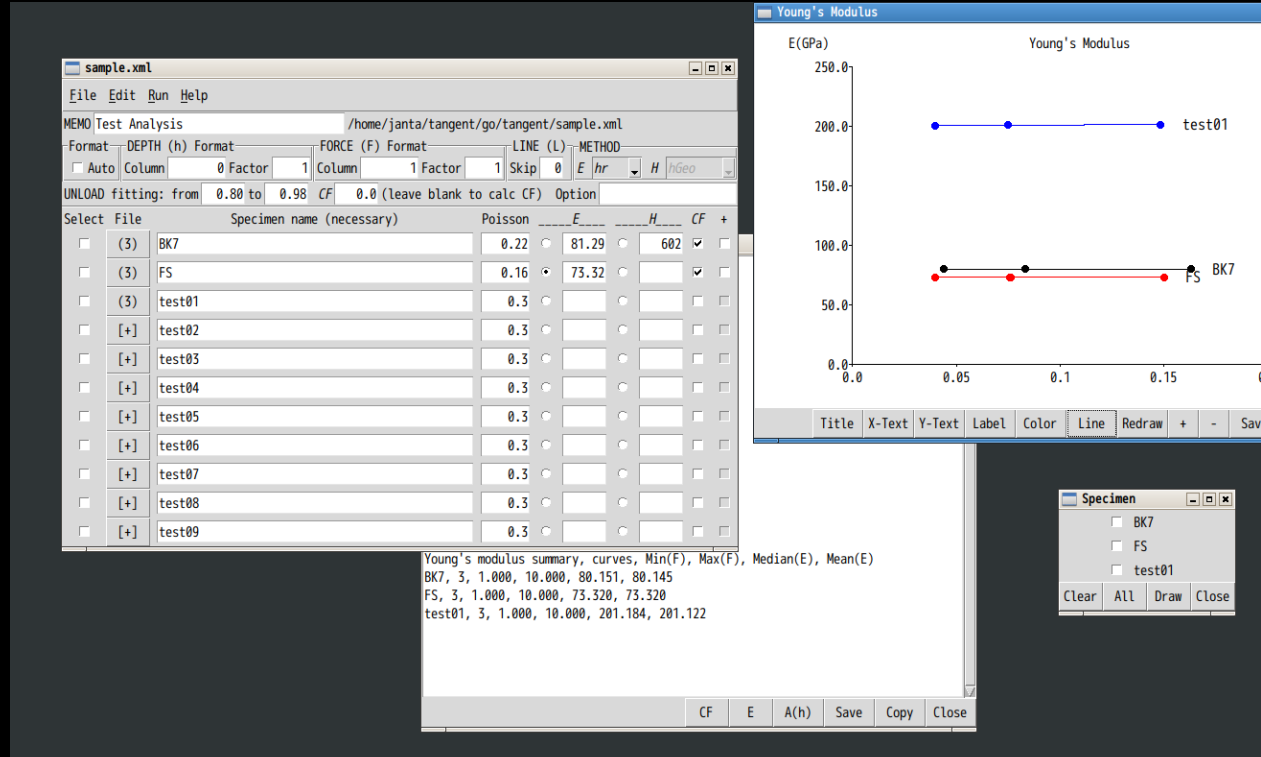


Introduction of tangentGo



K. MIYAHARA

tangentGo program

- Analysis for Instrumented Indentation Testing (IIT)
- Already proven method
- Windows/macOS/Linux
- Just click to run Simply unzip files to install
- GUI supported
- Free to use

For all IIT users

Analysis

- Proposed by Prof. Ishibashi: **tangent depth analysis**
- Input: Force-depth curves by commercial testers
- Output: Young's modulus, Hardness, etc.
- File Setting: Read curves automatically
(Manual setting available)
- Database: Standard specimens registered
and more updates expected

Performance of tangent depth analysis

- Applied to curves by 11 commercial testers
- The variation of Young's modulus is reduced to $1/2.5 \sim 1/5$ by tangent depth analysis (tangentGo).
- The problems of outliers and standard specimens are also improved.

The tangent depth analysis has advantages and is proven with the same curves and conditions.

Graph functions

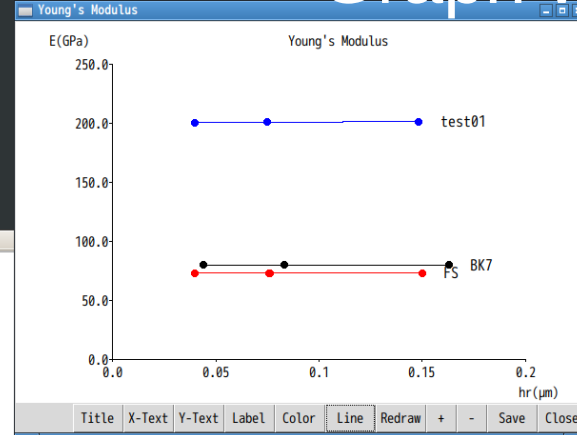
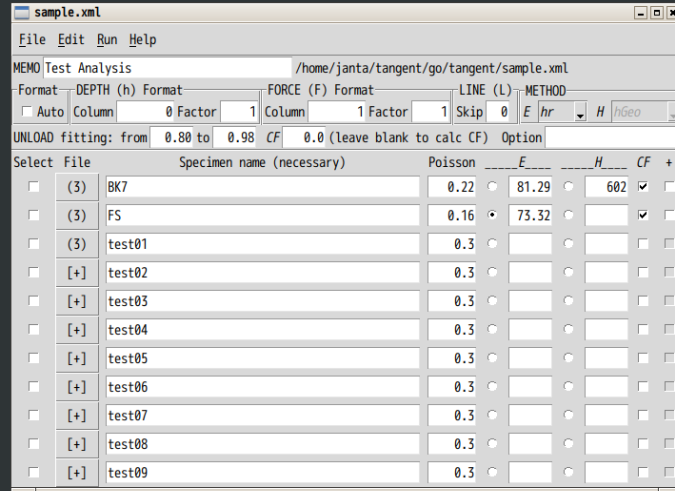
- Force-depth curves
 - Young's modulus
 - Hardness
 - Area function
 - C_F (Frame compliance)
 - and more
- ✓ Autoscale
 - ✓ Pick specimens
 - ✓ Color / Grayscale
 - ✓ Save images
 - ✓ Save plot data

Easy to create necessary graphs

Screen layout

Main window

Graph window

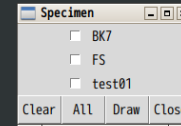


Young's modulus summary, curves, Min(F), Max(F), Median(E), Mean(E)

BK7, 3, 1.000, 10.000, 80.151, 80.145

FS, 3, 1.000, 10.000, 73.320, 73.320

test01, 3, 1.000, 10.000, 201.184, 201.122



Output window

Specimen window

Multiple windows / GUI supported

Other functions

- Save / Load settings
- Copy / Paste results
- Help / Tooltip
- Debug information
- Batch run

For all IIT users, please test tangentGo with your own experimental data.

Download

- The tangentGo (β version) is available here.



<https://3zip.net/t/en.html>