The Chla level in the wake of a giant iceberg remains elevated for more than a month.

The spread of the enhanced production can be up to 1000 km and the enhancement an order of magnitude.

Relative to the undisturbed background, up to 0.012-0.04 Gt C sequestered in the deep Southern Ocean annually by giant icebergs.

10-20% of estimated Southern Ocean total C export.
Icebergs and the Carbon Cycle

• Remote sensing to determine properties and production – visual, SAR, altimetry
• Shipboard sampling near icebergs
• Modelling to determine density and contribution to ocean biogeochemistry