



Baltic Marine Environment Protection Commission

Expert Group on Monitoring of Radioactive Substances
in the Baltic Sea

MORS EG 5-2015

Oulu, Finland, 19-21 May 2015

Document title	Monitoring of Radionuclides in the Baltic Sea in 2014 by Finland
Code	3-1
Category	INF
Agenda Item	3 – Scientific reports by the Contracting Parties and IAEA
Submission date	30.04.2015
Submitted by	Finland
Reference	

Background

This document contains the results by Finland on monitoring of radionuclides in the Baltic Sea in 2014.

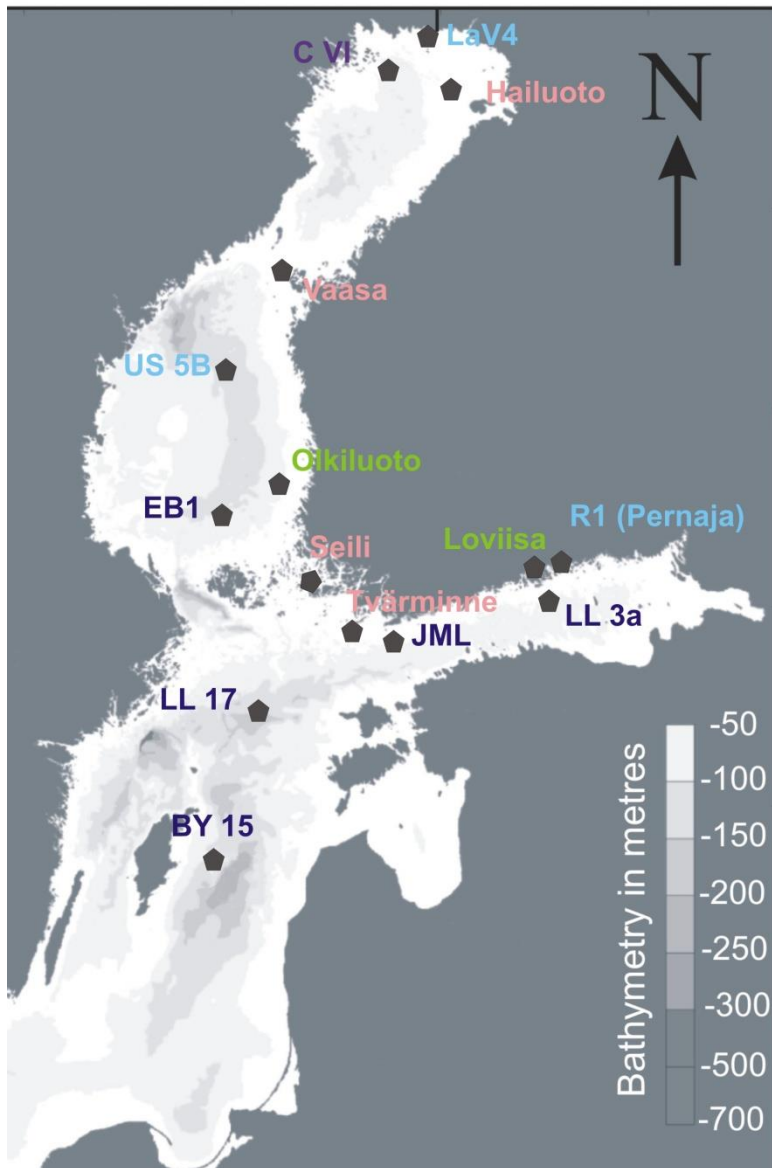
Action required

The Meeting is invited to take note of the information.

Monitoring of Radionuclides in the Baltic Sea in 2014

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Bathymetric data, Seifert et al. 2001

