

AMS Analyses of I-129 in Arctic Ocean

--National Perspective from China

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Climate Change

- Longer-term and profound challenge for mankind
- No country can be immune to it





“Tackling climate change is the inherent need for China's sustainable development and the responsibility to promote the building of a community with a shared future for humans.”

-- by General Secretary *Xi Jinping*

National Policies / Actions



Industrial & energy
structure adjustments



Energy efficiency
improvements



Market mechanism
construction



Advocating a low-
carbon lifestyle



Increasing forest
carbon sinks

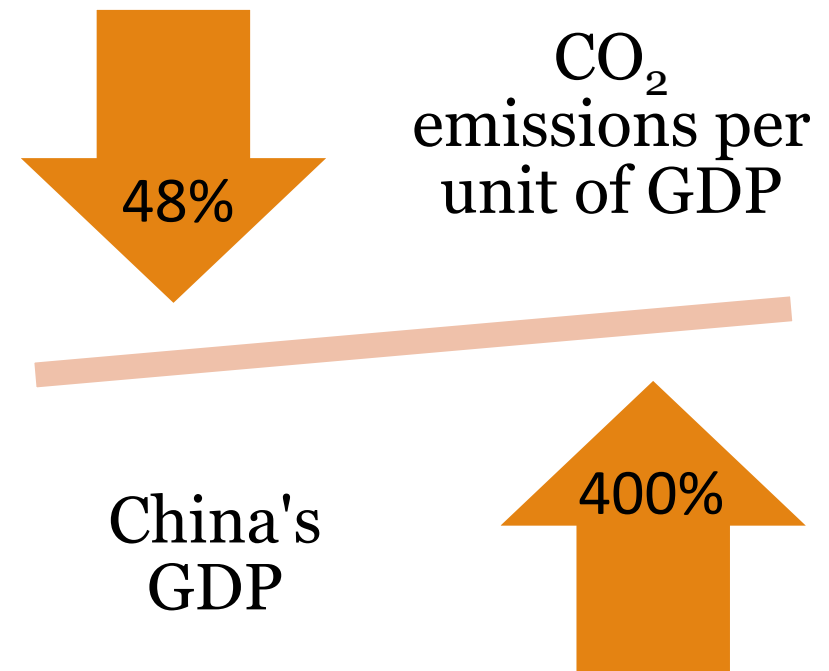
National Commitments

- **Climate action target proposed in 2009:**

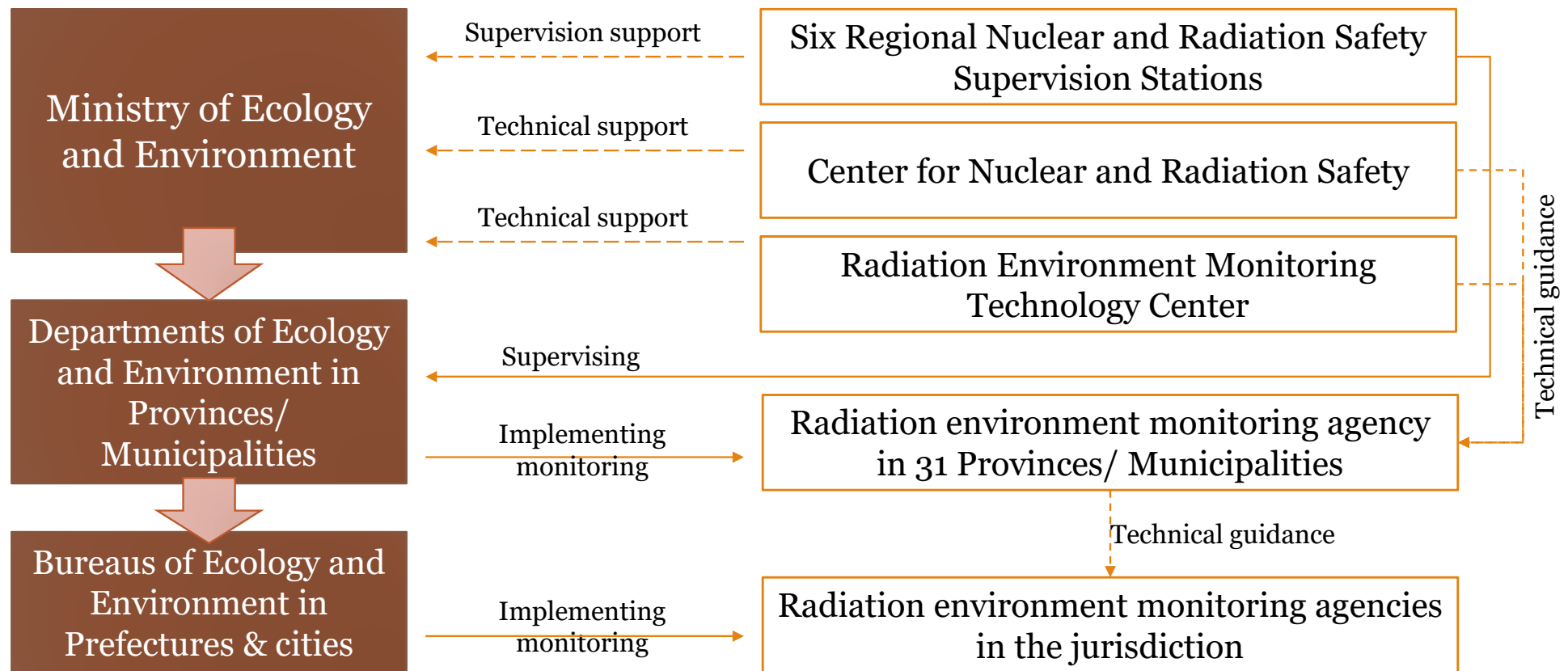
- By 2020, carbon emissions will be reduced by 40%-45% compared to 2005
- Completed ahead of schedule

