TDIG Summary and Roadmap

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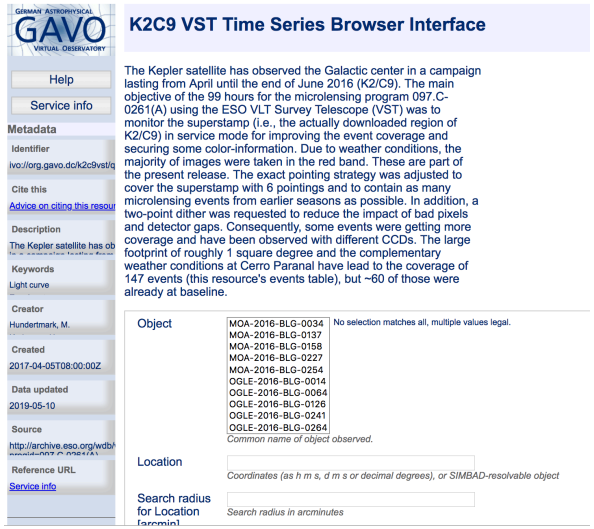
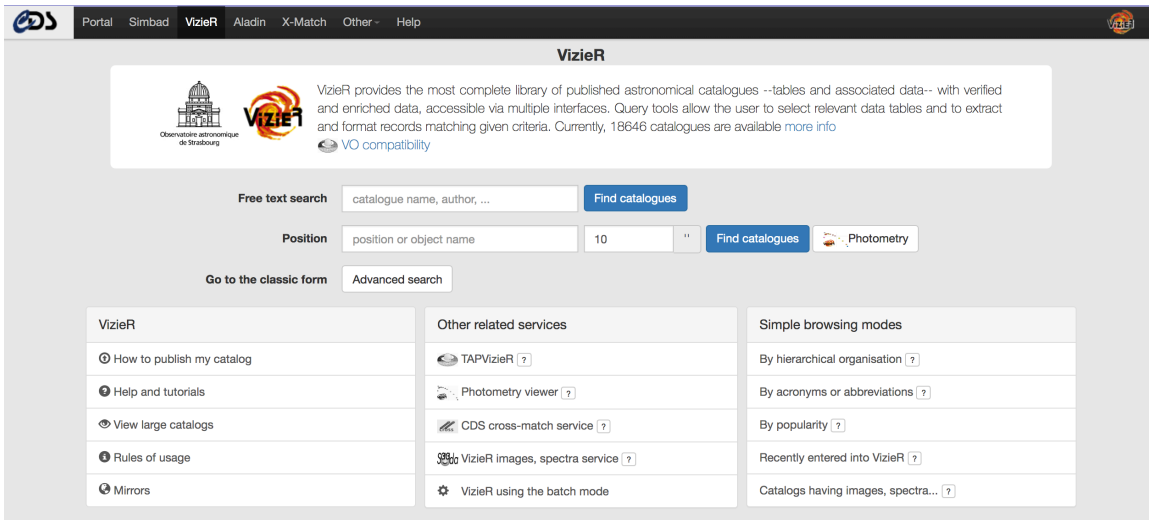
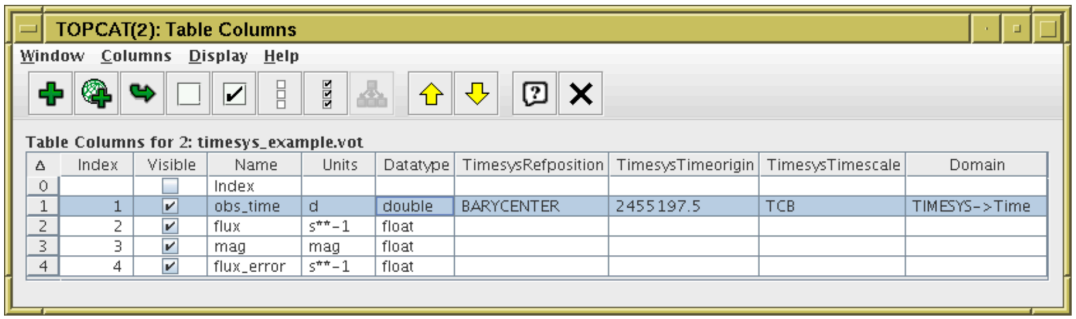
17 May 2019, Paris Interop

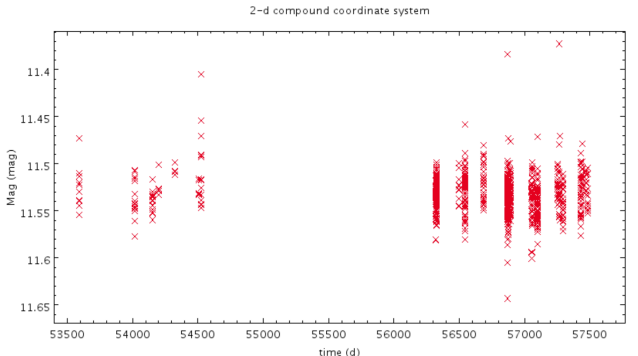
TDIG summary
TIMESYS

- TIMESYS in VOTable1.4
  - Implementation in services: VizieR (in beta) and GAVO
  - Client implementation: Topcat, Stilts, SPLAT
  - Validator: votlint
  - But refposition=TOPOCENTER is not enough (needed for light-travel corrections)