Sampling stations & samples

Seawater samples: 11 stations

Sediment samples: 6 stations

Biota samples: 6 stations

Sea Water samples

Fish samples

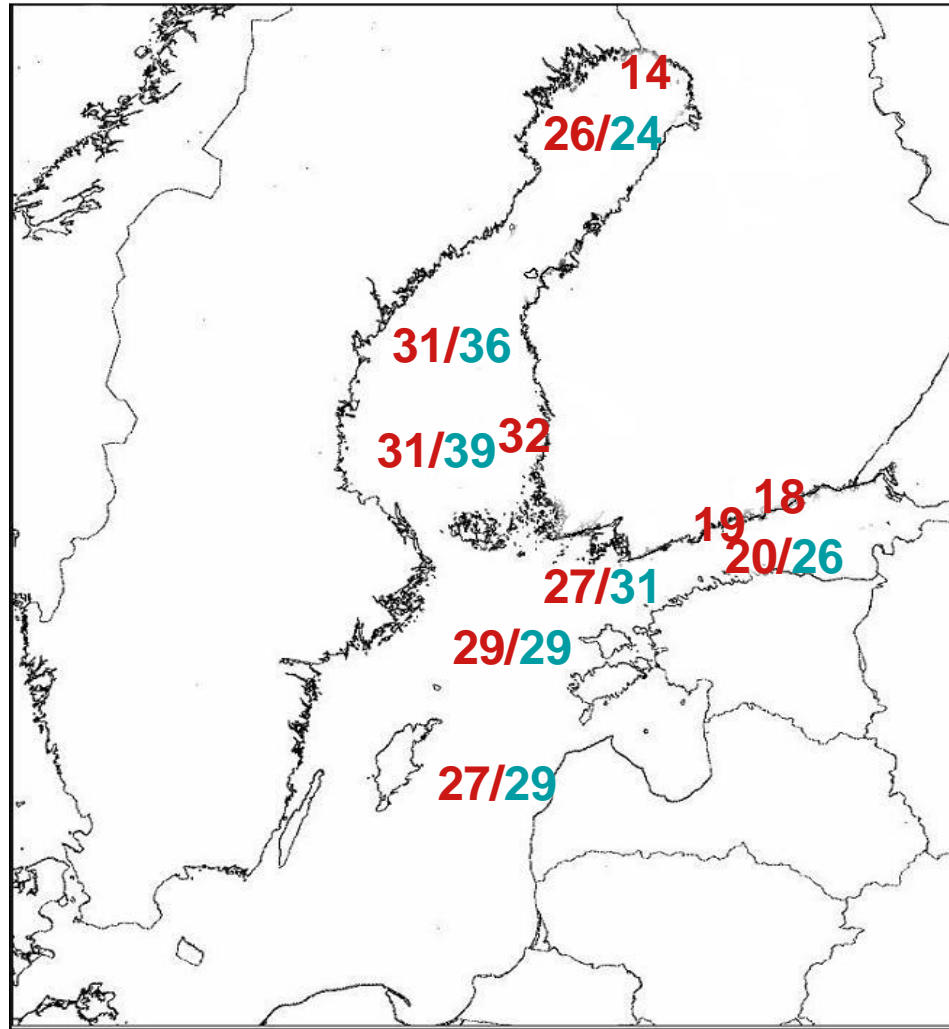
Sea Water and Bottom Sediment samples

Sea Water+ Fish+ Other Biota

