

MSB7102 Mini-project, Semester I, 2021

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MAKERERE UNIVERSITY

##

COLLEGE OF HEALTH SCIENCES

SCHOOL OF BIOMEDICAL SCIENCES

DEPARTMENT OF IMMUNOLOGY AND MOLECULAR BIOLOGY

MASTER OF SCIENCE IN BIOINFORMATICS

COURSE UNIT: Molecular biology for Bioinformatics

COURSE CODE: MSB 7102

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**

1. Import the data described above into R, **

```
t1d_metadata <- read.csv("diabimmune_16s_t1d_metadata.csv",  
  stringsAsFactors = FALSE)
```

Change structure of categorical variables to factors

```
t1d_metadata$Gender <- as.factor(t1d_metadata$Gender)  
t1d_metadata$Case_Control <- as.factor(t1d_metadata$Case_Control)  
t1d_metadata$Delivery_Route <- as.factor(t1d_metadata$Delivery_Route)
```

- i. provide descriptive summaries of the subject data (using appropriate graphics and statistical summary measures) given in the diabimmune_16s_t1d_metadata.csv file.

```
summary(t1d_metadata)
```

```
##   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
```

Cross tabulation Gender Vs Age at enrollment

```
xtabs(~Gender + Case_Control, data = t1d_metadata)
```

```
##           Case_Control  
## Gender   case control  
## female  142     270  
## male    118     247
```

```
xtabs(~Delivery_Route +Case_Control, data = t1d_metadata)
```

```
##           Case_Control
## Delivery_Route case control
##      cesarian    0      66
##      vaginal   260     451
```

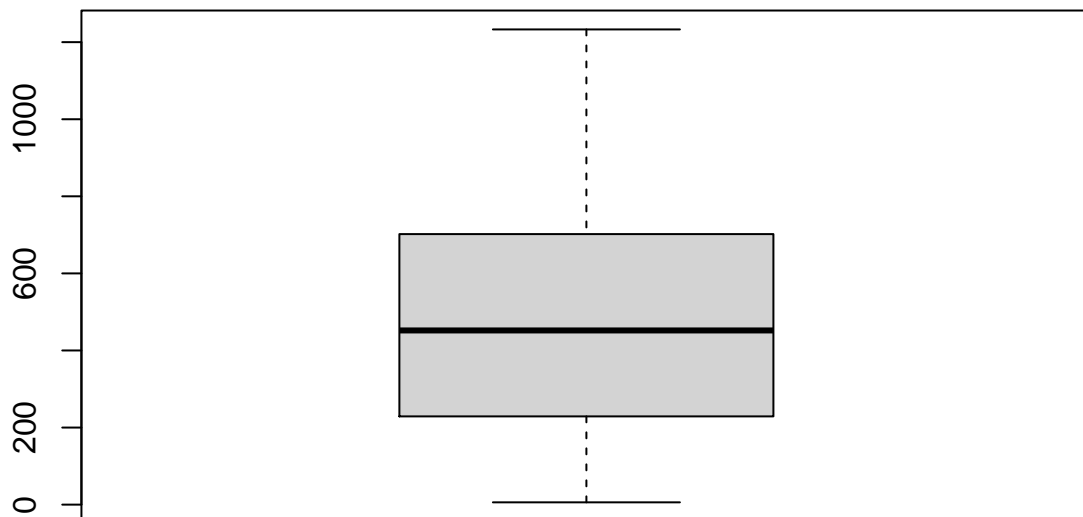
```
addmargins(xtabs(~Delivery_Route+Case_Control, data = t1d_metadata))
```

```
##           Case_Control
## Delivery_Route case control Sum
##      cesarian    0      66  66
##      vaginal   260     451 711
##      Sum       260     517 777
```

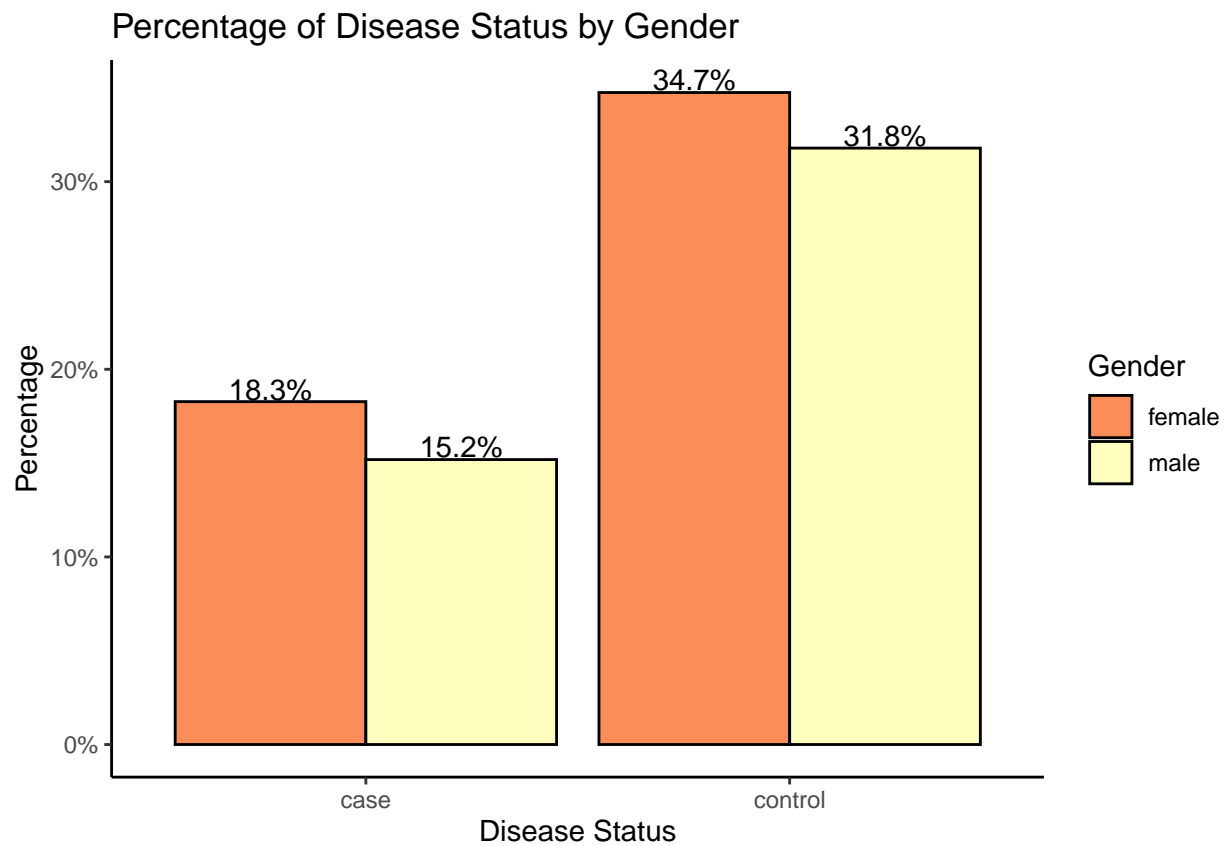
from the table above, its noted that no baby born by Cesarian section was included in the sample as a case, but 66 babies born by cesarian section were sampled as control elements. 260 babies were

Graphics

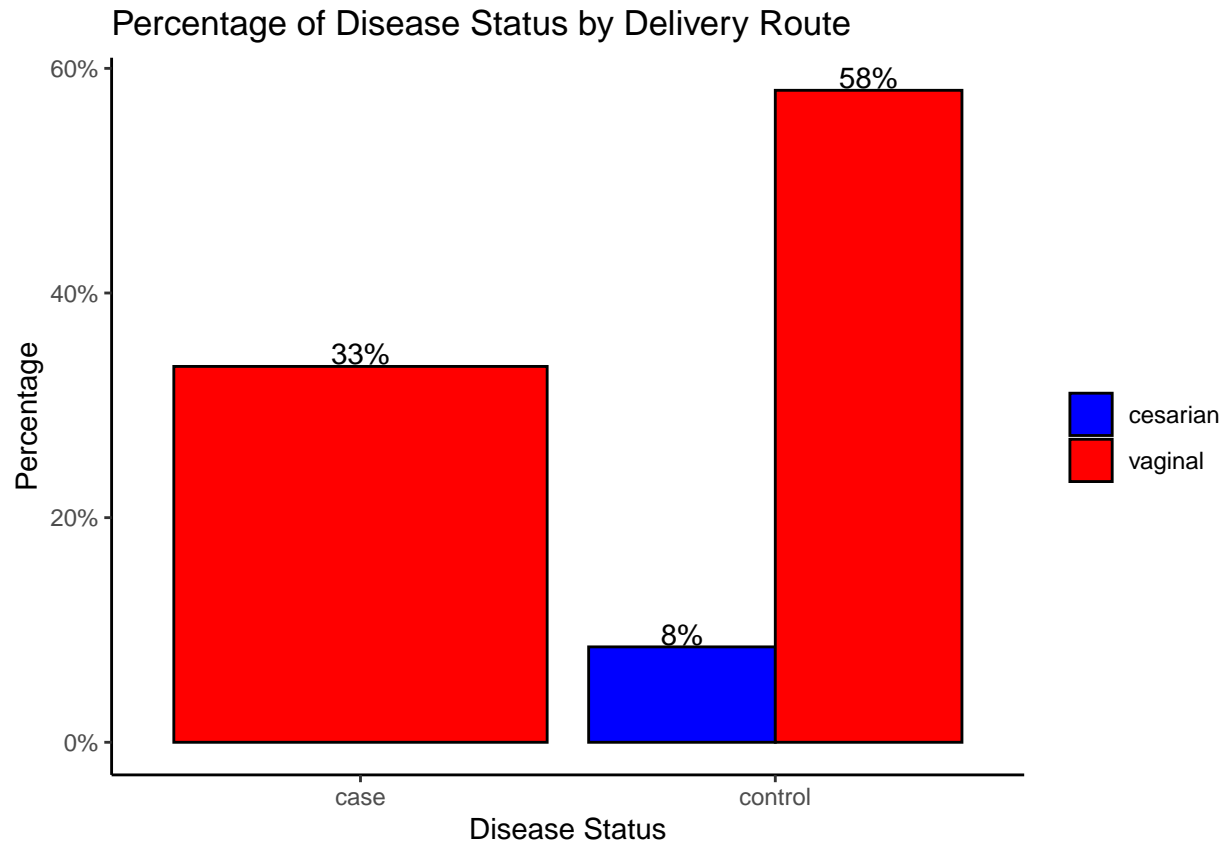
```
boxplot(t1d_metadata$Age_at_Collection)
```



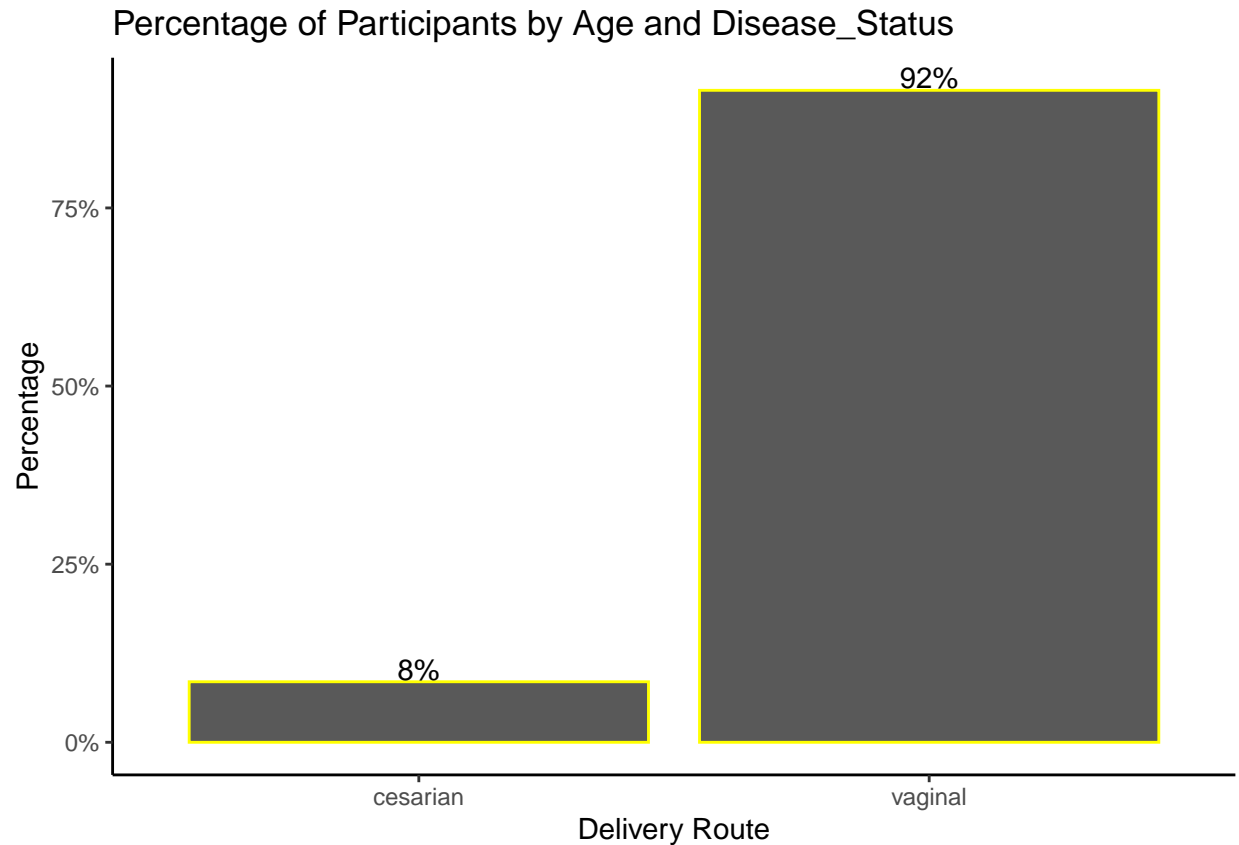
```
library (ggplot2)
bar_chart1 <- ggplot(t1d_metadata, aes(x =Case_Control ,y= ((..count..)/sum(..count..)), fill= Gender))
  geom_bar(position = "dodge", color= "Black")+
  scale_y_continuous(labels=scales::percent)+
  labs(title = "Percentage of Disease Status by Gender",
       y= "Percentage", x= "Disease Status" )+
  geom_text(stat= "count", aes(label= scales::percent((..count..)/sum(..count..))), position = position_dodge,
  theme_classic()+
  scale_fill_brewer(palette = "Spectral")
bar_chart1
```



```
bar_chart2 <- ggplot(t1d_metadata, aes(x =Case_Control ,y= ((..count..)/sum(..count..)), fill= Delivery_Route))
  geom_bar(position = "dodge", color= "Black")+
  scale_y_continuous(labels=scales::percent)+
  labs(title = "Percentage of Disease Status by Delivery Route",
       y= "Percentage", x= "Disease Status" )+
  geom_text(stat= "count", aes(label= scales::percent((..count..)/sum(..count..))), position = position_dodge,
  theme_classic()+
  scale_fill_manual(name = "", values = c("blue", "red"))
bar_chart2
```



```
bar_chart3 <- ggplot(t1d_metadata, aes(x =Delivery_Route ,y= (..count..)/sum(..count..), fill= Age_at_C
  geom_bar(position = "dodge",color= "yellow")+
  scale_y_continuous(labels=scales::percent)+
  labs(title = "Percentage of Participants by Age and Disease_Status",
        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 = ("black"))
bar_chart3
```



- ii. In addition, use appropriate test(s) to check for association/independency between disease status and other variables (delivery mode, gender and age). Note that age is given in days.

```
df1 <- xtabs(~Gender + Case_Control, data = tid_metadata)
```

```
chisq.test(df1)
```

```
##
## Pearson's Chi-squared test with Yates' continuity correction
##
## data: df1
## X-squared = 0.30687, df = 1, p-value = 0.5796
```

```
fisher.test(df1)
```

```
##
## Fisher's Exact Test for Count Data
##
## data: df1
## 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
```

The Chi-squared probability value of 0.5796, like the Fisher's Exact Test p-value (0.543), which is greater than 5% level of significance, is insignificant at the 95% level of significance, implying that gender and case_Control were independent variables.

```
df2 <- xtabs(~Delivery_Route + Case_Control, data = t1d_metadata)

chisq.test(df2)
```

```
##
## Pearson's Chi-squared test with Yates' continuity correction
##
## data: df2
## X-squared = 34.649, df = 1, p-value = 3.949e-09
```

```
fisher.test(df2)
```

```
##
## Fisher's Exact Test for Count Data
##
## data: df2
## 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
```

The Chi-squared probability value of 3.949e-09, like the Fisher's Exact Test p-value (6.86e-13), which is less than 5% level of significance, is significant at the 95% level of significance, implying that Delivery_route and case_Control were dependent variables.

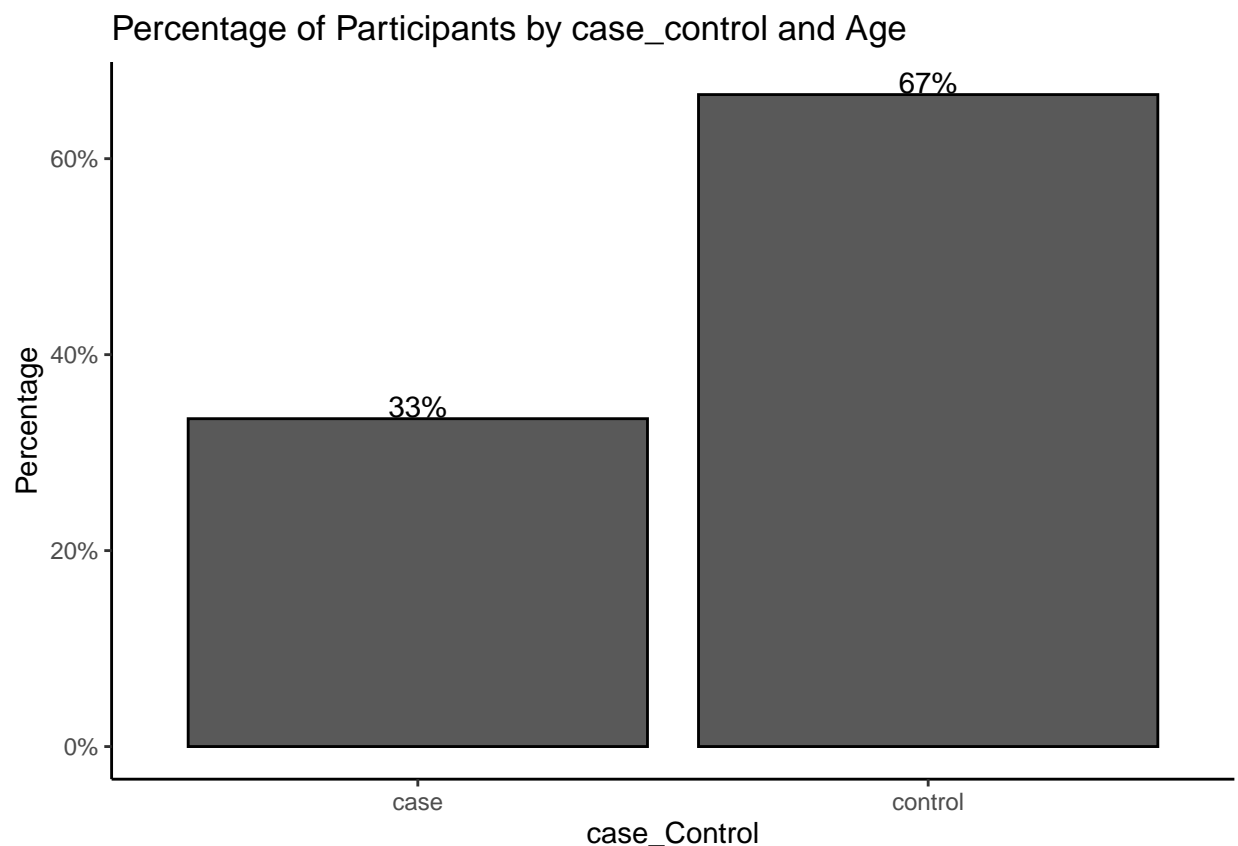
```
df3 <- xtabs(~Age_at_Collection+ Delivery_Route , data = t1d_metadata)

t.test(df3)
```

```
##
## One Sample t-test
##
## data: df3
## t = 28.078, df = 1085, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
## 0.6654712 0.7654681
## sample estimates:
## mean of x
## 0.7154696
```

The Chi-squared probability value (0.5186), like the Fisher's Exact Test p-value (0.5195), which is greater than 5% level of significance, is insignificant at the 95% level of significance, implying that gender and case_Control were independent variables.

```
bar_chart4 <- ggplot(t1d_metadata, aes(x =Case_Control ,y= (..count..)/sum(..count..), fill= Age_at_Col.
  geom_bar(position = "dodge",color= "Black")+
  scale_y_continuous(labels=scales::percent)+
  labs(title = "Percentage of Participants by case_control and Age",
        y= "Percentage", x= "case_Control")+
  geom_text(stat= "count", aes(label= scales::percent((..count..)/sum(..count..))), position = position.
  theme_classic()+
  scale_fill_manual(name = "", values = c("White", "grey"))
bar_chart4
```



```
model = glm(t1d_metadata$Case_Control ~ t1d_metadata$Gender + t1d_metadata$Delivery_Route + t1d_metadata$Age_at_Collection,
  family = binomial)
summary(model)
```

```
##
## Call:
## glm(formula = t1d_metadata$Case_Control ~ t1d_metadata$Gender +
##      t1d_metadata$Delivery_Route + t1d_metadata$Age_at_Collection,
##      family = binomial)
##
## Deviance Residuals:
##      Min       1Q   Median       3Q      Max
```

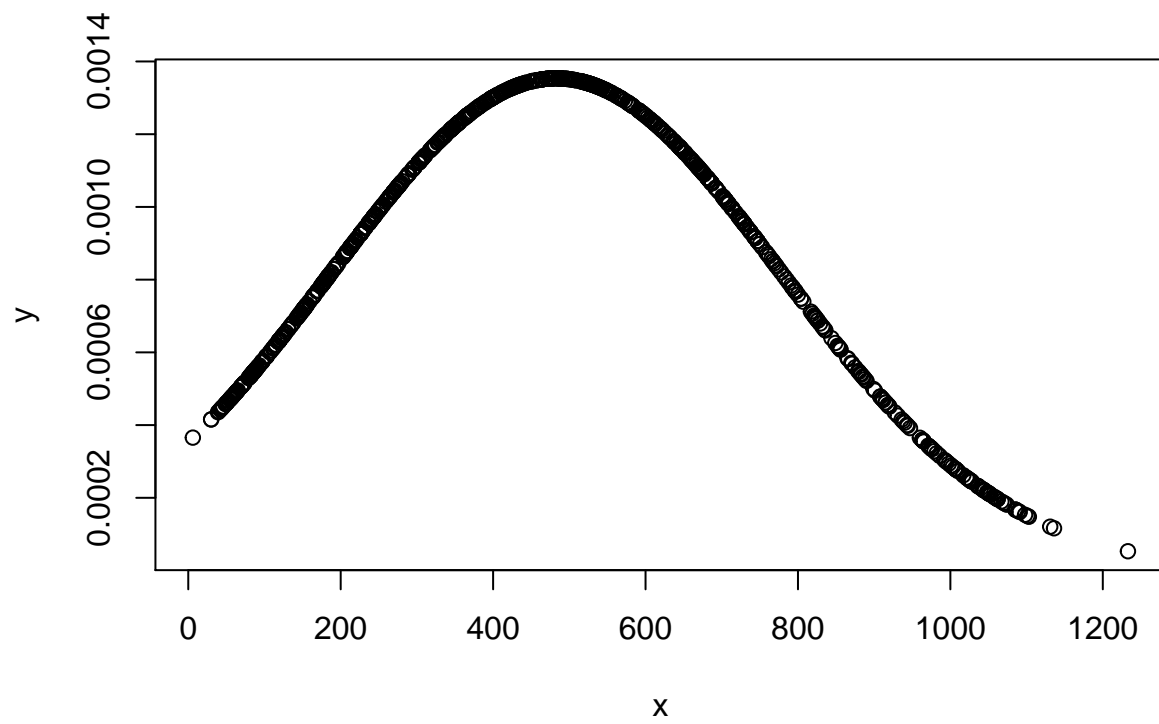


```
## -1.5032 -1.3854 0.9051 0.9596 1.0564
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept)      1.763e+01  4.862e+02  0.036  0.971
## t1d_metadata$Gendermale      1.375e-01  1.566e-01  0.878  0.380
## t1d_metadata$Delivery_Routevaginal -1.702e+01  4.862e+02 -0.035  0.972
## t1d_metadata$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
```

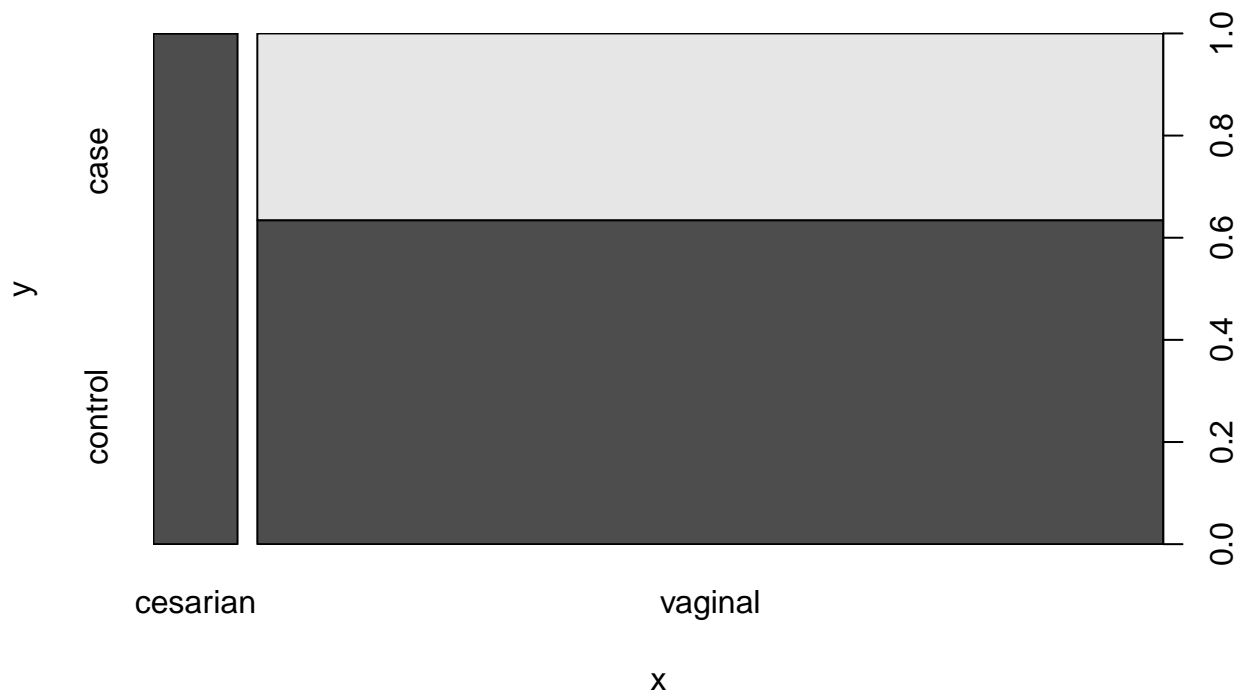
```
anova(model, test = "Chisq")
```

```
## Analysis of Deviance Table
##
## Model: binomial, link: logit
##
## Response: t1d_metadata$Case_Control
##
## Terms added sequentially (first to last)
##
##
##              Df Deviance Resid. Df Resid. Dev  Pr(>Chi)
## NULL                                776      990.52
## t1d_metadata$Gender              1      0.397      775      990.13  0.5285
## t1d_metadata$Delivery_Route      1    57.083      774      933.04 4.178e-14 ***
## t1d_metadata$Age_at_Collection  1      0.973      773      932.07  0.3239
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
x <- t1d_metadata$Age_at_Collection
y <- dnorm(t1d_metadata$Age_at_Collection, mean(t1d_metadata$Age_at_Collection), sd(t1d_metadata$Age_at_Collection))
plot(x, y)
```



```
plot(t1d_metadata$Delivery_Route, t1d_metadata$Case_Control)
```



From the linear regression model above, we can conclude that,

```
model1 = anova(model, test = "Chisq")
summary(model1)
```

##	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
## Min.	:1	Min. : 0.3974	Min. :773.0	Min. :932.1	Min. :0.0000
## 1st Qu.:	:1	1st Qu.: 0.6853	1st Qu.:773.8	1st Qu.:932.8	1st Qu.:0.1619
## Median :	:1	Median : 0.9732	Median :774.5	Median :961.6	Median :0.3239
## Mean :	:1	Mean :19.4845	Mean :774.5	Mean :961.4	Mean :0.2841
## 3rd Qu.:	:1	3rd Qu.:29.0281	3rd Qu.:775.2	3rd Qu.:990.2	3rd Qu.:0.4262
## Max. :	:1	Max. :57.0829	Max. :776.0	Max. :990.5	Max. :0.5285
## NA's :	:1	NA's :1			NA's :1

```
model1 = anova(model, test = "Cp")
summary(model1)
```

##	Df	Deviance	Resid. Df	Resid. Dev	Cp
## Min.	:1	Min. : 0.3974	Min. :773.0	Min. :932.1	Min. :939.0
## 1st Qu.:	:1	1st Qu.: 0.6853	1st Qu.:773.8	1st Qu.:932.8	1st Qu.:939.8
## Median :	:1	Median : 0.9732	Median :774.5	Median :961.6	Median :966.3
## Mean :	:1	Mean :19.4845	Mean :774.5	Mean :961.4	Mean :966.4
## 3rd Qu.:	:1	3rd Qu.:29.0281	3rd Qu.:775.2	3rd Qu.:990.2	3rd Qu.:992.9
## Max. :	:1	Max. :57.0829	Max. :776.0	Max. :990.5	Max. :994.1
## NA's :	:1	NA's :1			

2. Using phyloseq, create a phyloseq object. This will comprise the OTU abundance, taxonomy (provided in the .txt file) and sample data (provided in the .csv file).

```
library(tidyverse)
taxa.data <- read_tsv("diabimmune_t1d_16s_otu_table.txt", skip = 1)

##
## -- Column specification -----
## cols(
##   .default = col_double(),
##   ConsensusLineage = col_character()
## )
## i Use 'spec()' for the full column specifications.

otu.data <- taxa.data %>% select(1:778)
taxonomy <- taxa.data %>% select(`#OTU ID`, ConsensusLineage) %>%
  separate(ConsensusLineage, c("Domain", "Phylum", "Class", "Order", "Family", "Genus", "Species"), sep =
    sampledata <- t1d_metadata

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

taxonomy <- column_to_rownames(taxonomy, var = "#OTU ID")
otu.data <- column_to_rownames(otu.data, var = "#OTU ID")
sampledata <- column_to_rownames(sampledata, var = "Sample_ID")
```

Change OTU and taxonomy dataframes to matrices

```
otu.data_matx <- as.matrix(otu.data)
taxonomy_matx <- as.matrix(taxonomy)
```

create phyloseq object

```
otu.data_table <- otu_table(otu.data_matx, taxa_are_rows = TRUE)
sample_data1 <- sample_data(sampledata)
taxonomy_table <- tax_table(taxonomy_matx)

phyloseq.objectA = phyloseq(otu.data_table, taxonomy_table, sample_data1)

#Validity checks

rank_names(phyloseq.objectA)
```

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

```
taxa_names(phyloseq.objectA)
```

```
##      [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"
##	[764]	"183207"	"365842"	"4407515"	"4448211"	"190240"	"174950"	"185563"
##	[771]	"188648"	"185232"	"185731"	"369014"	"105287"	"176201"	"176297"
##	[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"
##	[939]	"195105"	"3082155"	"4396297"	"4433737"	"134265"	"1033413"	"181204"
##	[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"	"1111135"	"185859"	"331253"	"196139"	"2170530"
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##	[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"

##	[1114]	"182674"	"186735"	"199524"	"688934"	"114462"	"4473129"	"4405104"
##	[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"
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##	[1415]	"1646171"	"186981"	"300374"	"232900"	"207340"	"553150"	"187404"
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##	[1429]	"185164"	"564334"	"190913"	"1076818"	"4349946"	"360890"	"315223"
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##	[1443]	"151870"	"186352"	"234443"	"4449427"	"4466707"	"4335484"	"586453"
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##	[1457]	"4330001"	"732765"	"345354"	"578511"	"2774254"	"708285"	"189309"
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##	[1478]	"3422630"	"276484"	"148352"	"4364405"	"172233"	"836693"	"3856408"
##	[1485]	"527988"	"563803"	"324015"	"341730"	"339566"	"2066056"	"3390534"

##	[1492]	"193148"	"4460786"	"193654"	"197052"	"174792"	"4456702"	"3648884"
##	[1499]	"340711"	"181452"	"191476"	"3797933"	"178708"	"4212012"	"193129"
##	[1506]	"191222"	"561607"	"4364464"	"113003"	"4475642"	"2123719"	"194036"
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##	[1534]	"4435784"	"183532"	"4347652"	"184320"	"3141342"	"4350477"	"178183"
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##	[1562]	"3692427"	"293511"	"4474759"	"213870"	"4455767"	"4460021"	"365167"
##	[1569]	"303326"	"814442"	"194380"	"193969"	"579244"	"195166"	"340759"
##	[1576]	"842786"	"182116"	"4354486"	"2420187"	"4450214"	"157453"	"199534"
##	[1583]	"178018"	"2119695"	"197698"	"197696"	"193852"	"184497"	"572889"
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##	[1597]	"2530636"	"4442899"	"4437359"	"196513"	"2368865"	"147702"	"4439398"
##	[1604]	"186772"	"309929"	"177207"	"1776714"	"183093"	"197274"	"4403689"
##	[1611]	"839964"	"323135"	"193797"	"4391326"	"288930"	"581201"	"192741"
##	[1618]	"4377149"	"187225"	"189937"	"158625"	"191148"	"2532909"	"185584"
##	[1625]	"4425669"	"197761"	"178631"	"194734"	"4332878"	"343257"	"332718"
##	[1632]	"4254313"	"4405423"	"4366391"	"295485"	"323106"	"188315"	"196918"
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##	[1646]	"4456027"	"300662"	"4468805"	"288004"	"304973"	"360311"	"4403113"
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##	[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"
##	[1702]	"3530697"	"194297"	"185836"	"173851"	"194584"	"4409280"	"4366843"
##	[1709]	"362793"	"330469"	"180771"	"158649"	"4366089"	"146564"	"4336940"
##	[1716]	"185814"	"194471"	"194324"	"176469"	"307984"	"179572"	"3807411"
##	[1723]	"208901"	"199256"	"192438"	"186011"	"201772"	"3235048"	"188449"
##	[1730]	"181074"	"335670"	"187504"	"178331"	"326390"	"2137906"	"198583"
##	[1737]	"216010"	"196724"	"2730944"	"4458634"	"1614788"	"187468"	"552235"
##	[1744]	"197460"	"193778"	"187924"	"364227"	"188262"	"186471"	"4463532"
##	[1751]	"187180"	"4390972"	"186906"	"184980"	"341920"	"4232048"	"180215"
##	[1758]	"182036"	"175836"	"4443094"	"327218"	"4469032"	"166848"	"232828"
##	[1765]	"192437"	"3302038"	"189877"	"305288"	"199344"	"322505"	"3302039"
##	[1772]	"182431"	"179273"	"851733"	"196017"	"302160"	"1047077"	"215097"
##	[1779]	"924547"	"4290144"	"581021"	"4359797"	"197286"	"4227110"	"4297420"
##	[1786]	"928538"	"1132942"	"281015"	"772515"	"1010113"	"4376230"	"4384058"
##	[1793]	"167950"	"4453060"	"1995363"	"691423"	"348680"	"839152"	"305561"
##	[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"

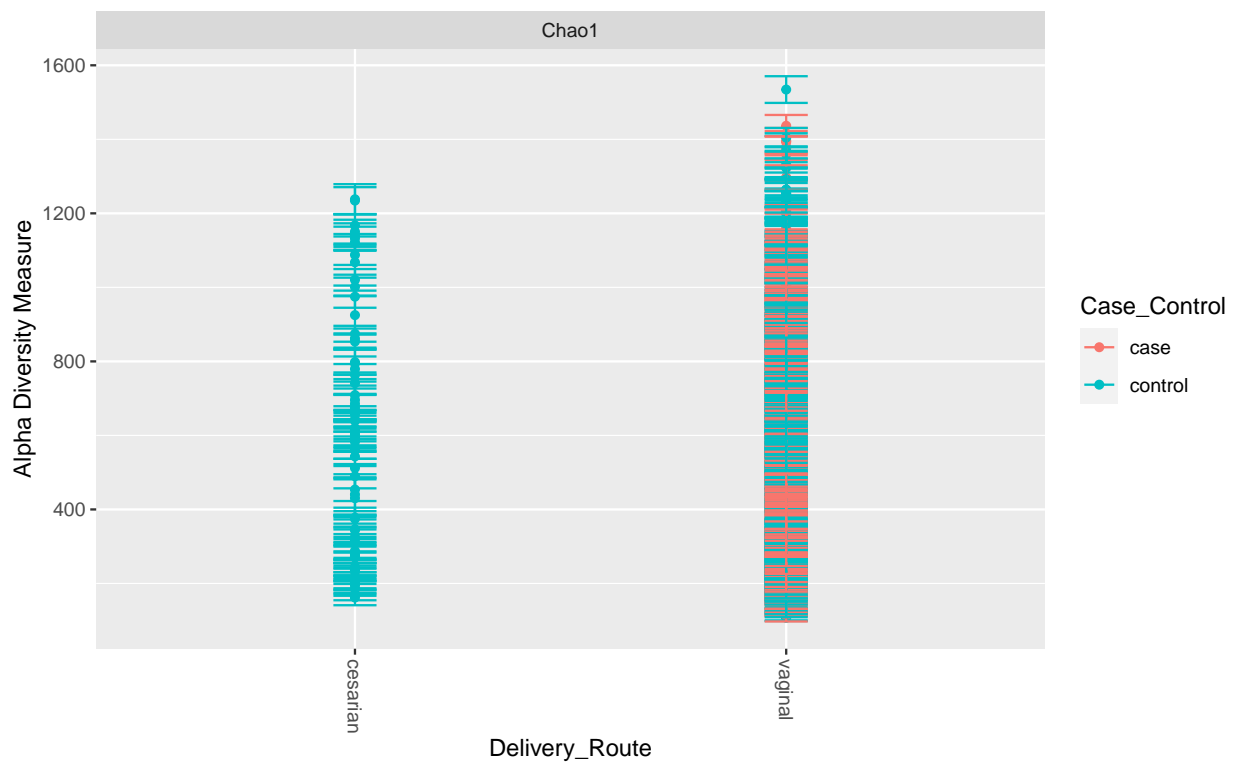
```
sample_variables(phyloseq.objectA)
```

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

3. Generate Alpha diversity plots and ordination plots. Examine any observed patterns by delivery mode, gender and disease status.

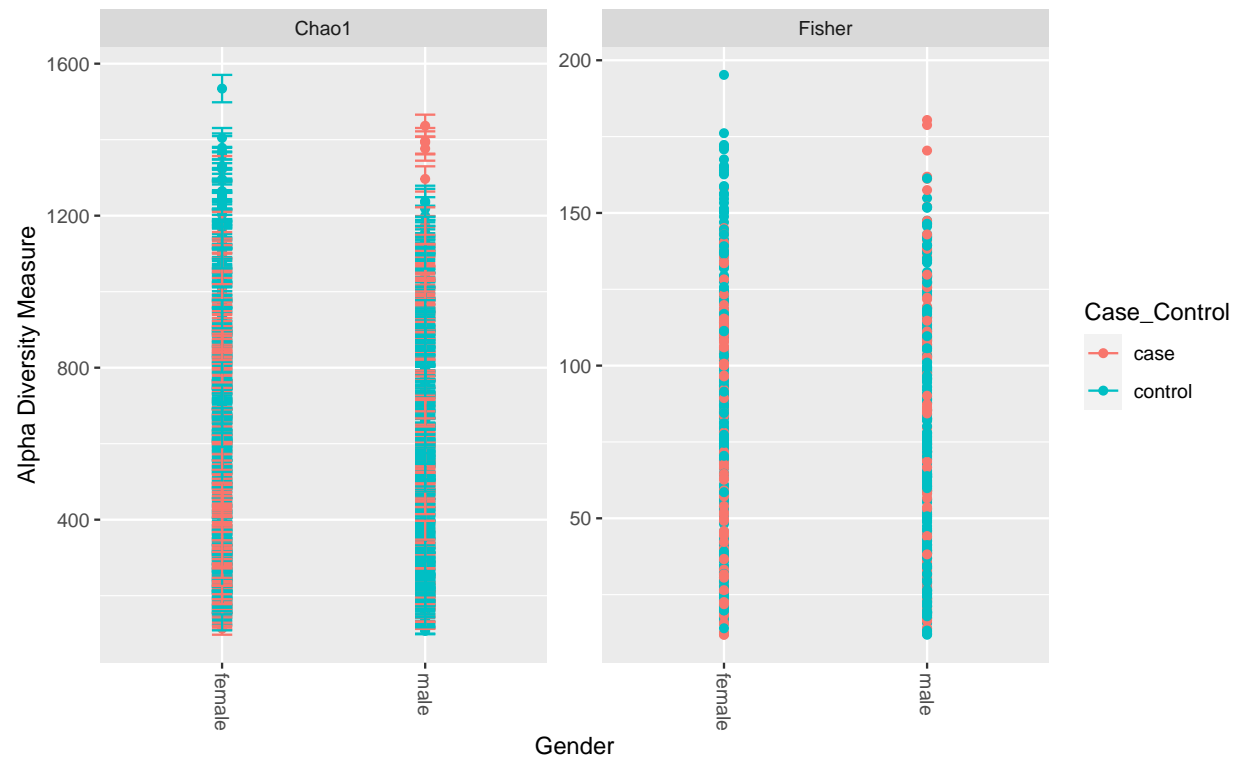
```
#Alpha Diversity
```

```
Fig.A <- plot_richness(phyloseq.objectA,x = "Delivery_Route", color="Case_Control", measures= "Chao1")
Fig.A
```



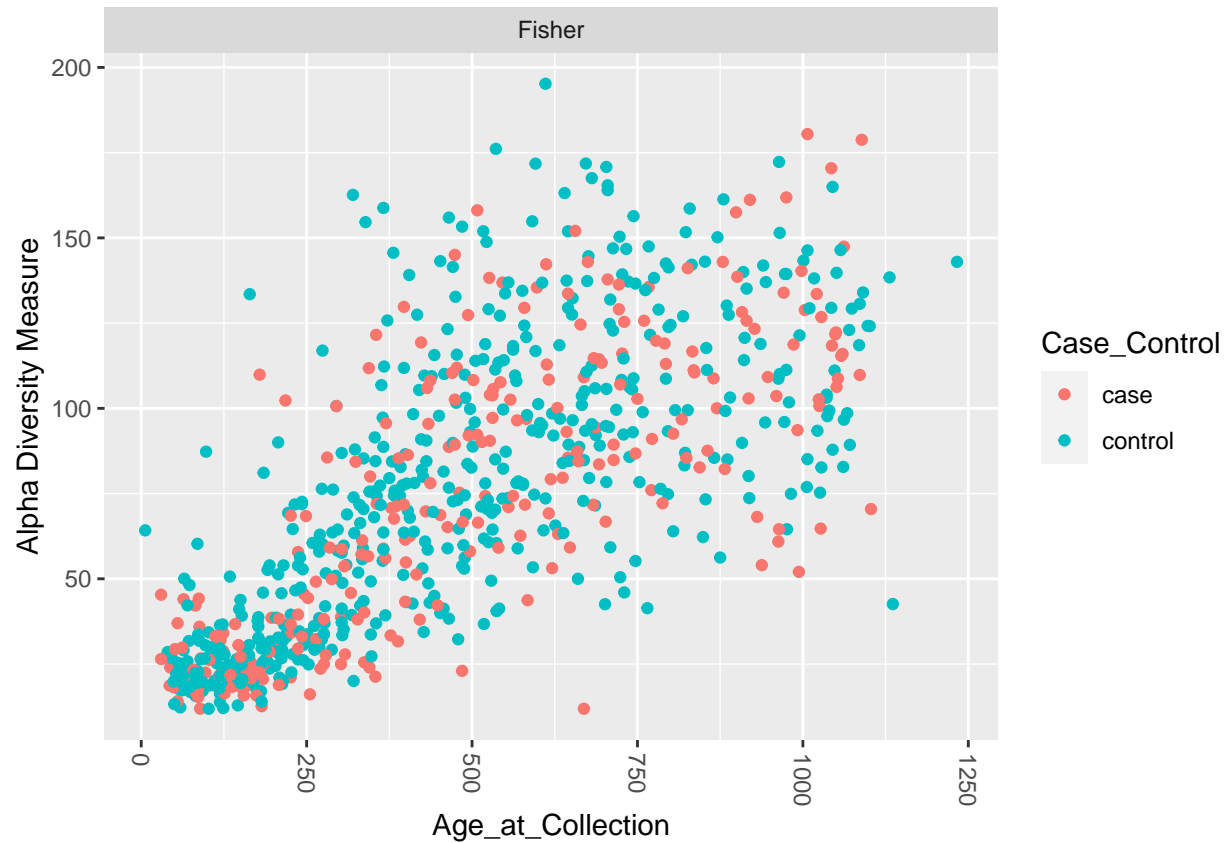
Its evident that all there were no cases involved in the sample that had been delivered by cesarian section. implying that all cases involved in the studay had been born by vaginal route.

