The Virtual Observatory

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CENTRO DE ASTROBIOLOGÍA

CSIC
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

INTA Instituto Nacional de Técnica Aeroespacial

EXCELENCIA MARÍA DE MAEZTU

ESCAPE
European Science Cluster of Astronomy & Particle physics ESFRI research Infrastructures

Data! Data! Data!

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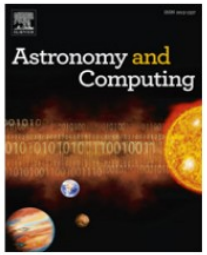

Full length article

Euro-VO—Coordination of virtual observatory activities in Europe

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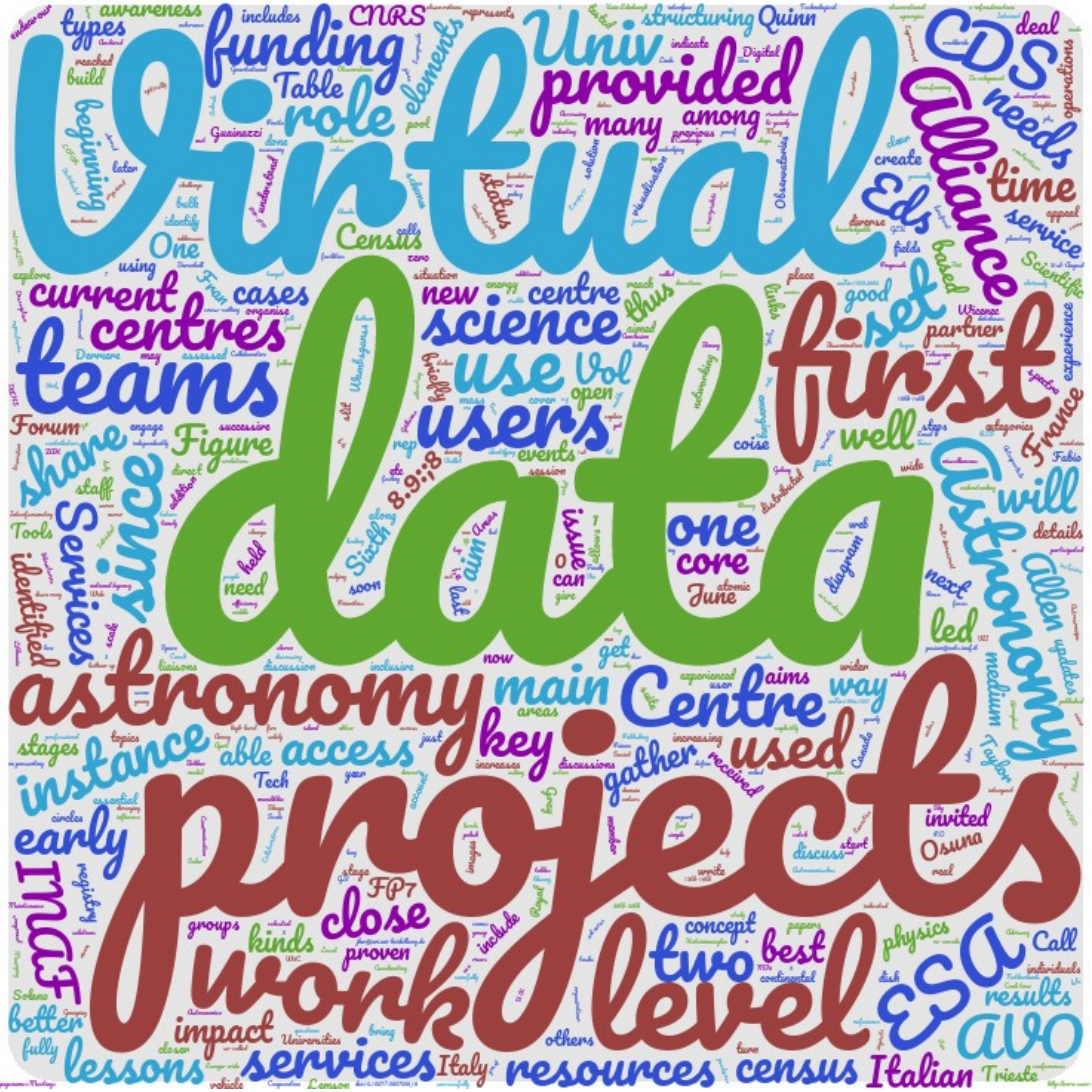
Data! Data! Data!



