Chandra X-ray Center

Features that make other packages easier to use than CIAO

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9 - don't know

12 - IDL is much easier, because we have access to the data variables
     and the analyses are much more customizable.

19 - I'm not sure any of the systems are easier than CIAO, but that
     doesn't mean CIAO is necessarily easy to use.  I think there is a
     danger in making complicated analysis software too easy.  Scripts such
     as psextract which remove most (if not all) of the technical detail
     (and therefore knowledge of the system) from the user can promote bad
     science.  People should be willing to put forth the effort to learn
     how the system works.

23 - Most CIAO analysis systems are much more user-friendly than non-CIAO
     X-ray analysis systems, e.g. ISIS, pwdetect, PROS.  I think the CIAO
     documentation is really first-rate.  One exception is XSPEC, which is
     a bit easier to use than Sherpa, although Sherpa is pretty well-
     documented and offers (in most areas) greater functionality.

27 - I use gratings; at this point there is no choice but use CIAO (until
     FTOOLS teams finish their prototype on grating analysis tool with ftools).
     So I am not sure if I can compare CIAO logically with anything.

28 - TARA has a gui-based interface which allows free-form data exploration
     starting with the level 1 events file.  It's a very easy tool for
     first look at the data file.

31 - IRAF - somewhat easier because of parameter file management review
     and frequently used scripting (i.e. it's easy to borrow someone
     else's script and adapt, not that they're robust or anything)

IDL - a lot more programmable, but fewer "tasks"

34 - S-Lang/ISIS: It is easy to write functions to peform the types of
     analysis specific to my research.

38 - It boils down to again spectral analysis:
     XSPEC for CCD analysis is reliable and easier to use, maybe
     because we were used to it for so many years

     ISIS seems the way to go for grating analysis. It takes some
     to get into it, but once that step is done it seems to be
     most reliable, accurate and thus promising. It would be good
     to see this system develop further.

     Sherpa seems less reliable, many times I cannot figure out
     what it is really doing or simply doesn't work. After a while
     plain frustration takes over. Don't its advantage to the others.
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39 - Xselect, probably because it handles simpler telescopes.

43 - ISIS: fully s-lang based; It is programmable, extensible,
     uniform, efficient.It provides both high-level functions useful
     for grating spectroscopy, and low-level ability for fine control
     and customization. More rapid turnaround for fixes, enhancements.
     Good manual, with intro examples and detailed reference guide.
     Small source code base, relatively easy to build.
     All free components.


     IDL is also more flexible than ciao, and has a large function
     library, but has syntax ambiguities, command-line syntax differs
     from procedures. I sometimes use IDL for plotting, or
     to run pre-existing applications not yet converted to isis.
     IDL's primary strength now is in the large suite of multidimensional
     visualization functions.

47 - IRAF is easier to use for isophotal fitting of extended sources.
     ISIS is easier to use for repetitive fitting tasks.

51 - IRAF: I think IRAF is a little bit easier for me because of the way things
     are organized into different packages.

     Also, IRAF is simpler and probably does not do all the things CIAO can do.
     for instance, I'd never be able to process a level 1 evt file in
     CIAO without looking up the specific threads, but when I used IRAF, I
     rarely had to look up instructions because it seemed more obvious how
     to use it.

53 - AIPS

54 - IDL and S-Lang/ISIS: I can read in the data and then write programs
     or scripts to do to the data exactly what I want and with clear
     visibility of what I've done (not hidden in someone's black box.)

58 - none

62 - IRAF - has an easy interpace to edit the task parameters
     SAS - has a nicer GUI and uses grace for plotting

65 - xanadu. just because i am more used to it.

75 - idl is easier to use because you have much better control over
     the data and much more flexibility because of long history of user
     contributed libraries and tools

77 - * the scripting capabilities of IBIS are much more advanced than
     those of CIAO

     * for spectral fitting, it makes much more sense to continue to develop
     and expand XSPEC rather than throwing tons of ressources to developing
     another system

     * the same is true for many of the ftools capabilities - it just
     doesn't make sense to redevelop many of the available tools
     from scratch (incidentally, XMM made the same mistake)

82 - XSPEC (it is simple to use and I already know it)
     IDL (more powerful and versatile in some instances)
     TARA (quicklook functionality is great)TARA

83 - one good feature of ftools is the style of the arguments
     e.g. && and ||

84 - IDL, more flexibility, less of a blackbox, consistent interface/behavior.
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90 – It isn't harder or easier than other packages.  It's all a matter of
     familiarity at this point, I think.  I'm much more familiar with IRAF,
     IRAF/pros and AIPS, so those tasks are easier to use.

99 – arms and legs above the SAS, but for people who know IDL and/or
     XSPEC there is not much incentive to learn CIAO also, except for the
     simplest tools like firstlook and psextract.

102 – It happens that some tasks are "updated" while others are not. I
      remember once I had to run one part of a thread with an old version of
      ciao and the following part with a newer version because there was
      some incompatibility. It's not difficult, it's annoying.

103 – IDL. IDL scripts can be examined an modified. IDL vectors and
      structures work very well with the FITS file format. Much easier to
      understand processing in IDL and do new things with data.

105 – I find XSPEC easier, but this could be the result of "traditional" use.

107 – spectral analysis is easier with xspec. sherpa is somehow
      criptic and it seems to me that there is no tutorial around.

108 – IDL; transparent access to data at a low level.

111 – sherpa is nicer than xspec, dmlist is more comprehensive than fdump

112 – Mathematica. It is an integrated system, with a coherent logic.
      It is well verified via millions of users.
      It is stable.
      It is extensible.

115 – everything that I'm aware of

119 – the HEASOFT package is somewhat easier (although it may be less
      complete) because of its structure made of large programs with many
      commands rather than single command tools with many option.
      On the other hand CIAO is definitely easier than IRAF/PROS, even if
      they share the same kind of user interface (CIAO is more stable and
      flexible)

121 – None

124 – *All* astronomical software is aggravating to use, although
      in different ways.  I use ciao until I have a task which breaks.
      I switch to xspec or funtools for that task until something else breaks.
      I go back and see if ciao does any better now, ...
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