

# Viewdist

(<http://genepi.qimr.edu.au/viewapps/>)

Plotting Program for quick visualisation  
of distributions

Harry Beeby & Sarah Medland

Queensland Institute of Medical  
Research

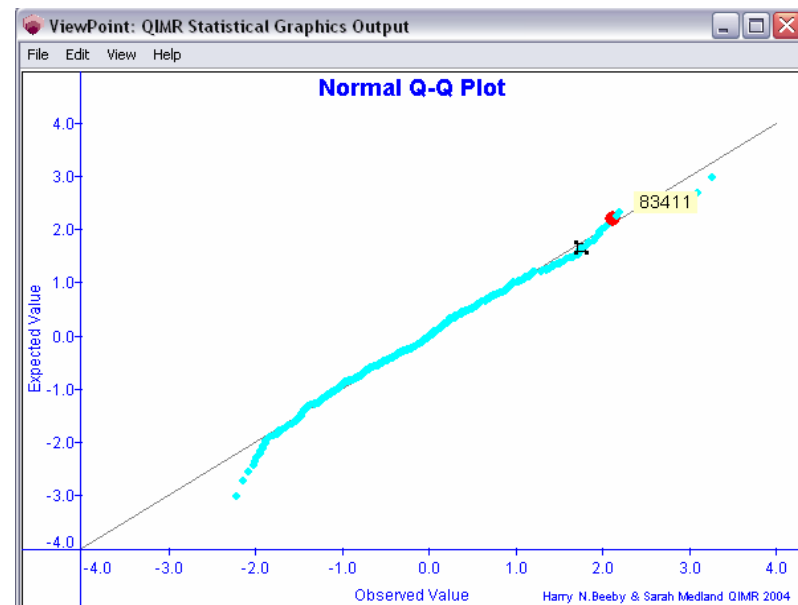


Designed for use with the Mx %p function

- Reads in %p or data files
- Produces QQ plots or distribution against itself
- Aim to help identify outliers
- Can read in %p files for two models and plot the difference between the two files
  - Useful for identifying per family contribution to a LOD score at a specific loci

# Outlier detection

- QQ plots observed scores against the expected distribution (normal or chi-square)
- The case identifier is shown as you pass the mouse over the data point

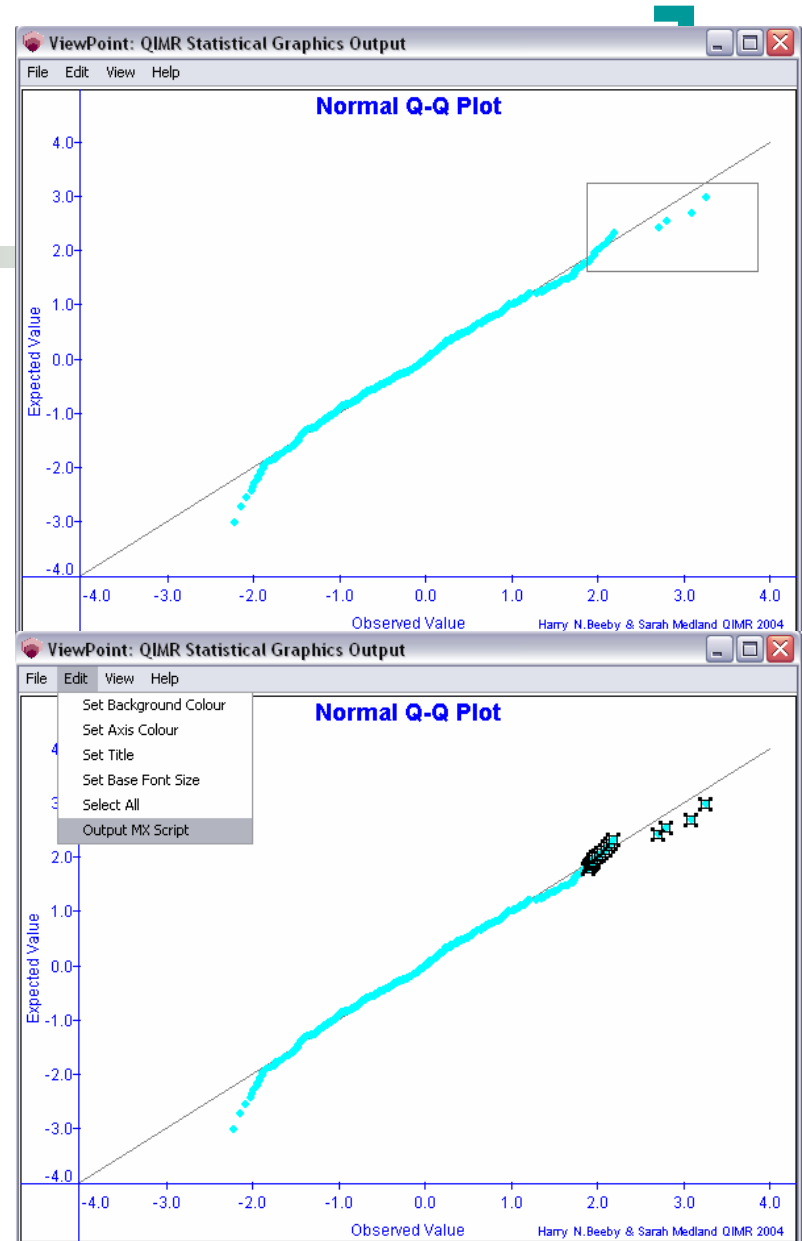


- Can select multiple data points
- Output a text file containing Mx commands to exclude the selected cases

select if fam ^= 1234 ;

select if fam ^= 5678 ;

select if fam ^= 9876 ;



## ■ Working from a %p file

- Can graph Z score or Mahalanobis distance
- Can display the results for multiple models (max 6) if using the NModel option
  - Suits mixture distribution linkage approach
- Can graph raw data from a dat file
  - Requires user to specify the columns to be plotted
- Can customise the plot and change the expected distribution
- Results can be printed or saved as jpg

## [ per case change in model fit ]

- If two %p files are read in using 'open difference files' the difference in  $-2LL$  can be calculated and plotted to determine which cases are contributing the most to change in chi-square
- Selecting these families and excluding them from the analysis can provide information regarding the robustness of the linkage finding

# [ Input format ]

---

- Tab or Space delimited
- Required columns
  - Identifiers
  - Data
- Optional Columns
  - Model (specify -1 if not included in data file)