# New generation DAL protocol: DataLink status F.Bonnarel (CDS)

#### Data Link

- Related to the Uprise of ObsTAP
- Discussions in Napoli and mainly Pune
- Use cases listed.
- Prototypes in Urbana
  - Xmm data: laurent michel
  - Aladin/ Healpix provenance (F Bonnarel)
- Working Draft : F.Bonnarel, L.Michel, M.Louys, .
   Others ? (Markus, etc ...)-→ May the 12th

#### Use cases

- Retrieving other data formats: fits, jpeg, text/xml
- Acces to some kind of "preview" of a dataset: Images, spectra, SimDAL use case...
- Internal description and access to complex or heterogeneous datasets and archives: MEFS, Xray use case

#### Use cases

- Linkage to IVOA standardized metadata observation, characterisation, provenance
- Link to another IVOA service :
  - ObsTAP,
  - any kind of TAP service
  - simple access protocols such as SIA,SSA, etc...
    - Query mode
    - Access data mode
  - Other UWS Web services for reprocessing

#### Caveats/Issues/questions

- DataLink is strongly needed for ObsTap but is not EXCLUSIVLY bound to it
  - Usefull each time a TABLE Row has a « dataset » id and must be related to other resources (data metadata, services)
- DataLink is not an « AccessData » method it is a « Related Resource Discovery » protocol
  - Attached to individual DataSets
  - AccessData DAL resources can be some of those

#### Caveats/Issues/questions

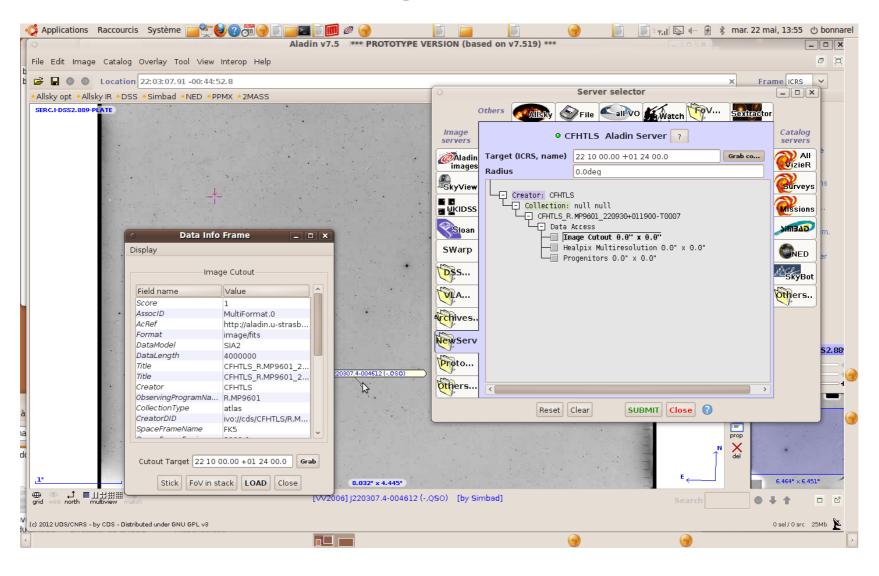
- Define it as a real (« registered ») IVOA service or a generic method (to be included in DALI?)
  - New parameter ?
  - Dal extension mechanism
  - if it is a service must be described in the registry

What kind of Data set ID to use:
 Publisher Did? Or internal ID?

