

About the WorldView Constellation

What

Part of ESA's Third Party Missions Programme (TPM) since 2015, **the WorldView constellation consists of five very high resolution optical satellites** owned by US space technology firm Maxar Technologies and locally tasked in Europe by German data supplier European Space Imaging

The missions

Launched in



The constellation consists of **five sun-synchronous orbit missions**, WorldView-1, GeoEye-1, WorldView-2, WorldView-3 and WorldView-4. Although the mission has a different name, GeoEye-1 is a key part of WorldView, being the constellation's first mission to carry a multispectral sensor. The first four missions of the constellation are currently active

Coverage

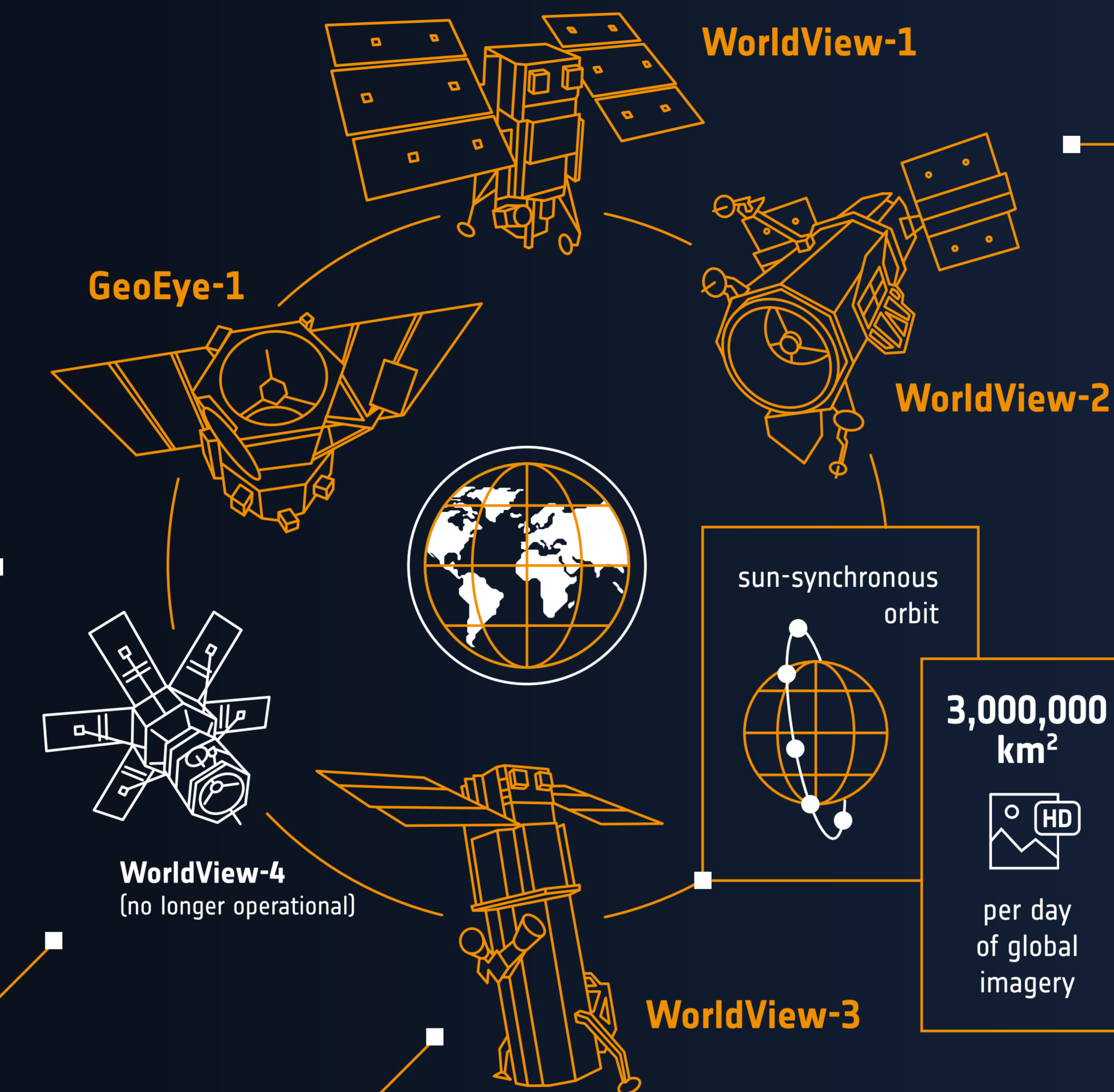
The four active satellites in the constellation collect more than **three million square km per day of global imagery**. They have a revisit rate as low as one day

Data and users

ESA's TPM programme distributes the constellation's data to users for **free, for research purposes**

WorldView 1-4 data: earth.esa.int/eogateway/search?text=&category=Data&filter=worldview&subFilter=data%20description

GeoEye-1 data: earth.esa.int/eogateway/catalog/geoeye-1-full-archive-and-tasking



Objective

The overall aims of the WorldView constellation are to meet the growing commercial demand for very high-resolution satellite imagery and to support large mapping projects

Capability

While each satellite in the constellation has differing capabilities, as a whole they offer pansharpended 8-band multispectral imagery of 30-50 cm resolution and up to 8-band short-wave infrared imagery of 3.7 m resolution with a geolocational accuracy of 3-5 m without ground control points. A proprietary intelligent high definition processing algorithm is also used to deliver multispectral imagery at resolutions up to 15 cm HD imagery

- 30-50 cm**
pansharpended 8-band multispectral
- 3.7 m**
up to 8-band short-wave infrared
- 15 cm**
HD imagery

Applications

WorldView data have applications across a wide variety of industries, including:



- Agriculture & forestry
- Oil and gas
- Mining
- Environmental management
- Defence & security
- Maritime
- Emergency response
- Urban development