

## ***Interactive comment on “Rapid decline of Arctic sea ice volume: Causes and consequences” by Jean-Claude Gascard et al.***

**Gascard**

jga@locean-ipsl.upmc.fr

Received and published: 20 January 2019

As a matter of fact according to GRACE (Gravity Recovery and Climate Experiment) mounted on board a NASA satellite launched in 2002, the Greenland Ice sheet has lost 3600 Gigatonnes of ice between 2002 and 2016. That represents 280 Gigatonnes of ice per year on average (1 gigatonne of ice is equivalent to 1 km<sup>3</sup> of water). It is fascinating to realize that the Arctic Ocean has lost about the same quantity of sea ice than the Greenland ice sheet during the same time period despite the fact the Greenland ice sheet volume is 2 orders of magnitude larger and 3 orders of magnitude thicker than the Arctic sea ice.

---

Interactive comment on The Cryosphere Discuss., https://doi.org/10.5194/tc-2019-2, 2019.

Printer-friendly version

Discussion paper

