Beyond Obs/TAP services: Data Linking

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Motivation

- Assume data have been « discovered » by querying ObsTAP, How do we access them?
- There is the access_reference field.
- But what if we have several products in an observation?
- Two approaches suggested (avoiding duplication):
 - Data link with a package version of all the products for this observation (e.g. a tar/zip file)
 - Data link to a table structure (VOTable?) with all the products within this observation











Going further...

- In this first phase, this is perfectly OK, but, in some use cases, you would need to know more in order to do more than a simple download e.g.:
 - Further metadata characterization information could be needed e.g. spectra or image are in some way, extensions of a basic observation class. Extra characterization information of these subclasses could be not present in a response at observation level
 - Data links could be of different nature (next slide)
- So the question is: what if we want to tell what it is ??











General description

• **Describe what is behind the link**. This is the DataLink concept:

For a given ObSID (or Ivo identifier), we response by a TABLE containing the following FIELDS:

- Type or Nature of data behind the link = Sub product (image,spectrum), preview, obs log, observation description,
- URL service type = Retrieval, SSA, SIA Query, SIA AccessData, (for cutouts and transforms) etc ...
- And an « Access GROUP » (see next slide)
- This could be a way to reuse of standard S*AP protocols in the context of ObsTAP
- What about the way back (from Products to Observations) ?











Data link record

- Data link Fields
- (for a resolution map):
 - ObsId = sdss_spec_...
 - Type =
 - SpecAxis.resolution.VariationMap
 - Service = retrieval
 - Format = fits/extension.table
 - AcceReference: URL
 - Extnum = 3
 - Cutout : NULL
 - ROW: 50