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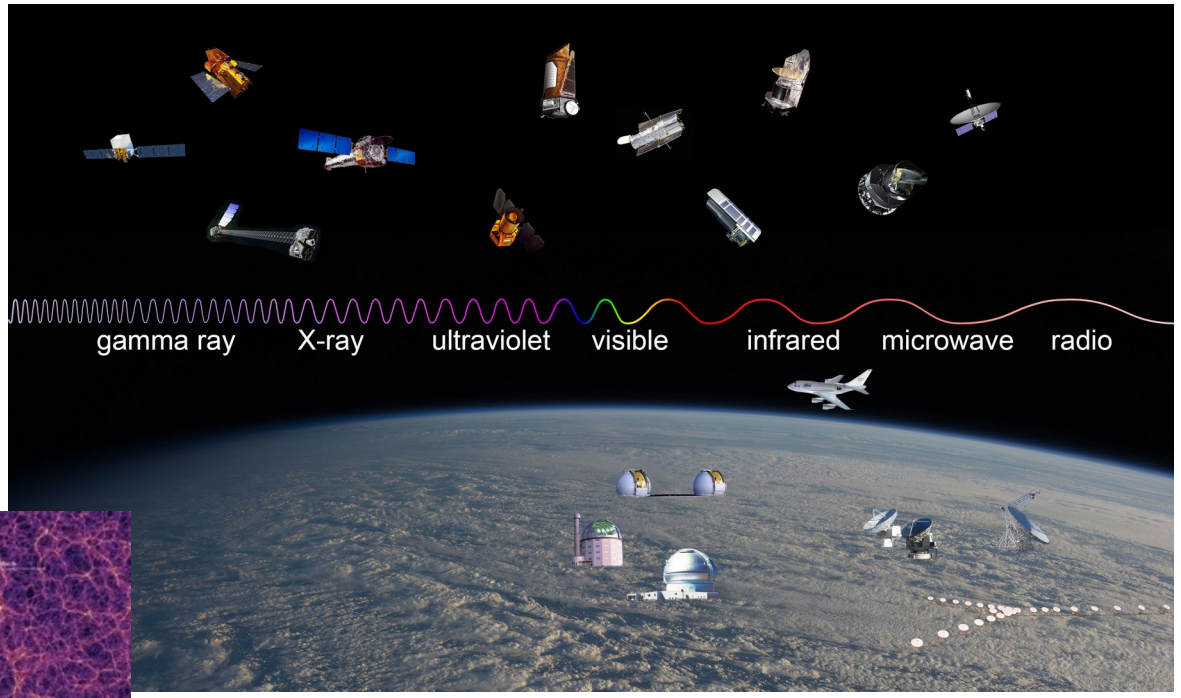
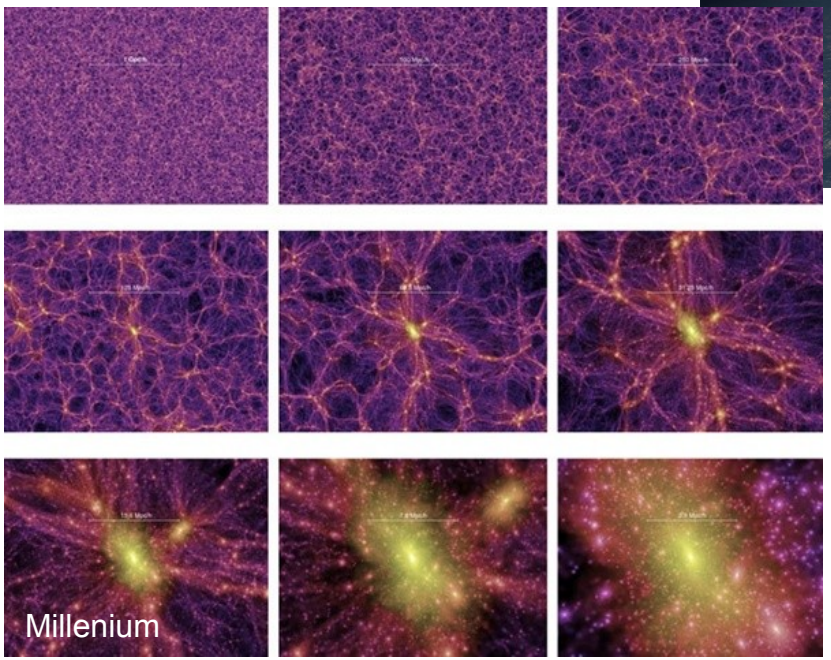
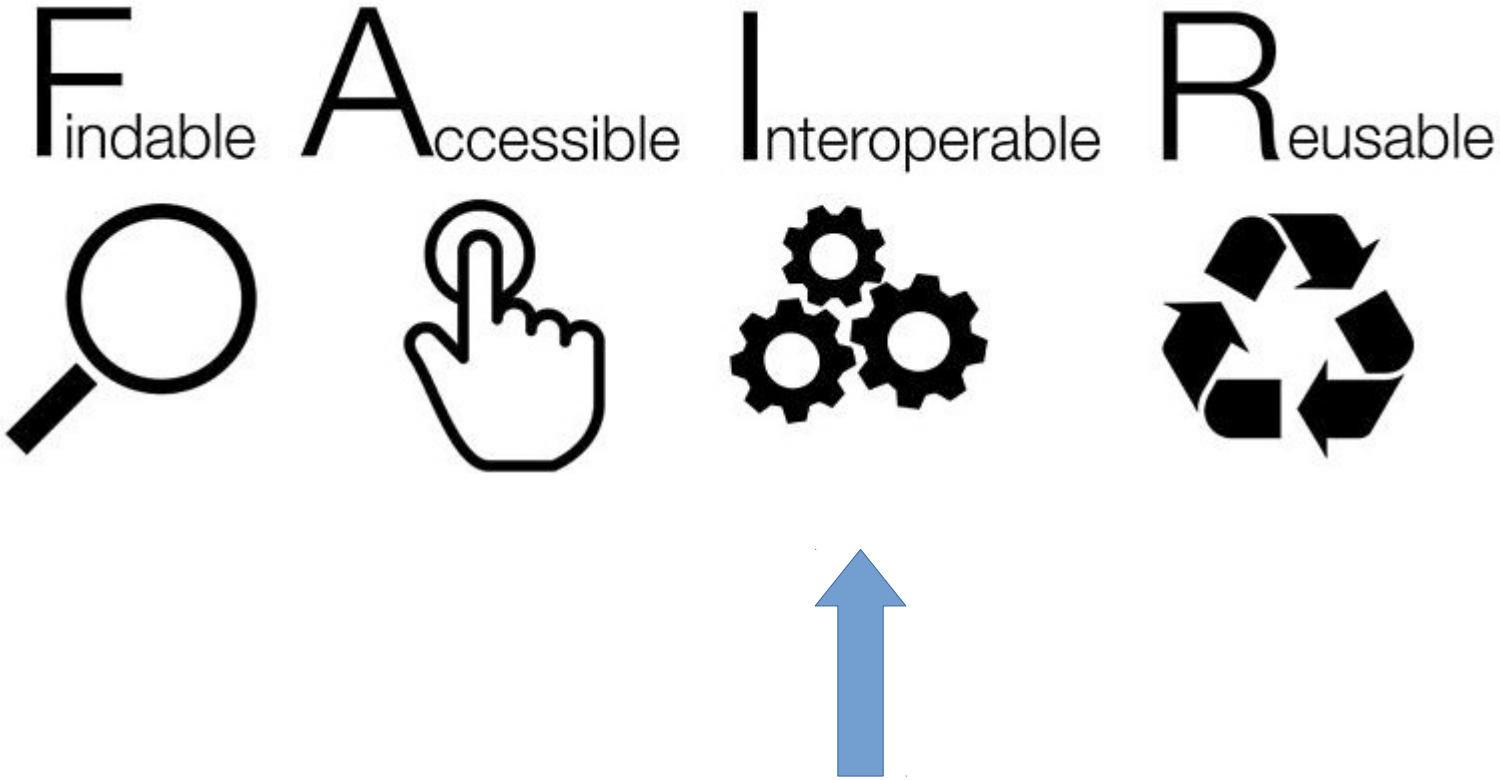




