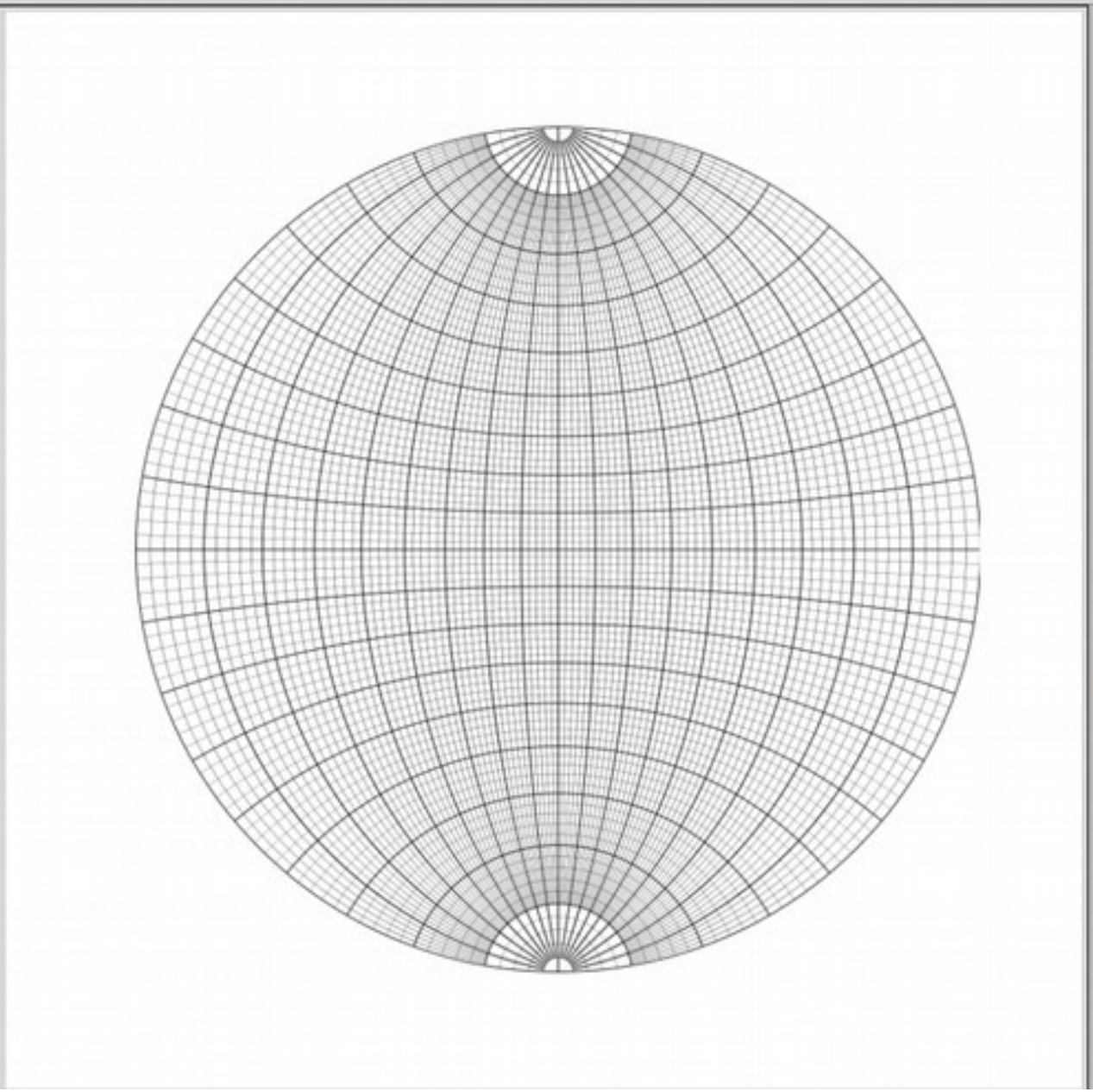
Draw stereographic projections with Stereo-Proj

