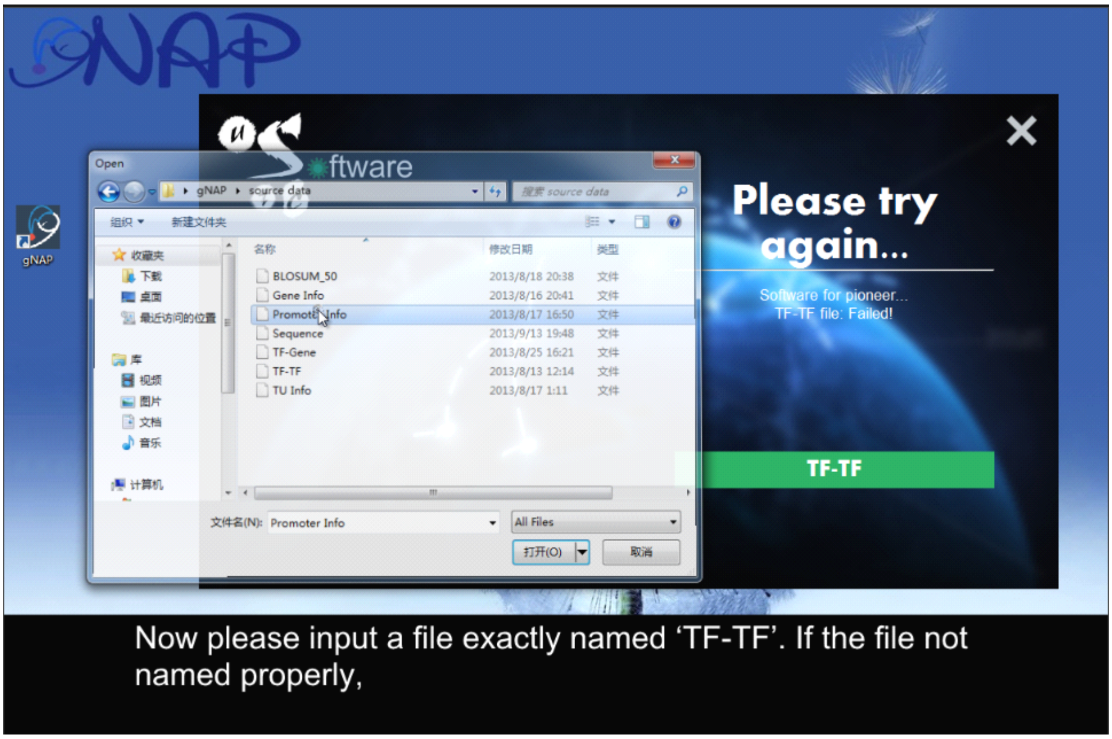


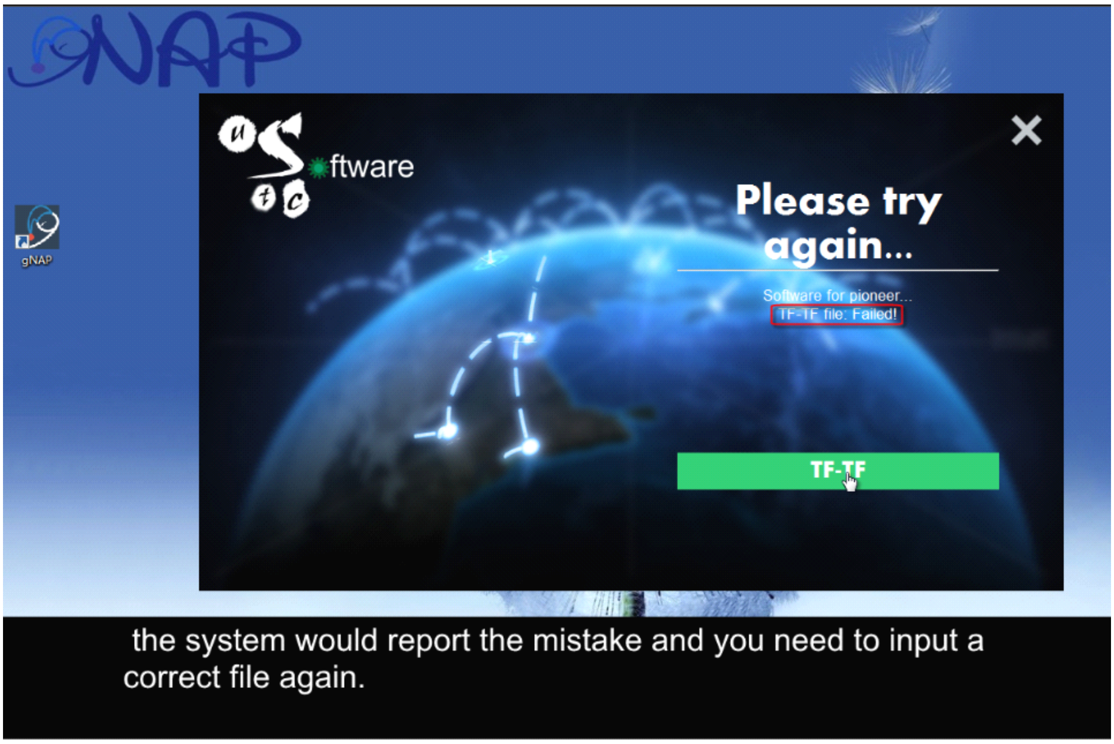
名称	修改日期	类型
BLOSUM_50	2013/8/18 20:38	文件
Gene Info	2013/8/16 20:41	文件
Promoter Info	2013/8/17 16:50	文件
Sequence	2013/9/13 19:48	文件
TF-Gene	2013/8/25 16:21	文件
TF-TF	2013/8/13 12:14	文件
TU Info	2013/8/17 1:11	文件

文件名(N): Promoter Info

Please try again...

Software for pioneer...
TF-TF file: Failed!

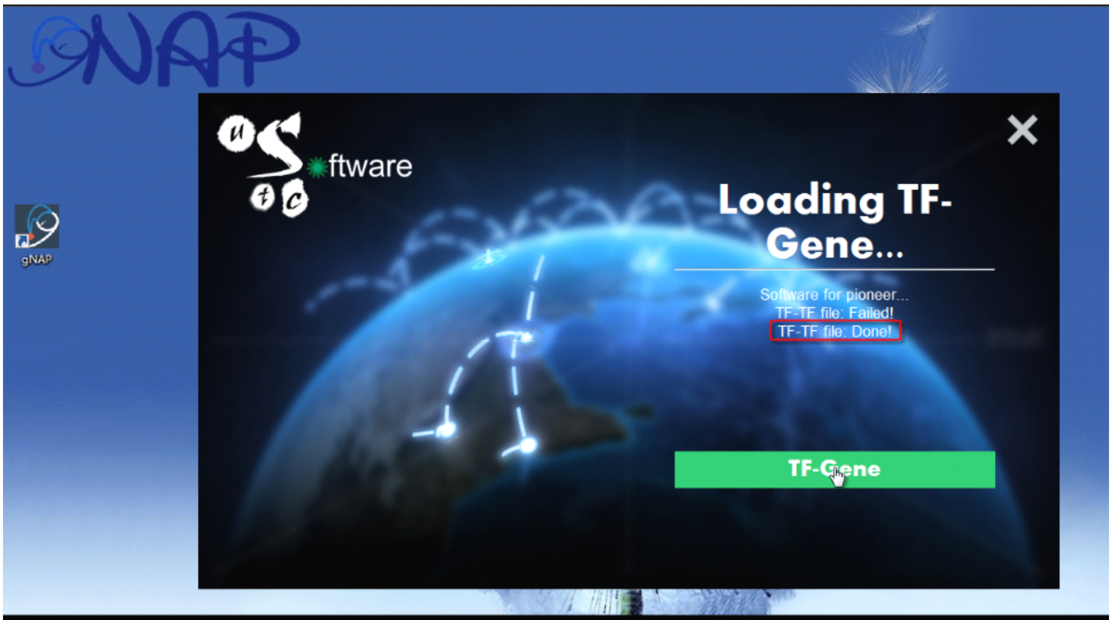
Now please input a file exactly named 'TF-TF'. If the file not named properly,



Please try again...

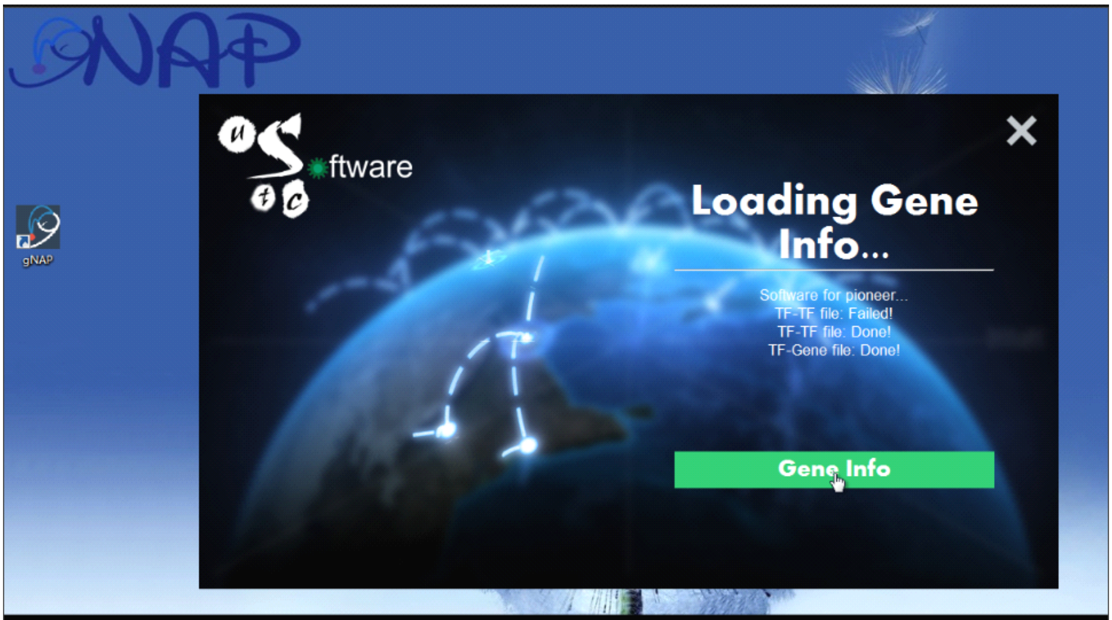
Software for pioneer...
TF-TF file: Failed!

the system would report the mistake and you need to input a correct file again.



