This github contains the raw data and demonstration used in the original publication of OATH.

1 How to get the data

Please either "git clone https://github.com/gc5k/OATH.git" to have the whole data cloned to your local computer, or download it (notice the "clone or download", a green button?)

2 System requirement

OATH has already been realized in GEAR [GEnetic Analysis Repository; gear.jar]. More details about GEAR can be found https://github.com/gc5k/GEAR/wiki.

gear.jar requires java installed. To check the details, type "java -version". If it shows "java 1.7" or "java 1.8", then your computer is ready; otherwise please download java online and install it first (from oracle website).

3 Three demonstrations included

a) Run Figure2Demo.R.

DemonFig2 has an R script to generate Fig 2 as in the paper; and also it shows the kernel of OATH.

b) Run ArabAnalysis_Fig6.R.

ArabData has the cleaned genotype data for generating results for Fig 6. Although genotype data are not really needed by OATH, to provide a more comprehensive experience for users we still include the data for 295 Arabidopsis lines.

c) Run GWAMA_Fig7.R.

GWAMA analysis. Naive summary statistics provided two Chinese GWAS cohorts: NAcohort and SLEcohort.