DM1 minutes thanks to Laurent Michel

Mireille Louys (ML): ObsTAP , Photometry & Simulation DM

AM : Alberto Micol	DT : Doug Tody
FB: Francois Bonnarel	PS: Pior Skoda
BH : Bob Hanisch	SD : Sebastien Derriere
JMcD : JonathanMcDowell	JS : Jesus Salgado

1° ObsTap :
Current WD issued and to discuss here, with updates to be finished very soon.
still some questions to be discussed :
Dataproduct type:
-what are the possible values for this attribute of Observation ?
-how to provide a classification finer than
Image, Spectrum, Cube, TimeSeries, EventList, Visibility
Should be considered, but we are short in time.
DT has a list of possible data product types to suggest.
Calibration level
Suggestion for a set of examples for the classification of Calibration Level from 0 -> 3 .
table content agreed
ML asks for the necessity to add a uri to link to existing files.
agreed that no links are needed
AM asks to use the same case lower or upper for names in tables → easier for DB tables.
List of Observable
For most observations flux is observed depending on position or spectral coordinates or time coordinates.
When the measurement is not a flux, the characterisation model provides a way to be more precise about the observable and use a name, a ucd , and units.
The WD document contains a table than lists some of the possibilities that can be used for different kinds of observations as a guide line.
this is not covering all possibilities.
Please review this table and give comments.
PS mentions different cases of normalized spectra, line ratio, etc..
where more metadata are required to explain what was observed.

ML: these are not necessarily covered by this model.
we focus first on observations discovery not intermediate or final specific science results.

Comments received by Doug
New title proposed for the document to illustrate better its content
……. OK
Names inconsistency between data model summary and short names in ObsCoreTable.(ex: o_ucd, o_fluxucd)
ML suggest to change only optional parameters names when needed, because they are not yet implemented.
Mandatory fields already implemented , but not difficult to change.(PD)
Many people suggest updating now and fixing the inconsistencies.
Finally agreed.

To be checked in the document:
ML: Are Use cases well explained?
Can we have an estimation for all implementation of Obscore ,
How much of these use-cases are supported?
How many data model fields are really used?
AM volunteers.
Describe implementations in another document (IVOA Note, with data on DM and TAP service uptake).
Time line: plan to deliver the last version of WD within 2 weeks, have 1 month discussion in the WG and go for REC process.

Photometry Data Model
2° Phot DM Jesus Salgado IVOA WD 0.2
Need to add photometric metadata to spectrum data model.
UML Diagram of the model and classes definition with utypes
Spectral coordinate bound to the Effective wavelength of a filter.

Use case considered: photometric filter service
Data discovery, synthetic photometry
Define filter, zeropoint and when no ZeroPoint available, like in SDSS filter profile service, access to Reference spectrum
Magnitude and luptitudes supported.
SpectralAxis of Characterisation model reused.

JMcD: provide a precise serialization example for each use-case makes the doc easy to understand .

3° Phot DM JMcD SED DM
SED considered before 2005 but delayed to issue SpectDM more quickly
SED can be an aggregation of spectral componantes , isolated points or single segments of Spectrum possibly overlapping.
Proposition for a CoordFrame , named Band model to support external references
Aperture correction : nneded to compare diff. photometric points with diff aperture size. Not yet in Characterisation DM.
IC : mostly related to Provenance
ML : Are all concepts present for an SED?
Aperture concept difficult to link :
Have a simple size estimation
Special needs for Xrays observations → should be discussed.
SD: Aperture is difficult to describe and rerely available in catalogs.
JmD: Size of the aperture is OK
IC : Modeled in spectrumDM already
SD : time coverage
Where to put correction flags ? -< pslinter meeting

4° **Simulation Data Model** GL
Comes to DM for the recommendation process
Documentation present on IVOA web site and on googlecode@volute web site.
The DM WG to read and check the content.
WD + data model documentation +XML schema
Automated generation of the data model generation → html document on line, with hypertext navigation within utypes definitions
Plans to implement this model on TAP
RP : flexible DM are difficult to query and may need a lot of table joins
GL if we have an OO QL ….. see demo in theory /Dal session on Friday ..
Implementation in OV-France,Paris

DM2

Polarimetry

1° Bigorre astronomy Data Center in Toulouse/France
Feedback on the use Spectrum DM, distribute / analyse polarimetric data with VOSpec. Involved in MUSE (ESO) project and EST solar telescope
Huge data sets (EST to deliver 1PB/day).
Simulated data cube
How to use MUSE data in the VO context is an open question.
Data base runs SSAP
Looking for visualising tools supporting spectra in counts (not covered by VOSPec)
Need a tool for broadening synthetic spectra
Polarization : there is a VO Note pretty much radioastronomy oriented.
Other polarised observation to consider
ML: suggestion to write or complete a requirement document for polarimetric data.
Need for UCD extensions
Need to tackle normalised flux axes (dx/K)

Planetary data

2° IDIS DM Michel Gangloff

IDIS key part of the EuroPlanet project
A general view on how to distribute data for planetology (european).
Observations and simulations multi-disciplinary models
Plasmas – atmosphere – Small body – geology
Offers a generic and extensible data model . Plasma part in current development
Some data model paradigms of the VO can be re-used , for instance Characterisation DM
Demo of a web interface to write XML instance documents , using jaxfront to generate web interface from XML

3° **Characterisation** v2.0 FB IC

New observation types considered (polar Z), composed dataset
Variation of the properties along of the axes
Polarisation : a new characterisation axis
supported by Aladin server for images.

sensitivity map branched at level 4 defining how to access maps or other data formats in external files.
ULM diagram + XML schema ready. UTYPE list in January. RFC for 1st semester 2011
Demo IC : Fitting of spectra using a service based on filter transmission curve and LSF

4° FB **Provenance**
Wants to cover history and processing applied to produce a data set
use case : ALMA observations
use case : data processing (GWS)
Data Quality instrumental conditions , calibrations details :
Do they fit in Provenance or Characterisation

10/12/2010 06:47:00

SSA 1.0

VO compliance

Formulaire de recherche

TAP upload

DM mapping

SAMP Web

Metadata édition

DM édition

DM mapping

Attachement des filtres aux nœuds

Passage en JQuery

Iconographie