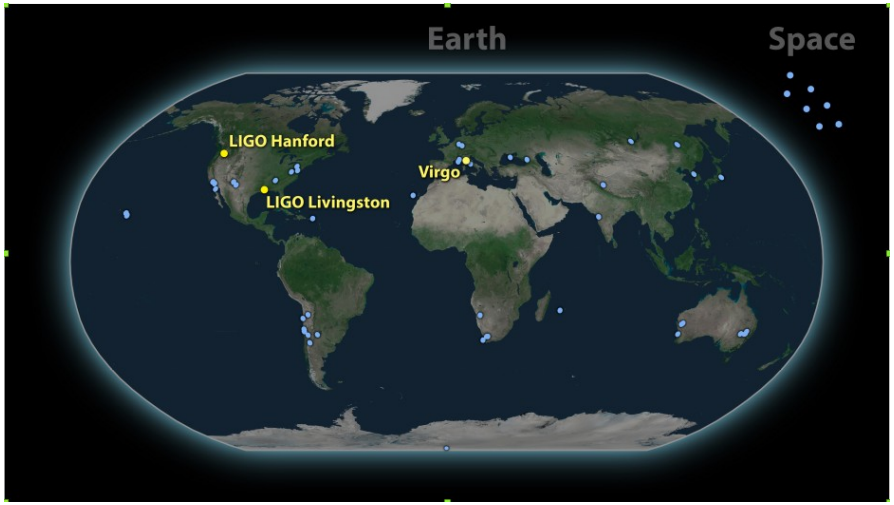
Archives: Not just repositories...

Archives:… but research infrastructures

FAIR: The magic word



FAIR: Interoperable



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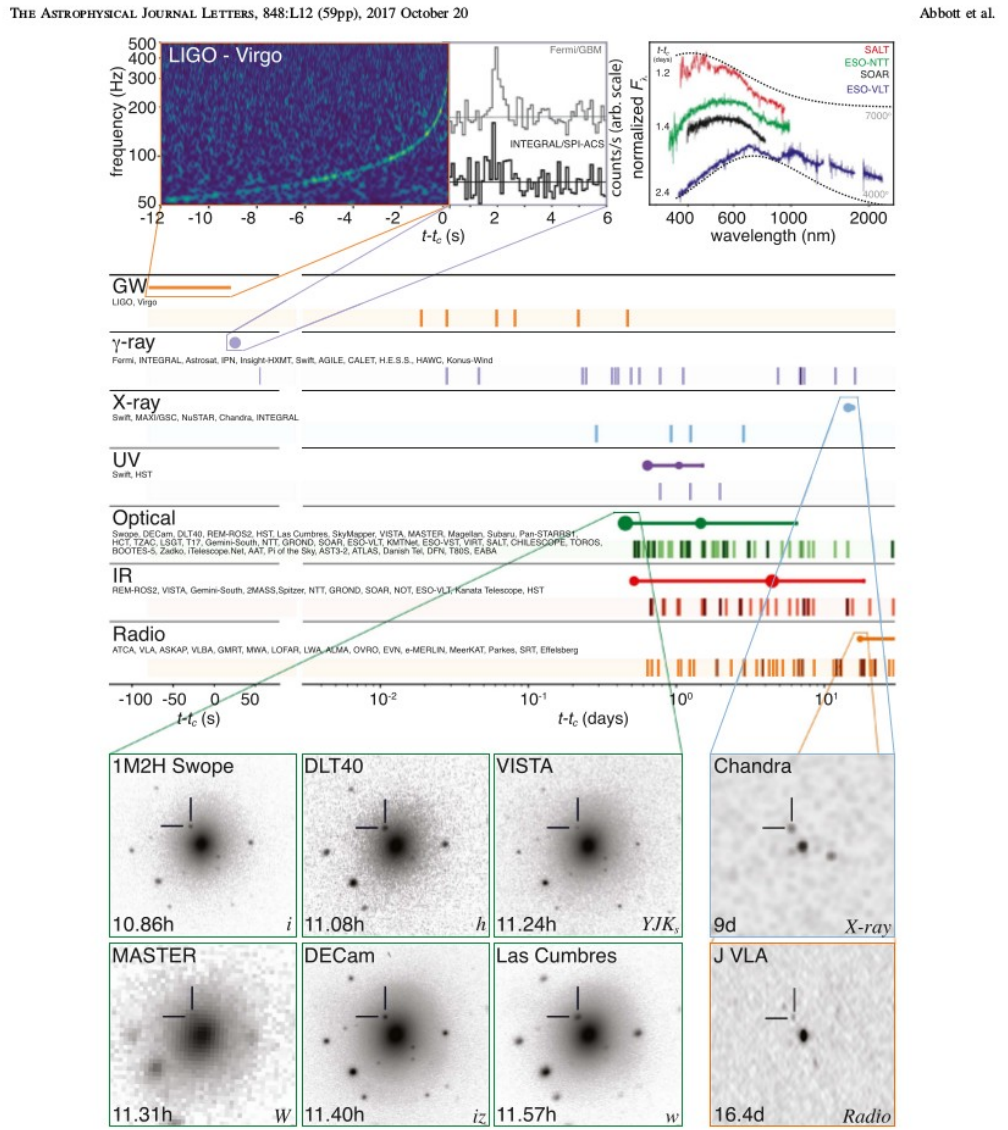
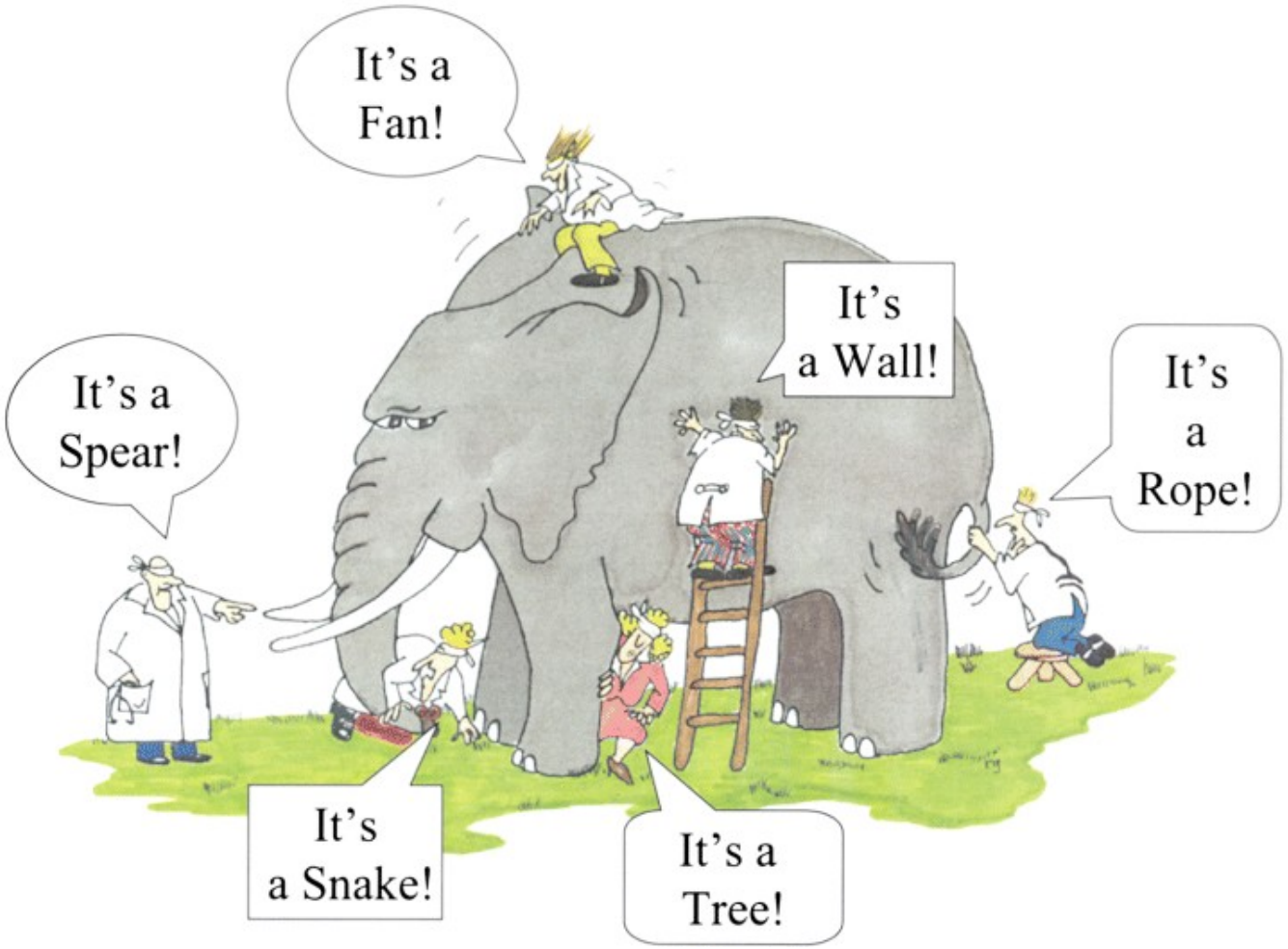
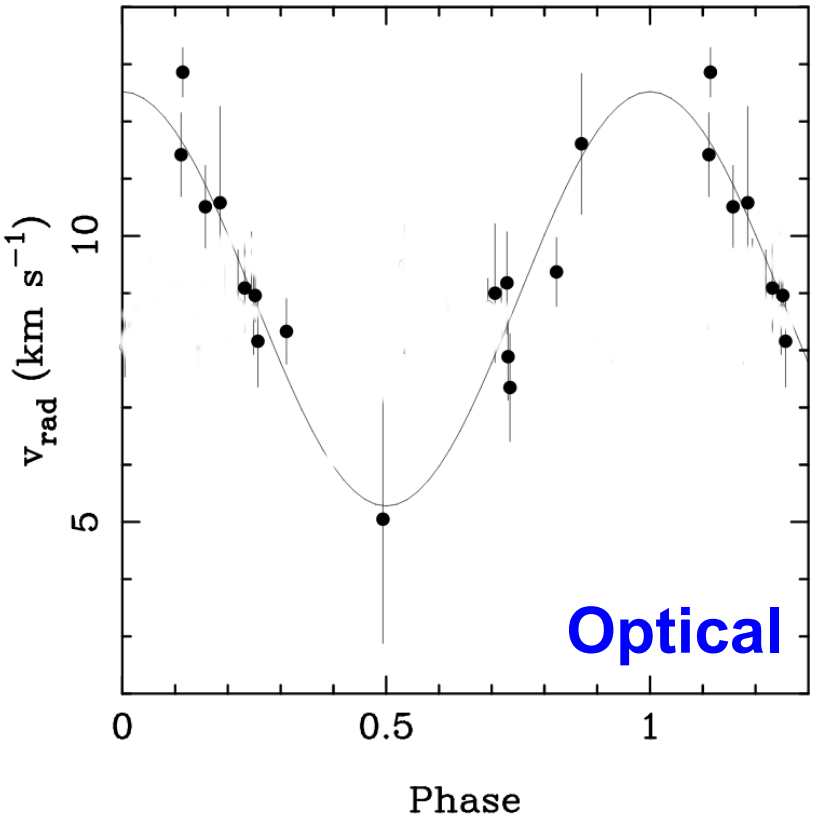


