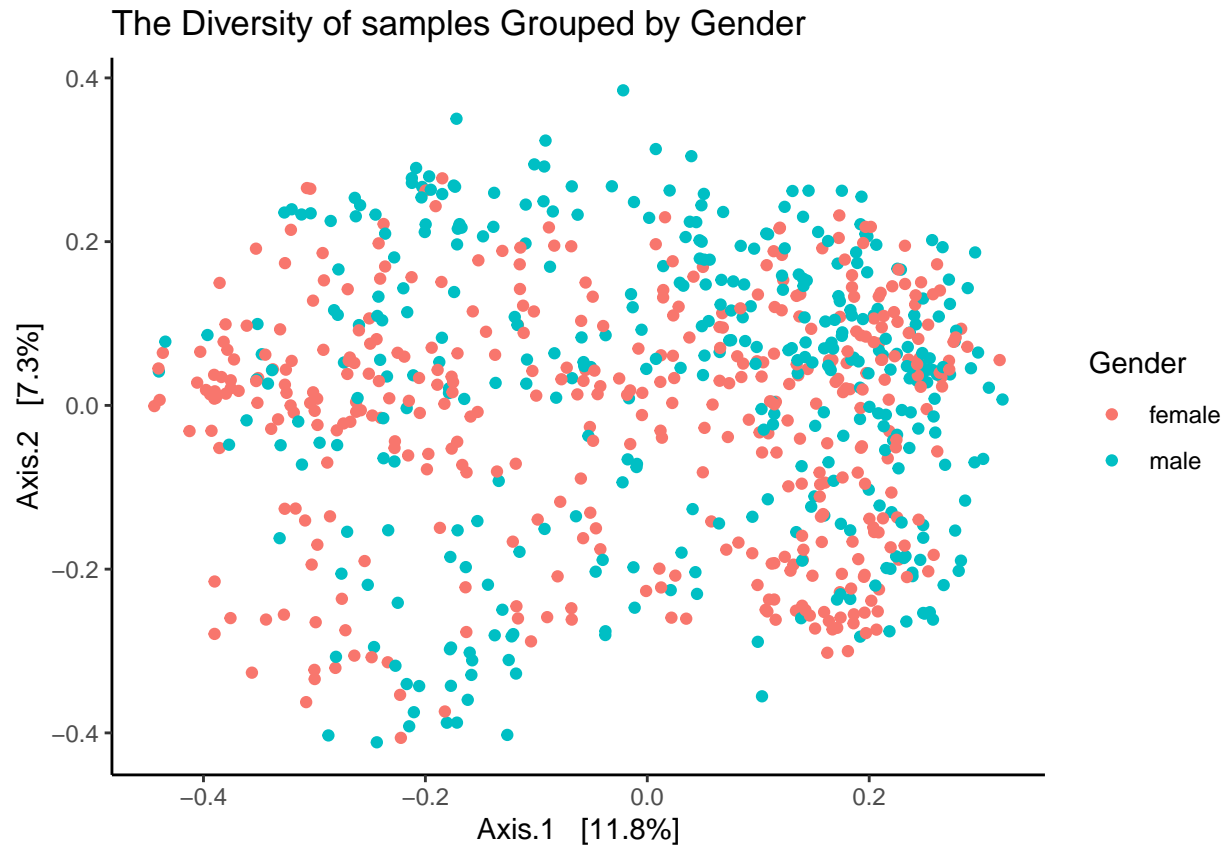
```
plot_richness(phseqData,x = "Age_at_Collection", color="Case_Control", measures= "Chao1")
```



#Ordination Plots

```
Ordn <- ordinate(phseqData, "PCoA", "bray")%>%
plot_ordination(phseqData, ., color = "Gender", title = "The Diversity of samples Grouped by Gender")+
  theme_classic()

Ordn
```



```

Ord1 <- Ordinate <- ordinate(phseqData, "PCoA", "bray")
plot_ordination(phseqData, Ordinate, color = "Case_Control", title = "The Diversity of samples Grouped by Gender",
  theme_classic()

```

```

## Warning in plot_ordination(phseqData, Ordinate, color = "Case_Control", : Could not obtain coordinates for Case_Control
## Please check your ordination method, and whether it is supported by 'scores' or listed by phyloseq-package

## NULL

```

```

Ord1
## $correction
## [1] "none" "1"
##
## $note
## [1] "No correction was applied to the negative eigenvalues"
##
## $values
##      Eigenvalues  Relative_eig Rel_corr_eig Broken_stick Cum_corr_eig
## 1  3.290153e+01  1.175916e-01  0.0364644144  9.329966e-03  0.03646441
## 2  2.050455e+01  7.328422e-02  0.0230636660  8.039644e-03  0.05952808
## 3  1.561774e+01  5.581853e-02  0.0177811806  7.394482e-03  0.07730926
## 4  1.337723e+01  4.781086e-02  0.0153592661  6.964375e-03  0.09266853
## 5  1.166573e+01  4.169385e-02  0.0135091824  6.641794e-03  0.10617771

```

## 6	9.847286e+00	3.519467e-02	0.0115435078	6.383730e-03	0.11772122
## 7	9.254199e+00	3.307494e-02	0.0109023998	6.168676e-03	0.12862362
## 8	7.884795e+00	2.818063e-02	0.0094221178	5.984344e-03	0.13804573
## 9	7.268978e+00	2.597967e-02	0.0087564390	5.823054e-03	0.14680217
## 10	6.196359e+00	2.214608e-02	0.0075969722	5.679684e-03	0.15439915
## 11	5.802327e+00	2.073779e-02	0.0071710358	5.550652e-03	0.16157018
## 12	5.490844e+00	1.962454e-02	0.0068343329	5.433350e-03	0.16840451
## 13	5.370828e+00	1.919559e-02	0.0067045992	5.325823e-03	0.17510911
## 14	5.051931e+00	1.805584e-02	0.0063598814	5.226568e-03	0.18146900
## 15	4.917835e+00	1.757657e-02	0.0062149277	5.134402e-03	0.18768392
## 16	4.533278e+00	1.620215e-02	0.0057992349	5.048380e-03	0.19348316
## 17	4.232688e+00	1.512783e-02	0.0054743061	4.967735e-03	0.19895746
## 18	4.134374e+00	1.477645e-02	0.0053680322	4.891834e-03	0.20432550
## 19	3.912552e+00	1.398364e-02	0.0051282489	4.820149e-03	0.20945375
## 20	3.902575e+00	1.394799e-02	0.0051174648	4.752237e-03	0.21457121
## 21	3.659457e+00	1.307907e-02	0.0048546613	4.687721e-03	0.21942587
## 22	3.416449e+00	1.221055e-02	0.0045919779	4.626277e-03	0.22401785
## 23	3.277910e+00	1.171541e-02	0.0044422221	4.567626e-03	0.22846007
## 24	3.171701e+00	1.133581e-02	0.0043274128	4.511525e-03	0.23278748
## 25	3.082801e+00	1.101808e-02	0.0042313152	4.457762e-03	0.23701880
## 26	2.959841e+00	1.057861e-02	0.0040983988	4.406149e-03	0.24111720
## 27	2.895362e+00	1.034816e-02	0.0040286991	4.356521e-03	0.24514590
## 28	2.755081e+00	9.846789e-03	0.0038770600	4.308732e-03	0.24902296
## 29	2.481006e+00	8.867233e-03	0.0035807941	4.262649e-03	0.25260375
## 30	2.452969e+00	8.767028e-03	0.0035504871	4.218155e-03	0.25615424
## 31	2.341488e+00	8.368588e-03	0.0034299793	4.175144e-03	0.25958422
## 32	2.316237e+00	8.278341e-03	0.0034026839	4.133521e-03	0.26298690
## 33	2.294229e+00	8.199682e-03	0.0033788937	4.093198e-03	0.26636580
## 34	2.216072e+00	7.920347e-03	0.0032944089	4.054097e-03	0.26966020
## 35	2.159592e+00	7.718482e-03	0.0032333551	4.016147e-03	0.27289356
## 36	2.036432e+00	7.278303e-03	0.0031002234	3.979280e-03	0.27599378
## 37	1.986741e+00	7.100705e-03	0.0030465087	3.943438e-03	0.27904029
## 38	1.927205e+00	6.887921e-03	0.0029821525	3.908565e-03	0.28202244
## 39	1.895533e+00	6.774723e-03	0.0029479160	3.874609e-03	0.28497036
## 40	1.826857e+00	6.529274e-03	0.0028736799	3.841523e-03	0.28784404
## 41	1.785790e+00	6.382498e-03	0.0028292876	3.809265e-03	0.29067333
## 42	1.710896e+00	6.114824e-03	0.0027483298	3.777794e-03	0.29342166
## 43	1.688847e+00	6.036017e-03	0.0027244949	3.747072e-03	0.29614615
## 44	1.659545e+00	5.931291e-03	0.0026928203	3.717065e-03	0.29883897
## 45	1.641844e+00	5.868026e-03	0.0026736860	3.687739e-03	0.30151266
## 46	1.567228e+00	5.601346e-03	0.0025930288	3.659065e-03	0.30410569
## 47	1.557025e+00	5.564882e-03	0.0025820002	3.631015e-03	0.30668769
## 48	1.496835e+00	5.349757e-03	0.0025169360	3.603561e-03	0.30920462
## 49	1.445865e+00	5.167591e-03	0.0024618399	3.576679e-03	0.31166646
## 50	1.408036e+00	5.032386e-03	0.0024209472	3.550346e-03	0.31408741
## 51	1.387229e+00	4.958022e-03	0.0023984558	3.524540e-03	0.31648587
## 52	1.345104e+00	4.807466e-03	0.0023529203	3.499239e-03	0.31883879
## 53	1.323789e+00	4.731284e-03	0.0023298790	3.474426e-03	0.32116867
## 54	1.294559e+00	4.626816e-03	0.0022982828	3.450080e-03	0.32346695
## 55	1.263497e+00	4.515798e-03	0.0022647056	3.426185e-03	0.32573165
## 56	1.233359e+00	4.408082e-03	0.0022321268	3.402725e-03	0.32796378
## 57	1.209079e+00	4.321306e-03	0.0022058817	3.379683e-03	0.33016966
## 58	1.180657e+00	4.219724e-03	0.0021751582	3.357046e-03	0.33234482
## 59	1.158715e+00	4.141303e-03	0.0021514397	3.334799e-03	0.33449626

## 60	1.153137e+00	4.121365e-03	0.0021454094	3.312929e-03	0.33664167
## 61	1.130368e+00	4.039987e-03	0.0021207967	3.291424e-03	0.33876247
## 62	1.106733e+00	3.955517e-03	0.0020952490	3.270271e-03	0.34085772
## 63	1.043420e+00	3.729233e-03	0.0020268095	3.249459e-03	0.34288452
## 64	1.021887e+00	3.652272e-03	0.0020035327	3.228978e-03	0.34488806
## 65	1.013539e+00	3.622435e-03	0.0019945084	3.208817e-03	0.34688257
## 66	9.856184e-01	3.522647e-03	0.0019643276	3.188965e-03	0.34884689
## 67	9.788779e-01	3.498556e-03	0.0019570413	3.169415e-03	0.35080393
## 68	9.516440e-01	3.401221e-03	0.0019276023	3.150157e-03	0.35273154
## 69	9.285441e-01	3.318661e-03	0.0019026321	3.131181e-03	0.35463417
## 70	9.080198e-01	3.245305e-03	0.0018804459	3.112481e-03	0.35651462
## 71	9.020462e-01	3.223955e-03	0.0018739886	3.094048e-03	0.35838860
## 72	8.846388e-01	3.161741e-03	0.0018551719	3.075874e-03	0.36024378
## 73	8.767321e-01	3.133482e-03	0.0018466250	3.057953e-03	0.36209040
## 74	8.583424e-01	3.067756e-03	0.0018267462	3.040277e-03	0.36391715
## 75	8.238853e-01	2.944605e-03	0.0017894992	3.022841e-03	0.36570665
## 76	8.140471e-01	2.909443e-03	0.0017788644	3.005636e-03	0.36748551
## 77	7.992722e-01	2.856637e-03	0.0017628933	2.988658e-03	0.36924840
## 78	7.862284e-01	2.810017e-03	0.0017487934	2.971901e-03	0.37099720
## 79	7.796194e-01	2.786396e-03	0.0017416492	2.955358e-03	0.37273885
## 80	7.590464e-01	2.712868e-03	0.0017194105	2.939025e-03	0.37445826
## 81	7.553184e-01	2.699543e-03	0.0017153806	2.922896e-03	0.37617364
## 82	7.408522e-01	2.647841e-03	0.0016997432	2.906966e-03	0.37787338
## 83	7.282841e-01	2.602922e-03	0.0016861574	2.891230e-03	0.37955954
## 84	7.217148e-01	2.579443e-03	0.0016790562	2.875684e-03	0.38123859
## 85	6.948669e-01	2.483487e-03	0.0016500345	2.860323e-03	0.38288863
## 86	6.931991e-01	2.477526e-03	0.0016482317	2.845143e-03	0.38453686
## 87	6.771760e-01	2.420259e-03	0.0016309112	2.830139e-03	0.38616777
## 88	6.641099e-01	2.373560e-03	0.0016167871	2.815308e-03	0.38778456
## 89	6.584241e-01	2.353239e-03	0.0016106410	2.800645e-03	0.38939520
## 90	6.477974e-01	2.315258e-03	0.0015991538	2.786147e-03	0.39099435
## 91	6.403637e-01	2.288690e-03	0.0015911183	2.771810e-03	0.39258547
## 92	6.332541e-01	2.263280e-03	0.0015834330	2.757631e-03	0.39416890
## 93	6.220742e-01	2.223323e-03	0.0015713479	2.743606e-03	0.39574025
## 94	6.157647e-01	2.200772e-03	0.0015645275	2.729731e-03	0.39730478
## 95	6.025788e-01	2.153645e-03	0.0015502740	2.716005e-03	0.39885505
## 96	6.010065e-01	2.148026e-03	0.0015485744	2.702422e-03	0.40040363
## 97	5.930151e-01	2.119464e-03	0.0015399359	2.688981e-03	0.40194356
## 98	5.802812e-01	2.073952e-03	0.0015261710	2.675679e-03	0.40346974
## 99	5.697370e-01	2.036267e-03	0.0015147730	2.662513e-03	0.40498451
## 100	5.645316e-01	2.017663e-03	0.0015091462	2.649479e-03	0.40649365
## 101	5.565167e-01	1.989017e-03	0.0015004823	2.636576e-03	0.40799414
## 102	5.473718e-01	1.956333e-03	0.0014905970	2.623800e-03	0.40948473
## 103	5.374520e-01	1.920879e-03	0.0014798740	2.611150e-03	0.41096461
## 104	5.283830e-01	1.888466e-03	0.0014700707	2.598623e-03	0.41243468
## 105	5.184726e-01	1.853045e-03	0.0014593578	2.586216e-03	0.41389404
## 106	5.131270e-01	1.833940e-03	0.0014535795	2.573927e-03	0.41534762
## 107	5.063014e-01	1.809545e-03	0.0014462012	2.561754e-03	0.41679382
## 108	5.017461e-01	1.793264e-03	0.0014412771	2.549695e-03	0.41823509
## 109	4.944210e-01	1.767084e-03	0.0014333588	2.537748e-03	0.41966845
## 110	4.868253e-01	1.739937e-03	0.0014251481	2.525910e-03	0.42109360
## 111	4.799682e-01	1.715429e-03	0.0014177358	2.514180e-03	0.42251134
## 112	4.724910e-01	1.688705e-03	0.0014096532	2.502555e-03	0.42392099
## 113	4.718259e-01	1.686328e-03	0.0014089342	2.491034e-03	0.42532992

## 114	4.644073e-01	1.659814e-03	0.0014009150	2.479615e-03	0.42673084
## 115	4.580908e-01	1.637238e-03	0.0013940871	2.468297e-03	0.42812493
## 116	4.462450e-01	1.594901e-03	0.0013812821	2.457077e-03	0.42950621
## 117	4.409598e-01	1.576011e-03	0.0013755690	2.445953e-03	0.43088178
## 118	4.326999e-01	1.546490e-03	0.0013666403	2.434925e-03	0.43224842
## 119	4.268309e-01	1.525514e-03	0.0013602961	2.423990e-03	0.43360871
## 120	4.243694e-01	1.516716e-03	0.0013576353	2.413147e-03	0.43496635
## 121	4.189504e-01	1.497348e-03	0.0013517775	2.402394e-03	0.43631813
## 122	4.156823e-01	1.485668e-03	0.0013482448	2.391730e-03	0.43766637
## 123	4.105690e-01	1.467393e-03	0.0013427176	2.381154e-03	0.43900909
## 124	4.059438e-01	1.450862e-03	0.0013377178	2.370663e-03	0.44034681
## 125	3.988883e-01	1.425645e-03	0.0013300910	2.360258e-03	0.44167690
## 126	3.900967e-01	1.394224e-03	0.0013205876	2.349935e-03	0.44299749
## 127	3.863239e-01	1.380740e-03	0.0013165094	2.339694e-03	0.44431400
## 128	3.786483e-01	1.353307e-03	0.0013082122	2.329534e-03	0.44562221
## 129	3.768321e-01	1.346816e-03	0.0013062490	2.319454e-03	0.44692846
## 130	3.733435e-01	1.334347e-03	0.0013024779	2.309451e-03	0.44823093
## 131	3.717771e-01	1.328749e-03	0.0013007847	2.299526e-03	0.44953172
## 132	3.648293e-01	1.303917e-03	0.0012932743	2.289676e-03	0.45082499
## 133	3.577260e-01	1.278530e-03	0.0012855959	2.279901e-03	0.45211059
## 134	3.561729e-01	1.272979e-03	0.0012839170	2.270199e-03	0.45339451
## 135	3.516420e-01	1.256785e-03	0.0012790194	2.260570e-03	0.45467353
## 136	3.494965e-01	1.249117e-03	0.0012767001	2.251012e-03	0.45595023
## 137	3.417440e-01	1.221409e-03	0.0012683199	2.241524e-03	0.45721855
## 138	3.385364e-01	1.209945e-03	0.0012648526	2.232106e-03	0.45848340
## 139	3.352972e-01	1.198368e-03	0.0012613511	2.222756e-03	0.45974475
## 140	3.332378e-01	1.191008e-03	0.0012591250	2.213473e-03	0.46100387
## 141	3.289866e-01	1.175813e-03	0.0012545295	2.204256e-03	0.46225840
## 142	3.204887e-01	1.145442e-03	0.0012453436	2.195105e-03	0.46350375
## 143	3.166415e-01	1.131692e-03	0.0012411849	2.186018e-03	0.46474493
## 144	3.140216e-01	1.122328e-03	0.0012383528	2.176995e-03	0.46598329
## 145	3.119799e-01	1.115031e-03	0.0012361458	2.168034e-03	0.46721943
## 146	3.095376e-01	1.106302e-03	0.0012335057	2.159135e-03	0.46845294
## 147	3.066790e-01	1.096085e-03	0.0012304157	2.150298e-03	0.46968335
## 148	3.023313e-01	1.080546e-03	0.0012257160	2.141520e-03	0.47090907
## 149	2.967474e-01	1.060589e-03	0.0012196800	2.132802e-03	0.47212875
## 150	2.920366e-01	1.043753e-03	0.0012145878	2.124142e-03	0.47334334
## 151	2.883747e-01	1.030665e-03	0.0012106294	2.115540e-03	0.47455397
## 152	2.879045e-01	1.028984e-03	0.0012101211	2.106994e-03	0.47576409
## 153	2.862893e-01	1.023211e-03	0.0012083751	2.098505e-03	0.47697246
## 154	2.830832e-01	1.011753e-03	0.0012049094	2.090072e-03	0.47817737
## 155	2.782017e-01	9.943061e-04	0.0011996327	2.081693e-03	0.47937700
## 156	2.737165e-01	9.782756e-04	0.0011947843	2.073369e-03	0.48057179
## 157	2.676178e-01	9.564788e-04	0.0011881919	2.065097e-03	0.48175998
## 158	2.659915e-01	9.506662e-04	0.0011864339	2.056879e-03	0.48294641
## 159	2.588115e-01	9.250045e-04	0.0011786725	2.048712e-03	0.48412509
## 160	2.574184e-01	9.200253e-04	0.0011771666	2.040597e-03	0.48530225
## 161	2.555208e-01	9.132434e-04	0.0011751154	2.032532e-03	0.48647737
## 162	2.512385e-01	8.979383e-04	0.0011704864	2.024518e-03	0.48764785
## 163	2.489735e-01	8.898430e-04	0.0011680379	2.016553e-03	0.48881589
## 164	2.466044e-01	8.813756e-04	0.0011654770	2.008637e-03	0.48998137
## 165	2.434562e-01	8.701238e-04	0.0011620739	2.000769e-03	0.49114344
## 166	2.410402e-01	8.614892e-04	0.0011594623	1.992949e-03	0.49230291
## 167	2.376323e-01	8.493089e-04	0.0011557784	1.985176e-03	0.49345868

## 168	2.310771e-01	8.258804e-04	0.0011486925	1.977449e-03	0.49460738
## 169	2.281893e-01	8.155594e-04	0.0011455709	1.969769e-03	0.49575295
## 170	2.252577e-01	8.050818e-04	0.0011424020	1.962134e-03	0.49689535
## 171	2.231630e-01	7.975952e-04	0.0011401377	1.954544e-03	0.49803549
## 172	2.202025e-01	7.870141e-04	0.0011369374	1.946998e-03	0.49917242
## 173	2.195962e-01	7.848473e-04	0.0011362821	1.939496e-03	0.50030871
## 174	2.157839e-01	7.712220e-04	0.0011321611	1.932038e-03	0.50144087
## 175	2.125834e-01	7.597832e-04	0.0011287014	1.924622e-03	0.50256957
## 176	2.071834e-01	7.404833e-04	0.0011228642	1.917249e-03	0.50369243
## 177	2.048362e-01	7.320943e-04	0.0011203269	1.909917e-03	0.50481276
## 178	2.028426e-01	7.249689e-04	0.0011181719	1.902627e-03	0.50593093
## 179	2.021001e-01	7.223153e-04	0.0011173693	1.895378e-03	0.50704830
## 180	1.973696e-01	7.054081e-04	0.0011122557	1.888170e-03	0.50816056
## 181	1.958856e-01	7.001044e-04	0.0011106516	1.881001e-03	0.50927121
## 182	1.945629e-01	6.953771e-04	0.0011092219	1.873872e-03	0.51038043
## 183	1.902778e-01	6.800617e-04	0.0011045897	1.866783e-03	0.51148502
## 184	1.876691e-01	6.707380e-04	0.0011017698	1.859732e-03	0.51258679
## 185	1.859199e-01	6.644864e-04	0.0010998790	1.852719e-03	0.51368667
## 186	1.846167e-01	6.598287e-04	0.0010984703	1.845744e-03	0.51478514
## 187	1.815161e-01	6.487469e-04	0.0010951186	1.838807e-03	0.51588026
## 188	1.795284e-01	6.416430e-04	0.0010929700	1.831907e-03	0.51697323
## 189	1.788023e-01	6.390479e-04	0.0010921851	1.825044e-03	0.51806541
## 190	1.747767e-01	6.246603e-04	0.0010878336	1.818217e-03	0.51915325
## 191	1.712660e-01	6.121127e-04	0.0010840386	1.811425e-03	0.52023729
## 192	1.697464e-01	6.066815e-04	0.0010823959	1.804670e-03	0.52131968
## 193	1.684968e-01	6.022156e-04	0.0010810452	1.797949e-03	0.52240073
## 194	1.672720e-01	5.978379e-04	0.0010797212	1.791264e-03	0.52348045
## 195	1.619843e-01	5.789394e-04	0.0010740053	1.784613e-03	0.52455445
## 196	1.609199e-01	5.751352e-04	0.0010728548	1.777996e-03	0.52562731
## 197	1.589785e-01	5.681968e-04	0.0010707562	1.771412e-03	0.52669806
## 198	1.559737e-01	5.574572e-04	0.0010675081	1.764862e-03	0.52776557
## 199	1.541246e-01	5.508484e-04	0.0010655093	1.758346e-03	0.52883108
## 200	1.525314e-01	5.451544e-04	0.0010637871	1.751862e-03	0.52989487
## 201	1.506424e-01	5.384032e-04	0.0010617452	1.745410e-03	0.53095661
## 202	1.488189e-01	5.318856e-04	0.0010597740	1.738991e-03	0.53201639
## 203	1.468894e-01	5.249897e-04	0.0010576883	1.732603e-03	0.53307408
## 204	1.457284e-01	5.208400e-04	0.0010564332	1.726247e-03	0.53413051
## 205	1.454155e-01	5.197217e-04	0.0010560950	1.719921e-03	0.53518660
## 206	1.434701e-01	5.127688e-04	0.0010539921	1.713627e-03	0.53624060
## 207	1.406659e-01	5.027467e-04	0.0010509609	1.707363e-03	0.53729156
## 208	1.405673e-01	5.023943e-04	0.0010508543	1.701130e-03	0.53834241
## 209	1.361793e-01	4.867111e-04	0.0010461110	1.694927e-03	0.53938852
## 210	1.356367e-01	4.847718e-04	0.0010455244	1.688753e-03	0.54043405
## 211	1.336011e-01	4.774966e-04	0.0010433241	1.682608e-03	0.54147737
## 212	1.309903e-01	4.681654e-04	0.0010405018	1.676493e-03	0.54251787
## 213	1.289096e-01	4.607289e-04	0.0010382527	1.670407e-03	0.54355613
## 214	1.277313e-01	4.565179e-04	0.0010369790	1.664349e-03	0.54459310
## 215	1.250430e-01	4.469094e-04	0.0010340730	1.658319e-03	0.54562718
## 216	1.232696e-01	4.405713e-04	0.0010321560	1.652318e-03	0.54665933
## 217	1.224878e-01	4.377773e-04	0.0010313110	1.646344e-03	0.54769064
## 218	1.203716e-01	4.302139e-04	0.0010290234	1.640398e-03	0.54871967
## 219	1.199832e-01	4.288255e-04	0.0010286035	1.634479e-03	0.54974827
## 220	1.184124e-01	4.232113e-04	0.0010269055	1.628587e-03	0.55077518
## 221	1.165743e-01	4.166421e-04	0.0010249186	1.622722e-03	0.55180010

## 222	1.152914e-01	4.120570e-04	0.0010235319	1.616883e-03	0.55282363
## 223	1.129699e-01	4.037597e-04	0.0010210224	1.611071e-03	0.55384465
## 224	1.115692e-01	3.987534e-04	0.0010195082	1.605285e-03	0.55486416
## 225	1.109429e-01	3.965153e-04	0.0010188313	1.599525e-03	0.55588299
## 226	1.081793e-01	3.866379e-04	0.0010158439	1.593790e-03	0.55689883
## 227	1.070209e-01	3.824976e-04	0.0010145917	1.588080e-03	0.55791343
## 228	1.049945e-01	3.752553e-04	0.0010124012	1.582396e-03	0.55892583
## 229	1.032353e-01	3.689677e-04	0.0010104995	1.576737e-03	0.55993633
## 230	1.030506e-01	3.683077e-04	0.0010102999	1.571102e-03	0.56094663
## 231	1.011916e-01	3.616636e-04	0.0010082904	1.565492e-03	0.56195492
## 232	9.975721e-02	3.565370e-04	0.0010067399	1.559906e-03	0.56296166
## 233	9.913748e-02	3.543220e-04	0.0010060700	1.554345e-03	0.56396773
## 234	9.841194e-02	3.517289e-04	0.0010052857	1.548807e-03	0.56497301
## 235	9.661688e-02	3.453133e-04	0.0010033453	1.543293e-03	0.56597636
## 236	9.585186e-02	3.425791e-04	0.0010025183	1.537802e-03	0.56697888
## 237	9.276371e-02	3.315419e-04	0.0009991801	1.532334e-03	0.56797806
## 238	9.196274e-02	3.286792e-04	0.0009983143	1.526890e-03	0.56897637
## 239	9.034210e-02	3.228869e-04	0.0009965625	1.521468e-03	0.56997293
## 240	8.908490e-02	3.183936e-04	0.0009952035	1.516070e-03	0.57096814
## 241	8.706460e-02	3.111730e-04	0.0009930196	1.510693e-03	0.57196116
## 242	8.655772e-02	3.093614e-04	0.0009924717	1.505339e-03	0.57295363
## 243	8.517169e-02	3.044076e-04	0.0009909734	1.500007e-03	0.57394460
## 244	8.311831e-02	2.970688e-04	0.0009887538	1.494697e-03	0.57493335
## 245	8.233432e-02	2.942667e-04	0.0009879063	1.489409e-03	0.57592126
## 246	8.219008e-02	2.937512e-04	0.0009877504	1.484142e-03	0.57690901
## 247	7.982458e-02	2.852968e-04	0.0009851934	1.478897e-03	0.57789420
## 248	7.906039e-02	2.825656e-04	0.0009843673	1.473673e-03	0.57887857
## 249	7.652813e-02	2.735151e-04	0.0009816300	1.468470e-03	0.57986020
## 250	7.523069e-02	2.688780e-04	0.0009802275	1.463288e-03	0.58084043
## 251	7.476343e-02	2.672080e-04	0.0009797224	1.458127e-03	0.58182015
## 252	7.321126e-02	2.616605e-04	0.0009780446	1.452986e-03	0.58279820
## 253	7.143043e-02	2.552957e-04	0.0009761195	1.447866e-03	0.58377432
## 254	7.082959e-02	2.531483e-04	0.0009754701	1.442766e-03	0.58474979
## 255	6.976423e-02	2.493406e-04	0.0009743184	1.437686e-03	0.58572410
## 256	6.912358e-02	2.470509e-04	0.0009736259	1.432626e-03	0.58669773
## 257	6.679200e-02	2.387178e-04	0.0009711055	1.427585e-03	0.58766884
## 258	6.506975e-02	2.325623e-04	0.0009692438	1.422565e-03	0.58863808
## 259	6.276629e-02	2.243297e-04	0.0009667539	1.417564e-03	0.58960483
## 260	6.252718e-02	2.234751e-04	0.0009664954	1.412582e-03	0.59057133
## 261	6.139464e-02	2.194274e-04	0.0009652712	1.407619e-03	0.59153660
## 262	6.067330e-02	2.168492e-04	0.0009644914	1.402675e-03	0.59250109
## 263	5.953071e-02	2.127656e-04	0.0009632563	1.397750e-03	0.59346435
## 264	5.907467e-02	2.111356e-04	0.0009627634	1.392844e-03	0.59442711
## 265	5.803851e-02	2.074324e-04	0.0009616433	1.387956e-03	0.59538875
## 266	5.677768e-02	2.029261e-04	0.0009602804	1.383087e-03	0.59634903
## 267	5.635537e-02	2.014168e-04	0.0009598239	1.378236e-03	0.59730886
## 268	5.494163e-02	1.963640e-04	0.0009582957	1.373404e-03	0.59826715
## 269	5.322775e-02	1.902385e-04	0.0009564430	1.368589e-03	0.59922360
## 270	5.205404e-02	1.860436e-04	0.0009551743	1.363792e-03	0.60017877
## 271	5.061505e-02	1.809006e-04	0.0009536188	1.359013e-03	0.60113239
## 272	5.001662e-02	1.787617e-04	0.0009529719	1.354252e-03	0.60208536
## 273	4.900497e-02	1.751461e-04	0.0009518783	1.349508e-03	0.60303724
## 274	4.821761e-02	1.723320e-04	0.0009510272	1.344782e-03	0.60398827
## 275	4.628935e-02	1.654403e-04	0.0009489428	1.340073e-03	0.60493721

## 276	4.583401e-02	1.638129e-04	0.0009484506	1.335380e-03	0.60588566
## 277	4.565471e-02	1.631721e-04	0.0009482568	1.330705e-03	0.60683392
## 278	4.407913e-02	1.575409e-04	0.0009465537	1.326047e-03	0.60778047
## 279	4.180678e-02	1.494194e-04	0.0009440973	1.321406e-03	0.60872457
## 280	4.086495e-02	1.460532e-04	0.0009430792	1.316781e-03	0.60966765
## 281	4.011466e-02	1.433717e-04	0.0009422682	1.312173e-03	0.61060992
## 282	3.961350e-02	1.415805e-04	0.0009417265	1.307581e-03	0.61155164
## 283	3.757269e-02	1.342866e-04	0.0009395204	1.303005e-03	0.61249116
## 284	3.703262e-02	1.323563e-04	0.0009389366	1.298446e-03	0.61343010
## 285	3.646445e-02	1.303257e-04	0.0009383224	1.293902e-03	0.61436842
## 286	3.632223e-02	1.298174e-04	0.0009381687	1.289375e-03	0.61530659
## 287	3.576412e-02	1.278226e-04	0.0009375654	1.284863e-03	0.61624416
## 288	3.526327e-02	1.260326e-04	0.0009370240	1.280367e-03	0.61718118
## 289	3.448698e-02	1.232581e-04	0.0009361849	1.275887e-03	0.61811737
## 290	3.328540e-02	1.189636e-04	0.0009348860	1.271422e-03	0.61905225
## 291	3.274486e-02	1.170317e-04	0.0009343017	1.266973e-03	0.61998655
## 292	3.112123e-02	1.112288e-04	0.0009325466	1.262539e-03	0.62091910
## 293	3.011335e-02	1.076265e-04	0.0009314571	1.258120e-03	0.62185056
## 294	2.850071e-02	1.018629e-04	0.0009297139	1.253716e-03	0.62278027
## 295	2.780309e-02	9.936956e-05	0.0009289598	1.249327e-03	0.62370923
## 296	2.698659e-02	9.645133e-05	0.0009280772	1.244953e-03	0.62463731
## 297	2.667889e-02	9.535161e-05	0.0009277446	1.240594e-03	0.62556505
## 298	2.646665e-02	9.459306e-05	0.0009275151	1.236249e-03	0.62649257
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## 301	2.336953e-02	8.352381e-05	0.0009241672	1.223303e-03	0.62926730
## 302	2.299743e-02	8.219391e-05	0.0009237650	1.219016e-03	0.63019106
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## 304	2.122214e-02	7.584893e-05	0.0009218460	1.210485e-03	0.63203526
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## 306	1.959598e-02	7.003697e-05	0.0009200882	1.202010e-03	0.63387706
## 307	1.919636e-02	6.860870e-05	0.0009196562	1.197793e-03	0.63479671
## 308	1.822106e-02	6.512291e-05	0.0009186019	1.193590e-03	0.63571531
## 309	1.695636e-02	6.060283e-05	0.0009172348	1.189401e-03	0.63663255
## 310	1.627352e-02	5.816234e-05	0.0009164967	1.185225e-03	0.63754905
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## 328	3.521016e-03	1.258428e-05	0.0009027116	1.112283e-03	0.65391112
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## 330	1.833666e-03	6.553607e-06	0.0009008877	1.104428e-03	0.65571400
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## 340	-4.043403e-03	-1.445131e-05	0.0008939698	1.065850e-03	0.66468474
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## 463	-6.307569e-02	-2.254355e-04	0.0008305038	6.669178e-04	0.77043950
## 464	-6.327818e-02	-2.261592e-04	0.0008297602	6.641309e-04	0.77126926
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## 479	-7.010470e-02	-2.505575e-04	0.0008228827	6.230344e-04	0.78366045
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## 670	-1.577054e-01	-5.636466e-04	0.0007277754	1.896475e-04	0.93255833
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## G36918  0.1224942527  1.531335e-01 -0.1311886577 -0.2075763539 -6.558145e-02
## G37044 -0.2198598370  1.430383e-01  0.0990212789 -0.0831292920  2.635637e-02
## G37009  0.0132220811 -3.945964e-02  0.0863126602 -0.2367424500  1.818365e-01
## G37029  0.1930616509  2.549337e-01  0.0498468753  0.1047776744  1.699330e-01
## G37035 -0.3374645291  4.411797e-02  0.0809375150  0.0310413113 -9.884745e-02
## G36982  0.1622710193 -3.021075e-01 -0.1338576485 -0.0269986158  8.181123e-02
## G36984  0.1317396854 -1.945000e-01 -0.1216315497 -0.0775859836  3.489038e-02
## G37030  0.2347855613  7.137720e-02 -0.0552070085  0.0794167260  3.999537e-02
## G37031 -0.4442560295 -8.445781e-04  0.0649929081  0.1160987591 -1.448568e-01
## G36906  0.1213645567  1.838281e-01 -0.0880282769  0.0915983823  5.126559e-02
## G37028 -0.4028760258  6.547884e-02  0.0699344515  0.0252249075 -4.024500e-02
## G37014 -0.0422764156 -1.756607e-01  0.0054841268  0.0375178320  5.285889e-02

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##	G36944	0.1403112325	1.549904e-01	0.1420603685	-0.1563959160	1.089990e-01
##	G36902	0.1904131079	5.369427e-02	0.0505461136	0.3039644898	-6.527429e-02
##	G37051	-0.2737717024	-2.206211e-02	0.0221187969	0.0522039686	-1.893808e-01
##	G36964	-0.2376563956	2.215444e-01	0.1487648140	0.1095124749	3.065769e-02
##	G36951	0.2770893816	7.826333e-02	-0.1096319345	0.0309693379	9.540978e-03
##	G37025	0.1966103283	2.093747e-01	0.0456227659	0.1829693421	7.858784e-02
##	G36930	0.2581424933	-1.825830e-01	-0.0431150152	-0.0621592642	1.062060e-02
##	G36935	0.1271870987	-9.885223e-02	-0.0933152816	0.0076608477	-1.132937e-01
##	G37041	-0.3977378972	1.884787e-02	0.0653218796	0.0435956675	-5.446801e-02
##	G36959	-0.3309135437	9.291458e-02	0.1459771018	0.0546748555	-1.939136e-01
##	G36905	0.0501437316	1.691558e-01	0.2359462605	-0.0576287809	1.580712e-01
##	G36917	0.1736613141	1.081697e-01	0.0632925901	0.0900318349	8.437824e-03
##	G36992	0.2044679576	-1.546529e-01	-0.0034758680	-0.1537558242	-2.885625e-02
##	G36921	0.2637709627	1.403549e-01	-0.0474934863	0.1400604981	5.980537e-02
##	G37004	-0.1638161342	-2.221596e-01	-0.0704414633	-0.0540373876	6.235518e-02
##	G36966	-0.2699664042	1.419066e-01	0.0623745077	-0.0814671344	-4.663004e-02
##	G36936	0.0350954084	-2.604946e-01	0.0309551715	-0.1526338202	2.154787e-01
##	G37015	0.1572777920	-1.668210e-01	-0.0177213043	-0.1584561997	1.013341e-01
##	G37034	0.2420302553	9.896769e-02	-0.0096647373	0.1152993886	2.078040e-02
##	G36953	0.1921724651	2.212802e-01	-0.1018512532	-0.1276369516	6.833526e-02
##	G36974	0.0997217697	1.354002e-01	0.3204511474	-0.0830639838	1.156002e-01
##	G37039	0.2064371677	1.962147e-01	-0.0659176547	0.1119930066	1.518522e-01
##	G36933	0.1959025545	-2.069606e-01	-0.0641653969	-0.0608991129	-8.257338e-02
##	G37052	0.2249143917	6.295393e-02	-0.0523923638	0.2270627063	-9.599105e-02
##	G36925	0.2719231612	5.450419e-02	0.0479638425	0.1433795180	-3.752235e-02
##	G37046	-0.2497005518	7.538204e-02	0.1128428742	-0.1014596763	-1.119262e-01
##	G37053	-0.3265863757	2.531110e-02	0.0987596465	0.1078403665	-1.688731e-01
##	G36998	-0.1907248532	2.433397e-01	0.0024809110	-0.1521115354	1.437282e-01
##	G37045	-0.0375421881	8.572438e-02	0.0570071933	-0.1565400630	5.040059e-02
##	G37049	-0.0574497051	5.289352e-02	0.0106305190	-0.0433007545	-1.087276e-02
##	G37019	0.1858961601	-2.661525e-01	-0.0097443785	0.1196105545	4.835724e-02
##	G36988	-0.3507091653	3.337054e-02	-0.0341681364	-0.1019853635	-4.209540e-02
##	G37037	0.1735190988	1.273778e-01	-0.0407008183	0.2450782143	4.699145e-02
##	G37005	-0.2988239047	-2.648138e-01	-0.0362537194	-0.1751794520	8.974640e-02
##	G36928	0.2760449483	7.758854e-02	-0.0125818623	0.2084171310	4.864813e-02
##	G36923	-0.1166157562	9.831344e-02	0.3368882334	-0.0719588695	2.144310e-02
##	G37033	-0.3940259864	1.351127e-02	0.0876570031	0.1165576800	-1.939128e-01
##	G37017	0.1602885320	-9.433245e-02	0.0309888862	0.1120279961	-3.126339e-02
##	G37012	-0.1710181409	6.360853e-02	0.0500709332	-0.1407219727	-1.906995e-02
##	G36952	0.2366343166	8.898828e-02	-0.2164058667	-0.0237131721	-4.740135e-02
##	G37011	-0.2822724563	1.163100e-01	0.1049991471	-0.0281087607	3.521414e-02
##	G36957	-0.4366063609	6.419636e-02	0.0997499077	0.0517592822	-1.625554e-01
##	G37021	-0.3683022556	1.772067e-02	0.0548661287	0.0650877971	-1.602640e-01
##	G36937	0.1066956010	-2.496059e-01	-0.0700355764	0.0763170508	1.082954e-01
##	G37047	0.2285933060	1.658309e-01	-0.0422011698	0.1938734345	7.856126e-02
##	G37032	0.1605056409	1.024703e-01	-0.1229962504	-0.0190956937	-8.530808e-02
##	G36932	0.0577183312	-1.417369e-01	0.0288654648	-0.1529390005	1.562883e-01
##	G37043	-0.3817804262	7.768591e-02	0.0736994209	0.0166309814	2.716369e-02
##	G37054	0.2529898575	4.362929e-02	-0.0698344747	0.1866512886	-1.029349e-01
##	G36948	0.1539643000	2.118180e-01	0.0129977228	0.0375472478	1.368633e-01
##	G36972	0.1345422132	1.337377e-01	0.3305899888	-0.0552210082	-4.948597e-04
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## G37040 0.2406197266 1.100329e-01 -0.1513923039 0.0450648490 3.653701e-02
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## G37023 -0.0165339840 8.713100e-03 0.0205450434 0.0392453318 -2.620738e-02
## G37036 -0.1850763483 8.262390e-02 0.0679227830 -0.1230185728 2.961893e-02
## G37026 -0.2422924838 1.328261e-01 0.1348823690 -0.0997848041 2.073675e-02
## G37050 -0.2789504402 1.105847e-01 0.1071548098 -0.0129820125 1.849156e-02
## G36973 0.0651805340 9.572953e-02 0.3851117648 -0.0268374378 9.332878e-03
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## G36303 -0.2379339081 -1.569692e-02 0.0433074381 -0.1418713187 6.253875e-02
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##	G36192	-0.0447488701	1.372322e-02	0.1870563406	-0.1207642589	-1.726889e-01
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##	G36142	-0.0821128302	9.382778e-03	-0.0511740186	-0.0799271042	-1.233070e-01
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##	G36308	0.1403909755	2.303715e-01	-0.0649519974	-0.1050947594	1.446066e-01
##	G36209	-0.3112447770	-7.227226e-02	0.0010654301	-0.0913718818	-7.888293e-02
##		Axis.6	Axis.7	Axis.8	Axis.9	Axis.10
##	G37016	-1.701715e-01	1.017704e-01	0.0896758868	1.678207e-01	-0.0914984909
##	G36918	1.053030e-02	-7.682230e-02	0.0800950134	-4.382889e-05	0.1155614020
##	G37044	-1.222749e-01	-1.606303e-02	0.2467368408	2.713225e-01	-0.0370416043
##	G37009	-1.206266e-01	2.431843e-02	-0.0284963790	-1.605715e-02	-0.0240802296
##	G37029	-6.739905e-02	8.525142e-02	0.0412405130	-5.993794e-02	0.0674281455
##	G37035	8.061542e-02	1.548065e-01	-0.0182031689	5.161960e-02	0.2902126766
##	G36982	7.616144e-02	-1.978173e-02	-0.0100668488	-9.690359e-02	-0.1465431601
##	G36984	4.564147e-02	-5.895116e-04	-0.0865354521	-5.452947e-02	-0.1849199571
##	G37030	-3.851943e-02	-1.157494e-01	0.0087951714	-3.439701e-02	0.0879712429
##	G37031	3.774144e-02	-7.222555e-02	0.0422841732	-2.470998e-02	0.0348743844
##	G36906	-1.209208e-01	7.554944e-02	-0.0102977373	-3.814083e-02	-0.0178061698
##	G37028	7.996981e-02	5.782984e-02	0.0201535119	1.225935e-01	0.2023893605
##	G37014	-8.625689e-02	1.725715e-01	-0.0948354190	1.537077e-01	0.0547916376
##	G37010	-1.539488e-01	5.241438e-02	-0.1496529917	6.037528e-02	-0.1186030055
##	G36944	-5.356115e-02	1.179015e-01	0.0171386872	-9.587413e-02	-0.0387360163
##	G36902	-1.089562e-01	-2.792610e-03	0.0138915194	-1.164894e-01	0.0302214822
##	G37051	6.775517e-02	2.317690e-01	-0.1513304370	-3.710341e-02	0.0539511294
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##	G37025	-9.232132e-02	1.307779e-01	0.0821096727	-9.100211e-03	0.0428073354
##	G36930	-5.453417e-03	-7.570986e-02	0.1243232593	1.517809e-01	0.1029454281
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##	G37041	2.315931e-02	-3.115183e-02	0.0256497165	-9.172458e-04	0.0440469286
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##	G36966	-6.256537e-02	-8.902258e-03	-0.0005905802	-6.270981e-02	-0.0381848644
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##	G37040	-0.0377463405	0.0026186453	4.414890e-02	-2.929515e-02	0.0425406676
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##	G37024	-0.1191969267	-0.0503343437	3.067312e-02	-6.565236e-02	-0.0042930348
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##	G37036	0.0142211535	0.1541534624	1.087426e-01	-4.769592e-03	-0.0690967826
##	G37026	0.1239074510	0.1358169855	4.973386e-02	-1.453717e-01	-0.1081429029
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##	G36904	-0.0300620256	0.0592982194	2.563884e-02	-5.360741e-02	0.0366038106
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##	G36910	-0.0528378303	0.1019005341	-9.986022e-03	1.421769e-02	0.0393056217
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## G36251 0.0510758029 -0.0103714598 1.074287e-01 4.302051e-02 -0.0932858915
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## G36172 -0.2555713616 -0.1028385521 -7.034186e-02 1.134573e-01 -0.0647495578
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## G36151 0.0405003465 -0.0653081952 8.157154e-02 -8.091623e-02 0.0409642751
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## G36239 -0.0050380767 0.0342912963 1.364096e-02 2.674693e-02 -0.0657579495
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## G36204 0.0682363466 -0.0886677182 -1.317530e-02 2.248477e-02 -0.0460631743
## G36318 -0.0111393202 -0.0515246756 -1.471754e-02 -1.294186e-01 0.0874809980
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##	G36317	0.0371474193	-0.0667258324	-1.403899e-02	7.965734e-02	0.0059583446
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##	G36234	0.0421685654	0.0040866104	-2.250188e-02	4.079592e-02	-0.0242947672
##	G36206	-0.0261495934	-0.0954703937	-5.205442e-03	-1.739323e-02	-0.0268481426
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##	G36216	-0.0055565001	-0.1266282396	1.621917e-02	7.206989e-02	0.0300477415
##	G36208	-0.0111197006	-0.0203174392	-7.954704e-03	1.022394e-02	-0.1108367653
##	G36309	-0.0704193272	0.0217778821	3.726108e-02	1.232123e-01	0.0537940750
##	G36146	-0.2524898264	-0.1959046611	-6.150114e-02	8.686176e-02	-0.0476796626
##	G36192	0.0386323820	-0.0014842471	1.251537e-01	9.571507e-02	-0.0891510316
##	G36284	-0.1023769507	0.1092595010	-1.543723e-02	-1.280714e-01	0.2295598204
##	G36291	0.0542259737	0.0194830189	4.959358e-02	6.559438e-02	0.0129172075
##	G36142	0.0159275383	-0.0098420133	-7.532888e-03	-1.040587e-02	-0.0444625245
##	G36138	0.0002145537	0.0143567715	-8.059356e-02	-2.848950e-02	0.0328982410
##	G36203	0.0483613839	0.0698220571	-6.619703e-02	5.966250e-02	-0.0988618043
##	G36282	-0.0113707735	-0.0114986412	-4.319468e-02	1.096997e-01	0.0048907373
##	G36290	-0.0318349443	0.0600088370	-2.062905e-01	1.655220e-01	-0.0700857389
##	G36274	-0.0210938130	0.0265645567	-4.543157e-02	7.033604e-02	-0.0525209385
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##	G36258	-0.0424631723	0.0558710976	2.524692e-01	-6.724925e-02	0.0886469034
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##	G36143	-0.0963342826	-0.0371304395	-5.311020e-02	-1.366420e-01	-0.0069005330
##	G36308	-0.0504977035	0.0613809146	8.751053e-02	1.310752e-01	0.0292074529
##	G36209	0.0777186823	0.0591047877	9.774049e-02	2.231708e-02	-0.0189115799
##		Axis.16	Axis.17	Axis.18	Axis.19	Axis.20
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##	G36918	0.0245260625	0.0462340885	-2.944882e-02	1.041212e-01	-2.793926e-02
##	G37044	-0.0497256904	0.1009767517	3.506045e-03	-3.079956e-02	1.453073e-02
##	G37009	-0.0463335438	0.0140102070	2.163069e-02	1.605956e-01	4.453107e-03
##	G37029	0.1210377173	0.2200478641	8.467007e-04	8.129228e-02	2.546784e-02
##	G37035	0.0945668913	-0.1516155838	3.751808e-03	1.399830e-01	6.663598e-02
##	G36982	0.0303179052	-0.0338596515	3.369843e-03	-3.561697e-02	-4.682622e-02
##	G36984	-0.0241630489	-0.0276015640	-6.119965e-02	-1.016966e-02	-6.058500e-02
##	G37030	-0.1370922769	-0.1201699578	-7.885311e-02	3.657062e-02	1.008091e-01
##	G37031	-0.0551815309	-0.1045977626	8.300228e-02	1.423808e-01	7.689603e-02
##	G36906	0.0112769951	0.0095647658	-6.462575e-02	3.426080e-02	-7.136613e-02
##	G37028	0.0190589799	-0.1701159482	1.574968e-02	1.470064e-01	6.933299e-02
##	G37014	-0.0687563500	0.2093598715	-1.193683e-01	-3.384001e-02	-2.750046e-02
##	G37010	0.0168235727	-0.0076472550	-9.154220e-02	1.102849e-01	-1.437170e-01
##	G36944	0.0618130700	-0.0279436120	1.847582e-02	5.907080e-02	3.590863e-02
##	G36902	-0.0736335355	0.0371868499	-4.682295e-03	2.890574e-02	1.389059e-02
##	G37051	0.0225609939	-0.0716284860	-1.106014e-02	1.270514e-02	1.926381e-01
##	G36964	0.0366601853	0.0675140718	-9.724249e-02	-1.332565e-02	-8.834063e-02
##	G36951	-0.0926590349	-0.0025907053	-6.688119e-02	7.605041e-02	2.627836e-02
##	G37025	0.1433893468	0.2355784298	2.275769e-02	1.969433e-02	2.567879e-02
##	G36930	-0.0343219392	0.1496963119	3.537748e-02	5.153152e-02	2.121286e-02
##	G36935	-0.0388566868	0.0131267879	-7.920092e-02	-4.943968e-02	7.085078e-03
##	G37041	-0.0061549659	-0.0818667678	5.473886e-02	1.623056e-02	9.015779e-02
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## G36936 0.0541595316 -0.0158718243 -4.870317e-02 8.721942e-02 3.230423e-02
## G37015 -0.1605909140 0.0853312432 1.668144e-01 4.355903e-02 8.133433e-02
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## G37026 0.0572528371 0.0563399212 3.931802e-02 -4.807570e-02 -3.060341e-02
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## G35364 0.0272337033 0.1116752437 3.123791e-02 3.405948e-02 1.297592e-02
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## G35498 0.0106214020 0.0032056336 -5.790493e-02 -1.747079e-02 -4.783425e-02
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## G36270 -0.0212543035 -0.0774720453 2.167842e-02 -1.028719e-01 -9.035833e-02
## G36158 -0.0291114072 0.1204066128 4.705741e-02 -4.679399e-02 3.178623e-02
## G36233 -0.0594469476 -0.0479307929 -4.828803e-02 -5.384072e-02 -7.785784e-02
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## G36322 -0.0599699031 0.0405461222 3.777028e-02 1.347003e-01 -4.489457e-02
## G36182 -0.0626994670 0.0064579010 -2.722148e-02 6.582506e-02 2.538322e-02
## G36256 -0.1800215942 -0.0126892290 -9.334540e-03 -1.981858e-02 -7.397870e-02
## G36163 0.0613133148 -0.0429037419 4.182697e-02 -3.887025e-02 8.783214e-02
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## G36157 0.0388006506 -0.1214238457 -1.318066e-02 8.950423e-03 -1.616979e-02
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## G36290 -0.0423860501 -0.0902062005 8.787176e-02 -1.259927e-01 -1.054180e-02
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##	G36209	-0.0424506229	-0.0128156459	-8.557999e-02	4.345063e-02	-7.582990e-03
##		Axis.21	Axis.22	Axis.23	Axis.24	Axis.25
##	G37016	0.0092841139	-3.957993e-02	7.101178e-02	-0.0618219561	-5.715020e-02
##	G36918	0.0504523984	3.313222e-02	-6.111364e-02	0.0101618099	3.575354e-02
##	G37044	-0.0278031776	-9.888737e-02	-9.589628e-02	0.0133575711	4.114802e-02
##	G37009	0.1019818940	2.373843e-03	1.924229e-01	-0.0275933269	-6.838244e-02
##	G37029	-0.0513827747	6.037012e-02	-3.231183e-02	-0.0701314923	2.450014e-02
##	G37035	-0.0489895039	7.164435e-02	8.020750e-03	-0.0478270351	3.563885e-02
##	G36982	0.0348012990	-8.808062e-02	-5.334810e-02	-0.0112207449	-1.658859e-01
##	G36984	-0.0327883137	-5.939047e-02	2.975463e-02	-0.0148654204	-1.512785e-01
##	G37030	0.0267441080	-5.332754e-02	2.909692e-03	-0.0411471748	-5.378160e-02
##	G37031	-0.1218767213	-3.632317e-03	3.527588e-02	0.0841508853	4.653861e-02
##	G36906	-0.0137418630	-3.873921e-02	2.633117e-02	-0.0309196345	-2.625617e-02
##	G37028	-0.1228195989	-2.691713e-02	1.545426e-02	0.0639569659	3.627562e-02
##	G37014	-0.0646516392	3.410236e-02	-3.601599e-02	-0.0127801952	1.055574e-01
##	G37010	0.0498858147	2.783547e-02	2.834350e-02	-0.0292519487	-7.938496e-02
##	G36944	0.0628885324	-3.682563e-02	8.686335e-03	0.0052676264	1.828140e-02
##	G36902	-0.1207208049	-2.033139e-02	-3.026337e-02	-0.1107779472	-2.505421e-02
##	G37051	0.1062808099	6.282108e-02	5.794146e-03	-0.0939847317	6.732544e-02
##	G36964	0.0175598050	-1.141494e-01	1.906763e-02	0.1096732511	1.247903e-02
##	G36951	-0.0038216101	2.734409e-03	-9.517206e-02	-0.0008796038	-8.279195e-03
##	G37025	-0.0903641824	2.957003e-02	-1.582526e-02	-0.0614674067	2.337442e-02
##	G36930	-0.0297080493	2.924507e-02	6.575553e-02	0.0391871528	-5.767128e-02
##	G36935	0.0069388826	-8.936340e-02	1.306819e-01	0.1075839269	-3.676555e-02
##	G37041	-0.1597587001	-2.952256e-02	9.738943e-03	0.2099390276	-6.299972e-04
##	G36959	0.0964305923	-3.080163e-02	-5.801926e-02	-0.0029335527	-1.789590e-02
##	G36905	0.0595933822	-1.295642e-03	2.865099e-02	-0.0158587165	1.015899e-01
##	G36917	0.0400016600	7.657358e-03	2.441713e-03	0.0417490243	-5.392053e-03
##	G36992	-0.0115177273	-1.554992e-02	-1.516009e-02	0.0278418805	-5.399247e-02
##	G36921	-0.0124862780	-1.301633e-01	-3.187476e-02	-0.0405989561	-4.142007e-02
##	G37004	0.0633695190	8.027572e-02	-9.939078e-02	0.0546809187	-4.554846e-03
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##	G37015	-0.0200638019	-5.060349e-02	1.668445e-02	-0.0519759174	-5.838764e-02
##	G37034	-0.0506817550	3.449375e-02	3.142376e-02	0.0153505191	-7.220955e-02
##	G36953	0.0007798993	7.523156e-02	-8.705707e-02	-0.0494705885	4.406357e-02
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##	G36933	-0.0577567977	-3.212439e-03	-1.868607e-02	0.0050519043	-1.157229e-01
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##	G37046	0.1070541064	-2.032811e-03	-7.101353e-02	-0.0376156425	-4.226981e-02
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##	G36148	-0.1449974608	8.480481e-02	-7.334314e-02	0.0666703269	-4.930439e-02
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##	G36232	0.0078709570	-4.358022e-02	4.368906e-02	-0.0234659276	-4.193382e-02
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##	G36239	0.0910553438	-8.741268e-02	-8.899591e-02	0.0486579285	3.873465e-02
##	G36270	-0.0412856061	7.389550e-03	7.730292e-02	-0.0419421497	-5.584248e-02
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##	G36233	-0.1445457638	5.406429e-02	-6.050201e-02	-0.0073592544	1.265153e-02
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##	G36175	-0.0240883360	-5.589290e-02	-5.627237e-02	-0.0164900954	8.769246e-02
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## G35412 -2.858298e-02 0.1301239681 -4.422125e-02 0.0899332845 7.439833e-02
## G35388 1.573460e-01 -0.1239163865 1.482650e-01 -0.1889836075 -1.503396e-01
## G35354 -2.039573e-03 0.0445805317 1.499339e-02 -0.0124080278 2.845291e-02
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## G35406 3.568111e-02 -0.0892987117 2.524044e-02 0.1228376796 9.985762e-02
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## G35445 -3.124037e-02 0.0030057205 1.991274e-02 0.0253524113 4.351494e-03
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## G36137 -2.211243e-02 -0.1166229327 9.787599e-03 -0.0471076367 -7.968563e-02
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## G36202 3.586621e-02 0.0715402525 5.578973e-02 0.0318626108 -1.004660e-03
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## G36297 6.543266e-03 -0.0681698197 3.354858e-02 0.0304433409 2.271254e-02
## G36170 1.134411e-01 -0.0343127238 -1.292293e-02 -0.0185203885 -3.881790e-02
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## G36148 -1.965569e-02 0.1103273638 -7.111701e-02 0.0348514603 7.947610e-03
## G36213 -1.146035e-02 0.0359345426 7.579652e-03 0.0006087512 8.641434e-03

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## G36176 -4.251261e-02 -0.0174089411 -4.287148e-02 -0.0836093313 7.094390e-02
## G36214 -8.708148e-02 0.0642203898 3.813661e-02 0.0147464414 -1.196704e-02
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## G36309 1.097778e-02 -0.1243075291 2.577281e-02 -0.0017121061 2.533912e-02
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##	G36291	-7.888927e-02	0.0238110863	1.154778e-02	0.0678112360	5.695779e-04
##	G36142	4.919134e-02	0.1178071163	1.509812e-02	0.0277551385	6.257677e-02
##	G36138	2.729345e-02	0.0814914082	-1.672218e-02	-0.1227478465	2.537060e-02
##	G36203	3.486960e-03	-0.0093038243	-3.191758e-02	0.1239422913	-5.576783e-02
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##	G36274	2.539760e-02	-0.0399959642	-1.034170e-01	-0.0444471862	8.555025e-02
##	G36314	-5.286480e-02	0.0555910116	6.534963e-02	0.0032591427	1.063085e-01
##	G36258	-1.420209e-01	-0.0501313762	8.383957e-02	-0.0353711486	2.835312e-04
##	G36147	-4.332035e-02	0.0599894086	-8.342966e-02	0.0527307865	4.871636e-02
##	G36235	-5.491219e-02	-0.0181474093	-4.573297e-02	-0.0261693168	5.508129e-02
##	G36143	5.625637e-02	0.1546437037	-2.767477e-02	-0.0346988601	-2.022953e-02
##	G36308	-4.918814e-02	-0.1337514725	2.999427e-02	0.0575540927	1.782682e-02
##	G36209	1.793425e-02	0.0634927084	3.239780e-02	-0.0409919480	9.850534e-02
##		Axis.31	Axis.32	Axis.33	Axis.34	Axis.35
##	G37016	-0.1729631617	-0.0877684841	8.955279e-02	3.715567e-02	7.933862e-03
##	G36918	0.0187650432	-0.0029792533	3.398105e-02	-1.865493e-03	8.762468e-02
##	G37044	-0.0264873464	-0.0462955977	-3.904391e-03	-5.063709e-02	-5.039476e-02
##	G37009	0.0219390082	-0.0174826249	-4.287598e-02	1.283519e-01	-1.659161e-02
##	G37029	-0.0263123827	0.0075263675	5.383021e-02	-3.187044e-02	-4.100928e-02
##	G37035	-0.0338756629	0.0143150457	4.915155e-02	8.173150e-02	-1.281730e-02
##	G36982	0.0406411739	-0.0644673388	-4.602245e-02	2.314659e-02	-1.857000e-02
##	G36984	-0.0545304774	0.0287906357	-3.017649e-02	-6.525121e-02	2.238185e-02
##	G37030	-0.0030443897	-0.1184944439	-4.521694e-02	-7.752521e-02	1.928712e-02
##	G37031	-0.0070632017	0.0250663543	1.803536e-02	1.270508e-02	6.359888e-03
##	G36906	-0.0396753228	-0.0514237015	2.207353e-02	-3.144687e-02	1.399439e-02
##	G37028	-0.0245777348	-0.0214966559	3.528130e-03	-1.666252e-03	5.287227e-02
##	G37014	0.0719511108	-0.0088836722	5.219419e-02	-2.446159e-02	1.143042e-02
##	G37010	-0.0664184230	-0.0495547743	-8.684771e-03	6.872592e-02	2.721445e-02
##	G36944	-0.0168499534	0.0348330384	-4.453998e-02	1.923780e-02	-5.319219e-02
##	G36902	0.0270367469	-0.1070918813	-1.465598e-02	8.581781e-02	-4.162776e-02
##	G37051	0.0640864422	0.0640322924	-2.457197e-02	8.080338e-02	8.812066e-03
##	G36964	-0.0104901533	0.0504812294	9.762210e-02	1.527384e-02	-6.147838e-02
##	G36951	0.0078699865	0.0027966630	5.745994e-02	-1.430194e-03	2.953915e-02
##	G37025	-0.0309247000	0.0492732427	2.242958e-02	-1.930586e-02	-1.847527e-02
##	G36930	-0.0085640792	0.0160388958	5.856431e-02	-1.291078e-02	9.498040e-02
##	G36935	0.0524749953	0.0495750622	7.099936e-02	-3.866296e-02	4.909648e-02
##	G37041	-0.0135025542	-0.0064286979	4.044406e-02	-1.014462e-02	-5.306397e-03
##	G36959	-0.0426891111	0.0974685113	-2.697519e-02	3.844130e-02	-3.708896e-02
##	G36905	0.0532024960	-0.0480625808	3.590506e-02	5.158437e-02	-4.053691e-02
##	G36917	-0.0539999988	-0.0549229111	4.049965e-02	4.138462e-02	8.459214e-02
##	G36992	-0.0619978411	0.0444498113	2.030325e-02	-6.651712e-03	3.779528e-02
##	G36921	-0.0445864140	-0.0227932376	-1.521349e-02	4.553585e-02	5.608870e-02
##	G37004	-0.0376488827	0.0238089696	2.134092e-02	-6.517922e-03	9.445928e-03
##	G36966	-0.0150031238	0.0846932047	6.205563e-02	6.565698e-03	-9.019250e-02
##	G36936	-0.0051831058	0.0366633125	1.416665e-02	5.769998e-02	6.103492e-02
##	G37015	-0.0632718691	-0.0820898692	-1.754711e-02	4.289556e-02	-5.827137e-02
##	G37034	-0.0845517376	0.1226662203	2.901715e-02	-9.116665e-02	-5.359174e-02
##	G36953	0.0448312853	0.0066542778	1.341448e-02	9.451851e-02	1.368305e-02
##	G36974	-0.0264298590	-0.0319143635	-7.440306e-02	4.189068e-02	-2.378692e-02
##	G37039	-0.0544515201	-0.0618403976	-1.048743e-01	-1.366861e-02	4.564944e-02
##	G36933	-0.0120841734	0.0286621058	6.943277e-02	1.702147e-02	1.757841e-02

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## G37046 0.0523939862 0.0407317890 7.572899e-02 6.256205e-02 4.142340e-02
## G37053 0.0283199044 -0.0084001650 4.379765e-03 -1.067874e-02 -1.551131e-02
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## G36988 -0.0046392258 0.0255292367 3.109396e-02 5.024056e-02 6.451084e-02
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## G37005 -0.0112473084 0.0395957671 1.647531e-02 -2.186701e-03 4.763181e-02
## G36928 -0.0565794818 0.0589546518 -1.136343e-02 1.599004e-02 1.204419e-01
## G36923 -0.0148125362 0.0471931072 2.755804e-02 -7.186500e-03 4.332179e-03
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## G37017 -0.0188494957 -0.1335091878 4.691671e-02 2.393384e-02 -8.702518e-03
## G37012 0.0308537447 0.0630599665 -2.422042e-02 4.918645e-02 -1.649951e-02
## G36952 0.0392463692 -0.0104041931 8.535838e-02 6.884855e-02 1.151808e-02
## G37011 -0.0101319992 -0.0175958165 -3.624154e-03 -8.160643e-02 -1.122624e-02
## G36957 -0.0240317455 0.0225815716 5.696712e-02 8.466080e-02 2.160595e-02
## G37021 -0.0020180903 0.0359078086 -9.638249e-03 5.176799e-02 5.012848e-03
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## G37032 -0.0060289456 -0.0879929042 -3.006115e-02 -2.117613e-02 2.606149e-02
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## G36193 0.0441117131 0.0114431484 -4.614252e-02 4.081052e-02 7.440570e-03
## G36151 -0.0220080121 0.0710316931 2.590346e-02 -1.436320e-03 3.559463e-02
## G36248 -0.0755398154 0.0075309660 -9.328276e-03 -7.678958e-02 -6.873784e-03
## G36239 -0.0290275937 -0.0762459561 1.953565e-02 6.890953e-02 -1.738335e-03
## G36270 0.0036455725 0.0684711451 3.662080e-02 2.200863e-02 -5.127318e-02
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##	G36233	0.0702969019	-0.0616745246	-4.442854e-02	3.994245e-02	5.738717e-02
##	G36311	0.0061764809	-0.0546041240	1.848437e-02	3.528226e-02	2.153986e-02
##	G36175	-0.0471934102	0.0225653783	8.160462e-02	-3.706003e-02	-2.425484e-02
##	G36267	-0.0324223899	-0.0606716926	-2.851631e-03	4.209030e-02	-3.887816e-02
##	G36183	-0.0386567886	0.0452402544	2.017776e-03	-1.146165e-01	4.491971e-02
##	G36227	0.0870862965	0.0266574208	1.215170e-02	-3.147682e-02	4.617887e-02
##	G36322	0.0550575946	-0.0476874271	-4.368211e-02	-6.385005e-02	4.510290e-03
##	G36182	0.0119919937	0.0404940425	-8.658928e-02	2.219930e-02	-2.147809e-02
##	G36256	0.0148706000	-0.0150752073	3.475552e-02	2.322414e-03	-1.028878e-01
##	G36163	0.0381716931	0.0058536628	1.168676e-01	-1.228823e-01	6.039846e-02
##	G36287	0.0234855796	-0.0234699005	1.449471e-01	8.053818e-02	-7.166410e-02
##	G36157	0.0446146757	0.0393986436	-4.591516e-02	1.426897e-03	4.038355e-02
##	G36262	-0.0756388495	0.0442353454	-6.150094e-02	3.285718e-02	1.044103e-02
##	G36200	-0.0749509085	0.0558818798	-1.997386e-03	-5.929991e-02	-1.103230e-01
##	G36160	0.0471218327	0.1648356645	-9.713139e-03	9.299000e-03	5.989036e-02
##	G36185	-0.0746328958	-0.0242145904	4.706703e-03	-5.353547e-02	3.624461e-02
##	G36162	0.0829308954	0.0163742714	1.001375e-01	-2.723667e-02	4.961786e-02
##	G36204	-0.0484784553	-0.0455184185	-5.589816e-02	-6.068454e-02	-3.905994e-02
##	G36318	0.0216577479	-0.0114080645	3.161550e-02	7.848688e-03	9.614342e-02
##	G36194	-0.0051725689	-0.0139965710	5.583002e-03	1.353994e-02	5.305739e-02
##	G36244	0.0620017319	0.0240901964	5.706456e-02	2.852975e-02	1.066873e-02
##	G36197	-0.0451864389	0.0416585639	-3.826353e-03	-3.543104e-02	8.847873e-02
##	G36264	0.0350093824	-0.0789963941	-5.142433e-02	1.911364e-02	-4.061363e-02
##	G36317	0.0039700770	-0.0442814686	3.135395e-02	-2.107355e-02	5.785842e-02
##	G36159	-0.0846159631	0.0605479757	-7.344847e-02	7.238091e-02	-1.953399e-03
##	G36234	0.0691337106	0.0164725970	-5.001970e-03	1.040306e-02	9.178261e-02
##	G36206	-0.0429970849	0.0033087911	-1.228733e-01	6.815744e-02	-3.163403e-02
##	G36257	0.0607465865	0.0242448074	-3.382772e-02	4.480652e-02	5.755111e-03
##	G36216	0.0319378428	-0.0444182124	-7.617147e-02	-1.527517e-02	5.491026e-02
##	G36208	-0.0229719608	-0.0499147238	-1.987428e-02	5.579612e-02	-1.677588e-03
##	G36309	0.0619429425	-0.0099526409	5.605077e-02	4.105137e-02	-1.373211e-02
##	G36146	-0.0062312711	0.0279730820	-7.154038e-02	5.052154e-02	-4.956588e-02
##	G36192	0.0320488317	-0.0278042642	8.806076e-03	5.415485e-02	-8.038553e-02
##	G36284	0.0401118200	0.0072775002	-5.790124e-02	5.243294e-02	-4.151937e-02
##	G36291	-0.0235820136	-0.0324970540	-5.700886e-03	-9.934518e-03	5.461925e-02
##	G36142	-0.0640295298	-0.0033689228	1.459847e-02	-4.607482e-02	5.390664e-02
##	G36138	-0.0341286028	-0.0309043764	2.050810e-02	-3.108466e-03	-3.683102e-03
##	G36203	-0.0591039755	0.0178671437	-2.473898e-02	-5.066679e-02	-5.925865e-03
##	G36282	-0.0613712960	-0.0381655335	1.288977e-02	-8.181875e-02	4.185042e-02
##	G36290	0.1076851659	0.0336110901	-9.631014e-02	-1.302833e-02	8.244998e-02
##	G36274	0.0312086892	-0.0769219489	-3.895353e-02	1.091237e-01	6.207424e-02
##	G36314	-0.0762196047	-0.1092211644	-8.301095e-03	3.625336e-02	2.570369e-02
##	G36258	0.0307891151	-0.0424596786	-9.901498e-02	-5.365612e-02	-1.742103e-02
##	G36147	0.0210507653	-0.0530500886	4.021445e-02	-1.245266e-01	-4.250916e-02
##	G36235	0.0346749313	0.0338071957	7.179641e-02	-2.143411e-04	7.131476e-03
##	G36143	0.0147439500	0.0746639432	-3.962242e-02	-6.450514e-02	-3.761953e-02
##	G36308	0.0372119978	-0.0231021036	4.621017e-02	-3.555432e-02	-2.827664e-02
##	G36209	-0.0373556350	0.0379739074	-1.038242e-02	6.306974e-02	2.065038e-03
##		Axis.36	Axis.37	Axis.38	Axis.39	Axis.40
##	G37016	-0.0180466054	0.0403166863	0.0533894667	-2.917996e-02	-1.621462e-02
##	G36918	-0.0226465366	-0.0014718340	0.1044253543	-4.367805e-02	7.896395e-02
##	G37044	-0.0470558070	-0.0957268369	-0.0153635812	6.422377e-02	-5.571277e-02
##	G37009	-0.0335065705	0.0547393244	0.0751344354	6.790242e-02	3.162111e-02
##	G37029	-0.0174223805	0.0019661794	-0.0245817884	-9.611304e-02	-5.978817e-02


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## G36982 -0.0838381171 -0.0353491901 0.0047637992 -4.931625e-02 -1.610503e-02
## G36984 -0.0941741545 -0.0288982462 -0.1139482611 -7.993727e-02 2.432402e-02
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## G37031 0.0036545809 -0.0409651761 0.0279953669 1.201034e-03 -3.165414e-02
## G36906 0.0606570191 -0.0893816847 0.0312916165 -3.653260e-02 -4.864197e-02
## G37028 0.0120750790 -0.0572606800 0.0045295871 2.303833e-02 -2.791091e-04
## G37014 0.0662445573 0.0990780942 0.0292445203 -2.687167e-02 -1.574006e-02
## G37010 -0.0327398328 -0.0684590432 0.1001985420 3.694539e-02 1.105789e-02
## G36944 0.0730976802 -0.0071095267 -0.0087747748 3.929668e-02 -6.027905e-02
## G36902 0.0074927026 -0.0015749140 0.0199092233 -2.537255e-02 -5.398404e-02
## G37051 -0.0345455653 -0.0589671590 -0.0115139138 -6.303209e-02 -3.867635e-02
## G36964 -0.0567971417 0.0095857634 -0.0335675816 -2.756891e-02 1.929163e-03
## G36951 -0.0310837162 -0.0399080699 -0.0163223739 -6.076949e-02 -2.046575e-02
## G37025 0.0061346603 0.0363152966 -0.0040648854 -1.460109e-01 -2.990263e-02
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## G37041 -0.0151278972 -0.0269017581 0.0301301155 -6.915382e-03 -3.787430e-02
## G36959 -0.1109762599 0.0018718963 -0.0183342082 -1.086803e-01 -9.581474e-03
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## G36917 0.0502533696 -0.0055813667 0.0363328990 -7.628107e-02 1.588820e-01
## G36992 0.0149007488 -0.0337109112 0.0246112506 -6.362406e-02 -1.215254e-02
## G36921 0.0268275721 0.0020882917 0.0381501575 1.670940e-02 -4.070206e-02
## G37004 0.0093012192 -0.0147160471 0.0670162913 -1.149667e-02 -9.501772e-04
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## G37052 -0.0227342822 -0.0236690191 0.0258025996 4.169713e-02 -5.720606e-02
## G36925 0.0237555725 -0.0354954508 0.0240149722 -5.377808e-02 1.868435e-01
## G37046 -0.0009773252 -0.0235315135 -0.0084533755 7.112873e-03 1.382831e-02
## G37053 -0.0557635516 -0.0424379372 -0.0079622670 6.551283e-03 -9.463805e-02
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## G36988 -0.0663274695 -0.0374430124 0.0483245575 9.647799e-02 -1.909756e-02
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## G35535 -0.0112828584 0.0022935219 0.0161982278 -2.213185e-02 6.637716e-03
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## G35528 0.0124087468 -0.1867190726 0.0022338293 -2.703042e-02 2.151141e-02
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##	G35365	-0.0574808431	-0.0064309339	-0.0745531716	5.440117e-03	4.046093e-03
##	G35442	-0.0255096599	-0.0107848034	-0.0602207788	-4.422620e-02	-1.555786e-02
##	G35476	-0.0243938801	-0.0055899307	0.0634921547	-3.866372e-02	1.183813e-01
##	G35515	0.0584083568	0.0892929324	0.0587129782	4.636153e-03	2.137360e-02
##	G35351	0.0229287440	-0.0339378279	-0.0419049726	9.450434e-03	-1.763574e-02
##	G35484	-0.0345100871	0.0142044195	-0.0448592522	3.641703e-02	-1.529769e-02
##	G35495	-0.0057791138	-0.0371938823	0.0181205188	2.756456e-02	3.309529e-02
##	G35473	-0.0772119465	0.0029991105	-0.1090036586	1.299176e-02	6.577363e-02
##	G35418	-0.0679038946	-0.0384527874	0.0680597419	-1.527958e-02	-6.639241e-02
##	G35529	0.0142039055	-0.0237413482	0.0463557918	-4.136313e-02	6.086957e-02
##	G35532	0.0213280991	0.0650855503	-0.0740036448	-2.056774e-02	4.481977e-03
##	G35537	0.0199677799	0.0010680822	0.0389199116	9.643088e-03	6.163873e-03
##	G35520	-0.0806195863	0.0539926342	-0.0014412575	3.784994e-02	2.734205e-02
##	G35370	0.0289986725	0.0796385168	0.0039826444	3.600878e-02	-9.688259e-02
##	G35517	0.0008090370	-0.0054917134	0.0873105186	-8.051960e-02	3.126395e-02
##	G35417	0.0085358617	-0.0413538299	0.0506003286	7.714172e-02	1.254862e-02
##	G35465	-0.0945295585	0.0233380129	0.1166256520	4.540297e-02	-7.032418e-02
##	G35350	0.0184911252	-0.0129822620	0.0402405394	-3.844493e-03	4.220919e-03
##	G35421	-0.0689891942	-0.0258677950	-0.0009729774	5.924352e-02	-9.897201e-02
##	G35531	0.0301268642	-0.0729305120	0.0179675703	-4.433623e-02	8.094865e-03
##	G35444	0.0115858312	0.0962701120	0.0222213447	-5.620058e-02	2.658085e-02
##	G35443	0.0856789564	-0.1670467037	0.0234751869	-7.509374e-02	8.092104e-03
##	G35349	-0.0314000547	-0.0269339209	-0.0565579121	-1.258749e-02	-1.063078e-02
##	G35523	-0.0607438518	0.0817708972	-0.0657143326	-1.746368e-02	2.784701e-02
##	G35487	0.0020925367	0.0207976557	-0.0938264084	2.638354e-02	7.554864e-03
##	G35386	0.0511980727	0.0060387224	0.0565456796	-8.398470e-02	-5.575602e-03
##	G35521	-0.0244630595	-0.0386764439	0.0250957085	-3.835176e-02	2.385813e-02
##	G35475	0.0522164681	0.1068655594	-0.0169737364	-1.729625e-03	9.027014e-02
##	G35490	-0.0140037837	-0.0484156219	0.0068786366	1.543068e-03	1.626757e-02
##	G35422	-0.0563297271	0.0150616460	-0.0155096916	-3.310832e-02	-4.167119e-02
##	G35526	0.0225261617	-0.0481501537	0.1055802618	8.794469e-02	6.037630e-02
##	G35498	0.0181469143	0.0131336176	-0.0089990147	2.913124e-02	2.318092e-02
##	G35348	0.0498119140	0.1004854497	0.0793731860	1.800305e-02	1.882522e-02
##	G35423	-0.0338217774	0.0074654753	0.0352497497	-1.949349e-02	7.248968e-02
##	G35374	-0.0184895619	-0.0539407536	0.0939800009	5.806769e-02	4.956447e-02
##	G35486	-0.0719220327	-0.0489407040	-0.0426110544	1.926268e-02	-5.111276e-02
##	G35524	0.0649574030	-0.0866926852	-0.0286859025	-5.472773e-02	-1.391639e-02
##	G35394	-0.0666717236	0.0251884940	-0.0021923440	7.918440e-03	-1.409778e-02
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##	G35419	0.0112179804	-0.1440174131	0.0005376383	2.473653e-02	-1.569072e-02
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##	G35519	0.0023637478	0.0180575726	0.0769335762	-2.138364e-02	6.455238e-03
##	G35505	0.1832118152	-0.0804731885	0.0656368029	-6.654335e-03	2.969886e-03
##	G35447	0.0637845354	0.0315394163	0.0059164005	-1.030697e-03	4.299874e-02
##	G35458	-0.0414261195	-0.0001896067	-0.0132314334	2.992674e-02	-3.469300e-02
##	G35397	-0.0120243923	0.0548236898	0.0659257915	2.491454e-02	-4.751458e-02
##	G35462	0.0605485771	0.0700331864	-0.0125210198	2.889549e-02	1.072266e-01
##	G35392	-0.0107243164	-0.0232481710	-0.0611072124	-4.709959e-02	1.304592e-02
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##	G35497	0.0377450131	-0.0376823162	0.0697121855	8.791442e-02	7.739351e-02

