

2015 Taiwan National Report

2015 GEOTRACES SSC

I still feel unreal about the loss. What I have learned is that some valuable things do not exist forever. **We deeply appreciate your hearty concern for our loss.**



TORI has ordered 2 new R.V.

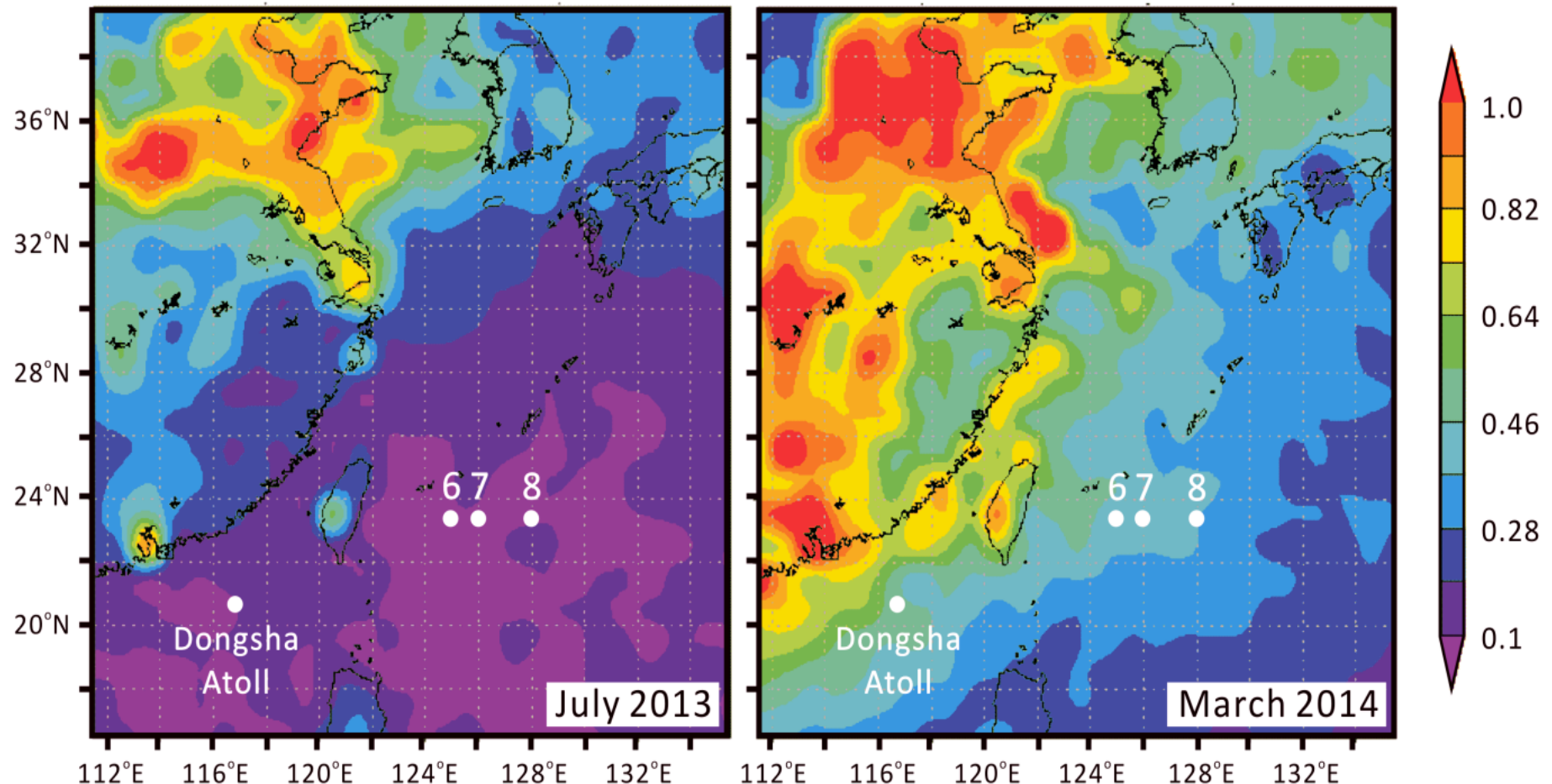
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- A 2000-ton new R.V. (70 m) will be delivered at **the end of 2016**, which is originally designed for ROV operation, sediment coring, and mineral/energy survey. The R.V. will also be fully equipped with sampling capabilities for **oceanography research**.
- In addition, a 3000-ton new R.V. (80 m) for **oceanography research** to replace OR/5 will be under construction in 2016 and is expected to be delivered in **2018**. **A complete trace metal clean sampling system will be installed on this vessel.**

