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Institute of Statistical Science, Academia Sinica  
Official Website: <http://gap.stat.sinica.edu.tw/Software/GAP>  
[Current Version: v0.1.004, Build 2005-07-15]

## Features

### Generalized Association Plots

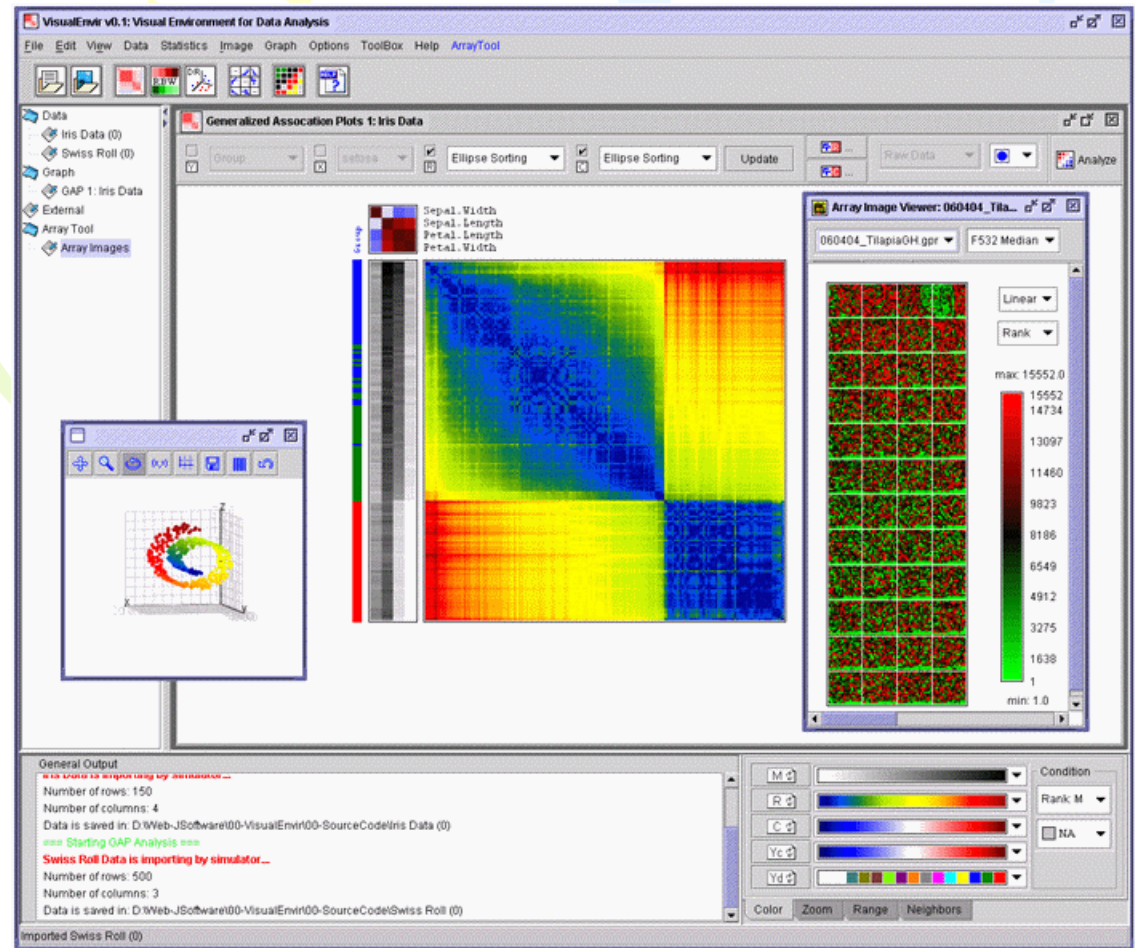
- Various seriation algorithms and clustering analysis
- Various display conditions
- GAP with a Covariate Adjusted
- GAP with Nonlinear Association Analysis
- GAP with Missing Value Imputation

### Statistical Plots

- Histogram, 2D Scatterplot, 3D Scatterplot (Rotatable)