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##	G35453	-0.0179878306	-0.0318819962	0.0646770148	-1.043250e-02	-4.970590e-02
##	G35352	-0.0045220956	-0.0519417132	-0.0804865251	2.121710e-02	1.496730e-02
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##	G35530	0.1053200954	-0.1321957066	0.0521191634	-1.355194e-02	5.023141e-05
##	G35512	0.0394563678	0.0444905215	0.0111888323	4.629761e-02	-4.039317e-02
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##	G35455	-0.1416906934	-0.0085181637	0.0609409190	-1.243518e-02	1.733214e-02
##	G35481	0.0001422488	-0.0713547402	-0.0695766839	2.326859e-02	-8.876135e-02
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##	G35469	-0.0117998010	-0.0467345844	0.0433242053	7.246412e-02	-7.170650e-02
##	G35513	0.0341736729	0.0406487865	0.0481595978	-2.503975e-03	-2.207895e-02
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##	G35527	-0.0267868069	-0.0726284063	0.0749461583	-3.696867e-03	3.784601e-02
##	G35516	-0.0554377107	0.0271233895	-0.0067779307	-4.380133e-02	-3.325944e-02
##	G35463	0.0096833945	0.0932095391	0.0593959682	-9.299306e-02	5.999047e-02
##	G35441	0.0669572266	-0.0246624892	-0.0138194108	4.955585e-03	-8.115151e-02
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##	G35412	0.0283289037	-0.0046178504	-0.0080205191	-1.058403e-01	2.346107e-02
##	G35388	-0.1405066024	0.0310165264	-0.0513167760	-7.884638e-02	-4.207530e-02
##	G35354	0.0586081312	0.0460645007	0.0471933130	5.195639e-03	2.180829e-04
##	G35533	0.0107431703	-0.1048113962	0.0049182384	-4.229802e-02	4.679735e-02
##	G35406	0.0265364746	0.0042288401	-0.0144851259	-1.206250e-02	-7.385930e-02
##	G35467	-0.0851459920	-0.0446534998	0.0883491528	-3.650563e-02	-5.380693e-02
##	G35522	0.0363476161	-0.0879533028	0.0427410152	-7.813836e-02	-1.933553e-02
##	G35404	0.0553499898	0.0060837556	0.0213065022	3.360189e-02	2.230057e-02
##	G35445	-0.0472001620	0.0002604130	0.0465523626	2.480300e-02	9.941679e-03
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##	G36145	-0.0198466895	-0.0378845855	0.0431990891	3.286101e-02	-3.303106e-03
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##	G36219	0.0639757592	0.1041710929	0.0969606710	-9.778975e-02	5.935439e-03
##	G36299	0.0031602680	-0.0481919137	0.0211816620	5.719628e-02	-3.293056e-02
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##	G36202	0.0141055982	0.0079204630	-0.0508116567	-1.019863e-02	-1.902431e-02
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##	G36272	-0.0077504637	0.0191889944	0.0583485236	-7.110305e-02	-6.889878e-02
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## G36266 -0.0139240142 0.0304262532 0.0041328692 2.820748e-02 -1.682854e-02
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## G36267 0.0164694028 0.0183438040 0.0437594837 -1.977109e-02 1.376178e-02
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##	G36234	-0.0015721102	-0.0000642779	0.0595298550	-9.230542e-02	-7.519271e-02
##	G36206	-0.0119372403	0.0120347757	-0.0786126072	-2.577397e-02	6.677633e-02
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##	G36192	-0.0438989126	0.0148675511	0.0259637430	-2.054502e-02	7.800569e-02
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##	G36138	0.0345740104	0.0303376345	-0.0149219419	-1.263341e-02	-4.570725e-02
##	G36203	0.0590136190	0.0695235589	-0.0316184501	-6.467519e-02	2.689169e-02
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##	G36314	0.0811130245	0.0761303305	-0.0852578898	-3.091482e-03	5.818902e-02
##	G36258	-0.1023725836	-0.0674117664	0.0666298076	2.454553e-02	1.365640e-02
##	G36147	0.0191461028	-0.0525236290	0.0721010208	1.057322e-02	1.950755e-02
##	G36235	-0.0226379769	0.0295209963	0.0597128082	-1.047057e-01	-4.178876e-03
##	G36143	-0.0933302402	-0.0366915269	-0.0133461906	6.468402e-02	1.514244e-02
##	G36308	-0.0004133647	-0.0024238111	-0.0896208949	2.359550e-02	-4.089000e-02
##	G36209	0.0029469146	0.0496005490	-0.0239781104	1.386232e-02	2.108441e-02
##		Axis.41	Axis.42	Axis.43	Axis.44	Axis.45
##	G37016	-2.593419e-02	3.672821e-02	-0.0289435766	-2.518045e-02	5.655217e-02
##	G36918	8.198330e-02	-7.076042e-02	0.0728281903	-6.853605e-02	-5.116928e-02
##	G37044	-2.486257e-02	3.572108e-02	0.0286979133	-3.521996e-02	-3.670340e-02
##	G37009	-3.317254e-02	7.510604e-02	0.0107066915	-6.008488e-02	1.223077e-01
##	G37029	-1.852496e-02	2.939331e-02	-0.0192763398	-9.489494e-02	-8.183130e-03
##	G37035	-5.729664e-03	-5.551397e-03	0.0432819634	-7.675537e-02	1.981935e-02
##	G36982	1.687344e-02	-1.859975e-02	0.0060396721	-3.137663e-02	-4.260895e-03
##	G36984	6.802278e-02	-2.801991e-03	-0.0138945020	-4.510482e-02	3.955270e-02
##	G37030	7.641634e-02	-5.605380e-03	-0.0573471834	1.293338e-02	1.327074e-02
##	G37031	-1.676951e-02	-1.208229e-02	-0.0989555100	1.710565e-02	-3.813630e-02
##	G36906	1.517540e-02	8.674717e-02	-0.0410772511	3.328154e-02	1.776968e-02
##	G37028	-6.033927e-02	-4.011886e-02	0.0131526639	-2.786995e-03	-1.650571e-02
##	G37014	-8.206341e-02	9.857206e-03	0.0545268930	-6.975214e-02	4.724813e-02
##	G37010	-4.266965e-02	3.059529e-03	-0.0216166341	1.832457e-02	7.484165e-02
##	G36944	-3.772621e-02	1.064607e-01	0.1085468404	-4.039387e-02	4.036485e-02
##	G36902	9.856223e-03	-4.371848e-02	-0.0234355903	3.704261e-02	5.071627e-02
##	G37051	-6.825573e-02	1.201445e-02	-0.0297019282	-1.269296e-02	6.327605e-02
##	G36964	-7.560437e-03	-1.241363e-01	-0.0566405692	-5.723786e-02	5.008141e-02
##	G36951	-9.556677e-03	-3.445210e-02	0.0216861661	2.166868e-02	6.469940e-02
##	G37025	-1.523212e-02	3.615789e-02	-0.0650779095	-6.439895e-02	-1.427087e-02
##	G36930	3.136970e-02	4.655329e-02	0.0019486919	-9.483945e-02	3.044761e-03
##	G36935	-3.770486e-03	2.712075e-03	0.0666560008	-5.838771e-02	7.149332e-02
##	G37041	-2.231373e-02	-1.260782e-02	-0.0903005848	3.054226e-02	-1.150837e-01
##	G36959	1.232783e-01	-7.362865e-02	0.0480164579	-1.472525e-03	4.576246e-03
##	G36905	-2.550080e-02	1.179095e-01	0.0136160586	-4.364597e-03	-2.420744e-02
##	G36917	-6.811364e-02	-4.974804e-02	0.0556582334	1.577308e-02	-2.716985e-02
##	G36992	3.359676e-03	3.206586e-02	-0.0262000154	-7.520165e-02	-2.385069e-02

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## G36303 4.422419e-02 -4.996302e-02 -0.0346612927 3.177513e-03 4.728043e-03
## G36193 6.725112e-02 -7.238630e-02 0.0067904213 -4.103920e-02 1.257340e-02
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##	G36308	4.553373e-02	2.781535e-03	-0.0083656262	-2.223746e-02	2.959441e-02
##	G36209	1.882246e-02	3.812679e-02	-0.0243988070	2.986722e-02	4.298514e-02
##		Axis.46	Axis.47	Axis.48	Axis.49	Axis.50
##	G37016	-0.0599595801	-0.0506877271	2.500733e-02	-0.0352050547	-2.728787e-02
##	G36918	-0.0263648068	0.0788106399	-4.521107e-02	-0.0793962739	2.623882e-03
##	G37044	0.0450232608	0.0188323613	1.861289e-02	-0.0358771288	2.067764e-02
##	G37009	-0.0296693850	-0.0670959655	-5.062180e-02	-0.0594325312	3.237750e-02
##	G37029	0.0622701258	-0.0024196285	8.030729e-02	0.0575008322	1.915299e-02
##	G37035	0.0344540853	0.0726812802	-3.894040e-02	0.0100392565	-5.971941e-03
##	G36982	-0.0481922655	-0.0076407745	-3.237497e-02	-0.0141489871	-7.083107e-02
##	G36984	0.0030600648	0.0767369831	-5.624787e-02	0.0340127799	-6.890980e-02
##	G37030	0.0371548104	0.0423367430	4.860368e-02	-0.0841385128	1.152697e-02
##	G37031	-0.0234098761	0.0256607884	-1.167670e-03	0.0206519078	-1.151000e-03
##	G36906	0.0773413460	0.0467653837	-5.392003e-03	0.0875979236	-5.862216e-03
##	G37028	0.0618629894	-0.0088902642	-5.741651e-02	0.0435249525	3.084081e-02
##	G37014	-0.0422098540	-0.0114340641	-2.718697e-02	0.0335769176	-2.130912e-02
##	G37010	-0.0074381930	0.0420106051	-1.136344e-01	-0.0563031184	-1.432629e-03
##	G36944	-0.0127437076	-0.0724648823	3.481391e-02	-0.0748930724	7.326397e-02
##	G36902	0.0733251136	0.0094354776	-1.040447e-02	-0.0288899458	2.669893e-02
##	G37051	-0.0495087736	0.0458971874	2.693762e-02	0.0186815793	-1.349036e-01
##	G36964	-0.0774609457	0.0297898806	-9.761333e-03	0.0078403947	3.961569e-02
##	G36951	-0.0348336047	-0.0730110161	-4.098965e-02	0.0919511828	-5.798329e-02
##	G37025	0.0455583882	-0.0298082826	-1.473414e-02	0.0460799296	3.884441e-02
##	G36930	-0.0019798078	-0.0416721071	5.031993e-02	0.0780860076	-2.575281e-02
##	G36935	-0.0287213081	-0.0470705565	-7.895965e-03	0.0216796827	-1.579838e-02
##	G37041	-0.0594933470	0.0478123053	5.882321e-02	-0.0520248599	-1.321395e-02
##	G36959	-0.0728316519	-0.0154524170	6.171755e-02	0.0214585050	5.514417e-02
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##	G36917	-0.0189582679	0.0692460783	1.016536e-02	-0.0629335457	4.463388e-02
##	G36992	-0.0100699799	-0.0314686891	3.249880e-03	-0.0203706121	6.020129e-03
##	G36921	-0.0595484098	-0.0104521755	-1.195120e-02	0.0445405569	2.963333e-02
##	G37004	0.0302012688	-0.0254494925	-2.031156e-04	-0.0752549930	-4.097536e-03
##	G36966	-0.0569632266	0.0569090502	-6.061298e-02	0.0090727875	6.588076e-02
##	G36936	0.0276261208	-0.0456865102	-5.506452e-02	-0.0593553786	1.748885e-02
##	G37015	-0.0866678351	0.0324162818	-2.434060e-02	0.0635582719	2.523044e-02
##	G37034	-0.0002169659	-0.0304606610	5.513173e-02	0.0687117360	2.966117e-02
##	G36953	-0.0318898259	0.1094775695	7.476595e-02	0.0116252998	-2.183510e-02
##	G36974	0.0130644234	0.0335084451	-5.914527e-02	-0.0598971411	-1.002869e-03
##	G37039	0.0146511363	0.0031352325	1.169860e-02	-0.0729968075	-6.057316e-02
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##	G37046	-0.0462637686	-0.0446335341	2.265359e-02	0.0133346408	1.905271e-02
##	G37053	-0.0040678805	0.0762103168	-1.946577e-02	-0.0329207753	-2.655478e-02
##	G36998	-0.0677694797	-0.0020857049	-6.965308e-02	0.0209582225	2.720934e-02
##	G37045	-0.0620237762	0.0078977877	1.660851e-03	0.0944249284	6.453751e-02
##	G37049	0.0570810977	0.0645272084	2.851386e-02	0.0442747532	3.313308e-02
##	G37019	-0.0448699184	-0.0303705101	1.125147e-02	0.0318999738	-5.060837e-02
##	G36988	-0.0285876179	-0.0359763458	-5.842986e-02	0.0051197171	-8.280151e-02
##	G37037	0.0100239758	-0.0334223660	-9.770963e-02	0.0165579013	6.059846e-02
##	G37005	0.0013191484	-0.0049658546	-2.919109e-03	-0.0307541003	-2.470242e-02
##	G36928	-0.0519471577	0.0050883155	1.112936e-02	-0.0373397164	-3.356613e-02

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## G37017 -0.0506671773 -0.0561629446 3.882670e-02 0.0309947307 -2.056424e-02
## G37012 -0.0409354056 -0.1433576960 -1.465581e-02 -0.0046238078 -9.561436e-03
## G36952 -0.0417198431 -0.0242105319 -7.494198e-03 0.0751078836 -3.313318e-02
## G37011 0.0039113083 -0.0552359128 9.158881e-02 -0.0134734666 -3.090226e-03
## G36957 -0.0308218970 -0.0007876438 -1.666498e-02 0.0430068863 -2.898661e-02
## G37021 -0.0189228460 0.0315205366 -4.669107e-02 0.0058054539 -2.361103e-02
## G36937 0.0463440445 -0.0063164699 -9.668568e-02 0.0262560621 -9.379501e-03
## G37047 0.0173177148 -0.0458993085 -2.950614e-02 0.0317898325 5.167016e-02
## G37032 0.0233580334 0.0449274144 2.588573e-02 -0.1212372953 -7.157283e-04
## G36932 -0.0202981467 0.0076378168 3.681774e-02 -0.0281916019 4.054891e-02
## G37043 0.0535904858 -0.0209427587 -4.131690e-02 0.0433309192 -1.146564e-02
## G37054 0.0878285602 -0.0004345150 -4.401995e-02 -0.1160523410 9.813694e-03
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## G36972 0.0491370999 -0.0010228477 -7.226477e-02 0.0018433964 5.743201e-02
## G36968 -0.1454188511 0.0383422139 1.373752e-02 0.0547212397 2.573556e-02
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## G37040 0.0567687979 0.0414274027 7.077277e-02 -0.0327853716 -1.350770e-02
## G37027 0.0734830733 -0.0175289771 1.094683e-01 0.0176671445 -2.544035e-03
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## G37023 0.0283195007 0.0407052991 1.480771e-02 0.0262898335 9.082801e-02
## G37036 -0.0451604308 0.0053396971 5.660363e-02 0.0792288264 6.181138e-02
## G37026 0.0071120596 -0.0588497817 1.064103e-01 -0.0981895784 7.490963e-04
## G37050 0.0023824051 -0.0421499838 8.080132e-02 -0.0122020874 6.759612e-04
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## G35477 0.0508422785 0.0426101320 2.088718e-02 0.0173388625 9.361993e-04
## G35390 0.0101850239 -0.0075988396 1.949578e-03 0.0478395049 -5.271822e-02
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## G35395 0.0030681586 -0.0251003711 2.724553e-02 0.0559039590 -5.064815e-02
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## G35409 0.0538433220 -0.0272672445 5.925520e-02 -0.0163707097 -6.066026e-02
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## G35511 0.0334934064 -0.1098384840 -9.673339e-03 0.0389888884 1.059537e-01
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## G35510 0.0367814822 -0.0306424653 -1.952730e-02 0.0072979994 1.346535e-02
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## G35444 0.0127699005 -0.0458199466 3.507862e-02 -0.0648389952 3.753316e-02
## G35443 -0.0209305914 0.0247894501 1.109347e-01 0.0125015914 6.326181e-02
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## G35523 0.0013862517 0.0621293470 6.898064e-02 0.0402277343 -5.722267e-02
## G35487 -0.0270307415 0.0681115693 -3.799186e-02 -0.0431958829 4.846234e-02
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## G35419 0.0665185018 0.0381642804 -3.978938e-03 0.1344999995 1.420081e-03

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## G35513 0.0514322687 0.1254026032 1.702637e-02 0.0285093042 1.596279e-02
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## G36232 -0.0430565811 0.0612704855 -2.833858e-03 0.0383510366 2.178891e-02
## G36240 0.0100658335 0.0222589397 1.037325e-01 0.0203206994 6.634588e-02
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##	G36162	-0.0371625468	0.0606856976	-1.006006e-01	-0.0838473886	1.117735e-02
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##	G36318	-0.0285066801	-0.0002599396	2.979747e-02	0.0184676100	3.447582e-02
##	G36194	0.0600040894	-0.0794946135	-2.759569e-02	0.0092661757	-1.199704e-02
##	G36244	0.0187022548	0.0059006024	-9.027207e-03	0.0040208585	-2.557401e-02
##	G36197	0.0553966640	-0.0116267480	9.453041e-03	0.0287236377	-7.307305e-03
##	G36264	-0.0529731730	0.0409140453	-1.002984e-02	0.0652904704	1.292723e-02
##	G36317	-0.0267413848	0.0389241074	2.726112e-02	0.1148794313	-2.218462e-02
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##	G36257	-0.0261019359	-0.0324090961	-1.127643e-02	-0.0139919182	-1.361358e-01
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##	G36192	-0.0813117409	0.0080035093	5.481323e-02	-0.0173561244	6.650488e-03
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##	G36138	0.0798000916	-0.0291405882	5.362962e-02	0.0338596137	-2.358773e-02
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##	G36209	-0.0670529627	0.0313430941	1.233279e-02	0.0211996982	-3.272270e-02
##		Axis.51	Axis.52	Axis.53	Axis.54	Axis.55
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##	G36918	9.251780e-03	-6.799512e-02	2.260410e-02	-1.203569e-02	4.897702e-03
##	G37044	2.800127e-02	1.144608e-02	2.548631e-02	5.061895e-02	-1.650958e-02
##	G37009	-4.307612e-02	-1.224076e-02	-4.618723e-02	1.077111e-02	-5.284133e-02
##	G37029	1.406112e-02	1.333451e-02	-6.476427e-03	1.611036e-02	9.200550e-03
##	G37035	2.388115e-02	-4.978218e-03	-1.953196e-02	-2.392337e-02	2.766827e-02
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##	G37030	1.654180e-02	6.134323e-02	-1.909006e-03	4.528611e-02	-1.068434e-02
##	G37031	3.641223e-02	4.581588e-02	3.679383e-02	2.039251e-02	-2.062588e-02
##	G36906	1.278552e-02	-4.549003e-02	2.532076e-04	-9.370493e-03	-4.162723e-02
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##	G36202	-3.028851e-02	5.028798e-02	-1.938238e-03	1.858341e-02	6.092563e-02
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##	G36225	-1.516180e-02	-4.053165e-02	5.139583e-02	-1.524798e-02	-1.960381e-02
##	G36272	2.955115e-02	-2.436342e-02	1.897102e-03	1.259091e-02	3.387512e-02
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##	G36259	-8.675995e-03	-1.001794e-01	4.528105e-02	3.330806e-02	-1.103314e-02
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##	G36246	7.653592e-03	-1.145293e-02	-8.078096e-02	-2.428035e-02	3.819314e-02
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## G36244 -6.838233e-03 2.397701e-02 1.638415e-02 -5.875324e-03 4.863039e-02
## G36197 1.483458e-02 3.479765e-02 -1.250651e-01 -7.441725e-02 -1.972401e-02
## G36264 -5.632079e-04 1.779777e-02 1.389421e-04 -2.539339e-02 -3.188175e-02
## G36317 -1.248651e-02 3.138612e-02 4.179685e-03 3.725215e-02 -4.973345e-03
## G36159 1.168861e-02 -5.420055e-03 -4.640968e-02 -1.604381e-02 4.346493e-03
## G36234 4.989960e-03 -4.336339e-02 -5.139129e-03 3.147901e-02 -3.868670e-02
## G36206 -5.337214e-02 -4.069266e-02 -4.012736e-02 -1.458345e-02 -8.518652e-02
## G36257 6.708026e-02 -4.855826e-02 -5.656557e-02 3.693393e-02 -6.490706e-03
## G36216 3.346703e-02 1.423140e-02 -2.120807e-02 -1.916171e-02 -3.072603e-02
## G36208 -3.758343e-02 -1.586257e-02 -4.037965e-02 -1.347222e-02 -8.749553e-02
## G36309 -1.230882e-02 2.994928e-02 4.722142e-03 2.163739e-03 -6.138214e-03
## G36146 -4.825723e-02 2.722272e-02 1.864257e-02 -4.043746e-02 -4.241484e-02
## G36192 4.450515e-02 -2.459490e-03 5.657551e-02 7.595546e-03 -7.417568e-03
## G36284 -6.707140e-03 1.517302e-02 9.634335e-03 -2.645741e-02 -5.679555e-02

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##	G36291	-2.247963e-03	-7.239041e-02	-1.162212e-03	-3.256613e-02	-4.140694e-02
##	G36142	-3.305030e-02	-4.037077e-02	2.054908e-02	-1.537784e-02	1.644852e-02
##	G36138	7.176912e-02	-8.614089e-03	-3.281564e-02	1.823609e-02	6.038628e-02
##	G36203	-8.086239e-02	-6.321602e-03	2.278809e-02	-4.440380e-02	5.593702e-03
##	G36282	5.162143e-03	-6.178851e-02	-2.702451e-02	-5.501918e-02	-5.229683e-02
##	G36290	2.109073e-02	-1.156126e-01	-7.831667e-02	6.912719e-02	-2.056960e-02
##	G36274	1.384048e-02	-2.698086e-02	3.488566e-03	3.249530e-02	4.309149e-03
##	G36314	1.369022e-02	-6.337584e-03	3.995744e-02	7.379243e-02	6.886002e-02
##	G36258	1.394062e-01	-8.136401e-02	2.501342e-02	-3.301869e-02	-2.546051e-02
##	G36147	7.082637e-05	-5.489079e-02	-2.823998e-02	3.473066e-02	4.732649e-03
##	G36235	-1.678683e-02	6.986473e-02	3.548309e-03	2.228891e-03	6.058728e-02
##	G36143	-3.128998e-02	-5.027768e-02	-6.612292e-02	-5.317281e-02	8.066691e-02
##	G36308	-1.904736e-02	9.642630e-03	2.930266e-02	-2.845970e-02	-3.711155e-02
##	G36209	1.119370e-02	-3.726725e-02	-2.319284e-02	7.723345e-02	-1.528569e-02
##		Axis.56	Axis.57	Axis.58	Axis.59	Axis.60
##	G37016	-0.0019870732	2.155439e-03	-4.622789e-02	5.223483e-02	-2.399033e-02
##	G36918	0.0386649817	3.014792e-02	5.192543e-02	-4.517985e-02	2.925282e-02
##	G37044	-0.0722989002	-5.947896e-03	-1.484983e-02	-1.523201e-02	2.095750e-02
##	G37009	0.0926590535	8.729985e-02	8.206961e-02	1.288195e-02	4.031499e-02
##	G37029	0.0814265494	6.166995e-02	4.672648e-03	2.442118e-02	1.512516e-02
##	G37035	-0.0044834358	9.506697e-02	6.071655e-03	4.027411e-02	-6.691364e-02
##	G36982	-0.0087636475	7.278790e-03	-3.512379e-02	-5.806455e-02	-9.834234e-02
##	G36984	-0.0055929510	-1.976724e-02	2.894053e-03	2.166561e-02	6.010300e-03
##	G37030	0.0491523389	-1.528055e-02	-3.000574e-02	-4.560805e-02	-3.193132e-02
##	G37031	0.0497709006	-9.458558e-03	-2.423694e-02	1.089268e-01	-4.676621e-02
##	G36906	0.0271299887	7.418593e-03	2.570196e-02	-2.312524e-02	-8.393867e-02
##	G37028	-0.0255656479	3.455549e-02	-1.719855e-02	5.234307e-02	-8.165904e-04
##	G37014	0.0129045659	-3.553607e-02	1.203388e-02	-1.170012e-02	6.603462e-02
##	G37010	0.0037230054	2.206316e-02	8.824556e-02	1.834978e-02	1.091350e-01
##	G36944	0.0917923570	-1.253709e-02	1.561957e-02	6.421490e-03	-1.207909e-02
##	G36902	0.0207467984	-3.686370e-02	5.363590e-03	-3.073790e-02	-3.136527e-02
##	G37051	0.0213475819	-5.320756e-03	3.385104e-02	-2.316430e-02	-3.955475e-02
##	G36964	0.0316880225	-6.165987e-03	3.020319e-02	1.920646e-02	2.024526e-02
##	G36951	0.0134276208	4.701298e-02	-1.125057e-02	3.663951e-02	6.218757e-02
##	G37025	-0.0098541592	4.350683e-03	3.186901e-03	-1.609665e-02	3.870886e-02
##	G36930	0.0210418509	-1.437517e-02	7.257967e-03	4.109438e-04	-5.016039e-02
##	G36935	0.0296112232	-4.106557e-02	-3.869554e-02	4.523858e-03	-1.011999e-02
##	G37041	0.0223272363	2.173532e-02	-1.956229e-02	1.261489e-01	-1.778779e-02
##	G36959	0.0567851537	4.072290e-02	-4.823414e-03	7.069570e-03	-2.325439e-03
##	G36905	-0.0235962455	2.724899e-02	2.117072e-02	-5.326334e-02	3.028231e-02
##	G36917	0.0341404451	2.513006e-02	9.949382e-03	6.346554e-03	-1.038359e-02
##	G36992	-0.0028088077	2.026889e-02	2.834531e-02	-1.356736e-02	-2.631977e-02
##	G36921	0.0197260980	-6.853605e-02	5.941169e-02	3.675968e-02	-4.153203e-02
##	G37004	-0.0007160841	5.871739e-03	1.185596e-02	-3.920124e-02	4.180652e-02
##	G36966	0.0251009717	8.351090e-02	4.171916e-02	1.033825e-02	2.289047e-02
##	G36936	0.0901644594	3.233229e-03	7.974138e-03	-3.481418e-03	3.349443e-02
##	G37015	-0.0303193298	-6.260861e-02	-6.739166e-02	-7.169631e-03	-9.072743e-02
##	G37034	-0.0785222801	6.135923e-03	5.635616e-02	-1.577306e-02	-3.770046e-02
##	G36953	-0.0084201887	5.910870e-02	2.561687e-02	4.544378e-02	-7.527573e-02
##	G36974	-0.0203266957	-4.119246e-02	-5.199687e-02	1.952521e-02	2.141511e-02
##	G37039	-0.0075432807	6.293134e-03	-4.318237e-02	-4.185871e-02	-2.169976e-02
##	G36933	0.0125246207	4.586124e-03	5.171191e-02	-2.643944e-02	6.030348e-02
##	G37052	0.0427716055	-3.152756e-02	-4.813627e-02	-3.251069e-02	-8.952966e-02
##	G36925	0.0254002051	3.147567e-02	6.918960e-03	-1.661672e-02	4.162853e-02

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## G37046 -0.0173221296 1.601226e-04 5.777640e-02 -4.347655e-02 -5.314765e-02
## G37053 -0.0275369254 -1.101794e-02 -1.397942e-02 1.040927e-01 -5.307564e-02
## G36998 -0.0601483963 -6.441528e-03 -1.123795e-02 2.734731e-02 -6.088301e-02
## G37045 -0.0291322258 -1.618296e-03 -1.909617e-02 8.636566e-03 -4.431070e-02
## G37049 0.0367916781 2.517798e-02 -2.674504e-02 2.629893e-03 -1.059530e-01
## G37019 -0.0643807343 -1.411904e-02 -3.120009e-02 -4.639359e-03 1.502749e-02
## G36988 0.0046422489 1.346658e-01 1.212192e-02 -4.605243e-04 5.321965e-02
## G37037 -0.0329304340 -3.733594e-03 -1.219454e-02 7.819528e-03 6.916087e-02
## G37005 0.0050093767 5.319919e-02 2.978503e-03 -2.764062e-02 -1.470206e-02
## G36928 -0.0101601530 -3.057004e-02 -2.923906e-03 -1.105070e-02 8.732306e-03
## G36923 0.0677129396 2.743903e-02 -1.692356e-02 3.228951e-02 2.969078e-02
## G37033 -0.0304733154 1.397441e-02 2.697229e-03 7.202157e-02 -3.828773e-02
## G37017 -0.0411728905 -1.319177e-02 -7.121102e-02 4.622770e-02 2.899466e-02
## G37012 0.0034841017 2.963450e-02 6.713522e-02 -1.109460e-02 -5.307214e-02
## G36952 -0.0157476210 6.380830e-02 -3.261574e-02 -3.381778e-02 2.027200e-02
## G37011 -0.0514449269 -1.640341e-02 2.139892e-02 -2.815265e-02 -2.419553e-02
## G36957 0.0440724797 -4.007689e-02 3.922730e-02 3.078497e-02 -1.640075e-02
## G37021 -0.0445431185 8.056715e-02 1.612229e-02 6.240075e-02 -6.408445e-04
## G36937 -0.0171016859 -3.046680e-02 -5.494523e-04 5.121745e-05 -3.181780e-02
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## G37054 0.0199234617 3.994393e-02 -4.817729e-03 -6.413961e-02 8.672570e-03
## G36948 0.0047355404 -1.455093e-02 -7.061537e-03 2.352575e-02 -7.791574e-03
## G36972 -0.0018636627 9.742486e-03 -4.615929e-02 4.280387e-02 3.780097e-03
## G36968 0.1274743647 3.015089e-02 4.232527e-02 2.106507e-02 -2.902124e-02
## G36911 0.0379268395 -2.441825e-03 4.546726e-02 8.233906e-03 2.369040e-02
## G36987 0.0187069001 5.938339e-02 3.875973e-04 -9.606580e-03 -5.241984e-02
## G37042 0.0456059124 6.395618e-02 8.852857e-02 5.941167e-02 2.702971e-02
## G36960 0.1159292472 2.598941e-02 -1.941758e-02 3.303471e-02 -8.909406e-03
## G37040 0.0259128428 4.896270e-02 -1.079037e-02 -8.495799e-02 -2.883336e-02
## G37027 -0.0161095198 3.455427e-02 1.622587e-02 -5.954622e-02 -4.180928e-02
## G37024 0.0246094661 7.835667e-02 -5.581134e-02 3.459696e-02 3.047375e-02
## G37023 -0.0204638540 -5.660599e-04 4.914785e-03 6.942821e-02 1.409074e-01
## G37036 -0.0765827288 1.112134e-02 -4.090375e-02 7.662232e-03 -3.264607e-02
## G37026 -0.0651970890 -4.836304e-02 4.572053e-02 -4.484667e-03 -2.302311e-02
## G37050 -0.0269596051 -3.278332e-02 9.391876e-03 -4.524000e-02 -2.160519e-02
## G36973 0.0565709858 2.996063e-02 -2.108580e-02 1.748965e-02 -8.246140e-03
## G36991 0.0173404757 -3.462871e-02 3.030881e-02 -2.691384e-02 -3.466399e-02
## G36904 -0.0082593048 -3.044659e-02 2.209652e-02 -2.716858e-02 -2.017752e-04
## G36958 -0.0335598268 -5.227850e-02 7.085737e-02 -7.320940e-02 -9.791188e-03
## G36993 0.0460060559 -5.319283e-02 1.588894e-02 2.755621e-02 -3.908090e-02
## G37020 0.0075406000 3.099948e-02 -3.018952e-02 1.325674e-02 -3.902421e-03
## G36910 -0.0149998126 -3.787418e-02 -6.572012e-03 8.132168e-03 1.169157e-02
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## G37048 -0.0018812257 4.052943e-03 -1.004825e-02 -3.385720e-02 -3.038179e-02
## G36940 -0.0575828535 -2.954448e-02 -2.521607e-02 -3.789297e-02 -1.422203e-02
## G37013 -0.0077420350 3.252405e-02 -4.500392e-03 1.128073e-02 5.852176e-02
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## G36938 -0.0341652786 -2.052940e-02 -2.748019e-02 -1.573467e-02 3.626607e-02
## G37022 0.0616870666 8.341932e-03 3.742886e-02 -1.264653e-01 -8.767655e-03
## G35534 0.0277817322 -1.444799e-02 -8.184851e-03 -2.922058e-02 -2.002255e-02

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## G35535 0.0633171334 5.429138e-02 6.234158e-02 1.155461e-02 -1.256758e-02
## G35361 0.0872562424 5.101076e-02 -9.704078e-03 -1.017506e-02 -1.171841e-02
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## G35433 -0.0266140593 1.292469e-03 -1.636198e-02 -3.799765e-02 -1.516527e-02
## G35528 -0.0590231352 3.090211e-02 -2.522268e-03 -3.843398e-02 -2.839496e-02
## G35381 0.0157231113 -3.372672e-02 -1.762099e-02 -1.230057e-02 1.113352e-02
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## G35536 0.0890292492 7.472595e-02 8.675944e-02 3.633582e-02 -2.299235e-02
## G35514 0.0197558739 -5.593918e-02 5.637044e-02 6.165553e-02 2.171655e-02
## G35525 -0.0087693957 -6.175908e-03 -4.761573e-02 1.591940e-02 6.551876e-03
## G35395 -0.0046780198 1.578207e-02 -1.069548e-05 1.762257e-03 -2.475532e-02
## G35480 0.0284139635 -5.584608e-02 -5.923371e-02 2.095100e-02 -2.848879e-02
## G35409 0.0009102922 4.915127e-02 1.083204e-03 3.107225e-03 3.375582e-02
## G35391 0.0105268779 1.824711e-02 -5.072322e-02 3.947144e-02 -5.136906e-03
## G35437 0.0232053262 -9.152091e-03 8.548162e-03 -7.829259e-03 -5.617301e-02
## G35511 0.0155302755 1.971150e-03 -8.809211e-02 1.840310e-02 -6.150901e-02
## G35448 -0.0072051298 2.172396e-02 6.269681e-02 2.146412e-02 -4.430019e-02
## G35510 -0.0299832039 9.625633e-02 5.051836e-02 9.291212e-02 -5.607111e-02
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## G35403 -0.0366208180 8.170288e-03 -4.516058e-02 -3.153554e-02 -3.657611e-02
## G35424 -0.0163718728 -4.639802e-02 -3.081993e-02 2.652779e-02 -9.083787e-02
## G35398 -0.0469493834 2.489079e-02 -3.283513e-02 -3.677549e-02 -2.382382e-02
## G35365 0.0624810263 -2.056193e-02 5.100280e-02 1.012256e-01 -3.865187e-02
## G35442 0.0076944609 -7.676435e-02 -3.713650e-02 -1.265084e-02 -1.456046e-02
## G35476 0.0438312758 -2.172284e-02 6.461150e-02 -4.207827e-02 6.190396e-02
## G35515 -0.0276762013 7.768004e-02 -1.288870e-02 2.936940e-02 -3.968105e-02
## G35351 0.0701817545 3.001070e-02 1.027106e-01 -1.955335e-02 -3.870258e-02
## G35484 -0.0232165832 4.604122e-02 -3.283634e-03 1.305863e-02 -3.430804e-02
## G35495 -0.0359698210 2.753511e-02 1.293494e-02 -4.103304e-02 -1.653743e-02
## G35473 0.0129700717 -2.683833e-02 1.138207e-02 -1.036570e-02 9.311032e-03
## G35418 -0.0528594178 -2.271155e-02 -2.677193e-02 2.534793e-02 4.961938e-02
## G35529 0.0420603960 9.468685e-02 9.702825e-02 2.083666e-02 -3.885757e-02
## G35532 0.0118818441 2.970660e-02 -5.402027e-02 -5.989516e-02 -4.206760e-02
## G35537 0.0142401465 -3.600951e-02 -3.944241e-02 8.920412e-03 2.602033e-02
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## G35370 0.0753528013 -4.558930e-04 7.058930e-02 3.328629e-02 6.017918e-03
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## G35443 -0.0086430122 -2.155327e-02 -3.356388e-02 3.332395e-02 -1.846437e-02
## G35349 0.0411057579 -3.657811e-02 -1.363025e-01 9.083186e-02 -2.670727e-02
## G35523 -0.0009790051 5.893280e-02 6.927857e-02 -6.950281e-02 6.319536e-03
## G35487 0.0125684080 -9.781477e-03 4.711860e-02 -1.005344e-02 -4.040678e-02
## G35386 0.0364098627 5.035378e-02 1.348061e-02 -4.940418e-02 -1.372357e-02
## G35521 -0.0798905438 6.712529e-03 3.388668e-02 5.461323e-03 6.350369e-03
## G35475 -0.0060206298 3.669132e-02 -2.374550e-02 5.965279e-03 -5.183540e-02
## G35490 -0.0397611695 -6.295107e-03 3.819825e-03 9.759941e-02 -3.824899e-02
## G35422 -0.0398366599 7.087313e-03 -2.508490e-02 1.100215e-01 2.107467e-02

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## G35526 -0.0519314373 5.308563e-02 4.749746e-03 -3.059071e-02 -5.813415e-03
## G35498 0.0084791794 6.859029e-02 5.323159e-02 7.283087e-02 -9.661854e-03
## G35348 -0.0293901160 9.733018e-02 3.259306e-03 2.898846e-02 -2.080886e-02
## G35423 -0.0126622930 3.156768e-03 -1.888134e-02 1.666856e-02 2.887857e-03
## G35374 -0.0974704181 4.896240e-02 5.462805e-03 -4.196010e-02 -2.270647e-02
## G35486 -0.0179772114 3.898825e-03 4.455721e-02 -1.223792e-02 -8.709822e-03
## G35524 -0.0481689573 -2.529382e-02 2.446382e-02 8.837556e-03 -6.002923e-02
## G35394 0.0487257850 3.400534e-02 8.236941e-03 5.347050e-02 -2.008758e-02
## G35359 0.0818820852 6.148114e-02 -3.139116e-03 -4.542712e-03 -2.454904e-02
## G35419 0.0486479762 9.104234e-02 -4.882545e-02 -1.720577e-02 1.718366e-02
## G35356 -0.0926737247 6.479539e-02 2.290091e-03 -2.614759e-02 -4.711296e-02
## G35519 0.0368191226 -2.014824e-02 3.280410e-02 1.093483e-02 1.609505e-03
## G35505 -0.0063280964 -7.249062e-04 8.586217e-02 -5.643557e-02 1.350972e-02
## G35447 -0.1034270570 5.642106e-02 6.410018e-02 7.468880e-03 -7.480029e-02
## G35458 -0.0253406266 1.329639e-02 5.469247e-03 -2.470527e-02 4.841032e-02
## G35397 0.0612953529 7.531883e-02 -8.198962e-02 6.966354e-03 -3.200916e-02
## G35462 0.0169151753 -5.978690e-03 3.336481e-03 1.095064e-02 -6.955022e-02
## G35392 0.0465978081 -2.385281e-02 7.084394e-02 3.603727e-02 6.732410e-02
## G35464 -0.0423623682 6.576252e-02 5.694349e-02 3.244853e-02 -1.086940e-03
## G35497 0.0112233089 -3.873645e-03 4.278795e-02 1.302814e-02 6.918464e-03
## G35373 -0.0222850428 6.782602e-03 2.800478e-03 -5.522497e-02 -3.565958e-03
## G35453 0.0245694255 -2.122556e-02 1.392045e-02 3.976630e-02 -4.155393e-02
## G35352 0.0427868608 3.639511e-02 -3.825739e-02 1.531562e-02 -4.124787e-03
## G35366 -0.0413493939 -4.611719e-02 3.940348e-02 7.393612e-03 3.305147e-02
## G35530 0.0128553237 3.469013e-02 4.938348e-03 -4.708738e-02 1.877166e-03
## G35512 0.0326056769 2.509857e-02 2.602286e-02 2.989719e-02 -3.046880e-02
## G35372 0.0417079181 3.885136e-02 6.411243e-02 -1.442396e-02 -1.941163e-02
## G35407 0.0036501712 1.848981e-02 2.447855e-02 4.704849e-02 -1.521252e-02
## G35455 -0.0382002629 -1.394288e-02 6.697164e-03 2.805207e-02 -4.910515e-02
## G35481 0.0217930295 -8.919829e-02 7.778335e-02 5.963423e-02 1.509695e-02
## G35355 0.0451633420 -2.499443e-02 -2.741796e-02 3.239192e-02 -5.830469e-03
## G35469 -0.0517192205 -4.190847e-02 -2.645980e-03 -5.441538e-04 -4.544287e-02
## G35513 0.0630434491 -5.435684e-02 3.063276e-02 1.277954e-02 6.128693e-02
## G35387 0.0205165761 -2.225591e-02 2.533527e-02 -2.680979e-02 -7.708197e-02
## G35527 -0.0900138291 2.203328e-02 -7.821240e-03 -4.165668e-02 -1.787750e-02
## G35516 0.0278082489 -3.329358e-02 -2.295448e-02 -2.668063e-02 -5.337903e-02
## G35463 -0.0337969790 -5.065817e-02 7.774339e-02 -2.011609e-02 6.727344e-02
## G35441 0.0923277449 5.402268e-02 -2.228395e-02 -8.542918e-02 -2.260105e-02
## G35414 0.0454388938 -3.226041e-03 2.299349e-02 9.401057e-03 -4.237890e-02
## G35412 -0.0231622214 1.388158e-02 -1.013951e-02 2.629226e-02 5.602550e-02
## G35388 0.0632947999 2.456929e-02 3.239034e-02 -2.436906e-02 -4.911899e-03
## G35354 -0.0128106281 -6.536231e-02 -6.709295e-03 1.105348e-02 -1.620494e-02
## G35533 0.0268174073 -1.500907e-02 -2.825444e-02 -2.543109e-02 2.181277e-02
## G35406 0.0302518441 -2.158632e-02 -2.934861e-02 2.745346e-02 -3.190163e-02
## G35467 0.0704477398 8.223291e-03 3.114937e-02 8.736067e-03 2.963815e-02
## G35522 -0.0607039489 -4.066496e-03 1.773380e-02 7.184532e-04 -4.671244e-02
## G35404 0.0247067919 2.092594e-02 4.886263e-03 -3.862272e-02 -2.462009e-02
## G35445 -0.0183620814 2.229154e-02 5.959871e-02 1.213272e-02 -5.622087e-02
## G36173 0.0370591269 5.671851e-02 2.423742e-02 -6.534265e-02 -2.497204e-03
## G36145 0.0193237698 -8.308998e-02 -5.134922e-02 -6.161346e-02 -3.761953e-02
## G36196 0.0184833110 -9.510007e-03 2.826528e-02 -2.845531e-02 -2.083975e-02
## G36219 -0.0339935610 7.512120e-02 5.528652e-02 1.774061e-02 -6.955071e-02
## G36299 -0.0027854530 2.045160e-02 -3.018163e-02 3.067352e-02 1.329261e-02
## G36137 -0.0121560412 -3.393976e-02 -3.074895e-02 -8.004470e-03 2.521704e-02

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## G36273 0.0058250551 6.566960e-03 -1.320515e-02 5.136282e-03 -7.668452e-03
## G36201 -0.0335475325 1.829271e-02 3.196034e-02 -9.333774e-03 -2.976885e-02
## G36165 -0.0750239010 -1.065975e-02 5.348061e-02 -2.941390e-02 -1.800481e-02
## G36202 -0.0347810241 -7.660244e-03 9.221742e-03 -6.532364e-04 -7.832099e-02
## G36226 0.0397265986 -6.028032e-03 8.760060e-02 4.910907e-02 1.610103e-02
## G36269 0.0179111478 3.496710e-02 1.589362e-02 -5.956269e-02 -2.238566e-03
## G36135 0.0135279479 -2.754234e-02 -9.268193e-03 -4.529460e-02 1.789784e-02
## G36250 -0.0332551998 4.642920e-02 2.991180e-02 -2.470363e-03 2.890321e-03
## G36225 -0.0413830247 3.627183e-02 2.213237e-02 -1.417915e-02 1.680633e-02
## G36272 0.0139478752 8.408630e-03 4.592196e-02 -2.459000e-02 1.496625e-02
## G36285 -0.0467431532 -8.520402e-02 1.989468e-02 6.142189e-03 2.785219e-02
## G36259 0.0725852351 1.054574e-02 1.938080e-02 2.402461e-02 3.840137e-02
## G36229 0.1161853024 -8.882994e-03 5.380007e-03 1.279811e-02 -1.815869e-02
## G36155 0.0751686982 -4.569338e-02 -3.049216e-02 -6.605218e-02 1.348225e-04
## G36251 -0.0370674124 1.800058e-03 -3.197697e-02 -4.201317e-02 3.733757e-02
## G36297 0.0142303997 2.110840e-02 -1.952670e-02 -3.070609e-02 -2.059468e-02
## G36170 0.0247692298 -1.706499e-02 -4.621420e-02 -1.116348e-01 3.145755e-02
## G36241 -0.0133678103 -7.152134e-02 5.704109e-02 -1.134771e-02 7.349989e-02
## G36224 -0.0186622942 5.607372e-02 -4.750406e-02 -5.716456e-03 2.108264e-03
## G36169 0.0173910544 -1.767740e-02 -5.190391e-02 -1.008361e-01 -2.724529e-02
## G36266 -0.0021269287 6.862192e-02 -2.546063e-02 1.915135e-02 4.560366e-02
## G36164 -0.0214226263 1.699952e-02 9.507375e-02 -3.253029e-02 -4.439103e-03
## G36215 -0.0201853838 6.527203e-02 4.596178e-02 -3.623738e-03 -2.691472e-02
## G36195 -0.0431795989 -4.882005e-02 -7.897106e-03 -1.638349e-02 4.700135e-02
## G36205 -0.0149063812 -5.929845e-02 2.707619e-03 7.976565e-03 -1.449023e-02
## G36246 -0.0542769229 9.982297e-02 4.348969e-02 1.145190e-02 -2.318171e-02
## G36150 -0.0531274738 -4.861869e-02 -5.392448e-02 1.327244e-02 -4.832532e-02
## G36237 0.0311093206 -4.121911e-02 9.426006e-03 -1.523359e-02 2.375209e-02
## G36148 0.0423509371 -7.392325e-02 1.405243e-02 1.787558e-03 8.365127e-03
## G36213 -0.0471458793 3.182426e-02 1.821457e-02 -1.783369e-02 -3.223884e-02
## G36232 -0.0489148800 -6.920950e-02 2.441358e-02 6.047508e-02 -5.813663e-02
## G36240 -0.0428419123 -5.951356e-02 3.793356e-02 3.927517e-02 1.996744e-03
## G36249 -0.0205564188 4.602609e-02 -2.563238e-02 -2.999493e-02 4.017406e-03
## G36298 0.0099836846 1.342063e-02 -7.092444e-03 -3.386834e-03 -4.435406e-02
## G36176 -0.0129985366 -4.541612e-02 4.075162e-02 6.531175e-02 -9.170927e-03
## G36214 -0.0288584277 -8.045229e-03 5.714616e-02 5.060712e-02 -2.363483e-02
## G36230 0.0082784578 -4.509576e-03 2.672931e-02 -1.305679e-02 -5.193734e-03
## G36320 -0.0128643534 4.857862e-02 -1.318348e-02 6.222726e-02 4.362028e-03
## G36245 -0.0022456785 7.243531e-02 1.750316e-02 -1.561600e-02 3.901608e-02
## G36161 0.0351654353 3.524371e-02 3.556744e-04 2.274708e-04 2.262753e-02
## G36172 0.0465874892 3.324265e-02 6.058889e-02 -3.339364e-02 4.450350e-02
## G36212 -0.0208897457 -1.810778e-02 3.034711e-02 1.243416e-01 -1.312584e-02
## G36180 0.0242141358 -6.756414e-02 7.189332e-03 2.969753e-02 -1.087959e-02
## G36153 -0.0193091968 -2.960024e-02 -3.374359e-02 3.213525e-02 -1.277832e-02
## G36210 0.0145470012 5.090957e-02 -8.261968e-02 -1.891291e-02 -4.656097e-02
## G36303 0.0520905275 4.003810e-02 -2.063818e-02 6.420425e-02 2.041074e-02
## G36193 0.0177399275 -4.873110e-02 -5.951103e-02 -2.004701e-03 -5.874344e-02
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## G36248 -0.0190266019 4.351084e-02 1.779239e-02 -1.826453e-02 1.024216e-02
## G36239 -0.0529271143 -2.479754e-02 9.676631e-03 1.352083e-03 1.700883e-02
## G36270 -0.0426564311 -7.329614e-02 -3.295938e-02 -6.196000e-03 1.546113e-02
## G36158 0.0006309755 2.490681e-02 -4.445969e-02 1.442456e-02 -1.135572e-02
## G36233 0.0254227663 4.116953e-02 1.667808e-02 -1.590510e-02 -2.542120e-02
## G36311 0.0426868761 3.203454e-03 -1.556700e-02 -1.588380e-02 -6.476317e-03

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##	G36175	0.0244311477	-2.136106e-02	7.844996e-03	2.197564e-02	3.157443e-02
##	G36267	-0.0054376598	8.895487e-02	2.146101e-02	1.827822e-02	4.567691e-02
##	G36183	0.0408855289	1.963027e-02	4.342688e-05	2.454532e-03	6.674678e-02
##	G36227	0.0527981584	-2.554523e-03	9.283834e-03	4.974748e-02	5.334423e-03
##	G36322	0.0124503265	6.112508e-03	2.172564e-02	1.088282e-03	9.861223e-03
##	G36182	-0.0547694017	-2.200031e-02	-6.558565e-03	-2.335243e-02	6.634917e-02
##	G36256	0.0143373903	1.260183e-02	8.453703e-02	-6.961562e-03	1.109347e-01
##	G36163	-0.0283531772	-3.038126e-02	5.512067e-02	-4.827255e-02	3.836580e-03
##	G36287	-0.0034024316	1.154637e-02	-1.369296e-02	-3.693321e-02	-1.328137e-02
##	G36157	-0.0027566489	2.058217e-02	2.953078e-02	4.838182e-02	3.428553e-02
##	G36262	0.0081528724	-9.581675e-02	8.432791e-02	5.367709e-02	5.165596e-02
##	G36200	-0.0443145385	-3.304863e-02	3.008202e-02	1.689698e-03	-3.734803e-02
##	G36160	0.0228462439	4.899005e-02	-3.098643e-02	-2.007716e-03	-7.761439e-02
##	G36185	0.0450633681	1.859786e-02	1.561952e-02	2.805770e-02	-4.894885e-02
##	G36162	-0.0434717256	-1.796282e-03	5.714762e-02	-3.247266e-02	8.184829e-02
##	G36204	-0.0452542173	-5.593719e-02	9.135520e-03	3.165412e-02	-4.304979e-02
##	G36318	0.0496058502	6.276466e-02	-4.101164e-03	-3.271309e-02	3.770902e-02
##	G36194	-0.0246048150	-3.761117e-02	-1.081167e-02	-1.707818e-02	5.178214e-02
##	G36244	0.0329528263	1.677570e-03	2.376623e-02	-1.015975e-02	-1.702554e-03
##	G36197	0.0004450937	-9.079719e-02	-2.502572e-02	-4.195492e-02	-2.662860e-02
##	G36264	0.0116381147	-4.063179e-02	9.815732e-03	1.302734e-02	-7.150553e-03
##	G36317	-0.0498899846	-2.648521e-03	-1.048742e-02	1.483732e-02	-5.997118e-02
##	G36159	-0.0285514377	-2.296825e-02	-5.358485e-04	5.702254e-03	-3.035840e-02
##	G36234	-0.0054685858	-5.741764e-03	-1.349197e-03	-1.616623e-02	-5.035761e-02
##	G36206	-0.0405101678	2.983905e-02	8.027947e-03	-1.053295e-02	4.008962e-02
##	G36257	-0.0323125868	-5.469231e-02	6.601525e-02	-2.105653e-02	7.726968e-02
##	G36216	-0.0046154718	7.151397e-03	-3.618098e-02	-4.805730e-02	-3.199410e-02
##	G36208	-0.0404706814	-2.031843e-02	1.467497e-02	1.280797e-03	1.137617e-02
##	G36309	0.0301031273	2.176515e-02	1.049763e-02	-3.571151e-03	2.234534e-02
##	G36146	0.0045768489	1.833748e-02	-2.133612e-03	1.002658e-02	-4.195112e-02
##	G36192	0.0465233084	-9.013141e-04	-6.331549e-03	-1.956263e-02	-1.781374e-02
##	G36284	0.0144666301	5.068088e-03	-2.649595e-03	-4.212759e-02	-2.516587e-02
##	G36291	-0.0161441741	-4.492010e-02	3.555641e-02	-3.994329e-02	3.702628e-02
##	G36142	0.0205589043	-7.116298e-02	5.377629e-02	-1.354907e-03	6.742400e-02
##	G36138	0.0267960259	1.153907e-02	3.094348e-02	6.691751e-02	-7.708799e-03
##	G36203	0.0038955348	-2.697905e-02	1.484326e-02	-4.644787e-02	-2.531630e-02
##	G36282	-0.0174378325	-8.654111e-02	-2.975110e-02	2.302461e-02	9.552803e-03
##	G36290	-0.0208808771	-2.267048e-02	7.969812e-02	1.065362e-02	-2.823030e-02
##	G36274	-0.0425646753	1.650605e-02	-3.018308e-02	-5.390007e-02	3.984559e-02
##	G36314	0.1118138390	-3.112497e-02	-1.048867e-01	3.698756e-03	4.218333e-02
##	G36258	0.0601887040	1.458931e-02	1.231195e-02	1.127932e-02	-2.407589e-02
##	G36147	-0.0149998540	-5.719380e-02	-3.504885e-03	-2.798630e-03	6.284480e-02
##	G36235	0.0169935935	2.329848e-02	5.926250e-03	-2.040807e-02	-2.041164e-02
##	G36143	0.0174742621	-7.281764e-03	6.348454e-02	2.852073e-03	-1.786214e-02
##	G36308	0.0016776515	1.024224e-02	-7.977521e-03	1.721466e-02	-3.415961e-02
##	G36209	-0.0188008834	-1.874581e-02	5.314385e-02	8.372315e-02	2.048708e-02
##		Axis.61	Axis.62	Axis.63	Axis.64	Axis.65
##	G37016	2.478649e-02	-1.602449e-02	-5.714079e-02	-0.0226182915	-2.389637e-02
##	G36918	1.411668e-02	-6.546993e-02	6.139511e-03	0.0183289267	6.497991e-02
##	G37044	2.575613e-02	6.746638e-03	4.886499e-02	-0.0453280185	2.325568e-02
##	G37009	-5.725572e-02	-2.892627e-02	2.923015e-02	0.0320019517	1.922729e-02
##	G37029	-1.099578e-02	-5.221177e-02	3.057187e-03	0.0099598231	-1.761089e-02
##	G37035	3.072973e-02	1.377569e-02	-6.562497e-02	0.0299691490	-3.114101e-02
##	G36982	3.361482e-02	-1.167204e-02	-1.485035e-02	-0.0836841305	-1.866218e-02

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## G36984 6.531375e-02 -1.244071e-02 -1.011180e-01 -0.1106172052 1.893995e-02
## G37030 4.882299e-02 -5.740792e-02 -1.116103e-02 -0.0344405374 -2.725765e-03
## G37031 -4.524455e-02 -9.148159e-03 -2.580136e-02 -0.0007640957 -2.591219e-02
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##	G36938	3.802098e-02	-3.129644e-02	-3.109536e-02	0.0215954855	7.223658e-04
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##	G35361	4.502881e-02	3.548148e-02	5.717877e-02	-0.0298456552	-7.702138e-02
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##	G35381	7.363887e-02	7.059815e-02	2.988741e-02	-0.0033986406	-3.764150e-02
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##	G35391	5.570670e-02	2.060446e-02	7.267238e-02	0.0146128059	-5.590423e-03
##	G35437	-1.893493e-02	3.673840e-02	-4.031442e-02	-0.0325976710	1.237225e-02
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##	G35370	1.135252e-02	-3.187271e-02	-1.462931e-02	-0.0687202519	-3.328706e-02
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##	G35407	1.630117e-02	1.916132e-02	-1.785779e-02	-0.0858907279	-4.733568e-03
##	G35455	2.472852e-02	7.033723e-02	2.127201e-02	-0.0036462989	-2.306165e-02
##	G35481	-7.902867e-03	-3.652564e-02	-3.613348e-02	-0.0027195642	3.575494e-02
##	G35355	-1.960619e-03	2.830007e-02	2.247546e-02	-0.0202337476	-1.471863e-02
##	G35469	3.430219e-02	5.780917e-02	6.876887e-03	-0.0106500427	7.648671e-02
##	G35513	-2.597943e-03	7.983342e-02	2.109014e-02	-0.0713084611	9.271406e-02
##	G35387	1.786033e-03	2.545636e-02	-2.986579e-02	-0.1073377590	5.520944e-02
##	G35527	-1.011362e-03	6.132840e-02	5.453416e-02	0.0504811426	-2.632481e-02
##	G35516	-8.099053e-02	5.084508e-03	6.889255e-03	0.0261052857	-3.350709e-02
##	G35463	-4.428025e-02	2.769473e-02	-5.991264e-02	-0.0205645722	1.195941e-02
##	G35441	-2.256101e-02	9.110396e-02	-1.419083e-01	0.0177970407	-6.182675e-02
##	G35414	-9.190783e-03	2.113164e-02	2.691044e-02	0.0028539610	3.397197e-02
##	G35412	-2.770401e-03	3.878980e-02	-1.434673e-03	-0.0565898317	9.462364e-02
##	G35388	1.006201e-02	8.626923e-02	-2.270674e-02	0.0417252195	-2.262110e-02
##	G35354	-1.413204e-03	-6.353800e-02	-2.351703e-02	-0.0200262039	2.937790e-02
##	G35533	-8.344541e-02	9.587994e-02	-4.104475e-02	-0.0033169393	-2.981268e-03
##	G35406	2.430534e-02	3.079003e-02	-1.126356e-03	-0.0592165472	-2.946090e-02
##	G35467	-5.043985e-02	4.131869e-02	-1.907569e-02	0.0549002091	-1.187749e-01
##	G35522	-8.460494e-02	1.475685e-02	4.688315e-02	0.0198200021	-3.165306e-02
##	G35404	1.403498e-02	1.311216e-02	2.180036e-02	0.0194019131	-2.653594e-02
##	G35445	-3.215772e-02	-1.042168e-02	-5.345864e-02	0.0164080012	-1.701365e-02
##	G36173	-6.993116e-02	3.401024e-03	4.707930e-02	0.0228519168	2.392582e-02
##	G36145	-5.542046e-02	4.667964e-02	-6.429334e-02	0.0640442267	1.079884e-02
##	G36196	-3.191103e-02	4.390852e-03	4.722226e-03	-0.0239433048	4.141176e-02
##	G36219	-2.215866e-03	-3.073927e-02	-2.008269e-02	-0.0904109277	-1.754958e-02
##	G36299	4.256231e-03	-2.425977e-02	1.300091e-02	-0.0257224470	-3.127533e-03
##	G36137	9.084763e-03	3.591039e-02	3.267222e-03	-0.0110140210	4.113958e-02
##	G36273	-2.553480e-02	-1.603977e-02	1.054899e-02	0.0077520780	-1.263462e-02
##	G36201	-3.502813e-02	-1.310332e-02	6.928696e-02	0.0833994778	1.105076e-02
##	G36165	-4.811361e-02	4.459133e-02	3.566241e-02	-0.0385814175	-8.250812e-02
##	G36202	-2.241264e-02	-7.343246e-02	-5.282250e-02	-0.0301542358	1.940552e-02
##	G36226	-4.668140e-02	-2.144900e-02	3.873893e-03	-0.0240614554	6.664476e-02
##	G36269	6.243588e-02	-2.222609e-02	1.205655e-02	-0.0464675054	-5.350875e-02
##	G36135	4.861391e-02	-8.368397e-02	-5.769742e-03	-0.0207184299	-2.059565e-03
##	G36250	-2.744716e-02	1.863120e-02	2.441687e-02	0.0072062040	-2.770539e-02
##	G36225	7.997972e-02	9.157328e-03	-8.288119e-03	0.0101346235	1.421339e-02
##	G36272	-1.575052e-02	1.301831e-02	1.335906e-03	-0.0006897543	9.062000e-03
##	G36285	9.808057e-03	3.953158e-02	1.272308e-02	0.0343775776	-5.213645e-02
##	G36259	3.119722e-02	6.331069e-03	-4.306638e-02	0.0295810960	-4.291813e-02
##	G36229	3.676956e-02	-3.111417e-02	-1.667309e-02	0.0314577868	-4.411460e-03
##	G36155	3.852338e-02	-3.976276e-02	4.040804e-03	0.0619959059	2.909447e-02
##	G36251	5.801226e-02	-7.282043e-03	-3.861996e-02	0.0292458870	-1.637558e-02
##	G36297	9.699749e-03	1.533863e-02	-1.294327e-03	0.0140486378	2.020110e-02
##	G36170	-4.334687e-02	-2.756947e-04	-1.604171e-03	-0.0086807964	-4.800054e-02
##	G36241	1.427326e-02	-4.248967e-02	-3.698262e-02	0.0537101150	5.377705e-03
##	G36224	2.701947e-02	1.813281e-02	-3.402734e-03	-0.0575972534	3.024741e-02
##	G36169	-1.765512e-02	-2.611511e-03	-5.703713e-02	-0.0138960341	-1.676018e-02
##	G36266	3.436509e-02	-3.823702e-03	9.921965e-03	0.0305291765	-4.349878e-03
##	G36164	4.669227e-02	5.654254e-02	7.870642e-02	-0.0472826664	1.555563e-02


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## G36215 1.422750e-03 -3.190480e-02 -2.029221e-02 -0.0265277969 1.335076e-02
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## G36205 -2.435746e-02 -7.277235e-03 -4.003564e-02 0.0040902849 1.071118e-02
## G36246 -3.335739e-03 -6.525367e-02 -2.930982e-02 -0.0340720023 1.698194e-02
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## G36237 1.421854e-01 -9.690845e-03 -2.367588e-02 0.0191215282 -7.649734e-02
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## G36232 -4.666005e-02 -1.154753e-02 1.861683e-02 0.0140824256 5.256466e-03
## G36240 -4.084985e-03 3.592945e-02 4.708527e-03 0.0406014064 -1.947558e-03
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## G36176 3.670346e-02 3.851611e-02 3.360345e-02 0.0045337018 2.673006e-03
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## G36210 1.917455e-03 6.645777e-02 -9.654841e-02 0.0443045275 1.698012e-02
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## G36248 3.988815e-02 -4.303298e-02 4.373742e-03 -0.0298697778 1.659473e-02
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## G36227 -3.309437e-02 -5.545937e-03 -2.893255e-02 0.0107934728 4.515338e-02
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##	G36159	-6.960527e-02	2.496059e-02	3.887394e-02	0.0515135952	9.382208e-03
##	G36234	1.235760e-02	-3.847887e-02	4.712956e-02	0.0119539496	8.412078e-03
##	G36206	-9.843856e-02	9.437222e-04	-1.510535e-02	-0.0553862409	-1.698423e-02
##	G36257	-1.446060e-02	-3.404972e-02	-4.851069e-02	0.0168250149	-1.868264e-02
##	G36216	-3.017370e-02	-5.659665e-02	-3.563888e-02	0.0019767046	-4.085502e-02
##	G36208	-3.875074e-02	-3.652103e-02	-2.189261e-02	-0.0214807101	3.312076e-02
##	G36309	1.921605e-02	9.268531e-03	-6.182071e-03	-0.0069617251	2.306777e-02
##	G36146	-2.276282e-02	-1.924975e-02	1.420805e-02	0.0008679696	-1.936822e-02
##	G36192	-5.100355e-02	-6.402023e-02	-3.641698e-02	0.0202241533	1.419018e-02
##	G36284	-2.669678e-03	-1.622713e-02	9.759951e-03	-0.0529885019	-4.033991e-02
##	G36291	-3.733378e-02	1.209983e-02	-7.022615e-02	0.0768217727	-5.753290e-02
##	G36142	-1.912046e-02	2.370256e-02	-7.313879e-02	0.0429535307	-9.891736e-02
##	G36138	5.312020e-02	8.995686e-05	-2.952621e-03	0.0101193945	7.233688e-02
##	G36203	-2.417409e-02	-2.339606e-02	-2.111198e-03	0.0039079912	3.777835e-02
##	G36282	-8.781226e-03	4.490744e-02	-6.898057e-02	0.0456133023	-4.224803e-02
##	G36290	-2.546719e-02	5.928598e-02	4.665621e-02	0.0047597568	4.730462e-02
##	G36274	-1.906978e-02	3.127096e-02	-2.773572e-03	0.0406631686	2.114702e-03
##	G36314	5.232678e-02	7.732277e-03	2.285447e-02	0.0265823331	1.490419e-02
##	G36258	-2.114208e-02	9.550049e-03	3.714623e-02	0.0313689230	-9.294178e-03
##	G36147	5.220092e-02	2.072253e-02	5.189935e-04	-0.0339262777	-2.189092e-02
##	G36235	-1.045496e-02	-2.518032e-02	-3.795322e-02	-0.0325257285	8.662905e-03
##	G36143	-1.029046e-01	-3.120682e-02	-5.561142e-03	-0.0379034148	3.851823e-03
##	G36308	7.160078e-02	4.658348e-03	8.928505e-03	0.0081434600	3.119901e-02
##	G36209	-4.405300e-02	6.183824e-03	-1.774264e-02	-0.0287028938	2.921668e-03
##		Axis.66	Axis.67	Axis.68	Axis.69	Axis.70
##	G37016	2.152559e-02	-4.889252e-02	2.485648e-02	0.0151123978	-2.791645e-03
##	G36918	3.279468e-02	-2.265621e-02	-6.700046e-02	-0.0385417868	2.779102e-02
##	G37044	2.157669e-02	2.746755e-02	-3.889522e-02	-0.0648533151	-2.357398e-02
##	G37009	-3.107959e-02	-2.963423e-02	1.367639e-02	0.0420352714	-2.477346e-02
##	G37029	1.144251e-03	3.560282e-02	3.817818e-02	0.0099683991	1.949245e-02
##	G37035	1.260699e-02	6.944869e-03	1.469940e-02	0.0620301792	4.763676e-03
##	G36982	4.075503e-02	3.971919e-03	-4.616375e-02	-0.0496993410	2.934600e-02
##	G36984	7.549394e-03	-4.124425e-02	-1.429390e-02	0.0276815148	-3.818462e-02
##	G37030	-4.490985e-02	-3.134421e-02	-3.555067e-02	0.0211285800	-6.823632e-02
##	G37031	6.365301e-02	-1.389618e-02	-5.843919e-02	-0.0221563507	-3.909148e-02
##	G36906	2.556740e-02	-1.711595e-02	3.205753e-02	0.0513200602	-4.075244e-02
##	G37028	-6.675433e-03	-2.716220e-02	-7.388539e-02	-0.0309562370	-3.525795e-02
##	G37014	4.019780e-02	-3.281561e-02	-5.917403e-02	-0.0198502839	-3.197897e-02
##	G37010	5.695584e-03	-5.912329e-03	5.196198e-03	-0.0663228654	-1.871368e-02
##	G36944	6.430784e-02	-3.381174e-02	-1.923525e-02	0.0004361554	-2.174812e-04
##	G36902	1.635434e-03	-2.215626e-02	-1.715497e-02	-0.0042677554	2.421296e-02
##	G37051	5.366973e-03	7.318407e-02	7.223018e-02	0.0659127122	-1.286301e-02
##	G36964	-2.097466e-02	5.094209e-02	-8.469627e-02	0.0629304504	1.532615e-03
##	G36951	2.748016e-02	-2.130417e-02	-1.724476e-02	0.0308456397	4.294313e-02
##	G37025	4.623919e-03	-1.530919e-02	5.681895e-03	0.0244965158	1.039588e-02
##	G36930	-4.261471e-02	1.392258e-02	-1.641400e-02	0.0133914195	-1.054160e-03
##	G36935	-3.926978e-02	1.764429e-02	-3.864011e-03	0.0359622581	1.551839e-02
##	G37041	5.768852e-02	-2.467653e-02	-6.790995e-02	0.0161602709	-6.769390e-04
##	G36959	8.397209e-03	-6.870455e-04	-4.493282e-03	-0.0369590681	-4.147771e-02
##	G36905	2.803193e-02	-2.334982e-02	-2.988771e-02	-0.0585542907	-1.078424e-01
##	G36917	9.266745e-02	5.789497e-02	-5.592063e-03	-0.0792245785	1.255026e-01
##	G36992	6.734397e-04	-3.086657e-02	-1.017448e-02	-0.0208051968	2.568123e-03
##	G36921	1.471214e-02	2.304618e-02	3.852963e-02	-0.0560203577	-2.358647e-02
##	G37004	3.839311e-02	2.961387e-02	-1.326258e-02	0.0087496063	-7.795039e-02

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## G37015 -2.403824e-02 -2.208078e-03 3.112464e-02 -0.0263017395 -1.879013e-02
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## G36953 3.697132e-02 5.187091e-02 -8.352334e-02 0.0033030801 1.482169e-03
## G36974 6.428926e-02 2.938220e-02 4.120455e-02 0.0670590088 1.570305e-03
## G37039 -6.565912e-02 1.778380e-02 2.034973e-02 -0.0136631913 -4.576578e-02
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## G37052 2.476030e-03 3.577577e-02 -3.225921e-02 -0.0486184557 4.356041e-02
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##	G37016	-1.902787e-02	-1.203295e-02	1.490332e-02	1.639061e-02	1.563063e-02
##	G36918	3.877433e-02	5.198707e-03	1.925976e-02	-3.721036e-02	1.827915e-02
##	G37044	3.953352e-02	3.961383e-02	1.159102e-02	-3.483519e-02	-3.536105e-02
##	G37009	-4.338948e-03	2.978454e-02	5.845613e-02	-1.005433e-01	1.243292e-02
##	G37029	-1.931094e-02	1.282560e-03	1.906223e-02	1.343243e-02	-4.146672e-03
##	G37035	2.854944e-02	2.495670e-02	-4.135491e-02	-2.063871e-02	1.948959e-02
##	G36982	5.913880e-02	-1.623101e-02	6.388202e-03	3.524854e-02	-4.113604e-02
##	G36984	5.871400e-02	-9.336161e-03	4.119431e-02	7.451766e-02	-5.351413e-02
##	G37030	-5.907367e-02	5.091694e-02	4.100066e-02	-1.665086e-02	9.733809e-02
##	G37031	4.332724e-02	9.657814e-02	-4.759480e-02	-6.937595e-03	4.761508e-02
##	G36906	-6.476722e-02	-2.117585e-04	-5.031852e-02	1.406391e-02	-4.004717e-02
##	G37028	5.135726e-02	1.301085e-02	7.624632e-04	-4.638480e-02	2.677314e-02
##	G37014	2.732529e-02	3.672728e-02	1.774204e-02	3.707478e-02	-2.867760e-03
##	G37010	-1.383414e-02	1.204189e-03	-6.761300e-03	1.756262e-02	-1.548895e-02
##	G36944	2.135381e-02	-1.077696e-02	-4.452012e-02	-5.811716e-02	-5.088586e-02
##	G36902	4.947405e-02	2.919492e-02	1.105205e-03	2.833471e-02	2.611800e-02
##	G37051	-3.273546e-03	-4.013350e-02	-2.699914e-02	-1.639824e-02	-3.191277e-02
##	G36964	-7.174519e-04	-2.725116e-02	3.345704e-02	-5.719491e-03	-1.041602e-02
##	G36951	3.996853e-02	-1.531267e-02	3.569490e-03	6.375323e-02	4.002094e-02
##	G37025	4.050337e-02	5.218051e-02	1.334063e-02	1.387033e-02	4.054729e-03
##	G36930	4.479758e-04	-3.031556e-02	9.006863e-04	1.965998e-02	-4.782907e-02
##	G36935	-7.661273e-03	3.636025e-03	3.380178e-02	9.482731e-03	7.668318e-03
##	G37041	3.089160e-02	1.413393e-01	-7.335242e-02	-2.723694e-02	-1.953034e-03
##	G36959	9.154384e-03	-4.635639e-02	1.304584e-02	-4.814250e-03	-1.640537e-03
##	G36905	-3.701004e-02	-1.465010e-02	-7.135405e-02	-5.186444e-02	-6.854417e-02
##	G36917	-1.316563e-02	4.315766e-02	5.443613e-02	-4.717233e-03	7.890744e-02
##	G36992	2.904345e-02	-4.981965e-02	-1.176494e-02	2.369023e-02	-9.377467e-03
##	G36921	-1.635476e-02	-2.811778e-03	9.357385e-03	1.921704e-02	1.420486e-02
##	G37004	-2.147045e-02	-4.550972e-03	-2.698260e-02	-7.203236e-03	1.902067e-02
##	G36966	2.870230e-03	-5.241522e-03	-3.186498e-02	-8.802045e-03	-5.760462e-02
##	G36936	1.711429e-02	8.161790e-02	5.693639e-02	-7.532193e-02	-1.211320e-02
##	G37015	-6.748042e-02	6.294843e-02	3.546487e-02	-5.001294e-03	-1.808341e-02
##	G37034	4.724503e-02	-1.360229e-02	2.036066e-02	-1.558688e-02	3.452834e-02
##	G36953	-2.857416e-02	-4.131402e-02	4.303058e-02	-1.204182e-02	3.204416e-02
##	G36974	-1.561175e-03	1.994519e-02	2.426818e-02	4.692565e-02	-2.654677e-02
##	G37039	1.957844e-02	5.151081e-02	-6.609778e-02	3.381549e-02	2.909463e-02
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##	G37052	6.421193e-03	2.920429e-02	6.675069e-03	-3.558470e-02	-6.007631e-06
##	G36925	-9.524138e-03	3.764128e-02	7.262471e-02	-1.585671e-03	3.480953e-02
##	G37046	2.517321e-02	1.218778e-01	-3.636535e-02	1.110591e-02	9.329645e-03
##	G37053	7.366159e-02	1.058434e-01	-6.776053e-02	-1.912525e-02	2.349895e-02
##	G36998	7.171565e-03	2.088906e-02	-6.510487e-02	2.265780e-02	-1.295213e-02
##	G37045	1.681833e-02	7.479156e-02	7.411318e-02	-6.212267e-02	-1.007767e-02
##	G37049	9.971559e-03	-3.146054e-02	-2.504681e-02	-2.662469e-02	1.702342e-02
##	G37019	-2.972848e-02	-4.189318e-03	7.825416e-03	-1.834267e-02	2.732160e-02
##	G36988	-8.161659e-04	3.915477e-02	9.765768e-03	4.465340e-02	3.289637e-02
##	G37037	2.771208e-02	2.622426e-02	1.421425e-02	-4.689156e-04	4.291462e-04
##	G37005	2.790629e-02	4.564917e-02	3.799774e-02	-1.586749e-03	1.872356e-03
##	G36928	-2.261977e-04	3.237431e-03	5.687919e-02	-2.038857e-03	3.191553e-02
##	G36923	-2.666565e-02	-4.459797e-02	-7.036298e-03	-1.935051e-02	-2.141671e-02
##	G37033	5.288420e-02	2.045956e-02	-1.368610e-02	-3.435284e-02	6.728640e-02


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## G36322 -7.795301e-03 1.813060e-02 5.873992e-02 1.443572e-02 -3.856123e-02
## G36182 2.386522e-02 -3.849912e-02 -2.874531e-02 3.869126e-02 9.680481e-03
## G36256 4.116636e-03 3.382400e-02 5.624011e-02 -5.798750e-02 -6.317465e-02
## G36163 -3.534840e-02 -1.020824e-01 1.014038e-05 -3.726844e-02 -6.174478e-03
## G36287 -1.042341e-02 1.776278e-02 7.734851e-03 -6.965566e-03 2.503513e-02
## G36157 -5.601353e-04 -1.386577e-03 8.651892e-02 -2.620927e-03 -5.641507e-02
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##	G36162	-4.310859e-02	-5.083924e-03	6.475500e-03	3.361035e-02	1.200518e-02
##	G36204	-3.200806e-03	-3.053962e-02	-2.028296e-02	1.908505e-02	-3.668286e-02
##	G36318	-2.383767e-02	-5.138498e-04	6.245902e-03	-1.152111e-02	4.153808e-03
##	G36194	-3.174165e-03	-8.279216e-04	2.058338e-02	2.162514e-02	-2.509977e-02
##	G36244	-3.008288e-02	-2.699724e-03	4.125593e-02	-1.329027e-02	-1.774452e-02
##	G36197	2.786030e-02	1.792375e-02	4.275723e-03	4.128194e-04	4.784234e-02
##	G36264	1.009350e-02	3.366187e-02	2.499116e-02	-2.891297e-02	-6.929830e-03
##	G36317	-3.720741e-02	-6.426351e-02	-4.175563e-02	-3.593232e-02	-2.514065e-02
##	G36159	-5.358076e-03	-1.042943e-02	2.842878e-02	4.312335e-02	3.279260e-03
##	G36234	-5.540266e-02	6.287247e-03	3.347250e-03	-1.170120e-02	-2.147613e-02
##	G36206	-3.796587e-02	-4.506086e-02	-2.405578e-02	-2.869323e-02	-2.266124e-02
##	G36257	-2.566903e-02	2.896699e-02	-7.911159e-02	-1.809234e-02	2.294145e-02
##	G36216	-3.153733e-02	-5.593421e-02	-8.372536e-03	-2.587978e-03	-2.892940e-02
##	G36208	-5.015507e-02	1.556102e-02	2.440785e-02	-1.238490e-02	1.045238e-02
##	G36309	1.228633e-02	-1.134967e-02	3.742905e-02	4.598219e-03	3.811115e-03
##	G36146	-6.394106e-02	-2.041193e-02	2.724401e-04	3.422784e-02	-2.524510e-02
##	G36192	1.001550e-02	1.662592e-02	-1.236132e-02	-2.227882e-02	3.455729e-02
##	G36284	7.617418e-02	-5.943030e-02	-7.334864e-02	-2.432293e-02	1.420763e-02
##	G36291	6.081511e-02	2.269827e-03	9.209225e-02	5.826662e-04	-5.943177e-02
##	G36142	3.821105e-02	5.499094e-02	2.645173e-02	2.867047e-03	2.618688e-02
##	G36138	1.822858e-02	2.092539e-02	-4.990681e-03	2.163292e-02	2.402742e-02
##	G36203	4.728133e-02	3.184135e-02	-2.887912e-02	5.440631e-02	-4.363433e-02
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##	G36274	5.535641e-02	-1.985517e-02	-2.688255e-02	2.634687e-02	-2.220273e-02
##	G36314	1.440881e-02	1.977827e-02	-1.437995e-02	-6.368863e-02	5.631036e-02
##	G36258	3.641978e-02	4.825478e-03	4.137852e-02	7.225145e-02	-1.997732e-02
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##	G36235	-2.707269e-02	-1.690405e-02	-1.909729e-03	-2.021625e-02	2.598085e-04
##	G36143	3.188609e-02	1.972799e-02	3.475010e-02	-7.382296e-03	2.885254e-02
##	G36308	1.272598e-02	1.163998e-02	3.161660e-02	-4.011592e-04	9.717344e-03
##	G36209	3.356865e-02	3.565508e-02	7.456282e-03	2.243280e-03	-1.145606e-03
##		Axis.76	Axis.77	Axis.78	Axis.79	Axis.80
##	G37016	-6.554319e-05	2.887585e-03	1.846716e-02	0.0212370137	1.616841e-02
##	G36918	3.535652e-02	-1.278993e-02	3.053033e-02	-0.0296066440	-3.145907e-03
##	G37044	1.116146e-02	1.967438e-03	-1.835578e-02	-0.0622607154	6.149028e-02
##	G37009	1.662313e-02	9.807830e-04	-1.972537e-02	-0.1060809441	-6.121883e-02
##	G37029	3.551321e-02	-1.624651e-02	4.312253e-02	0.0364782462	-6.378086e-02
##	G37035	1.866380e-02	-1.197113e-02	-1.131849e-02	0.0375434183	6.786058e-04
##	G36982	-2.552258e-02	4.389351e-02	1.070118e-02	0.0201449653	-6.136612e-02
##	G36984	-2.336967e-02	5.801976e-02	-2.372093e-02	0.0074857479	-1.997664e-02
##	G37030	2.117271e-02	9.207522e-02	8.278517e-03	-0.0631035323	1.322704e-02
##	G37031	-1.346796e-02	-4.907885e-03	-5.877851e-03	-0.0186777772	1.665011e-02
##	G36906	5.574248e-02	-1.113183e-02	-2.171997e-02	-0.0315816681	9.659183e-03
##	G37028	1.255498e-02	-4.509346e-02	-3.750782e-03	0.0533881535	1.256689e-03
##	G37014	4.052318e-02	6.313097e-02	-1.189828e-02	-0.0022159893	2.327611e-02
##	G37010	-1.627164e-02	2.389322e-02	-6.963678e-02	-0.0084089161	3.130929e-02
##	G36944	-3.043869e-02	1.330220e-02	3.753637e-02	-0.0077103869	-9.153041e-02
##	G36902	-5.102163e-02	-2.292289e-02	7.131045e-02	-0.0063565052	-9.103119e-03
##	G37051	-3.452002e-02	-5.979847e-02	-8.433491e-02	-0.0426175024	7.917326e-02
##	G36964	8.320385e-03	-2.161335e-02	-3.212878e-02	0.0127189836	1.723458e-02
##	G36951	4.426013e-03	-3.088107e-02	1.360879e-02	-0.0079135807	-1.286640e-02

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## G37041 1.520299e-02 -5.293758e-03 -3.744283e-02 -0.0072947554 2.222810e-03
## G36959 1.955239e-02 2.383951e-02 3.875255e-02 0.0418064033 -5.673294e-04
## G36905 8.299409e-02 2.963029e-02 2.888212e-02 0.0504349435 -1.074986e-03
## G36917 -1.809976e-02 4.065590e-02 1.789637e-02 -0.0776554489 1.825220e-02
## G36992 -4.409137e-02 -1.690838e-02 1.210866e-02 -0.0138039765 2.447495e-02
## G36921 1.310540e-02 -1.882745e-02 2.456442e-02 -0.0033808261 1.063114e-02
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## G36966 1.216474e-02 1.495839e-02 -1.062090e-02 0.0269835077 -1.302391e-02
## G36936 2.479037e-02 2.003906e-02 -1.867410e-02 -0.0676379480 2.184534e-02
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## G35417 -2.595105e-02 2.005037e-02 2.255187e-02 -0.0150334875 7.975291e-03
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## G35531 5.250507e-02 -4.242985e-02 -9.119216e-02 0.0040571769 -1.244989e-02
## G35444 -4.646656e-02 -1.375746e-03 -1.863261e-02 0.0400029466 1.526792e-02
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## G35521 -1.275079e-02 -2.783386e-02 -7.322098e-03 -0.0135754301 4.116072e-02
## G35475 -2.502350e-02 2.126924e-02 1.703948e-02 0.0690055228 -1.053412e-02
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## G35422 3.572407e-02 -1.517956e-02 -4.607144e-02 0.0002034303 -5.089518e-03
## G35526 3.702908e-03 -1.405392e-02 -3.494465e-02 0.0487646741 -1.128235e-02
## G35498 -2.713630e-02 3.111671e-02 6.039052e-03 -0.0416337137 8.088914e-03
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## G35447 1.560892e-02 -4.870055e-03 -4.571457e-02 -0.0369722172 1.247686e-02
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## G35392 1.666530e-03 4.633447e-02 1.995071e-02 -0.0236454067 -5.651498e-02
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## G35497 -9.571899e-03 3.156618e-02 -1.779442e-03 0.0220336592 2.909124e-02
## G35373 -6.193215e-03 7.727825e-03 -1.919315e-02 0.0290342593 -1.621076e-02
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## G35513 6.393416e-02 -1.345856e-02 1.902924e-02 0.0539132080 7.219919e-02
## G35387 -2.618214e-02 -1.646493e-02 -2.150782e-02 0.0459923605 5.014056e-03

