



## Report on IODP Expedition Related Activities

Reporting date (Day/Month/Year) : 13 October 2015

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Type of activities (leave one)	1. Expedition (port call) 3. Sampling party	2. Pre-expedition meeting 4. 2nd Post-expedition meeting
IODP Expedition Number and Name	EXPEDITION 349	
Responsibility in the expedition	PETROLOGIST (ex Sedimentologist)	
Activity Period (including transportation)	From (Day/Month/Year) 27/09/2015 to (Day/Month/Year) 02/10/2015	
Venue (city and country)	SHANGHAI, CHINA	
<p>Result of the activity</p> <p>The second postcruise meeting was held in Baiyulan Jinjiang Metropolo Hotel in Shanghai and was attended by almost all of the expedition participants. The first day and half of the second day consisted of short (15 min) presentations of all the expedition participants regarding the results of their postcruise researches. The second half of the second day and the first half of the third day were devoted to thematic discussions based on the principal objectives of the expedition, as well as to the integration of all the data acquired during and post expedition. Accomplishments of various post expedition researches varied from complete to very preliminary results.</p> <p>The principal results of the post expedition meeting are the following:</p> <ol style="list-style-type: none"> <li>1. The cessation of spreading are the same within 1 million year between the East and Southwest subbasin based on 40Ar-39Ar dating results, complimented by my own Re-Os isochron age results and paleontological dating.</li> <li>2. The source of the South China Sea oceanic crust is the same as that of the West Philippine Basin in having an Indian Ocean-type isotopic signature.</li> <li>3. There is a significant contrast in the mantle source and magmatic processes between the East and Southwest subbasins based on my own and other petrologists' results.</li> <li>4. The provenance of the sediments in the South China Sea basin show a distinct change at around 12 and 8 Ma, potentially related to the tectonic processes occurring at this time, as well as changes in weathering rates.</li> <li>5. Zircon ages of gravity deposits suggest changing sediment provenance from Pre-Oligocene to Pleistocene, which could be related to the tectonic evolution of the basin.</li> <li>6. Gravity data modelling suggests asymmetry in seamount distribution, attributed to hotter mantle, thicker crust, and higher degree of melting underneath the Northern subbasin.</li> <li>7. Three-dimensional geophysical data modelling suggests spreading started earlier at the East subbasin and progressed toward the southwest.</li> </ol>		
Notes:		

Note:

1. The report should be submitted to the J-DESC/IODP Travel Support by email (travel@j-desc.org) **within two weeks after the activity.**