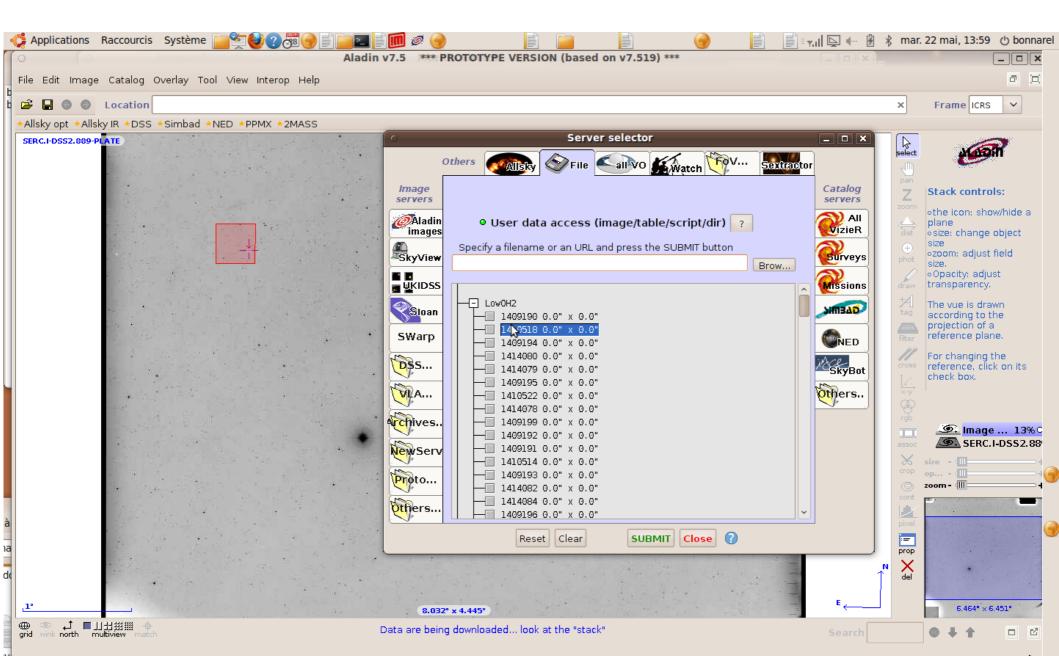
## CDS Prototype « Slide Demo » (real demo HackAThon session)

- Based on CDS description as proposed in the Working Draft
- Used in two ways: FROM Usual DAL response and FROM Healpix AllSky maps
  - DataLink attached to a SIA (sia2) Query response (shown in Napoli)
  - DataLink retrieved for accessing Healpix cell progenitor information (thanks to P.Fernique)
    - Link towards IVOA metadata for each proogenitor
    - Link towards progenitor cutouts (access data)

