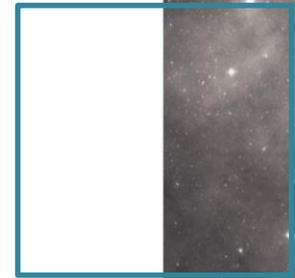


ASTERICS Time Domain Day (21st March) short report Part 2 : TimeSeries



François Bonnarel (CDS)



□ 3 views on the problem

- Jiri Nadvornik presented the ideas he developed in the IVOA note « TimeSeries Cube Data Model »
 - Use a modified version of SparseCubeDataModel
 - The goal is Independance of the Cube model part and the DomainAxis models using VO-DML design
 - Applied to the 3 categories of use cases of the CSP
- Juan Manuel Alacid SVO :
 - Report experience of TimeSeries services using SSA
 - Interrogation about usage of « TimeSeries Cube Data Model »

□ 3 views on the problem

- CDS view reported by F.Bonnarel
 - Use cases from VizieR users and projects
 - Starting point is VizieR content
 - Proposed list of TimeDomain metadata items for discovery
 - Thoughts to serialize « à la VizieR SED » using SparseCube annotation, but it's more difficult

□ Discussion on use cases

- Mainly on discovery
 - There is not only light curves but also: velocities , sequences of spectra.
 - No peculiar pressure on TimeSeries of VOEvents
 - Vizier distinguish between archived TimeSeries and on the fly build up (much more difficult)
 - Discovery on other axes than time
 - Discovery of nature of TimeSeries content = variability and even periodicity, and transient aspects
 - Period description
 - Periodogram view of TimeSeries for query and retrieval ?
 - Look at solar physics, planetary science, space physics Virtual Observatories and what they have done already, because theyb extensively need time.

□ Prototype(s) discussion

- Long and controversy discussion on examples provided by Jiri.
- Decision to go on with other examples based on different philosophies in the Hack-a-thon session on Thursday 23rd, 2 PM