

The ASTRI Data Management System

Wednesday, 7 October 2015 15:30 (20 minutes)

The Italian National Institute for Astrophysics (INAF) is leading the “Astrofisica con Specchia Tecnologia Replicante Italiana” (ASTRI) project, in the framework of the Cherenkov Telescope Array observatory. We recently inaugurated the first end-to-end prototype of a dual-mirror (2M) small-size telescope (SST) on Mt. Etna, in Sicily. This prototype will be followed by the ASTRI/CTA mini-array composed of nine SST-2M units to be installed at the final CTA southern site, being one of the CTA precursors. The ASTRI SST-2M prototype includes the complete data handling and data archiving chains, from the proposal handling to the data acquisition and from the data reduction up to the delivery of the final scientific products. A data archive and a dedicated data reduction and analysis software are now under development within the ASTRI Project following a typical approach of an open astronomical observatory. The ASTRI data management system is presented here. The focus is given to the various adopted solutions and software subsystems currently in development for the support of the ASTRI SST-2M and the ASTRI/CTA mini-array science operations such as: proposal preparation and submission; observation scheduling (Scheduler); data archive (Archive); data reduction pipelines, data analysis suites. Additional user support systems (science operations, web pages, user portal, etc.) are also outlined.

Presenter: ANTONELLI, Lucio angelo