

SIA → DAP and SODA 1.1

Why it is interesting

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SIA → DAP

SIA : Query by MOC

- I get a response from a service which provides a MOC.
- I want to query available datasets in this MOC

Retrieve data in standard mode or in full mode

- SIA allows direct access to
- cutouts by scripts of SIA commands



SIA → DAP

For other datasets than images and cubes it's useful to have a query parameter interface
This is called « DAP » but shares a lot with SIA2.0
It can be considered as SIA2.1 or SSA2.0 or a time series discovery and access by forcing the DPTYPE parameter



SIA → DAP

Case sensitiveness for FACILITY, COLLECTION, INSTRUMENT – not for others

Wildcards could be useful for ivoa_ids → encoding issues. A keyword is proposed instead

Root URL query gives list of supported DPTYPES, FACILITY, INSTRUMENT, COLLECTION



SODA

- Introduction of PIXELS
- Introduction of transformation parameters
- Introduction of RESPONSEFORMAT,
DPTYPE, METADATA
- Introduction of MOC



PIXELS

I have a large bunch of datasets obtained at the same position, really aligned and I want to pick up the same region on all this images (to create a timeseries)

I am happy with pixel cutouts inferred from my first extraction. I don't need the world position.



RESPONSEFORMAT

Changing the format is a server side operation

Want to produce a png image from a FITS

Want to produce a VOTable from a FITS table

Want to produce an HiPS from one or several FITS files

(a server side operation which helps visualisation for SKA)

Want to produce FITS files from an HiPS



DPTYPE

SODA 1 assumes that the product type remains the one of the initial dataset

- We need to allow producing spectra or images from cubes by summing up inside the filtering area
- People already had such extension of SODA service. → useful to standardize



Transformation parameter

To align images, spectra, and cubes it's useful to change spatial and spectral resolution and also the projection and orientation.

Could work in combination with
RESPONSEFORMAT and DPTYPE



METADATA

Instead to extract data we only extract more metadata than those we had previously.

- FITS header
- ObsCore record if SODA discovered from elsewhere
- More advanced datamodel metadata : cube, provenance
- Some group already provided this



Discussion

DAP (May version – no feedback)

Github : <https://github.com/ivoa-std/DAP> : see unique PR and Issues.

See also : <https://github.com/ivoa-std/SIA> for previous discussions

Pre-draft : https://wiki.ivoa.net/internal/IVOA/SIAP-2_0-Next/DAP.pdf

Twiki : https://wiki.ivoa.net/twiki/bin/view/IVOA/SIAP-2_0-Next

- One BIG pull request which will change for a while



Discussion

SODA (November version)

Github : <https://github.com/ivoa-std/SODA>: see PR and Issues.

Pre-draft :

https://wiki.ivoa.net/internal/IVOA/SODA-1_0-Next/SODA-20231111.pdf

Twiki : https://wiki.ivoa.net/twiki/bin/view/IVOA/SODA-1_0-Next

One BIG pull request which will change for a while