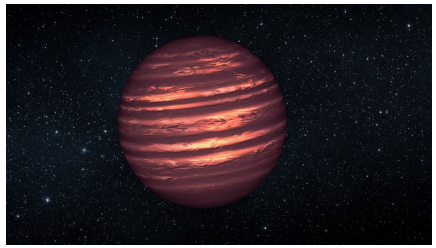
Multi-λ Astronomy

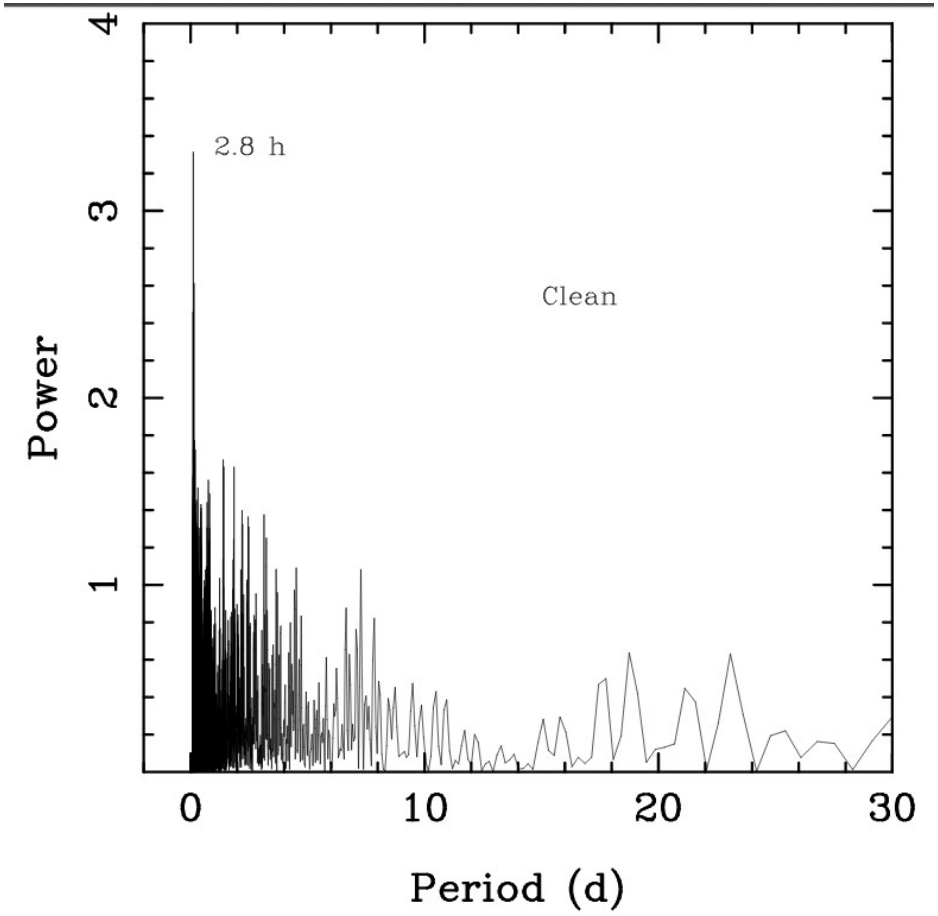


Multi-λ Astronomy



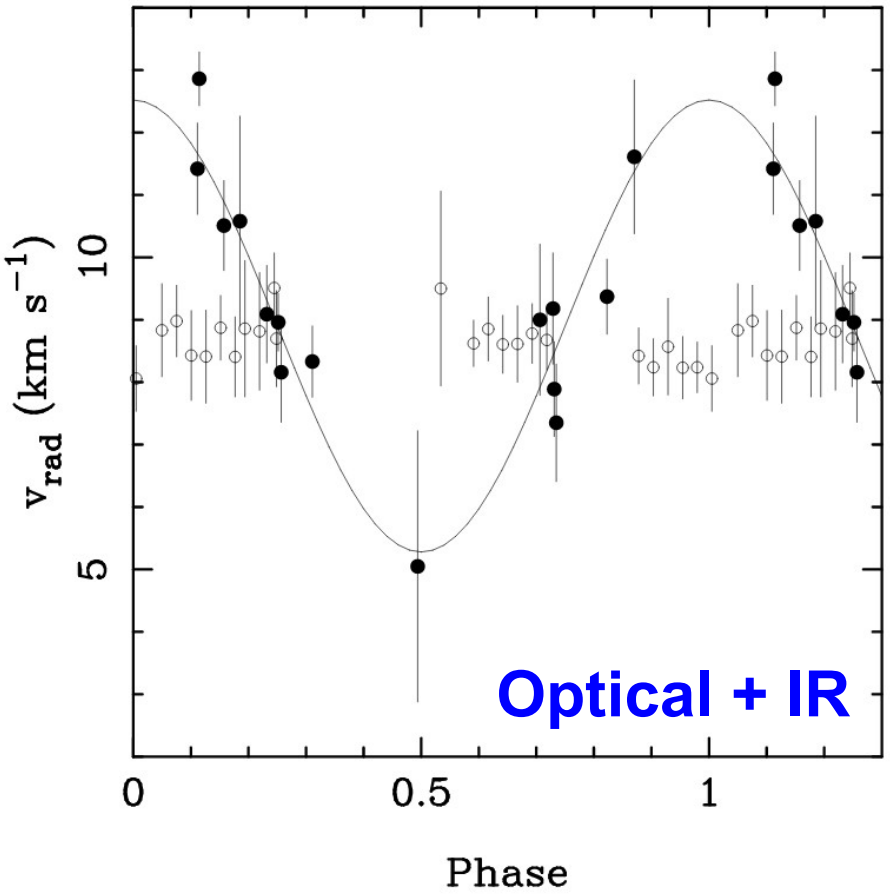
LP 944−20





- 14 nights convering 841 days
- Period: 2.5 – 3.7 hours
- VLT/UVES

Multi-λ Astronomy



NIRSPEC / IR data rules out the planetary hypothesis

The multi-λ nightmare

- Data discovery
  - How can I find archives that contain the data I am looking for?
  - Once identified, how to select only those fulfilling certain conditions (spectral resolution, wavelength range, spatial resolution,…).
- Data access: Access protocols of very diverse nature.
- Data analysis: How to put all the pieces of the puzzle together?
  - For images:
    - Different pixel scales, orientations,…
  - For spectra:
    - Different unit both in flux and wavelength.
  - For photometry:
    - Where to find the filter / filter + detector / filter+detector+telescope / filter+detector+telescope+atmosphere curves?
    - And the zero-points?
  - For catalogues:
    - Different labels for the same magnitude (V, Vmag, Johnson V,…)

The International Virtual Observatory Alliance

Virtual Observatories of the Future

Caltech campus, Pasadena, Calif., USA
June 13 - 16, 2000
http://astro.caltech.edu/nvoconf
Email inquiries: *nvoconf@astro.caltech.edu*

MPA/ ESO/ MPE Joint Astronomy Conference

MINING THE SKY

July 31 - August 4, 2000

Garching, Germany

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Spanish Virtual Observatory

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(Admin)

