



Data Access Layer

- [WD-SIA-2.0-20140512](#) review

WD-SIA-2.0 query

- query capability to discover images and cubes

query param	ObsCore column(s)
POS=<circle> <coord range> <polygon>	s_region
BAND=<range of wavelength>	em_min, em_max
TIME=<range of time>	t_min, t_max
POL=<pol state value from ObsCore>	pol_states
EXPTIME=<range of exposure time>	t_exptime
FOV=<range of field-of-view>	s_fov
SPATRES=<range of spatial resolution>	s_resolution

WD-SIA-2.0 query

- <range>
 - values separated by /
 - missing value == open-ended

BAND=0.20/0.22

TIME=54321.0/

EXPTIME=/600
- TIME parameter allows for MJD and timestamp strings as specified by DALI

WD-SIA-2.0 query

- simple geometry
 - simple geometry values with fixed coordinate and reference system
 - POS=circle 12 34 0.5
 - POS=polygon 10 10 12 10 12 12 10 12
 - POS=range 10/20 -2/2
 - POS=range / -2/2
- coordinate range is **not** an STC box
- polygon interior is the smaller of left- and right-side (smaller than half sphere)

WD-SIA-2.0 query

- output currently limited to ObsCore fields
- advice about use of DataLink
 - in access_url (and access_format)
 - describing DataLink services that can be called (with obs_publisher_id) using DataLink service descriptor
 - describing direct calls to access data service(s) (DataLink service descriptor)

WD-SIA-2.1 metadata

- was **get-gory-details** in Hawaii
- capability intended to get complete metadata for a dataset (via `obs_publisher_id`)
- requires ImageDM serialisation format
- deferred to SIA-2.1

WD-AccessData-1.0 (wiki)

- preliminary work to support basic cutouts

query param	operation
POS=<circle> <coord range> <polygon>	cutout spatial extent
BAND=<range of wavelength>	cutout energy extent
TIME=<range of time>	cutout time extent
POL=<pol state value from ObsCore>	cutout polarization(s)

- cutout parameters define extents in standard coordinate/reference system only
- can be implemented & used without metadata capability