



# Cooperation of Russian and Norwegian scientists in the Barents Sea research - history, results and prospects

V International Conference  
«Fishery in the Arctic:  
challenges, international practice, prospects»

Murmansk 2018



# Major milestones



## First contacts

- 1887 – Establishment of personal contacts between N. M. Knipovich and Norwegian scientists
- 1898 – The first call of the Russian R/V «Andrey Pervozvanny» at the port of Oslo, the meeting of N. M. Knipovich, F. Nansen and J. Hjort
- 1902 – Establishment of ICES
- 1923 – The beginning of informal Soviet – Norwegian cooperation within hunting concessions
- 1926 – Establishment of the Joint Norwegian – Soviet Commission of experts in seal biology and sealing conditions in the northern waters





# Major milestones



Two scientists very important for the development and cooperation in fisheries research between Russia and Norway:

**Nikolay M. Knipovich (1862-1939) and Johan Hjort (1868-1948).**

They cooperated within ICES established in 1902 and its committees.

Knipovich was a Russian delegate (1902-1914) and Vice President (1913-1914).

Hjort was a delegate for Norway (1902-1948), Vice President (1920-1938) and President (1938-1948).



# Major milestones



## Re-establishing and expanding cooperation

1955 - USSR resumed membership in ICES

1956 – Exchange of visits of the Soviet and Norwegian Ministers of Fisheries. Establishment of official contacts between USSR and Norway in the field of fisheries research

1957 – The first joint scientific conference at PINRO

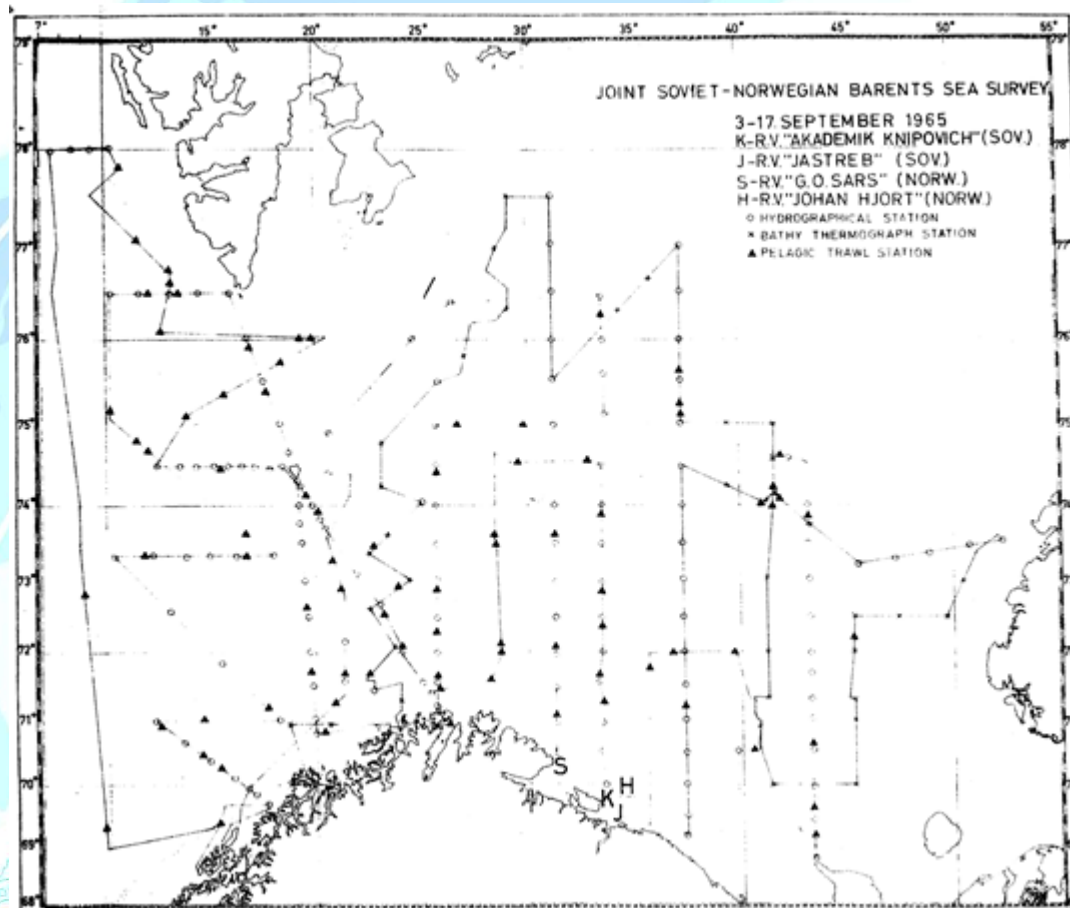
1958 – The first visit of Russian RV Sevastopol to Bergen