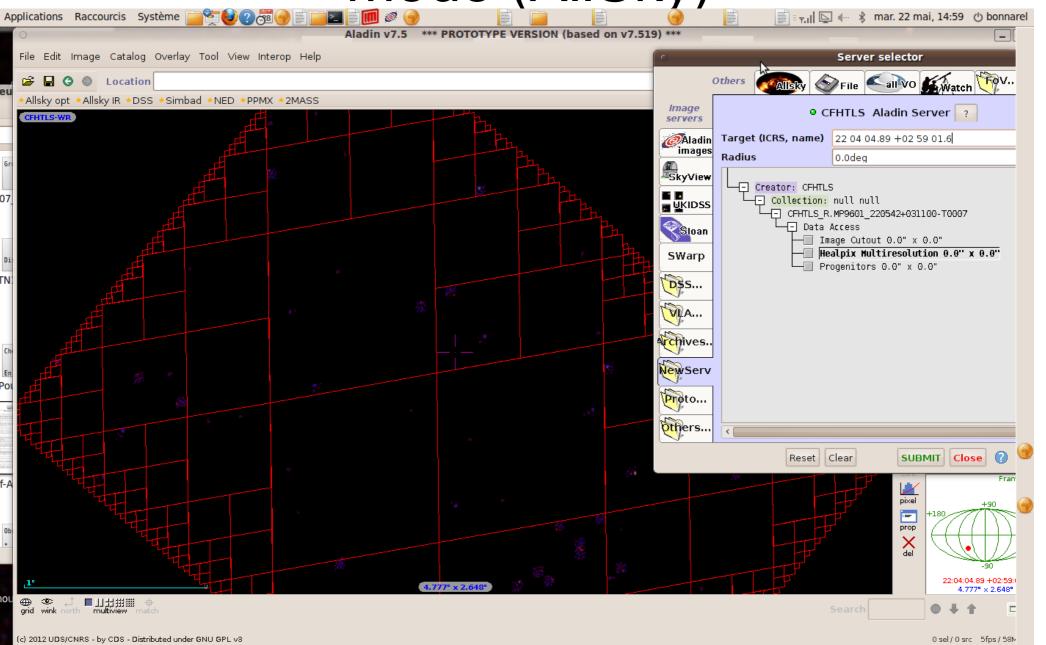
## 1. DataLink attached to SIA response



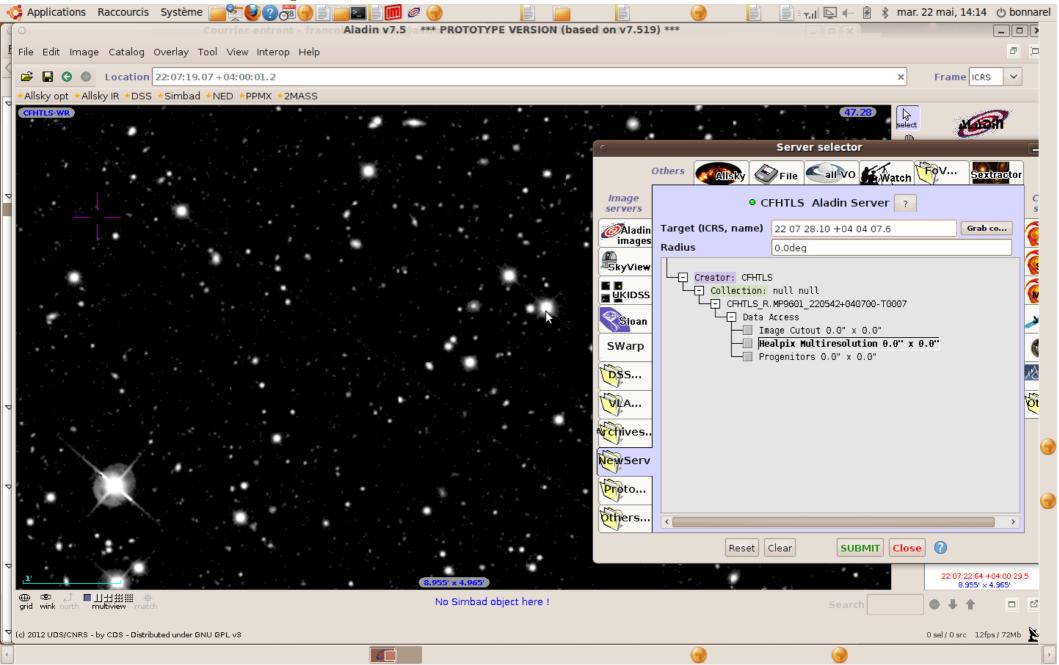