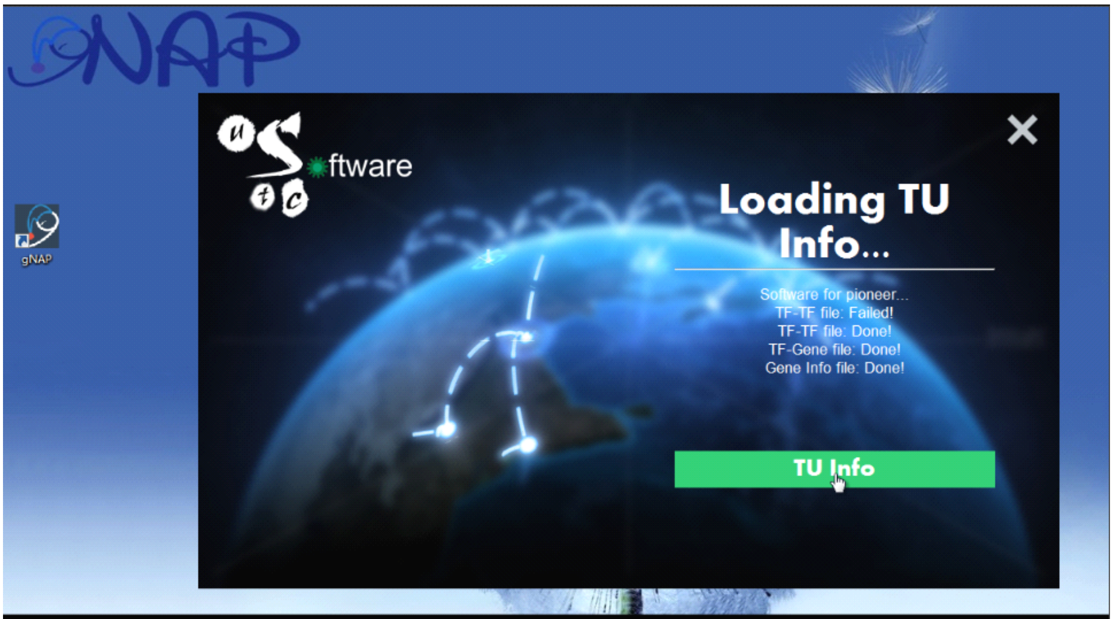
Software for pioneer...
TF-TF file: Failed!
TF-TF file: Done!

Input file ‘TF-Gene’.



Software for pioneer...
TF-TF file: Failed!
TF-TF file: Done!
TF-Gene file: Done!

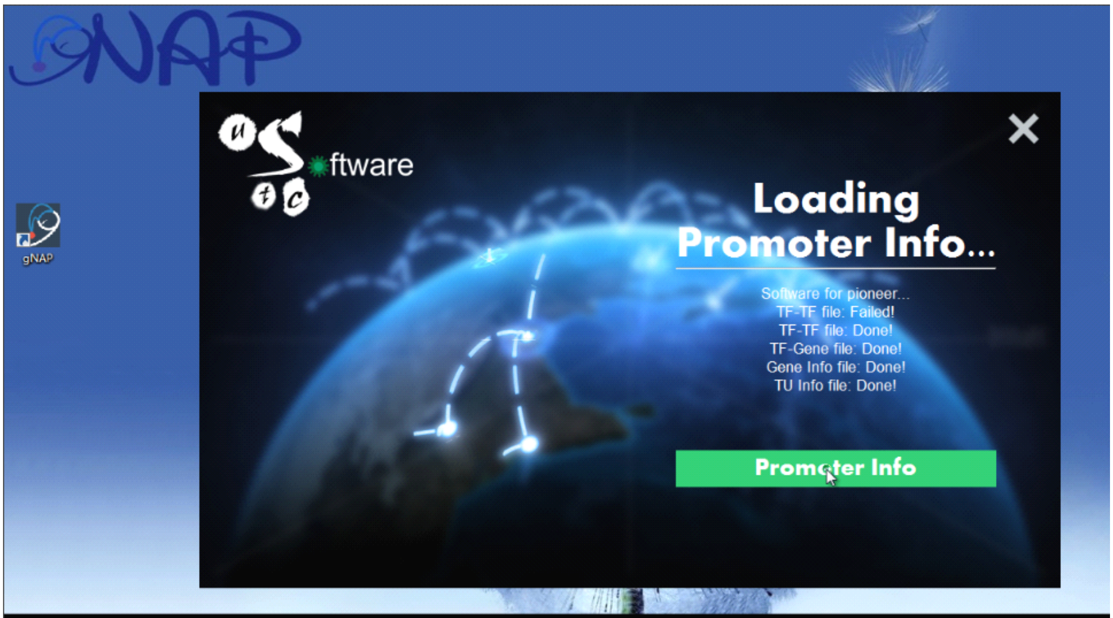
Input file ‘Gene Info’.



Loading TU Info...

Software for pioneer...
TF-TF file: Failed!
TF-TF file: Done!
TF-Gene file: Done!
Gene Info file: Done!

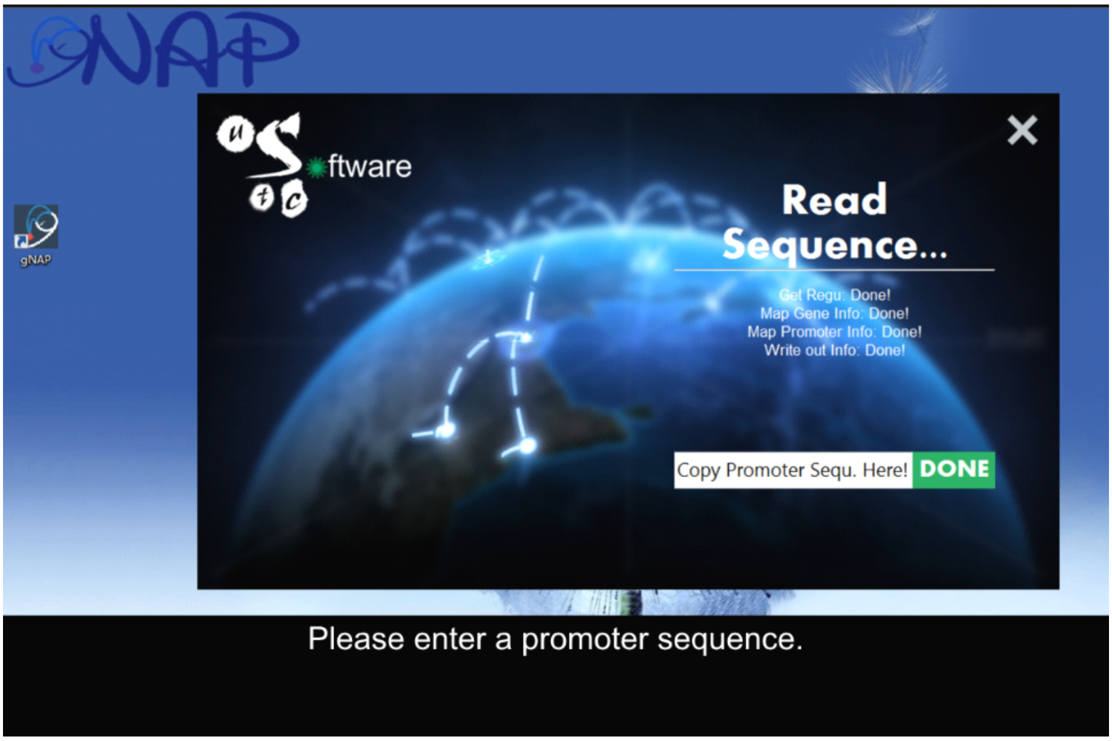
Input file 'TU info'.



Loading Promoter Info...

Software for pioneer...
TF-TF file: Failed!
TF-TF file: Done!
TF-Gene file: Done!
Gene Info file: Done!
TU Info file: Done!

Input file 'Promoter Info'.

