
Replacing in situ observation from sea cruises in the oceanic dynamics

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Abstract

Collecting in situ observations during sea cruises is an essential part of physical oceanography. However, these observations represent only snapshots of the state of the ocean and it remains always a hard task of replacing such observations within the context of the oceanic dynamics. In the recent decades the problem has been also extended in the sense that different autonomous floats are deployed during the cruises, with the underlying ideas that they provide some ways of extending in time the main parameters such as temperature and salinity. Another important question regards the place of these observations within the context of the existing climatologies, and more recently, within the context of operational products and reanalysis. By considering different cruises staged in the southwestern and eastern Pacific Ocean, these points will be discussed more specifically.

Keywords: physical oceanography, cruise, climatology, ocean dynamics

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