Seasonal variation of aerosol deposition

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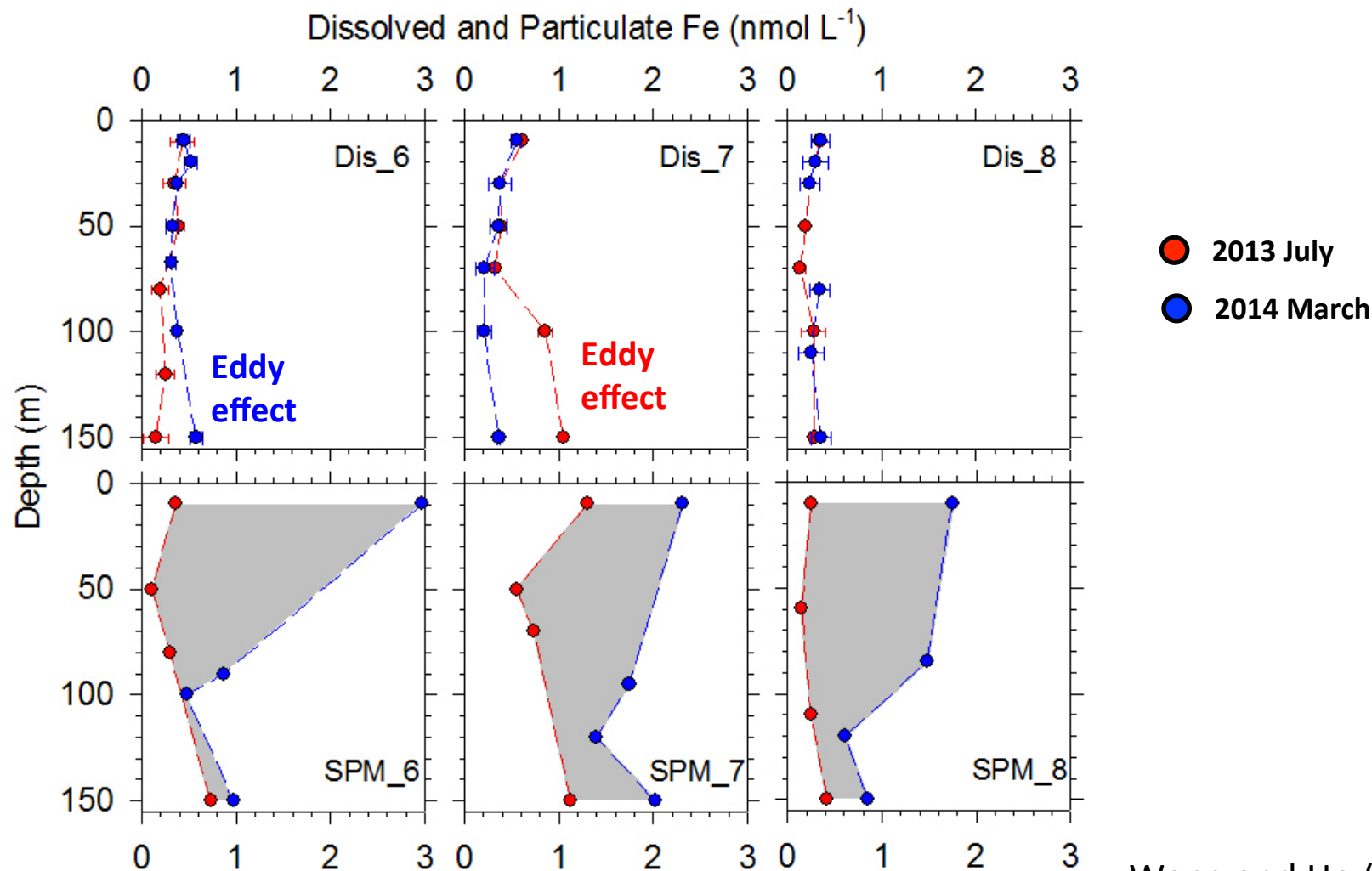
The surface water of the NWPO, **receiving huge amount of East Asian aerosols in winter and spring**, provides an ideal platform to investigate **the fate of aerosol TEI** (e.g., Fe) in the oceanic surface water. About **Dongsha** aerosol time series station.



