

Author's Accepted Manuscript

Coastal Circulation in the Southwestern Yellow Sea in the Summers of 2008 and 2009

Dongliang Yuan, Yao Li, Bin Wang, Lei He, Naoki Hirose



www.elsevier.com/locate/csr

PII: S0278-4343(17)30070-5
DOI: <http://dx.doi.org/10.1016/j.csr.2017.01.022>
Reference: CSR3553

To appear in: *Continental Shelf Research*

Received date: 29 August 2015
Revised date: 4 November 2016
Accepted date: 10 January 2017

Cite this article as: Dongliang Yuan, Yao Li, Bin Wang, Lei He and Naoki Hirose, Coastal Circulation in the Southwestern Yellow Sea in the Summers of 2008 and 2009, *Continental Shelf Research*, <http://dx.doi.org/10.1016/j.csr.2017.01.022>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Dongliang Yuan^{1,2*}, Yao Li^{1,2}, Bin Wang^{3,4}, Lei He⁵, and Naoki Hirose⁴

¹Key Laboratory of Ocean Circulation and Wave, Institute of Oceanology, Chinese Academy of Sciences, Qingdao, China

²Qingdao Collaborative Innovation Center of Marine Science and Technology, Qingdao, China

³College of oceanography, Hohai University, Nanjing, China

⁴Research Institute for Applied Mechanics, Kyushu University, Kasuga, Japan

⁵School of Marine Sciences, Sun Yat-Sen University, Guangzhou, China

*Corresponding author at: Institute of Oceanology, Chinese Academy of Sciences, 7 Nanhai Road, Qingdao, China 266071. Email: dyuan@qdio.ac.cn

Abstract

The coastal ocean circulation off the Chinese Subei (north Jiangsu Province) coasts in the southwestern Yellow Sea in summer is studied using hydrographic data from four research cruises, moored current meter data in the Lunan (south Shandong Province) trough, and Lagrangian trajectories of satellite-tracked ARGOS surface drifters in the summers of 2008 and 2009. The hydrographic data indicate a fresh water plume extending offshore in the northeastward direction from the Sheyang River mouth and a belt of relatively cold surface temperature from the surrounding areas located offshore of the Subei coasts to the south of the plume in summer. The drifter trajectories show that the Subei coastal current, which is traditionally thought to flow southward year round, flows northward in June through July under the forcing of the southerly monsoon. A northward intrusion along the submarine valley off the

Download English Version:

<https://daneshyari.com/en/article/5764682>

Download Persian Version:

<https://daneshyari.com/article/5764682>

[Daneshyari.com](https://daneshyari.com)