Tweets by @ObsVirtEsp

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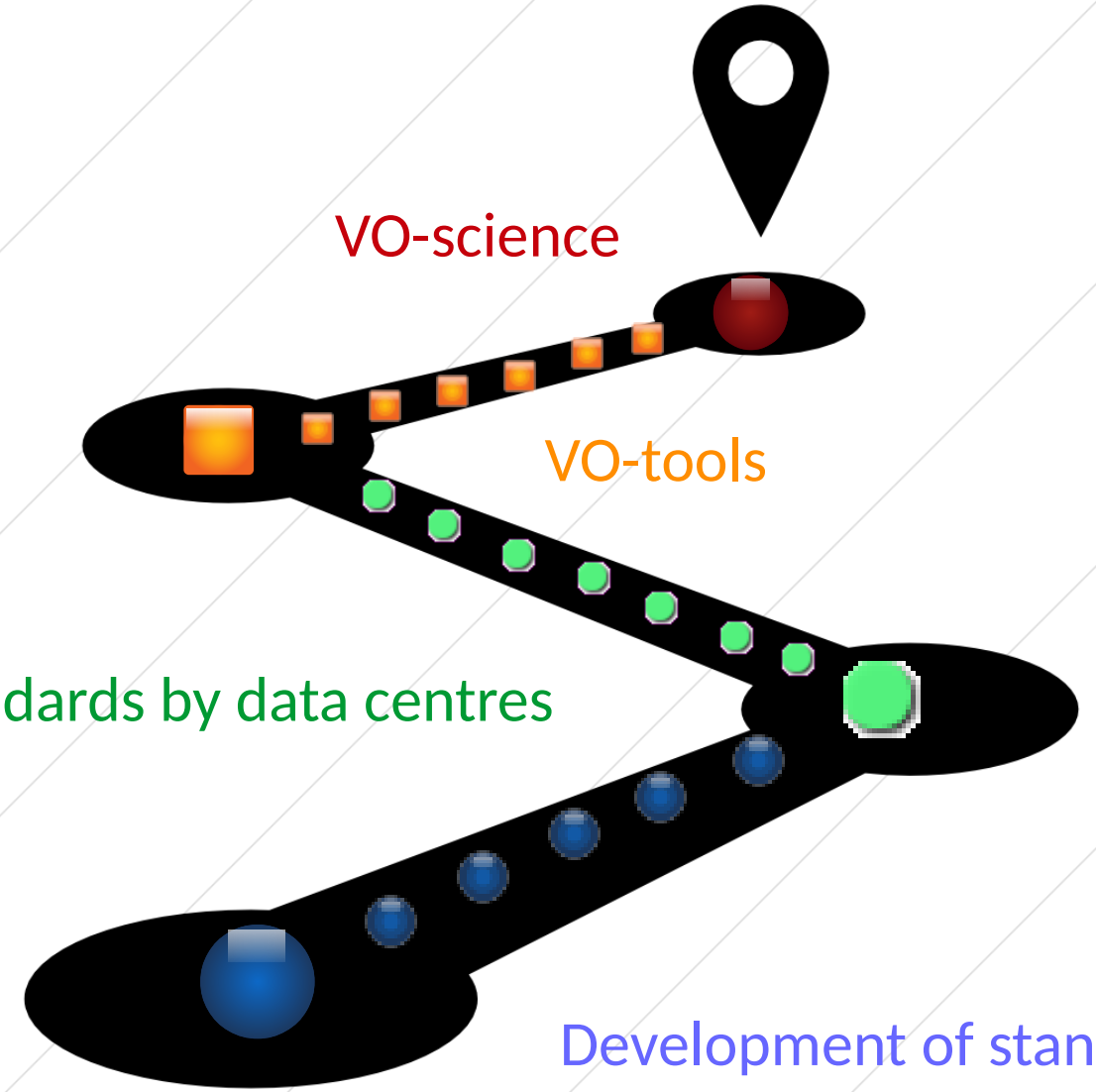
@ObsVirtEsp estará presente en el IX Ciclo de Conferencias "Jornadas de Astronomía" de @astrocuenca