January 2015

Stereo-Proj

Save Structures



Crystal parameters

a 1

b 1

c 1

alpha 90

beta 90

gamma 90

max indices 1

d - 1 +

0

carre/rond

g vector

Tilt

Inclination

PLOT

PLOT uvw Hexa

x y and z rotations

- 10 + 0

- 10 + 0

- 10 + 0

Add a pole

Add - Symmetry - dhkl 0.0

Plane - Iso-Schmid -

Sym Planes -

Euler Angles (phi1,phi, phi2)

0 0 0

PLOT

Phi1,Phi,Phi2

Rotation around g vector

- + 0

b vector n vector

Angle

Width

Schmid factor

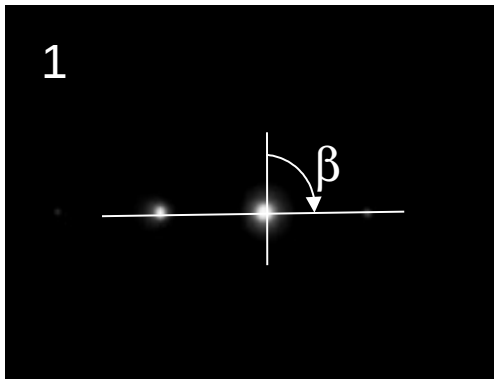
greer blue red

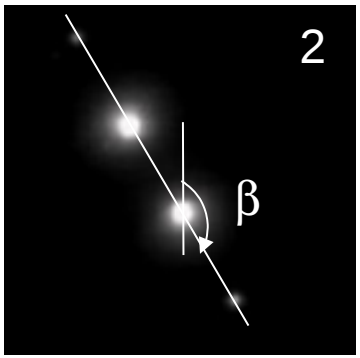
Marker size 40

Tilt, inclination

41.9,118.1

-Enter crystal parameter and angles alpha, beta and gamma (and the max indices shown).
-Enter a diffraction vector and the tilt angle (along x) et the inclination angle beta :