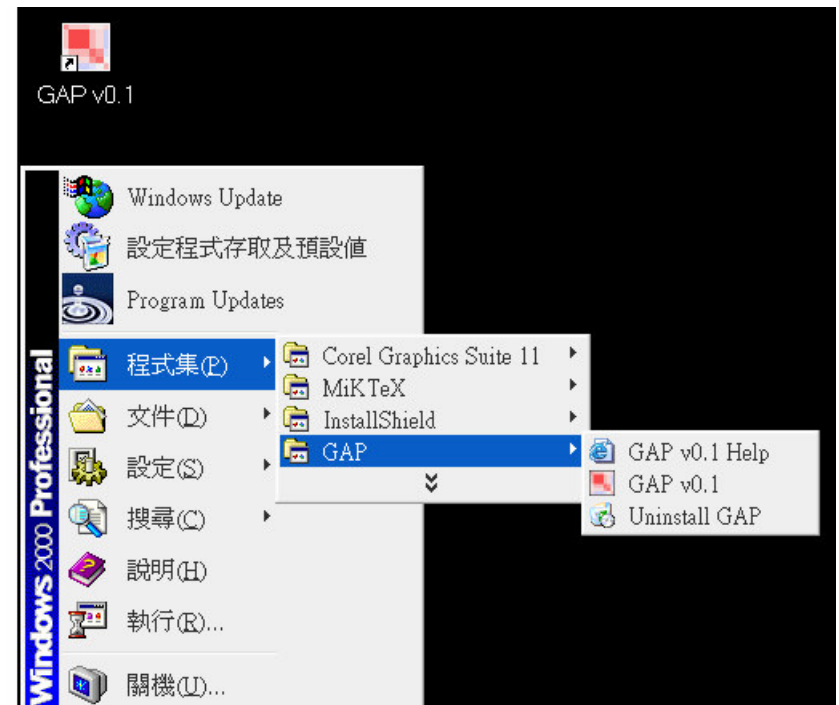
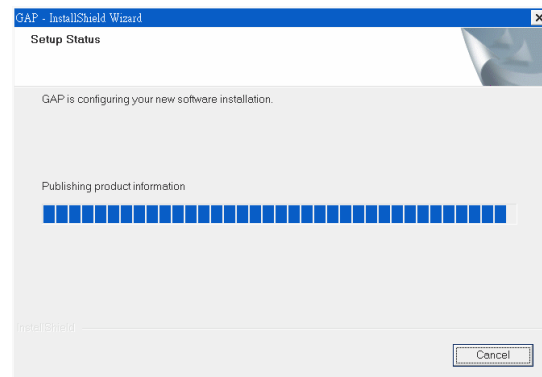
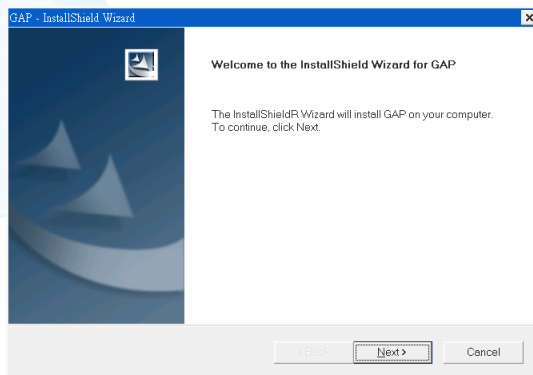
### Microarray Toolbox