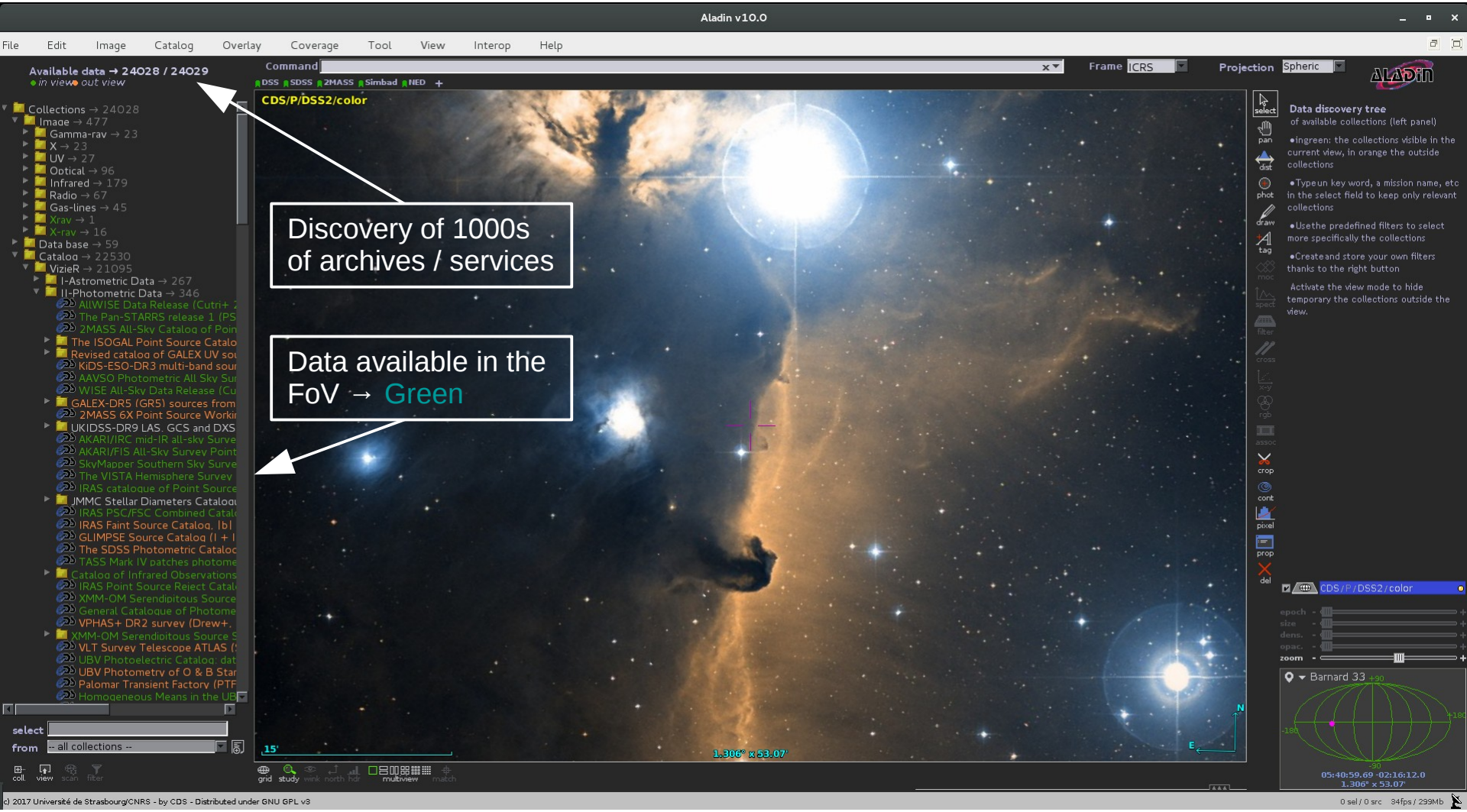
Embed View on Twitter

http://svo.cab.inta-csic.es

The Virtual Observatory roadmap



FAIR. The power of VO