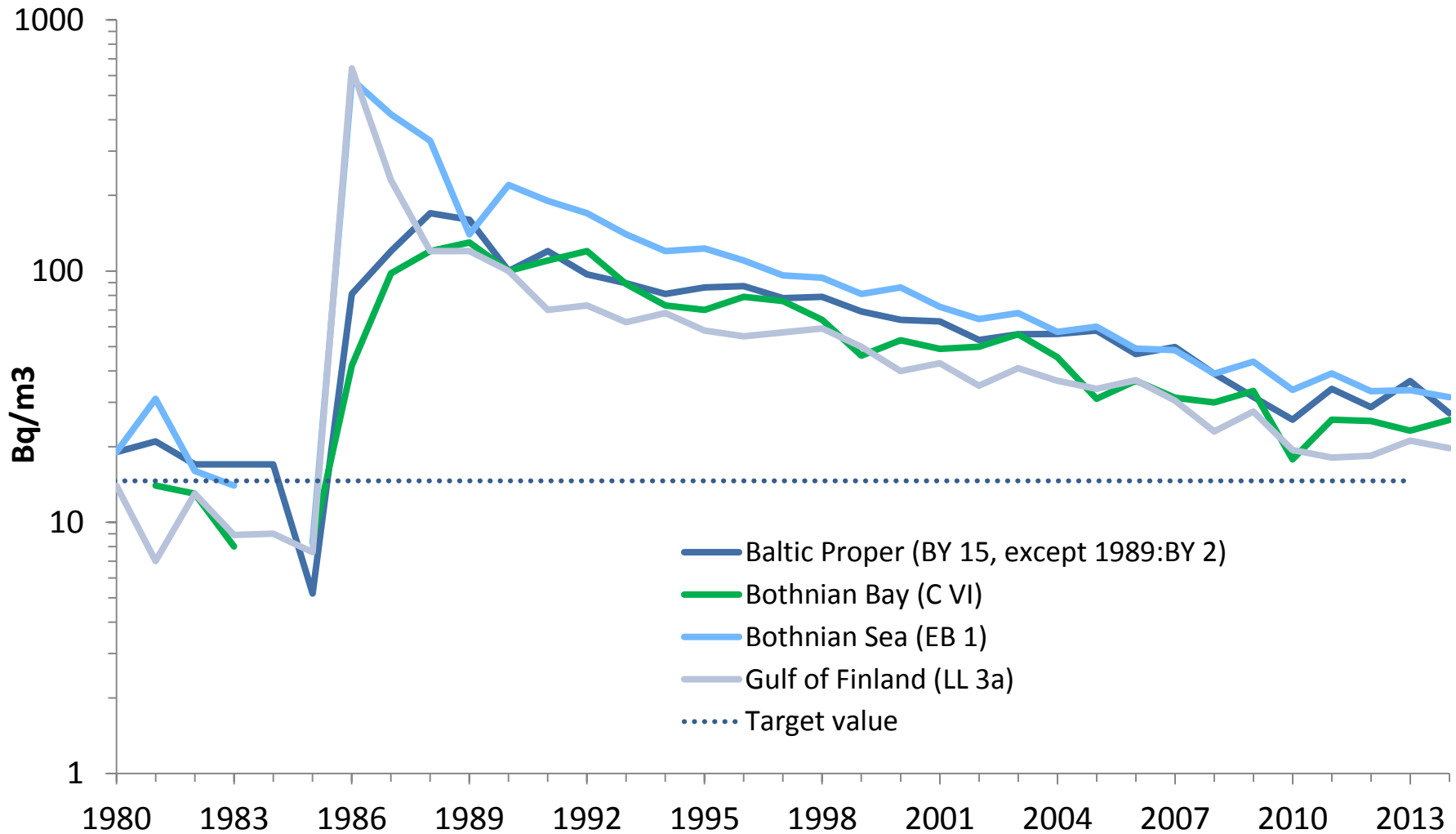
Cs-137 in seawater (Bq/m³) in 2014

surface

bottom

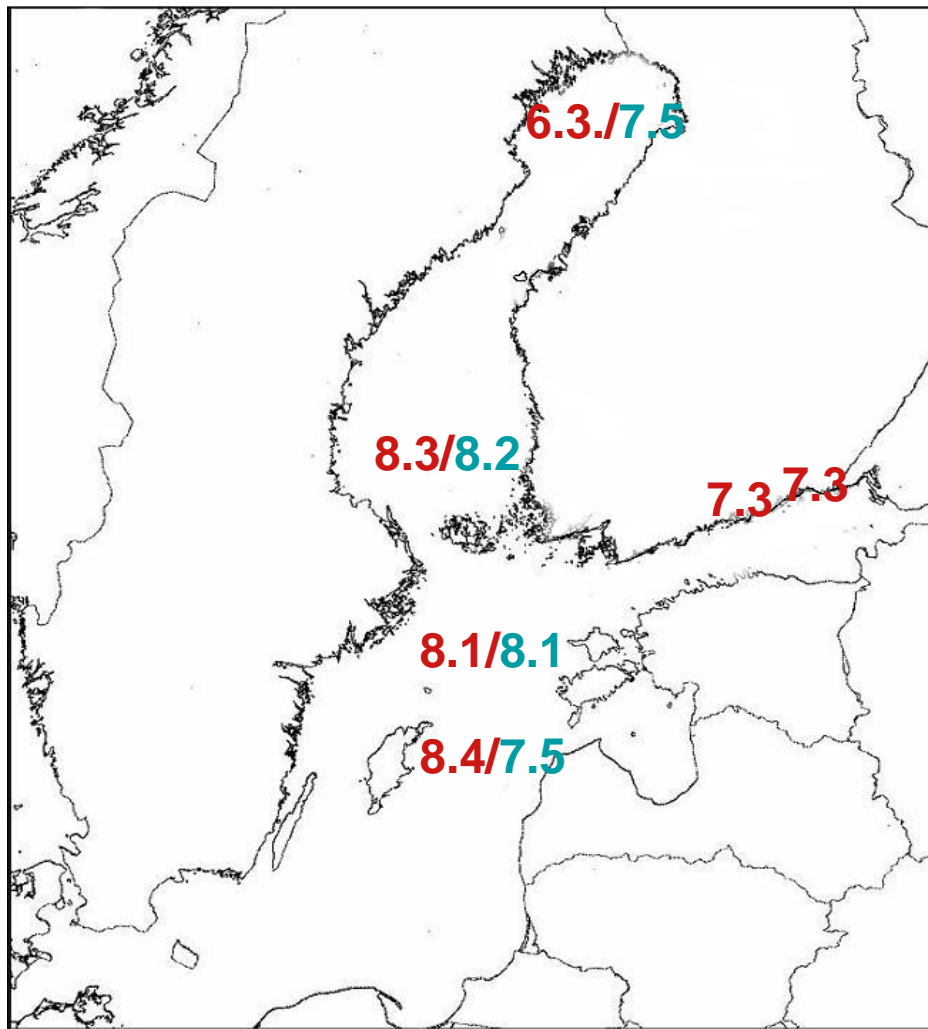


Cs-137 concentrations in surface water in different part of the Baltic Sea between 1980 - 2014



