

Europe's largest solar telescope opens in Canary Islands

May 21 2012



A man stands atop the German Solar Telescope GREGOR on the Spanish Canary island of Tenerife. A powerful solar telescope billed as the largest in Europe opened Monday on Spain's Canary Islands which scientists say will allow them to study the sun in unprecedented detail.

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With a mirror diameter of 1.5 metres (4.9 feet), the Gregor telescope will be able to show structures on the sun on scales as small as 70 kilometres (43.5 miles), the Astrophysical Institute of the Canary Islands said in a statement.

The telescope was built on the island of Tenerife at a cost of 12.85

million euros (\$16.4 million) by a German consortium led by the Kiepenheuer Institute for [Solar Physics](#) in Freiburg which covered the majority of the expense.

"Its advanced technology will allow the scientific community -- Spanish, German and international -- to study the sun in an unprecedented level of detail," the statement said.

In addition to the large diameter of its mirror, the telescope features a retractable roof that prevents [air turbulence](#) in its [optical path](#) which allows it to deliver "images of a sharpness that up until now no terrestrial solar telescope has ever obtained."

The [solar telescope](#) is the largest in Europe and the third largest in the world, the institute said.

"Gregor was built mainly to study [physical processes](#) on the surface of the sun," said Oskar von der Luhe, the director of the Kiepenheuer Institute.

"In these layers we see how energy from its interior emerges and then is launched into space, and on some occasions, reaches the Earth," he added.

Named after 17th century Scottish mathematician and astronomer James Gregory, the telescope will be used at night to observe stars.

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Citation: Europe's largest solar telescope opens in Canary Islands (2012, May 21) retrieved 21 September 2024 from <https://phys.org/news/2012-05-europe-largest-solar-telescope-canary.html>

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