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News

A treasure trove of modern astronomy

Attendees to the course

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Astronomical archives worldwide store millions upon millions of observations and are the key to many discoveries. To help astronomers access and use this information efficiently, the Spanish Virtual Observatory (SVO), in the Centro de Astrobiología at ESAC, held a course on the subject between the 25-26 of November.

The comparison of sky regions observed at different wavelengths, the discovery of objects that suddenly change brightness, the comparison of images taken over various years; searching for variations or for objects that move in a characteristic way, are some of the tasks which, without comprehensive archives, simply cannot be addressed.

The Virtual Observatory (VO) is the international initiative that makes the seamless access to the huge amount of information hosted in astronomical archives possible. In addition to access, VO also provides tools to analyse this data and extract useful information.

The main objective of this training course was to expose participants to the most popular VO tools and services available today; enabling them to use them for their own research. During the course, VO experts guided participants in the usage of such tools through a series of real-life science cases.

ESAC is the Virtual Observatory node for all European space-based astronomy, and ensures that all the ESAC Astronomy Archives are accessible through the VO framework.

The Spanish Virtual Observatory was created in 2004 and is currently celebrating its tenth anniversary. It hosts the largest collection of Spanish astronomical data, including the archive of the Gran Telescopio Canarias (GTC), and plays a leading role in VO science projects at Spanish and European levels. It also makes a significant contribution to other International Virtual Observatory Alliance (IVAO) activities, developing data models, data access protocols, applications and tools.