1965 – The first joint survey to assess the strength of year-classes of the main target fishes in the Barents Sea (0-group survey)

Since 1965 – the practice of planning and conducting of joint research became a tradition. Annual meetings of Russian (PINRO) and Norwegian (IMR) scientists in March



# Major milestones



Routes and stations from the first joint 0-group survey report (1965)







# Major milestones



In 1972 it was signed an intergovernmental agreement "On economic, industrial, scientific and technical cooperation between the USSR and Norway", and in 1975 an agreement on cooperation in the field of fisheries, for the implementation of which was created a Joint Soviet-Norwegian Fisheries Commission. Since then, cooperation between the scientists of our countries in the field of fisheries research has entered a new phase and became more inclusive, strong and committed

Since 1975 – Joint research on pelagic fishes in the Barents Sea

Since 1983 – Russian-Norwegian Symposia (once in two years)

Since 1990 – Joint trawl-acoustic survey of blue whiting west of the British Isles





# Major milestones



Since 1995 – International trawl-acoustic survey for the stock assessment of Atlanto-Scandian herring in the Norwegian and Barents Seas (Russia, Faroe Islands, Iceland, Norway, EU)

Since 1996 – International survey for the stock assessment of the Irminger Sea redfish (Russia, Iceland, Germany and Norway)

Since 2000 – Survey for demersal fishes in the Barents Sea and adjacent waters (Greenland halibut, cod, haddock and other species) (winter survey)

Since 2001 – Remote sensing to study the relationship between distribution of feeding capelin and marine mammals in the Barents Sea

Since 2001 – Publishing Joint IMR/PINRO report series

Since 2004 – Joint “Ecosystem” survey in the Barents Sea







# SCIENTIFIC RESEARCH COLLABORATION



PINRO,  
Murmansk



University  
of Bergen



University of  
Tromsø –the Arctic  
University of  
Norway



The Norwegian  
Institute for Nature  
Research,  
Trondheim



Norwegian  
Institute of Marine  
Research &  
National Institute  
of Nutrition and  
Seafood Research  
(NIFES), Bergen



Akvaplan-niva AS



The University Centre in Svalbard

University Centre  
in Svalbard



Nansen  
Environmental and  
Remote Sensing  
Centre, Solheimsvik





# Main ways of present scientific cooperation



- Implementation of the Joint Russian-Norwegian Fisheries Commission requests

Joint research program approved annually by the Joint Fisheries Commission (usually Appendix 10 of Protocol).

These programs include not only the traditional studies of marine resources, but also the special requests related for example to work out or revise of the harvest control rules for different commercial species, to develop common technical regulatory measures for fisheries, to establishing accurate conversion factors and many other tasks.





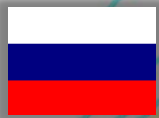
# Main ways of present scientific cooperation



- Annual meetings for reporting and coordination of biological resources research carried out according to both national and international programs (since 1965, at present format since 1979 after establishment of Joint Fisheries Commission)