### 1. Acces to Stack progenitors



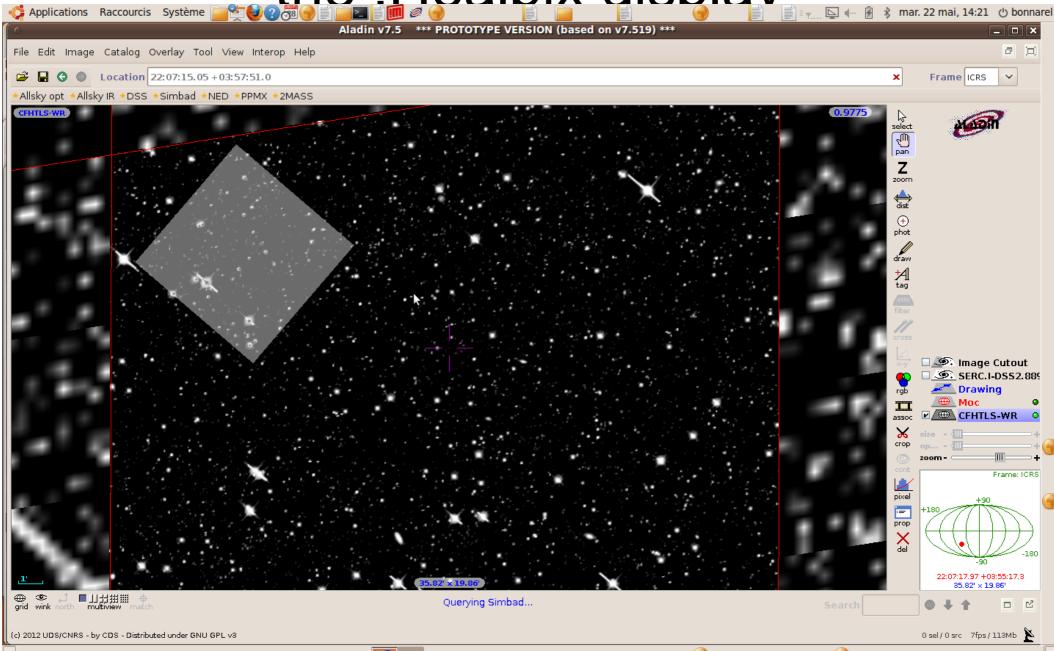
## 1.Access to Healpix multiresoltion mode (AllSky)