Seasonal variation of dissolved & particulate Fe

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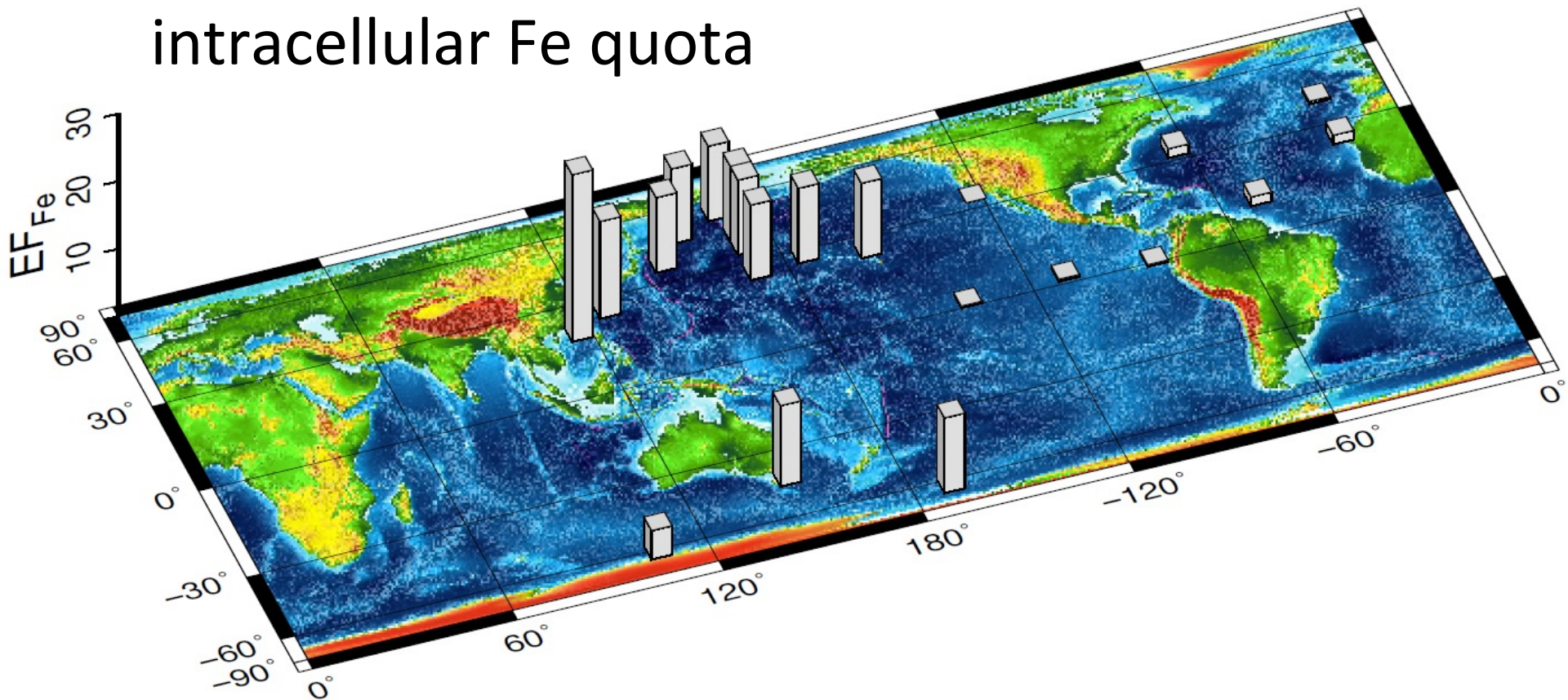
The **seasonal transformation** of major Fe pools and processes, including **aerosol deposition**, **dissolved & suspended Fe pools**, and **sinking particle** fluxes, were investigated in the surface water during high and low aerosol deposition seasons.



Fe adsorption on biotic particles

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Fe biological enrichment factor (BEF) =
total Fe conc. of biotic particles/
intracellular Fe quota



Liao, Yang, and Ho (in prep.)

Some related News

2015 GEOTRACES SSC

- **Kuo-Fang (Denner) Huang**, an assistant research fellow at Academia Sinica, has established **Taiwan 4th MC-ICPMS system** (Neptune Plus).
- **Haojia (Abby) Ren**, a marine **N isotope** biogeochemist, has joined the department of geosciences at National Taiwan University as an assistant professor in August 2014.
- I have received 5-yr funding (2015 to 2019) from Academia Sinica to study **trace metal-nitrogen fixation** interaction in marine diazotrophs. Visit UC Santa Cruz since this November for 8 months.
- My group will join **Japan GEOTRACES** cruise in **ECS and WPS**.
- **Council of Marine Affairs**, including 3 major agencies, Coastal Guard, Ocean Conservation, Marine Research Institute, has been established this year.