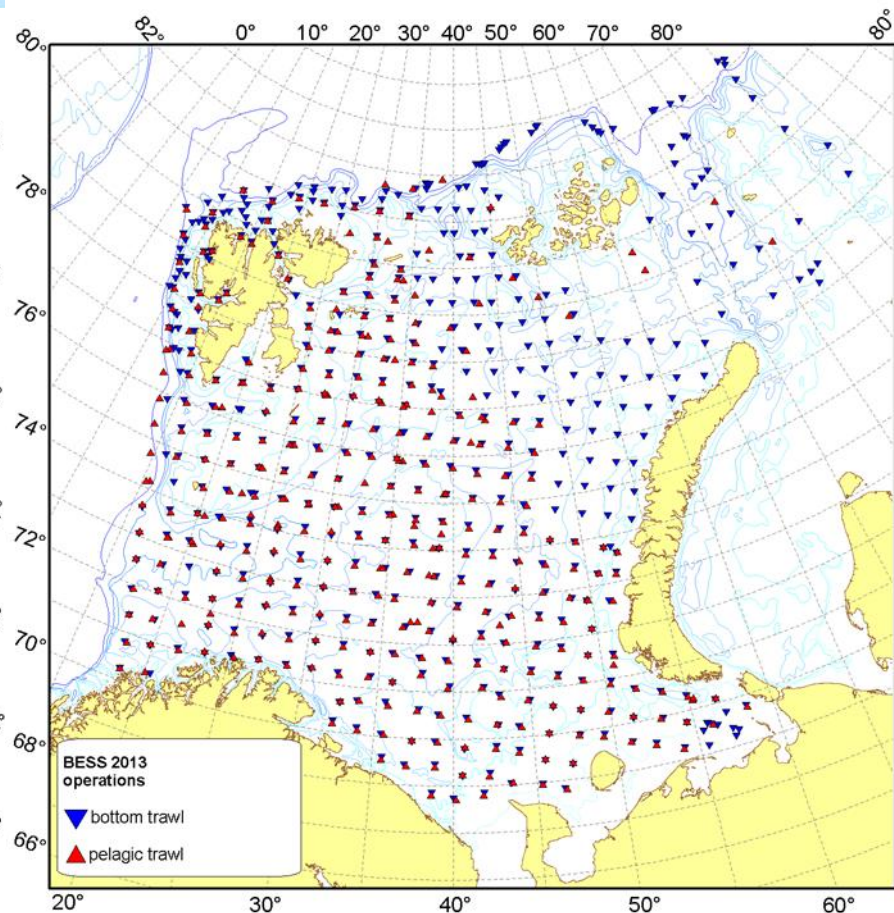
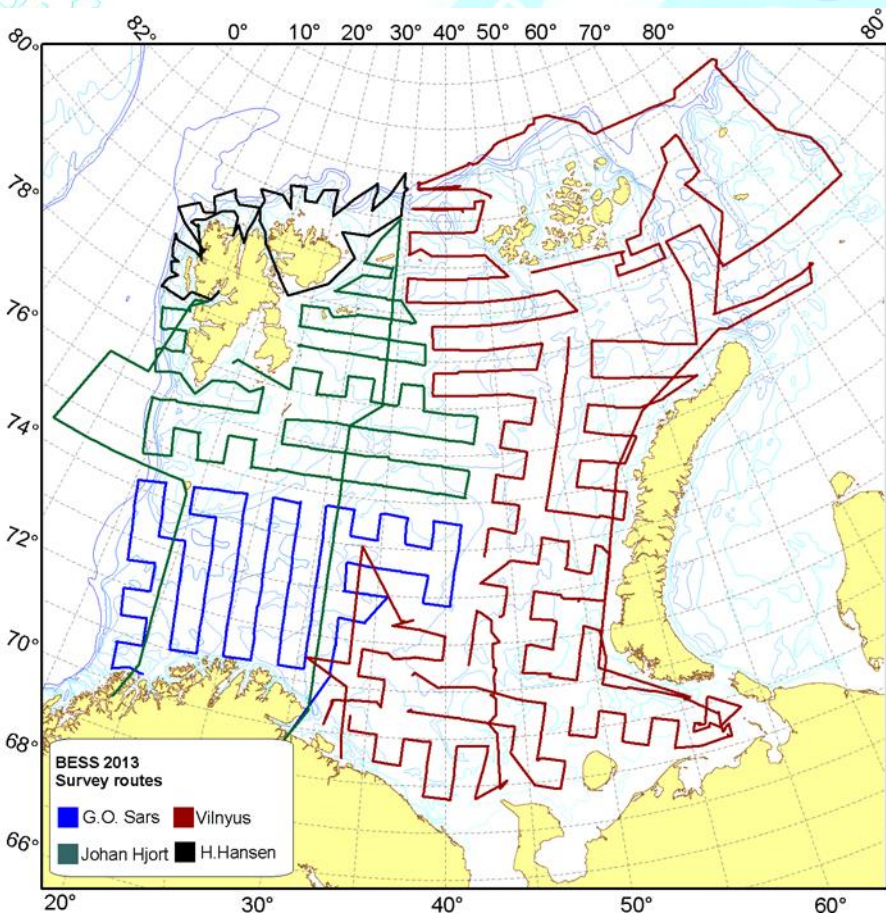




# Main ways of present scientific cooperation



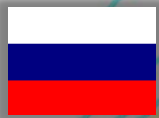
- Joint surveys for stock assessment of marine resources