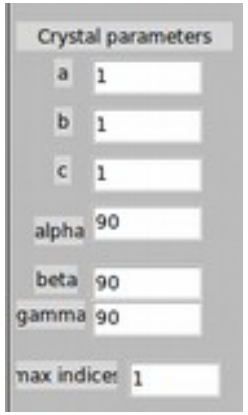


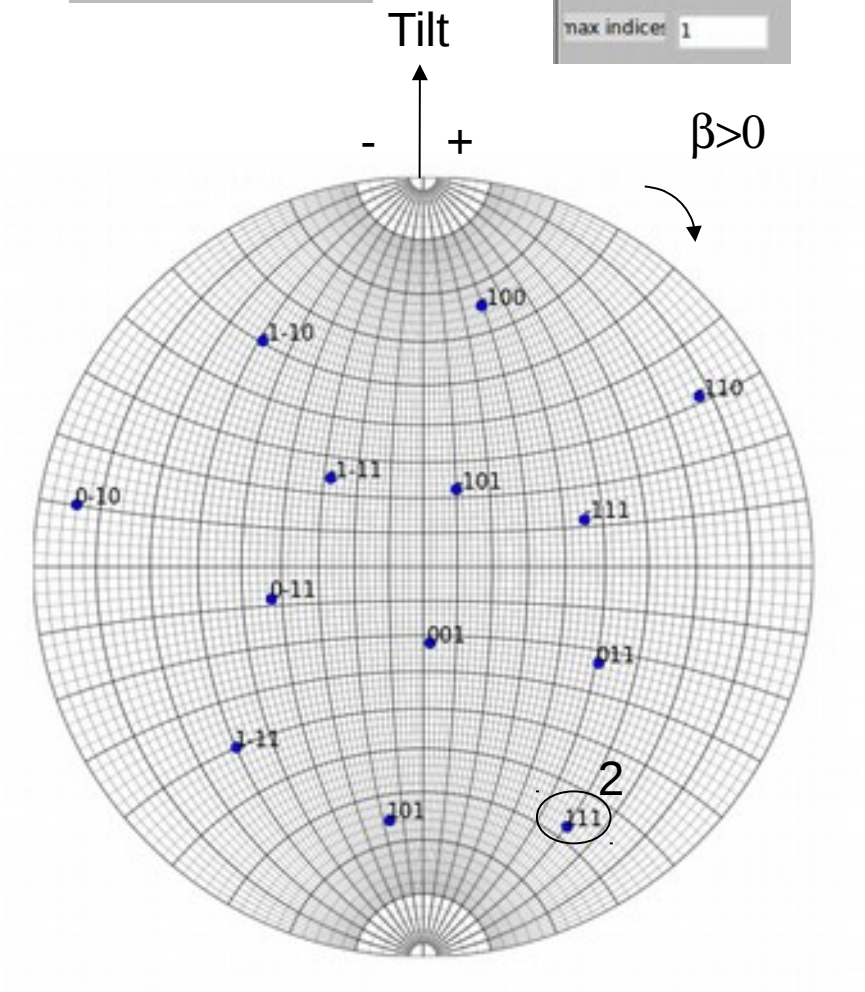
{111} beta=90

Tilt -22.2

{111} beta=147.5

Tilt 30





Example Al (cubic a=b=c=1 alpha=beta=gamma=90°):

Here we enter (111) as the diffraction vector, and beta=147.5 et Tx=30:

PLOT

We use the positive tilt angle and inclination angle as shown here

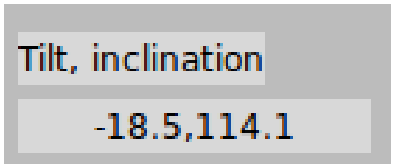
To get the correct projection, rotate along the g-vector up to the correct projection here, 47°

