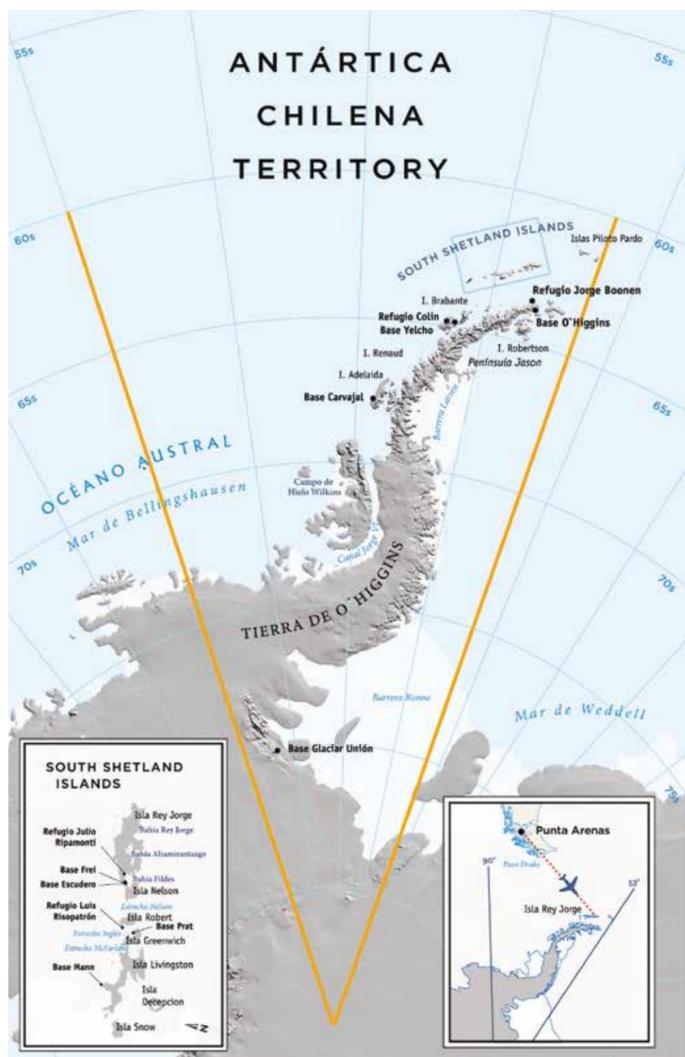
