



The astrophysics community in Enabling Grids for E-scienceE (EGEE) is growing, both in terms of astronomical research groups and related applications. Two astrophysical applications have been supported by EGEE since 2004: Planck and Magic. In early 2007 these applications received their own “cluster” or dedicated bunch of computers.

The European Space Agency's **Planck** satellite mission will study relic radiation from the Big Bang. It will map the background radiation from this event, detectable today as microwaves. It will survey the sky with an unprecedented level of coverage, accuracy, stability and sensitivity.

One of the primary issues for the centres that process data from Planck is to define, design and run a complete simulation of the Planck mission to test the data analysis pipelines. The simulation software must mimic the Planck observing procedure and any source of systematic effect. Moreover, it must cover all the aspects of the microwave sky. The simulation pipeline is a fundamental test for the whole analysis infrastructure. It is the main tool to set the hardware requirements for the data processing computations and is therefore crucial to the Planck mission.

MAGIC, an imaging atmospheric Cherenkov telescope located on the Canary Islands, La Palma, is used for astro-particle physics research and measures characteristics of atmospheric showers indicated by very high energy (VHE) electromagnetic particles, particularly gamma rays, hitting the upper atmosphere. Analysis of the data requires extensive simulation of VHE particles creating showers in the atmosphere. The first data challenge on the EGEE infrastructure began in March 2005.

With the creation of the astrophysical applications cluster in Enabling Grids for E-scienceE, many astronomical institutes joined the cluster and each institute brought new applications and use-cases. Now the astrophysical applications cluster counts a total of 14 partner institutions and 22 candidate applications to be ported to EGEE.

Application webpages

EGEE is keen to consider other applications. For further information on how to participate see <http://technical.eu-egee.org/index.php?id=392>. More information about the applications running on EGEE be found on the EGEE website at <http://technical.eu-egee.org/index.php?id=148>.

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