ADF31: feature files for spectral simulation

Provides feature files for special feature spectral fitting codes.

Utilising subroutines :

ADAS604

Formatted files to ADF31 specification :

Database Status	Date = March 17 , 2003	Data type = features	Data root = /.../adas/adas/adf31/

class	*seq-libraries*	*Members*	*elements*	*Comments*
/p705_p604	/he_li	<ion sym>.dat	Ar	

Data lines : *Format:*

First draft structure of these files only is specified at this stage.

Table B31a – example of he-like/li-like satellite line special feature.

```
Creator:                Allan Whiteford
Date:                   08/05/02
Source Data:            /home/whitefor/adas/argon_dr_spectra/adf04_final
Atom:                   AR
Charge:                 15
Number of Temperatures:   13
Number of Densitys:       11
Number of Relations:     211
Number of Levels:        106
Number of Parents:         1

1:Levels


2:Parents


Available Relations
      .        .

Electron Density Axis
1.00E+06 1.00E+07 1.00E+08 1.00E+09 1.00E+10 1.00E+11 1.00E+12 1.00E+13 1.00E+14 1.00E+15 1.00E+16

Electron Temperature Axis
```

```
1.28E+05
2.56E+05
5.12E+05
1.28E+06
5.12E+04
2.56E+06
5.12E+06
1.28E+07
2.56E+07
5.12E+07
1.28E+08
2.56E+08
5.12E+08

1   1   2
      .        .

1   1   3
      .        .

  1   2 1.17E+09
---
Creator:                Allan Whiteford
Date:                   08/05/02
Source Data:            /home/whitefor/adas/adf04/helike_adwl01#ar16.dat
Atom:                   AR
Charge:                 16
Number of Temperatures:   13
Number of Densities:      11
Number of Relations:      61
Number of Levels:         31
Number of Parents:         1

1:Levels
      .        .

2:Parents
      .        .

Available Relations
      .        .

1   1   2
      .        .

  1   2 4.44E+06
      .        .
---
 Ionisation Balance

AR+ 15

0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
1.90E-81 3.11E-81 4.87E-81 7.33E-81 1.07E-80 1.51E-80 2.10E-80 3.05E-80 5.54E-80 1.11E-79 2.98E-79
2.58E-35 3.63E-35 5.10E-35 7.16E-35 1.01E-34 1.41E-34 1.96E-34 2.71E-34 4.18E-34 7.10E-34 1.28E-33
5.88E-09 6.50E-09 7.18E-09 7.93E-09 8.75E-09 9.62E-09 1.05E-08 1.14E-08 1.25E-08 1.44E-08 1.66E-08
3.71E-02 3.74E-02 3.76E-02 3.78E-02 3.81E-02 3.83E-02 3.85E-02 3.87E-02 3.90E-02 3.99E-02 4.11E-02
2.36E-01 2.36E-01 2.36E-01 2.36E-01 2.36E-01 2.36E-01 2.36E-01 2.36E-01 2.36E-01 2.35E-01 2.31E-01
6.35E-02 6.35E-02 6.35E-02 6.35E-02 6.35E-02 6.35E-02 6.35E-02 6.35E-02 6.34E-02 6.33E-02 6.30E-02
```

```
8.87E-04 8.87E-04 8.87E-04 8.87E-04 8.87E-04 8.87E-04 8.87E-04 8.87E-04 8.86E-04 8.85E-04 8.83E-04
1.54E-05 1.54E-05 1.54E-05 1.54E-05 1.54E-05 1.54E-05 1.54E-05 1.54E-05 1.54E-05 1.54E-05 1.54E-05
9.56E-07 9.56E-07 9.56E-07 9.56E-07 9.56E-07 9.56E-07 9.56E-07 9.55E-07 9.55E-07 9.55E-07 9.54E-07
7.25E-08 7.25E-08 7.25E-08 7.25E-08 7.25E-08 7.25E-08 7.24E-08 7.24E-08 7.24E-08 7.24E-08 7.23E-08
1.51E-02 1.51E-02 1.51E-02 1.51E-02 1.51E-02 1.51E-02 1.51E-02 1.51E-02 1.51E-02 1.51E-02 1.50E-02

AR+ 16

      .        .

C ==========================================================
C Generated by ADAS706
C From Input files:
C               /home/whitefor/adas/argon_dr_spectra/adf04_final
C               /home/whitefor/adas/adf04/helike_adwl01#ar16.dat
C               /packages/adas/adas/adf11/***89/***89_ar.dat
C Created by:
C               Allan Whiteford
C Date:
C               08/05/02
C ==========================================================
```