

## Position for Matthew Mazloff, Sarah Gille, Lynne Talley, and Ariane Verdy

Contact Name: Dr. Matthew Mazloff Contact Email: <a href="mailto:mmazloff@ucsd.edu">mmazloff@ucsd.edu</a>

**Title of the Position:** Postdoctoral Scholar-Employee

**School or Division:** Scripps Institution of Oceanography

Center, Institute, or other Organized Unit: Climate, Atmospheric Science and Physical

Oceanography

## **Description of the Position:**

This position contributes to quantifying and explaining the Southern Ocean carbon cycle. The postdoctoral researcher will help develop and analyze a Biogeochemical Southern Ocean State Estimate (BSOSE; <a href="http://sose.ucsd.edu/">http://sose.ucsd.edu/</a>) as part of the Southern Ocean Carbon and Climate Observations and Modeling (SOCCOM) project (<a href="https://soccom.princeton.edu/">https://soccom.princeton.edu/</a>). The SOCCOM mission is explained at <a href="https://soccom.princeton.edu/content/overview">https://soccom.princeton.edu/content/overview</a>. Towards this mission the candidate will examine mechanisms governing the carbon budget in BSOSE and assess processes accounting for discrepancies between BSOSE and biogeochemical (BGC) observations, including BGC Argo floats. Emphasis will also be on BSOSE analysis for providing context to the BGC observations. Contact Matt Mazloff (<a href="mmazloff@ucsd.edu">mmazloff@ucsd.edu</a>) for further information.

## Responsibilities:

- Investigate the Southern Ocean carbon state in support of the SOCCOM project goals (<a href="https://soccom.princeton.edu/">https://soccom.princeton.edu/</a>)
- Collaborate with the SOCCOM project, the ECCO consortium (<a href="https://www.ecco-group.org/">https://www.ecco-group.org/</a>), and the ongoing observational, modeling, and state estimation research activities underway at Scripps Institution of Oceanography
- Contribute to the production of mapped BGC products, including BSOSE.
- Analyze and interpret BSOSE in the context of BGC-Argo observations.
- Disseminate research findings via presentations and peer-reviewed journals.

## **Qualifications Required and Preferred Academic Background:**

Applicants should have 0-2 years of postdoctoral experience, or be nearing completion of their Ph.D. (estimated within 3 months), and be self-motivated. Good written and verbal communication skills, including the ability to produce scientific publications and presentations and meet project milestones, are required. Also required is a strong analytical background with a Ph.D. in biogeochemical oceanography or a related field. Programming experience working in a Unix environment with experience in scripting languages such as Fortran, Python, and Matlab is desired. Other desired qualifications include experience with in situ and satellite biogeochemical observations, numerical modeling, assimilation, and data analysis. A theoretical background in the oceanic carbon cycle and ecosystem dynamics is also desired.

**Appointment Length/Period:** Initial appointment is for one year, with extension possible contingent upon candidate eligibility, performance, and eligibility of funding. Desired start date is September 1, 2020, or by mutual agreement.

**Application Procedure:** Please contact Dr. Matthew Mazloff via email at mmazloff@ucsd.edu with a CV, a personal statement of the candidate's experience and career goals, and the names and email contact information for three referees.

The University of California, San Diego is an AA/EOE.

**Application Closing Date:** open until filled, with preference to applications received by July 31, 2020.