The ESASSI-08 cruise in the South Scotia Ridge region: preliminary analysis of hydrodynamic and biogeochemical data.

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The ESASSI-08 oceanographic cruise to be carried out in January 2008 is a major
milestone of ESASSI, a 3-year project funded by the Spanish Polar Program. ESASSI
is the Spanish component of SASSI, a core project of the International Polar Year
devoted to study the water and heat shelf-slope exchanges in different locations of
Antarctica. SASSI has been promoted by IAnZone (a consortium of physical oceanography
groups working in Antarctica) and involves up to 13 countries. The objectives
of the ESASSI project are: i) to determine the path of the Antarctic Slope Front (ASF)
in the South Scotia Ridge region, and ii) to study the outflow of dense, ventilated water
from the Weddell Sea into the South Scotia Sea. Both issues remain unclear due
to the complex bathymetry in between the South Shetland Is. and the South Orkney
Is. The ESASSI-08 cruise has been planned in the form of different sections across
the shelf covering different key locations of the study region. Each of these sections
covers from shelf waters (200 m) to open sea (3000 m). In this presentation we intend
to show a preliminary analysis of the major hydrodynamic variables (T, S, velocity)
and biogeochemical parameters (including CFCs and oxygen isotopes).