

ON OCTOBER 12, 2009, NASA LAUNCHES OPERATION ICE BRIDGE, A 158-FOOT LONG DC-8 AIRPLANE LABORATORY CONTAINING INSTRUMENTS TO MAP CHANGES IN SEA ICE AND ICE SHEETS DURING UP TO 17 FLIGHTS OVER WESTERN ANTARCTICA, THE ANTARCTIC PENINSULA, AND COASTAL AREAS; ITS DATA WILL ALSO PROVIDE INSIGHT INTO THE SHAPE OF THE TERRAIN BELOW THE ICE, SOMETHING NOT EASILY OBSERVABLE BY SATELLITES IN ORBIT

The airplane will make its 17 round-trip flights over Antarctica from Punta Arenas, Chile, where it will be based until mid-November. Each flight lasts 11 hours, two-thirds of which is the travel time to and from the continent. Since 2003, NASA has relied on the Ice, Cloud and Land Elevation Satellite (ICESat) and its precise laser altimeter to collect data on ice sheet elevation and sea ice thickness. It will soon be out of commission, however, and Operation Ice Bridge will help continue researching and monitoring until ICESat II is launched in 2014. Instruments aboard the airborne laboratory include the Airborne Topographic Mapper (ATM), the Multichannel Coherent Radar Depth Sounder, and the Laser Vegetation Imaging Sensor.

LB2009