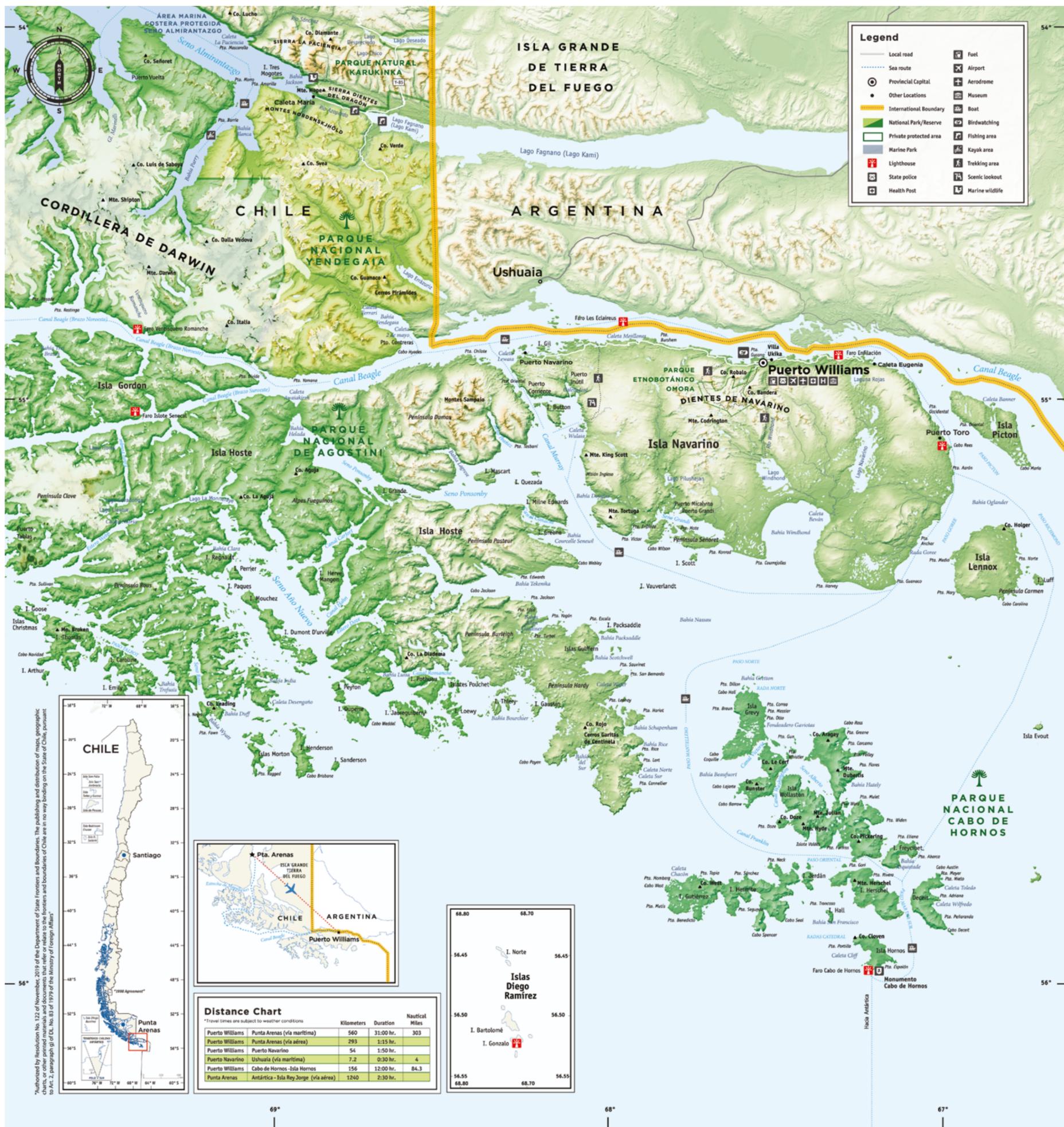


