1 ADAS Examples

1.1 ADAS205 Test Case

1.Move to your sub-directory */disk2/user/adas/pass*. If you do not have one create it and move into it using the UNIX commands
>*mkdir adas*
>*cd adas*
>*mkdir pass*
>*cd pass*
Start ADAS and go to the ADAS2 series sub-menu. Click with the mouse on the fifth button in adas2 series to initiate ADAS205. The input window for ADAS205 pops up.
2.Click on *Central Data*, the data root to class ADF04 should appear in the window above. Click on the directory name *belike* in the file list window. *belike* appears above in the selection window. Click on *belike_jl1990o.dat*. It appears in the selection window.
3.Click the *Browse comments* button. Information about what is in the file *belike_jl1990o.dat* is displayed. Click *Done* to restore the input window. Click *Done* and the ADAS205 Processing window appears.
4.Click on the *Default Temperatures* button and then on the *Default Densities* button.
5.Click on the selections button for metastable states. A pop-up list of all the levels appears. Click on the button beside the first level. Note that it darkens. It is a click on/click off button. Then click on this pop-up's *Done* button to restore the full Processing options window.
6.Click on the *Done* button to proceed to the Output options window.
7.Click on the button for *Graphical Output*. Select *Graph Temperature* by clicking on the one you wish in the list. Choose the fifth one. Click on the button for *Text* and then select the *Contour file*. Click on the *Default File Name* button. */disk2/user/adas/pass/contour.pass* appears in the file name editable window. Then click *Done*. The graph pops up. There are several graphs to look at. Finally, click *Done* to restore the Output options window. Click the *Cancel* button on each of the three options windows in turn as you back out of the program. Note that this code does not yet have the quick *Exit to Menu* icon; which is present with most ADAS codes. Finally, click on the *Exit* button on the sub-menu and main menu windows to exit ADAS.
8.[ls] to see the files created and note the collection file *contour.pass*. You may wish to see its' format.

1.2 ADAS207 Test Case

1.Move to your sub-directory */disk2/user/adas/pass*. Make sure you have a *contour.pass* file there. Start ADAS and go to the ADAS2 series sub-menu. Click with the mouse on the seventh button in adas2 series to initiate ADAS207. The input window for ADAS207 pops up.
2.Click on *User Data*, the data root to your */pass* sub-directory should appear in the window above. Click on *contour.pass* in the file list window. It appears in the selection window.
3.Click *Done* and the ADAS207 Processing window appears.
4.Click on the *selections* button for the first composite line assembly. A window with the full list of lines pops up. Click on the buttons alongside the lines you wish for the numerator of the line ratio. Select transition 1 for the test. Click on the *Done* button.
5.Click on the *selections* button for the second composite line assembly. A window with the full list of lines pops up. Click on the buttons alongside the lines you wish for the denominator of the line ratio. Select transition 3 for the test. Click on the *Done* button.
6.Click on the *Done* button to proceed to the Output options window.
7.Select *Diagnostic Contour Plot* from the pull down menu. Then click *Done*. The graph pops up. Click *Done* to restore the Output options window and the *Cancel* button on each screen to back out as before.

1.3 Example

Experiment with the same data set in ADAS205 but edit in a solar relevant range of electron temperatures and densities. Proceed to form the *contour.pass* file. Now run ADAS207 with this *contour.pass* file. Try adding more lines to the two composites and looking at the alternative graphs e.g. 'Spectrum Line Ratios against Density for a given temperature'.

1.4 Example

Repeat the above but at the metastable selection in the ADAS205 processing screen, select the first and second levels. Follow through the consequences to ADAS207.