Standing Committee for Science Priorities (CSP) status

Interop meeting 10-12 November 2023

Ada Nebot for the CSP

ada.nebot@astro.unistra.fr

CENTRE DE DONNÉES ASTRONOMIQUES DE STRASBOURG

Observatoire astronomique de Strasbourg | ObAS

The CSP of the IVOA: who?

Who is the CSP?

- Members of the science community and active astronomy projects.

Members

- Members: Mark Allen, Christophe Arviset, Chenzhou Cui, Raffaele D'Abrusco, Vandana Desai, Gregory Dubois-Felsmann, Janet Evans, Pepi Fabbiano, Mark Lacy, Marco Molinaro, Kai Lars Polsterer, Enrique Solano
- New members: Rachana Bhatawdekar and Rosie Bolton
- Chairs: Ada Nebot (chair) & Francesca Civano (vice-chair)

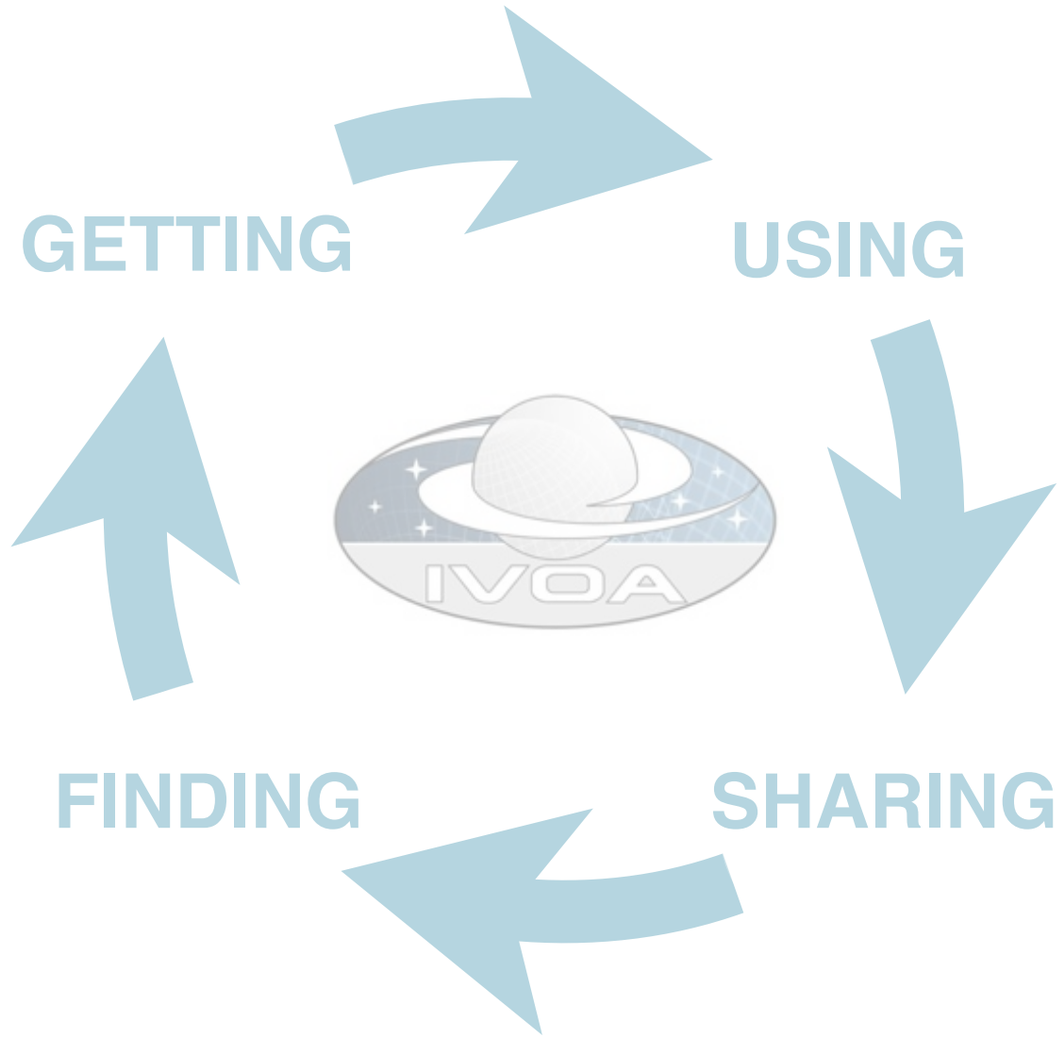
http://ivoa.net/twiki/bin/view/IVOA/IvoaSciencePriorities

The CSP of the IVOA: what?