```
Fig.B <- plot_richness(phyloseq.objectA,x = "Gender", color="Case_Control", measures= c("Chao1", "fisher"))
Fig.B
```



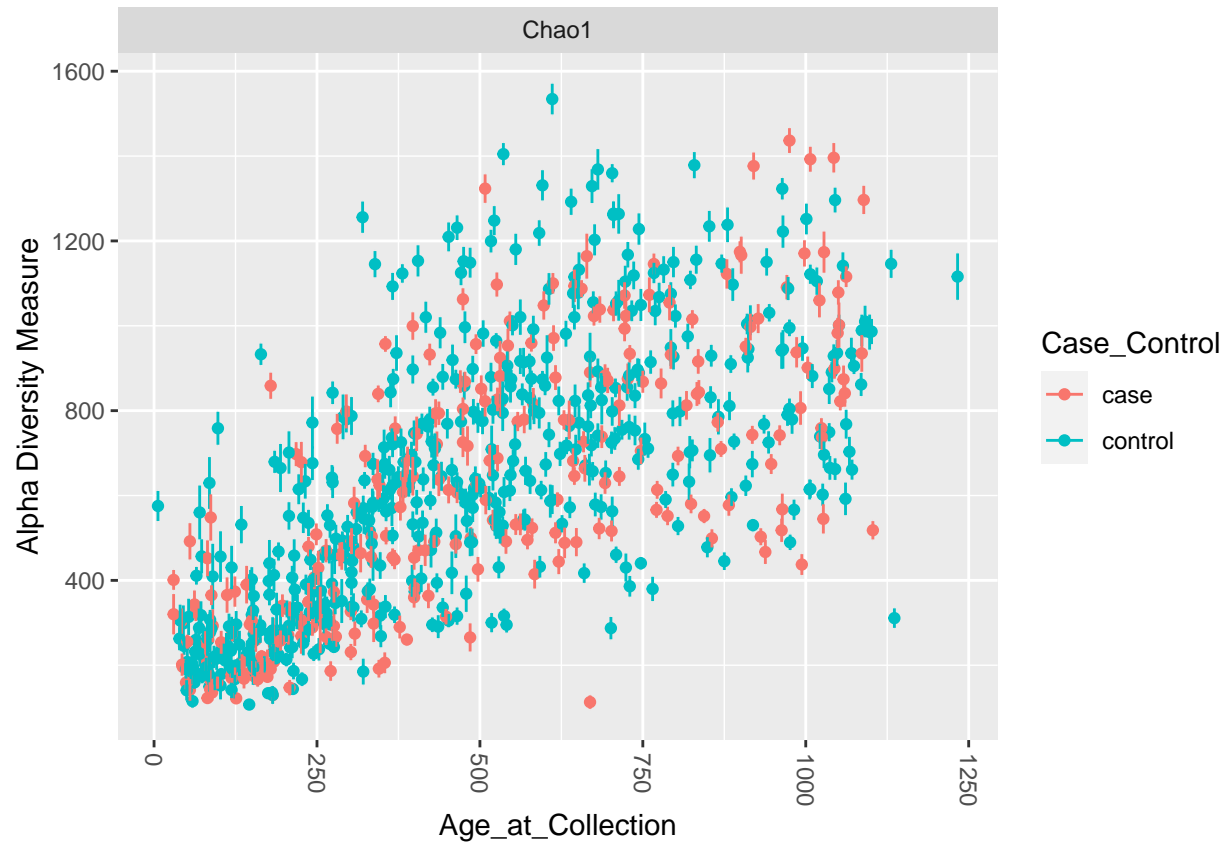
The distribution shows that, the male and female were equally involved in the study both as cases and controls.

```
Fig.C <- plot_richness(phyloseq.objectA,x = "Age_at_Collection", color="Case_Control", measures= c("fis1", "fis2", "fis3", "fis4", "fis5", "fis6", "fis7", "fis8", "fis9", "fis10", "fis11", "fis12", "fis13", "fis14", "fis15", "fis16", "fis17", "fis18", "fis19", "fis20", "fis21", "fis22", "fis23", "fis24", "fis25", "fis26", "fis27", "fis28", "fis29", "fis30", "fis31", "fis32", "fis33", "fis34", "fis35", "fis36", "fis37", "fis38", "fis39", "fis40", "fis41", "fis42", "fis43", "fis44", "fis45", "fis46", "fis47", "fis48", "fis49", "fis50", "fis51", "fis52", "fis53", "fis54", "fis55", "fis56", "fis57", "fis58", "fis59", "fis60", "fis61", "fis62", "fis63", "fis64", "fis65", "fis66", "fis67", "fis68", "fis69", "fis70", "fis71", "fis72", "fis73", "fis74", "fis75", "fis76", "fis77", "fis78", "fis79", "fis80", "fis81", "fis82", "fis83", "fis84", "fis85", "fis86", "fis87", "fis88", "fis89", "fis90", "fis91", "fis92", "fis93", "fis94", "fis95", "fis96", "fis97", "fis98", "fis99", "fis100"))
Fig.C
```



Its evident that, most of the elements involved in the study were bellow 750 days of life and fall within 0 to 150 measure of diversity.

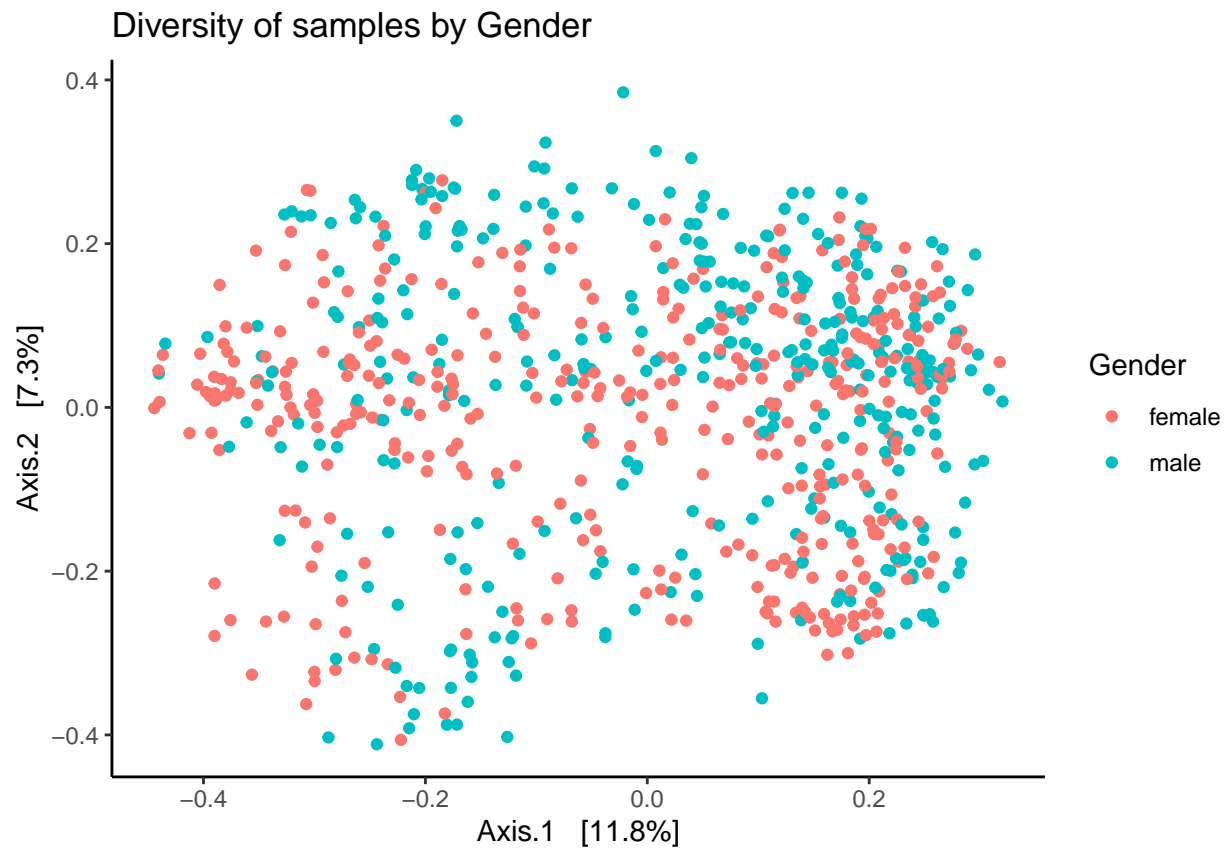
```
Fig.D <- plot_richness(phyloseq.objectA,x = "Age_at_Collection", color="Case_Control", measures= "Chao1")
Fig.D
```



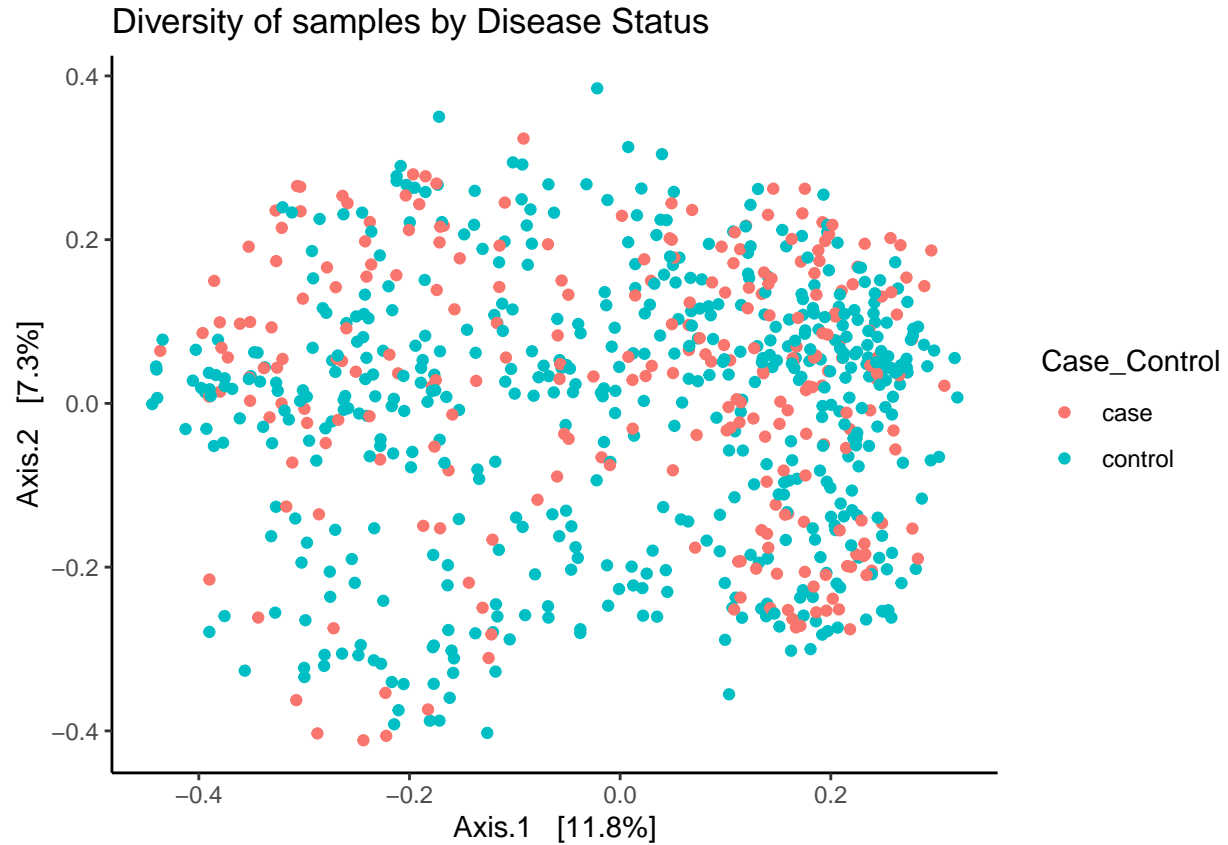
like the Fisher test, the choa1 test of richness also shows that, most of the elements involved in the study were bellow 750 days of life and fall within 0 to 150 measure of diversity.

#Ordination Plots

```
gf <- ordinate(phyloseq.objectA, "PCoA", "bray")%>%
plot_ordination(phyloseq.objectA, .,color = "Gender", title = "Diversity of samples by Gender")+
  theme_classic()
gf
```



```
gf2 <- ordinate <- ordinate(phyloseq.objectA, "PCoA", "bray")  
plot_ordination(phyloseq.objectA, ordinate, color = "Case_Control", title = "Diversity of samples by Dis  
theme_classic()
```



gf2

```
## $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
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## 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
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## 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
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## 449	-5.740903e-02	-2.051826e-04	0.0008364764	7.065796e-04	0.75877691
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## 470	-6.653069e-02	-2.377838e-04	0.0008268860	6.475349e-04	0.77623722
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## 476	-6.829934e-02	-2.441050e-04	0.0008248912	6.311497e-04	0.78119116
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## 480	-7.032847e-02	-2.513573e-04	0.0008226200	6.203406e-04	0.78448307
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## 508	-8.030950e-02	-2.870299e-04	0.0008113358	5.471112e-04	0.80735692
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## G37044 -0.2198598370  1.430383e-01  0.0990212789 -0.0831292920  2.635637e-02
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## 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
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## 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
## G37010  0.0217585875 -2.592514e-01 -0.1078201686 -0.0871986650  1.358917e-01
## 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

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##	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
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##	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
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##	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
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##	G36987	-0.3024573887	-1.944211e-01	-0.0425505283	-0.1831802344	1.146424e-01
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## G36180 -0.0916888489 3.234798e-01 -0.0974413550 0.1717868948 2.067156e-01
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##	G36209	-0.3112447770	-7.227226e-02	0.0010654301	-0.0913718818	-7.888293e-02
##		Axis.6	Axis.7	Axis.8	Axis.9	Axis.10
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##	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
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##	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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##	G36951	-4.882856e-02	-6.543436e-02	0.0417707088	-4.390776e-02	0.1032074498
##	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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##	G36992	-1.241546e-01	-2.903301e-02	0.1375229992	1.175582e-01	0.0520259143
##	G36921	-5.691598e-02	7.941342e-02	-0.0400808424	-9.519689e-02	0.0818128772
##	G37004	-1.795070e-01	-2.740765e-02	-0.0700279097	1.622823e-01	-0.0507710777
##	G36966	-6.256537e-02	-8.902258e-03	-0.0005905802	-6.270981e-02	-0.0381848644
##	G36936	-2.156159e-01	-3.263590e-02	-0.1083316041	2.279065e-02	-0.0608774722
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##	G36933	-8.791200e-02	-6.203364e-02	0.1006487452	1.371389e-01	0.0128089380
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##	G36998	-5.928816e-02	3.953088e-02	-0.0255670212	-2.270532e-02	0.0131566733
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##	G36928	-1.928030e-02	4.036032e-02	0.0652179878	-4.801585e-02	0.0469285442
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##	G37033	9.417949e-03	-1.041723e-02	0.0452407036	5.339756e-02	0.1334850850
##	G37017	-5.320620e-02	2.382868e-01	0.0315526904	9.446741e-02	0.0030460602
##	G37012	8.889163e-04	1.196566e-01	-0.0132884059	6.602684e-02	0.0134990712
##	G36952	2.774479e-03	-4.716354e-02	0.0450108496	9.198228e-03	0.0891883692
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##	G36957	-4.941615e-02	-7.589126e-02	0.0865574373	6.500985e-02	-0.0283324644
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##	G37054	-6.697852e-02	2.592975e-02	-0.0207863423	-2.942919e-02	0.1570262553
##	G36948	-1.105780e-01	8.953250e-03	-0.0595311637	-9.878170e-02	-0.0279590540
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##	G37024	4.380527e-02	1.340834e-01	0.0826604955	3.570274e-02	0.0396572477
##	G37023	5.025564e-02	1.987524e-01	0.0718539915	1.476425e-01	-0.0632965465
##	G37036	-3.742324e-02	1.544913e-01	0.1366896087	1.725163e-01	0.0259070015
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##	G35364	4.789199e-02	-2.908974e-02	-0.0144241969	8.805274e-02	-0.0070074038
##	G35433	-1.434185e-01	-3.001068e-02	-0.0406565939	2.080502e-01	0.0267460582
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## G35530 0.0456498044 -0.0822037832 -7.952603e-02 -1.162722e-01 -0.1005677025
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## G36246 0.0570700742 -0.0183977587 6.443572e-02 -3.476402e-02 -0.1689520265
## G36150 -0.0331167334 0.0281240031 -5.397261e-03 -8.899790e-02 -0.0847106380
## G36237 0.0111223783 0.0376094620 4.005259e-02 -7.691647e-02 0.1700708479
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## G36193 0.0186686384 -0.0075088336 2.936195e-02 1.390109e-01 -0.1296737188
## G36151 0.0405003465 -0.0653081952 8.157154e-02 -8.091623e-02 0.0409642751
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## G36270 0.0437889584 -0.1508536789 -5.420497e-03 1.149377e-02 -0.0719070827
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## G36267 -0.0005131977 0.0222653900 6.862920e-02 2.025707e-02 -0.1627056476
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## G36257 -0.0116931740 0.0572766577 -1.171518e-01 7.625033e-02 0.0199120261
## 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

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##	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
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##	G36314	-0.0265272155	0.0107864749	3.023459e-02	-1.166780e-01	0.0103996288
##	G36258	-0.0424631723	0.0558710976	2.524692e-01	-6.724925e-02	0.0886469034
##	G36147	-0.1067504656	-0.1732023783	7.105262e-02	-1.141511e-01	0.0456753767
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##	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
##	G37016	-0.0829444965	0.0292283124	1.121465e-01	-1.172055e-02	7.547553e-02
##	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
##	G36959	-0.0465864579	0.0404384635	-4.559561e-02	-3.320873e-02	-2.820182e-02
##	G36905	0.0038872269	-0.0554231670	2.058593e-02	6.239739e-03	-5.583811e-02
##	G36917	-0.0359141793	0.0103663397	-3.066408e-02	3.390895e-02	7.507211e-02
##	G36992	-0.0647185023	0.0892927762	4.256763e-02	-1.727159e-02	9.789050e-02
##	G36921	-0.0833676303	0.0202269240	-2.324517e-02	-3.867849e-03	6.470756e-02
##	G37004	0.0167113239	0.0315777018	-1.403389e-01	9.604304e-02	-2.303986e-01
##	G36966	0.0480170572	-0.0479734739	-3.697029e-02	-8.537689e-02	-6.239895e-02
##	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
##	G37034	0.0084063285	0.0624728315	4.064049e-02	5.244267e-02	-2.811209e-02
##	G36953	0.0361492126	0.0171483416	-2.364051e-02	1.229800e-01	8.901427e-03
##	G36974	0.0117265293	0.0658245074	5.247034e-02	6.420993e-02	-2.012122e-02
##	G37039	-0.0599269971	0.0245665441	-5.258631e-02	2.123838e-02	9.158683e-02

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## G37019 0.0255889173 0.0315396063 1.257866e-01 4.635892e-02 -7.195918e-02
## G36988 -0.1596910453 0.0541421035 -1.396849e-01 1.813340e-02 -8.278670e-02
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## G37005 0.0325105089 0.0701171063 -1.144474e-01 -1.200743e-01 6.028569e-03
## G36928 -0.1231769587 0.0070455694 1.513785e-02 -5.500164e-03 -8.562653e-03
## G36923 0.1016028820 0.0540007524 8.469300e-02 1.230186e-02 -1.686238e-02
## G37033 -0.0488209498 -0.1112743979 1.676799e-02 1.296244e-01 9.860283e-02
## G37017 -0.0359681850 0.0740686243 1.550749e-01 7.898082e-02 -1.181316e-01
## G37012 0.0761671768 -0.0712640234 -5.457565e-02 -3.315009e-02 -6.651783e-02
## G36952 -0.0273260654 0.0443473060 1.719496e-02 1.005093e-01 -6.934074e-02
## G37011 -0.0928931625 0.0834119648 -4.788740e-03 -2.715698e-02 -1.069716e-02
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## G37027 -0.0039546763 0.0617826539 -5.641566e-02 8.625846e-03 -2.745624e-02
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## G35514 -0.0183332945 -0.0084675519 -3.553252e-02 5.253913e-02 6.068795e-06
## G35525 -0.0142854919 -0.0424868443 -1.019783e-02 -6.483214e-03 -4.825929e-02
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## G35480 -0.0004737475 0.0350660484 -8.606171e-02 -4.665203e-02 3.224326e-02
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## G35511 0.0062904064 0.0590067376 6.814745e-02 -5.753150e-02 5.664500e-02
## G35448 -0.0796428677 0.1098080143 -1.054185e-01 -7.273598e-02 -1.323029e-02
## G35510 0.2088883755 -0.0661964327 7.384423e-02 2.177122e-03 9.487849e-02
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## G35442 0.0850327071 -0.0535741941 9.117900e-02 7.279258e-02 7.267546e-03
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## G35532 0.0156264908 0.0694858321 -2.028357e-02 -7.632590e-03 -5.809534e-03
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## G35523 0.0560921794 0.0022980804 -2.943958e-02 -7.363154e-02 -5.281948e-02
## G35487 0.0140131587 0.0406375389 2.328137e-03 7.670884e-02 6.581634e-02
## G35386 0.0027169086 0.0929180014 -4.101132e-03 4.984259e-03 1.141709e-01
## G35521 0.0071444539 -0.0705430913 -7.882567e-02 -5.612822e-02 -1.996598e-02

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## G35497 -0.0248207247 0.0515594842 7.798023e-03 2.259172e-02 -4.642913e-02
## G35373 -0.0625097621 0.0041273455 1.062457e-01 3.268381e-02 -8.883764e-02
## G35453 -0.0308081922 0.0081727160 5.493100e-02 -3.625495e-02 1.405015e-02
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## G36185 0.1044898846 -0.0088864149 1.095299e-01 -4.458208e-02 1.265387e-02
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##	G36159	-0.1037034363	-6.416652e-02	-1.880774e-02	-0.0385875173	4.513147e-02
##	G36234	-0.0888373659	5.788892e-02	-3.511714e-02	-0.0154542926	2.610366e-02
##	G36206	0.0573256672	-1.007130e-01	-3.738167e-02	-0.0105910947	3.351441e-02
##	G36257	-0.0862903491	5.739247e-02	2.030334e-02	-0.0535110495	-2.033200e-01
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##	G36146	-0.1329236124	-6.255110e-02	4.531443e-02	0.0508043283	-4.676638e-02
##	G36192	0.0005818439	3.698662e-02	-3.995874e-02	-0.0151999342	-2.222567e-02
##	G36284	0.0746753649	-7.196439e-02	9.434710e-02	-0.0358755393	1.029953e-01
##	G36291	-0.0217673123	-5.882968e-02	-3.616737e-02	0.0948694443	2.594500e-02
##	G36142	-0.1560292557	-8.538976e-02	1.385236e-02	-0.0282811501	4.551912e-02
##	G36138	0.0021381188	5.980918e-02	1.384761e-02	0.0520866120	5.423351e-02
##	G36203	0.0936119897	3.494538e-02	1.864395e-02	-0.0101787983	-4.273478e-02
##	G36282	0.0634643774	-1.402819e-01	-1.040522e-01	0.1127790510	1.963246e-02
##	G36290	0.0992457672	1.008432e-01	3.379043e-02	-0.0077982301	-6.338586e-02
##	G36274	0.0267697984	-7.215793e-02	-8.001575e-02	0.0079679618	5.647018e-03
##	G36314	0.1399504780	3.075331e-01	-1.775136e-01	0.0038004304	-1.784666e-01
##	G36258	-0.0015734440	1.469857e-01	-1.056641e-01	-0.0957224021	-7.188274e-03
##	G36147	-0.0624769140	1.194134e-01	-2.492252e-02	0.0837675907	-5.461587e-02
##	G36235	-0.1443253523	7.966305e-02	2.006178e-02	-0.0095822458	5.237209e-02
##	G36143	-0.1828154036	5.680733e-02	-6.790378e-02	-0.0285290590	6.854499e-03
##	G36308	-0.0008742954	4.500894e-02	-1.264602e-01	0.0929309259	-7.872060e-03
##	G36209	-0.0691948278	-2.426580e-02	8.231026e-02	-0.0570426531	-4.134866e-02
##		Axis.26	Axis.27	Axis.28	Axis.29	Axis.30
##	G37016	9.114513e-03	0.1263579952	1.597692e-02	0.0304981387	4.350977e-04
##	G36918	4.950004e-02	-0.0456613296	-7.648625e-02	0.0805104584	-6.601632e-02
##	G37044	1.075629e-02	0.0127790559	-7.986298e-02	0.0146654037	-3.620251e-03
##	G37009	-9.020252e-02	-0.0676543973	2.054322e-02	-0.0181030567	-8.801263e-03
##	G37029	6.489207e-02	-0.0266237162	-1.609140e-01	0.0288957233	-2.451661e-02
##	G37035	-3.477473e-02	-0.0356310943	-1.316640e-02	0.0690792032	-7.135596e-02
##	G36982	-1.866346e-02	-0.0552467285	-4.865532e-02	0.0566502747	1.770475e-02
##	G36984	-1.033002e-01	-0.0066078434	-6.183279e-02	0.0012930455	6.201987e-02
##	G37030	-9.288256e-02	0.1437579549	2.538550e-02	-0.0769610638	-3.119863e-02
##	G37031	-3.958286e-02	0.0112573777	-2.540936e-02	0.0577835501	5.928783e-03
##	G36906	4.825601e-02	0.0897850889	3.580554e-02	-0.0299893646	-2.714198e-02
##	G37028	-1.498662e-02	-0.0379566115	3.072459e-02	0.0033939330	-5.805030e-02
##	G37014	-2.463660e-02	0.0998938509	4.639502e-02	-0.0305360837	-1.815636e-02
##	G37010	3.528526e-02	-0.1160244137	-4.807958e-02	-0.0050758340	-6.079574e-02
##	G36944	-6.688700e-02	0.0839780424	-4.328852e-02	-0.1139339837	-3.610371e-03
##	G36902	-5.271165e-02	0.0749065851	9.403515e-02	0.0411984826	6.033344e-02
##	G37051	-7.345592e-02	-0.0145162111	9.812023e-03	0.0296396559	-9.806615e-02
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##	G37025	3.974482e-02	-0.0021787780	-7.936811e-02	0.0661961345	-1.982387e-02
##	G36930	-3.866418e-02	-0.0055858838	-8.198772e-02	-0.0199006165	-4.877376e-02
##	G36935	-9.691631e-02	0.0361681572	1.045063e-02	-0.0247209584	1.874492e-02
##	G37041	-6.126617e-02	0.0290101385	7.532270e-04	0.0749889399	-8.824516e-02
##	G36959	1.350584e-01	-0.0611422155	1.078623e-01	-0.1382034881	-1.726498e-01
##	G36905	5.047101e-02	0.0696872136	-5.830645e-02	-0.0666305228	4.320961e-02
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## G36966 7.867003e-02 -0.0050514651 9.168044e-02 -0.0677072806 -5.634024e-02
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## G35414 1.524908e-02 -0.0123382600 -8.057429e-02 0.0420227522 1.755426e-03
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## G36219 -9.562002e-02 0.0428820695 6.701407e-02 -0.0014501634 -9.532227e-02
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## G36202 3.586621e-02 0.0715402525 5.578973e-02 0.0318626108 -1.004660e-03
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## G36269 7.166620e-03 0.0275713759 4.548382e-03 0.0607649999 4.241104e-02
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## G36225 -2.247034e-02 0.0825665119 9.396012e-04 -0.0107016134 8.536877e-04
## G36272 -3.151512e-02 -0.0637494685 -9.436312e-02 0.0049011852 9.505032e-02
## G36285 -1.370291e-02 0.0184592370 -2.536962e-02 0.0677494132 1.007557e-02
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## G36297 6.543266e-03 -0.0681698197 3.354858e-02 0.0304433409 2.271254e-02
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## G36320 6.431735e-02 0.0649087872 -9.438676e-02 0.0534693470 1.368353e-02
## G36245 7.991613e-02 0.1155055069 2.709241e-02 0.0084706195 -5.604502e-02
## G36161 -4.363701e-02 0.0682968564 -1.122873e-02 0.0226129140 -4.709008e-02
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## G36153 -7.972381e-02 -0.0023973668 5.125306e-02 -0.0556060354 6.792436e-02
## G36210 -9.799629e-02 0.0800181702 1.321988e-02 0.0474526513 -9.499580e-02
## G36303 -5.039494e-02 0.0067084919 1.279532e-02 0.0585244454 -1.470298e-02
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## G36311 -1.315957e-03 -0.1156634683 5.762932e-03 0.0966469573 5.744106e-02
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## G36216 1.628502e-01 -0.0039505654 1.034733e-02 0.0661635401 4.398000e-03
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## G36309 1.097778e-02 -0.1243075291 2.577281e-02 -0.0017121061 2.533912e-02
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## G36314 -5.286480e-02 0.0555910116 6.534963e-02 0.0032591427 1.063085e-01
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##	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
##	G37052	-0.0282530397	-0.0906873944	-8.134463e-02	5.316313e-02	4.493206e-03
##	G36925	-0.0354219434	0.0398511653	3.279072e-02	-2.340122e-02	7.281670e-02
##	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
##	G36998	0.0304426583	-0.0349073931	4.067650e-02	-4.403109e-02	-4.546064e-02
##	G37045	0.0265230403	-0.0602214376	-2.797383e-02	-1.312726e-01	-1.401836e-01
##	G37049	-0.0226200890	-0.0258673125	-1.303840e-02	-7.851381e-02	-8.379571e-02
##	G37019	-0.0975657202	-0.0964690422	4.108708e-02	-1.759217e-02	4.535752e-02
##	G36988	-0.0046392258	0.0255292367	3.109396e-02	5.024056e-02	6.451084e-02
##	G37037	-0.0370758385	0.1511235715	-7.995057e-02	-9.985037e-03	-2.048327e-02
##	G37005	-0.0112473084	0.0395957671	1.647531e-02	-2.186701e-03	4.763181e-02

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## G36928 -0.0565794818 0.0589546518 -1.136343e-02 1.599004e-02 1.204419e-01
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## G37033 0.0295289759 0.0115664876 -1.434070e-03 2.353555e-02 2.133878e-02
## 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
## G36937 -0.0046261158 -0.0308035258 -5.243731e-02 7.576874e-02 -7.288568e-02
## G37047 -0.0842488831 0.1269171038 -2.229430e-02 -4.286569e-02 -5.618295e-02
## G37032 -0.0060289456 -0.0879929042 -3.006115e-02 -2.117613e-02 2.606149e-02
## G36932 -0.0662625888 0.1078444258 1.528385e-02 7.615719e-03 3.188803e-02
## G37043 -0.0210789356 0.0077300941 7.360369e-04 -1.225234e-02 7.271432e-02
## G37054 0.0798001514 -0.0630241394 -2.945737e-02 -3.222440e-02 1.963614e-02
## G36948 0.0556225386 0.0165638824 -2.401828e-02 -1.524856e-02 -5.742994e-02
## G36972 -0.0963221688 -0.0034932132 -2.729193e-02 -3.733635e-02 -3.704766e-02
## G36968 -0.1195527133 0.1480250638 1.970928e-02 -1.636858e-02 1.492124e-02
## G36911 0.0376060117 -0.0599220258 -2.221521e-02 5.371266e-02 -1.930499e-02
## G36987 -0.0049331944 0.0426416285 1.222350e-03 3.832340e-03 6.745757e-02
## G37042 -0.0538861570 -0.0207511699 3.740966e-02 4.820148e-02 4.073524e-03
## G36960 -0.0527572229 0.1036062143 -8.390278e-02 -5.365554e-02 -7.290294e-02
## G37040 0.0854532021 -0.1744883217 2.001109e-02 -1.336497e-02 -2.576817e-03
## G37027 -0.0415393702 -0.0357544714 -4.798806e-02 -5.615728e-02 -8.575402e-02
## G37024 -0.0356493003 0.0347576030 1.070005e-01 6.387487e-03 -8.867910e-02
## G37023 -0.0409471342 0.0299909992 1.059059e-01 -6.344485e-02 -7.662247e-02
## G37036 -0.0539362995 -0.0057060776 3.419268e-02 -8.507906e-02 -1.125126e-01
## G37026 -0.0209765777 -0.0498316606 -6.311201e-02 -6.446614e-02 -1.668098e-02
## G37050 0.0133135488 -0.0076180615 8.485525e-03 -8.601437e-02 -9.525859e-04
## G36973 -0.0460719763 0.0127287529 1.412853e-02 -5.230279e-02 -5.086656e-02
## G36991 -0.0222316150 0.0200053452 -5.910905e-02 -2.609247e-02 5.193451e-02
## G36904 -0.0349695965 -0.0301242433 2.748772e-02 -5.226984e-02 7.630784e-02
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## G36993 -0.0396945387 -0.0011882423 1.376061e-02 6.619122e-02 2.240658e-02
## G37020 -0.0184391979 -0.0332364152 4.801052e-02 -6.276585e-03 -6.677876e-03
## G36910 0.0852220148 -0.0688007271 3.449931e-02 -5.189787e-02 -5.990766e-03
## G36927 0.0636957710 -0.0818814799 2.884384e-03 2.917472e-04 -2.662142e-02
## G37018 -0.0202070005 0.0411676418 7.724522e-02 -1.234562e-01 1.869518e-03
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## G37013 -0.0652775054 0.0260508872 9.263628e-02 9.868295e-03 -9.342502e-02
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## G35528 -0.0259292971 -0.0012325652 3.058644e-03 2.659955e-02 1.200930e-03
## G35381 -0.0390044462 -0.0546996546 1.782182e-02 -1.134023e-02 2.675661e-02
## G35416 -0.0239761530 0.0514692255 -4.893405e-03 2.569004e-03 2.587500e-02
## G35477 -0.0499943425 -0.1033225540 4.594714e-02 4.770914e-02 -3.685523e-02
## G35390 0.0991362019 0.0065928076 -2.030249e-02 -9.886265e-02 1.660607e-02

