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# DataLink prototype

- **DataLink prototype developed to support CADC archival data access in CAOM-2.0 ecosystem**
- **data discovery: TAP, CAOM-2.0 or ObsCore-1.0**
- **data access use cases:**
  - multiple files per data product
  - perform operations on files: cutout
  - perform filtering on file type

<http://beta.cadc-ccda.hia-ihp.nrc-cnrc.gc.ca/caom2proto/>

# DataLink API

- **single input parameter**
  - URI=<identifier from data discovery>
- **multiple input URIs allowed**
- **values are case sensitive**
- **open issues:**
  - how do we tell clients which DataLink service to use?
  - how do we tell clients which identifier in a response can be used with the DataLink service?
  - the identifier could certainly be an IVOA publisher DID... does it have to be? can it be any URI the service understands?

- **required output fields**
  - uri: the input URI to disambiguate multiple inputs
  - accessURL: the link to access the data
  - semantics: meaning of the link
  - errorMessage: message explaining why accessURL is null
- **custom fields: allowed**
  - we include some CAOM-2.0 metadata to support our apps
    - content-type
    - content-length
    - productType (limited vocab from CAOM-2.0)

# Cutout API

- **single parameter:**
  - CUTOUT=<STC-S>
- **prototype supports position and energy cutouts:**
  - CUTOUT=Circle ICRS 12.0 34.0 0.5
  - CUTOUT=EnergyInterval 200 300 nm
  - CUTOUT=Circle ICRS 12.0 34.0 0.5 EnergyInterval 200 300 nm
- **service does all the conversion from STC-S to the native coordinates of the data**
- **functionality could be extended with more STC in STC-S**