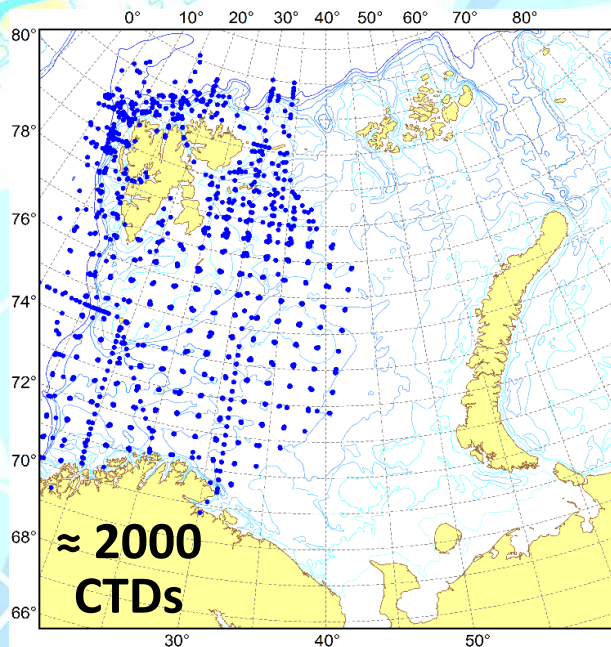
Tracks and station positions in August-September



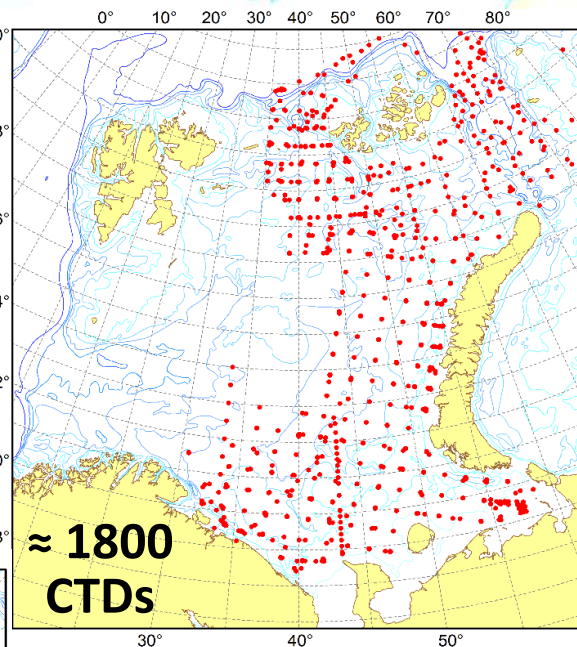




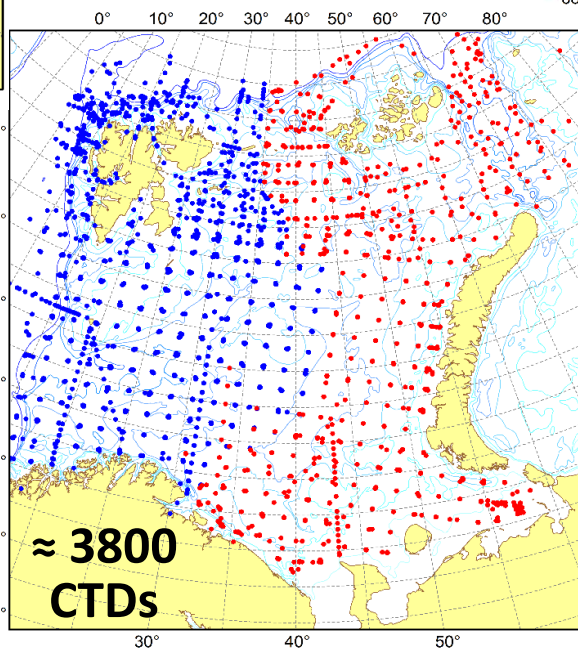
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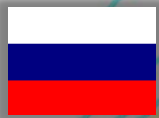
**Norwegian CTDs**