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## G35525 -0.0582391319 -0.0159181667 -4.182953e-03 -1.097217e-02 -2.820273e-02
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## G35437 0.0109417312 -0.0025087706 5.280010e-02 2.876139e-02 -1.695001e-02
## G35511 0.0694632629 0.0398021192 2.595070e-02 -1.725270e-02 1.569460e-02
## G35448 0.0483676519 -0.0319585751 -2.915934e-02 -3.809978e-02 1.085738e-02
## G35510 0.0550598647 0.0378939917 -1.585881e-02 -5.086533e-02 -2.164570e-03
## G35470 0.0519737288 -0.0256529806 4.049862e-02 1.204262e-01 -3.126796e-02
## G35403 0.0346594178 0.1751717888 1.535129e-02 3.221731e-02 1.216020e-01
## G35424 0.0204771136 0.0777833119 6.613849e-03 -2.190866e-02 6.893318e-02
## G35398 0.0107736456 0.0546630433 -9.425437e-02 -2.125421e-02 -6.791729e-03
## G35365 -0.0688079363 0.0595032230 -1.048688e-02 1.798747e-02 -4.132257e-04
## G35442 -0.0051958499 0.0319870391 5.041723e-02 4.850389e-02 3.188549e-02
## G35476 0.0241066002 -0.0718475690 7.081826e-03 3.819293e-02 1.156543e-01
## G35515 0.0607368389 0.0192235606 1.915736e-02 -5.656142e-02 7.458473e-05
## G35351 -0.0296670555 -0.0178072246 4.504058e-02 -5.152855e-02 -1.237901e-01
## G35484 0.0420517022 0.0507868213 -1.481130e-03 -7.843535e-02 5.834298e-02
## G35495 0.0238683314 -0.0375583710 1.084955e-02 -4.977999e-02 6.822991e-02
## G35473 0.0183374303 0.0457775733 5.786828e-03 -6.208727e-02 5.501685e-02
## G35418 -0.0173927317 -0.0196768844 2.982081e-02 -1.440500e-02 -2.346930e-02
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## G35532 0.0700158957 -0.0111322991 1.929661e-02 2.599882e-03 -3.182213e-02
## G35537 0.0226004023 0.0261885492 9.685634e-03 3.346538e-02 5.779790e-02
## G35520 0.0103392242 -0.0595996787 -2.888900e-02 1.054843e-01 -3.144571e-02
## G35370 0.0726939424 0.1467484782 1.631679e-01 -7.998743e-03 -6.167374e-02
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## G35417 -0.0319739332 0.0441846136 1.284764e-03 -2.068269e-02 4.597873e-02
## G35465 -0.0013058939 -0.0933935699 3.279072e-02 6.933506e-02 -1.984706e-02
## G35350 0.0615619654 0.0385266649 3.595158e-02 -2.643903e-02 1.681528e-03
## G35421 0.1097682699 -0.0072833295 4.554368e-02 4.130221e-02 -7.609672e-02
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## G35444 0.0707052071 0.0161731020 -4.554996e-03 1.771835e-03 -2.118786e-02
## G35443 -0.0114337226 0.0357548941 5.200547e-02 6.450711e-02 -1.240115e-02
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## G35524 0.0074155630 0.0037607259 -1.242741e-02 4.327779e-02 -6.387266e-02
## G35394 0.0773079722 0.1090230329 1.755527e-02 -2.260241e-02 -3.138502e-02
## G35359 -0.0204243601 0.1364085616 -1.335639e-01 -3.380189e-02 -1.061106e-01

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## G35397 -0.0290210525 0.0790502639 -6.084870e-02 2.211754e-02 3.715196e-03
## G35462 -0.0226534823 0.0434220788 1.257575e-01 1.049134e-02 1.370652e-01
## G35392 -0.0021620263 0.0243217964 1.899270e-02 -3.621682e-02 -1.014943e-01
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## G35497 -0.0085707549 0.0047243019 2.353511e-02 -5.961785e-02 7.260010e-02
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## G35366 0.0098741982 0.0335664278 2.769677e-02 -2.201772e-04 -1.198430e-02
## G35530 -0.0297740050 -0.0546401860 1.972888e-02 5.228894e-02 2.040662e-02
## G35512 -0.0056105306 0.0367913488 9.703764e-02 4.762155e-03 1.095688e-02
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## G36196 0.0839829273 0.0691962786 7.685585e-02 9.958106e-02 6.843673e-02
## G36219 0.1711834667 -0.0452409184 1.811782e-02 -3.409325e-02 2.265167e-02
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## G36225 0.0370353239 0.0356719244 3.527848e-02 4.986821e-03 -9.334891e-03

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##	G36259	-0.0583567409	-0.0061457729	-1.347996e-01	1.110017e-02	-2.969785e-02
##	G36229	0.0784785411	0.0723273114	9.446818e-04	-3.006886e-02	7.959523e-02
##	G36155	0.0099282276	-0.0068077099	5.218115e-02	-9.557717e-02	5.661404e-02
##	G36251	0.0849836079	0.0482143006	9.077534e-02	1.171004e-02	-5.896039e-02
##	G36297	0.0759597365	-0.0044324460	4.417746e-02	-1.028348e-02	-3.582352e-02
##	G36170	-0.0215395748	-0.0268636144	-5.538922e-02	-8.614371e-02	4.846838e-02
##	G36241	0.0353497022	-0.0303984421	-1.191992e-01	-9.776328e-03	6.730208e-02
##	G36224	0.0325770919	0.0965512900	-1.496312e-02	3.362206e-02	-1.962243e-02
##	G36169	-0.0190125099	-0.0394265515	-3.816564e-02	-4.618664e-02	8.944843e-02
##	G36266	0.0077298517	-0.1254121036	-2.297474e-03	4.589011e-02	-8.072274e-03
##	G36164	0.0385925488	0.0615654813	9.932740e-02	-1.469071e-02	4.175942e-02
##	G36215	-0.0098723977	-0.0429224850	3.369517e-02	2.394018e-02	1.879803e-02
##	G36195	-0.0146525992	0.0057525431	6.032641e-02	2.391419e-02	9.476855e-02
##	G36205	-0.0209711779	-0.0054435800	-6.462636e-02	-3.318390e-02	2.255616e-02
##	G36246	-0.1134333325	-0.0757174748	-5.044332e-02	-1.254124e-01	-6.176676e-02
##	G36150	-0.1073551868	0.0144168006	1.602556e-02	-3.563851e-02	-2.772829e-02
##	G36237	0.0223355242	-0.0766040556	-7.153640e-02	-5.852331e-02	-4.850210e-02
##	G36148	0.0344737926	0.0119146375	2.703920e-03	-4.121702e-02	-6.759077e-02
##	G36213	-0.1729685309	-0.0285987143	4.336186e-02	5.819738e-02	6.744672e-02
##	G36232	0.0201143991	0.0239833858	2.162390e-02	1.181015e-01	-4.387067e-03
##	G36240	-0.1071670388	-0.0886486101	3.391300e-02	-4.478161e-02	4.499831e-02
##	G36249	-0.0646794576	-0.0546889986	3.655879e-02	2.261351e-02	-4.152344e-02
##	G36298	0.0275561148	0.0667510048	-9.378377e-02	-2.829882e-02	-3.475383e-02
##	G36176	-0.1014855984	0.0539510280	3.183994e-02	9.651325e-04	-2.594987e-02
##	G36214	-0.0427989804	0.0209863630	1.717875e-02	-3.631578e-02	6.900305e-02
##	G36230	0.0033380022	0.0174641342	2.517786e-02	-8.241715e-03	4.447572e-03
##	G36320	-0.0342941403	0.0116997912	3.190422e-02	5.118472e-02	-1.227261e-03
##	G36245	-0.0755303854	-0.0852654798	-3.169395e-02	-9.524993e-02	7.842090e-03
##	G36161	0.0616468495	-0.0132206162	2.690200e-02	-1.952509e-02	4.476673e-02
##	G36172	0.0978581411	-0.0234550266	2.634760e-02	-1.001588e-01	-5.437619e-02
##	G36212	-0.0498120131	0.0025204062	-2.520553e-02	-5.840331e-02	6.806846e-02
##	G36180	-0.0195124144	0.0465472474	5.766556e-02	5.293305e-02	3.408251e-02
##	G36153	-0.0761773877	0.0457153786	9.740933e-02	-3.123513e-02	3.238624e-02
##	G36210	-0.1084548406	-0.0041875873	5.162438e-02	1.315200e-01	4.316955e-02
##	G36303	0.0259544877	-0.0343301842	3.464563e-02	-1.366665e-01	1.149665e-01
##	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
##	G36158	0.0587862561	0.0343246171	-1.106164e-01	5.178995e-02	5.702945e-04
##	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
##	G37035	-0.0340099144	-0.0855440542	-0.0155439048	1.418965e-03	-5.251945e-02
##	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
##	G37030	-0.0772334007	-0.0374431071	-0.0258441012	2.683776e-02	1.810950e-02
##	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

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## 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
## G36930 0.1006005731 -0.1072562805 -0.0053956550 -6.510394e-02 -7.031821e-02
## G36935 0.0219081323 0.1111789006 -0.0031556174 -1.654765e-02 -2.106250e-02
## 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
## G36905 -0.0490744534 -0.0694105219 0.0841780446 -2.265847e-02 -3.092479e-02
## 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
## G36966 0.0210241829 -0.0164775209 0.0089082293 -4.045449e-02 -6.846021e-02
## G36936 -0.0041049361 0.0003254382 0.0484688741 6.507108e-02 6.369532e-03
## G37015 -0.0868157640 0.0429072277 0.0177114272 4.960078e-02 1.654798e-02
## G37034 -0.0020661566 0.0335257858 -0.0449389430 -9.326956e-02 3.821346e-02
## G36953 -0.0984723478 0.0866292366 0.0205473182 -4.173184e-02 9.109919e-02
## G36974 0.0090558898 -0.0741655920 -0.0439641117 4.167310e-02 3.443615e-02
## G37039 -0.0684159369 0.0012559616 -0.0591627669 3.004141e-02 -1.913107e-02
## G36933 0.0763053466 -0.0272432443 0.0355349951 -2.635252e-02 -9.283525e-02
## 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
## G36998 0.0869175892 -0.0066338584 0.0461345998 -4.712808e-02 -1.879988e-02
## G37045 0.0789318867 -0.0978379463 -0.0927184539 -4.987771e-03 -1.199001e-01
## G37049 0.0077561088 -0.0858288461 -0.0487040334 -4.805476e-02 -7.936166e-02
## G37019 -0.0487173289 0.0734322510 -0.0098166274 -5.518388e-03 -1.244045e-02
## G36988 -0.0663274695 -0.0374430124 0.0483245575 9.647799e-02 -1.909756e-02
## G37037 0.0448842686 -0.0141186744 -0.0429010679 -1.531846e-01 -3.845457e-02
## G37005 0.0221384387 -0.0040073188 -0.0080646510 3.636742e-02 -4.723989e-03
## G36928 0.1214339709 -0.1352157970 0.0123273932 -3.550069e-02 1.295938e-01
## G36923 -0.0525764009 -0.0872765297 -0.0550052721 -4.655657e-02 2.976290e-02
## G37033 -0.0447929135 -0.0594392917 -0.0303908874 3.321593e-02 -5.136751e-02
## G37017 -0.0407447415 0.0927504400 0.0114310817 -7.438400e-02 5.411870e-02
## G37012 -0.0204021911 -0.1158069802 -0.1222034173 6.586077e-02 2.510514e-02
## G36952 -0.0379862850 0.0353825438 0.0121126195 -6.870332e-02 8.039001e-03
## G37011 -0.0851074901 -0.1205878383 -0.0164178323 1.027995e-01 -4.413358e-02
## G36957 -0.0028988904 0.0203234013 -0.0010075525 5.051976e-02 -3.159664e-02
## G37021 -0.0343700364 -0.0932473070 -0.0138242609 -2.942902e-02 -3.999569e-02
## G36937 -0.0478105984 -0.0201501227 0.0992014054 8.378183e-02 -2.388628e-02
## G37047 0.0179081934 -0.0066844303 -0.0122302337 -1.400522e-01 -1.343835e-02
## G37032 0.0481997535 -0.0633974690 -0.0050537891 1.992396e-02 4.346039e-02
## G36932 -0.0154792453 -0.0007745556 -0.0457379344 8.084551e-03 9.170270e-03
## G37043 0.0172677213 -0.0672233070 0.0384824428 1.204624e-02 2.722815e-04
## G37054 -0.0813061789 -0.1069878502 -0.0368343864 -3.307598e-03 1.528212e-02
## G36948 -0.0473638314 0.0110254365 -0.0044680308 3.406210e-02 -4.740962e-02
## G36972 0.0037642582 -0.0303727790 -0.0004696901 -3.017902e-02 2.637861e-03
## G36968 -0.1424752848 0.0316617134 -0.0362072976 -6.646856e-02 -7.117133e-02
## G36911 -0.0174160648 0.0111162785 0.0397072433 -5.127752e-04 -3.596990e-02
## G36987 -0.0248962299 -0.0279355889 0.0066922780 4.647896e-02 7.282843e-03
## G37042 -0.0530025356 -0.1532214160 0.0028978954 8.725347e-02 4.149344e-04
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##	G37040	0.0028347445	-0.1676229395	0.0037115093	1.107448e-03	3.812383e-02
##	G37027	-0.0610161680	-0.0537731711	0.0676539916	6.314032e-02	-8.094394e-02
##	G37024	-0.1084503004	0.0101088869	0.0526485019	-3.357839e-02	-9.654695e-02
##	G37023	-0.0215006059	0.0071232179	-0.0163228244	-4.676020e-02	-9.434617e-02
##	G37036	-0.0234381360	-0.0969486379	0.0038699589	5.472306e-02	-7.924817e-02
##	G37026	-0.0576696779	-0.0803021853	-0.0538982303	4.336044e-02	-1.995269e-02
##	G37050	-0.0984063544	-0.0866031145	0.0033398745	8.982700e-02	-4.078233e-02
##	G36973	-0.0676603649	-0.0706166296	0.0509754920	-1.425678e-02	2.762024e-02
##	G36991	0.0717834412	-0.0252542076	-0.0387218910	-7.346275e-02	-5.693420e-02
##	G36904	-0.0938103960	-0.0143256160	0.0462417004	-7.197445e-02	-2.085707e-02
##	G36958	-0.0556326309	-0.0312622344	-0.0408467485	-3.771027e-02	6.425605e-02
##	G36993	-0.0422199128	-0.0793080346	-0.0272312105	9.368987e-02	-4.430497e-03
##	G37020	0.0768521593	0.0298958604	-0.0895604634	-1.463262e-02	-5.243962e-02
##	G36910	-0.0017810181	0.0321027470	-0.0169631173	-4.632490e-03	-2.349674e-02
##	G36927	0.0453642393	0.0088938096	-0.0255465331	-1.804364e-02	-9.242024e-02
##	G37018	-0.0969964703	-0.0705439544	0.0110821310	-8.849109e-02	-1.492567e-01
##	G37048	0.0534083746	-0.0442799427	-0.0375587545	1.616793e-02	-3.490747e-02
##	G36940	-0.0829202798	0.0161894067	-0.0367586695	-7.438476e-02	-1.645136e-02
##	G37013	0.0979448803	0.0456218624	-0.0963401803	3.042206e-02	-6.763986e-02
##	G37038	-0.0343103478	0.0168726141	-0.0203533748	-3.176835e-02	-8.873004e-02
##	G36938	-0.0655095197	-0.0397631289	0.1130098360	8.792608e-02	-4.467803e-02
##	G37022	0.0161410515	-0.0772782405	0.0012422618	5.397397e-02	-3.052961e-02
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##	G35535	-0.0112828584	0.0022935219	0.0161982278	-2.213185e-02	6.637716e-03
##	G35361	-0.0722006320	-0.0329151241	0.0943112031	7.956637e-02	8.290669e-02
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##	G35433	0.0105792519	0.0376739202	0.0560207706	-3.734428e-02	1.698729e-02
##	G35528	0.0124087468	-0.1867190726	0.0022338293	-2.703042e-02	2.151141e-02
##	G35381	-0.0617820376	-0.0103438976	-0.0239268435	-3.776413e-02	4.769266e-02
##	G35416	-0.0124080108	-0.0612633799	0.0439838974	7.152102e-02	-1.969178e-02
##	G35477	-0.0208291834	-0.0732777285	0.0554439042	-5.357585e-02	4.272018e-02
##	G35390	0.0559729001	0.0761234544	0.0366648721	-1.074791e-01	4.985790e-02
##	G35536	0.0251906823	0.0146877917	0.0074266539	-3.439815e-02	3.944554e-02
##	G35514	0.0449679189	0.0169573139	0.0598962654	-1.854796e-02	-2.806213e-02
##	G35525	0.0022058602	-0.0764956102	0.0240587107	3.925439e-03	-1.628620e-02
##	G35395	0.0226613259	-0.0410422264	0.0116169244	1.204727e-02	-6.479061e-02
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##	G35391	0.0526459355	-0.0303466851	-0.0955482789	-3.482386e-02	6.871192e-02
##	G35437	-0.0196885201	-0.0599081937	-0.0363913486	1.799376e-02	-9.022536e-03
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##	G35476	-0.0243938801	-0.0055899307	0.0634921547	-3.866372e-02	1.183813e-01
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## G36159 0.0034289581 -0.0315155444 0.0197355816 3.862191e-02 -6.076627e-02
## G36234 -0.0015721102 -0.0000642779 0.0595298550 -9.230542e-02 -7.519271e-02
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## G36257 0.0242601247 0.0734686911 0.0033469652 6.893010e-02 -5.069894e-02
## G36216 -0.0399607172 0.0647009442 0.0447567365 1.968333e-02 2.680158e-02
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## G36146 0.0027433167 0.0173193126 -0.0453946908 6.228776e-02 1.426199e-02
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##	G36142	-0.0136995412	0.0194784238	-0.0558925007	-7.481771e-02	9.586939e-03
##	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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##	G36290	0.0767150057	-0.0334516031	0.0577687420	4.757510e-02	-3.776880e-02
##	G36274	-0.0040416476	-0.0057625415	0.0270508369	2.862496e-02	-8.851059e-02
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##	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
##	G36921	2.913195e-02	-2.920582e-02	0.1307168358	3.653671e-02	-3.969935e-02
##	G37004	-4.366435e-02	4.354402e-02	0.0598416360	-1.286998e-02	-4.530427e-02
##	G36966	5.667605e-02	-9.299526e-02	0.0171853207	-5.118179e-02	-2.507147e-02
##	G36936	1.499969e-02	6.849666e-02	0.0248966426	-4.707030e-02	6.422600e-02
##	G37015	-4.266685e-02	-2.294492e-03	-0.0180078031	-7.708698e-02	1.824519e-02
##	G37034	-1.368823e-01	5.949802e-02	-0.0973802534	-2.996280e-02	-6.012313e-03
##	G36953	4.869154e-02	-2.617948e-02	0.0511109363	-6.354500e-03	-7.634958e-02
##	G36974	-4.022263e-02	-4.576389e-02	-0.0195363871	-6.257843e-02	-2.666056e-02
##	G37039	-3.283366e-02	-1.836254e-02	-0.0486022222	-2.442347e-03	-9.522633e-03
##	G36933	6.632249e-02	3.463525e-02	-0.0139905532	-6.685582e-02	-2.840939e-03
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## G37053 8.363154e-03 4.360162e-03 -0.0233712655 -2.252507e-02 -1.523042e-02
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## G36988 -3.174980e-02 -2.206174e-02 0.0295322245 -2.292354e-02 -3.740515e-02
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## G37033 -5.987248e-03 -1.824946e-02 -0.0351486746 -2.732623e-02 9.401373e-03
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## G37012 -1.039344e-01 1.968194e-02 0.0317343362 1.122247e-01 4.485266e-03
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## G37011 8.178452e-03 -2.577883e-02 0.0628960096 -2.732152e-02 7.299393e-04
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## G37050 2.497922e-02 -2.015104e-02 0.0473787321 -3.934268e-02 -2.385625e-03
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##	G36183	-1.014348e-02	1.643493e-02	0.0533315016	-8.940239e-03	8.178248e-02
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##	G36322	6.781041e-02	8.115467e-02	-0.0349152090	3.201546e-02	-2.668850e-02
##	G36182	-5.088825e-02	2.533096e-02	0.0078495395	-4.934335e-02	-2.051605e-02
##	G36256	2.993173e-02	3.873396e-02	-0.0645641927	1.708068e-02	-2.264118e-02
##	G36163	-4.914804e-02	1.540631e-02	-0.0785741596	-4.395596e-02	-3.664456e-02
##	G36287	-1.406550e-02	-6.236418e-02	0.0160806694	5.497159e-03	-4.014052e-02
##	G36157	3.508806e-03	2.796444e-02	-0.0568198959	-3.920603e-02	5.056752e-02
##	G36262	5.271842e-02	3.336843e-02	0.0081321737	-2.056180e-02	6.905312e-02
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##	G36162	8.184419e-02	-1.168661e-03	-0.0709679926	-7.682639e-02	-2.843722e-02
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##	G36318	-3.642109e-03	6.730312e-02	0.0378784179	8.310448e-02	-1.344677e-02
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##	G36244	5.699799e-02	1.091673e-02	-0.0238565339	2.725058e-02	-4.395920e-02
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##	G36264	1.029588e-02	2.381817e-02	0.0480486404	1.562544e-02	-3.095663e-02
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##	G36257	3.441605e-02	-5.859373e-02	0.0062126616	1.009093e-02	-6.719299e-02
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##	G36208	1.732147e-02	-8.487232e-02	0.0179417592	-4.938290e-02	-2.991360e-02
##	G36309	-1.890812e-04	2.815731e-02	0.0287919571	-1.524213e-02	2.618427e-02
##	G36146	9.634013e-03	7.252545e-02	-0.0154860558	7.729068e-02	1.407866e-02
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##	G36284	2.264936e-02	-2.480150e-03	0.0275829705	-5.090616e-02	-4.033945e-02
##	G36291	3.614893e-02	-8.498877e-02	0.0026450236	8.743814e-02	2.583129e-02
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##	G36138	-6.335375e-02	1.343743e-02	0.0372504973	8.198185e-02	-1.082843e-02
##	G36203	-1.573427e-02	6.248737e-03	-0.0103860310	2.876356e-02	1.317661e-02
##	G36282	4.566397e-02	-5.359019e-02	-0.0388566693	-1.312654e-02	6.213531e-03
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##	G36314	1.109328e-01	9.188313e-02	-0.0020573668	4.456807e-02	-4.027685e-02
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##	G36147	-8.673933e-02	-4.769315e-02	0.0027841356	3.155858e-02	-2.435095e-03
##	G36235	7.015097e-03	3.574301e-02	-0.0002138956	5.267606e-02	-3.112484e-02
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##	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
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##	G37029	0.0622701258	-0.0024196285	8.030729e-02	0.0575008322	1.915299e-02
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## G37031 -0.0234098761 0.0256607884 -1.167670e-03 0.0206519078 -1.151000e-03
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## G37010 -0.0074381930 0.0420106051 -1.136344e-01 -0.0563031184 -1.432629e-03
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## G37051 -0.0495087736 0.0458971874 2.693762e-02 0.0186815793 -1.349036e-01
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## G37024 0.0121128994 0.1252554412 1.154450e-01 0.0696626935 1.075462e-01
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## G36259 0.0355303092 0.0110224770 -2.104981e-02 -0.0842194475 -8.818023e-02
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## G36155 -0.0403001131 0.0009252104 -6.946386e-02 -0.0445208429 -1.655920e-02
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## G36170 0.0087574820 0.0125220409 -1.366100e-01 -0.1103211348 -2.007465e-02
## G36241 -0.0803221827 0.0138972349 -4.156281e-02 0.0164285695 -2.640359e-02
## G36224 0.0439626964 -0.0429031571 1.157042e-02 0.0723453285 -9.874489e-04
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## G36195 0.0451380927 -0.0691322189 -1.244159e-02 0.0070573992 -4.365906e-02
## G36205 0.0210424585 -0.0520241884 -2.459379e-02 -0.0053455144 -1.959470e-02
## G36246 -0.0357490035 0.0341938841 4.395866e-02 0.0279627166 9.368550e-02
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## G36237 -0.0039324535 -0.0524524948 -8.191939e-02 -0.0418044366 -5.007946e-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
## G36249 -0.1063555610 0.0151099581 3.753031e-02 0.0392171906 -1.405480e-02
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## G36230 0.0013105140 0.0087130019 -2.869163e-02 0.0323190632 -3.975755e-02
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## G36245 -0.0017619112 0.0096754813 6.569380e-02 0.0912144698 3.304525e-02
## G36161 0.0050325008 0.0086053133 1.452557e-02 0.0304618550 -6.715480e-02
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## G36153 -0.0600356029 -0.0850767663 1.233455e-02 -0.0201728566 -1.167929e-02
## G36210 0.0472299039 0.0392136342 5.971133e-02 0.0909034514 -2.058896e-03
## G36303 0.0306549070 0.0583007096 -6.353570e-02 0.0347154598 -9.118592e-02
## G36193 -0.0122866119 0.0397554711 2.335351e-02 -0.0349175056 7.720052e-04
## G36151 -0.0055380336 0.0485528024 9.242504e-03 -0.0887191185 4.333801e-02
## G36248 0.0047833485 0.0016788232 5.777019e-02 0.0213300196 4.024359e-02
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## G36267 0.0066738171 -0.0778885471 1.211130e-03 -0.0283717414 -1.116615e-02
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##	G36206	0.0039357010	-0.0308063420	-2.328281e-03	0.0104553186	-3.862500e-02
##	G36257	-0.0261019359	-0.0324090961	-1.127643e-02	-0.0139919182	-1.361358e-01
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##	G36208	0.0535797097	0.0170846744	-1.505507e-02	-0.0342706500	-4.342479e-03
##	G36309	0.0063618487	0.0039513620	1.455860e-02	0.0067243157	-3.222681e-02
##	G36146	-0.0232852608	-0.0024074727	7.256400e-02	-0.0639180386	-6.706570e-03
##	G36192	-0.0813117409	0.0080035093	5.481323e-02	-0.0173561244	6.650488e-03
##	G36284	-0.0077795520	-0.0476887555	-6.698413e-02	-0.0035644459	1.099894e-02
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##	G36142	0.0868968242	0.0229032168	3.339987e-02	-0.0212067762	3.784732e-02
##	G36138	0.0798000916	-0.0291405882	5.362962e-02	0.0338596137	-2.358773e-02
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##	G36282	0.0902239258	0.0051145942	-4.381349e-02	0.0376319760	-1.405529e-02
##	G36290	-0.0066745879	0.0222219997	3.900178e-02	0.0190458387	2.822983e-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
##	G37016	3.149268e-02	1.062024e-01	-1.177892e-02	-2.807287e-02	7.666695e-03
##	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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##	G36984	7.877428e-02	5.305554e-02	-1.073996e-02	1.473107e-02	-2.434877e-02
##	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
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##	G37014	-9.488319e-05	5.687208e-03	-6.230345e-02	-3.042701e-02	-4.056227e-02
##	G37010	-2.574300e-02	-8.819206e-03	3.862723e-02	-8.619263e-02	-1.391389e-02
##	G36944	1.109101e-02	8.101519e-02	-3.870326e-02	-2.463055e-02	4.782673e-02
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##	G37025	-2.888413e-02	3.413427e-02	2.852346e-02	2.170257e-02	-4.549014e-02
##	G36930	5.454121e-02	-7.212444e-02	8.389317e-03	-1.249934e-02	2.506857e-02
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##	G37041	4.010483e-02	7.003245e-02	6.470937e-02	1.301159e-02	-1.668952e-02
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##	G36248	-5.284261e-02	1.950172e-03	-4.541412e-02	-3.465111e-02	2.861644e-02
##	G36239	5.887482e-02	4.036119e-02	2.671375e-02	-2.472049e-02	2.973035e-02
##	G36270	-3.959667e-02	5.695429e-02	-6.980586e-03	2.241157e-02	-2.539684e-02
##	G36158	2.241402e-02	5.627480e-04	1.423124e-02	-3.135210e-02	6.038517e-03
##	G36233	-1.477304e-04	1.940749e-02	4.197058e-02	8.188682e-03	1.141823e-02
##	G36311	-1.187670e-02	1.359063e-02	-2.190568e-02	-1.779346e-02	6.500508e-03
##	G36175	1.520186e-02	1.828843e-02	-1.363710e-03	-3.989367e-02	-2.927480e-02
##	G36267	3.381029e-02	6.161016e-02	6.429779e-03	1.294438e-02	1.561690e-02
##	G36183	1.003178e-01	2.217313e-02	4.283864e-03	-3.427218e-02	2.080882e-02
##	G36227	1.662751e-02	4.694789e-02	5.195012e-02	7.586349e-02	-4.237553e-02
##	G36322	-4.996526e-02	2.149593e-02	-4.855349e-02	3.966581e-02	5.310959e-02
##	G36182	5.059436e-02	5.136347e-02	-6.598432e-02	4.484820e-02	-1.073263e-02
##	G36256	-4.663026e-02	-3.639270e-02	-3.299092e-02	-3.257060e-02	-7.654849e-02
##	G36163	6.182620e-02	-1.837145e-02	4.058114e-03	2.805639e-02	8.589869e-02
##	G36287	4.136146e-02	3.297237e-02	7.590324e-02	4.830562e-02	2.671295e-02
##	G36157	-5.469470e-03	-2.445459e-02	-5.263581e-02	4.372834e-02	-2.021971e-02
##	G36262	-1.578844e-02	-7.497125e-02	4.396530e-02	-8.939812e-02	-2.877990e-02
##	G36200	-8.175586e-02	1.251615e-02	2.038819e-02	7.100392e-02	1.593723e-03
##	G36160	-2.213435e-04	-1.509623e-02	-3.394801e-02	1.831865e-02	1.664114e-02
##	G36185	-2.230989e-02	-4.025883e-03	4.843048e-02	-7.714886e-02	-1.941703e-02
##	G36162	1.677930e-02	-7.754127e-04	2.484210e-02	8.526086e-03	2.441695e-03
##	G36204	-8.986495e-02	-3.228902e-02	-4.522884e-02	1.475595e-02	-1.409765e-03
##	G36318	-6.191950e-02	5.157423e-02	-9.534065e-03	-1.913865e-02	-4.203526e-02
##	G36194	-2.127736e-02	-3.869399e-02	1.760396e-03	-4.377188e-03	-2.717237e-02
##	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
##	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
##	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

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## 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
## G37047 -0.0285046001 -2.163687e-02 2.246845e-02 -4.702046e-03 2.544046e-02
## G37032 -0.0305253975 5.611525e-03 4.158927e-02 2.742826e-02 -4.195336e-02
## G36932 0.0246558409 -2.799906e-02 -2.350475e-02 5.677153e-03 3.187295e-02
## G37043 0.0309573030 -3.347040e-04 -3.525150e-02 3.058900e-02 -8.850266e-03
## 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
## G36927 -0.0063801928 2.281594e-02 4.706249e-02 -4.513383e-02 7.655157e-03
## G37018 -0.0368563521 -8.226587e-02 -7.441359e-02 1.947715e-02 5.502292e-02
## 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
## G37038 0.0071857948 -6.184695e-02 2.741288e-02 7.516623e-02 -1.152639e-01
## 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
## 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
## G35364 0.1475188523 2.341679e-02 2.585761e-02 1.680159e-02 -3.298277e-02
## 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
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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

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## 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
## G35470 -0.0142068578 1.091917e-02 2.039322e-02 -4.735639e-02 -2.581542e-02
## G35403 -0.0366208180 8.170288e-03 -4.516058e-02 -3.153554e-02 -3.657611e-02
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## G35442 0.0076944609 -7.676435e-02 -3.713650e-02 -1.265084e-02 -1.456046e-02
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## 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
## G35517 0.0047002293 7.473937e-03 7.133976e-02 -9.826240e-03 -1.511332e-02
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## 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
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##	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
##	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
##	G36151	-0.0466386396	1.665278e-02	-2.564492e-02	-7.950580e-03	-1.297491e-02
##	G36248	-0.0190266019	4.351084e-02	1.779239e-02	-1.826453e-02	1.024216e-02
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##	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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##	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
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##	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
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##	G36262	0.0081528724	-9.581675e-02	8.432791e-02	5.367709e-02	5.165596e-02

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## G36160 0.0228462439 4.899005e-02 -3.098643e-02 -2.007716e-03 -7.761439e-02
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## G36209 -0.0188008834 -1.874581e-02 5.314385e-02 8.372315e-02 2.048708e-02
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## G36229 3.676956e-02 -3.111417e-02 -1.667309e-02 0.0314577868 -4.411460e-03
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## G36284 -2.669678e-03 -1.622713e-02 9.759951e-03 -0.0529885019 -4.033991e-02
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##	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
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##	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
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##	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
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##	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
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##	G37015	-2.403824e-02	-2.208078e-03	3.112464e-02	-0.0263017395	-1.879013e-02
##	G37034	1.835250e-03	-1.245039e-02	1.012320e-02	-0.0152383574	-5.377917e-02
##	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
##	G36933	1.100295e-02	-6.159213e-03	-1.953465e-02	0.0145552939	-4.248774e-02
##	G37052	2.476030e-03	3.577577e-02	-3.225921e-02	-0.0486184557	4.356041e-02
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##	G37046	-3.485726e-03	-3.323723e-02	2.732260e-02	-0.0296857593	-4.483197e-02

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##	G36998	4.759809e-02	4.244934e-02	5.513975e-03	0.0450541615	-9.746596e-02
##	G37045	3.093259e-02	-4.354619e-02	-3.100249e-02	-0.0242869105	5.011047e-03
##	G37049	3.414390e-02	-3.511483e-03	-3.144754e-02	0.0832169905	7.308779e-02
##	G37019	5.967537e-02	1.211988e-02	-2.651061e-02	-0.0192197257	-9.360695e-03
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##	G36928	4.915507e-02	1.557512e-02	-2.994265e-02	-0.0602673412	7.031994e-02
##	G36923	2.718638e-02	-5.482449e-02	-5.151890e-02	-0.0464933819	-2.645155e-02
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##	G36952	6.542585e-02	-7.430047e-03	-3.397897e-02	0.0074394568	8.804195e-04
##	G37011	-2.925856e-02	4.948127e-02	-2.241995e-02	-0.0382548903	-7.019647e-03
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##	G36972	1.699770e-02	-4.881629e-02	2.195391e-02	0.0294547758	-3.565613e-02
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##	G36911	1.416914e-02	-1.396120e-03	-5.303038e-02	0.0609413745	-1.239066e-02
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##	G37038	2.220181e-02	-2.034081e-03	-2.210539e-02	0.0542033817	-4.028484e-03
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## G36244 -3.275634e-02 -1.753667e-02 1.406767e-03 -0.0083809802 7.313321e-03
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## G36317 -1.331840e-02 -9.265930e-02 1.063055e-02 -0.0743702693 -4.004304e-02
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## G36290 1.791742e-02 -1.450774e-03 2.076154e-02 0.0770131519 -6.437890e-02
## G36274 2.825317e-02 -3.057232e-02 1.482389e-02 -0.0200700664 -5.375881e-02
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## G36258 3.807707e-02 -2.073839e-02 -5.633807e-02 0.0041288809 -1.309581e-02
## G36147 -6.094885e-02 -1.022040e-02 7.379595e-02 0.0384456561 -1.610858e-02
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##	G36972	1.621266e-03	8.072740e-02	-6.988251e-03	1.028587e-02	1.261636e-02
##	G36968	-9.544400e-03	-1.749108e-02	-1.658005e-02	-3.918296e-03	-3.386625e-02
##	G36911	3.938891e-02	1.508935e-02	-8.835249e-03	4.207844e-02	-5.859498e-02
##	G36987	1.428269e-02	-5.752138e-02	6.744996e-02	7.070368e-05	1.971416e-02
##	G37042	-1.629412e-02	-4.037001e-02	-4.246341e-02	6.470141e-02	3.066490e-02
##	G36960	1.075099e-03	4.923255e-02	1.827414e-02	4.953739e-02	-8.015194e-03
##	G37040	2.409135e-02	-1.969961e-02	1.515246e-03	7.663641e-02	8.119699e-02
##	G37027	-2.612739e-02	1.029530e-02	-3.941237e-02	1.788779e-02	-2.279074e-02
##	G37024	-1.119893e-03	5.713229e-02	7.407667e-03	2.578808e-02	3.410971e-02
##	G37023	4.788407e-02	3.743143e-03	-3.988201e-02	-5.101005e-02	2.203087e-02
##	G37036	2.416571e-02	9.224107e-02	5.408741e-03	-6.884218e-02	-2.440626e-02
##	G37026	-2.536486e-02	-8.370346e-03	-2.837062e-02	3.636860e-02	7.190965e-03
##	G37050	-2.820827e-02	-1.737922e-02	4.676452e-02	1.663198e-02	1.209620e-02
##	G36973	1.966710e-02	6.532135e-02	4.865619e-03	8.448553e-02	6.520627e-02
##	G36991	3.054743e-02	-4.577431e-03	-6.928524e-03	1.377807e-02	-4.702746e-02
##	G36904	-2.695745e-02	1.260908e-02	5.386337e-05	1.168751e-02	-2.643194e-02
##	G36958	-2.881417e-02	3.139026e-02	-8.575216e-04	-4.084639e-02	-3.910397e-02
##	G36993	3.072578e-03	9.954081e-03	-1.295503e-02	4.204581e-03	4.228067e-03
##	G37020	1.592858e-02	-1.832002e-02	9.912903e-04	5.112388e-02	-3.907166e-02
##	G36910	-5.439783e-02	1.786327e-02	-1.176563e-02	3.856727e-02	-2.371903e-02
##	G36927	-1.565585e-02	1.932033e-02	5.796299e-04	-2.970582e-02	6.480901e-03
##	G37018	1.526226e-02	3.897306e-02	7.811780e-02	-4.138630e-02	1.668841e-02
##	G37048	4.127594e-02	1.856795e-02	1.501894e-02	1.675813e-02	1.554357e-02
##	G36940	1.646714e-02	-9.487655e-03	3.691809e-02	-2.265482e-02	3.434507e-02
##	G37013	3.784250e-02	-8.828351e-03	-6.904612e-02	3.195011e-02	-1.365803e-02
##	G37038	6.313268e-03	-4.134491e-03	-5.182943e-02	-1.563034e-02	2.242734e-02
##	G36938	2.780392e-03	3.758371e-02	-3.309228e-02	9.275155e-03	-2.028271e-02
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##	G35534	1.937346e-02	1.223151e-02	-6.844580e-02	2.076876e-03	2.535530e-02
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##	G35361	6.845111e-02	-6.055551e-03	-4.745695e-02	6.306258e-02	5.216926e-03
##	G35364	-5.250333e-02	6.188743e-02	-1.840055e-02	1.858854e-02	7.936432e-03
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##	G35381	3.154777e-02	2.268095e-02	4.443423e-02	6.437852e-02	3.146534e-02
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##	G35391	-3.290351e-02	3.991997e-02	-8.005403e-03	2.618317e-02	-6.683994e-02
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##	G35403	2.413563e-02	8.781083e-03	6.053804e-03	7.192994e-02	5.196913e-02
##	G35424	-1.285898e-02	-4.284285e-02	-6.062624e-02	-9.025022e-02	-2.482727e-02