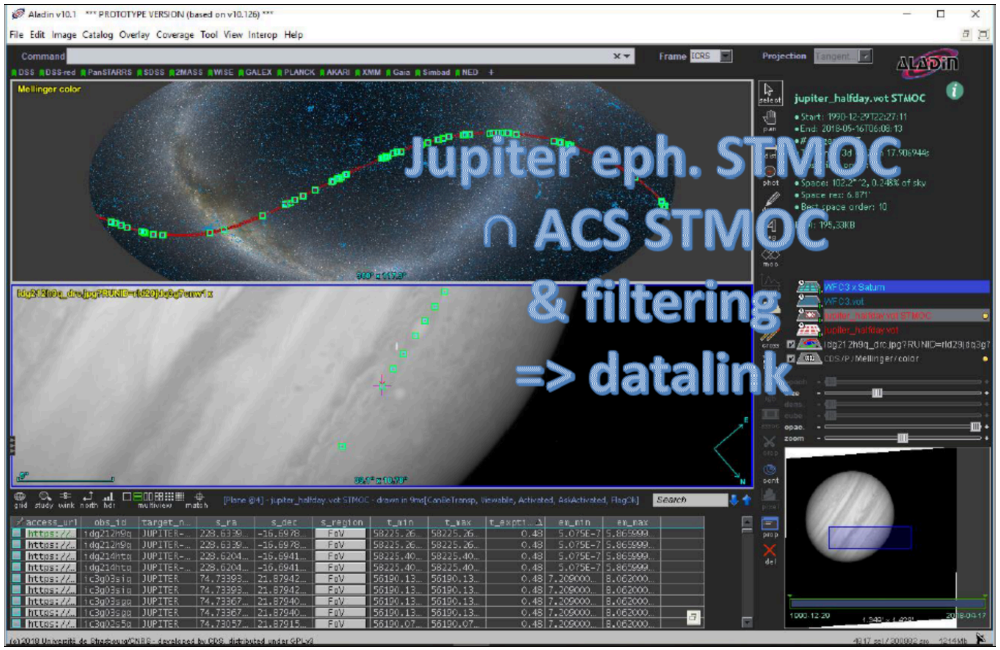


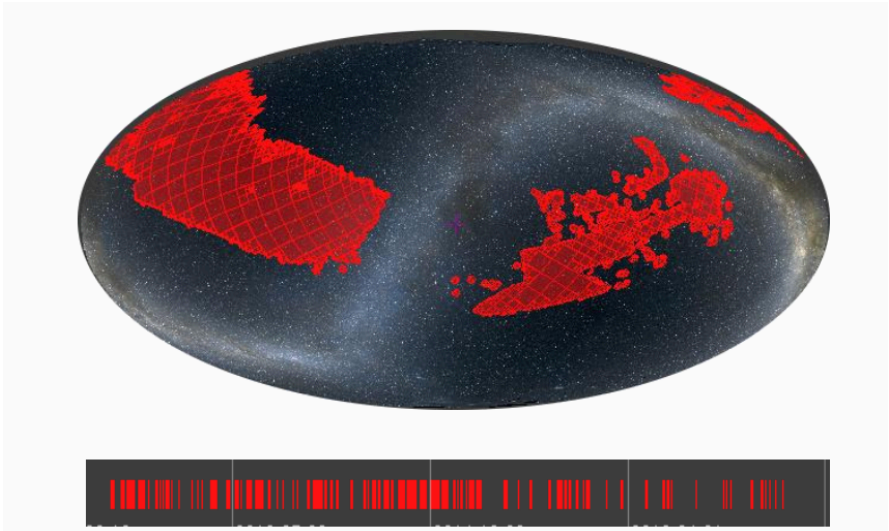




TDIG summary
Space and Time coverage

- ST-MOC
  - Coverage in Space and Time of any image collection or catalog containing positions and time
  - Filter catalogs by intersection of STMOCs that is in areas of interest
  - An STMOC IVOA note is ready (Durand, Fernique, Nebot et al. 2019)
  - Proto for tests: http://aladin.u-strasbg.fr/java/stmoc/index.html





2 years CDS&Co R&D
driven by
IVOA effort on time

Time Domain Roadmap

- TimeSeriesDM:
  - Explore how the current status of the data model is able to describe ZTF-DR1 products (Objects Table, lightcurves, single-epoch images, quality flags)
- ST-MOC:
  - Work with data providers to precompute STMOCs: VizieR catalogs and HiPS, and for solar system body ephemeris — work close to SSIG for that.
  - Ingest in CDS MocServer: => clients can resource by Space - Time
  - Create library in python and add to mocpy
  - IVOA 2.0 MOC for SMOC, TMOC and STMOC?
  - VO registry coverage by STMOC?
- Semantics work to improve discovery and client use of:
  - VOEvents services and streams (What and where)
  - Time Series as distributed by datalink (data product (sub)type)
  - Get the *refposition* case of topocenter started for TIMESYS in VOTable1.4