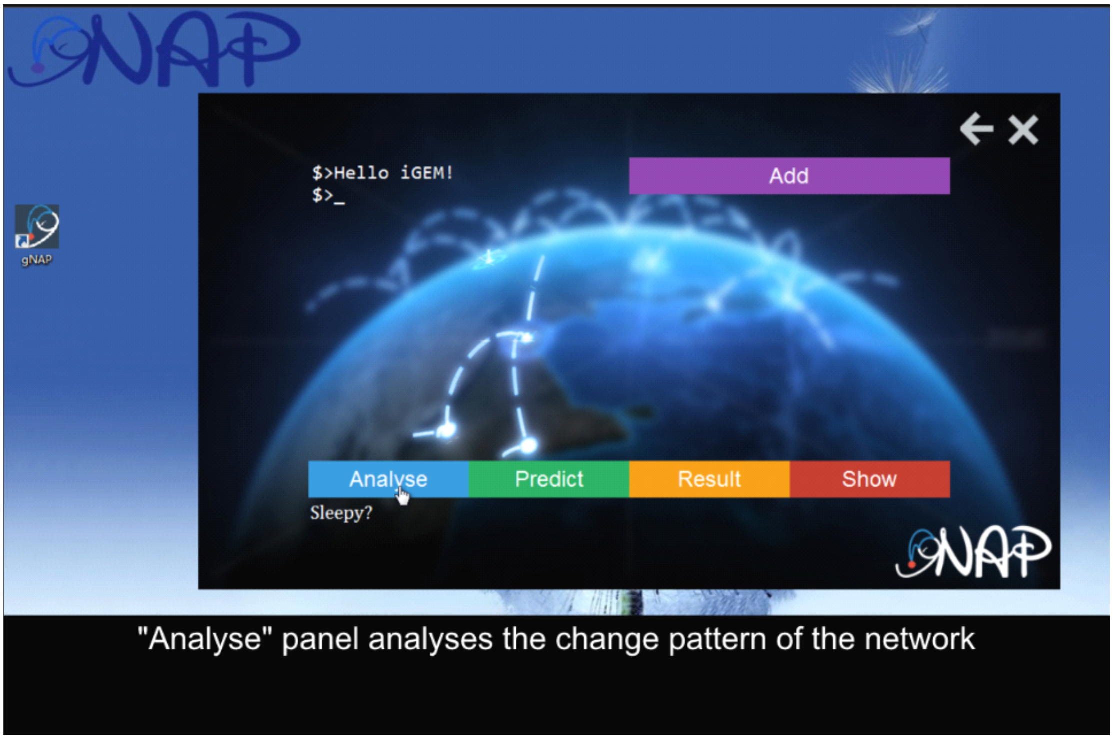


Get Regu: Done!
Map Gene Info: Done!
Map Promoter Info: Done!
Write out Info: Done!

Please enter a promoter sequence.

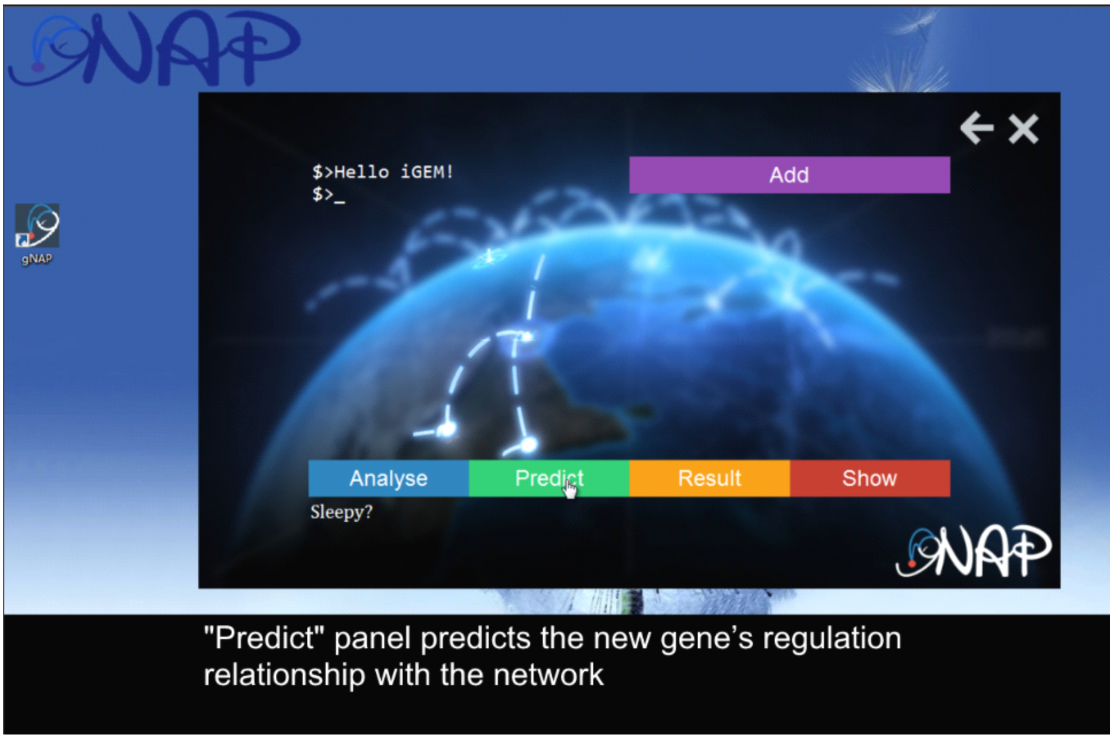
Get Regu: Done!
Map Gene Info: Done!
Map Promoter Info: Done!
Write out Info: Done!

Please enter a Gene sequence.



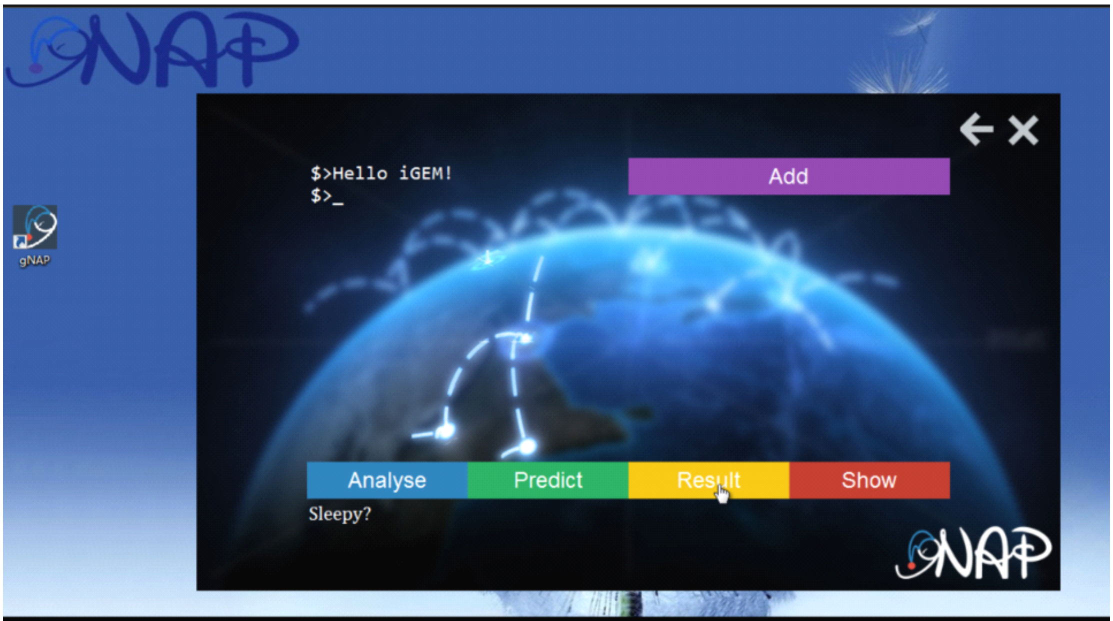
```
$>Hello iGEM!
$>_
```

"Analyse" panel analyses the change pattern of the network



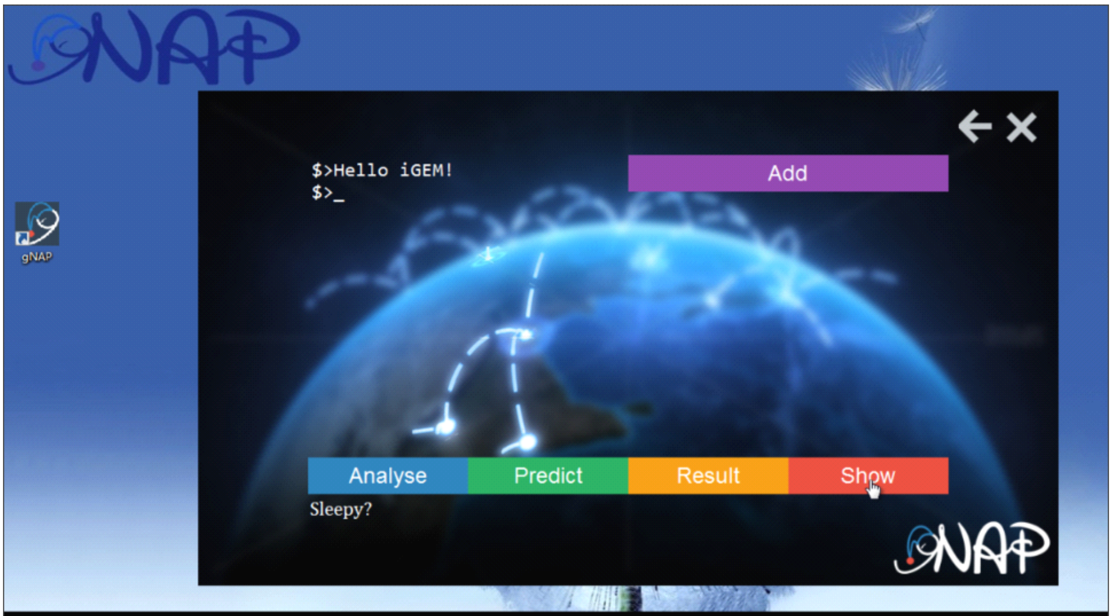
```
$>Hello iGEM!
$>_
```

"Predict" panel predicts the new gene’s regulation relationship with the network



```
$>Hello iGEM!
$>_
```

