

Analysis of the U.S. Navy's MOODS data set for the Surface Heat Budget of the Arctic Ocean (SHEBA) Experiment

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Brief Description

(1) water mass analysis, (2) correlation analysis of the T-S fields, (3) determination of temporal and spatial decorrelation scales for assessing oceanic thermocline and halocline, (4) development of an upper ocean thermohaline feature model for transforming each profile (MOODS or SHEBA).

Selected Publications

- (1) Chu, P.C., 2002: C-vector for identification of oceanic secondary circulation across Arctic fronts in Fram Strait. *Geophysical Research Letters*, **29**, 10.1029/2002GLO15978 ([paper download](#)).
- (2) Chu, P.C., Q.Q. Wang, and R.H. Bourke, 1999: A geometric model for Beaufort/Chukchi Sea thermohaline structure. *Journal of Atmospheric and Oceanic Technology*, **16**, 613-632 ([paper download](#)).
- (3) Chu, P.C., 1996: The S-transform for obtaining localized spectra. *Marine Technology Society Journal*, **29** (4), 28-38 ([paper download](#)).
- (4) Chu, P.C., 1995: P-vector method for determining absolute velocity from hydrographic data. *Marine Technology Society Journal*, **29** (2), 3-14 ([paper download](#)).
- (5) Cai, W.J., and P.C. Chu, 1996: Ocean climate drift and interdecadal oscillation due to a change in thermal damping. *Journal of Climate*, **11**, 2821-2833 ([paper download](#)).