

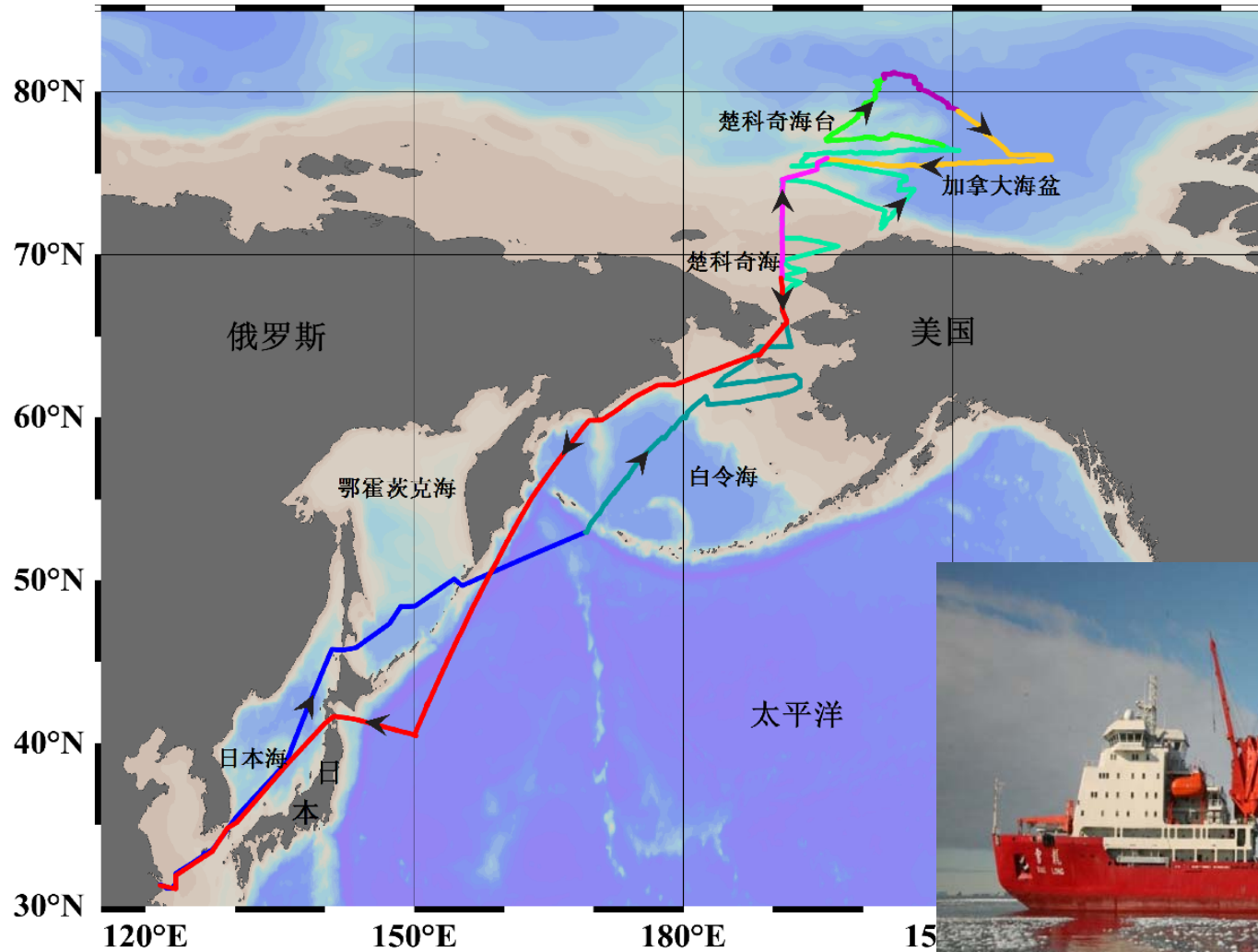
FARO meeting ASSW 2015  
23-30 April Toyama Japan