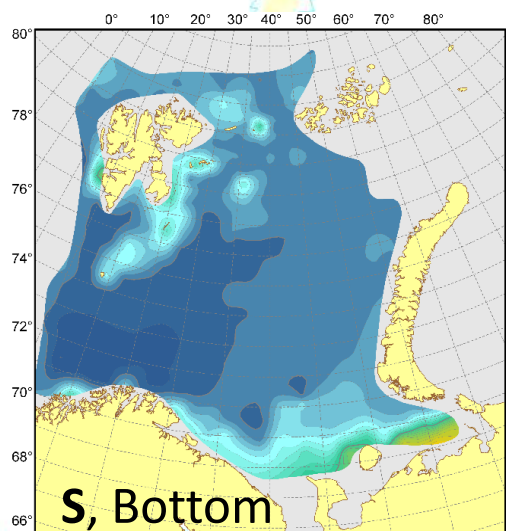
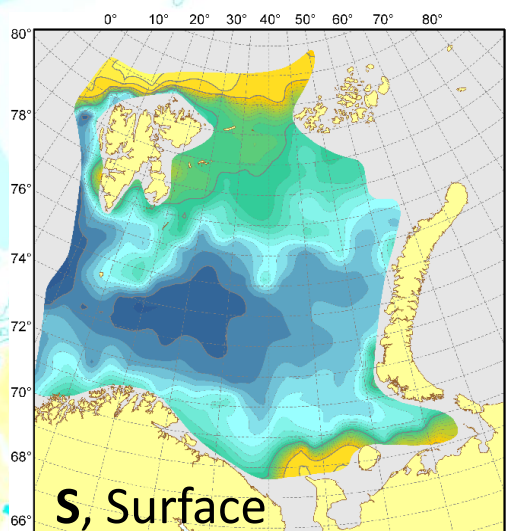
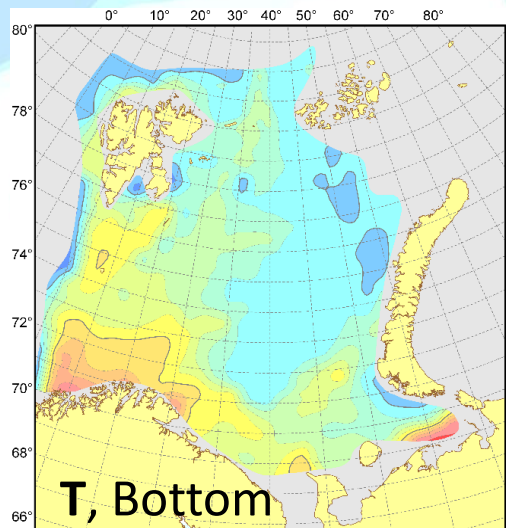
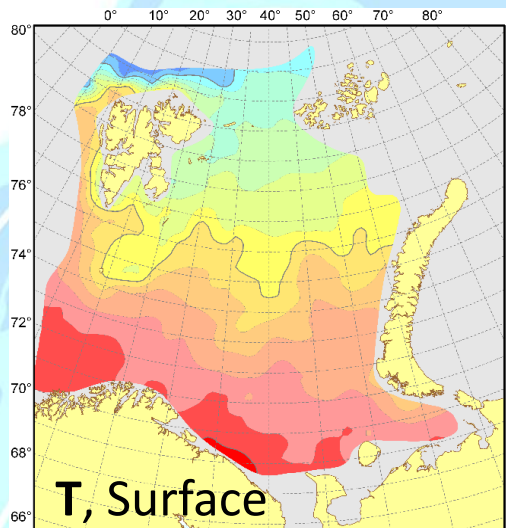
**Russian CTDs**