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## G36245 -1.150843e-02 1.195098e-02 1.909020e-02 2.803234e-02 -4.427457e-03
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## G36172 -4.852944e-03 -8.830854e-03 -2.836382e-02 -2.168838e-02 -4.071891e-02
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## G36239 -3.263551e-02 -4.991521e-03 2.051120e-02 4.597395e-02 2.132384e-02
## G36270 4.379635e-02 1.184157e-02 9.942346e-02 3.934578e-02 3.948929e-03
## G36158 -4.382848e-02 1.421336e-02 -3.501975e-03 1.093322e-02 3.607331e-02
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## G36162 -4.310859e-02 -5.083924e-03 6.475500e-03 3.361035e-02 1.200518e-02
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##	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
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##	G36138	1.822858e-02	2.092539e-02	-4.990681e-03	2.163292e-02	2.402742e-02
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##	G36282	2.843141e-02	-5.442776e-02	2.281274e-02	-3.771694e-02	-7.654319e-03
##	G36290	-7.224598e-02	2.534380e-04	4.664675e-02	-8.770513e-04	5.570994e-02
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##	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
##	G36147	-1.222667e-02	2.104973e-02	7.774417e-03	1.319677e-02	9.122804e-03
##	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
##	G37025	2.506232e-02	1.851057e-02	2.907044e-02	0.0382393931	-4.757507e-02
##	G36930	-1.112472e-02	-4.875764e-02	4.342551e-03	0.0177949211	-4.701277e-04
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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
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##	G36921	1.310540e-02	-1.882745e-02	2.456442e-02	-0.0033808261	1.063114e-02
##	G37004	-9.616088e-03	-1.676557e-02	-1.202703e-02	0.0306838344	2.016955e-02
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##	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
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##	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
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##	G36285	-1.664649e-03	-3.420829e-02	3.134970e-02	-0.0584183481	4.381367e-03
##	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
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##	G36241	-1.097779e-02	-6.948036e-04	9.094101e-02	0.0361264408	-2.007516e-03
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##	G36266	2.157421e-02	-1.821833e-02	3.899284e-03	-0.0226336522	4.106480e-02
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##	G36195	-3.855731e-02	-2.475335e-02	3.734805e-03	-0.0104419939	1.477599e-02
##	G36205	-1.154240e-02	1.305136e-02	1.457823e-02	0.0510935631	-3.988078e-02
##	G36246	5.984823e-03	3.665180e-03	2.811127e-02	-0.0361175168	6.568264e-03
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##	G36237	-3.156847e-02	-2.223878e-02	3.078040e-02	-0.0030346278	-4.776015e-02
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##	G36153	2.347630e-02	-5.008324e-02	-5.537081e-02	0.0187511534	-1.455525e-02
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## G36206 -3.072614e-03 1.001084e-01 -3.962060e-02 0.0528406410 4.967087e-03
## G36257 -9.413721e-03 -3.439564e-02 7.997584e-02 0.0519843976 -3.434779e-03
## G36216 -8.374920e-02 -9.013307e-03 1.622272e-02 -0.0203231958 8.197850e-03
## G36208 -1.743935e-02 2.224968e-02 -4.387878e-03 0.0041620766 -5.375829e-03
## G36309 3.364534e-02 -7.795918e-04 7.557084e-03 0.0148420694 4.811531e-02
## G36146 -1.403761e-03 2.026416e-02 -6.614691e-03 0.0030713015 6.840361e-02
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##	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
##	G37051	-0.0204888717	4.418669e-02	0.0129943915	3.808601e-02	-0.0592914387
##	G36964	0.0214668981	5.868085e-03	0.0070047172	2.672824e-03	0.0202153018
##	G36951	0.0099669583	-8.414208e-03	0.0434230183	3.627826e-02	-0.0440207510
##	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
##	G36992	-0.0099146046	-3.723112e-03	0.0683331426	-3.115807e-02	-0.0149635912
##	G36921	-0.0397852958	-1.517341e-02	0.0137791250	2.608185e-02	0.0314015797
##	G37004	-0.0142749031	-1.945382e-02	0.0239798448	2.446561e-02	-0.0302798182
##	G36966	-0.0175221259	3.858608e-02	0.0356075323	-3.847974e-02	-0.0219263070
##	G36936	0.0234136105	2.283392e-02	0.0014546487	-4.101939e-03	-0.0142180967
##	G37015	0.0067097704	1.627227e-02	-0.0049946267	5.259710e-02	0.0029676987
##	G37034	0.0197568780	-5.810795e-02	0.0630787558	-1.565223e-02	0.0240660490
##	G36953	-0.0441853828	-3.178205e-02	0.0610101667	7.310065e-03	0.0047386753
##	G36974	0.0471104125	-6.050218e-02	-0.0225972674	-1.709347e-02	0.0393558767
##	G37039	-0.0062785244	2.945898e-03	0.0253414508	2.050764e-02	0.0245102067
##	G36933	0.0228338252	-1.138872e-03	0.0373729523	6.185164e-03	-0.0040551022
##	G37052	-0.0156385904	1.010669e-02	-0.0288649210	2.204107e-02	0.0130025377
##	G36925	-0.0466372180	-1.740448e-02	0.0467472333	3.381926e-02	0.0272286510
##	G37046	0.0221788070	2.357463e-02	-0.0242978843	-7.334522e-03	-0.0291400161
##	G37053	0.0136086143	-2.212980e-02	-0.0171699058	3.232308e-02	0.0217005428
##	G36998	0.0201287904	-6.154515e-03	0.0527018541	-2.434170e-02	0.0023357747
##	G37045	-0.0068374367	2.448248e-02	-0.0914982558	-3.293669e-02	0.0037442125
##	G37049	0.0067701416	2.968058e-02	-0.0738852005	-2.003363e-02	0.0174923471
##	G37019	-0.0312205283	-7.520375e-03	-0.0244463464	-4.360510e-02	0.0016400240
##	G36988	-0.0445447897	1.261099e-02	0.0203321964	1.379271e-02	0.0264490976
##	G37037	0.0063538232	-3.906465e-03	-0.0175410649	1.016280e-02	-0.0107654915
##	G37005	-0.0058603091	4.008319e-03	-0.0226176395	-6.602523e-03	0.0003932574
##	G36928	-0.0218444058	-1.118999e-02	0.0264226572	-8.411286e-03	0.0006919469
##	G36923	-0.0068951112	2.053726e-02	0.0264194310	-1.903276e-02	-0.0181163079
##	G37033	0.0318550348	5.499677e-03	-0.0187167178	-4.178392e-02	0.0828283886
##	G37017	0.0054109305	1.233949e-02	-0.0442216545	3.090492e-03	-0.0122567156

##	G37012	0.0271080377	2.087655e-02	0.0078178028	1.238614e-02	-0.0303691144
##	G36952	-0.0422179634	2.590386e-03	0.0364424534	2.914966e-02	-0.0137031783
##	G37011	0.0248518268	-5.096236e-03	0.0628277543	3.884083e-02	0.0635945639
##	G36957	-0.0105746079	2.234443e-03	0.0528141619	4.457017e-02	0.0218326094
##	G37021	-0.0005795439	6.506701e-04	-0.0056043530	-2.962587e-02	0.0453390211
##	G36937	-0.0032564610	6.627212e-04	-0.0206874058	-2.505575e-02	0.0091398919
##	G37047	0.0546145483	1.303742e-02	0.0176848675	4.089382e-02	-0.0165498720
##	G37032	-0.0794027556	-3.347346e-02	-0.0046994124	-7.026684e-03	-0.0035865200
##	G36932	-0.0422913303	2.845092e-02	0.0381725349	-3.971262e-02	-0.0594738757
##	G37043	0.0308582772	-1.059450e-02	-0.0147321949	2.156894e-03	0.0113463788
##	G37054	0.0022374838	2.240935e-02	0.0061061483	-3.755266e-02	0.0065149921
##	G36948	-0.0223703650	1.237277e-02	-0.0239879856	-6.920987e-02	0.0140399073
##	G36972	0.0500535175	-3.734651e-02	-0.0011000912	1.318676e-02	-0.0069548260
##	G36968	-0.0288796413	5.723253e-02	0.0052823995	3.106346e-02	0.0001539233
##	G36911	-0.0937960896	-2.535908e-02	-0.0085120858	-4.534503e-02	-0.0252371591
##	G36987	-0.0190235966	5.493725e-02	-0.0120638050	-1.584839e-02	0.0095022893
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##	G37027	0.0249666768	2.292849e-02	-0.0277538320	-2.532264e-02	0.0386173907
##	G37024	-0.0136110487	1.618294e-02	-0.0413867596	6.901764e-03	0.0303954756
##	G37023	-0.0229541146	-2.246309e-02	-0.0562238441	8.610934e-03	-0.0427268379
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##	G37050	-0.0037744006	6.935648e-03	0.0532774591	2.366535e-02	0.0356051556
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##	G37048	-0.0070539162	6.903341e-03	0.0375408838	4.602455e-02	0.0179137777
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##	G35417	-0.0046184200	2.306935e-02	-0.0263465500	1.496447e-03	0.0039001172
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##	G35386	-0.0074939925	-5.789927e-02	0.0121470371	-3.756712e-02	-0.0337767579
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##	G35490	0.0581612265	-3.032260e-02	-0.0021370391	-3.076985e-02	-0.0104964233
##	G35422	0.0186158969	-2.180365e-02	0.0329527702	-8.461819e-03	0.0007024209
##	G35526	0.0097911240	9.164841e-03	0.0142651779	-8.673962e-04	-0.0135564108
##	G35498	-0.0069716985	2.673669e-02	-0.0131564634	8.209511e-03	0.0227708188
##	G35348	-0.0032177151	1.474805e-02	0.0192561565	-2.461379e-02	0.0170779297
##	G35423	-0.0185708827	1.921288e-02	0.0315742121	1.077324e-02	0.0280073641
##	G35374	-0.0063215359	-1.905719e-02	-0.0101473950	1.595261e-02	0.0362753107
##	G35486	-0.0539797251	1.206779e-02	0.0125584130	-2.712324e-02	0.0117691057
##	G35524	-0.0176233951	2.931020e-02	0.0197142534	-1.046139e-02	-0.0291693987
##	G35394	0.0242628573	-3.243412e-02	-0.0684902736	-1.809165e-02	-0.0486032200
##	G35359	0.0181340256	9.105359e-03	-0.0064915080	3.698568e-03	0.0403143767
##	G35419	-0.0017775178	-6.495053e-03	0.0313752715	-1.952202e-02	-0.0090522643
##	G35356	-0.0404301092	-3.345292e-02	0.0064186764	2.630505e-02	-0.0382337140
##	G35519	0.0098514411	-6.978175e-03	-0.0303540294	3.108096e-03	-0.0461541991
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## G35447 -0.0068227221 -2.961472e-02 -0.0164831415 7.329891e-02 0.0412454713
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## G35392 0.0044080899 -1.634003e-02 0.0095213897 2.818649e-03 -0.0312722154
## G35464 -0.0049338010 1.935172e-02 0.0372464357 1.649764e-02 -0.0019152702
## G35497 0.0397828112 3.257972e-02 0.0168039590 8.563147e-03 0.0200236259
## G35373 0.0044181131 -1.704164e-02 -0.0176830791 2.507483e-02 0.0434252278
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## G35352 0.0093656580 5.090694e-03 0.0209084563 -1.706105e-02 0.0085276642
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## G35469 0.0499573890 -2.117461e-02 -0.0323618696 -2.647764e-02 -0.0191826404
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## G36250 0.0399539252 -5.343788e-03 0.0300789399 -3.972215e-02 -0.0017103707
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##	G36297	0.0177336391	4.674091e-03	0.0220259579	3.469471e-02	0.0185514932
##	G36170	0.0189927843	8.053550e-03	-0.0093659029	4.851579e-02	-0.0012336515
##	G36241	0.0110562098	-2.805518e-02	-0.0077987888	4.439946e-02	-0.0052183742
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##	G36266	0.0113492938	-5.960854e-03	-0.0563312732	2.091026e-02	-0.0129671870
##	G36164	-0.0092906578	-5.045423e-02	-0.0095734140	3.802811e-02	0.0201104474
##	G36215	0.0127891608	-2.950933e-03	0.0291837321	1.032943e-02	-0.0106432824
##	G36195	-0.0453465410	1.510856e-02	0.0238007961	8.938245e-03	-0.0226684252
##	G36205	0.0284682898	-1.928024e-03	0.0044368531	1.582657e-02	0.0186712549
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##	G36150	-0.0487221495	2.367797e-03	0.0300098478	-6.634073e-03	-0.0458950451
##	G36237	0.0713793387	-5.729076e-02	-0.0109062485	1.535587e-02	0.0400411872
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##	G36249	0.0394995284	2.720949e-02	0.0325468220	-3.738547e-02	0.0080691912
##	G36298	0.0568071326	-1.509033e-02	0.0669133404	-3.530027e-02	0.0097220581
##	G36176	0.0077983353	9.946386e-04	-0.0277341024	1.683088e-02	-0.0262748647
##	G36214	0.0693260430	1.480127e-02	0.0289128503	-1.408239e-02	0.0651984074
##	G36230	-0.0383066757	-1.208377e-02	0.0074455200	3.729566e-02	-0.0131298605
##	G36320	-0.0296709206	-1.864608e-03	0.0107549787	-1.272363e-02	0.0284742636
##	G36245	0.0184324116	9.958130e-03	0.0306761892	-2.014615e-02	-0.0431156122
##	G36161	0.0287126615	5.611227e-02	-0.0082338434	-2.210694e-02	0.0443162882
##	G36172	-0.0124948283	-2.863995e-02	-0.0330043217	-1.558290e-02	0.0438122646
##	G36212	0.0466147685	5.751038e-02	0.0268796283	-3.935109e-02	0.0141770030
##	G36180	0.0097929870	4.532629e-02	0.0401152295	4.652156e-02	0.0204837076
##	G36153	-0.0452976626	-9.254299e-03	-0.0345742901	3.530176e-02	0.0026018285
##	G36210	0.0533187279	2.519908e-02	0.0115335485	1.421465e-02	0.0164507790
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##	G36151	-0.0296569576	2.428168e-02	-0.0046389403	3.121816e-02	-0.0172584942
##	G36248	-0.0115573059	1.764685e-03	0.0188347728	1.308881e-02	-0.0180433478
##	G36239	0.0235379605	-1.972795e-02	0.0272212251	-2.900641e-02	0.0082071349
##	G36270	0.0740130531	2.592087e-02	0.0073594289	2.963213e-02	0.0240518616
##	G36158	-0.0529690722	2.063554e-03	0.0171474514	-4.048189e-02	0.0295582786
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##	G36311	0.0170785315	6.134606e-02	-0.0080985592	2.594764e-02	-0.0312805235
##	G36175	0.0217022524	2.406723e-04	-0.0156122973	1.457311e-02	-0.0350160944
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##	G36256	0.0086880312	-2.746867e-02	0.0275935671	6.953000e-03	0.0457361528
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##	G36262	-0.0577464520	1.191966e-02	0.0231209088	7.027038e-02	-0.0111626053
##	G36200	-0.0431498745	-3.849335e-02	0.0323726395	-1.746461e-02	0.0479463224
##	G36160	-0.0152741613	-2.461533e-02	0.0087792534	-2.797790e-02	-0.0027663363

##	G36185	-0.0088421106	-6.266517e-02	-0.0106108235	5.722218e-02	-0.0106771395
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##	G36204	0.0050818354	1.740567e-02	-0.0103561767	6.834613e-02	0.0298969450
##	G36318	0.0537044676	3.191384e-02	-0.0238233146	4.617067e-02	-0.0142117696
##	G36194	-0.0429239782	4.828674e-02	0.0098704334	-1.113859e-02	-0.0206828761
##	G36244	0.0091245556	-3.917359e-03	-0.0244358312	1.885470e-02	-0.0223039073
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##	G36264	-0.0305198534	8.249461e-04	-0.0296164130	4.242533e-02	0.0337338194
##	G36317	-0.0978428296	3.420260e-02	-0.0389166371	-2.088886e-02	-0.0042329470
##	G36159	0.0149341573	-2.743085e-03	-0.0159278691	-1.388302e-02	-0.0025821608
##	G36234	0.0099809368	3.026172e-03	-0.0479588442	-5.582800e-02	-0.0007656649
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##	G36208	-0.0086478115	-2.443778e-02	-0.0010707793	3.357194e-02	0.0186689231
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##	G36142	0.0210927446	1.711026e-02	-0.0784447120	-6.495287e-03	0.0396217852
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##	G36143	-0.0134330852	-9.392187e-03	0.0024811812	-3.993366e-02	-0.0033828053
##	G36308	-0.0017267047	-2.913752e-02	-0.0497957731	1.935460e-02	0.0169317690
##	G36209	-0.0906070368	5.929110e-03	0.0223229264	3.917772e-02	-0.0212690804
##		Axis.86	Axis.87	Axis.88	Axis.89	Axis.90
##	G37016	-9.835954e-03	-1.650833e-02	3.488306e-02	-5.596315e-03	5.209679e-02
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##	G37044	3.333080e-02	-4.762828e-03	-3.122068e-03	-5.212720e-03	-5.053702e-02
##	G37009	6.811530e-02	5.048072e-03	-2.359232e-02	-9.160251e-03	-1.129913e-03
##	G37029	-4.023466e-02	-1.383285e-02	6.390070e-03	-2.162103e-02	2.066231e-02
##	G37035	3.470281e-02	4.353716e-02	1.120262e-02	-3.709552e-02	3.718615e-03
##	G36982	-4.880150e-02	-5.688614e-02	-3.280239e-03	-1.201345e-02	1.798338e-02
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##	G37030	-3.349577e-02	-6.847131e-02	-1.104741e-02	-1.872956e-02	4.038647e-02
##	G37031	6.900791e-02	1.272035e-02	1.166389e-02	4.521375e-02	-2.320835e-02
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##	G37028	3.906470e-02	6.608527e-02	1.822174e-02	-2.126911e-02	-5.946565e-03
##	G37014	-7.167540e-04	1.070949e-02	4.852968e-02	-3.265865e-03	4.976388e-02
##	G37010	1.887638e-02	-3.236661e-02	-1.145830e-02	-5.811802e-03	-3.634119e-03
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##	G36951	-3.217304e-02	9.268123e-03	-1.136688e-03	-3.159321e-02	-6.035334e-02
##	G37025	-2.407835e-02	-1.737694e-02	-5.773130e-03	-9.577899e-04	-3.300796e-03

##	G36930	1.510927e-02	3.660440e-03	1.954273e-02	1.785154e-02	2.539613e-02
##	G36935	1.148603e-02	-2.693442e-03	4.783256e-02	6.210201e-02	6.221528e-02
##	G37041	5.854676e-02	-4.675447e-02	7.328644e-03	3.803187e-02	-1.093371e-02
##	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
##	G37004	1.581861e-02	1.952562e-02	-2.071047e-02	1.453447e-02	-1.267490e-02
##	G36966	2.339451e-02	-1.301356e-02	3.430050e-02	2.168780e-03	-6.060048e-03
##	G36936	-3.366262e-02	2.987989e-02	-3.607887e-02	5.694924e-03	2.300103e-02
##	G37015	3.876796e-02	-2.570262e-02	1.453431e-02	-9.786350e-03	6.267871e-02
##	G37034	-2.855069e-02	1.213899e-02	-1.284929e-02	-2.784372e-02	1.598704e-02
##	G36953	-3.471786e-02	5.651305e-02	8.902608e-03	-1.051445e-02	1.545355e-03
##	G36974	-2.208913e-02	-1.702881e-02	-3.921836e-02	4.115426e-02	-1.758911e-02
##	G37039	-4.348159e-02	-2.366026e-02	-7.805301e-02	-4.177486e-03	-5.599249e-02
##	G36933	-1.864151e-02	3.091152e-02	2.194478e-02	-1.286845e-02	-8.500793e-03
##	G37052	-1.559870e-02	-1.512197e-02	-6.088585e-02	-8.205501e-02	2.289618e-02
##	G36925	-3.705771e-02	3.233344e-02	-4.142613e-02	-7.269615e-03	5.842383e-02
##	G37046	1.942289e-02	2.394885e-03	4.571462e-02	-1.457882e-02	-4.078051e-03
##	G37053	4.443376e-02	-2.473280e-02	-9.832024e-03	2.788207e-02	-5.580271e-02
##	G36998	-1.744623e-03	1.154788e-02	-4.761244e-02	2.293928e-02	1.848612e-02
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##	G37049	5.071440e-03	-1.122368e-02	-3.649600e-02	2.531120e-02	1.224233e-02
##	G37019	9.501249e-03	4.122766e-03	4.392443e-02	3.155821e-02	1.340401e-02
##	G36988	8.521794e-03	-3.509990e-02	-3.680708e-02	-9.096719e-03	-7.242422e-04
##	G37037	-5.542727e-02	-3.021334e-02	-3.043710e-02	2.477405e-03	2.458864e-02
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##	G36928	-2.115478e-02	4.108315e-02	-1.781214e-02	9.891854e-03	5.717620e-02
##	G36923	2.342308e-02	1.746810e-02	1.808395e-02	-1.698971e-02	5.451121e-02
##	G37033	2.783987e-02	5.051923e-02	3.180692e-03	-3.927171e-04	-3.909381e-02
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##	G37012	-7.052760e-02	-9.020084e-03	6.943079e-03	-1.684147e-02	-7.176233e-03
##	G36952	1.902556e-02	1.956527e-02	1.368414e-02	1.357166e-02	-3.651217e-02
##	G37011	-1.868148e-02	-2.909385e-02	2.595313e-02	1.165240e-02	1.736197e-02
##	G36957	-2.155025e-02	-2.840911e-02	-2.865733e-02	9.189253e-03	-2.530110e-02
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##	G36972	-1.407818e-02	-2.204969e-02	-3.089709e-02	2.975592e-02	1.813473e-02
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##	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
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##	G37040	2.847006e-02	-5.251544e-02	9.655932e-03	1.911920e-02	4.233064e-03
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##	G37024	-2.453879e-02	-3.143714e-02	-5.854080e-02	-6.107029e-02	2.172018e-02
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## G35388 5.809567e-02 -2.016602e-02 9.918512e-03 -2.694235e-02 2.354725e-02
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## G36201 4.792608e-02 -1.291198e-02 -3.846765e-03 -3.086324e-02 1.261101e-02
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## G36249 4.176059e-02 1.121700e-02 -1.382110e-02 2.988515e-02 9.136132e-03
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## G36176 3.245554e-02 -3.960852e-02 2.436306e-02 5.375355e-03 -3.427085e-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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## G36239 -4.169076e-02 2.505725e-02 8.929581e-03 -9.092428e-03 1.137741e-02
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## G36227 1.935433e-02 5.951610e-02 2.438937e-02 1.558996e-02 3.943602e-02
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##	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
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##	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
##	G36936	-6.197260e-03	-0.0372329949	-2.368465e-02	-2.121376e-02	3.259691e-02
##	G37015	-3.064168e-02	0.0245278843	3.939552e-02	1.588759e-02	-2.018128e-02
##	G37034	3.383419e-02	-0.0138571996	-1.109869e-03	-1.399986e-02	2.006172e-02
##	G36953	-3.320244e-02	0.0213312547	-1.339660e-02	3.573601e-02	4.134829e-04
##	G36974	3.132789e-03	0.0167006399	1.536083e-02	1.775633e-03	-1.500468e-02
##	G37039	1.858386e-02	0.0090585639	-3.384127e-03	2.732516e-02	-4.100867e-02
##	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
##	G37046	2.000012e-02	-0.0228118193	4.303554e-02	-1.807348e-02	1.146389e-02
##	G37053	-4.223144e-03	-0.0050562323	7.228021e-04	-1.553006e-02	1.035324e-02
##	G36998	3.450083e-02	-0.0397058290	-3.535922e-02	3.867321e-03	1.344604e-03

##	G37045	6.911065e-03	0.0185877964	-6.854129e-02	-1.277241e-02	3.006760e-02
##	G37049	-9.103616e-03	-0.0149897426	2.509071e-02	2.129231e-02	-9.991900e-03
##	G37019	-1.903576e-02	-0.0073555190	5.830778e-03	-2.611791e-02	-1.034683e-02
##	G36988	2.269702e-02	-0.0356370111	1.730710e-02	9.139121e-03	2.195076e-03
##	G37037	1.253600e-02	-0.0139470103	1.204329e-02	1.198706e-03	3.447064e-02
##	G37005	-2.735675e-02	-0.0202943931	-3.273998e-02	8.288494e-03	1.487880e-03
##	G36928	6.935146e-02	0.0404632595	4.666805e-02	2.060160e-02	3.171295e-03
##	G36923	3.037556e-03	-0.0187688232	7.783416e-02	-4.812632e-02	5.959288e-03
##	G37033	-1.596057e-03	-0.0180736169	-9.873544e-03	-7.415668e-03	1.884932e-02
##	G37017	3.258776e-02	-0.0144488693	-3.166836e-02	-6.093228e-03	3.626439e-03
##	G37012	2.184614e-02	0.0072728245	-4.150946e-03	-3.564372e-02	3.791045e-02
##	G36952	-2.562199e-03	0.0586342711	-7.273284e-03	3.677247e-03	-6.924491e-02
##	G37011	-1.952723e-02	-0.0234107063	-9.895006e-03	1.085588e-02	4.090644e-03
##	G36957	-8.532502e-03	-0.0007568827	2.092731e-02	2.247398e-02	-7.583611e-03
##	G37021	1.600249e-02	0.0127315349	2.145003e-02	-2.443327e-02	2.290309e-02
##	G36937	-1.078468e-02	-0.0392030367	1.222189e-02	2.182512e-02	-3.199825e-02
##	G37047	2.824304e-02	-0.0423368748	3.483136e-02	-7.024477e-03	-5.009800e-03
##	G37032	-1.323762e-02	-0.0410326980	-3.209461e-02	5.804432e-03	-5.723203e-02
##	G36932	2.426816e-02	0.0915731474	-9.055936e-02	-4.294579e-02	-5.703768e-02
##	G37043	-4.078103e-02	-0.0313429004	2.174426e-03	1.717223e-02	-4.452936e-03
##	G37054	-2.060043e-02	0.0145975302	-1.994746e-02	3.208154e-03	1.131676e-03
##	G36948	-1.982630e-02	-0.0163057722	1.159482e-02	-5.330298e-02	-2.869180e-02
##	G36972	-6.158000e-02	-0.0119828591	-3.028654e-02	8.134279e-04	-2.955782e-02
##	G36968	4.566653e-02	-0.0240981886	6.696374e-03	-1.510948e-02	-6.759915e-03
##	G36911	1.803856e-02	-0.0479601088	-6.246720e-03	3.168195e-02	1.402876e-02
##	G36987	-1.769861e-02	0.0001562500	-3.333560e-02	2.282016e-02	-5.147823e-03
##	G37042	-1.021899e-02	0.0013536525	2.995863e-03	5.911776e-02	5.196727e-02
##	G36960	-1.498622e-03	-0.0498204666	-4.474658e-02	1.928283e-02	-2.143781e-02
##	G37040	-1.796377e-02	-0.0168770128	1.218192e-02	-5.691166e-03	-3.262485e-02
##	G37027	-1.441756e-02	0.0161160777	2.222884e-02	-1.902534e-03	1.544702e-02
##	G37024	-3.002758e-03	0.0420435781	8.416267e-05	-2.770555e-02	8.197156e-03
##	G37023	-3.129019e-02	-0.0080283577	7.059151e-03	2.847614e-02	6.277931e-03
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##	G37026	-2.301027e-02	-0.0330646456	2.108239e-02	1.187401e-02	-1.452582e-02
##	G37050	-3.933334e-03	-0.0366759920	-3.833291e-03	1.888269e-02	-8.141390e-03
##	G36973	-7.827998e-02	-0.0016827787	-6.598079e-02	-1.060475e-02	-5.431529e-02
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##	G37020	8.899038e-03	0.0267450978	-8.158426e-03	1.253344e-02	6.575563e-03
##	G36910	2.440191e-03	-0.0235926814	-1.132956e-02	3.899435e-02	3.761844e-02
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##	G37013	-7.353028e-04	0.0065347573	4.721639e-03	-8.522536e-04	-6.354775e-02
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##	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
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##	G36250	4.394996e-03	-0.0100966369	-4.736512e-02	-2.000275e-02	-5.867952e-02
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##	G36272	-3.367105e-02	0.0134124912	8.310824e-03	-1.300693e-03	1.160338e-02
##	G36285	-3.635283e-02	-0.0054006352	3.424637e-02	-1.178932e-02	-2.588080e-02
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##	G36251	4.197159e-02	0.0026135019	-8.868791e-03	1.846791e-02	1.277939e-02
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##	G36224	4.991017e-03	0.0092268303	-2.014604e-02	-2.731207e-02	2.938459e-02
##	G36169	1.357807e-03	0.0247213223	3.715783e-02	-6.922330e-03	-7.779062e-03
##	G36266	-1.323522e-02	0.0173276412	8.324805e-03	-2.224089e-02	-4.550181e-02
##	G36164	3.664178e-02	0.0390275104	-2.025201e-02	5.470689e-02	-3.243742e-02
##	G36215	-3.564130e-02	0.0271502524	8.709846e-03	-1.649829e-03	-3.495083e-02
##	G36195	8.472692e-05	0.0082387046	-6.417162e-03	6.344624e-03	6.627633e-02
##	G36205	1.707214e-02	0.0074235847	1.767162e-02	7.126438e-02	4.314046e-03
##	G36246	4.965792e-02	-0.0190232376	-3.696966e-02	-2.160479e-02	2.522893e-02
##	G36150	5.045929e-03	-0.0229275888	4.644689e-03	2.452905e-02	5.592611e-04
##	G36237	5.575459e-02	0.0038898151	-4.630027e-02	2.706935e-02	4.138786e-02
##	G36148	9.520439e-03	0.0283794267	2.497566e-02	1.203038e-02	-3.590120e-03
##	G36213	-3.073069e-02	0.0458726595	-5.525492e-02	-1.392734e-02	-1.112114e-02
##	G36232	-1.810085e-02	-0.0040879085	-1.506945e-02	-2.959613e-02	-4.023700e-02
##	G36240	2.669654e-02	-0.0002245343	-1.936388e-03	-1.757640e-03	1.220490e-02
##	G36249	-3.456992e-02	-0.0234975029	-9.769535e-03	1.059281e-02	-2.860367e-03
##	G36298	2.456373e-02	-0.0160338890	1.243700e-02	-1.067269e-02	-1.077909e-03
##	G36176	2.113929e-02	-0.0000945401	1.691949e-02	8.953481e-03	5.816600e-03
##	G36214	-3.218487e-02	0.0167929775	4.927045e-02	-2.080153e-02	-5.669746e-02
##	G36230	-1.144668e-02	0.0023138120	4.958757e-02	6.166091e-03	-1.506580e-02
##	G36320	-1.599992e-02	0.0476019214	-3.065829e-03	-1.333348e-02	-3.341177e-02
##	G36245	3.620693e-03	0.0083234379	-3.802265e-02	9.954357e-03	-4.619041e-03
##	G36161	-3.245928e-02	-0.0077196774	-2.016822e-02	2.029743e-02	-1.645043e-02
##	G36172	9.662290e-03	-0.0216553353	4.085120e-02	2.707015e-02	-3.140592e-02
##	G36212	-4.743036e-03	0.0198972946	1.265811e-02	-4.115873e-02	-1.062891e-02
##	G36180	9.943191e-03	-0.0295539604	1.740356e-03	4.429180e-02	1.439734e-02
##	G36153	4.316960e-02	-0.0364838936	1.796741e-02	-3.773503e-04	1.356570e-02
##	G36210	5.306190e-02	-0.0084238532	7.531010e-02	-2.026872e-03	9.353361e-03
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##	G36239	-4.304176e-03	0.0394013714	2.637389e-02	-1.197083e-02	3.408766e-02
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##	G36158	-2.948784e-02	0.0057816967	1.877964e-02	-6.201642e-02	-3.705694e-02
##	G36233	4.254977e-02	0.0238798524	-2.508751e-02	-1.273890e-03	-2.874435e-02
##	G36311	-7.394041e-02	0.0244703194	7.957514e-03	5.468773e-03	3.395495e-02
##	G36175	2.810622e-02	-0.0092777875	-4.469787e-03	1.066854e-03	-1.151066e-02
##	G36267	-4.276826e-02	0.0529150390	4.824074e-03	1.964031e-03	3.001046e-02
##	G36183	-4.523251e-02	0.0265215686	-4.692777e-02	3.005229e-02	-9.267040e-03

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## G36182 8.889899e-02 -0.0042485517 1.308621e-03 6.486294e-02 -1.758936e-02
## G36256 4.483659e-02 -0.0459648487 -5.302259e-02 4.767475e-03 -1.757389e-02
## G36163 6.800929e-03 -0.0237129250 4.443522e-02 -5.080363e-03 -3.471385e-02
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## G37016 7.118946e-02 -3.722783e-02 2.651727e-02 8.365601e-03 1.566057e-03
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##	G36992	-2.518202e-02	-1.135723e-02	-9.186762e-03	2.606155e-02	3.118939e-02
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##	G36936	2.082000e-02	-1.005036e-02	1.447854e-02	-1.642947e-02	3.195381e-02
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##	G37054	-6.957284e-03	9.331032e-03	-2.147653e-02	-1.835651e-03	1.095655e-02
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## G36183 -2.051414e-02 5.035562e-03 1.513723e-02 5.400799e-02 -3.851097e-02
## G36227 8.105773e-03 -7.608963e-02 2.668453e-02 -3.889493e-03 -1.179243e-02
## G36322 -3.235468e-03 6.696682e-03 -4.724081e-03 2.657534e-02 4.288150e-02
## G36182 3.299432e-02 3.528590e-02 -1.216043e-02 7.976287e-03 7.972443e-03
## G36256 -1.923740e-02 -4.077337e-03 1.657623e-03 3.040128e-03 -3.469701e-02
## G36163 -9.396577e-03 -4.251513e-03 -4.713224e-02 -1.984621e-02 1.977517e-02
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## G36157 -1.964438e-02 -1.134088e-02 1.760143e-02 4.966030e-02 2.582691e-02
## G36262 -2.561662e-03 2.049693e-02 6.119062e-02 4.549685e-03 -8.043983e-03
## G36200 1.588234e-02 4.493769e-02 3.181383e-02 2.631099e-02 1.518083e-02
## G36160 2.484511e-02 1.936048e-02 3.415705e-03 -8.122745e-03 -1.581734e-02
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## G36234 -4.038427e-02 -1.755045e-03 3.589801e-02 1.391060e-03 -4.487080e-03
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##	G36208	-4.290234e-02	1.513320e-03	-2.551737e-03	5.667101e-03	-1.930612e-02
##	G36309	-2.826307e-02	3.662288e-02	-3.046710e-02	4.540631e-02	6.209324e-03
##	G36146	-2.619214e-02	-3.604179e-02	-5.996784e-03	-2.588858e-02	-4.968936e-03
##	G36192	-4.347353e-02	-4.608257e-03	2.423480e-02	-1.572485e-03	5.332610e-03
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##	G36282	5.402558e-02	-1.683328e-02	-3.006795e-02	-3.726718e-02	-4.404968e-02
##	G36290	4.864503e-02	-1.591206e-02	-9.135075e-03	-8.322038e-03	2.051713e-02
##	G36274	-2.272939e-02	2.994639e-02	1.519564e-02	-3.026272e-02	-1.294944e-02
##	G36314	-4.056903e-02	5.916824e-02	6.252063e-03	-1.673582e-02	4.514511e-03
##	G36258	3.058358e-02	-1.463538e-02	5.104020e-02	7.766574e-02	-2.368628e-02
##	G36147	-1.505391e-02	-3.766937e-03	1.200924e-02	4.364198e-04	-4.192779e-02
##	G36235	-4.238591e-02	-1.682836e-02	1.743526e-02	9.566648e-03	8.649573e-03
##	G36143	6.192216e-03	1.284986e-02	-2.602796e-02	-1.796081e-02	-3.756813e-02
##	G36308	-2.351587e-02	4.528386e-04	3.600472e-02	2.174231e-02	-6.567643e-03
##	G36209	-3.511507e-02	-8.743450e-03	3.510429e-03	-3.370100e-02	-4.187150e-02
##		Axis.101	Axis.102	Axis.103	Axis.104	Axis.105
##	G37016	-1.473202e-02	-4.380231e-02	-1.301951e-03	1.423373e-02	-7.625387e-04
##	G36918	-2.883208e-02	5.349540e-03	2.099381e-02	3.028608e-03	-2.146330e-02
##	G37044	2.194438e-02	-9.893556e-03	-1.557677e-02	-4.089695e-02	-1.641709e-02
##	G37009	-2.216186e-02	4.219886e-02	-2.306404e-02	-1.963118e-02	-1.994139e-02
##	G37029	-1.078142e-03	4.920858e-03	2.121990e-02	4.239711e-02	1.697813e-02
##	G37035	4.824068e-02	2.269478e-02	-8.826685e-04	2.683736e-02	-6.236327e-03
##	G36982	1.808909e-02	3.253735e-02	-4.049929e-02	-2.187856e-02	2.355712e-02
##	G36984	2.396039e-02	2.241021e-02	-3.203973e-02	1.725150e-02	2.455962e-02
##	G37030	2.019457e-02	-2.021492e-03	-3.941782e-03	3.311702e-02	-2.977412e-02
##	G37031	-8.439755e-03	4.255101e-02	3.859895e-02	2.818880e-02	2.593926e-03
##	G36906	-1.156620e-02	-2.725721e-02	2.647607e-02	-9.108152e-02	4.930852e-02
##	G37028	6.288654e-02	5.091611e-02	2.024199e-02	4.772064e-02	1.968574e-02
##	G37014	-1.759722e-02	3.477566e-02	-7.934035e-04	2.379790e-02	7.675850e-03
##	G37010	3.099348e-02	-1.548311e-02	6.973605e-03	-6.431062e-03	1.091818e-02
##	G36944	-1.208602e-02	-8.727887e-04	2.831690e-02	1.226653e-02	2.365440e-02
##	G36902	2.450924e-02	1.813062e-02	-1.827335e-02	1.364716e-03	1.721886e-02
##	G37051	-2.831556e-02	-7.555609e-03	-3.350875e-02	-3.406341e-02	-3.183978e-03
##	G36964	-8.349912e-03	-1.790144e-03	4.235946e-03	-3.083057e-02	-1.083339e-02
##	G36951	-6.398957e-02	7.116513e-03	-2.212694e-02	5.900118e-02	-2.722866e-02
##	G37025	-1.346771e-02	8.112985e-03	-4.692648e-03	3.213613e-02	1.799390e-02
##	G36930	2.031381e-02	-5.074309e-02	3.346666e-02	-2.502543e-02	-4.815365e-03
##	G36935	1.014819e-01	3.285256e-02	-6.069522e-02	-2.538938e-03	1.084012e-02
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##	G36905	-6.992728e-02	2.462533e-02	-2.314196e-02	9.644337e-03	6.048470e-02
##	G36917	-5.992054e-03	-6.300891e-03	2.560660e-02	3.177760e-02	-1.495571e-02
##	G36992	-2.857166e-02	4.561637e-04	3.725785e-02	-1.452769e-02	9.157010e-03
##	G36921	-3.302951e-02	4.168477e-02	-2.149294e-02	1.407197e-02	1.528876e-02
##	G37004	3.908408e-02	2.589590e-02	-8.875787e-03	2.992172e-04	-1.910793e-02
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##	G36936	-1.266825e-02	4.024470e-02	-5.178175e-03	3.295116e-03	1.962117e-02
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## G36974 -1.138084e-02 -1.689715e-02 -1.059527e-02 -3.780746e-03 1.984312e-02
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## G36925 1.245097e-02 4.309693e-02 3.022998e-02 3.247501e-02 -2.094874e-02
## G37046 2.548903e-02 2.085974e-02 6.841629e-03 -3.873284e-03 1.565117e-02
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## G35349 -1.167671e-02 2.626047e-02 6.447576e-03 -1.243629e-02 -2.092880e-02