# Chinese Arctic Activities in 2014

Huigen YANG  
Polar Research Institute of China  
25 April, 2015

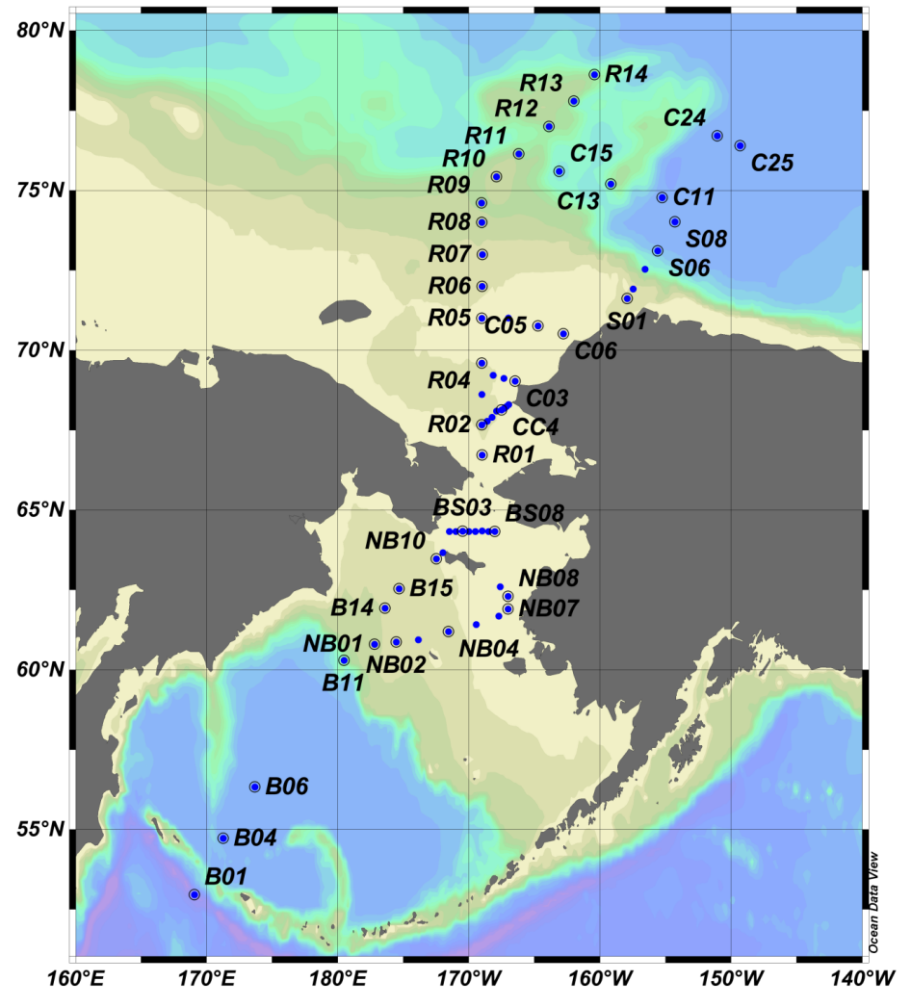


# 1. CHINARE-6

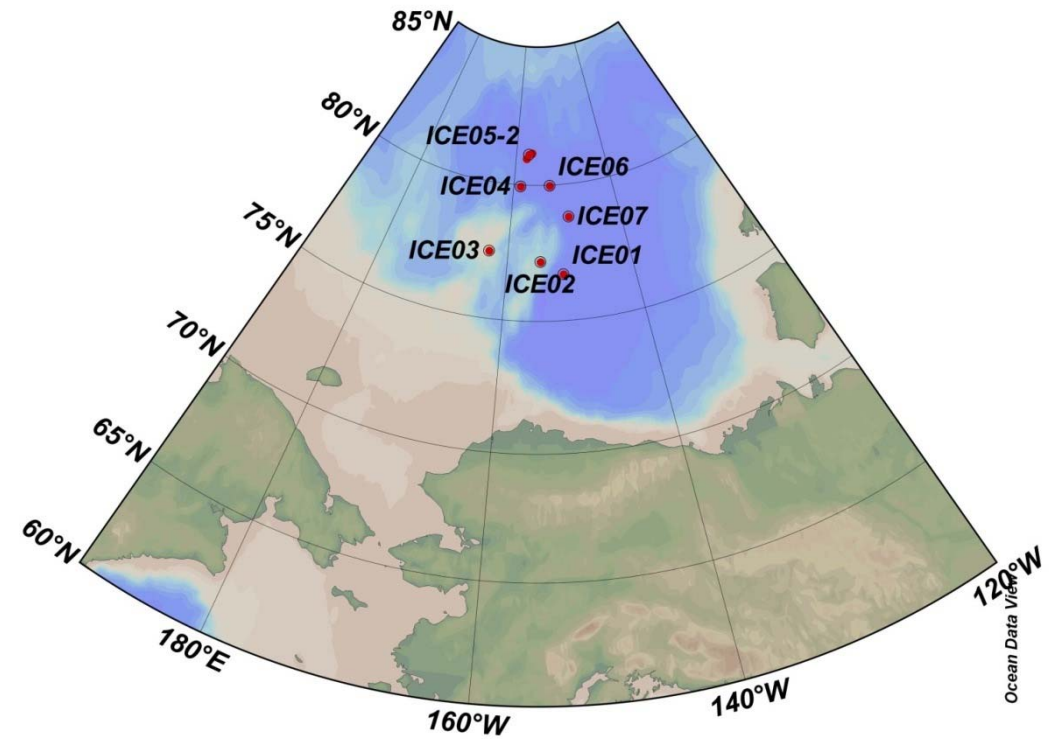


- July 11—Sept. 24 (76 days)