In result panel you can check the output



```
$>Hello iGEM!
$>_
```

"Show" function provides visual output.

```
$>Hello iGEM!
$>_
```

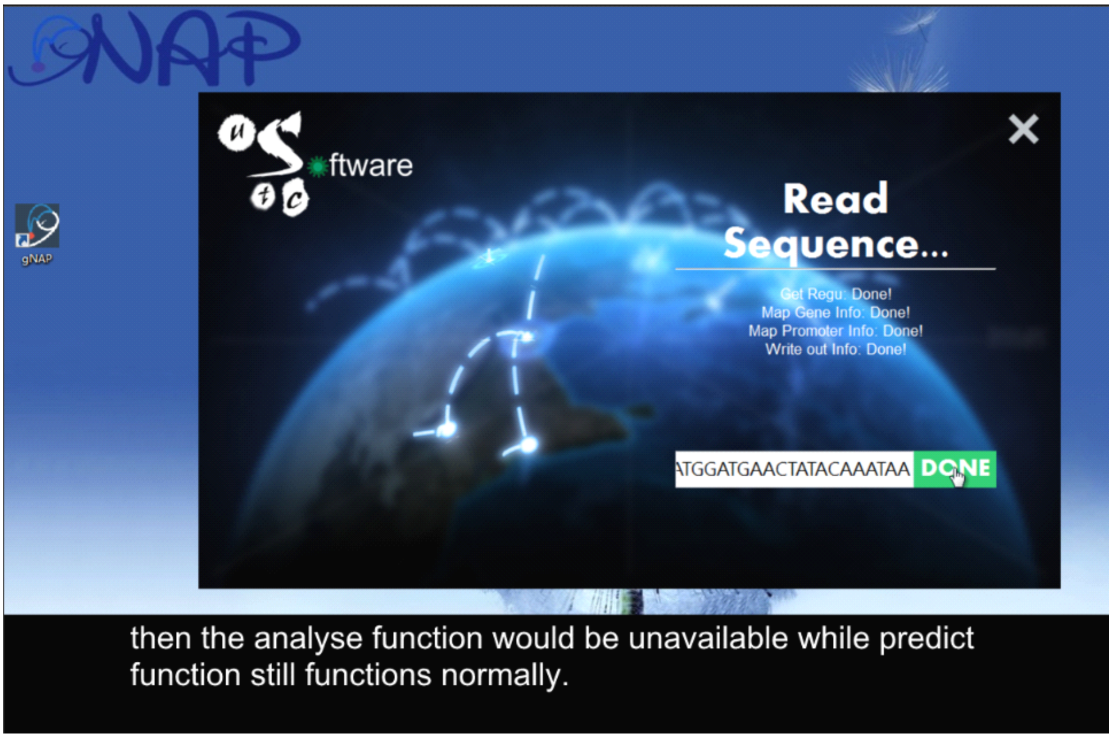
Click "Add" to input the expected express level of the original gene.

Read Sequence...

```
Get Regu: Done!
Map Gene Info: Done!
Map Promoter Info: Done!
Write out Info: Done!
```

TGACTGCCATTGATGGAGGG

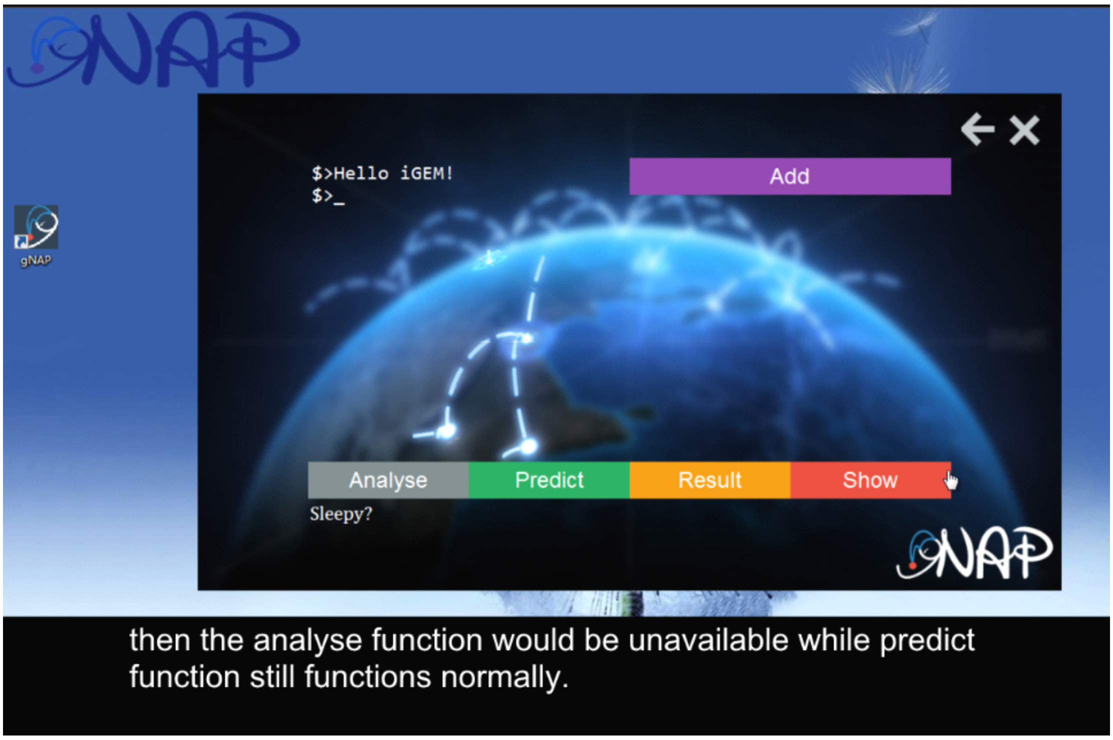
If no promoter sequence or gene sequence were entered,



Get Regu: Done!
Map Gene Info: Done!
Map Promoter Info: Done!
Write out Info: Done!

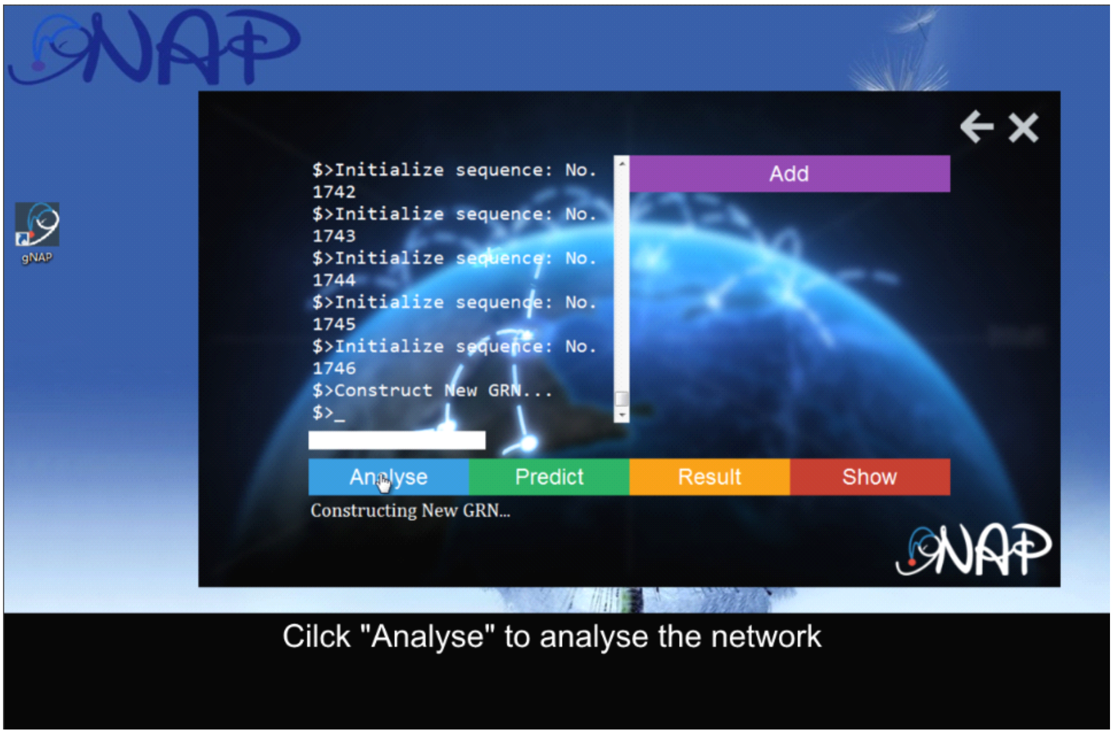
TGGATGAACTATACAAATAA

then the analyse function would be unavailable while predict function still functions normally.



```
$>Hello iGEM!
$>_
```

