

## NEXT POLISH SATELLITE IN SPACE

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**The Polish “Hevelius” satellite appears in the Earth’s orbit. It has been launched by the Long March 4B rocket from the Chinese space centre to the height of over 600 km.**

“Hevelius” was to be launched in December 2013, one month after the launch of the first Polish scientific satellite “Lem”. However, the failures of the carrier rocket had caused that the launch of “Hevelius” spacecraft was postponed at various times. As a result, the satellite was launched 19<sup>th</sup> August, 2014, at 5:15 Polish time.

Its main task, like in the case of five other objects belonging to the Brite constellation, is to observe and take photos of the stars. Placed at the height of 800 km, for few years they will perform precise brightness measurements of the 286 brightest stars. This is to help the scientists in their researches on the processes inside these unique objects. The Brite satellites are the first such small devices that have their scientific task.

Designed in the Space Research Centre, the „Hevelius” satellite belongs to the group of nanosatellites, that is the objects of very small size. The satellite is in the shape of cube with a side 20 cm long and it weighs less than 7 kg. The advanced technology solutions designed by the Polish scientists are applied to its construction.

The "Hevelius" satellite differs from the other satellites of the BRITE constellation in few relevant details. The telescope designed in the Space Research Centre and some experimental devices, which have been designed for the future space missions by the designing engineers of the Space Research Centre are applied to the satellite. The experimental devices include, among others, the anti-radiation cover that protects the photosensitive telescope matrix from harmful cosmic radiation. It has been designed in cooperation with scientists of the Silesian University of Technology in Gliwice, the National Centre for Nuclear Research in Swierk and the Institute of Nuclear Physics in Cracow. The small antenna boom and mechanism for securing and releasing the satellite constitute another example of the experimental solutions.