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## G35522 9.724617e-03 -4.610921e-02 -4.367177e-02 0.0273753715 -5.067991e-02
## G35404 3.842120e-03 6.826146e-02 -1.223477e-03 0.0200938106 9.425349e-03
## G35445 -4.266769e-02 3.039735e-02 2.336928e-02 -0.0141782540 -3.006812e-02
## G36173 -1.210899e-02 1.083046e-02 -6.088152e-02 0.0418452103 -1.766206e-02
## G36145 6.267141e-02 -2.056801e-03 -7.149920e-04 0.0079008683 2.777160e-02
## G36196 -5.143328e-03 5.633146e-03 -3.534055e-02 0.0437303434 9.231310e-03
## G36219 1.971317e-02 -3.829751e-04 -1.700853e-02 -0.0538244299 -2.091238e-02
## G36299 -9.364296e-03 -4.208332e-02 -5.713996e-02 -0.0225868619 -2.616146e-02
## G36137 2.444381e-05 -5.112384e-02 7.872443e-02 0.0481239180 -1.508613e-02
## G36273 2.417854e-02 7.943707e-02 1.653969e-02 0.0052831477 1.654749e-03
## G36201 2.337531e-02 4.213531e-02 -3.009524e-02 0.0047098006 -1.010780e-02
## G36165 -1.376591e-02 -4.489777e-02 -2.103046e-02 -0.0369821469 -1.095559e-02
## G36202 -3.038707e-03 -2.854111e-02 -1.348968e-02 0.0207174763 -2.276849e-02
## G36226 -8.788054e-03 -3.911024e-02 3.577860e-02 0.0159652648 4.298590e-02
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## G36259 -2.318785e-02 5.226002e-02 1.117406e-02 0.0527280119 2.337509e-02
## G36229 3.871898e-02 -4.462636e-02 5.516753e-02 0.0289974162 5.309977e-02
## G36155 -9.492732e-03 2.907204e-02 -3.516238e-02 -0.0075722942 -5.674706e-03
## G36251 -1.888158e-02 2.747030e-02 -2.390157e-02 0.0090352893 2.576544e-03
## G36297 3.524203e-03 7.589562e-04 1.831376e-03 -0.0109538883 1.308986e-02
## G36170 1.047088e-02 -2.369053e-02 7.924583e-03 0.0295108926 1.378488e-02
## G36241 -1.097779e-02 -6.948036e-04 9.094101e-02 0.0361264408 -2.007516e-03
## G36224 -1.471800e-02 -3.355503e-02 -8.493066e-03 0.0128464347 7.143182e-03
## G36169 1.490334e-02 -5.049151e-02 -1.710643e-03 0.0059435641 3.840099e-04
## G36266 2.157421e-02 -1.821833e-02 3.899284e-03 -0.0226336522 4.106480e-02
## G36164 -7.151942e-02 -3.056525e-02 -2.070016e-03 -0.0305333365 2.517348e-02
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## G36246 5.984823e-03 3.665180e-03 2.811127e-02 -0.0361175168 6.568264e-03
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## G36232 1.890689e-02 -7.724398e-03 2.112445e-02 -0.0397547089 2.962968e-02
## G36240 1.294773e-02 -2.225672e-02 8.169169e-03 -0.0254301739 1.146987e-02
## G36249 5.347399e-03 -4.046766e-02 4.017894e-02 -0.0365684186 -3.244488e-02
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## G36230 -3.599704e-02 -1.752848e-02 1.554494e-02 -0.0110163206 -3.675587e-03
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## G36161 -3.856195e-02 -1.699569e-02 -3.054985e-02 0.0255008950 -4.236136e-02
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## G36303 -3.091136e-03 -1.439923e-02 1.823831e-02 -0.0088026157 3.735054e-02
## G36193 -1.895580e-02 -1.154968e-02 4.632716e-03 0.0075386129 -2.395399e-02
## G36151 5.447320e-02 -2.736293e-02 -4.256051e-02 0.0720188844 -2.895330e-02
## G36248 6.340293e-03 4.624635e-02 2.782807e-02 -0.0050127242 2.409904e-02
## G36239 -1.917350e-02 -5.005026e-02 -4.028675e-02 -0.0136110328 6.589136e-02
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## G36158 -2.106082e-02 7.609130e-03 7.252654e-03 -0.0353889345 1.078348e-02
## G36233 3.447040e-02 2.205077e-03 1.837406e-02 0.0021170396 3.352393e-02
## G36311 -3.894951e-02 -4.035351e-03 -1.366645e-02 -0.0139957509 -2.628680e-04
## G36175 -5.224745e-02 1.859747e-02 3.927095e-03 0.0038346089 1.297891e-02
## G36267 5.201352e-02 -3.869719e-02 1.436306e-02 -0.0183761928 4.773650e-02
## G36183 4.613059e-03 2.742257e-02 -2.270506e-02 -0.0031775438 9.461427e-03
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## G36318 -7.379353e-02 4.993722e-02 -3.887021e-02 0.0713595072 8.415880e-03
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## G36244 2.636554e-02 5.408038e-02 -1.730906e-02 -0.0345912184 6.816399e-03
## G36197 -5.442966e-03 -1.980550e-02 -3.791718e-03 0.0141291723 4.082728e-02
## G36264 -2.564077e-02 3.229906e-02 2.296341e-02 0.0044396789 2.359732e-02
## G36317 7.910026e-02 7.420715e-02 6.273514e-02 0.0373024368 4.561821e-02
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## G36284 1.348839e-02 2.575289e-02 -4.535762e-02 -0.0133412651 -6.362093e-02
## G36291 -1.396227e-02 -2.816303e-03 -7.021249e-02 0.0199996960 -9.155621e-03
## G36142 1.216882e-02 -3.870092e-02 6.873818e-03 -0.0744100064 3.615290e-02

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##	G36203	1.365123e-02	3.793482e-03	1.013544e-02	0.0458878505	-1.337044e-02
##	G36282	3.476924e-02	8.125404e-02	4.740514e-03	0.0149618251	-1.397252e-02
##	G36290	-8.815424e-03	9.109667e-05	-1.805524e-02	0.0607436902	-1.002723e-02
##	G36274	5.072129e-03	-9.568147e-03	-5.507959e-03	0.0122233044	3.108502e-02
##	G36314	-2.475073e-02	3.542504e-02	-2.942168e-02	0.0468759289	6.004506e-03
##	G36258	5.343710e-02	-2.141642e-02	-2.177297e-02	0.0598786832	-1.764537e-02
##	G36147	1.034109e-02	1.338239e-02	1.255394e-02	-0.0175010266	-4.978369e-03
##	G36235	7.066901e-03	1.820948e-02	-3.653034e-03	-0.0095649669	1.072977e-02
##	G36143	-1.908571e-02	2.308502e-02	3.575672e-02	-0.0074879968	-1.460271e-02
##	G36308	6.682500e-02	3.006213e-02	-1.484664e-02	0.0136985647	3.474274e-02
##	G36209	-1.365952e-02	2.082512e-02	3.700078e-02	-0.0093280957	-1.414720e-02
##		Axis.81	Axis.82	Axis.83	Axis.84	Axis.85
##	G37016	-0.0354336250	1.538836e-02	0.0145737898	2.628901e-02	0.0050139232
##	G36918	-0.0364737772	3.525705e-02	0.0130780952	-3.596156e-02	-0.0077966235
##	G37044	0.0081598317	5.702052e-03	0.0093549558	3.426718e-02	0.0252650477
##	G37009	0.0379630671	3.816267e-03	0.0171656044	4.217582e-03	0.0140115653
##	G37029	0.0005228369	-2.218082e-02	0.0013935704	1.639040e-02	0.0288483127
##	G37035	0.0271086989	1.930292e-02	-0.0646650341	-3.332079e-02	0.0320321803
##	G36982	0.0060532240	6.393159e-03	0.0100573024	-4.860955e-02	-0.0139320248
##	G36984	-0.0021991668	5.818321e-02	0.0320202527	-4.831423e-02	-0.0207290282
##	G37030	-0.0844230256	-1.869185e-02	-0.0043404641	-1.802463e-02	0.0448392278
##	G37031	0.0383854523	-2.967252e-02	0.0031815811	1.915471e-02	0.0154759396
##	G36906	0.0678312016	4.941598e-03	0.0720509742	-4.825435e-02	0.0447490291
##	G37028	0.0453110508	-1.679842e-02	-0.0220940567	-3.232241e-02	0.0181243588
##	G37014	-0.0249315753	-1.325891e-02	-0.0068750479	-2.153036e-02	0.0054731432
##	G37010	0.0052486058	-5.398968e-02	0.0586153949	-1.802213e-02	-0.0290051190
##	G36944	0.0089725587	5.962899e-03	0.0754725144	-1.284570e-02	-0.0416237543
##	G36902	0.0493234621	4.471870e-02	0.0103947908	1.788980e-02	-0.0015680048
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##	G36964	0.0214668981	5.868085e-03	0.0070047172	2.672824e-03	0.0202153018
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##	G37025	0.0282495471	2.256470e-02	0.0385650498	2.688392e-02	0.0007760629
##	G36930	0.0315362004	2.958033e-02	0.0016059350	-2.899823e-04	0.0258284049
##	G36935	-0.0589478750	-1.883929e-02	0.0068000737	-1.285083e-01	-0.0356834393
##	G37041	0.0183368211	-5.918904e-02	-0.0096251810	5.252457e-02	0.0013465706
##	G36959	-0.0363314840	7.911772e-02	0.0126284566	3.845069e-02	-0.0254355593
##	G36905	-0.0512839394	3.188987e-02	0.0108280287	-1.459888e-01	0.0134259160
##	G36917	-0.0607211456	4.464508e-02	0.0251330788	1.856805e-02	-0.0312228904
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##	G37015	0.0067097704	1.627227e-02	-0.0049946267	5.259710e-02	0.0029676987
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##	G35424	0.0182749693	6.351811e-02	0.0241846060	3.111533e-02	-0.0247424795
##	G35398	0.0221096376	-4.454875e-03	-0.0382532222	-3.814024e-02	-0.0303587014
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## G36984 -2.291221e-02 -5.074715e-02 2.367134e-02 -2.606817e-03 1.039580e-02
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##	G36959	2.362349e-03	-1.378087e-02	-2.543135e-03	-1.933785e-02	-3.408855e-02
##	G36905	1.367940e-02	4.432222e-02	-7.406230e-02	6.912745e-03	4.589712e-02
##	G36917	2.299337e-02	4.835938e-02	-3.803375e-02	4.472658e-02	6.502965e-02
##	G36992	1.804413e-02	4.836684e-03	-1.525182e-02	-1.517839e-02	1.956547e-02
##	G36921	1.109347e-02	2.262735e-02	-2.422649e-02	-1.982526e-02	-4.141147e-03
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##	G36966	2.339451e-02	-1.301356e-02	3.430050e-02	2.168780e-03	-6.060048e-03
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##	G37011	-1.868148e-02	-2.909385e-02	2.595313e-02	1.165240e-02	1.736197e-02
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##	G37032	-2.949967e-02	-1.174654e-02	-1.076487e-02	-4.653564e-02	-3.381298e-02
##	G36932	-2.322519e-03	5.454277e-02	-2.602449e-02	3.822846e-02	-1.431707e-02
##	G37043	2.083968e-02	1.451568e-02	-1.430908e-04	2.492058e-02	5.360744e-03
##	G37054	-3.961308e-02	-1.523413e-02	-1.642963e-02	-1.048809e-02	-1.024478e-02

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## G36968 7.789893e-03 -1.151546e-02 1.720243e-02 -1.543460e-02 -2.287697e-02
## G36911 3.764744e-02 -2.347693e-03 -3.324332e-03 -3.323908e-02 -4.000686e-02
## G36987 2.626327e-02 1.825991e-02 -5.621380e-02 3.735077e-02 1.243910e-02
## G37042 -7.997994e-02 2.513497e-02 2.177683e-02 3.737705e-04 4.627564e-02
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## G37040 2.847006e-02 -5.251544e-02 9.655932e-03 1.911920e-02 4.233064e-03
## G37027 -5.551901e-03 -1.942696e-02 1.263183e-03 5.788488e-02 4.679799e-02
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## G36991 2.189162e-02 1.119204e-02 -2.847217e-03 -3.412637e-02 -2.650597e-02
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## G36993 -2.336808e-02 3.989464e-02 2.276848e-02 1.991806e-02 1.760158e-02
## G37020 6.860654e-02 1.363271e-02 3.053895e-02 3.619355e-03 -3.035639e-03
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## G36266 -3.271945e-02 2.791901e-02 -3.598228e-02 2.259011e-02 4.912799e-02
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## G36249 4.176059e-02 1.121700e-02 -1.382110e-02 2.988515e-02 9.136132e-03
## G36298 -5.992931e-04 -1.202892e-02 2.722298e-03 2.927789e-02 2.443280e-02
## G36176 3.245554e-02 -3.960852e-02 2.436306e-02 5.375355e-03 -3.427085e-02
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## G36230 -4.168427e-03 -1.296803e-02 -7.660011e-04 1.580135e-02 3.156662e-02
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## G36161 -1.848985e-02 2.297114e-02 9.051255e-03 2.457008e-02 2.957718e-02
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## G36151 -1.602557e-02 4.622221e-02 -3.390880e-02 -6.039398e-03 2.049319e-02
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## G36239 -4.169076e-02 2.505725e-02 8.929581e-03 -9.092428e-03 1.137741e-02
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##	G36216	3.094825e-02	3.250059e-02	-2.869731e-02	1.494766e-02	-1.844393e-02
##	G36208	3.776398e-02	-1.076902e-02	-3.988716e-03	6.830661e-03	-1.117340e-02
##	G36309	-1.305591e-02	-9.021732e-03	-3.396375e-03	1.823261e-02	-1.291520e-02
##	G36146	-2.036470e-03	2.277045e-02	1.081903e-02	-1.703455e-02	-2.571262e-02
##	G36192	1.504545e-02	-2.972607e-02	1.694459e-02	-2.325922e-03	-3.937222e-02
##	G36284	1.361710e-02	-1.072532e-03	1.486793e-02	7.883085e-03	-1.174947e-02
##	G36291	-4.263045e-02	-2.476255e-02	2.943814e-02	-5.127394e-02	-2.203565e-02
##	G36142	9.041138e-03	-3.652939e-02	-5.300169e-03	-7.324838e-03	-4.641500e-02
##	G36138	2.519007e-02	1.309965e-02	1.317708e-02	2.230119e-02	2.662461e-02
##	G36203	-1.530147e-02	1.979812e-02	1.643678e-02	-5.631418e-02	-5.675118e-02
##	G36282	-7.335830e-02	-2.021258e-03	2.432319e-02	6.967044e-03	4.140677e-02
##	G36290	-9.868275e-03	9.814184e-03	-1.107942e-02	-4.945638e-02	5.168055e-02
##	G36274	2.692177e-02	3.112734e-03	-2.254643e-02	-4.082771e-02	1.017621e-02
##	G36314	-2.524442e-02	-6.797803e-03	2.668349e-02	1.085613e-02	-2.759629e-02
##	G36258	8.967573e-03	4.606012e-02	-1.470773e-02	-1.192311e-02	4.400995e-02
##	G36147	3.657126e-03	2.330345e-02	1.366822e-03	-2.665120e-02	-1.334501e-02
##	G36235	2.040602e-02	-3.999767e-04	-1.102996e-02	-2.815726e-02	1.365695e-02
##	G36143	-2.826112e-02	1.836337e-02	2.172640e-02	4.337235e-02	4.711298e-03
##	G36308	-2.370099e-02	-3.540013e-02	-1.168224e-02	4.310282e-02	2.546218e-02
##	G36209	-1.898743e-02	9.072560e-03	-6.353946e-03	-2.093072e-02	-2.862484e-02
##		Axis.91	Axis.92	Axis.93	Axis.94	Axis.95
##	G37016	9.685115e-03	0.0072555148	6.893588e-03	-1.994884e-02	-2.276756e-02
##	G36918	7.206787e-02	0.0274544221	-4.685779e-02	1.339143e-02	3.680671e-03
##	G37044	-3.330439e-02	0.0003327108	4.098802e-02	-6.158468e-03	-2.849254e-02
##	G37009	3.823105e-02	-0.0473174005	-3.449594e-02	3.563110e-02	5.293829e-02
##	G37029	-2.365275e-02	0.0218265272	1.565286e-02	-2.096950e-02	-3.254270e-02
##	G37035	2.700139e-02	-0.0119377716	-1.491489e-03	1.260859e-02	3.915712e-03
##	G36982	-8.689227e-03	-0.0336116907	2.575437e-02	3.110278e-02	2.636706e-02
##	G36984	2.294519e-02	0.0472639865	-3.637152e-02	8.530411e-02	8.789502e-02
##	G37030	-6.598678e-02	-0.0197682187	-3.595290e-02	1.861234e-02	1.658108e-02
##	G37031	-6.052008e-04	-0.0050915665	3.127230e-02	-2.574328e-02	5.642573e-02
##	G36906	-1.162130e-02	0.0147542993	4.505572e-02	-1.052295e-02	-1.176964e-02
##	G37028	-3.089947e-02	0.0099638472	-2.473060e-03	3.486077e-02	2.891528e-02
##	G37014	-3.572763e-02	0.0283512554	2.034645e-02	-2.419749e-02	-2.110002e-02
##	G37010	-4.318748e-03	-0.0439280952	2.606094e-03	-9.284843e-03	2.163780e-02
##	G36944	-1.984677e-02	-0.0324141180	-3.067201e-02	5.422766e-02	-3.478454e-02
##	G36902	-3.234523e-03	-0.0123514297	-1.516384e-02	-3.154388e-03	-1.043864e-02
##	G37051	-8.186291e-03	-0.0051353451	-1.107814e-02	4.609021e-02	-4.705222e-02
##	G36964	2.092277e-02	-0.0533165248	9.611288e-03	1.854160e-02	6.342007e-03
##	G36951	-2.223183e-02	0.0547487436	-2.675209e-02	-2.928653e-02	-4.176458e-02
##	G37025	-4.349686e-03	0.0253886251	4.775686e-02	-4.655144e-02	-1.648702e-02
##	G36930	4.585864e-03	-0.0133305898	-2.262848e-02	1.468353e-04	1.424165e-02
##	G36935	5.421077e-02	0.0450833150	-2.606289e-02	-4.641420e-03	-5.138158e-03
##	G37041	9.964111e-03	0.0118166052	2.156761e-02	-3.220457e-02	5.050812e-02
##	G36959	1.766067e-02	-0.0059305269	2.246604e-02	-3.271446e-02	-1.356575e-02
##	G36905	7.592215e-02	-0.0084605793	-5.618489e-02	-2.027123e-02	-5.290836e-02
##	G36917	6.460484e-02	0.0414553324	7.962087e-03	2.663319e-02	-4.072133e-02
##	G36992	1.382877e-02	-0.0112930211	-1.006135e-02	-1.466410e-02	-2.020008e-02
##	G36921	-1.160030e-02	0.0145609031	-2.873589e-02	6.143441e-02	3.775133e-02
##	G37004	5.065696e-03	-0.0075987792	3.327533e-02	-2.991946e-02	-4.204020e-02
##	G36966	-1.812043e-03	0.0179810128	2.151293e-02	-2.076763e-02	2.985656e-02
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## G36974 3.132789e-03 0.0167006399 1.536083e-02 1.775633e-03 -1.500468e-02
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## G36933 2.145041e-02 0.0093727480 -6.310316e-03 8.495439e-04 -2.661827e-04
## G37052 1.307583e-02 -0.0498582662 1.969070e-02 -1.210248e-03 -8.983447e-02
## G36925 2.743888e-02 0.0008710710 1.240961e-02 5.702149e-03 3.349191e-03
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##	G36938	1.158389e-02	-0.0115629590	9.027048e-03	-7.467933e-03	-2.157320e-02
##	G37022	-4.758495e-03	0.0027759147	2.590856e-02	1.594917e-02	-4.413792e-02
##	G35534	-3.081141e-03	-0.0028381224	1.221368e-02	-1.239316e-03	1.969650e-04
##	G35535	3.690655e-02	-0.0306879008	-1.409431e-03	2.192792e-02	2.508246e-02
##	G35361	6.145133e-03	-0.0325631270	-1.028359e-02	2.013588e-02	-1.496006e-02
##	G35364	-3.359035e-02	0.0475934994	9.157312e-03	6.440810e-02	-3.334218e-02
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##	G35416	-8.438101e-04	0.0083238343	-3.740293e-02	2.592560e-03	2.213821e-04
##	G35477	-4.249974e-02	-0.0741294356	-3.260460e-03	-4.331299e-03	-8.478489e-03
##	G35390	-3.289255e-03	-0.0373854524	-4.794496e-02	3.755430e-03	1.354883e-02
##	G35536	2.440020e-02	-0.0556681967	1.708924e-02	-4.850361e-02	-9.041253e-03
##	G35514	9.948539e-04	-0.0250580701	-1.292933e-02	-6.677704e-02	1.336923e-02
##	G35525	-3.250945e-02	0.0360766921	1.958029e-02	2.559838e-02	-5.009114e-02
##	G35395	-1.577320e-02	-0.0101103803	5.488012e-02	-1.455899e-02	-2.990250e-02
##	G35480	3.311326e-02	-0.0141583248	-2.911911e-02	1.625228e-03	3.723444e-02
##	G35409	2.788644e-02	-0.0431442252	-2.689786e-02	-1.124728e-02	3.075665e-03
##	G35391	1.124141e-02	0.0539714621	-1.810593e-02	-1.268186e-02	-1.305818e-02
##	G35437	-3.393687e-02	-0.0268325192	-2.118877e-02	1.998841e-03	-2.696848e-02
##	G35511	-8.424738e-02	-0.0197148079	-3.159664e-02	-2.039184e-03	7.899112e-03
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##	G35510	-3.673036e-02	-0.0015022732	-5.848972e-02	7.720310e-03	3.491131e-03
##	G35470	-9.600886e-03	-0.0323967183	-1.236863e-02	6.474567e-02	-2.495198e-03
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##	G35424	1.231693e-02	0.0136802269	1.997496e-02	-7.212449e-03	-1.213765e-02
##	G35398	8.818456e-04	0.0168132241	9.233905e-03	3.627899e-03	2.076490e-02
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##	G35465	-3.747875e-02	-0.0050475421	2.831993e-02	3.135674e-02	-1.958233e-02
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##	G35421	5.125755e-02	0.0323228615	8.243355e-02	3.598906e-03	-8.875455e-02
##	G35531	-7.192303e-02	0.0447924599	6.603401e-02	4.904892e-02	2.455894e-02
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## G36194 -1.748240e-03 -0.0285713354 -6.741140e-03 -3.697604e-04 4.701553e-02
## G36244 3.351109e-03 -0.0097100737 -1.103379e-02 1.135232e-02 1.398147e-02
## G36197 -2.501381e-02 -0.0241190952 -3.846091e-02 3.346955e-02 -4.225862e-02
## G36264 2.866294e-02 -0.0053786143 -2.973141e-02 1.073355e-02 3.153666e-02
## G36317 2.967362e-02 -0.0143412955 -3.862025e-02 -1.352505e-02 -3.316972e-03
## G36159 3.045611e-02 -0.0220525527 2.179687e-02 3.243864e-02 2.182849e-02
## G36234 -3.035014e-02 0.0566724822 1.303061e-02 -2.153611e-02 2.192738e-02
## G36206 -1.342044e-02 0.0177429592 2.218203e-02 -7.011534e-03 -4.836276e-02
## G36257 -2.515756e-02 -0.0111617490 -4.640672e-02 1.507665e-02 3.380808e-03
## G36216 -1.056111e-02 -0.0029426800 9.098148e-03 -3.300554e-02 3.543739e-03
## G36208 8.761579e-03 0.0229370905 -1.354234e-02 1.894602e-02 8.041012e-03
## G36309 1.904551e-02 0.0201530534 2.300967e-02 -5.041118e-03 2.407216e-02
## G36146 1.068451e-02 -0.0200721500 -3.987519e-02 -3.760934e-02 1.291612e-02
## G36192 1.054635e-02 -0.0199615567 1.895237e-02 -1.052575e-02 -8.128170e-04
## G36284 -3.566409e-02 -0.0385215643 -4.222409e-02 2.408599e-02 4.448552e-03
## G36291 3.722545e-02 0.0280721599 -7.372942e-03 2.314983e-02 -1.387494e-02
## G36142 1.323969e-02 -0.0381571969 2.170691e-02 -2.247638e-02 -1.777404e-03
## G36138 3.833017e-02 -0.0166403973 2.553696e-02 -4.195250e-02 2.526138e-02
## G36203 2.173252e-02 0.0067383185 2.186990e-02 3.580323e-02 -2.180287e-02
## G36282 5.166547e-02 0.0400376558 1.076087e-02 -3.210835e-02 -6.905868e-02
## G36290 -1.421083e-02 -0.0220784106 -1.436109e-02 -1.884859e-02 1.967058e-02
## G36274 -8.215287e-03 0.0608750161 3.927138e-02 -3.507394e-02 2.235025e-02
## G36314 -2.848962e-02 -0.0353046968 -1.560408e-04 6.299029e-03 -1.952727e-02
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## G36147 4.016050e-02 -0.0382839619 1.242913e-02 1.357222e-02 1.912618e-02
## G36235 -5.671060e-03 0.0147013652 -9.038185e-03 -2.952326e-02 -7.669547e-03
## G36143 7.678408e-03 0.0152968292 4.866106e-02 -4.709951e-03 1.862073e-02
## G36308 5.398383e-04 -0.0414701673 1.293194e-02 1.457261e-02 1.526990e-02
## G36209 -4.863219e-02 -0.0503576595 -7.714771e-02 2.958788e-03 -7.556179e-02

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##	Axis.96	Axis.97	Axis.98	Axis.99	Axis.100
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## G36918	2.411310e-03	5.342944e-03	-2.897510e-02	3.695250e-02	2.970919e-02
## G37044	1.285333e-02	-2.402682e-02	-1.717344e-02	-2.378208e-02	2.409909e-02
## G37009	-1.850236e-03	2.347378e-02	4.606402e-03	-4.494411e-02	1.989697e-02
## G37029	-9.866670e-03	1.621408e-02	1.034872e-02	-5.478671e-03	-8.044459e-03
## G37035	1.663763e-02	-1.512294e-02	2.509602e-02	-8.375584e-03	-2.886543e-02
## G36982	-1.812324e-02	6.520001e-02	3.279240e-02	-5.725203e-02	-4.086914e-02
## G36984	-7.531984e-02	3.247905e-02	8.218112e-03	-3.900720e-02	-5.441941e-02
## G37030	7.866431e-02	2.159480e-02	4.744555e-02	3.225467e-03	1.658527e-02
## G37031	4.523403e-03	2.114069e-02	-6.875737e-03	3.140393e-02	8.933051e-03
## G36906	1.190760e-02	5.826605e-03	1.458250e-02	-6.495064e-03	1.749955e-02
## G37028	3.945013e-02	1.998330e-04	2.713223e-02	-2.142293e-02	-2.492204e-02
## G37014	-4.353049e-02	-2.868578e-02	1.856027e-03	5.134072e-02	4.290779e-02
## G37010	-2.497083e-02	-1.663568e-02	2.116036e-02	4.133981e-02	-3.109832e-02
## G36944	4.831228e-02	-5.347947e-02	4.119024e-02	-6.072872e-03	-4.717451e-03
## G36902	2.336887e-02	3.758558e-02	8.034280e-03	1.779874e-02	1.881621e-02
## G37051	5.014487e-03	5.760429e-03	3.191426e-02	-1.212176e-03	8.555541e-03
## G36964	-3.126103e-03	-8.254495e-04	-2.696782e-02	-2.756595e-02	7.700643e-03
## G36951	-7.300661e-02	-2.631571e-02	-1.732060e-02	-2.585730e-02	-7.545519e-02
## G37025	-1.763749e-02	-2.070595e-02	-1.624706e-02	-1.302559e-02	1.711874e-02
## G36930	-3.652002e-02	9.380184e-03	-3.381661e-02	2.030888e-02	-1.812538e-02
## G36935	-2.374804e-02	-1.985419e-02	-1.772858e-02	1.081821e-02	-3.397201e-03
## G37041	-3.110911e-02	7.927983e-02	-6.096083e-02	3.933989e-03	-5.706970e-03
## G36959	-1.108352e-03	9.018794e-03	1.687538e-02	-7.646915e-04	-1.285215e-03
## G36905	-1.410137e-02	7.652870e-02	2.804909e-02	-3.179595e-02	4.197813e-02
## G36917	3.063594e-02	2.169236e-02	-3.551433e-02	-1.230587e-02	-2.602697e-02
## G36992	-2.518202e-02	-1.135723e-02	-9.186762e-03	2.606155e-02	3.118939e-02
## G36921	2.239467e-02	2.148085e-02	-6.970965e-02	-3.429594e-02	2.224579e-02
## G37004	-4.076747e-03	2.869442e-02	9.395840e-03	-1.440194e-02	-1.731255e-02
## G36966	2.326373e-02	2.908804e-02	3.334981e-02	-3.092899e-02	-3.136905e-03
## G36936	2.082000e-02	-1.005036e-02	1.447854e-02	-1.642947e-02	3.195381e-02
## G37015	4.100286e-02	3.306608e-02	4.417254e-02	3.173944e-04	1.034625e-02
## G37034	-5.687042e-03	-3.657359e-02	2.108900e-02	4.069463e-02	-2.866184e-02
## G36953	-2.593031e-02	-1.362470e-02	-1.438699e-02	2.259150e-02	7.730006e-03
## G36974	-1.930848e-02	-2.691676e-02	-1.869038e-02	-6.207111e-03	-1.478595e-02
## G37039	4.415105e-02	-2.435625e-03	-1.707782e-02	-5.528722e-03	3.626289e-02
## G36933	-9.120294e-03	3.365618e-02	-1.756525e-02	2.297957e-02	1.702789e-02
## G37052	-1.466546e-02	-3.089450e-03	-3.653813e-02	5.379270e-02	-3.299647e-02
## G36925	1.168713e-02	-3.343308e-02	-5.254384e-02	1.123157e-02	-2.170799e-07
## G37046	-2.665909e-02	1.243476e-02	-5.436648e-03	2.954778e-02	-3.489220e-02
## G37053	-2.061289e-02	-1.437517e-02	1.582305e-02	2.391916e-02	2.433810e-02
## G36998	-2.076633e-02	2.003759e-02	8.498016e-03	-2.105066e-02	4.513776e-02
## G37045	2.825879e-03	2.178806e-02	-3.345349e-02	-8.222962e-03	-4.530606e-02
## G37049	1.625846e-03	2.973004e-02	-7.208033e-03	4.597258e-02	-7.110432e-05
## G37019	3.692600e-02	-1.047810e-02	9.167941e-03	-2.253899e-02	-5.640693e-02
## G36988	2.957766e-02	2.012494e-02	3.452662e-02	-1.989817e-02	-2.136209e-02
## G37037	3.434164e-03	3.253267e-03	1.382599e-02	-1.905624e-03	-1.443194e-02
## G37005	3.434958e-02	1.428654e-02	2.986855e-04	1.062553e-02	-4.250031e-03
## G36928	-1.918677e-02	-4.135401e-02	-1.837885e-02	-1.301553e-02	-1.185782e-02
## G36923	1.541685e-02	1.067111e-03	2.614701e-02	1.424851e-02	3.407213e-02
## G37033	8.610130e-03	-9.089487e-02	3.419064e-02	-9.632526e-03	6.717709e-03
## G37017	1.662786e-02	-4.095587e-02	3.024497e-03	-2.250028e-02	-1.990610e-02
## G37012	2.503229e-02	-1.416409e-02	-2.352307e-02	5.766663e-02	7.182857e-04

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## G36957 -2.973038e-02 -1.524789e-03 3.979347e-02 -6.251502e-02 2.111838e-02
## G37021 4.462254e-02 -2.561013e-02 -4.772275e-02 2.785267e-02 -6.635321e-03
## G36937 -5.086141e-03 4.722724e-03 -9.598005e-03 9.628187e-03 9.805284e-03
## G37047 -1.727774e-02 -4.089194e-03 -2.343895e-02 1.267537e-02 4.587374e-02
## G37032 -4.527334e-03 1.148402e-02 -1.419795e-02 -1.309734e-02 -6.747994e-02
## G36932 1.457504e-02 -4.674109e-02 -8.093354e-03 -4.652076e-02 1.613649e-02
## G37043 -1.308343e-02 -1.868116e-02 6.232377e-02 -3.306250e-02 -2.882292e-02
## G37054 -6.957284e-03 9.331032e-03 -2.147653e-02 -1.835651e-03 1.095655e-02
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## G36968 8.790819e-03 -2.514151e-02 2.976019e-03 2.634393e-03 5.298355e-02
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## G36910 -6.417263e-03 1.172756e-02 -3.149374e-02 5.320815e-03 -1.247008e-02
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## G35534 -5.452753e-03 6.555305e-03 -1.805296e-03 2.215501e-03 1.184312e-02
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##	G35511	3.684843e-02	1.000705e-02	-3.700768e-02	1.283151e-02	-6.217558e-02
##	G35448	3.500648e-03	2.233196e-02	1.788680e-02	7.239339e-03	-1.226825e-02
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##	G35403	-3.290629e-02	-2.668308e-02	-1.721715e-02	2.538197e-02	1.210412e-02
##	G35424	7.636040e-03	-2.014722e-02	-3.051726e-02	2.665012e-02	-3.206604e-02
##	G35398	-4.459735e-04	2.315767e-02	-1.378870e-02	7.905866e-04	-1.281023e-02
##	G35365	1.548888e-02	1.481944e-02	-2.444170e-02	7.565781e-04	9.319721e-04
##	G35442	1.086040e-02	5.857544e-02	-2.775323e-02	-1.564772e-02	2.956996e-02
##	G35476	-6.493663e-03	-4.289656e-02	-2.536092e-02	8.571205e-03	-2.909165e-02
##	G35515	5.656490e-02	-2.548428e-03	-7.709084e-03	-3.164394e-02	2.574396e-02
##	G35351	-5.472573e-02	-1.223155e-02	6.143218e-03	-2.187114e-02	3.068058e-02
##	G35484	-3.841293e-02	1.965060e-02	-2.437364e-02	4.681275e-02	6.913226e-03
##	G35495	9.932627e-04	1.722534e-02	1.208175e-02	-3.970864e-02	-7.505016e-03
##	G35473	8.218386e-03	-7.965767e-03	2.473213e-02	-4.941497e-03	5.921787e-02
##	G35418	1.515539e-02	-5.667494e-03	-8.789330e-03	3.580385e-02	-3.580582e-02
##	G35529	-5.023555e-02	7.257776e-02	-6.579107e-02	-5.489576e-02	-9.299454e-03
##	G35532	2.657715e-03	-1.302086e-02	-1.517926e-02	-3.169092e-03	-5.192155e-03
##	G35537	-2.586211e-02	-4.587306e-02	4.596511e-02	2.092049e-02	4.710132e-03
##	G35520	-4.141157e-02	3.475727e-02	2.339523e-03	5.652240e-02	1.609969e-02
##	G35370	-4.256221e-03	1.515851e-03	-5.469777e-03	4.935344e-02	4.906644e-02
##	G35517	1.574984e-02	5.123776e-03	-5.813054e-02	-3.327672e-02	2.441287e-02
##	G35417	-4.209043e-03	8.109482e-03	-1.725221e-03	-1.517069e-02	-1.359506e-02
##	G35465	1.625295e-02	3.244491e-03	-7.902692e-02	-1.551212e-02	2.748659e-02
##	G35350	-5.621413e-03	-2.527534e-02	1.702334e-02	-3.458486e-02	-5.490758e-02
##	G35421	6.187994e-03	3.801726e-02	-1.836113e-02	2.447385e-02	-2.108692e-02
##	G35531	-6.856545e-02	-7.055244e-02	-5.864636e-02	5.623898e-02	-4.629620e-02
##	G35444	-1.679117e-02	1.037524e-02	9.364613e-03	-1.631326e-02	-1.715856e-02
##	G35443	1.702063e-02	6.035676e-03	-3.132680e-03	2.309046e-02	7.818295e-03
##	G35349	5.677218e-03	3.048904e-02	-4.299904e-02	2.987936e-02	-2.403951e-02
##	G35523	3.257288e-02	4.769018e-02	1.999662e-02	1.524965e-02	-5.329038e-02
##	G35487	4.035345e-03	-1.334268e-02	-4.345280e-02	-4.407797e-03	2.656954e-02
##	G35386	-4.164666e-02	-3.405378e-02	-1.548240e-02	1.045858e-02	1.731675e-02
##	G35521	1.279804e-02	-4.318422e-03	-2.141223e-03	1.096821e-02	1.494440e-03
##	G35475	2.451960e-02	2.779186e-02	3.063175e-02	2.763327e-02	4.024833e-03
##	G35490	2.724766e-02	-7.914824e-02	6.209860e-02	1.525886e-02	3.333518e-02
##	G35422	1.501146e-02	1.750552e-02	2.160213e-02	7.264751e-02	-2.939917e-02
##	G35526	-8.239001e-03	2.677393e-03	-8.256184e-03	-2.619764e-02	-4.998421e-04
##	G35498	5.091349e-02	4.770488e-03	1.565418e-02	-1.750968e-02	1.859024e-03
##	G35348	2.357809e-02	-1.927198e-02	8.442693e-03	7.292965e-03	3.431996e-02
##	G35423	7.028565e-03	9.618193e-03	2.631630e-02	5.928861e-03	-2.261205e-02
##	G35374	1.769503e-02	-2.169485e-02	-1.867501e-02	-3.324783e-02	-7.272926e-03
##	G35486	-3.752695e-03	-1.658303e-02	-1.403579e-02	-5.730461e-02	-2.670816e-02
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##	G35394	-3.892183e-02	-4.216741e-02	-4.260951e-02	5.494974e-02	-1.312287e-02
##	G35359	-4.836640e-02	3.193284e-02	3.285520e-03	3.010455e-02	-3.657558e-02
##	G35419	3.858582e-02	-1.368916e-02	5.765753e-02	1.351440e-02	-4.717991e-02
##	G35356	-8.698671e-03	6.685346e-03	-3.308776e-02	-2.142305e-02	-2.896194e-02
##	G35519	1.107301e-02	-1.209555e-02	-8.954534e-03	7.425539e-03	-2.258500e-03
##	G35505	1.667282e-02	7.130272e-02	5.451786e-02	-4.748020e-03	-3.138725e-03
##	G35447	8.489747e-03	2.426504e-02	-1.822492e-02	-1.973770e-02	-9.286273e-03

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## G35453 -2.840664e-02 1.342937e-02 -3.046545e-02 1.215395e-02 1.068397e-02
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## G35527 -3.814457e-02 -4.370270e-02 7.408630e-03 1.904807e-02 2.006085e-02
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## G36245 9.157667e-03 -2.272984e-02 -1.216429e-02 -1.499518e-02 6.811052e-03
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##	G36274	-2.293704e-02	1.888613e-02	1.923838e-02	1.374221e-02	-4.149886e-02
##	G36314	-3.459077e-03	-2.002799e-03	1.305527e-02	-2.803003e-02	-1.517798e-02
##	G36258	4.580567e-03	1.654236e-02	8.111877e-03	-2.668374e-02	-9.849161e-03
##	G36147	-8.967543e-03	3.165838e-03	1.998398e-02	2.747883e-03	5.224813e-02
##	G36235	-3.731903e-03	9.868327e-03	5.220730e-03	-1.208392e-02	1.353459e-02
##	G36143	-6.459884e-02	-6.544668e-02	3.774270e-02	-1.730376e-02	6.705170e-03
##	G36308	3.005456e-02	-7.819454e-03	-2.772317e-02	3.486682e-05	3.415773e-02
##	G36209	3.271629e-02	1.390975e-02	-5.864668e-02	1.346453e-02	3.905505e-02
##		Axis.106	Axis.107	Axis.108	Axis.109	Axis.110
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##	G36918	-2.161145e-02	-0.0117190233	-4.598948e-03	-6.941983e-04	-2.711047e-02
##	G37044	-3.455488e-02	-0.0434884270	1.984254e-03	-1.603635e-03	-2.711100e-02
##	G37009	4.858420e-02	0.0368068076	-2.933726e-02	-2.867936e-02	1.761492e-02
##	G37029	1.052426e-02	-0.0732285986	1.130148e-02	2.219451e-02	-3.008413e-02
##	G37035	-1.226974e-03	-0.0026099263	-2.002953e-02	-1.117654e-02	3.757899e-03
##	G36982	6.219645e-03	-0.0126977748	1.939448e-02	-1.723381e-03	1.580642e-03
##	G36984	-1.988639e-02	-0.0325437662	5.471329e-02	5.407436e-02	2.894342e-02
##	G37030	-6.831324e-03	-0.0279706048	-2.886602e-02	-1.137985e-02	-2.488027e-02
##	G37031	-2.403630e-02	-0.0398400416	1.683748e-02	1.669271e-02	5.802961e-02
##	G36906	1.227829e-02	0.0385454011	1.303959e-02	-1.830136e-02	2.824965e-02
##	G37028	1.545776e-02	-0.0123795915	-4.951406e-03	2.535135e-02	3.623016e-02
##	G37014	8.119898e-04	0.0278888437	2.613683e-02	-2.601211e-02	6.282033e-02
##	G37010	-2.199470e-03	-0.0028307084	1.193818e-02	-2.451852e-02	-1.196564e-02
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##	G36902	-2.182519e-03	0.0176038174	1.784506e-02	1.397182e-03	5.155918e-03
##	G37051	1.484756e-02	0.0224995134	-4.276554e-02	2.951109e-02	-2.810333e-03
##	G36964	-1.139697e-02	-0.0036716317	-3.649545e-02	4.425007e-03	-1.719341e-02
##	G36951	1.157102e-02	-0.0154661757	2.648746e-04	2.113316e-03	2.061838e-02
##	G37025	3.963954e-02	-0.0160667241	1.665712e-03	-6.911544e-03	5.594729e-04
##	G36930	6.083614e-03	0.0202727545	-1.959164e-02	1.555037e-02	-2.766666e-02
##	G36935	-6.243203e-02	-0.0039543699	-1.867217e-02	9.461767e-03	8.467230e-03
##	G37041	-3.386539e-02	0.0237510597	9.304319e-03	-6.228593e-04	3.159863e-02
##	G36959	-3.301856e-02	0.0174430959	-2.280626e-02	1.722229e-02	-8.053256e-03
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##	G37004	-1.946675e-02	-0.0072698500	-6.834979e-03	4.097030e-02	-4.327932e-02
##	G36966	1.351534e-02	-0.0035989951	-5.877464e-02	-6.550925e-02	-1.176523e-02
##	G36936	1.410469e-02	0.0217312284	-2.230323e-02	-3.155054e-02	5.825299e-03
##	G37015	-2.959308e-02	0.0147803767	1.886118e-02	-2.610366e-02	1.610715e-02
##	G37034	4.866731e-02	-0.0153717862	2.312454e-02	1.922979e-02	-1.031550e-02
##	G36953	6.384734e-03	-0.0318215900	2.580860e-02	-4.507234e-03	2.149871e-02
##	G36974	2.910415e-02	0.0193546861	-2.097202e-02	2.664165e-02	2.628634e-02
##	G37039	-4.586338e-02	-0.0244180567	4.501610e-02	-8.456723e-02	-6.160381e-03
##	G36933	9.984226e-03	0.0355635370	1.182890e-02	7.769282e-03	1.139283e-02
##	G37052	-3.517418e-02	-0.0045619102	3.660907e-02	-3.438565e-03	7.270383e-03
##	G36925	3.861715e-02	0.0177578040	-2.480723e-02	-7.043046e-03	-1.495948e-02
##	G37046	8.952084e-03	-0.0245273482	3.445063e-02	6.033170e-04	1.761041e-02
##	G37053	-3.706861e-02	-0.0332057193	-3.615115e-03	3.429427e-02	-9.592729e-03
##	G36998	-1.985602e-02	0.0345645979	-6.447817e-02	5.567082e-02	2.971150e-03
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## G37049 4.329100e-02 0.0238620794 -5.594456e-02 9.175279e-03 -8.932095e-03
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## G36988 1.355131e-02 -0.0060939255 6.785266e-03 -3.807620e-03 -1.217289e-02
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## G37005 2.993070e-03 0.0112182952 1.938723e-02 -7.085792e-03 2.835500e-03
## G36928 1.064112e-02 0.0498368885 -1.241572e-02 -3.728058e-05 -2.173408e-02
## G36923 -5.204957e-02 -0.0238842395 -5.543436e-02 -2.738293e-02 -3.612143e-02
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## G36957 -2.460984e-02 0.0163220716 -1.481724e-02 1.566679e-02 -2.936052e-02
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## G37036 2.590582e-02 0.0286861923 1.844650e-03 -3.291739e-02 -1.395374e-02
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##	G35390	6.617140e-02	0.0288864350	4.496482e-02	-7.383480e-02	4.621368e-02
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##	G35395	-1.268007e-02	0.0419586119	-5.498560e-03	-2.219161e-02	-5.957182e-03
##	G35480	-1.152583e-02	-0.0467887769	-1.391293e-02	-3.223755e-02	-2.416885e-03
##	G35409	-1.655799e-02	0.0427600313	-2.663833e-02	-2.837990e-02	4.000053e-02
##	G35391	-4.508866e-02	-0.0250199914	3.445066e-02	1.189196e-03	5.290885e-02
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##	G35510	1.656099e-02	0.0022515425	-3.306814e-02	-7.097426e-03	2.839827e-02
##	G35470	-1.001200e-02	-0.0093960353	2.165320e-03	-1.757930e-02	-6.627805e-03
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##	G35398	1.087013e-03	0.0002610698	1.654399e-02	-1.656138e-02	-7.859486e-03
##	G35365	2.509370e-02	0.0064368898	1.282960e-02	6.638873e-02	7.803502e-03
##	G35442	-3.970282e-02	-0.0045073051	-3.509791e-02	-5.590228e-03	-1.781095e-02
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##	G35515	-6.284084e-03	0.0010398262	-4.413519e-02	1.951822e-04	1.278858e-02
##	G35351	4.563701e-02	0.0347277930	-2.402649e-02	-4.146073e-03	-1.099702e-02
##	G35484	-9.654755e-03	-0.0148591946	3.571557e-03	3.689567e-02	-3.452278e-03
##	G35495	8.627914e-03	-0.0014423693	4.744586e-03	-1.273300e-02	-3.694922e-03
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##	G35418	3.339912e-02	0.0044829197	2.819070e-02	-8.193776e-03	-1.015811e-02
##	G35529	1.417052e-02	0.0052110321	-1.113928e-02	9.062260e-03	5.102834e-02
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##	G35537	3.669137e-03	0.0549882192	1.738844e-02	-7.353774e-03	-1.757895e-02
##	G35520	-2.039266e-02	0.0121228517	2.819135e-02	9.691892e-03	4.062479e-02
##	G35370	1.847665e-02	0.0015208470	9.995517e-03	-2.503034e-02	7.172081e-04
##	G35517	9.878231e-03	0.0198328983	5.765839e-03	2.488267e-03	-2.711397e-02
##	G35417	1.635000e-02	-0.0077328557	-2.942180e-03	-1.444528e-03	-2.061418e-03
##	G35465	1.612065e-02	0.0069044459	2.818470e-02	1.697686e-02	-5.447837e-04
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##	G35487	-2.622624e-02	0.0542817150	2.298829e-03	2.280849e-02	-4.232396e-03
##	G35386	-5.642515e-03	0.0304923286	-1.384609e-02	1.462147e-02	-1.238244e-02
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##	G36259	-2.534126e-02	0.0074803946	-4.447298e-02	1.450748e-02	3.573511e-03
##	G36229	-2.627742e-02	-0.0056755070	2.332579e-02	2.688628e-02	-2.683684e-02
##	G36155	1.361068e-02	0.0217688403	9.022011e-03	3.266797e-02	-1.413867e-02
##	G36251	4.693280e-02	-0.0083509165	1.478738e-02	-8.203804e-03	2.175746e-02
##	G36297	-1.514491e-02	0.0214510727	-9.120507e-03	-2.607972e-02	-1.192847e-02
##	G36170	-1.470133e-02	0.0218828549	1.537779e-02	1.506378e-02	-1.502828e-02
##	G36241	2.121761e-03	0.0011559201	-3.493115e-03	1.867634e-02	-2.314549e-02
##	G36224	-1.701979e-02	-0.0216866454	-5.662360e-03	-3.284631e-02	7.044664e-04
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##	G36266	-4.546833e-02	-0.0280957500	-1.260602e-02	3.437494e-02	1.776488e-02
##	G36164	-1.301556e-02	-0.0014027425	-1.816241e-02	5.637349e-02	-1.269536e-02
##	G36215	2.844926e-02	0.0031121110	-1.573506e-04	9.717728e-03	-1.320162e-02
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##	G36237	2.361255e-02	0.0625060302	1.842618e-02	-9.988058e-03	-5.988183e-02
##	G36148	-1.356054e-02	-0.0222361156	-1.457412e-02	3.725605e-03	1.303155e-02
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##	G36320	3.079121e-02	-0.0365730395	3.583186e-02	1.561323e-02	1.172277e-02
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##	G36180	-7.129230e-03	0.0241917622	-3.433890e-02	-2.473842e-02	-1.941018e-02
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##	G36151	2.561160e-03	0.0332914691	-2.947539e-02	9.557001e-03	-1.862723e-02
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##	G36175	-4.656988e-02	0.0502082343	8.239780e-03	2.758697e-02	-1.595145e-02
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##	G36227	9.317500e-03	-0.0184170621	1.037756e-02	-5.267938e-03	-3.353216e-02

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## G36256 -8.570346e-02 -0.0275057469 7.464277e-03 1.765776e-02 -2.452617e-02
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## G36175 3.199567e-03 2.353335e-03 -2.962698e-03 1.574141e-02 -1.322286e-03
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## G36262 -2.011442e-02 -6.624097e-03 -7.404389e-03 1.015035e-02 3.003357e-02
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## G36160 1.352002e-02 3.587797e-02 2.167904e-02 4.111292e-02 3.006317e-02
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## G36318 2.808524e-03 -1.262531e-02 4.962823e-02 -4.959741e-02 -8.047733e-03
## G36194 -1.208563e-02 1.348026e-02 -1.654545e-02 1.364716e-02 1.962710e-02
## G36244 -5.998679e-03 4.194152e-03 2.627709e-02 -1.025350e-02 2.139259e-02
## G36197 1.728108e-02 2.955446e-02 2.454997e-02 2.484830e-02 3.925174e-02
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## G36206 3.791798e-02 1.851906e-03 -2.713320e-03 3.339885e-02 -8.280732e-02
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##	G36146	-2.634218e-03	4.005036e-03	-7.100132e-03	2.125476e-03	2.767783e-02
##	G36192	-7.100025e-03	-2.042149e-03	-6.762051e-03	6.883652e-03	2.459547e-02
##	G36284	2.426849e-02	5.332291e-03	-3.298238e-02	7.176632e-03	-2.241034e-03
##	G36291	-2.489123e-02	-3.236195e-02	2.351690e-02	-1.988854e-02	2.583815e-02
##	G36142	-2.711439e-02	-2.601835e-02	-3.371113e-02	3.929310e-02	3.624411e-02
##	G36138	-3.235596e-02	2.302422e-02	-9.873934e-03	1.171964e-02	-1.349708e-02
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##	G36282	5.352630e-02	-4.034935e-02	-1.729564e-02	-2.829393e-02	-3.855158e-02
##	G36290	-7.544935e-03	-7.379389e-03	-1.708364e-02	-1.053648e-02	7.856735e-02
##	G36274	-8.677220e-03	-4.501633e-02	-1.292844e-02	1.326555e-02	-8.306641e-02
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##	G36258	4.944050e-03	-4.350029e-02	1.266421e-03	-2.112284e-02	-1.280901e-02
##	G36147	-8.032618e-04	-1.788402e-02	5.593267e-03	-5.196538e-03	9.087560e-03
##	G36235	-2.386322e-02	-3.383536e-03	-1.488429e-02	-2.611641e-02	1.462254e-02
##	G36143	-3.686223e-02	-6.372974e-02	4.370642e-02	3.116458e-02	2.489892e-02
##	G36308	-1.759274e-02	-1.599815e-02	-1.045035e-02	1.289165e-02	2.470096e-02
##	G36209	1.363826e-02	-2.979406e-02	6.330368e-02	2.725090e-03	-5.475162e-02
##		Axis.116	Axis.117	Axis.118	Axis.119	Axis.120
##	G37016	-6.312865e-03	7.259923e-03	3.479615e-02	6.329480e-03	2.303493e-02
##	G36918	2.973695e-02	-2.747884e-02	-2.243589e-02	-1.829462e-02	-8.774915e-03
##	G37044	2.538523e-02	-3.403605e-02	3.878940e-02	-2.667026e-02	-2.488693e-02
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##	G37029	2.643908e-02	-1.654175e-02	-8.324422e-03	-2.621956e-02	7.035862e-03
##	G37035	-1.310281e-02	2.555792e-02	-2.550808e-02	3.114824e-02	-2.405980e-02
##	G36982	-2.514498e-02	-1.933385e-02	-1.081681e-02	-9.970835e-03	3.865064e-02
##	G36984	2.948359e-02	-3.269639e-02	-3.346680e-02	-2.037236e-02	3.196035e-03
##	G37030	2.658788e-02	4.028752e-02	5.705393e-02	3.259484e-02	-1.300728e-02
##	G37031	-1.355624e-02	1.943536e-02	4.073778e-04	-4.131279e-02	-2.339900e-02
##	G36906	5.788227e-03	3.532818e-03	-4.419012e-02	4.310133e-02	-1.301079e-02
##	G37028	-1.742523e-02	8.880023e-03	3.181625e-03	4.830545e-03	-4.352049e-02
##	G37014	4.200452e-02	1.969152e-03	-1.444977e-02	-2.416204e-02	2.686826e-02
##	G37010	9.530097e-03	3.040883e-02	-1.225647e-02	3.696957e-02	2.135154e-02
##	G36944	3.116527e-03	-3.188370e-02	-1.709919e-02	-4.752920e-02	-1.618927e-02
##	G36902	-5.634408e-03	1.944560e-02	-2.479413e-02	9.166212e-03	-1.336578e-02
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##	G36964	6.857200e-03	1.466733e-02	2.099186e-02	1.955732e-03	-1.936515e-02
##	G36951	1.879540e-02	1.336403e-02	-2.976278e-02	2.162458e-02	-2.945318e-02
##	G37025	1.831885e-02	-1.660000e-02	-2.982546e-02	7.442521e-04	-4.126975e-03
##	G36930	-3.235276e-02	6.201883e-03	3.167886e-03	-9.970660e-03	-1.750059e-04
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##	G37041	4.548987e-03	3.454141e-02	4.713297e-03	-1.010666e-02	-1.726807e-02
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##	G36905	-2.112911e-02	1.815930e-02	-4.601564e-02	4.838682e-02	-4.957543e-02
##	G36917	-2.136028e-02	-4.918606e-03	-2.821599e-02	-1.236577e-02	-8.955885e-03
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##	G37004	3.344866e-03	1.081822e-02	-2.892467e-03	-1.519409e-02	2.904870e-02
##	G36966	2.557147e-02	4.413076e-02	-5.004086e-02	-7.890632e-02	1.030350e-02
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##	G37015	8.515875e-03	4.717626e-03	2.780646e-02	2.369993e-02	-3.787453e-02
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##	G35398	3.758702e-02	3.042159e-02	1.822685e-03	1.302449e-02	2.154499e-02
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##	G35442	5.065839e-02	-1.073683e-02	2.853922e-02	-1.144485e-02	3.663731e-02
##	G35476	1.496270e-02	2.099591e-02	1.230296e-02	-6.968620e-03	1.824682e-02
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##	G35418	2.955029e-02	-2.162053e-03	7.402237e-03	1.849549e-02	1.613709e-02
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##	G35447	2.355297e-02	7.678602e-04	3.352438e-03	1.186445e-03	-2.978693e-02
##	G35458	1.403614e-02	2.378557e-02	1.333876e-02	2.662220e-03	-7.607006e-03
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##	G35462	2.237554e-02	-2.032523e-02	1.662829e-02	3.937138e-02	-9.521203e-03
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##	G35527	-1.714500e-02	-3.181852e-02	-1.749929e-02	2.870539e-02	3.012581e-02
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##	G35463	5.663957e-03	2.630482e-02	8.245063e-03	-6.424881e-03	-2.153068e-03
##	G35441	1.236374e-02	2.697121e-02	-3.403617e-03	2.666490e-02	1.696775e-02
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##	G35404	3.136369e-02	-1.034461e-02	2.541614e-02	3.641346e-02	6.566353e-03
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## G36143 -1.400156e-02 2.473478e-02 2.463397e-02 4.188612e-02 -2.027705e-02
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## G36209 6.122887e-03 -2.335758e-02 -5.887611e-02 2.639488e-03 3.110251e-02
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## G35464 9.566611e-03 -2.468103e-03 3.327172e-03 -6.407944e-03 -4.086778e-02
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## G35453 3.786709e-02 -2.493243e-02 1.609829e-02 -3.433498e-03 5.575824e-04
## G35352 -5.864619e-03 -1.917132e-02 -2.236890e-03 -1.152460e-02 -3.057606e-03
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## G35530 8.981798e-03 1.634744e-02 -1.198302e-02 1.362663e-02 1.342214e-03
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## G36155 -2.021031e-02 -2.052309e-02 -4.097430e-02 2.571872e-03 -1.538545e-02
## G36251 -6.796458e-03 -1.536604e-02 -1.712948e-02 1.315605e-02 -2.713192e-02
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## G36224 -2.589167e-02 1.477138e-02 -1.361740e-02 -1.618870e-02 5.557846e-03
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##	G36244	-6.241661e-03	3.522871e-02	-3.019187e-03	6.958547e-03	-2.309858e-02
##	G36197	7.328851e-03	1.193004e-02	-2.882903e-02	3.612073e-02	-4.471142e-03
##	G36264	-1.799228e-02	-1.593461e-02	1.834276e-02	1.153424e-02	-1.787086e-04
##	G36317	9.179273e-03	2.263058e-02	-1.334309e-02	2.548263e-02	-1.984621e-02
##	G36159	8.087448e-03	2.182251e-03	4.562020e-02	-3.319473e-03	1.318066e-02
##	G36234	-1.336028e-03	2.422679e-02	-2.409159e-03	9.502764e-03	-1.254381e-02
##	G36206	3.001961e-02	6.123150e-03	-1.887004e-02	1.044538e-02	-3.948543e-03
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##	G36216	1.227374e-02	1.063081e-02	1.520370e-02	-1.915433e-03	2.101231e-02
##	G36208	-6.291476e-03	2.827998e-02	3.544828e-03	-1.105258e-02	-4.554395e-03
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##	G36146	-4.029883e-02	2.406397e-02	-3.941111e-03	-7.754817e-03	-2.790257e-02
##	G36192	1.028921e-04	-3.404435e-02	4.710562e-02	9.955963e-03	3.467930e-02
##	G36284	9.935012e-03	-3.882537e-02	-3.626277e-02	-4.935717e-02	1.587509e-02
##	G36291	3.038477e-03	1.041940e-02	7.303886e-03	2.954348e-02	-7.647186e-05
##	G36142	4.278035e-02	4.450092e-03	1.360432e-02	-1.905955e-02	-4.495885e-03
##	G36138	8.695134e-03	-2.844743e-02	1.409162e-02	9.824579e-03	1.936341e-02
##	G36203	5.889142e-03	-3.767860e-02	3.857906e-03	1.923141e-02	4.919743e-02
##	G36282	-2.029016e-02	-1.224664e-02	7.980296e-03	-2.010091e-02	-1.732696e-02
##	G36290	5.019956e-02	1.524159e-02	2.790091e-03	-3.354323e-02	5.111975e-04
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##	G36258	-3.552469e-02	4.002873e-02	2.649028e-02	2.039544e-02	-4.460632e-02
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##	G36235	-3.273864e-02	2.926972e-03	-4.087424e-03	2.349713e-02	-2.306591e-02
##	G36143	-6.460307e-02	5.969571e-05	8.155117e-03	-2.088622e-02	4.466980e-02
##	G36308	9.376931e-03	2.376410e-03	2.870716e-02	1.004183e-02	2.844001e-02
##	G36209	-2.591293e-02	-3.058686e-02	-4.746459e-02	4.951730e-02	2.753247e-02
##		Axis.126	Axis.127	Axis.128	Axis.129	Axis.130
##	G37016	1.304173e-02	-1.814556e-02	-2.426031e-03	-2.627145e-02	-0.0166375212
##	G36918	-7.332088e-04	7.963856e-03	-3.579291e-03	-8.824293e-03	-0.0288153061
##	G37044	-1.405596e-03	3.045882e-02	-2.489223e-02	1.633509e-02	-0.0154129865
##	G37009	4.887629e-02	-2.167258e-02	-1.277983e-02	-5.231048e-03	0.0040807207
##	G37029	5.962596e-02	-2.183809e-03	2.340239e-02	2.792182e-02	0.0355212598
##	G37035	2.170546e-02	-1.474103e-02	-1.115732e-02	8.670010e-03	-0.0128954836
##	G36982	6.749856e-03	-1.326250e-02	2.196169e-02	-5.657517e-03	-0.0074274062
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##	G37030	-5.986367e-03	-3.100743e-02	1.464872e-02	-1.894627e-02	-0.0054750626
##	G37031	-4.937467e-03	7.745337e-03	9.104569e-03	-5.097782e-02	-0.0097788275
##	G36906	-3.635649e-02	3.766737e-03	2.375518e-02	-3.103384e-02	0.0182712419
##	G37028	1.504805e-02	-8.284140e-03	-1.761360e-03	1.282136e-02	0.0106370894
##	G37014	3.126626e-02	1.988352e-02	3.055565e-02	1.092981e-02	-0.0409967383
##	G37010	-1.419979e-02	-4.376752e-02	3.696282e-03	1.269896e-02	-0.0317955981
##	G36944	5.345943e-02	7.513637e-03	-1.322632e-02	3.337455e-02	-0.0023024196
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##	G37051	2.350528e-03	9.876078e-03	9.000356e-05	2.731550e-03	-0.0253245785
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##	G36951	-3.482076e-02	-7.227016e-03	-3.173752e-02	8.323772e-04	0.0089424503
##	G37025	4.697275e-02	2.612153e-02	-2.908260e-02	1.862625e-02	0.0416962710
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##	G36935	-1.092686e-02	-3.511057e-02	6.502942e-03	2.554277e-02	0.0062132459
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## G36250 4.631151e-03 -2.890720e-02 2.186073e-02 -4.394951e-02 -0.0085955941
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## G36214 1.956776e-02 2.040183e-02 1.015391e-02 1.109847e-02 0.0233862566
## G36230 -3.466516e-02 1.779908e-02 1.353376e-02 -8.883530e-03 -0.0173028129
## G36320 -2.197036e-02 -1.768301e-02 -1.337046e-02 -8.103393e-03 -0.0289564700

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## G36212 -3.061415e-03 -1.990695e-02 1.184320e-02 7.652709e-05 0.0384662764
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## G36193 5.471893e-03 -2.206953e-03 9.124267e-03 -3.038288e-02 0.0204656452
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## G36175 -3.647338e-02 -9.360314e-03 -6.972941e-03 3.232061e-02 0.0249971630
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## G36182 1.601488e-02 -2.991672e-02 2.310866e-02 6.250230e-03 -0.0231593146
## G36256 -2.048902e-02 -8.398155e-03 -8.157885e-03 -1.367468e-02 0.0157891206
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## G36282 -3.864666e-02 -2.672197e-02 1.971045e-02 -3.650025e-02 -0.0246169458
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##	G36258	-2.452963e-02	-2.348646e-03	2.590957e-03	-3.034160e-03	-0.0201599846
##	G36147	-4.012166e-03	2.919969e-02	-2.251483e-02	1.770639e-02	0.0041354777
##	G36235	1.879648e-02	3.573873e-02	3.470429e-02	-1.599044e-02	-0.0104611737
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##	G36308	3.035459e-02	3.319709e-02	2.745050e-02	-1.136628e-02	-0.0422583645
##	G36209	2.434225e-02	4.632224e-03	-2.190518e-02	-3.577628e-02	-0.0509075021
##		Axis.131	Axis.132	Axis.133	Axis.134	Axis.135
##	G37016	-2.133884e-02	-3.086152e-02	-2.158956e-02	1.805012e-02	3.046020e-03
##	G36918	1.750068e-02	-1.950512e-02	-1.139358e-02	-2.079354e-02	-4.008849e-02
##	G37044	-1.118647e-02	3.945013e-03	-2.533482e-02	-1.749107e-02	-1.210359e-02
##	G37009	-6.987947e-03	-1.027669e-02	3.125798e-02	-7.457022e-03	2.696571e-02
##	G37029	4.571712e-03	3.127634e-02	-3.578688e-03	4.440606e-02	2.402752e-02
##	G37035	-6.375390e-04	-1.556287e-02	-4.675886e-04	-1.083625e-02	-2.286453e-02
##	G36982	2.271018e-02	1.620056e-02	1.518975e-02	3.385410e-02	1.804021e-03
##	G36984	3.332657e-02	-5.610644e-02	-3.752738e-02	3.020148e-02	2.294734e-02
##	G37030	1.105950e-02	4.780345e-02	-6.435544e-02	1.315313e-02	-5.468765e-02
##	G37031	-3.367086e-04	-2.866615e-02	-2.623710e-02	1.600644e-02	-9.193592e-03
##	G36906	4.778645e-03	1.555192e-02	-1.715422e-02	-1.813046e-02	-4.968093e-02
##	G37028	-1.273184e-02	3.676088e-02	3.264096e-02	4.706765e-03	-1.747573e-03
##	G37014	9.291881e-03	1.842302e-03	5.981199e-03	1.982542e-02	-3.113305e-03
##	G37010	5.081430e-03	4.233456e-02	2.837185e-03	-2.144216e-02	-2.130946e-02
##	G36944	-2.318867e-02	2.259110e-02	-9.844576e-03	-1.409295e-02	2.781978e-02
##	G36902	2.118064e-03	-3.271579e-02	1.907911e-02	8.997840e-03	5.407385e-04
##	G37051	-2.175752e-02	3.130462e-02	2.481801e-02	8.886209e-03	4.406937e-03
##	G36964	-4.733882e-04	1.931716e-02	-1.449596e-02	-3.136601e-03	1.515308e-02
##	G36951	2.795546e-02	-3.751401e-02	2.669920e-02	2.497330e-02	1.632062e-02
##	G37025	1.770930e-02	1.936586e-02	-2.445505e-03	1.157121e-02	-2.312193e-02
##	G36930	1.668019e-03	1.198729e-02	-4.023607e-02	6.820102e-03	2.897753e-03
##	G36935	2.524830e-02	3.152396e-02	1.754138e-02	1.967918e-02	-2.715205e-02
##	G37041	-1.347130e-02	-2.317869e-02	-4.311653e-03	6.849419e-03	6.521182e-04
##	G36959	-1.115750e-02	-1.575667e-03	5.701805e-03	-1.787318e-03	1.639068e-02
##	G36905	5.288967e-03	-6.009455e-02	-3.276857e-02	-1.522938e-02	3.270328e-02
##	G36917	-2.000650e-02	-3.472465e-02	4.187870e-03	5.483931e-03	2.395662e-02
##	G36992	1.721497e-04	7.046691e-03	-1.501111e-02	8.280038e-03	-2.341572e-02
##	G36921	3.142173e-02	-3.100819e-02	-4.036604e-03	-1.904105e-02	-4.511010e-02
##	G37004	9.511515e-03	2.755122e-02	3.935800e-03	-2.106972e-02	-1.227100e-02
##	G36966	-2.915449e-02	-4.834240e-02	-2.425791e-02	3.465751e-02	2.537394e-02
##	G36936	-1.418385e-02	-2.202952e-02	2.484806e-02	-1.428647e-02	1.031492e-02
##	G37015	-4.572632e-02	3.084937e-02	-2.133445e-02	-8.486806e-03	-1.085185e-02
##	G37034	-4.673627e-03	6.900250e-03	2.438788e-02	7.989777e-03	3.987837e-02
##	G36953	1.251523e-02	4.026904e-03	1.590249e-02	4.974725e-03	9.204286e-03
##	G36974	2.457867e-02	4.023331e-02	-1.141682e-02	-3.500980e-02	-1.485939e-02
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##	G37052	1.668766e-02	-1.582922e-02	4.351245e-03	5.418633e-02	2.318678e-02
##	G36925	2.209732e-02	-3.020591e-02	-4.894920e-03	1.791172e-02	1.845894e-02
##	G37046	1.618548e-02	-1.688735e-02	-3.001520e-02	-2.340529e-02	4.789978e-04
##	G37053	-4.777383e-03	-1.803553e-02	-1.992546e-02	-7.677523e-03	2.371211e-02
##	G36998	-6.884249e-03	1.619193e-03	-5.101688e-03	-2.132488e-02	4.125092e-03
##	G37045	3.246015e-03	2.955674e-02	1.974612e-02	-1.981065e-02	-1.147968e-02
##	G37049	2.512680e-02	2.080430e-02	-1.406147e-02	3.241947e-02	4.264248e-03
##	G37019	2.493469e-02	-6.880745e-03	2.731712e-02	-1.013440e-02	-3.007587e-02

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## G36197 5.839825e-03 1.743635e-02 -1.425025e-02 -3.736747e-02 1.603961e-02
## G36264 1.650510e-02 3.044887e-02 -2.561901e-02 1.166227e-02 2.422558e-02
## G36317 1.197467e-03 -4.764737e-02 2.000669e-02 -2.040204e-02 2.789103e-02
## G36159 1.354584e-02 1.131003e-03 2.707655e-02 -8.505346e-03 2.308102e-02
## G36234 1.820198e-02 3.870952e-02 -5.565622e-02 1.321106e-02 2.876145e-02
## G36206 -3.598460e-02 1.751958e-02 -8.108781e-03 -2.583727e-03 7.837110e-03
## G36257 1.087020e-02 7.380324e-03 -9.458187e-03 -7.284073e-03 -4.725472e-03
## G36216 -1.955032e-02 -1.208739e-02 -1.466360e-02 -1.402649e-02 2.778467e-02
## G36208 -2.482145e-03 -2.830069e-02 2.523052e-03 -2.506821e-02 1.501752e-02

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##	G36146	3.033002e-02	-2.310415e-02	3.231647e-03	-1.581782e-02	-1.865591e-02
##	G36192	1.058688e-02	-2.086115e-03	4.802722e-03	-3.856919e-03	-4.530921e-04
##	G36284	-2.386124e-02	-7.081481e-03	1.138372e-02	-1.980252e-02	-7.127769e-03
##	G36291	1.002976e-02	2.183948e-02	5.333921e-03	3.051513e-02	3.531409e-03
##	G36142	-1.458612e-04	2.455094e-02	7.179861e-03	-2.063800e-02	-2.531571e-02
##	G36138	2.079651e-02	1.848832e-02	-2.513094e-02	-1.294958e-02	1.110045e-02
##	G36203	-1.294065e-02	9.066275e-03	2.750107e-02	1.235416e-02	-3.284615e-02
##	G36282	2.243521e-02	1.094118e-02	-5.663591e-02	6.320524e-02	-6.967915e-02
##	G36290	-1.973554e-02	1.236900e-02	2.377276e-02	1.177253e-02	2.879117e-02
##	G36274	-6.947336e-03	7.200892e-03	-3.987324e-02	-4.814267e-03	-2.637667e-03
##	G36314	1.278850e-02	-7.507803e-03	2.221704e-02	-1.957884e-03	1.587898e-02
##	G36258	-2.546081e-02	1.566478e-02	-1.420054e-02	-8.628416e-03	9.371878e-03
##	G36147	-1.561791e-02	7.656928e-03	-2.562163e-02	-1.059893e-02	9.431192e-03
##	G36235	-4.385077e-03	-1.729092e-02	-3.903093e-03	9.539660e-04	-9.603933e-03
##	G36143	3.535002e-02	2.572774e-02	-4.179843e-02	1.594417e-02	8.955984e-03
##	G36308	1.451367e-02	9.499879e-03	-1.575925e-02	1.234673e-02	2.195022e-02
##	G36209	-5.170759e-03	-4.206346e-02	-2.373902e-02	4.205882e-03	-4.182778e-02
##		Axis.141	Axis.142	Axis.143	Axis.144	Axis.145
##	G37016	-2.587113e-02	2.795549e-02	6.534803e-03	-3.738306e-03	1.626662e-02
##	G36918	-2.832411e-02	-1.207297e-02	-1.481590e-02	-2.680533e-02	-5.714813e-05
##	G37044	-2.056503e-03	-2.583710e-02	5.837464e-04	-1.000657e-02	-3.488403e-02
##	G37009	9.220372e-03	2.470320e-03	2.021197e-02	3.906803e-03	1.604748e-02
##	G37029	1.060601e-02	8.634577e-03	1.903928e-02	1.759711e-02	3.212999e-02
##	G37035	-6.428018e-03	-8.005574e-03	1.118306e-02	-1.145390e-02	-7.360803e-03
##	G36982	1.621891e-02	-3.004393e-02	-2.793149e-03	6.965001e-03	4.066352e-03
##	G36984	-4.293856e-02	-1.019088e-02	6.725427e-04	-8.386997e-03	-1.099546e-03
##	G37030	-3.382379e-03	4.757873e-02	1.899724e-03	-2.247556e-02	-4.504729e-03
##	G37031	4.002401e-02	1.550099e-02	1.093599e-02	-1.680741e-02	9.618855e-03
##	G36906	2.893125e-02	-3.518894e-02	7.635357e-03	1.252698e-02	3.745488e-03
##	G37028	9.403191e-03	-3.146960e-02	-2.196257e-02	-9.729883e-04	-1.571193e-02
##	G37014	-1.869447e-02	1.289521e-02	-2.963370e-02	5.164804e-03	1.529834e-02
##	G37010	1.919541e-02	4.018666e-03	-1.084657e-02	-1.083805e-02	-2.161997e-02
##	G36944	1.604117e-02	-3.799741e-04	-1.239707e-02	1.833875e-02	2.639082e-02
##	G36902	1.569190e-02	3.084218e-02	-6.411070e-03	-2.164448e-02	3.888618e-02
##	G37051	-2.018296e-02	4.028183e-02	-2.067956e-03	-9.006372e-03	6.587243e-03
##	G36964	3.854169e-03	5.286478e-03	1.182370e-02	1.899231e-02	2.389940e-02
##	G36951	-2.656514e-02	-1.883778e-02	7.725500e-03	-3.822920e-03	3.242566e-03
##	G37025	-4.136983e-03	-2.635138e-03	1.928907e-02	8.593264e-03	1.722841e-02
##	G36930	2.392808e-02	3.358126e-02	1.106267e-02	9.505439e-03	-3.795384e-02
##	G36935	-3.344932e-02	-1.058558e-02	2.040371e-02	-1.683403e-02	-3.723950e-03
##	G37041	-4.567831e-02	3.003622e-02	2.787433e-02	-1.245866e-02	-2.908430e-03
##	G36959	3.113663e-03	2.067697e-03	-8.021690e-03	-2.611745e-03	5.021634e-04
##	G36905	2.146826e-03	-1.884436e-02	-6.308893e-03	-5.442565e-02	-1.868154e-02
##	G36917	-1.846921e-02	-3.477536e-02	-3.441869e-02	-1.506739e-02	1.319323e-02
##	G36992	-9.540856e-03	-1.253693e-02	-6.346511e-04	-1.332472e-02	-1.775070e-02
##	G36921	-1.236084e-03	-1.890386e-02	3.555096e-03	-1.437784e-02	5.660549e-02
##	G37004	1.644641e-02	-1.699093e-02	1.953827e-02	-7.832807e-03	1.076946e-02
##	G36966	3.022665e-02	-1.662260e-02	5.525066e-02	2.237353e-02	3.541371e-02
##	G36936	8.622183e-03	3.158625e-02	-1.967072e-02	-8.736334e-03	1.448273e-03
##	G37015	-1.532044e-02	-2.675439e-03	-1.374893e-03	-2.481776e-02	-1.798769e-02
##	G37034	-9.815451e-03	-2.397343e-02	2.537400e-02	3.961658e-03	9.367583e-03
##	G36953	-2.500626e-02	-2.652916e-03	3.196609e-02	-2.152413e-02	-1.131922e-02
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## G37052 -3.604769e-02 2.750063e-02 -1.022875e-02 3.038261e-02 -1.934871e-02
## G36925 2.767741e-02 -3.561095e-02 2.854113e-02 5.484634e-03 -1.296872e-02
## G37046 3.166841e-03 -1.690791e-02 1.578620e-02 8.242818e-03 1.518279e-02
## G37053 2.744485e-03 1.222109e-02 4.909862e-02 -1.425435e-03 -4.161781e-03
## G36998 -3.554349e-02 1.615151e-02 -1.664328e-02 -2.197901e-02 -8.040051e-03
## G37045 -1.740939e-03 -9.703049e-03 1.102278e-02 4.945691e-04 1.515884e-02
## G37049 6.728910e-03 -1.328137e-02 -9.936351e-03 -2.417883e-02 -2.691038e-02
## G37019 7.524733e-04 -4.420656e-03 2.038460e-02 2.533223e-02 1.231416e-02
## G36988 9.492125e-03 1.768535e-02 1.495585e-02 -1.737711e-02 -6.918452e-03
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## G37005 2.745839e-03 2.633037e-02 9.556610e-03 2.102758e-03 -1.801854e-02
## G36928 1.760653e-02 -9.597721e-03 8.094288e-03 3.322930e-02 1.759540e-02
## G36923 -3.489712e-02 1.747597e-02 6.813574e-03 -2.522185e-02 5.446887e-02
## G37033 -6.224252e-03 -1.138726e-02 -1.749336e-02 -5.911122e-03 1.434025e-03
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## G37012 1.316593e-02 -1.373886e-03 -1.733436e-02 -7.633760e-03 1.600978e-03
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## G37032 -1.418552e-03 4.127738e-02 1.207013e-02 1.102533e-02 -1.235024e-02
## G36932 -1.098047e-02 -2.407504e-02 3.239304e-02 6.924540e-02 -2.886929e-02
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## G36972 -3.027203e-02 -8.115184e-03 -1.201722e-02 -1.991610e-02 1.453598e-02
## G36968 -1.587145e-02 -2.259632e-02 -1.502199e-02 -9.871888e-03 6.681201e-03
## G36911 -4.499103e-02 -4.175560e-03 -7.656263e-03 2.152074e-02 3.862211e-03
## G36987 -9.057129e-03 -1.204215e-02 1.328796e-03 -1.063216e-02 -1.070168e-02
## G37042 -3.540704e-03 -2.520218e-02 -1.276774e-02 -2.409232e-02 1.302745e-02
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## G37040 3.201848e-03 1.942052e-02 -1.529180e-02 -1.993075e-02 7.296965e-03
## G37027 4.262059e-03 -1.467733e-04 -1.197817e-02 -3.217880e-03 2.066083e-02
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## G37023 1.486422e-02 2.329967e-02 -2.122211e-02 -8.669515e-03 7.731039e-03
## G37036 2.838892e-02 -1.602870e-02 7.827206e-03 -1.933077e-02 4.341110e-02
## G37026 -2.605428e-02 1.846258e-02 -1.462862e-02 3.831020e-02 1.992501e-02
## G37050 4.877325e-03 2.426186e-02 1.528347e-03 2.236202e-02 3.538062e-03
## G36973 3.511148e-03 -1.116907e-02 1.889174e-02 -1.942187e-02 -2.987087e-02
## G36991 -4.985705e-03 1.796406e-02 8.770545e-03 8.592430e-03 -2.426984e-02
## G36904 -1.457635e-02 6.113450e-03 2.913832e-03 9.739605e-03 1.793698e-02
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## G37020 2.488194e-02 6.363701e-03 3.723839e-03 -4.994152e-03 2.261104e-02
## G36910 -1.935638e-03 2.484177e-02 1.072053e-02 1.576983e-02 5.564219e-03
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## G36940 -2.113234e-03 -2.211940e-03 -1.857338e-02 -1.156182e-02 -1.507147e-02
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##	G36938	2.888363e-02	-1.847329e-02	3.944437e-03	-1.189128e-02	1.936758e-02
##	G37022	4.351376e-02	1.546104e-02	5.308925e-06	-2.527052e-03	-9.772297e-03
##	G35534	-1.396077e-02	-1.400914e-03	8.902367e-03	1.175483e-02	1.590350e-02
##	G35535	-7.730808e-03	1.507976e-02	2.172510e-02	6.518933e-03	-2.230199e-02
##	G35361	5.425926e-03	2.717624e-02	-8.806559e-03	2.451781e-02	-8.792015e-03
##	G35364	2.868509e-03	5.303121e-03	-5.398740e-03	1.731615e-02	-8.968999e-03
##	G35433	3.119130e-02	2.116354e-02	4.285200e-02	1.693643e-03	4.708122e-02
##	G35528	-9.406054e-03	2.404673e-02	-1.139286e-02	8.188610e-03	7.665830e-03
##	G35381	-4.322187e-03	1.377798e-02	2.520416e-03	1.276072e-03	-2.759944e-02
##	G35416	3.756294e-02	2.431559e-02	1.299251e-02	1.400326e-02	1.396707e-03
##	G35477	-1.124985e-02	-1.209597e-02	3.389274e-02	4.007791e-02	4.881555e-02
##	G35390	-1.066634e-02	-5.162089e-03	-1.350403e-02	-3.431088e-02	-3.129322e-02
##	G35536	1.812082e-02	7.355726e-03	-2.504523e-02	2.720312e-02	1.933083e-02
##	G35514	2.155711e-03	4.054634e-02	7.094294e-03	-1.882006e-02	-1.961160e-02
##	G35525	-9.935590e-03	2.826887e-02	1.605256e-02	-8.821752e-03	1.734792e-02
##	G35395	-2.421892e-02	1.496822e-02	1.809370e-03	-9.574600e-03	-1.297652e-02
##	G35480	-2.205276e-03	1.438546e-02	6.605727e-03	1.462250e-02	1.699489e-02
##	G35409	2.963987e-02	1.741796e-03	2.306802e-02	1.565123e-02	6.195163e-03
##	G35391	-2.796863e-02	3.183587e-02	1.677700e-02	-6.026653e-03	1.798398e-02
##	G35437	-2.641809e-02	-1.436693e-02	-6.139925e-05	4.016961e-03	3.633818e-02
##	G35511	-3.597572e-02	3.092716e-02	2.529363e-02	1.052702e-02	-7.201838e-03
##	G35448	-2.912857e-02	-2.037170e-02	1.918130e-02	-2.820431e-03	-9.848427e-03
##	G35510	-1.312781e-03	1.648318e-02	1.040924e-02	-7.854564e-03	-5.786271e-03
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##	G35403	3.677452e-02	5.057681e-02	1.320816e-02	1.909608e-02	3.181713e-03
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##	G35442	-2.558196e-02	6.660597e-03	-2.258557e-02	2.426975e-02	-3.497018e-03
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##	G35515	2.092434e-03	9.192884e-03	2.738692e-03	-2.123063e-02	-1.219017e-02
##	G35351	-7.232910e-03	1.335408e-02	1.408708e-02	-3.017530e-02	-4.864450e-03
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##	G35537	6.375522e-03	4.211611e-02	1.947849e-02	-2.960780e-03	1.291767e-03
##	G35520	-1.683569e-02	-2.975718e-02	-1.604519e-03	-1.559703e-02	-2.965846e-02
##	G35370	-5.633620e-03	9.605156e-03	-7.699832e-03	1.809897e-03	5.502393e-03
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##	G35421	-1.803441e-02	1.247715e-02	-5.963496e-03	1.063646e-02	-5.806843e-03
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##	G35419	2.050310e-02	3.483881e-02	-3.922020e-02	-4.356414e-02	4.477045e-04
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##	G35366	1.422819e-02	-2.198762e-02	9.603985e-04	-1.370072e-02	7.801327e-03
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##	G35469	-8.865922e-03	-1.888829e-02	1.251447e-02	3.517027e-03	-1.428525e-02
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##	G35414	2.414053e-02	-2.019303e-02	3.665306e-03	1.709696e-02	1.669429e-02
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##	G35388	-1.774835e-02	-1.042592e-02	1.702708e-03	-2.372280e-02	-2.954077e-02
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##	G35533	-3.599580e-03	-9.089957e-03	-3.062870e-02	-8.009683e-03	4.201974e-02
##	G35406	-1.699256e-03	-7.008315e-03	1.531944e-02	-4.077194e-02	-1.002198e-02
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## G36308 -1.494683e-03 3.991990e-03 2.680444e-03 2.239111e-02 2.891615e-02
## G36209 5.950401e-02 5.564425e-02 3.453369e-02 -2.285485e-02 8.601522e-03
## Axis.146 Axis.147 Axis.148 Axis.149 Axis.150
## G37016 -3.040006e-02 -3.537801e-02 -6.191007e-03 4.819308e-04 5.313799e-03
## G36918 1.481080e-02 -1.022758e-02 -4.817893e-02 1.996564e-02 1.610071e-02
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## G37035 -7.458328e-03 1.763546e-02 -5.027747e-02 7.820334e-04 1.784492e-02
## G36982 3.642675e-02 1.311538e-02 -1.151608e-02 1.514855e-02 3.241947e-03
## G36984 1.089303e-02 4.059235e-03 1.392561e-03 -1.768989e-02 4.557342e-03
## G37030 3.435808e-02 1.630113e-02 -5.372357e-02 2.889685e-03 6.208048e-03
## G37031 3.042999e-02 3.610119e-04 -1.315221e-02 -3.011177e-02 -6.740519e-03
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## G36935 2.181180e-02 -2.749862e-02 3.938773e-02 2.589474e-02 1.268089e-02
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## G37036 -9.333053e-03 2.534471e-02 1.472935e-02 3.540762e-03 -2.734994e-02
## G37026 2.465144e-02 -1.652832e-03 2.579674e-02 2.387937e-02 -1.591119e-02
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##	G36138	-1.075269e-02	-1.453138e-02	-6.118737e-03	3.004545e-02	-8.841151e-03
##	G36203	-8.487739e-03	9.976513e-03	9.735074e-03	1.120478e-03	1.239650e-02
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##	G36274	2.944089e-02	-2.138471e-04	-9.580404e-03	2.689170e-02	-1.490056e-02
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##	G36209	2.092442e-02	1.745032e-02	7.379097e-03	3.821839e-04	4.376749e-03
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##	G37044	1.259677e-02	-1.006970e-04	-5.200543e-03	-2.269334e-02	-8.691174e-03
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##	G37029	-1.982476e-03	-3.133479e-02	-1.389126e-02	-1.097892e-02	2.562085e-02
##	G37035	-5.707675e-03	7.296400e-03	4.515496e-03	6.467807e-03	-2.205285e-03
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##	G37031	-5.440184e-02	-1.181138e-02	3.538397e-02	-9.378919e-03	-1.245269e-03
##	G36906	3.792223e-02	1.009001e-02	5.318975e-03	2.987450e-02	1.177210e-03
##	G37028	-2.197525e-02	4.768258e-03	1.260227e-02	1.163055e-02	2.691444e-02
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##	G37010	2.429697e-03	3.023527e-02	-1.072276e-02	2.750089e-03	-4.379352e-02
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##	G36951	-3.562960e-02	-3.134595e-03	8.318677e-04	-5.737697e-04	-1.425465e-02
##	G37025	2.058537e-03	-9.188226e-03	-5.824903e-03	-6.110269e-03	1.030025e-02
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##	G36905	-2.839520e-02	3.194821e-02	4.135265e-02	2.778056e-02	-1.374067e-02