What is the goal of the CSP?

- Sustain the scientific impact of the VO as an interoperable ecosystem to support science

- Ensure continuous engagement of the international astronomical community



Astronomy community

- The astronomy community comprises missions that are active or under development, operating observatories, astronomical archives, and teams of astronomers performing research and disseminating data products to the community.

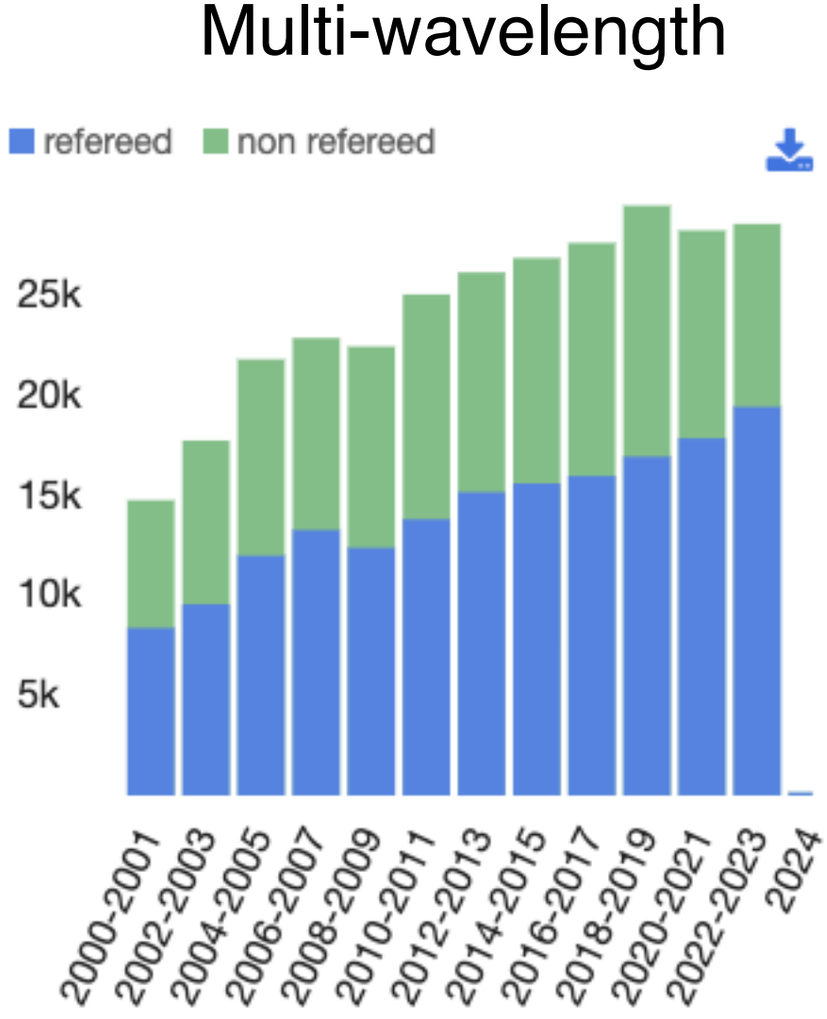
The CSP of the IVOA: why?