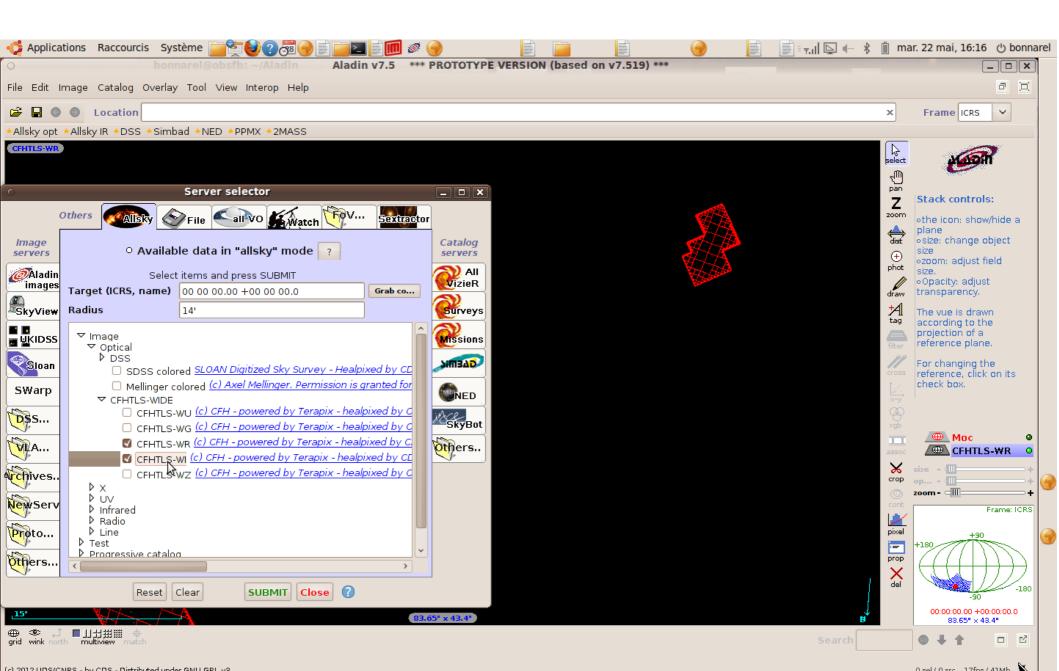
#### 1.Healpix mode: best resolution



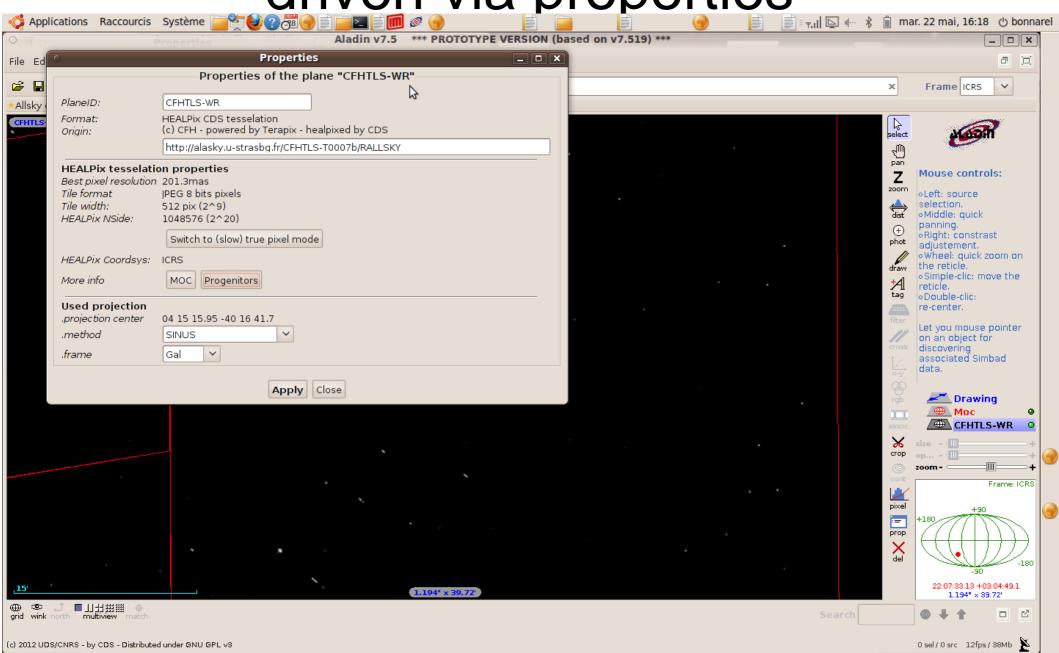
1. Original image Cutout on top of the Healpix display