- jMATool

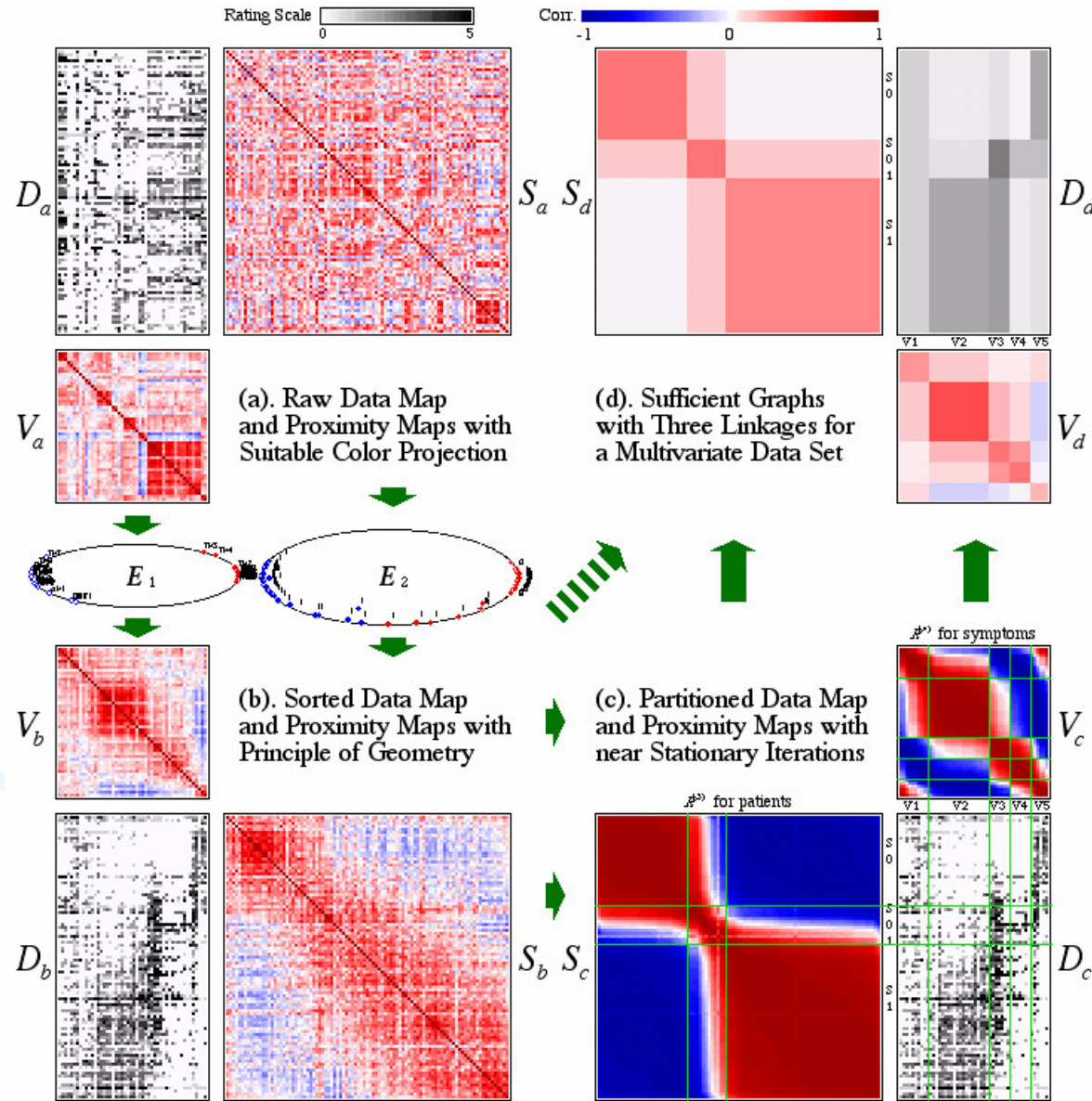


# Download and Installation

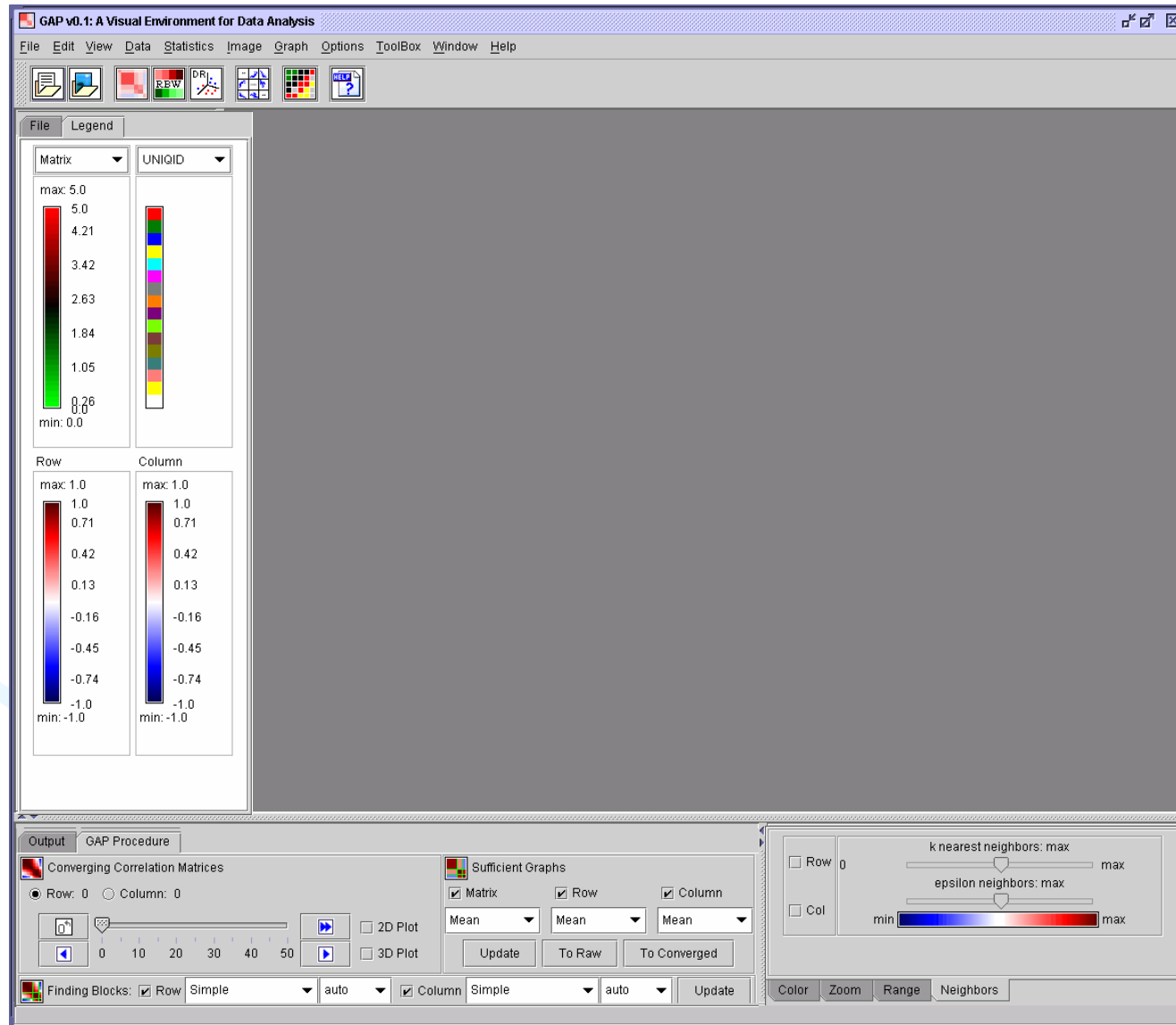
- Install Java(TM) 2 Runtime Environment, Standard Edition 1.4.2\_03
- Windows platform: GAPv0.1.003\_win\_setup.exe
- GAPv0.1.004\_win\_setup\_withJAVA.zip  
j2re-1\_4\_2\_03-windows-i586-p.exe



# A Complete GAP procedure



# Main Window





# Input Data

Open Data

Data Information

File: D:\My Documents\00Schizo\SAPSSANS9550.bt

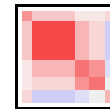
No. Row: 95  Row name Yconti.: 0 Xconti.: 0

No. Col: 50  Col name Ydiscr.: 1 Xdiscr.: 0

Missing Value: NA

var0	var1	var2	var3	var4	var5	var6
UNIQID	AH1	AH2	AH3	AH4	AH5	AH6
1	1	1	0	0	0	0
1	3	2	1	1	1	0
1	5	5	5	0	0	0
1	5	5	5	5	4	5
0	0	0	0	0	0	0
1	2	0	2	0	0	2
0	0	0	0	0	0	0
1	3	1	1	0	0	0
1	5	5	1	0	0	4
0	0	0	0	0	0	0
1	2	0	2	0	0	0
1	5	0	1	0	0	0
1	0	0	0	5	0	0
0	0	0	0	0	0	0
1	5	5	5	0	0	0
0	0	0	0	0	0	0