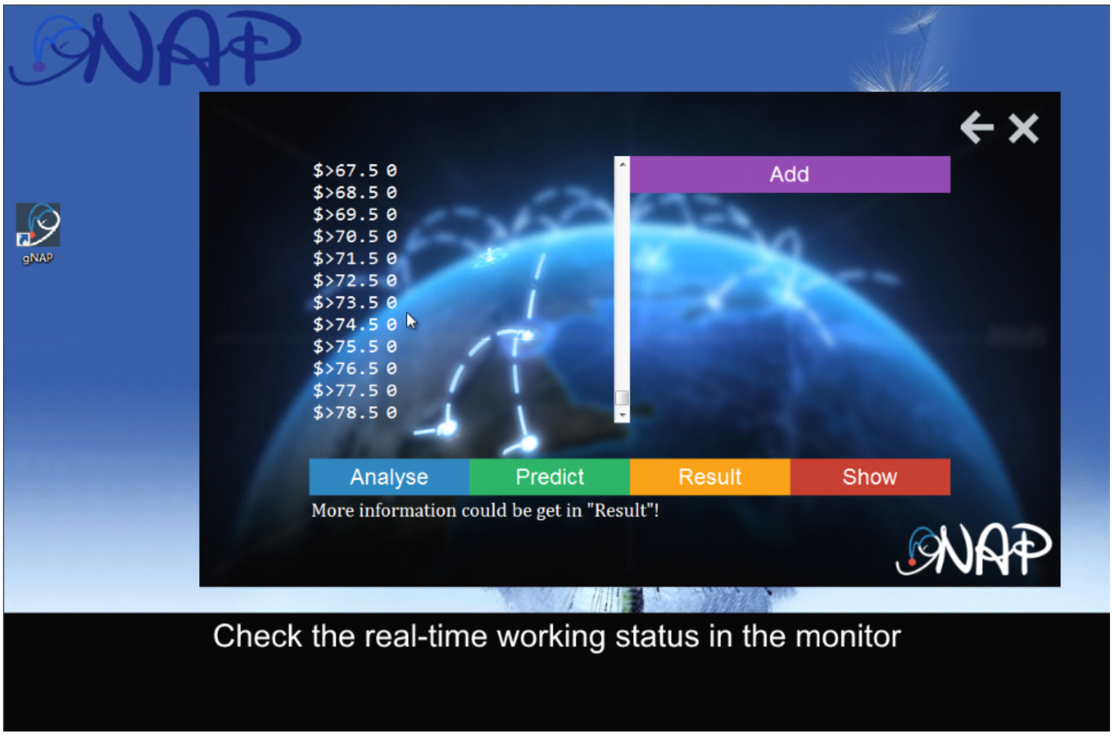
then the analyse function would be unavailable while predict function still functions normally.



```
$>Initialize sequence: No.
1742
$>Initialize sequence: No.
1743
$>Initialize sequence: No.
1744
$>Initialize sequence: No.
1745
$>Initialize sequence: No.
1746
$>Construct New GRN...
$>_
```

Constructing New GRN...

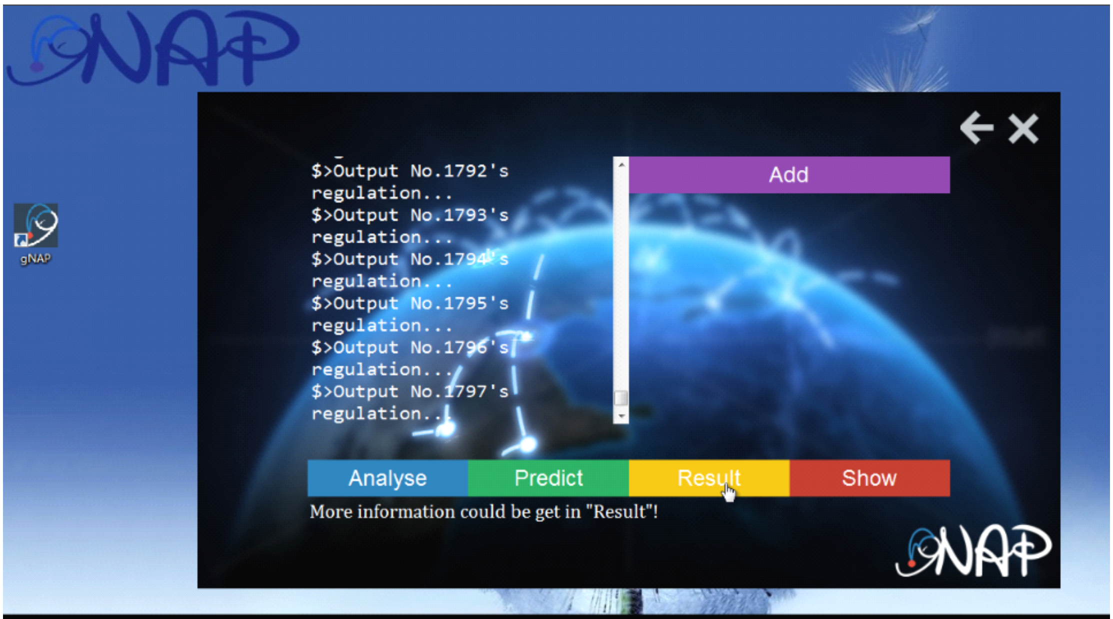
Cilck "Analyse" to analyse the network



```
$>67.5 0
$>68.5 0
$>69.5 0
$>70.5 0
$>71.5 0
$>72.5 0
$>73.5 0
$>74.5 0
$>75.5 0
$>76.5 0
$>77.5 0
$>78.5 0
```

More information could be get in "Result"!

Check the real-time working status in the monitor



```
$>Output No.1792's
regulation...
$>Output No.1793's
regulation...
$>Output No.1794's
regulation...
$>Output No.1795's
regulation...
$>Output No.1796's
regulation...
$>Output No.1797's
regulation...
```

More information could be get in "Result"!

Click "Result" for the analysis output

acrR

```
Gene Name:acrR
RegulonDB ID:ECK120002020
Promoter Name:acrRp
Left Position:484985
Right Position:485632
Click here for more Info on
RegulonDB
```

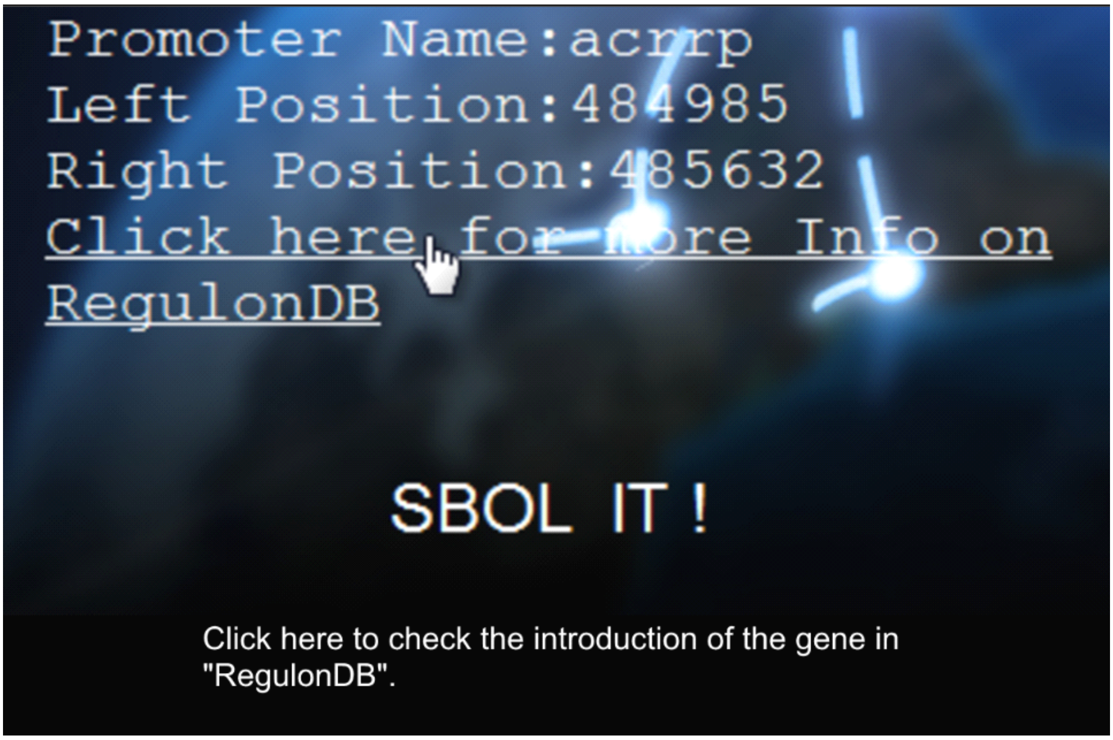
Stable ability indicates the stable points of the network.

Gene Name:acrR
RegulonDB ID:ECK120002020
Promoter Name:acrrp
Left Position:484985
Right Position:485632
Click here for more Info on RegulonDB

Select gene to see its concentration change.

Gene Name:acrR
RegulonDB ID:ECK120002020
Promoter Name:acrrp
Left Position:484985
Right Position:485632
Click here for more Info on RegulonDB

Check the genes properties in detail.



Promoter Name:acrrp
Left Position:484985
Right Position:485632
Click here for more Info on RegulonDB

Click here to check the introduction of the gene in "RegulonDB".

