



Oceanographic analysis of insitu temperature data from 100 marine mammals in the North West Atlantic in 2004: applications to ocean forecasting

F.J.M. Davidson, G. Stenson, M. Hammil and W.D. Bowen

Fisheries and Oceans Canada (davidsonf@dfo-mpo.gc.ca)

The Canadian East Coast Marine Mammal Program put out roughly 100 seal tags in 2004 on Harp, Hood and Grey Seals as well as some Belugas. The animals traveled all over the east coast of Canada including the shelves, the Labrador Sea, East and West Greenland, the Canadian Archipelago and Baffin Bay. These temperature profiling tags are linked by the Argos Satellite transmission system to relay in-situ temperature profiles in real time. The talk focuses on an over view of the data set collected, an analysis of the 55,000 temperature profiles collected in 2004 and the 10,000 temperature profiles collected in 2005. The talk then delves into the applicability of the animal tags to ocean forecasting systems for eastern Canadian Waters including the Newfoundland Operational Ocean Forecasting system, a regional initiative in the European MERSEA project.