Progress in Characterisation version 2.0

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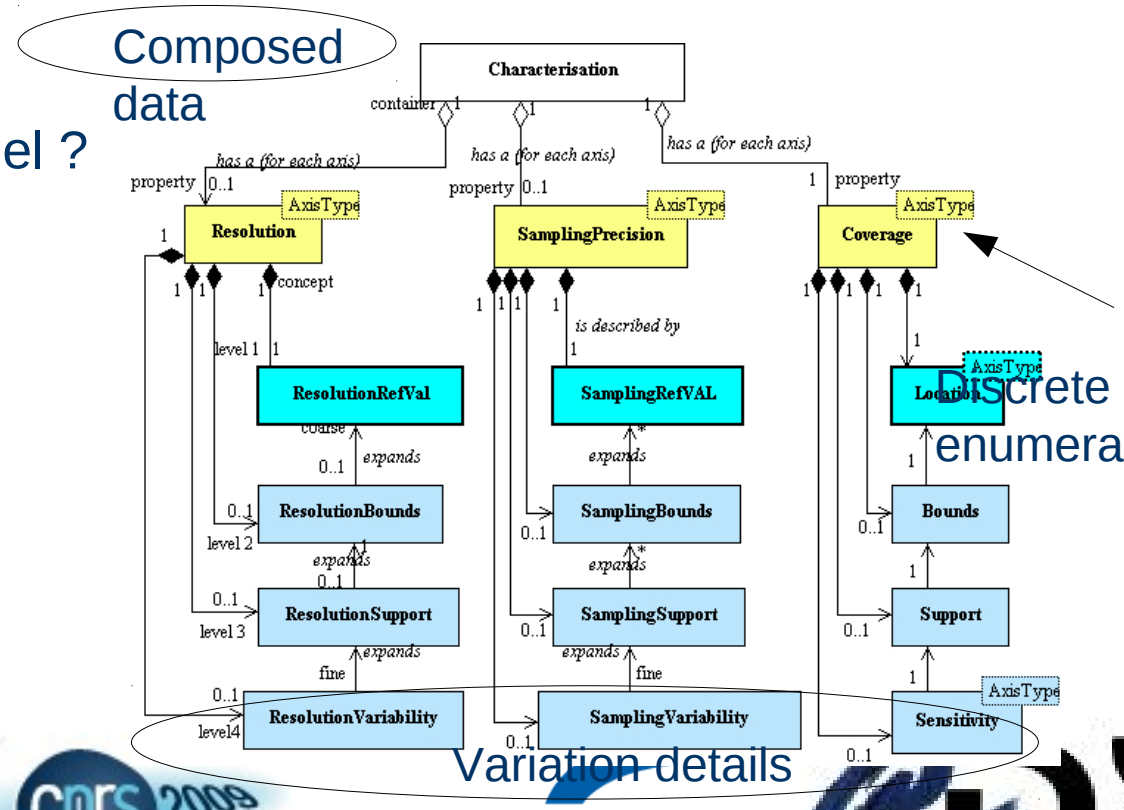
Characterization 2

- Why a new version:
  - Tackle new categories of datasets :
    - Polarization
    - Redshift
  - Describe composed datasets ...
  - Describe variations of characterization properties along the axes (so called level 4)
  - Change class, attribute and role names in the scope of ObsDM core components …
    - Shortening
    - Specialization

CHAR 2 Motivation: use cases for data analysis in VO context

Where do we complete the model ?