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##	G36158	5.290100e-02	4.008947e-03	-2.802580e-02	-3.129543e-02	-5.891997e-03
##	G36233	-2.237090e-02	-1.636551e-02	-3.510162e-02	1.488244e-02	-3.199758e-02
##	G36311	2.449466e-02	4.018846e-03	5.786979e-03	-1.561952e-04	7.519390e-03
##	G36175	6.483820e-03	5.387082e-02	2.541804e-02	-1.839804e-02	8.328676e-04
##	G36267	-4.596831e-02	-1.463616e-03	3.791672e-03	-2.797168e-02	-6.588640e-02
##	G36183	-2.681309e-02	-7.252945e-03	3.895207e-02	-2.057046e-02	-2.824162e-02
##	G36227	-2.917007e-03	-8.834158e-03	5.278116e-02	1.089821e-02	4.042046e-03
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##	G36256	4.153306e-02	-3.667651e-02	1.049365e-02	6.785401e-02	-1.973040e-02
##	G36163	3.999073e-02	1.727114e-02	-1.299439e-02	1.379697e-02	-1.762778e-02
##	G36287	-1.205719e-02	-3.944044e-02	2.625042e-02	3.319268e-02	-1.522451e-02
##	G36157	-6.101386e-02	2.044210e-02	-6.590088e-02	7.825953e-02	8.478764e-02
##	G36262	-3.345894e-03	-2.705281e-02	1.049263e-02	-6.590583e-02	-3.882914e-02
##	G36200	-1.256855e-02	-2.740490e-02	-1.883984e-02	1.122391e-03	-3.275838e-02
##	G36160	-2.071043e-02	-1.051463e-02	-1.393280e-02	-3.273934e-02	1.743588e-02
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##	G36234	2.099562e-02	-1.459078e-02	2.888290e-02	-2.728683e-02	-2.650016e-02
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##	G36208	2.467971e-03	1.439766e-02	-3.057905e-02	-2.121347e-02	2.604401e-02
##	G36309	1.009300e-02	5.153488e-03	-4.297555e-02	7.481646e-03	-1.683168e-02
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##	G36291	4.310258e-02	3.601179e-02	-5.718472e-03	-8.935476e-04	-4.025867e-02
##	G36142	-4.941730e-02	-4.294568e-02	-4.925425e-02	5.004310e-02	-3.100623e-02
##	G36138	-3.567452e-03	-1.578038e-02	-3.133432e-02	1.640107e-03	-3.191802e-02
##	G36203	-1.392257e-02	4.221829e-03	2.143737e-02	-2.130810e-02	-2.585838e-02
##	G36282	-4.939329e-03	3.350295e-02	4.771292e-02	8.971591e-03	-9.672977e-03
##	G36290	-1.919632e-02	-1.562686e-02	-4.209977e-02	-4.416722e-02	7.520846e-03
##	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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## 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
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## G37010 -2.199470e-03 -0.0028307084 1.193818e-02 -2.451852e-02 -1.196564e-02
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## G37025 3.963954e-02 -0.0160667241 1.665712e-03 -6.911544e-03 5.594729e-04
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## G36935 -6.243203e-02 -0.0039543699 -1.867217e-02 9.461767e-03 8.467230e-03
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## G37015 -2.959308e-02 0.0147803767 1.886118e-02 -2.610366e-02 1.610715e-02
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## G37033 -2.910555e-02 -0.0147503793 3.654856e-02 4.261491e-02 -2.303522e-02
## G37017 -1.385015e-02 0.0191824410 -6.484853e-03 1.687935e-02 2.322181e-02
## G37012 -7.554703e-03 0.0147259113 -2.949324e-03 -1.152272e-02 -4.393511e-02
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## G36911 3.055182e-02 -0.0182720842 -6.740304e-03 -4.529849e-03 3.211637e-03
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## G37023 2.066345e-02 0.0443204289 -3.746745e-02 2.030196e-03 -6.092362e-02
## G37036 2.590582e-02 0.0286861923 1.844650e-03 -3.291739e-02 -1.395374e-02
## G37026 3.227294e-03 0.0176373622 6.761561e-03 5.127915e-02 4.396460e-03
## G37050 -2.444561e-02 0.0031115467 2.206746e-02 2.282721e-02 3.431201e-02
## G36973 -1.003190e-02 0.0045891874 4.829286e-02 -4.874707e-02 -3.067916e-02
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## G35423 4.807254e-02 0.0110706561 -7.297867e-03 -7.592116e-03 -1.208017e-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
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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
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##	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
##	G36935	-4.805437e-04	2.644633e-02	8.922690e-03	-1.069949e-03	-2.159397e-02
##	G37041	4.548987e-03	3.454141e-02	4.713297e-03	-1.010666e-02	-1.726807e-02
##	G36959	1.064790e-03	-2.693331e-03	3.000058e-02	-3.262627e-02	1.950349e-02
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##	G36917	-2.136028e-02	-4.918606e-03	-2.821599e-02	-1.236577e-02	-8.955885e-03
##	G36992	1.617191e-02	5.163657e-03	9.494673e-03	-4.596773e-02	-1.629488e-02
##	G36921	1.683946e-02	-5.348537e-05	8.828632e-03	5.720316e-03	4.933066e-02
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##	G37052	-3.074047e-04	-9.008102e-03	-5.142944e-03	-2.151161e-02	-1.201990e-02
##	G36925	-3.159909e-02	-6.910614e-04	-1.257003e-02	2.200282e-03	-9.635941e-03
##	G37046	-5.146887e-03	8.389417e-03	2.961169e-02	2.480300e-02	2.971727e-02
##	G37053	2.136428e-02	2.515565e-02	-2.110440e-02	-1.916247e-02	1.459993e-02
##	G36998	6.774922e-03	1.761627e-02	4.034958e-02	-2.372695e-02	6.207069e-03
##	G37045	-1.713965e-03	-3.086189e-02	2.696949e-02	-1.405006e-02	4.936503e-02
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##	G35359	2.571219e-02	-3.648669e-02	1.374102e-02	1.667498e-02	3.083710e-02
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##	G35519	2.831149e-03	1.701253e-02	5.085774e-03	1.703729e-03	2.795146e-02
##	G35505	1.317302e-02	1.410694e-02	1.581428e-02	-1.589491e-02	1.277805e-02
##	G35447	2.355297e-02	7.678602e-04	3.352438e-03	1.186445e-03	-2.978693e-02
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##	G35373	1.553239e-02	6.616753e-02	-5.746506e-02	1.327170e-02	-1.819663e-02
##	G35453	4.465002e-03	-1.207642e-02	-1.793467e-02	2.543447e-03	1.191401e-02
##	G35352	-3.770243e-04	-7.266329e-03	5.466456e-03	-2.887536e-02	-2.961005e-02
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##	G35530	7.214354e-03	-1.014812e-02	-1.472912e-03	2.981413e-02	-1.382802e-03
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##	G35372	-3.093012e-02	2.818396e-02	-9.736938e-03	-5.553387e-02	-5.179524e-03
##	G35407	3.429068e-02	-3.685692e-02	-5.305465e-02	3.129108e-02	-2.575815e-02
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##	G35527	-1.714500e-02	-3.181852e-02	-1.749929e-02	2.870539e-02	3.012581e-02
##	G35516	-1.808068e-02	-6.747431e-03	2.686004e-02	1.018868e-02	-2.175749e-02
##	G35463	5.663957e-03	2.630482e-02	8.245063e-03	-6.424881e-03	-2.153068e-03
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##	G35414	-2.394316e-02	-1.651359e-02	1.532858e-02	-2.602787e-02	-1.190817e-02
##	G35412	-1.323695e-02	-3.244212e-03	5.302208e-03	2.530601e-02	9.770118e-03
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##	G36145	-2.274582e-02	-3.170659e-02	2.739290e-02	3.662270e-02	-6.276646e-03
##	G36196	1.802906e-03	3.738164e-02	5.973861e-03	-7.555330e-03	2.309707e-02
##	G36219	-2.501563e-02	-1.239474e-03	-3.393122e-02	-1.590955e-02	9.808580e-03
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##	G36201	3.210499e-02	-1.274814e-02	-8.841108e-03	-2.862756e-02	5.148425e-02
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##	G36202	-1.636255e-02	1.780285e-02	-2.005657e-02	-6.539561e-02	2.144275e-02
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## G36212 6.872971e-03 4.458093e-02 3.259794e-02 4.694799e-02 -1.041188e-02
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## G36227 3.315085e-02 -3.115890e-02 2.128740e-02 9.669127e-03 -1.718324e-02
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## G36157 4.711341e-02 -4.902554e-02 -2.179693e-02 -3.898588e-02 5.979659e-03
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## G36234 1.261687e-02 2.962062e-02 9.902356e-03 2.839488e-02 1.997176e-02
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## G36928 8.055338e-03 2.185259e-02 -3.523163e-02 -1.966564e-02 1.040979e-03
## G36923 -1.511640e-03 2.865648e-02 -2.967190e-02 2.195387e-02 -4.251501e-02
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## G36972 1.045431e-02 5.425588e-03 -3.015929e-02 2.895275e-02 6.741900e-02
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##	G37042	1.791566e-02	7.261293e-04	-1.389167e-02	2.195631e-02	-4.404980e-03
##	G36960	1.553372e-02	-1.239625e-02	9.737564e-03	-1.987493e-02	2.343515e-02
##	G37040	-3.599319e-02	9.895253e-03	-4.999778e-02	5.334922e-03	-4.630185e-03
##	G37027	1.530898e-02	-3.544312e-02	-1.715852e-03	1.529958e-02	2.033877e-02
##	G37024	1.427678e-02	-2.772503e-02	-6.034857e-03	-4.216806e-02	3.782821e-03
##	G37023	-3.303824e-03	3.599130e-02	-6.329178e-03	-5.690152e-02	2.271370e-02
##	G37036	-4.779473e-02	3.157562e-02	-4.874304e-02	4.448296e-02	5.312809e-02
##	G37026	3.304475e-02	-3.027960e-02	-1.943004e-02	-1.168864e-02	1.184551e-03
##	G37050	-1.717514e-02	-2.961303e-02	-5.360439e-04	3.019163e-02	1.687255e-02
##	G36973	5.814209e-03	-1.525137e-02	1.478556e-02	3.401908e-02	1.821295e-02
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##	G36904	6.748603e-02	-2.319542e-02	1.254259e-02	3.299923e-02	4.413989e-03
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##	G36993	-1.864863e-03	2.257567e-02	1.236728e-02	-7.921887e-03	-2.457135e-03
##	G37020	-1.550865e-02	3.102361e-02	-3.329848e-02	-9.889187e-03	-1.084802e-02
##	G36910	-4.477149e-02	2.972398e-02	2.373711e-02	3.812661e-02	1.342183e-02
##	G36927	5.238013e-02	4.407724e-02	3.226144e-02	-2.517050e-02	2.403475e-02
##	G37018	1.643432e-02	-5.548184e-05	-1.425565e-02	-1.308203e-02	2.191807e-02
##	G37048	-2.893506e-02	-3.895410e-02	-1.946436e-02	1.150923e-02	-1.522271e-02
##	G36940	1.407158e-02	-5.970729e-03	1.373903e-02	8.413096e-03	2.335679e-02
##	G37013	-6.154908e-02	3.689663e-02	-6.831002e-03	-3.463838e-02	1.604020e-03
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##	G35534	8.753599e-03	2.004511e-02	-1.154321e-02	-2.459434e-02	-1.594042e-02
##	G35535	-1.280465e-02	1.826449e-03	-2.448189e-02	-1.615905e-02	-3.961994e-03
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##	G35364	-1.657328e-02	-2.763613e-03	1.954081e-02	2.242986e-03	-1.093676e-02
##	G35433	-6.205413e-03	-2.286188e-02	1.460400e-02	5.261661e-02	1.105665e-02
##	G35528	-4.462399e-04	2.414619e-02	2.366138e-02	-1.997717e-02	1.202419e-02
##	G35381	-1.659322e-02	-1.937662e-02	6.620985e-03	-1.830210e-02	9.650662e-03
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##	G35390	-3.363828e-02	6.773079e-02	-2.727051e-02	-5.604536e-02	-1.454017e-02
##	G35536	-2.826572e-02	1.677176e-03	3.116849e-02	1.433799e-02	3.332362e-02
##	G35514	4.316440e-02	-7.653698e-03	-2.035495e-02	2.590989e-02	-3.270401e-03
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##	G35480	-6.717220e-03	1.606984e-02	3.111374e-03	-6.622593e-03	1.298984e-02
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##	G35391	-3.540663e-03	1.857106e-02	-1.126582e-02	-1.961947e-02	-1.266551e-02
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##	G35511	-1.338203e-02	4.186810e-03	3.166958e-02	3.647231e-03	-1.405394e-02
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##	G35470	1.987189e-03	-8.679018e-03	1.573308e-02	-8.379197e-04	1.899370e-02
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##	G35424	-4.266519e-03	-1.384783e-02	-5.592419e-03	-2.944525e-02	1.547081e-02
##	G35398	1.946400e-02	3.358977e-02	1.616633e-02	1.327093e-02	-5.228171e-02
##	G35365	-1.679442e-02	-1.044066e-02	3.027526e-03	-2.254506e-02	-7.880502e-03
##	G35442	-2.911746e-02	2.003294e-02	-2.438955e-02	-1.642113e-02	9.952697e-03
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## G36204 1.380384e-02 5.553758e-03 2.888113e-02 -1.243907e-02 3.322209e-02
## G36318 1.988022e-02 7.679691e-03 3.349013e-02 2.063214e-02 -2.530038e-02
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## G36197 7.328851e-03 1.193004e-02 -2.882903e-02 3.612073e-02 -4.471142e-03
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## G36159 8.087448e-03 2.182251e-03 4.562020e-02 -3.319473e-03 1.318066e-02
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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
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##	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
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##	G36258	-3.552469e-02	4.002873e-02	2.649028e-02	2.039544e-02	-4.460632e-02
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##	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
##	G36984	1.392326e-02	1.675746e-02	-1.226062e-02	6.308501e-03	-0.0166320931
##	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
##	G36964	9.806656e-03	1.830329e-02	-2.146502e-03	4.856497e-03	0.0238741310
##	G36951	-3.482076e-02	-7.227016e-03	-3.173752e-02	8.323772e-04	0.0089424503
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##	G36930	1.254044e-02	-2.713488e-02	1.535353e-02	-1.134456e-03	-0.0138176819
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##	G36959	4.488882e-03	1.993852e-02	-1.819334e-02	-9.504623e-03	0.0063435460
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##	G36921	-1.219083e-02	1.382983e-02	-5.825428e-03	6.133505e-02	0.0242638367
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##	G36936	-1.830011e-02	1.650895e-02	6.289122e-03	-1.120542e-03	-0.0297795489
##	G37015	-2.895546e-02	-1.248249e-02	-2.259769e-02	-2.775579e-02	0.0064384754
##	G37034	-5.518221e-02	1.490493e-02	8.626521e-03	1.338216e-02	-0.0093349480
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## G35523 -2.025449e-03 -1.677842e-03 5.358885e-03 2.858917e-02 -0.0402022627
## G35487 -6.283414e-03 -1.165552e-03 3.140401e-02 -9.666804e-03 -0.0039085149

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##	G36299	1.310377e-02	-1.838189e-02	4.373830e-03	-4.880271e-03	0.0070669971
##	G36137	3.858737e-02	-2.393819e-02	3.054637e-02	-1.778169e-02	0.0074231453
##	G36273	-1.884100e-02	-1.227151e-02	3.831071e-03	1.244956e-02	-0.0175653917
##	G36201	1.847758e-02	9.940391e-03	-2.394284e-02	3.537704e-02	-0.0157141184
##	G36165	-4.432275e-03	2.845048e-02	1.662363e-02	-1.321873e-02	0.0033970848
##	G36202	3.396759e-02	-8.258230e-03	2.799848e-02	9.873178e-03	-0.0191612825
##	G36226	-2.584552e-02	1.089848e-02	9.446135e-03	1.882876e-02	0.0299427258
##	G36269	-3.679869e-03	1.800285e-02	-3.402927e-02	2.377561e-03	0.0089274517
##	G36135	6.377854e-03	4.371114e-03	1.738039e-02	2.207877e-03	-0.0013038094
##	G36250	4.631151e-03	-2.890720e-02	2.186073e-02	-4.394951e-02	-0.0085955941
##	G36225	1.058139e-02	-6.730572e-03	-8.429252e-03	2.879242e-02	0.0386034914
##	G36272	4.565458e-02	2.802129e-03	-2.330549e-02	-8.959537e-03	-0.0151485958
##	G36285	-1.476879e-02	2.286999e-02	1.150799e-02	4.957858e-03	-0.0071774302
##	G36259	7.841390e-03	-2.167002e-02	1.983312e-03	1.787807e-02	0.0147235356
##	G36229	-2.179577e-03	5.908209e-03	-9.639575e-03	3.064471e-02	0.0193822987
##	G36155	1.167540e-02	9.260928e-03	1.241228e-02	4.764374e-03	0.0101884987
##	G36251	2.094043e-02	2.844306e-02	1.230089e-02	-1.936479e-02	0.0413399012
##	G36297	-3.579597e-03	-4.837843e-04	1.844448e-03	-1.162131e-02	0.0338469785
##	G36170	3.998436e-02	-1.302490e-02	-6.605705e-03	-4.737860e-02	0.0031534822
##	G36241	-3.264687e-03	5.752415e-03	6.300445e-03	-3.928963e-02	0.0170429199
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##	G36169	2.856385e-02	8.505587e-03	-1.032492e-03	-4.930314e-02	0.0072981393
##	G36266	1.842278e-02	-2.017095e-03	-3.204301e-02	7.623274e-03	0.0092554847
##	G36164	-3.236738e-03	1.311618e-02	4.527630e-03	2.022995e-02	-0.0280937599
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##	G36205	-2.832267e-02	9.969487e-03	-4.181587e-02	-2.339505e-02	-0.0108196640
##	G36246	-2.357907e-02	-8.281507e-04	1.626522e-02	-1.525978e-02	-0.0188323937
##	G36150	1.551600e-02	4.175752e-03	-2.397938e-04	-4.725641e-02	-0.0374205734
##	G36237	-3.667916e-02	-1.485249e-02	-8.465139e-02	-2.439891e-02	-0.0153325308
##	G36148	-7.145433e-04	-4.824812e-03	-2.331430e-02	1.792204e-02	-0.0009449964
##	G36213	-1.285454e-02	1.539625e-02	1.220860e-03	-1.616972e-02	0.0033242959
##	G36232	-2.751817e-02	-1.295263e-02	-1.536308e-02	-1.683297e-02	-0.0138268797
##	G36240	-3.792484e-02	-6.642729e-02	-2.045174e-02	6.190555e-03	-0.0304519001
##	G36249	2.783023e-02	-1.397763e-03	1.518653e-02	2.078360e-02	-0.0026873944
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##	G36176	4.999081e-03	-4.487849e-03	1.138164e-02	1.974450e-02	-0.0392622131
##	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
##	G36245	-2.570582e-02	2.282919e-02	1.572953e-02	-3.590129e-02	0.0066906048
##	G36161	-5.575053e-02	-1.349655e-02	1.584130e-03	5.856887e-03	0.0148618751
##	G36172	-3.119426e-02	6.958929e-04	-3.385134e-02	7.748982e-03	-0.0325826155
##	G36212	-3.061415e-03	-1.990695e-02	1.184320e-02	7.652709e-05	0.0384662764
##	G36180	9.274066e-03	1.872400e-02	-6.622819e-03	3.068752e-02	-0.0259270029
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##	G36210	1.207906e-02	-4.668719e-02	-4.504880e-03	6.716835e-03	0.0130039572
##	G36303	4.795506e-02	-2.123103e-02	-8.933551e-03	1.079935e-02	0.0341818192
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##	G36266	-4.065842e-03	8.529692e-05	-8.213346e-03	4.437186e-02	9.366635e-03
##	G36164	1.951013e-02	3.541692e-02	3.787411e-03	-1.662754e-03	-1.244150e-02
##	G36215	-1.555144e-03	2.396185e-02	-7.209800e-03	-2.337747e-03	7.185226e-04
##	G36195	-3.223630e-02	1.574039e-02	-1.184286e-02	-4.559131e-03	-3.916682e-03
##	G36205	-1.846423e-02	2.774868e-03	-1.156799e-02	-9.425480e-03	1.402021e-03
##	G36246	-2.421235e-02	1.304736e-02	2.724651e-02	1.756177e-02	-1.152816e-02
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##	G36237	-1.178876e-02	-1.994520e-02	1.880509e-02	-1.093151e-02	4.476989e-03
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##	G36240	6.780323e-02	6.065318e-02	1.776704e-02	-7.530136e-04	6.179655e-04
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##	G36230	3.884387e-02	1.829512e-02	-5.768518e-03	-1.944292e-02	1.472598e-02
##	G36320	-1.692342e-02	-1.536370e-02	1.014869e-02	-2.401733e-02	-1.996255e-02
##	G36245	-3.795172e-02	7.690203e-03	-3.903288e-02	-2.382696e-02	5.077921e-03
##	G36161	3.607436e-02	8.104431e-03	2.620968e-02	-5.465109e-03	-1.334778e-02
##	G36172	-3.249851e-02	3.717057e-02	1.852914e-02	1.191762e-03	9.110229e-03
##	G36212	-3.733144e-02	1.629201e-02	-2.052500e-02	-2.740095e-02	-1.718582e-02
##	G36180	-1.828018e-02	7.384033e-03	-2.810367e-03	-1.484785e-02	6.043764e-03
##	G36153	2.160022e-03	5.011819e-03	6.740176e-04	-5.789320e-03	1.247748e-02
##	G36210	-1.177146e-02	-3.434633e-02	-3.544545e-02	-2.391028e-02	-2.009215e-02
##	G36303	-2.276139e-02	1.065843e-02	8.655764e-03	-2.100320e-02	1.605873e-02
##	G36193	-1.003268e-02	6.204616e-03	4.360966e-02	3.350735e-02	-2.056583e-03
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##	G36248	2.133248e-03	1.342468e-02	1.804356e-02	2.196943e-02	1.272114e-02
##	G36239	9.165539e-03	-6.456893e-03	-1.966860e-02	-3.050471e-02	3.097220e-02
##	G36270	1.161047e-02	2.673160e-02	-1.830447e-02	8.724156e-04	1.954737e-02
##	G36158	-3.146999e-02	-6.877827e-03	-2.100421e-02	-7.181432e-03	1.423030e-02
##	G36233	-7.412283e-03	-1.352629e-02	1.283693e-02	-1.643961e-02	-5.433245e-03
##	G36311	1.476804e-02	-1.606379e-02	-6.879404e-03	7.561197e-03	1.090483e-02
##	G36175	1.930128e-02	3.247916e-02	-3.367526e-02	1.057905e-02	-1.964507e-02
##	G36267	1.524997e-02	-2.508512e-03	-1.610129e-02	-3.346219e-02	-1.643246e-03
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##	G36163	-1.091444e-02	2.726458e-03	-1.110148e-02	1.450267e-02	2.224534e-03
##	G36287	-1.943757e-02	-1.625919e-02	2.590838e-02	-7.073218e-03	2.267278e-02
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##	G36200	-1.463406e-02	1.335872e-02	3.426942e-02	-9.239057e-03	-6.138565e-02
##	G36160	-2.456698e-02	-2.565403e-02	1.749898e-02	1.561426e-02	-3.176098e-03
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##	G36204	-3.224120e-02	-2.137983e-02	1.016313e-02	-1.419466e-02	-2.230162e-02
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##	G36264	1.933109e-02	-4.216352e-04	4.781915e-03	-5.532370e-03	-3.124368e-02
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##	G36146	1.441615e-02	3.300821e-03	1.094620e-02	-6.872860e-03	-2.685933e-02
##	G36192	4.831257e-03	-3.102584e-02	1.487342e-03	4.310442e-02	1.031552e-02
##	G36284	1.877437e-02	1.039589e-02	-4.721093e-02	2.126670e-02	-5.501909e-02
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##	G36203	-1.911629e-02	-2.055422e-02	-2.848455e-02	6.753297e-03	1.303607e-02
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##	G36314	-4.117123e-02	-6.808387e-03	1.451234e-03	3.358462e-02	2.050266e-02
##	G36258	-6.223625e-03	7.998532e-03	4.621720e-03	-3.643550e-02	-4.393617e-02
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##	G36143	9.919730e-03	2.275967e-02	-2.108271e-02	5.212083e-02	-6.261174e-03
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##	G36944	2.628916e-02	-2.761003e-02	-6.412111e-03	1.034799e-02	-1.068548e-02
##	G36902	1.262110e-03	-1.043053e-02	-5.654266e-02	-9.606773e-03	1.699648e-02
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## G36208 -2.482145e-03 -2.830069e-02 2.523052e-03 -2.506821e-02 1.501752e-02
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##	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
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##	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
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##	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
##	G36974	-2.207353e-02	3.610885e-02	5.574493e-03	-8.894181e-03	9.552886e-03
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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
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##	G37019	7.524733e-04	-4.420656e-03	2.038460e-02	2.533223e-02	1.231416e-02
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## G36227 -7.021311e-03 7.803858e-03 -3.521512e-02 -2.249320e-02 -3.790072e-03
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## G36182 1.460852e-02 1.747761e-02 3.417951e-02 -1.036659e-02 -6.313102e-03
## G36256 -4.264236e-03 -9.508417e-05 -3.767398e-02 -1.757624e-03 1.953759e-02

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## G36157 2.142430e-02 -3.007666e-02 7.320644e-03 2.163982e-02 -4.262231e-02
## G36262 -1.289533e-02 9.382980e-03 3.499497e-02 2.916704e-03 -1.634655e-02
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## G36185 -3.790921e-02 -9.530156e-03 -9.367972e-03 5.538522e-03 -1.491896e-02
## G36162 -7.681391e-03 1.404629e-02 -1.191413e-02 -6.840409e-03 7.997911e-03
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## G36234 8.468312e-03 2.132063e-02 9.403723e-03 3.572351e-03 -2.719916e-03
## G36206 -2.184631e-02 -1.488664e-02 3.773205e-02 2.058887e-02 -1.425684e-02
## G36257 -2.788193e-02 -2.882299e-02 -6.277054e-03 -3.251913e-03 1.652980e-02
## G36216 2.274908e-02 3.438825e-02 -1.026344e-02 1.721257e-02 1.704768e-03
## G36208 -3.041183e-03 1.779860e-02 4.176001e-03 6.132376e-04 3.087070e-02
## G36309 -2.795427e-02 -7.618981e-04 -2.850602e-05 1.981813e-02 -5.486492e-03
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## G36192 4.199763e-02 1.284581e-02 -1.015760e-02 9.020706e-04 2.286859e-02
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## G36143 -3.009147e-02 4.150513e-02 -1.135014e-02 -5.242453e-02 -1.590835e-02
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## G36209 5.950401e-02 5.564425e-02 3.453369e-02 -2.285485e-02 8.601522e-03
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## G37010 -1.522354e-02 -2.383178e-02 1.773245e-03 2.901386e-03 -7.961573e-03

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## G37015 -8.399436e-04 -2.691497e-02 -1.824174e-02 1.953204e-02 1.321147e-02
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## G37017 1.210044e-02 -9.033397e-04 -1.426393e-03 -4.410817e-02 5.385227e-03
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## G35477 -2.409319e-02 3.621461e-02 -1.101136e-02 1.296091e-03 7.917965e-04
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##	G36291	2.117678e-02	9.151602e-04	-7.207964e-03	5.469350e-04	-4.968269e-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
##	G36282	2.469553e-02	-2.125119e-02	-7.883640e-04	2.579750e-02	1.929006e-02
##	G36290	1.764255e-02	-2.793870e-02	3.520272e-02	9.243343e-03	1.724085e-02
##	G36274	2.944089e-02	-2.138471e-04	-9.580404e-03	2.689170e-02	-1.490056e-02
##	G36314	1.737088e-02	-1.392816e-02	1.259940e-02	-2.943436e-02	7.982907e-03
##	G36258	8.520067e-03	1.730407e-02	5.426374e-04	1.873171e-02	1.915575e-02
##	G36147	-2.508180e-02	1.703529e-02	1.162913e-02	-7.949448e-03	1.078430e-02
##	G36235	-1.726064e-02	1.964838e-02	1.832577e-02	-5.185051e-03	4.678735e-03
##	G36143	1.000992e-02	5.683014e-03	-1.497745e-02	5.334937e-03	5.523561e-03
##	G36308	-2.220622e-02	2.369497e-03	2.770118e-02	-6.458546e-03	1.242996e-02
##	G36209	2.092442e-02	1.745032e-02	7.379097e-03	3.821839e-04	4.376749e-03
##		Axis.151	Axis.152	Axis.153	Axis.154	Axis.155
##	G37016	6.864840e-03	-2.665225e-02	-2.156772e-02	-1.061561e-02	-6.553879e-03
##	G36918	-1.072779e-02	-3.618091e-02	5.209747e-03	1.707897e-03	-3.400959e-03
##	G37044	1.259677e-02	-1.006970e-04	-5.200543e-03	-2.269334e-02	-8.691174e-03
##	G37009	-7.918433e-03	-2.027254e-02	2.209105e-02	-1.237843e-02	1.680878e-02
##	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
##	G36982	3.526869e-02	1.192377e-02	-2.220407e-02	-5.662311e-03	1.338210e-02
##	G36984	2.824731e-03	2.768841e-03	-7.713363e-04	-2.393711e-02	-1.828664e-02
##	G37030	-9.565366e-03	-3.242224e-03	-8.356504e-03	5.122084e-02	-1.122599e-02
##	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
##	G37014	2.869829e-03	1.557833e-03	-9.645142e-03	-4.758076e-03	6.616825e-03
##	G37010	2.429697e-03	3.023527e-02	-1.072276e-02	2.750089e-03	-4.379352e-02
##	G36944	2.554313e-03	1.458486e-02	6.685901e-04	-8.675502e-02	5.853576e-03
##	G36902	1.550217e-02	-1.402769e-02	2.532233e-02	-4.201516e-03	-1.637049e-02
##	G37051	-1.765457e-02	5.683217e-03	1.715764e-02	-2.616143e-03	2.742064e-03
##	G36964	3.444222e-02	9.392048e-03	-2.571524e-02	7.178200e-03	1.132211e-02
##	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
##	G36930	1.001479e-02	2.461099e-02	-8.212818e-03	-2.634612e-03	-2.017949e-02
##	G36935	6.464865e-03	7.657903e-03	-1.925589e-02	-2.039107e-02	-9.813548e-03
##	G37041	-7.575830e-03	-1.310220e-02	-1.231511e-02	1.294007e-02	3.564381e-02
##	G36959	-6.610922e-04	1.704539e-02	-1.848965e-02	1.394808e-02	4.126438e-03
##	G36905	-2.839520e-02	3.194821e-02	4.135265e-02	2.778056e-02	-1.374067e-02
##	G36917	3.025072e-02	2.875153e-03	2.704605e-02	-2.760978e-02	1.654012e-03
##	G36992	-2.017605e-02	3.143594e-03	5.733350e-03	5.865285e-02	-2.924148e-03
##	G36921	-1.076097e-02	7.700320e-03	2.363265e-02	8.157472e-03	-5.456506e-03
##	G37004	1.747126e-02	1.612734e-02	9.179137e-03	1.645482e-02	1.637390e-02
##	G36966	-5.013557e-02	6.724769e-03	-2.899049e-02	2.405963e-02	-3.238590e-02
##	G36936	5.239176e-03	2.309691e-02	8.048660e-03	1.572357e-02	-2.357533e-03
##	G37015	-6.213392e-06	3.014446e-02	-4.936945e-03	-1.179434e-02	-1.119580e-02
##	G37034	-2.414925e-02	-3.079106e-02	3.087955e-02	-1.074464e-02	-3.292836e-02
##	G36953	5.374822e-03	-2.033538e-02	-5.052449e-03	7.473966e-03	-2.265982e-03
##	G36974	-2.042145e-02	-1.940552e-02	-1.225465e-02	2.141309e-02	-2.248092e-02
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## G36998 -2.983187e-02 1.640200e-02 4.232486e-02 -1.077920e-02 1.507736e-02
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## G36952 8.258402e-03 2.051284e-02 9.224622e-03 8.308767e-03 2.041716e-02
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## G35511 -1.568369e-02 3.553217e-02 -1.549253e-02 -3.196524e-02 1.578350e-02
## G35448 6.112549e-03 1.171313e-02 -7.997043e-03 7.837656e-03 1.196464e-02
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##	G35490	-2.837061e-02	-6.637754e-03	-1.136364e-02	1.752461e-02	2.711494e-02
##	G35422	1.533556e-02	-2.186137e-02	3.402974e-02	1.886096e-02	1.202823e-02
##	G35526	2.902098e-02	1.427889e-02	-1.633370e-02	-6.731983e-03	-4.682215e-03
##	G35498	8.373274e-03	-9.943415e-03	2.590837e-02	-1.541204e-02	4.225845e-03
##	G35348	1.810284e-02	1.867973e-02	3.053580e-02	-1.301813e-02	1.360138e-02
##	G35423	-5.365573e-03	1.722013e-03	-2.775926e-02	-1.282697e-02	1.742416e-02
##	G35374	-2.891461e-03	3.204874e-02	-3.748044e-03	-3.684607e-03	1.679391e-03
##	G35486	7.287747e-03	-1.547435e-03	8.842780e-03	-4.265392e-03	-3.921418e-03
##	G35524	-4.702071e-03	1.533864e-02	-1.130702e-02	5.358508e-03	3.137054e-02
##	G35394	8.710904e-03	2.853129e-02	-3.000726e-02	-3.386524e-03	-1.875397e-02
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##	G35519	8.659109e-03	-4.946790e-03	7.579313e-03	4.634621e-03	-5.652420e-04
##	G35505	6.644947e-03	-1.802795e-02	1.831677e-02	-6.535745e-03	4.939116e-03
##	G35447	5.400517e-02	-3.642635e-02	7.427497e-03	-4.563933e-02	2.646034e-02
##	G35458	-3.186344e-02	6.744491e-03	-6.095223e-03	6.726559e-03	1.291212e-02
##	G35397	4.778672e-03	-3.840240e-03	3.810722e-03	-1.937698e-02	-1.107806e-02
##	G35462	6.372911e-03	-8.333343e-03	6.547320e-03	-1.397201e-03	1.330423e-02
##	G35392	-1.053659e-02	3.222272e-03	-1.556055e-02	-5.744506e-02	5.558192e-02
##	G35464	1.338823e-02	-4.776197e-03	-4.564341e-02	8.182262e-03	4.737274e-02
##	G35497	1.500229e-03	1.717366e-04	-1.020970e-02	4.743828e-03	1.549411e-02
##	G35373	-3.950287e-02	3.754285e-02	-1.835178e-02	5.798540e-02	2.429940e-02
##	G35453	-1.187983e-02	-1.644907e-02	-2.962835e-02	9.220436e-03	2.507753e-02
##	G35352	9.097624e-03	-4.255722e-02	-3.734093e-02	-9.535283e-04	-2.575338e-02
##	G35366	4.903975e-03	-3.016106e-03	1.050013e-02	-2.986938e-03	-1.532285e-02
##	G35530	8.722421e-03	-4.918169e-03	-1.363136e-02	-1.314658e-02	6.916162e-03
##	G35512	-2.005143e-02	1.445314e-02	-2.675755e-02	1.692960e-02	-1.921718e-03
##	G35372	-1.383767e-03	-1.205295e-02	3.646600e-02	-2.673462e-02	-1.574110e-02
##	G35407	2.916822e-02	-2.253243e-02	-1.366132e-02	3.272528e-02	-1.146421e-02
##	G35455	4.791223e-02	1.068916e-03	-6.705700e-03	-3.610489e-02	3.088878e-03
##	G35481	-3.137659e-03	1.123929e-02	9.031856e-03	6.869475e-03	7.185499e-03
##	G35355	-1.001949e-03	1.478627e-02	-1.084617e-02	-2.894648e-02	3.250028e-02
##	G35469	7.239710e-04	9.106988e-03	1.822588e-02	4.916692e-03	1.063384e-02
##	G35513	2.305259e-02	1.544711e-02	-1.275635e-02	5.196882e-02	-5.414506e-02
##	G35387	7.657806e-03	2.491437e-02	-3.118122e-03	-4.235716e-02	8.928809e-03
##	G35527	6.323478e-03	1.012951e-02	-3.615728e-02	2.329598e-02	9.803599e-03
##	G35516	-2.163488e-02	-1.933763e-02	-1.856967e-02	-1.622523e-03	-4.590016e-02
##	G35463	-4.532450e-03	2.816244e-02	-1.758176e-02	1.609324e-03	1.281240e-02
##	G35441	-3.972842e-02	-1.629872e-02	-1.288898e-02	1.012848e-02	-9.463653e-03
##	G35414	-3.043577e-03	2.503611e-03	-7.782619e-03	-1.018813e-02	-1.875905e-02
##	G35412	-3.749782e-02	1.990448e-02	3.316589e-03	-2.374727e-02	2.740491e-03
##	G35388	1.074855e-02	-1.116867e-02	2.290473e-02	-1.191679e-02	2.827202e-02
##	G35354	-2.350394e-02	3.444855e-02	1.240208e-02	1.189519e-02	5.700918e-02
##	G35533	-1.177901e-02	-2.633465e-02	2.039655e-02	2.816074e-02	1.305585e-02
##	G35406	3.027099e-02	-8.443844e-03	1.127277e-02	1.540813e-02	-1.116207e-02
##	G35467	-6.398610e-03	1.676035e-03	-5.805588e-03	-1.956124e-02	-7.307427e-03
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##	G35404	-3.125418e-02	-1.885799e-03	4.521729e-03	1.634369e-02	-8.443493e-03
##	G35445	6.036005e-02	4.334135e-02	2.711964e-02	-1.480815e-02	1.937491e-02
##	G36173	-1.851989e-02	2.668490e-02	2.907318e-02	-6.906494e-03	-2.018194e-02
##	G36145	1.523923e-02	3.620681e-02	-2.001988e-03	4.620104e-02	3.218824e-02
##	G36196	1.055682e-02	-7.236370e-03	-3.715193e-02	6.772099e-04	-1.367366e-03


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##	G36904	8.045971e-03	9.773963e-03	2.625399e-02	1.349889e-02	-1.164777e-02
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## G36195 7.209747e-03 1.318444e-02 2.073522e-02 -2.850947e-02 -3.312670e-02
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## G36246 -3.007798e-02 1.930383e-02 1.614508e-03 1.812415e-02 1.588452e-03
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## G36158 -3.368857e-03 -1.221538e-02 2.573205e-02 -7.466000e-03 -7.385456e-03
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##	G36159	-3.303695e-02	-2.853522e-03	2.667023e-03	-1.965582e-02	5.714181e-03
##	G36234	1.538046e-02	2.185742e-03	-2.498801e-02	-4.476225e-03	-3.568682e-02
##	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
##	G36216	4.803149e-03	-5.855851e-03	2.319933e-02	-1.479972e-02	9.943814e-03
##	G36208	3.591972e-02	2.578308e-02	6.433868e-03	1.640024e-02	2.002857e-02
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##	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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##	G36314	-1.541214e-02	2.874075e-03	4.060254e-02	3.456707e-02	2.637459e-02
##	G36258	-5.470290e-06	-4.610902e-02	-1.954837e-02	6.346557e-03	-3.176754e-02
##	G36147	-1.472575e-02	2.225056e-03	4.212778e-03	-1.656186e-02	1.396459e-02
##	G36235	-5.281412e-02	2.034052e-03	-9.817344e-03	-7.846113e-03	-2.031988e-03
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##	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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##	G36918	-5.397272e-03	6.077602e-03	3.482563e-03	1.895637e-02	-8.570867e-03
##	G37044	-1.001198e-02	1.535777e-02	3.113974e-02	-1.118770e-03	1.427436e-02
##	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
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##	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
##	G37014	6.957151e-03	1.842239e-02	1.483104e-02	6.910819e-03	5.824780e-03
##	G37010	2.017159e-03	3.043935e-03	3.148804e-02	1.466855e-02	-2.562633e-03
##	G36944	2.797762e-03	-2.587345e-02	1.358620e-02	-2.976269e-02	-6.924695e-03
##	G36902	5.558278e-03	-8.149978e-03	3.723745e-03	-3.058348e-03	1.137269e-02
##	G37051	2.717460e-02	1.032002e-02	3.395021e-05	-1.262986e-02	-1.079357e-02
##	G36964	7.080329e-03	6.962412e-04	7.538962e-03	-4.556801e-03	1.684725e-03
##	G36951	2.385969e-02	-2.475000e-02	1.768025e-02	-2.123235e-02	-1.163988e-02
##	G37025	2.594606e-02	4.370599e-03	3.265312e-03	-2.353480e-02	3.501326e-02
##	G36930	1.321378e-02	-2.310157e-02	-1.603712e-03	-8.417101e-03	2.833645e-02
##	G36935	-2.722858e-03	-2.725633e-03	-8.437492e-03	1.346214e-02	-1.801387e-03
##	G37041	-4.040427e-03	-3.289866e-02	3.975523e-03	1.884279e-02	1.216909e-02
##	G36959	1.244203e-02	-4.557584e-03	1.805722e-02	7.426657e-03	3.558083e-03
##	G36905	-1.691339e-02	1.172004e-02	8.991018e-03	-1.425620e-02	3.151808e-02
##	G36917	-2.292407e-03	3.917499e-02	1.624958e-03	-3.519423e-04	-5.206520e-03


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##	G35522	6.086056e-03	1.509616e-02	-3.938557e-02	6.163288e-03	1.307493e-02
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##	G36299	3.830424e-03	-2.246565e-02	1.434318e-02	-8.731895e-03	-2.540815e-02
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##	G36201	-2.819593e-02	2.452882e-02	3.982222e-03	5.857532e-02	3.344220e-02
##	G36165	-2.159143e-02	-1.498799e-02	1.081534e-03	8.125497e-03	6.210229e-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
##	G36225	1.542721e-02	-5.445315e-04	-1.479780e-02	3.639644e-02	-6.403565e-03
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##	G36241	-2.994751e-02	1.488367e-02	-1.877043e-02	-1.851824e-02	-2.418359e-03
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##	G36164	-2.772465e-02	-1.537025e-02	9.005014e-03	-4.962532e-03	-5.186300e-03
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##	G36205	-1.425292e-02	2.538842e-02	-2.455744e-02	-7.985526e-03	-4.345405e-03
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##	G36150	-1.094289e-02	-5.954050e-02	-6.239903e-03	8.763466e-03	-4.459399e-05
##	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
##	G36213	2.217794e-02	-7.715254e-03	-1.892321e-03	-4.994476e-04	1.378961e-02
##	G36232	3.010544e-03	-2.295980e-03	6.403956e-04	1.736288e-02	1.178460e-02
##	G36240	2.313729e-02	-3.713575e-03	-1.209209e-02	4.094354e-03	-3.516758e-02
##	G36249	4.463281e-02	1.138203e-02	3.540816e-03	-1.886607e-02	-1.108295e-02
##	G36298	-3.656088e-02	2.974347e-02	-1.293614e-02	-3.855599e-02	7.342749e-04
##	G36176	-1.964831e-02	-3.432588e-02	-4.870335e-03	8.862158e-03	-1.027988e-04
##	G36214	1.538759e-02	2.536481e-02	-3.190650e-02	-3.340752e-03	-1.003971e-03
##	G36230	5.295684e-03	-1.333839e-02	-1.706532e-02	-1.841251e-02	1.240915e-02
##	G36320	1.660980e-02	2.394769e-03	-1.527762e-02	1.962298e-03	1.929698e-02
##	G36245	1.503926e-02	6.059430e-03	2.861938e-02	2.015294e-02	1.529648e-02
##	G36161	1.924106e-03	-1.847195e-02	2.594724e-02	-1.816179e-02	4.423652e-03
##	G36172	3.994108e-02	-1.684521e-02	-2.035531e-02	-2.200132e-02	6.564735e-03