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## G36272 2.068999e-02 5.862764e-03 2.086879e-02 -3.098067e-02 -2.204595e-02
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##	G36143	-1.765739e-02	3.232312e-04	-1.610435e-02	1.802649e-02	4.358254e-02
##	G36308	-2.582653e-02	4.424491e-03	1.532760e-02	-7.261805e-03	2.132381e-02
##	G36209	-3.895961e-02	-3.701994e-02	5.327828e-02	1.337596e-02	-1.071956e-02
##		Axis.156	Axis.157	Axis.158	Axis.159	Axis.160
##	G37016	-3.944157e-03	-1.628232e-02	-3.880452e-03	-1.426720e-03	4.277085e-03
##	G36918	1.198426e-02	2.255600e-02	1.712006e-02	-1.566269e-02	1.224821e-02
##	G37044	-5.922126e-03	-1.949836e-02	-6.776090e-03	-4.175551e-02	5.601536e-02
##	G37009	-1.756083e-02	2.170723e-02	-1.350513e-03	1.187705e-03	-9.451631e-03
##	G37029	1.237192e-02	8.609907e-03	-1.300519e-02	2.838051e-03	3.067621e-03
##	G37035	-7.236925e-03	5.326006e-03	-2.729705e-02	1.433994e-05	4.686217e-03
##	G36982	1.734820e-03	-1.794822e-02	1.885029e-02	-2.034736e-02	-1.168783e-02
##	G36984	3.036586e-02	-4.428138e-02	1.005781e-02	1.894925e-03	-3.528138e-02
##	G37030	-8.610584e-02	1.775987e-02	1.211467e-02	4.579783e-03	2.346328e-02
##	G37031	-1.768186e-02	-1.202541e-03	3.248829e-02	2.405584e-02	-4.865688e-03
##	G36906	-4.254329e-03	8.370998e-03	3.174114e-02	-8.948440e-03	4.043647e-03
##	G37028	6.698244e-03	-2.911636e-02	8.530460e-03	-8.204970e-03	-1.844581e-02
##	G37014	9.037532e-03	-1.076153e-02	-3.052897e-02	-1.981640e-03	7.101787e-03
##	G37010	-9.538284e-03	6.142275e-03	2.311787e-02	1.324194e-02	9.128441e-03
##	G36944	-6.589710e-03	4.115951e-02	-1.334108e-02	-1.309161e-02	8.431513e-03
##	G36902	-1.941232e-02	-7.291899e-03	1.681037e-02	5.848686e-03	-6.411003e-03
##	G37051	-3.722491e-02	2.680805e-02	9.422420e-03	-3.080505e-02	-2.885322e-04
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##	G37025	-7.626674e-03	1.253501e-02	5.176473e-03	2.760849e-02	-6.684515e-04
##	G36930	-4.540873e-03	-8.674845e-04	-4.297029e-03	9.734544e-03	-2.933876e-02
##	G36935	3.141067e-02	-1.452931e-02	-2.449242e-03	-2.246944e-02	-1.633975e-02
##	G37041	2.076217e-02	-1.039083e-02	-6.495755e-04	-2.125623e-02	4.107156e-02
##	G36959	-1.643317e-02	8.788683e-03	-2.018023e-03	-1.357145e-02	1.962224e-02
##	G36905	2.102202e-02	-2.718735e-02	-5.007691e-02	-3.354723e-02	-3.425349e-03
##	G36917	8.761873e-03	-1.502502e-02	1.796146e-02	1.179285e-02	2.999465e-02
##	G36992	-1.000630e-02	3.220925e-02	-1.756959e-02	2.494073e-02	-1.515033e-02
##	G36921	8.152564e-03	2.472226e-02	2.414918e-02	1.594521e-02	1.254368e-04
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##	G37015	1.311772e-02	-1.760803e-02	-1.663386e-02	1.543001e-02	-1.803389e-03
##	G37034	2.686041e-02	-8.338768e-03	-1.906572e-02	5.276280e-03	6.301834e-03
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##	G37052	1.418016e-02	-3.094252e-02	5.698698e-03	-1.635655e-03	-3.039883e-02
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##	G36988	8.666127e-03	-2.193374e-02	2.379360e-03	9.153901e-03	2.003002e-02
##	G37037	-1.608490e-02	4.533351e-02	2.363548e-03	5.602576e-03	4.911650e-03

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##	G35437	-5.062285e-03	-3.538095e-02	2.203400e-02	3.015837e-02	1.676941e-02
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##	G35465	3.100626e-02	1.646519e-02	-1.834682e-02	2.038463e-02	-2.808714e-02
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##	G35455	1.084630e-03	-2.049623e-03	2.418434e-02	1.414300e-02	1.952696e-02
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##	G35513	8.102691e-03	7.728452e-03	1.175518e-02	-1.038710e-02	-4.321075e-03
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##	G35463	2.356481e-04	-3.117147e-03	-3.799762e-02	4.331604e-02	3.391697e-02
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## G36320 -4.478298e-03 1.603526e-03 5.515172e-03 -5.309141e-03 -2.209566e-02
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## G36180 -6.960948e-03 9.800730e-03 -1.230158e-02 -1.314591e-02 -1.158605e-02
## G36153 1.371264e-02 -1.876550e-02 -1.094067e-02 -1.566994e-02 1.027898e-02
## G36210 2.953122e-02 1.003459e-02 4.624885e-03 8.992302e-03 -2.440656e-02
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##	G36200	4.141578e-02	1.858451e-02	-1.345117e-02	1.200434e-02	-2.635411e-02
##	G36160	1.034609e-02	1.137911e-02	6.028000e-03	2.359906e-02	2.199297e-02
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##	G36244	-3.328888e-02	1.603222e-02	-2.070938e-02	2.049725e-03	9.603959e-03
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##	G36317	-1.162145e-02	2.759742e-02	-2.636529e-02	8.266240e-03	-2.552383e-02
##	G36159	-3.303695e-02	-2.853522e-03	2.667023e-03	-1.965582e-02	5.714181e-03
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##	G36206	-4.516530e-03	-1.695919e-02	-4.586292e-02	-1.614822e-02	2.619213e-02
##	G36257	8.287437e-03	3.007336e-02	2.163787e-02	1.926336e-02	-5.508703e-04
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##	G36309	-2.299240e-02	5.659899e-03	2.110942e-02	-9.131123e-04	-2.055487e-02
##	G36146	-5.351204e-03	-1.665165e-02	-8.662292e-03	7.126063e-03	2.319064e-02
##	G36192	-2.030348e-02	-2.827467e-04	-4.887013e-02	-1.955082e-02	1.305890e-02
##	G36284	-3.792583e-03	-3.107256e-02	-8.893446e-03	3.956381e-03	1.409843e-02
##	G36291	1.427771e-02	2.549407e-04	1.574617e-02	-1.515719e-02	-2.152898e-02
##	G36142	-1.316979e-02	-5.006059e-02	-3.852913e-02	9.433352e-03	-2.329688e-03
##	G36138	2.423556e-03	1.940520e-02	-6.129929e-03	3.101532e-02	-1.474976e-02
##	G36203	-2.401350e-03	-3.233380e-02	5.326873e-03	-9.684047e-03	-1.542881e-03
##	G36282	6.823318e-03	2.413824e-02	-5.473443e-03	-1.803845e-02	-1.795150e-02
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##	G36258	-5.470290e-06	-4.610902e-02	-1.954837e-02	6.346557e-03	-3.176754e-02
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##	G36235	-5.281412e-02	2.034052e-03	-9.817344e-03	-7.846113e-03	-2.031988e-03
##	G36143	4.674739e-02	1.068243e-02	-5.244930e-03	-1.388912e-02	8.245613e-03
##	G36308	-8.411373e-03	2.138417e-04	-3.745054e-03	-7.141620e-03	-9.866606e-03
##	G36209	3.343297e-02	1.400129e-02	-1.318674e-02	8.641895e-03	1.369450e-02
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##	G37009	-1.317963e-02	-6.240942e-03	-9.889084e-04	-3.373194e-02	1.454527e-02
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##	G37035	-8.167326e-03	8.025096e-05	-2.807927e-03	2.315898e-02	-4.793281e-04
##	G36982	1.580492e-02	8.545528e-03	-1.646535e-02	-2.257734e-02	-7.783848e-03
##	G36984	1.682874e-02	2.650491e-03	-4.685743e-03	-7.921815e-03	-2.243106e-02
##	G37030	-1.834935e-02	5.674660e-03	1.463013e-02	-2.977919e-02	1.870494e-02
##	G37031	1.405574e-02	-8.216727e-03	8.926747e-03	-6.804497e-03	1.223384e-02
##	G36906	1.567876e-02	2.299447e-03	1.535854e-02	-1.042249e-02	1.951167e-02
##	G37028	-1.504116e-03	-2.210853e-02	-3.577509e-03	2.261875e-02	-7.803852e-03
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##	G37010	2.017159e-03	3.043935e-03	3.148804e-02	1.466855e-02	-2.562633e-03
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##	G36135	-8.380030e-03	-1.712670e-02	7.606132e-03	2.129934e-02	6.837234e-03
##	G36250	-2.072816e-03	1.203243e-02	-1.693420e-02	-2.049220e-02	1.362368e-02
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##	G36266	-6.213061e-03	2.621652e-02	-1.669234e-03	5.088805e-03	1.489496e-02
##	G36164	-2.772465e-02	-1.537025e-02	9.005014e-03	-4.962532e-03	-5.186300e-03
##	G36215	4.372733e-02	-8.181319e-03	-1.556122e-03	-6.195922e-03	2.105057e-02
##	G36195	4.504371e-03	-3.892861e-03	-7.466691e-03	-1.057165e-02	-4.202092e-03
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##	G36237	1.192523e-03	-2.102323e-02	1.422257e-02	-1.588643e-02	1.352940e-03
##	G36148	5.499196e-03	-2.177534e-02	-1.680693e-03	-2.814198e-02	3.431895e-03
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## G36157 -1.339283e-02 1.238849e-02 -8.656236e-03 -1.205443e-02 -1.864969e-02
## G36262 6.992584e-04 -5.443090e-03 1.460327e-02 1.297614e-02 -5.304512e-02
## G36200 3.238194e-03 -8.668315e-03 1.662579e-02 1.439185e-02 2.259044e-02
## G36160 -4.483837e-03 -1.275067e-03 4.102003e-02 1.843393e-02 5.659900e-03
## G36185 -2.200594e-02 3.288554e-03 -1.870434e-02 8.279899e-03 -1.539741e-02
## G36162 -2.852784e-02 -7.276304e-03 1.641391e-02 2.389779e-03 -1.196995e-02
## G36204 -4.251530e-03 6.374915e-03 9.431516e-03 -6.585167e-02 4.988324e-02
## G36318 1.183375e-02 1.271121e-02 1.818867e-03 5.572795e-03 7.556401e-03
## G36194 -6.829499e-03 -9.042776e-03 1.364750e-03 -1.687684e-02 2.242731e-02
## G36244 -2.692186e-02 2.450872e-02 -1.208572e-02 3.022252e-03 -1.160009e-02
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## G36309 -4.305496e-03 4.454086e-02 -1.548298e-02 -3.485559e-03 -1.964379e-02
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##	G36142	2.257553e-03	2.468331e-02	2.454373e-02	1.653629e-02	2.691534e-02
##	G36138	1.165255e-02	-4.284667e-03	-2.742882e-02	1.435072e-03	-2.060333e-02
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##	G36282	-2.656415e-02	-2.260527e-02	-6.004538e-03	-2.384009e-02	5.113731e-03
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##	G36235	-3.528526e-02	-1.383439e-03	2.412451e-02	-3.116519e-02	-1.194340e-02
##	G36143	-1.034386e-02	-3.691944e-02	2.321760e-02	7.313188e-03	4.398447e-02
##	G36308	-9.339009e-03	7.344933e-04	8.133736e-03	1.930278e-02	2.100773e-02
##	G36209	1.132276e-02	2.401198e-02	5.665989e-03	-5.043849e-03	-1.753915e-02
##		Axis.166	Axis.167	Axis.168	Axis.169	Axis.170
##	G37016	-2.578865e-03	-2.794733e-02	-1.817141e-02	-6.495508e-03	-2.640693e-03
##	G36918	-5.073451e-03	3.276305e-02	1.338929e-02	-2.929107e-03	-2.485436e-02
##	G37044	1.683622e-02	-3.949493e-02	1.598241e-02	-9.543806e-03	-1.110510e-02
##	G37009	-1.083905e-03	3.231044e-03	6.330000e-03	-1.055692e-02	-1.225653e-02
##	G37029	2.082597e-02	-1.541122e-02	-1.353708e-02	-1.134676e-02	9.299865e-03
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##	G36984	1.975613e-02	-9.410303e-03	5.193282e-03	2.982410e-02	-9.779265e-03
##	G37030	-1.296551e-02	-8.295975e-03	-1.388181e-02	2.810168e-02	5.468860e-03
##	G37031	-2.141632e-02	1.286887e-02	-1.574792e-02	9.563434e-03	-3.119620e-02
##	G36906	6.490101e-03	-1.661917e-02	-1.929646e-02	-7.865683e-03	-7.581068e-03
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##	G37014	1.192670e-02	-1.997111e-02	-7.323497e-03	9.437446e-03	-2.489337e-02
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##	G36944	-2.150556e-02	-1.092508e-02	2.186336e-02	2.082067e-03	-2.860354e-02
##	G36902	-2.093109e-02	-8.095152e-03	7.334476e-03	4.298497e-03	2.002098e-02
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##	G37025	-1.234829e-02	2.591301e-02	-1.736033e-02	6.986487e-03	-1.114327e-02
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##	G36936	1.480490e-02	7.079761e-03	2.198129e-02	-3.501947e-03	2.196104e-02
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## G36918 -1.518625e-04 1.787497e-02 -1.637485e-03 -7.981614e-03 8.363339e-03
## G37044 1.236368e-03 -4.603550e-03 -7.566188e-03 -3.568892e-03 -2.550257e-02
## G37009 3.169975e-02 -1.215057e-02 2.362334e-02 4.862360e-03 -2.449062e-02
## G37029 -2.267127e-02 -1.018231e-02 -2.856275e-02 -1.087940e-02 -8.137097e-04

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## G36984 -7.563691e-04 2.528532e-03 -7.357098e-03 2.222650e-04 -1.688233e-02
## G37030 4.995027e-03 -5.154509e-04 5.598910e-02 1.544887e-02 -1.332454e-02
## G37031 4.062946e-03 6.819892e-03 -4.156520e-03 -1.181439e-03 5.716368e-03
## G36906 -1.008821e-02 2.299199e-02 5.244223e-03 1.119921e-02 -9.460503e-05
## G37028 -2.913475e-02 -2.758921e-02 1.102870e-02 -1.122170e-02 -1.151370e-02
## G37014 1.029772e-02 -2.110798e-02 -2.067689e-02 2.096280e-03 -3.384108e-03
## G37010 -2.005224e-02 5.565100e-04 -2.515635e-02 1.203562e-02 1.472831e-03
## G36944 1.572626e-02 4.950527e-04 6.105316e-03 -2.727478e-02 3.089961e-02
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## G36964 -7.411081e-04 -1.668575e-02 2.963570e-02 6.166738e-03 -1.304750e-02
## G36951 -7.166728e-03 -2.292669e-02 -3.193213e-03 -1.801479e-02 2.397455e-03
## G37025 -7.519312e-03 -1.722233e-03 -2.415494e-02 5.769622e-03 -8.284105e-04
## G36930 2.026104e-02 -1.674727e-02 -3.255258e-03 -1.867399e-02 -1.562812e-02
## G36935 -2.309848e-02 9.548188e-03 -8.768701e-03 2.513481e-02 -1.418960e-02
## G37041 1.831969e-02 -6.650842e-03 -9.943448e-03 1.173675e-02 1.238674e-02
## G36959 -9.167093e-03 3.111483e-04 2.601550e-02 3.109996e-03 4.466636e-03
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## G36917 -1.468298e-02 9.601927e-03 1.918219e-02 1.337448e-02 2.059611e-02
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## G36921 9.930562e-03 -2.812072e-02 4.313311e-03 4.704510e-02 8.122911e-03
## G37004 -8.085739e-03 -1.270063e-02 -5.324306e-03 -2.141959e-02 -6.551481e-03
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## G36936 7.458821e-03 -4.075900e-04 6.726579e-04 2.853843e-02 -1.318311e-02
## G37015 -3.820162e-03 1.033286e-02 -1.180460e-02 -1.316979e-02 -5.808109e-03
## G37034 -3.699067e-03 -1.821490e-02 -2.607574e-02 -1.213562e-02 3.726310e-03
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## G36937 4.434047e-02 1.968339e-02 3.183211e-02 7.386558e-03 -1.740580e-02
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## G36968 2.046962e-02 1.165255e-03 -8.067878e-03 2.550725e-03 1.170884e-02
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## G37042 1.261963e-03 9.745019e-03 -1.907600e-02 -1.822182e-03 2.545395e-02
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## G37027 1.041593e-02 -3.768671e-02 6.500559e-03 8.677825e-03 -4.195996e-04
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## G37036 -2.325408e-02 2.799388e-02 -1.415693e-02 1.974792e-02 1.728587e-02
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## G37050 -1.797336e-04 -5.376210e-03 2.201402e-03 7.631750e-03 8.982128e-03
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## G36991 8.358770e-03 -2.673251e-02 -1.563810e-02 1.846572e-02 8.914514e-03
## G36904 -2.986131e-02 1.214165e-02 -1.544459e-02 -1.056020e-02 3.535788e-02
## G36958 -5.156472e-03 8.459959e-03 -6.810261e-03 -2.055300e-03 -2.447065e-02
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## G37020 -7.182812e-03 -1.248061e-02 -3.456406e-03 1.205531e-02 2.880802e-02
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## G35433 -1.093900e-02 9.026429e-03 -6.700753e-03 3.050012e-02 1.888072e-03
## G35528 3.921502e-03 -2.207331e-02 -1.465143e-02 7.946233e-03 -2.982212e-03
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## G35476 2.464167e-02 1.011988e-02 -1.490810e-02 5.924660e-03 4.227662e-03
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## G35520 9.965407e-03 1.422760e-03 2.271998e-02 5.558788e-02 -1.345659e-02
## G35370 5.137753e-03 -1.549039e-02 -2.420914e-02 5.502690e-03 9.706143e-03
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##	G36195	-1.864586e-02	-1.090452e-02	-2.853972e-03	5.222774e-04	-3.131425e-04
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##	G36237	-5.274343e-03	8.110261e-04	2.344590e-02	1.870469e-03	-1.568407e-02
##	G36148	1.544591e-02	2.113624e-02	2.154882e-02	-4.271841e-03	-9.568620e-03
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##	G36240	3.102829e-03	-1.256365e-02	4.798055e-02	7.936804e-03	1.150041e-02
##	G36249	1.255488e-03	-2.091683e-02	5.760914e-03	2.822409e-02	-6.629575e-03
##	G36298	-8.635490e-04	-5.305204e-03	-2.945425e-03	-4.003789e-02	1.493284e-03
##	G36176	2.787343e-02	7.437310e-03	-1.441105e-02	1.088654e-02	1.212777e-02
##	G36214	-1.571497e-02	1.493228e-03	-4.396926e-03	-6.168849e-03	1.545227e-02
##	G36230	-7.726927e-03	5.123274e-03	1.550995e-02	-7.663997e-03	9.911090e-03
##	G36320	2.469746e-02	1.999391e-02	2.483781e-03	-1.825029e-03	-6.769224e-03
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##	G36172	3.400340e-04	2.065029e-02	1.943442e-03	-2.614496e-02	-2.319132e-02
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##	G36210	5.784727e-03	1.642426e-02	-1.288524e-02	1.551344e-03	2.877731e-03
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##	G36158	-4.421703e-03	4.401246e-03	-2.569357e-02	1.672759e-03	1.021790e-02
##	G36233	-2.660043e-02	-2.666661e-03	6.165212e-03	3.858569e-03	2.457089e-03
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##	G36175	-1.071580e-02	-1.614430e-02	2.139786e-03	-1.958179e-02	1.898375e-02
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##	G36192	-2.130640e-02	-3.025708e-03	-2.322527e-02	7.868785e-03	1.941870e-02
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##	G36235	2.276657e-02	3.080134e-03	-1.035383e-02	-4.176883e-03	-2.179852e-02
##	G36143	4.238476e-02	1.762514e-02	-2.434462e-02	1.074838e-03	2.262541e-03
##	G36308	2.069369e-02	8.908321e-03	-5.132264e-03	-1.378506e-02	-2.493788e-02
##	G36209	2.628381e-02	-3.057170e-02	4.196333e-02	4.454104e-03	2.749932e-03
##		Axis.176	Axis.177	Axis.178	Axis.179	Axis.180
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##	G37035	5.293701e-03	1.678542e-02	-1.847911e-02	1.513811e-02	-9.737246e-03
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##	G37051	2.055252e-02	1.437243e-02	-4.636632e-03	-8.175263e-03	4.734040e-03
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## G36269 -1.873996e-02 2.513871e-02 -1.582886e-02 -1.004371e-02 -3.326074e-03
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## G36259 1.662216e-02 9.379862e-03 -2.058947e-03 1.335766e-02 8.207586e-03
## G36229 -2.069612e-02 4.863051e-03 -1.367628e-03 -6.840670e-03 -3.091821e-02
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## G36151 -1.870385e-03 -2.080350e-02 -1.273772e-02 -3.517503e-03 2.418197e-02
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## G36322 -1.925397e-02 2.531748e-02 1.531520e-02 2.115326e-03 1.069893e-02
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## G36146 -6.242256e-03 -1.472490e-02 1.993279e-02 1.847681e-02 1.657177e-02
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##	G36209	-2.977232e-04	-1.241005e-02	9.452664e-03	2.544222e-02	3.620736e-03
##		Axis.181	Axis.182	Axis.183	Axis.184	Axis.185
##	G37016	1.083740e-02	5.287648e-03	2.979946e-03	-8.905562e-03	-8.983535e-03
##	G36918	3.473203e-03	-2.427842e-02	1.166794e-02	2.341609e-02	2.215934e-02
##	G37044	7.477872e-03	-1.336899e-02	2.338964e-02	-1.334456e-02	3.958014e-03
##	G37009	1.313018e-02	-1.205441e-02	1.342021e-02	-1.115411e-02	2.625967e-02
##	G37029	4.767014e-05	9.464388e-03	3.231732e-03	-1.821777e-04	-8.648223e-03
##	G37035	1.269365e-02	-7.493400e-03	6.039938e-03	-1.426984e-02	-2.883413e-02
##	G36982	7.893156e-03	-2.464876e-02	1.591209e-02	-3.301212e-03	-2.002546e-02
##	G36984	-2.854047e-02	-2.269294e-02	-2.154072e-02	-1.592771e-02	1.734543e-02
##	G37030	-1.020404e-02	3.421080e-02	2.408079e-02	3.609472e-02	-1.677857e-02
##	G37031	1.331862e-02	-3.304634e-02	-1.652174e-02	-8.326423e-03	-2.305535e-02
##	G36906	8.696775e-03	-6.041367e-03	1.125394e-02	2.381314e-02	-6.178962e-03
##	G37028	-1.688623e-02	-7.982861e-03	-1.522163e-02	-8.243947e-03	-2.367617e-03
##	G37014	-1.001620e-02	1.859673e-03	-1.429017e-02	-1.085262e-02	-1.207299e-03
##	G37010	1.236601e-02	-1.405404e-02	-1.270782e-02	-5.910305e-03	5.786563e-04
##	G36944	1.002344e-02	1.377598e-02	1.161434e-02	2.044215e-02	6.906101e-03
##	G36902	6.032171e-03	-1.853656e-03	-8.045765e-03	3.617732e-03	-1.137992e-02
##	G37051	1.534830e-02	-2.821209e-02	-1.339909e-02	-1.203827e-02	-1.075131e-02
##	G36964	1.367062e-02	4.396438e-03	1.060548e-02	1.422716e-02	1.583821e-02
##	G36951	-1.064050e-02	3.037759e-02	1.057970e-02	-1.491618e-02	1.430642e-02
##	G37025	3.006089e-02	9.148034e-03	9.004376e-03	3.156516e-03	1.251201e-02
##	G36930	2.022018e-02	1.365757e-02	1.922542e-02	-4.885799e-03	4.602286e-03
##	G36935	1.540563e-03	-1.998461e-03	-1.369451e-02	-8.855089e-04	5.318851e-03
##	G37041	1.429432e-02	1.071393e-02	-1.816710e-02	2.372060e-03	1.434854e-02
##	G36959	-1.281892e-03	-7.610961e-03	-2.302599e-02	-5.799424e-03	1.845655e-02
##	G36905	3.941365e-02	3.199411e-03	-2.345632e-02	-2.584854e-03	-1.698024e-02
##	G36917	5.146548e-03	-1.589417e-02	3.048971e-02	-9.217612e-03	-1.420958e-02
##	G36992	-8.825184e-03	6.008501e-03	9.607321e-03	-8.554280e-03	1.044255e-03
##	G36921	-4.586412e-02	-9.482013e-03	-5.821081e-03	-1.310344e-02	-5.148598e-03
##	G37004	-1.749780e-02	8.133831e-03	-7.617991e-03	-1.036985e-03	2.966764e-02
##	G36966	1.086628e-02	1.371210e-02	9.385912e-02	-3.538881e-02	-2.353233e-02
##	G36936	-1.722431e-02	-1.891117e-02	-9.573318e-03	1.478423e-02	1.424516e-03
##	G37015	7.026244e-03	3.951491e-03	1.285682e-02	2.459504e-03	-3.293885e-04
##	G37034	7.114382e-03	1.964882e-02	8.963300e-03	1.083571e-02	6.046669e-03
##	G36953	1.688418e-02	-1.127255e-02	2.264922e-03	-8.819428e-03	1.292756e-02
##	G36974	3.000801e-02	1.360815e-02	-2.283176e-02	2.980578e-02	-9.609772e-04
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##	G37053	7.224874e-03	1.467340e-02	-1.823059e-02	2.710754e-02	9.748976e-03
##	G36998	-8.113730e-03	-8.246576e-03	3.137709e-03	-3.753233e-03	-1.429922e-02
##	G37045	5.459687e-03	-1.680726e-02	-2.791546e-02	3.643329e-02	5.863755e-03
##	G37049	-7.824109e-03	-1.269954e-02	1.443419e-02	-1.066145e-02	2.013555e-02
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##	G37005	7.080009e-04	-1.317842e-02	-4.938792e-04	6.820740e-03	-1.887768e-02
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## G37017 -2.303291e-02 -1.115134e-02 3.112517e-03 -1.964593e-02 -6.384509e-03
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## G36212 3.269406e-02 5.215078e-03 -1.070548e-02 -2.889270e-03 3.482258e-03
## G36180 2.608732e-02 -1.571008e-02 5.458087e-05 1.092403e-02 2.379161e-02
## G36153 6.963388e-03 1.131136e-02 -2.091583e-03 -1.924089e-03 -2.736642e-02
## G36210 -2.320882e-03 1.605013e-03 -4.979059e-03 -3.919702e-03 -7.883044e-03
## G36303 2.172578e-02 2.589369e-03 -9.544204e-03 5.564912e-03 4.635724e-03
## G36193 2.638233e-02 -2.102225e-02 4.589175e-03 4.563870e-04 -1.209779e-02
## G36151 -7.958672e-03 -2.423155e-02 -1.099599e-02 3.577647e-03 1.624770e-03
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## G36239 1.408005e-02 -1.397044e-02 2.751928e-02 -6.101876e-03 -1.160693e-02
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##	G36160	-5.013424e-04	-4.823285e-03	3.790645e-03	-1.388554e-02	2.806356e-02
##	G36185	1.550803e-03	3.066862e-02	-1.043118e-02	1.722483e-02	1.824372e-02
##	G36162	8.196045e-03	-3.469024e-03	1.411960e-02	-4.911697e-03	3.126338e-02
##	G36204	1.148108e-02	5.662352e-03	-1.186908e-02	1.858871e-03	3.234874e-02
##	G36318	4.894271e-03	-1.362916e-02	-1.112630e-02	-4.863522e-03	-2.232438e-02
##	G36194	-1.428422e-02	-7.752905e-03	-4.377021e-03	-5.106971e-03	3.692954e-03
##	G36244	-1.538034e-02	-1.473916e-03	-7.011272e-03	2.492620e-02	-1.927688e-02
##	G36197	1.982569e-02	-6.449199e-03	6.921935e-03	3.395221e-03	7.305835e-04
##	G36264	8.759490e-03	2.930131e-02	8.525685e-03	2.159338e-02	-6.298673e-03
##	G36317	4.535585e-03	-4.420902e-02	2.303096e-03	-4.580500e-03	5.995545e-03
##	G36159	-1.005885e-03	-1.236758e-02	-6.218559e-03	-3.779064e-03	-2.746438e-03
##	G36234	-4.537679e-03	2.639544e-02	2.272675e-02	1.021021e-03	2.035903e-03
##	G36206	1.492536e-02	2.763418e-02	9.636568e-03	-1.841310e-02	-1.539558e-02
##	G36257	-3.045780e-03	9.815678e-04	-4.681197e-03	1.604164e-04	-9.115312e-03
##	G36216	4.449378e-02	-4.087362e-03	1.030038e-02	-2.956692e-02	6.893395e-03
##	G36208	1.496434e-02	-1.069544e-02	1.610209e-02	-2.338983e-02	9.862497e-03
##	G36309	-3.860706e-02	-4.100344e-03	1.061726e-02	6.514037e-03	-1.227036e-03
##	G36146	-7.011423e-03	1.511392e-02	1.090379e-02	9.106054e-03	1.343907e-02
##	G36192	-3.699563e-02	-8.807901e-03	2.418762e-02	-1.967305e-02	9.316823e-03
##	G36284	8.128232e-03	-7.344819e-03	-2.306893e-02	2.619225e-02	1.377267e-03
##	G36291	-4.818465e-03	-3.292104e-02	6.753728e-03	1.562940e-02	2.102992e-02
##	G36142	-3.167809e-02	-4.006169e-03	2.480128e-03	-1.226296e-02	1.104459e-02
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##	G36203	-1.370868e-03	1.630243e-02	1.017633e-02	-1.224712e-02	-6.021279e-03
##	G36282	2.031341e-02	-8.705873e-03	-1.245955e-02	-1.158467e-02	-5.484117e-03
##	G36290	1.411125e-02	6.900429e-04	-1.890488e-02	-3.168591e-03	1.255781e-03
##	G36274	-2.316192e-02	1.890759e-02	-2.237745e-02	2.093808e-02	9.863194e-03
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##	G36258	2.842042e-03	1.508721e-02	1.302484e-02	2.948295e-03	2.355484e-02
##	G36147	-5.203953e-03	2.124279e-03	-9.133346e-03	-2.923229e-02	-1.033645e-02
##	G36235	-3.284760e-02	9.662706e-03	5.256375e-03	-2.086057e-03	1.221176e-02
##	G36143	1.502238e-02	-1.260804e-03	-2.621426e-04	2.887157e-02	-2.477890e-03
##	G36308	1.219305e-02	-6.808054e-03	7.038319e-03	-4.147118e-03	2.943617e-03
##	G36209	1.055537e-02	2.713117e-02	2.666076e-02	8.271933e-03	1.112050e-02
##		Axis.186	Axis.187	Axis.188	Axis.189	Axis.190
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##	G36918	-2.766637e-03	1.642047e-02	1.980893e-02	1.084269e-02	-1.774207e-02
##	G37044	4.822876e-03	2.873451e-02	-1.884662e-03	7.436581e-03	-1.341515e-02
##	G37009	-1.585362e-02	1.590636e-02	-1.894989e-03	3.505169e-03	2.629135e-02
##	G37029	1.473757e-03	-5.448808e-03	1.763905e-02	1.004261e-03	-2.095605e-03
##	G37035	-2.570381e-02	-6.600286e-03	-1.112673e-03	-2.684607e-03	1.042344e-02
##	G36982	-2.810995e-03	-1.027574e-02	6.073750e-04	-1.808832e-02	6.375165e-03
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##	G37030	8.753099e-03	-2.839723e-02	3.047984e-03	-4.803413e-02	1.187902e-02
##	G37031	1.301838e-02	7.402919e-03	-1.039475e-02	6.050503e-03	1.112776e-02
##	G36906	1.416441e-02	2.668403e-02	-2.499117e-02	-1.074652e-02	2.092512e-02
##	G37028	-2.801568e-03	6.928213e-04	2.576006e-02	6.982854e-03	-1.353423e-04
##	G37014	-1.244767e-02	1.706296e-03	-1.653556e-03	-9.625804e-03	2.308185e-02
##	G37010	2.174175e-03	3.731726e-03	-1.781211e-02	-5.378588e-03	-1.225363e-02
##	G36944	-2.737044e-03	-1.017350e-02	-1.970232e-02	-1.258545e-02	2.934838e-04
##	G36902	-3.363226e-03	3.732268e-03	2.541494e-02	-1.812007e-02	-7.900388e-03
##	G37051	-1.847027e-02	-1.330024e-02	-4.020827e-04	1.588348e-02	-1.302957e-02


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## G36930 -3.013777e-03 1.927510e-02 1.204670e-02 -2.902400e-02 -3.246756e-02
## G36935 2.554385e-03 -2.276007e-03 1.024824e-02 3.196738e-02 -3.728820e-03
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## G36905 2.080956e-02 -1.261504e-02 -2.347089e-02 1.976911e-02 -8.924169e-03
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## G36921 -6.270890e-03 1.158979e-02 4.968133e-02 3.688949e-03 3.039344e-02
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## G36197 -4.080778e-03 1.610359e-02 -1.051520e-02 1.180979e-02 1.765739e-02
## G36264 -1.040925e-02 9.133638e-03 -1.196936e-02 1.589293e-02 -3.930732e-03
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##	G36138	-1.302941e-02	-1.120423e-02	-2.117854e-03	-1.749946e-02	9.170044e-03
##	G36203	1.576372e-02	-1.869152e-02	2.309859e-02	-1.069949e-02	4.163858e-02
##	G36282	1.539786e-02	-7.128798e-03	-3.326017e-03	3.057580e-04	-1.780034e-04
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##	G36274	1.760537e-02	-2.228453e-03	-7.438259e-03	2.913408e-02	-1.431492e-03
##	G36314	1.630427e-02	6.868161e-03	3.847841e-03	2.038572e-02	2.165874e-02
##	G36258	8.019880e-03	4.399587e-03	-7.066135e-03	2.815200e-02	1.294857e-02
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##	G36235	4.227586e-03	3.699031e-03	2.642796e-02	-1.487367e-02	3.557246e-03
##	G36143	-1.469200e-02	6.916754e-03	3.973149e-05	-1.099795e-02	-1.031769e-02
##	G36308	-3.039499e-02	-8.952135e-03	-5.561862e-03	-2.614074e-03	-2.999637e-02
##	G36209	-2.426806e-02	5.652330e-04	-8.621558e-03	2.084510e-03	3.363125e-03
##		Axis.191	Axis.192	Axis.193	Axis.194	Axis.195
##	G37016	-4.511352e-03	-3.253305e-02	-1.712406e-02	8.784362e-03	-2.471766e-02
##	G36918	1.241348e-02	-2.387160e-02	-1.065296e-02	-4.031230e-03	1.084803e-02
##	G37044	-2.458986e-03	-5.503640e-03	1.260495e-02	-1.199206e-02	-1.014521e-02
##	G37009	-3.374667e-02	-1.109208e-02	1.971207e-02	1.456733e-02	-2.713791e-02
##	G37029	2.022266e-03	-1.035580e-02	-3.885477e-03	1.382137e-02	-4.962372e-03
##	G37035	6.366027e-03	-7.049691e-04	1.889957e-03	-1.075151e-02	-3.817123e-03
##	G36982	-5.809670e-03	7.826797e-03	-3.006162e-02	-3.516305e-03	4.232562e-03
##	G36984	8.519654e-03	-7.043090e-03	1.999800e-03	1.553283e-02	-2.622091e-02
##	G37030	-3.420534e-03	-9.507338e-03	2.436200e-02	-3.291961e-02	8.608261e-03
##	G37031	-2.033427e-03	-2.253745e-02	2.168873e-02	2.947458e-02	2.624920e-02
##	G36906	6.198934e-03	8.387451e-03	-5.303555e-03	3.530900e-03	7.585905e-03
##	G37028	-1.405208e-02	8.728836e-03	-8.729071e-03	2.591437e-03	1.027684e-02
##	G37014	-2.431666e-02	-6.288717e-05	1.835948e-02	-2.060626e-02	-1.611670e-02
##	G37010	1.050897e-02	8.507651e-03	3.167958e-03	2.160989e-02	1.734654e-02
##	G36944	-6.289067e-03	-3.405949e-03	5.089747e-02	8.883273e-03	-1.630475e-02
##	G36902	1.981114e-02	6.128611e-03	-9.653187e-03	-7.666725e-03	-2.671333e-02
##	G37051	1.617862e-02	2.574262e-03	1.147145e-02	-8.732894e-03	7.350759e-03
##	G36964	1.799684e-02	6.504977e-03	-1.430526e-02	1.033118e-02	-9.729872e-04
##	G36951	-1.367843e-02	-7.511964e-03	1.040216e-02	-1.382398e-02	-1.435894e-02
##	G37025	5.504396e-03	6.904993e-03	-2.988304e-02	-7.162654e-03	-2.456909e-02
##	G36930	7.258594e-04	7.023537e-04	1.312190e-02	-1.460605e-02	-1.258345e-02
##	G36935	9.938380e-03	-4.207428e-03	7.697575e-04	-4.055533e-04	2.444855e-03
##	G37041	2.814901e-02	-5.273410e-03	8.897089e-03	-1.730649e-02	6.155389e-03
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##	G36917	7.163515e-03	-2.627705e-02	4.018749e-03	-1.845748e-03	7.907520e-03
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##	G36921	2.796985e-02	5.058301e-03	-1.182150e-02	-3.163202e-03	1.509474e-02
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##	G36966	1.467727e-02	-6.475027e-03	-1.881542e-02	9.103469e-03	5.124347e-04
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##	G37034	-7.913479e-03	-1.501398e-02	-1.113286e-03	1.850392e-02	-7.584558e-03
##	G36953	-6.843371e-03	1.886794e-02	4.840478e-03	1.628311e-02	3.541889e-04
##	G36974	-1.612145e-02	-6.072291e-03	1.677291e-02	1.645107e-02	3.542215e-02
##	G37039	-3.553639e-02	1.407192e-02	-1.853283e-02	-5.935153e-03	-4.165713e-04
##	G36933	3.312089e-03	-9.315527e-03	1.047554e-02	2.651746e-02	-7.150680e-03
##	G37052	7.344161e-03	1.712073e-02	2.400101e-02	-1.256061e-02	-5.081489e-02
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## G37005 8.837210e-03 -2.203582e-02 3.957549e-03 -4.590980e-03 5.154012e-03
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## G37017 1.844336e-03 1.225427e-04 1.206481e-02 -1.164928e-03 1.746598e-03
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##	G35423	-6.252863e-03	-1.857806e-02	-2.766402e-02	1.654598e-02	-2.262357e-03
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##	G35394	1.167783e-02	1.685559e-02	2.061295e-03	2.223888e-02	6.707397e-03
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##	G35356	1.942001e-02	-2.755381e-02	7.532513e-03	1.551987e-02	9.107755e-03
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##	G35505	-8.377071e-03	-4.065617e-03	3.330674e-03	5.904888e-03	1.089017e-02
##	G35447	-3.038023e-02	-1.542857e-02	-1.942296e-02	2.837669e-02	-7.641663e-03
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##	G35464	4.708092e-03	3.063331e-02	8.526761e-03	2.728364e-02	-7.846740e-03
##	G35497	-2.770678e-02	-2.042371e-02	-5.516101e-03	-1.178054e-02	-1.845211e-02
##	G35373	-1.064113e-02	-1.039045e-02	1.608621e-02	1.429969e-02	8.388973e-04
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##	G35352	-7.147281e-03	7.362525e-03	-5.861838e-03	-1.025421e-02	8.997282e-03
##	G35366	-5.322182e-03	-5.945731e-03	-1.090825e-02	1.198231e-02	-1.146980e-02
##	G35530	2.092955e-03	-8.197466e-03	2.789436e-02	-1.762694e-02	5.554331e-03
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##	G35372	5.910523e-03	-8.330691e-03	-2.349168e-02	1.462582e-04	1.476958e-03
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##	G35513	-5.131536e-03	-1.537689e-02	-3.377454e-02	-4.839655e-03	-8.237261e-03
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##	G35527	-2.498253e-03	2.020453e-03	1.232231e-02	-2.071111e-03	1.870574e-02
##	G35516	1.314085e-03	-2.691694e-02	1.266956e-02	-2.099670e-04	1.484779e-02
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##	G36196	-5.256024e-03	-9.764564e-03	-2.578489e-03	-1.003440e-02	5.950905e-03
##	G36219	-3.598540e-03	2.064552e-02	-1.442958e-02	-4.064831e-03	-1.004064e-02
##	G36299	2.354676e-02	4.066735e-03	-3.007374e-02	1.732029e-02	1.681546e-02
##	G36137	-8.881454e-03	5.916990e-03	-1.560643e-02	7.522389e-03	-9.515069e-03

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## G36226 -3.009640e-03 -6.389713e-03 -1.742656e-03 1.662663e-02 -3.901124e-03
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## G37035 -2.095991e-02 5.127106e-03 -3.150584e-03 4.132219e-03 2.187987e-02
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## G35414 -3.752314e-04 1.126418e-02 1.072097e-02 1.143250e-02 1.957941e-02
## G35412 -1.566415e-02 2.148068e-03 1.736148e-02 2.028038e-03 -7.181170e-03
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##	G36257	1.041841e-02	-5.671462e-03	2.272138e-03	-1.134199e-02	1.537669e-02
##	G36216	4.494785e-03	3.320877e-02	1.710195e-02	-3.789513e-03	-2.052094e-02
##	G36208	-2.040103e-03	-5.800134e-03	2.124635e-02	1.389325e-02	1.260929e-02
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##	G36203	-1.310891e-02	1.099897e-02	1.407117e-02	-3.751797e-03	-1.178583e-02
##	G36282	-1.059707e-02	1.888060e-02	-1.772243e-02	8.121632e-03	-2.921045e-02
##	G36290	-4.284358e-03	2.619841e-02	-1.927108e-02	-2.666004e-02	6.647220e-03
##	G36274	2.412998e-02	1.862879e-02	-5.998357e-04	3.973230e-03	-9.027277e-03
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##	G36143	6.358063e-03	1.280642e-02	-1.541017e-02	-2.074402e-02	-1.717483e-02
##	G36308	1.084228e-02	1.712001e-02	1.405186e-02	-1.359306e-02	1.065445e-02
##	G36209	2.664001e-03	1.598374e-02	1.602082e-02	-6.040490e-03	1.821562e-02
##		Axis.201	Axis.202	Axis.203	Axis.204	Axis.205
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##	G37044	6.638576e-03	5.268235e-03	2.512099e-02	7.522635e-03	-4.617811e-03
##	G37009	1.621907e-02	2.712423e-02	1.808810e-03	9.553574e-03	1.616166e-02
##	G37029	8.242660e-03	4.286042e-03	-3.279819e-02	1.628340e-02	1.230651e-02
##	G37035	2.573675e-02	-3.697956e-03	-1.113030e-02	9.454606e-03	1.392343e-02
##	G36982	1.291996e-02	-9.490520e-03	7.638496e-03	2.337657e-03	1.079796e-02
##	G36984	-1.616280e-02	1.076607e-02	7.207299e-04	-7.704000e-04	-1.419853e-02
##	G37030	1.718018e-03	6.763447e-03	-9.169797e-03	-4.008001e-03	-2.455580e-03
##	G37031	-9.368580e-03	3.593933e-03	1.632629e-02	-1.440025e-02	4.892016e-03
##	G36906	-2.852923e-03	-8.616639e-03	-6.946203e-04	-3.558303e-02	2.509283e-02
##	G37028	-3.217873e-02	-1.019247e-02	7.274598e-03	-9.854104e-03	-4.772134e-03
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##	G37010	1.848713e-02	3.052595e-03	-1.006439e-02	-1.616380e-02	-3.996050e-02
##	G36944	-5.564277e-03	-3.052370e-03	2.385531e-02	-1.638822e-02	7.163849e-04
##	G36902	2.482544e-02	-2.561459e-02	4.833496e-03	3.592106e-04	-7.776224e-03
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##	G36964	-1.059622e-02	1.867024e-02	1.706364e-02	4.150507e-03	1.932714e-02
##	G36951	-1.021521e-02	1.558856e-02	-8.060857e-03	4.088382e-03	-5.782739e-03
##	G37025	1.376445e-02	5.218215e-03	-1.687642e-03	1.891275e-03	2.671699e-02
##	G36930	3.147395e-03	-1.931666e-02	-7.072362e-03	4.000358e-03	7.386676e-03
##	G36935	5.717637e-03	-8.010664e-03	3.429460e-02	-1.677782e-02	1.256547e-04
##	G37041	-3.105528e-02	-6.711580e-03	-7.128287e-03	2.818673e-02	1.894613e-02
##	G36959	7.510059e-03	-1.983224e-02	-2.455898e-02	2.010613e-03	3.817170e-03
##	G36905	1.292821e-02	2.301465e-02	1.093884e-02	1.450550e-03	1.605437e-02
##	G36917	1.306675e-02	-3.328889e-03	2.136628e-03	-2.380614e-02	1.524968e-03
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##	G36921	1.650403e-02	-2.104802e-02	7.822794e-03	-1.559573e-02	-2.124551e-02
##	G37004	-1.616056e-02	-7.446362e-03	3.242859e-04	-7.629142e-03	-4.087991e-03

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##	G36219	7.770940e-03	-5.784198e-03	-4.456821e-03	9.933824e-03	1.608125e-03
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##	G36137	1.877608e-03	-7.480168e-03	2.428961e-03	-4.204184e-03	1.405241e-02
##	G36273	-5.628467e-03	-5.276763e-03	4.575724e-03	-1.680905e-02	-1.987168e-02
##	G36201	-1.029106e-02	2.515271e-02	-1.394102e-03	-5.499391e-03	7.263956e-03
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##	G36135	-1.114991e-04	-5.715473e-03	-1.166903e-03	-2.734574e-03	7.467767e-03
##	G36250	5.881235e-03	-1.584915e-02	-1.633687e-02	1.237146e-02	-2.281528e-02
##	G36225	7.292258e-03	8.642533e-03	-1.976618e-02	9.528211e-03	-6.085991e-03
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##	G36285	-4.617297e-03	-2.986744e-02	-1.803740e-02	8.853700e-03	2.439128e-02
##	G36259	-1.796952e-03	1.515422e-02	-3.364352e-02	-4.344643e-03	4.025473e-03
##	G36229	1.219774e-02	8.902565e-03	-1.197258e-02	1.707156e-03	4.785521e-03
##	G36155	-1.685868e-02	-1.300721e-02	-1.600267e-02	2.505162e-05	-2.252532e-02
##	G36251	6.817323e-03	4.538345e-03	5.673661e-03	1.874829e-03	1.836116e-02
##	G36297	-1.971814e-02	-9.791728e-03	-2.332004e-02	4.787038e-03	1.299227e-02
##	G36170	5.655930e-03	3.953494e-03	2.139909e-02	1.173206e-02	2.753892e-02
##	G36241	1.386170e-02	8.246746e-04	2.293062e-02	-1.430910e-02	9.935025e-03
##	G36224	-2.326511e-03	1.891361e-02	1.841715e-02	1.317169e-02	2.776077e-02
##	G36169	-8.537073e-03	2.406183e-02	1.494652e-04	6.532443e-03	1.556488e-02
##	G36266	1.507944e-02	-1.704520e-02	2.116701e-02	1.112223e-03	1.865167e-02
##	G36164	-7.425803e-04	3.490984e-03	2.188573e-02	-3.744748e-02	9.308405e-03
##	G36215	7.439189e-03	4.670546e-03	1.624302e-03	7.280768e-03	-1.018321e-03
##	G36195	-4.466310e-03	-7.279565e-03	4.615040e-03	-5.836564e-03	6.843979e-05
##	G36205	-2.095329e-04	1.021156e-02	8.630568e-03	-1.828892e-02	1.418788e-02
##	G36246	-1.574521e-02	2.403568e-02	1.675470e-03	1.754944e-02	-7.551222e-03
##	G36150	1.102409e-03	6.731826e-04	5.688276e-04	-8.177612e-03	1.898254e-03
##	G36237	2.293996e-03	8.373204e-03	-3.926671e-03	2.797023e-03	-8.616726e-03
##	G36148	1.652974e-02	8.946043e-03	1.035799e-02	-2.339318e-03	3.931242e-03
##	G36213	8.882059e-03	-1.295664e-02	-8.775564e-03	-4.036424e-03	-3.792550e-04
##	G36232	1.140289e-03	9.481411e-04	-1.306199e-02	2.313075e-02	-7.500309e-03
##	G36240	-3.160191e-02	-1.154597e-02	6.873079e-03	-2.737926e-03	1.895485e-02
##	G36249	-5.339680e-04	4.183889e-03	7.217588e-03	-1.617415e-02	-1.033308e-03
##	G36298	1.707971e-03	-5.949774e-03	-1.975241e-02	-2.481316e-02	6.031895e-03
##	G36176	-1.142017e-02	-1.367534e-02	-7.221173e-04	1.883630e-03	1.341079e-02
##	G36214	-1.129310e-02	-1.859049e-03	-1.729544e-03	-1.518113e-02	-2.184278e-02
##	G36230	1.590946e-02	1.280005e-02	-9.204506e-03	3.103935e-03	9.547044e-03
##	G36320	1.221731e-02	1.084191e-02	-5.557774e-03	1.671047e-03	1.451544e-02
##	G36245	1.292817e-02	-1.076980e-02	7.014785e-03	-1.532213e-02	-1.777004e-02
##	G36161	-1.722987e-03	2.689033e-02	-2.308437e-02	-5.222259e-03	-1.542972e-02
##	G36172	-4.060293e-02	-1.522064e-02	8.359867e-03	2.441922e-02	-1.951855e-03
##	G36212	-1.343336e-02	1.357660e-02	4.708510e-02	-1.544364e-03	-2.179586e-03
##	G36180	2.502728e-03	1.154441e-02	1.414156e-02	9.645487e-03	-9.532372e-03
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## G36193 8.400726e-03 -1.579327e-02 1.590692e-02 -9.229145e-03 3.691200e-03
## G36151 -4.353274e-05 8.004039e-03 -9.937462e-03 1.427657e-02 1.939620e-02
## G36248 1.093725e-02 -1.632342e-02 -1.406520e-02 4.297712e-03 -2.608063e-03
## G36239 8.481654e-03 2.452241e-02 2.068833e-02 2.380577e-02 1.041772e-02
## G36270 -8.845978e-03 9.860485e-03 -4.315299e-04 1.499910e-02 1.776909e-02
## G36158 1.313507e-02 -6.396421e-03 2.366173e-03 5.819408e-03 -7.053529e-03
## G36233 -1.252920e-02 2.849313e-02 2.307549e-02 1.952527e-02 2.106111e-02
## G36311 -2.006781e-02 1.149964e-02 3.710748e-03 1.991341e-02 -1.706177e-02
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## G36227 6.000596e-03 -5.065210e-03 -6.791467e-03 2.706736e-03 -5.258690e-03
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## G36264 7.459238e-03 1.171371e-02 -1.518440e-02 -1.691016e-02 1.169443e-02
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## G36284 -2.021522e-03 -3.571285e-02 3.264769e-03 -6.262235e-03 7.204617e-04
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## G36282 -1.204944e-02 5.537828e-03 -1.374277e-02 1.252337e-02 -2.501154e-02
## G36290 -7.812819e-03 -4.080295e-03 5.591143e-03 8.645709e-03 -5.959127e-03
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## G36235 -2.757236e-02 -1.107428e-02 -2.011202e-02 -9.496757e-03 -7.592267e-03
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##	G36209	3.608119e-03	1.762101e-02	-8.481330e-03	-1.618314e-02	1.132199e-02
##		Axis.206	Axis.207	Axis.208	Axis.209	Axis.210
##	G37016	-3.208596e-03	7.414118e-03	-7.137600e-03	1.802331e-02	5.747818e-03
##	G36918	-1.475987e-02	2.924431e-02	-1.929304e-02	1.946856e-03	-1.768855e-02
##	G37044	-2.311877e-03	1.659416e-04	4.977348e-02	-4.866958e-03	-2.964493e-02
##	G37009	8.993882e-04	1.486185e-02	-8.188457e-04	-2.152192e-02	-4.811236e-04
##	G37029	-1.381513e-02	5.739953e-03	-1.984562e-03	2.240474e-04	-7.086227e-03
##	G37035	3.353493e-03	9.303316e-03	4.145100e-03	4.579142e-03	-6.727899e-03
##	G36982	5.935000e-03	-1.300111e-02	-8.952804e-03	1.504280e-02	2.631446e-03
##	G36984	-1.210330e-02	5.373847e-03	-1.306069e-02	1.555043e-02	-1.106367e-02
##	G37030	1.451815e-02	-2.227395e-02	-9.574885e-03	-2.852109e-02	4.785060e-03
##	G37031	-2.174707e-02	1.290036e-02	7.474510e-03	-2.447280e-03	5.224987e-03
##	G36906	2.935093e-03	2.783056e-02	-1.739461e-02	-1.429825e-02	-3.514042e-02
##	G37028	1.385017e-02	2.616589e-02	-6.147576e-03	-4.248252e-03	4.972662e-03
##	G37014	8.131424e-03	9.022034e-03	-1.278760e-02	-3.344347e-03	1.090779e-03
##	G37010	7.067072e-04	-6.201722e-03	-8.654246e-03	3.685170e-03	-2.786195e-04
##	G36944	-2.602330e-02	2.242754e-02	1.758216e-03	-2.491415e-02	-1.112621e-02
##	G36902	1.800441e-02	-3.307274e-02	-9.371162e-03	1.668073e-02	-1.095033e-02
##	G37051	-7.893438e-03	2.757974e-02	1.309099e-03	1.153918e-03	-3.200508e-03
##	G36964	1.373205e-02	3.597562e-03	1.767670e-03	6.964295e-03	-1.256647e-02
##	G36951	-2.532855e-03	-1.562200e-03	-1.250333e-02	-7.051740e-03	-2.504329e-02
##	G37025	1.028414e-02	1.810005e-02	1.928357e-02	7.865130e-03	-5.436854e-03
##	G36930	-1.254241e-02	3.889355e-03	5.183950e-03	7.545434e-03	2.040583e-03
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##	G37041	1.538826e-03	-1.096448e-02	-1.801873e-02	-5.951137e-03	1.439062e-02
##	G36959	1.344525e-02	8.073729e-03	-2.214510e-02	-5.910338e-03	-6.597621e-03
##	G36905	1.733780e-02	-1.881122e-03	-5.517460e-03	-4.191628e-03	-1.779823e-02
##	G36917	-1.991415e-03	2.303810e-02	-1.744796e-02	-1.343263e-02	-1.661046e-02
##	G36992	-7.659766e-03	-5.947800e-03	-2.098309e-03	1.171924e-02	7.166587e-04
##	G36921	-1.103840e-02	5.897031e-03	1.800246e-02	1.072037e-02	-1.730786e-02
##	G37004	-4.196957e-04	2.008545e-02	-7.787745e-03	4.506308e-03	2.685675e-03
##	G36966	-7.692651e-03	-3.390378e-03	2.844443e-02	-2.140043e-02	1.017007e-02
##	G36936	-7.198780e-03	-2.305824e-02	-8.331006e-03	8.092335e-03	-3.036159e-03
##	G37015	-1.747904e-02	1.235973e-03	-1.111081e-02	1.087298e-02	3.118873e-02
##	G37034	-8.616933e-03	1.161209e-02	1.233912e-03	-1.691899e-02	-1.416881e-03
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##	G37046	2.126005e-02	-9.892138e-03	1.019157e-02	1.205896e-02	1.890678e-02
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##	G37049	1.299332e-03	-6.108967e-03	6.177404e-03	8.760938e-03	-1.853345e-02
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##	G37005	2.058247e-02	2.695072e-03	-5.385898e-03	-7.949187e-03	7.293245e-03
##	G36928	-5.804991e-03	-1.211384e-02	-1.972289e-02	-1.409859e-02	-2.099647e-03
##	G36923	1.390517e-03	-3.974421e-03	-3.041661e-03	-9.595739e-04	-1.479140e-02
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## G36972 -2.617790e-02 -9.205549e-03 2.536722e-02 -6.600176e-03 -6.224182e-03
## G36968 -1.683386e-05 -3.869951e-03 -2.618600e-04 1.856722e-02 -5.229152e-03
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## G36303 1.078920e-02 8.824188e-03 2.779411e-02 3.594794e-03 -7.793175e-03
## G36193 2.865970e-03 -2.863018e-03 -1.698382e-02 3.443873e-03 -9.140241e-03
## G36151 3.853655e-04 -1.470462e-02 -4.594664e-03 -1.779620e-02 2.049981e-02
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## G36239 3.005264e-02 3.772923e-03 8.164269e-03 4.348770e-03 1.288431e-03
## G36270 -4.245199e-03 1.284609e-02 -2.077557e-02 -2.403706e-02 -1.271318e-02
## G36158 1.442037e-03 -2.952914e-03 3.445889e-03 4.467972e-03 3.295976e-03
## G36233 1.387011e-02 2.254121e-03 -1.446240e-02 3.293549e-03 -1.924441e-02
## G36311 -1.407228e-03 -2.244320e-02 3.491199e-02 1.711973e-02 -1.032901e-02
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## G36227 1.526419e-03 3.331065e-03 8.704245e-03 5.842302e-03 -1.108217e-02
## G36322 -6.650171e-03 -1.102154e-02 2.006248e-03 -7.203038e-03 9.669456e-03
## G36182 1.062779e-02 -1.348871e-02 7.493233e-03 4.628257e-03 -3.801875e-04
## G36256 -1.522401e-02 -1.351657e-02 -5.725562e-03 7.965694e-03 1.545010e-02
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## G36287 -2.239672e-02 -1.594459e-02 1.824477e-03 1.411386e-02 -1.931965e-02
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## G36262 9.148817e-03 -3.337311e-03 -2.557207e-03 1.588448e-02 3.100417e-02
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##	G36185	-2.420955e-03	-1.712082e-02	7.409612e-03	6.372211e-03	-7.793999e-03
##	G36162	-4.434059e-03	2.891845e-03	-2.537163e-03	9.308408e-03	1.909947e-02
##	G36204	-2.567646e-02	1.875218e-02	-2.431579e-02	-3.119739e-02	-2.349489e-02
##	G36318	6.088490e-03	-1.155563e-02	2.022046e-03	-7.097375e-03	-4.165309e-03
##	G36194	-8.812607e-03	-1.165361e-02	-5.302760e-05	7.703895e-03	-2.581358e-03
##	G36244	1.443569e-02	2.114285e-02	1.318858e-02	1.421722e-02	-9.859600e-03
##	G36197	-6.582133e-03	5.804822e-04	2.546754e-03	-6.889325e-03	1.838596e-03
##	G36264	-6.923603e-03	2.132747e-03	1.693647e-02	3.694519e-03	-3.052612e-03
##	G36317	8.627092e-03	-2.801453e-03	-2.251726e-02	4.319716e-03	1.179009e-02
##	G36159	-2.485882e-02	-2.382091e-02	-8.515181e-03	6.589843e-03	-1.927713e-03
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##	G36206	-2.920055e-03	1.077451e-02	-5.994064e-04	1.381673e-02	2.028459e-02
##	G36257	-3.711233e-03	9.377761e-03	-1.959746e-02	9.211486e-03	-7.926640e-04
##	G36216	-1.461739e-02	9.797527e-03	-2.015906e-02	-3.375467e-03	2.980167e-03
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##	G36309	-1.736306e-03	-1.058074e-02	-1.373401e-02	1.923919e-03	-2.501987e-02
##	G36146	1.670468e-03	-1.318261e-02	3.078236e-03	-1.431780e-02	3.480198e-03
##	G36192	-2.829611e-02	9.085434e-03	5.460325e-03	4.230829e-04	8.447648e-03
##	G36284	-5.977980e-03	3.218946e-04	-4.786717e-03	-1.054727e-02	-6.956608e-03
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##	G36142	7.031382e-03	-1.531244e-03	2.130065e-02	-6.942130e-03	2.188637e-02
##	G36138	5.918708e-03	1.198493e-02	2.085550e-03	8.437775e-03	3.183720e-03
##	G36203	-2.271525e-02	7.591617e-03	-1.093003e-03	-7.846180e-04	-1.231994e-02
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##	G36258	1.035349e-02	-2.733068e-03	-1.442146e-02	-1.081257e-02	4.020870e-03
##	G36147	-4.409776e-03	4.303323e-03	-9.423038e-04	-1.889733e-03	-1.347160e-02
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##	G36143	7.845114e-03	1.081651e-02	-1.245904e-02	8.605800e-03	1.180243e-02
##	G36308	3.755416e-02	2.268967e-02	-3.470337e-03	2.572752e-02	-3.830751e-03
##	G36209	-1.654518e-02	-3.697046e-03	-1.901451e-02	2.410231e-02	-6.585878e-03
##		Axis.211	Axis.212	Axis.213	Axis.214	Axis.215
##	G37016	-3.106147e-02	-4.129004e-03	1.711987e-02	4.244444e-03	1.952562e-02
##	G36918	-1.525181e-02	9.945985e-03	9.049687e-03	-1.690635e-03	1.618583e-03
##	G37044	7.726736e-03	8.511439e-03	-1.416336e-02	7.514104e-03	8.889266e-03
##	G37009	-1.330694e-02	2.286907e-02	2.943861e-03	2.440313e-02	8.083445e-03
##	G37029	-1.417983e-02	-1.041469e-02	-3.224684e-03	-2.679705e-03	1.100114e-02
##	G37035	-6.624979e-03	1.661448e-02	2.493478e-02	2.122117e-04	-6.822145e-03
##	G36982	-2.288277e-03	8.087968e-03	-1.264009e-02	1.046138e-02	1.662546e-02
##	G36984	-6.096632e-03	-2.559006e-03	1.948970e-02	-6.144718e-03	-1.552370e-02
##	G37030	1.863181e-02	-6.728875e-03	-2.231918e-02	-1.362071e-02	-8.013517e-03
##	G37031	2.296809e-02	1.183334e-02	-2.177608e-03	1.560904e-02	-1.287735e-02
##	G36906	-4.444647e-03	-1.971748e-02	-7.013100e-04	-2.104235e-04	2.145124e-02
##	G37028	-7.286326e-03	-1.489582e-02	-2.643375e-02	1.135594e-03	2.665272e-02
##	G37014	1.131454e-02	2.164686e-03	-1.281825e-02	-2.868376e-02	3.323608e-03
##	G37010	8.754074e-03	2.806521e-04	-1.379985e-02	1.030475e-02	1.318076e-03
##	G36944	-7.481813e-03	1.905418e-03	-2.728295e-03	1.011235e-02	4.979268e-03
##	G36902	-1.634828e-03	1.249051e-02	6.271325e-03	5.841153e-04	-1.745168e-02
##	G37051	-9.274011e-03	-1.544974e-02	-7.182872e-03	1.026160e-02	-1.604500e-02
##	G36964	-3.629465e-03	7.820780e-03	5.121145e-03	-8.751631e-03	-2.821532e-03
##	G36951	-3.202445e-02	1.051385e-02	-2.153685e-02	1.247270e-02	1.176404e-02

##	G37025	4.123961e-03	2.013259e-02	-9.661020e-03	-4.958476e-03	-1.275885e-02
##	G36930	1.006845e-02	-4.905133e-03	-3.123794e-03	1.836590e-02	-1.883480e-02
##	G36935	2.102674e-02	1.286025e-02	-1.713578e-03	2.398557e-02	1.180909e-02
##	G37041	-6.049836e-04	4.281527e-03	1.183623e-02	1.006536e-02	-1.816325e-03
##	G36959	3.833370e-03	-3.254992e-03	8.499310e-03	-8.241263e-03	1.626307e-02
##	G36905	1.460050e-02	1.169087e-02	-2.916154e-03	-8.324229e-03	-4.034493e-03
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##	G36992	9.359579e-03	7.625420e-03	1.272262e-02	-1.920646e-02	-1.722376e-02
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##	G36966	-3.182546e-03	-2.813337e-02	1.783891e-02	-2.994057e-03	5.391334e-05
##	G36936	8.908973e-03	1.645663e-03	-2.813860e-03	5.022869e-03	6.245065e-04
##	G37015	-1.292842e-02	-7.420972e-03	-3.162819e-04	2.181676e-02	1.095425e-02
##	G37034	1.365653e-02	1.466329e-03	-1.321057e-02	2.177588e-02	3.261587e-03
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##	G36933	5.602456e-04	-1.507185e-02	2.025217e-03	7.854952e-03	1.743499e-02
##	G37052	-1.566747e-02	7.476859e-03	1.574671e-02	1.393269e-02	-3.235740e-03
##	G36925	8.934616e-03	-1.904907e-02	-3.637761e-03	3.321999e-03	3.465694e-03
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##	G37045	1.318980e-02	-2.581615e-04	-4.275123e-04	1.042531e-02	5.778406e-03
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##	G37019	-1.339703e-02	4.405028e-03	-1.351805e-03	1.460205e-03	-8.894892e-03
##	G36988	6.244067e-03	1.118492e-02	-5.313501e-03	-6.652652e-03	1.104866e-02
##	G37037	-7.798737e-03	1.124459e-02	5.749674e-03	-2.155481e-03	-1.578087e-02
##	G37005	2.136321e-02	-5.904349e-03	-1.381112e-02	2.410529e-02	-5.336887e-03
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##	G37012	-3.703068e-03	-1.352199e-02	1.602232e-03	-1.007836e-02	-2.133867e-02
##	G36952	-1.149581e-02	1.635006e-02	-5.719254e-03	-1.036263e-02	-7.975366e-03
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##	G37032	-2.272601e-03	3.028509e-02	-3.785049e-03	-6.413995e-03	-8.014191e-03
##	G36932	-2.371949e-02	5.659458e-03	-9.086113e-03	2.676110e-03	8.255263e-03
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##	G37054	1.743647e-02	2.539945e-02	-5.181807e-03	-2.688532e-02	1.870005e-02
##	G36948	-6.189394e-03	-1.761527e-02	-9.183862e-03	-3.640060e-03	-2.468244e-03
##	G36972	4.276605e-03	1.956795e-02	-1.175285e-02	-1.196700e-02	-1.134087e-03
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## G36159 -1.407924e-02 2.240618e-03 -4.602530e-03 -1.530582e-02 -1.705362e-02
## G36234 -3.417381e-02 -1.318420e-02 -8.708820e-03 2.227413e-02 8.588290e-03
## G36206 -7.088796e-03 -7.439293e-03 -2.173686e-02 -3.996843e-03 7.581228e-03
## G36257 1.766151e-02 -2.048948e-02 1.356371e-03 -6.214136e-03 -1.802161e-03
## G36216 -1.528532e-02 -1.000175e-03 -4.523379e-04 2.956660e-03 -2.156147e-02
## G36208 -1.548105e-04 1.218804e-02 1.871077e-02 -5.523955e-03 -6.945495e-03
## G36309 -1.646281e-02 -2.563130e-03 6.205438e-03 2.296765e-02 -9.477693e-03
## G36146 -4.022015e-03 -3.546042e-03 1.474129e-02 -4.220113e-03 -9.194331e-03
## G36192 -1.167309e-02 1.171189e-03 1.877747e-02 6.596044e-03 9.574286e-04
## G36284 3.558213e-03 -1.545009e-02 -1.193466e-04 1.704414e-02 -6.331109e-03
## G36291 -8.667111e-03 -3.442489e-02 -1.050685e-02 -5.092273e-04 -1.263229e-02
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##	G36282	-6.485466e-03	-9.311370e-03	-4.550327e-03	-5.021795e-03	2.354213e-02
##	G36290	1.674048e-03	1.870185e-03	-7.544165e-03	-9.438393e-03	-8.256196e-04
##	G36274	-2.557380e-02	-3.245770e-03	3.235688e-02	2.335135e-02	1.177830e-02
##	G36314	1.755800e-03	-8.292951e-03	-7.049997e-03	-2.472885e-04	6.468534e-03
##	G36258	4.076361e-03	-2.883405e-03	-1.281835e-02	1.318259e-02	3.213368e-03
##	G36147	-1.647393e-02	-9.311028e-03	-1.078104e-02	-8.664336e-03	5.283961e-03
##	G36235	1.317403e-02	6.691420e-03	-5.377433e-03	3.747521e-03	4.997918e-03
##	G36143	2.352008e-03	-2.289731e-02	-2.157402e-02	5.879393e-03	8.351426e-03
##	G36308	2.373536e-02	1.186863e-02	1.044469e-02	-7.382355e-03	1.477430e-02
##	G36209	6.924144e-03	-3.845103e-02	1.315170e-02	-2.447335e-02	-2.015386e-02
##		Axis.216	Axis.217	Axis.218	Axis.219	Axis.220
##	G37016	3.333069e-03	1.242749e-02	8.615597e-04	-1.044589e-02	-1.090429e-02
##	G36918	-3.241168e-03	7.938218e-03	6.420509e-03	-1.714730e-02	-1.051739e-03
##	G37044	-9.811528e-04	9.995641e-03	3.784946e-02	-9.271076e-04	-9.169704e-03
##	G37009	-2.392432e-02	7.483512e-03	2.229915e-02	1.191629e-02	-1.327164e-02
##	G37029	-1.813775e-02	2.058241e-02	-1.439070e-02	-1.904785e-02	7.174357e-03
##	G37035	-5.285741e-03	1.151248e-02	-1.820010e-02	6.046120e-03	-3.973485e-03
##	G36982	-1.406711e-02	-5.489644e-03	1.318030e-03	1.037051e-02	-2.839220e-02
##	G36984	-1.039842e-02	-1.806110e-02	4.742410e-03	-3.206016e-02	1.036466e-02
##	G37030	-2.394688e-02	-1.813201e-02	-2.630769e-03	-1.652606e-02	-1.279971e-02
##	G37031	1.754958e-02	-3.871869e-03	-2.176564e-02	-3.058012e-03	-1.356176e-02
##	G36906	4.630691e-03	-2.135680e-02	-2.374598e-03	-1.496295e-03	4.576798e-03
##	G37028	-1.141211e-02	8.218363e-03	1.121219e-02	-1.600303e-02	6.361196e-04
##	G37014	-2.316905e-03	-1.324505e-02	1.189310e-03	1.304435e-02	-2.360033e-03
##	G37010	1.121033e-02	7.682604e-03	1.318076e-03	-5.940731e-03	2.835346e-03
##	G36944	-5.900019e-03	1.119759e-03	1.516897e-02	1.815923e-02	1.136033e-02
##	G36902	7.792181e-03	-7.024976e-03	-4.493839e-03	1.327454e-02	2.342157e-02
##	G37051	-2.045883e-02	-1.706486e-03	9.291879e-03	-1.075249e-02	-5.186269e-03
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##	G36951	8.629861e-03	-5.173612e-03	-2.003965e-02	-2.614725e-02	1.608378e-02
##	G37025	-4.785537e-03	-2.801195e-02	7.101365e-03	6.389935e-03	1.090500e-03
##	G36930	4.339996e-03	6.395172e-03	-2.829890e-03	7.928452e-03	-9.572891e-03
##	G36935	7.861097e-03	-6.730145e-04	1.062118e-02	1.953592e-02	-8.776474e-03
##	G37041	-1.816172e-02	1.166629e-02	-1.798815e-02	-1.546890e-02	4.132651e-03
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##	G36905	-1.423699e-03	-1.795566e-02	-1.439023e-02	2.795269e-02	-1.891271e-02
##	G36917	7.476799e-03	2.919436e-02	-4.278222e-03	-8.737418e-03	-9.991968e-03
##	G36992	-1.162873e-02	1.647142e-02	-4.444986e-03	3.061662e-03	8.401508e-03
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##	G36966	3.408248e-02	-9.143582e-03	1.328102e-02	5.101165e-03	-2.449318e-02
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##	G37015	-3.665047e-03	2.816575e-03	-1.200968e-02	3.279647e-03	8.489083e-03
##	G37034	2.836330e-03	-6.210069e-03	3.152364e-03	1.084084e-02	4.123205e-03
##	G36953	-2.214897e-02	-1.527245e-02	-1.837612e-02	8.633830e-03	1.904678e-02
##	G36974	1.926253e-02	3.634107e-02	1.236987e-02	-3.885216e-03	-2.233839e-03
##	G37039	2.292047e-02	1.383716e-02	3.498485e-02	1.772248e-02	4.458544e-02
##	G36933	-1.029877e-03	-1.124256e-02	-9.197159e-03	3.816649e-03	-6.122781e-03
##	G37052	-2.607949e-02	2.002593e-03	-1.734265e-02	-4.333466e-03	-2.546116e-02
##	G36925	9.351084e-03	-1.044472e-02	6.351757e-03	1.800943e-02	-1.615011e-03
##	G37046	3.408222e-03	-1.065349e-02	-6.013655e-03	4.419484e-03	3.626366e-03
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## G37049 1.267431e-03 7.416527e-03 1.667941e-02 -3.097755e-02 1.514967e-02
## G37019 -1.375302e-02 8.568870e-03 -5.475561e-04 2.381904e-02 5.715228e-03
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## G37037 -3.233173e-03 2.911269e-03 4.204364e-03 7.474476e-03 6.449299e-03
## G37005 6.595863e-03 6.013560e-05 1.342670e-02 -1.609626e-02 -1.038719e-03
## G36928 -2.173988e-03 -1.661431e-03 4.862478e-04 -2.315974e-02 2.251632e-02
## G36923 -6.754284e-04 -7.961097e-03 -5.115609e-03 -6.168120e-03 7.416639e-04
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## G35526 -8.580603e-03 6.402420e-03 1.692597e-02 -2.120433e-02 8.409407e-04
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## G35486 9.652984e-03 5.343639e-03 -2.248700e-02 -1.064591e-03 -6.579763e-03
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##	G37023	1.047058e-02	1.739952e-02	1.989973e-02	-1.724225e-02	8.734706e-03
##	G37036	1.260757e-02	7.971706e-04	-4.810067e-03	7.977735e-03	3.307292e-02
##	G37026	-3.918790e-03	-8.677823e-03	1.106407e-02	-4.617602e-03	8.556321e-03
##	G37050	1.208402e-02	-8.708833e-03	-8.365471e-03	-2.355387e-04	-1.586153e-02
##	G36973	6.596964e-03	-7.915631e-03	1.921279e-02	4.013857e-03	-1.379542e-02
##	G36991	-1.218162e-02	1.597962e-02	-3.280994e-04	-1.064140e-02	1.131813e-02
##	G36904	1.432161e-04	5.133302e-03	-9.705428e-03	9.768130e-03	-1.919245e-02
##	G36958	6.737655e-03	-8.843647e-03	-2.613722e-03	-1.709342e-02	1.130967e-02
##	G36993	8.083569e-03	3.643516e-03	-1.040949e-02	-4.907280e-03	1.431943e-02
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##	G36910	1.508070e-02	-5.951068e-03	2.016547e-02	-9.961009e-04	2.534734e-02
##	G36927	5.339426e-03	-2.576485e-03	-1.060635e-02	1.587565e-02	-6.565113e-03
##	G37018	1.477771e-02	-2.092172e-02	-9.888020e-03	6.168580e-03	1.133163e-02
##	G37048	3.842320e-03	8.219771e-03	-7.479287e-03	6.969618e-03	-9.054333e-03
##	G36940	4.456678e-03	1.071208e-02	8.715388e-03	1.809787e-03	-2.901243e-02
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##	G37038	8.368069e-03	1.283053e-02	-1.593303e-02	-6.505588e-03	1.085313e-02
##	G36938	-1.559187e-02	6.325047e-03	1.390553e-02	1.574304e-04	-1.290647e-03
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##	G35528	1.389963e-02	-8.136176e-03	1.204591e-02	1.094271e-02	-4.761049e-03
##	G35381	-4.112073e-03	-3.147210e-02	1.007200e-02	2.955613e-03	-2.398478e-02
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##	G35424	-1.694564e-03	-2.322840e-03	1.114435e-02	1.856581e-02	2.379180e-03
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##	G35355	3.263404e-03	-1.071699e-02	-2.928321e-03	-4.776111e-03	-7.805075e-03
##	G35469	-1.797671e-02	1.896883e-02	-8.827385e-03	6.611413e-03	5.087740e-03
##	G35513	-1.101936e-02	7.064964e-03	-2.249398e-03	-7.280278e-03	2.259673e-02
##	G35387	3.919077e-03	-1.126651e-03	1.087709e-02	-1.349624e-02	-1.953031e-02
##	G35527	-1.249185e-02	1.683410e-02	-2.766311e-03	-3.290252e-03	1.739617e-02
##	G35516	-7.203928e-03	-2.254932e-03	-1.218730e-02	3.562312e-03	-2.127330e-02
##	G35463	2.943183e-02	-2.197150e-02	-1.933343e-02	-6.859684e-03	3.021606e-02
##	G35441	-1.670816e-02	8.727465e-04	-2.451844e-02	5.110398e-03	-1.419122e-02
##	G35414	-8.539341e-03	-1.106050e-02	-1.804362e-02	-8.542169e-03	-1.550771e-03
##	G35412	1.382252e-02	2.026785e-02	2.790822e-02	6.506054e-03	-1.420766e-02
##	G35388	-1.356853e-02	-7.702166e-03	-7.007017e-03	5.997974e-03	1.846271e-02
##	G35354	1.635845e-03	-4.518409e-03	2.142545e-03	1.282340e-02	-1.491610e-03
##	G35533	1.602333e-02	-9.578153e-03	-4.498126e-04	-1.297337e-02	8.124418e-03
##	G35406	8.443895e-03	-1.123823e-02	-6.136614e-03	-1.467767e-02	1.193755e-02
##	G35467	-2.657100e-03	4.548943e-03	9.465863e-03	2.147417e-02	-3.800086e-03
##	G35522	1.612107e-02	3.985476e-03	-1.983220e-02	4.266355e-03	4.049713e-03
##	G35404	1.387927e-02	8.743901e-03	-3.936489e-03	-5.426428e-03	4.128184e-05
##	G35445	-4.536597e-02	-2.591657e-02	3.585542e-02	-1.546828e-02	-5.249839e-02
##	G36173	-1.504671e-02	-8.332482e-03	-1.630258e-02	1.195740e-02	1.667239e-02
##	G36145	2.089703e-04	-2.091263e-03	-1.796631e-03	2.770044e-02	-6.170477e-03
##	G36196	2.920500e-04	1.844672e-03	-8.059203e-03	-6.474006e-03	1.037984e-02
##	G36219	1.029430e-02	1.690234e-02	-3.312446e-03	-8.921413e-03	1.233496e-03
##	G36299	-2.230773e-02	1.248993e-02	-1.085374e-02	2.037379e-03	-1.810484e-02
##	G36137	2.671637e-04	-2.133733e-02	1.259066e-02	-3.125701e-02	-9.741026e-03
##	G36273	-2.168059e-02	2.255818e-03	2.920599e-03	-1.105429e-02	5.721196e-03
##	G36201	6.519697e-03	3.265453e-03	-9.949338e-03	-1.812136e-02	-7.268666e-03
##	G36165	-1.307179e-02	2.655536e-03	-5.282064e-03	-9.076822e-03	-1.255336e-02
##	G36202	1.088565e-02	-1.443158e-02	-1.425077e-02	-1.080088e-02	1.195287e-02
##	G36226	7.927236e-03	-3.037132e-04	-7.477282e-03	-8.530685e-03	1.380109e-02
##	G36269	2.165304e-03	-1.839616e-02	6.958755e-04	2.384521e-02	9.125429e-03
##	G36135	9.749981e-03	-1.389953e-02	1.263710e-03	-1.577094e-02	-9.157784e-03
##	G36250	-6.888364e-03	5.008494e-03	8.992629e-03	1.880829e-02	-1.423996e-02
##	G36225	7.397856e-03	-1.522014e-03	1.628744e-03	2.075453e-03	-1.279267e-02
##	G36272	-1.967207e-03	-7.897028e-03	2.828613e-02	6.866929e-03	-2.002828e-03
##	G36285	2.440806e-02	5.412129e-03	-4.339507e-03	-1.844010e-02	2.886187e-03
##	G36259	6.771655e-03	1.542047e-02	2.391323e-03	-6.486247e-03	-8.349870e-03
##	G36229	-2.016977e-02	1.010991e-02	-5.466093e-03	-6.565108e-03	7.844491e-03
##	G36155	5.543523e-03	5.055840e-03	-6.434964e-03	-1.333537e-03	1.131491e-02
##	G36251	5.402064e-04	1.537268e-02	-6.195746e-03	-1.194191e-02	2.107519e-03
##	G36297	-4.012065e-04	-1.764434e-02	7.343417e-04	8.128273e-03	6.860357e-03
##	G36170	-2.260625e-03	-1.334894e-02	2.482352e-02	-2.506918e-02	-9.614664e-03
##	G36241	-1.118331e-02	1.714511e-02	3.808675e-03	-2.368609e-03	-8.126058e-03
##	G36224	2.258058e-02	2.131686e-02	5.838394e-04	6.212478e-03	-1.281425e-02
##	G36169	1.308573e-02	1.636120e-02	9.512779e-03	9.802727e-03	1.370858e-02
##	G36266	3.392506e-03	-8.144346e-03	-1.681004e-02	-2.414523e-02	5.842168e-03
##	G36164	-8.525810e-03	-1.087012e-02	7.235043e-03	5.926823e-03	2.463435e-03
##	G36215	2.231818e-03	3.514267e-03	-2.316320e-02	5.875722e-03	-2.242212e-02
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## G36150 8.785119e-04 -1.596650e-02 -1.812957e-03 -4.861994e-03 -1.337338e-02
## G36237 3.580604e-03 8.854384e-03 -9.932296e-03 -5.409324e-03 -3.712239e-04
## G36148 -5.987558e-03 -4.133852e-03 3.985562e-03 1.749251e-02 -9.188585e-03
## G36213 -6.344933e-03 4.208466e-03 5.309745e-03 -1.081248e-02 5.164311e-03
## G36232 -3.490464e-04 4.348176e-04 -7.916805e-03 1.464337e-02 -3.902521e-03
## G36240 -1.548931e-02 2.888445e-03 -1.074637e-02 5.888026e-03 1.543990e-02
## G36249 -3.976571e-03 3.799671e-03 8.117823e-03 -1.103937e-02 1.046212e-02
## G36298 6.939265e-03 -2.028388e-02 -8.381898e-03 -6.525151e-03 4.806943e-03
## G36176 -9.021135e-03 -8.548337e-03 1.480262e-02 -2.270446e-03 -1.288868e-02
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## G36320 -1.105630e-03 2.895036e-04 -1.324203e-02 9.528734e-04 1.520355e-02
## G36245 -8.958490e-03 2.306592e-02 3.646852e-03 -3.502524e-03 -1.640887e-02
## G36161 -2.499855e-03 -3.953809e-02 1.722802e-02 -1.837299e-02 -1.635159e-02
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## G36248 -5.996414e-03 1.613145e-02 5.629693e-03 -2.246738e-03 6.998062e-03
## G36239 -7.699822e-03 1.134136e-02 1.622329e-02 5.630555e-03 1.012685e-03
## G36270 -2.466674e-03 1.282901e-02 1.693970e-02 -1.070283e-02 -4.496388e-03
## G36158 -3.902037e-03 -2.016594e-02 1.380247e-02 -6.218468e-03 -3.039650e-03
## G36233 2.423148e-02 -3.106331e-04 1.340622e-02 -3.328106e-03 -9.040254e-03
## G36311 -1.054450e-02 4.956800e-03 6.011448e-03 -1.647238e-02 9.606087e-03
## G36175 3.262201e-03 -2.261193e-02 -1.976551e-03 -1.447802e-02 9.215582e-03
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## G36183 -3.338674e-04 -1.228248e-02 -3.444421e-03 8.428278e-03 2.179265e-03
## G36227 -8.070485e-04 -1.385817e-02 4.961235e-03 -1.364367e-03 -7.410195e-03
## G36322 1.166247e-03 -3.730870e-03 2.801142e-03 1.622905e-02 1.925869e-02
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## G36256 -1.267487e-02 -9.684385e-03 3.951411e-03 -2.045362e-03 1.524315e-02
## G36163 9.538108e-03 -7.510856e-03 2.716025e-02 1.978305e-02 -4.913493e-03
## G36287 5.294552e-03 -1.433853e-02 -2.878483e-02 2.279877e-02 -2.018385e-03
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## G36262 7.384875e-03 3.388415e-03 -1.753916e-02 2.771880e-02 -1.239497e-02
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##	G36257	-3.993121e-03	-1.503844e-03	4.606972e-03	3.130185e-03	-1.297281e-04
##	G36216	-9.102759e-03	2.202393e-03	-1.349755e-02	1.283101e-02	-3.125727e-03
##	G36208	-1.137359e-02	4.573260e-03	1.762826e-02	6.873106e-03	2.913086e-02
##	G36309	7.391118e-03	-2.121629e-02	-1.177348e-02	2.049198e-02	-6.230467e-04
##	G36146	1.102681e-02	1.558267e-02	-8.528918e-03	3.044578e-03	-1.137576e-02
##	G36192	1.017679e-02	-1.055139e-02	6.349665e-03	-1.268904e-02	1.102893e-03
##	G36284	2.124112e-04	-4.030660e-02	1.699785e-02	-3.444163e-02	1.303303e-03
##	G36291	-1.539442e-02	1.152104e-02	8.844662e-03	1.428738e-03	-2.297216e-03
##	G36142	1.664943e-03	-1.284767e-02	3.401089e-03	4.409500e-03	-3.694897e-03
##	G36138	2.373955e-02	-1.502455e-03	7.601023e-03	2.129300e-03	1.874426e-02
##	G36203	-6.539330e-03	-9.108132e-03	-1.573170e-03	1.413275e-02	3.533316e-03
##	G36282	9.985931e-03	-1.965188e-02	-1.017025e-02	6.148962e-03	6.206073e-04
##	G36290	-3.665156e-03	-6.502672e-03	1.753376e-03	-3.498324e-03	-6.900320e-03
##	G36274	-6.726069e-03	1.093196e-02	-2.851890e-02	-1.847304e-02	-3.388404e-02
##	G36314	-1.669600e-03	5.501844e-03	-1.005484e-02	-4.948982e-03	-1.367575e-03
##	G36258	9.809082e-03	2.827369e-03	6.268773e-03	1.350265e-02	7.538473e-04
##	G36147	-1.001763e-02	3.119236e-03	4.206682e-03	3.334290e-03	5.088792e-03
##	G36235	-1.802083e-02	-9.245010e-03	9.587647e-03	-1.234039e-02	5.738723e-03
##	G36143	-4.379310e-03	7.152896e-03	1.890606e-02	-2.236772e-02	1.237136e-02
##	G36308	6.370375e-03	5.889591e-03	-4.395432e-03	-9.160487e-04	-6.551770e-03
##	G36209	3.600544e-03	1.361878e-02	1.970175e-02	-3.379402e-04	2.983018e-02
##		Axis.226	Axis.227	Axis.228	Axis.229	Axis.230
##	G37016	-1.187439e-03	2.522227e-02	-1.228982e-02	7.875127e-03	-8.515129e-03
##	G36918	1.137897e-02	7.433106e-03	-8.658011e-03	-3.044733e-02	-1.685974e-03
##	G37044	1.149862e-02	4.084022e-03	6.233083e-03	2.349105e-03	-6.250783e-05
##	G37009	-3.105970e-03	-7.426235e-03	-1.343124e-02	-2.472330e-03	-1.530096e-02
##	G37029	-3.044223e-03	7.339058e-03	-9.879215e-03	9.678801e-04	1.754698e-03
##	G37035	-8.710703e-03	-5.816276e-03	1.283105e-03	5.214401e-03	5.306185e-03
##	G36982	6.948689e-03	-5.226028e-03	1.060919e-02	-8.697459e-04	2.861310e-03
##	G36984	-3.487568e-03	6.205856e-03	1.763349e-02	1.370681e-02	1.795900e-02
##	G37030	2.068078e-03	1.360900e-02	-1.249326e-03	2.807694e-03	1.264930e-02
##	G37031	1.907354e-02	-2.714070e-03	-2.031220e-02	-4.815573e-03	-1.892846e-02
##	G36906	2.995053e-03	-1.306089e-02	3.187370e-03	2.219799e-02	-1.199631e-02
##	G37028	-1.487976e-03	-6.142428e-03	-1.726255e-03	-5.300676e-03	-4.351716e-03
##	G37014	-1.865395e-03	9.245612e-03	-8.481967e-03	5.806840e-03	1.285506e-02
##	G37010	-3.430646e-03	-1.637171e-02	8.350113e-03	-8.951262e-03	-9.405630e-03
##	G36944	-7.450327e-03	2.604357e-02	-5.537464e-03	3.008668e-03	2.387571e-02
##	G36902	-6.045405e-03	6.574309e-03	-1.519493e-02	6.720489e-03	1.683610e-02
##	G37051	-1.655243e-02	-2.131064e-02	1.841183e-03	1.613411e-02	6.553484e-03
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##	G37025	1.089887e-02	-1.432059e-02	1.646248e-02	5.272172e-03	7.780422e-03
##	G36930	-1.107618e-02	2.959836e-02	-5.658284e-04	5.342165e-04	-1.057547e-03
##	G36935	1.659283e-02	2.113070e-03	-1.956525e-02	-4.837435e-04	1.137896e-04
##	G37041	-3.111541e-02	-2.166892e-02	1.052915e-03	4.996937e-03	-1.179115e-02
##	G36959	-1.292627e-02	6.072412e-03	-1.438413e-02	3.370320e-03	8.953881e-03
##	G36905	-2.073445e-02	-2.052677e-02	1.785313e-02	6.944267e-03	3.776125e-03
##	G36917	3.586453e-03	5.344181e-03	8.196139e-03	-1.625589e-02	1.394240e-02
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##	G36921	-1.240831e-02	8.687808e-03	-1.912011e-02	-9.633590e-03	2.340459e-02
##	G37004	-2.598241e-04	9.867236e-03	-9.588087e-03	5.718450e-03	1.741939e-02
##	G36966	1.246586e-02	-2.427758e-02	1.221848e-02	5.021184e-02	-9.566634e-03
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## G36272 -1.485053e-02 -9.006568e-03 2.199409e-03 1.469833e-02 1.559842e-02
## G36285 -1.609498e-03 1.129488e-02 -6.613452e-03 1.082437e-02 1.337000e-02
## G36259 -1.793137e-04 -3.776849e-03 -1.652460e-02 -1.218918e-03 -1.284543e-02
## G36229 -3.890924e-03 1.871716e-02 7.753985e-03 1.150214e-02 1.364806e-03
## G36155 1.731262e-02 -5.942810e-03 6.724308e-03 5.070420e-03 -2.909885e-03
## G36251 -1.341445e-03 -6.766555e-03 1.511560e-03 1.444711e-02 6.814344e-03
## G36297 1.125508e-02 -2.327532e-02 -6.429267e-03 3.274719e-03 -8.123508e-04
## G36170 -8.582374e-03 -3.083331e-03 6.638962e-03 -1.631963e-02 -6.651880e-03
## G36241 -2.452669e-02 1.582769e-02 1.112662e-02 -8.654820e-03 1.040010e-02
## G36224 -1.955621e-02 -3.572812e-03 3.322224e-02 4.089827e-03 1.167437e-02
## G36169 -1.380609e-02 1.860878e-02 8.620062e-03 1.776761e-02 9.458327e-03
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## G36164 1.096865e-02 -9.949414e-03 4.426538e-03 3.472704e-03 8.053009e-03
## G36215 -7.797730e-03 -3.348483e-03 -8.679314e-03 2.654361e-03 -4.076758e-03
## G36195 -2.634460e-03 -6.112124e-03 -4.327825e-03 4.612249e-03 -9.290089e-03
## G36205 3.197418e-03 2.544867e-03 -4.081351e-03 -1.145650e-02 2.538167e-02
## G36246 6.260360e-03 3.175221e-03 4.051350e-03 -4.139297e-03 -1.946983e-03
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## G36237 3.103834e-02 1.785454e-02 5.007527e-03 -1.960190e-03 1.245267e-02
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## G36213 -9.752432e-03 -1.168374e-02 8.876014e-03 6.757128e-03 1.311318e-02
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## G36240 2.693065e-03 1.797571e-04 1.292888e-02 2.375965e-03 -7.739108e-03
## G36249 2.312340e-05 2.822854e-03 -2.575144e-03 4.191836e-03 -6.605678e-03
## G36298 -2.529390e-02 4.397715e-03 1.403540e-02 4.191293e-03 -2.727443e-02
## G36176 3.448493e-02 -9.164369e-03 -2.616125e-03 5.362468e-03 -1.567873e-03
## G36214 -1.041752e-02 4.466872e-03 1.608936e-02 6.660317e-03 8.051698e-03
## G36230 7.177594e-03 1.351729e-02 1.117839e-03 -1.459165e-02 -1.604569e-03
## G36320 4.340043e-03 8.430976e-03 6.217296e-03 2.058851e-02 -1.425926e-02
## G36245 5.323172e-03 -1.135604e-02 7.025123e-03 1.875872e-03 -3.379001e-03
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## G36172 -3.127589e-03 -1.079445e-02 1.733852e-02 -3.686192e-03 2.196490e-03
## G36212 2.250207e-03 -6.529176e-03 -8.814454e-03 -9.528360e-03 4.608174e-03
## G36180 2.589243e-03 8.349388e-03 4.523121e-03 -6.894118e-03 -1.343313e-02
## G36153 -1.652635e-03 1.734261e-03 8.351262e-03 1.248468e-03 3.671652e-03
## G36210 1.653822e-02 1.130064e-02 -3.027112e-03 4.574688e-03 4.822507e-03
## G36303 -6.687775e-03 -6.946862e-03 1.377287e-02 -1.300089e-02 -1.604684e-02