Clear benefits

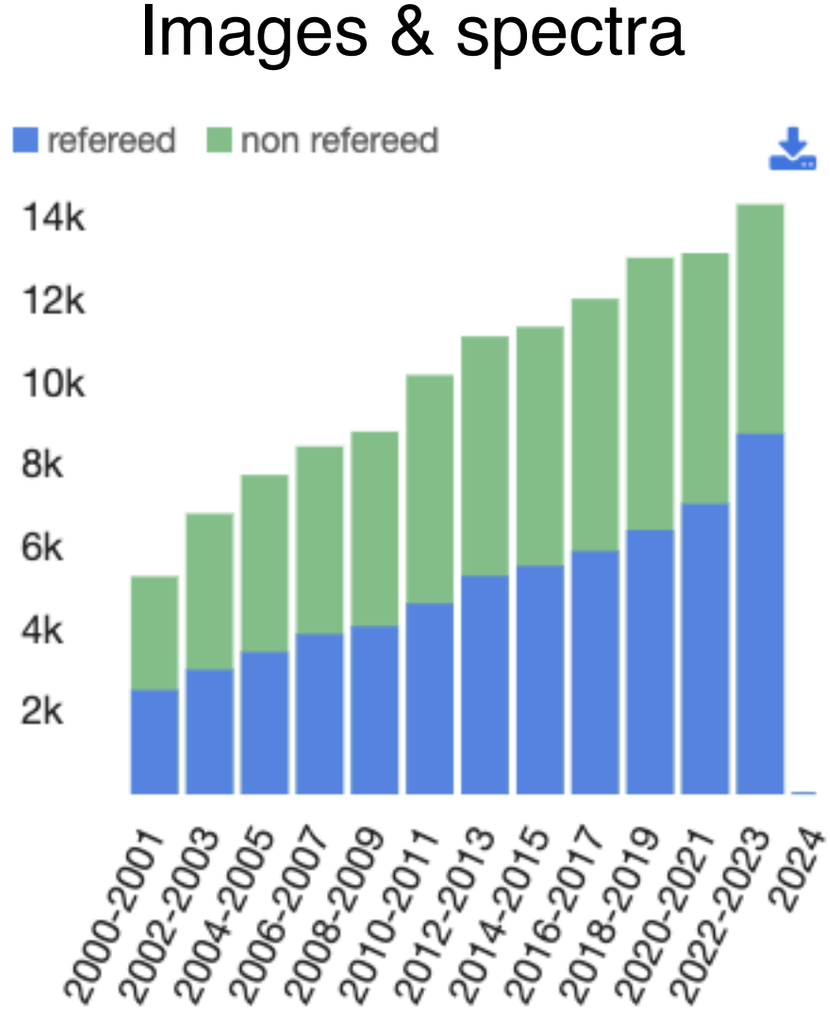
- Growth in the scientific return of data
- Capability to discover and fuse multiple data sets

- combination of different missions producing different data types

Multi-wavelength



Images & spectra



The CSP of the IVOA: how?

Recommend scientific priorities and scientific requirements

- Driven by scientific use cases that are developed in cooperation with the scientific community.
- Will drive the development of new protocols which will be developed by the IVOA and coordinated by the TCG

Scientific community → **Committee Scientific Priorities** → **Technical Coordination Group**

➡ Identify and transmit the needs of the community

The CSP of the IVOA: where and when?

A world wide continuous effort

- Encourages engagement, adoption and feedback of implementations of the international astronomical community
- Support VO members in developing tutorials, technical and scientific workshops and scientific training materials.

➡ Report back & forth

CSP important considerations

- Identify the current main science cases in the community
- Engage with large and small projects
- Ensure IVOA is building standards, tools and services responding to these science cases
- Ensure right balance for these standards
  - Not too generic, not too specific
  - Implementable standards, while not too simplistic
  - Need for new standards, or updating existing standards
  - Addressing new data types, new areas in astronomy

Accomplishments over last semester

- **Solar System Interest Group**
  - Discussions between IVOA SSIG and the IHDEA (International Heliophysics Data Environment Alliance).
  - Resource discovery:
    - How to reuse/inspire from IVOA recommendations to improve the IHDEA/SPASE registry?
    - Use of EPNTAP as a resource discovery interface?
  - Semantics:
    - Use the IVOA Semantics vocabularies as a common source of terms? (e.g.: reference frames)
  - Time Domain:
    - Improve VOEvent for storing heliophysics event?
    - Integrate HAPI* in IVOA framework?