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## G36151 2.816119e-03 8.599287e-03 1.841764e-02 2.793570e-03 -2.174062e-02
## G36248 -3.159303e-02 -1.559592e-02 3.797651e-02 -4.113849e-03 1.181915e-02
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##	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
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##	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
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##	G37035	9.054120e-03	-1.103312e-02	-1.144728e-02	9.133878e-03	-6.630168e-03
##	G36982	2.948202e-02	-1.002502e-02	1.932531e-03	8.741634e-03	-2.585381e-02
##	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
##	G37028	6.589893e-03	2.148204e-02	-2.802051e-02	1.291140e-02	7.872078e-03
##	G37014	1.192670e-02	-1.997111e-02	-7.323497e-03	9.437446e-03	-2.489337e-02
##	G37010	-6.028949e-03	-2.117242e-02	9.438907e-03	-1.014424e-02	1.537381e-03
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##	G36902	-2.093109e-02	-8.095152e-03	7.334476e-03	4.298497e-03	2.002098e-02
##	G37051	-2.057471e-02	-1.954198e-02	6.245825e-03	-1.604326e-02	3.689938e-03
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##	G37025	-1.234829e-02	2.591301e-02	-1.736033e-02	6.986487e-03	-1.114327e-02
##	G36930	-1.220286e-02	2.051739e-02	-3.423008e-02	-6.808106e-03	5.209489e-03
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##	G36959	-7.433532e-03	-1.383148e-02	1.829944e-02	2.664504e-02	6.050827e-03
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##	G36921	-1.144540e-02	-2.694435e-03	2.826088e-02	-2.586981e-03	6.930891e-03
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## G36256 1.577346e-02 -1.109001e-02 -4.238967e-02 -1.733392e-02 2.043419e-02
## G36163 7.149677e-03 -2.601409e-02 -7.600104e-03 4.818014e-03 -2.488026e-02
## G36287 1.169757e-03 -8.510476e-03 -1.286635e-02 6.970069e-03 -4.943339e-02

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##	G36157	3.259139e-02	8.673894e-03	7.024173e-03	-1.506623e-02	1.395210e-03
##	G36262	-2.293467e-02	-1.217297e-02	-1.331795e-02	-3.262073e-03	9.555297e-03
##	G36200	8.019874e-03	4.133828e-02	-3.450310e-02	6.990038e-03	1.278742e-02
##	G36160	-4.134364e-02	1.337354e-02	7.007455e-03	2.785526e-02	2.523149e-02
##	G36185	1.001760e-02	1.915661e-02	2.439543e-02	-1.762867e-02	-1.330226e-02
##	G36162	1.475875e-02	1.009619e-02	-1.379539e-02	2.413506e-03	2.526201e-03
##	G36204	-1.334727e-03	-1.112557e-02	-1.887547e-02	1.273629e-02	-1.014096e-02
##	G36318	2.994787e-02	-6.836725e-03	-5.378726e-03	-2.884893e-02	-3.336707e-03
##	G36194	3.701379e-03	-7.433325e-03	-3.186430e-02	-2.168235e-02	-8.884237e-03
##	G36244	9.140902e-03	-1.857320e-02	1.032225e-02	3.875919e-03	3.967322e-02
##	G36197	-7.452573e-03	-4.375426e-03	2.359706e-02	4.773525e-03	-9.303390e-04
##	G36264	1.180305e-02	-3.513758e-03	-3.456591e-03	-7.566098e-03	-1.942840e-02
##	G36317	5.833540e-03	1.914333e-02	2.145497e-02	5.148226e-03	1.708874e-02
##	G36159	-6.528529e-03	1.714221e-02	2.315437e-02	-1.361138e-02	-7.376338e-03
##	G36234	1.450748e-02	7.790640e-03	1.758345e-02	-1.399848e-02	-2.695122e-02
##	G36206	-4.001137e-02	6.166617e-03	-8.136979e-03	1.848020e-04	3.761472e-02
##	G36257	4.465911e-03	1.721141e-02	1.282888e-02	-8.062466e-04	1.549662e-02
##	G36216	2.500594e-02	3.636795e-02	1.737390e-02	1.226990e-02	1.146424e-02
##	G36208	-4.418229e-03	-6.899609e-04	-1.777988e-02	7.891536e-03	-3.150021e-02
##	G36309	2.990307e-04	-3.752879e-03	-6.776522e-03	1.323401e-02	-2.403630e-02
##	G36146	-1.307972e-02	4.719899e-03	8.046234e-03	2.174624e-02	-2.853343e-02
##	G36192	-2.084489e-02	4.409631e-03	2.586511e-02	2.467737e-02	2.117623e-02
##	G36284	-2.537926e-02	1.246665e-02	1.014021e-05	4.659938e-03	-2.069122e-02
##	G36291	7.620412e-03	-1.539595e-02	-2.555472e-03	3.957726e-02	-2.217536e-02
##	G36142	1.040666e-02	4.554581e-03	1.726983e-02	2.492647e-02	1.105923e-03
##	G36138	-7.497266e-03	-2.169762e-02	-2.002273e-02	1.804227e-02	-1.159771e-02
##	G36203	-1.515993e-03	1.258903e-02	1.702084e-02	1.077301e-02	2.085578e-03
##	G36282	-3.121562e-02	-7.073118e-03	-1.993770e-03	5.517386e-03	-8.778690e-03
##	G36290	-5.246125e-03	1.733990e-02	4.512877e-03	3.562313e-03	2.384026e-02
##	G36274	-8.478315e-03	-2.468535e-03	-2.642915e-03	5.222874e-03	1.339684e-02
##	G36314	4.195718e-02	2.614100e-02	8.158534e-03	1.854371e-02	3.693917e-03
##	G36258	-7.752740e-03	-1.078524e-02	-1.737427e-02	1.227173e-02	-2.217369e-02
##	G36147	2.590274e-02	7.971885e-03	-2.294132e-03	-8.802715e-03	4.725009e-03
##	G36235	6.042939e-03	1.542373e-04	3.280013e-02	3.906070e-03	-1.034048e-03
##	G36143	-1.619669e-02	1.001773e-02	1.529173e-02	7.877618e-04	-1.307590e-02
##	G36308	4.196955e-03	3.463225e-03	-2.386283e-02	-2.811944e-02	-2.178960e-02
##	G36209	-9.533086e-03	2.927688e-02	-1.901349e-03	3.562889e-03	1.958249e-02
##		Axis.171	Axis.172	Axis.173	Axis.174	Axis.175
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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
##	G37035	8.004318e-03	-1.278538e-02	-1.785327e-02	2.057003e-04	-4.412699e-04
##	G36982	-1.680288e-02	-6.091532e-03	1.574178e-02	-9.652682e-03	1.488745e-03
##	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
##	G36902	1.500067e-02	4.897554e-03	-1.636335e-02	2.280593e-02	-6.606829e-03

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## 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
## G36905 -6.230358e-03 -2.069832e-02 4.514992e-02 -1.185319e-02 2.507882e-02
## G36917 -1.468298e-02 9.601927e-03 1.918219e-02 1.337448e-02 2.059611e-02
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## G37004 -8.085739e-03 -1.270063e-02 -5.324306e-03 -2.141959e-02 -6.551481e-03
## G36966 -3.017223e-02 -7.021144e-03 -2.631877e-03 2.292665e-02 3.183980e-02
## 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
## G36953 8.587547e-03 1.634363e-02 2.318062e-02 -2.885744e-03 -9.555183e-03
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## G37052 4.834887e-03 -1.487585e-02 -3.483198e-03 3.406076e-02 -3.421111e-03
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## G37042 1.261963e-03 9.745019e-03 -1.907600e-02 -1.822182e-03 2.545395e-02
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## G37024 -4.353538e-03 -3.910807e-02 -3.823658e-02 -3.418831e-02 -4.561640e-03
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## G37036 -2.325408e-02 2.799388e-02 -1.415693e-02 1.974792e-02 1.728587e-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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## G35528 3.921502e-03 -2.207331e-02 -1.465143e-02 7.946233e-03 -2.982212e-03
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##	G36147	-2.259269e-03	-3.683888e-03	2.136631e-02	-1.275786e-02	-1.064523e-02
##	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
##	G37016	2.596905e-02	2.035850e-02	-2.676731e-03	4.136214e-03	9.097784e-03
##	G36918	-4.372384e-04	-7.013393e-03	-1.842864e-02	3.510342e-02	1.415392e-02
##	G37044	6.696288e-03	2.895724e-03	5.948484e-03	1.533418e-02	1.364307e-02
##	G37009	1.269489e-02	-1.878253e-03	-5.099903e-03	5.138732e-03	-5.737579e-03
##	G37029	-3.974815e-03	1.720979e-02	1.950811e-02	1.604925e-02	-2.497082e-02
##	G37035	5.293701e-03	1.678542e-02	-1.847911e-02	1.513811e-02	-9.737246e-03
##	G36982	4.260108e-03	-8.169308e-03	6.425610e-03	7.776210e-03	-2.474183e-03
##	G36984	-1.694401e-03	1.039312e-02	-7.916868e-03	5.916136e-02	1.588377e-02
##	G37030	2.616737e-02	1.929612e-02	-2.036748e-02	9.766415e-03	-5.192517e-03
##	G37031	-3.254211e-02	5.862927e-03	1.402614e-02	1.653992e-02	-6.213832e-03
##	G36906	1.241393e-02	-3.051980e-02	-1.647079e-02	-1.019986e-03	1.303387e-02
##	G37028	2.428087e-02	1.681181e-02	5.075009e-03	1.335714e-02	-1.190987e-02
##	G37014	1.727656e-02	5.661408e-03	-6.789341e-04	-1.313769e-02	2.471903e-03
##	G37010	-5.697933e-03	9.441364e-03	2.066133e-02	-6.302688e-03	-1.024276e-02
##	G36944	-8.757376e-03	-2.165560e-02	-1.309472e-02	-9.160113e-04	1.369087e-02
##	G36902	1.857172e-02	-2.100458e-02	-3.826859e-03	4.380113e-03	-1.745849e-02
##	G37051	2.055252e-02	1.437243e-02	-4.636632e-03	-8.175263e-03	4.734040e-03
##	G36964	8.053724e-03	1.019383e-02	-4.258383e-03	1.423677e-02	-7.949357e-03
##	G36951	1.748577e-02	1.001843e-02	1.220604e-02	3.097328e-03	1.835756e-03
##	G37025	1.972419e-02	-1.462212e-02	-6.169358e-03	-2.205425e-02	1.275639e-02
##	G36930	-7.975710e-03	-4.043364e-03	7.446814e-03	7.497436e-03	-2.998641e-03
##	G36935	-1.342491e-02	2.266314e-02	3.377696e-02	2.793929e-02	1.794592e-02
##	G37041	5.013599e-03	-7.292655e-03	4.591838e-03	2.158586e-02	-4.825156e-03
##	G36959	7.329985e-03	2.492945e-02	-3.616666e-04	-7.833184e-04	-1.224189e-03
##	G36905	-4.125743e-03	2.360298e-02	1.037953e-02	-1.351471e-02	-2.395636e-02
##	G36917	2.213326e-03	-5.408704e-03	6.494882e-03	3.407395e-02	5.145530e-03
##	G36992	-4.520967e-03	-1.412484e-02	-6.694402e-04	-9.957397e-03	2.470943e-02
##	G36921	-9.541152e-03	-7.381242e-03	-1.242151e-02	2.645717e-02	-2.660253e-02
##	G37004	1.841051e-02	3.507450e-02	3.564937e-04	1.286487e-02	-8.313654e-03
##	G36966	-6.039248e-03	2.810334e-02	4.875950e-02	6.269974e-03	2.408988e-03
##	G36936	1.173016e-02	1.114407e-02	-3.662316e-03	-5.890458e-03	-8.214739e-03
##	G37015	1.951979e-02	9.811067e-04	-2.848587e-06	-1.141457e-02	2.790481e-02
##	G37034	2.605066e-02	-1.611684e-03	-1.073283e-02	-1.728858e-02	5.359910e-03
##	G36953	1.921900e-02	-1.193479e-02	-1.265651e-02	-1.881733e-02	-8.087586e-03
##	G36974	-9.392171e-03	-2.217448e-02	-9.905011e-03	-2.865156e-02	1.082157e-02
##	G37039	-3.999150e-02	4.812977e-02	-4.528110e-02	2.192384e-02	-3.893740e-02
##	G36933	-7.530307e-03	-1.065994e-02	-3.429499e-02	1.152557e-02	5.807147e-03
##	G37052	5.359912e-03	3.864646e-03	1.321446e-02	9.912722e-03	7.423996e-03

##	G36925	1.054896e-02	2.017242e-02	5.133758e-02	5.662656e-03	1.264578e-02
##	G37046	1.654704e-02	-4.821864e-03	4.891318e-03	-8.556456e-04	3.045716e-02
##	G37053	1.457527e-02	1.632195e-04	2.592501e-03	-3.206119e-03	1.920605e-02
##	G36998	1.616956e-02	-3.044181e-02	-6.506711e-04	5.208904e-02	-5.939970e-03
##	G37045	-3.735581e-02	-2.950179e-03	-1.073909e-02	2.176746e-02	1.050692e-03
##	G37049	-1.925015e-03	-4.915833e-03	1.764416e-02	-5.695081e-03	-4.986970e-03
##	G37019	2.399076e-02	-9.460803e-03	-1.543437e-02	-1.018822e-02	2.064558e-02
##	G36988	1.203230e-02	9.941046e-03	-6.310213e-04	2.282327e-03	-3.760750e-02
##	G37037	-2.332302e-03	3.510207e-04	-1.439322e-02	7.327897e-04	4.967098e-03
##	G37005	-4.073517e-03	-8.301662e-03	-4.336748e-03	4.356977e-03	1.339451e-03
##	G36928	6.125102e-03	-1.520244e-03	2.675618e-02	1.233450e-02	7.864699e-03
##	G36923	9.534404e-03	1.880344e-02	-3.269821e-03	1.691246e-02	4.066976e-03
##	G37033	1.914109e-02	2.807858e-03	1.049518e-02	-4.540905e-03	1.103635e-03
##	G37017	2.009785e-02	1.464787e-02	-2.087176e-02	3.212239e-02	-1.599909e-03
##	G37012	3.056432e-03	-4.162810e-03	-1.233612e-02	4.201014e-03	2.904728e-02
##	G36952	1.104077e-02	1.023982e-02	-2.003941e-02	-2.619385e-02	1.175268e-02
##	G37011	-3.108839e-03	-2.146766e-03	-1.816761e-03	-6.079335e-05	-5.733366e-03
##	G36957	-6.369167e-03	2.013731e-02	-1.180065e-02	-4.372286e-03	3.812625e-03
##	G37021	-1.899129e-02	-1.693465e-02	1.484654e-02	-8.527849e-03	8.632194e-03
##	G36937	1.795559e-02	-1.509954e-02	4.642620e-02	-6.687251e-03	-6.542322e-03
##	G37047	7.434599e-03	4.929778e-03	9.563075e-03	-2.143991e-03	5.788355e-03
##	G37032	-6.346083e-03	1.531154e-02	-1.670744e-02	-3.433315e-04	-2.782003e-02
##	G36932	-1.207743e-02	1.854396e-03	-2.241828e-02	-2.681114e-02	4.745887e-04
##	G37043	-2.850771e-02	2.140337e-02	-9.503038e-03	-2.041135e-02	-8.240386e-03
##	G37054	2.285835e-02	1.998683e-02	-1.701933e-02	-1.988231e-03	9.819781e-03
##	G36948	2.902777e-02	1.503462e-02	-1.590643e-02	-2.076176e-03	-7.601377e-03
##	G36972	-4.204971e-03	1.340751e-02	2.776908e-02	-2.996363e-02	-1.710867e-02
##	G36968	1.123365e-02	-4.846653e-03	4.028362e-04	-3.718956e-03	-4.612186e-03
##	G36911	1.432162e-03	-7.578428e-03	-2.778685e-02	-2.361056e-02	-9.968369e-03
##	G36987	1.025220e-03	-6.928294e-03	1.604291e-02	-8.206643e-03	-1.583712e-02
##	G37042	1.513629e-02	-4.419097e-03	-1.311593e-02	-9.368603e-03	-5.313337e-03
##	G36960	-1.020198e-02	-5.197254e-03	-7.645746e-03	-4.609579e-03	3.744624e-02
##	G37040	-2.054104e-03	-2.174415e-03	-2.306483e-02	-4.430876e-03	2.116648e-02
##	G37027	1.949993e-04	-4.257117e-03	3.842351e-02	2.336702e-02	-3.794004e-02
##	G37024	-3.314299e-02	-1.350195e-02	-7.595942e-03	-1.426988e-02	2.374990e-02
##	G37023	2.867767e-02	1.676732e-02	-7.736176e-03	1.717844e-02	-5.279922e-03
##	G37036	-1.310612e-02	-1.110138e-02	-1.925475e-02	-1.327809e-02	3.365445e-02
##	G37026	1.831569e-02	3.445213e-02	5.205565e-03	-1.023763e-02	2.970255e-03
##	G37050	6.893364e-03	1.588205e-02	-9.693294e-04	-1.876865e-02	-1.605606e-03
##	G36973	7.342587e-04	3.909368e-03	1.823228e-02	-2.005059e-02	-7.300478e-03
##	G36991	2.463981e-02	-5.162996e-03	8.738962e-03	-1.767374e-02	6.802400e-03
##	G36904	9.645215e-03	-7.403028e-03	3.359294e-03	6.985789e-04	3.130019e-03
##	G36958	-5.081366e-03	-1.611170e-02	-1.330475e-02	1.358655e-02	-2.666765e-02
##	G36993	1.398394e-02	7.191244e-03	-4.474901e-03	7.621256e-03	3.844686e-03
##	G37020	1.527268e-02	7.722856e-03	4.529778e-03	-1.667121e-02	-1.261492e-02
##	G36910	-1.128081e-02	2.715513e-02	8.184652e-03	-3.688212e-02	4.720266e-03
##	G36927	-2.663280e-03	1.258578e-02	-4.942955e-03	9.960402e-03	-1.996400e-02
##	G37018	1.868596e-02	-1.033436e-02	4.742288e-03	8.263525e-03	-2.562510e-03
##	G37048	1.725866e-02	-3.457003e-03	2.182424e-02	-1.275917e-02	-1.244062e-03
##	G36940	2.386927e-03	-8.857583e-03	-1.322991e-02	2.666622e-03	7.638564e-03
##	G37013	-2.080228e-02	-1.542251e-02	-1.354921e-02	-1.201613e-02	-1.304252e-02
##	G37038	-3.176085e-03	4.343844e-02	-3.087773e-02	2.580741e-02	-7.151308e-03
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## G35453 -2.783956e-02 -1.016651e-02 1.816579e-02 9.120585e-03 3.697602e-03
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##	G36183	-5.885447e-04	-3.711946e-04	2.353431e-02	4.994313e-02	-1.720527e-02
##	G36227	2.515415e-02	3.977647e-03	8.854331e-03	8.808074e-05	1.707858e-02
##	G36322	-1.925397e-02	2.531748e-02	1.531520e-02	2.115326e-03	1.069893e-02
##	G36182	-2.205112e-02	1.770737e-02	-1.112882e-02	1.594277e-02	-1.032069e-02
##	G36256	1.523989e-02	2.359170e-04	-1.663005e-02	-2.388105e-02	-1.929561e-02
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##	G36185	2.671668e-03	-4.899867e-03	2.305452e-02	5.192815e-03	-3.082081e-03
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##	G36194	2.984578e-02	-2.570414e-02	-1.632714e-02	-1.313111e-02	4.582879e-03
##	G36244	-8.830618e-03	-7.634839e-03	1.000358e-02	-4.648166e-04	-2.107955e-02
##	G36197	-2.683546e-02	9.201377e-04	3.651712e-04	-1.737885e-02	-6.872448e-03
##	G36264	2.383039e-02	1.109637e-02	5.019655e-03	-1.255940e-02	-1.356695e-02
##	G36317	2.270147e-02	-7.608991e-03	2.018889e-02	-4.466037e-02	2.222794e-05
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##	G36146	-6.242256e-03	-1.472490e-02	1.993279e-02	1.847681e-02	1.657177e-02
##	G36192	-5.947032e-03	1.667732e-02	4.555404e-03	1.161108e-02	-3.134704e-02
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##	G36142	-1.113619e-02	2.477155e-02	-6.004221e-03	-1.598240e-03	-8.827326e-03
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##	G36314	1.046710e-02	1.385431e-03	2.032343e-02	-6.243020e-04	5.313179e-03
##	G36258	-1.758988e-02	-3.798797e-02	3.825818e-03	-1.131193e-02	-1.476728e-02
##	G36147	2.012425e-02	-6.882288e-03	9.540684e-03	9.396736e-03	4.309843e-03
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##	G36143	7.844208e-04	3.646235e-03	-6.442693e-03	2.325825e-02	1.371612e-03
##	G36308	7.285614e-03	-2.126795e-02	-4.254176e-03	5.090345e-03	2.070378e-02
##	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
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## G37030 -1.020404e-02 3.421080e-02 2.408079e-02 3.609472e-02 -1.677857e-02
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## G36150 -9.465609e-03 -1.999043e-02 -1.142696e-02 -1.094034e-02 4.764426e-03
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##	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
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##	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
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##	G36138	8.395290e-03	6.169848e-03	-3.005932e-03	-1.267838e-02	4.885334e-03
##	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
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##	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
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##	G36209	1.055537e-02	2.713117e-02	2.666076e-02	8.271933e-03	1.112050e-02
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##	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
##	G36984	-1.640966e-02	2.602606e-02	-4.567834e-04	2.000033e-02	2.487744e-02
##	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
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##	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
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##	G36964	-1.142084e-02	1.386903e-02	6.546123e-03	1.343134e-02	1.653765e-03
##	G36951	-2.982368e-02	-2.301832e-02	9.066549e-04	1.356456e-02	1.483553e-02
##	G37025	1.357643e-02	-4.292283e-03	2.791811e-03	2.666723e-03	-5.828186e-03
##	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
##	G37041	1.332222e-02	-1.307403e-04	-9.015416e-03	-4.024679e-02	-8.952136e-03
##	G36959	-8.925828e-03	1.377107e-03	-1.890743e-02	2.274940e-03	2.068334e-02
##	G36905	2.080956e-02	-1.261504e-02	-2.347089e-02	1.976911e-02	-8.924169e-03
##	G36917	1.558170e-02	-1.248893e-03	-1.266438e-02	-5.852644e-03	-2.622127e-02
##	G36992	-3.469334e-02	3.041627e-02	-2.668122e-02	-7.848256e-03	-3.556679e-03
##	G36921	-6.270890e-03	1.158979e-02	4.968133e-02	3.688949e-03	3.039344e-02

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## G36320 -1.073487e-02 -1.527101e-02 -2.871571e-03 -9.666595e-03 -3.569365e-03
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## G36161 -3.869782e-02 -8.790998e-03 1.407471e-02 -1.238636e-02 -1.098846e-02
## G36172 8.238025e-03 1.251898e-02 8.955000e-04 8.297755e-03 -2.470148e-03
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## G36151 8.049630e-03 -1.282943e-02 9.935379e-03 -1.196700e-02 -2.809865e-02
## G36248 1.056098e-02 1.105568e-02 -1.668864e-02 6.094188e-03 2.654528e-03
## G36239 1.755512e-02 -1.555911e-02 2.543925e-02 -3.316118e-02 2.662194e-02
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##	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
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##	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
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##	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
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##	G36959	-5.705497e-03	-1.190756e-02	-1.523783e-03	3.669876e-03	1.038179e-03
##	G36905	1.411100e-02	1.275308e-02	8.462235e-03	-2.111141e-02	-2.924795e-03
##	G36917	7.163515e-03	-2.627705e-02	4.018749e-03	-1.845748e-03	7.907520e-03
##	G36992	-4.069472e-03	6.475751e-03	-2.340529e-03	6.194120e-03	4.202236e-02
##	G36921	2.796985e-02	5.058301e-03	-1.182150e-02	-3.163202e-03	1.509474e-02
##	G37004	5.555913e-03	5.016411e-03	4.995349e-03	-6.109647e-03	-1.224267e-02
##	G36966	1.467727e-02	-6.475027e-03	-1.881542e-02	9.103469e-03	5.124347e-04
##	G36936	5.974691e-03	1.057261e-03	-2.469604e-02	-8.249381e-03	7.518186e-03
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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
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##	G37053	5.213702e-03	-1.338422e-02	-1.252786e-02	-1.458156e-02	9.995776e-03
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##	G37049	-9.634367e-03	-5.215420e-03	1.586384e-02	-1.087893e-02	-1.311598e-02
##	G37019	-1.331060e-02	-2.212734e-02	-1.584892e-02	2.064005e-03	1.996767e-02
##	G36988	2.285043e-02	-6.333566e-05	1.483181e-02	1.959530e-03	-1.419388e-02
##	G37037	-1.817081e-03	2.172092e-02	1.908231e-02	-3.432596e-03	-7.611723e-03
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##	G36928	-9.436705e-03	7.276095e-03	-3.313525e-02	1.462068e-02	9.736866e-03
##	G36923	3.858291e-03	6.560030e-03	7.548776e-03	2.111979e-03	-2.773629e-02

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##	G36204	-2.182718e-02	3.674188e-03	2.018983e-02	4.228697e-03	-9.905735e-03
##	G36318	-1.753234e-02	9.914050e-04	3.582150e-03	2.192233e-02	2.123454e-02
##	G36194	-6.056150e-03	4.965254e-03	-5.422917e-03	1.023806e-02	-1.121156e-02
##	G36244	-6.778161e-03	-1.016175e-02	1.216175e-03	-3.135282e-03	-3.601769e-03
##	G36197	-1.080875e-02	-1.600073e-03	-4.506554e-03	6.474016e-03	1.712986e-02
##	G36264	-6.740672e-03	2.844930e-03	-8.485349e-03	-1.110454e-02	-6.503298e-03
##	G36317	-2.051455e-03	-8.433477e-03	1.162563e-03	-2.022334e-02	-6.827643e-03
##	G36159	4.535122e-03	1.299236e-02	-1.598577e-02	5.127069e-03	-2.526034e-02
##	G36234	-1.819688e-02	-2.587585e-02	7.529025e-03	5.762136e-03	1.090017e-02
##	G36206	-7.934001e-03	1.331781e-02	-1.067539e-02	-1.172185e-02	3.553621e-04
##	G36257	-7.287853e-03	-2.838273e-03	2.840563e-03	-8.286722e-03	1.417715e-03
##	G36216	1.149155e-03	-2.527385e-02	3.650577e-03	-1.753787e-02	-7.611013e-03
##	G36208	3.532238e-03	-1.726172e-02	5.837961e-03	3.651733e-02	-1.775157e-04
##	G36309	8.994691e-03	6.872017e-03	8.303814e-03	2.531930e-02	2.997185e-02
##	G36146	-1.535955e-02	-1.601440e-02	-1.298962e-03	2.926193e-03	-1.617012e-03
##	G36192	-3.106759e-02	1.331115e-02	8.222439e-03	-1.102705e-02	2.634055e-02
##	G36284	-9.782210e-03	4.458432e-03	1.291485e-02	7.124020e-02	1.099111e-02
##	G36291	-2.213538e-02	1.466419e-02	-2.650466e-02	2.132429e-02	-2.293550e-02
##	G36142	-8.244759e-03	1.324759e-03	-1.048669e-02	-4.745429e-03	-5.719433e-03
##	G36138	-9.207840e-03	-3.783047e-03	2.262339e-03	2.512906e-02	5.233619e-03
##	G36203	2.060039e-02	9.065035e-03	1.294710e-02	-1.599959e-03	1.467965e-02
##	G36282	9.123142e-03	-2.427418e-02	1.075281e-03	4.016095e-03	2.041861e-02
##	G36290	-6.810189e-03	2.786201e-02	5.543322e-03	7.764961e-03	-8.472171e-03
##	G36274	9.643188e-03	-3.233258e-03	1.917822e-02	2.793760e-03	2.917102e-02
##	G36314	-1.517135e-02	-1.281929e-02	-1.929958e-02	1.700169e-03	8.551336e-03
##	G36258	2.845497e-02	-3.259431e-02	-8.340693e-03	2.281166e-03	1.325828e-02
##	G36147	5.265442e-04	6.852310e-03	-9.553734e-03	-7.037889e-03	9.210483e-03
##	G36235	1.197743e-03	-1.477959e-02	-1.066553e-02	3.589431e-02	2.098436e-02
##	G36143	1.493797e-02	-7.025654e-03	-4.261326e-03	8.289044e-03	-2.239478e-02
##	G36308	1.077090e-02	4.733493e-03	8.685599e-03	-5.950086e-03	-3.394395e-03
##	G36209	-1.851856e-02	2.447270e-02	2.284234e-03	8.435754e-03	-2.570872e-03
##		Axis.196	Axis.197	Axis.198	Axis.199	Axis.200
##	G37016	-2.969533e-03	1.102015e-02	2.712936e-03	9.988422e-03	1.114115e-02
##	G36918	-4.264100e-03	-1.671104e-02	4.852208e-04	6.232967e-03	-1.259661e-02
##	G37044	1.306966e-02	1.186327e-02	4.233745e-03	3.496068e-03	3.539843e-02
##	G37009	1.911285e-02	1.036862e-02	9.348999e-03	2.396078e-03	9.929706e-03
##	G37029	-8.162259e-03	-4.237952e-04	2.050170e-02	3.123664e-03	-1.255493e-02
##	G37035	-2.095991e-02	5.127106e-03	-3.150584e-03	4.132219e-03	2.187987e-02
##	G36982	-7.864175e-03	-4.739289e-03	-5.557507e-03	-4.146513e-03	-6.792143e-03
##	G36984	2.913063e-02	-2.661215e-02	1.329832e-02	4.720972e-03	1.903652e-03
##	G37030	-1.127580e-02	2.250281e-02	-1.104411e-02	1.847128e-03	1.957496e-02
##	G37031	-7.126290e-03	-3.140400e-02	8.962116e-03	-1.106961e-02	-2.297527e-02
##	G36906	2.838940e-02	1.722289e-02	-1.020427e-02	4.092879e-03	-2.356172e-02
##	G37028	-1.708646e-02	1.903624e-02	-1.439136e-02	6.508379e-03	-4.816478e-03
##	G37014	8.680326e-03	1.972573e-02	-1.410360e-02	-1.183597e-02	-8.870233e-03
##	G37010	-2.969241e-03	8.344371e-03	-1.759182e-02	1.499704e-03	1.471273e-02
##	G36944	-1.237483e-02	-1.475538e-02	5.240260e-03	2.208656e-02	8.057746e-03
##	G36902	-4.205213e-03	-2.015382e-02	2.328700e-02	-8.553912e-03	1.489731e-04
##	G37051	-5.899378e-04	2.190125e-03	-1.582137e-02	9.292313e-03	-1.270793e-02
##	G36964	1.473964e-03	7.687835e-03	1.047289e-02	-2.499305e-03	-1.733947e-03

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## G36935 -1.802897e-02 -2.685508e-02 -1.044825e-02 2.566773e-03 -3.131630e-04
## G37041 2.723752e-02 2.706567e-03 -1.507330e-03 4.420242e-03 2.481300e-02
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## G36992 8.298050e-03 1.438154e-02 1.587519e-02 -1.315852e-02 -1.029002e-02
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## G37040 -4.957315e-03 -1.641763e-02 -2.871343e-03 6.804851e-03 -2.791927e-02
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## G35473 -2.329024e-03 8.599936e-03 6.120523e-03 -6.800356e-03 1.196327e-02
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## G35498 9.668940e-03 1.637774e-03 2.160820e-03 -8.852107e-03 1.319774e-02
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## G36273 7.924372e-04 6.007191e-03 2.368421e-03 -2.258016e-02 5.017637e-03
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##	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
##	G36314	-2.881043e-03	-1.008587e-02	-2.394942e-02	-2.089830e-03	-1.734469e-04
##	G36258	-2.208690e-02	-1.053655e-02	-1.529463e-03	-9.778226e-03	-1.434908e-02
##	G36147	1.030438e-02	-1.372871e-02	-6.786667e-03	-3.656298e-03	1.250492e-03
##	G36235	-1.534502e-02	1.488234e-02	1.549587e-02	-6.217620e-03	4.716159e-03
##	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
##	G37016	1.418691e-02	-6.921959e-04	7.746962e-04	-7.769935e-03	-6.021785e-03
##	G36918	1.501865e-02	-3.790854e-03	-2.280852e-02	-7.485285e-03	3.815432e-03
##	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
##	G37014	-1.241451e-02	-2.125720e-03	3.662886e-03	7.657323e-03	-1.678022e-02
##	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
##	G37051	-5.055411e-02	-2.193391e-02	-1.774005e-02	9.385372e-03	-2.803448e-03
##	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
##	G36992	-1.146137e-02	-6.166736e-03	-3.108898e-03	-6.078602e-03	-5.006457e-03
##	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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##	G37052	-1.100807e-03	-2.353719e-02	1.546129e-02	2.050727e-02	-1.329815e-02
##	G36925	-2.519825e-02	1.138170e-02	-4.957012e-03	1.268259e-02	-3.631600e-03
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##	G35356	3.590649e-03	2.998647e-03	-2.094276e-02	-8.026656e-03	1.875071e-02
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##	G35447	1.038962e-02	1.198350e-02	-1.284242e-02	2.304777e-02	-6.444077e-03
##	G35458	8.564411e-03	1.218110e-02	-9.772148e-03	-6.093796e-03	-7.091506e-03
##	G35397	2.435171e-02	-7.240950e-04	-1.707545e-02	6.363768e-03	-1.125655e-02
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##	G35392	4.897497e-03	-1.078706e-04	-6.379832e-03	1.589448e-02	-2.756363e-02
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##	G35497	8.467320e-03	-1.268384e-02	1.938742e-03	3.999193e-04	-8.562262e-03
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##	G35366	9.618434e-03	-7.164535e-03	-5.871715e-03	3.953248e-03	-2.433590e-02
##	G35530	-1.980168e-02	-2.710706e-02	3.777845e-02	1.713891e-02	-1.929513e-02
##	G35512	1.369381e-02	-9.751023e-03	5.829828e-03	8.155433e-03	1.990525e-02
##	G35372	8.953212e-03	1.497572e-02	1.617880e-02	-1.179366e-02	-1.954868e-02
##	G35407	-8.599355e-03	6.672140e-03	9.235103e-03	-4.320381e-03	4.729089e-03
##	G35455	-1.714511e-02	-1.370824e-02	7.851471e-03	7.381957e-03	5.908041e-03
##	G35481	8.375593e-03	-3.625487e-03	9.170076e-03	-1.139727e-02	1.904018e-03
##	G35355	-7.080032e-03	-4.993560e-03	5.414930e-03	-1.919009e-03	-9.020798e-03
##	G35469	-1.415318e-02	-1.142273e-02	-6.826532e-03	9.458065e-03	-3.243829e-03
##	G35513	-5.695539e-03	1.405438e-02	6.461397e-03	1.360622e-02	-1.372506e-02
##	G35387	1.047662e-02	-1.393633e-02	2.218679e-02	1.243309e-02	1.073359e-02
##	G35527	4.487050e-03	-1.727818e-02	-1.524724e-02	7.985266e-03	1.945309e-02
##	G35516	-5.456146e-04	4.903618e-03	1.156860e-02	-1.181257e-02	-1.550925e-02
##	G35463	2.000229e-03	2.405793e-02	-1.321877e-02	1.450010e-02	-2.756054e-02
##	G35441	-8.043497e-03	1.417771e-02	-1.922670e-02	1.558866e-03	-1.002477e-02
##	G35414	-4.629579e-03	7.696810e-03	6.509200e-03	6.045201e-03	1.498871e-02
##	G35412	-1.546991e-02	1.196815e-02	-3.041408e-02	-2.123671e-02	5.752292e-03
##	G35388	3.582799e-03	8.275063e-03	2.401585e-02	6.515284e-03	-5.589433e-03
##	G35354	-6.187928e-03	-1.909957e-03	1.657944e-02	1.430800e-02	-6.116031e-04
##	G35533	-1.044416e-02	2.717816e-02	-1.482391e-02	-8.994419e-03	-1.954093e-03
##	G35406	7.572557e-03	-2.208623e-03	-3.750974e-03	-1.716357e-03	9.050631e-03
##	G35467	2.145604e-03	8.011645e-03	-7.576289e-03	-7.026712e-03	6.381778e-03
##	G35522	1.144984e-03	-3.586774e-03	1.557298e-02	2.538906e-02	2.208040e-02
##	G35404	9.564604e-03	-6.941751e-03	1.325561e-02	-4.070375e-03	1.716411e-02
##	G35445	4.487163e-03	1.087228e-02	8.643124e-03	-2.290018e-02	-1.875999e-02
##	G36173	3.597825e-03	-1.189829e-02	4.612054e-03	1.742436e-02	1.296467e-02
##	G36145	1.925309e-02	-8.694866e-03	-9.459463e-03	7.064394e-03	8.865268e-04
##	G36196	-9.551592e-03	1.144319e-02	6.888139e-03	1.769101e-02	-1.458032e-02
##	G36219	7.770940e-03	-5.784198e-03	-4.456821e-03	9.933824e-03	1.608125e-03
##	G36299	-8.466167e-03	-1.740225e-02	1.204402e-02	3.560080e-03	8.831366e-04
##	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


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## G36202 -2.437422e-02 -1.663930e-02 -1.650272e-02 -5.834458e-03 -2.192571e-03
## G36226 -5.884788e-03 -5.744508e-03 -2.405785e-02 3.622727e-03 6.755461e-04
## G36269 -2.329286e-02 1.378438e-02 6.842645e-04 -1.215236e-02 2.883208e-02
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## 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
## G36272 -4.681765e-03 -2.107164e-02 -1.775142e-02 9.824148e-03 1.563468e-03
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## G36320 1.221731e-02 1.084191e-02 -5.557774e-03 1.671047e-03 1.451544e-02
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## G36172 -4.060293e-02 -1.522064e-02 8.359867e-03 2.441922e-02 -1.951855e-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
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## G36239 8.481654e-03 2.452241e-02 2.068833e-02 2.380577e-02 1.041772e-02
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## 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
##	G36322	-1.469689e-03	8.294422e-03	3.213897e-03	1.469486e-02	-7.972540e-03
##	G36182	2.324055e-02	7.817750e-03	2.882528e-02	6.135561e-03	-1.986751e-02
##	G36256	-1.699721e-03	-2.122625e-02	1.399468e-02	-1.116955e-02	1.379860e-03
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##	G36287	4.822258e-04	-1.502811e-03	1.757410e-02	-1.923307e-02	4.904040e-03
##	G36157	1.105784e-03	-4.682773e-02	1.980158e-02	-5.656907e-02	3.064080e-02
##	G36262	6.563214e-04	-1.014200e-02	3.237887e-03	2.481385e-02	-2.272791e-02
##	G36200	-1.421754e-02	-4.119341e-03	4.223794e-04	-4.920837e-03	-2.145133e-02
##	G36160	1.155547e-03	-9.090093e-03	-1.133904e-03	8.118453e-03	2.329623e-02
##	G36185	-5.713239e-03	-1.713150e-03	-1.678326e-02	2.263718e-02	-2.770681e-03
##	G36162	-1.889177e-03	-2.275543e-02	6.303049e-03	-9.351641e-03	-1.002545e-03
##	G36204	1.161817e-02	-1.941532e-02	-3.175149e-02	1.607743e-02	1.557180e-02
##	G36318	9.242532e-03	5.369936e-03	4.765686e-03	3.762992e-03	-8.864455e-03
##	G36194	-1.726672e-03	-2.080657e-03	-3.535684e-03	8.999320e-04	7.214344e-03
##	G36244	1.129221e-02	4.240845e-02	-1.931441e-02	1.960906e-02	2.120427e-02
##	G36197	8.383776e-03	-1.790842e-03	-5.424109e-03	1.926129e-03	-6.703990e-03
##	G36264	7.459238e-03	1.171371e-02	-1.518440e-02	-1.691016e-02	1.169443e-02
##	G36317	-1.864306e-02	-6.039748e-03	1.077591e-02	8.702252e-03	-1.348499e-03
##	G36159	-2.189693e-02	-5.404537e-03	5.593933e-04	-5.580682e-03	6.284745e-03
##	G36234	1.385116e-02	8.873492e-03	1.222956e-02	-2.574914e-02	-5.952429e-03
##	G36206	-1.288022e-02	-5.408925e-02	-6.847277e-03	-1.978734e-02	1.967359e-03
##	G36257	-2.756502e-02	1.445629e-03	-1.664680e-02	-8.107243e-04	-1.057350e-02
##	G36216	-9.403094e-03	1.172854e-02	3.240371e-03	1.203696e-03	-2.718755e-02
##	G36208	9.581538e-03	-4.304122e-03	1.248947e-02	-4.765183e-03	-8.244372e-03
##	G36309	1.188703e-02	1.767524e-03	-2.206191e-02	-1.748664e-02	7.168252e-03
##	G36146	-5.840870e-03	-8.560928e-03	-2.394945e-03	-1.281435e-02	-6.028618e-03
##	G36192	-1.153452e-02	-1.677200e-02	-1.712750e-03	-6.223061e-03	-5.843046e-03
##	G36284	-2.021522e-03	-3.571285e-02	3.264769e-03	-6.262235e-03	7.204617e-04
##	G36291	1.542656e-03	2.419427e-02	1.137378e-02	5.708794e-03	-3.459881e-03
##	G36142	-4.091448e-03	5.242775e-03	1.609690e-02	-5.973895e-03	-1.188744e-02
##	G36138	-3.100758e-03	-4.708570e-03	-1.071538e-02	-8.587252e-04	1.267185e-02
##	G36203	1.313449e-03	1.457631e-02	-7.953214e-03	1.983165e-03	7.024497e-03
##	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
##	G36274	4.153324e-02	8.729767e-04	-1.771421e-02	1.609051e-02	-2.871156e-02
##	G36314	1.288960e-03	3.471757e-03	-6.386469e-03	6.065275e-03	6.835512e-03
##	G36258	-1.142912e-02	1.193826e-02	-6.961940e-04	3.259495e-02	5.400262e-03
##	G36147	1.931167e-02	-1.417620e-02	8.335417e-03	-2.460890e-03	-2.493264e-02
##	G36235	-2.757236e-02	-1.107428e-02	-2.011202e-02	-9.496757e-03	-7.592267e-03
##	G36143	-1.089763e-02	1.582114e-02	-1.124716e-02	-3.188918e-03	1.837612e-02
##	G36308	2.197336e-02	-7.543762e-03	4.374452e-03	-1.201463e-03	5.944411e-03
##	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
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##	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