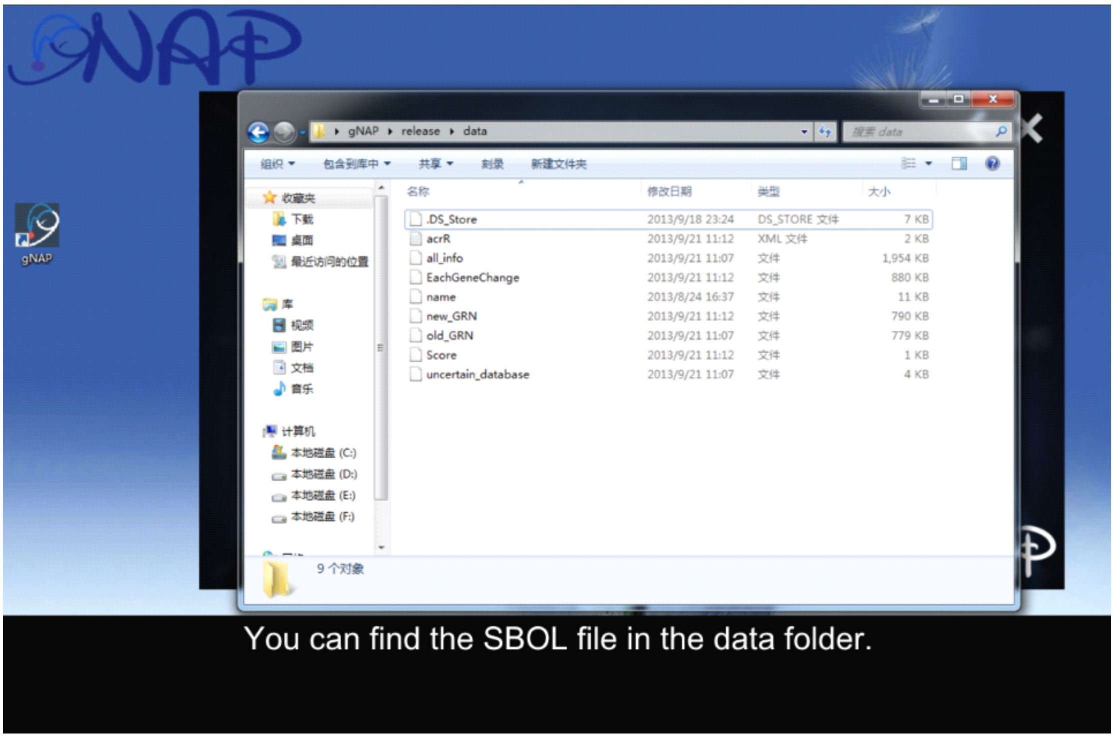
Analyze

STABLE SCORE ★★★

acrR

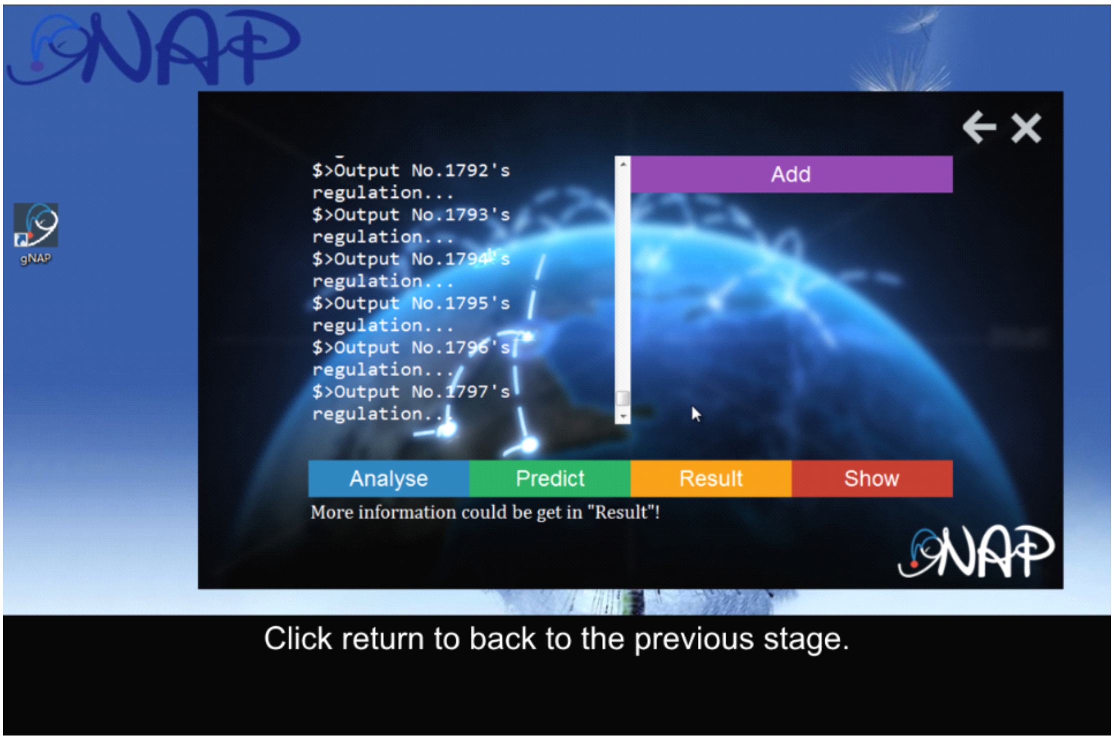
Gene Name:acrR
RegulonDB ID:ECK120002020
Promoter Name:acrrp
Left Position:484985
Right Position:485632
Click here for more Info on RegulonDB

Output a SBOL file.



名称	修改日期	类型	大小
.DS_Store	2013/9/18 23:24	DS_STORE 文件	7 KB
acrR	2013/9/21 11:12	XML 文件	2 KB
all_info	2013/9/21 11:07	文件	1,954 KB
EachGeneChange	2013/9/21 11:12	文件	880 KB
name	2013/8/24 16:37	文件	11 KB
new_GRN	2013/9/21 11:12	文件	790 KB
old_GRN	2013/9/21 11:07	文件	779 KB
Score	2013/9/21 11:12	文件	1 KB
uncertain_database	2013/9/21 11:07	文件	4 KB

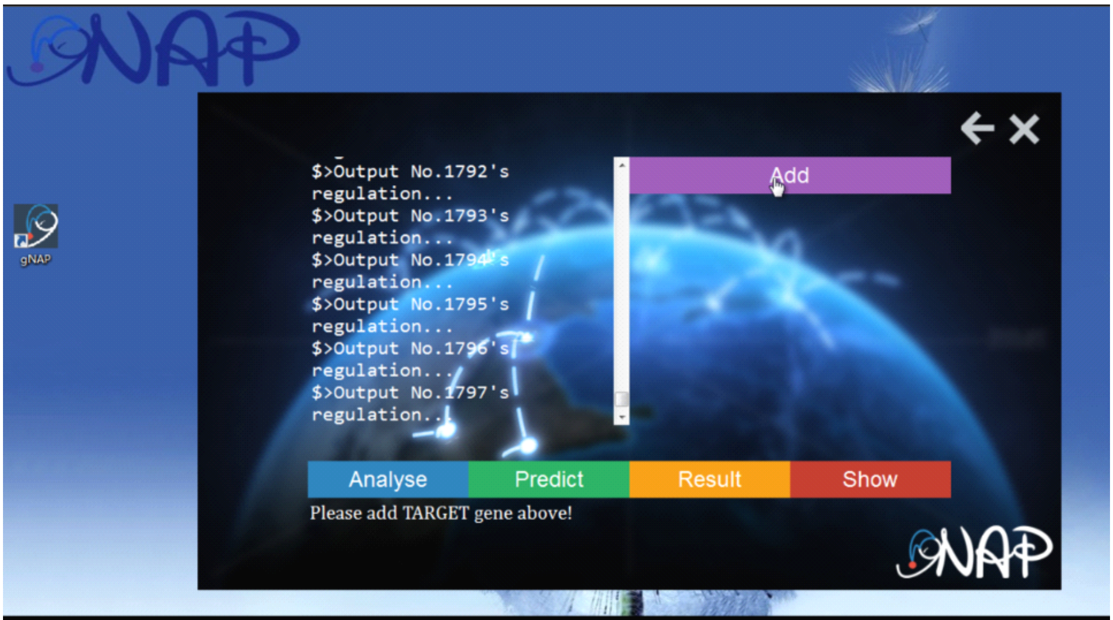
You can find the SBOL file in the data folder.



```
$>Output No.1792's
regulation...
$>Output No.1793's
regulation...
$>Output No.1794's
regulation...
$>Output No.1795's
regulation...
$>Output No.1796's
regulation...
$>Output No.1797's
regulation...
```

More information could be get in "Result"!

Click return to back to the previous stage.



```
$>Output No.1792's
regulation...
$>Output No.1793's
regulation...
$>Output No.1794's
regulation...
$>Output No.1795's
regulation...
$>Output No.1796's
regulation...
$>Output No.1797's
regulation...
```

Please add TARGET gene above!