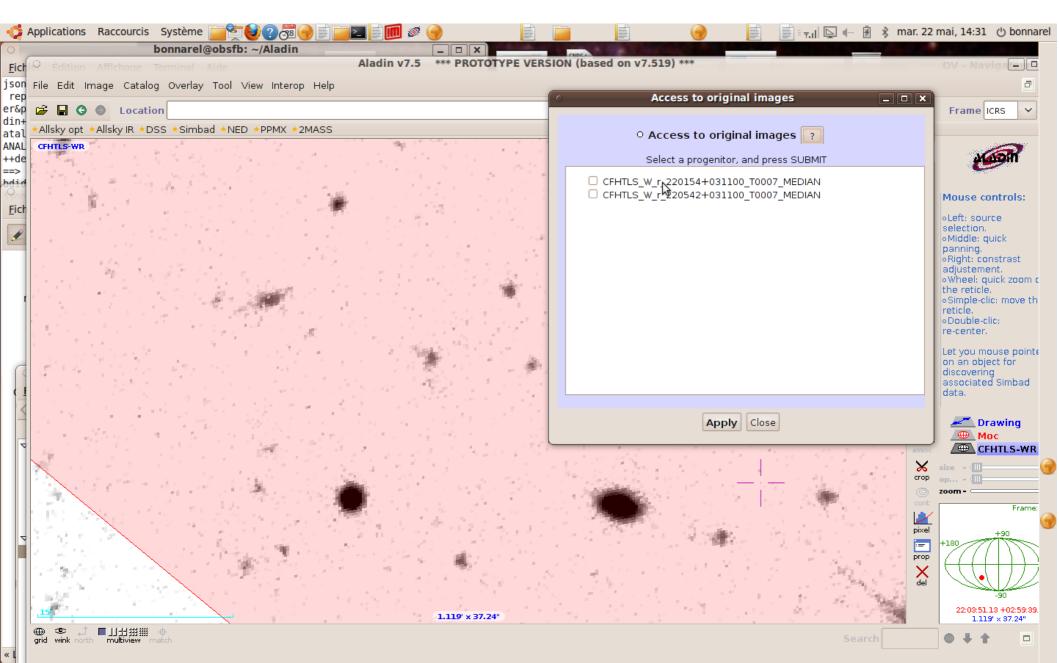
#### 2.CFHTLS ALLSKY MODE



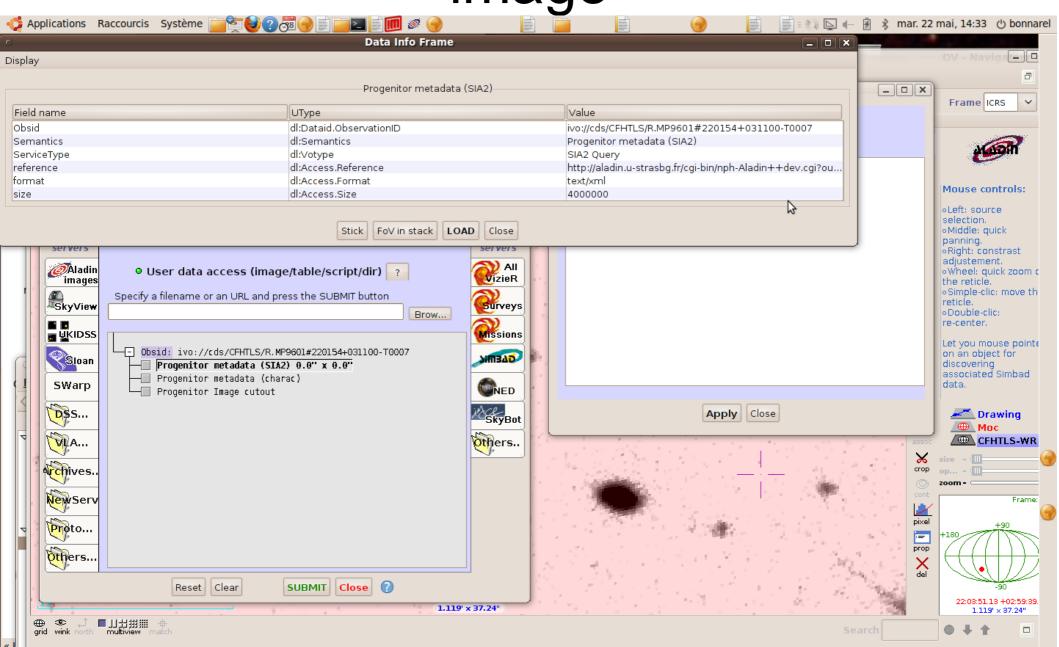
2. Acces to MOC and Progenitors driven via properties



