ADAS operation, visits, releases, corrections and recommendations

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Computational requirements

- Usual to create an ADAS account:
  - username of 'adas' and home directory of `/home/adas`,
  - exact setup varies according to network implementation at each site.
- ADAS requires the following software:
  - IDL,
  - FORTRAN compiler,
  - C compiler,
  - csh,
  - Perl,
  - CVS.

Size of ADAS and distribution

- Hard disk requirements are just over 2.9GB but we would request at least a 3.5GB disk quota.
- 411,971 lines of FORTRAN in 15MB of code.
- 395,076 lines of IDL in 12MB of code.
- 2.8GB of data (up 0.6GB from last year and still growing!)
- Last ADAS release was August 2006.
- Next ADAS release should be around December 2006.

Current and supported platforms

- PC-based linux systems:
  - now our preferred platform,
  - support for and experience with g77 and Portland Group compilers,
  - IDL licenses are 40% cheaper!
- Sun and DEC systems are becoming few and far between.
- Plan to do testing with gfortran and ifort.
- ADAS will compile, link and run with the g77 port for Solaris.
- Other systems are supported but not recommended.

Current ADAS sites

Site	Country	Platform	IDL	Contacts
Auburn	USA	Linux⋆	6.3	Stuart Loch
Caderache	France	DEC?	6.0	Rémy Guirlet
Catania	Italy	Linux	6.0	Alessandro Lanzafame
Garching	Germany	Sun	ALL	Kurt Behringer
GA	USA	Linux⋆	6.0	Todd Evans
IPR	India	Linux	5.4	Parameswaran Vasu
JAERI	Japan	DEC	5.4	Hirotaka Kubo
JET	England	Linux	5.5	Martin O'Mullane
Jülich	Germany	Linux	6.1	Phillipe Mertens
Lausanne	Switzerland	Linux	5.5	Richard Pitts
NIFS	Japan	Linux⋆	5.4	Takako Kato
ORNL	USA	Linux	6.3	Predrag Krstic
Padua	Italy	Linux	5.6	Marco Valisa
Philips	Germany	Linux	5.6	Thomas Krücken
RAL	England	DEC	5.4	Andrzej Fludra
Stockholm	Sweden	Linux	6.0	Elisabeth Rachlew
Strathclyde	Scotland	Linux	6.3	Allan Whiteford
Toronto	Canada	Linux	6.1	David Elder
UKAEA	England	Linux	6.1	Martin O'Mullane
Wisconsin	USA	Linux	5.4	Daniel Den Hartog

ADAS visits Oct 2005 – Oct 2006

Hugh Summers	Martin O'Mullane	Allan Whiteford
IPP-Garching	IAEA	JAEA
IPR	IPP-Garching	NIFS
JAEA	Auburn	IPP-Garching
NIFS	GA	
SWIP	Madison	

(Sept 2004 – Sept 2005:

Hugh Summers	Martin O'Mullane	Allan Whiteford
KTH Stockholm	TUW Vienna	FZ-Jülich x 2
IAEA	IPP-Garching	KTH Stockholm
		Phillips Research
		IPP-Garching

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Major additions since last year

- Additional of beryllium to '96 GCR data.
- Baseline data for germanium added.
- Revision of N-like DR.
- Command line version of ADAS309.
- Addition of offline code adas8#3.
- Collection of DR etc. scripts (adas7#1).
- Addition of code ADAS812.

Documentation

- ADAS manual can sometimes lag behind (or be in front of) codes and data:
  - part of the time allocated to OPEN-ADAS will address this.
- Bulletins are issued with every release, all of the ADAS bulletins are available at all ADAS sites under the directory `/.../adas/docs/bulletins`.
- GCR Paper I is also available for people who haven't yet noticed:
  - 'Ionization state, excited populations and emission of impurites in dynamic finite density plasmas. I: The generalized collisional–radiative model for light elements'
    Summers H P, Dickson W J, O'Mullane M G, Badnell N R, Whiteford A D, Brooks D H, Lang J, Loch S D and Griffin D C
    Plasma Phys. Contr. Fusion **48** 263 (February 2006)

Data Status

- Data Status is no longer the definitive source of ADAS data.
- Interim recommendations and reminders:
  - ADF11 and ADF15 files are categorised according to the year a method was introduced. '96' data is currently the best (GCR) and should be used where available.
  - ADF04 files are categorised according to the year they were produced so a general recommendation is not always possible.
- More sustainable solution will come from the OPEN-ADAS indexing.

Questions

- Some repeats from last year!
- With the database becoming so large (possibility of becoming larger than 10GB within the next year) from heavy species and DR calculations, does it make sense for every site to receive all the data?
- Is there any call for a version of ADAS which runs on Windows?
- Is there any call for the XML tag files from OPEN-ADAS and/or a MySQL database to be made available on local machines?