Add gene and adjust the expression pattern of the gene.

acrR

```
Gene Name:acrR
RegulonDB ID:ECK120002020
Promoter Name:acrrp
Left Position:484985
Right Position:485632
Click here for more Info on
RegulonDB
```

TARGET

```
idnR  Low
kdgR  High
baeR  Low
```

```
ada->new    -
allS->new   -
rpiR->new   -
araC->new   -
lldR->new   +
leuO->new   +
glpR->new   -
nagC->new   -
oxyR->new   -
cspA->new   +
gadW->new   +
metJ->new   +
gcvA->new   -
lrhA->new   -
```

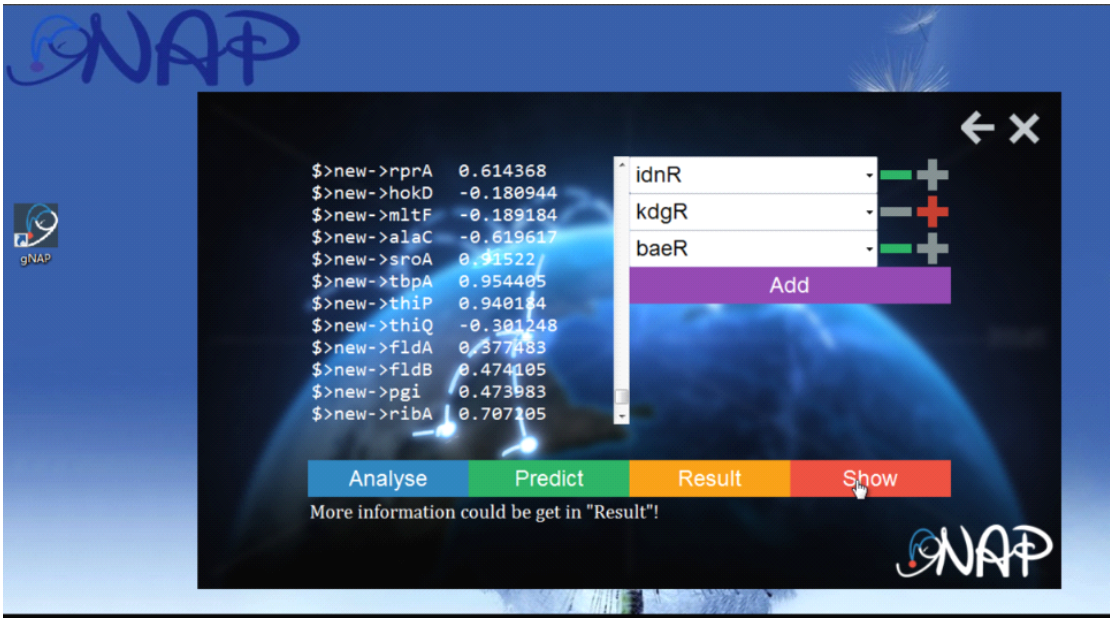
Here is the goal you want .

```
Gene Name:acrR
RegulonDB ID:ECK120002020
Promoter Name:acrrp
Left Position:484985
Right Position:485632
Click here for more Info on
RegulonDB
```

```
idnR  Low
kdgR  High
baeR  Low
```

```
ada->new    -
allS->new   -
rpiR->new   -
araC->new   -
lldR->new   +
leuO->new   +
glpR->new   -
nagC->new   -
oxyR->new   -
cspA->new   +
gadW->new   +
metJ->new   +
gcvA->new   -
lrhA->new   -
```

Here shows the prediction result.

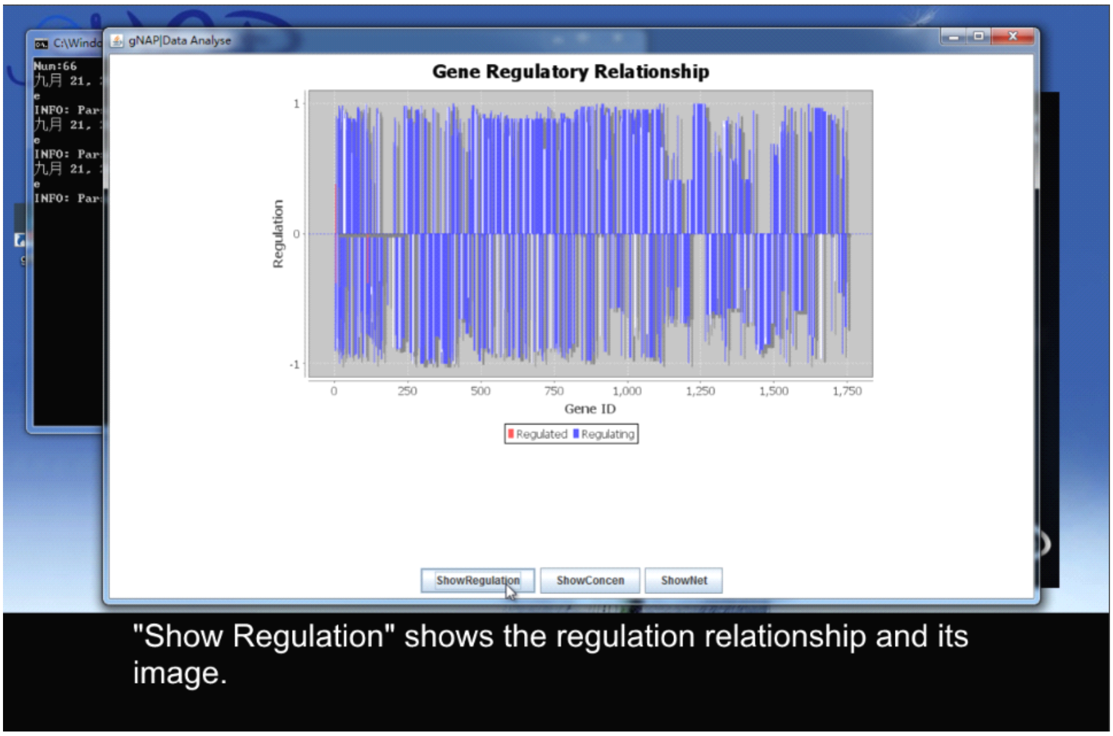


```
$>new->rprA   0.614368
$>new->hokD   -0.180944
$>new->mltF   -0.189184
$>new->alaC   -0.619617
$>new->sroA   0.91522
$>new->tbpA   0.954405
$>new->thiP   0.940184
$>new->thiQ   -0.301248
$>new->fldA   0.377483
$>new->fldB   0.474105
$>new->pgi    0.473983
$>new->ribA   0.707205
```

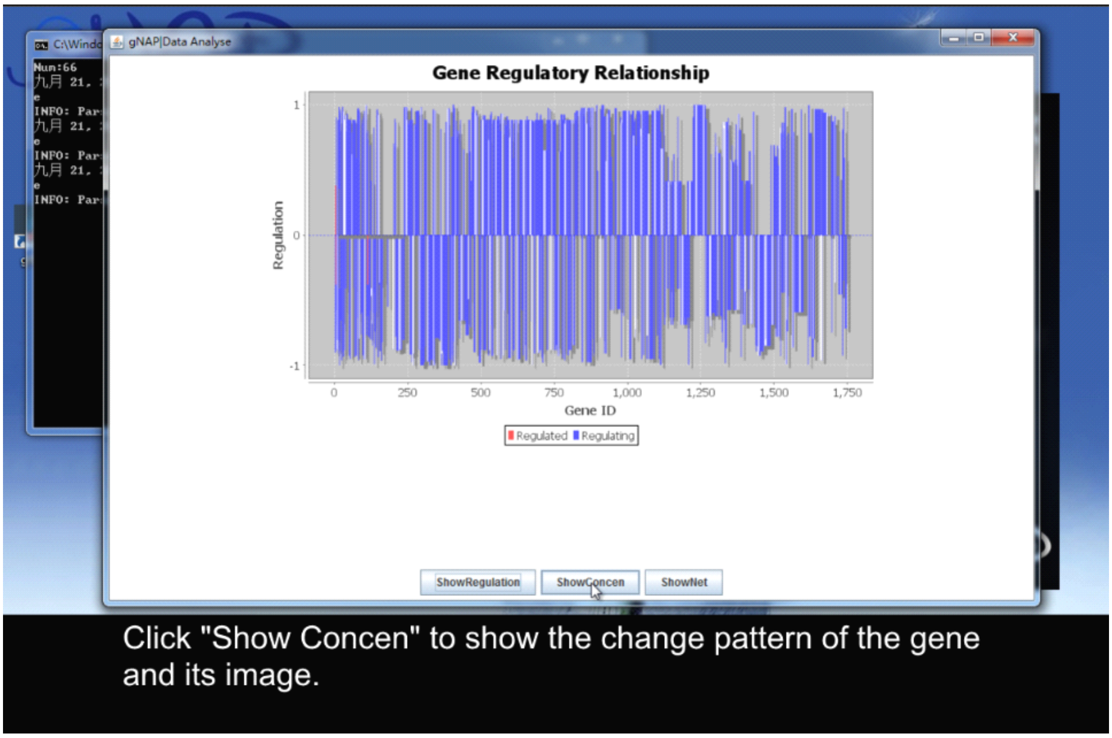
idnR
kdgR
baeR

More information could be get in "Result"!

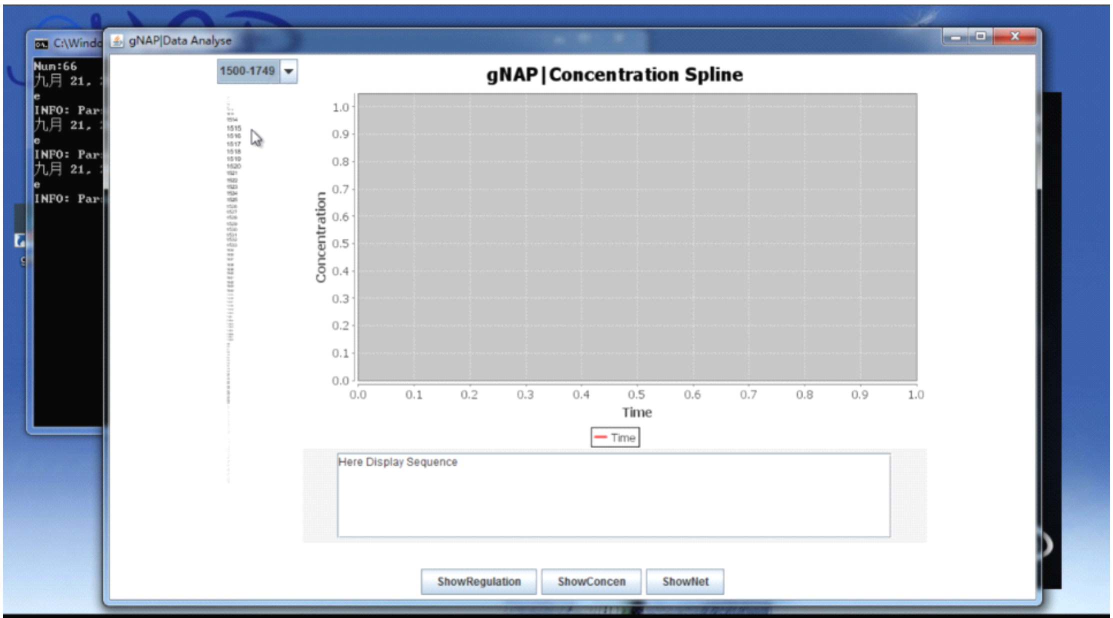
Click "Show" to the visual data platform.