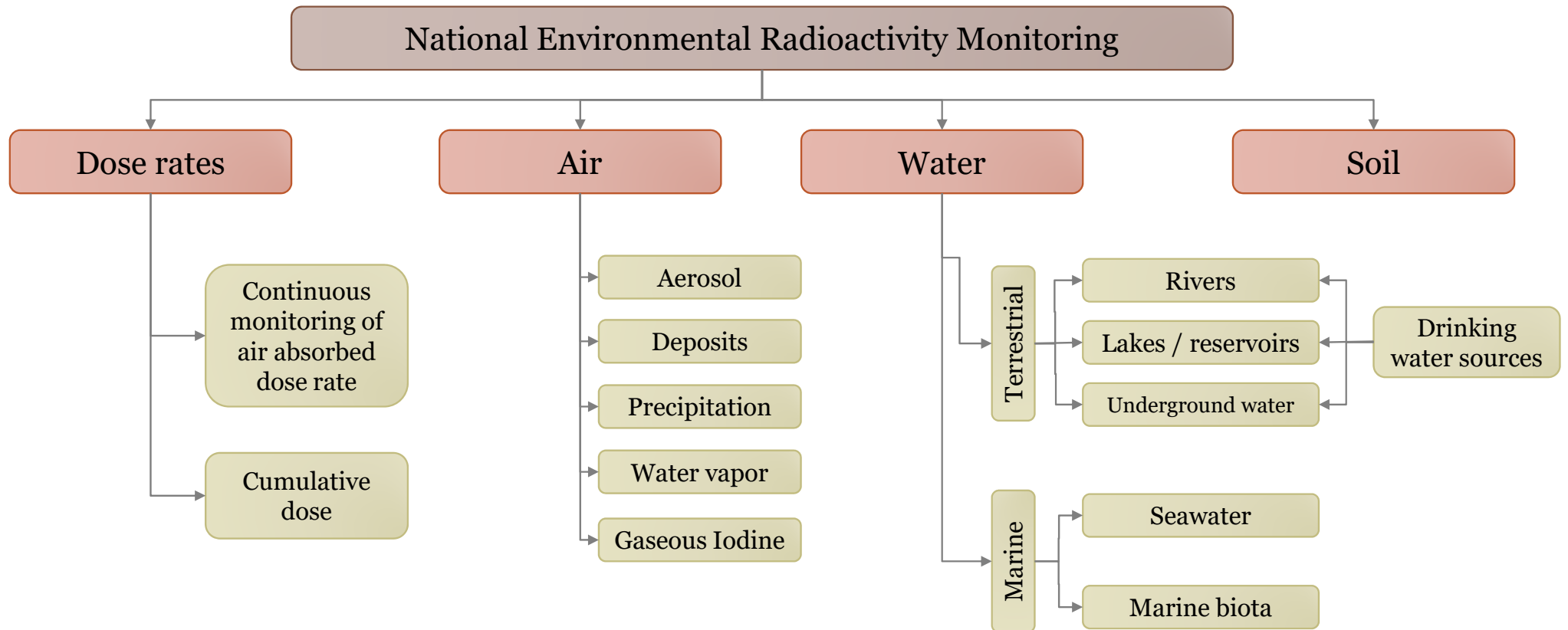
- **New commitment made in 2020:**

- To achieve the peak of carbon emissions by 2030
- To achieve carbon neutrality by 2060

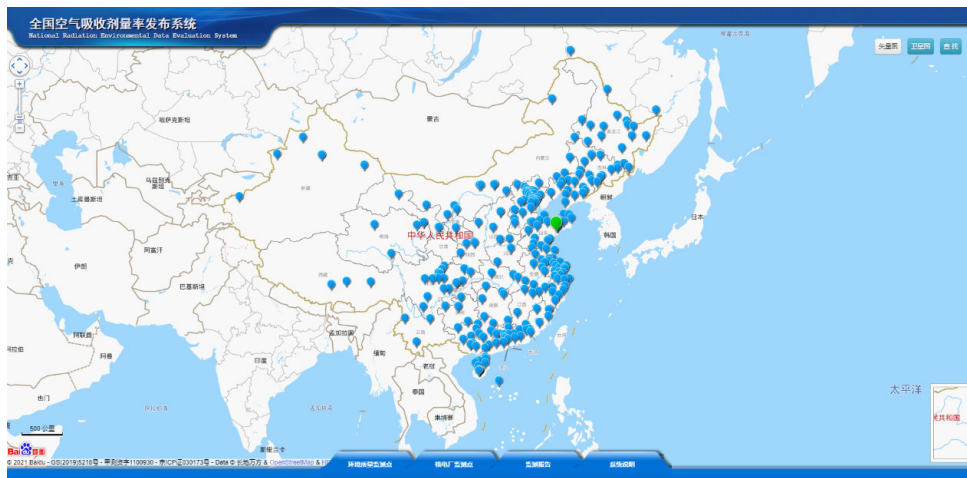


Environmental Radioactivity Monitoring Implementation System in China





Data release



Real-time monitoring data release system

<http://data.rmtc.org.cn:8080/gis/PubIndex.html#>



Annual Reports of the National
Radiation Environment

Collaboration with IAEA



IAEA/RCA Regional Training Course 2013 on
Radioanalysis of environmental samples



IAEA/RCA Regional Training Course 2019 and technical
visit to Radiation Monitoring Technology Center

AMS systems in China

No.	Institute	City	Type
1	China Institute of Atomic Energy	Beijing	2 x 13 MV
2	China Institute of Atomic Energy	Beijing	150 kV
3	China Institute of Atomic Energy	Beijing	2 x 350 kV
4	China Institute of Atomic Energy	Beijing	2 x 350 kV
5	China Institute for Radiation Protection	Taiyuan	2 x 300 kV
6	Peking University	Beijing	2 x 6 MV
7	Peking University	Beijing	2 x 0.5 MV
8	Beijing Normal University	Beijing	2 x 1 MV
9	Institute of Earth Environment, CAS	Xian	2 x 3 MV
10	Institute of Earth Environment, CAS	Xian	2 x 200 kV
11	Institute of Geochemistry, CAS	Guangzhou	2 x 0.5 MV
12	Institute of Hydrogeology and Environmental Geology, CGS	Shijiazhuang	2 x 1 MV
13	Tianjin University	Tianjin	2 x 0.5 MV
14	Guangxi University	Nanning	150 kV
15	Nanjing University	Nanjing	2 x 200 kV
16	Lanzhou University	Lanzhou	2 x 200 kV
17	Qingdao	Qingdao	2 x 200 kV
18	Qingdao	Qingdao	2. 0.5 MV
19	Institute of Geochemistry, CAS	Guiyang	2 x 1MV
20	Henan University	Kaifeng	2 x 200 KV