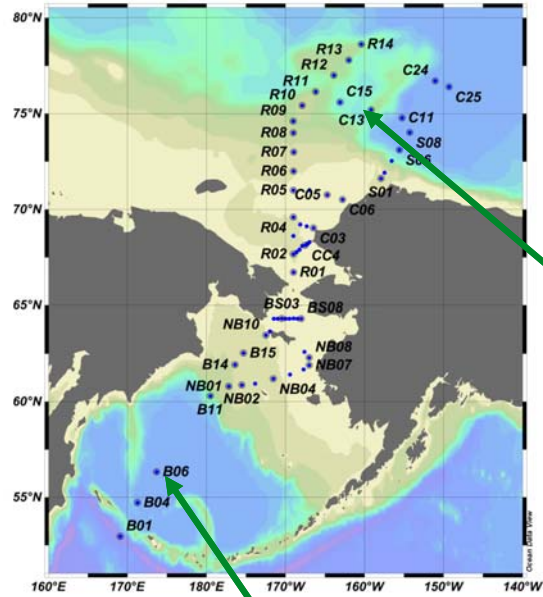




12 transects in total  
90 investigation stations



Ocean and sea ice sampling stations during the CHINARE-6



two mooring systems  
and 37 ice buoys were  
deployed during the  
cruise



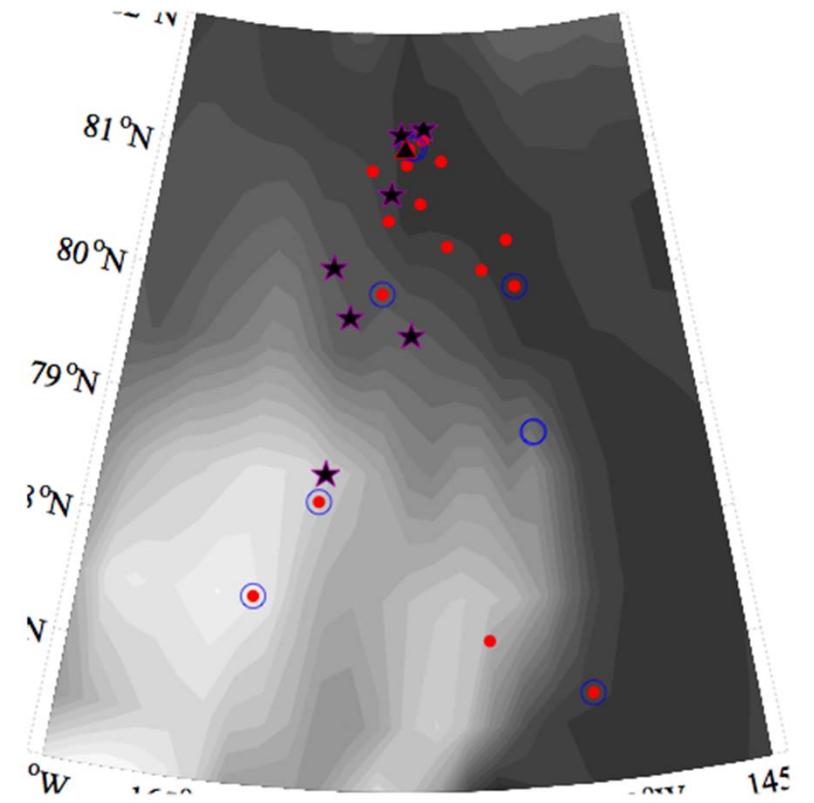
air-ocean flux mooring system



sediment trap deployment



ITP buoy deployment on pack ice



# China-Iceland Joint Aurora Observatory (CIAO)



CIAO with magnetic latitude of  $66^\circ$ , is well located under the earth magnetosphere's plasmasheet and ideal to observe nightside aurora.