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## G36151 8.389555e-03 2.369642e-03 9.212872e-03 -1.162100e-03 -3.278665e-03
## G36248 7.318480e-03 -3.758745e-03 -4.051501e-03 -3.050067e-02 -1.571467e-02
## G36239 5.342298e-04 1.185255e-02 -1.988342e-02 -7.252075e-03 1.186339e-02
## G36270 -5.946827e-04 -1.056077e-02 -4.739701e-03 -1.406663e-02 -1.234049e-02
## G36158 -5.741886e-03 9.665950e-03 1.765732e-02 -9.727759e-03 -3.522648e-03
## G36233 -8.640973e-03 4.036459e-02 -1.781656e-02 8.152079e-03 -2.261890e-02
## G36311 3.398372e-03 -6.445500e-03 -2.721360e-02 7.452417e-03 2.074739e-02
## G36175 3.962992e-02 -1.439986e-03 -8.605983e-03 2.076488e-03 -2.762674e-03
## G36267 9.136404e-03 -8.735468e-03 1.086457e-02 -7.189892e-03 -1.532247e-04
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## G36227 9.141940e-03 -5.818525e-03 6.716147e-03 -4.782451e-03 -5.292675e-03
## G36322 2.052592e-03 -1.038560e-02 -1.776874e-02 1.421915e-02 -8.138574e-03
## G36182 -5.157461e-03 -8.777505e-03 1.862706e-02 7.640827e-04 -1.235468e-02
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## G36163 7.381560e-03 -3.252256e-03 1.174584e-02 -2.721308e-02 8.119151e-04
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## G36157 -1.205558e-03 -8.266313e-03 -1.385318e-03 -1.150779e-02 4.864399e-03
## G36262 3.517627e-02 2.254012e-02 2.357981e-02 4.301579e-03 -2.785114e-02
## G36200 -2.949219e-03 2.000950e-02 5.562921e-03 7.342916e-03 8.941042e-03
## G36160 1.565486e-04 -1.880895e-02 -1.058156e-02 1.642757e-02 1.184684e-02
## G36185 -5.263466e-03 -4.688701e-03 2.419568e-03 2.156138e-03 7.963796e-03
## G36162 -6.598705e-03 -5.012582e-03 6.362572e-04 1.815218e-02 2.057091e-03
## G36204 6.918693e-04 -7.071274e-03 2.464865e-03 -4.275210e-03 -3.206080e-02
## G36318 4.416499e-03 3.940684e-03 1.309326e-03 2.329293e-02 -1.576802e-03
## G36194 2.003253e-02 3.231118e-03 -4.202057e-03 2.567053e-02 1.963613e-03
## G36244 1.078178e-02 1.364923e-02 5.655239e-03 -1.662300e-02 2.165678e-02
## G36197 1.092867e-02 -4.753141e-03 -5.121820e-03 2.096909e-02 2.453598e-03
## G36264 -1.213875e-02 -1.688707e-02 -5.261180e-04 -1.063383e-03 -6.517306e-03
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## G36257 -2.454325e-03 -5.418980e-03 1.370672e-02 2.020290e-03 4.822577e-03
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## G36208 -4.524053e-03 7.475122e-03 -1.462982e-02 -1.291592e-02 -3.882411e-04
## G36309 1.042406e-02 -1.973798e-02 6.598509e-03 -4.116789e-03 -1.594407e-02
## G36146 -1.028217e-02 7.753105e-03 -1.100984e-02 8.145219e-03 1.167399e-02
## G36192 1.416689e-02 -1.889430e-03 3.001594e-03 -3.150471e-03 6.867045e-03
## G36284 9.589350e-04 5.637487e-03 -3.135557e-02 3.873839e-03 -1.230541e-03
## G36291 5.053443e-03 -6.791547e-03 -1.327227e-02 -1.565062e-03 -1.014905e-02
## G36142 -1.733301e-02 -9.802345e-03 -4.999998e-03 -1.813700e-02 -2.716432e-02
## G36138 -1.342502e-02 3.218878e-03 2.026207e-02 -1.372048e-02 -1.775989e-02
## G36203 -3.216750e-03 2.312476e-02 -1.595580e-03 -1.110606e-02 1.131370e-02
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## G36308 -1.949024e-03 1.602077e-02 -5.890506e-03 -7.256401e-03 2.247278e-02
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## G36918	2.615937e-03	1.733267e-02	-1.735237e-02	-3.609286e-04	-5.821857e-03
## G37044	-1.400479e-02	-6.838872e-03	9.449118e-03	2.081089e-02	-2.948825e-02
## G37009	-5.672472e-03	6.281308e-03	-1.687722e-02	1.739480e-03	-7.495148e-03
## G37029	-2.577626e-03	-1.220100e-02	-9.220396e-03	-9.477820e-03	-4.129692e-03
## G37035	1.891621e-02	-1.552798e-02	-5.395915e-03	-1.020045e-02	2.663198e-02
## G36982	-1.272629e-02	-1.066426e-04	-5.390369e-03	3.106934e-03	-7.553994e-04
## G36984	-6.548103e-03	-3.482217e-03	2.030893e-03	-8.148103e-03	8.413857e-03
## G37030	-4.300011e-03	-1.811486e-03	-1.448036e-03	8.691792e-03	-4.594817e-03
## G37031	-7.893312e-03	-1.167397e-02	8.914376e-03	-1.573973e-02	-8.158895e-03
## G36906	-1.232245e-02	-9.671134e-03	9.507932e-03	1.208868e-02	1.801942e-03
## G37028	-1.825447e-02	7.495471e-03	-4.594525e-03	1.896991e-02	6.103079e-03
## G37014	-2.005521e-04	4.898631e-03	7.863651e-04	9.285310e-03	-1.008293e-02
## G37010	6.297280e-04	9.604461e-04	-7.525713e-03	-1.077272e-02	1.121840e-02
## G36944	-2.045094e-02	3.482649e-03	1.365094e-02	-1.215437e-02	-3.021502e-03
## G36902	2.065457e-02	8.487344e-04	-2.385932e-03	2.666933e-02	6.996893e-03
## G37051	3.657248e-03	-2.880453e-03	-6.884602e-03	1.021362e-02	1.032194e-02
## G36964	-1.125349e-02	-2.556318e-03	-1.527431e-02	8.129461e-03	-5.324307e-03
## G36951	1.303196e-02	1.174430e-03	1.799507e-02	-1.295894e-03	-4.620581e-03
## G37025	-6.639565e-03	3.693651e-03	6.604816e-03	-6.571321e-03	5.943769e-03
## G36930	-6.587115e-03	1.469887e-02	-1.619181e-02	1.545575e-02	5.489825e-03
## G36935	2.419358e-02	1.184916e-02	-1.740250e-02	1.379808e-03	-5.820709e-03
## G37041	-1.416924e-02	-2.141927e-04	1.065875e-02	2.976410e-03	2.118481e-02
## G36959	-1.346183e-02	1.606757e-02	1.528094e-02	6.324310e-03	1.865322e-02
## G36905	1.358139e-02	1.873290e-02	-2.232131e-03	3.179047e-02	-8.993693e-03
## G36917	-4.088534e-02	1.347283e-02	-1.988543e-03	1.450753e-02	-1.013480e-02
## G36992	-7.917446e-03	1.106741e-02	9.241872e-03	1.542395e-03	1.612426e-02
## G36921	-8.844528e-04	-2.104125e-03	6.746439e-03	1.972423e-02	-2.884357e-03
## G37004	1.286991e-03	6.240642e-03	7.346316e-03	1.998795e-02	9.457178e-03
## G36966	-3.739775e-03	6.495682e-03	-1.828093e-02	-4.550993e-03	-7.812787e-03
## G36936	1.847252e-02	2.750836e-03	8.719684e-03	9.261829e-03	-3.074936e-03
## G37015	4.450146e-03	1.019109e-02	1.008176e-02	6.987588e-04	2.035809e-03
## G37034	-5.479455e-04	-3.930362e-03	-2.049166e-02	-2.425145e-02	9.814434e-03
## G36953	1.118075e-02	-9.367069e-03	-1.362119e-02	-3.228062e-03	1.278206e-02
## G36974	-8.059161e-03	1.291492e-02	-2.496136e-02	-1.152418e-02	-3.225365e-02
## G37039	1.431219e-02	-3.204082e-04	-7.317976e-03	-2.373535e-02	2.799710e-03
## G36933	1.262572e-03	-3.044681e-04	1.675400e-02	-7.974808e-03	-3.717121e-03
## G37052	-8.108038e-03	-1.339652e-03	-9.846424e-03	-1.003642e-03	-7.678646e-03
## G36925	-1.606009e-02	1.516080e-02	3.145327e-02	9.946184e-03	4.259935e-03
## G37046	-5.907547e-03	1.030743e-02	-3.041204e-03	-1.814658e-02	1.651744e-03
## G37053	-2.700701e-03	-9.537006e-03	6.225861e-03	-1.585129e-03	6.803973e-03
## G36998	-1.929638e-04	5.339062e-03	2.279107e-03	2.062485e-02	2.132262e-02
## G37045	-1.666826e-02	7.946223e-03	-2.588782e-03	1.227069e-02	5.136196e-03
## G37049	3.041016e-03	-1.301238e-02	2.591700e-04	1.053691e-02	2.412678e-03
## G37019	1.352693e-02	7.822461e-03	6.723686e-04	1.421825e-02	-6.138602e-03
## G36988	-2.107254e-03	-1.779896e-03	1.581708e-02	5.594467e-03	1.218641e-02
## G37037	2.042986e-02	3.238937e-03	-6.859466e-03	6.774307e-03	-2.273341e-03
## G37005	9.738478e-03	9.620278e-03	1.179703e-02	8.063540e-03	-1.081384e-02
## G36928	-1.919166e-02	-4.629209e-03	-1.405242e-02	6.309193e-03	1.943304e-04
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## G37033	1.060853e-02	4.863906e-03	-1.042000e-03	1.382714e-02	1.381407e-03
## G37017	-6.382019e-03	8.685983e-03	1.544376e-02	-6.969812e-03	1.394686e-03
## G37012	-1.788534e-03	-1.654747e-02	-1.209567e-02	9.395914e-03	9.626225e-03

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## G37011 1.057044e-02 1.223524e-02 -1.992159e-03 4.420268e-03 5.498579e-03
## G36957 -1.192531e-02 4.591661e-03 7.318882e-03 -1.506598e-03 1.142969e-02
## G37021 2.651733e-05 -6.220166e-03 1.891043e-03 2.037636e-02 -2.000169e-02
## G36937 -6.041737e-03 5.285473e-03 2.143564e-02 -1.189943e-02 -1.810881e-03
## G37047 -4.398901e-03 1.108310e-03 8.520188e-03 1.802291e-02 2.466619e-03
## G37032 3.696170e-03 2.402670e-03 4.030520e-03 1.500617e-02 -7.477462e-03
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## G36911 8.265428e-03 -1.018006e-02 9.245796e-03 6.668224e-03 5.389664e-03
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## G36248 1.365293e-02 6.951312e-03 1.528109e-02 -2.004671e-02 3.231644e-03
## G36239 1.315429e-02 -4.859114e-03 -2.997264e-04 1.697901e-03 9.029169e-03
## G36270 -1.385835e-03 -1.192645e-02 2.324898e-02 6.406506e-03 1.155800e-03
## G36158 -6.274495e-03 -8.025096e-04 2.822891e-03 -1.823791e-02 1.404885e-03
## G36233 1.564110e-02 1.099690e-02 8.112237e-03 1.600406e-02 -1.000663e-02
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## G36175 2.221695e-02 2.468435e-02 -8.487236e-03 -2.335922e-02 7.539133e-03
## G36267 2.898675e-03 1.168919e-02 4.014799e-03 -6.442697e-04 -1.437357e-02
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## G36256 -1.612778e-02 -3.011055e-03 2.844639e-03 -8.252164e-05 1.389531e-03
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##	G36194	-4.548388e-03	2.120276e-03	1.836455e-02	-1.848856e-02	1.809633e-02
##	G36244	-7.705563e-03	4.797090e-03	1.637311e-02	8.440523e-03	3.543643e-03
##	G36197	-4.532817e-04	-7.625668e-04	3.035902e-03	1.697646e-02	6.357649e-03
##	G36264	-2.537792e-02	-1.038563e-02	1.076212e-02	-5.069143e-04	-1.409277e-02
##	G36317	-8.840966e-04	-1.227343e-02	-4.775714e-03	3.375679e-04	-5.394166e-03
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##	G36234	-1.218095e-02	1.265068e-02	2.665551e-02	2.697862e-03	1.221172e-02
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##	G36257	-1.422970e-03	7.605191e-03	-1.168776e-02	9.217412e-03	-7.247152e-03
##	G36216	5.648610e-05	-1.007069e-03	-8.332710e-03	9.241886e-04	8.140250e-03
##	G36208	-6.718626e-03	1.676255e-03	5.955504e-03	7.631720e-03	8.156689e-03
##	G36309	-1.611108e-02	-3.161927e-03	8.659644e-03	1.958660e-02	1.924849e-03
##	G36146	-8.857123e-03	7.706756e-03	-9.537752e-03	-5.623113e-03	1.860861e-02
##	G36192	-8.220820e-03	-8.743947e-03	5.052418e-03	5.515105e-03	5.869266e-03
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##	G36291	8.919313e-03	2.809805e-03	-3.481846e-03	-7.316134e-03	1.859498e-02
##	G36142	-2.325644e-02	-5.019925e-03	-2.784085e-02	-1.758559e-02	8.787831e-03
##	G36138	-2.521134e-03	6.051260e-03	-4.280834e-03	-9.520502e-03	-1.379124e-02
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##	G36282	7.468891e-03	-7.592911e-04	-1.675665e-02	-8.673875e-04	6.836006e-03
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##	G36314	1.050593e-02	3.161713e-03	-6.210538e-03	7.607083e-03	-8.663754e-04
##	G36258	3.681841e-04	-2.093111e-02	4.629246e-03	2.736665e-04	3.725801e-03
##	G36147	-6.274544e-03	-2.040585e-02	7.796157e-03	-8.386569e-03	8.151797e-03
##	G36235	3.156749e-02	1.163034e-03	4.224526e-03	-7.603982e-03	1.163105e-02
##	G36143	7.549567e-03	-1.713288e-02	-7.705861e-03	-7.714452e-04	4.734819e-04
##	G36308	1.708647e-02	-1.298246e-02	-1.568278e-02	3.990473e-03	-1.571949e-02
##	G36209	-1.562073e-02	-1.066634e-02	2.023373e-02	8.023165e-03	-1.493670e-03
##		Axis.236	Axis.237	Axis.238	Axis.239	Axis.240
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##	G36918	8.311147e-03	-1.611154e-03	7.717085e-04	2.316054e-03	-2.159215e-03
##	G37044	-1.596757e-02	-1.321806e-03	-3.204510e-03	1.027099e-03	7.398727e-03
##	G37009	-7.392132e-03	5.165027e-04	-1.043081e-02	1.360343e-03	1.161444e-02
##	G37029	1.832253e-02	-5.729865e-03	3.304705e-03	-5.911294e-03	-1.581811e-02
##	G37035	-5.982668e-04	1.978418e-03	1.930749e-02	-5.713560e-03	7.066938e-03
##	G36982	1.255417e-03	1.228046e-02	2.237461e-03	-2.879218e-03	-3.142098e-03
##	G36984	1.075546e-02	5.435534e-03	-7.471116e-03	-4.353593e-03	4.960165e-03
##	G37030	1.406947e-02	3.223491e-03	5.755221e-03	1.641648e-03	-2.836628e-04
##	G37031	5.277122e-03	4.574489e-03	8.092244e-05	3.867365e-03	-1.093724e-02
##	G36906	3.312450e-03	1.858091e-04	3.158030e-03	-1.959858e-03	1.112960e-03
##	G37028	8.344883e-03	-2.216964e-05	-2.254593e-02	-2.689291e-03	9.954660e-03
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##	G37010	3.240806e-03	6.693735e-03	-3.995747e-03	1.266604e-02	1.275603e-02
##	G36944	6.904731e-03	-8.508499e-04	-2.317861e-02	1.300360e-02	3.054700e-03
##	G36902	-1.168890e-03	2.413470e-03	-2.341252e-02	1.323491e-02	6.598869e-03
##	G37051	1.378316e-02	1.160072e-02	4.514836e-03	1.390953e-02	5.984587e-03
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##	G37025	6.736480e-03	-6.278091e-03	6.465079e-03	-1.094851e-02	9.242355e-03
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## G36291 9.616976e-03 -2.690487e-02 2.375760e-02 1.562162e-03 -1.181393e-02
## G36142 -1.510034e-02 9.500715e-05 -1.602123e-02 4.589815e-03 -1.026143e-02
## G36138 -4.201080e-03 -7.078224e-04 -9.041871e-03 2.826419e-03 1.093727e-02
## G36203 -1.413468e-02 -1.398802e-02 9.460688e-03 7.814672e-03 -7.962301e-03

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##	G36282	3.098096e-03	-8.435890e-04	-1.577187e-02	3.141537e-03	2.271079e-02
##	G36290	-5.819903e-03	-2.996884e-03	5.117717e-03	-4.434544e-03	-1.207370e-02
##	G36274	-1.826045e-02	-6.154428e-03	8.890719e-03	1.633495e-02	6.140787e-04
##	G36314	-1.076197e-02	4.738705e-03	4.291098e-03	2.106413e-02	6.622638e-03
##	G36258	6.606016e-03	1.294805e-02	-1.444877e-03	-2.869995e-03	1.531479e-02
##	G36147	7.931406e-03	-1.038149e-03	1.824067e-02	1.409340e-02	1.107487e-03
##	G36235	-1.015344e-02	-1.783618e-02	1.875272e-02	1.648899e-03	-1.370145e-03
##	G36143	-6.672741e-03	-7.682404e-03	-1.609434e-02	1.161502e-03	-1.240018e-02
##	G36308	-9.778312e-03	-2.122270e-02	1.625238e-03	9.504101e-03	2.702827e-03
##	G36209	4.203170e-03	2.579859e-03	-1.395393e-02	-4.026386e-03	2.089153e-02
##		Axis.241	Axis.242	Axis.243	Axis.244	Axis.245
##	G37016	-7.537695e-03	1.920890e-02	-4.416306e-03	-5.436074e-03	3.091611e-03
##	G36918	-1.135032e-02	-6.902990e-03	5.722453e-04	-2.069801e-02	-2.143242e-02
##	G37044	3.714769e-02	6.713146e-03	-1.587455e-02	6.385129e-04	4.734516e-03
##	G37009	-6.451758e-03	-3.311637e-03	1.507659e-02	-1.710794e-02	-1.473103e-02
##	G37029	-4.379953e-03	-1.992588e-03	2.425696e-02	3.376622e-03	1.532125e-03
##	G37035	-8.160646e-03	-7.305951e-03	3.308655e-03	6.554463e-03	-9.887819e-03
##	G36982	3.118571e-03	-8.845228e-03	-4.224764e-03	1.199209e-02	-2.035954e-02
##	G36984	9.842140e-03	2.384673e-03	2.454324e-03	4.092945e-03	9.061320e-03
##	G37030	4.419463e-03	-1.348620e-04	3.580276e-03	-5.751555e-04	-6.086426e-03
##	G37031	4.819552e-04	-2.764627e-03	-8.476815e-03	1.263370e-02	-1.651576e-02
##	G36906	9.978818e-03	2.143541e-03	6.496591e-03	1.146544e-02	-1.472533e-02
##	G37028	-1.281172e-02	8.200028e-03	5.195162e-04	-3.478970e-04	1.637344e-02
##	G37014	2.612471e-03	5.816579e-03	1.797075e-03	-1.213772e-02	6.249887e-03
##	G37010	-1.728982e-03	9.874883e-03	-6.229665e-03	1.019709e-03	6.112166e-03
##	G36944	-1.297869e-02	-1.010338e-02	3.212097e-02	-9.554402e-03	-1.574508e-02
##	G36902	-9.003184e-03	-2.789567e-03	-9.344401e-03	1.383559e-02	1.023065e-02
##	G37051	-3.209596e-03	1.301203e-02	-1.377697e-02	1.273553e-02	8.133606e-03
##	G36964	1.042491e-02	1.963588e-03	1.182251e-02	3.797768e-03	-2.931842e-03
##	G36951	7.083989e-03	1.367667e-02	-4.903087e-03	-1.859924e-02	1.337436e-03
##	G37025	8.935394e-03	9.873770e-03	-2.406742e-02	-2.541839e-03	1.698284e-03
##	G36930	9.107483e-04	9.276361e-03	9.853140e-03	1.359788e-02	-4.999970e-03
##	G36935	7.895863e-03	3.261103e-03	-4.979792e-03	5.826848e-03	-1.122544e-02
##	G37041	7.981460e-03	-1.226282e-02	-2.090061e-03	-1.372263e-02	-1.539852e-02
##	G36959	1.895159e-03	-4.209200e-03	-1.209226e-02	7.584117e-03	3.389290e-03
##	G36905	-4.407401e-03	-1.354014e-02	-1.019362e-02	1.354706e-02	1.864688e-02
##	G36917	2.614956e-03	1.612885e-02	-2.890680e-02	-2.002504e-02	1.801850e-05
##	G36992	-1.357505e-02	6.142836e-03	9.538271e-03	7.715106e-03	1.415795e-02
##	G36921	5.483362e-03	1.009243e-02	-9.162316e-03	9.280952e-03	-9.250209e-03
##	G37004	-5.762275e-03	-2.690166e-03	-1.041613e-03	-1.170052e-02	9.924966e-03
##	G36966	2.910069e-03	2.281471e-02	-1.643586e-02	7.022846e-03	1.109008e-02
##	G36936	-1.130411e-02	1.068948e-03	8.539117e-03	5.074646e-03	1.094418e-02
##	G37015	4.879839e-03	6.448458e-03	-1.828943e-02	-1.454827e-02	1.192273e-02
##	G37034	9.353331e-03	5.823225e-03	1.257627e-02	-2.753004e-03	1.073697e-02
##	G36953	-2.995012e-03	1.182041e-02	-3.717552e-03	-1.495279e-02	-8.473763e-03
##	G36974	5.210920e-03	1.350218e-02	-1.005927e-02	1.430105e-02	-2.941942e-02
##	G37039	2.565706e-03	-1.168788e-02	-6.591132e-03	4.780285e-03	-4.884946e-03
##	G36933	-8.325509e-03	6.141422e-03	-3.184069e-03	3.362013e-03	2.120720e-02
##	G37052	4.163895e-03	1.023517e-02	1.159237e-02	-1.890992e-03	3.599386e-03
##	G36925	3.102416e-03	-1.182840e-02	-4.387326e-03	1.007107e-02	-4.913396e-03
##	G37046	7.369388e-03	1.483146e-02	-7.395514e-03	-1.116204e-02	5.472297e-03
##	G37053	-5.628107e-04	-1.241603e-02	1.041526e-02	8.924798e-03	6.101833e-03
##	G36998	4.542021e-03	7.093133e-03	1.503064e-02	-1.569456e-02	8.022480e-03
##	G37045	-1.343801e-02	-2.753801e-03	4.247307e-03	-1.504617e-02	7.949057e-03

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## G36988 7.104936e-03 8.469930e-04 -7.417062e-03 1.263634e-02 2.434851e-03
## G37037 6.456995e-03 8.506688e-03 -6.542834e-03 1.165419e-02 2.505558e-02
## G37005 2.074783e-03 -1.087209e-03 -3.118267e-03 -2.434196e-03 1.106640e-02
## G36928 -2.118582e-02 -7.474989e-03 -5.281011e-03 2.753605e-02 1.059011e-02
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## G37033 -8.040042e-03 5.666975e-03 1.258156e-03 3.850971e-03 1.646013e-02
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## G36937 3.962443e-03 -2.998903e-03 1.950003e-04 -2.089929e-03 1.155732e-02
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## G37032 -2.525077e-03 3.233434e-04 -1.119807e-02 -9.751631e-03 -1.352875e-02
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## G36987 9.193245e-03 -4.958145e-03 -1.394666e-02 -4.229280e-03 2.640943e-03
## G37042 -6.482278e-03 1.415063e-03 1.217686e-02 -3.627198e-03 1.412867e-03
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## G37027 1.211014e-02 -6.073936e-03 3.338223e-03 3.172689e-03 -5.567381e-03
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## G35364 3.129071e-03 -1.914881e-02 1.943857e-03 1.269702e-02 2.140522e-02
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## G35477 -1.123477e-02 -2.787750e-03 2.382683e-02 -3.303074e-02 -4.414651e-03
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## G35511 1.914852e-02 1.449586e-02 -1.899718e-03 -1.855026e-02 9.088175e-03
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## G35510 9.479822e-03 8.198601e-03 -2.650778e-05 4.284606e-03 -5.511253e-03
## G35470 1.828375e-03 3.562419e-03 6.546843e-03 1.430502e-02 8.113006e-03
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## G35422 1.854201e-02 -1.331323e-02 1.873903e-02 2.021497e-03 -8.323705e-04
## G35526 -7.856892e-03 -1.036548e-02 3.272052e-03 -2.281713e-03 2.561993e-03
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## G35348 1.341020e-02 6.439652e-03 -5.397498e-03 -9.488593e-04 7.218200e-03
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## G36145 1.773341e-02 -2.091262e-03 1.353079e-03 1.183341e-02 5.391923e-03
## G36196 3.449108e-03 6.405440e-03 -8.732187e-04 1.415252e-03 9.556264e-03
## G36219 1.108799e-02 2.061888e-02 6.521963e-03 -1.608856e-02 -2.588345e-03
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##	G36148	-8.796819e-03	4.537166e-03	-7.182479e-03	-1.412098e-03	-6.171444e-03
##	G36213	-1.170420e-02	2.946577e-03	-2.047566e-03	-8.825499e-03	-1.455495e-03
##	G36232	1.354640e-02	1.628149e-02	3.068352e-04	-1.806943e-02	7.638403e-03
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##	G36249	-7.321162e-03	-1.339553e-02	-3.967364e-03	-9.303310e-03	1.493185e-03
##	G36298	1.560042e-02	-2.619437e-03	5.785321e-03	-9.533984e-03	1.254654e-02
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##	G36172	1.494340e-02	-1.192511e-02	5.671408e-04	1.209061e-02	1.639507e-02
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##	G36175	5.870876e-04	-2.184420e-02	9.474148e-03	1.101636e-02	-8.001738e-03
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##	G36183	-9.223047e-03	5.745608e-03	-9.796225e-03	5.341750e-03	1.230699e-02
##	G36227	1.303707e-02	-3.790966e-03	-1.270097e-02	8.236506e-03	1.172629e-02
##	G36322	6.046043e-03	7.045683e-03	-4.962583e-04	-6.332344e-04	-6.620496e-03
##	G36182	2.137536e-03	1.155861e-02	-1.290965e-02	-5.744371e-03	6.913347e-03
##	G36256	-2.222949e-02	3.905677e-03	-2.227245e-03	5.598049e-03	6.149373e-03
##	G36163	-2.726906e-02	-1.239386e-02	3.985314e-03	-2.135216e-02	-1.438040e-02
##	G36287	-1.177978e-02	1.849580e-03	-1.184552e-02	-2.296451e-02	3.670252e-03
##	G36157	-1.151671e-02	-1.016689e-02	-5.199249e-03	2.202100e-03	4.265929e-03
##	G36262	2.285787e-03	2.838277e-03	-1.149985e-02	-1.039450e-02	-6.315579e-03
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##	G36194	-8.501204e-03	1.115449e-02	-1.160338e-03	3.571922e-03	7.116766e-03
##	G36244	1.037924e-02	-9.129360e-03	-3.729568e-03	-5.808223e-03	1.374735e-02
##	G36197	-6.888159e-03	6.681188e-03	4.982205e-03	1.242555e-02	-1.967415e-02
##	G36264	1.321673e-02	-9.534919e-03	2.316362e-04	6.664394e-03	3.789685e-03
##	G36317	-1.686804e-02	6.186061e-03	1.832812e-02	-6.654094e-03	-2.044048e-02
##	G36159	-4.655874e-03	7.828524e-03	8.638805e-03	-3.448624e-04	-8.608484e-03
##	G36234	-8.288215e-03	-1.796089e-02	-1.767858e-02	7.252869e-03	-7.475792e-03
##	G36206	-8.725571e-03	-7.286558e-03	9.835884e-04	-1.187004e-02	5.662315e-04
##	G36257	1.491733e-02	-4.743713e-05	5.816229e-03	-9.004679e-03	-6.023821e-03

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##	G36309	1.790309e-03	6.841776e-03	-1.467780e-03	6.895662e-03	6.760780e-03
##	G36146	6.729409e-03	-1.368003e-02	-4.341060e-03	-2.008706e-02	7.315579e-03
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##	G36274	-7.679082e-03	1.217331e-02	1.615854e-02	3.788150e-03	-2.648277e-02
##	G36314	-3.261649e-03	-4.602207e-03	-1.291888e-02	6.822468e-03	7.305560e-03
##	G36258	2.923278e-03	-4.140525e-03	2.927267e-04	-6.626456e-03	2.799947e-03
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##	G36308	-1.756640e-03	-7.829378e-03	2.059926e-02	2.117793e-02	-5.079996e-03
##	G36209	-6.936285e-03	-1.864224e-02	9.069795e-03	8.479355e-03	-1.291651e-04
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##	G37044	6.198275e-03	-6.498152e-03	-2.002797e-02	4.613243e-03	1.512667e-03
##	G37009	-1.596135e-03	-3.038787e-03	1.250700e-02	-1.081904e-02	4.444263e-03
##	G37029	1.130666e-03	1.009420e-02	1.273083e-02	-4.066832e-03	8.664374e-03
##	G37035	7.437823e-03	-7.537204e-03	-6.496011e-03	-2.285955e-03	-1.351226e-02
##	G36982	-3.396039e-03	-1.092867e-02	2.402984e-02	3.205822e-03	-2.104412e-03
##	G36984	-1.285022e-02	6.978455e-04	-1.127494e-02	4.850258e-03	-9.179957e-03
##	G37030	1.668569e-02	-2.807969e-03	-3.277356e-03	5.890391e-03	6.832847e-03
##	G37031	-3.961271e-03	-6.588829e-03	-1.610987e-02	1.551786e-02	4.760994e-03
##	G36906	-1.370745e-02	-4.668115e-03	-1.285257e-02	5.042209e-03	-5.732880e-03
##	G37028	-1.311494e-02	3.457979e-03	5.251510e-03	1.073368e-02	2.155031e-02
##	G37014	-1.263583e-02	1.474350e-03	9.887947e-03	-4.595760e-04	-8.621259e-04
##	G37010	1.570192e-02	1.922425e-03	5.674823e-04	-8.715444e-03	-8.143988e-03
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##	G36951	-3.262738e-03	1.771483e-02	-1.450574e-02	8.196987e-03	-1.583885e-02
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##	G35510	9.721043e-03	-7.696152e-03	5.346509e-03	-1.217275e-02	3.550782e-04
##	G35470	-5.736114e-03	-1.042963e-02	1.006121e-02	-9.691276e-03	-8.073420e-03
##	G35403	-1.276522e-03	-1.939366e-04	-5.186777e-03	1.289395e-02	1.690214e-02
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## G35409 9.168651e-03 1.010552e-02 -8.675237e-03 1.034667e-02 1.456728e-03
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## G36200 -2.916949e-03 -1.815383e-02 -8.381549e-03 -1.341658e-02 -1.282528e-02
## G36160 9.707188e-03 -1.339084e-02 -4.760349e-03 2.302379e-03 7.600209e-03
## G36185 5.275045e-03 3.446345e-03 -4.072304e-03 -1.719041e-02 1.391556e-04
## G36162 -4.356324e-03 1.125337e-02 -1.742494e-03 1.668216e-02 3.547996e-03
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##	G36244	-2.390476e-02	-1.358904e-02	3.597874e-03	-6.543126e-03	-1.021095e-02
##	G36197	4.668441e-03	-4.198928e-03	1.452700e-02	2.064977e-03	5.342317e-03
##	G36264	-1.198048e-02	-2.055123e-03	-2.043857e-02	-1.601432e-02	-3.488962e-03
##	G36317	-1.026997e-03	6.324624e-03	2.024377e-02	-8.097585e-03	7.619106e-03
##	G36159	-5.924248e-03	3.815743e-03	-1.056017e-02	6.817535e-03	-6.232770e-04
##	G36234	2.427104e-02	2.731776e-03	-1.457350e-04	-1.652230e-02	1.607209e-03
##	G36206	4.135430e-03	-1.763620e-02	1.455358e-03	7.218859e-03	-2.167388e-02
##	G36257	-4.889900e-03	1.797627e-02	-5.394135e-03	4.535800e-03	8.645751e-03
##	G36216	3.196356e-03	-9.927672e-03	6.996230e-03	-4.054129e-03	4.085224e-03
##	G36208	-1.055229e-02	-1.139262e-02	6.071603e-03	1.225005e-02	1.146506e-02
##	G36309	-4.974329e-03	-8.026060e-03	5.470874e-03	1.383734e-02	3.019279e-03
##	G36146	-5.054125e-03	2.397781e-04	3.086398e-03	3.149490e-03	-1.472705e-04
##	G36192	-1.446671e-02	5.198251e-03	-9.817220e-03	7.553518e-03	1.253746e-02
##	G36284	-9.553722e-03	1.890948e-02	5.627278e-03	-7.789081e-03	2.914565e-03
##	G36291	1.603490e-03	-6.387810e-03	1.173698e-03	1.149641e-02	-1.046932e-02
##	G36142	5.091385e-03	-5.534587e-03	-6.364018e-03	-2.985591e-03	-1.790830e-02
##	G36138	-8.191071e-03	-4.326968e-03	1.678886e-03	2.038413e-02	4.452748e-03
##	G36203	-1.525586e-02	-1.422174e-02	-1.227908e-02	1.809053e-02	-1.539669e-03
##	G36282	8.498831e-03	-2.592891e-03	1.688929e-03	-3.681143e-03	1.557016e-02
##	G36290	-1.644197e-03	2.507352e-03	1.515557e-02	1.420675e-04	2.773059e-03
##	G36274	-9.232547e-03	4.014553e-03	-3.175702e-03	-4.902563e-03	1.078950e-02
##	G36314	-3.460137e-03	-7.138113e-05	1.650148e-03	1.082131e-02	-3.411585e-03
##	G36258	-1.277798e-02	-6.477381e-03	-2.788227e-03	2.702514e-03	-3.469853e-03
##	G36147	-7.101251e-03	-1.168872e-02	-6.838640e-03	-1.341084e-03	-1.652953e-02
##	G36235	-2.238559e-03	-9.716271e-03	5.722129e-03	4.088569e-03	-3.363040e-03
##	G36143	7.840444e-03	2.280297e-03	1.492488e-03	-5.340349e-03	-3.206514e-03
##	G36308	-5.095463e-05	1.245320e-02	-1.120437e-02	-9.807378e-03	-4.519002e-04
##	G36209	6.054473e-04	-1.257270e-02	4.297683e-03	1.594082e-03	2.818903e-03
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##	G36918	8.143341e-03	-1.590099e-03	-3.469229e-03	-5.787228e-03	-4.360650e-03
##	G37044	-7.860672e-03	-5.510214e-03	-2.682250e-03	-4.945470e-03	-5.350292e-03
##	G37009	-3.902559e-04	-1.471109e-02	9.545984e-04	8.993756e-03	-9.851626e-03
##	G37029	4.826728e-03	-1.618852e-02	3.215935e-03	-1.423898e-03	-1.256904e-02
##	G37035	-2.022248e-03	-1.226807e-02	-4.664426e-03	2.870747e-03	5.533956e-03
##	G36982	-1.018162e-02	-1.579390e-03	3.228291e-03	9.297703e-03	-1.196571e-02
##	G36984	4.814760e-03	1.118282e-02	6.471310e-03	1.292401e-02	-3.485290e-03
##	G37030	-3.102361e-03	-9.287029e-04	5.719144e-03	-9.238483e-03	-7.449830e-03
##	G37031	-1.009737e-02	-8.584763e-03	2.617996e-03	1.033588e-02	-1.747454e-03
##	G36906	-4.028305e-05	-1.909888e-02	-3.231824e-03	-1.607526e-02	1.087331e-02
##	G37028	-9.309023e-03	-1.163136e-02	-5.377164e-03	-8.342204e-03	-5.895586e-04
##	G37014	-3.595945e-04	-5.862549e-03	1.998998e-03	-1.811256e-03	-7.904874e-03
##	G37010	-7.199405e-03	-2.321267e-03	1.817186e-03	9.231222e-03	-3.701249e-04
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##	G37051	4.695680e-03	-1.034259e-02	-3.236005e-03	-2.423289e-03	-7.420202e-03
##	G36964	-5.691644e-03	-2.415098e-05	-4.160778e-03	-1.830725e-04	-3.299127e-03
##	G36951	-4.478348e-03	1.047033e-02	-9.070729e-03	1.135416e-03	-8.057007e-03
##	G37025	-4.040364e-03	1.209862e-02	6.132330e-03	-2.911219e-03	1.242191e-02
##	G36930	-1.742305e-04	2.919898e-03	-9.444511e-03	1.088684e-03	2.880069e-03
##	G36935	2.323360e-03	4.989559e-03	3.450426e-03	-7.568891e-03	-8.720469e-03
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## G36992 -7.146673e-03 -2.854970e-03 -5.691733e-03 -4.817386e-03 2.974588e-03
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## G36925 -1.172373e-02 -3.214987e-04 6.081363e-03 -4.824524e-03 1.233584e-02
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## G35531 -4.909207e-03 -2.011860e-02 5.545986e-03 -9.052079e-03 4.048497e-03
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## G36224 7.690606e-03 8.125796e-03 -1.661747e-03 -1.532302e-02 -1.124249e-02
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## G36164 -1.350123e-02 8.864911e-03 -1.299429e-02 2.850259e-03 -3.332934e-03
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##	G36258	3.015674e-03	6.451103e-03	4.004523e-03	1.236503e-02	-1.344378e-02
##	G36147	1.669316e-02	-1.490396e-03	-1.185988e-03	-8.914012e-03	-1.504064e-02
##	G36235	3.352236e-03	5.331221e-03	1.555135e-02	2.126542e-03	8.956451e-03
##	G36143	9.919924e-03	-6.228264e-03	-4.309800e-03	1.334462e-02	-1.327464e-02
##	G36308	4.710021e-04	4.433578e-04	-1.271913e-02	6.193657e-03	-2.556166e-03
##	G36209	-7.411706e-03	-1.130236e-02	1.202826e-02	-9.436662e-03	3.376660e-03
##		Axis.266	Axis.267	Axis.268	Axis.269	Axis.270
##	G37016	5.481552e-03	-6.790157e-03	-1.337169e-02	-3.126548e-03	-8.772772e-03
##	G36918	1.129893e-02	7.905697e-03	3.727159e-03	5.899218e-03	-5.448715e-03
##	G37044	-1.010000e-02	1.613010e-03	5.221123e-03	8.226277e-03	-1.051971e-02
##	G37009	-1.656700e-03	2.483088e-03	1.269475e-04	-1.196669e-02	1.060645e-02
##	G37029	-9.344779e-03	-3.882543e-04	9.665163e-03	-5.014996e-03	2.180858e-02
##	G37035	-1.618251e-03	1.050063e-02	-1.214662e-02	-9.766035e-03	1.258764e-02
##	G36982	2.692911e-03	-2.382499e-03	-3.808278e-04	-5.172667e-03	1.777198e-04
##	G36984	-3.785773e-03	-6.200926e-03	2.371484e-03	-8.629389e-03	-1.169026e-03
##	G37030	-1.772688e-02	-9.127174e-03	9.454286e-03	-4.223803e-04	1.295505e-03
##	G37031	6.343032e-04	-5.859086e-03	-9.288284e-03	-9.807451e-03	7.227408e-03
##	G36906	4.251204e-03	-1.586715e-02	-7.551527e-03	-5.814326e-03	1.262534e-03
##	G37028	-3.035772e-03	-5.984308e-03	-3.193725e-03	3.255854e-03	-6.468423e-03
##	G37014	-3.835873e-03	8.199368e-03	1.331090e-02	-9.804467e-03	-4.209692e-04
##	G37010	6.865372e-03	1.486576e-03	3.690006e-03	-9.072813e-04	-7.654643e-03
##	G36944	-5.704335e-03	4.336651e-03	7.507175e-03	-3.934229e-03	1.787931e-03
##	G36902	-1.529630e-02	-4.843494e-03	-5.586078e-03	-2.935693e-03	-5.006028e-03
##	G37051	5.659519e-03	2.765513e-03	-2.306468e-03	-1.011012e-02	-4.527917e-03
##	G36964	-4.537862e-03	-2.702440e-03	4.343955e-05	-1.323330e-03	-6.933193e-03
##	G36951	1.250170e-03	-4.598444e-03	1.470596e-02	8.932504e-03	1.471077e-03
##	G37025	5.175237e-03	-7.794394e-04	-6.731705e-04	1.903987e-03	1.530195e-03
##	G36930	2.927103e-03	-6.883837e-03	-2.165157e-03	-8.031077e-03	-8.866134e-03
##	G36935	1.314464e-02	-2.182718e-03	1.375958e-04	-1.114800e-02	5.392048e-03
##	G37041	2.312222e-03	1.657912e-03	-1.332448e-03	6.977094e-04	2.053714e-03
##	G36959	1.220100e-02	-1.139269e-02	-9.023291e-03	-3.731647e-03	8.172516e-03
##	G36905	-6.622594e-03	2.151066e-02	1.424189e-02	-8.776264e-03	1.486407e-02
##	G36917	8.527873e-03	-3.256616e-03	9.438446e-03	-7.985817e-03	5.006809e-03
##	G36992	5.660505e-03	-7.717758e-03	1.503528e-03	-7.619484e-03	-3.067718e-03
##	G36921	1.259038e-02	1.813511e-03	-7.247307e-03	4.676238e-03	1.066649e-02
##	G37004	3.197870e-03	-6.219400e-03	6.740374e-03	8.092606e-03	8.732652e-03
##	G36966	-1.300741e-02	-7.204351e-03	3.077507e-02	3.479947e-03	-6.578243e-03
##	G36936	5.171022e-03	-8.231826e-03	1.001487e-02	7.312661e-03	6.182738e-03
##	G37015	-4.046302e-03	1.393449e-02	5.605350e-03	6.321524e-03	-1.293423e-02
##	G37034	-1.017777e-02	2.067540e-03	7.250595e-04	-1.046671e-02	6.369882e-03
##	G36953	-8.918347e-04	6.107617e-03	-1.292128e-02	-1.535796e-03	-6.107540e-03
##	G36974	-5.615700e-03	2.174374e-02	2.287214e-02	4.135641e-03	-3.505004e-03
##	G37039	-5.655377e-04	-6.390876e-03	-1.183670e-02	4.232067e-04	-5.640552e-03
##	G36933	4.110361e-04	1.848993e-02	-1.153643e-02	1.406897e-02	-1.218325e-02
##	G37052	3.654023e-03	8.194287e-03	5.391147e-03	1.352384e-03	8.007475e-03
##	G36925	9.696247e-04	4.031120e-03	8.536918e-03	2.268438e-03	-2.661922e-03
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##	G37053	-1.255939e-02	-3.887072e-03	-3.778869e-03	6.670594e-05	7.218395e-03
##	G36998	-2.022335e-02	-4.426807e-03	-6.094955e-03	-6.074783e-03	7.978774e-03
##	G37045	4.128801e-03	-8.928034e-03	-9.310385e-03	-3.386397e-03	1.311150e-03
##	G37049	2.995856e-03	8.672650e-03	-7.285472e-03	-9.989304e-04	1.147301e-02
##	G37019	-2.775996e-03	-6.098945e-03	9.475528e-03	4.250263e-03	-4.493744e-03

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## G36928 -1.311596e-02 3.936956e-03 1.033796e-02 3.725184e-03 -2.558285e-03
## G36923 1.359850e-02 5.646860e-03 -1.156005e-03 2.129468e-03 -2.150364e-02
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## G37017 7.835568e-03 -7.372037e-04 -5.442967e-03 -8.681930e-03 4.022887e-03
## G37012 -6.067805e-04 2.396949e-03 -4.597130e-03 2.761224e-03 -6.319915e-03
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## G37032 1.016572e-02 4.269082e-03 -1.708933e-03 -1.749279e-03 4.948178e-03
## G36932 3.296176e-03 2.514773e-03 -2.193640e-03 4.878761e-03 -4.634539e-03
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## G36911 -1.224083e-02 -6.905128e-03 7.813470e-04 -1.200985e-03 1.921151e-04
## G36987 1.165726e-03 -7.360168e-03 5.596694e-03 5.579453e-04 2.050457e-03
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## G37027 7.581703e-03 -5.767781e-04 1.305932e-02 9.673868e-03 4.335152e-04
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## G35351 5.838472e-03 1.975598e-02 -1.092506e-02 3.364723e-03 -1.437263e-02
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## G35374 -1.389040e-02 -1.899584e-03 -2.538597e-03 1.755336e-03 5.708575e-03
## G35486 -1.426770e-03 2.089655e-03 -8.094633e-03 1.132508e-03 5.837755e-03

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## G35519 -6.670442e-03 -9.734009e-05 1.209046e-02 -1.750791e-02 8.791575e-03
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## G35464 9.087637e-03 1.567414e-03 -3.739517e-03 -6.207611e-03 -2.414430e-03
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## G35366 1.871324e-04 3.067943e-03 -7.370424e-03 7.961422e-03 3.868872e-04
## G35530 -1.060546e-02 2.629848e-03 3.349361e-03 1.008799e-02 -3.137905e-03
## G35512 1.134824e-02 3.512592e-03 3.461716e-03 -9.041971e-03 -1.284799e-03
## G35372 -6.873304e-03 6.246605e-03 1.222948e-02 5.012846e-03 1.327415e-03
## G35407 -1.677100e-03 1.785277e-04 -6.348312e-03 2.179684e-05 2.063806e-03
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## G35469 2.742865e-03 2.246890e-03 1.429381e-02 -1.064533e-02 -5.904699e-03
## G35513 -2.143300e-03 6.834685e-03 -5.793958e-03 2.447694e-02 -1.661806e-02
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##	G36157	2.786259e-03	-7.469330e-03	3.393971e-03	-1.832916e-02	-1.149831e-04
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##	G36200	5.874691e-03	5.524979e-03	-7.956119e-03	6.907014e-03	4.609886e-03
##	G36160	3.583389e-03	-5.074755e-03	8.679713e-03	1.491197e-02	-4.535959e-03
##	G36185	1.220190e-02	-3.516020e-03	-1.014449e-02	-1.604781e-02	-1.840948e-02
##	G36162	5.507065e-03	1.488236e-03	1.922341e-03	-2.504396e-03	6.095053e-03
##	G36204	-1.390046e-02	5.868022e-03	-1.300702e-02	2.575810e-03	-3.119504e-03
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##	G36264	-8.452977e-03	-1.325051e-02	7.863183e-04	1.680940e-02	3.344679e-02
##	G36317	-1.070872e-02	1.243272e-02	-8.427210e-04	8.982117e-03	-9.051123e-03
##	G36159	-7.484557e-03	3.008749e-03	2.703791e-03	4.224235e-03	9.784992e-04
##	G36234	-1.551968e-03	-5.698749e-03	-9.329758e-03	-9.807637e-03	3.512110e-03
##	G36206	3.809428e-03	1.314783e-02	-3.096509e-03	-3.047891e-03	1.228392e-02
##	G36257	-5.533575e-03	-3.116833e-04	-4.105702e-03	-3.647200e-03	7.240234e-03
##	G36216	8.500952e-03	2.046336e-02	4.825285e-03	-2.218561e-04	-5.220686e-03
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##	G36309	6.258688e-03	7.651507e-03	-1.034622e-02	-1.836776e-02	-1.460261e-03
##	G36146	3.800221e-03	-5.365581e-03	-1.275763e-03	-1.698999e-03	4.264211e-03
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##	G36282	-1.165959e-02	-3.344584e-03	4.856362e-03	3.505709e-03	2.575571e-03
##	G36290	-8.095715e-03	-2.219994e-04	2.107778e-03	-7.085753e-03	4.121664e-03
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##	G36308	7.191644e-03	-2.231211e-02	8.836264e-03	1.503762e-02	1.260062e-04
##	G36209	1.569556e-02	-9.248370e-03	-3.828335e-03	1.253777e-02	-8.613666e-03
##		Axis.271	Axis.272	Axis.273	Axis.274	Axis.275
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##	G37044	3.024781e-03	-6.009353e-03	5.577923e-03	2.977317e-04	-4.340179e-03
##	G37009	6.076514e-03	7.624199e-03	1.649723e-02	2.048320e-03	-9.533185e-05
##	G37029	1.133353e-02	-1.801964e-02	-2.860575e-03	5.259214e-03	4.570428e-04
##	G37035	2.129772e-03	-8.624666e-03	3.482576e-05	1.427590e-02	5.669097e-03
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##	G37030	4.529937e-03	2.263515e-03	-2.153687e-03	-4.401189e-03	-5.490751e-03
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##	G37028	-1.489204e-02	1.151254e-02	-2.737205e-03	-1.094392e-02	7.743102e-03
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## G36902 -1.195217e-02 5.140129e-03 -2.032750e-02 -8.418761e-04 -2.723608e-04
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## G36968 -2.190726e-03 9.100600e-03 -6.139743e-03 -2.279977e-03 -5.805753e-03
## G36911 -4.424647e-03 1.259041e-03 6.790524e-03 1.372929e-02 -2.910520e-03

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##	G36284	2.932412e-02	-1.352210e-02	-8.976796e-03	1.007619e-02	-8.238460e-03
##	G36291	-9.699864e-03	-4.245888e-03	3.630860e-03	-3.352570e-03	9.940938e-03
##	G36142	-8.703516e-03	4.111134e-03	1.280650e-03	1.437813e-03	-4.751978e-03
##	G36138	1.736984e-02	-1.213993e-02	-4.702751e-03	-4.022158e-03	-6.850724e-03
##	G36203	1.671870e-02	2.143052e-03	2.264253e-03	-2.660220e-03	2.852336e-03
##	G36282	9.160545e-04	3.455544e-03	-2.844726e-03	9.250549e-04	-6.707133e-03
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##	G36274	-1.626685e-02	-4.930678e-03	9.045742e-03	2.320713e-03	-1.743099e-02
##	G36314	-5.589846e-04	-3.644827e-03	6.057726e-03	-1.596775e-03	1.926072e-03
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##	G36147	1.354243e-02	1.624431e-05	1.399523e-03	4.952627e-03	-4.780133e-03
##	G36235	9.589878e-03	-5.857950e-03	1.286986e-02	3.172681e-04	8.333169e-03
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##	G36308	-2.338760e-04	7.609813e-03	2.886066e-03	5.130374e-03	7.976650e-03
##	G36209	-1.628289e-02	-1.296710e-02	7.070042e-03	-7.007966e-03	1.218006e-02
##		Axis.276	Axis.277	Axis.278	Axis.279	Axis.280
##	G37016	7.932929e-03	-4.424753e-03	-2.741973e-03	-7.026241e-03	7.507546e-03
##	G36918	-1.794056e-03	2.441149e-03	-2.395933e-03	7.017482e-03	8.932090e-03
##	G37044	4.884471e-04	3.240834e-03	2.051617e-03	7.483131e-03	5.118491e-03
##	G37009	-8.572969e-03	6.772527e-03	1.685651e-02	-4.925115e-03	6.996878e-03
##	G37029	1.550365e-02	4.755113e-03	7.020496e-04	-2.227339e-03	1.405727e-02
##	G37035	2.713402e-03	5.521581e-03	1.255898e-02	-1.886849e-03	-7.511363e-03
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##	G36984	-9.141568e-03	2.517626e-03	1.314096e-02	3.180356e-04	-2.248447e-03
##	G37030	-2.152263e-03	1.893046e-03	-3.663692e-04	-6.994198e-03	-2.858063e-03
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##	G36906	-9.949723e-04	-3.245724e-03	-2.986239e-03	-1.525403e-03	1.012444e-03
##	G37028	8.263903e-03	3.303758e-03	-1.721567e-03	-3.915705e-03	-9.032773e-04
##	G37014	-8.400593e-03	-6.660462e-03	-1.437969e-03	-7.867130e-03	4.394917e-03
##	G37010	-8.051041e-03	-2.677515e-03	5.153385e-03	-1.114370e-02	-5.403552e-03
##	G36944	-4.638360e-03	-6.362127e-03	4.528630e-03	-3.546694e-03	-1.408342e-02
##	G36902	4.786178e-03	1.191773e-02	1.158014e-02	-4.378006e-03	8.691928e-03
##	G37051	-1.898947e-03	5.647213e-03	-6.558441e-04	-5.625223e-04	2.215533e-03
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##	G36951	3.220650e-03	3.819838e-03	3.559046e-03	-1.122354e-02	-1.073390e-02
##	G37025	-1.555364e-02	9.537702e-03	-5.701890e-03	4.785567e-03	-3.815095e-03
##	G36930	-2.740052e-03	9.723431e-03	-2.438792e-03	3.642035e-03	3.057288e-03
##	G36935	-9.009785e-04	1.245588e-03	-2.888782e-04	-1.786578e-03	4.194896e-03
##	G37041	-9.875214e-03	1.277016e-03	-4.229807e-03	4.539430e-03	7.862504e-03
##	G36959	8.074695e-03	-3.265795e-04	3.932795e-03	-7.614969e-03	8.586881e-03
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##	G36921	2.782984e-03	9.020852e-03	1.005712e-02	5.063905e-04	1.061120e-03
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##	G36936	6.061934e-03	4.652200e-03	-1.501525e-02	1.722908e-03	-2.191010e-03
##	G37015	2.829042e-03	7.015230e-03	-1.731861e-03	-5.416501e-03	-1.183877e-02
##	G37034	7.161655e-03	-7.262346e-03	6.386789e-03	-9.497076e-03	-4.134197e-05
##	G36953	-2.804537e-03	-1.459835e-02	6.226599e-03	-4.221752e-03	-1.113736e-02
##	G36974	-3.899366e-03	1.984566e-02	3.220666e-03	9.720192e-03	3.917278e-03

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## G36193 6.733209e-04 -1.203666e-03 -1.157610e-03 -1.054073e-02 -1.366492e-02
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## G36248 1.234435e-02 -9.503590e-03 -4.171420e-03 -9.789147e-03 -4.617305e-03
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## G36175 -9.187489e-03 1.315036e-02 -1.554758e-02 2.118138e-03 5.058799e-03
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## G36182 -6.500060e-03 -2.109656e-03 5.120670e-03 -5.275312e-03 2.461939e-02
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## G36287 9.295059e-03 1.228036e-02 6.636587e-03 2.993370e-03 5.241568e-03
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## G36262 1.051618e-02 9.382640e-03 -6.964694e-03 -6.729695e-03 8.324775e-05
## G36200 -3.145277e-03 7.685870e-03 1.273170e-03 -6.497155e-03 -5.490901e-04
## G36160 1.521992e-02 1.039345e-03 -1.862670e-04 6.625394e-04 -1.160526e-04
## G36185 1.875979e-02 4.246280e-03 2.958518e-03 -8.015585e-05 -9.840012e-03
## G36162 1.821981e-03 -2.510920e-03 3.815183e-04 8.992757e-03 -1.153284e-02
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## G36318 4.825639e-03 4.636998e-03 -1.737074e-03 3.855586e-03 1.737710e-02
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##	G36208	1.636411e-03	4.311572e-03	-5.199959e-05	-6.699314e-04	2.276493e-03
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##	G36284	-1.782045e-02	1.168011e-02	7.939760e-03	1.014540e-02	6.639378e-05
##	G36291	6.215284e-03	1.416891e-03	2.583598e-03	-9.428449e-05	-2.342974e-04
##	G36142	-2.827778e-03	2.993967e-03	7.822657e-03	-8.751804e-04	-5.772509e-03
##	G36138	-3.359338e-03	-5.147789e-03	-3.172082e-04	7.469192e-03	-3.882529e-03
##	G36203	-5.761707e-03	-4.109073e-03	-6.236577e-03	-8.271293e-03	2.847972e-03
##	G36282	2.386842e-03	3.163088e-04	-4.650589e-03	-3.153485e-04	-9.634527e-03
##	G36290	1.044683e-02	7.677343e-03	-3.486958e-03	1.721803e-03	-9.346761e-03
##	G36274	5.733598e-04	-1.554206e-02	-9.558826e-03	2.024707e-03	1.248653e-02
##	G36314	-1.398081e-02	5.716087e-03	-4.026634e-03	7.480824e-03	1.649385e-03
##	G36258	-2.520696e-03	-3.951919e-03	-4.341970e-03	7.719805e-03	-3.062266e-03
##	G36147	-8.544177e-03	6.097512e-03	-7.025112e-03	7.540202e-03	-1.126042e-02
##	G36235	-3.269932e-03	-3.787377e-03	1.081457e-02	2.822124e-03	1.972532e-03
##	G36143	-5.121745e-03	-7.101394e-03	-4.032517e-03	3.701773e-03	7.263082e-03
##	G36308	1.591447e-03	1.999092e-02	-9.649725e-03	-3.509257e-03	-5.755039e-03
##	G36209	6.836924e-03	1.042563e-03	4.913912e-03	-4.797184e-03	7.728372e-03
##		Axis.286	Axis.287	Axis.288	Axis.289	Axis.290
##	G37016	2.477068e-03	-3.781533e-03	4.207966e-03	7.326979e-03	7.011121e-03
##	G36918	-2.513656e-03	-2.997530e-03	-1.684583e-03	-7.937599e-03	-3.270590e-03
##	G37044	7.407446e-03	3.256792e-03	1.677209e-03	2.249065e-03	5.581669e-03
##	G37009	3.183444e-03	1.000368e-02	-1.149835e-02	2.448742e-03	3.537535e-03
##	G37029	2.578059e-03	-3.178142e-03	-4.934211e-04	2.678459e-03	-5.627662e-03
##	G37035	-8.195428e-03	-8.951639e-04	2.647498e-03	-4.461090e-04	7.429144e-03
##	G36982	8.353721e-03	5.362305e-03	-4.237614e-03	8.510273e-03	-4.483990e-04
##	G36984	-7.164715e-03	3.416027e-03	-5.006399e-03	6.979621e-03	-1.593733e-03
##	G37030	1.003393e-02	2.435636e-04	8.258909e-03	-5.661975e-03	-1.717702e-03
##	G37031	-7.553339e-03	5.096580e-03	-1.403872e-03	-3.241167e-03	3.272319e-03
##	G36906	-7.947126e-04	-4.899801e-03	-1.470072e-02	-2.917177e-03	1.355965e-03
##	G37028	8.606100e-03	-5.048687e-04	-4.044473e-03	-2.078232e-03	-1.128509e-03
##	G37014	2.916857e-03	7.218771e-04	3.368675e-03	1.013491e-03	-7.225362e-03
##	G37010	-6.250842e-04	4.990883e-03	-4.841471e-03	1.517060e-02	-1.390380e-03
##	G36944	-1.152783e-03	3.997175e-04	-2.659712e-03	7.362910e-04	-4.566304e-03
##	G36902	7.133981e-03	1.566976e-03	-3.747016e-04	-3.643511e-03	8.808906e-03
##	G37051	-3.198276e-03	-6.514378e-04	8.019334e-03	-5.299363e-03	-5.907797e-03
##	G36964	-6.593102e-03	-5.739752e-04	-2.967113e-03	3.683121e-03	3.074402e-04
##	G36951	-4.640963e-03	3.242582e-05	1.609964e-04	-2.774539e-03	-3.202297e-04
##	G37025	3.426082e-03	1.360193e-02	3.154422e-03	-6.864963e-03	1.143749e-02
##	G36930	7.384175e-03	-3.146828e-03	-1.712397e-03	-3.765428e-05	6.431827e-03
##	G36935	-2.872274e-03	-1.349721e-02	-5.452818e-03	-1.034738e-02	8.035931e-03
##	G37041	1.825914e-03	1.613166e-03	-1.516727e-02	3.212304e-03	3.202867e-03
##	G36959	5.323150e-03	-4.493737e-03	-2.230104e-03	3.937825e-03	-2.283409e-03
##	G36905	-2.776711e-03	-4.745456e-03	-9.117147e-04	4.268700e-03	9.189347e-03


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## G36921 -6.450938e-04 7.741530e-03 2.953323e-03 3.745147e-03 8.234079e-03
## G37004 1.441785e-03 -2.763527e-04 1.583738e-03 -3.217040e-03 -2.967954e-03
## G36966 1.848378e-04 5.983605e-03 -6.860501e-03 -2.479661e-03 -5.190222e-03
## G36936 -1.199934e-03 -4.306959e-03 9.650358e-04 -6.560308e-03 2.286200e-03
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## G36953 4.829881e-03 -3.791635e-03 1.146460e-02 4.887924e-03 -3.338141e-03
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## G37053 1.034704e-04 -1.096788e-02 3.548560e-04 1.038062e-02 -1.346172e-02
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## G37019 6.461955e-03 -3.591881e-03 -4.394810e-03 2.708508e-03 -1.383305e-03
## G36988 1.956396e-03 2.106379e-03 -3.652357e-03 2.326301e-03 1.098012e-02
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## G37005 6.107630e-04 -5.489609e-03 6.859868e-04 -9.106663e-04 6.677867e-03
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## G37047 -8.714518e-03 -3.158649e-03 5.285764e-04 4.687691e-03 9.961803e-03
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## G36911 1.275636e-02 1.816708e-03 5.461394e-03 1.390693e-02 1.487473e-02
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## G37036 3.435956e-03 -3.777167e-03 3.665964e-03 -4.052230e-03 -5.135238e-03
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## G35381 -1.085794e-03 -4.853133e-03 -5.306633e-03 -1.714687e-03 9.052474e-03
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## G35390 7.187902e-03 1.232935e-03 4.705230e-03 -2.417582e-03 -3.207765e-03
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## G35356 -1.785519e-02 1.610550e-03 6.548590e-03 -6.870399e-03 -5.791227e-03
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## G36230 1.852364e-02 7.015161e-03 -1.000684e-04 -6.229277e-03 5.878198e-03
## G36320 -1.573282e-03 7.833609e-03 3.225984e-03 -3.120932e-03 -3.826602e-03
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## G36153 3.016062e-03 9.808222e-03 -1.132468e-02 -1.405348e-02 -4.596941e-03
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## G36227 -3.751208e-03 1.918673e-02 -8.438925e-03 -4.709819e-03 -1.268629e-03
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## G36182 7.268112e-03 -3.568710e-03 -1.000455e-02 3.497258e-03 -1.228859e-02
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## G36159 3.306952e-04 -2.737408e-03 1.098692e-03 5.657244e-03 -1.468688e-03
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## G36206 -1.755251e-02 5.975375e-03 -3.666558e-03 1.762637e-03 9.105157e-03
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##	G36235	-8.430706e-03	-2.621142e-02	-5.947492e-03	1.139995e-03	-6.006836e-03
##	G36143	-2.710134e-03	1.689533e-03	2.994606e-03	3.623261e-03	3.521249e-03
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##	G36209	-7.615880e-03	3.876894e-03	7.873851e-03	6.744549e-03	1.923001e-03
##		Axis.291	Axis.292	Axis.293	Axis.294	Axis.295
##	G37016	-5.893471e-04	-2.198396e-03	-5.056467e-03	-2.844171e-03	-3.225069e-03
##	G36918	4.125316e-03	9.200896e-03	6.363691e-03	-7.766027e-04	2.396907e-03
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##	G37009	6.994909e-03	-7.493205e-03	-6.915494e-04	1.527455e-03	-1.560605e-03
##	G37029	7.070636e-03	5.815113e-03	2.226019e-03	-1.055310e-02	3.655794e-03
##	G37035	-4.254016e-03	-1.697740e-03	1.568958e-03	-2.988657e-03	7.542387e-03
##	G36982	-2.458187e-03	3.602095e-03	1.337185e-03	6.311243e-03	9.685750e-04
##	G36984	-1.088005e-03	5.521474e-03	-9.115042e-04	-3.971532e-03	2.618409e-04
##	G37030	3.537216e-03	5.581471e-04	-6.637562e-03	1.471079e-03	5.355405e-03
##	G37031	-5.930713e-03	-3.229143e-03	2.260095e-03	-1.690069e-02	5.670595e-03
##	G36906	-5.272959e-03	6.548153e-03	6.728996e-03	5.288430e-03	-2.408229e-05
##	G37028	4.760769e-03	2.804991e-03	-1.025043e-04	-4.141966e-03	-9.857899e-03
##	G37014	-6.901914e-03	-1.536401e-04	-2.233673e-03	-3.328531e-03	-2.111010e-03
##	G37010	5.735940e-03	-3.033252e-03	6.912642e-03	-5.845357e-03	-5.955977e-03
##	G36944	-4.548592e-03	2.418814e-03	8.886019e-04	-2.095908e-04	-1.047491e-04
##	G36902	-7.712237e-03	-4.187154e-03	2.251982e-03	2.019228e-03	-3.749146e-03
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##	G36951	-1.679802e-03	3.731796e-03	1.079246e-02	-1.375978e-03	5.880549e-03
##	G37025	-1.118214e-03	3.447914e-03	1.064470e-03	1.238641e-02	-4.575323e-03
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##	G36935	2.811462e-03	5.563517e-03	6.685734e-03	-6.117231e-04	-2.225619e-03
##	G37041	5.593457e-04	2.132950e-03	-6.689513e-03	1.468819e-02	-3.994816e-03
##	G36959	-1.943200e-03	6.700104e-03	7.823936e-03	-6.246890e-03	8.387958e-03
##	G36905	5.353221e-03	8.557520e-03	-2.05215e-03	-1.661580e-03	4.853421e-03
##	G36917	-2.116915e-03	-4.900730e-03	9.012072e-03	7.394214e-03	6.507066e-03
##	G36992	9.880869e-03	-5.075621e-03	7.676690e-03	1.560927e-03	1.770061e-03
##	G36921	2.037637e-03	3.672475e-03	2.636900e-03	-4.025063e-03	3.858350e-03
##	G37004	-1.003070e-03	2.191038e-04	-2.010361e-03	-1.554797e-03	3.734246e-03
##	G36966	-1.034315e-02	5.177050e-03	1.676308e-03	2.281571e-03	-3.944435e-03
##	G36936	-3.053383e-03	-6.579175e-03	1.456034e-03	-1.180310e-02	7.009925e-03
##	G37015	-2.477531e-03	-5.521314e-04	-1.928777e-03	-6.427372e-03	4.445527e-03
##	G37034	6.479278e-03	-1.110956e-02	3.436451e-03	-1.634961e-03	1.318949e-03
##	G36953	-2.470440e-03	-1.254824e-02	-5.680555e-03	-7.275419e-03	-7.089119e-04
##	G36974	5.505835e-03	-1.407292e-03	-1.708454e-03	-4.866875e-03	-1.876130e-02
##	G37039	3.942929e-03	-9.179585e-04	-2.047816e-03	1.159689e-02	-9.334824e-04
##	G36933	-5.893740e-03	-2.831184e-03	-1.260347e-03	3.463538e-03	1.024325e-02
##	G37052	8.909416e-03	-5.167314e-03	3.989215e-03	-1.206266e-03	5.506106e-03
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##	G37046	-1.221335e-03	-3.197342e-03	-4.637300e-03	-3.601699e-03	3.044816e-04
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##	G37049	-5.531304e-05	4.996123e-03	-4.373197e-03	-1.346693e-02	-8.747306e-03
##	G37019	-1.768157e-02	8.074214e-03	-5.070580e-03	1.311300e-02	7.674911e-03
##	G36988	2.288718e-03	8.979259e-03	-1.511725e-03	-4.959346e-03	-7.752678e-03
##	G37037	-1.097927e-03	-4.429215e-03	-2.888896e-03	-5.212036e-03	-1.402084e-03

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## G36145 -1.158220e-03 -4.062882e-03 -3.330786e-03 -3.880194e-03 6.451233e-03
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## G36266 -8.245825e-03 7.777451e-03 -2.714346e-03 -9.627590e-03 1.658530e-03
## G36164 -3.317087e-03 1.206954e-02 1.284877e-02 1.941426e-03 -2.793665e-03
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## G36256 3.288276e-03 -4.344058e-03 -1.739579e-04 1.940639e-03 4.186605e-03
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##	G36262	1.672881e-02	1.492836e-02	4.599496e-03	2.202614e-03	-1.413280e-02
##	G36200	4.375607e-03	1.995300e-03	6.387826e-03	-5.249526e-03	1.200378e-02
##	G36160	1.904783e-03	-3.306564e-03	-3.569122e-03	-7.360525e-03	-1.822066e-03
##	G36185	3.708482e-04	6.095711e-03	5.572399e-03	-1.250482e-03	4.231400e-03
##	G36162	-8.335376e-04	-5.876429e-04	-1.325310e-02	-1.838558e-03	5.046567e-03
##	G36204	2.630943e-03	-4.319635e-03	3.524634e-04	8.440260e-03	-1.489350e-03
##	G36318	-3.409576e-05	-5.448731e-03	7.472749e-03	-6.751078e-04	4.253819e-03
##	G36194	-1.091889e-02	-1.073149e-02	-4.013452e-03	3.284387e-03	6.940431e-03
##	G36244	3.239380e-03	3.377960e-03	-4.912547e-03	-1.638271e-02	9.420892e-04
##	G36197	7.410823e-03	2.616259e-03	-5.541044e-03	9.885052e-03	6.288462e-03
##	G36264	1.998401e-04	2.397565e-03	-5.475457e-04	1.370938e-03	6.284550e-03
##	G36317	8.560730e-03	1.041470e-03	2.995636e-03	1.255502e-03	7.499245e-03
##	G36159	-5.487062e-03	-1.658733e-03	-5.593713e-04	5.889704e-03	-1.834393e-03
##	G36234	1.800262e-03	7.413896e-03	1.261299e-02	-7.371040e-03	-1.345090e-02
##	G36206	-1.471586e-02	1.283680e-04	1.272627e-02	-2.997269e-03	-5.021461e-03
##	G36257	-3.687373e-03	-2.310704e-03	8.888935e-03	-3.199417e-03	2.827324e-03
##	G36216	8.413576e-03	-1.321380e-02	4.557175e-03	3.217949e-03	4.760959e-03
##	G36208	-1.504311e-02	3.888143e-03	8.587118e-04	-4.590332e-03	3.970684e-03
##	G36309	-1.215129e-02	2.737457e-03	9.546685e-03	2.534336e-03	-8.508748e-04
##	G36146	-9.968478e-04	-3.115457e-03	-4.255712e-03	-3.185851e-03	-2.468412e-03
##	G36192	1.052468e-03	5.856169e-03	6.031166e-04	-5.059616e-03	-7.763697e-04
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##	G36282	1.238036e-03	2.254810e-03	-2.574138e-03	3.644863e-05	1.609243e-03
##	G36290	-6.695958e-03	9.466046e-03	7.321648e-03	-5.244501e-03	8.232957e-03
##	G36274	-1.382076e-03	-4.878056e-03	3.442591e-03	-7.555806e-03	-1.206955e-02
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##	G36258	-5.471662e-03	-1.455467e-03	-6.401683e-03	3.890398e-03	8.043787e-03
##	G36147	-4.948795e-03	-9.885234e-03	1.235315e-03	1.245708e-02	-5.936345e-03
##	G36235	-2.375366e-03	-1.525280e-02	5.898583e-03	3.046837e-03	3.359822e-03
##	G36143	-4.230360e-03	4.356069e-04	4.721831e-03	5.285651e-03	-4.409052e-03
##	G36308	-2.296957e-03	3.841514e-03	-4.879314e-03	5.407061e-03	9.594961e-03
##	G36209	-3.911099e-03	-7.060782e-04	5.366674e-03	5.422607e-04	-1.228265e-02
##		Axis.296	Axis.297	Axis.298	Axis.299	Axis.300
##	G37016	-1.654488e-02	4.640564e-03	-5.206760e-03	4.093209e-03	-1.147441e-02
##	G36918	-8.574209e-04	-2.755962e-03	2.469669e-03	3.964947e-03	3.287274e-03
##	G37044	-5.193435e-04	2.008544e-03	6.249028e-05	-2.993488e-03	-3.957393e-03
##	G37009	1.092860e-02	-5.002874e-03	-8.523609e-03	8.201776e-03	1.665884e-03
##	G37029	4.523174e-03	1.636860e-03	6.239354e-03	1.079955e-02	2.391521e-04
##	G37035	-1.322103e-03	8.138401e-03	-9.872543e-03	7.777404e-04	-1.534786e-03
##	G36982	1.455544e-03	-9.368723e-03	7.001069e-03	-8.417335e-04	-3.788903e-04
##	G36984	-1.609353e-03	-7.041441e-03	7.981749e-03	1.669784e-02	-4.934270e-03
##	G37030	-4.955598e-03	4.288347e-03	-7.174439e-03	9.096237e-03	-2.142514e-03
##	G37031	-6.186754e-03	9.885446e-03	1.073924e-02	-1.329372e-02	3.482562e-03
##	G36906	6.867277e-03	-3.602781e-03	7.692657e-03	-2.751840e-03	-3.406454e-03
##	G37028	4.097537e-03	-1.672196e-03	-4.061317e-03	4.537947e-04	1.020408e-03
##	G37014	1.876278e-03	-5.713211e-03	8.991072e-04	4.647820e-03	-4.425175e-05
##	G37010	-5.510168e-04	1.324737e-03	9.878126e-03	1.088931e-02	-1.187551e-03
##	G36944	1.008665e-02	1.067283e-02	5.631388e-03	6.392104e-03	4.092866e-03