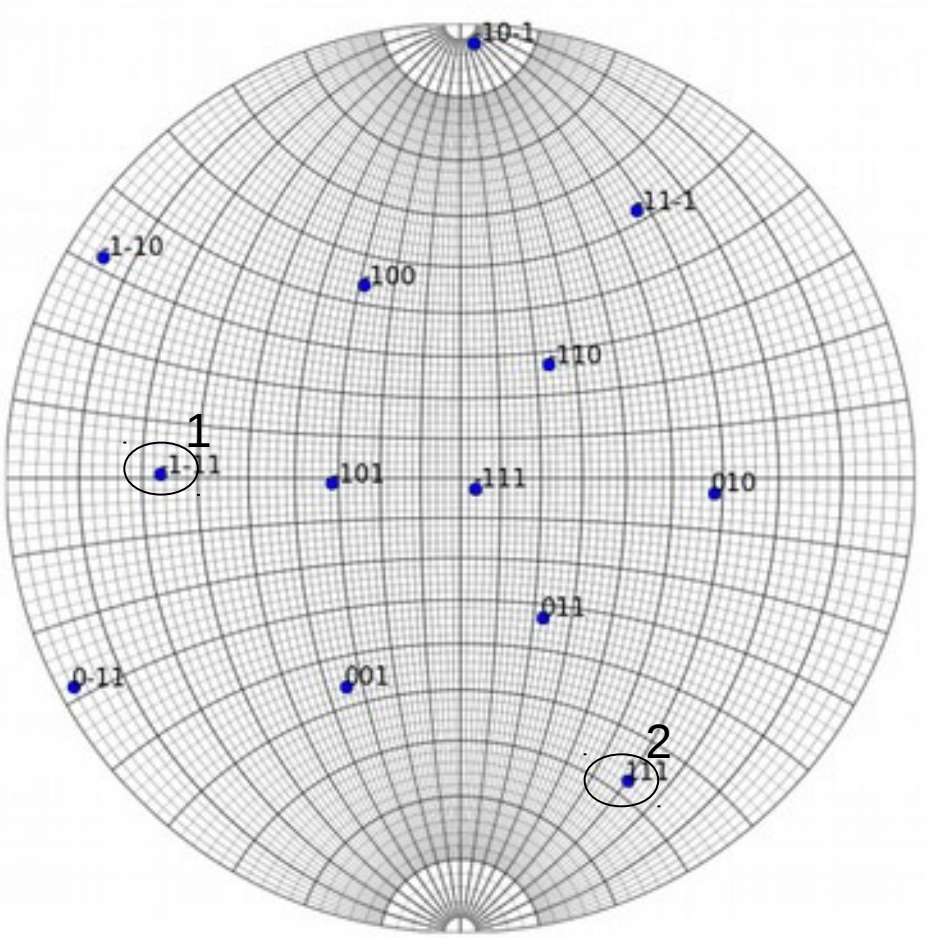
Rotation value

Rotation increment

Euler angles are given

Running the mouse over the projection you get the inclination and tilt angles

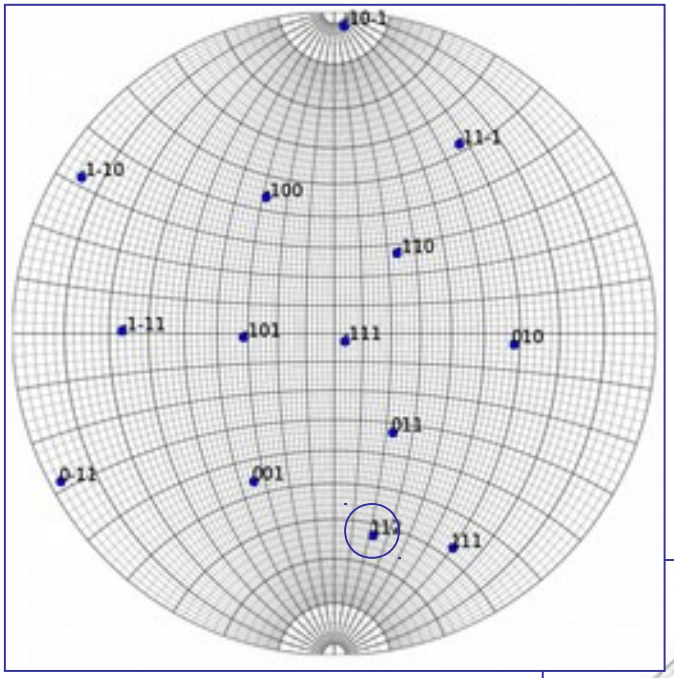




