

European Spaceport, Kourou, French Guiana



Aerial view of the Ariane 5 launch pad and surrounding buildings at the European Spaceport in Kourou, French Guiana. (Image: ESA)

The ATV will be launched from the European Spaceport in French Guiana. It covers an area of 750 km² and is surrounded on two sides by equatorial forest. To the east it has a 50 km coastline bordering the Atlantic Ocean and to the south lies the town of Kourou.

In 1964 the French Government chose Kourou, from 14 other sites, as a base from which to launch its satellites. When the European Space Agency came into being in 1975, the French Government offered to share the site with ESA. For its part, ESA approved funding to upgrade the launch facilities at the site to prepare the Spaceport for the Ariane launchers under development.

Since then, ESA has continued to fund two thirds of the Spaceport's annual budget to finance the operations and services and also finances new facilities to accommodate new launchers such as Vega or for the exploitation of Soyuz. To date, ESA has invested more than €1.6 billion in improving and developing the ground facilities at Europe's Spaceport and owns the special infrastructure built for the Ariane launchers.

Kourou lies at latitude 5°3', just over 500 km north of the equator. Its nearness to the equator makes

it ideally placed for launches into geostationary transfer orbit as few changes have to be made to a satellite's trajectory.

Launchers also profit from the 'slingshot' effect created by the speed of the Earth's rotation around the axis of the Poles. This increases the speed of a launcher by 460 m per second. These important factors save fuel and money, and prolong the active life of satellites.

Thanks to its geographical position, Europe's Spaceport offers a launch angle of 102°, enabling a wide range of missions from east to north. In fact, Europe's Spaceport is so well placed that it can carry out all possible space missions.

Safety is equally important. French Guiana is scarcely populated and 90% of the country is covered by equatorial forests. In addition there is no risk of cyclones or earthquakes.

The high levels of efficiency, safety and reliability at Europe's Spaceport are well known. In addition to its many European clients, the spaceport also undertakes launches for industries in the United States, Japan, Canada, India and Brazil.