New categories of datasets

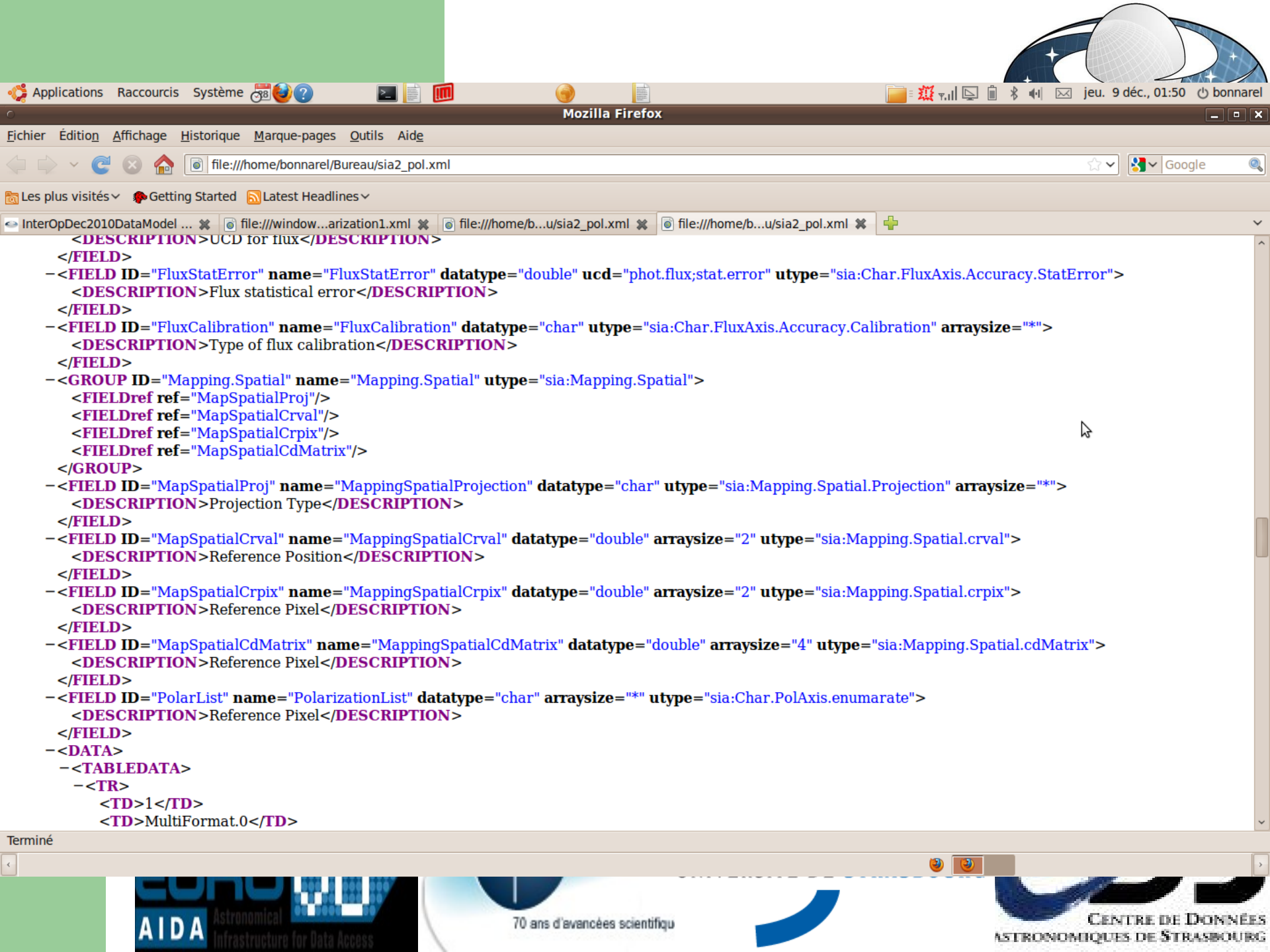
New discrete axis: polarization (spectral bands)

- list of available polarization states in the dataset ..
- Coverage, resolution, sampling replaced by a discrete list of states
- Mechanism can be used to create a spectral axis made of a discrete list of bands