Another 5 AMS systems are under construction: China Academy of Engineering Physics, 404 Factory (CNNC), SINOPEC Institute, Sun Yat-sen University, Henan Provincial Institute of Cultural Heritage and Archaeology

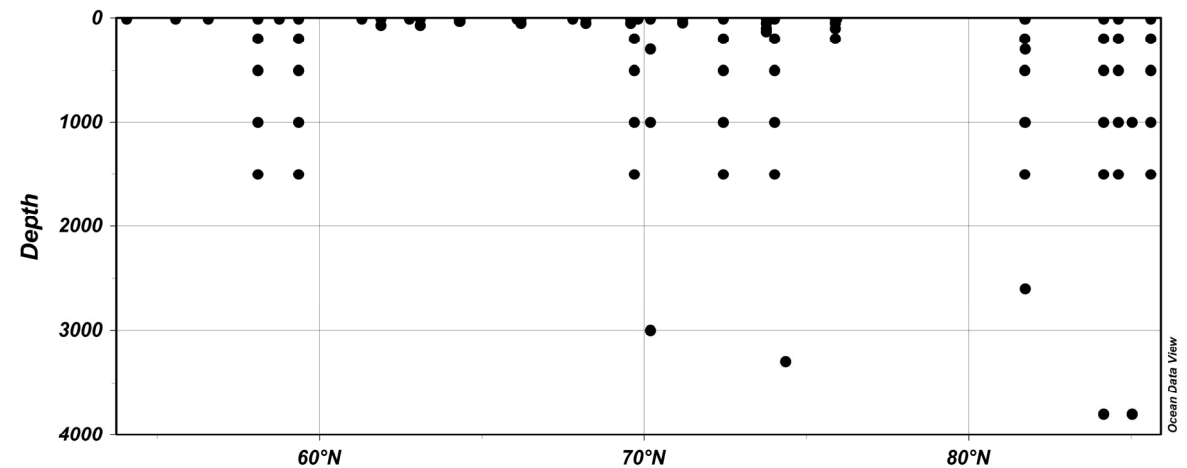
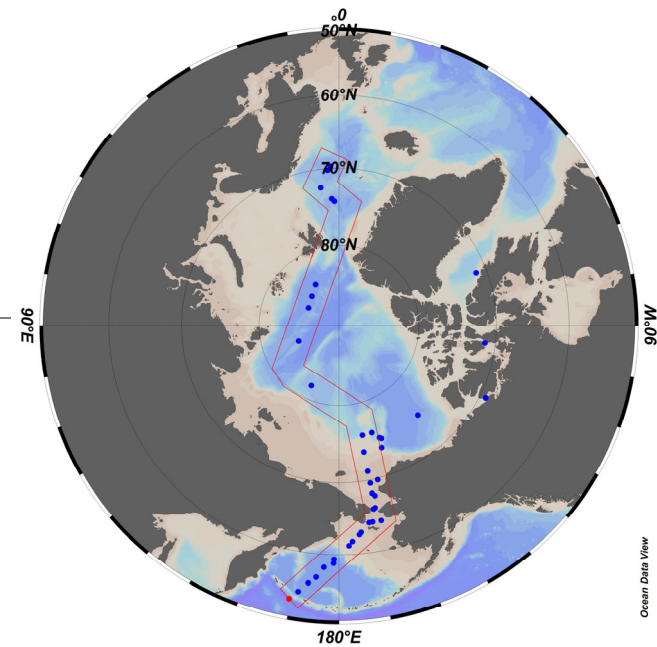
Sampling and Analyzing

