

Telescopes/Instruments identification Documentalist use case



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□ Survey of usage for Observing Facilities names and description / Emmanuelle Perret @CDS

http://cds.u-strasbg.fr/meetings/Lisa8/public/presentations/wednesday/afternoon/06_facilities_uniqueIDs.pdf

Gathering of Telescope lists from several sources Marion Schmitz

Pb of multiple identifiers for the same telescope → sorting , clustering



□ Lisa conference June 2017

- LISA VIII , Strasbourg, 6-9 Juin 2017 <http://cds.unistra.fr/meetings/Lisa8/>
- Main Conference for Librarians in astronomy
- Audience :
 - Agencies
 - Datacenters :NED, CDS , ESO
 - Bibliographic services ADS
 - Journals : Elsevier , AAS, Astronomy and Astrophysics
- Large Interest from documentalists and librarians
 - Standardised Tags for science articles
 - Discussed how to validate the
 - Measure of the publication rate wrt instruments (telbib @eso)
- Présentation/ discussion of possible usage



□ What are the needs

- Agreed it is necessary to have a global index
- Define a Unique ID for each Facility
- Represent hierarchical relations
Instrument/Telescope/Observatory
- Bind the ID to the description record
- Gather them in a repository



Former plans for a facility repository

- Initiated with Baptiste Cecconi, considering the nomenclature efforts in space science (VESPA prototype)
- A first attempt presented in Sydney ADASS 2015
- Facilities, Telescopes, Space Missions, Instruments
- An XML schema based on an extension of VOResource



□ Follow up

- A list of interested people set up
- Marion Schmitz @NED provided a list of telescopes and instruments
- 3800 entries , uncomplete records after compiling lists from IAU and AAS codes
- Cross validation to organize and share by different partners



□ Existing Descriptions

- The **PDS4 Information Model Specification v 1.8**
- https://pds.jpl.nasa.gov/datastandards/documents/im/v1/index_1B00.html
- Offers a rich and handy classification for
 - Telescopes
 - Space craft
 - Instrument
- Assessment of the data model description for a small set (10/20 items)
 - At CDS :Ground based telescopes and their instruments
 - At Paris DataCenter : space science facilities



□ Documentalists requirements / E. Perret

- In order to verify the granularity and features needed
- Recorded a list of all telescopes and instruments names encountered while feeding the CDS bibliographics system for Vizier table ingestion
- for APJ and APJS
- During 4 months , on a daily basis
- [instruments & telescopes lookuptable](#)



□ Various cases to tackle

- Alternate names from one author to another
- Telescopes with no names : size +location only
- Multiple telescopes for a survey
- Multiple instruments
- Instruments change telescope host
- Etc...



□ Next steps

- Analyse the training set
- Write a short used case document expressing documentalist usage
- Contribute to the telescope lists merging
 - Fuzzy logic algorithms : coll. Baptiste Cecconi , Graz University.
 - Meeting in Strasbourg end of November
 - Extract the metadata profile from PDS 4 information system
 - Discuss a prototype db close to Vizier → Gilles Landais

