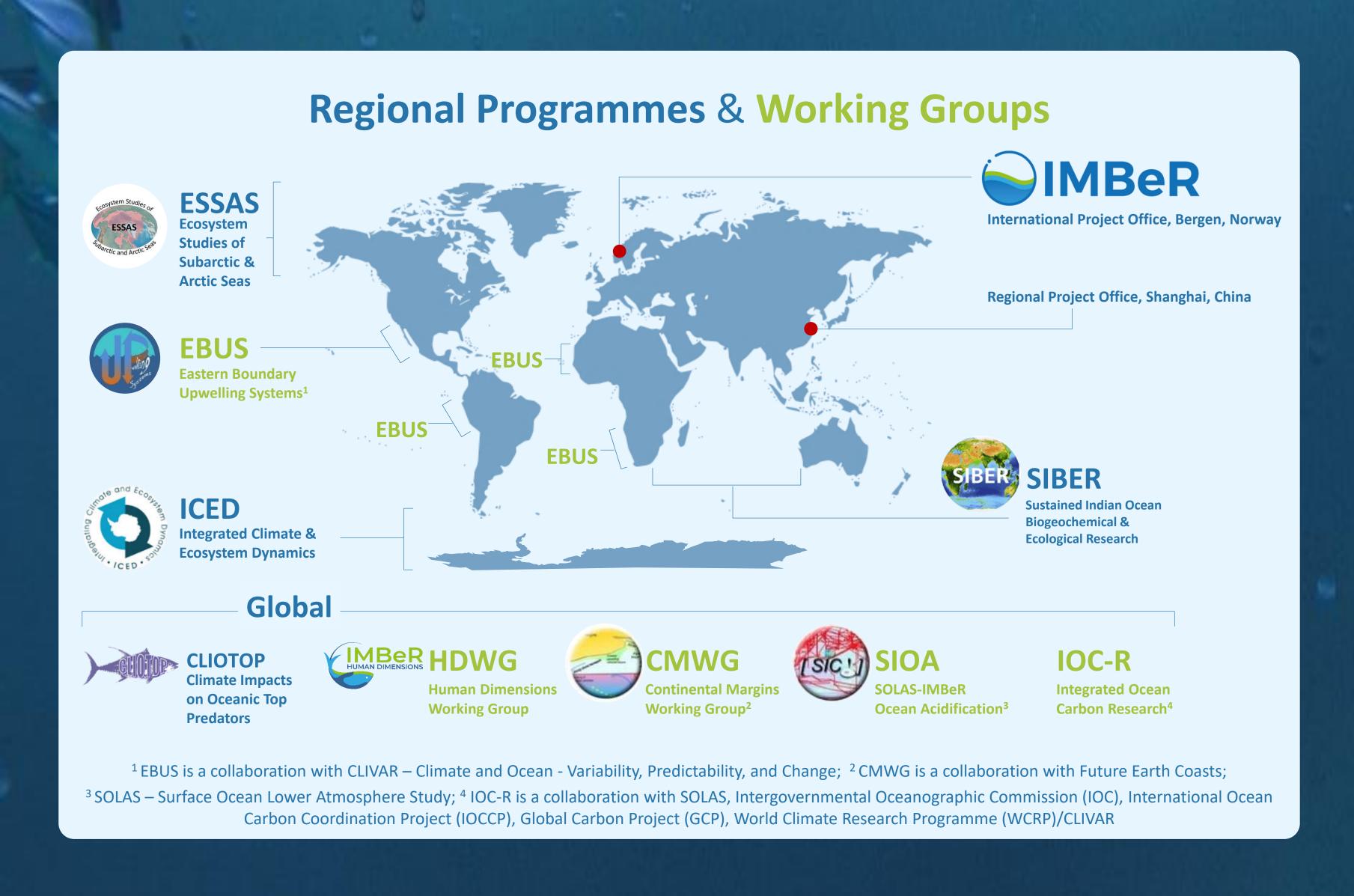


Global Research Project: Ocean sustainability under global change for the benefit of society Carol Robinson, John Claydon<sup>a</sup>, Lisa Maddison<sup>a</sup>, Veslemøy Kjersti Villanger<sup>a</sup>, Fang Zuo<sup>b</sup>, Xiaona Wang<sup>b</sup>

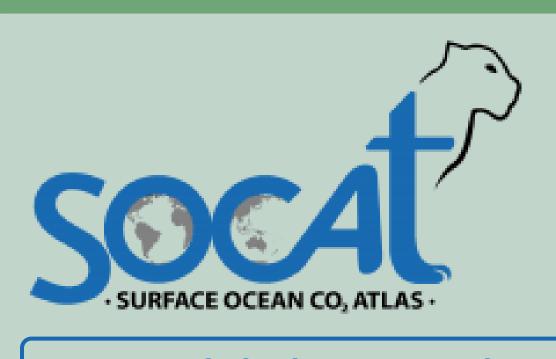


## What we do

IMBeR research is conducted through Regional Programmes, Working Groups, **Endorsed Projects** and broad collaborations.

