CIAO 3

Plans and Status

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CIAO 2.2 Plans in June 2001

Analysis Task	tool	status June 2002
Small Sources		
‘<100% PSF in region’ for `mkarf`	mkarf	underway
`mkpsf` output 8 images, weights	mkpsf	released
make chip region on the sky	skyfov	released
NaN in DM for a region	datamodel	released
profiles counts/area	dmextract	released
`Sherpa` to use 2-D PSF library	Sherpa	released
`SAOSac` WWW interface	CHaRT	testing
Large Sources		
Very Faint (5x5) bkgd flagging	‘part55’	acis_process_events
fill image holes	dmfilth	released
RMF/ARF averaging	mkwarf	released

- CIAO 2.2 released in October 2001
- CIAO 2.2.1 patch in December 2001
- Release notes:

  `http://cxc.harvard.edu/ciao/documents_releasenotes.html`

- CIAO 2.2.2 patch preliminary schedule for fall 2002
- CIAO 3 release preliminary schedule for May 2003 release.

CIAO Functionality

CIAO has a lot of capabilities which are not fully used by the users:

- Sets of analysis tools building the general analysis infrastructure
- Threads/scripts
- Scripting potential of Slang
- PRISM
- ToolAgent
- Interactive power of Sherpa and Chips
- Online help and documentation

and

The users have problems, but are not able to identify directly the reason.

- Libraries are buried within tools, not easily accessible or callable from scripts; difficult to create importable modules
- CHIPS/Sherpa/S-Lang parser conflicts
- No easy scripting, often intermediate steps with intermediate files
- Output files from some tools cannot be easily used in scripts, e.g. dmstat.
- No easy thread-like sequence from ToolAgent
- GUIs vs. Command Line
- Help is only partially accessible from GUIs
- no CIAO access from ds9

CIAO & Users

- Tools - CL access for every users
- GUIs - easy for non-scripting users
- Scripts - advanced access for adventureous users.

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May 2002 CIAO Workshop Participants:


Q: Are there any part of CIAO that you liked or disliked in particular? Any
suggestions for the future of CIAO?


% needs to maintain focus on real problems in analysis, eg I have pile-up
% issues and more tools and threads for diagnosis and dealing with this are
% needed

$ I liked the command-line interface, the fact that it's script- and
$ unix-based (as opposed to having to get into another environment like IRAF
$ or IDL.

@ I don't see the sense to develop something like S-lang. It is just another
@ language. I tend to use what I already know, e.g. IDL, C, FORTAN, etc.

> So much typing! :)
>
> Seriously, I find it a bit cumbersome, especially when having to
> deal with "punlearn" and repeated calls to "pset", then finally
> issuing the command. As you compile more scripts, though, this
> problem should be alleviated.
>
```

CIAO 3 is the Infrastructure Release:

- intuitive and productive interactions within applications and tools
- moving more tools into libraries;
- open the current applications into callable library modules
- removing hidden assumptions to obtain flexible interfaces

What do we gain?

- Flexibility
- Accessibility
- Rapid development
- Contributions
- Better Access to Powerful Data Analysis system