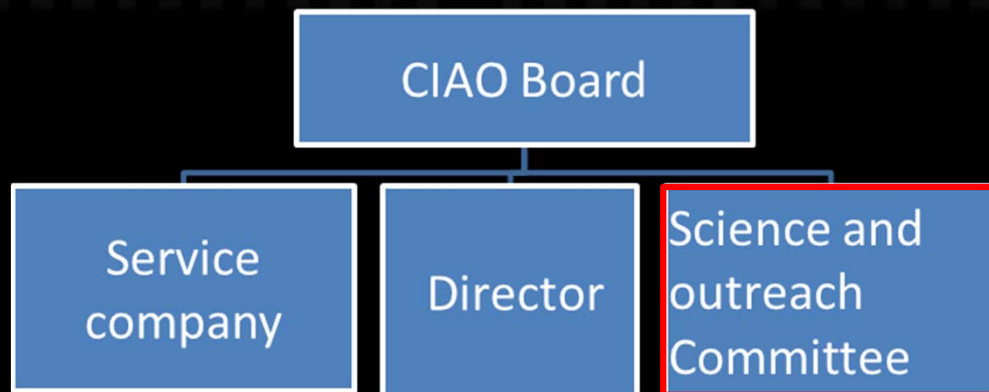
## Icelandic institutes:

Arctic Portal  
Husavik Academic Center  
The Icelandic Centre for Research (RANNIS)  
Icelandic Meteorological Office (IMO)  
Science Institute, University of Iceland  
University of Akureyri  
Icelandic Arctic Cooperation Network



## Chinese institutes:

Polar Research Institute of China  
National Space Science Center, CAS  
Institute of Geology and Geophysics, CAS  
China Research Institute of Radio Propagation  
National Center for Space Weather, CMA  
Peking University  
Wuhan University  
University of Science and Technology of China  
Shandong University



## 2. Joint Aurora Observatory in Iceland

### 3. Wing-fixed aircraft

**Basler BT-67**



- Aircraft weight 7100kg
- Maximum of take off weight 13000kg
- Passangers 40



A CHINARE aircraft will be in service late this year



## 4. Chinese new icebreaker



- ⌘ **Displacement of 14,000 tons, 20,000 nm endurance, self-sustaining for 60 days**
- ⌘ **Ice breaking capability of 1.5m sea ice plus 0.2m snow, at speed of 2 to 3 knots**
- ⌘ **Hydrographic, chemical , biological, geological and geophysical investigation**

# 5. The China-Nordic Arctic Research Center (CNARC)

[www.cnarc.info](http://www.cnarc.info)

## Purpose

- To increase awareness, understanding and knowledge of the Arctic and its global impacts
- To promote cooperation for sustainable development of the Nordic Arctic and coherent development of China in a global context

## Activities

- China-Nordic Arctic Cooperation Symposium
- **CNARC Fellowship / Internship Program**
- CNARC Publication Program
- Joint Research Project

## Member institutes

### - Nordic

- Arctic Center, University of Lapland (Finland)
- Fridtjof Nansen Institute (Norway)
- Icelandic Centre of Research
- Nordic Institute of Asian Studies (Denmark)
- Norwegian Polar Institute;
- Swedish Polar Research Secretariat

### - China

- Polar Research Institute of China
- Shanghai Institutes for International Studies
- Tongji University
- Ocean University of China
- Shanghai Jiao Tong University



# Why China-Nordic?

- Compared to other parts of the Arctic, the **Nordic Arctic is a relatively less understood entity/region to China** and Nordic countries have high and unique expertise about the Arctic.
- China is playing important roles on global affairs and its development will have **impacts on the Arctic**, which **Nordic countries have interests** in.
- CNARC's **research themes** include: (1) Arctic climate change and its impacts, (2) Arctic resources, shipping and economic cooperation, and (3) Arctic policy-making and legislation.



# Milestones

1<sup>st</sup> China-Nordic Arctic Cooperation Symposium, 4-7th June 2013, Shanghai, China

- Theme: **Sustainable Development in the Arctic: Human Activity and Environmental Change**
- Roundtable: **Establishing CNARC**

2<sup>nd</sup> China-Nordic Arctic Cooperation Symposium, 2-5th June 2014, Akureyri & Reykjavík, Iceland

- Theme: **North meets East**
- Roundtable: **China-Iceland Arctic Economic Cooperation**

3<sup>rd</sup> China-Nordic Arctic Cooperation Symposium, 26-28th May 2015, Shanghai, China

- Theme: **Arctic Synergies: Policies and Best Practices**
- Roundtable: **Arctic Shipping**



THANKS!