CHINARE Arctic-8 Cruise

Jul – Oct 2017

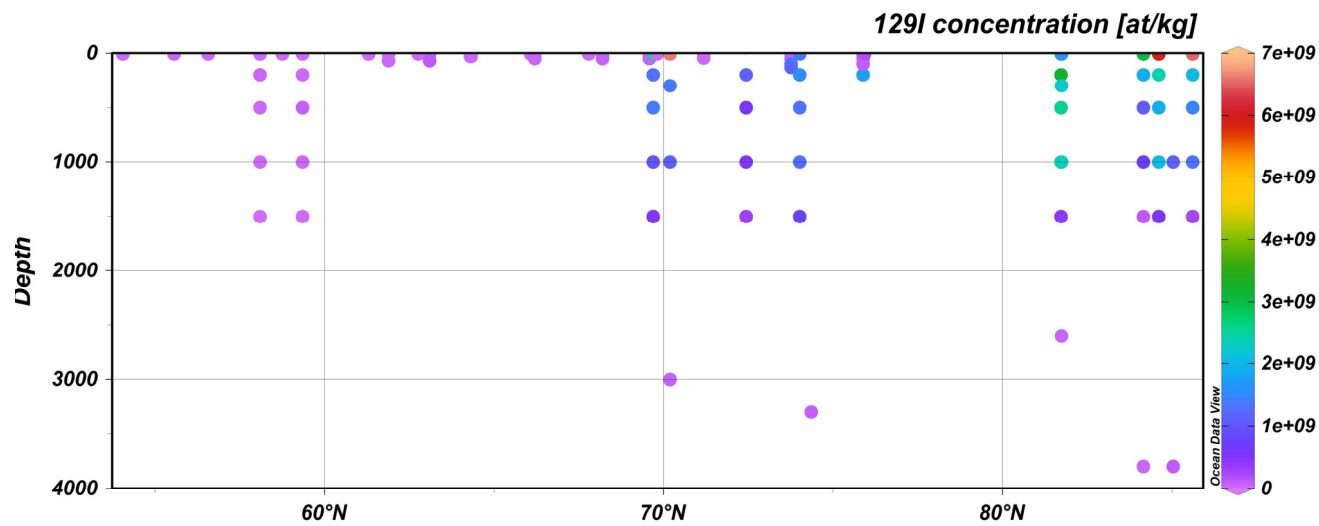
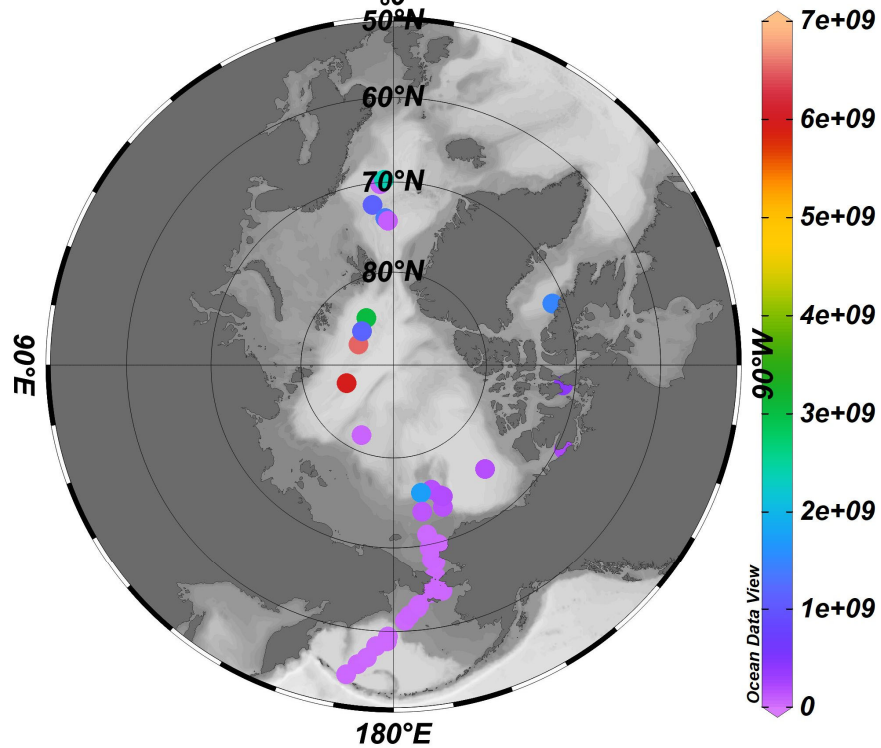
52 stations, 0-3800 m depth