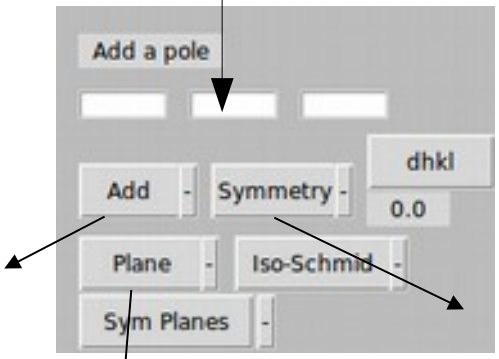
Other features

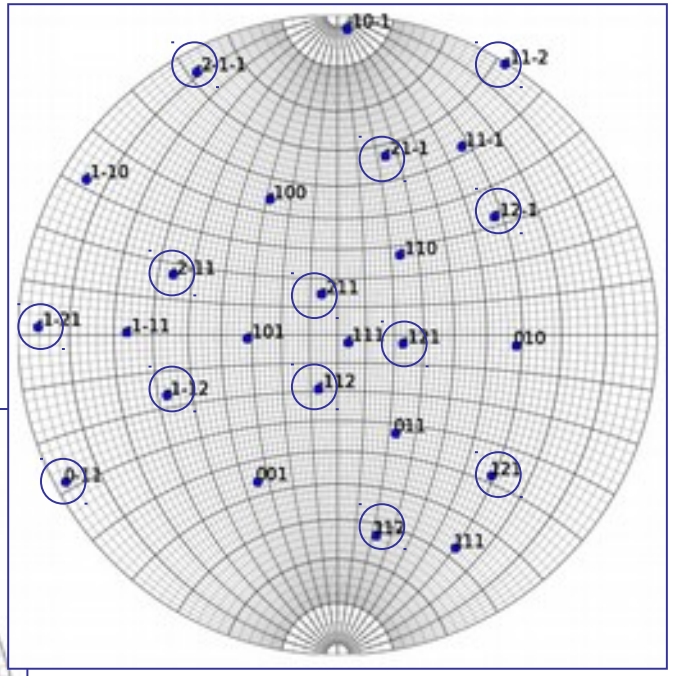
• Draw the uvw direction by ticking:

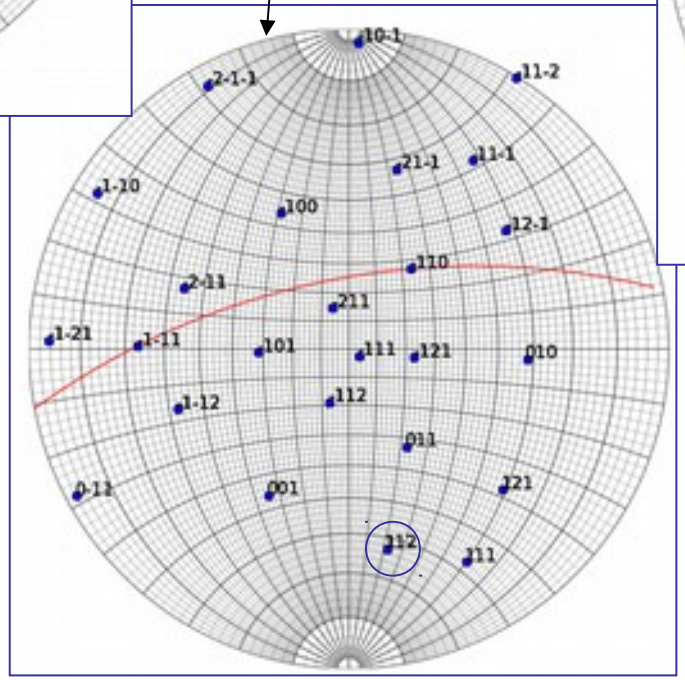
• Add a pole/direction, draw the plane, and equivalent plane/pole :



