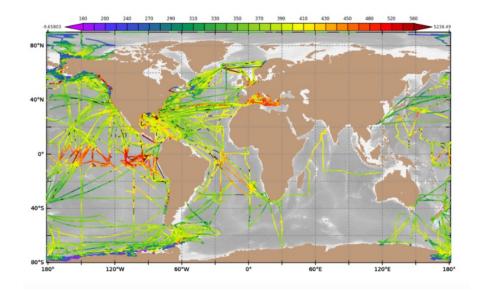
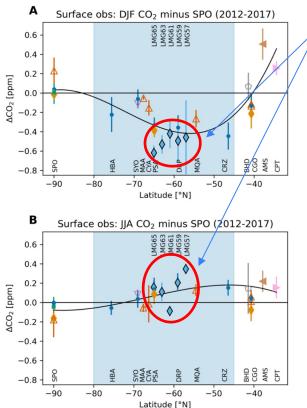
## Largest Network of Surface $pCO_2$ data In the world.

## FY 2021 HIGHLIGHTS



- ~ 8.8 M data points since 2005. Represents ¼ of world wide data.
- 2020 and 2021 had a 40% data loss compared to previous years
- Contributes to the GCB-2021 estimate of the still increasing Ocean sink of 2.8 +/- 0.4 GtC/year.

## Atmospheric measurements from ships used in atmospheric studies



Measurements from ships quality comparable to Surface Monitoring Stations and Aircraft Campaigns.

FY 2021

HIGHLIGHTS

- Ship measurements from the ARSV Laurence
  M. Gould, funded by GOMO.
- Ship-based measurements extend back to 2005 and are utilized due to extensive temporal coverage.
- This analysis estimates a net uptake of CO<sub>2</sub> south of 45°S. Consistent with ship-based estimates but stronger than recent estimates based on profiling-float observations.

From Long, M., et al. (2021), Strong Southern Ocean Carbon Uptake Evident in Airborne Observations, Science.