



Research the Icy Land

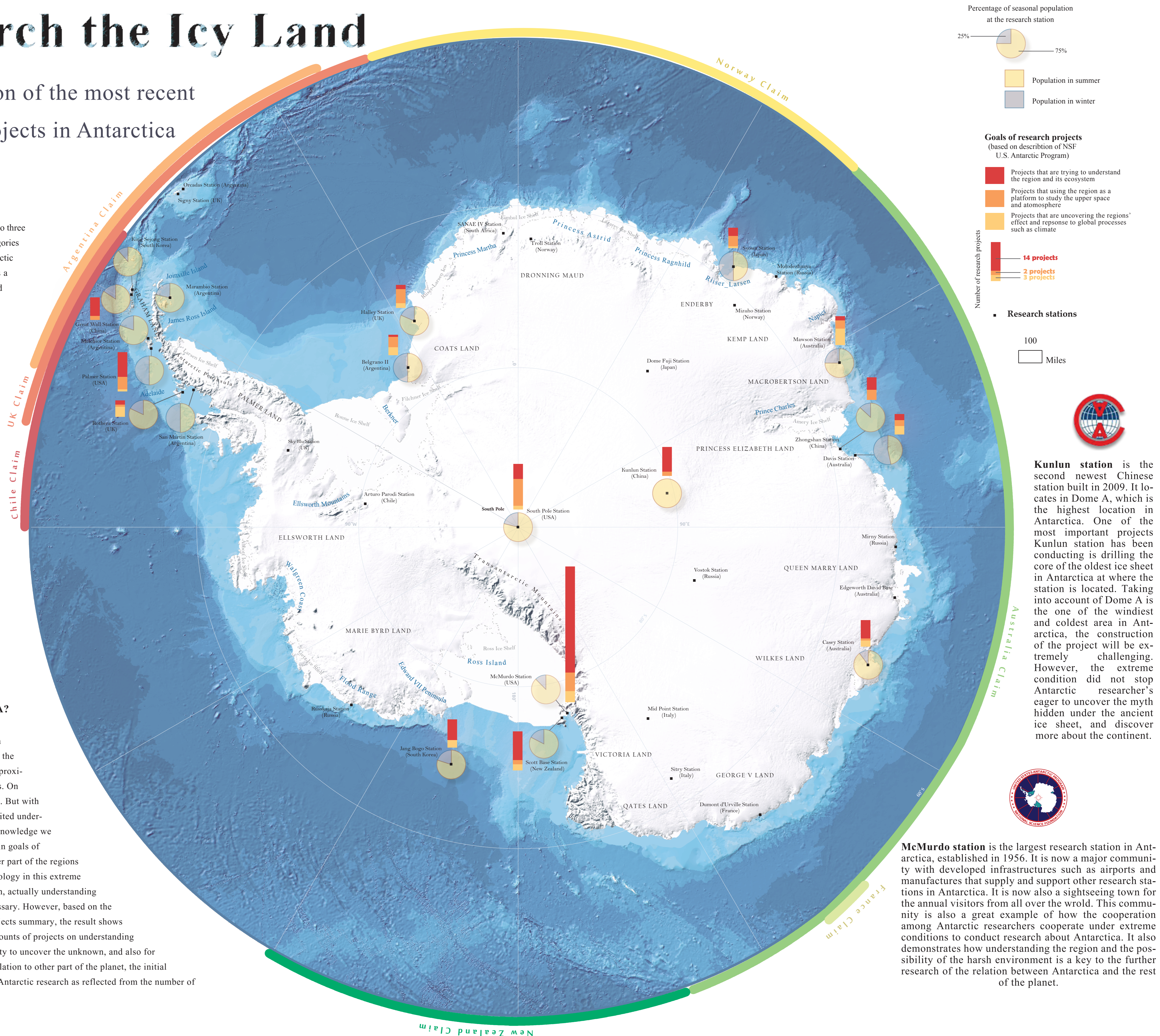
A categorization of the most recent research projects in Antarctica

BASIS OF THE CATEGORIZATION

This map categorizes the most recent research projects into three groups based on the goals of the projects. The three categories are: projects that are developed to understand the Antarctic region and its ecosystems, projects that use the region as a platform to study the upper atmosphere and space, and projects that are uncovering Antarctica's effects on (and responses to) global processes such as climate. The goals are based on National Science Foundation's explanation about the United States Antarctic Program. Information about the projects and population at the research station are found on each country's Antarctic program website. The categorization is based on the reviewing the title and overview of the projects listed.

WHY RESEARCHING THE ANTARCTICA?

Antarctica has only been discovered around 200 years ago, but this continent has been formed for 250 million years. This region has the most hostile environment on the planet: its lowest temperature reached -129°F , and approximately 98% of the region is covered by thick ice sheets. On average, it's also the windiest and driest place on earth. But with less than 150 years of exploration history, we have limited understanding of this continent comparing to the extensive knowledge we have on other continents. Some people say that the main goals of researching this hostile environment are to benefit other part of the regions by monitoring the climate change or testing new technology in this extreme environment, since no one will live here in the long run, actually understanding the geography, geology, or ecosystem is not very necessary. However, based on the literature review of 12 Antarctic research stations' projects summary, the result shows that most research stations in Antarctica have most amounts of projects on understanding the Antarctic region. Because, driven by strong curiosity to uncover the unknown, and also for further understanding of the role Antarctica plays in relation to other part of the planet, the initial step to understand the region is still the main trend of Antarctic research as reflected from the number of projects developed.



Kunlun station is the second newest Chinese station built in 2009. It locates in Dome A, which is the highest location in Antarctica. One of the most important projects Kunlun station has been conducting is drilling the core of the oldest ice sheet in Antarctica at where the station is located. Taking into account of Dome A is the one of the windiest and coldest area in Antarctica, the construction of the project will be extremely challenging. However, the extreme condition did not stop Antarctic researcher's eager to uncover the myth hidden under the ancient ice sheet, and discover more about the continent.

McMurdo station is the largest research station in Antarctica, established in 1956. It is now a major community with developed infrastructures such as airports and manufactures that supply and support other research stations in Antarctica. It is now also a sightseeing town for the annual visitors from all over the world. This community is also a great example of how the cooperation among Antarctic researchers cooperate under extreme conditions to conduct research about Antarctica. It also demonstrates how understanding the region and the possibility of the harsh environment is a key to the further research of the relation between Antarctica and the rest of the planet.