

Claire Gegout (MS '08, Kirchhoff) is currently on a one-year assignment as a scientist at the French Antarctic station, Dumont D'Urville (DDU), named for the French explorer who first set foot first on that location in Antarctica. Claire reports things are going well there, but they are starting to enter the Antarctic winter with temperatures plummeting and the days getting shorter and shorter. At DDU, she works as an atmospheric chemist and glaciologist- a chemist that studies the ice. Every day she takes samples of air at several places around the station, and analyses them to look for specific molecules of interest to the home laboratory in France. They are interested in mostly sulfur compounds such as DMS and its oxidized form DMSO. These species play an important part in various atmospheric mechanisms, and understanding its seasonal variations and degradation is very interesting, especially as these type of compounds participate in global warming. They also check for various ions in the atmosphere, such as Cl^- , NO_3^- , and SO_4^- . A small part of her job is also to hike to the continent (DDU is an island, a mile from the continent) to study the accumulation of snow and ice on the Antarctic coast. She checks a network of 150 beacons to gather data that will help create a model to predict the evolution of ice mass in this zone. Claire sent us these photos of the scenario near her temporary Antarctic home.