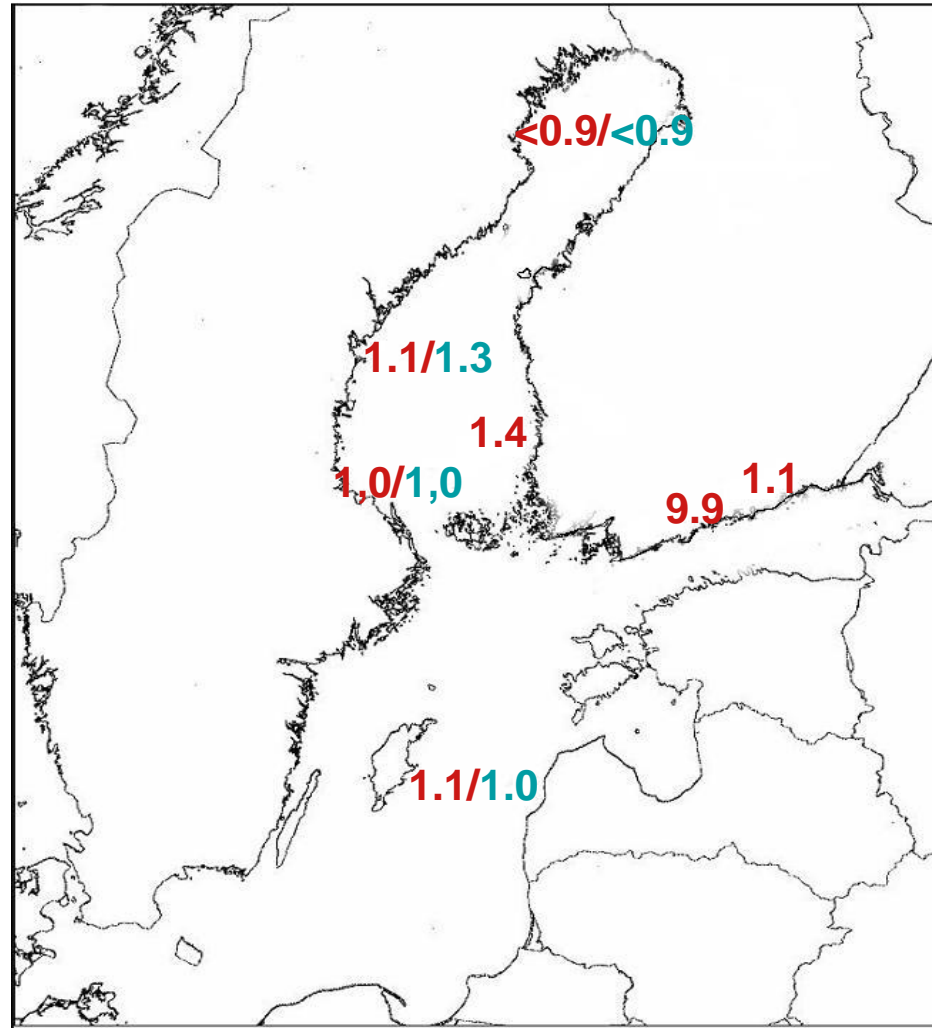
Sr-90 in seawater (Bq/m³) in 2014

Surface/Bottom

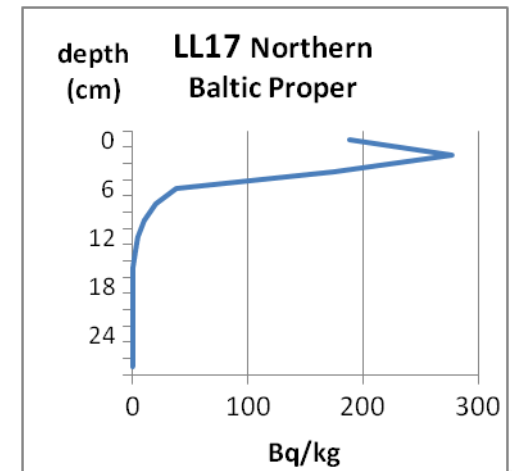
