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Preliminary data on sedimentological features of sediments in the eastern Ross Sea.

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Recent literature on antarctic sediments has set a model for sediment deposition in the Ross Sea during and post LGM. Sediment features has been connected to WAIS and EAIS glacial evolution. Data set (High resolution seismic profiles, gravity and piston cores) is rich, complete for the western Ross Sea, more scanty for central and eastern part.

During 2001-2002 PNRA cruise 19 gravity core were collected in eastern Ross Sea, in a basin located between Hayes Bank and Houtz Bank (173° - 165° W).

In this note we show preliminary data on 7 cores: magnetic susceptibility, physical properties (water content and pocket penetrometer tests), grain size and micropaleontological content. These data, as well as x-ray radiograph and visual description of sediment characteristics and sedimentary structure, allowed to sketch the lithostratigraphy of sediments.

First results show a prevalence of muddy sediments and soft diamicton. The diamicton is almost barren, whilst silica remains and foraminifera occur only in the uppermost levels.

These results confirm a sensible difference between sedimentation pattern in Western and central Eastern Ross sea and consequently a different model in glacial retreat.