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## 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
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## G37051 -7.893438e-03 2.757974e-02 1.309099e-03 1.153918e-03 -3.200508e-03
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## G36269 -1.058888e-02 -7.169462e-03 -1.544172e-03 -1.780009e-02 -6.120140e-03
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## G36272 -2.104720e-02 -2.174086e-02 -2.090148e-02 -5.304449e-03 5.568546e-03
## G36285 -7.621669e-03 -1.456447e-02 1.856729e-03 2.421986e-02 1.911834e-02
## G36259 -2.185844e-02 -6.455853e-03 6.062565e-03 -4.560871e-03 -8.181202e-03
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## G36266 -7.274414e-03 1.069332e-02 -2.007017e-02 -1.303775e-02 3.506473e-04
## G36164 5.936087e-03 1.953536e-02 1.120147e-02 -1.725527e-02 1.770878e-03
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## G36150 7.094239e-03 -6.965333e-03 -4.238550e-03 1.064718e-02 1.431491e-03
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## G36148 -1.197524e-02 8.464425e-03 3.261561e-03 8.933916e-03 1.495298e-03
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## G36317 8.627092e-03 -2.801453e-03 -2.251726e-02 4.319716e-03 1.179009e-02
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##	G36216	-1.461739e-02	9.797527e-03	-2.015906e-02	-3.375467e-03	2.980167e-03
##	G36208	8.632429e-03	-1.211656e-02	-2.509675e-03	-1.119380e-02	-1.444680e-02
##	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
##	G36291	-1.394920e-02	-1.059002e-02	-3.727321e-03	1.464048e-03	2.919132e-03
##	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
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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
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##	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
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##	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
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##	G37025	4.123961e-03	2.013259e-02	-9.661020e-03	-4.958476e-03	-1.275885e-02
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##	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
##	G36917	8.610705e-03	9.415547e-03	-1.346555e-03	1.650267e-02	-1.426384e-03
##	G36992	9.359579e-03	7.625420e-03	1.272262e-02	-1.920646e-02	-1.722376e-02
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##	G37004	6.387615e-04	8.226488e-03	-1.165862e-02	-4.711936e-03	1.016668e-02
##	G36966	-3.182546e-03	-2.813337e-02	1.783891e-02	-2.994057e-03	5.391334e-05

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##	G37034	1.365653e-02	1.466329e-03	-1.321057e-02	2.177588e-02	3.261587e-03
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##	G36998	-6.419026e-03	1.528918e-02	9.967841e-03	-1.424025e-02	1.622640e-02
##	G37045	1.318980e-02	-2.581615e-04	-4.275123e-04	1.042531e-02	5.778406e-03
##	G37049	-3.518623e-03	-1.572635e-02	5.279095e-03	-2.937067e-03	3.233192e-03
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##	G37033	-9.554298e-03	-2.616222e-02	1.221487e-02	-1.380796e-02	-1.216314e-02
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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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##	G36968	-4.146326e-03	9.133096e-03	-4.468914e-03	3.085603e-03	1.048241e-02
##	G36911	2.099532e-03	9.395187e-03	5.399853e-03	-2.181027e-03	5.885020e-03
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##	G37042	-1.402619e-02	-1.283634e-02	-9.915183e-04	-1.136268e-02	1.600004e-03
##	G36960	-2.217787e-02	2.019255e-02	1.488530e-02	-1.934275e-02	-5.931586e-03
##	G37040	-3.002338e-03	-1.267360e-02	-1.326802e-03	5.602978e-03	5.825502e-03
##	G37027	-1.535584e-02	-1.083900e-02	1.995497e-02	-1.078801e-02	1.101418e-02
##	G37024	-8.317067e-03	-8.081907e-03	1.182590e-03	1.064199e-02	3.301881e-03
##	G37023	7.143312e-03	2.584334e-03	-3.795677e-03	-2.328734e-02	-1.396300e-02
##	G37036	3.877999e-03	-3.643714e-03	1.891139e-02	-1.805607e-03	-8.444283e-03
##	G37026	1.231263e-02	-1.953394e-02	-7.944324e-03	1.996943e-02	4.893379e-05
##	G37050	-1.533137e-02	1.656068e-02	1.188880e-02	-2.909495e-03	2.450148e-03
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##	G36904	1.576812e-03	-1.588059e-02	-1.052941e-02	2.532165e-02	1.154943e-02
##	G36958	-2.265506e-03	7.030652e-03	9.144783e-03	5.530913e-03	-1.866946e-02
##	G36993	4.802553e-03	-1.192939e-02	-1.048530e-02	-1.299418e-03	-1.313101e-02
##	G37020	2.178408e-02	2.817860e-02	-4.603931e-03	-6.243903e-03	-1.973326e-02
##	G36910	1.272409e-03	1.151301e-02	-1.984763e-03	1.834487e-02	1.403405e-02

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##	G36135	-5.669260e-03	-5.656425e-03	1.762551e-03	-2.333556e-04	9.684958e-03
##	G36250	-1.166602e-02	3.655027e-03	1.695305e-02	1.572181e-02	1.721865e-02
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##	G36155	-1.411368e-03	1.593438e-02	1.764745e-03	-3.097689e-02	6.034048e-03
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##	G36266	-3.986653e-03	6.046500e-04	1.479365e-03	-1.965718e-02	-7.483192e-03
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##	G36237	3.602030e-03	-2.338625e-03	-4.358887e-03	-6.700147e-03	-2.421436e-02
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##	G36232	-1.514782e-02	1.897123e-02	-1.159316e-02	-1.779458e-03	1.613335e-02
##	G36240	-7.140979e-03	-9.048941e-04	2.335690e-02	8.578232e-03	-3.998067e-03
##	G36249	1.411509e-02	1.363231e-02	-5.659548e-03	-1.013689e-02	6.195662e-03
##	G36298	1.875454e-02	6.526767e-03	1.801569e-02	-1.599901e-02	1.269325e-02
##	G36176	5.640036e-03	1.365742e-02	-3.576861e-03	-1.955235e-02	4.451605e-03
##	G36214	1.729895e-02	-9.080729e-03	-2.088397e-03	4.831936e-03	-8.851712e-03
##	G36230	4.785238e-03	-1.112791e-02	-1.152561e-02	-5.807967e-03	-6.613043e-03
##	G36320	-4.422405e-03	8.635745e-03	-6.592407e-03	-1.091956e-03	1.770290e-02
##	G36245	1.576634e-04	-1.582573e-03	2.296477e-03	-1.205091e-02	8.168348e-03
##	G36161	-1.965913e-02	2.685249e-02	-8.361913e-03	1.089931e-02	1.855486e-02
##	G36172	5.755239e-03	-9.786652e-03	-9.052138e-03	1.274672e-03	-2.751857e-02
##	G36212	-2.274419e-03	-4.691700e-03	1.671964e-02	-6.768102e-03	-2.781398e-03
##	G36180	-4.523661e-03	2.011629e-02	4.843576e-03	1.242650e-02	3.182934e-03
##	G36153	2.248659e-02	1.843075e-02	8.114495e-03	3.927464e-03	3.123432e-03
##	G36210	-7.563560e-03	1.398451e-02	-7.246336e-03	-1.231697e-02	7.531243e-03

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## G36151 -2.909589e-03 1.850229e-02 -2.286626e-02 -3.213463e-03 -5.226828e-03
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## G36233 -5.081575e-02 -3.252819e-03 -3.877576e-02 9.181586e-03 1.456096e-02
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## G36318 4.023093e-03 1.473282e-03 9.966446e-03 -7.466889e-04 -7.209567e-04
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## G36197 -1.197410e-02 -1.163936e-02 -4.612172e-03 1.669603e-02 -1.684851e-02
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## G36159 -1.407924e-02 2.240618e-03 -4.602530e-03 -1.530582e-02 -1.705362e-02
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##	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
##	G36964	-3.597906e-03	1.047509e-02	5.511259e-03	7.367420e-03	-4.149776e-03
##	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
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##	G36921	4.039545e-04	-2.382117e-04	1.884722e-02	1.298692e-03	-2.192236e-03
##	G37004	3.581934e-03	-1.440142e-03	-1.695404e-02	-3.335418e-03	1.232476e-02
##	G36966	3.408248e-02	-9.143582e-03	1.328102e-02	5.101165e-03	-2.449318e-02
##	G36936	-1.039744e-02	-1.402387e-02	-1.247116e-02	-1.433810e-02	-5.757786e-03
##	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
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##	G37033	-1.608836e-02	-3.694014e-04	6.314726e-03	3.410130e-03	1.908719e-03
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## G35525 6.715407e-03 -2.739551e-02 -2.601610e-03 1.864214e-02 2.131426e-02
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## G36262 2.688699e-02 1.005071e-02 -2.541093e-02 -1.750316e-02 6.466812e-03
## G36200 -1.687785e-03 1.226660e-02 -1.189704e-02 4.912289e-03 -7.267630e-03
## G36160 -1.755241e-02 -8.919678e-03 -4.822318e-03 -2.936386e-03 -1.991114e-02

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##	G36185	-2.530330e-03	9.765456e-03	2.411803e-03	-5.572128e-03	2.863754e-02
##	G36162	3.041607e-03	8.375100e-03	6.697631e-03	-1.145806e-02	-1.464860e-03
##	G36204	-1.557976e-02	-2.640916e-02	-1.294689e-02	3.822389e-03	-7.970960e-03
##	G36318	4.804488e-03	-4.892195e-03	4.366238e-03	-1.378578e-03	1.051919e-02
##	G36194	5.596932e-03	3.006795e-03	5.823526e-03	-1.503433e-05	7.130707e-04
##	G36244	-1.407507e-02	-1.948179e-02	1.503120e-03	3.258403e-02	9.076086e-03
##	G36197	6.985954e-04	-1.528211e-02	-1.820374e-03	1.211771e-02	-1.192983e-02
##	G36264	2.656372e-03	-1.196835e-02	-1.719923e-02	-3.098121e-02	-8.234220e-03
##	G36317	2.417943e-02	-6.029888e-03	1.959406e-03	8.797859e-03	3.465147e-03
##	G36159	-1.005886e-02	-5.124775e-04	-7.496840e-04	-3.585194e-03	-6.833291e-03
##	G36234	-1.530997e-02	-1.189069e-02	1.092295e-02	-3.504766e-03	-5.000643e-03
##	G36206	1.674487e-02	5.740416e-03	-1.453430e-02	9.875693e-03	1.385733e-02
##	G36257	-4.962260e-03	9.021383e-03	5.595589e-03	-4.249199e-03	1.397166e-02
##	G36216	-8.755881e-03	1.588016e-02	1.529808e-02	-2.622370e-02	6.782874e-03
##	G36208	-7.831182e-04	4.472443e-03	-7.323287e-03	1.362649e-02	4.874431e-03
##	G36309	-1.712855e-02	-9.227529e-03	-2.715201e-02	1.599705e-02	-8.892174e-03
##	G36146	-1.287232e-02	-7.549662e-03	-7.593415e-03	-8.551922e-03	7.057096e-03
##	G36192	-1.718755e-02	-1.066469e-02	-8.210230e-03	-3.023740e-03	5.462206e-03
##	G36284	-2.872248e-03	-4.158475e-03	2.815142e-02	-3.152535e-02	5.898814e-03
##	G36291	-2.361928e-03	7.474836e-04	5.894877e-03	1.037966e-02	-8.855897e-03
##	G36142	-4.324150e-03	4.183711e-03	3.613581e-02	7.136480e-04	-1.044444e-02
##	G36138	-5.433593e-03	-8.031562e-05	1.194401e-03	-1.439335e-02	7.847247e-03
##	G36203	-2.611131e-03	2.031639e-02	1.779318e-02	-1.236848e-02	1.160129e-02
##	G36282	-8.113188e-03	1.015311e-02	1.469026e-02	4.320337e-03	-2.937408e-03
##	G36290	1.431621e-02	-5.513365e-03	-6.181205e-03	-1.304042e-02	2.447758e-04
##	G36274	8.326890e-03	-2.619682e-02	-2.250600e-02	-3.544224e-02	-2.667158e-02
##	G36314	-2.322773e-03	2.441515e-03	-6.951315e-03	1.671026e-02	1.118463e-03
##	G36258	3.822016e-03	-7.891719e-03	9.160670e-03	-5.536129e-03	9.885228e-03
##	G36147	-1.895364e-02	-2.713700e-03	-1.014149e-03	-1.029826e-02	-8.501773e-03
##	G36235	3.972565e-03	9.817396e-03	-2.030065e-02	2.464096e-03	7.106142e-03
##	G36143	2.583402e-02	3.587362e-03	-4.769957e-03	2.535022e-02	7.457440e-03
##	G36308	1.015013e-02	-1.132815e-02	-3.010907e-03	-1.433103e-02	4.973524e-03
##	G36209	2.180989e-03	2.693527e-03	1.355717e-03	-1.133835e-02	-1.827867e-02
##		Axis.221	Axis.222	Axis.223	Axis.224	Axis.225
##	G37016	6.549771e-03	-6.349990e-03	1.330684e-02	1.036919e-02	-1.665051e-02
##	G36918	-2.230719e-02	-1.088012e-02	8.473665e-03	-8.697442e-03	1.190094e-03
##	G37044	-1.250334e-02	-2.585070e-03	1.944690e-02	-9.925925e-04	-4.988398e-03
##	G37009	1.613611e-02	7.196343e-03	3.484310e-05	-4.342201e-03	-2.272058e-02
##	G37029	-1.000639e-02	8.773913e-03	-1.154446e-02	-2.858471e-03	2.480138e-03
##	G37035	-7.384315e-04	1.363623e-02	3.074103e-02	9.843962e-03	3.302720e-03
##	G36982	9.979684e-03	6.091655e-03	-1.887635e-03	5.141294e-03	2.585919e-03
##	G36984	-4.279236e-03	2.810232e-02	1.006490e-02	1.771412e-02	-3.169383e-03
##	G37030	-1.797297e-05	-1.862920e-02	-2.086182e-02	2.803427e-03	7.548167e-03
##	G37031	-1.142237e-03	8.124975e-03	-3.612648e-02	1.425236e-02	-8.463818e-03
##	G36906	1.673904e-02	-3.209254e-02	1.325917e-02	1.512910e-02	6.249039e-03
##	G37028	-1.280642e-04	-8.510902e-04	1.285248e-03	-1.364828e-02	7.012920e-03
##	G37014	6.147321e-03	2.324138e-03	-1.452689e-02	4.806639e-04	-3.238676e-03
##	G37010	5.216057e-03	-1.365364e-02	-1.580433e-02	-2.531329e-03	8.382325e-03
##	G36944	-2.525073e-03	1.079320e-02	1.562977e-02	-1.695332e-02	-1.539680e-02
##	G36902	-2.360248e-02	9.385193e-03	-4.193955e-03	9.655525e-03	-1.608533e-02
##	G37051	-9.049643e-04	6.972575e-03	-5.058664e-05	-2.455211e-03	7.636278e-03
##	G36964	-7.935483e-03	-3.965291e-03	-1.017367e-02	1.451263e-02	-1.944684e-04
##	G36951	-3.448568e-03	2.696882e-02	-1.065824e-03	-4.837945e-03	1.298655e-02
##	G37025	5.922169e-03	1.319460e-02	-4.267393e-03	3.452437e-03	1.296762e-02

##	G36930	8.702305e-03	1.235083e-03	1.493991e-03	-1.613154e-03	8.947028e-03
##	G36935	1.314673e-02	-4.617418e-03	6.421308e-03	1.076524e-02	3.174475e-02
##	G37041	-3.230763e-03	1.770825e-03	5.384614e-03	-1.613412e-02	3.598848e-03
##	G36959	2.257922e-03	6.968828e-03	7.283318e-03	1.153942e-02	-7.140960e-03
##	G36905	-3.509229e-03	-2.848492e-03	2.567613e-02	1.383537e-02	6.138499e-03
##	G36917	3.767610e-02	2.868953e-02	9.830447e-04	-1.498944e-03	-2.295979e-02
##	G36992	-6.147775e-03	3.222987e-03	2.235196e-03	4.290102e-03	-2.634628e-03
##	G36921	9.792691e-03	-2.693663e-02	-1.546242e-02	-2.267023e-02	2.115742e-02
##	G37004	-1.056719e-02	8.269347e-03	1.253040e-02	2.241766e-02	1.480870e-02
##	G36966	-1.543391e-02	3.827342e-03	1.229423e-02	2.794849e-03	-1.167144e-02
##	G36936	-8.616401e-03	9.355460e-03	-4.952646e-05	3.010518e-03	-5.272557e-03
##	G37015	1.281792e-02	-1.274974e-02	-8.236172e-03	9.057281e-03	1.794590e-02
##	G37034	2.171393e-03	-5.975281e-03	1.542245e-02	7.754914e-03	1.078727e-02
##	G36953	-2.130905e-02	-1.998928e-02	-7.504966e-03	-9.273510e-03	1.416372e-02
##	G36974	-8.367106e-03	1.436296e-02	3.561593e-02	4.730774e-03	7.093421e-03
##	G37039	-1.667135e-02	-1.368861e-02	3.853822e-03	7.901461e-03	-9.021758e-03
##	G36933	4.192460e-03	5.756031e-03	-1.032164e-02	1.140938e-02	-3.527596e-03
##	G37052	-1.564995e-02	-1.420149e-02	9.827981e-03	1.135027e-03	-6.003192e-03
##	G36925	-3.470444e-03	-1.760214e-02	8.428277e-04	6.469967e-03	-2.038772e-02
##	G37046	3.469630e-03	1.417137e-02	-1.958559e-02	6.596352e-03	1.612180e-02
##	G37053	-9.123824e-03	-1.362222e-03	1.118911e-02	-6.888702e-03	-9.773782e-03
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##	G37045	6.823699e-03	-3.188925e-04	-1.974221e-02	7.706311e-03	3.724468e-03
##	G37049	-9.961348e-03	-1.945783e-03	1.298936e-03	-9.246053e-03	-3.327773e-02
##	G37019	-2.327579e-03	-7.007181e-03	1.647273e-02	-1.267232e-02	-4.191724e-03
##	G36988	-9.571901e-03	1.696917e-02	-2.314149e-03	6.940516e-03	2.485833e-02
##	G37037	-1.178699e-02	-4.618055e-03	1.917037e-02	-1.177194e-02	-3.943960e-03
##	G37005	2.011490e-02	3.648689e-02	1.239989e-02	1.238205e-02	1.161687e-02
##	G36928	-9.450475e-03	8.388241e-03	4.529695e-03	1.023665e-02	-1.424279e-03
##	G36923	-5.838380e-03	1.468430e-02	1.576033e-03	-2.615881e-02	-1.050505e-02
##	G37033	7.451821e-03	-1.504206e-02	-1.053634e-02	1.872868e-02	1.728577e-02
##	G37017	-1.143450e-02	-1.762626e-02	-4.371066e-04	-7.967742e-04	1.333035e-02
##	G37012	-1.516686e-02	9.021063e-03	-1.776428e-03	-6.080295e-03	6.757719e-03
##	G36952	1.693799e-02	1.702606e-02	3.805461e-03	2.747191e-03	-1.441707e-02
##	G37011	-8.349141e-03	1.566530e-02	-3.104006e-03	-1.334039e-02	8.043161e-03
##	G36957	-2.189113e-02	6.963250e-03	5.079600e-02	-1.065020e-02	1.908548e-03
##	G37021	-3.262896e-02	-8.134164e-03	-2.310635e-02	3.808183e-03	-1.246720e-02
##	G36937	1.447596e-02	-2.717726e-02	4.641968e-03	-1.047884e-02	2.612526e-02
##	G37047	4.771863e-03	-1.695372e-02	-2.589366e-03	-7.937894e-03	-9.124083e-04
##	G37032	3.166867e-03	-2.791310e-03	-4.815799e-03	-2.066185e-03	-2.316342e-03
##	G36932	-2.650915e-02	-2.209879e-02	-1.098223e-02	4.088393e-05	4.416604e-05
##	G37043	-6.413954e-03	-7.042720e-04	1.595231e-02	2.098001e-02	9.849842e-03
##	G37054	-4.661935e-03	1.523222e-02	-1.339687e-02	1.761887e-03	1.774099e-02
##	G36948	8.929601e-03	-3.787906e-03	-1.465333e-02	1.074265e-02	7.966246e-03
##	G36972	3.047258e-02	4.406354e-03	-1.174164e-02	1.486862e-02	-2.640735e-02
##	G36968	7.932872e-03	1.051736e-02	1.038241e-03	-1.675764e-03	8.781774e-03
##	G36911	-1.242725e-02	-3.172333e-03	9.697236e-03	-1.506193e-02	3.779652e-03
##	G36987	-1.703230e-03	-2.284291e-03	-1.371270e-02	-1.597246e-02	-3.071055e-03
##	G37042	1.743955e-02	-1.275394e-02	1.077570e-02	8.047070e-03	1.230905e-02
##	G36960	-1.371243e-02	3.144253e-03	8.878761e-03	2.537003e-03	6.612290e-03
##	G37040	-1.536739e-02	1.111428e-02	4.611771e-03	-1.193680e-02	-1.460111e-02
##	G37027	8.620352e-03	-3.429031e-03	-1.778058e-02	-7.792280e-03	7.915135e-03
##	G37024	-6.268743e-03	-1.129892e-02	8.205090e-03	3.958267e-04	6.761593e-03
##	G37023	1.047058e-02	1.739952e-02	1.989973e-02	-1.724225e-02	8.734706e-03

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##	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
##	G36964	-1.701295e-02	2.241479e-03	4.144601e-04	1.403423e-02	5.256979e-03
##	G36951	-2.245029e-03	8.889562e-05	3.425078e-03	-1.395259e-03	-1.633015e-02
##	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
##	G36992	-2.988886e-02	-1.367812e-02	8.674405e-03	-3.600310e-03	2.138651e-02
##	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
##	G36936	1.276326e-02	1.072755e-03	2.134859e-03	8.390144e-03	5.747216e-03
##	G37015	-2.077405e-02	-1.457512e-02	-1.901763e-02	-1.288531e-02	1.803587e-02
##	G37034	1.664133e-03	4.063562e-03	-1.575036e-03	-5.045600e-03	-8.996835e-03
##	G36953	-3.011908e-04	4.083255e-04	1.852819e-02	-1.282677e-02	-2.976350e-03
##	G36974	-1.926705e-03	2.448162e-03	1.257246e-03	2.950869e-02	3.649526e-03
##	G37039	3.465717e-02	-2.141764e-02	-1.476609e-02	6.931190e-03	1.990160e-03
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##	G37052	-3.286305e-03	-1.029515e-02	1.372273e-02	4.114262e-03	-1.672791e-03
##	G36925	-1.463268e-02	-3.983031e-04	-3.022233e-04	1.593370e-02	-1.430697e-03
##	G37046	7.950039e-03	-9.836158e-04	4.473254e-03	4.729856e-03	-8.335310e-03
##	G37053	1.735397e-03	-1.110170e-02	-5.828564e-03	1.358041e-02	2.195157e-03
##	G36998	-2.029660e-02	-5.229334e-03	-7.354747e-03	-1.081688e-02	-2.104905e-02

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## G37019 -1.110303e-02 1.934963e-03 -9.379037e-03 9.128635e-03 -8.948066e-03
## G36988 1.820724e-02 -8.470644e-04 -4.646658e-03 -9.631099e-04 -1.536550e-02
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## G37005 1.014878e-02 -7.224706e-03 -1.772391e-02 -1.058338e-02 2.449346e-03
## G36928 -1.182924e-02 1.831676e-02 -1.209280e-02 1.834718e-02 2.519165e-03
## G36923 6.206916e-03 -8.965980e-03 -1.002382e-02 -1.248811e-02 2.558561e-03
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## G35381 -1.352524e-05 -1.428477e-02 9.782969e-03 -1.928239e-02 5.294908e-03
## G35416 -1.202460e-02 -2.212706e-02 -2.866183e-02 -9.602455e-03 -8.550455e-04
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## G35422 -1.162816e-02 3.264432e-02 -8.522024e-03 1.088441e-02 -7.087546e-03
## G35526 3.152627e-02 7.809498e-03 5.278588e-05 -3.125099e-02 1.864668e-04
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## G35394 -2.678299e-02 6.134113e-03 8.393127e-03 1.011391e-03 1.882638e-03
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##	G36205	3.197418e-03	2.544867e-03	-4.081351e-03	-1.145650e-02	2.538167e-02
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##	G36240	2.693065e-03	1.797571e-04	1.292888e-02	2.375965e-03	-7.739108e-03
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##	G36303	-6.687775e-03	-6.946862e-03	1.377287e-02	-1.300089e-02	-1.604684e-02
##	G36193	-5.102359e-03	9.416692e-03	-2.910569e-03	1.473429e-02	-3.531036e-03
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##	G36267	9.136404e-03	-8.735468e-03	1.086457e-02	-7.189892e-03	-1.532247e-04
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##	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
##	G36203	-1.019507e-02	-1.029476e-03	1.048323e-02	2.668811e-02	3.082390e-03
##	G36282	7.468891e-03	-7.592911e-04	-1.675665e-02	-8.673875e-04	6.836006e-03
##	G36290	1.313478e-02	-8.131371e-03	-1.866539e-02	-7.449067e-03	-4.248516e-03
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##	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
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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
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##	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
##	G37014	-4.008556e-03	4.187110e-03	-1.013529e-02	7.555912e-03	-2.518629e-03
##	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
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##	G37051	1.378316e-02	1.160072e-02	4.514836e-03	1.390953e-02	5.984587e-03
##	G36964	-1.575783e-03	2.087532e-03	6.023781e-03	5.711913e-03	-5.775737e-03
##	G36951	5.176562e-03	-6.835637e-03	3.284355e-04	-1.022723e-02	-2.686639e-02
##	G37025	6.736480e-03	-6.278091e-03	6.465079e-03	-1.094851e-02	9.242355e-03
##	G36930	1.452197e-02	-2.474544e-03	9.408534e-03	4.976954e-03	-9.506436e-03
##	G36935	1.346205e-03	-1.421420e-02	9.359209e-03	-9.565525e-03	-1.409963e-02
##	G37041	8.283193e-03	1.022575e-03	-2.396973e-03	-1.610001e-02	1.391978e-03
##	G36959	-3.995193e-03	-1.069098e-02	-2.480027e-02	3.773255e-03	1.605514e-02
##	G36905	2.089935e-03	-1.954658e-02	-8.506814e-03	1.296708e-02	-2.238046e-02
##	G36917	6.875164e-03	2.088565e-02	1.528449e-02	-4.151174e-03	-1.653644e-02
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##	G36936	-4.893056e-03	-3.078965e-03	-1.162142e-02	-1.071227e-02	5.538861e-03
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## G36320 -7.171111e-03 -1.021249e-02 -1.205422e-03 2.730827e-04 2.119844e-03
## G36245 -5.529699e-03 1.244987e-02 2.150715e-02 -1.002851e-02 -1.179596e-02
## G36161 -5.028897e-03 -2.158959e-02 -3.166104e-03 -8.380997e-03 2.662468e-03
## G36172 -2.401667e-02 9.263025e-03 -1.424457e-02 2.078253e-02 -8.031968e-03
## G36212 1.102993e-02 1.654934e-02 8.227633e-03 4.811076e-03 3.077843e-03
## G36180 1.143664e-02 4.062570e-03 3.100023e-03 3.146573e-03 -1.228698e-02
## G36153 7.377734e-03 -9.438211e-03 1.456838e-02 7.058568e-03 1.921013e-02
## G36210 -1.788092e-02 -1.611701e-03 -2.085292e-02 1.236256e-02 -9.556609e-03
## G36303 1.341872e-02 1.540550e-02 -3.534278e-03 -3.069572e-03 -7.783399e-03
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##	G36239	-3.328143e-03	1.002412e-04	-1.860955e-02	7.028513e-03	-1.648672e-02
##	G36270	2.178082e-03	-1.530153e-03	5.398003e-03	-4.559712e-03	2.813131e-03
##	G36158	1.562402e-02	-6.242280e-03	-1.590041e-02	-4.821834e-04	-3.719949e-03
##	G36233	1.426925e-02	-2.952962e-04	-3.024307e-03	9.178989e-03	7.858048e-03
##	G36311	4.864398e-04	2.607274e-03	7.068912e-03	-4.473465e-03	1.466537e-02
##	G36175	-1.283663e-02	2.988382e-03	1.089300e-02	-9.418159e-03	3.926545e-03
##	G36267	-1.281118e-02	9.922148e-03	1.592055e-02	-1.736131e-02	1.346469e-02
##	G36183	-6.766904e-03	3.934342e-03	-1.641550e-02	4.209944e-03	3.722371e-03
##	G36227	-7.198899e-03	-4.571535e-03	-6.198682e-03	-1.202071e-02	1.331555e-04
##	G36322	3.939989e-03	-1.012892e-02	-1.502500e-02	6.127517e-03	-2.521218e-03
##	G36182	1.692966e-02	9.109533e-04	2.279465e-02	-5.954388e-03	-8.668615e-03
##	G36256	-1.153898e-02	9.864033e-03	5.806621e-03	2.911502e-03	1.008353e-02
##	G36163	1.237187e-02	-2.429449e-02	2.809485e-03	-1.213033e-02	9.590445e-03
##	G36287	-3.024337e-02	-1.644505e-02	-5.847619e-03	2.132869e-02	7.163221e-03
##	G36157	1.675783e-03	-1.127496e-02	6.499810e-03	-2.273176e-02	3.571135e-03
##	G36262	3.943341e-03	8.918127e-03	-1.846016e-03	-2.038971e-02	1.910539e-02
##	G36200	3.186744e-04	1.591891e-02	4.749351e-03	-2.800996e-02	1.666953e-02
##	G36160	1.443976e-02	-6.124393e-03	1.896444e-02	6.770392e-03	-8.341082e-03
##	G36185	1.039958e-02	-1.617380e-03	-8.854998e-03	4.461598e-03	1.634002e-02
##	G36162	1.643393e-02	-5.855048e-03	3.159003e-03	1.058389e-02	2.539907e-03
##	G36204	8.814282e-03	1.343473e-02	2.687110e-02	-2.157160e-02	-2.815177e-02
##	G36318	1.335123e-02	-1.219651e-04	2.918821e-02	-6.824546e-03	5.861292e-04
##	G36194	-6.841481e-03	5.467060e-03	-2.656297e-03	-2.311636e-02	2.288065e-03
##	G36244	4.799016e-03	1.437718e-02	-2.425553e-02	-4.971075e-04	-8.581344e-04
##	G36197	6.117302e-05	2.918348e-03	-6.912598e-03	-1.090685e-02	-4.831385e-03
##	G36264	-1.904567e-02	2.318058e-02	1.715684e-02	7.309731e-04	6.466763e-03
##	G36317	-8.939742e-03	2.317246e-03	-7.745987e-04	2.422837e-03	8.773843e-03
##	G36159	-1.956902e-03	-5.882979e-03	-1.640415e-03	9.461626e-03	1.435327e-03
##	G36234	1.735000e-02	2.839394e-03	-3.992866e-03	1.279082e-02	1.705646e-02
##	G36206	-1.182590e-02	1.998499e-02	3.321892e-03	-5.747656e-03	1.226895e-02
##	G36257	-7.147521e-03	-8.194525e-03	1.512440e-03	9.624904e-03	-6.342569e-03
##	G36216	5.174328e-03	-2.879734e-03	7.963203e-03	7.431884e-04	4.326079e-03
##	G36208	4.819334e-03	-4.433927e-03	-1.683465e-02	7.386820e-04	1.570485e-03
##	G36309	-1.113733e-02	9.634115e-03	-1.562313e-03	-1.729265e-03	-1.626289e-02
##	G36146	1.312700e-02	1.518333e-02	3.497074e-03	2.551889e-02	2.105280e-02
##	G36192	1.366280e-02	7.557586e-03	1.360713e-02	-7.909574e-03	2.013684e-02
##	G36284	4.042940e-02	-1.617709e-02	-2.396674e-02	3.872847e-03	7.210459e-03
##	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
##	G36282	3.098096e-03	-8.435890e-04	-1.577187e-02	3.141537e-03	2.271079e-02
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##	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
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## 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
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## G37051 -3.209596e-03 1.301203e-02 -1.377697e-02 1.273553e-02 8.133606e-03
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## G36930 9.107483e-04 9.276361e-03 9.853140e-03 1.359788e-02 -4.999970e-03
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## G36992 -1.357505e-02 6.142836e-03 9.538271e-03 7.715106e-03 1.415795e-02
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## G36966 2.910069e-03 2.281471e-02 -1.643586e-02 7.022846e-03 1.109008e-02
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## G37034 9.353331e-03 5.823225e-03 1.257627e-02 -2.753004e-03 1.073697e-02
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## G37053 -5.628107e-04 -1.241603e-02 1.041526e-02 8.924798e-03 6.101833e-03
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## G35532 9.606414e-03 3.168070e-03 4.095351e-03 -8.359570e-03 1.710164e-02
## G35537 -7.235700e-04 -4.664898e-03 -2.723644e-03 8.775953e-03 2.945088e-03
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##	G36194	-2.467540e-02	1.533932e-02	-1.493462e-02	-1.562232e-02	6.060400e-03
##	G36244	1.802063e-02	7.879809e-03	7.670406e-03	-1.508998e-03	1.754187e-02
##	G36197	-1.713661e-02	-5.693472e-03	-7.926631e-03	-4.324631e-03	6.697266e-03
##	G36264	5.636820e-03	1.393279e-02	6.649243e-03	1.476961e-02	-1.134014e-02
##	G36317	8.821578e-03	-1.151757e-02	-1.539171e-03	1.311570e-02	-1.174185e-02
##	G36159	-1.511967e-02	1.411067e-03	4.844009e-03	-8.986420e-03	-3.240120e-03
##	G36234	-2.846622e-03	1.901219e-02	-3.427432e-03	7.066225e-03	-1.479417e-02
##	G36206	1.733964e-03	2.558555e-02	-5.852584e-03	-9.739302e-03	6.308548e-03
##	G36257	3.518033e-03	-2.390212e-03	-7.454248e-03	-1.230931e-02	-1.799087e-03
##	G36216	-1.070375e-02	2.354905e-02	4.789275e-03	6.560488e-03	-7.938519e-03
##	G36208	1.341314e-02	-1.666482e-02	6.445586e-03	2.180211e-02	7.299727e-03
##	G36309	2.038040e-03	-5.713172e-03	-2.543526e-03	-2.033419e-02	1.350459e-02
##	G36146	-8.370559e-05	-1.124890e-02	-1.971767e-03	-4.953519e-05	-4.971748e-03
##	G36192	-6.692183e-03	-1.564636e-02	-1.778371e-03	-6.650835e-03	6.338308e-04
##	G36284	-1.429205e-02	-1.601653e-02	-2.283281e-04	5.910962e-03	-5.137664e-03
##	G36291	1.303452e-02	-2.159467e-03	-4.406825e-03	-1.487773e-02	-1.520846e-02
##	G36142	-6.266364e-03	5.016728e-03	-1.529774e-02	-1.875271e-02	1.265037e-02
##	G36138	-5.353504e-03	1.006540e-03	1.173752e-02	-5.032896e-03	1.770647e-02
##	G36203	2.856794e-02	9.781618e-03	8.211330e-03	1.370371e-02	-1.196828e-02
##	G36282	-8.928786e-05	-1.281622e-02	1.117839e-02	3.095394e-03	-1.050992e-02
##	G36290	-9.670206e-03	-7.699020e-03	1.902903e-03	1.204135e-02	-1.294897e-02
##	G36274	-4.802059e-03	-1.564525e-02	-1.432331e-02	1.167355e-02	1.475203e-02
##	G36314	-5.618545e-03	-8.074960e-03	-3.639232e-03	-3.139037e-03	4.959457e-03
##	G36258	3.321053e-03	-9.863413e-06	-2.253952e-03	-7.912502e-03	2.603749e-03
##	G36147	1.075953e-02	-1.230798e-02	5.715688e-03	-3.626900e-03	-9.716461e-04
##	G36235	-2.667979e-03	-1.566436e-03	3.778876e-03	1.192365e-02	4.567500e-03
##	G36143	8.295727e-03	-1.654655e-03	6.702941e-03	7.631668e-03	1.557294e-03
##	G36308	-8.822771e-03	-2.597499e-02	6.076954e-03	7.413366e-03	6.964680e-03
##	G36209	1.459868e-02	6.292854e-03	1.198358e-02	1.755474e-02	-2.420460e-03
##		Axis.246	Axis.247	Axis.248	Axis.249	Axis.250
##	G37016	-5.758389e-03	3.966602e-04	1.391411e-03	-1.162169e-02	1.470122e-02
##	G36918	4.122914e-03	1.069369e-02	-8.733845e-04	-1.581754e-02	1.550071e-03
##	G37044	-5.216081e-03	-1.619624e-03	6.571528e-03	-1.705054e-02	9.624302e-03
##	G37009	6.259658e-03	-1.216320e-03	-3.857973e-03	9.354364e-03	-5.732972e-03
##	G37029	1.024605e-03	-2.520330e-03	-1.276425e-02	1.185274e-02	-2.306413e-03
##	G37035	3.617938e-04	-8.231441e-03	-9.156099e-03	-3.010141e-03	-2.762102e-03
##	G36982	-8.365170e-03	-6.196821e-03	-3.112486e-03	-2.308877e-03	-9.450664e-03
##	G36984	-6.793040e-03	5.192915e-03	7.621604e-03	5.725187e-03	2.805836e-04
##	G37030	-6.493152e-03	7.130929e-03	-1.793055e-02	-2.407441e-03	-7.171210e-03
##	G37031	-4.580672e-03	6.136817e-03	1.129504e-02	3.266978e-03	-7.361800e-03
##	G36906	1.099707e-03	7.994720e-03	-3.940856e-04	8.370328e-03	4.813299e-03
##	G37028	8.709485e-03	1.158911e-02	2.634389e-03	-1.448496e-02	3.234115e-03
##	G37014	-9.521158e-03	1.483706e-02	-9.548498e-03	3.388906e-03	3.984662e-03
##	G37010	-2.449416e-03	-2.066401e-03	2.170375e-02	-1.715543e-02	1.335146e-02
##	G36944	6.406628e-03	-1.259026e-02	-3.109899e-03	4.022201e-03	-3.663234e-03
##	G36902	1.539356e-02	-7.706951e-03	7.375366e-03	1.086300e-02	6.094230e-03
##	G37051	1.851361e-02	6.167570e-04	-6.234474e-04	1.782830e-03	-1.231315e-02
##	G36964	-2.711968e-03	5.002816e-03	2.580951e-03	1.025450e-02	1.480143e-03
##	G36951	-1.316287e-02	7.272739e-03	1.490566e-02	-4.848725e-03	-8.079541e-03
##	G37025	-3.679943e-03	8.146235e-03	-1.513890e-02	-9.983368e-03	1.552017e-02
##	G36930	1.948594e-02	-1.776396e-02	-6.035407e-03	-6.668413e-03	-1.327696e-03
##	G36935	-1.841002e-02	7.012058e-03	-1.117667e-02	9.331217e-03	-1.338104e-02