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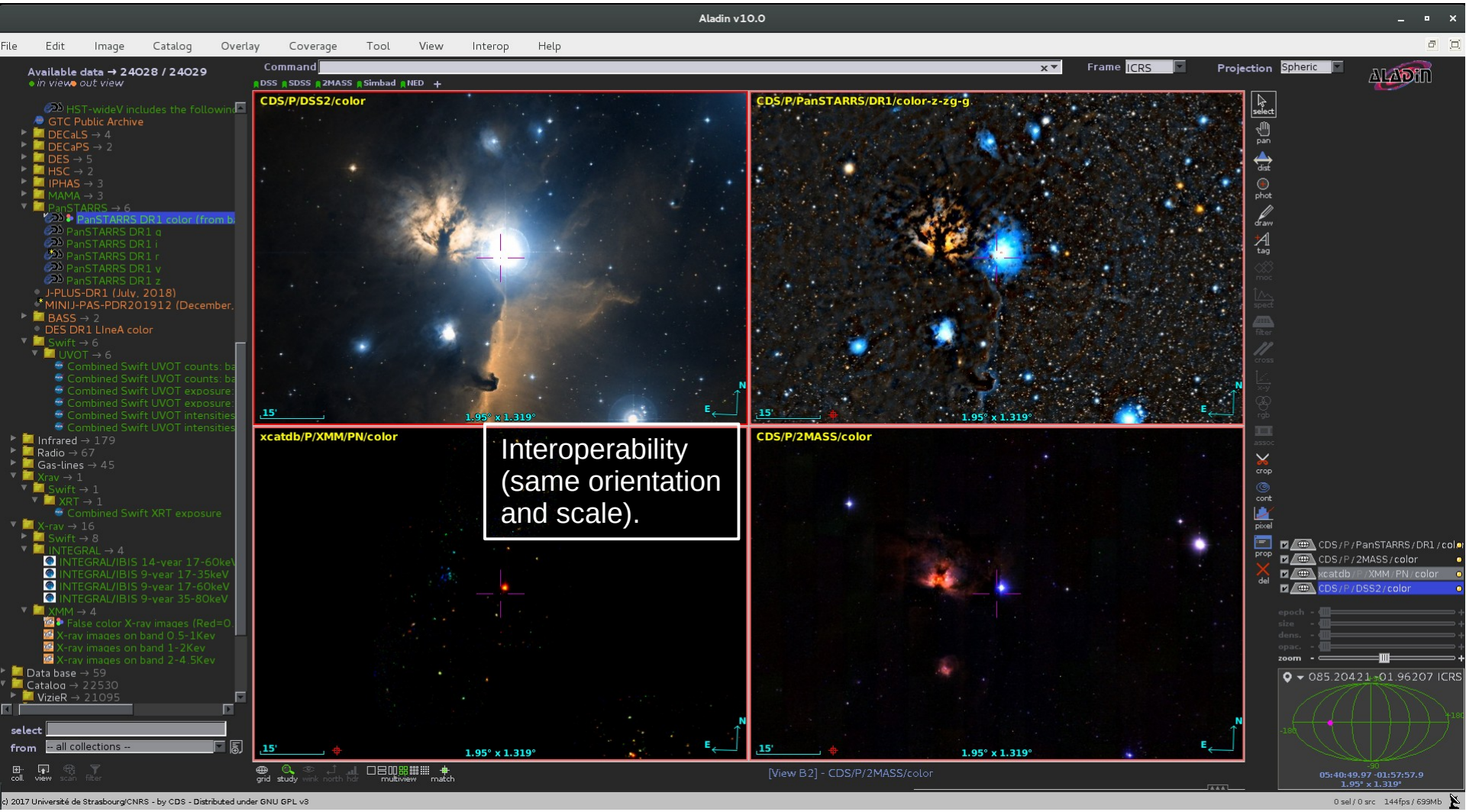

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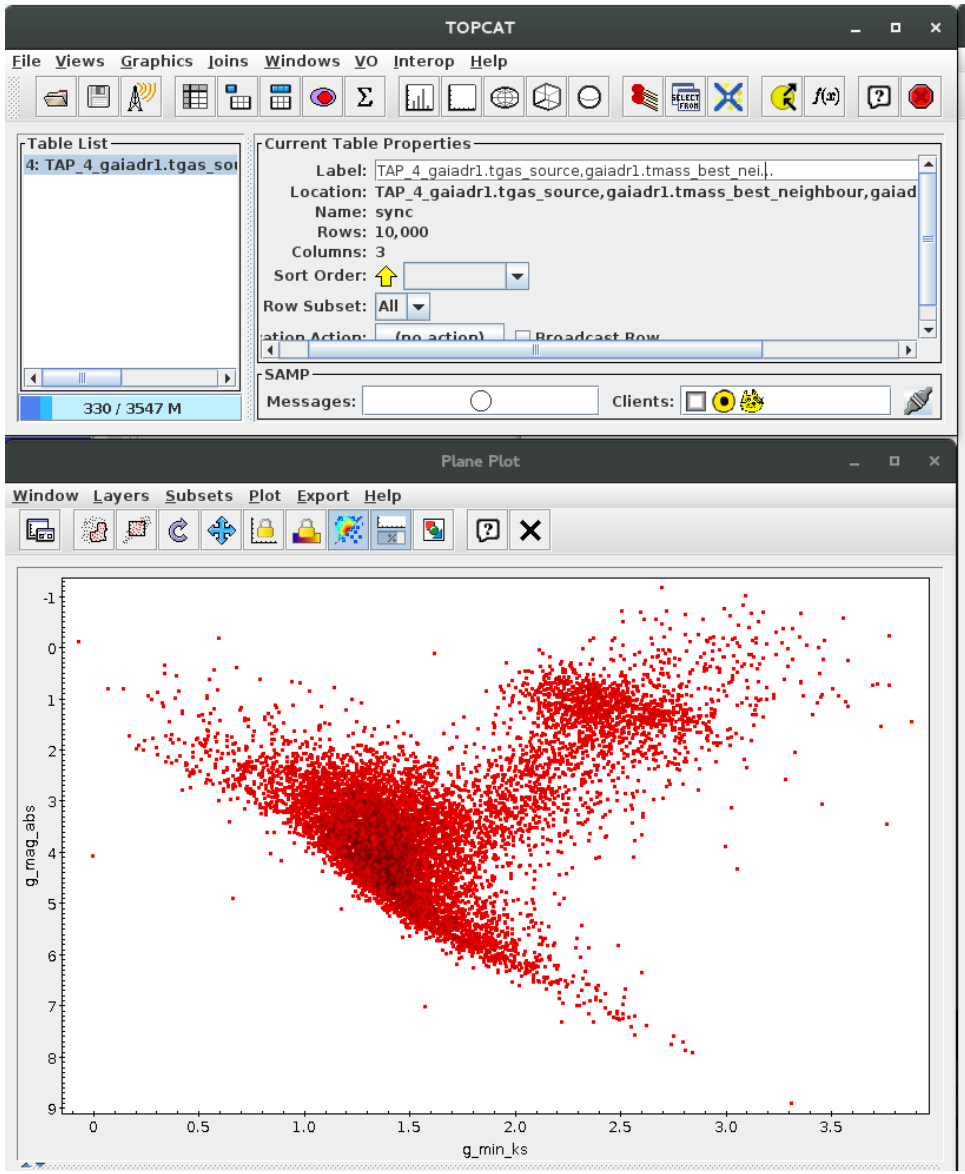

