

Michael J. Leber, M.S.

Physical Oceanographer

EXPERTISE

Ocean current forecasting for the offshore energy industry. Interpreting *in situ* and remotely-sensed data sources and numerical model output to identify oceanographic features and predict their development and evolution. Weather forecasting, particularly for the New England region and for aviation operations. Analyzing numerical model output and current observations to produce short and medium-range weather forecasts.

QUALIFICATION SUMMARY

- More than 2 years of experience in physical oceanography and 1 year experience in meteorology
- Ability to identify gradients associated with the fronts of major oceanographic features from remotely-sensed data sources
- Evaluate data from drifting buoys and vessel- and rig-mounted ADCPs to generate reliable nowcasts and forecasts
- Analyze and compare model output to make routing recommendations for vessels to avoid opposing ocean currents and take advantage of boosting currents
- Organize and coordinate air deployments of strategically-placed drifting buoys for optimal spatial coverage within and around major oceanographic features
- Extensive scientific report writing
- Respond to client questions and requests in a timely manner
- Experience with various meteorological software utilized by the National Weather Service including AWIPS, WARP, CIWS, BUFKIT, and GEMPAK

WORK EXPERIENCE

2015-Present Woods Hole Group, Inc., Physical Oceanographer

2014-2015 U.S. National Weather Service Boston Center Weather Service Unit (CWSU), Meteorologist Intern

Summer 2012 Blue Hill Meteorological Observatory, Weather Observer



Education

2016 – M.S.
Atmospheric Science
University of Massachusetts Lowell

2013 – B.S.
Atmospheric Science
University of Massachusetts Lowell

Professional Affiliations

-American Meteorological Society

Publications & Presentations

2

PUBLICATIONS & PRESENTATIONS

Sharma, N., J. S. Storie, L. Ivanov, B. Magnell, M. J. Leber, D. E. Gustafson, and H. M. Zimmerle. 2018. 2014-2017 Loop Current Activity, Offshore Technology Conference, Metocean Advances.

Sharma, N., J. S. Storie, K. M. Obenour, M. J. Leber, and A. Srinivasan. 2016. Loop Current Hyperactivity: Analysis of In Situ Measurements in the Gulf of Mexico, Offshore Technology Conference, Developments in MetOcean Science.