OK Cancel



# GAP

Generalized Association Plots

Data: SAPSSANS9550.bt

Variables: UNIQID

Covariate Adjustment:  None  Means No. Groups: 0  Partial

Option: Nonlinear Association

Row Processing:  Row Processing

Row Proximity Measure: Pearson's Correlation

Row Seriation Method: Original Order

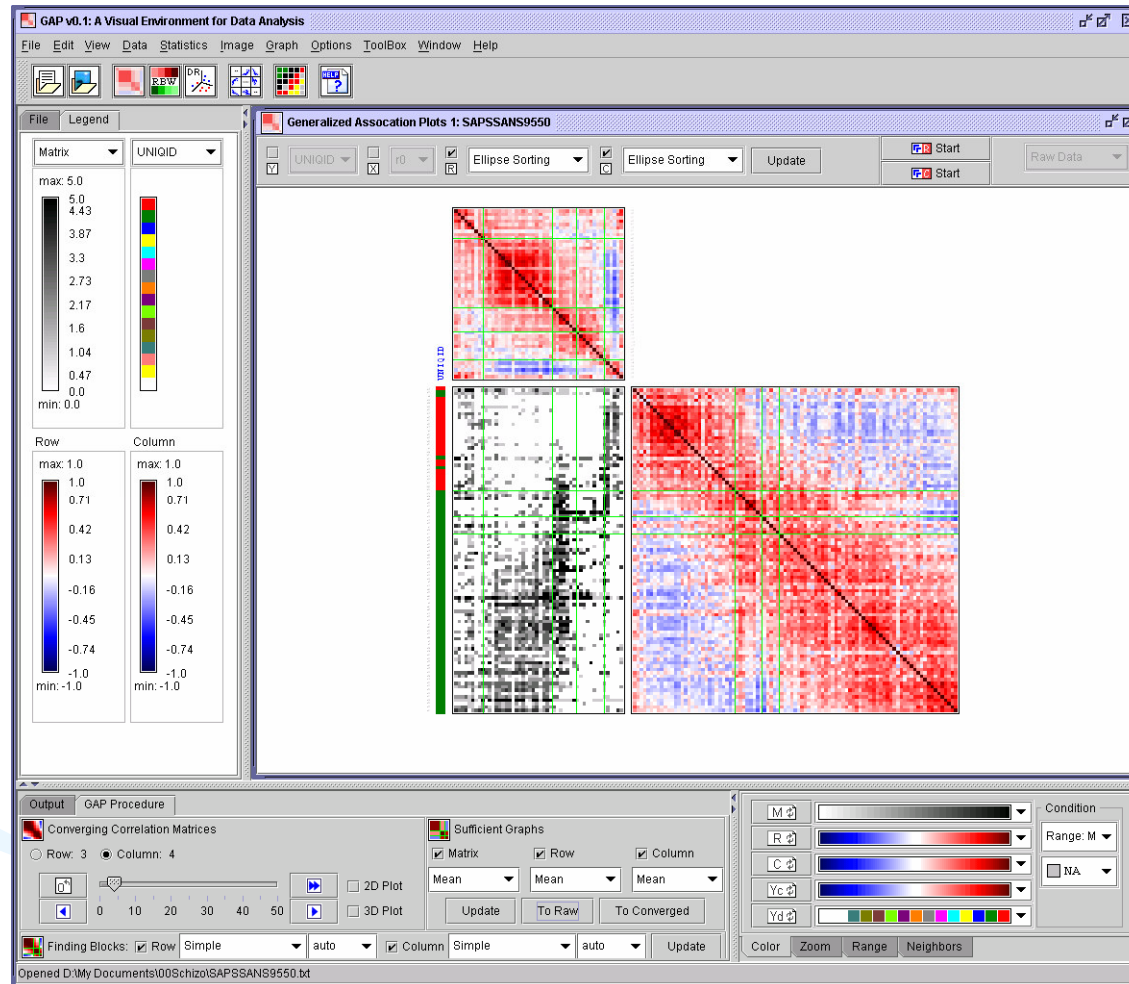
Column Processing:  Column Processing

Column Proximity Measure: Pearson's Correlation