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##	G36905	5.249803e-03	-9.720322e-03	-4.016488e-03	6.052020e-04	6.525296e-06
##	G36917	1.456280e-03	-8.142055e-03	2.435379e-02	2.046092e-02	1.090942e-02
##	G36992	4.838839e-03	1.505337e-02	1.135947e-02	-2.448718e-03	-1.505073e-02
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##	G36966	1.987527e-02	-1.145814e-02	-2.131338e-02	1.111305e-02	7.266913e-03
##	G36936	4.150411e-03	-6.914425e-03	-6.808400e-03	9.267057e-03	3.273677e-03
##	G37015	-4.028172e-03	-1.111232e-02	-3.343530e-03	1.461946e-02	3.535937e-03
##	G37034	5.102270e-03	-7.121870e-03	7.963839e-03	-1.029762e-02	-3.067597e-03
##	G36953	2.028843e-03	-1.827843e-02	-8.336155e-03	6.294935e-03	3.520609e-03
##	G36974	-1.108257e-02	-2.246393e-02	-1.560936e-03	2.800300e-02	6.226858e-03
##	G37039	-1.071107e-02	4.549789e-03	-1.546220e-03	1.889872e-02	5.157661e-03
##	G36933	2.235442e-03	-1.885105e-03	-1.190542e-02	-6.173381e-03	-6.329469e-03
##	G37052	2.594526e-02	-8.738746e-03	7.751508e-03	-1.087400e-02	-1.876690e-02
##	G36925	-1.887773e-02	-4.102183e-03	-1.377688e-02	1.726181e-02	1.039234e-02
##	G37046	1.422302e-02	-1.383508e-02	-7.435294e-03	-4.762554e-03	1.251323e-03
##	G37053	1.895444e-02	8.877573e-04	6.262166e-03	1.353286e-03	4.965461e-03
##	G36998	-2.747574e-02	-1.359117e-03	4.420498e-04	-1.403892e-02	-1.273237e-02
##	G37045	-2.628905e-03	-6.603283e-03	6.021928e-03	-2.085034e-03	-4.501456e-03
##	G37049	-8.743640e-03	9.737711e-03	4.574464e-04	1.385245e-02	9.210370e-03
##	G37019	1.725484e-03	-4.694608e-03	2.217569e-03	-1.854580e-02	-3.290957e-03
##	G36988	-5.867078e-03	1.003257e-02	-3.955611e-04	-1.815555e-03	4.609979e-03
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##	G36928	-1.563703e-02	1.401132e-02	-7.781710e-03	7.237714e-03	-1.587948e-02
##	G36923	-1.441013e-02	-1.429850e-04	1.194186e-02	4.913934e-03	6.536829e-03
##	G37033	8.366694e-03	8.067617e-03	-1.421474e-02	2.027271e-02	-1.963717e-02
##	G37017	6.521684e-03	1.070626e-02	-3.437527e-03	3.370897e-04	5.916946e-03
##	G37012	1.625327e-02	-1.183299e-02	1.716632e-03	1.855599e-04	2.486112e-04
##	G36952	1.085446e-02	2.745064e-03	9.216773e-03	8.191916e-03	5.961523e-03
##	G37011	6.246113e-03	4.839882e-05	1.560746e-03	5.093858e-03	-6.164407e-03
##	G36957	-3.099617e-03	6.406526e-03	-1.097088e-02	-1.550133e-02	2.687062e-02
##	G37021	-2.816020e-02	-2.307815e-03	-3.855566e-03	1.002795e-02	-7.881880e-03
##	G36937	-9.405284e-03	2.162060e-03	1.096297e-03	-9.858679e-03	-2.708943e-03
##	G37047	7.007900e-04	3.766115e-03	-8.547189e-03	1.557081e-03	8.945875e-03
##	G37032	-6.849835e-04	7.506411e-03	7.299757e-03	1.922580e-02	-9.819067e-03
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##	G37054	-8.481501e-03	7.414018e-03	1.435193e-02	1.511613e-02	1.349971e-03
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##	G36972	-4.039356e-03	3.383160e-03	-7.301151e-03	4.660475e-03	5.561670e-03
##	G36968	-5.632583e-04	3.834322e-03	1.052354e-02	-1.188504e-03	-1.296685e-03
##	G36911	-8.342613e-03	4.700499e-03	9.740519e-03	3.946750e-03	-5.367762e-03
##	G36987	1.871803e-02	-1.134702e-02	6.314796e-03	1.696460e-03	-1.158295e-03
##	G37042	-1.426944e-02	2.083735e-03	-6.827524e-03	-9.270990e-03	-1.530776e-02
##	G36960	7.250200e-03	7.351209e-03	3.679510e-03	-1.070602e-02	-2.095771e-02
##	G37040	5.940356e-03	6.132578e-03	-7.216803e-04	-9.423468e-03	7.711058e-03
##	G37027	5.571181e-03	2.704671e-03	-7.306166e-03	-1.085224e-02	-4.748843e-03
##	G37024	-1.050652e-02	-8.139134e-03	5.703718e-03	1.032110e-02	-4.267810e-03
##	G37023	-6.414053e-03	-4.233668e-03	1.323632e-02	-1.438168e-03	2.504764e-03
##	G37036	4.460624e-03	6.127318e-03	7.897504e-03	-1.296467e-03	-5.873814e-03
##	G37026	1.359307e-02	1.290625e-02	-1.601400e-02	-1.747153e-02	-5.498125e-03


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##	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
##		Axis.251	Axis.252	Axis.253	Axis.254	Axis.255
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##	G36918	5.174798e-03	2.801405e-03	7.007521e-03	3.072522e-03	-2.365729e-03
##	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
##	G36944	1.261272e-02	5.949264e-03	-4.509168e-03	5.386224e-03	-4.242038e-03
##	G36902	4.228345e-03	8.814840e-03	7.286352e-03	3.171260e-02	-1.274030e-03
##	G37051	-3.862633e-03	-1.250979e-03	9.039487e-03	8.280080e-04	-8.330266e-03
##	G36964	-1.731678e-02	-6.329278e-04	6.485147e-03	2.969018e-03	6.261893e-03
##	G36951	-3.262738e-03	1.771483e-02	-1.450574e-02	8.196987e-03	-1.583885e-02
##	G37025	-9.325048e-03	-1.318871e-02	8.245139e-03	-3.903758e-03	-9.238636e-03
##	G36930	-9.295565e-04	2.296711e-03	-7.562919e-04	6.266249e-03	-1.556108e-02
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##	G36959	-1.535699e-02	-7.134815e-03	2.027346e-03	6.579498e-03	-6.936530e-03
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##	G37039	-1.641195e-02	1.283105e-02	2.716514e-02	2.212722e-03	-6.905504e-03
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##	G37052	2.453523e-02	-1.056237e-02	-1.986766e-03	7.440966e-03	-1.896728e-03
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##	G37053	2.070608e-06	-2.152362e-03	-4.868069e-03	-8.486070e-03	6.863218e-03
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##	G37045	2.093022e-02	2.889578e-03	1.918574e-04	-5.731019e-03	-6.247497e-03
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## G36232 -9.184786e-03 6.916366e-03 1.350354e-02 6.124657e-03 -9.737008e-03
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## G36151 -9.688525e-03 5.048559e-03 1.170152e-02 1.297035e-02 5.390068e-03
## G36248 -5.110251e-04 6.789988e-03 1.059547e-02 2.450656e-03 -8.829316e-03
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## G36270 -1.544705e-02 -1.713049e-02 -9.153189e-03 -1.446079e-02 1.855117e-04
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##	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
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##	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
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##	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
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##	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
##		Axis.261	Axis.262	Axis.263	Axis.264	Axis.265
##	G37016	1.235927e-03	2.870796e-03	2.796883e-03	3.287636e-03	-6.626581e-03
##	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
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##	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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##	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
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##	G36905	-2.001007e-02	2.124012e-03	-3.142683e-03	-1.487247e-03	-5.325416e-03
##	G36917	4.224059e-03	1.584642e-03	-9.063752e-03	6.847591e-03	-1.496393e-02
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##	G36966	1.026859e-02	-1.297658e-03	-2.392907e-03	8.387281e-03	-1.332074e-02
##	G36936	1.181980e-03	8.670970e-03	-6.004894e-03	-5.660599e-03	2.024480e-02
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##	G37034	7.749814e-03	4.352501e-03	-6.906619e-03	-3.389534e-03	8.790091e-03
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## G35356 -1.353455e-02 1.118891e-03 1.324041e-02 1.637929e-02 9.825387e-03
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## G36209 -7.411706e-03 -1.130236e-02 1.202826e-02 -9.436662e-03 3.376660e-03
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## G36935  1.314464e-02 -2.182718e-03  1.375958e-04 -1.114800e-02  5.392048e-03
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##	G35424	1.438938e-02	1.788912e-03	-6.027034e-03	-1.057656e-02	2.330514e-04
##	G35398	-1.304887e-02	-6.813485e-04	-8.291100e-03	1.795949e-03	4.353127e-04
##	G35365	6.013422e-04	7.716884e-03	-1.921167e-03	1.499160e-03	-1.531427e-02
##	G35442	-6.143636e-03	1.193485e-02	-3.346342e-03	2.371191e-02	5.412994e-04
##	G35476	2.756850e-03	-7.478610e-03	2.142740e-03	-5.832543e-06	-4.391094e-03
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##	G35351	5.838472e-03	1.975598e-02	-1.092506e-02	3.364723e-03	-1.437263e-02
##	G35484	-3.339809e-03	-1.132827e-02	-6.090201e-03	-2.154344e-02	8.595449e-04
##	G35495	-3.544220e-03	-2.683936e-03	4.673283e-06	-2.902427e-03	-3.361589e-03
##	G35473	-8.637027e-03	1.147337e-02	4.147455e-03	2.148324e-02	6.154654e-03
##	G35418	8.224603e-03	1.222406e-02	-1.021474e-03	1.562141e-03	-2.167490e-04
##	G35529	1.108785e-02	1.495144e-03	-1.662115e-03	2.183289e-02	-4.796940e-03
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##	G35520	1.072172e-02	-1.218690e-02	5.632506e-03	-1.685097e-02	7.459955e-03
##	G35370	2.716683e-03	1.312669e-02	5.591302e-03	1.830550e-03	-1.070714e-02
##	G35517	3.537598e-03	-3.303565e-03	7.227284e-03	-3.839689e-03	-3.414743e-03
##	G35417	-2.669152e-03	8.758646e-03	1.376187e-05	1.025364e-02	1.165873e-02
##	G35465	-1.965990e-03	1.254770e-02	-8.039207e-03	4.069095e-03	2.897833e-03
##	G35350	-2.157933e-03	4.665563e-03	-1.799981e-02	-7.139956e-03	1.242196e-02
##	G35421	1.316783e-03	-1.296280e-02	4.119309e-03	1.600078e-02	-1.681925e-03
##	G35531	-1.137635e-02	-9.429510e-03	-1.952429e-02	-8.215649e-03	-1.096929e-03
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##	G35443	-8.165525e-03	-9.539387e-03	2.736675e-03	-6.340238e-03	-7.903381e-03
##	G35349	6.143486e-03	-1.772636e-03	-4.307927e-03	-1.013980e-02	6.360921e-04
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##	G35487	4.161090e-03	5.388147e-03	9.523024e-03	9.700255e-03	1.454578e-02
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##	G35447	-1.323520e-02	7.355402e-03	1.284096e-02	3.842312e-04	-1.186494e-02
##	G35458	-9.807805e-03	-7.396549e-03	-3.750751e-03	-1.053634e-03	5.485086e-03
##	G35397	4.492020e-03	-4.689148e-04	-8.523256e-04	-3.274669e-03	4.825287e-04
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## G36282 -1.165959e-02 -3.344584e-03 4.856362e-03 3.505709e-03 2.575571e-03
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## G35463 -1.183242e-03 -1.168699e-02 2.195505e-02 1.118158e-02 9.746072e-03
## G35441 -4.338655e-03 1.288177e-03 -1.121894e-02 -1.800581e-03 8.774338e-03
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## G36151 5.007484e-05 6.228060e-03 9.003421e-03 9.811259e-03 -6.748514e-03
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## G36227 -3.715313e-03 7.736684e-03 -8.384347e-03 2.453746e-03 6.855693e-03
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## G36309 -3.505522e-03 7.122729e-04 -6.768581e-04 -1.750491e-02 -1.107497e-02
## G36146 1.233573e-03 -1.004541e-02 -7.505579e-03 4.545866e-03 8.792336e-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
##	G36143	-1.280269e-02	-3.098979e-03	-2.493626e-03	-1.058872e-02	-3.425909e-03
##	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
##	G36982	-1.512978e-03	3.255723e-03	-3.366463e-03	2.143431e-03	-3.559726e-04
##	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
##	G37031	-3.132574e-03	2.261263e-03	-6.791316e-03	-4.990122e-03	3.512519e-03
##	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
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##	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
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##	G36959	8.074695e-03	-3.265795e-04	3.932795e-03	-7.614969e-03	8.586881e-03
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##	G36966	-4.166020e-03	8.473064e-03	-3.544641e-03	3.120079e-03	8.047778e-03
##	G36936	6.061934e-03	4.652200e-03	-1.501525e-02	1.722908e-03	-2.191010e-03
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##	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
##	G37039	-3.434191e-03	-2.136320e-02	-3.320088e-03	9.640490e-03	-1.607004e-03
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##	G37052	-5.571185e-03	-1.603636e-03	-6.157398e-03	-4.735546e-04	1.663023e-03
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##	G37053	-8.090524e-03	5.734680e-03	8.794935e-03	-6.868893e-03	1.484926e-03
##	G36998	1.294049e-02	2.158362e-03	-1.399240e-03	1.894446e-02	-1.008374e-02
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##	G37049	-5.742589e-03	-3.690555e-04	5.564905e-04	9.119600e-03	-3.625949e-03
##	G37019	2.784628e-03	-1.694781e-03	-1.405383e-02	3.285515e-03	-6.899344e-03
##	G36988	8.333026e-04	-4.618302e-03	3.928016e-03	-7.780780e-04	-2.379249e-03

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## G36195 -3.953546e-03 6.369486e-03 -1.304494e-03 5.626752e-04 9.687643e-03
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##	G36930	-2.585738e-03	-5.184645e-03	-7.043958e-04	2.530873e-03	4.854044e-03
##	G36935	-6.831528e-03	4.759703e-03	6.619212e-04	6.824002e-03	-1.771054e-03
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##	G37004	-4.556077e-03	4.935237e-03	2.773805e-03	2.955308e-03	1.181802e-03
##	G36966	-1.488062e-04	-3.085643e-04	-1.287496e-02	-5.548080e-03	1.737086e-03
##	G36936	-3.469979e-03	-7.896903e-03	5.211171e-03	-1.243559e-02	-1.887201e-03
##	G37015	-5.946175e-04	-2.956288e-03	-1.961541e-03	-4.255594e-03	-7.585494e-03
##	G37034	1.538408e-03	-7.186854e-04	2.522330e-03	4.204907e-03	1.083026e-03
##	G36953	-3.218075e-03	-2.694731e-03	-4.192583e-03	-2.596750e-04	7.864970e-03
##	G36974	-2.110325e-03	5.252220e-03	9.993560e-03	1.230436e-02	5.091173e-03
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##	G37032	-3.858753e-03	-6.789869e-04	9.247324e-03	-8.604149e-03	-4.927780e-03
##	G36932	4.884016e-03	-2.345013e-03	8.989458e-03	2.680253e-03	1.633076e-02
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##	G36948	-1.009549e-02	8.026028e-03	-2.915035e-03	-3.729211e-03	1.603880e-03
##	G36972	1.002366e-02	-9.620713e-03	3.788745e-03	4.855315e-03	1.611904e-02
##	G36968	7.841323e-03	-7.946639e-04	7.923683e-03	2.620508e-03	1.513763e-03
##	G36911	1.277773e-02	-9.621038e-04	-1.128694e-02	-9.551726e-03	-1.076410e-02
##	G36987	-2.143610e-03	1.640738e-03	-1.870680e-03	-2.060747e-03	4.595214e-03

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## G37040 -7.968049e-03 5.928770e-03 9.006223e-03 -5.085999e-03 -1.850105e-03
## G37027 -1.108690e-03 -8.045571e-03 -4.141880e-03 5.426984e-03 -1.704932e-03
## G37024 7.705547e-03 -7.345357e-04 6.520244e-04 1.417280e-03 -1.300480e-03
## G37023 -1.574671e-02 -5.620227e-03 4.796486e-03 8.119176e-03 2.497527e-03
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## G37026 3.037623e-03 -3.404169e-03 9.265919e-04 4.841408e-03 -4.520262e-03
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## G37020 5.676556e-03 6.867965e-03 1.203177e-02 3.117286e-03 1.100916e-02
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## G36214 -5.650413e-03 -1.536037e-03 2.646784e-04 -1.339052e-03 6.264519e-03
## G36230 -5.626517e-03 -3.171284e-03 7.227258e-03 5.205679e-03 -9.089247e-04
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## G36245 -9.384791e-03 -7.764549e-03 1.740617e-02 6.765757e-03 -1.256364e-03
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## G36172 9.646128e-03 2.295898e-02 4.551584e-03 2.167192e-03 3.155230e-03
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## G36180 1.084760e-02 -5.416505e-03 9.654786e-03 -1.299210e-04 -6.196905e-03
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## G36248 4.084062e-04 1.010794e-02 4.866438e-03 9.581093e-03 -1.202473e-02
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## G36270 -3.666030e-04 1.113635e-02 -7.090549e-03 2.181396e-03 1.764049e-03
## G36158 7.761141e-03 -1.393207e-02 9.799847e-03 -5.351643e-05 -9.979621e-03
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## G36227 2.414033e-03 1.003870e-02 1.188167e-02 -1.005172e-03 -2.960498e-03
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## G36182 -4.939265e-03 -6.293691e-03 3.236219e-03 1.303419e-02 9.643950e-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
##	G36917	6.340581e-03	1.526440e-03	9.203046e-03	5.478297e-03	-6.819404e-03
##	G36992	-1.611298e-03	5.634476e-03	-9.499900e-03	-3.400096e-03	9.917408e-04
##	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
##	G37015	-1.729805e-03	-8.030132e-03	-3.456983e-03	-9.385799e-03	-8.229384e-03
##	G37034	-3.861125e-03	1.848801e-03	-6.309145e-03	-7.145327e-04	6.272170e-04
##	G36953	4.829881e-03	-3.791635e-03	1.146460e-02	4.887924e-03	-3.338141e-03
##	G36974	6.671666e-03	1.318608e-02	-9.206244e-03	3.172465e-03	-7.152516e-03
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## G36925 -2.871123e-03 -9.337171e-04 1.324396e-02 -8.946846e-03 2.850096e-03
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## G37049 -6.240873e-03 -1.656483e-03 -3.870302e-03 -2.639263e-03 -5.584377e-03
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## G35498 1.741351e-03 6.692608e-03 4.855500e-04 3.858255e-03 4.985440e-03
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## G35462 -2.794573e-03 3.435921e-03 -7.792717e-03 -2.816301e-03 -2.399897e-03
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## G35464 5.585829e-03 8.326113e-03 -4.761367e-03 -2.030574e-03 5.447045e-03

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## G35463 -6.156126e-03 -2.496991e-03 -4.778858e-03 1.078802e-02 -2.683303e-03
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## G36170 -4.759305e-03 5.913416e-03 6.327663e-03 5.017901e-04 1.994004e-03
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## G36164 -3.317087e-03 1.206954e-02 1.284877e-02 1.941426e-03 -2.793665e-03
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## G36195 1.383769e-02 9.757012e-03 3.489970e-03 -2.496545e-03 -3.755416e-03
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## G36148 6.454703e-03 5.934820e-03 -7.415511e-03 -5.089723e-03 1.436489e-03
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## G36267 5.178360e-04 1.033686e-04 -4.311821e-03 -8.268893e-03 3.481979e-03
## G36183 1.190878e-03 -2.532438e-03 -5.822663e-03 5.602898e-03 -1.146650e-02
## G36227 5.020266e-03 -4.017937e-03 -9.805325e-03 4.278648e-04 1.015407e-02
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## G36157 3.956313e-03 -4.867064e-03 4.474310e-03 -2.057515e-02 1.999838e-03
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##	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
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##	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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##	G36291	-1.201165e-02	-7.716547e-03	9.688192e-04	2.386414e-03	-1.670534e-03
##	G36142	-1.046843e-02	-1.840055e-03	-4.517061e-03	-1.569667e-03	-4.131269e-03
##	G36138	-2.785106e-03	2.749479e-03	8.826833e-03	-2.482507e-03	-4.289498e-03
##	G36203	1.079275e-02	1.876613e-04	6.458200e-03	-4.584989e-03	5.699672e-03
##	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
##	G36314	-2.800761e-03	-5.257546e-03	-8.095396e-03	-1.246919e-03	-4.543327e-04
##	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
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##	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
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##	G36902	7.416802e-03	5.040180e-04	2.640121e-03	-2.544363e-04	6.659188e-03
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##	G36935	5.631319e-03	9.541866e-03	-4.956610e-03	-1.384516e-03	3.161143e-03
##	G37041	2.001294e-03	-2.263939e-03	-4.983610e-03	5.524271e-03	-5.279940e-03
##	G36959	-1.041509e-03	-1.045552e-03	1.938362e-03	-6.172842e-04	1.591814e-03
##	G36905	-8.437870e-04	1.782181e-03	1.041831e-02	-1.055542e-02	1.313751e-03
##	G36917	-7.910558e-04	-4.056143e-03	5.263031e-03	6.533884e-03	3.463806e-03

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## G35463 8.464890e-03 2.155185e-03 -5.867969e-03 -6.479145e-03 -6.919512e-03
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## G35414 1.725199e-03 -5.063226e-03 6.316113e-03 -6.408141e-03 4.456199e-03
## G35412 9.946304e-03 5.274542e-04 3.459938e-03 -1.382842e-02 7.245651e-03
## G35388 6.870633e-03 -1.030439e-04 -7.156835e-03 -5.587015e-03 2.473009e-03

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## G35406 -1.313960e-03 -9.283923e-03 -4.259362e-03 -6.928974e-03 3.382948e-03
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## G36135 5.976494e-03 -1.206352e-03 -3.845957e-04 5.137333e-03 7.369280e-03
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## G36270 -4.558039e-04 8.397001e-04 -5.711277e-03 2.197516e-03 4.181798e-03
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## G36175 6.229036e-03 -2.660636e-03 5.778472e-03 -7.432129e-04 7.047447e-03
## G36267 -3.876063e-03 -5.245345e-03 -1.450255e-03 -4.276011e-03 6.865380e-03
## G36183 6.821021e-03 5.991071e-03 -7.206897e-03 -5.857000e-03 2.364095e-03
## 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
## G36163 6.925215e-03 6.699307e-03 7.795868e-03 -6.037644e-04 -1.346200e-04
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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
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##	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
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##	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
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##	G36930	8.884436e-03	3.514737e-03	-6.997615e-03	3.252872e-03	-7.700995e-04
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##	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
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##	G36933	-2.421693e-03	-4.975877e-03	-5.432606e-03	-6.954741e-04	-1.998126e-03
##	G37052	-5.386340e-03	-1.687727e-03	4.836320e-03	-1.621680e-04	-4.785785e-03
##	G36925	1.086293e-02	-1.012530e-02	5.898296e-03	-7.484284e-03	-1.977064e-03
##	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
##	G36998	-1.621849e-02	-1.677339e-03	-4.621891e-03	-2.883926e-03	-1.546025e-02
##	G37045	1.741769e-03	-2.378417e-03	3.093657e-04	1.476138e-03	5.000320e-03
##	G37049	-1.147403e-02	-1.265035e-03	1.722792e-03	-1.383660e-03	-3.496370e-03
##	G37019	3.772275e-03	-8.299814e-03	-5.918490e-03	-4.825523e-03	-2.795746e-03
##	G36988	-3.386590e-03	-5.928519e-03	-1.433007e-03	5.750842e-03	-1.010177e-03
##	G37037	-1.440780e-03	2.439332e-04	6.472116e-03	2.963549e-03	-5.938121e-03
##	G37005	1.132393e-02	-4.040134e-03	-6.894248e-03	-1.145795e-03	-5.358265e-03

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## G36923 -6.649183e-03 3.073925e-03 -4.453172e-03 6.137146e-04 -4.225632e-03
## G37033 1.077176e-02 -3.872839e-03 -2.513792e-04 -1.182718e-03 -7.349877e-03
## G37017 -7.138672e-03 2.832065e-03 6.445747e-04 7.515449e-03 3.200546e-03
## G37012 4.115739e-03 -8.055728e-04 9.980625e-04 1.153052e-03 -4.488731e-03
## G36952 4.342812e-03 -4.121917e-03 3.953416e-04 -6.296853e-03 2.810941e-03
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## G36957 5.872537e-03 7.604710e-04 -5.370201e-03 6.356078e-03 -2.458456e-03
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## G36948 3.661263e-04 -5.879503e-03 3.329248e-03 -8.528654e-03 -8.767376e-04
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## G36968 -2.762443e-03 -1.353358e-03 1.771810e-03 5.585991e-03 -2.206138e-03
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## G37027 2.488242e-03 -2.023839e-03 -2.924356e-03 -2.877457e-03 3.500088e-03
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## G36927 -1.070424e-02 8.516156e-05 -1.711184e-03 -6.958420e-03 5.522829e-04
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## G35477 -1.329826e-03 4.216520e-03 9.359258e-03 6.078651e-03 -7.628136e-03
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## G35525 -1.367642e-03 3.003878e-03 -1.779906e-02 3.125201e-03 2.729306e-04
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## G35515 -2.396165e-03 -1.162285e-03 3.949407e-03 8.231368e-03 -2.438416e-03
## G35351 -1.484202e-03 -6.512325e-03 1.937635e-03 -7.300333e-04 9.010187e-04
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## G35495 -4.436616e-03 1.055784e-03 4.190613e-03 2.949506e-03 2.319920e-03
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## G36157 3.569305e-03 1.851835e-03 1.017186e-03 8.148948e-04 4.363145e-03
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## G36309 -3.419081e-03 1.681129e-03 2.927381e-03 -1.259034e-03 -1.178920e-02
## G36146 -3.515092e-04 -3.648213e-03 -5.448937e-04 -2.334093e-03 -5.525152e-03
## G36192 -1.202886e-03 -1.054939e-02 6.196688e-03 5.030737e-03 -3.046825e-03

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## G37044 -3.418925e-04 3.469517e-03 -3.833227e-03 -1.155640e-03 -7.196132e-03
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## 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
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## G36984 -4.474602e-03 6.876280e-04 -3.642369e-04 -3.831081e-03 -1.552410e-03
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## G37050 2.520188e-03 -6.857224e-03 -2.601270e-03 5.305071e-03 5.208853e-03
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## G35412 -6.991323e-03 3.018394e-03 3.370353e-03 8.376485e-03 -2.442475e-03
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##	G36257	-2.267836e-03	6.895164e-04	-1.696783e-03	1.616676e-03	-3.710460e-03
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##	G36309	1.105490e-04	6.592116e-03	-1.366872e-02	3.982713e-03	4.138315e-03
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##	G36192	-2.481610e-03	2.621897e-04	-4.516448e-03	1.376026e-03	-2.694245e-04
##	G36284	-3.386101e-03	-6.112822e-03	4.591697e-03	3.975574e-03	2.236473e-03
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##	G36142	8.963732e-03	2.742334e-03	-2.279776e-03	8.425409e-04	-3.834518e-03
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##	G36203	1.401804e-03	-3.740659e-04	6.547119e-03	-4.257481e-03	-5.336169e-03
##	G36282	2.079180e-04	-3.432428e-04	1.919968e-03	2.126628e-03	-3.535084e-03
##	G36290	1.179348e-03	-1.832309e-03	8.793141e-04	2.547494e-03	3.146905e-03
##	G36274	8.138143e-03	2.795786e-03	-7.069760e-03	1.406845e-03	-3.085026e-03
##	G36314	-1.188708e-03	7.469503e-05	3.078157e-03	-5.731729e-04	-2.287257e-04
##	G36258	-2.754336e-04	1.901597e-04	2.820352e-03	-4.582920e-04	1.364698e-03
##	G36147	-5.778667e-03	2.057525e-03	-4.653910e-03	6.602763e-04	1.318620e-03
##	G36235	-1.961944e-03	4.406462e-03	-2.123137e-03	-9.738727e-03	-1.035876e-03
##	G36143	-6.100908e-03	-1.263333e-03	1.768648e-03	1.644721e-03	-1.920694e-03
##	G36308	7.003916e-03	-2.599530e-03	1.279440e-02	-2.929097e-03	2.845956e-03
##	G36209	3.389243e-03	-3.894917e-03	2.448788e-03	-3.105182e-03	5.304182e-04
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##	G36918	-4.394227e-03	3.821552e-03	-2.139703e-03	-9.347747e-04	4.563704e-03
##	G37044	5.320908e-04	3.193048e-03	7.039396e-03	2.498730e-04	2.326715e-03
##	G37009	1.363781e-03	1.496113e-03	-1.006415e-02	-1.241017e-04	-2.652009e-03
##	G37029	1.228391e-04	-4.388245e-03	3.120526e-03	-6.019897e-03	-4.969623e-03
##	G37035	1.490968e-03	1.893250e-03	2.679955e-03	1.480194e-03	4.679264e-05
##	G36982	-2.986815e-03	1.411179e-03	-3.204752e-03	-4.923110e-04	-1.793293e-03
##	G36984	2.119348e-03	-4.224898e-03	-2.547167e-03	-7.080369e-04	-6.012230e-04
##	G37030	4.546781e-04	1.330934e-03	-4.678394e-03	1.114935e-03	4.298955e-04
##	G37031	-2.609018e-03	6.724945e-03	-8.207618e-04	2.147148e-04	-1.290098e-03
##	G36906	-1.792045e-03	1.398806e-03	-5.268471e-03	3.440830e-04	2.523703e-03
##	G37028	-5.089224e-03	-1.375256e-03	-3.576728e-03	5.795671e-04	-5.364759e-03
##	G37014	1.347543e-03	7.997636e-04	2.915249e-03	-4.754540e-04	1.627894e-03
##	G37010	4.384734e-04	6.203320e-03	-5.461915e-04	-2.374734e-03	-6.353070e-04
##	G36944	-3.977939e-03	-9.200259e-04	-8.768940e-04	-2.567840e-03	2.411013e-03
##	G36902	6.728922e-03	-5.348537e-05	2.780911e-03	-8.600985e-04	1.331877e-03
##	G37051	-3.512089e-03	-1.391048e-03	-3.112274e-03	-4.178386e-03	-1.763988e-03
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##	G36951	8.312222e-04	7.813195e-04	-3.023473e-03	7.756458e-04	-2.316255e-03
##	G37025	-3.128176e-03	8.164139e-04	1.595671e-03	1.505626e-03	6.146271e-03
##	G36930	3.572489e-03	1.186844e-03	-1.003446e-03	-1.059356e-03	-5.284218e-03
##	G36935	-1.429500e-03	1.087553e-03	1.492722e-03	2.538453e-04	-1.021427e-03
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##	G36905	-5.375528e-03	-1.381819e-03	-9.574914e-04	-4.330402e-03	-9.946940e-04
##	G36917	-2.579221e-03	-3.098793e-03	-1.010326e-03	2.261846e-03	3.005247e-04
##	G36992	3.556992e-03	2.316157e-03	-2.397843e-03	-2.075318e-03	-1.395515e-03
##	G36921	-1.828610e-04	3.259290e-04	-3.878145e-03	-3.611778e-03	6.163896e-05

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##	G36209	-3.414443e-04	-9.826188e-04	7.629889e-03	8.124648e-04	-1.680350e-03
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##	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
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##	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
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##	G36917	4.495211e-03	-4.771100e-03	-1.731194e-04	6.882815e-04	1.543561e-03
##	G36992	-4.323987e-03	-6.042978e-04	5.119197e-03	-7.553863e-04	-1.440625e-03
##	G36921	-2.798066e-03	-1.892805e-05	-2.012743e-03	2.092086e-03	-2.036910e-03
##	G37004	-2.560253e-04	1.243403e-03	-8.307342e-05	-3.987328e-04	-5.520399e-04
##	G36966	5.315738e-04	2.529382e-04	-1.737436e-03	9.631757e-04	-1.519232e-04
##	G36936	-8.685696e-04	2.310031e-03	-1.490322e-03	1.082403e-03	6.902726e-04
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##	G37037	2.502355e-04	2.857239e-03	1.481496e-03	1.323315e-03	-1.369013e-03
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##	G36928	-2.492049e-03	3.135222e-03	2.917052e-03	1.563372e-03	2.024466e-03
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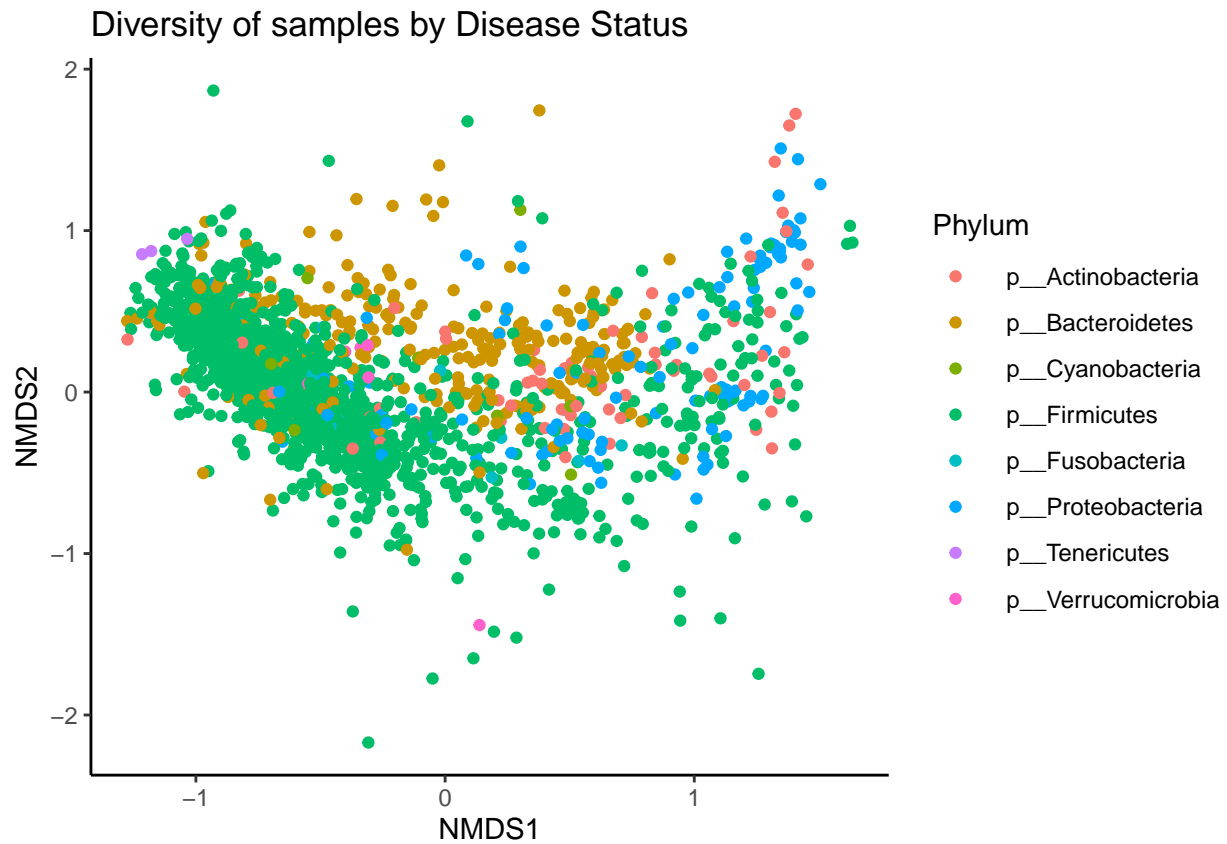
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## G36160 -1.159729e-03 -5.776631e-04
## G36185 -2.384461e-03 -1.767214e-03
## G36162 -8.319519e-04 6.993991e-04
## G36204 1.048900e-03 -1.235930e-03
## G36318 6.999282e-04 -6.646190e-04
## G36194 -7.622947e-04 -7.282599e-04
## G36244 4.937558e-04 2.609901e-03
## G36197 2.457283e-04 -4.282696e-04
## G36264 -2.315692e-03 4.529401e-05
## G36317 1.357326e-03 -1.719716e-05
## G36159 -5.962499e-04 -5.719586e-04
## G36234 -2.434434e-03 5.707844e-04
## G36206 9.298935e-04 2.537837e-04
## G36257 -5.667692e-04 -8.076490e-04
## G36216 -9.947393e-04 2.332788e-04
## G36208 -2.227207e-04 -1.087863e-03
## G36309 9.436370e-04 -3.850255e-04
## G36146 3.286101e-04 1.755414e-04
## G36192 -2.344933e-05 -9.641690e-04
## G36284 1.540653e-03 -4.672305e-04
## G36291 6.803462e-04 -2.866236e-04

```

```
## G36142 -2.215786e-04 -9.418034e-04
## G36138 -1.865008e-04 1.041853e-04
## G36203 6.528223e-04 1.138346e-03
## G36282 1.548349e-03 4.452795e-04
## G36290 6.033156e-04 1.388398e-03
## G36274 -2.302303e-03 -1.842654e-03
## G36314 -4.365556e-04 -3.202329e-04
## G36258 1.006799e-03 4.331082e-04
## G36147 -1.051835e-03 -7.967406e-04
## G36235 2.119260e-03 3.519582e-04
## G36143 1.478996e-03 -2.615063e-04
## G36308 -3.263462e-03 2.053738e-04
## G36209 5.086611e-04 -6.787438e-04
## [ reached getOption("max.print") -- omitted 476 rows ]
##
## $trace
## [1] 279.7949
##
## attr("class")
## [1] "pcoa"
```

```
gf3 <- ordinate(phyloseq.objectA, "NMDS", "bray")%>%
  plot_ordination(phyloseq.objectA, ., type="taxa", color="Phylum", title = "Diversity of samples by Dis
  theme_classic()
```

```
## Square root transformation
## Wisconsin double standardization
## Run 0 stress 0.181114
## Run 1 stress 0.188329
## Run 2 stress 0.1861775
## Run 3 stress 0.1867648
## Run 4 stress 0.1847392
## Run 5 stress 0.4201182
## Run 6 stress 0.1864125
## Run 7 stress 0.1827443
## Run 8 stress 0.1858517
## Run 9 stress 0.1870042
## Run 10 stress 0.1881328
## Run 11 stress 0.187761
## Run 12 stress 0.1915409
## Run 13 stress 0.1837814
## Run 14 stress 0.1908444
## Run 15 stress 0.1851595
## Run 16 stress 0.188115
## Run 17 stress 0.18683
## Run 18 stress 0.1861607
## Run 19 stress 0.1903984
## Run 20 stress 0.1897525
## *** No convergence -- monoMDS stopping criteria:
##      3: no. of iterations >= maxit
##     12: stress ratio > sratmax
##      5: scale factor of the gradient < sfgrmin
```



4. Perform differential abundance using DESeq2

DESeq: Creating a DESeq object

```
phyloseq_objectB <- phyloseq(otu_table(otu.data_matx + 1, taxa_are_rows=TRUE), tax_table(taxonomy_matx))
sample_data(phyloseq_objectB) <- sample_data1

casecontrol = phyloseq_to_deseq2(phyloseq_objectB, ~ 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

```
casecontrol = DESeq(casecontrol, test="Wald", fitType="parametric")

## 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
```

Results table

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

plot_theme

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

Phylum order

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

Genus order

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

