

CXSFIT Tutorial

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1 Aim

The aim is to run CXSFIT and read AUG data and perform simple fits.

2 Tasks

1. Run CXSFIT by typing `/u/adas/run/cxsfit`
2. Read data for AUG shot 25321 🍪.
3. Explore the data by changing the track and frame slider, find a nice CX spectra 🍪🍪.
4. Play with the view options, in particular change the colour and contour schemes 🍪.
5. Add a single line 🍪🍪.
6. Fit the frame 🍪🍪.
7. Narrow in the fit range or exclude some data 🍪.
8. Refit the frame, is it better 🍪🍪?
9. Fit all of the tracks and view the temperature contour plot 🍪.
10. Find a fit where the temperature is too high, add parameter bounds and refit this frame — did it work 🍪🍪?
11. Try to use multiple Gaussians to describe the passive and active feature 🍪🍪🍪.
12. Add some lines to try to fit the other (unrelated) lines 🍪🍪🍪🍪.
13. After you've got some good fits, switch to 'refit failed frames mode' and use 'previous frame estimates', do things get better 🍪🍪🍪?
14. Try to find someone from AUG to show you how it's really done 🍪🍪🍪🍪🍪.
15. Make a PNG of a spectrum as souvenir 🍪.