

ADF27: driver data-sets for ADAS701 calculations

Provides driver datasets for ADAS701 dielectronic calculations.

An extension is in progress. Distinct driver collections will be made available oriented to ADF09, ADF04 and autoionisation supplementation of ADF25 drivers.

Utilising subroutines :

ADAS701

Formatted files to ADF27 specification :

Database Status	Date = January 12 1999	Data type = ADAS701 drivers	Data root = ../../adas/adas/adf27/
<i>sequence</i>	<i>libraries</i>	<i>Members</i>	<i>elements</i>
	<isoelec. seq>-like	<ion>-ls<type>.dat	c,n,ne
		<ion>-ls_str.dat	c,n,ne
		<ion>-ls_sat.dat	
		<ion>-ls_aut.dat	
			<i>Comments</i>
			output suited for dielectronic post-processing
			output suited for preliminary structure
			output suited for satellite line post-processing
			output suited for spin breakdown autoionisation

- Notes:
1. Autostructure runs are divided into parent transition, capturing n-shell types for economical runs. <type> distinguishes these as for example '22-2' for n=2-2 parent transition with capture to n=2; '22-n' for n=2-2 parent transition with capture to all higher n. The output is expected to be post-processed by ADAS702.
 2. 'ls' indicates LS-coupled operation of Autostructure. Later drivers will include 'ic' for intermediate coupling operation.
 3. 'sat' indicates that the output is expected to be post-processed by ADAS703 for satellite line population studies.
 4. 'str' indicates initial structure runs for optimisation and/or selection of energy bands for autoionisation.
 5. 'aut' are drivers specifically for procuring spin breakdown autoionisation rates for use by ADAS204 population calculations.

Data lines :

Format:

The structure of these files is described in detail in the ADAS701 manual description.

Table B27a - example.

D:\Summers\adasdocs\idl_manu\appxa\appxa-28.doc