Metadata definitions for observations and simulations

Recap – why metadata?

- Two main purposes:
  - Provide searchability in archives
  - Ensure usability for all users
- Why standards?
  - "Checklist" to get a rich set of metadata
  - Makes a generic set of SVO search terms possible
  - Makes generic analysis/visualization software possible (e.g., CRISPEX)

Recap – why metadata?

- *What's in it for you*?
  - You want other people to use the data!
  - Show that your data is sought after = $$$ in the future
  - If you're the only one interested in your data……
  - (And you're supposed to do it)

What has been done?

- The Metadata documents themselves:
  - Not a large amount of *changes* – good!
  - Relaxation of "mandatoriness" – good!
  - Some clarifications
  - Some additions/extensions of "mechanisms"
- But *a lot of work* "in the background"
  - "How to do this in FITS" (advanced WCS and/or other mechanisms)
  - SSTRED CHROMIS/CRISP pipeline (Mats Löfdahl)
  - SPICE pipeline (in-house)
  - Others too, but very little, very few – maybe a good sign?
  - Some resulting advanced mechanisms not yet spelled out in the document

What has been done?

- Now available on ArXiv (thus referenceable)

- "Live" version (http://sdc.uio.no/open/solarnet/)

- No changelog: Use latest version, do a "compare documents" from your previous version

- Any breaking changes will be announced (tell us if you're not already on the list – i.e., if you have not received emails from me about the document)

What has *not* been done?

- Simulation metadata – very little!
    - Should have had a zoom meeting, forum, email discussion or something!
    - Simulated observations, though… are like observations!
    - I.e., simulated observations benefit from all work done on the observations metadata document (in particular mechanisms to describe advanced properties of the data set – variations over time & space)
    - Simulations also benefit (advanced WCS coordinates, mechanisms)
- Prioritized observation pipelines - more urgent with data streams that may not be possible to store and/or reprocess!
    - Lack of urgency for simulations seems to be confirmed by earlier discussion
    - Simulations can always be improved – people focus on that?

What we need

- Ask us
  - Do you have (absolutely) *any* piece of metadata that may be relevant to searchability or usability, and you can't find out how to do it – ask!
  - Complex WCS descriptions? Ask us to verify you've done it right!
- Tell us if you're implementing the recommendations
  - Important for getting recommendations/mechanisms "recognized"
- Some help?
  - Stopped updating of the index/cross-reference tables
  - A lot of work… not high priority, but should be done for completeness sake
  - Alternatively: Drop them – use Cmd-/Ctrl-F in document…?

Current list of "users"

- Solar Orbiter SPICE
- SST CHROMIS/CRISP (SSTRED)
- AISAS/Lomnicky Stit COMP-S/SCD
- SAMNET
- Gregor HiFI/GFPI
- ROB USET
- Alma pipeline for Solar data (SOAP)