- New axis : redshift # spectral
  - Discussion last tuesday

Composed datasets

- Observation made of consistent subparts, with some kind of partition of the properties.
  - Global characterisation of the whole set (rough, level 1 and 2 + some 3= fov)
  - Full characterisation of « segments »
  - Exemples:
    - CCD mosaic with variable resolution or/and sampling
    - Image with several polarization states or bands and specific flux bounds/resolution for each state/bands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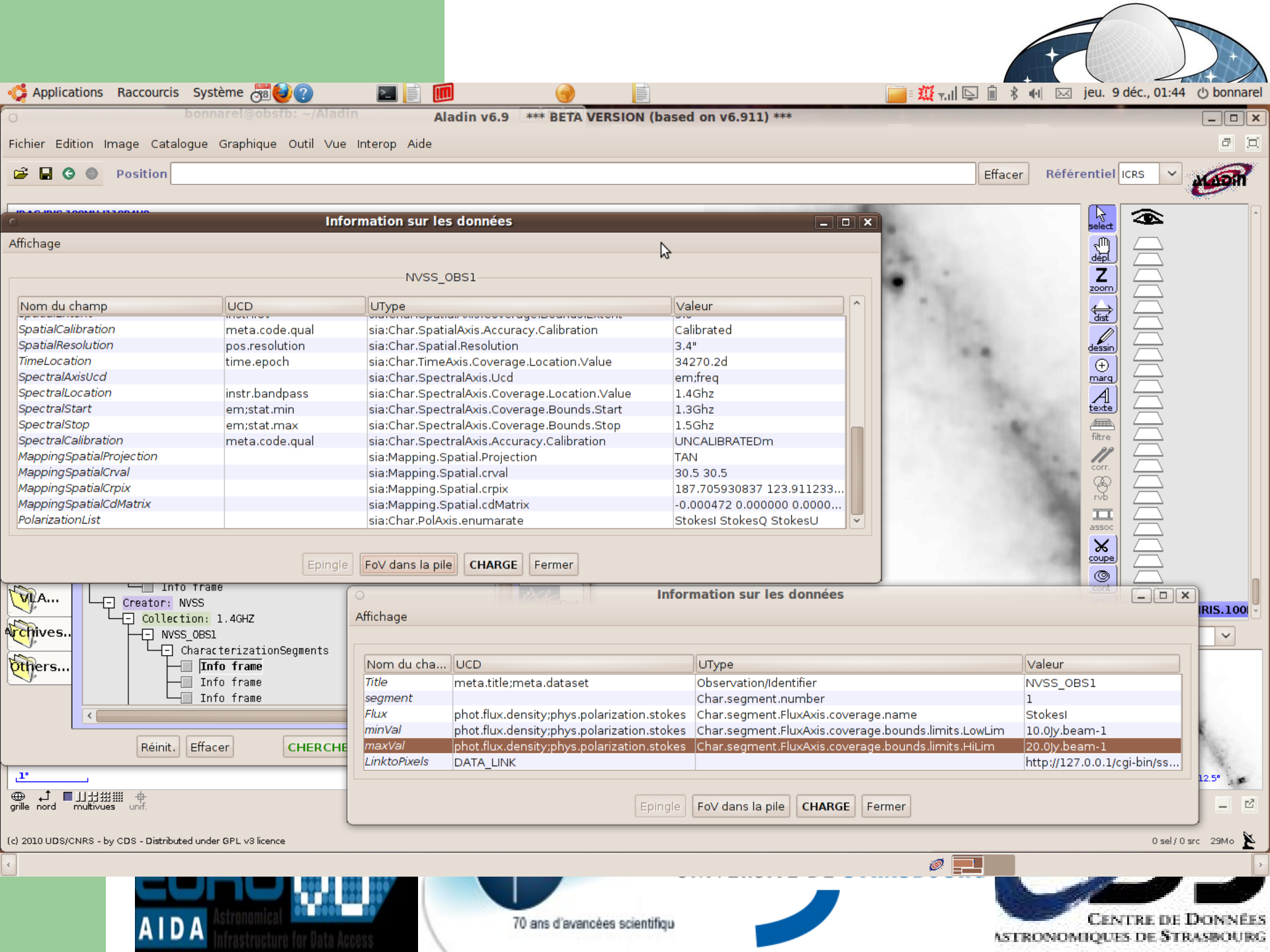
Applications Raccourcis Système
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NVSS_OBS1
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cont.
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Creator: NVSS
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Réinit.
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Epingle
FoV dans la pile
CHARGE
Fermer
grille nord multivues unif.
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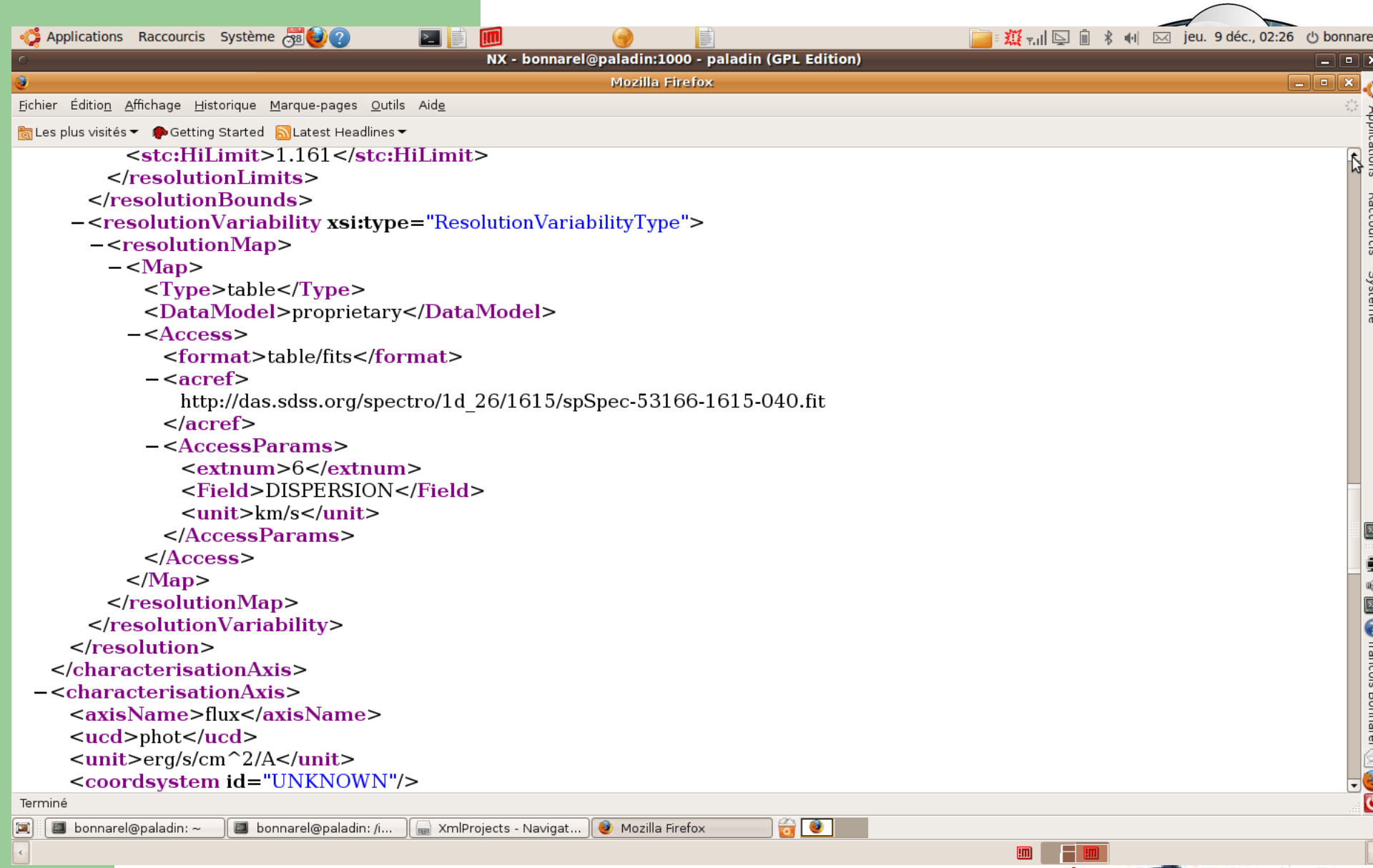
Property variations

- Characterisation should allow to describe variations of « properties » along the axes
  - What is it?
    - Some Images come with sensitivity maps, or psf variations.
    - Most spectra come with local errors, resolutions, and bin size.
  - What is it for ? (use cases)
    - Sensitivity maps for local SNR, quality estimation
    - All maps for simulation/observation comparison : inverse problem.

Property variations

- How does it work?
  - Describe where to find the variation map (extended access reference)
  - The latter mechanism can be usefull outside characterization (eg, provenance, DataLink, etc ...)
  - Alternatives : fonctional description, moment description
- Igor's demo (next to come !!)
  - Spectra with Full characterization in xml available via an ssa proxy service
  - Resolution map found and extracted using characterization
  - Spectrum fitting using the resolution map.



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Utype and other technical Changes

- New UML diagram and new xml schema:
  - New IVOA UML/xml mapping and schema writing rules
  - Xml element names and UTYPES mapped from UML roles.
  - Some Utypes have been modified since version 1:
    - shortening/consistency eg :
    - These new utypes are used in ObsCore DM.

Characterization 2.0 roadmap

- Working Draft: available this week.
  - Author list to any people interested in contributing.
- Utype list: mid january
- Xml schema, xml examples: ready for comment
- Roadmap says RFC in first semester 2011