

ESFRI requirements for VO standards Hackathon April 14th

Notes taken by Mireille Louys/ François Bonnarel

- HiPS for ESFRIs
 - Nice presentation by James Collinson of a service using AladinLite with HiPS of SKA simulated data
 - Further discussion with CDS required
 - Beside this, there is still a little issue to publish the HiPS in the wider community. → to be addressed between FB and Alex Clarke
 - HiPS 3D exists. No real « cube visualisation » functionality. For Radio and MUSE : to be checked ! Spectra extraction and manipulation tool worked out in Aladin by CDS and Toulouse (CASSIS) group.
 - HiPS 2D can be used as discovery of cube « progenitors ».
 - Question mark about CARTA / ALMA ? They have small fields, when SKA is like a survey
 - Martino Romaniello (ESO)
In my understanding, from Felix Stoehr the ALMA sub-system scientist, CARTA's main case is for ALMA, which has a rather small field of view, so there's no compelling need to support HiPS ...
 - Alex Clarke (SKAO)
CARTA are keen to support SKA use cases, so we do have influence over how they develop it further
 - Martino Romaniello (ESO)
What is the largest spatial extent foreseen for individual SKA products?
 - Alex Clarke (SKAO)
A single pointing will have a FWHM of about 4 degrees
at 560MHz and also the resolution is high so it will be something like 30000 pixels
 - Mark Kettenis (JIVE)
To some extent SKA will be a survey instrument
- Radio extension to ObsCore
 - Discussion focused on frequency parameters : should we really add them in the extension or only encourage to provide UDF for conversion in ADQL ?
 - Providers would have to translate these freq values in wavelength to serve the mandatory em_min em_max in m , in Obscore.
 - but the algorithm for this depends on the DP.
The translation may vary from one data collection to another .
 - Who is defining the UserDefinedFunction code ?
is it up to the service to define how the translation is coded in the UDF?
or is it up to the client to select an appropriate algo?
- DataModels for ESFRIs

- Many ESFRIs need interoperability datamodels. A workshop in May + IVOA interop will address the coupled questions of « integration » datamodels (source, Cube, TimeSeries, Mango) and serialization/VOTable annotation
- TimeDomain
 - Pulsar data : JIVE has sequences of spectra. But Pulsar community is not the majority of Jive but they are happy with an obstap dealing with dynamic spectra (or EPN TAP?)
 - How to manage FRBs ?
 - Proposed additional time sampling characterisation attributes are not needed by all ESFRI time data as far as we know
 - It would be a good idea Involving ESFRIs in IVOA TimeDomain discussions