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## G37025 -9.709721e-03 4.655490e-03 -8.885430e-04 -5.353167e-03 -2.014518e-03
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## G36987 -3.290102e-03 1.229092e-03 2.870987e-03 -3.272817e-03 6.285439e-04
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## G36148 4.226713e-03 -6.579982e-04 -9.610619e-03 3.920201e-03 -1.848391e-03
## G36213 -2.708426e-03 -2.716626e-03 -1.744090e-03 -4.345194e-03 -5.006421e-03

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## G36240 2.452161e-03 8.043788e-03 -2.646851e-03 -1.382044e-02 -6.072872e-04
## G36249 -6.564107e-03 2.388826e-03 -1.469067e-03 2.749408e-03 4.957997e-03
## G36298 4.655774e-03 1.090841e-03 -7.089719e-03 9.093914e-03 -1.553610e-02
## G36176 -6.523106e-03 -9.469927e-03 -3.190110e-03 5.180159e-03 -4.801586e-03
## G36214 -9.747572e-03 7.344860e-03 6.212597e-03 -3.969742e-03 5.338377e-03
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## G36320 -6.752681e-04 3.489013e-03 4.557461e-03 -5.443556e-03 7.772412e-04
## G36245 -7.606910e-04 9.738337e-04 1.879471e-03 -2.248962e-03 4.220890e-03
## G36161 -1.275766e-02 3.368469e-03 -6.265867e-03 4.699372e-03 5.841279e-03
## G36172 -3.664904e-03 5.237385e-03 -1.649572e-03 7.725459e-03 -1.623189e-03
## G36212 5.714117e-03 -4.432932e-03 2.122884e-03 2.219325e-03 -1.036671e-02
## G36180 6.203771e-03 -3.069465e-03 8.281868e-03 6.099936e-03 -9.192105e-04
## G36153 8.500053e-03 -6.956008e-03 1.110763e-03 -3.909431e-03 3.986641e-04
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## G36193 7.809200e-03 -6.119910e-03 6.778990e-03 -1.387951e-03 -1.072125e-03
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## G36248 1.010616e-03 -1.604049e-04 3.108319e-03 1.590250e-03 -1.010986e-02
## G36239 -1.104934e-02 -2.073122e-03 -1.447899e-04 3.210427e-03 -1.187130e-02
## G36270 -4.558039e-04 8.397001e-04 -5.711277e-03 2.197516e-03 4.181798e-03
## G36158 -1.335289e-03 1.920881e-03 -1.066107e-02 -2.754815e-03 7.334377e-03
## G36233 -3.388648e-03 -5.682693e-03 -5.354557e-03 -3.522668e-03 1.203722e-02
## G36311 -5.795193e-03 -5.493125e-04 -4.479371e-03 -6.679528e-03 1.165534e-04
## G36175 6.229036e-03 -2.660636e-03 5.778472e-03 -7.432129e-04 7.047447e-03
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## G36227 -5.951475e-04 6.335005e-03 -3.849576e-04 2.558013e-03 3.808611e-03
## G36322 -1.140866e-03 2.188554e-03 5.259389e-03 4.596452e-03 4.476687e-03
## G36182 -6.537530e-03 2.457515e-03 -5.130985e-04 3.830816e-03 5.407134e-03
## G36256 -1.025176e-03 2.370267e-03 -6.645135e-03 -2.478600e-04 1.152085e-03
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## G36262 -1.200632e-02 3.340877e-03 1.355268e-03 6.606680e-03 3.014064e-03
## G36200 -1.883905e-04 1.023081e-02 -5.474874e-03 4.830613e-03 -1.730558e-03
## G36160 -6.803433e-03 -1.151524e-03 4.377287e-03 -7.428883e-03 -4.465238e-03
## G36185 1.732461e-03 3.792526e-03 -8.253349e-03 7.688738e-04 5.071177e-03
## G36162 6.714013e-04 -5.201850e-03 -1.087260e-02 -4.976016e-03 -1.707291e-03
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## G36318 5.076470e-03 -1.410850e-03 6.235924e-03 -7.609215e-04 -1.306682e-03
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## G36244 2.815175e-03 -3.266129e-03 2.040605e-03 -2.568310e-03 9.675916e-04
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##	G36291	-1.461882e-03	4.102626e-03	-1.671478e-03	6.107832e-03	5.159202e-03
##	G36142	3.084637e-03	-6.018325e-03	1.059922e-03	-8.006386e-04	3.432981e-03
##	G36138	1.835290e-03	4.782527e-03	-4.429680e-03	-1.275353e-02	-4.886381e-03
##	G36203	9.803477e-03	-1.442366e-03	1.153256e-04	2.136344e-04	-2.306046e-03
##	G36282	5.799067e-03	8.853335e-04	4.418500e-03	8.697403e-03	5.177671e-03
##	G36290	-1.976519e-03	-2.516885e-03	-9.406891e-04	6.267415e-04	1.851068e-03
##	G36274	2.714400e-03	4.942604e-03	-7.453658e-03	5.799240e-03	-9.184420e-04
##	G36314	-4.296154e-03	1.431720e-03	4.898558e-03	3.678503e-03	1.855784e-04
##	G36258	8.527124e-04	7.213317e-04	2.799098e-03	2.060520e-03	3.260978e-03
##	G36147	-1.472338e-03	2.493238e-03	5.765424e-03	-7.592135e-04	6.147303e-03
##	G36235	4.840539e-03	7.118413e-03	8.998447e-03	-2.508515e-03	2.673784e-03
##	G36143	-2.681588e-03	6.924734e-03	-3.057506e-03	7.485344e-03	-2.367989e-03
##	G36308	-2.694847e-03	-4.611177e-04	-9.031918e-03	-5.483207e-03	-4.895303e-03
##	G36209	-1.597924e-03	6.717257e-03	-1.079786e-02	-6.522980e-03	-2.338889e-03
##		Axis.301	Axis.302	Axis.303	Axis.304	Axis.305
##	G37016	1.476180e-03	3.385419e-03	-7.318745e-03	-2.894153e-03	5.649743e-03
##	G36918	9.095782e-03	-9.795712e-03	3.876932e-03	1.036163e-02	1.186370e-04
##	G37044	3.002696e-03	-5.176799e-03	-2.697978e-03	1.427097e-03	4.128143e-03
##	G37009	-9.632105e-03	-4.691516e-03	2.121530e-03	-1.590367e-02	-1.367534e-02
##	G37029	2.019510e-03	-6.016569e-03	2.614720e-03	3.475162e-03	8.521480e-03
##	G37035	-2.231263e-04	-2.079885e-03	-4.256214e-04	-3.751528e-03	6.659250e-05
##	G36982	-6.570134e-04	3.991797e-04	-4.258500e-03	4.693780e-03	5.612277e-04
##	G36984	3.534753e-03	6.932071e-03	2.936467e-03	1.082607e-03	-6.232170e-04
##	G37030	2.118350e-03	2.668683e-03	1.510631e-03	-8.597942e-03	-2.463868e-03
##	G37031	1.197564e-03	-2.390959e-03	-7.505510e-03	-5.573604e-03	7.951967e-03
##	G36906	-2.058987e-03	-2.839029e-03	-8.629664e-04	5.048332e-03	-1.834413e-03
##	G37028	-4.549045e-03	7.600967e-03	4.074114e-03	1.112814e-03	-3.376597e-03
##	G37014	-3.848647e-03	1.307780e-03	1.478471e-03	7.117138e-03	-2.271933e-03
##	G37010	-6.232571e-03	-3.061530e-03	-1.005263e-03	1.742018e-03	-1.551230e-03
##	G36944	-4.834893e-03	-8.312124e-03	1.107313e-02	-9.539606e-03	4.251268e-03
##	G36902	9.643591e-03	1.533077e-02	2.206340e-03	-5.417093e-03	-6.532126e-03
##	G37051	2.212815e-03	1.523998e-03	-1.558794e-03	-5.304084e-03	-5.093328e-03
##	G36964	1.959155e-03	8.093367e-04	-7.678676e-03	8.492078e-03	-2.697821e-03
##	G36951	5.490919e-03	-1.674645e-03	2.261496e-03	1.780631e-03	2.925095e-03
##	G37025	-4.337492e-03	7.408581e-03	-4.758131e-03	-9.718985e-03	-3.929891e-03
##	G36930	8.884436e-03	3.514737e-03	-6.997615e-03	3.252872e-03	-7.700995e-04
##	G36935	-2.086980e-04	1.092988e-02	3.602641e-03	-1.286207e-03	-2.213547e-03
##	G37041	3.385675e-03	1.555581e-03	8.456428e-04	4.977147e-03	-1.047938e-02
##	G36959	5.372150e-03	1.173069e-02	8.013563e-03	-3.979114e-03	-1.710041e-03
##	G36905	6.447143e-04	4.371677e-04	-8.371460e-03	-1.300541e-02	5.873532e-03
##	G36917	-3.020433e-03	6.979279e-03	-2.639522e-03	5.105957e-05	-5.992072e-04
##	G36992	1.367443e-03	-3.148231e-03	4.912513e-03	8.524060e-03	1.698036e-03
##	G36921	4.204810e-03	-5.247738e-03	-2.820794e-03	-5.494042e-03	-4.097531e-03
##	G37004	2.571722e-03	8.784981e-03	-2.229286e-03	7.330960e-03	-1.272936e-03
##	G36966	9.498085e-03	6.704750e-03	2.046334e-02	-7.639139e-03	1.308659e-04
##	G36936	-2.014136e-03	4.394704e-03	3.632249e-03	7.360142e-04	-8.672255e-03
##	G37015	-2.303479e-04	-4.294450e-03	5.008802e-03	-5.503936e-03	6.398035e-03
##	G37034	-1.101097e-04	4.385783e-03	2.608844e-03	1.444532e-03	2.188949e-03
##	G36953	-2.477261e-03	3.445105e-03	1.530967e-04	6.602130e-03	-9.780683e-04
##	G36974	-1.077842e-02	-2.148755e-03	4.131008e-03	4.502213e-03	-8.126311e-03
##	G37039	3.420875e-03	-9.732597e-03	-9.105633e-03	7.010440e-03	-2.814942e-03
##	G36933	-2.421693e-03	-4.975877e-03	-5.432606e-03	-6.954741e-04	-1.998126e-03

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## G37046 -8.282906e-04 1.809299e-03 9.464058e-03 -1.151978e-03 -3.425034e-03
## G37053 -1.589959e-02 1.086993e-02 1.106778e-02 -4.753100e-04 5.112023e-03
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##	G36182	1.252048e-03	3.901619e-03	5.162443e-03	-5.086948e-03	1.907904e-03
##	G36256	3.440834e-03	9.835260e-03	7.400869e-04	7.084532e-03	4.773192e-03
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##	G36287	-5.637107e-04	-6.229280e-04	1.670265e-04	-4.844809e-03	-3.721928e-03
##	G36157	4.701704e-03	-6.700605e-03	6.294240e-03	-2.559300e-03	3.900013e-03
##	G36262	4.001889e-03	-1.253722e-03	-1.986440e-03	-3.201801e-03	1.075938e-03
##	G36200	-1.832245e-03	-5.797580e-04	-4.606220e-03	-4.036921e-03	-1.777895e-03
##	G36160	-3.113060e-03	4.305427e-03	8.364488e-03	5.497959e-03	-3.903358e-03
##	G36185	4.082403e-03	3.086159e-03	-2.420424e-03	-7.828447e-03	-8.205372e-04
##	G36162	-6.064118e-03	6.590960e-03	5.892881e-03	-4.047824e-03	1.971888e-03
##	G36204	-1.623268e-03	1.642106e-03	-1.693860e-03	4.505009e-03	-5.674848e-03
##	G36318	9.482906e-05	5.166463e-04	-4.436515e-03	5.185064e-03	1.778702e-03
##	G36194	4.821647e-03	-1.462772e-03	-1.389534e-03	5.172933e-03	4.381231e-05
##	G36244	-1.187337e-02	-7.798187e-03	-1.187083e-04	5.368485e-03	4.929104e-03
##	G36197	-4.374748e-03	-5.536209e-03	-2.795574e-03	5.307155e-04	8.097648e-04
##	G36264	8.429134e-03	1.006674e-02	6.966628e-03	8.476993e-03	5.428549e-03
##	G36317	-9.913944e-03	-4.936440e-03	-5.114010e-04	6.159521e-03	6.326645e-03
##	G36159	-6.221509e-03	2.489795e-03	-9.037555e-04	-3.961086e-04	-7.247796e-04
##	G36234	2.564520e-03	5.671753e-03	7.802386e-03	2.336518e-05	7.537400e-03
##	G36206	-5.579063e-03	1.020047e-03	6.985274e-03	6.108369e-03	-4.452222e-03
##	G36257	5.828516e-03	4.522598e-03	-3.581487e-03	-5.042102e-03	-1.430088e-03
##	G36216	1.715027e-03	1.593540e-03	-5.198292e-03	-8.286625e-04	-4.802777e-04
##	G36208	-8.322025e-03	-4.860406e-04	1.050794e-02	-1.002398e-02	6.550134e-04
##	G36309	3.613083e-03	-9.192705e-03	-8.982409e-03	-5.247359e-03	-8.672822e-03
##	G36146	3.168274e-03	-7.162402e-03	-4.036147e-03	-4.304271e-03	-4.341860e-03
##	G36192	-2.225959e-04	4.971149e-03	2.569445e-03	-3.189779e-03	-1.730952e-03
##	G36284	-1.507699e-03	-1.609006e-04	-3.424439e-03	5.623673e-03	-6.605366e-03
##	G36291	-3.069150e-03	1.660026e-03	-3.749988e-03	-2.883938e-03	1.453685e-03
##	G36142	-6.309331e-03	-9.451715e-04	5.768245e-03	2.209538e-03	1.021693e-02
##	G36138	-2.498771e-03	6.498044e-04	1.121225e-03	-2.338448e-03	6.945878e-03
##	G36203	-7.180302e-03	5.798421e-03	1.460739e-03	6.978215e-03	1.537246e-03
##	G36282	-2.505951e-03	-8.006303e-03	1.831846e-03	-8.244782e-03	3.465062e-03
##	G36290	-2.422639e-03	8.582717e-03	-4.738757e-03	-3.741715e-03	-1.055764e-03
##	G36274	2.749592e-03	9.568968e-03	-1.546771e-02	-8.345837e-03	-2.256889e-03
##	G36314	7.361116e-03	-6.715094e-03	5.307651e-03	5.272136e-03	4.432730e-04
##	G36258	-1.815591e-03	-3.808566e-03	-4.017709e-03	-1.120342e-02	-7.360724e-04
##	G36147	-8.726336e-04	-6.913055e-03	5.514859e-03	6.070003e-04	9.478350e-03
##	G36235	6.599715e-03	-2.135091e-03	7.740095e-03	-1.352895e-02	-1.540245e-02
##	G36143	3.173048e-03	-1.055643e-02	-6.230302e-04	-1.141249e-03	2.148734e-03
##	G36308	-3.655982e-03	2.444870e-03	1.010935e-02	7.102080e-03	-1.201911e-03
##	G36209	-1.673010e-03	2.085767e-03	-6.739625e-04	-7.166627e-03	7.619209e-03
##		Axis.306	Axis.307	Axis.308	Axis.309	Axis.310
##	G37016	1.075272e-03	-7.571451e-03	2.075000e-03	-5.124596e-03	-6.043736e-03
##	G36918	6.196195e-03	-2.126659e-03	-5.767206e-03	6.731157e-03	-3.225697e-04
##	G37044	2.385835e-03	-2.346826e-03	-1.119590e-04	1.491809e-02	-2.826860e-03
##	G37009	-2.109924e-03	9.951272e-03	4.105115e-03	4.733719e-03	1.130728e-03
##	G37029	-2.509164e-03	-1.019424e-02	-3.619809e-03	-1.913470e-03	2.645289e-03

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## G36984 -1.471466e-03 3.281549e-03 -3.139834e-03 2.543296e-03 1.913240e-03
## G37030 1.963403e-03 -9.954405e-04 -2.676348e-03 3.723629e-03 -1.454721e-03
## G37031 -1.542954e-03 -2.573076e-03 -2.262056e-03 -2.569336e-03 3.744687e-04
## G36906 -3.328181e-03 -8.763129e-03 -1.576849e-03 1.348242e-03 8.926709e-03
## G37028 -1.443305e-03 -4.697089e-03 2.202441e-03 2.899981e-03 -1.257468e-03
## G37014 -3.673314e-03 -4.779406e-03 -1.277373e-03 7.415352e-05 -1.151051e-03
## G37010 7.277820e-03 4.341429e-03 8.936447e-04 -1.730000e-03 8.940568e-03
## G36944 -2.742235e-03 3.239311e-03 3.040895e-03 -1.814817e-03 9.665489e-03
## G36902 -2.779664e-04 -9.063220e-03 5.783421e-03 -1.315362e-03 6.438577e-03
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## G36964 -8.814035e-03 -1.439867e-03 -3.889286e-03 4.358248e-03 3.113588e-03
## G36951 5.265986e-03 -6.720537e-03 -1.639898e-03 -5.416266e-03 7.980333e-03
## G37025 3.363711e-03 1.228021e-02 5.456444e-03 -8.908145e-05 -5.603101e-03
## G36930 -2.362604e-03 5.244213e-03 -7.123953e-03 4.570394e-03 4.089551e-03
## G36935 -1.939073e-03 3.623704e-03 6.129651e-04 -7.774149e-04 2.911621e-03
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## G36905 4.723076e-03 7.407396e-03 -6.591180e-03 -3.988012e-04 -2.273649e-03
## G36917 -5.109164e-03 -2.647701e-03 -2.173823e-04 -3.305405e-03 -5.410447e-03
## G36992 -7.029520e-03 3.781840e-03 -2.264671e-04 3.445517e-03 -8.522844e-03
## G36921 -2.728967e-03 -4.983887e-03 -1.917843e-03 9.386259e-03 7.016425e-03
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## G36936 7.153847e-03 -1.120806e-02 5.183744e-03 1.531674e-03 -1.241045e-03
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## G36974 2.316309e-03 -1.742353e-03 -5.589551e-03 1.177207e-02 5.014378e-03
## G37039 -3.488575e-03 -2.989125e-03 -1.225781e-03 1.037486e-03 4.468610e-03
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## G37037 -3.230554e-03 -3.837426e-03 2.946036e-03 9.968580e-03 6.710908e-03
## G37005 3.201173e-03 1.038471e-03 3.416069e-05 -4.624683e-03 -5.595358e-04
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## G37027 5.038204e-03 1.232250e-03 1.929880e-04 -7.435069e-03 -1.917465e-03
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## G35416 -6.518855e-03 -7.900388e-03 8.015213e-03 -3.827977e-04 2.008721e-03
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## G35529 -1.158609e-03 -2.592923e-03 -2.070893e-03 -6.775814e-03 -1.502602e-03
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## G35537 -8.994581e-03 5.978427e-03 -3.320515e-03 3.511474e-03 8.137828e-03
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## G35465 4.618365e-03 5.334239e-04 8.927053e-04 -1.430303e-03 -2.008306e-03
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## G35421 3.850203e-03 -6.162663e-05 -1.616773e-03 1.120409e-03 -8.463953e-03
## G35531 -1.349636e-03 -1.299404e-03 4.355944e-03 -1.241230e-03 3.764690e-03
## G35444 -1.963209e-03 -2.246925e-03 -2.221890e-03 6.807656e-04 -1.700785e-03
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## G35386 4.555119e-03 -8.077805e-03 5.502918e-03 6.626353e-03 -1.620628e-03
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## G35464 -6.715854e-03 -7.503813e-03 -2.465358e-03 -2.713716e-03 2.090846e-04
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## G36311 8.322551e-04 -2.810624e-03 3.960602e-03 5.593335e-04 3.712888e-03
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## G36244 4.527067e-03 3.302924e-03 -4.688427e-04 -5.193100e-03 1.669318e-03
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## G36918 -3.750409e-04 -4.883604e-03  2.450060e-05 -5.721894e-03 -2.534279e-03
## G37044 -3.418925e-04  3.469517e-03 -3.833227e-03 -1.155640e-03 -7.196132e-03
## G37009  1.228989e-03  4.704051e-03 -5.487640e-03 -9.972054e-03  3.049692e-03
## G37029  5.541848e-03 -2.261046e-04  4.164878e-03 -2.490607e-03  4.163145e-03
## G37035 -2.984862e-03  4.283104e-03 -1.979316e-03 -1.854475e-03 -9.711663e-03
## G36982  1.160102e-03  2.739298e-03  3.439816e-04  5.060882e-03  1.853613e-03
## G36984 -4.474602e-03  6.876280e-04 -3.642369e-04 -3.831081e-03 -1.552410e-03
## G37030  6.226723e-03  2.741025e-03 -2.852008e-05  3.998949e-03  2.939187e-03
## G37031  4.899586e-05 -8.046761e-03 -3.206699e-04 -1.649190e-03 -1.010646e-02
## G36906  3.200773e-03  4.652777e-03  2.111699e-03  3.117065e-03 -2.816298e-03
## G37028 -2.470071e-03  1.100172e-03  1.688642e-03  8.248063e-03  6.467565e-04
## G37014  3.238028e-03 -1.776799e-03  4.362573e-04 -8.554537e-05 -1.336365e-03
## G37010  2.233691e-03  5.872930e-03  3.841750e-03 -3.800286e-03 -4.558008e-03
## G36944  4.294073e-04  5.049162e-04  1.340500e-03  4.172910e-03 -2.179428e-03
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## G37051 -2.397416e-03  3.029975e-03 -3.464769e-03  1.701546e-03 -3.634634e-03
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## G36959 -3.832096e-03  3.154897e-03 -5.696664e-03  4.773011e-03  4.785861e-03
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## G36917 -9.636540e-04 -3.060807e-03 -4.740320e-03  1.215242e-03 -1.990987e-03
## G36992  7.024766e-03  7.787930e-03  9.015726e-04 -5.204029e-03 -2.874324e-03

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## G36974 7.194945e-03 1.218908e-03 -6.636326e-03 3.379831e-04 -8.336112e-03
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## G36998 3.356421e-03 6.576399e-03 -9.990611e-03 -2.205461e-03 5.875025e-03
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## G37049 8.681576e-03 -5.828786e-04 3.440921e-03 -1.770446e-03 3.697607e-03
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## G35416 5.027047e-03 -8.177275e-03 1.682400e-03 2.680083e-03 4.115905e-03
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## G35398 1.016074e-03 -4.726650e-03 -1.232030e-03 6.893737e-04 3.714726e-03
## G35365 -8.059874e-04 -7.371698e-04 -5.457665e-03 3.644947e-04 -1.793831e-03
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## G35372 -3.890516e-03 4.380738e-03 2.539421e-04 4.415936e-03 2.283808e-03
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## G35455 -9.543825e-03 7.151455e-03 4.138030e-03 -8.775110e-04 6.423963e-03
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## G35527 -2.577852e-04 -2.526188e-03 2.246152e-03 1.153341e-03 -2.325326e-04
## G35516 -7.556903e-03 1.030064e-03 -1.974985e-03 4.829426e-03 9.383840e-04
## G35463 2.291380e-03 -4.811666e-03 7.154877e-03 6.490624e-04 4.995040e-03
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## G35414 3.337974e-03 6.744747e-03 -5.524691e-03 9.452169e-03 -2.946470e-03
## G35412 7.346002e-03 5.844088e-03 1.691930e-03 4.044252e-03 -3.186721e-03
## G35388 3.112553e-03 -1.226845e-03 -1.073108e-03 1.231578e-03 -4.849831e-03
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##	G35522	6.519008e-03	1.056764e-02	7.702131e-04	-4.225291e-03	5.136241e-03
##	G35404	-8.153525e-03	7.834776e-04	3.810525e-03	-3.032752e-03	-1.862757e-03
##	G35445	-5.445253e-03	-1.011356e-03	-9.928716e-04	5.760346e-04	2.165661e-03
##	G36173	6.309865e-03	8.262801e-03	-3.240301e-03	-2.194597e-03	-2.544932e-03
##	G36145	5.963366e-04	6.780574e-03	3.576601e-04	3.135238e-03	2.248040e-03
##	G36196	3.307784e-03	1.294504e-03	-3.715608e-03	8.534256e-04	5.228858e-03
##	G36219	3.180556e-04	4.776597e-03	1.531681e-03	4.412372e-03	2.928531e-03
##	G36299	-4.969002e-03	6.062778e-03	3.574241e-03	-8.570863e-03	4.266884e-03
##	G36137	8.031370e-04	-3.863337e-03	7.314353e-04	9.264519e-04	-4.350400e-03
##	G36273	-4.122133e-04	4.038552e-03	-1.912384e-03	-2.281365e-03	-8.879645e-04
##	G36201	2.593060e-03	-1.405305e-03	-4.618158e-04	-5.257379e-04	2.825009e-03
##	G36165	-5.565224e-03	3.234358e-03	-4.591662e-03	7.937969e-05	-2.927644e-03
##	G36202	-5.499682e-03	6.594654e-03	1.647334e-03	1.753231e-03	-2.022133e-03
##	G36226	1.926018e-04	-3.160996e-03	7.877387e-03	-6.589500e-03	-3.856602e-04
##	G36269	-8.566137e-03	1.149198e-02	1.026015e-03	-6.398593e-03	-3.642074e-03
##	G36135	-4.181239e-03	-4.088464e-03	-2.411164e-03	-4.476791e-03	3.774827e-03
##	G36250	1.019841e-03	2.735357e-03	4.315304e-04	3.047343e-03	-7.260815e-04
##	G36225	8.254272e-03	2.989986e-03	4.476630e-03	2.894599e-03	-4.323801e-03
##	G36272	3.416569e-04	6.553765e-03	-2.102451e-03	-9.928589e-04	1.174856e-02
##	G36285	4.004581e-03	2.513247e-03	-3.165393e-03	1.819612e-03	2.429929e-03
##	G36259	8.777079e-04	3.241972e-04	-2.024526e-03	-6.729618e-05	-3.166764e-04
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##	G36251	4.109360e-03	-7.215352e-03	3.410501e-03	6.084179e-03	-4.727540e-03
##	G36297	3.250734e-03	-2.454510e-03	3.680885e-03	4.270797e-03	-1.192281e-03
##	G36170	1.360191e-03	1.404466e-03	-2.598369e-03	3.682467e-03	-2.223544e-03
##	G36241	8.890490e-03	3.870980e-03	4.056396e-03	1.313995e-02	1.986805e-03
##	G36224	-7.578603e-03	-1.499446e-03	-3.197331e-03	-9.207234e-04	3.748735e-03
##	G36169	3.325087e-03	-5.921664e-03	1.284479e-03	-6.046974e-03	3.627260e-03
##	G36266	-1.110565e-03	-2.195926e-04	-3.285777e-03	-2.141737e-03	4.816024e-03
##	G36164	-5.219815e-03	-6.642598e-03	2.191758e-03	5.306465e-03	-2.938447e-03
##	G36215	-1.972984e-03	2.549865e-04	2.173948e-04	-1.883227e-03	-5.446196e-03
##	G36195	5.035740e-03	-6.323586e-03	-3.800588e-04	-8.859845e-03	3.417162e-03
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##	G36150	-9.924523e-04	1.864558e-05	1.896273e-03	2.855031e-03	-2.138772e-04
##	G36237	-2.315147e-03	-3.226720e-03	2.037095e-03	-1.298249e-03	4.038568e-03
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##	G36213	6.629667e-03	2.753845e-03	-5.379963e-04	-2.049098e-03	3.446113e-03
##	G36232	1.052653e-02	-3.990653e-04	-6.145714e-04	-6.366306e-03	3.047278e-03
##	G36240	6.573004e-04	1.258490e-03	3.165907e-03	7.653512e-03	2.920651e-03
##	G36249	-1.584510e-03	3.775671e-03	-4.462797e-03	-3.563677e-03	4.957140e-04
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##	G36176	2.807357e-03	2.698556e-03	5.864054e-04	1.119958e-02	1.164450e-03
##	G36214	4.306089e-03	6.569806e-03	-8.829319e-05	-1.597220e-03	-2.606561e-03
##	G36230	-5.223377e-03	-4.236085e-03	-2.455537e-03	2.993659e-03	-4.368532e-03
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##	G36161	-3.689387e-03	-4.068080e-03	3.804735e-03	-4.067161e-03	2.139189e-03
##	G36172	-5.071633e-03	3.417823e-03	-3.160633e-03	1.649241e-04	3.780427e-03
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## G36210 7.069507e-04 -1.036343e-03 -1.789399e-03 1.675057e-03 1.141539e-04
## G36303 -5.623090e-03 -7.559373e-04 -4.326792e-03 -2.927647e-03 -4.630752e-03
## G36193 -3.840316e-03 -2.858002e-03 5.825204e-03 -1.589544e-03 1.710704e-03
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## G36248 1.149809e-03 7.284259e-03 2.636933e-03 -1.137038e-02 3.400705e-03
## G36239 -1.342385e-03 1.555357e-03 -2.987408e-03 -2.451214e-04 -1.008141e-03
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## G36158 -5.505934e-03 -5.892456e-03 4.622770e-03 -1.344203e-03 -8.609334e-03
## G36233 -3.899285e-03 -2.758642e-03 -3.457836e-03 9.902243e-04 6.155488e-03
## G36311 1.524390e-03 -4.420985e-03 -5.465326e-04 9.384579e-03 1.582222e-03
## G36175 -5.889339e-03 3.840699e-03 -2.294269e-03 5.209914e-03 6.903431e-03
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##	G36308	1.056278e-03	3.399142e-03	-4.939994e-03	-4.593510e-03	3.720324e-03
##	G36209	-3.163185e-03	2.376458e-03	2.973397e-03	-9.874933e-04	3.242916e-03
##		Axis.316	Axis.317	Axis.318	Axis.319	Axis.320
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##	G37044	-2.348584e-03	-4.761023e-03	-2.705422e-03	-4.285610e-03	-1.275112e-03
##	G37009	3.184523e-03	4.733788e-03	-3.348483e-03	-3.472351e-03	-4.494879e-03
##	G37029	-5.210167e-03	2.592278e-03	2.397362e-03	-1.344659e-03	-2.584888e-03
##	G37035	1.123866e-03	1.581711e-05	4.976154e-03	4.020707e-03	2.089272e-03
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##	G37039	-3.256536e-03	-5.883525e-03	6.213037e-03	2.668349e-03	-5.659171e-04
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##	G36925	-5.036685e-03	-8.559994e-04	3.710709e-03	1.868960e-03	7.313416e-03
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##	G37053	-6.504753e-03	4.251312e-03	-1.977076e-03	3.831178e-03	-8.473995e-04
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##	G36988	-2.865672e-03	3.074418e-03	-1.736858e-03	1.763183e-03	-7.267323e-04
##	G37037	2.471695e-03	-3.234135e-03	-3.384289e-04	-1.417397e-03	-1.312154e-03
##	G37005	2.123763e-04	1.381174e-03	3.087722e-03	-3.337917e-03	-6.939545e-04
##	G36928	2.282366e-04	2.095078e-03	-9.144262e-03	-1.019683e-03	-3.944995e-03

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## G36957 -1.235603e-03 6.278818e-03 5.946979e-03 4.641203e-03 4.663688e-04
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##	G35497	-1.223448e-03	3.452393e-03	-1.550575e-03	-4.220340e-04	-2.609010e-03
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##	G35530	2.320463e-03	5.353885e-03	-2.786753e-03	1.217068e-03	-3.112871e-03
##	G35512	4.644622e-03	1.458936e-03	-1.417604e-04	-1.798710e-03	3.192852e-03
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##	G35455	-3.632202e-03	-3.493786e-03	-5.420183e-03	2.942547e-03	2.535381e-03
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##	G35414	-4.566564e-03	-2.209569e-03	1.642523e-04	-2.299461e-03	-4.460817e-03
##	G35412	-6.991323e-03	3.018394e-03	3.370353e-03	8.376485e-03	-2.442475e-03
##	G35388	2.160993e-04	4.023761e-03	-4.691638e-03	-2.112466e-03	-6.033067e-03
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##	G35445	5.098822e-04	2.315838e-03	2.697441e-05	-1.807714e-03	-3.459599e-03
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##	G36299	-2.793638e-03	2.233686e-04	-4.943926e-03	8.042656e-04	-1.496510e-03
##	G36137	-3.274058e-04	-3.564866e-03	-1.653394e-03	-4.465712e-03	-3.146684e-03
##	G36273	2.264601e-03	8.953845e-03	8.559978e-03	-9.746878e-03	-2.967499e-03
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##	G36226	-2.267139e-03	-2.769287e-03	5.610943e-03	5.601069e-03	4.883246e-04
##	G36269	-3.458101e-03	6.508423e-03	-2.580760e-03	-1.154934e-03	2.208881e-03
##	G36135	6.036702e-03	3.229929e-03	3.592622e-03	4.844831e-03	-4.921651e-03
##	G36250	2.187816e-03	2.220923e-04	2.807870e-03	-3.560625e-03	-2.178023e-03
##	G36225	4.271693e-04	-2.959808e-03	-7.774924e-03	2.086431e-03	-3.091426e-03
##	G36272	-2.384327e-03	-4.293202e-03	4.306185e-04	-3.640883e-03	4.039855e-03

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## G36249 -2.132377e-03 -3.034043e-03 -3.591370e-03 1.802700e-03 1.846569e-03
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##	G36230	5.967550e-04	7.351450e-04	1.327832e-03	-1.127958e-03	-4.324455e-03
##	G36320	1.950937e-03	-1.163376e-03	-6.480702e-03	4.755661e-03	-1.307388e-03
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##	G36161	6.286072e-03	1.078735e-03	-4.434699e-03	3.674717e-03	-2.497206e-03
##	G36172	-4.321698e-03	1.345334e-04	1.850901e-03	1.768681e-03	1.840090e-03
##	G36212	-2.323578e-03	-7.849269e-04	4.281193e-03	4.407619e-04	4.678215e-03
##	G36180	2.063823e-03	-1.553247e-04	-1.289584e-03	8.917576e-04	-4.146636e-03
##	G36153	-5.676409e-03	1.407470e-03	2.398774e-05	4.011826e-04	2.024572e-03
##	G36210	2.149413e-04	-5.063667e-04	-2.174402e-03	1.009959e-04	-1.876427e-03
##	G36303	-7.497991e-04	-6.147538e-04	-2.516175e-03	-8.785100e-04	-1.751965e-04
##	G36193	-2.791298e-03	3.168394e-03	-2.523494e-04	-1.543141e-03	4.502668e-03
##	G36151	-5.125584e-03	-1.000009e-03	1.030462e-03	4.394370e-03	8.188506e-04
##	G36248	-2.470414e-03	-8.523792e-04	-1.166687e-03	-3.456386e-03	1.234009e-03
##	G36239	-4.850347e-04	-3.877254e-05	5.781108e-03	-2.037471e-03	-2.108725e-03
##	G36270	-1.509933e-03	-1.137114e-03	-7.116057e-03	2.248359e-03	2.216460e-04
##	G36158	-3.706398e-03	3.908316e-03	5.749721e-04	-3.673329e-03	-4.460547e-03
##	G36233	5.453846e-03	-1.671815e-03	1.880584e-03	3.177421e-03	9.941614e-04
##	G36311	-2.110887e-03	-3.067712e-03	-6.601297e-03	-1.944740e-03	-2.537023e-03
##	G36175	2.205631e-03	6.955863e-04	2.778392e-03	1.144885e-03	2.049370e-03
##	G36267	5.234881e-03	2.260216e-03	4.350405e-03	-1.503257e-03	-4.256933e-03
##	G36183	7.229016e-03	-3.896435e-03	-1.186324e-04	3.607720e-03	-3.549759e-04
##	G36227	3.127476e-03	-2.192246e-03	5.423823e-04	6.179327e-04	-3.535489e-03
##	G36322	-6.864330e-06	-2.975641e-03	-1.920482e-03	9.753598e-04	-6.660770e-04
##	G36182	-2.157476e-03	-2.978881e-03	2.530463e-03	1.639627e-03	-7.897401e-04
##	G36256	2.984205e-03	1.360269e-03	-1.761573e-03	2.040793e-03	2.903595e-03
##	G36163	-1.748838e-03	-2.850506e-03	1.226938e-03	2.220128e-03	2.224086e-03
##	G36287	2.720059e-03	1.958524e-03	-4.800134e-03	-2.473283e-03	-2.340791e-04
##	G36157	1.013828e-02	4.654893e-03	1.095662e-04	-2.860191e-03	3.425591e-03
##	G36262	-1.937201e-03	4.365832e-03	-2.259320e-03	1.314953e-03	2.772338e-03
##	G36200	-1.443113e-04	-1.441684e-03	3.298107e-03	-1.259701e-03	-4.621749e-04
##	G36160	3.948073e-03	3.706172e-03	-3.015375e-03	1.050707e-03	-2.251230e-03
##	G36185	7.688030e-04	1.233729e-04	-5.940731e-03	2.745146e-03	1.185546e-03
##	G36162	4.539034e-03	1.998672e-03	-2.157000e-03	3.678326e-03	-5.023820e-03
##	G36204	-4.446176e-03	4.100558e-04	-2.714566e-03	8.905783e-05	4.442973e-03
##	G36318	-3.903753e-04	-4.189886e-03	2.274372e-03	-4.195832e-03	2.344936e-03
##	G36194	-1.540124e-03	1.054793e-04	-5.005166e-03	8.556501e-04	-1.897225e-03
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##	G36317	5.021034e-03	4.562754e-03	-6.135689e-05	1.029822e-03	-1.197526e-03
##	G36159	2.054855e-03	2.977010e-03	9.573891e-04	2.559737e-04	2.379698e-03
##	G36234	2.713052e-03	2.544727e-03	3.227076e-03	-7.730860e-04	-3.263870e-03
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##	G36216	2.549373e-03	-5.276374e-04	-3.266552e-03	-2.087235e-03	-2.121275e-03
##	G36208	-4.275193e-03	1.462544e-03	2.254750e-03	2.038639e-03	1.142013e-03
##	G36309	3.710909e-03	-2.780388e-03	5.794649e-03	2.213769e-03	-3.151019e-03
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##	G36192	1.065898e-04	3.880330e-03	-1.666599e-03	2.256000e-03	-2.688849e-03
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##	G36291	2.300408e-03	4.520252e-03	-2.341935e-03	-1.119709e-04	9.835362e-04
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##	G36138	-6.865601e-05	7.938165e-04	-3.561166e-03	3.570040e-03	-5.047695e-06
##	G36203	2.159781e-03	1.180543e-03	-4.423983e-03	7.009459e-04	9.059627e-04
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##	G36290	-5.735030e-03	1.383590e-03	1.794925e-03	1.539695e-03	1.181853e-04
##	G36274	-5.701576e-03	-5.394830e-04	7.856797e-03	5.429295e-04	7.239960e-04
##	G36314	2.655366e-03	1.776200e-03	2.740817e-03	-8.351754e-04	-1.193622e-03
##	G36258	-5.160927e-04	-4.461776e-04	2.334728e-03	-3.416747e-04	-1.038546e-03
##	G36147	-9.886899e-04	-1.740713e-03	5.054888e-03	2.936000e-03	-2.938857e-03
##	G36235	-6.469101e-03	4.929628e-03	-1.599999e-03	-2.810814e-04	-2.908702e-04
##	G36143	-2.895768e-03	-3.261356e-04	-3.857165e-03	1.699787e-03	1.485989e-03
##	G36308	-2.723328e-03	6.724810e-03	-3.807183e-04	-3.388718e-03	3.876373e-03
##	G36209	-3.414443e-04	-9.826188e-04	7.629889e-03	8.124648e-04	-1.680350e-03
##		Axis.326	Axis.327	Axis.328	Axis.329	Axis.330
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##	G36918	-1.890561e-03	4.317414e-04	2.584275e-03	2.405326e-03	-1.819270e-03
##	G37044	2.498972e-03	6.956390e-04	2.957365e-03	-6.848493e-04	-1.708634e-03
##	G37009	-1.975271e-03	1.246929e-04	-9.002988e-04	-2.330285e-03	-2.840613e-05
##	G37029	-1.092532e-03	-1.548696e-03	-1.748048e-03	5.907042e-04	-1.152395e-03
##	G37035	6.065230e-04	-1.512395e-03	1.068922e-03	3.105618e-04	1.792218e-05
##	G36982	1.172209e-03	8.391800e-05	-2.675031e-04	-1.275591e-03	-9.553138e-04
##	G36984	-1.922355e-03	3.035675e-04	-1.101243e-03	1.931319e-03	6.372581e-04
##	G37030	-7.716105e-04	-2.907160e-03	-1.090173e-03	-3.727240e-04	8.870093e-04
##	G37031	-1.777269e-03	8.685603e-04	-1.875953e-03	-4.150753e-05	2.142165e-03
##	G36906	-1.817646e-03	3.551103e-04	4.724650e-05	-1.130290e-03	-8.009471e-04
##	G37028	-2.225858e-03	5.081530e-03	-1.008369e-03	-1.029353e-03	-1.899966e-03
##	G37014	9.591821e-04	-2.711473e-03	1.303625e-03	-4.603636e-04	-4.107745e-06
##	G37010	3.645256e-03	-1.330315e-03	3.924873e-05	-9.230116e-04	1.829761e-03
##	G36944	-1.996609e-03	-2.220458e-03	-3.187213e-03	4.525663e-04	-9.791424e-04
##	G36902	-8.792011e-04	-1.474195e-03	3.189846e-03	-1.343512e-03	-1.559321e-03
##	G37051	1.154938e-03	-2.395782e-03	-9.228597e-04	5.412264e-04	1.895013e-03
##	G36964	5.984908e-04	-2.594739e-03	4.082997e-05	-1.191071e-03	2.019188e-03
##	G36951	-1.094376e-03	-1.293781e-03	-8.199423e-04	-2.012333e-03	5.763067e-04
##	G37025	8.663873e-04	1.399318e-03	-1.175017e-03	-1.488297e-03	5.126146e-04
##	G36930	2.283081e-03	4.013313e-03	1.665491e-03	2.118678e-03	-4.416370e-04
##	G36935	-5.710435e-03	1.880322e-03	-5.413054e-04	4.193632e-04	-9.570243e-04
##	G37041	-9.183576e-04	1.420157e-03	1.313636e-03	1.561357e-03	-6.438484e-04
##	G36959	3.225986e-03	-8.345417e-04	-3.950920e-03	7.095710e-05	8.280399e-04
##	G36905	2.143858e-03	-3.687795e-03	-1.042039e-03	1.802648e-04	1.087905e-03
##	G36917	4.495211e-03	-4.771100e-03	-1.731194e-04	6.882815e-04	1.543561e-03
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##	G36966	5.315738e-04	2.529382e-04	-1.737436e-03	9.631757e-04	-1.519232e-04
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##	G37015	1.551573e-03	1.916837e-03	8.186049e-04	-1.749884e-03	2.088425e-05
##	G37034	2.102613e-03	1.417191e-03	-2.013121e-03	-1.546923e-03	7.228204e-04
##	G36953	1.473401e-03	-1.676001e-03	-8.048658e-04	1.498837e-03	7.060709e-04
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##	G37052	-2.106361e-04	3.859473e-04	-2.109821e-04	1.084206e-03	-6.873571e-06
##	G36925	-8.190734e-04	-3.536273e-03	-3.825629e-03	-1.534350e-03	-2.041589e-03

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## G35484 -1.069031e-03 -1.242222e-03
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## G35473 -8.150384e-04 6.680975e-04
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Ordin2 <- ordinate(phseqData, "NMDS", "bray")%>%
plot_ordination(phseqData, type="taxa", color="Phylum", title = "The Diversity of samples Grouped by Di
theme_classic()

```

```

## Square root transformation
## Wisconsin double standardization
## Run 0 stress 0.181114
## Run 1 stress 0.1961715
## Run 2 stress 0.1912842
## Run 3 stress 0.1872015
## Run 4 stress 0.190229
## Run 5 stress 0.1892442
## Run 6 stress 0.1862065
## Run 7 stress 0.1852243
## Run 8 stress 0.1850844
## Run 9 stress 0.1889925
## Run 10 stress 0.1847885
## Run 11 stress 0.1872334
## Run 12 stress 0.1909694
## Run 13 stress 0.1852273
## Run 14 stress 0.1855907
## Run 15 stress 0.1873373

```



```
## Run 16 stress 0.1889804
## Run 17 stress 0.1846914
## Run 18 stress 0.1870326
## Run 19 stress 0.1897587
## Run 20 stress 0.1901943
## *** No convergence -- monoMDS stopping criteria:
##      9: no. of iterations >= maxit
##      2: stress ratio > sratmax
##      9: scale factor of the gradient < sfgrmin

## Warning in plot_ordination(., phseqData, type = "taxa", color = "Phylum", : Full
## functionality requires 'physeq' be phyloseq-class with multiple components.

## Warning in plot_ordination(., phseqData, type = "taxa", color = "Phylum", : Could not obtain coordin
## Please check your ordination method, and whether it is supported by 'scores' or listed by phyloseq-p
```

```
Ordn2
```

```
## NULL
```

```
#Differential Abundance
```

```
OTUmat <- OTUmat+1
OTUData = otu_table(OTUmat, taxa_are_rows = TRUE)
phseqData = phyloseq(OTUData, Taxonomytable, sampledata1)

deseqData <- phyloseq_to_deseq2(phseqData, ~ Case_Control)
```

```
## converting counts to integer mode
```

```
## it appears that the last variable in the design formula, 'Case_Control',
## has a factor level, 'control', which is not the reference level. we recommend
## to use factor(...,levels=...) or relevel() to set this as the reference level
## before proceeding. for more information, please see the 'Note on factor levels'
## in vignette('DESeq2').
```

```
deseqData2 <- DESeq(deseqData)
```

```
## estimating size factors
```

```
## estimating dispersions
```

```
## gene-wise dispersion estimates
```

```
## mean-dispersion relationship
```

```
## -- note: fitType='parametric', but the dispersion trend was not well captured by the
## function: y = a/x + b, and a local regression fit was automatically substituted.
## specify fitType='local' or 'mean' to avoid this message next time.
```

```
## final dispersion estimates

## fitting model and testing

## -- replacing outliers and refitting for 991 genes
## -- DESeq argument 'minReplicatesForReplace' = 7
## -- original counts are preserved in counts(dds)