      ➡ **TDIG session**
  - Access:
    - Push for more adoption of TAP

Accomplishments over last semester

- **High Energy**
  - Representatives of different missions from X-ray, gamma-ray and neutrino
  - Several meetings to discuss about common approaches to discover and present data
  - Notes https://wiki.ivoa.net/twiki/bin/view/IVOA/HEGroup
  - Next steps:
    - How do things fold into IVOA requirements?
    - Continue to meet to discuss IVOA protocols and how High Energy data fits in
    - Consider new Data models and/or extension to existing or developing standards
    - Consider formalizing group by spring Interop to HEIG IG
- All are welcome - send email to "heig@ivoa.net" to get on the mailing list !!

➡ **DM session**

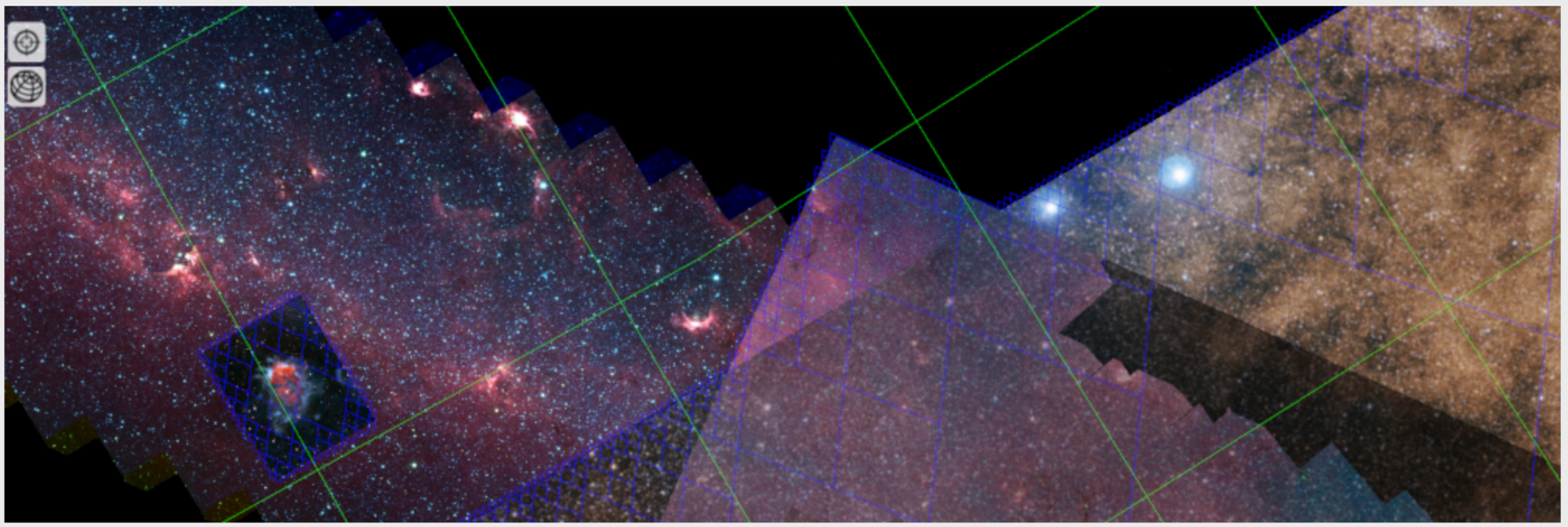
Accomplishments over last semester

- **And many more…**
  - Roadmap for Cone Search
    - ➡ Session on DAL (10 nov)
  - Obscore extensions for Radio data of
    - ➡ DM WG session
  - Active participation to conferences, workshops and VO schools!

eas 2023 Kraków

Special Session SS4 12 July 2023

Science with the Virtual Observatory: status, success cases, the future



THANKS

Can only be achieved with community engagement

We need you!

Thanks!!

Looking forward to a productive meeting!