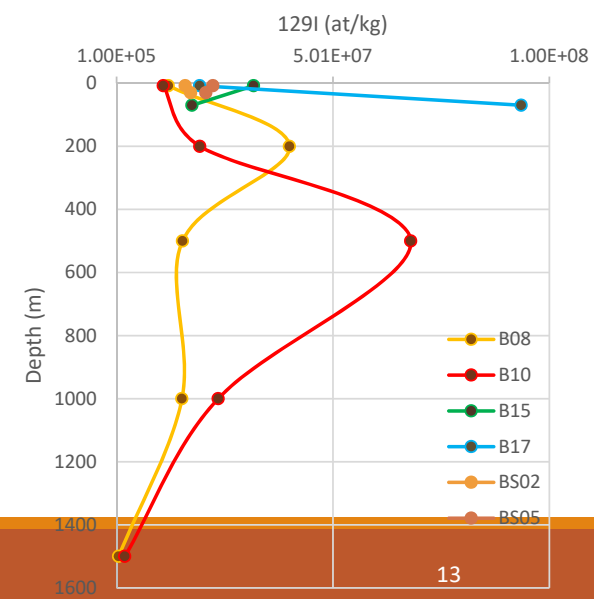
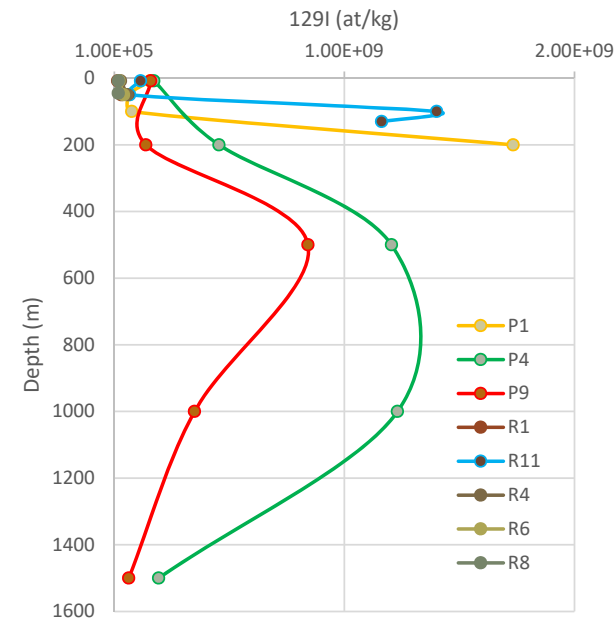
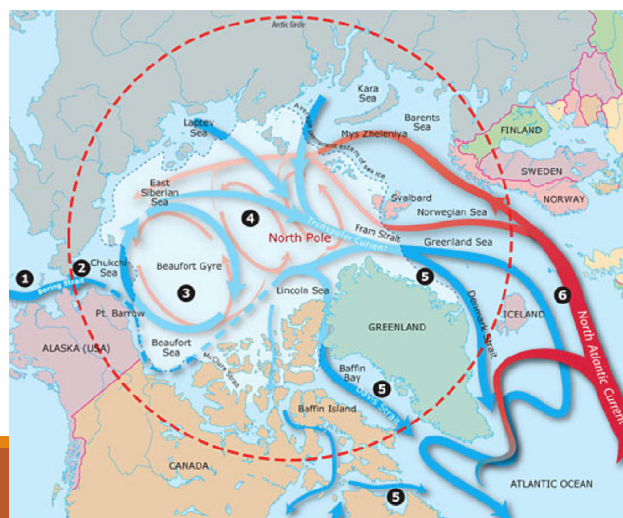
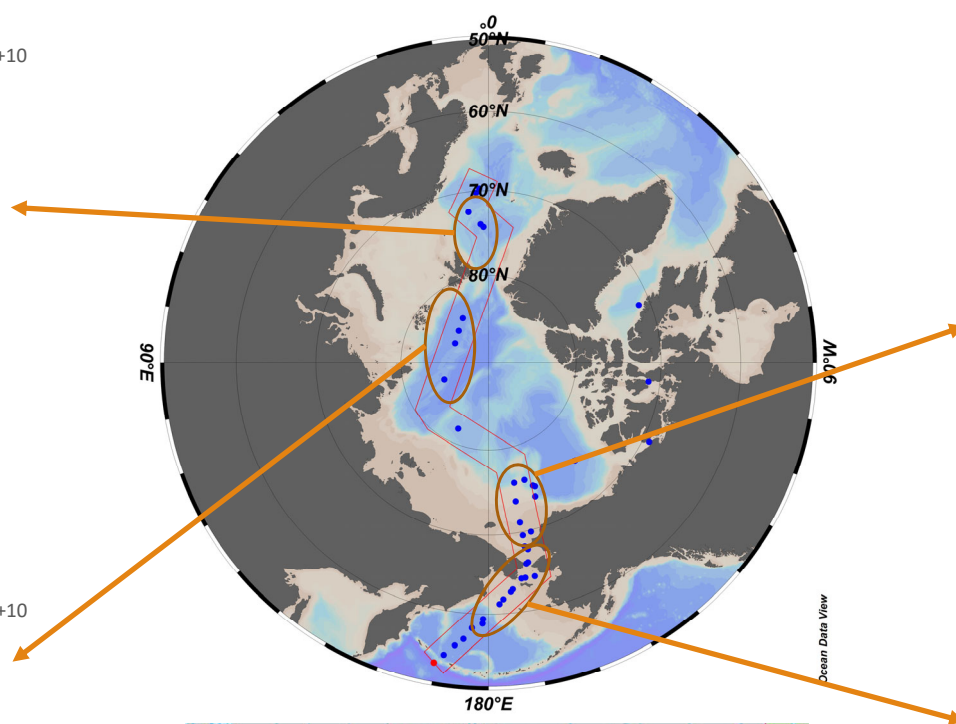