## estimating dispersions

## fitting model and testing
```

```
output <- results(deseqData2)
deseq.output <- as.data.frame(output)
deseq.output[>% arrange(log2FoldChange, padj)]
```

##	baseMean	log2FoldChange	lfcSE	stat	pvalue
## 357305	36.833238	-4.4554614229	0.20411659	-21.828022161	1.257449e-105
## 3039313	31.672260	-3.8895618382	0.20546229	-18.930782040	6.361100e-80
## 113069	27.079313	-3.7501651750	0.20246541	-18.522498142	1.359786e-76
## 2134134	6.506172	-3.5955198666	0.15759681	-22.814673785	3.278901e-115
## 840376	29.796294	-3.3580598413	0.20462011	-16.411191750	1.590525e-60
## 4401580	139.428182	-3.2092518663	0.19699027	-16.291423335	1.135554e-59
## 354574	6.171230	-3.1440032662	0.14227237	-22.098480890	3.268802e-108
## 1105984	4.104460	-2.9308902665	0.14526958	-20.175526887	1.606427e-90
## 4396292	7.202524	-2.8153213715	0.15935778	-17.666670743	7.573680e-70
## 4020502	198.255394	-2.5778122263	0.23979625	-10.750010723	5.925473e-27
## 4463108	3.222651	-2.5751114033	0.14039723	-18.341610896	3.852115e-75
## 193314	3.368792	-2.4096644198	0.14305485	-16.844339567	1.154507e-63
## 196382	3.433317	-2.4089446716	0.12997912	-18.533319985	1.112089e-76
## 4372003	3.816606	-2.3780605909	0.14582147	-16.308027506	8.654252e-60
## 336559	13.924977	-2.3135753022	0.19268563	-12.006994470	3.264966e-33
## 588471	75.564651	-2.2279147382	0.23930797	-9.309822591	1.280460e-20
## 363997	2.663528	-2.1571226855	0.12909556	-16.709503444	1.117623e-62
## 849535	2.376141	-1.8870843608	0.13178116	-14.319834183	1.645153e-46
## 41229	2.249052	-1.8553894248	0.12647084	-14.670491659	9.962059e-49
## 4323124	5.345370	-1.8538282215	0.15895173	-11.662837346	1.973543e-31
## 4391009	8.676015	-1.8397927998	0.16782035	-10.962870801	5.764133e-28
## 16054	34.279064	-1.7714101677	0.22309882	-7.940024728	2.021409e-15
## 4428313	3.426755	-1.7440847782	0.14569388	-11.970885578	5.048686e-33
## 331150	2.570599	-1.7108986968	0.12325106	-13.881412131	8.211017e-44
## 4408801	4.558242	-1.6890409087	0.15340768	-11.010146043	3.414498e-28
## 183439	2.927428	-1.6718178196	0.13837607	-12.081697459	1.319669e-33
## 4477861	4.162796	-1.6538319820	0.13330811	-12.406087140	2.422029e-35
## 3244896	17.799962	-1.6256861578	0.20036040	-8.113809648	4.905697e-16
## 4333921	1.929961	-1.6125590684	0.12115285	-13.310120364	2.021558e-40
## 179583	4.250742	-1.5367792591	0.14215382	-10.810678604	3.063951e-27
## 1135084	2.316964	-1.5146120569	0.11984027	-12.638590076	1.293527e-36
## 179291	2.575202	-1.4932878408	0.12484718	-11.960925454	5.692394e-33
## 539581	4.517823	-1.4932156662	0.15520681	-9.620812572	6.531315e-22
## 4374302	65.236161	-1.4331746250	0.21629288	-6.626083214	3.447109e-11
## 3325758	2.790781	-1.4277714900	0.11382160	-12.543941490	4.291099e-36

## 266210	2.653861	-1.4137131366	0.13225489	-10.689307126	1.142211e-26
## 4424063	2.866845	-1.4112796861	0.12064092	-11.698184275	1.302098e-31
## 190639	3.381178	-1.4060022143	0.14784157	-9.510195246	1.903050e-21
## 4350477	5.221077	-1.3948635493	0.15472479	-9.015126312	1.966437e-19
## 4339144	2.500855	-1.3891034745	0.13412463	-10.356810923	3.897403e-25
## 41128	1.812284	-1.3727960204	0.11639065	-11.794727795	4.155421e-32
## 4411295	61.658699	-1.3645832720	0.22257549	-6.130878566	8.739510e-10
## 547913	1.844160	-1.3508649705	0.12207577	-11.065790734	1.838343e-28
## 130103	4.745276	-1.3269042629	0.15173237	-8.745030652	2.229551e-18
## 2820255	1.723855	-1.2926924692	0.11319451	-11.420098658	3.318570e-30
## 4416614	2.223679	-1.2926268861	0.12406088	-10.419294535	2.024493e-25
## 4370025	6.127579	-1.2726229810	0.14822172	-8.585941344	9.009563e-18
## 1142029	34.334004	-1.2568063449	0.17467021	-7.195310131	6.231895e-13
## 178885	253.111666	-1.2458229246	0.25064723	-4.970423602	6.680678e-07
## 839684	2.592778	-1.2380988723	0.12401674	-9.983320937	1.803282e-23
## 178064	1.936294	-1.1873361442	0.11929657	-9.952810742	2.451593e-23
## 181560	41.444554	-1.1846852672	0.20433558	-5.797743449	6.721317e-09
## 4329132	3.049049	-1.1814413154	0.12414950	-9.516279218	1.794908e-21
## 279048	2.356572	-1.1589793571	0.13283486	-8.724963602	2.662663e-18
## 186448	4.532245	-1.1456455895	0.15994669	-7.162671361	7.911987e-13
## 288004	3.740947	-1.1172743015	0.14982899	-7.456996585	8.851700e-14
## 109633	1.634770	-1.1120166106	0.11842278	-9.390225671	5.987184e-21
## 175932	2.236868	-1.1064510080	0.12227780	-9.048666379	1.447250e-19
## 174943	1.646117	-1.0954794610	0.11144715	-9.829587191	8.396223e-23
## 4368575	1.620559	-1.0899743104	0.11533798	-9.450263687	3.379782e-21
## 4405104	29.430635	-1.0868233478	0.21012483	-5.172274793	2.312611e-07
## 4352875	1.600891	-1.0861641262	0.11036835	-9.841264424	7.476521e-23
## 4393172	5.435171	-1.0700128986	0.13664628	-7.830530558	4.858154e-15
## 579541	1.544223	-1.0697553560	0.11556670	-9.256605215	2.110352e-20
## 287813	2.176182	-1.0630041167	0.12062821	-8.812234621	1.226755e-18
## 308386	2.047527	-1.0519043036	0.12910897	-8.147414262	3.717883e-16
## 186723	20.964747	-1.0516742981	0.16014022	-6.567208850	5.126712e-11
## 4468892	2.538836	-1.0441649841	0.12384781	-8.431032936	3.426273e-17
## 194670	5.999997	-1.0318456691	0.15951488	-6.468648209	9.888350e-11
## 4475642	1.777883	-1.0237706234	0.10733768	-9.537849301	1.458250e-21
## 4451907	1.816219	-1.0166731468	0.11261530	-9.027841762	1.750908e-19
## 4442130	74.093451	-1.0159915066	0.16872108	-6.021722355	1.725707e-09
## 562244	2.400556	-1.0104101909	0.13325177	-7.582714801	3.383982e-14
## 324015	1.887742	-0.9891988073	0.11506439	-8.596914983	8.188760e-18
## 190913	4.293601	-0.9755138307	0.14744201	-6.616254396	3.684142e-11
## 168439	62.707879	-0.9738754121	0.22854726	-4.261155559	2.033726e-05
## 183207	12.346460	-0.9732779016	0.17444810	-5.579183298	2.416505e-08
## 4415649	2.927258	-0.9669361418	0.12958324	-7.461891726	8.528896e-14
## 178183	10.271574	-0.9659850942	0.18202439	-5.306899357	1.115057e-07
## 4467447	442.294000	-0.9570548632	0.23277396	-4.111520369	3.930622e-05
## 179861	3.209749	-0.9420379724	0.13328091	-7.068063731	1.571104e-12
## 4281639	4.806138	-0.9389213136	0.13846820	-6.780771964	1.195354e-11
## 178242	3.351970	-0.9317873490	0.14764336	-6.311068288	2.771159e-10
## 4391326	3.556034	-0.9311281570	0.14743586	-6.315479669	2.693248e-10
## 366794	19.465412	-0.9288934025	0.16162398	-5.747250049	9.070654e-09
## 294794	2.376008	-0.9261765274	0.12773094	-7.250995742	4.137187e-13
## 801210	2.435234	-0.9253254334	0.11547996	-8.012866216	1.120655e-15
## 186352	5.012386	-0.9205813008	0.14942808	-6.160698209	7.242490e-10
## 184525	11.316036	-0.9198264174	0.16146165	-5.696872518	1.220251e-08

## 4440670	4.041682	-0.9143307581	0.15454740	-5.916183373	3.294978e-09
## 185836	3.311199	-0.9105632317	0.14662711	-6.210060648	5.296416e-10
## 4144205	2.949796	-0.9093553612	0.12064509	-7.537441919	4.792800e-14
## 4232048	2.453250	-0.9087719431	0.11199912	-8.114098674	4.894036e-16
## 3475269	3.151202	-0.9015722116	0.11679482	-7.719282637	1.169862e-14
## 174792	2.943237	-0.9009687249	0.11932381	-7.550619748	4.331919e-14
## 4439690	2.082763	-0.9000045178	0.11822452	-7.612672001	2.684865e-14
## 353330	1.462087	-0.8933910791	0.10944829	-8.162677438	3.276787e-16
## 4420408	31.444956	-0.8869615215	0.17705023	-5.009660264	5.452620e-07
## 182577	13.167289	-0.8851721254	0.14852883	-5.959598208	2.528589e-09
## 176507	4.562500	-0.8768378031	0.11835393	-7.408607259	1.276327e-13
## 4481861	28.859134	-0.8697116699	0.16386386	-5.307525993	1.111232e-07
## 185731	4.794533	-0.8669407743	0.11581398	-7.485631799	7.120376e-14
## 193644	14.585787	-0.8635571631	0.14833881	-5.821518900	5.831521e-09
## 175559	3.846839	-0.8619784106	0.12186208	-7.073392943	1.511906e-12
## 1952	372.225460	-0.8535725871	0.26349332	-3.239446770	1.197618e-03
## 4360055	1.771180	-0.8525855584	0.10561579	-8.072519441	6.886220e-16
## 4460021	8.162542	-0.8520022940	0.17407538	-4.894444548	9.858377e-07
## 187356	5.161576	-0.8515732453	0.13351271	-6.378218702	1.791595e-10
## 353615	3.162775	-0.8502047543	0.13346348	-6.370317363	1.886375e-10
## 4466275	2.242651	-0.8395195318	0.11496178	-7.302596932	2.822658e-13
## 292057	1.530044	-0.8348562441	0.11153699	-7.485016891	7.153794e-14
## 4349946	3.376972	-0.8270566298	0.14721253	-5.618113118	1.930541e-08
## 15728	37.306503	-0.8252612175	0.20383206	-4.048731143	5.149606e-05
## 179267	90.727494	-0.8236232370	0.21778098	-3.781887812	1.556435e-04
## 182073	6.292355	-0.8205102943	0.16873215	-4.862797678	1.157381e-06
## 3943186	26.742020	-0.8200735816	0.20905962	-3.922678087	8.757012e-05
## 166637	4.984283	-0.8196369536	0.15390820	-5.325492563	1.006798e-07
## 4416025	49.262192	-0.8161285046	0.19939590	-4.093005426	4.258178e-05
## 4420417	6.561527	-0.8137924570	0.16811391	-4.840720545	1.293692e-06
## 4476065	26.194796	-0.8123804006	0.22233693	-3.653825703	2.583617e-04
## 174010	9.207146	-0.8113113960	0.14685931	-5.524412247	3.305904e-08
## 526682	7.024638	-0.8050319516	0.14733694	-5.463884130	4.658277e-08
## 3321163	2.921488	-0.8033776946	0.11521486	-6.972865271	3.105500e-12
## 185584	3.732735	-0.8028127575	0.13212787	-6.076029016	1.231951e-09
## 177111	6.853177	-0.7990484050	0.13858133	-5.765916532	8.121525e-09
## 186687	32.563362	-0.7982214515	0.15654578	-5.098964899	3.415159e-07
## 3225199	2.273416	-0.7891346729	0.12253832	-6.439901059	1.195514e-10
## 198740	2.254880	-0.7888289069	0.12217383	-6.456610959	1.070737e-10
## 186358	1.913941	-0.7883582938	0.11454962	-6.882242468	5.891762e-12
## 332718	1.933115	-0.7882407110	0.11640509	-6.771531115	1.274265e-11
## 184342	11.437924	-0.7848740157	0.16141560	-4.862442242	1.159462e-06
## 2309802	3.935530	-0.7833942070	0.12157912	-6.443492808	1.167548e-10
## 578016	638.364759	-0.7753638432	0.22995317	-3.371833634	7.466954e-04
## 3924627	49.965514	-0.7748956342	0.21386324	-3.623323179	2.908421e-04
## 130663	2.429667	-0.7722544247	0.11345866	-6.806483107	1.000135e-11
## 1667433	1.996585	-0.7700291804	0.10778300	-7.144254647	9.048552e-13
## 192231	4.559994	-0.7672660452	0.11819781	-6.491372522	8.505787e-11
## 2700883	51.992414	-0.7632309026	0.21176794	-3.604090872	3.132475e-04
## 4356065	4.263727	-0.7596497655	0.13542177	-5.609509750	2.029006e-08
## 270094	4.948847	-0.7528175961	0.13024585	-5.779973977	7.471218e-09
## 328544	5.319036	-0.7492715285	0.12203922	-6.139596128	8.273155e-10
## 185607	25.332184	-0.7429446995	0.15104071	-4.918837437	8.705973e-07
## 193709	26.975503	-0.7263328085	0.16474232	-4.408902460	1.038958e-05

##	211907	5.800244	-0.7244810396	0.12535923	-5.779239616	7.503899e-09
##	362568	2.722228	-0.7228479868	0.10874511	-6.647176834	2.987680e-11
##	4381430	70.776160	-0.7212256200	0.18846438	-3.826853737	1.297916e-04
##	180826	52.306409	-0.7130483074	0.20843966	-3.420885898	6.241751e-04
##	4368216	6.851143	-0.7104721732	0.17809462	-3.989296167	6.626964e-05
##	2555599	6.564623	-0.7101360781	0.15358953	-4.623596847	3.771425e-06
##	180037	11.603071	-0.7097728162	0.15218335	-4.663932277	3.102235e-06
##	4103317	870.293264	-0.7088960556	0.23179101	-3.058341498	2.225658e-03
##	332732	3.713805	-0.7051607217	0.13316255	-5.295488086	1.186989e-07
##	180857	1.452938	-0.6896057874	0.11104504	-6.210144718	5.293583e-10
##	54563	2.618864	-0.6894837590	0.12003013	-5.744255728	9.232617e-09
##	367889	3.332218	-0.6833922474	0.11750023	-5.816092641	6.023909e-09
##	134265	2.278754	-0.6799498222	0.11698885	-5.812090780	6.169737e-09
##	180572	2.553922	-0.6769058759	0.11162040	-6.064356170	1.324833e-09
##	840961	1.388531	-0.6756270401	0.10828090	-6.239577394	4.387546e-10
##	185570	15.297444	-0.6753096997	0.18630884	-3.624678811	2.893208e-04
##	184037	37.039881	-0.6710555260	0.15858282	-4.231577832	2.320577e-05
##	312586	2.327369	-0.6649806830	0.11301634	-5.883934097	4.006274e-09
##	3588390	373.812373	-0.6643744527	0.19663210	-3.378769100	7.281113e-04
##	181422	17.835725	-0.6591055778	0.14848407	-4.438897715	9.042077e-06
##	583500	1.664983	-0.6589673558	0.11186959	-5.890495918	3.850384e-09
##	4340358	17.695580	-0.6588106918	0.17031021	-3.868298306	1.095975e-04
##	3426658	11.810210	-0.6546535479	0.14296257	-4.579195389	4.667680e-06
##	193873	4.334805	-0.6515593310	0.11516542	-5.657595441	1.535085e-08
##	2018038	2.253290	-0.6466926488	0.09976853	-6.481929983	9.055667e-11
##	197052	1.510355	-0.6461854549	0.09538904	-6.774210756	1.250872e-11
##	190100	28.839254	-0.6440863050	0.14887191	-4.326446133	1.515344e-05
##	326936	1.863706	-0.6436601160	0.11888312	-5.414226147	6.155433e-08
##	3598692	1.625551	-0.6425169295	0.10650170	-6.032926526	1.610166e-09
##	181918	2.666368	-0.6422197056	0.12366609	-5.193175591	2.067370e-07
##	194672	20.944548	-0.6403779389	0.18022124	-3.553287928	3.804478e-04
##	180529	16.935725	-0.6393905405	0.18067335	-3.538931181	4.017506e-04
##	178238	16.972323	-0.6388378272	0.15030782	-4.250196779	2.135828e-05
##	1141218	2.417825	-0.6373180657	0.13027926	-4.891938101	9.984785e-07
##	3439403	42.899105	-0.6371241787	0.16818669	-3.788196277	1.517450e-04
##	357449	1.939440	-0.6369311452	0.11052463	-5.762798010	8.273079e-09
##	199054	6.789838	-0.6315570902	0.14229787	-4.438275220	9.068262e-06
##	177754	14.541084	-0.6315224100	0.13739952	-4.596249158	4.301643e-06
##	187569	25.814616	-0.6298007916	0.16265446	-3.872016663	1.079386e-04
##	179400	69.978558	-0.6286826169	0.23128864	-2.718173353	6.564344e-03
##	177172	5.261971	-0.6228299310	0.13671448	-4.555698283	5.221184e-06
##	198503	2.335166	-0.6215917503	0.09768174	-6.363438676	1.972862e-10
##	324163	4.987826	-0.6179546293	0.10763941	-5.740969823	9.413587e-09
##	265871	3549.566369	-0.6171305652	0.23644082	-2.610084688	9.051981e-03
##	177230	4.284231	-0.6162013050	0.14309872	-4.306127338	1.661374e-05
##	183210	2.551010	-0.6149435301	0.10049070	-6.119407350	9.392402e-10
##	195436	54.234108	-0.6143639586	0.18422834	-3.334796075	8.536197e-04
##	194586	3.772502	-0.6136470440	0.11540495	-5.317337149	1.052969e-07
##	359872	96.136250	-0.6108200187	0.22133478	-2.759711019	5.785251e-03
##	198422	10.714344	-0.6107725088	0.16415124	-3.720791373	1.985995e-04
##	4390319	33.875836	-0.6097551728	0.18490000	-3.297756513	9.746061e-04
##	1646259	1.776982	-0.6041130289	0.11438696	-5.281310460	1.282631e-07
##	302049	106.474193	-0.6030762909	0.16130253	-3.738790128	1.849080e-04
##	195166	6.436753	-0.5994210865	0.16471618	-3.639114848	2.735768e-04

##	318970	25.742991	-0.5992250124	0.14171517	-4.228375954	2.353842e-05
##	344525	6.351084	-0.5987092558	0.13740182	-4.357360403	1.316404e-05
##	295485	2.950331	-0.5947237871	0.11674108	-5.094383188	3.498785e-07
##	197364	72.123693	-0.5916803982	0.21055715	-2.810070283	4.953068e-03
##	182255	14.503712	-0.5915596953	0.14644697	-4.039412360	5.358529e-05
##	4437746	3.102258	-0.5904923765	0.14404998	-4.099218848	4.145469e-05
##	264967	1.411134	-0.5846065662	0.10249861	-5.703556104	1.173334e-08
##	129401	1.419296	-0.5842525647	0.10499304	-5.564679163	2.626352e-08
##	4476780	163.754666	-0.5791752272	0.24706791	-2.344194430	1.906823e-02
##	135956	1.432347	-0.5786072173	0.10776348	-5.369232743	7.907232e-08
##	3302038	2.123913	-0.5773587786	0.11320326	-5.100195762	3.393024e-07
##	184990	14.709404	-0.5761733799	0.14245837	-4.044503626	5.243410e-05
##	365167	1.951758	-0.5760789128	0.10278449	-5.604726091	2.085846e-08
##	157327	16.424050	-0.5754582331	0.14110054	-4.078356072	4.535527e-05
##	192654	1.367296	-0.5724018579	0.10811224	-5.294514956	1.193327e-07
##	3609545	65.055133	-0.5677344681	0.21424673	-2.649909612	8.051331e-03
##	312882	10.729329	-0.5675470730	0.17913083	-3.168338288	1.533130e-03
##	4420669	1.477198	-0.5664911552	0.10656022	-5.316159830	1.059801e-07
##	3997242	1.862458	-0.5662933298	0.09971656	-5.679029751	1.354609e-08
##	365842	3.379095	-0.5649269628	0.11056608	-5.109405673	3.231738e-07
##	177567	26.097862	-0.5637616468	0.16145956	-3.491658526	4.800315e-04
##	525215	2.871965	-0.5636109924	0.11401140	-4.943461764	7.674741e-07
##	176306	15.300861	-0.5628302777	0.17418396	-3.231240563	1.232542e-03
##	365717	6.054665	-0.5621429099	0.12658494	-4.440835511	8.961027e-06
##	206233	4.496781	-0.5604973414	0.16696704	-3.356934046	7.881191e-04
##	365385	705.043060	-0.5593418466	0.24385817	-2.293717929	2.180671e-02
##	4419650	5.830080	-0.5592307045	0.12493663	-4.476114714	7.601365e-06
##	4437024	1.780735	-0.5556960790	0.10082344	-5.511576016	3.556348e-08
##	1096610	2.700384	-0.5554813116	0.11172809	-4.971724744	6.635988e-07
##	191081	12.474279	-0.5545621165	0.13446752	-4.124134234	3.721318e-05
##	194258	2.645850	-0.5534072589	0.10116253	-5.470476808	4.488264e-08
##	174763	4.000730	-0.5524550777	0.10699811	-5.163222961	2.427337e-07
##	187077	3.932944	-0.5494842561	0.10438368	-5.264082188	1.408914e-07
##	182289	515.196097	-0.5485274312	0.20040241	-2.737129878	6.197782e-03
##	182854	9.379005	-0.5410930839	0.13014113	-4.157740928	3.214102e-05
##	321453	12.628367	-0.5408973592	0.12886992	-4.197235106	2.701934e-05
##	2740953	1.749400	-0.5406411733	0.11484796	-4.707451081	2.508334e-06
##	184897	3.884964	-0.5403439747	0.13268083	-4.072509862	4.650923e-05
##	199677	5.574166	-0.5403422196	0.13623914	-3.966130570	7.304886e-05
##	679245	11.148252	-0.5400140979	0.17882833	-3.019734686	2.529962e-03
##	306066	1.877288	-0.5399444676	0.09620492	-5.612441250	1.994920e-08
##	3600504	3368.116901	-0.5374879117	0.21469930	-2.503445071	1.229908e-02
##	187945	3.296063	-0.5358413103	0.13750038	-3.897016919	9.738482e-05
##	4425495	1.806257	-0.5341340312	0.11598250	-4.605298487	4.118747e-06
##	180473	2.373102	-0.5308178285	0.11995050	-4.425307159	9.630515e-06
##	208790	17.647711	-0.5266104108	0.21130565	-2.492173871	1.269639e-02
##	184770	4.082857	-0.5232664844	0.14572803	-3.590705714	3.297838e-04
##	192015	4.873858	-0.5219329998	0.13602737	-3.836970535	1.245614e-04
##	348009	22.794230	-0.5208787418	0.20866638	-2.496227444	1.255221e-02
##	193654	2.698404	-0.5152507153	0.12497672	-4.122773483	3.743378e-05
##	194219	2.761051	-0.5151686147	0.12469850	-4.131313712	3.606959e-05
##	2430693	2.220087	-0.5143772552	0.11362153	-4.527110841	5.979558e-06
##	360311	1.761728	-0.5126816183	0.10096885	-5.077621475	3.821892e-07
##	189450	8.502015	-0.5093938424	0.12609491	-4.039765256	5.350473e-05

## 178557	1.633874	-0.5057153543	0.11004797	-4.595408159	4.319030e-06
## 1126851	1.507801	-0.5055169124	0.10618740	-4.760610978	1.930078e-06
## 3302039	2.199162	-0.4980030444	0.11201954	-4.445680157	8.761422e-06
## 360000	1.524425	-0.4937704820	0.10898510	-4.530623852	5.880977e-06
## 182933	2.443797	-0.4916888492	0.09522219	-5.163595204	2.422513e-07
## 593043	3.221139	-0.4898907877	0.14337305	-3.416895995	6.333947e-04
## 180090	2.070763	-0.4896615550	0.10484045	-4.670540383	3.004084e-06
## 378660	1.396304	-0.4895229949	0.10365665	-4.722543191	2.329136e-06
## 1131759	1.815129	-0.4876453127	0.12229741	-3.987372441	6.680910e-05
## 105287	3.213177	-0.4871189204	0.10351357	-4.705845813	2.528155e-06
## 4376828	14.404966	-0.4860070101	0.13212947	-3.678263420	2.348274e-04
## 1860112	43.229917	-0.4857922178	0.16485458	-2.946792348	3.210887e-03
## 4403113	2.410362	-0.4849469796	0.11509490	-4.213453118	2.514958e-05
## 198183	44.722622	-0.4847905830	0.20167822	-2.403782579	1.622642e-02
## 1077373	2.125552	-0.4847092843	0.11445080	-4.235088773	2.284614e-05
## 147195	2.448133	-0.4846109497	0.13055953	-3.711800579	2.057901e-04
## 188333	1.619866	-0.4845759092	0.10500660	-4.614718516	3.936284e-06
## 4471279	4.993394	-0.4835516595	0.15555400	-3.108577408	1.879904e-03
## 4473788	3.709200	-0.4831244841	0.12078154	-3.999986269	6.334616e-05
## 357930	2.376398	-0.4823981799	0.13372620	-3.607357183	3.093317e-04
## 304047	5.264710	-0.4813277984	0.12461258	-3.862593884	1.121894e-04
## 187782	2.299252	-0.4798410285	0.09017549	-5.321190972	1.030901e-07
## 4453609	272.984352	-0.4763166406	0.25684408	-1.854497225	6.366806e-02
## 162623	12.190804	-0.4757845836	0.16425302	-2.896656522	3.771624e-03
## 3563235	178.498228	-0.4746151176	0.18991278	-2.499121512	1.245016e-02
## 369014	5.441395	-0.4725419889	0.12706993	-3.718755468	2.002067e-04
## 173876	2.873749	-0.4704022166	0.14125193	-3.330235662	8.677251e-04
## 1028036	1.355841	-0.4698495155	0.10682110	-4.398471251	1.090161e-05
## 321517	1.380842	-0.4697505912	0.10442218	-4.498570848	6.841180e-06
## 3272632	3.756324	-0.4689997467	0.11322915	-4.142040742	3.442292e-05
## 960871	1.323494	-0.4678113605	0.10134439	-4.616055841	3.911018e-06
## 191251	3.378738	-0.4675668558	0.13617631	-3.433540456	5.957533e-04
## 923098	1.571393	-0.4643714001	0.09869166	-4.705274758	2.535243e-06
## 198071	19.706587	-0.4609564921	0.18014721	-2.558776769	1.050412e-02
## 176300	1.877110	-0.4600465511	0.09522869	-4.830965888	1.358723e-06
## 185763	317.893111	-0.4594700682	0.24505271	-1.874984622	6.079484e-02
## 183824	3.013846	-0.4569448246	0.10019216	-4.560684507	5.098714e-06
## 174672	2.864404	-0.4565702593	0.10194923	-4.478408263	7.520167e-06
## 194534	1.802581	-0.4544350934	0.09456502	-4.805530588	1.543416e-06
## 331253	2.647462	-0.4542718515	0.09473680	-4.795093943	1.625986e-06
## 552235	1.509603	-0.4530838385	0.10811807	-4.190639262	2.781696e-05
## 4414476	155.111517	-0.4529103864	0.23903128	-1.894774525	5.812228e-02
## 529979	14.525252	-0.4527602190	0.18367211	-2.465046148	1.369956e-02
## 181003	1.907610	-0.4523134992	0.10876466	-4.158643857	3.201426e-05
## 2497335	15.970268	-0.4522450704	0.17472675	-2.588298991	9.645122e-03
## 189208	3.277900	-0.4510442572	0.12246273	-3.683114372	2.304017e-04
## 360636	405.468369	-0.4509318584	0.25771788	-1.749711180	8.016816e-02
## 174516	2.077257	-0.4507493740	0.13163741	-3.424173927	6.166714e-04
## 186255	1.789726	-0.4499449769	0.09882135	-4.553115232	5.285730e-06
## 197864	17.350130	-0.4492931281	0.17857762	-2.515954324	1.187106e-02
## 174950	2.337837	-0.4475652380	0.09438818	-4.741751137	2.118788e-06
## 556126	1.489486	-0.4465554473	0.10817527	-4.128073381	3.658154e-05
## 3465233	1.514387	-0.4453203797	0.10735048	-4.148284987	3.349752e-05
## 179695	3.234986	-0.4443278771	0.12016668	-3.697596428	2.176506e-04

##	197004	630.017715	-0.4428564647	0.24948538	-1.775079859	7.588470e-02
##	190162	13.965656	-0.4418837377	0.13760862	-3.211163325	1.321988e-03
##	825808	1329.691292	-0.4415870764	0.21172356	-2.085677594	3.700784e-02
##	182054	6.788913	-0.4412499160	0.12996416	-3.395166040	6.858699e-04
##	1012948	1.513523	-0.4411155588	0.10257536	-4.300404537	1.704866e-05
##	189610	2.066467	-0.4405756868	0.11179040	-3.941086997	8.111320e-05
##	188454	2.151505	-0.4402598813	0.09456874	-4.655448409	3.232764e-06
##	308544	78.211545	-0.4384399918	0.15828888	-2.769872263	5.607828e-03
##	180462	20.512619	-0.4380532786	0.14264383	-3.070958475	2.133728e-03
##	1061772	1.885769	-0.4378212488	0.10194687	-4.294602151	1.750069e-05
##	4337755	2.972824	-0.4377519315	0.09756998	-4.486543195	7.238805e-06
##	213870	1.526822	-0.4376280286	0.10898286	-4.015567508	5.930292e-05
##	59563	3.966948	-0.4374479172	0.13955187	-3.134661724	1.720524e-03
##	4473883	1.453347	-0.4349476661	0.10994631	-3.956000620	7.621496e-05
##	177828	1.672256	-0.4345911768	0.11534271	-3.767825196	1.646759e-04
##	179785	9.815643	-0.4341082322	0.16048943	-2.704902368	6.832447e-03
##	1820513	50.000952	-0.4335725936	0.22972902	-1.887321837	5.911705e-02
##	517754	1.683088	-0.4322887526	0.10219053	-4.230223374	2.334594e-05
##	197761	2.796945	-0.4321264121	0.11425304	-3.782187270	1.554563e-04
##	292735	147.954264	-0.4314386373	0.16535833	-2.609113446	9.077714e-03
##	3472078	51.453650	-0.4314348592	0.18571389	-2.323115686	2.017294e-02
##	180874	2.910236	-0.4306836166	0.12147122	-3.545560835	3.917785e-04
##	363430	1.789801	-0.4292363476	0.12269970	-3.498267336	4.682915e-04
##	197334	4.951502	-0.4291144153	0.13816992	-3.105700759	1.898287e-03
##	4323555	1.589849	-0.4285810193	0.10381085	-4.128479996	3.651692e-05
##	2058521	1.320406	-0.4277083802	0.10035141	-4.262106317	2.025091e-05
##	3610691	3.077934	-0.4275880725	0.14442364	-2.960651499	3.069891e-03
##	661266	6.491996	-0.4263912737	0.12307611	-3.464451956	5.313130e-04
##	1943669	3.391846	-0.4260503109	0.10685979	-3.987003194	6.691313e-05
##	192263	2.612460	-0.4258334250	0.09450646	-4.505865681	6.610289e-06
##	519746	4.658638	-0.4253355798	0.14301015	-2.974163570	2.937884e-03
##	211935	7.208318	-0.4248162200	0.15329770	-2.771184635	5.585275e-03
##	681370	67.076697	-0.4246339479	0.13588680	-3.124909551	1.778597e-03
##	166869	5.853434	-0.4245996838	0.15333827	-2.769039311	5.622185e-03
##	136526	1.442637	-0.4240438289	0.11495757	-3.688698503	2.254041e-04
##	370225	3.135749	-0.4238102634	0.13020863	-3.254855457	1.134501e-03
##	174625	2.286879	-0.4229891626	0.10468719	-4.040505606	5.333609e-05
##	3785400	1.303244	-0.4216847339	0.10396613	-4.055981897	4.992413e-05
##	842594	2.226883	-0.4214140776	0.11512280	-3.660561349	2.516633e-04
##	2544615	1.784661	-0.4195476141	0.10125211	-4.143593863	3.419050e-05
##	197988	6.288483	-0.4194245113	0.17104481	-2.452132313	1.420124e-02
##	4393532	145.353228	-0.4189054432	0.16984201	-2.466441883	1.364629e-02
##	2210028	4.368971	-0.4184533358	0.14457599	-2.894348663	3.799460e-03
##	180974	1.608800	-0.4179479806	0.10949907	-3.816908906	1.351340e-04
##	174045	1.729185	-0.4159531557	0.09800054	-4.244396639	2.191824e-05
##	195681	2.538216	-0.4140296642	0.10615533	-3.900224887	9.610338e-05
##	276484	1.935199	-0.4136895588	0.09888975	-4.183340936	2.872561e-05
##	2423305	1.560537	-0.4133336168	0.11482902	-3.599557057	3.187597e-04
##	4318671	26.497025	-0.4130416965	0.18312338	-2.255537699	2.409960e-02
##	178018	1.387768	-0.4097419613	0.11031978	-3.714129568	2.039043e-04
##	180414	4.380071	-0.4086423360	0.13410359	-3.047214097	2.309731e-03
##	199279	5.620868	-0.4076035113	0.14185137	-2.873454886	4.060091e-03
##	195929	2.821729	-0.4075186935	0.09732319	-4.187272211	2.823271e-05
##	4472091	53.214785	-0.4065024329	0.16740857	-2.428205633	1.517374e-02

## 4306048	3.046911	-0.4061393655	0.10007825	-4.058218051	4.944859e-05
## 1130824	2.424791	-0.4060131337	0.12495093	-3.249380531	1.156566e-03
## 184678	2.291511	-0.4057111121	0.10569043	-3.838674162	1.237005e-04
## 191148	2.052766	-0.4054147061	0.10904851	-3.717746261	2.010080e-04
## 184339	2.235568	-0.4052218777	0.09561805	-4.237922493	2.255976e-05
## 161423	87.798564	-0.4045354479	0.17821393	-2.269942891	2.321105e-02
## 192070	1.543834	-0.4030151614	0.11216610	-3.593021115	3.268661e-04
## 342777	1.293559	-0.4028768182	0.10486920	-3.841707639	1.221813e-04
## 197343	2.236873	-0.4025685875	0.11933832	-3.373338819	7.426251e-04
## 195029	1.396285	-0.4024889530	0.10207379	-3.943117434	8.042925e-05
## 189459	1.725879	-0.4016464390	0.09850719	-4.077331329	4.555555e-05
## 176008	2.446691	-0.4013747281	0.09450053	-4.247327733	2.163354e-05
## 194001	4.052920	-0.3977903311	0.14766279	-2.693910493	7.061913e-03
## 191483	4.583817	-0.3970706613	0.10993348	-3.611917569	3.039412e-04
## 189937	2.694430	-0.3957024813	0.12037116	-3.287352809	1.011340e-03
## 174818	33.157325	-0.3950796998	0.16812382	-2.349932889	1.877680e-02
## 4365130	99.555780	-0.3941881110	0.24248203	-1.625638421	1.040266e-01
## 193863	1.829417	-0.3940264887	0.10191470	-3.866238202	1.105270e-04
## 3754778	1.291806	-0.3936831770	0.10870662	-3.621519819	2.928774e-04
## 191391	2.198573	-0.3907533701	0.09809811	-3.983291402	6.796733e-05
## 182674	5.303485	-0.3898492107	0.15177973	-2.568519514	1.021340e-02
## 181899	1.770204	-0.3889913324	0.09429953	-4.125061067	3.706364e-05
## 3359884	1.639804	-0.3883770595	0.10768320	-3.606663335	3.101597e-04
## 194761	2.118797	-0.3882676504	0.09776711	-3.971352497	7.146574e-05
## 1919007	4.595042	-0.3880533804	0.11394638	-3.405578836	6.602395e-04
## 4325509	1.732162	-0.3879015788	0.11793558	-3.289097123	1.005093e-03
## 191551	1.982390	-0.3857168951	0.10641079	-3.624791237	2.891950e-04
## 2985051	4.930163	-0.3854368789	0.14928182	-2.581941137	9.824634e-03
## 183030	3.051780	-0.3846968366	0.13447202	-2.860794611	4.225807e-03
## 187210	15.455529	-0.3826760979	0.16591637	-2.306439689	2.108608e-02
## 189092	27.140673	-0.3822147341	0.19628276	-1.947265896	5.150287e-02
## 581201	1.469741	-0.3816358859	0.11085204	-3.442750224	5.758309e-04
## 184000	9.237257	-0.3813979489	0.14037923	-2.716911510	6.589422e-03
## 309391	3.814593	-0.3793017358	0.11271572	-3.365118342	7.651084e-04
## 4357811	9.394756	-0.3791058201	0.13973389	-2.713055704	6.666590e-03
## 4307484	6.264208	-0.3782529844	0.10937528	-3.458304265	5.435871e-04
## 193969	2.174233	-0.3779972218	0.13344168	-2.832677288	4.615996e-03
## 181718	2.464731	-0.3766595698	0.12472251	-3.019980755	2.527907e-03
## 190171	4.191285	-0.3758292838	0.14191043	-2.648355577	8.088440e-03
## 4468234	307.771645	-0.3756993489	0.14947683	-2.513428695	1.195639e-02
## 189478	2.276539	-0.3727639088	0.11994881	-3.107691643	1.885547e-03
## 842786	1.277925	-0.3722738666	0.10406259	-3.577403541	3.470242e-04
## 311820	5.106961	-0.3716821302	0.13709496	-2.711129018	6.705453e-03
## 4294457	2.985946	-0.3693266688	0.12993172	-2.842467374	4.476581e-03
## 577170	129.960369	-0.3689615506	0.18001920	-2.049567791	4.040663e-02
## 302880	1.343085	-0.3689407184	0.10158012	-3.632016788	2.812148e-04
## 194443	2.029670	-0.3684889098	0.09241066	-3.987515305	6.676890e-05
## 185861	1.458709	-0.3682768737	0.10167126	-3.622231949	2.920720e-04
## 178799	2.463327	-0.3670776798	0.12557106	-2.923266553	3.463799e-03
## 471180	2.530224	-0.3667994760	0.11551970	-3.175211429	1.497274e-03
## 161762	2.018904	-0.3664458349	0.11772553	-3.112713532	1.853759e-03
## 193480	3.759608	-0.3660489261	0.13805817	-2.651410791	8.015628e-03
## 188676	48.245149	-0.3646636323	0.21050389	-1.732336827	8.321361e-02
## 193191	5.696261	-0.3619965427	0.17268516	-2.096280592	3.605731e-02

##	4465907	15.517606	-0.3604464054	0.13604077	-2.649546910	8.059978e-03
##	342380	3.727595	-0.3579849105	0.10578418	-3.384106363	7.141033e-04
##	3265556	2.819390	-0.3537715115	0.11307500	-3.128644715	1.756145e-03
##	3430935	5.132809	-0.3534527073	0.11831942	-2.987275494	2.814759e-03
##	528628	1.755394	-0.3532018922	0.12012695	-2.940238536	3.279597e-03
##	2840201	2.438926	-0.3505924607	0.11519274	-3.043529114	2.338208e-03
##	3713805	7.979350	-0.3501572005	0.14970897	-2.338919300	1.933961e-02
##	187946	3.427495	-0.3497091542	0.13508613	-2.588786622	9.631476e-03
##	556240	1.652294	-0.3494357774	0.10773211	-3.243562083	1.180451e-03
##	190240	2.168882	-0.3480192395	0.09087429	-3.829677669	1.283112e-04
##	186090	2.813151	-0.3470123065	0.13165563	-2.635757348	8.394974e-03
##	176967	2.130745	-0.3461010225	0.09162806	-3.777238540	1.585768e-04
##	4383922	2.812407	-0.3458874205	0.12076763	-2.864074022	4.182303e-03
##	72820	3346.677987	-0.3452388394	0.14327649	-2.409598615	1.597008e-02
##	176157	2.111531	-0.3441251436	0.11349566	-3.032055443	2.428946e-03
##	339087	2.019475	-0.3440956292	0.09250615	-3.719705516	1.994552e-04
##	173965	15.907101	-0.3432524329	0.19236353	-1.784394512	7.435958e-02
##	4439469	58.797858	-0.3417364567	0.19037192	-1.795099109	7.263791e-02
##	183457	2.556712	-0.3406694109	0.13098579	-2.600811874	9.300344e-03
##	189755	1.827561	-0.3402217117	0.09598448	-3.544549222	3.932851e-04
##	180528	1.566842	-0.3394027980	0.10423257	-3.256206776	1.129115e-03
##	291090	3.811614	-0.3390317441	0.13262478	-2.556322794	1.057849e-02
##	300952	1.686014	-0.3384429507	0.10486813	-3.227319359	1.249559e-03
##	197022	6.789516	-0.3361977303	0.12605241	-2.667126567	7.650286e-03
##	369635	4.398323	-0.3355942646	0.14203383	-2.362777025	1.813858e-02
##	4315974	4.812820	-0.3344209756	0.12421079	-2.692366525	7.094693e-03
##	610111	1.429067	-0.3343366695	0.11001368	-3.039046314	2.373284e-03
##	292521	3.014395	-0.3340561784	0.10609593	-3.148623995	1.640411e-03
##	4466220	1.556617	-0.3330982130	0.11003994	-3.027066351	2.469397e-03
##	185113	2.191712	-0.3323388307	0.10991282	-3.023658529	2.497381e-03
##	193769	2.505657	-0.3288171778	0.12500721	-2.630385792	8.528802e-03
##	186921	2.626947	-0.3276587266	0.10448322	-3.135993760	1.712728e-03
##	4472174	2.074545	-0.3263528460	0.10781208	-3.027052760	2.469509e-03
##	181269	1.787915	-0.3251435075	0.09310853	-3.492091459	4.792541e-04
##	194110	4.344442	-0.3244156582	0.13728510	-2.363079818	1.812377e-02
##	2487129	1.808466	-0.3240022686	0.09071701	-3.571571434	3.548457e-04
##	178462	34.751353	-0.3236174788	0.16641893	-1.944595324	5.182370e-02
##	194686	3.573322	-0.3229930214	0.12337596	-2.617957496	8.845782e-03
##	196176	4.529718	-0.3197444327	0.13272945	-2.408993801	1.599657e-02
##	175704	14.987420	-0.3186625781	0.14745940	-2.161019084	3.069387e-02
##	303161	1.390147	-0.3185243945	0.10165556	-3.133369270	1.728119e-03
##	4296424	2.947676	-0.3183141403	0.10791314	-2.949725441	3.180564e-03
##	339566	1.499685	-0.3166643060	0.10956086	-2.890304951	3.848683e-03
##	179609	1.458709	-0.3118176776	0.09818730	-3.175743342	1.494531e-03
##	176604	24.648418	-0.3107577099	0.17115644	-1.815635466	6.942631e-02
##	188832	1.899826	-0.3101231864	0.09518209	-3.258209550	1.121176e-03
##	174862	4.287345	-0.3098719582	0.11834968	-2.618274476	8.837569e-03
##	196100	5.528022	-0.3085304757	0.12169057	-2.535368758	1.123290e-02
##	176201	2.723477	-0.3057132024	0.09522577	-3.210404205	1.325484e-03
##	210095	2.265439	-0.3052732230	0.11939237	-2.556890589	1.056124e-02
##	179911	4.852897	-0.3051123702	0.11947431	-2.553790566	1.065573e-02
##	185428	1.482859	-0.3029143042	0.10404067	-2.911499054	3.596990e-03
##	197581	1.530847	-0.3022017484	0.09848840	-3.068399284	2.152089e-03
##	178420	1.713062	-0.3010420400	0.10506665	-2.865248175	4.166825e-03

##	924547	1.592115	-0.2991806682	0.10829591	-2.762622102	5.733911e-03
##	354850	7.382069	-0.2990306675	0.14578217	-2.051215642	4.024595e-02
##	319411	1.804039	-0.2987359470	0.11108208	-2.689326279	7.159640e-03
##	191355	27.525218	-0.2986943543	0.20297445	-1.471585979	1.411327e-01
##	173927	2.069690	-0.2979841576	0.12901908	-2.309613163	2.090958e-02
##	4183249	7.226219	-0.2972267453	0.13199901	-2.251734624	2.433905e-02
##	186022	6.336059	-0.2962226037	0.12572009	-2.356207326	1.846261e-02
##	178970	1.627057	-0.2957076818	0.10633468	-2.780914830	5.420596e-03
##	194868	2.050760	-0.2947683847	0.11680103	-2.523679750	1.161337e-02
##	181176	1.670248	-0.2935247828	0.10016096	-2.930530849	3.383834e-03
##	180083	1.697518	-0.2929654594	0.10293014	-2.846255362	4.423670e-03
##	194320	7.284168	-0.2923200903	0.16456383	-1.776332571	7.567812e-02
##	176865	2.961980	-0.2919416534	0.11885104	-2.456366029	1.403501e-02
##	194824	2.695073	-0.2913445554	0.11488666	-2.535930192	1.121491e-02
##	181853	1.735202	-0.2900677771	0.09978923	-2.906804371	3.651415e-03
##	864465	2.031848	-0.2900216623	0.10101906	-2.870959881	4.092275e-03
##	190058	10.723223	-0.2897676586	0.15040637	-1.926565030	5.403386e-02
##	4377149	2.407086	-0.2893109108	0.13276579	-2.179107394	2.932369e-02
##	171559	2.750023	-0.2889038213	0.08963146	-3.223241226	1.267488e-03
##	3424669	5.070955	-0.2888827100	0.13410223	-2.154197663	3.122467e-02
##	307113	37.038643	-0.2872828902	0.15171491	-1.893570596	5.828203e-02
##	342231	1.344284	-0.2856364273	0.10131488	-2.819293959	4.812942e-03
##	186772	13.150765	-0.2856000943	0.17938028	-1.592148769	1.113513e-01
##	237444	2.530545	-0.2855457928	0.13313570	-2.144772572	3.197104e-02
##	4381422	1.367736	-0.2850370260	0.10378386	-2.746448473	6.024435e-03
##	181756	5.463707	-0.2833674578	0.12802495	-2.213376822	2.687168e-02
##	189828	12.575370	-0.2791197459	0.17746662	-1.572801363	1.157648e-01
##	196518	5.789554	-0.2788161967	0.13965392	-1.996479596	4.588174e-02
##	3195723	16.664066	-0.2778505677	0.19820222	-1.401853941	1.609589e-01
##	197460	1.608785	-0.2772216343	0.10311558	-2.688455253	7.178346e-03
##	975306	2.891799	-0.2752290446	0.11743529	-2.343665533	1.909529e-02
##	178760	1.844300	-0.2751066308	0.09661216	-2.847536331	4.405906e-03
##	194733	2.613542	-0.2746728302	0.10171531	-2.700407996	6.925449e-03
##	193868	1.692257	-0.2746545103	0.10976978	-2.502095839	1.234605e-02
##	928538	1.454412	-0.2735360233	0.10174127	-2.688545340	7.176409e-03
##	178439	3.798923	-0.2714076014	0.12924117	-2.100008921	3.572806e-02
##	178151	3.517286	-0.2710248332	0.12624308	-2.146849104	3.180530e-02
##	4297222	1.368735	-0.2708036019	0.10360688	-2.613760812	8.955170e-03
##	175485	131.854203	-0.2705811220	0.18953412	-1.427611661	1.534037e-01
##	342110	5.985592	-0.2704673915	0.14539767	-1.860190647	6.285856e-02
##	3671383	2.004261	-0.2700870269	0.09705458	-2.782836468	5.388596e-03
##	175535	17.557241	-0.2700299606	0.16343587	-1.652207437	9.849227e-02
##	2160415	4.844136	-0.2694608621	0.14955576	-1.801741735	7.158605e-02
##	355975	4.613699	-0.2688573219	0.14328121	-1.876431183	6.059610e-02
##	192419	1.698601	-0.2681004905	0.10824163	-2.476870508	1.325400e-02
##	194758	1.960357	-0.2672380530	0.09348193	-2.858713513	4.253627e-03
##	288138	1.653549	-0.2669851625	0.11925224	-2.238827275	2.516716e-02
##	798581	55.163681	-0.2666507974	0.20769172	-1.283877832	1.991847e-01
##	191395	2.856108	-0.2665880387	0.09824809	-2.713417058	6.659324e-03
##	4473509	107.887363	-0.2655798640	0.22058750	-1.203966044	2.286027e-01
##	175145	2.879360	-0.2654459668	0.11484122	-2.311417175	2.080982e-02
##	175751	2.620665	-0.2654293905	0.11799126	-2.249568274	2.447636e-02
##	4437515	24.378670	-0.2648633003	0.20244241	-1.308339016	1.907583e-01
##	193915	3.411309	-0.2642768828	0.12357503	-2.138594577	3.246852e-02

## 178253	1.261386	-0.2639841740	0.10571796	-2.497060868	1.252275e-02
## 198866	1.734029	-0.2624027015	0.10124089	-2.591864766	9.545729e-03
## 663649	2.358318	-0.2608075052	0.10255607	-2.543072287	1.098825e-02
## 175550	3.457242	-0.2601540774	0.12569936	-2.069653076	3.848484e-02
## 4437748	1.438632	-0.2601200046	0.10537727	-2.468464088	1.356943e-02
## 189754	1.707408	-0.2595370677	0.10794512	-2.404342667	1.620158e-02
## 192684	7.562763	-0.2586462662	0.14043255	-1.841782891	6.550691e-02
## 577294	3.101028	-0.2543311558	0.11088335	-2.293682104	2.180877e-02
## 4331723	1.722434	-0.2541875911	0.10752576	-2.363969329	1.808031e-02
## 4371463	1.326025	-0.2525888875	0.10249895	-2.464306999	1.372785e-02
## 4330001	2.788072	-0.2525192239	0.13602389	-1.856432850	6.339189e-02
## 4309636	1.726632	-0.2494938480	0.10171610	-2.452845257	1.417313e-02
## 4435655	1.944124	-0.2475171956	0.13113963	-1.887432398	5.910219e-02
## 495017	1.712222	-0.2460015062	0.10700871	-2.298892338	2.151105e-02
## 4343184	1.702510	-0.2458267261	0.09703380	-2.533413417	1.129576e-02
## 194036	2.152709	-0.2451348384	0.11702098	-2.094793916	3.618932e-02
## 197708	2.588366	-0.2437209264	0.11530665	-2.113676324	3.454292e-02
## 2237211	4.004416	-0.2417575003	0.12543113	-1.927412305	5.392827e-02
## 187868	2.077495	-0.2400243248	0.11357602	-2.113336243	3.457200e-02
## 186463	3.102051	-0.2397181434	0.10487721	-2.285702942	2.227164e-02
## 110625	1.450565	-0.2383630788	0.10204014	-2.335973742	1.949261e-02
## 184465	2.654242	-0.2376969129	0.11227239	-2.117144877	3.424755e-02
## 688800	2.326051	-0.2356485897	0.12913960	-1.824758536	6.803748e-02
## 289925	1.498693	-0.2355836934	0.10987317	-2.144142135	3.202150e-02
## 324894	3.549368	-0.2354764715	0.13557836	-1.736829300	8.241731e-02
## 191476	1.788257	-0.2353035384	0.10660260	-2.207296521	2.729335e-02
## 1995363	1.350828	-0.2344488506	0.10309391	-2.274128997	2.295823e-02
## 755148	1.572404	-0.2342047401	0.09986044	-2.345320513	1.901073e-02
## 110144	2.112609	-0.2328481529	0.12160437	-1.914800802	5.551791e-02
## 3014082	22.944297	-0.2318507644	0.15236394	-1.521690560	1.280866e-01
## 1132942	13.811825	-0.2317082606	0.19607187	-1.181751646	2.373043e-01
## 174304	1.930033	-0.2302945748	0.10540324	-2.184890836	2.889685e-02
## 189176	2.948826	-0.2296710963	0.13211720	-1.738389014	8.214229e-02
## 3272764	10.019628	-0.2296022335	0.16241688	-1.413659946	1.574618e-01
## 183698	6.228377	-0.2290231514	0.12708559	-1.802117417	7.152693e-02
## 320915	1.412353	-0.2275055054	0.10804484	-2.105658210	3.523405e-02
## 198587	38.455515	-0.2265325580	0.21103877	-1.073416804	2.830841e-01
## 363731	1.712178	-0.2254731572	0.10629946	-2.121112882	3.391230e-02
## 173851	2.827168	-0.2246022889	0.14013816	-1.602720387	1.089964e-01
## 174840	8.861786	-0.2242698778	0.15537111	-1.443446414	1.488948e-01
## 178485	1.960919	-0.2242514634	0.10442651	-2.147457188	3.175690e-02
## 230232	4.157311	-0.2236494748	0.15863756	-1.409814155	1.585946e-01
## 4072210	1.722909	-0.2236266742	0.09933763	-2.251177843	2.437428e-02
## 4425214	622.923080	-0.2230560037	0.16208820	-1.376139660	1.687784e-01
## 187385	8.131828	-0.2230491340	0.11868145	-1.879393339	6.019081e-02
## 291648	1.650178	-0.2220374219	0.09745700	-2.278311738	2.270801e-02
## 1046997	2.971973	-0.2216630864	0.12777677	-1.734768280	8.278186e-02
## 175184	3.034841	-0.2215850123	0.11560109	-1.916807363	5.526241e-02
## 12564	1.536575	-0.2214362249	0.11428712	-1.937543182	5.267898e-02
## 347639	2.284932	-0.2205145369	0.09145712	-2.411124807	1.590341e-02
## 194727	1.990366	-0.2180448882	0.11298244	-1.929900668	5.361915e-02
## 2565100	4.020928	-0.2172180676	0.13211048	-1.644215290	1.001317e-01
## 199524	2.598172	-0.2166802660	0.10971186	-1.974994068	4.826882e-02
## 193946	2.639985	-0.2162084579	0.11926365	-1.812861291	6.985322e-02

##	1751298	46.642879	-0.2153159703	0.20272572	-1.062104863	2.881881e-01
##	197203	1.699993	-0.2143333553	0.09870683	-2.171413628	2.989992e-02
##	207487	3.308246	-0.2122322925	0.12905868	-1.644463531	1.000805e-01
##	4347159	966.177814	-0.2118903145	0.22574915	-0.938609585	3.479312e-01
##	340219	1.911409	-0.2091917868	0.09603971	-2.178180057	2.939263e-02
##	195548	1.655525	-0.2087223070	0.09415885	-2.216703989	2.664333e-02
##	183604	18.300747	-0.2086874007	0.14951702	-1.395743454	1.627918e-01
##	189271	2.353891	-0.2086657004	0.10888698	-1.916351229	5.532040e-02
##	177134	1.852474	-0.2083920955	0.11961297	-1.742219912	8.146997e-02
##	271159	15.417281	-0.2083253012	0.13118206	-1.588062436	1.122722e-01
##	179677	2.377764	-0.2077904339	0.08850429	-2.347800615	1.888463e-02
##	183662	2.605617	-0.2076312909	0.08842689	-2.348056098	1.887168e-02
##	4364464	2.815219	-0.2076062765	0.12239522	-1.696195918	8.984878e-02
##	185021	2.019365	-0.2068584016	0.09213062	-2.245273136	2.475060e-02
##	180215	1.539872	-0.2059624536	0.10231436	-2.013035732	4.411087e-02
##	352529	2.894570	-0.2040355493	0.12173302	-1.676090385	9.372049e-02
##	4446902	16.963943	-0.2035310651	0.12269570	-1.658827955	9.715047e-02
##	193367	5.512908	-0.2034867443	0.11185940	-1.819129588	6.889166e-02
##	368175	2.001745	-0.2033266512	0.11977895	-1.697515678	8.959921e-02
##	317677	6.413691	-0.2033074772	0.14476533	-1.404393420	1.602017e-01
##	194101	1.607666	-0.2028753446	0.10531296	-1.926404345	5.405391e-02
##	1848900	1.928545	-0.2022057288	0.09923162	-2.037714703	4.157847e-02
##	2498994	1.705009	-0.2020917884	0.09732037	-2.076562003	3.784200e-02
##	192735	4.026926	-0.2015944221	0.14590380	-1.381694148	1.670656e-01
##	187212	3.336196	-0.2012463101	0.12047024	-1.670506385	9.481922e-02
##	185164	2.421590	-0.2011524279	0.12101454	-1.662216970	9.646928e-02
##	846798	1.496849	-0.1998440916	0.11216559	-1.781688062	7.480011e-02
##	194339	1.411155	-0.1977639537	0.10247777	-1.929822902	5.362878e-02
##	194129	1.675945	-0.1960222324	0.09875011	-1.985033051	4.714079e-02
##	178082	1.609884	-0.1954069080	0.10403698	-1.878244781	6.034769e-02
##	354334	7.829955	-0.1939189923	0.14283449	-1.357648182	1.745753e-01
##	4359797	1.783810	-0.1936528025	0.09416483	-2.056529983	3.973146e-02
##	180289	1.409912	-0.1933613957	0.10099539	-1.914556741	5.554906e-02
##	360730	1.320777	-0.1931267058	0.10631912	-1.816481481	6.929655e-02
##	4386507	2.318809	-0.1914871828	0.11393441	-1.680679152	9.282525e-02
##	198117	1.847619	-0.1905933440	0.10002935	-1.905374302	5.673143e-02
##	180629	3.514146	-0.1905573365	0.10284019	-1.852946122	6.389008e-02
##	197481	5.936503	-0.1898112982	0.11359961	-1.670879784	9.474543e-02
##	332929	3.989953	-0.1893725914	0.11652890	-1.625112716	1.041385e-01
##	2979308	32.226668	-0.1890648982	0.20850420	-0.906767797	3.645296e-01
##	302746	1.774208	-0.1879472406	0.09638796	-1.949903682	5.118760e-02
##	2283862	3.405025	-0.1876711520	0.13664042	-1.373467352	1.696071e-01
##	4304475	1.718283	-0.1870858805	0.09958547	-1.878646288	6.029281e-02
##	1918929	1.791154	-0.1863717363	0.10882356	-1.712604733	8.678528e-02
##	194104	3.099563	-0.1857450315	0.11805149	-1.573423880	1.156207e-01
##	4020046	11.122421	-0.1849091082	0.17833483	-1.036864805	2.997989e-01
##	169364	2.747303	-0.1838425657	0.12790942	-1.437287131	1.506364e-01
##	197661	1.832733	-0.1836296777	0.10395054	-1.766510128	7.731030e-02
##	289734	1551.178772	-0.1833473076	0.18791539	-0.975690747	3.292177e-01
##	179826	5.554288	-0.1818030367	0.14308190	-1.270622143	2.038631e-01
##	4434268	1.733143	-0.1812940769	0.11842262	-1.530907510	1.257923e-01
##	349257	2.875283	-0.1800004464	0.12610293	-1.427408869	1.534621e-01
##	403701	806.468518	-0.1796651215	0.26975046	-0.666041935	5.053843e-01
##	4309301	38.647184	-0.1791120108	0.12393316	-1.445230714	1.483931e-01

##	2686384	5.000386	-0.1789202204	0.11977119	-1.493850292	1.352148e-01
##	232828	1.807448	-0.1788432565	0.10776199	-1.659613511	9.699223e-02
##	352347	3.865081	-0.1786855626	0.12492294	-1.430366303	1.526119e-01
##	4468891	1.763823	-0.1774715102	0.09874499	-1.797271040	7.229260e-02
##	4343627	1383.403077	-0.1769661821	0.23945028	-0.739051905	4.598755e-01
##	335577	4.675766	-0.1760888213	0.11031164	-1.596285023	1.104252e-01
##	297182	1.910796	-0.1736806230	0.09851176	-1.763044636	7.789296e-02
##	337538	2.189826	-0.1727854001	0.10599645	-1.630105562	1.030792e-01
##	340474	23.599179	-0.1715644977	0.17375133	-0.987414031	3.234397e-01
##	192983	6.376852	-0.1710451233	0.13796667	-1.239756812	2.150654e-01
##	1124877	1.251774	-0.1710183713	0.10574886	-1.617212485	1.058324e-01
##	183340	5.842783	-0.1705766797	0.11217734	-1.520598421	1.283606e-01
##	185059	1.395483	-0.1705280097	0.10509194	-1.622655413	1.046631e-01
##	3715618	11.213830	-0.1683886258	0.14424986	-1.167339929	2.430731e-01
##	190863	1.452399	-0.1667142242	0.10033126	-1.661637901	9.658540e-02
##	191601	5.460226	-0.1647788048	0.11179441	-1.473944873	1.404964e-01
##	4381555	1.815723	-0.1643259099	0.09351452	-1.757223459	7.887973e-02
##	184864	1.461775	-0.1637712655	0.10123081	-1.617800572	1.057056e-01
##	1148151	1.326379	-0.1630243955	0.10779694	-1.512328590	1.304503e-01
##	177175	4.079885	-0.1620508566	0.13097746	-1.237242294	2.159971e-01
##	197552	1.880460	-0.1608280342	0.11542555	-1.393348637	1.635144e-01
##	4397092	3.815659	-0.1604138056	0.15700445	-1.021715002	3.069158e-01
##	4413347	4.309009	-0.1595274862	0.11460454	-1.391982203	1.639278e-01
##	4476950	3.392088	-0.1594790605	0.12766178	-1.249231021	2.115806e-01
##	194995	1.424381	-0.1594384706	0.10222821	-1.559632883	1.188467e-01
##	16513	1.941265	-0.1585677623	0.12121816	-1.308118858	1.908330e-01
##	210371	2.324955	-0.1583601402	0.09670781	-1.637511395	1.015237e-01
##	199694	1.980963	-0.1579573765	0.10355819	-1.525300731	1.271841e-01
##	4397439	1.430252	-0.1578766832	0.10873420	-1.451950557	1.465154e-01
##	134671	1.755772	-0.1577403034	0.10317734	-1.528827037	1.263073e-01
##	293307	2.563284	-0.1576873053	0.09002452	-1.751603875	7.984195e-02
##	579244	1.990858	-0.1570652117	0.11601913	-1.353787156	1.758043e-01
##	4364405	3.667416	-0.1564899440	0.15242414	-1.026674307	3.045739e-01
##	4465072	1.541867	-0.1557381426	0.10823329	-1.438911628	1.501756e-01
##	1108437	1.281195	-0.1552993595	0.10530528	-1.474753811	1.402787e-01
##	319687	1.759316	-0.1544686483	0.09876758	-1.563961045	1.178267e-01
##	181826	1.457730	-0.1533828837	0.10020553	-1.530682856	1.258478e-01
##	4458634	1.847649	-0.1512071166	0.11180270	-1.352446005	1.762327e-01
##	187751	4.154529	-0.1511550158	0.16190350	-0.933611806	3.505042e-01
##	245625	1.702004	-0.1506166881	0.10489935	-1.435820959	1.510533e-01
##	4045882	13.450491	-0.1504154147	0.16825609	-0.893967143	3.713395e-01
##	174571	2.053217	-0.1500938366	0.10744157	-1.396981091	1.624193e-01
##	166848	1.446955	-0.1489077336	0.09943608	-1.497522237	1.342574e-01
##	4319899	1.369343	-0.1486576343	0.10235582	-1.452361319	1.464012e-01
##	192711	3.002684	-0.1474568311	0.11482233	-1.284217384	1.990659e-01
##	688923	2.076346	-0.1461239305	0.12154284	-1.202242217	2.292697e-01
##	360660	2.680473	-0.1459771942	0.09422480	-1.549243945	1.213231e-01
##	184910	1.727277	-0.1456849274	0.09678718	-1.505208941	1.322704e-01
##	875735	2.675678	-0.1449484284	0.11315775	-1.280941247	2.002143e-01
##	4443846	7.903092	-0.1440871101	0.15905512	-0.905894188	3.649919e-01
##	327851	1.306723	-0.1434655082	0.10550879	-1.359749329	1.739093e-01
##	196307	3.513440	-0.1434589163	0.13613607	-1.053790638	2.919788e-01
##	2683271	25.908805	-0.1432681906	0.15635174	-0.916319768	3.594992e-01
##	288930	2.075693	-0.1429756929	0.10864098	-1.316038315	1.881612e-01

## 1830364	5.705315	-0.1425866205	0.14485532	-0.984338138	3.249493e-01
## 322835	3.922713	-0.1418157927	0.13538360	-1.047510849	2.948640e-01
## 195716	1.696709	-0.1408802235	0.09583138	-1.470084462	1.415389e-01
## 4374853	1.634144	-0.1406538671	0.10718675	-1.312231907	1.894419e-01
## 362608	1.287063	-0.1403150975	0.10463478	-1.340998651	1.799209e-01
## 289452	1.772843	-0.1401866357	0.09252855	-1.515063505	1.297563e-01
## 304757	1.515747	-0.1400261083	0.10273249	-1.363016841	1.728772e-01
## 173996	2.998582	-0.1397784389	0.11874546	-1.177126606	2.391450e-01
## 190076	2.126190	-0.1393303001	0.11664004	-1.194532385	2.322698e-01
## 198646	5.305877	-0.1387673178	0.10976162	-1.264260793	2.061364e-01
## 2407149	11.658919	-0.1382278695	0.17112905	-0.807740533	4.192400e-01
## 199218	1.557989	-0.1374273305	0.10236143	-1.342569460	1.794114e-01
## 178001	2.344704	-0.1366882341	0.11400527	-1.198964122	2.305419e-01
## 179508	3.877584	-0.1348235767	0.14060795	-0.958861676	3.376284e-01
## 176244	4.669863	-0.1329514213	0.10974292	-1.211480667	2.257112e-01
## 177561	1.994349	-0.1328670915	0.10194168	-1.303363730	1.924506e-01
## 1000547	2.666438	-0.1313490781	0.09660934	-1.359589886	1.739597e-01
## 197760	4.180478	-0.1298341931	0.12881387	-1.007920895	3.134924e-01
## 189292	1.769095	-0.1296262381	0.11274299	-1.149749886	2.502469e-01
## 4397098	1.325699	-0.1288086971	0.10577308	-1.217783315	2.233063e-01
## 193744	3.315604	-0.1286293271	0.09954659	-1.292152067	1.963045e-01
## 300297	1.812818	-0.1276264375	0.11608265	-1.099444597	2.715742e-01
## 315958	1.337730	-0.1261676042	0.10461823	-1.205981034	2.278248e-01
## 187035	4.480642	-0.1244342467	0.10722421	-1.160505151	2.458432e-01
## 191180	1.785342	-0.1243270348	0.10666514	-1.165582661	2.437832e-01
## 4458306	3.392354	-0.1236909042	0.12023782	-1.028718759	3.036119e-01
## 174360	1.816821	-0.1223060435	0.10745877	-1.138167113	2.550507e-01
## 192676	1.866027	-0.1217632454	0.10770404	-1.130535517	2.582506e-01
## 536866	6.319576	-0.1214000457	0.12244087	-0.991499366	3.214418e-01
## 194654	2.564307	-0.1210028404	0.11131688	-1.087012461	2.770313e-01
## 1085832	3.016874	-0.1204625275	0.10344452	-1.164513400	2.442160e-01
## 628226	1.749661	-0.1194513203	0.10671208	-1.119379583	2.629782e-01
## 181161	1.439116	-0.1194433890	0.10212882	-1.169536576	2.421875e-01
## 187882	5.737092	-0.1182859080	0.15184648	-0.778983534	4.359894e-01
## 1508541	19.940677	-0.1180792410	0.12015947	-0.982687784	3.257611e-01
## 189592	2.133342	-0.1179393827	0.10611649	-1.111414273	2.663901e-01
## 177349	4.347796	-0.1177105350	0.10722597	-1.097780054	2.723005e-01
## 340711	2.195244	-0.1168593474	0.12800729	-0.912911672	3.612890e-01
## 322580	2.511336	-0.1162491311	0.10314683	-1.127025696	2.597316e-01
## 187447	40.915735	-0.1151742119	0.18624304	-0.618408154	5.363063e-01
## 2024346	1.435401	-0.1147030527	0.10764710	-1.065547046	2.866284e-01
## 311950	2.037689	-0.1145414232	0.12852885	-0.891172829	3.728365e-01
## 184497	1.669848	-0.1135975655	0.10272480	-1.105843677	2.687942e-01
## 192406	90.764008	-0.1133174585	0.22045477	-0.514016806	6.072402e-01
## 196200	3.589429	-0.1127657292	0.10129220	-1.113271588	2.655918e-01
## 226338	1.264903	-0.1116099266	0.10706431	-1.042456868	2.971999e-01
## 199490	1.791904	-0.1114672327	0.09503172	-1.172947647	2.408168e-01
## 1992	77.076944	-0.1102030137	0.18775883	-0.586939167	5.572446e-01
## 4306587	1.381555	-0.1096638081	0.10607358	-1.033846620	3.012079e-01
## 129692	1.644530	-0.1087864915	0.11023064	-0.986898832	3.236922e-01
## 4345285	8.442526	-0.1075395551	0.15535340	-0.692225314	4.887958e-01
## 1076818	1.379038	-0.1056774112	0.10512602	-1.005245079	3.147789e-01
## 4448211	1.590843	-0.1045936785	0.09795126	-1.067813513	2.856046e-01
## 4479397	4.528159	-0.1039143863	0.13606426	-0.763715536	4.450368e-01

## 4335578	1.620433	-0.1030456567	0.09733673	-1.058651359	2.897586e-01
## 3537197	34.246136	-0.1026520897	0.20971595	-0.489481555	6.245008e-01
## 3450454	2.903342	-0.1015171784	0.11713208	-0.866689807	3.861120e-01
## 182196	3.207038	-0.1011004133	0.11371744	-0.889049345	3.739766e-01
## 184477	1.578818	-0.1009564830	0.09961132	-1.013504161	3.108194e-01
## 4472399	290.050207	-0.1009351624	0.20516423	-0.491972527	6.227388e-01
## 2704013	4.091274	-0.1007905799	0.14221298	-0.708729810	4.784922e-01
## 14920	1.424163	-0.1006064864	0.10216056	-0.984787957	3.247282e-01
## 184209	8.484532	-0.1005675627	0.10821300	-0.929348294	3.527086e-01
## 45296	1.626733	-0.0990231723	0.09579523	-1.033696263	3.012782e-01
## 196990	2.514659	-0.0984446349	0.10560049	-0.932236546	3.512143e-01
## 172233	1.785385	-0.0978199850	0.11533941	-0.848105442	3.963793e-01
## 1646171	13.055643	-0.0971669318	0.19470464	-0.499047853	6.177457e-01
## 4354103	1.470478	-0.0970730788	0.10882473	-0.892013079	3.723859e-01
## 4395075	1.790457	-0.0963108692	0.09726560	-0.990184242	3.220841e-01
## 4390972	1.335786	-0.0962552608	0.10428300	-0.923019683	3.559969e-01
## 188315	1.340976	-0.0958206507	0.10748664	-0.891465664	3.726794e-01
## 182588	1.406672	-0.0958098609	0.10350878	-0.925620654	3.546432e-01
## 2927689	1.739257	-0.0951721767	0.11418087	-0.833521175	4.045509e-01
## 175729	6.414127	-0.0949586618	0.14572094	-0.651647327	5.146287e-01
## 193174	2.070938	-0.0947097202	0.10005374	-0.946588472	3.438485e-01
## 2768843	1.791076	-0.0945881804	0.09549519	-0.990502086	3.219288e-01
## 175148	3.663018	-0.0943535379	0.13935985	-0.677049650	4.983745e-01
## 4483015	3.828452	-0.0940794531	0.11345126	-0.829249977	4.069630e-01
## 186478	2.622072	-0.0936240924	0.10440343	-0.896753056	3.698507e-01
## 193477	4.164525	-0.0928555788	0.13865185	-0.669703140	5.030470e-01
## 724120	1.706193	-0.0925352492	0.09652931	-0.958623309	3.377485e-01
## 187623	1.733387	-0.0924505921	0.10381069	-0.890569061	3.731604e-01
## 186030	2.574050	-0.0918799882	0.11300625	-0.813052298	4.161881e-01
## 12574	17.987566	-0.0917154815	0.12983931	-0.706376829	4.799538e-01
## 2201995	5.164700	-0.0913512403	0.15824785	-0.577266868	5.637592e-01
## 187952	4.458371	-0.0906869992	0.10710252	-0.846730758	3.971452e-01
## 199286	2.798233	-0.0901020433	0.14089074	-0.639517133	5.224866e-01
## 174752	5.301883	-0.0895048234	0.12050063	-0.742774755	4.576181e-01
## 4421070	1.398797	-0.0893242404	0.10161398	-0.879054613	3.793717e-01
## 3101394	1.292386	-0.0884442930	0.10535337	-0.839501327	4.011880e-01
## 182911	23.723362	-0.0879792661	0.19268121	-0.456605329	6.479547e-01
## 1823053	1.608003	-0.0875929631	0.10823208	-0.809306834	4.183387e-01
## 174439	4.378944	-0.0865885353	0.14046706	-0.616433039	5.376088e-01
## 176113	2.274946	-0.0856264849	0.10393295	-0.823862767	4.100175e-01
## 328105	1.878885	-0.0856081411	0.09571008	-0.894452690	3.710797e-01
## 187689	3.812909	-0.0843774733	0.14896200	-0.566436214	5.710973e-01
## 183224	3.464637	-0.0831591427	0.14780639	-0.562622125	5.736922e-01
## 4417708	1.555207	-0.0828519735	0.11684426	-0.709080401	4.782746e-01
## 1917420	12.266958	-0.0806072299	0.14719794	-0.547611129	5.839589e-01
## 4217963	5.762251	-0.0796855118	0.14754297	-0.540083421	5.891395e-01
## 189403	2.964083	-0.0789846804	0.12230387	-0.645806858	5.184044e-01
## 3609803	1.282487	-0.0789177695	0.10601414	-0.744407943	4.566297e-01
## 349431	1.575025	-0.0784128214	0.09957702	-0.787458986	4.310132e-01
## 955102	2.132707	-0.0774688215	0.11882285	-0.651969034	5.144211e-01
## 4407515	3.332517	-0.0772204040	0.14381947	-0.536925929	5.913188e-01
## 3887769	4.574770	-0.0765707445	0.09661929	-0.792499551	4.280695e-01
## 192370	2.065011	-0.0765243552	0.11179845	-0.684484944	4.936690e-01
## 185563	4.810273	-0.0762093121	0.10754929	-0.708598916	4.785734e-01

## 3450453	2.314177	-0.0760288712	0.09297089	-0.817770682	4.134881e-01
## 526804	2.232851	-0.0757959414	0.10317738	-0.734617828	4.625723e-01
## 334459	1.636258	-0.0756951071	0.10411654	-0.727022895	4.672119e-01
## 193831	3.335081	-0.0756193489	0.12226829	-0.618470635	5.362651e-01
## 196219	4.067215	-0.0755891707	0.12373292	-0.610905897	5.412619e-01
## 188856	1.527345	-0.0755155708	0.10393060	-0.726596114	4.674734e-01
## 192536	3.522639	-0.0753816391	0.12768979	-0.590349796	5.549562e-01
## 230479	2.379529	-0.0751809504	0.13329415	-0.564022879	5.727386e-01
## 191999	3.046596	-0.0740941055	0.11848209	-0.625361236	5.317340e-01
## 2281172	3.253766	-0.0740307502	0.11219230	-0.659855896	5.093463e-01
## 193075	2.317871	-0.0735517309	0.12046704	-0.610554834	5.414943e-01
## 149614	1.950010	-0.0735058179	0.09802709	-0.749852113	4.533438e-01
## 178849	1.594592	-0.0734235454	0.11191670	-0.656055321	5.117885e-01
## 197890	1.500633	-0.0724375881	0.10537304	-0.687439459	4.918058e-01
## 137026	1.205511	-0.0719672314	0.10828399	-0.664615645	5.062964e-01
## 195646	1.954234	-0.0712747063	0.10419379	-0.684059080	4.939379e-01
## 191872	5.295345	-0.0711252848	0.12629124	-0.563184646	5.733092e-01
## 329703	2.233330	-0.0703965692	0.12802056	-0.549884855	5.823984e-01
## 1740283	27.347758	-0.0699991553	0.18341704	-0.381639317	7.027289e-01
## 355424	2.655569	-0.0691627585	0.11502978	-0.601259583	5.476671e-01
## 183532	1.701101	-0.0690033762	0.11204385	-0.615860443	5.379866e-01
## 193053	55.724231	-0.0681109940	0.22349803	-0.304749862	7.605567e-01
## 302352	2.066982	-0.0675449207	0.10050899	-0.672028651	5.015655e-01
## 4457268	2.281285	-0.0670045445	0.10433264	-0.642220322	5.207301e-01
## 2920309	11.182149	-0.0657642697	0.15855285	-0.414778232	6.783043e-01
## 4464173	32.766787	-0.0654269634	0.19416683	-0.336962620	7.361451e-01
## 196017	1.362571	-0.0652123993	0.10410970	-0.626381588	5.310647e-01
## 3680006	1.416628	-0.0639710570	0.10428475	-0.613426784	5.395942e-01
## 206574	9.691890	-0.0635377036	0.14118593	-0.450028570	6.526898e-01
## 843357	2.122203	-0.0634022242	0.11107251	-0.570818350	5.681228e-01
## 4433823	42.051161	-0.0632770418	0.19248758	-0.328733111	7.423574e-01
## 4111715	16.024948	-0.0631506931	0.15568155	-0.405640180	6.850070e-01
## 179729	2.446680	-0.0629416125	0.09289319	-0.677569695	4.980446e-01
## 288651	2.154476	-0.0624715814	0.13149313	-0.475093887	6.347201e-01
## 355197	1.541371	-0.0619573591	0.09876885	-0.627296555	5.304649e-01
## 194584	2.080227	-0.0619300550	0.10675596	-0.580108656	5.618413e-01
## 4435400	4.314347	-0.0616533353	0.13982599	-0.440929024	6.592644e-01
## 4354486	1.752543	-0.0613214329	0.10154708	-0.603871926	5.459288e-01
## 1065569	1.912150	-0.0612444484	0.09780318	-0.626200985	5.311831e-01
## 4352494	1.310068	-0.0607833075	0.10646714	-0.570911431	5.680597e-01
## 518820	1.484454	-0.0604816968	0.11375128	-0.531701242	5.949329e-01
## 4430843	2.620313	-0.0597501198	0.12485077	-0.478572279	6.322429e-01
## 3195500	5.855231	-0.0589944514	0.14411925	-0.409344688	6.822867e-01
## 183054	2.096703	-0.0588292553	0.11872815	-0.495495414	6.202505e-01
## 4451251	4.508218	-0.0587263799	0.13807165	-0.425332645	6.705942e-01
## 199421	1.509371	-0.0581368347	0.10083562	-0.576550592	5.642431e-01
## 340113	1.591260	-0.0567069588	0.09894049	-0.573142112	5.665485e-01
## 851704	1.545214	-0.0559432687	0.10346101	-0.540718354	5.887017e-01
## 195947	2.042233	-0.0542765524	0.12011507	-0.451871297	6.513617e-01
## 174497	1.775330	-0.0539517008	0.09968123	-0.541242322	5.883406e-01
## 663500	1.379623	-0.0526823951	0.11130984	-0.473295031	6.360027e-01
## 299837	1.987893	-0.0515578740	0.09359836	-0.550841642	5.817422e-01
## 188194	7.480030	-0.0512719827	0.17045068	-0.300802451	7.635651e-01
## 288362	1.981015	-0.0499394143	0.09361582	-0.533450567	5.937217e-01

##	3903651	455.882638	-0.0497558719	0.17739895	-0.280474449	7.791135e-01
##	198190	2.913167	-0.0486892562	0.13046739	-0.373190990	7.090063e-01
##	3544569	1.394623	-0.0484374298	0.10764205	-0.449986127	6.527204e-01
##	147702	3.932875	-0.0483862004	0.13657662	-0.354278783	7.231300e-01
##	161007	2.324360	-0.0478744990	0.09248753	-0.517631908	6.047151e-01
##	4424239	34.913605	-0.0460074254	0.15588458	-0.295137759	7.678886e-01
##	4373152	3.210877	-0.0451952247	0.12037742	-0.375446020	7.073288e-01
##	25461	1.701504	-0.0442602174	0.10093150	-0.438517403	6.610113e-01
##	198909	5.841981	-0.0428667952	0.15226463	-0.281528248	7.783053e-01
##	179273	1.476332	-0.0425724808	0.10139017	-0.419887671	6.745675e-01
##	182874	61.282543	-0.0420308381	0.22768331	-0.184602191	8.535411e-01
##	177100	2.477259	-0.0418615594	0.12151225	-0.344504848	7.304667e-01
##	364563	1.465497	-0.0416926296	0.10145084	-0.410963849	6.810990e-01
##	4432433	2.488343	-0.0414940361	0.12152180	-0.341453442	7.327622e-01
##	199256	1.732751	-0.0408133771	0.11603253	-0.351740823	7.250326e-01
##	193679	3.303396	-0.0376789391	0.13294708	-0.283413057	7.768602e-01
##	196381	1.540141	-0.0372820355	0.10773173	-0.346063655	7.292949e-01
##	184980	1.840530	-0.0372721343	0.10412495	-0.357955830	7.203764e-01
##	193233	24.854739	-0.0369052613	0.17566980	-0.210083124	8.336028e-01
##	386273	1.577583	-0.0366680298	0.11400443	-0.321636878	7.477278e-01
##	357261	5.851668	-0.0366640240	0.15258870	-0.240280073	8.101131e-01
##	358798	3.576286	-0.0364930834	0.13567125	-0.268981707	7.879438e-01
##	175261	11.018556	-0.0358254830	0.15645204	-0.228987005	8.188790e-01
##	196918	1.605734	-0.0357294320	0.10300295	-0.346877742	7.286832e-01
##	3186216	3.403504	-0.0355924973	0.12783524	-0.278424779	7.806863e-01
##	4345397	1.666136	-0.0355304366	0.10350487	-0.343273075	7.313930e-01
##	189381	1.513574	-0.0352139139	0.09869575	-0.356792610	7.212471e-01
##	564290	1.286458	-0.0351800092	0.10769139	-0.326674302	7.439142e-01
##	176469	1.424937	-0.0336552819	0.10375697	-0.324366466	7.456606e-01
##	4433417	1.688880	-0.0331041979	0.11283789	-0.293378396	7.692329e-01
##	183496	6.140468	-0.0328471948	0.12259397	-0.267934839	7.887495e-01
##	64384	1.368860	-0.0327654597	0.10624566	-0.308393397	7.577830e-01
##	199344	2.213823	-0.0321548979	0.11122586	-0.289095523	7.725083e-01
##	178211	2.070181	-0.0307635025	0.11244599	-0.273584691	7.844038e-01
##	4329112	3.899000	-0.0304003848	0.12846505	-0.236643236	8.129336e-01
##	1986324	1.507566	-0.0302102188	0.10229886	-0.295313340	7.677545e-01
##	4397402	1.746475	-0.0300844044	0.11921592	-0.252352229	8.007688e-01
##	4434579	1.202128	-0.0290816109	0.10885033	-0.267170633	7.893378e-01
##	193452	1.844168	-0.0285773187	0.09561374	-0.298882961	7.650293e-01
##	1839271	25.989731	-0.0280954693	0.15981924	-0.175795286	8.604548e-01
##	2949328	2.282318	-0.0278838424	0.11989154	-0.232575568	8.160910e-01
##	188707	2.609313	-0.0269921787	0.12121309	-0.222683688	8.237817e-01
##	367456	2.458225	-0.0266465960	0.09239419	-0.288401210	7.730396e-01
##	4381092	4.871226	-0.0260599364	0.14200214	-0.183517916	8.543917e-01
##	197675	1.590354	-0.0258832865	0.10725159	-0.241332417	8.092975e-01
##	2229500	1.644633	-0.0256446919	0.10054088	-0.255067323	7.986711e-01
##	189067	1.635387	-0.0252074165	0.10194028	-0.247276322	8.046944e-01
##	290281	2.039795	-0.0250968948	0.09879403	-0.254032502	7.994704e-01
##	4346675	1.600697	-0.0241548049	0.09848869	-0.245254602	8.062593e-01
##	361702	1.700990	-0.0241087471	0.11045116	-0.218275186	8.272147e-01
##	4459414	1.422803	-0.0236272439	0.10975674	-0.215269190	8.295574e-01
##	190577	1.730285	-0.0231860238	0.10329464	-0.224464932	8.223956e-01
##	2532173	5.371459	-0.0229175006	0.14069767	-0.162884717	8.706092e-01
##	361864	1.374032	-0.0227822763	0.10908333	-0.208852042	8.345637e-01

## 4436046	200.629167	-0.0224631414	0.21741623	-0.103318605	9.177101e-01
## 4326869	2.681538	-0.0180539322	0.11764654	-0.153459105	8.780362e-01
## 521795	1.780814	-0.0171333157	0.10612347	-0.161446995	8.717414e-01
## 4452051	1.475054	-0.0159179587	0.10604037	-0.150112248	8.806761e-01
## 4431803	1.644212	-0.0158950552	0.11078005	-0.143483010	8.859087e-01
## 180509	12.132821	-0.0153946640	0.17044104	-0.090322518	9.280309e-01
## 157054	1.913348	-0.0135682878	0.12045200	-0.112644774	9.103122e-01
## 4154872	1.621851	-0.0134216934	0.11271820	-0.119072996	9.052175e-01
## 1062051	1.540635	-0.0132908662	0.10359118	-0.128301138	8.979107e-01
## 188648	2.035214	-0.0121654886	0.09595691	-0.126780747	8.991139e-01
## 211706	14.205425	-0.0118321307	0.11796133	-0.100305165	9.201021e-01
## 363029	7.845597	-0.0116605046	0.12043783	-0.096817622	9.228712e-01
## 345540	2.129848	-0.0116090919	0.11955251	-0.097104543	9.226434e-01
## 188127	2.000805	-0.0100056417	0.11366927	-0.088024156	9.298575e-01
## 128382	1.948310	-0.0095944803	0.12220540	-0.078511098	9.374215e-01
## 340759	1.414105	-0.0092838715	0.10242440	-0.090641213	9.277777e-01
## 102471	1.306778	-0.0091515320	0.10706308	-0.085477947	9.318814e-01
## 194899	1.957764	-0.0084490708	0.09823398	-0.086009655	9.314587e-01
## 4443574	1.384105	-0.0080989006	0.10437042	-0.077597664	9.381481e-01
## 189760	2.739660	-0.0072765572	0.12629021	-0.057617745	9.540531e-01
## 130763	1.614488	-0.0069433426	0.11038847	-0.062899163	9.498468e-01
## 4355379	1.390559	-0.0059012550	0.10324671	-0.057156836	9.544203e-01
## 4480189	22.095644	-0.0042865723	0.19401684	-0.022093816	9.823731e-01
## 194089	3.464863	-0.0039435365	0.10801389	-0.036509531	9.708761e-01
## 4373156	2.929462	-0.0023792431	0.10728386	-0.022177083	9.823067e-01
## 2200896	2.201372	-0.0017709730	0.10373893	-0.017071441	9.863796e-01
## 1722623	1.256299	-0.0015288911	0.10730885	-0.014247578	9.886325e-01
## 192444	19.720426	-0.0009568724	0.17118978	-0.005589542	9.955402e-01
## 192461	4.579764	-0.0007970988	0.12796937	-0.006228825	9.950301e-01
## 193763	3.997928	-0.0003795423	0.13032923	-0.002912180	9.976764e-01
## 2689396	4.684647	0.0006716787	0.12290723	0.005464924	9.956396e-01
## 212698	2.017891	0.0009437652	0.09425400	0.010012999	9.920109e-01
## 4326080	3.300048	0.0009715074	0.12092252	0.008034131	9.935898e-01
## 180552	2.348235	0.0012454610	0.11167618	0.011152432	9.911018e-01
## 3799784	7.708176	0.0013629496	0.14056807	0.009696012	9.922638e-01
## 4470870	3.559372	0.0015764282	0.15715780	0.010030862	9.919967e-01
## 197750	1.617252	0.0019725448	0.10374994	0.019012490	9.848311e-01
## 191718	1.439925	0.0021465669	0.10309394	0.020821465	9.833881e-01
## 2388088	1.775791	0.0021603479	0.10290122	0.020994387	9.832501e-01
## 192046	1.644117	0.0024737343	0.10470188	0.023626455	9.811506e-01
## 4379957	3.335588	0.0026027477	0.12189333	0.021352667	9.829643e-01
## 198128	1.824580	0.0030604297	0.09965138	0.030711364	9.754997e-01
## 176704	1.939720	0.0033652062	0.09678946	0.034768312	9.722645e-01
## 186955	2.719106	0.0036667455	0.10859472	0.033765412	9.730642e-01
## 1100471	1.651936	0.0038249224	0.11012463	0.034732670	9.722929e-01
## 335670	1.719615	0.0043484678	0.10253551	0.042409383	9.661723e-01
## 566976	2.853299	0.0056243326	0.10760748	0.052267113	9.583159e-01
## 189647	1.973571	0.0076651281	0.11397763	0.067251162	9.463818e-01
## 193551	3.111770	0.0082159348	0.12039018	0.068244226	9.455912e-01
## 3544699	8.348554	0.0087549299	0.17412535	0.050279468	9.598997e-01
## 4433737	3.976317	0.0092360654	0.13319725	0.069341264	9.447180e-01
## 188863	3.112257	0.0093126938	0.12052152	0.077269964	9.384088e-01
## 368486	4.690322	0.0093328367	0.15465488	0.060346214	9.518799e-01
## 197930	25.363207	0.0100760454	0.18445979	0.054624617	9.564375e-01

##	357046	308.724043	0.0111625678	0.25763323	0.043327360	9.654406e-01
##	141145	14.921011	0.0119855585	0.15773541	0.075985210	9.394309e-01
##	1838560	2.185672	0.0123739825	0.10872588	0.113808994	9.093892e-01
##	4425571	263.853559	0.0130593171	0.19088698	0.068413869	9.454562e-01
##	300378	2.753369	0.0131873160	0.13491867	0.097742708	9.221366e-01
##	216010	3.004743	0.0142850469	0.14168751	0.100820790	9.196927e-01
##	562410	1.319037	0.0146979551	0.10607286	0.138564711	8.897941e-01
##	4425663	1.252603	0.0167765282	0.10868574	0.154358142	8.773274e-01
##	4354477	4.957107	0.0182172307	0.12551969	0.145134448	8.846047e-01
##	192308	69.600190	0.0197878105	0.20034950	0.098766460	9.213237e-01
##	356745	30.248589	0.0201001175	0.19318892	0.104043844	9.171346e-01
##	191792	69.971355	0.0207142007	0.22976289	0.090154685	9.281643e-01
##	231952	2.070634	0.0209411673	0.11631232	0.180042558	8.571192e-01
##	3531225	3.252178	0.0219627987	0.11094783	0.197956084	8.430794e-01
##	113581	1.382632	0.0221026553	0.10661714	0.207308646	8.357688e-01
##	849642	1.452784	0.0235823384	0.11004845	0.214290514	8.303205e-01
##	2123719	2.592749	0.0237824200	0.11524801	0.206358612	8.365108e-01
##	187178	3.086375	0.0240793749	0.14258524	0.168877050	8.658934e-01
##	195105	1.538905	0.0243553703	0.10144529	0.240083799	8.102653e-01
##	207126	2.479048	0.0244324037	0.11791491	0.207203677	8.358508e-01
##	234443	1.250096	0.0247284979	0.10821522	0.228512208	8.192481e-01
##	175036	1.417243	0.0255216536	0.10446846	0.244300087	8.069984e-01
##	194667	1.934929	0.0264775656	0.12437538	0.212884294	8.314172e-01
##	3438642	1.573291	0.0279385392	0.11216692	0.249080034	8.032989e-01
##	2170530	1.660016	0.0289027277	0.09873664	0.292725456	7.697320e-01
##	185141	2.215247	0.0291388784	0.11410339	0.255372599	7.984353e-01
##	4469032	1.407513	0.0292387058	0.10559342	0.276898925	7.818577e-01
##	287875	1.338064	0.0293847200	0.10420868	0.281979590	7.779592e-01
##	3697034	2.486888	0.0299881435	0.12220779	0.245386504	8.061572e-01
##	345354	2.225790	0.0301684421	0.11132647	0.270990728	7.863982e-01
##	189782	1.719789	0.0309652654	0.10772273	0.287453391	7.737652e-01
##	587933	27.495448	0.0313249748	0.18885251	0.165870046	8.682592e-01
##	4449427	45.598396	0.0316656328	0.20757358	0.152551367	8.787521e-01
##	4326452	20.098692	0.0323840897	0.18161469	0.178312057	8.584779e-01
##	333114	2.082499	0.0329534978	0.12143273	0.271372462	7.861046e-01
##	4447072	49.464846	0.0339239460	0.17968302	0.188798845	8.502505e-01
##	179200	9.244491	0.0345083668	0.15494200	0.222717967	8.237550e-01
##	356360	2.030444	0.0346156585	0.09807792	0.352940393	7.241331e-01
##	3409355	1.513319	0.0347678325	0.11167115	0.311341213	7.555412e-01
##	316732	155.718691	0.0348316661	0.23573629	0.147756914	8.825346e-01
##	293511	1.613488	0.0350318087	0.09896310	0.353988583	7.233474e-01
##	1860111	2.356535	0.0359712778	0.11173689	0.321928398	7.475069e-01
##	566243	2.862625	0.0362002116	0.10895906	0.332236812	7.397104e-01
##	195556	1.807228	0.0362720123	0.09914304	0.365855374	7.144730e-01
##	4331360	58.473350	0.0363615935	0.21228995	0.171282688	8.640015e-01
##	524848	3.964894	0.0365156324	0.13479957	0.270888339	7.864769e-01
##	192958	3.775403	0.0370316788	0.12550069	0.295071510	7.679393e-01
##	1624383	1.971581	0.0376292860	0.10828798	0.347492728	7.282212e-01
##	1679707	1.711291	0.0387046924	0.10279233	0.376532871	7.065208e-01
##	527988	3.884022	0.0411933947	0.13325618	0.309129328	7.572232e-01
##	186549	1.713455	0.0414538817	0.11006429	0.376633355	7.064461e-01
##	209760	6.487035	0.0420308505	0.12885901	0.326177048	7.442904e-01
##	1023075	1.944639	0.0421494130	0.11567844	0.364367049	7.155839e-01
##	179392	1.474536	0.0424137540	0.10619356	0.399400419	6.895982e-01

## 195805	2.140397	0.0425275711	0.10818408	0.393103774	6.942428e-01
## 177237	4.847094	0.0427979154	0.13662408	0.313253091	7.540884e-01
## 242298	1.491222	0.0430064888	0.11338131	0.379308452	7.044588e-01
## 2658061	1.699745	0.0450714330	0.10152517	0.443943458	6.570835e-01
## 188966	2.144884	0.0450953544	0.12672301	0.355857654	7.219472e-01
## 193148	1.497794	0.0466893639	0.10307141	0.452980759	6.505626e-01
## 567960	1.781748	0.0468771415	0.09582169	0.489212206	6.246915e-01
## 198696	1.641157	0.0479677257	0.10381391	0.462054886	6.440420e-01
## 194372	1.542685	0.0483200197	0.10032436	0.481637953	6.300632e-01
## 194053	7.845192	0.0501945466	0.15218419	0.329827601	7.415302e-01
## 191833	3.501846	0.0508774023	0.12990301	0.391656825	6.953118e-01
## 173863	11.607792	0.0511092978	0.14988513	0.340989783	7.331113e-01
## 208972	1.346786	0.0522370011	0.10647698	0.490594316	6.237134e-01
## 685156	1.204970	0.0524838993	0.10997836	0.477220220	6.332053e-01
## 185593	1.285062	0.0526527418	0.11120400	0.473478867	6.358716e-01
## 176862	1.713854	0.0526606296	0.10266273	0.512947883	6.079878e-01
## 180563	3.173396	0.0531585907	0.12280546	0.432868314	6.651104e-01
## 389371	2.959148	0.0532183254	0.13435917	0.396090003	6.920386e-01
## 4454531	21.227874	0.0539923031	0.16155729	0.334199115	7.382293e-01
## 2816372	1.683480	0.0540849681	0.10529460	0.513653786	6.074941e-01
## 230578	3.073144	0.0541946642	0.14761658	0.367131271	7.135211e-01
## 196982	2.137158	0.0544624988	0.11528907	0.472399481	6.366417e-01
## 199430	29.055462	0.0563385563	0.17412053	0.323560669	7.462707e-01
## 192818	2.244033	0.0574136830	0.11405028	0.503406762	6.146783e-01
## 146086	1.515081	0.0576117189	0.11103700	0.518851527	6.038643e-01
## 208539	1.799527	0.0593607844	0.12066548	0.491945039	6.227582e-01
## 189624	1.325903	0.0597604352	0.10887724	0.548879053	5.830885e-01
## 4226619	1.691320	0.0603887525	0.10340156	0.584021686	5.592057e-01
## 179663	1.705233	0.0604947163	0.09789211	0.617973333	5.365929e-01
## 178478	2.713026	0.0628620469	0.13269771	0.473723661	6.356970e-01
## 193887	3.208484	0.0631273764	0.12253820	0.515164870	6.064378e-01
## 181754	3.811847	0.0631401338	0.11844234	0.533087523	5.939730e-01
## 67813	2.310602	0.0633563789	0.12021018	0.527046706	5.981612e-01
## 1906635	1.856150	0.0641951220	0.10420633	0.616038593	5.378690e-01
## 189877	1.677071	0.0651916087	0.10426441	0.625252748	5.318052e-01
## 4342104	20.067223	0.0661964857	0.17270420	0.383294005	7.015018e-01
## 1142110	1.713150	0.0665253452	0.11120096	0.598244361	5.496769e-01
## 267718	1.822101	0.0666456551	0.09691768	0.687652184	4.916718e-01
## 180842	1.510896	0.0678026101	0.11249461	0.602718754	5.466958e-01
## 183925	1.624025	0.0679226059	0.10949486	0.620326880	5.350426e-01
## 534957	1.983709	0.0689380151	0.11352630	0.607242658	5.436899e-01
## 1654474	6.627528	0.0689953860	0.13496765	0.511199432	6.092114e-01
## 195004	3.249160	0.0691998061	0.12387842	0.558610647	5.764275e-01
## 535955	7.515947	0.0707005135	0.12887043	0.548617051	5.832683e-01
## 182052	9.984875	0.0709658400	0.18666181	0.380184035	7.038088e-01
## 4344207	2.290284	0.0713313936	0.12052557	0.591836170	5.539603e-01
## 180352	2.872654	0.0716416333	0.11872535	0.603423228	5.462272e-01
## 197499	12.543581	0.0717798119	0.18435686	0.389352532	6.970154e-01
## 4336940	2.060575	0.0737338111	0.13142383	0.561038387	5.747714e-01
## 195186	1.711593	0.0742097202	0.09941287	0.746480031	4.553775e-01
## 186624	13.535281	0.0742106681	0.16959073	0.437586810	6.616858e-01
## 177792	9.663863	0.0749358962	0.17253961	0.434311277	6.640624e-01
## 192127	4.586133	0.0749610186	0.13942486	0.537644570	5.908225e-01
## 158625	1.556563	0.0759141810	0.09922880	0.765041804	4.442467e-01

## 305561	1.960664	0.0766018548	0.11148447	0.687107855	4.920148e-01
## 4333897	15.517470	0.0779440821	0.15464130	0.504031477	6.142393e-01
## 199710	1.553477	0.0782701717	0.10661057	0.734168977	4.628458e-01
## 839152	1.626137	0.0786598101	0.10927965	0.719802892	4.716464e-01
## 4480176	1.213467	0.0792374798	0.10968632	0.722400779	4.700481e-01
## 4455767	1.887160	0.0795509479	0.09839000	0.808526758	4.187874e-01
## 189793	1.904174	0.0796959221	0.10589802	0.752572364	4.517069e-01
## 1959881	1.568375	0.0797743693	0.10281031	0.775937408	4.377859e-01
## 198928	1.590442	0.0802076041	0.10231747	0.783909167	4.330934e-01
## 181452	4.318721	0.0810924269	0.13827907	0.586440346	5.575796e-01
## 4318284	1.431789	0.0811560655	0.10886266	0.745490374	4.559753e-01
## 305288	1.633623	0.0811660829	0.10222184	0.794019021	4.271844e-01
## 523140	2.630369	0.0815208379	0.11667196	0.698718335	4.847281e-01
## 190502	6.419629	0.0839869716	0.13024103	0.644858009	5.190192e-01
## 4393073	1.983691	0.0851095077	0.10835993	0.785433415	4.321995e-01
## 191222	1.449364	0.0868686610	0.10181000	0.853242951	3.935246e-01
## 4041792	1.606949	0.0868731980	0.09894794	0.877968779	3.799607e-01
## 190301	2.250144	0.0873664463	0.10891831	0.802128165	4.224788e-01
## 4409962	2.122873	0.0887664746	0.10238865	0.866956198	3.859660e-01
## 189334	1.328543	0.0888338791	0.10596929	0.838298310	4.018632e-01
## 315223	1.219957	0.0897716996	0.10974549	0.817998983	4.133578e-01
## 194559	2.368907	0.0908264252	0.11117634	0.816958212	4.139523e-01
## 191214	4.438105	0.0909903511	0.12705889	0.716127380	4.739127e-01
## 4396656	1.656695	0.0910172621	0.10147859	0.896910967	3.697664e-01
## 186896	1.779100	0.0913604250	0.09609339	0.950746162	3.417332e-01
## 4430639	2.258072	0.0915929162	0.10806803	0.847548700	3.966894e-01
## 189860	2.751997	0.0917013811	0.12251649	0.748481949	4.541695e-01
## 198947	2.746822	0.0920766994	0.09880077	0.931943144	3.513659e-01
## 328659	1.680056	0.0921595971	0.10208693	0.902756098	3.666554e-01
## 190864	2.521622	0.0921997040	0.11608913	0.794214769	4.270704e-01
## 189630	2.281015	0.0924292226	0.11028833	0.838068917	4.019920e-01
## 2072645	2.102609	0.0924753477	0.09945810	0.929792039	3.524788e-01
## 2996838	2.275372	0.0926019392	0.12410826	0.746138406	4.555838e-01
## 198468	1.660017	0.0931088726	0.10452541	0.890777385	3.730486e-01
## 4383924	1.958383	0.0934319412	0.10201063	0.915904011	3.597172e-01
## 192696	1.404990	0.0936492581	0.10338668	0.905815538	3.650335e-01
## 193797	1.845435	0.0946524410	0.12624729	0.749738387	4.534123e-01
## 3096648	1.812071	0.0950102086	0.11230231	0.846021858	3.975406e-01
## 179384	3.431288	0.0950765353	0.11859235	0.801708861	4.227214e-01
## 656881	46.006213	0.0959775063	0.17152617	0.559550235	5.757863e-01
## 197991	1.514034	0.0964173305	0.10375167	0.929308695	3.527291e-01
## 366147	1.660818	0.0964953179	0.11483164	0.840319980	4.007290e-01
## 351163	1.395462	0.0965634758	0.11175166	0.864089864	3.875385e-01
## 363735	6.647530	0.0966468772	0.12073994	0.800454887	4.234473e-01
## 196724	1.763967	0.0967981415	0.10479953	0.923650503	3.556683e-01
## 3244992	1.850820	0.0972766455	0.10620917	0.915896859	3.597210e-01
## 4449458	2.376633	0.0983178792	0.12873928	0.763697599	4.450475e-01
## 2420187	2.023677	0.1001515121	0.11111103	0.901364269	3.673947e-01
## 743082	1.703275	0.1005704603	0.10101444	0.995604783	3.194422e-01
## 4227110	1.772617	0.1011553823	0.11454957	0.883070855	3.771980e-01
## 193778	1.360630	0.1027918692	0.10552403	0.974108675	3.300026e-01
## 305224	1.375702	0.1036130106	0.10640603	0.973751345	3.301800e-01
## 179436	2.342172	0.1042674948	0.12520049	0.832804205	4.049552e-01
## 223059	3.143441	0.1047802495	0.12190689	0.859510505	3.900589e-01

## 188262	1.679244	0.1050149786	0.10359279	1.013728681	3.107122e-01
## 181217	1.432407	0.1058252824	0.10945615	0.966828104	3.336300e-01
## 583134	2.699946	0.1061982785	0.13491891	0.787126723	4.312077e-01
## 3756485	2.511428	0.1077189495	0.11578738	0.930316836	3.522071e-01
## 4390330	2.791105	0.1088688324	0.14479314	0.751892224	4.521159e-01
## 181140	1.806321	0.1089545635	0.10071581	1.081802041	2.793405e-01
## 1607319	2.041093	0.1089744561	0.10391368	1.048701707	2.943154e-01
## 4375000	2.519036	0.1098600884	0.10507399	1.045549793	2.957689e-01
## 185802	1.237189	0.1103271962	0.10926817	1.009691999	3.126429e-01
## 179905	2.243626	0.1107043800	0.11613955	0.953201361	3.404881e-01
## 851938	4.018398	0.1107541188	0.11193129	0.989483099	3.224268e-01
## 177910	1.325849	0.1110610990	0.10623477	1.045430749	2.958239e-01
## 1835779	2.674394	0.1118897356	0.11598422	0.964697889	3.346962e-01
## 190961	1.334467	0.1122442565	0.10620544	1.056859772	2.905756e-01
## 782953	1138.404595	0.1124343141	0.19991189	0.562419332	5.738304e-01
## 772515	3.090038	0.1135130790	0.13090575	0.867135956	3.858675e-01
## 4404507	1.461259	0.1142239471	0.10883747	1.049490975	2.939522e-01
## 3931537	119.737022	0.1143168175	0.21590652	0.529473681	5.964769e-01
## 308333	2.538672	0.1146237053	0.11202191	1.023225745	3.062011e-01
## 225919	1.591744	0.1146667529	0.10626117	1.079103051	2.805418e-01
## 4379646	1.568441	0.1148130273	0.10472224	1.096357595	2.729223e-01
## 189205	1.488556	0.1148900517	0.10763363	1.067417779	2.857832e-01
## 1103978	2.063049	0.1155311460	0.10171973	1.135779075	2.560490e-01
## 178631	1.675440	0.1166170367	0.11289106	1.033005032	3.016015e-01
## 4331760	3.845895	0.1168257777	0.15546543	0.751458220	4.523769e-01
## 146554	957.713815	0.1169744448	0.25953147	0.450713922	6.521957e-01
## 4254313	1.387329	0.1176929287	0.10648407	1.105263220	2.690456e-01
## 4362300	1.799340	0.1178320751	0.10529279	1.119089653	2.631019e-01
## 178928	1.544387	0.1179660182	0.10186158	1.158101173	2.468228e-01
## 189920	94.811449	0.1193499809	0.18233207	0.654574814	5.127415e-01
## 227565	1.410388	0.1194279530	0.10662301	1.120095508	2.626731e-01
## 392887	5.309712	0.1210746362	0.13961517	0.867202578	3.858310e-01
## 340547	1.492138	0.1218212341	0.10326163	1.179733750	2.381061e-01
## 313593	23.404977	0.1220633512	0.17936859	0.680516873	4.961772e-01
## 183970	2.083514	0.1227024625	0.10463402	1.172682303	2.409232e-01
## 179715	1.564669	0.1227545786	0.11086596	1.107234209	2.681927e-01
## 215097	1.252434	0.1228386759	0.11071833	1.109470126	2.672274e-01
## 4387453	1.647292	0.1232752568	0.11249852	1.095794493	2.731687e-01
## 192424	1.679081	0.1236733135	0.10129961	1.220866594	2.221365e-01
## 1068836	1.629838	0.1249152349	0.10931127	1.142748022	2.531432e-01
## 186263	21.882263	0.1261752132	0.18139093	0.695598257	4.866805e-01
## 4460786	2.477458	0.1264196674	0.11870978	1.064947366	2.868997e-01
## 184729	1.906197	0.1266225027	0.09824918	1.288789369	1.974713e-01
## 637546	1.566392	0.1286188792	0.10660863	1.206458470	2.276408e-01
## 4416763	1.861422	0.1286210358	0.10153959	1.266708256	2.052596e-01
## 197490	1.902993	0.1303747596	0.10109356	1.289644573	1.971741e-01
## 4334770	1.930470	0.1305594702	0.10193810	1.280772095	2.002737e-01
## 192592	1.336615	0.1310419050	0.10596518	1.236650660	2.162168e-01
## 180155	2.186383	0.1310901930	0.10246014	1.279426213	2.007470e-01
## 1811927	1.736448	0.1312766682	0.10178508	1.289743686	1.971397e-01
## 194177	4.146908	0.1321587715	0.12204675	1.082853701	2.788734e-01
## 174738	1.783078	0.1324755564	0.10547790	1.255955544	2.091321e-01
## 198583	1.764795	0.1345165219	0.09908441	1.357595162	1.745922e-01
## 195294	1.853412	0.1347734034	0.10867019	1.240205882	2.148993e-01

##	180123	2.385175	0.1358476069	0.11904150	1.141178598	2.537956e-01
##	691423	1.381694	0.1366487663	0.10916040	1.251816338	2.106368e-01
##	4346677	5.932806	0.1367067999	0.17008198	0.803770061	4.215298e-01
##	194925	1.841547	0.1367893805	0.10335698	1.323465353	1.856807e-01
##	225088	1.416270	0.1382858574	0.11257722	1.228364469	2.193102e-01
##	1111522	1.241814	0.1384587854	0.10920911	1.267831861	2.048580e-01
##	198221	2.033377	0.1392043499	0.11837058	1.176004670	2.395930e-01
##	319197	2.077587	0.1400832859	0.10410316	1.345619947	1.784251e-01
##	4004998	1.265167	0.1418493285	0.10950283	1.295394226	1.951843e-01
##	964220	2.346475	0.1438549297	0.10560415	1.362209117	1.731319e-01
##	181059	17.604771	0.1445890542	0.21151568	0.683585512	4.942369e-01
##	196581	1.696427	0.1446618537	0.11053043	1.308796602	1.906033e-01
##	184922	12.215836	0.1448543547	0.17891590	0.809622570	4.181571e-01
##	4290144	1.958297	0.1454090775	0.10943646	1.328707771	1.839444e-01
##	4354235	248.779309	0.1460924389	0.23393922	0.624488880	5.323066e-01
##	4305372	1.387557	0.1461075433	0.11195720	1.305030383	1.918825e-01
##	186133	1.691717	0.1468617893	0.11446046	1.283078802	1.994645e-01
##	181827	1.450294	0.1470108408	0.10183698	1.443589952	1.488544e-01
##	287700	1.495354	0.1484681164	0.10803350	1.374278477	1.693552e-01
##	695909	1.704612	0.1485491043	0.10380781	1.431001272	1.524299e-01
##	4449055	1.474501	0.1490984696	0.11335068	1.315373417	1.883844e-01
##	553150	1.886208	0.1492515496	0.12593987	1.185101652	2.359773e-01
##	322571	1.335513	0.1504017057	0.10778688	1.395361897	1.629067e-01
##	1888072	1.603237	0.1508417194	0.10397275	1.450781242	1.468408e-01
##	192741	2.106172	0.1509242118	0.12980131	1.162732571	2.449380e-01
##	189588	1.744585	0.1513394792	0.10605807	1.426949177	1.535945e-01
##	191361	249.155619	0.1513464037	0.22586077	0.670087182	5.028022e-01
##	174288	6.531798	0.1528398089	0.14559539	1.049757196	2.938298e-01
##	4411138	2.125846	0.1531199119	0.12120737	1.263288787	2.064854e-01
##	619140	1.292000	0.1545698086	0.10785690	1.433100792	1.518290e-01
##	4345850	1.935618	0.1559374488	0.10258304	1.520109488	1.284835e-01
##	199448	6.173652	0.1566384260	0.13508454	1.159558498	2.462286e-01
##	3550973	1.263820	0.1566513436	0.11038225	1.419171453	1.558490e-01
##	195522	2.097593	0.1578088975	0.10669872	1.479014039	1.391366e-01
##	2399341	1.296032	0.1578502876	0.10828950	1.457669432	1.449317e-01
##	186471	2.190577	0.1582032436	0.11918105	1.327419437	1.843700e-01
##	2714942	114.818474	0.1589703232	0.17721167	0.897064619	3.696844e-01
##	3794053	1.698168	0.1593186978	0.10124556	1.573587084	1.155829e-01
##	4344860	3.473035	0.1594926150	0.12619162	1.263892311	2.062687e-01
##	4426877	2.065388	0.1595365278	0.10709308	1.489699709	1.363032e-01
##	190649	2.844464	0.1600752996	0.12880072	1.242813740	2.139365e-01
##	196513	4.406800	0.1609871766	0.15702997	1.025200347	3.052687e-01
##	4456702	1.846494	0.1618053357	0.11822870	1.368579168	1.711309e-01
##	185859	1.660188	0.1633518785	0.10604558	1.540393141	1.234646e-01
##	175168	2.047205	0.1640952723	0.11667034	1.406486654	1.595797e-01
##	177207	5.806001	0.1643878116	0.16815387	0.977603486	3.282705e-01
##	4094259	3.394362	0.1650230893	0.12770872	1.292183360	1.962937e-01
##	186906	1.366880	0.1650604589	0.10648026	1.550150739	1.211053e-01
##	1986406	1.263840	0.1653948780	0.10963626	1.508578302	1.314066e-01
##	4387246	4.846566	0.1668998112	0.15757981	1.059144633	2.895339e-01
##	197458	3.477944	0.1669140812	0.11922453	1.399997856	1.615140e-01
##	258375	1.624709	0.1670476248	0.10528851	1.586570318	1.126100e-01
##	2177184	2.168923	0.1687613035	0.11520899	1.464827548	1.429680e-01
##	4477719	1.413041	0.1689838384	0.11316928	1.493195361	1.353861e-01

##	362793	3.338794	0.1708234963	0.15073728	1.133253122	2.571080e-01
##	175967	1.470680	0.1708919067	0.11499143	1.486127392	1.372454e-01
##	4396298	1.379385	0.1711454826	0.10825016	1.581018219	1.138739e-01
##	4388775	502.701890	0.1711718214	0.22554622	0.758921276	4.478997e-01
##	3413566	7.849136	0.1713392907	0.13325145	1.285834317	1.985009e-01
##	300662	4.682268	0.1732748179	0.13674328	1.267154203	2.051002e-01
##	191043	3.667140	0.1745575599	0.12241079	1.425998126	1.538689e-01
##	730906	3.883306	0.1757020077	0.13549275	1.296763142	1.947127e-01
##	48084	219.029081	0.1761365987	0.24439962	0.720690962	4.710997e-01
##	198119	1.841708	0.1762002892	0.10138962	1.737853416	8.223665e-02
##	125624	2.420285	0.1763942098	0.13870102	1.271758584	2.034589e-01
##	12562	1.277550	0.1767668055	0.11163528	1.583431356	1.133232e-01
##	194471	1.552246	0.1773376766	0.10730523	1.652647032	9.840272e-02
##	174960	1.760822	0.1784995349	0.09981187	1.788359815	7.371798e-02
##	182506	9.589733	0.1786882045	0.14444328	1.237082182	2.160566e-01
##	177040	3.735807	0.1789968888	0.13580627	1.318031062	1.874932e-01
##	195723	1.508704	0.1798201960	0.11037193	1.629220296	1.032664e-01
##	181871	2.038058	0.1800514440	0.12713071	1.416270287	1.566964e-01
##	4297420	2.033548	0.1809375727	0.10424943	1.735621685	8.263075e-02
##	232696	1.685738	0.1821416133	0.11049372	1.648434137	9.926362e-02
##	352852	2.954392	0.1825286937	0.14409820	1.266696600	2.052638e-01
##	196391	2.831035	0.1826609859	0.11852736	1.541087052	1.232956e-01
##	190980	3.995784	0.1827124343	0.11967355	1.526757035	1.268214e-01
##	188008	1.517640	0.1833026384	0.10161526	1.803888820	7.124874e-02
##	328617	937.193870	0.1835091633	0.23231176	0.789926260	4.295708e-01
##	4465124	1.284859	0.1835238295	0.11033823	1.663284081	9.625558e-02
##	187917	1.455315	0.1837789771	0.10617632	1.730884753	8.347232e-02
##	156357	2.156697	0.1843546883	0.13036486	1.414143987	1.573196e-01
##	584176	1.463806	0.1844943585	0.11237787	1.641732165	1.006455e-01
##	186381	1.792141	0.1847236054	0.11804212	1.564895755	1.176074e-01
##	187225	1.425853	0.1848491754	0.10840805	1.705124024	8.817130e-02
##	193852	2.046759	0.1857355568	0.10940009	1.697764154	8.955228e-02
##	182643	64.660936	0.1859255359	0.20241895	0.918518433	3.583475e-01
##	363264	1.454955	0.1860983191	0.10591273	1.757091200	7.890227e-02
##	4396297	10.283404	0.1862980488	0.18391384	1.012963706	3.110775e-01
##	2017729	2.847050	0.1863325339	0.11431725	1.629959915	1.031100e-01
##	4435784	1.680145	0.1865116095	0.10680099	1.746347148	8.075065e-02
##	4352805	1.341331	0.1874697547	0.11385990	1.646494919	9.966191e-02
##	3300804	3.071036	0.1878726660	0.12688661	1.480634294	1.387041e-01
##	4377328	1.546454	0.1880495445	0.10165929	1.849801856	6.434211e-02
##	4474760	1.348503	0.1886600536	0.10829598	1.742078064	8.149479e-02
##	4308811	1.393895	0.1888720733	0.11526521	1.638587010	1.012993e-01
##	1146771	1.568210	0.1897029971	0.10862810	1.746352906	8.074965e-02
##	4444262	4.801070	0.1898321771	0.14396585	1.318591742	1.873056e-01
##	1928156	2.591227	0.1899382631	0.11551193	1.644317243	1.001107e-01
##	3228684	1.640783	0.1900040458	0.09992158	1.901531669	5.723241e-02
##	746679	2.431256	0.1902074483	0.12366406	1.538098088	1.240246e-01
##	188077	1.399131	0.1902530836	0.10772176	1.766152752	7.737023e-02
##	4352747	2.036919	0.1912351029	0.10127580	1.888260598	5.899097e-02
##	4079463	2.593330	0.1914006263	0.10814183	1.769903772	7.674317e-02
##	3393191	116.008264	0.1914628052	0.21664157	0.883776834	3.768167e-01
##	295146	2.133945	0.1915456345	0.12011687	1.594660585	1.107882e-01
##	4372625	2.299913	0.1918215914	0.10246678	1.872036928	6.120149e-02
##	3907189	2.311292	0.1919735421	0.11056113	1.736356571	8.250081e-02

## 4468384	2.117430	0.1920493047	0.13331396	1.440579148	1.497036e-01
## 3462224	1.873432	0.1938209439	0.09968436	1.944346493	5.185368e-02
## 4391262	64.890084	0.1940840732	0.17895495	1.084541527	2.781248e-01
## 196590	1.368375	0.1974303333	0.10630161	1.857265689	6.327336e-02
## 759816	1.390581	0.1983472462	0.10716729	1.850818851	6.419562e-02
## 4364745	1.383559	0.1986409545	0.11080271	1.792744548	7.301378e-02
## 204126	2.020974	0.1996343296	0.10592393	1.884695338	5.947098e-02
## 2762219	4.499530	0.1997744701	0.13070275	1.528464143	1.263973e-01
## 341920	1.490730	0.2000219052	0.10473323	1.909822788	5.615603e-02
## 364227	4.457461	0.2000414915	0.14736897	1.357419325	1.746480e-01
## 307984	1.472792	0.2002818288	0.10660812	1.878673249	6.028912e-02
## 342844	1.288658	0.2006714477	0.11448203	1.752864219	7.962532e-02
## 175586	2.659682	0.2021061067	0.12958419	1.559651015	1.188424e-01
## 2575651	50.954831	0.2021728467	0.16961495	1.191951808	2.332801e-01
## 195465	3.760409	0.2022810105	0.12593816	1.606193136	1.082315e-01
## 197274	5.485951	0.2025319963	0.16474118	1.229395068	2.189237e-01
## 198198	5.185758	0.2025408602	0.13077931	1.548722451	1.214485e-01
## 105409	1.280441	0.2026686278	0.10957354	1.849612815	6.436937e-02
## 191734	1.564961	0.2028755934	0.10532124	1.926255314	5.407250e-02
## 292758	1.631170	0.2029497545	0.12350042	1.643312239	1.003183e-01
## 3696710	1.473238	0.2029800047	0.11275044	1.800259127	7.181973e-02
## 2170526	1.542442	0.2031492343	0.10263698	1.979298566	4.778240e-02
## 4316928	16.597593	0.2037952340	0.18506659	1.101199464	2.708099e-01
## 327218	2.207389	0.2042645657	0.13297885	1.536068075	1.245217e-01
## 3141094	13.789987	0.2058402647	0.15737934	1.307924317	1.908990e-01
## 194659	2.193847	0.2059236439	0.10833128	1.900869664	5.731909e-02
## 348680	1.558859	0.2059511246	0.10740940	1.917440363	5.518201e-02
## 4321810	20.279435	0.2066504776	0.20001644	1.033167474	3.015255e-01
## 176067	3.675925	0.2067230221	0.12502618	1.653437913	9.824177e-02
## 4451906	2.709468	0.2072571600	0.14331050	1.446210526	1.481182e-01
## 201772	1.528866	0.2073088622	0.10209422	2.030564169	4.229923e-02
## 193829	2.162417	0.2075567549	0.12033437	1.724833562	8.455747e-02
## 191779	1.766426	0.2077494363	0.10818479	1.920320164	5.481747e-02
## 2532909	1.579183	0.2078055676	0.11135977	1.866073887	6.203103e-02
## 4448928	1.405876	0.2096631975	0.10813764	1.938854966	5.251900e-02
## 4332078	1.285043	0.2099295718	0.10957318	1.915884709	5.537977e-02
## 183932	1.405859	0.2127741985	0.10684546	1.991420179	4.643471e-02
## 865469	2.210795	0.2138776783	0.10876333	1.966450335	4.924661e-02
## 2235671	8.697365	0.2154319528	0.18160659	1.186256250	2.355211e-01
## 174614	6.108442	0.2154765289	0.15577723	1.383235038	1.665928e-01
## 4422405	1.303693	0.2168529427	0.10930502	1.983924895	4.726421e-02
## 1776714	2.022418	0.2171143501	0.11273032	1.925962320	5.410908e-02
## 363442	2.198694	0.2172083983	0.09806499	2.214943269	2.676396e-02
## 302321	1.424105	0.2178016914	0.11314070	1.925051666	5.422289e-02
## 540055	1.398051	0.2179697698	0.11486010	1.897697950	5.773588e-02
## 238205	3.138087	0.2180652248	0.14601548	1.493439100	1.353223e-01
## 208479	1.703493	0.2188228436	0.12836214	1.704730448	8.824471e-02
## 191412	1.759935	0.2188352802	0.10927139	2.002676856	4.521198e-02
## 3439402	3.511503	0.2189548813	0.13990487	1.565026868	1.175766e-01
## 195015	1.584833	0.2216380181	0.10349624	2.141508018	3.223309e-02
## 579851	3.478461	0.2220921852	0.12630883	1.758326625	7.869195e-02
## 181864	4.608923	0.2224541475	0.13503143	1.647424900	9.947074e-02
## 941096	4.574743	0.2225312149	0.11800018	1.885854844	5.931452e-02
## 178331	2.078942	0.2238718851	0.11654062	1.920977237	5.473458e-02

## 710275	1.329756	0.2248229261	0.10930630	2.056815738	3.970395e-02
## 198127	1.876663	0.2249854619	0.11156857	2.016566757	4.374075e-02
## 3943182	42.919768	0.2262623219	0.18812078	1.202750258	2.290730e-01
## 136518	1.386811	0.2264503361	0.11006364	2.057448998	3.964306e-02
## 196526	1.500753	0.2267634892	0.11108158	2.041413995	4.120969e-02
## 230421	4.383938	0.2268007080	0.15130579	1.498955925	1.338851e-01
## 177581	7.491843	0.2274728638	0.14987324	1.517768362	1.290728e-01
## 182116	2.589610	0.2276952128	0.12150008	1.874033388	6.092582e-02
## 4380813	2.096197	0.2279309491	0.10369900	2.198005344	2.794873e-02
## 4473596	1.338250	0.2279897835	0.10769283	2.117037717	3.425665e-02
## 308081	1.351242	0.2296907229	0.11212349	2.048551395	4.050600e-02
## 4408423	2.488170	0.2299755397	0.11742144	1.958548030	5.016574e-02
## 119010	3.746053	0.2300081112	0.13585638	1.693024002	9.045090e-02
## 185235	1.896854	0.2300438902	0.10512880	2.188210004	2.865431e-02
## 332185	4.272886	0.2302234808	0.13866854	1.660243076	9.686556e-02
## 177986	4.096209	0.2310637541	0.13880424	1.664673626	9.597789e-02
## 4012414	1.308990	0.2321331130	0.11437729	2.029538419	4.240348e-02
## 228556	2.234158	0.2322862255	0.12031657	1.930625360	5.352940e-02
## 4318208	2.825861	0.2328845141	0.13483202	1.727219665	8.412822e-02
## 4462107	2.420131	0.2329597584	0.10295687	2.262692717	2.365464e-02
## 182517	4.195532	0.2331316535	0.12166405	1.916191740	5.534069e-02
## 178994	1.560763	0.2332838120	0.10347261	2.254546573	2.416180e-02
## 187038	1.511806	0.2342425437	0.10814537	2.165997036	3.031141e-02
## 4337431	1.320228	0.2343090783	0.10882454	2.153090493	3.131157e-02
## 45363	1.445211	0.2350377603	0.10867816	2.162695432	3.056461e-02
## 177222	9.867647	0.2351132033	0.13265008	1.772431733	7.632292e-02
## 296858	1.306290	0.2356146259	0.11427694	2.061786252	3.922809e-02
## 2137906	1.755167	0.2356319134	0.11736624	2.007663425	4.467907e-02
## 192625	2.047067	0.2356351316	0.10363871	2.273620877	2.298879e-02
## 3579831	1.356983	0.2358157049	0.10768418	2.189882524	2.853276e-02
## 193667	19.640799	0.2358780702	0.16987507	1.388538445	1.649731e-01
## 179435	1.569761	0.2361170214	0.10267527	2.299648389	2.146815e-02
## 4349261	1.310794	0.2372273827	0.11084309	2.140209031	3.233788e-02
## 358008	5.894756	0.2383724435	0.14528361	1.640738683	1.008517e-01
## 4343631	2.317327	0.2387488419	0.10300486	2.317840653	2.045798e-02
## 4370024	4.722868	0.2388649761	0.13674995	1.746728127	8.068451e-02
## 593422	2.014004	0.2393308664	0.10845420	2.206745914	2.733182e-02
## 4453060	1.447906	0.2398314752	0.10606849	2.261100090	2.375306e-02
## 3633129	4.371588	0.2401704339	0.11983640	2.004152557	4.505372e-02
## 255367	1.744887	0.2432246405	0.11436436	2.126752020	3.344069e-02
## 3186388	2.016476	0.2435868533	0.10644231	2.288440192	2.211190e-02
## 196831	1.444539	0.2441957691	0.10954465	2.229189383	2.580131e-02
## 302333	1.379640	0.2448637894	0.10825770	2.261860241	2.370604e-02
## 179402	1.397756	0.2460608585	0.10957991	2.245492510	2.473653e-02
## 49088	1.373962	0.2462443839	0.11017920	2.234944442	2.542100e-02
## 183579	2.535733	0.2463289768	0.12203555	2.018501856	4.353902e-02
## 188449	1.328686	0.2471382457	0.10846136	2.278583333	2.269185e-02
## 212532	6.610952	0.2477404001	0.16216479	1.527707711	1.265851e-01
## 191595	3.548126	0.2482962594	0.13616906	1.823441154	6.823660e-02
## 4443094	1.307507	0.2488485074	0.11195798	2.222695652	2.623633e-02
## 3857426	2.419407	0.2491733614	0.11454639	2.175305226	2.960725e-02
## 183804	1.398395	0.2501112739	0.10800072	2.315829760	2.056757e-02
## 3806695	1.408251	0.2502863827	0.10961388	2.283345630	2.241002e-02
## 4386317	1.887553	0.2510060976	0.11671324	2.150622384	3.150602e-02

## 178763	1.529695	0.2524600766	0.10477651	2.409510346	1.597394e-02
## 4459196	1.706590	0.2524908609	0.10382456	2.431899266	1.501988e-02
## 288258	1.320898	0.2533998776	0.11280388	2.246375474	2.467997e-02
## 3569942	2.568507	0.2536872205	0.11272229	2.250550621	2.441401e-02
## 3278416	1.616853	0.2541122962	0.11804017	2.152761103	3.133746e-02
## 207994	5.392103	0.2549827694	0.15172484	1.680560449	9.284832e-02
## 3318103	2.144041	0.2558083950	0.10789591	2.370881239	1.774573e-02
## 4456027	2.004317	0.2560823903	0.11547374	2.217667697	2.657750e-02
## 4379449	43.213504	0.2564175202	0.21607463	1.186708108	2.353428e-01
## 197970	22.477354	0.2564845502	0.17289678	1.483454788	1.379536e-01
## 176057	1.684255	0.2573350183	0.10312973	2.495255510	1.258665e-02
## 198956	9.552837	0.2582936175	0.14723235	1.754326519	7.937457e-02
## 2415144	24.427516	0.2585009155	0.15829609	1.633021437	1.024645e-01
## 306704	2.556518	0.2587799062	0.12453590	2.077954297	3.771357e-02
## 4278525	7.930643	0.2592058161	0.14293054	1.813508907	6.975337e-02
## 4391625	2.064599	0.2607461461	0.10495508	2.484359489	1.297847e-02
## 2232355	1.998203	0.2616631152	0.13112950	1.995455681	4.599320e-02
## 4450194	1.318827	0.2618262688	0.11588617	2.259340069	2.386224e-02
## 351020	1.909425	0.2621817921	0.11950930	2.193819204	2.824841e-02
## 4395096	10.863516	0.2633082949	0.15291771	1.721895356	8.508848e-02
## 195358	1.575738	0.2635160869	0.11368443	2.317961036	2.045144e-02
## 4375889	1.311467	0.2645341601	0.10863921	2.434978590	1.489267e-02
## 3141342	1.859468	0.2648419830	0.11717985	2.260132410	2.381303e-02
## 192437	2.451283	0.2661823121	0.13912399	1.913273971	5.571299e-02
## 574720	1.308870	0.2663668485	0.11256142	2.366413362	1.796138e-02
## 191442	4.561581	0.2667070717	0.13233571	2.015382555	4.386458e-02
## 760967	2.850159	0.2669012716	0.11812838	2.259417033	2.385746e-02
## 4458758	1.896447	0.2674586039	0.09920483	2.696023936	7.017262e-03
## 305318	8.335569	0.2676498580	0.15941009	1.679001950	9.315166e-02
## 4483045	1.667764	0.2689566531	0.10998848	2.445316612	1.447250e-02
## 175180	1.745609	0.2697346831	0.11879941	2.270505205	2.317695e-02
## 181204	9.022275	0.2703995387	0.16349930	1.653826893	9.816269e-02
## 300374	1.830683	0.2706184463	0.12099215	2.236661281	2.530849e-02
## 3443092	3.156358	0.2707846780	0.10977902	2.466634102	1.363896e-02
## 355510	4.691498	0.2713025904	0.14725899	1.842349889	6.542399e-02
## 4410401	13.498299	0.2714771962	0.15928067	1.704395098	8.830730e-02
## 266274	2.208457	0.2721667728	0.12105555	2.248279983	2.455834e-02
## 3851391	5.113011	0.2729519860	0.15672950	1.741548275	8.158752e-02
## 189524	5.801646	0.2730555593	0.15568058	1.753947453	7.943951e-02
## 287514	4.352476	0.2735915028	0.14253279	1.919498644	5.492126e-02
## 352747	1.666380	0.2743287652	0.11675944	2.349521080	1.879758e-02
## 4453501	640.970805	0.2745004433	0.19412698	1.414025173	1.573545e-01
## 191110	2.272308	0.2751433289	0.11431937	2.406795428	1.609318e-02
## 192839	1.464832	0.2758623027	0.10553581	2.613921240	8.950967e-03
## 4328189	1.458425	0.2758729414	0.10751148	2.565985994	1.028830e-02
## 186866	4.424705	0.2759913138	0.15201620	1.815538829	6.944114e-02
## 193534	1.762762	0.2763288511	0.11178653	2.471933251	1.343846e-02
## 366451	2.439438	0.2763873090	0.12167238	2.271569827	2.311251e-02
## 210542	1.610628	0.2770486274	0.10383902	2.668058974	7.629087e-03
## 1099710	1.400245	0.2776501204	0.10967234	2.531633087	1.135327e-02
## 2549971	5.218408	0.2778563892	0.13399539	2.073626455	3.811402e-02
## 175560	4.646115	0.2787038497	0.12877646	2.164245244	3.044553e-02
## 184036	1.510561	0.2800163426	0.10508823	2.664583290	7.708378e-03
## 4481624	2.741765	0.2801518562	0.11975620	2.339351563	1.931725e-02

##	304973	1.690381	0.2802685772	0.11805429	2.374065161	1.759345e-02
##	3154070	108.626244	0.2802700666	0.19254673	1.455595082	1.455046e-01
##	326390	1.577688	0.2804544575	0.10711847	2.618170791	8.840255e-03
##	3693042	1.470336	0.2815467150	0.11271079	2.497957173	1.249113e-02
##	505670	2.455749	0.2816959256	0.12414827	2.269028255	2.326661e-02
##	3747551	3.654016	0.2817251691	0.12627714	2.231006828	2.568068e-02
##	4475758	3.953007	0.2823214726	0.13420130	2.103716318	3.540320e-02
##	4465472	2.161443	0.2825447255	0.10917911	2.587901007	9.656273e-03
##	4178726	1.368739	0.2842931232	0.11415867	2.490333082	1.276234e-02
##	3562626	1.531700	0.2843094885	0.11860986	2.397013861	1.652930e-02
##	3441309	2.587227	0.2844442129	0.12478872	2.279406385	2.264292e-02
##	4438116	1.377751	0.2847114761	0.10800653	2.636057914	8.387541e-03
##	309929	1.552764	0.2848748850	0.11351285	2.509626820	1.208588e-02
##	289927	1.506620	0.2856286476	0.10439456	2.736049144	6.218174e-03
##	182383	8.378594	0.2858007065	0.15024060	1.902286781	5.713367e-02
##	330414	1.790239	0.2876989455	0.11269168	2.552974148	1.068074e-02
##	195494	1.998786	0.2891996213	0.12165472	2.377216557	1.744384e-02
##	203579	1.523504	0.2896181599	0.10703058	2.705938429	6.811167e-03
##	2438203	5.781199	0.2899703957	0.14683457	1.974810112	4.828970e-02
##	360890	1.338272	0.2902965227	0.11445283	2.536385696	1.120033e-02
##	54794	2.404438	0.2910393682	0.10981065	2.650374647	8.040256e-03
##	198626	1.515817	0.2914481069	0.10560326	2.759839978	5.782968e-03
##	188735	30.994951	0.2936001449	0.18622557	1.576583373	1.148914e-01
##	195651	11.594764	0.2941439258	0.15541516	1.892633427	5.840664e-02
##	302932	2.545593	0.2950647764	0.11258039	2.620925042	8.769154e-03
##	194734	4.544469	0.2952387324	0.15723744	1.877661773	6.042745e-02
##	4331782	10.982462	0.2959946018	0.17134303	1.727497218	8.407840e-02
##	229348	1.343982	0.2961047820	0.11516168	2.571209298	1.013441e-02
##	125270	2.158992	0.2964950615	0.12520536	2.368070047	1.788115e-02
##	189997	3.234382	0.2965588212	0.13157453	2.253922706	2.420103e-02
##	4347652	1.928638	0.2966343807	0.10964046	2.705519343	6.819768e-03
##	4420570	8.119053	0.2968464279	0.17364126	1.709538568	8.735123e-02
##	350865	2.108392	0.2969142509	0.11111108	2.672228889	7.534923e-03
##	258550	1.359794	0.2974318155	0.11084335	2.683352761	7.288806e-03
##	192438	1.891792	0.2983137211	0.11776918	2.533037299	1.130789e-02
##	213566	2.170421	0.3012544115	0.13083430	2.302564487	2.130336e-02
##	197397	3.477937	0.3017302727	0.13159264	2.292911494	2.185310e-02
##	342666	2.054455	0.3018013599	0.11115331	2.715181033	6.623955e-03
##	343257	1.346514	0.3019301865	0.11390886	2.650629503	8.034192e-03
##	239863	1.400363	0.3024986818	0.11312160	2.674101805	7.492970e-03
##	195207	1.994981	0.3027152852	0.11068108	2.735022889	6.237594e-03
##	330469	1.717039	0.3027839714	0.11140044	2.717978252	6.568216e-03
##	4480359	1.876843	0.3031156099	0.12573384	2.410771829	1.591880e-02
##	182142	1.365146	0.3044232918	0.11233038	2.710070965	6.726881e-03
##	180257	1.483194	0.3047166453	0.10525011	2.895166923	3.789570e-03
##	338177	1.727835	0.3050068279	0.10934480	2.789403976	5.280515e-03
##	3807411	1.344021	0.3060504975	0.10862754	2.817430037	4.840966e-03
##	158215	1.349141	0.3065459027	0.11264652	2.721308289	6.502409e-03
##	332450	1.570339	0.3069931942	0.11077814	2.771243474	5.584265e-03
##	4380191	2.236630	0.3076922884	0.11547146	2.664661001	7.706597e-03
##	3583645	2.036434	0.3097466694	0.10556856	2.934080743	3.345372e-03
##	172777	30.951075	0.3100971614	0.16138525	1.921471513	5.467229e-02
##	91962	1.970461	0.3106028129	0.11168383	2.781090274	5.417667e-03
##	167950	1.883426	0.3117123351	0.11199983	2.783150167	5.383388e-03

## 303326	1.726055	0.3123647666	0.10678456	2.925186697	3.442496e-03
## 189309	1.371897	0.3125245919	0.11099522	2.815658221	4.867742e-03
## 787663	2.048154	0.3125668484	0.10352171	3.019336243	2.533292e-03
## 191928	4.736882	0.3128301411	0.12537866	2.495082836	1.259277e-02
## 333768	1.370921	0.3160204189	0.11548030	2.736574193	6.208259e-03
## 4060124	5.862823	0.3160987290	0.13569834	2.329422211	1.983671e-02
## 2148365	40.933234	0.3165199149	0.18489890	1.711853946	8.692359e-02
## 196054	12.835210	0.3169755125	0.17723152	1.788482712	7.369816e-02
## 178712	1.349210	0.3178151257	0.11681196	2.720741371	6.513570e-03
## 2377731	1.365200	0.3181435159	0.11424021	2.784864559	5.355009e-03
## 198248	1.355294	0.3181921031	0.11466156	2.775054805	5.519241e-03
## 175642	1.451255	0.3182200815	0.11227516	2.834287540	4.592799e-03
## 189150	3.594344	0.3195781427	0.13382467	2.388036089	1.693868e-02
## 4468805	2.072740	0.3197865693	0.12164019	2.628954802	8.564774e-03
## 180982	1.572787	0.3213016785	0.12037444	2.669185248	7.603550e-03
## 2831841	2.859310	0.3231758866	0.12176724	2.654046152	7.953295e-03
## 3926480	778.921165	0.3237881699	0.24402076	1.326887819	1.845458e-01
## 2424737	2.197598	0.3240622437	0.11521793	2.812602432	4.914237e-03
## 849393	1.371647	0.3250312718	0.11826656	2.748293988	5.990627e-03
## 207390	1.784418	0.3250526569	0.10806361	3.007975304	2.629945e-03
## 293594	1.366780	0.3252195698	0.11418381	2.848210862	4.396578e-03
## 178965	1.496900	0.3254925951	0.10900270	2.986096560	2.825634e-03
## 561171	1.576413	0.3257625757	0.11484607	2.836514678	4.560888e-03
## 181174	2.817234	0.3259244884	0.13847521	2.353666670	1.858927e-02
## 4410166	8.597201	0.3260272571	0.17969690	1.814317624	6.962884e-02
## 190320	3.925526	0.3264719099	0.13302325	2.454246950	1.411800e-02
## 145856	1.361885	0.3278985119	0.11488319	2.854190583	4.314664e-03
## 194380	1.480814	0.3285525566	0.11191866	2.935636940	3.328637e-03
## 4390365	566.669218	0.3295981825	0.18646049	1.767656998	7.711826e-02
## 180999	24.740122	0.3296430513	0.20459456	1.611201431	1.071358e-01
## 190987	1.594160	0.3304612614	0.11416871	2.894499505	3.797635e-03
## 4310326	1.360819	0.3309352068	0.11128801	2.973682396	2.942495e-03
## 186233	1.645790	0.3333495419	0.12171580	2.738753149	6.167266e-03
## 3805518	2.240460	0.3333999834	0.11106473	3.001852810	2.683419e-03
## 1657491	1.587955	0.3339450941	0.12040810	2.773443792	5.546642e-03
## 368412	1.362321	0.3339771811	0.11130704	3.000503608	2.695336e-03
## 176297	2.896470	0.3360147785	0.12385887	2.712884319	6.670039e-03
## 196957	35.949687	0.3364078786	0.18362427	1.832044787	6.694475e-02
## 1107755	1.428117	0.3371349021	0.11515785	2.927589533	3.416007e-03
## 350832	1.512274	0.3372963255	0.11368411	2.966961041	3.007591e-03
## 1108007	1.899140	0.3384821747	0.12267013	2.759287698	5.792751e-03
## 430191	1.389459	0.3386636890	0.10843836	3.123098538	1.789578e-03
## 1147925	1.605048	0.3391875673	0.12007455	2.824808185	4.730893e-03
## 192323	2.649259	0.3392410730	0.12785235	2.653381671	7.968971e-03
## 4212012	2.188852	0.3395321739	0.10137262	3.349347831	8.100204e-04
## 309107	1.389116	0.3395744692	0.11932409	2.845816640	4.429769e-03
## 2883968	1.367984	0.3406976749	0.11811960	2.884345097	3.922287e-03
## 358712	1.366382	0.3407926018	0.11290327	3.018447699	2.540733e-03
## 3889756	1.697162	0.3408195800	0.12473325	2.732387640	6.287711e-03
## 194287	2.504376	0.3421427418	0.12152951	2.815305927	4.873082e-03
## 1763286	2.892514	0.3421815371	0.12250944	2.793103518	5.220498e-03
## 187121	1.366936	0.3427111364	0.11983011	2.859975177	4.236742e-03
## 198930	4.495211	0.3429550198	0.13271321	2.584181558	9.761040e-03
## 4381338	2.317739	0.3439916228	0.11311930	3.040963029	2.358228e-03

## 348863	1.775153	0.3444455927	0.10901699	3.159558876	1.580082e-03
## 191874	1.635636	0.3466054453	0.10376691	3.340230857	8.370877e-04
## 575768	2.739655	0.3484780540	0.12057957	2.890025753	3.852103e-03
## 708285	2.108515	0.3484852332	0.12379281	2.815068517	4.876684e-03
## 4004991	1.895169	0.3504832419	0.11246142	3.116475358	1.830270e-03
## 4310208	2.705355	0.3508996218	0.11981870	2.928588102	3.405053e-03
## 288810	3.119509	0.3511704996	0.12881775	2.726103353	6.408693e-03
## 207340	1.381735	0.3526094953	0.11533742	3.057199390	2.234156e-03
## 192342	5.150891	0.3527727441	0.14965811	2.357190924	1.841378e-02
## 176381	1.993575	0.3529944332	0.11356158	3.108396690	1.881054e-03
## 511229	1.388261	0.3532363857	0.11782343	2.998014777	2.717445e-03
## 545299	1.724404	0.3543225481	0.11483139	3.085589652	2.031490e-03
## 182653	4.285449	0.3549398024	0.15125769	2.346590146	1.894608e-02
## 308157	1.416576	0.3551624753	0.11557655	3.072963062	2.119447e-03
## 194215	3.015346	0.3556736023	0.13218653	2.690694716	7.130341e-03
## 205613	1.376959	0.3562984799	0.11246305	3.168138247	1.534185e-03
## 248126	1.695911	0.3563143233	0.10500664	3.393255070	6.906729e-04
## 2688035	3.897181	0.3565784470	0.13429829	2.655122848	7.927953e-03
## 4455308	3.471751	0.3567148447	0.12359502	2.886158759	3.899754e-03
## 261590	1.589799	0.3573747812	0.10500284	3.403477300	6.653394e-04
## 4370941	2.400239	0.3574200631	0.13430221	2.661311893	7.783682e-03
## 4454025	3.497806	0.3574277959	0.12851751	2.781160318	5.416498e-03
## 4405482	1.435288	0.3576316929	0.10972038	3.259482911	1.116155e-03
## 544419	1.959970	0.3580024667	0.11936956	2.999110261	2.707693e-03
## 4429239	1.522219	0.3602614081	0.10579150	3.405390952	6.606939e-04
## 4318125	1.636485	0.3603543088	0.11099443	3.246598236	1.167931e-03
## 191399	5.156570	0.3606009283	0.12812520	2.814441826	4.886202e-03
## 146935	1.470501	0.3613028484	0.11695142	3.089341344	2.006008e-03
## 19611	2.377175	0.3614880443	0.13631022	2.651951066	8.002814e-03
## 4431545	21.921316	0.3629366142	0.18013149	2.014842687	4.392113e-02
## 147969	14.165602	0.3630746719	0.19574633	1.854822396	6.362159e-02
## 179662	1.417038	0.3639426807	0.11261193	3.231830653	1.229999e-03
## 815573	1.450193	0.3642764847	0.11861543	3.071071530	2.132920e-03
## 216710	1.431721	0.3649159299	0.11909048	3.064190585	2.182598e-03
## 184314	1.373810	0.3664264956	0.11874188	3.085907940	2.029316e-03
## 185603	1.473636	0.3671697003	0.11065706	3.318086575	9.063639e-04
## 296420	1.778706	0.3676527485	0.11604367	3.168227547	1.533714e-03
## 90487	2.334320	0.3699668169	0.11130292	3.323963161	8.874792e-04
## 4335781	3.025418	0.3700151493	0.11579683	3.195382417	1.396457e-03
## 192255	1.548384	0.3701084122	0.10810412	3.423629181	6.179088e-04
## 194371	3.132775	0.3706962832	0.12714196	2.915609259	3.549948e-03
## 177301	2.031927	0.3709774546	0.13030846	2.846917654	4.414478e-03
## 581021	2.889630	0.3717271879	0.12744310	2.916809162	3.536321e-03
## 334336	8.642428	0.3717308043	0.15691411	2.369008068	1.783586e-02
## 305946	1.481693	0.3720534021	0.10776629	3.452409790	5.556032e-04
## 191153	533.011224	0.3728776929	0.26940489	1.384079154	1.663342e-01
## 185972	1.437069	0.3731774610	0.11606845	3.215149944	1.303764e-03
## 196315	2.804063	0.3750503625	0.11304789	3.317623678	9.078671e-04
## 4379889	4.896375	0.3754643763	0.14654728	2.562069890	1.040504e-02
## 4366843	2.969471	0.3756095593	0.11863850	3.166000568	1.545505e-03
## 177062	5.828201	0.3769360603	0.15169319	2.484858126	1.296031e-02
## 4366391	3.684150	0.3777955757	0.12368128	3.054589861	2.253685e-03
## 191250	1.968718	0.3780559858	0.12195969	3.099843676	1.936228e-03
## 187051	2.128247	0.3780576998	0.11762300	3.214147636	1.308324e-03

##	4406616	1.605161	0.3789752056	0.11993772	3.159766600	1.578956e-03
##	4429608	1.917878	0.3795514175	0.11465561	3.310360645	9.317584e-04
##	842596	1.398783	0.3815126811	0.11738273	3.250160100	1.153401e-03
##	797229	1.991458	0.3816662011	0.11378873	3.354165263	7.960480e-04
##	113003	1.470698	0.3818339166	0.10649079	3.585605204	3.362974e-04
##	493391	1.505208	0.3824209048	0.11598718	3.297096409	9.768996e-04
##	158649	2.343810	0.3829990260	0.13077398	2.928709670	3.403722e-03
##	4451899	6.781711	0.3831857960	0.16167349	2.370121350	1.778225e-02
##	336063	1.716157	0.3840182540	0.11081692	3.465339463	5.295626e-04
##	323106	14.102591	0.3850655523	0.20383428	1.889110877	5.887697e-02
##	1756274	1.802390	0.3858132431	0.11600798	3.325747499	8.818177e-04
##	4475469	1.664572	0.3860437002	0.10952697	3.524645121	4.240505e-04
##	176753	6.251462	0.3865273826	0.13321731	2.901480200	3.714042e-03
##	4352349	1.669553	0.3880351092	0.12570323	3.086914488	2.022458e-03
##	175373	1.510857	0.3893834887	0.10798446	3.605921531	3.110471e-04
##	158270	1.405939	0.3899878531	0.11789240	3.307998382	9.396535e-04
##	2724175	1182.068714	0.3900101115	0.19609348	1.988898973	4.671236e-02
##	4405423	1.578492	0.3900243951	0.11712801	3.329898631	8.687761e-04
##	4418165	1.520636	0.3915311924	0.11186171	3.500135928	4.650210e-04
##	3801267	74.912193	0.3916536331	0.18459549	2.121685845	3.386413e-02
##	2656868	2.188473	0.3917635734	0.10983665	3.566783677	3.613896e-04
##	187883	11.719507	0.3923194884	0.15409038	2.546034910	1.089543e-02
##	747563	1.419372	0.3930099532	0.11937502	3.292229436	9.939649e-04
##	185148	1.495151	0.3933204147	0.10718632	3.669502057	2.430234e-04
##	4351284	1.429272	0.3933593901	0.12098061	3.251425016	1.148281e-03
##	175650	2.136462	0.3937661262	0.11312657	3.480757085	4.999987e-04
##	4466616	6.840231	0.3958459313	0.13913910	2.844965382	4.441625e-03
##	316728	1.438726	0.3963380870	0.11298139	3.507994485	4.514984e-04
##	188079	16.127396	0.3968182218	0.18292133	2.169338154	3.005702e-02
##	4366867	6.572186	0.4018665154	0.14373945	2.795798393	5.177168e-03
##	190679	1.499719	0.4023731073	0.11099012	3.625305662	2.886199e-04
##	1868703	2.128041	0.4024861832	0.11220244	3.587143009	3.343210e-04
##	191783	1.548860	0.4030036267	0.11118949	3.624475938	2.895480e-04
##	176269	88.655015	0.4042322886	0.22754483	1.776495158	7.565134e-02
##	177421	1.465478	0.4042517823	0.10912614	3.704445156	2.118539e-04
##	180136	1.462067	0.4046110958	0.11911948	3.396682750	6.820800e-04
##	2774254	1.422315	0.4056179833	0.11770784	3.445972621	5.690080e-04
##	347529	2.044571	0.4057400702	0.11286480	3.594921341	3.244896e-04
##	4070490	1.438541	0.4071349389	0.11655360	3.493113331	4.774238e-04
##	188047	71.210164	0.4082169340	0.23821024	1.713683364	8.658689e-02
##	4435664	27.708430	0.4091150834	0.17267945	2.369216984	1.782579e-02
##	189708	6.235872	0.4095511385	0.13382399	3.060371536	2.210626e-03
##	522433	1.421532	0.4107997540	0.11499994	3.572173664	3.540305e-04
##	552376	1.496850	0.4111732499	0.11109925	3.700954305	2.147902e-04
##	4468466	10.406167	0.4115205667	0.19431759	2.117773124	3.419429e-02
##	180401	1.556697	0.4119004910	0.11149887	3.694212165	2.205696e-04
##	3929758	1.940626	0.4119713409	0.10756876	3.829841986	1.282256e-04
##	2037235	1.925279	0.4126192576	0.11817271	3.491662919	4.800236e-04
##	103166	1.534665	0.4146618032	0.11393382	3.639497148	2.731710e-04
##	194383	4.588694	0.4152479774	0.12488198	3.325123163	8.837948e-04
##	301578	11.532495	0.4153021561	0.17661090	2.351509246	1.869742e-02
##	196246	5.578538	0.4168816533	0.14738936	2.828437849	4.677578e-03
##	4454257	1.804452	0.4201524053	0.11212753	3.747094126	1.788950e-04
##	338301	1.438398	0.4203882019	0.12008276	3.500820682	4.638278e-04

##	199761	77.225915	0.4207689629	0.19368289	2.172463295	2.982074e-02
##	187468	1.820451	0.4212606165	0.10933334	3.852993188	1.166826e-04
##	4365141	1.474087	0.4222957963	0.11702300	3.608656270	3.077871e-04
##	759349	1.769290	0.4226384473	0.11692292	3.614675629	3.007239e-04
##	194297	33.503316	0.4246690672	0.22193059	1.913522005	5.568126e-02
##	2061739	2.478796	0.4248269148	0.11191446	3.795996657	1.470515e-04
##	4376230	2.985830	0.4253561803	0.13205506	3.221051771	1.277211e-03
##	307680	1.878121	0.4259477962	0.11303441	3.768301970	1.643618e-04
##	4102199	2.072202	0.4267460366	0.11985520	3.560513286	3.701306e-04
##	342397	4.235423	0.4274691427	0.12951477	3.300543522	9.649775e-04
##	4459940	1.436631	0.4294368488	0.11576629	3.709515616	2.076561e-04
##	3040024	1.736066	0.4304186865	0.11603077	3.709521991	2.076509e-04
##	197286	1.626236	0.4320010031	0.11504231	3.755148733	1.732386e-04
##	2932557	1.776091	0.4321261163	0.12115511	3.566718115	3.614800e-04
##	3221787	1.912437	0.4324306718	0.12113014	3.569967523	3.570255e-04
##	186748	1.513881	0.4329953219	0.10803582	4.007886545	6.126454e-05
##	4450010	8.194869	0.4341602000	0.15366213	2.825420991	4.721853e-03
##	851715	1.486588	0.4344369241	0.11546770	3.762410797	1.682833e-04
##	4442508	1.573199	0.4349079244	0.11013072	3.949015649	7.847322e-05
##	572889	1.604302	0.4349643158	0.12415524	3.503390688	4.593752e-04
##	688934	1.620513	0.4353952772	0.11529919	3.776221466	1.592254e-04
##	195937	83.737133	0.4354224484	0.22427070	1.941503948	5.219718e-02
##	199555	1.499003	0.4360133099	0.11346552	3.842694390	1.216910e-04
##	4381553	3633.859545	0.4361724222	0.22594090	1.930471302	5.354847e-02
##	199190	2.209184	0.4378082277	0.10977781	3.988130399	6.659606e-05
##	4316391	21.125802	0.4384308488	0.16787367	2.611671309	9.010083e-03
##	188753	4.347833	0.4391705650	0.13803140	3.181671357	1.464279e-03
##	198449	25.011256	0.4403631808	0.17536668	2.511099554	1.203557e-02
##	158027	1.447600	0.4417402640	0.12091853	3.653205816	2.589865e-04
##	175612	2.735081	0.4438997793	0.12601700	3.522538754	4.274345e-04
##	4407747	1.590524	0.4441879601	0.12114335	3.666630882	2.457672e-04
##	190761	2.384385	0.4447507691	0.11530079	3.857308791	1.146423e-04
##	294254	1.476219	0.4449164695	0.12243126	3.634010435	2.790496e-04
##	304779	5.420464	0.4450688524	0.13637808	3.263492601	1.100481e-03
##	311402	1.451348	0.4469929676	0.12069844	3.703386305	2.127405e-04
##	3028273	3.480740	0.4471091719	0.13807961	3.238053623	1.203482e-03
##	716984	2.291624	0.4475079034	0.12376872	3.615678428	2.995621e-04
##	1736067	1.738292	0.4501360099	0.10704070	4.205279207	2.607600e-05
##	3235048	2.967914	0.4501707799	0.13961822	3.224298121	1.262819e-03
##	173135	8.109955	0.4506237888	0.14334009	3.143738780	1.668043e-03
##	2119695	1.555627	0.4507720716	0.11992178	3.758884042	1.706729e-04
##	4439603	51.818460	0.4510324862	0.14943442	3.018263753	2.542275e-03
##	4339831	3.696051	0.4518886110	0.13150560	3.436268969	5.897851e-04
##	144814	6.476760	0.4521197506	0.15835515	2.855099734	4.302332e-03
##	4473295	1.677692	0.4539504728	0.11197664	4.053974734	5.035466e-05
##	4434334	214.730781	0.4546057878	0.15435989	2.945103128	3.228470e-03
##	359314	2.675412	0.4574749975	0.11795201	3.878484105	1.051094e-04
##	319275	2.519367	0.4588997137	0.13573275	3.380906432	7.224714e-04
##	701221	2.245512	0.4607580485	0.11374680	4.050734002	5.105722e-05
##	558839	1.956810	0.4610587875	0.11955971	3.856305548	1.151136e-04
##	4393568	2.677024	0.4618624657	0.12821656	3.602206082	3.155281e-04
##	4472130	5.621982	0.4630187705	0.16532274	2.800696197	5.099250e-03
##	199293	188.395060	0.4638150545	0.21230287	2.184685730	2.891190e-02
##	866280	1.825452	0.4663685505	0.11814862	3.947304109	7.903614e-05

##	2986828	66.641290	0.4679868632	0.19121942	2.447381439	1.438985e-02
##	2506486	7.358652	0.4681304908	0.16116871	2.904599054	3.677238e-03
##	197099	2.072476	0.4688768909	0.11988475	3.911063515	9.189060e-05
##	317286	2.118500	0.4695541000	0.13029638	3.603738724	3.136724e-04
##	188930	1.587861	0.4716157981	0.11789276	4.000379516	6.324098e-05
##	4372382	69.903604	0.4749230057	0.22844822	2.078908786	3.762573e-02
##	191278	1.462011	0.4750439062	0.11673805	4.069315061	4.715155e-05
##	4326084	1.540307	0.4751661254	0.11669558	4.071843333	4.664255e-05
##	1115481	2.287334	0.4751828588	0.12295499	3.864689354	1.112307e-04
##	563572	1.638745	0.4755137843	0.11432246	4.159408197	3.190732e-05
##	175836	2.112396	0.4756758856	0.12434556	3.825435170	1.305413e-04
##	71165	1.524283	0.4770188417	0.11857980	4.022766577	5.751849e-05
##	188044	1.711703	0.4796359264	0.11421341	4.199471106	2.675392e-05
##	184320	2.054639	0.4801651392	0.12028704	3.991827590	6.556604e-05
##	4469359	2.139887	0.4802091466	0.12490596	3.844565491	1.207662e-04
##	196139	1.681184	0.4817051716	0.11393364	4.227945061	2.358354e-05
##	180421	1.623383	0.4823464894	0.11648017	4.141017981	3.457679e-05
##	4339832	4.683370	0.4828079263	0.13024950	3.706793032	2.099003e-04
##	197698	5.348306	0.4831677275	0.16581022	2.913980292	3.568524e-03
##	195081	1.707142	0.4835035915	0.12161653	3.975640429	7.019011e-05
##	4423553	1.439143	0.4837964923	0.12279801	3.939774700	8.155817e-05
##	186011	1.508883	0.4845463693	0.12147731	3.988780998	6.641370e-05
##	199702	37.128208	0.4859764355	0.18267453	2.660340424	7.806171e-03
##	4335815	3.131905	0.4893312763	0.12704327	3.851689866	1.173055e-04
##	185914	1.485172	0.4914929464	0.12032799	4.084610152	4.415088e-05
##	4332082	6.702003	0.4915829731	0.15338714	3.204851238	1.351323e-03
##	2876801	2.948093	0.4922528818	0.10862819	4.531538933	5.855554e-06
##	2365946	3.379424	0.4926048627	0.13169507	3.740495779	1.836576e-04
##	4429335	3.367929	0.4968908466	0.13501804	3.680181202	2.330683e-04
##	193061	2.105975	0.4969421859	0.11862982	4.189015922	2.801667e-05
##	4356080	11.391430	0.4974945579	0.19657825	2.530771075	1.138121e-02
##	4474255	2.455485	0.4975282299	0.12504797	3.978698924	6.929342e-05
##	757622	2.490229	0.4981994478	0.12919208	3.856269328	1.151306e-04
##	183093	1.497360	0.4989793027	0.12251069	4.072944884	4.642241e-05
##	4484075	2.859868	0.4992446129	0.14751316	3.384407253	7.133211e-04
##	4404577	2.023987	0.4993097427	0.11409367	4.376313976	1.207031e-05
##	208739	26.026059	0.5005291878	0.17299126	2.893378543	3.811217e-03
##	197696	1.491733	0.5010600207	0.11856118	4.226172796	2.376995e-05
##	891034	2.058844	0.5015428648	0.12626488	3.972148444	7.122731e-05
##	3856408	2.481436	0.5016242502	0.13459945	3.726792710	1.939318e-04
##	187126	4.522285	0.5026050298	0.13001858	3.865640181	1.107982e-04
##	304088	1.484259	0.5030735732	0.12264222	4.101960714	4.096638e-05
##	177758	1.695799	0.5033747630	0.12177873	4.133519716	3.572496e-05
##	182431	2.003409	0.5066776493	0.12390889	4.089114455	4.330232e-05
##	306499	2.197529	0.5069564574	0.12837444	3.949045109	7.846357e-05
##	4432431	1.564776	0.5076388688	0.11765477	4.314647596	1.598577e-05
##	1602805	3.225176	0.5085028077	0.12821939	3.965880676	7.312544e-05
##	732765	1.499436	0.5126618099	0.12475594	4.109318003	3.968293e-05
##	199145	2018.033270	0.5130565507	0.24220619	2.118263550	3.415275e-02
##	4346374	1.672020	0.5175536087	0.10646142	4.861419234	1.165471e-06
##	185034	3.521751	0.5196413283	0.15456071	3.362053134	7.736524e-04
##	346938	1.642126	0.5198873561	0.10893833	4.772308925	1.821259e-06
##	368236	1.469891	0.5203289958	0.11324138	4.594866065	4.330273e-06
##	3082155	2.237926	0.5204452018	0.12156982	4.281039643	1.860222e-05

## 183849	2.186485	0.5218413668	0.12004419	4.347077181	1.379637e-05
## 322114	3.517983	0.5220316884	0.13466479	3.876526954	1.059581e-04
## 586453	1.673110	0.5247092918	0.12667885	4.142043523	3.442250e-05
## 192963	2.409098	0.5271030060	0.14415765	3.656434624	2.557476e-04
## 1024529	3.216163	0.5274772857	0.12246031	4.307332577	1.652351e-05
## 2654263	7.516442	0.5278730783	0.14490464	3.642899791	2.695838e-04
## 181008	3.995056	0.5280062074	0.13636446	3.872022108	1.079362e-04
## 158113	1.510578	0.5281720953	0.12006658	4.398993405	1.087541e-05
## 2157225	7.518708	0.5289854424	0.15359994	3.443916975	5.733517e-04
## 186997	11.906633	0.5316743713	0.17140867	3.101793950	1.923518e-03
## 836693	1.499231	0.5321963467	0.12066659	4.410469807	1.031466e-05
## 187924	2.125265	0.5330232919	0.12109901	4.401549474	1.074806e-05
## 2699610	2.051270	0.5334100768	0.13245080	4.027231781	5.643739e-05
## 4358921	1.995429	0.5335377642	0.11787187	4.526421640	5.999083e-06
## 4450415	1.798464	0.5337001008	0.11338034	4.707166302	2.511840e-06
## 4315658	2.928673	0.5338005123	0.14868570	3.590126867	3.305171e-04
## 170462	193.915478	0.5347798616	0.21728323	2.461210931	1.384689e-02
## 179319	9.354750	0.5378505215	0.15275355	3.521034536	4.298666e-04
## 2877100	1.518644	0.5382369868	0.11920034	4.515398078	6.319794e-06
## 3648884	2.113073	0.5411521463	0.13242966	4.086336574	4.382379e-05
## 185864	3.700669	0.5414621089	0.13783326	3.928384867	8.551828e-05
## 178708	2.114360	0.5443515950	0.12637696	4.307364298	1.652114e-05
## 3825935	2.680462	0.5448717554	0.12907130	4.221478953	2.427046e-05
## 151870	7.801819	0.5449170284	0.17180902	3.171643829	1.515788e-03
## 185192	8.633794	0.5453798277	0.15719099	3.469536098	5.213580e-04
## 179572	1.749697	0.5470770362	0.11467850	4.770528273	1.837434e-06
## 592616	82.878287	0.5485099185	0.22656492	2.420983444	1.547858e-02
## 181466	1.533732	0.5492233713	0.12162068	4.515871583	6.305687e-06
## 184394	1.986217	0.5504392888	0.13183753	4.175133411	2.978115e-05
## 180468	20.539043	0.5515572808	0.19334439	2.852719329	4.334689e-03
## 366722	1.537041	0.5522693604	0.12462855	4.431323054	9.365665e-06
## 347783	3.474066	0.5530421530	0.15522327	3.562881711	3.668060e-04
## 91557	17.231334	0.5536215777	0.18434867	3.003122209	2.672251e-03
## 186077	3.662530	0.5542433740	0.13056319	4.245020094	2.185738e-05
## 348304	11.458755	0.5559213951	0.15596195	3.564468205	3.645946e-04
## 2978122	1.751349	0.5568243376	0.12631882	4.408087037	1.042876e-05
## 4474759	1.643859	0.5570626868	0.12823414	4.344105860	1.398441e-05
## 300618	1.484688	0.5572681512	0.12221420	4.559765914	5.121067e-06
## 4428544	1.572366	0.5582381568	0.12393390	4.504321737	6.658526e-06
## 4029584	1.679429	0.5605273454	0.10889009	5.147643287	2.637795e-07
## 329693	1.828440	0.5606637892	0.11393350	4.920973914	8.611461e-07
## 2298935	61.863946	0.5618113361	0.20753195	2.707107628	6.787225e-03
## 268506	1.572314	0.5620132412	0.12936562	4.344378785	1.396703e-05
## 724147	1.562127	0.5637938963	0.12288464	4.587993325	4.475269e-06
## 196664	33.696217	0.5640545442	0.18298031	3.082596909	2.052029e-03
## 4472195	1.511200	0.5652423277	0.11773525	4.800960798	1.579062e-06
## 2272791	12.195182	0.5677645365	0.16678736	3.404122040	6.637709e-04
## 1146349	1.581835	0.5690877493	0.12702151	4.480247071	7.455668e-06
## 4474951	3.890698	0.5744444454	0.14102328	4.073401450	4.633146e-05
## 180216	29.222764	0.5751483236	0.19596284	2.934986696	3.335620e-03
## 4094866	9.354571	0.5751665578	0.14509178	3.964156855	7.365581e-05
## 1145262	1.541548	0.5760190464	0.12206947	4.718780463	2.372627e-06
## 193975	2.234328	0.5762810645	0.13358181	4.314068426	1.602773e-05
## 494906	2.953928	0.5765948234	0.13744412	4.195121858	2.727249e-05

##	320888	1.547241	0.5770346810	0.12426128	4.643720557	3.421903e-06
##	84709	1.558187	0.5785431226	0.12443018	4.649540011	3.326761e-06
##	182245	1.753419	0.5787792279	0.12188571	4.748540323	2.048900e-06
##	165118	1.637415	0.5794371365	0.12975469	4.465635552	7.983141e-06
##	1504042	275.824933	0.5797893246	0.23606700	2.456037203	1.404786e-02
##	1100972	37.327687	0.5801980111	0.20132086	2.881956780	3.952139e-03
##	193666	17.994870	0.5815514208	0.15423669	3.770512787	1.629125e-04
##	180606	9.269362	0.5817265676	0.17284126	3.365669650	7.635810e-04
##	152485	3.318695	0.5830185927	0.13100074	4.450498309	8.567127e-06
##	4481613	500.755852	0.5833963592	0.24576240	2.373822699	1.760500e-02
##	110060	2.975456	0.5842298469	0.14428775	4.049060534	5.142364e-05
##	308444	1.576244	0.5848223486	0.12689562	4.608688337	4.052172e-06
##	175336	17.611009	0.5878596726	0.20640107	2.848142512	4.397523e-03
##	815422	1.575626	0.5879390096	0.12171392	4.830499321	1.361911e-06
##	170652	6.155291	0.5894327840	0.16853364	3.497419086	4.697832e-04
##	144395	1.544387	0.5908316350	0.12448944	4.746038029	2.074397e-06
##	329313	3.312371	0.5921506680	0.13020212	4.547934054	5.417510e-06
##	193987	1.643371	0.5942158607	0.12864057	4.619194760	3.852321e-06
##	4421273	2.372405	0.5945845439	0.13572052	4.380947940	1.181641e-05
##	181139	18.558474	0.5972124660	0.18604618	3.210022797	1.327244e-03
##	538322	1.823698	0.5972455823	0.11983514	4.983893375	6.231743e-07
##	184760	35.833848	0.5976655968	0.18572302	3.218048104	1.290662e-03
##	174499	1.887750	0.5978396320	0.12722018	4.699251756	2.611164e-06
##	1034960	1.578842	0.5984932317	0.12728225	4.702095156	2.575054e-06
##	177518	1.591034	0.5986691734	0.12331557	4.854773670	1.205243e-06
##	182036	2.451128	0.6009448244	0.13367609	4.495529645	6.939699e-06
##	179657	9.167221	0.6025605128	0.17278928	3.487256340	4.880034e-04
##	1950496	3.003943	0.6060534827	0.13661636	4.436170617	9.157328e-06
##	270382	2.981463	0.6074094081	0.12204537	4.976914687	6.460578e-07
##	190991	3.907319	0.6092822145	0.13411889	4.542851501	5.549835e-06
##	4473129	2.883518	0.6106086446	0.12224019	4.995154671	5.878863e-07
##	179847	1.760278	0.6115127882	0.11561084	5.289406838	1.227137e-07
##	2123717	12.144585	0.6115843998	0.16805423	3.639208613	2.734772e-04
##	214031	1.575097	0.6157633852	0.12715782	4.842512880	1.282073e-06
##	725198	1.631484	0.6174643849	0.12634124	4.887275098	1.022412e-06
##	4415965	1.592272	0.6183337598	0.12428642	4.975071049	6.522371e-07
##	208901	1.645162	0.6207804206	0.12246006	5.069248092	3.993904e-07
##	322505	1.599012	0.6218290014	0.12668368	4.908516997	9.176768e-07
##	109413	3.068581	0.6221640402	0.12393860	5.019937763	5.168822e-07
##	281015	2.139506	0.6270358993	0.12793494	4.901209254	9.524853e-07
##	4473664	3.171766	0.6301228596	0.14575980	4.323022146	1.539063e-05
##	4401375	4.400552	0.6311511659	0.14509149	4.350022010	1.361239e-05
##	198209	3.859462	0.6313659062	0.12690735	4.975014394	6.524279e-07
##	190490	1.678877	0.6324258514	0.12542051	5.042443588	4.596243e-07
##	110562	1.614346	0.6335332138	0.12289196	5.155204909	2.533537e-07
##	586141	1.992582	0.6355340139	0.12424310	5.115245790	3.133327e-07
##	511378	70.863666	0.6358752811	0.22092727	2.878210940	3.999376e-03
##	16340	1.618837	0.6382647288	0.12289096	5.193748511	2.061015e-07
##	180107	1.736609	0.6420354073	0.13277409	4.835547533	1.327796e-06
##	4427290	14.534106	0.6438774244	0.20624296	3.121936494	1.796657e-03
##	181047	2.182234	0.6449753716	0.13381813	4.819790803	1.437088e-06
##	4357713	2.238069	0.6457084333	0.13765775	4.690679978	2.722986e-06
##	414949	1.630123	0.6484910021	0.12598309	5.147444979	2.640584e-07
##	114462	11.209647	0.6492160071	0.17232981	3.767287994	1.650306e-04

## 4399109	1.575828	0.6499680966	0.12675644	5.127693006	2.933142e-07
## 4439398	2.555336	0.6554549577	0.14652590	4.473304474	7.701999e-06
## 290241	1.757773	0.6559530843	0.12185278	5.383160434	7.318925e-08
## 174885	1.674856	0.6579905923	0.11827442	5.563253412	2.647909e-08
## 130048	1.619271	0.6581854411	0.12184710	5.401732348	6.600038e-08
## 192383	9.210045	0.6595856590	0.16514634	3.993946524	6.498253e-05
## 216111	10.548496	0.6614920595	0.17543860	3.770504572	1.629178e-04
## 190772	1.801393	0.6622450695	0.12473969	5.309016673	1.102183e-07
## 179472	24.138922	0.6643449542	0.18632817	3.565456336	3.632236e-04
## 180771	2.487557	0.6646732447	0.13925727	4.772987740	1.815128e-06
## 2442706	6.783761	0.6669870681	0.16389228	4.069667361	4.708031e-05
## 4396235	2.720965	0.6673294604	0.12751142	5.233487837	1.663410e-07
## 178015	4.156996	0.6723239393	0.13381834	5.024153854	5.056569e-07
## 4463532	4.181664	0.6737355842	0.14680128	4.589439424	4.444379e-06
## 187384	1.797628	0.6772277674	0.12323258	5.495525364	3.895489e-08
## 4387092	2.478984	0.6784229391	0.12455476	5.446784398	5.128857e-08
## 4471251	2.817841	0.6833077054	0.13321017	5.129546076	2.904417e-07
## 2250985	18.814968	0.6847307433	0.18116891	3.779515785	1.571336e-04
## 847934	1.595892	0.6880446213	0.12665165	5.432575260	5.554651e-08
## 306299	12.141847	0.6885144337	0.15859131	4.341438718	1.415528e-05
## 4377715	1.672591	0.6933398468	0.12502428	5.545641702	2.928780e-08
## 589329	2.304192	0.6936499021	0.12647823	5.484342397	4.150103e-08
## 2829179	1.674834	0.6947109550	0.13082899	5.310068861	1.095838e-07
## 2500766	1.829441	0.6953787337	0.12226886	5.687292254	1.290695e-08
## 215269	2.071621	0.6962878045	0.13207026	5.272101575	1.348704e-07
## 495451	2.376989	0.6973808877	0.12433872	5.608718785	2.038299e-08
## 182033	1.856394	0.6974443071	0.12141139	5.744471641	9.220845e-09
## 186272	1.614467	0.6988707606	0.12934626	5.403100051	6.549890e-08
## 182089	7.950950	0.7022851062	0.16629646	4.223091195	2.409743e-05
## 3797933	2.852382	0.7046021734	0.13818419	5.099007166	3.414396e-07
## 4353757	1.867654	0.7053575165	0.12337150	5.717345865	1.082007e-08
## 358939	4.352646	0.7053660650	0.14027677	5.028388218	4.946197e-07
## 4469007	49.742624	0.7073865244	0.22462145	3.149238463	1.636966e-03
## 3709990	117.878681	0.7081113457	0.18480144	3.831741390	1.272394e-04
## 2318497	71.392172	0.7082326351	0.20552517	3.445965381	5.690232e-04
## 4412022	2.254560	0.7098023228	0.14256359	4.978847068	6.396416e-07
## 4299126	2.018685	0.7112862139	0.13956313	5.096519338	3.459552e-07
## 3576174	70.157388	0.7123992596	0.21810991	3.266239728	1.089859e-03
## 3134492	379.608020	0.7125107274	0.23920514	2.978659794	2.895120e-03
## 183147	1.858539	0.7129098103	0.11944393	5.968573138	2.393374e-09
## 668514	130.068089	0.7131010632	0.22617574	3.152862788	1.616778e-03
## 306412	1.687539	0.7166074312	0.12908438	5.551465240	2.832850e-08
## 4418787	3.462617	0.7180662849	0.13879848	5.173444842	2.298170e-07
## 190453	2.382337	0.7226084642	0.14065972	5.137280515	2.787427e-07
## 3422630	1.656885	0.7260031183	0.12623910	5.751016254	8.870859e-09
## 186732	58.224960	0.7281140090	0.21137183	3.444706858	5.716790e-04
## 4202174	1.663437	0.7284227701	0.12959885	5.620595839	1.903000e-08
## 2368865	2.059907	0.7310866687	0.13773724	5.307836079	1.109343e-07
## 3530697	2.624071	0.7330163329	0.13708150	5.347302969	8.927451e-08
## 193129	3.740354	0.7348533584	0.15193795	4.836535985	1.321214e-06
## 237081	2.466008	0.7380603403	0.13237296	5.575612653	2.466602e-08
## 1010113	2.712825	0.7415211378	0.12975274	5.714878233	1.097826e-08
## 2391105	1.789955	0.7443639277	0.11906835	6.251568248	4.063515e-10
## 362765	2.409246	0.7457662698	0.13127874	5.680784774	1.340781e-08

## 302160	2.165140	0.7458423717	0.13588675	5.488705826	4.048893e-08
## 184174	2.539014	0.7462481058	0.13493811	5.530298909	3.196856e-08
## 158722	2.036151	0.7490261841	0.13400337	5.589606874	2.275843e-08
## 561607	1.924330	0.7501986296	0.13207026	5.680299497	1.344591e-08
## 196371	5.257258	0.7508360763	0.15784211	4.756880722	1.966073e-06
## 522595	1.727212	0.7563234826	0.13027297	5.805682328	6.410440e-09
## 28914	8.341264	0.7575453362	0.15916996	4.759348651	1.942187e-06
## 4331364	2.834933	0.7582875868	0.13969401	5.428203983	5.692396e-08
## 571642	1.705860	0.7583646272	0.12560132	6.037871586	1.561603e-09
## 365621	2.788521	0.7601702872	0.13700159	5.548623769	2.879270e-08
## 2063400	3.560144	0.7614449943	0.12813248	5.942638531	2.804705e-09
## 2132002	6.731310	0.7617621858	0.18164380	4.193714303	2.744236e-05
## 4353913	1.721739	0.7627297645	0.13040349	5.848997966	4.945431e-09
## 195123	1.834812	0.7633429507	0.12085926	6.315965722	2.684796e-10
## 197072	76.386852	0.7645064011	0.18222308	4.195442220	2.723397e-05
## 197624	7.044518	0.7664570606	0.16759204	4.573350118	4.799871e-06
## 182416	1.722110	0.7670198012	0.13095557	5.857099465	4.710210e-09
## 215231	2.481987	0.7692885144	0.13745205	5.596777244	2.183730e-08
## 4385326	20.059662	0.7709577761	0.20357361	3.787120467	1.524032e-04
## 305141	2.342740	0.7718621920	0.14034673	5.499680440	3.804802e-08
## 195508	10.593590	0.7743591497	0.16477758	4.699420656	2.609006e-06
## 4300690	1.732276	0.7751587882	0.13444498	5.765620829	8.135779e-09
## 4307265	1.771434	0.7764481238	0.13391656	5.797999256	6.711075e-09
## 885437	1.905216	0.7798530561	0.12896560	6.046984908	1.475816e-09
## 1033413	61.427730	0.7821633268	0.21470098	3.643035703	2.694414e-04
## 350503	1.790847	0.7844441585	0.13311404	5.893023494	3.791925e-09
## 4428676	2.051853	0.7888897798	0.13597355	5.801788455	6.561131e-09
## 259772	39.567045	0.7902395542	0.19731378	4.004989142	6.202033e-05
## 3211875	27.572130	0.7938604279	0.18756019	4.232563534	2.310426e-05
## 185411	17.217154	0.7940064690	0.18088436	4.389580439	1.135696e-05
## 4459634	5.489291	0.7963959749	0.17080541	4.662592330	3.122509e-06
## 4448492	121.167386	0.7993999116	0.21567171	3.706558933	2.100944e-04
## 4458576	3.534666	0.8019944487	0.15761545	5.088298569	3.612903e-07
## 510295	1.901517	0.8041491044	0.13197726	6.093088352	1.107529e-09
## 4415390	6.216125	0.8185548324	0.17203498	4.758072185	1.954506e-06
## 4472551	3.284718	0.8190221881	0.15086105	5.428983743	5.667585e-08
## 372146	1.825389	0.8208815164	0.12951361	6.338187232	2.324842e-10
## 363646	1.956468	0.8234255292	0.13258192	6.210692326	5.275167e-10
## 4456252	2.557551	0.8234980625	0.14445624	5.700675071	1.193339e-08
## 179576	1.736118	0.8235729042	0.12884748	6.391843436	1.638977e-10
## 189936	2.064046	0.8239299220	0.13350325	6.171609545	6.759827e-10
## 181155	21.092618	0.8266154293	0.16298649	5.071680754	3.943175e-07
## 360238	1.944907	0.8278971006	0.12871732	6.431901269	1.260176e-10
## 4396426	1.816712	0.8278983168	0.12681190	6.528553930	6.640770e-11
## 814442	14.140121	0.8321014973	0.18145194	4.585795534	4.522610e-06
## 3090117	1.761973	0.8357258360	0.12711806	6.574406979	4.884746e-11
## 341730	1.766886	0.8388336940	0.12523708	6.697965966	2.113405e-11
## 181485	10.810934	0.8428901812	0.16733025	5.037285104	4.721812e-07
## 4477696	488.675023	0.8445594867	0.18298998	4.615331821	3.924677e-06
## 2182669	2.111935	0.8497428873	0.13180596	6.446922925	1.141438e-10
## 4378683	82.271559	0.8501184097	0.20659063	4.114990071	3.871961e-05
## 564334	1.795497	0.8517801195	0.13049448	6.527326762	6.695388e-11
## 577710	2.878395	0.8518033645	0.14734628	5.780962830	7.427430e-09
## 186452	2.088275	0.8550318261	0.13416264	6.373099282	1.852459e-10

##	578511	2.071797	0.8634449611	0.13640335	6.330086253	2.450242e-10
##	198786	2.096922	0.8646788116	0.12280516	7.041062588	1.907793e-12
##	179744	1.779698	0.8699806610	0.13175653	6.602941702	4.030781e-11
##	4458959	429.515996	0.8703439744	0.20150094	4.319304821	1.565215e-05
##	2331530	2.153290	0.8704336348	0.12093112	7.197763591	6.120815e-13
##	178713	1.935533	0.8713500907	0.13786089	6.320502310	2.607144e-10
##	177515	548.885466	0.8718188097	0.24837309	3.510117788	4.479082e-04
##	177520	8.505123	0.8725703677	0.16081159	5.426041529	5.761756e-08
##	3203801	18.205913	0.8739477840	0.19143580	4.565226576	4.989551e-06
##	4449054	30.790309	0.8753687261	0.18304475	4.782266137	1.733300e-06
##	138389	9.975833	0.8760749628	0.17393107	5.036908901	4.731098e-07
##	279107	4.008230	0.8782314765	0.15667680	5.605370240	2.078103e-08
##	4481195	2.074057	0.8795845973	0.12421770	7.080992739	1.431254e-12
##	107044	1.807233	0.8846048404	0.13423371	6.590035137	4.397225e-11
##	187404	2.624446	0.8858201397	0.13837335	6.401667305	1.536893e-10
##	819353	13.250423	0.8890513370	0.20233566	4.393942836	1.113131e-05
##	175520	2.155777	0.8898192156	0.12814330	6.943938913	3.813154e-12
##	113542	1.797690	0.8936696714	0.13859875	6.447891418	1.134170e-10
##	3265161	10.826724	0.8938591367	0.16782423	5.326162647	1.003093e-07
##	212686	7.963140	0.8940193188	0.17210017	5.194761446	2.049825e-07
##	4405869	2.606074	0.8941216981	0.13178763	6.784564667	1.164371e-11
##	194151	17.909858	0.8942672624	0.16451599	5.435746884	5.456737e-08
##	4375664	1.883379	0.8951612326	0.13383114	6.688736279	2.251060e-11
##	4372528	23.379260	0.8968627730	0.17564305	5.106167086	3.287590e-07
##	185232	3.990812	0.8969571603	0.13415553	6.685949825	2.294316e-11
##	181539	3.777211	0.8997156705	0.14808320	6.075744400	1.234139e-09
##	2256425	2.302868	0.9002712127	0.13539737	6.649104068	2.948825e-11
##	275237	1.898417	0.9071105618	0.13715984	6.613528782	3.752650e-11
##	299267	7.812570	0.9076297729	0.15415838	5.887644539	3.917385e-09
##	186888	15.095069	0.9083653409	0.17605678	5.159502216	2.476073e-07
##	1105376	1.852062	0.9165533680	0.13737259	6.672025246	2.522972e-11
##	4372612	18.998858	0.9170667800	0.17285143	5.305520208	1.123521e-07
##	181167	2.486657	0.9175200521	0.13886339	6.607357386	3.912408e-11
##	4306262	461.435455	0.9235894252	0.26449724	3.491867919	4.796554e-04
##	182167	1.885422	0.9284760749	0.13179980	7.044593912	1.860032e-12
##	157470	1.884299	0.9366566469	0.13451018	6.963463118	3.320081e-12
##	194660	8.573784	0.9391815364	0.16287732	5.766189784	8.108375e-09
##	190169	3.363739	0.9436336538	0.14843835	6.357074374	2.056324e-10
##	312969	2.419106	0.9461057076	0.13295777	7.115836094	1.112364e-12
##	136127	2.253284	0.9462485437	0.13562974	6.976703786	3.021859e-12
##	167373	28.818366	0.9483934581	0.21111073	4.492398262	7.042556e-06
##	303269	2.161440	0.9497228391	0.14203936	6.686335759	2.288277e-11
##	4433947	149.225557	0.9504536813	0.20886831	4.550492537	5.352049e-06
##	4424598	8.539272	0.9542672142	0.16258343	5.869400077	4.373749e-09
##	4479443	4.090558	0.9618572013	0.14058828	6.841659901	7.828076e-12
##	300235	8.510557	0.9636355788	0.16106702	5.982823806	2.193020e-09
##	4383953	146.550341	0.9639620295	0.19829936	4.861145373	1.167085e-06
##	4256470	485.652065	0.9664964736	0.23950291	4.035426880	5.450311e-05
##	181074	3.697887	0.9704654434	0.14708884	6.597818369	4.172520e-11
##	544996	1.929543	0.9734168594	0.13633746	7.139760649	9.349357e-13
##	4404731	2.483551	0.9735880814	0.13503615	7.209832873	5.602059e-13
##	4476561	2.520338	0.9750813754	0.13905546	7.012175929	2.346399e-12
##	180171	30.418395	0.9776772644	0.19293657	5.067350752	4.033906e-07
##	583656	2.647618	0.9797346696	0.13738109	7.131510255	9.927356e-13

## 182886	14.042586	0.9899264407	0.15209996	6.508393863	7.595855e-11
## 157338	3.304206	0.9936539284	0.15732604	6.315889907	2.686112e-10
## 4404220	13.032421	0.9943721709	0.16909501	5.880553137	4.088977e-09
## 348642	2.020745	0.9986054474	0.13634356	7.324184672	2.403555e-13
## 213394	10.047801	1.0074107646	0.18769593	5.367248874	7.994671e-08
## 2280817	2.655256	1.0084585479	0.13353850	7.551818987	4.292208e-14
## 548503	2.848700	1.0093064563	0.14865986	6.789367559	1.126262e-11
## 179018	2.952612	1.0144563760	0.14855460	6.828845149	8.560091e-12
## 111135	2.092767	1.0152520636	0.13868561	7.320529104	2.469951e-13
## 519763	2.029256	1.0177462706	0.13498510	7.539693175	4.710785e-14
## 307238	7.661235	1.0191627157	0.17488759	5.827530263	5.625365e-09
## 3270612	1.952544	1.0197718615	0.13023402	7.830303413	4.866940e-15
## 816702	42.234049	1.0243859444	0.20513610	4.993689341	5.923666e-07
## 3251419	2.562169	1.0256828318	0.13763727	7.452071837	9.188567e-14
## 187780	2.786580	1.0272465719	0.14567726	7.051523156	1.769698e-12
## 132892	5.950389	1.0296397720	0.15784311	6.523184952	6.882990e-11
## 184114	3.827016	1.0347472425	0.15259679	6.780924113	1.194096e-11
## 4362337	2.013740	1.0352682124	0.13738409	7.535575831	4.861846e-14
## 1076969	3.531111	1.0391871974	0.15105595	6.879485205	6.006924e-12
## 2403301	1.976737	1.0396590217	0.13805822	7.530583844	5.051394e-14
## 2965498	2.091732	1.0468584498	0.14105010	7.421890867	1.154599e-13
## 4318122	2.238378	1.0497098340	0.13667718	7.680212923	1.588244e-14
## 299302	2.500598	1.0523117337	0.13082957	8.043378608	8.739478e-16
## 1106254	2.436128	1.0569932716	0.14756137	7.163075563	7.888684e-13
## 4419459	53.407431	1.0575526117	0.21973918	4.812763043	1.488577e-06
## 367176	54.055149	1.0607064005	0.21245873	4.992529061	5.959374e-07
## 4439360	1203.316191	1.0649454458	0.23256597	4.579111214	4.669559e-06
## 4483337	138.244094	1.0692008611	0.23016559	4.645354896	3.394923e-06
## 158423	2.007246	1.0707006961	0.13970178	7.664187820	1.799664e-14
## 317814	2.418372	1.0723359976	0.13935786	7.694836619	1.416751e-14
## 646800	2.009420	1.0734806431	0.14036209	7.647938681	2.042266e-14
## 193968	15.706832	1.0927288690	0.17567996	6.219997428	4.971630e-10
## 175508	2.433488	1.0930224563	0.13495491	8.099167616	5.533650e-16
## 553080	2.111706	1.0934668649	0.13706295	7.977844301	1.489111e-15
## 4452633	6.214743	1.0975292949	0.16873251	6.504551279	7.792563e-11
## 258099	3.221930	1.1006624886	0.14167966	7.768669652	7.931472e-15
## 179486	3.286765	1.1071391723	0.14290805	7.747213654	9.393084e-15
## 2800178	2.623919	1.1103264400	0.13594226	8.167632738	3.144996e-16
## 4336943	2.543729	1.1132703901	0.15090942	7.377076920	1.618025e-13
## 148279	3.058112	1.1146564136	0.14759598	7.552078242	4.283670e-14
## 851733	2.868752	1.1167971412	0.14825363	7.533017370	4.958101e-14
## 221429	2.974485	1.1176735974	0.14343756	7.792056556	6.592721e-15
## 3275562	165.631420	1.1180228998	0.23301128	4.798149229	1.601385e-06
## 157772	2.347505	1.1194164280	0.13832535	8.092633734	5.838824e-16
## 195871	2.092164	1.1268399926	0.14265163	7.899243623	2.806010e-15
## 563803	2.105486	1.1301178743	0.13609764	8.303728416	1.008941e-16
## 4469576	313.911148	1.1313895493	0.20292463	5.575417600	2.469368e-08
## 718358	3.526083	1.1327630269	0.14687190	7.712591993	1.232877e-14
## 2066056	4.280022	1.1360507171	0.15524186	7.317940644	2.518052e-13
## 134174	2.338970	1.1377572737	0.14056470	8.094189341	5.764696e-16
## 328472	5.136676	1.1405333648	0.15310824	7.449196314	9.391054e-14
## 4396688	13.045224	1.1460847819	0.19389165	5.910954805	3.401304e-09
## 296442	2.959204	1.1483852407	0.13916170	8.252164212	1.555515e-16
## 232900	2.434537	1.1502089013	0.14472114	7.947759846	1.899144e-15

## 13986	3.265568	1.1549523192	0.15275269	7.560929571	4.001989e-14
## 4384058	6.074829	1.1578584674	0.15841894	7.308838426	2.694615e-13
## 178809	3.629288	1.1647590706	0.15434599	7.546415969	4.473995e-14
## 358781	38.042111	1.1667327822	0.22697460	5.140367105	2.742022e-07
## 4326219	3.876355	1.1833749171	0.14315201	8.266561485	1.378780e-16
## 1145098	2.150709	1.1906835774	0.13608147	8.749784804	2.137600e-18
## 4445673	12.103872	1.1985869113	0.18731309	6.398842088	1.565597e-10
## 4358599	2.207879	1.2103837604	0.14861604	8.144368159	3.812675e-16
## 4464445	7.638381	1.2105078864	0.17999777	6.725126968	1.754394e-11
## 4307122	2.177896	1.2132060593	0.14429399	8.407876661	4.174998e-17
## 194324	2.847142	1.2182231832	0.14025714	8.685641384	3.766113e-18
## 676211	4.700351	1.2242387084	0.15545348	7.875273711	3.399977e-15
## 180312	11.126572	1.2320971751	0.16605970	7.419603622	1.174714e-13
## 215670	2.780461	1.2362471923	0.13704345	9.020841065	1.866507e-19
## 178773	2.306128	1.2376437228	0.14763797	8.382963495	5.161149e-17
## 188348	2.241599	1.2462578461	0.14503235	8.592964730	8.475356e-18
## 4153054	9.626765	1.2493029915	0.19139116	6.527485493	6.688298e-11
## 344154	3.123839	1.2521595000	0.13372240	9.363872653	7.686646e-21
## 179989	2.258516	1.2652472559	0.14640449	8.642134472	5.517244e-18
## 189083	8.540459	1.2691070204	0.17670684	7.181991285	6.870330e-13
## 193672	111.888319	1.2692693196	0.18762105	6.765068992	1.332457e-11
## 4347520	17.076960	1.2814763969	0.19072822	6.718861002	1.831505e-11
## 4335484	3.789621	1.2855152731	0.14723458	8.731068968	2.522768e-18
## 214036	8.180154	1.2975983269	0.17444816	7.438303309	1.019867e-13
## 4297695	2.719265	1.3096823956	0.15249870	8.588154747	8.837719e-18
## 176104	2.388489	1.3205272964	0.14758361	8.947655596	3.631119e-19
## 4367187	3.937728	1.3218840670	0.14040373	9.414878673	4.736291e-21
## 196296	3.358658	1.3231546215	0.14665362	9.022311259	1.841621e-19
## 370086	8.149453	1.3288080560	0.17904153	7.421786568	1.155509e-13
## 4295707	6.824230	1.3327099621	0.18294245	7.284859062	3.220068e-13
## 185814	5.029907	1.3570013313	0.16209683	8.371547382	5.686650e-17
## 146564	2.727044	1.3579606292	0.15118603	8.982051083	2.657654e-19
## 260414	23.194994	1.3588913267	0.20942710	6.488612589	8.663041e-11
## 1614788	7.309493	1.3685407061	0.18340681	7.461776863	8.536336e-14
## 163494	3.346650	1.3686035167	0.15416022	8.877799421	6.819607e-19
## 839964	2.411924	1.3790748422	0.14734726	9.359351913	8.022727e-21
## 4437814	20.301178	1.3924574074	0.18181735	7.658550889	1.880427e-14
## 4364747	2.710843	1.4106172620	0.14292916	9.869345489	5.653227e-23
## 193528	553.727811	1.4118564534	0.23257658	6.070501423	1.275115e-09
## 340876	3.778957	1.4348458492	0.16341599	8.780326917	1.630002e-18
## 4453773	2.493410	1.4388109005	0.15114916	9.519145777	1.746084e-21
## 3197419	2.634661	1.4396669215	0.15039365	9.572657547	1.041924e-21
## 365536	28.904922	1.4469715009	0.20109948	7.195302120	6.232261e-13
## 1047077	4.293635	1.4489144805	0.16310524	8.883310693	6.489938e-19
## 538000	2.979656	1.4575561056	0.15527928	9.386674859	6.192432e-21
## 4366089	12.104953	1.4614429631	0.19169227	7.623901303	2.461216e-14
## 73609	9.979361	1.4709200976	0.17842561	8.243884142	1.667086e-16
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## 4457427	268.990234	1.5215197498	0.23858073	6.377379096	1.801442e-10
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## 3390534	2.671533	1.5429810399	0.14554367	10.601498756	2.932426e-26
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## 539819	2.946661	1.6164748549	0.15680724	10.308674929	6.438287e-25
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## 4363066	8.593609	1.7027659844	0.16947155	10.047503737	9.422396e-24
## 177037	4.367653	1.7045223241	0.16080282	10.600077222	2.977343e-26
## 176062	5.024021	1.7202220443	0.17209211	9.995937841	1.587771e-23
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## 3692427	4.409247	2.0601119340	0.16209417	12.709352739	5.246691e-37
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4439360 1.835055e-05

4483337 1.372677e-05
158423 1.910543e-13
317814 1.518432e-13
646800 2.147735e-13
193968 3.304585e-09
175508 6.593285e-15
553080 1.701841e-14
4452633 5.704360e-10
258099 8.666584e-14
179486 1.021384e-13
2800178 3.870765e-15
4336943 1.510157e-12
148279 4.390203e-13
851733 4.936065e-13
221429 7.239066e-14
3275562 6.819584e-06
157772 6.883666e-15
195871 3.158523e-14
563803 1.276852e-15
4469576 1.342569e-07
718358 1.327714e-13
2066056 2.321167e-12
134174 6.832233e-15
328472 9.028310e-13
4396688 2.104674e-08
296442 1.946566e-15
232900 2.159432e-14
13986 4.131085e-13
4384058 2.473745e-12
178809 4.534728e-13
358781 1.309622e-06
4326219 1.735094e-15
1145098 2.974052e-17
4445673 1.102810e-09
4358599 4.616428e-15
4464445 1.388637e-10
4307122 5.405778e-16
194324 5.081984e-17
676211 3.789029e-14
180312 1.105613e-12
215670 2.732664e-18
178773 6.644237e-16
188348 1.123361e-16
4153054 4.949725e-10
344154 1.179321e-19
179989 7.400375e-17
189083 6.082822e-12
193672 1.058405e-10
4347520 1.444567e-10
4335484 3.466871e-17
214036 9.721284e-13
4297695 1.164499e-16
176104 5.213915e-18
4367187 7.419085e-20

196296 2.713968e-18
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4295707 2.932094e-12
185814 7.278912e-16
146564 3.840739e-18
260414 6.300393e-10
1614788 8.313649e-13
163494 9.668304e-18
839964 1.222511e-19
4437814 1.986867e-13
4364747 9.971047e-22
193528 8.160735e-09
340876 2.282002e-17
4453773 2.854911e-20
3197419 1.741723e-20
365536 5.539788e-12
1047077 9.259529e-18
538000 9.566239e-20
4366089 2.576226e-13
73609 2.074596e-15
186735 4.385699e-23
4409280 9.573973e-13
73000 7.404015e-09
190241 6.253631e-21
298937 3.459592e-22
4457427 1.257081e-09
606927 4.948642e-12
188851 7.167421e-22
174831 1.084623e-14
4447950 8.574582e-09
4449236 1.964035e-09
3390534 6.138910e-25
4425669 1.304160e-09
187180 1.641506e-23
580629 3.780004e-17
182483 1.316918e-22
148352 7.827376e-25
539819 1.276262e-23
214682 2.502391e-23
122049 1.595447e-21
190676 2.568984e-26
3507744 2.434251e-22
134726 4.446422e-20
4363066 1.773627e-22
177037 6.175230e-25
176062 2.939344e-22
2307779 2.526636e-20
315846 1.218324e-25
110192 9.967696e-29
269386 3.925473e-25
174147 8.138708e-27
842193 1.514213e-26
174611 1.090503e-14
4469233 2.783772e-27

368490 3.724041e-20
2119418 3.777481e-14
192462 3.287070e-15
211720 3.336306e-27
183829 6.382897e-28
185420 1.017781e-15
199534 5.029344e-29
4332878 8.122280e-30
4426298 8.437675e-27
4453304 6.974184e-22
3474081 9.226428e-31
2943548 7.817739e-21
186468 1.509033e-34
3692427 1.958765e-35
186416 1.571633e-27
178852 3.847849e-36
168071 1.981970e-34
186851 2.440580e-36
157453 2.525442e-32
184464 9.942729e-33
182735 9.827256e-39
4442899 1.371430e-36
176980 6.059721e-31
187504 9.621659e-37
179961 7.021359e-35
301253 7.824420e-32
4437359 1.076481e-36
2530636 2.092439e-37
323135 5.654536e-35
216599 3.281350e-32
174019 4.586029e-39
4450214 2.258817e-41
4338624 3.501890e-40
184925 2.339523e-41
173810 1.797121e-30
4413447 4.800277e-43
2617854 1.441247e-32
4302904 1.521642e-41
4422456 2.704836e-28
3327894 2.241020e-27
4403689 8.095867e-51
3138798 1.470870e-24
186981 2.401875e-42
4232045 6.221114e-32
772282 4.940481e-46
181961 1.139406e-45
553611 3.329126e-42
4466707 2.961910e-49
325850 6.800036e-49
181432 6.949488e-37
2730944 3.295843e-48
4301298 1.748804e-45
326482 6.788329e-23
185583 1.607394e-50