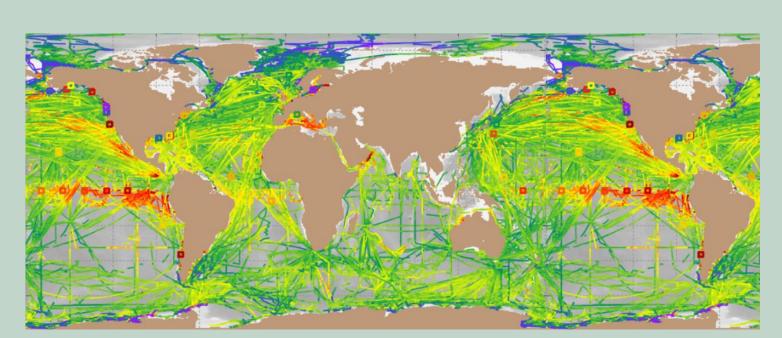
1000+ 2000+ 80+ Publications Scientists Countries

IMBeR science is also advanced through Conferences & Meetings, Summer Schools, and an Early Career Network



A core Global Ocean Observing System data product for biogeochemistry endorsed by IMBeR, SOLAS, **IOCCP** and **GOOS**.

The Surface Ocean CO<sub>2</sub> Atlas (SOCAT) is a synthesis activity for quality-controlled, surface ocean fCO<sub>2</sub> (fugacity of carbon dioxide) observations by the international marine carbon research community (>100 contributors). SOCAT data is publicly available, discoverable and citable.



**Locations of moorings** and tracks of ships and drifters for all data in SOCAT version 6.

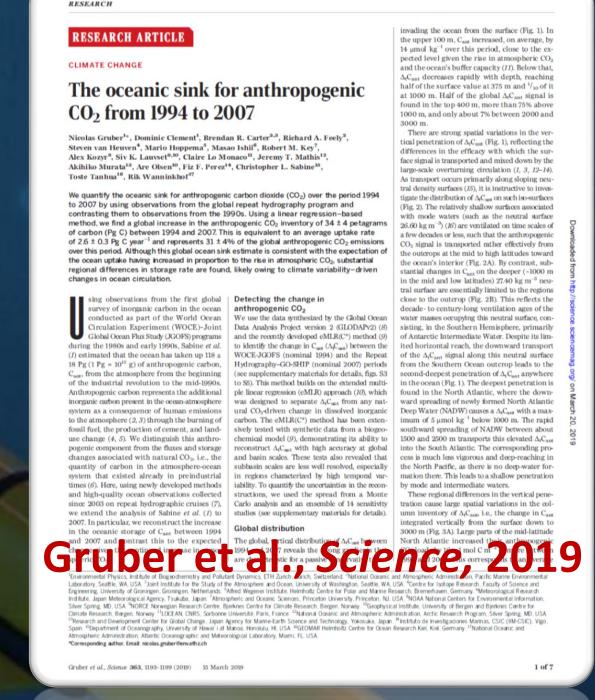
# Science

### **SOLAS-IMBeR Interior Ocean Carbon Working**

Group[2007-2017], led by Niki Gruber, has determined the amount of man-made CO, emissions taken up by the ocean from the atmosphere between 1994 and 2007.

#### The state of ocean CO, uptake

The ocean is an important sink for anthropogenic CO<sub>2</sub>. From the beginning of the industrial revolution to the mid-1990s roughly 30% of our emissions have been absorbed by the oceans. This process is an important moderator of climate change, but can we count on it to remain as strong in the future? Gruber et al. calculated the ocean uptake of anthropogenic CO<sub>2</sub> for the interval from 1994 to 2007, which continued as expected. They also observed clear regional deviations from this pattern, suggesting that there is no guarantee that uptake will remain as robust going forward



New Initiative

## **IOC Working Group** on Integrated Ocean Carbon Research

A new initiative on integrated ocean carbon is proposed under the auspices of IOC, in cooperation with IOCCP, SOLAS, IMBeR, GCP, WCRP/CLIVAR, and relevant national efforts on carbon research.



Brest, France 15-21 June 2019 FutureOceans2

2<sup>nd</sup> IMBeR Open Science Conference 30 Sessions | 12 Workshops | Up to 600 delegates





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