





Upland agricultural and natural landscape of Réunion Island.

Réunion FRANCE

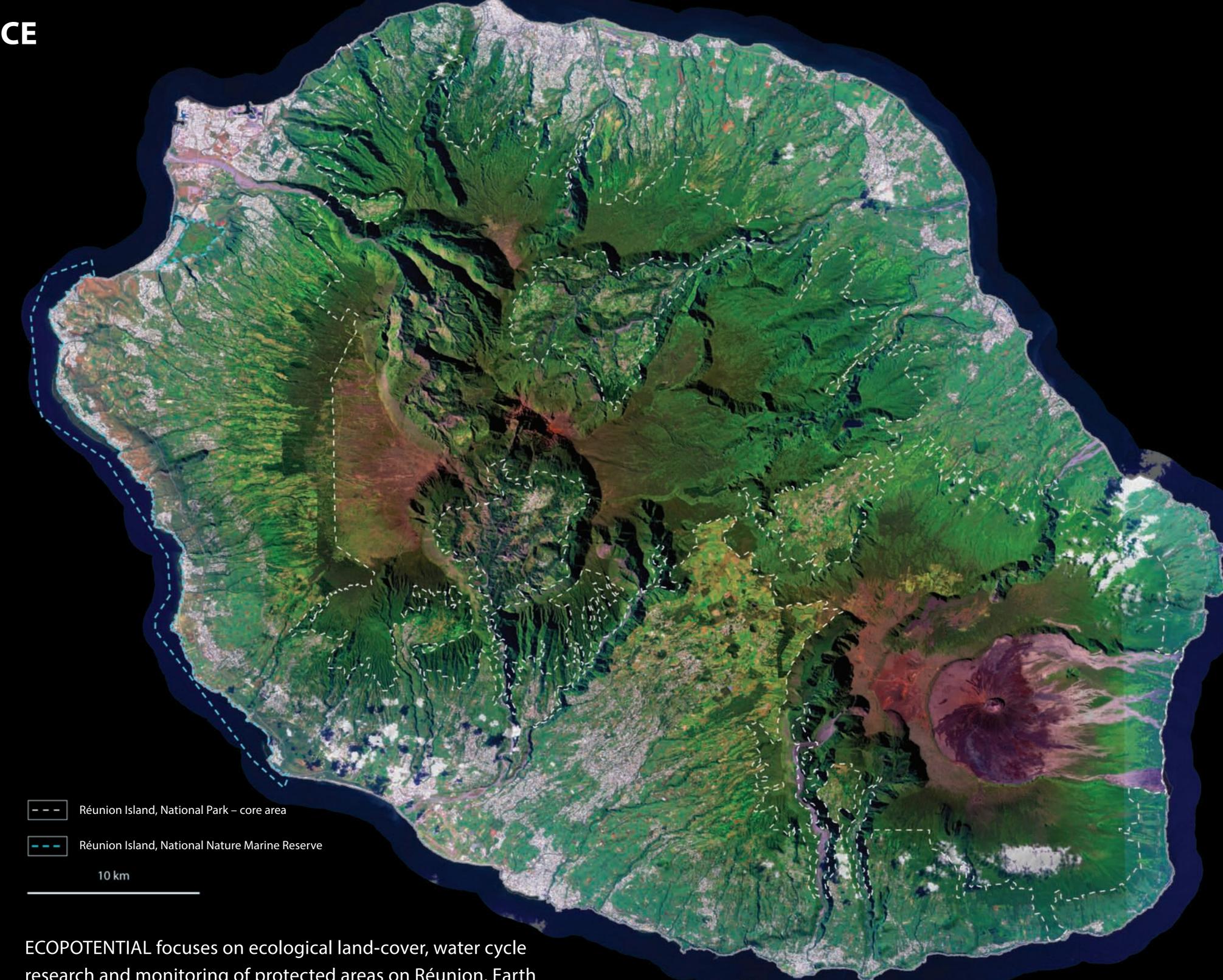
The volcanic island of Réunion is a French overseas department located in the warm Indian Ocean, east of Madagascar. It is home to one of the most active volcanoes in the world, Piton de la Fournaise, a UNESCO World Heritage Site since 2010.

The cycle of rock creation and destruction is very evident on Réunion, and starts when new rocks are formed by volcanic activity. Over time the lava fields are colonized by plants, the roots breaking up the rocks and together with rain, wind and sunshine starting the process of erosion. This cycle constantly modifies the landscape, creating and taking away niches for species to colonize.

This pronounced and iconic topography, which reaches up to 3,070 meters above sea level, therefore supports a variety of ecosystems with very high biodiversity. From the summit regions with sub-alpine shrubland and lush forests along their slopes, the land drops to coastal lowlands, where cultivated land and urban areas are found. Marine habitats include coral reefs, rocky coasts and soft bottom sediments are found around the island.

The arrival of humans on the island 350 years ago led to the massive extinction of local biodiversity and the introduction of non-native species, which continue to transform native habitats. Over the last three decades, La Réunion has experienced rapid land-use changes and intensification of human activities, fuelled by population growth and economic development.

Today, about half of the 230 native (endemic) species are endangered. To protect them and the ecosystems in which they live, the Réunion National Park covers about 42 per cent of the island, concentrated in the mountainous interior. Most of the fringing coral reefs located along the western and southern coast are protected within the Réserve Naturelle Nationale Marine de La Réunion.



ECOPOTENTIAL focuses on ecological land-cover, water cycle research and monitoring of protected areas on Réunion. Earth Observation allows scientists to map the ecosystems on the volcanoes, the land-use changes and how this influences ecosystem services. The results will inform terrestrial and marine spatial planning decision-making to maintain Réunion's unique beauty and the quality of human life for generations to come.

From the active volcano and a summit peak at 3070 metres above sea level, down to the coral reefs along the urban west coast, Réunion Island supports a high diversity of natural and anthropogenic landscapes.

Spot 6 image acquired on 08 April 2016 – Reunion island © Kalideos databases – CNES, distribution Airbus D.S. All rights reserved.



Volcanic activity.





Coral reef lagoon on the west coast of Réunion Island.

Humpback whale breaching off Réunion Island's west coast.