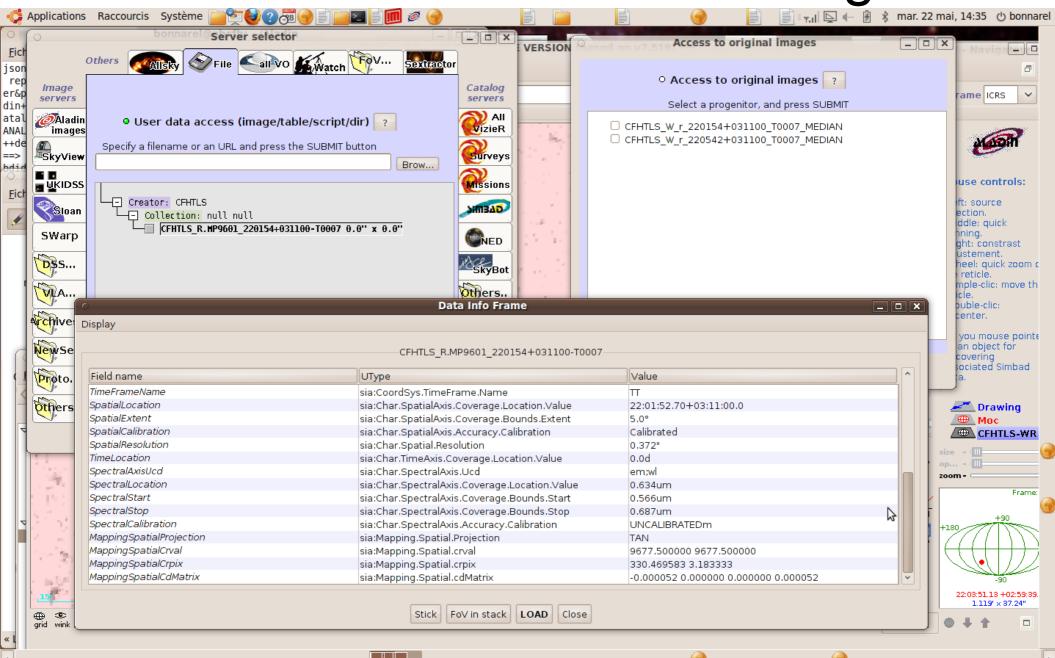
### 2.Original Images IDs



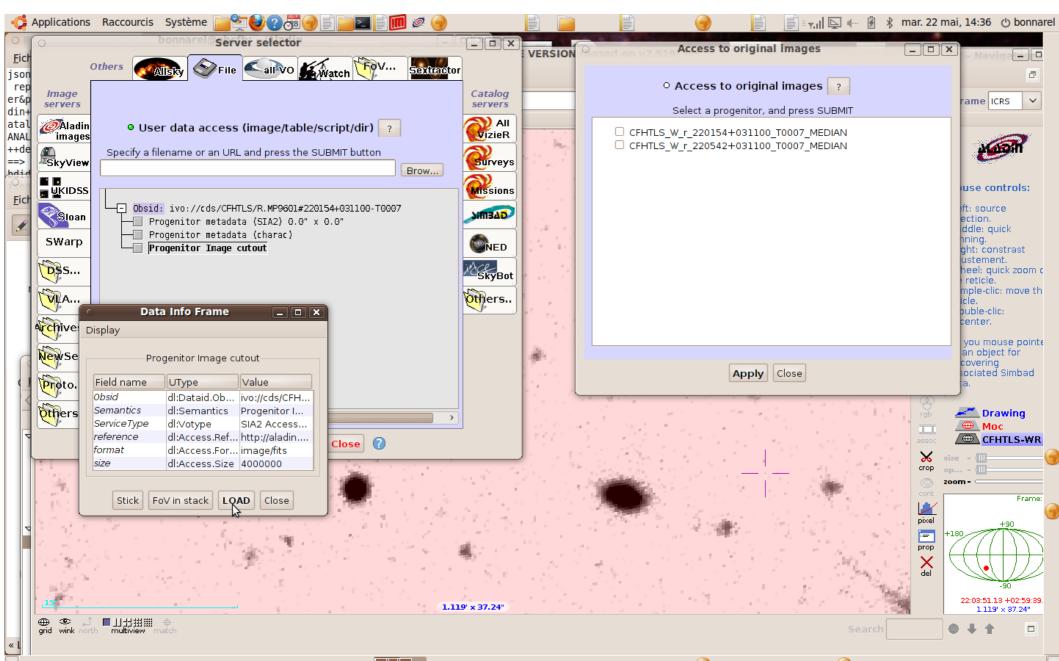
DataLink for one of the original image



### SIA2 metadata for this image



## 2. Retrieving original image cutout



2.Cutout on top of Healpix mode display

