A report on developments with the PRIC and CHINARE

Huigen Yang Polar Research Institute of China



1. New developments with the PRIC

- 2. Capacity building of the CHINARE
- 3. The 4th Arctic cruise of CHINARE

PRIC (Polar Research Institute of China) in Shanghai collaborating with the CAAA in Beijing plays the roles of national operator for Chinese research activities in polar regions

PRIC missions

- 1. to carry out scientific, engineering and strategic studies,
- 2. to implement environments monitoring,
- **3.** to provide management and sharing service with data, samples and information,
- 4. to operate research vessel and stations and provide logistic supports to research expeditions, and
- 5. to promote international scientific and logistic cooperation in polar regions

People in PRIC

Permanent positions increased from 145 to 230 since 2009.

- Scientists and staff 144 → 158,
- Postdoctors: $6 \rightarrow 8$
- PhD students:
 20→25



PRIC Campuses



The Jinqiao Campus in Shanghai downtown





The Caolu Campus by Yangtze River



Pier for Polar ships





1. New developments with the PRIC

- 2. Capacity building of the CHINARE
- 3. The 4th Arctic cruise of CHINARE

Antarctic Great Wall Station



New facilities at Great Wall







Newly c	onstructed	1,792	m2,
including	a sub-A	Antarctic	bio-
ecosystem	laboratory	and a	VSAT
communication link			

Antarctic Zhongshan Station

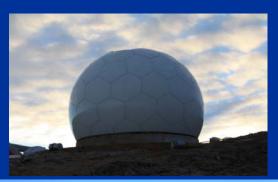


New facilities at Zhongshan



Comprehensive warehouse

VSAT antenna



Aurora Observatory







Antarctic Kunlun Station

Kunlun ,Chinese 1st inland station was set up at Dome A on the Antarctic ice sheet 27 Jan 2009.



Renovation of the R/V Xuelong



The new icebreaker under design



Specification for the New Icebreaker

Main function Displacement Icebreaking ability Berths Labs Construction period

Marine investigations $\sim 8000 \text{ T}$ Pole 10 90 $\sim 500 \text{ m}^2$ $\sim 5 \text{ y}$

1. New developments with the PRIC

- 2. Capacity building of the CHINARE
- 3. The 4th Arctic cruise of CHINARE

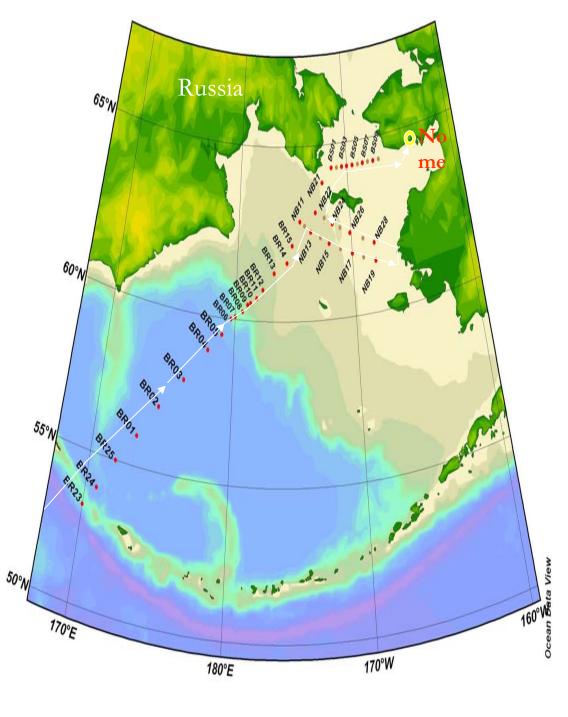
CHINARE:

Chinese National Antarctic/Arctic Research Expedition

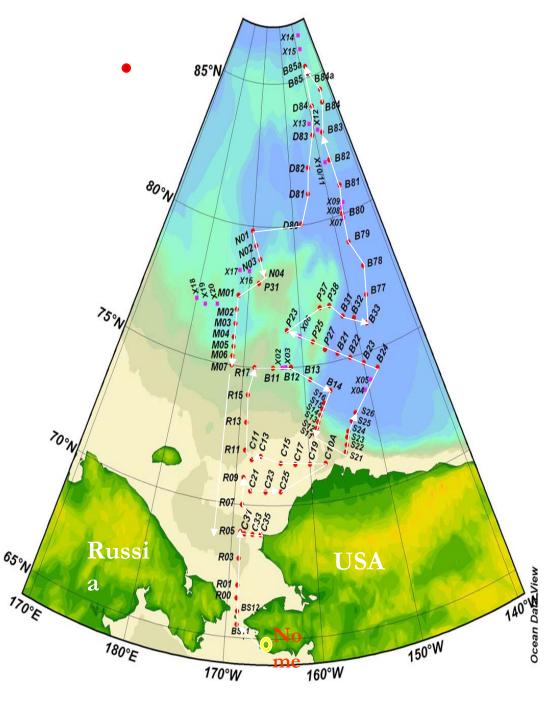
- 26 CHINARE's to the Antarctic since 1984.
- 3 CHINARE cruises into the Arctic Ocean in 1999, 2003 and 2008 respectively and the 4th CHINARE Arctic cruise in this year
- 6 years of station observation at Ny Alesund on Svalbard since 2004;

Xuelong 2008 Cruise into the Arctic Ocean

The 2008 Cruise departed from Shanghai on July 10, called on Nome on 25 July and came back to Shanghai on Sept. 24.



- CTD stations 130
- LADCP stations 100
- Mooring sets 9
- Water/ice sampling 129
- Sediment cores
 29



Xuelong 2010 cruise into the Arctic Ocean

Cruise objectives

Characteristics and mechanisms of sea ice rapid changes in the Arctic ocean

Responses of marine ecosystems to sea ice rapid changes in the Arctic ocean

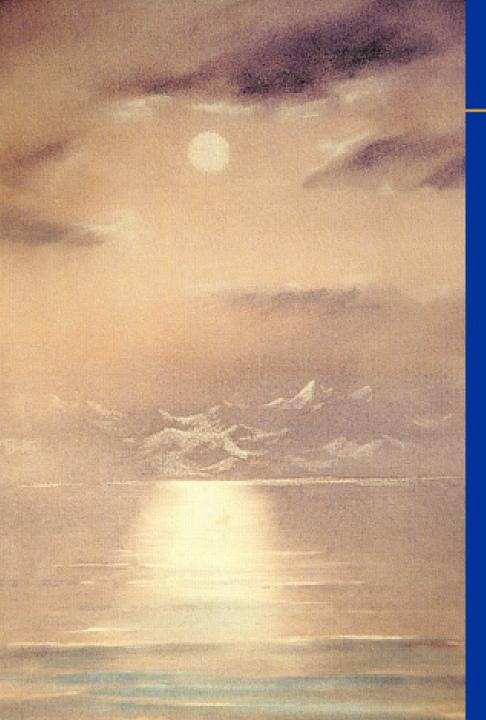
Cruise route

Xuelong will depart from Xiamen on July 1, call on Nome on 15 July and come back to Shanghai Sept 23.



 100 stations
 1 mooring system
 1 ice camp in Chukchi Plateau

B88 B87 **B86 B84** B83 B82 **B8**1 IB03 IB04 IB06 IB08 IB02 IB10 M11M09 IA02 IA03 IA04 IA06 IA08 M07 M05 M03 M01 • R12 S16 S26 • R11 \$13\$15 \$25 \$11 **S**12 **S**22 R10 R09 C07 C08 C09 S21 R08 • • C04 • C06 R06 • R05 C01 R04 R03 • R02 • NB18 NB17



Thanks for your kind attentions