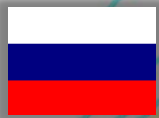
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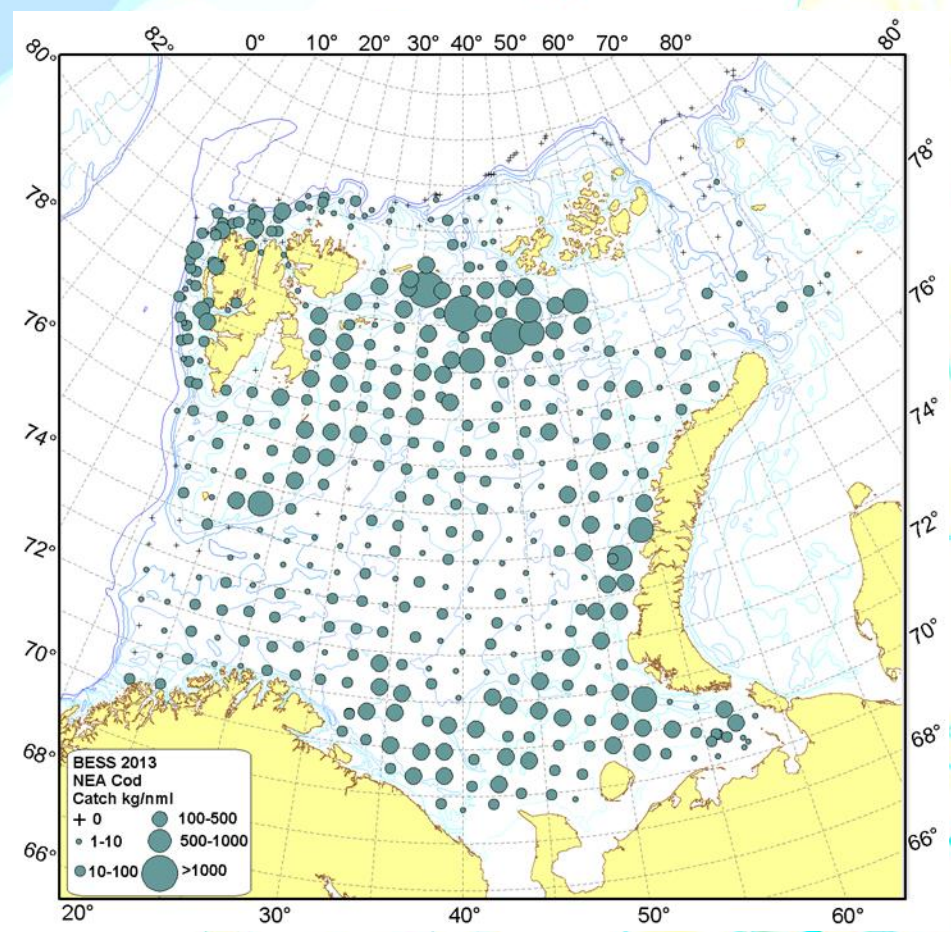
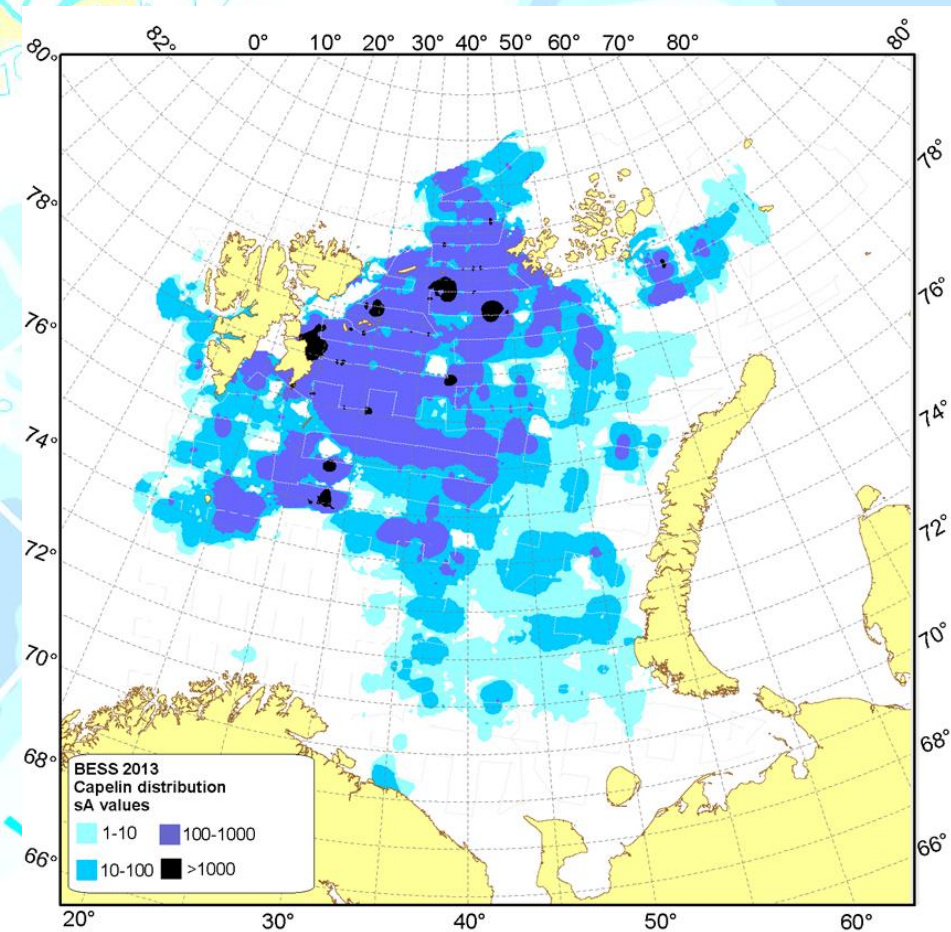
Temperature and salinity in August–September