```
## 753638 3.294760e-38
## 175844 4.914992e-51
## 4386018 1.349544e-56
## 4480861 2.187781e-52
## 4436552 4.393908e-25
## 3236435 4.377863e-53
## 329820 1.283886e-56
## 184238 9.599034e-49
## 292921 4.708689e-63
## 4301511 2.904940e-65
## 162491 2.703612e-64
## 3841096 1.668907e-74
## 192720 2.957711e-71
## 4412540 3.175993e-78
## 185575 2.218212e-67
## 4472721 3.081951e-74
## 4329571 1.658343e-77
## 163243 7.341151e-93
```

DESeq: Creating a DESeq object

```
phyloseq_object2 <- phyloseq(otu_table(OTUmat + 1, taxa_are_rows=TRUE), tax_table(taxmat))
sample_data(phyloseq_object2) <- sampledata1
```

```
phy2_output = phyloseq_to_deseq2(phyloseq_object2, ~ Case_Control)
```

```
## converting counts to integer mode
```

```
## it appears that the last variable in the design formula, 'Case_Control',
## has a factor level, 'control', which is not the reference level. we recommend
## to use factor(...,levels=...) or relevel() to set this as the reference level
## before proceeding. for more information, please see the 'Note on factor levels'
## in vignette('DESeq2').
```

DESeq test

Results table

```
res = results(phy2_output, cooksCutoff = FALSE)
alpha = 0.01
case_tab = res[which(res$padj < alpha), ]
case_tab = cbind(as(case_tab, "data.frame"), as(tax_table(phyloseq_object2)[rownames(case_tab), ], "matrix"))

theme_set(theme_bw())
scale_fill_discrete <- function(palname = "Set1", ...) {
  scale_fill_brewer(palette = palname, ...)
}
```

Phylum order

```
x = tapply(case_tab$log2FoldChange, case_tab$Phylum, function(x) max(x))
x = sort(x, TRUE)
case_tab$Phylum = factor(as.character(case_tab$Phylum), levels=names(x))
```

Genus order

```
x = tapply(case_tab$log2FoldChange, case_tab$Genus, function(x) max(x))
x = sort(x, TRUE)
case_tab$Genus = factor(as.character(case_tab$Genus), levels=names(x))
ggplot(case_tab, aes(x=Genus, y=log2FoldChange, color=Phylum)) + geom_point(size=6) +
  theme(axis.text.x = element_text(angle = -90, hjust = 0, vjust=0.5))
```