# ANTÁRTICA CHILENA PROVINCE

MAGALLANES AND ANTÁRTICA CHILENA REGION



## Antártica

*The last continent on Earth to be discovered.*

The Antártica Chilena is located about 1,000 km south of Punta Arenas and covers an area of 1,250,000 km<sup>2</sup>, with a very fragmented coastline. Chilean sovereignty in Antarctica is ensured by the existence of numerous bases and shelters, where families are dedicated to scientific research life. Antarctic ice floats on the purest waters in the world and moves along the entire coast of the Chilean Patagonia. Here, the blue whale coexists with the krill, the king penguin with the petrels. These icy currents, which rule the air and the sea, have isolated this remarkable fauna from threats and extinctions. A place to admire and explore, dedicated to science, and that increasingly attracts visitors, who must follow rigorous standards to preserve its pure state of conservation.

**DID YOU KNOW?** Antarctica is the coldest, least polluted, and driest continent in the world, with an average annual rainfall of 166 mm. Katabatic winds can reach speeds of more than 300 kilometers per hour. In August 2010, the lowest temperature was recorded, based on satellite data: -93 °C, in the Argus dome on the highest point of the Antarctic plateau.

**LIVING IN ANTARCTICA.** Peninsula Fildes on Isla Rey Jorge has the highest concentration of research bases and stations in Antarctica. The Chilean population center Villa Las Estrellas and other national bases share space with Argentine, Uruguayan, Russian, and Chinese facilities, in keeping with cooperation and peace agreements. This is one of the continent's most important tourist

## AN ANTARCTICA WITH FORESTS?

For most of its history, Antarctica was a green continent, full of life, similar to what one sees today in southern Chile. Warm temperatures were the result of a natural greenhouse phenomenon. However, about 28 million years ago, the continent began to become isolated and cool down. First, in the inner mountains, then in the valleys and coasts, until the trees could no longer survive. For 50 million years, the planet's climate has been in constant change, thanks to the deterioration caused by the greenhouse effect, the permanent glaciation of East Antarctica, and the appearance of the Antarctic Circumpolar Current, which is believed to have served as a thermal insulator for Antarctica. Today, the new global warming phenomenon is reversing the continent's permafrost in certain areas. The rise in temperature has weakened some of the glaciers formed over millions of years. Since the 1950s, average annual temperatures have increased by almost 2.5°C, much faster than in the rest of the planet, and winds have warmed about 5°C. This is why nowadays, as opposed to the previous seven decades, sea ice only forms for four months of the year.

## BIOLOGICAL DIVERSITY

Thanks to complex interactions, the vast majority of animal and plant species are only able to survive on the edges of the southern continent, where they have access to ice-free land, the nutrients provided by the sea, and access to migration routes to warmer areas. As a result, many of these organisms coexist in relatively small spaces, which sometimes force them to collaborate, and sometimes to compete for food. The persistence of these interactions over millions of years has allowed for the formation of fragile equilibria to survive in such harsh conditions. **FISH.** Having arrived millions of years ago from warmer waters, today there are hundreds of Antarctic species that are endemic to the continent, in all manner of shapes, sizes, and colors, yet always adapted to the cold and the darkness. Antarctic fish are one of the many mysteries that Antarctica has yet to reveal. **ZOOPLANKTON.** Antarctic krill is the most common species in the ocean and the key to the survival of the ecosystem. **WHALES.** Whales take advantage of the abundance of Antarctic marine life to feed during their migratory routes—blue whales, humpback whales, southern right whales, fin whales, Antarctic minke whales, and orcas.



**OTHER DOLPHINS.** Hourglass dolphin, southern right whale dolphin, spectacled porpoise, sperm whale, and beaked whales. **MICROORGANISMS.** A universe of microscopic creatures survives in Antarctica, dwelling close to the few possible resources: the sea, land, plants, and animals and their waste. **BIRDS CAPABLE OF FLIGHT.** They make long journeys to Antarctica to nest and hunt. In addition to penguins, members of the albatross and petrel, cormorant, sheathbill, skua, and seagull families appear at different times of the year. **PLANTS, LICHENS, MOSSES, FUNGI, AND ALGAE.** Despite being a decidedly inhospitable environment for most of the plant species on Earth, some have managed to survive and thrive both on land without ice or snow and in water, and even in the Southern Ocean. **SEALS AND SEA LIONS.** Capable of inhabiting both land and sea, these mammals rest, mate, and breed on the beaches of the mainland and islands.

**ERNEST SHACKLETON (1874-1922).** British explorer famous for his Antarctic adventure as commander of the *Endurance*, who in 1914 entered the white continent with the intention of traveling from coast to coast through the South Pole. After five months, Shackleton and his crew were trapped in the ice. Nine months later, the pressure of the ice shattered the ship, leaving the crew stranded on a drifting iceberg for five months. They escaped in their lifeboats and, after five terrible days of travel, reached Isla Elefante. From there, Shackleton and five volunteers crossed 1,360 kilometers of rough sea aboard a small boat to get help. After three failed international rescue attempts, the stoic Chilean sailor Luis Alberto Pardo Villalón, commanding the Chilean Navy's cutter *Yelcho*, achieved the rescue. Amazingly, all the men survived, and much of this epic was immortalized in the photographs taken by a crew member, Frank Hurley.

**Literature:** SOUTH: The Illustrated Story of Shackleton's Last Expedition, Ernest Henry, Shackleton