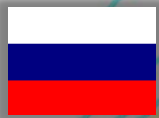
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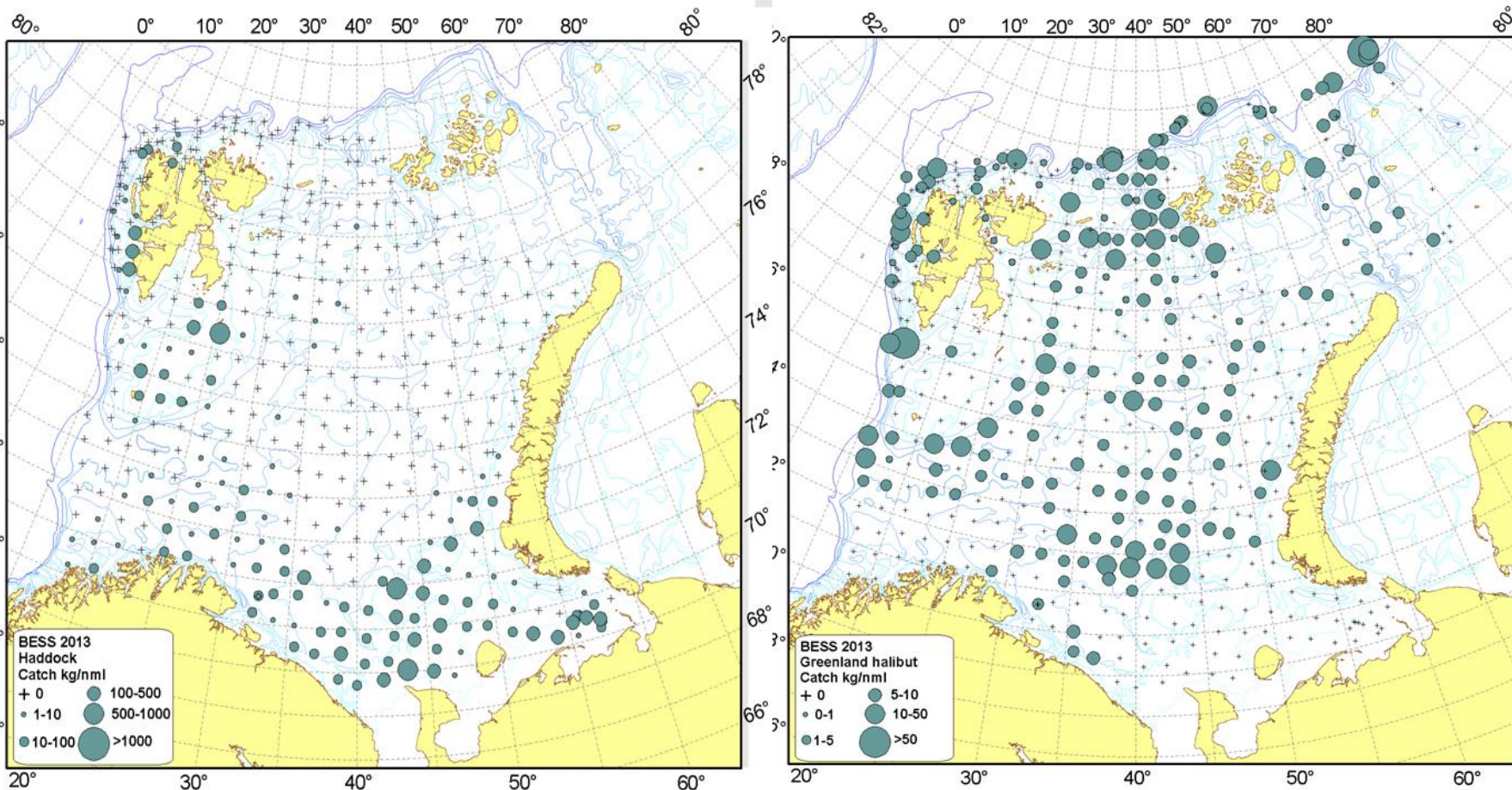
Distribution of capelin and cod







# Main ways of present scientific cooperation



Distribution of haddock and Greenland halibut







# Main ways of present scientific cooperation



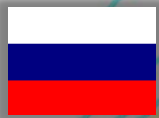
- Joint Symposia (once in two years)



15 Symposia were organized since 1983.  
During those meetings the most important  
topics were discussed.







# Main ways of present scientific cooperation

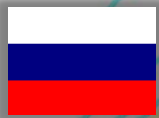


- Exchange of scientists and experts



IMR and PINRO on a regular basis organize alternate visits specialists, including age readers, specialists on plankton, benthos, stock modelling and others.