Indicate the pole

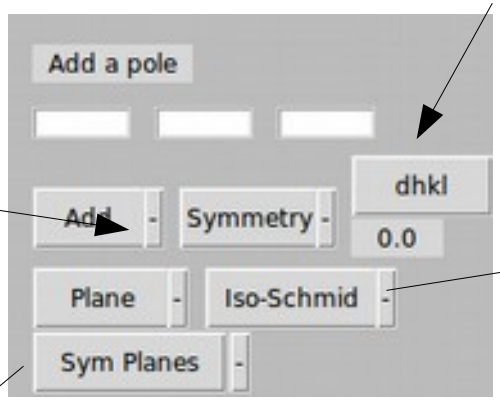


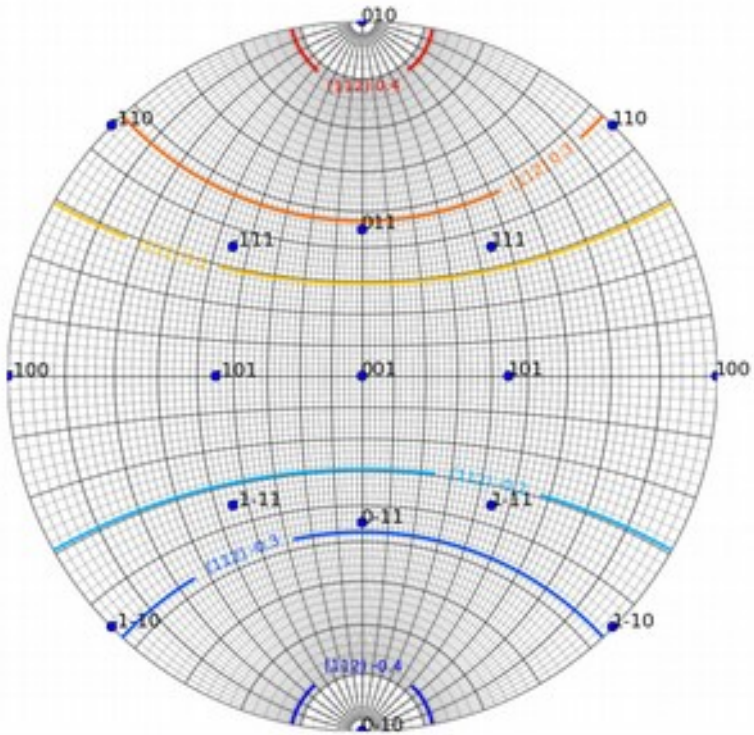




Interplanar spacing

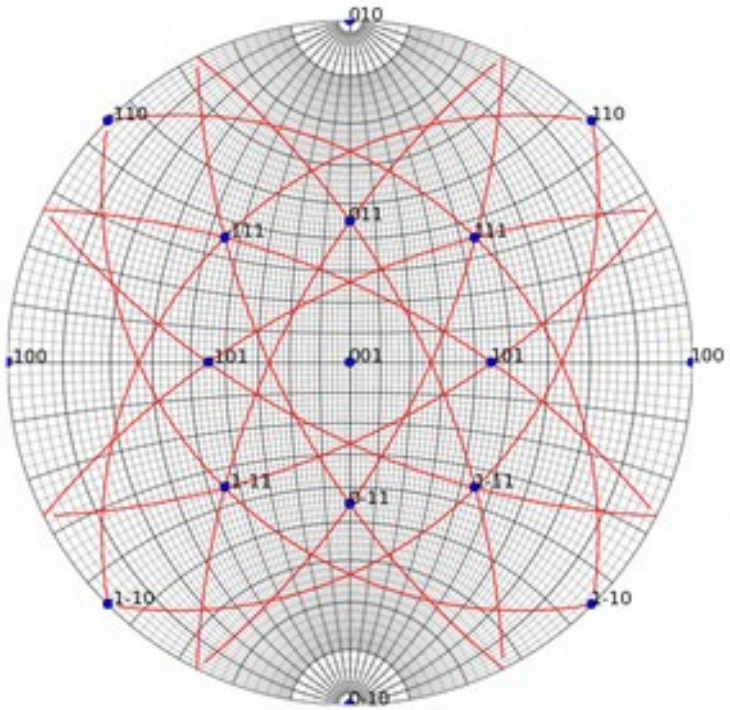
Minus button erase pole/plane indicated



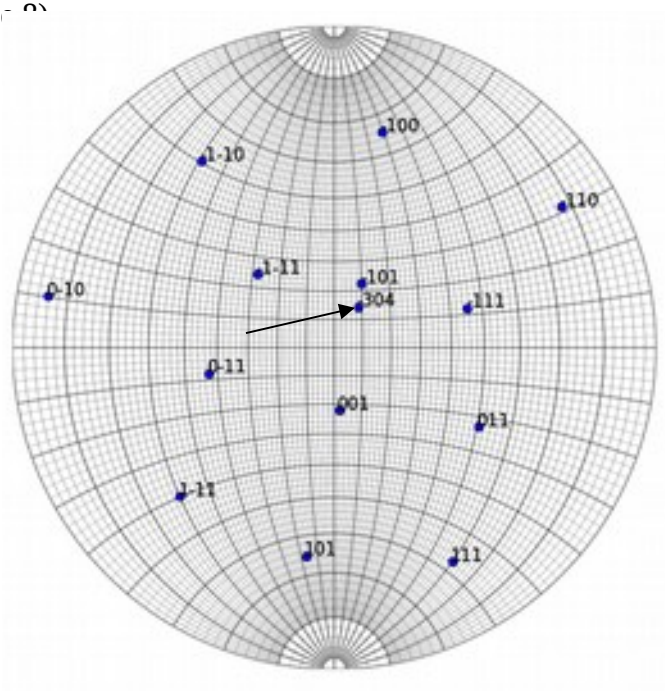


Draw iso-contours of the Schmid factor for a given plane

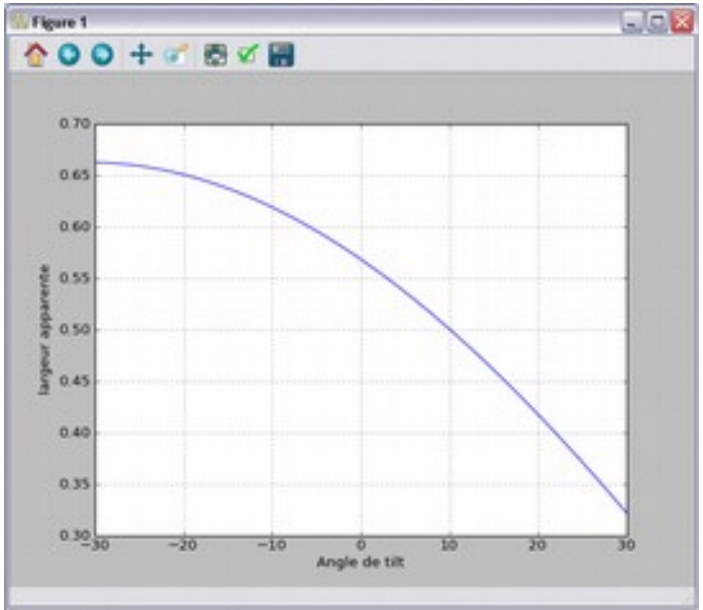
Draw equivalent planes



• Right click on the projection to draw the closest pole/direction (max indic[illegible])
• Change the number of pole/direction drawn

