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# Education and public outreach in the era of Big Data science

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With the development of many big science astronomical projects (CTA, EUCLID, FAST, GAIA, JWST, LSST, SKA, etc.) and large scale simulations, astronomy has become a **Big Data science**.

Astronomical data are a **very valuable resource for education and public outreach** (EPO), especially in the era of Internet and Cloud Computing.

- What is the value of astronomy data in EPO?
- What are advantages and benefits of data driven EPO?
- What are best practices of data driven EPO?

Astronomy is being fundamentally transformed by the Information and Computation Technology (ICT) revolution.

The new approaches to the data permits the **development of new tools, techniques and resources for astronomy EPO.**

- What are challenges facing data driven EPO?
- How to present astronomy to general public and schools with new technologies (es. VR)?
- There is the need for new software services and/or computing services for EPO uses?

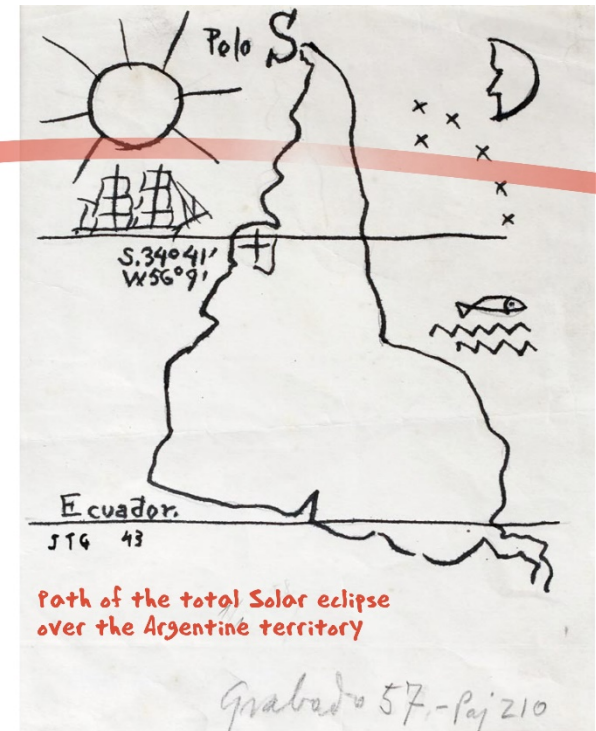


# Education and Heritage in the Era of Big Data in Astronomy

*The first steps on the IAU 2020–2030 Strategic Plan*

## Topics:

- State-of-the-art of astronomy education in countries/continents in the framework of the 2020-2030 IAU plan.
- Meta-analysis of astronomy education research on contents/school grade levels/focus on education cross studies.
- Literacy in Astronomy.
- Innovations in education methodologies and instrumentation.
- Research into the value and influence of astronomy education in other disciplines.
- Big Data in education and Open Astronomy.
- Astronomy as an interdisciplinary approach to science education in all levels.
- Inclusive education in Astronomy.
- Use of Astronomy Education Research experiments and results by teachers and in informal education activities (museum, planetarium, etc).
- Cultural Astronomy and heritage and education: from Stonehenge to the Space telescopes.



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