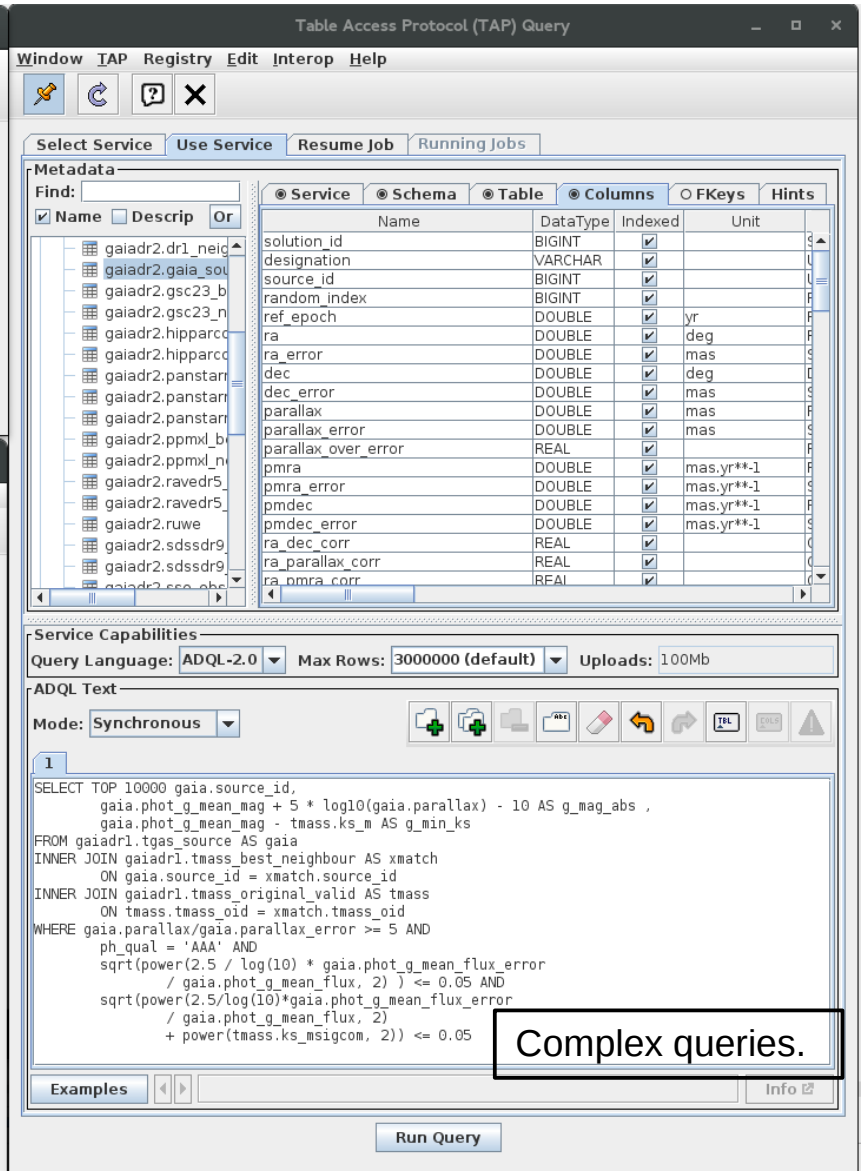

Complex queries.

The VO Schools

- >20 schools at national and european level since 2009. >500 participants

The school: Goals

- Goals:
  - Teach participants on how to efficiently use the VO tools for their own research.
  - Gather your feedback and requirements on VO tools and services.
- Methodology:
  - Tutorials based on real science cases.

The school: Schedule

Day 1. Monday 9 March

- 12:00 - 12:05 Welcome (Rainer?)
- 12:05 - 12:30 Introduction to the VO and the school (Enrique Solano)
- 12:30 - 13.30 Tutorial #1
  - Title: **Discovery of Brown Dwarfs mining the 2MASS and SDSS databases**
  - VO-tools: Aladin, TOPCAT
  - Tutor: Miriam Cortés
- 13:30 - 15:00 Lunch
- 15:00 - 15:45 Tutorial #1 (cont.)
- 15:45 - 16:45 Tutorial #2
  - Title: **Determination of stellar physical parameters using Clusterix and VOSA**
  - VO-tools: VOSA, Clusterix
  - Tutor: Enrique Solano
- 16:45 - 17:15 Coffee break
- 17:15 - 18:00 Tutorial #2 (cont.)

The school: Schedule

Day 2. Tuesday 10 March

- 09:30 - 11:15 Tutorial #3
  - Title: **Exploring Gaia data with TOPCAT and STILTS**
  - VO-tools: TOPCAT, STILTS
  - Tutor: Francisco Jiménez.
- 11:15 - 11:45 Coffee break
- 11:45 - 13:30 Tutorial #4
  - Title: **ADQL**
  - Tutor: Enrique Solano
- 13:30 - 15:00 Lunch
- 15:00 - 16:45 Tutorial #5
  - Title: **Advanced Aladin & TOPCAT**
  - Tutor: Miriam Cortés
- 16:45 - 17:15 Coffee break
- 17:15 - 18:15 Tutorial #6
  - Title: **Advanced VOSA**
  - Tutor: Enrique Solano

The school: Schedule

Day3. Wednesday 11 March

- 09:30 - 11:15 Participant's projects
- 11:15 - 11:45 Coffee break
- 11:45 - 12:15 Participant's projects (cont.)
- 12:15 - 13:00 Project presentations
- 13:00 - 13:30 Feedback and wrap up.

#SVOGranada2020