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所 属 : 厦門大学 海洋環境科学研究室
講 演 題 目 : 2007年8-9月の南シナ海西岸の2つの冷水渦の発達と特徴
日 時 : 2009年9月8日(火) 9:00 - 10:00
場 所 : 理学総合棟 (合同研究棟) 2階 204号講義室
担 当 教 員 : 川村宏 教授

【報告】
本セミナーには、20名が参加した。ベトナム沖では夏季に頻繁に冷水渦と暖水渦が観測されており、これまでにも多くの研究が着目してきた。本セミナーでは、中国が組織的に2007年に現場観測を行って、ベトナム沖の冷水渦、暖水渦を観測した結果が紹介された。インドシナ半島の地形や季節風、河川水の影響など、渦形成に関わる要因について、活発に議論された。

（講演者の紹介）
フー ジャンユ 教授は沿岸海洋学の専門家である。

（講演内容）
Two cold eddies were observed in the western South China Sea during August-September 2007 by using the cruise CTD and ADCP data and the satellite altimeter data.

The former cold eddy existed at the beginning of August and lasted for about one month. It had a symmetric structure with the scale of about 100km and could only reach down to 100m depth. This cold eddy was intensified by a local tropical cyclone which formed in the studied area at the beginning of August and became the tropical storm scale when staying at a specific area for a few days. Then a cold eddy emerged with the low temperature and high salinity core in the upper layers after the trail of tropical storm.

The latter cold eddy was centered near (110.8°E, 12.0°N) with the scale of about 100km in radius; it was generated in the late August and lasted for about one month until the late September. The well-developed status of this cold eddy was observed by the CTD mapping and underway ADCP measurement in the early September. This cold eddy had an asymmetric structure, which was stronger on the southeastern half but weaker on the northwestern half. The eddy could affect downward as deep as 250m at least. And the formation of this cold eddy was affected by the separation of coastal jet from the Vietnam coast, the local wind conditions, surface heating and plume from the Mekong River.

In order to study the variation of the eddies in the western South China Sea, 14 years of altimeter data from 1993 to 2006 have been used. It is concluded that the sea level anomaly has been characterized with a great inter-annual, inter-seasonal and intra-seasonal variations in the studied area, and eddy-like negative sea level anomaly, being accompanied with a strong coastal jet separating from the Vietnam coast, usually appears off the Vietnam coast in August and September, but both location and intensity of the cyclonic eddy vary a great deal. As for the mechanism of the eddies in the western South China Sea, they may be generated by the sea level variation propagating in a wave form from the western Pacific Ocean through the Luzon Strait, or be driven by the local wind field.