Column Seriation Method: Original Order

OK Cancel Apply

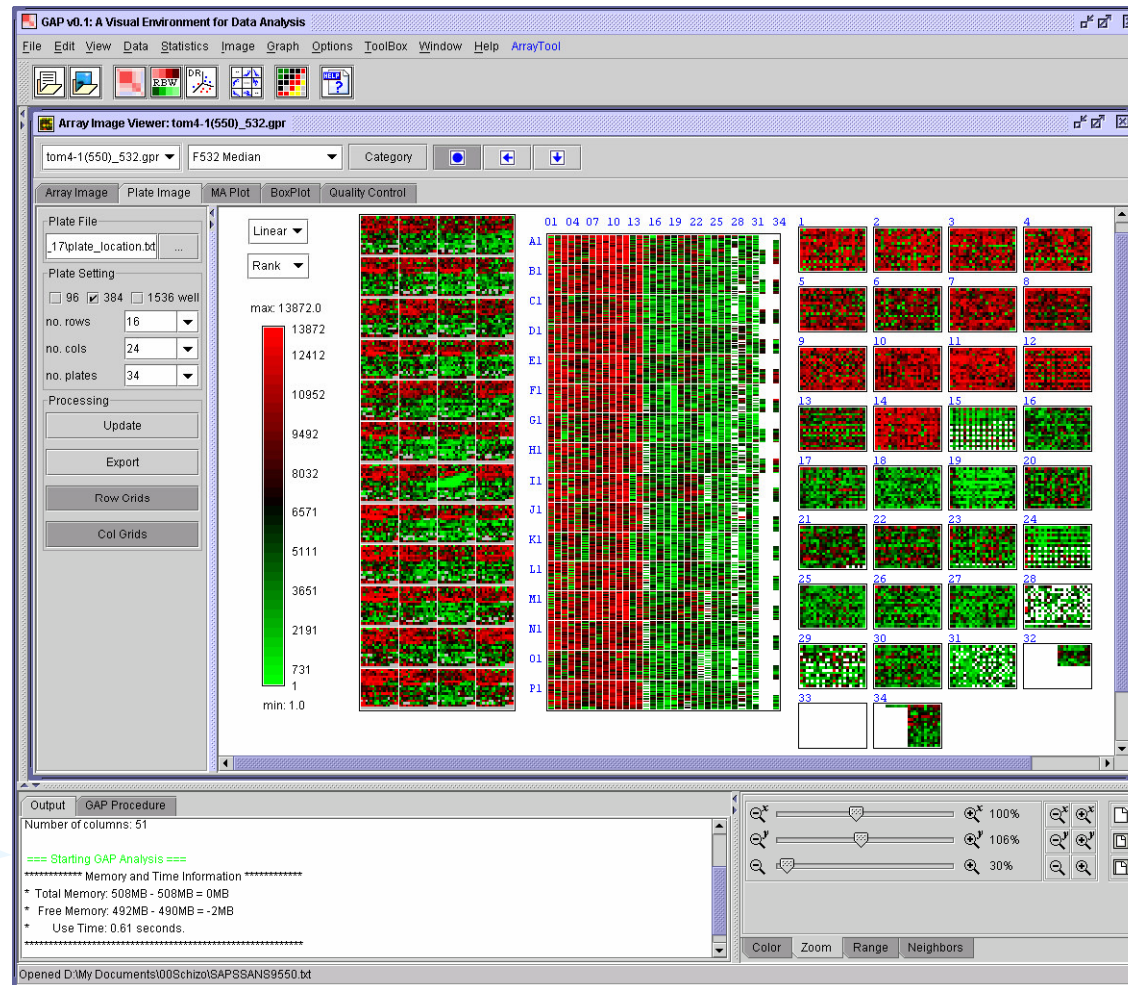
# GAP Procedure



**Exercise:** Please follow the steps with your instructor in the class!  
**Do it by yourself using** TradCellCycle103\_alpha.txt

# Microarray ToolBox: jMATool

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**Exercise:** Please follow the steps with your instructor in the class!