"Show Regulation" shows the regulation relationship and its image.

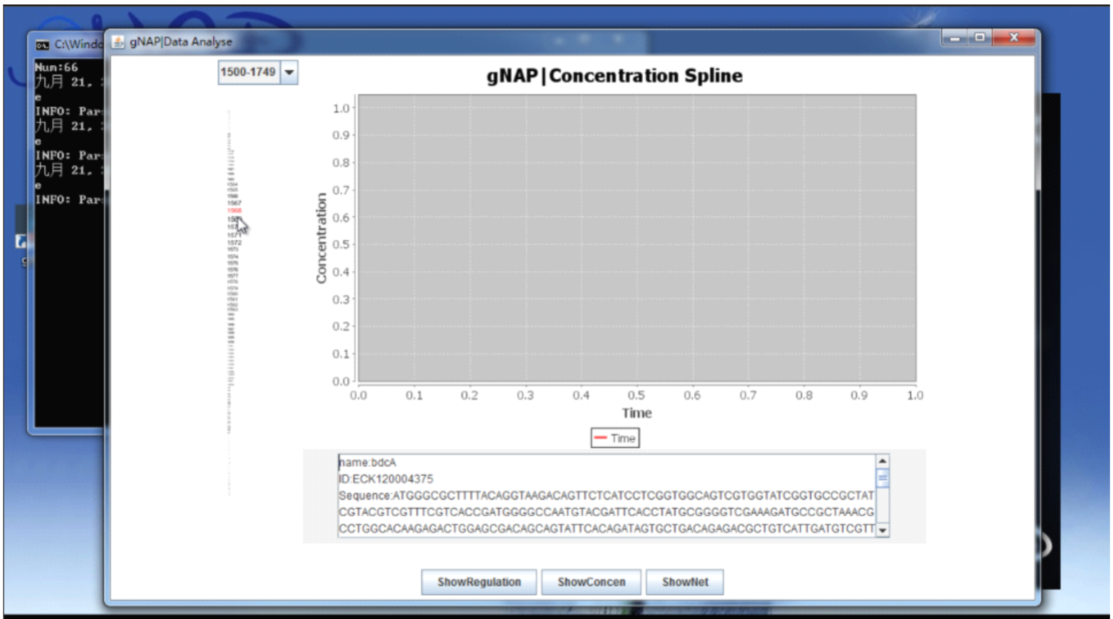


Click "Show Concen" to show the change pattern of the gene and its image.



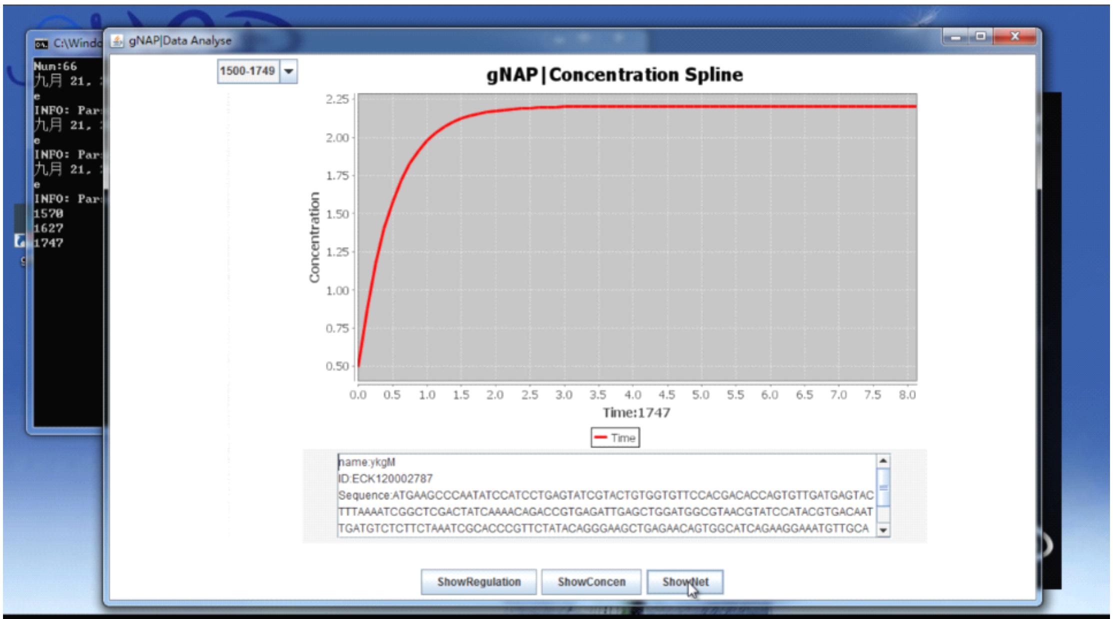
Here Display Sequence

Select the gene's position and number, its properties will be shown below.



name:bdcA
ID:ECK120004375
Sequence:ATGGGCGCTTTTACAGGTAAGACAGTTCTCATCCTCGGTGGCAGTCGTGGTATCGGTGCCGCTAT
CGTACGTCGTTTCGTCACCGATGGGGCCAATGTACGATTCACCTATGCGGGGTCGAAAGATGCCGCTAAACG
CCTGGCACAAGAGACTGGAGCGACAGCAGTATTCACAGATAGTGCTGACAGAGACGCTGTCATTGATGTCGTT

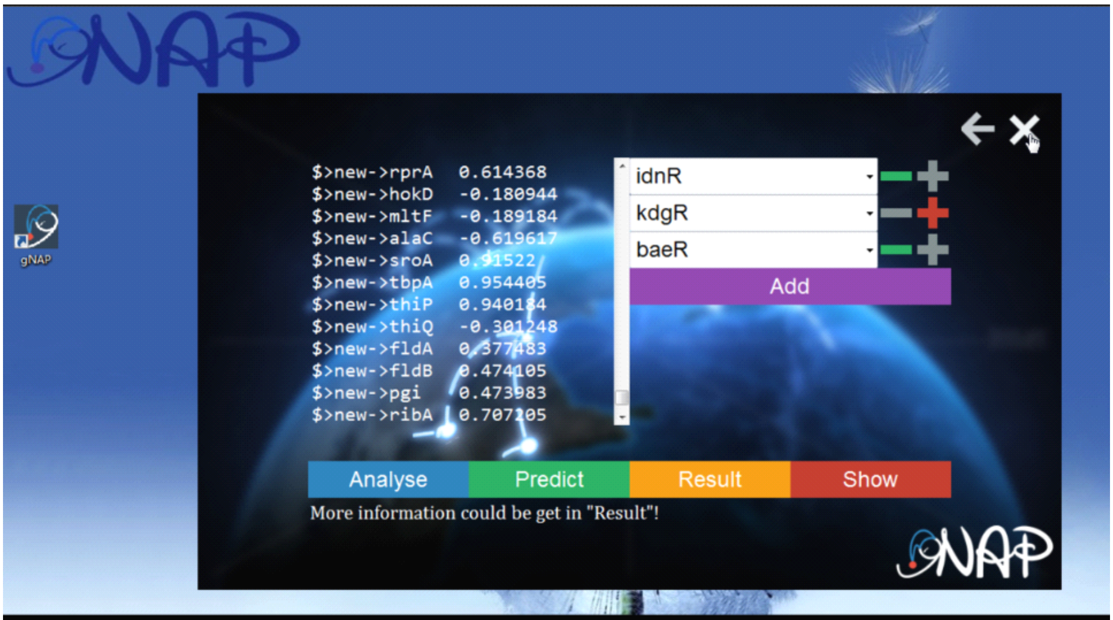
Then click to view its change pattern.



```
Num:66
九月 21,
e
INFO: Par
九月 21,
e
INFO: Par
九月 21,
e
INFO: Par
1570
1627
1747
```

name:ykgM
ID:ECK120002787
Sequence:ATGAAGCCCAATATCCATCCTGAGTATCGTACTGTGGTGTTCCACGACACCAGTGTTGATGAGTAC
TTTAAAATCGGCTCGACTATCAAAACAGACCGTGAGATTGAGCTGGATGGCGTAACGTATCCATACGTGACAAT
TGATGTCTCTTCTAAATCGCACCCGTTCTATACAGGGAAGCTGAGAACAGTGGCATCAGAAGGAAATGTTGCA

Click "Show Net" to show the image of the gene network's relationship.



```
$>new->rprA   0.614368
$>new->hokD   -0.180944
$>new->mltF   -0.189184
$>new->alaC   -0.619617
$>new->sroA   0.91522
$>new->tbpA   0.954405
$>new->thiP   0.940184
$>new->thiQ   -0.301248
$>new->fldA   0.377483
$>new->fldB   0.474105
$>new->pgi    0.473983
$>new->ribA   0.707205
```

More information could be get in "Result"!

Thank you.