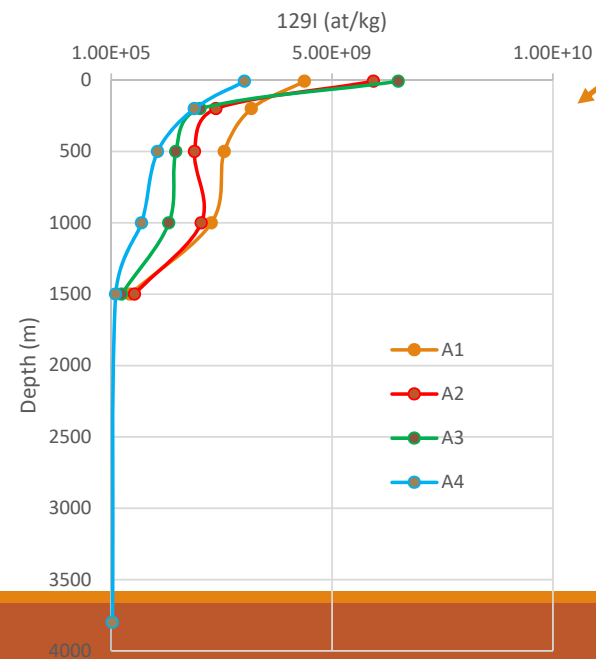
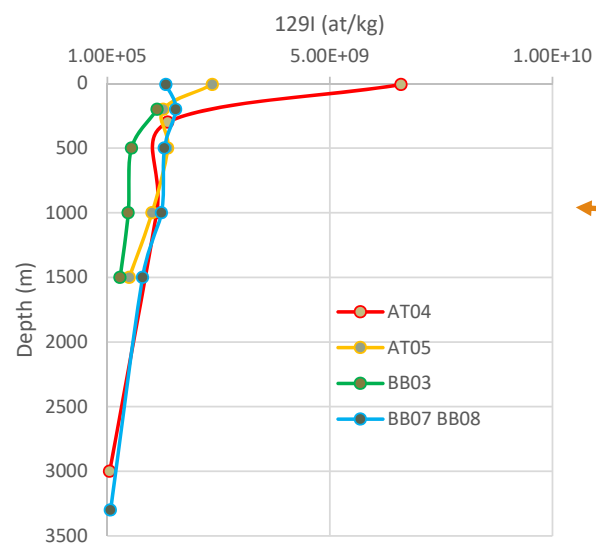
1 MV Tandem AMS in CNS, Seville Univ., Spain