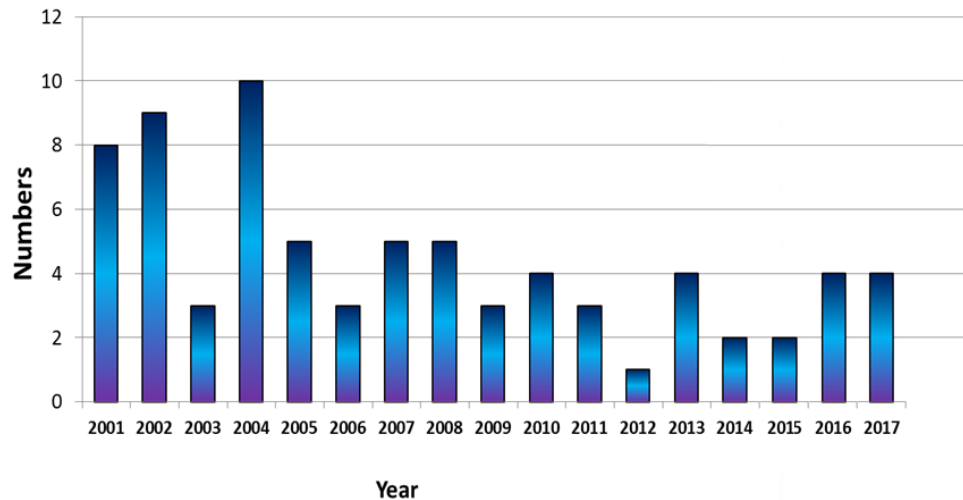




# Main ways of present scientific cooperation



- Publication of IMR/PINRO Joint Report Series

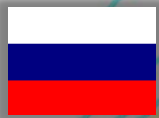


65 joint reports were published in 2001-2017.

From 1 to 10 issues published annually.



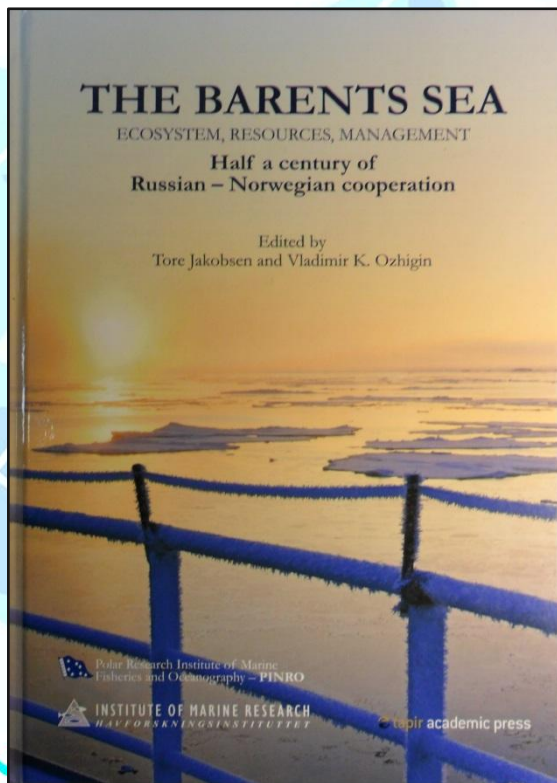




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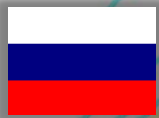
- Publication of Joint IMR/PINRO Monograph in 2011



The Barents Sea – Ecosystem, Resources, Management. Half a century of Russian-Norwegian cooperation.

Ed. by T. Jakobsen and V. Ozhigin.  
Tapir Academic Press, Trondheim, 825 pp.





# Main ways of present scientific cooperation



- Cooperation within the ICES

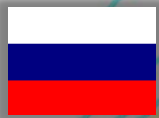


Russia and Norway possess the most extensive and comprehensive knowledge about the ecosystem of the Barents Sea.

The closest cooperation takes place during the meetings of the various expert groups (especially AFWG), workshops including benchmarks devoted to the state of the Barents Sea stocks.







# Perspective ways of scientific cooperation (floating and bottom garbage)



Some plastic garbage samples collected in the Barents Sea and adjacent waters in 2013-2015







**Thank you for attention!**