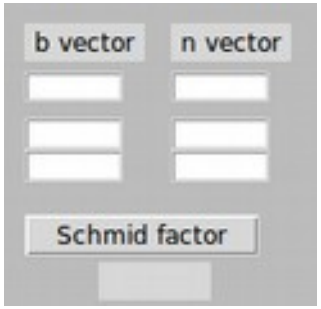


•Draw the apparent width vs the tilt angle

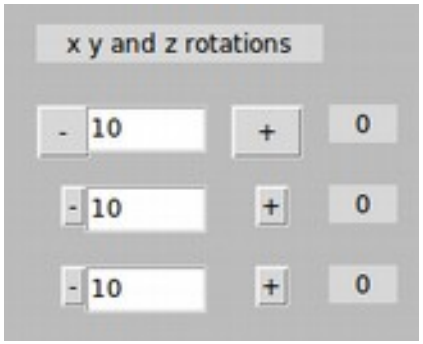


• Compute the angle between two pole

• Compute the Schmid factor (with the strain axis along y)



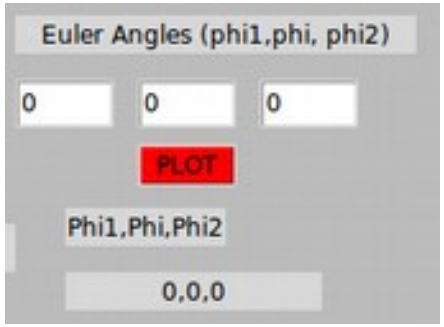
• Make rotation along x,y,z (default step 10°)



•Save the projection (jpeg default)

• Draw directly with the Euler angle

•Euler angles indications



• For hexagonal system tick for 4 indices notation