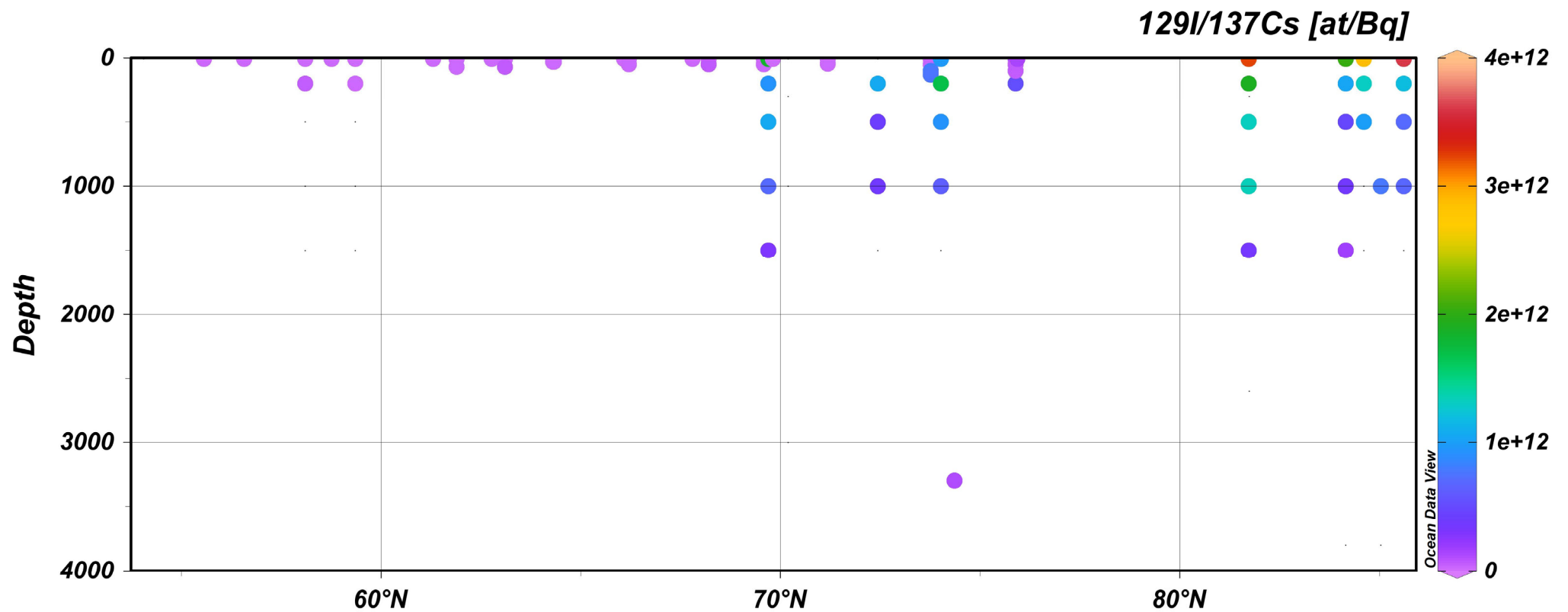
I-129 Distribution

129I concentration [at/kg] @ Depth=first





I-129/Cs-137 Distribution



THANK
YOU

A watercolor illustration featuring the words "THANK YOU" in a black, serif, all-caps font. The text is arranged in two lines, with "THANK" on top and "YOU" below it. The words are surrounded by several autumn leaves in shades of red, pink, and orange, some with white veins. Small clusters of green berries are also scattered around the leaves. The entire illustration is set against a white background.