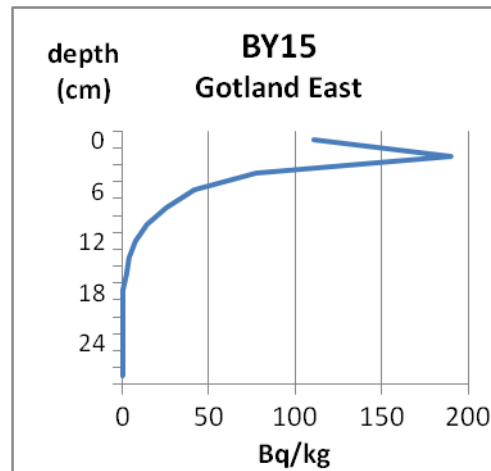
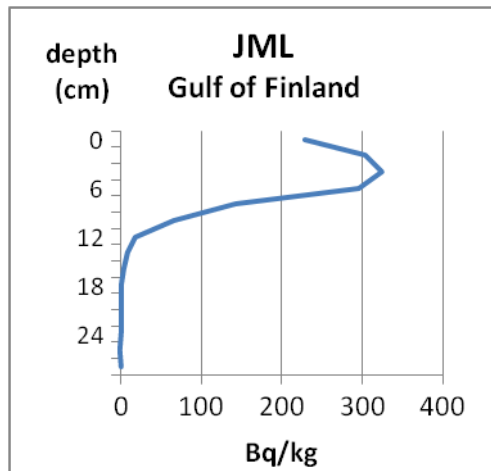
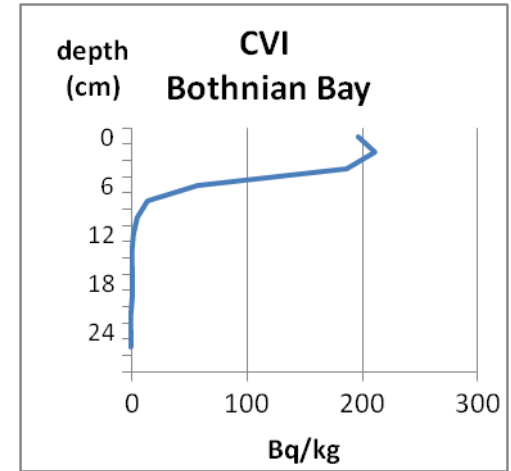
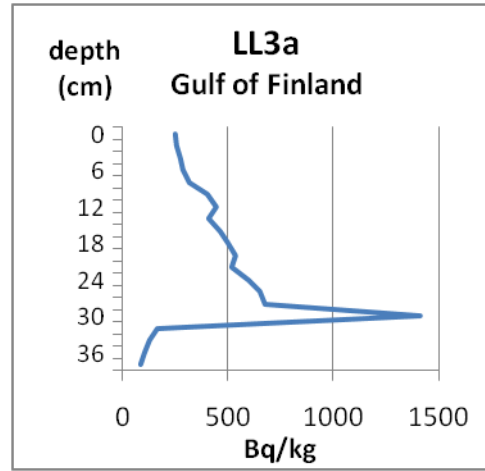
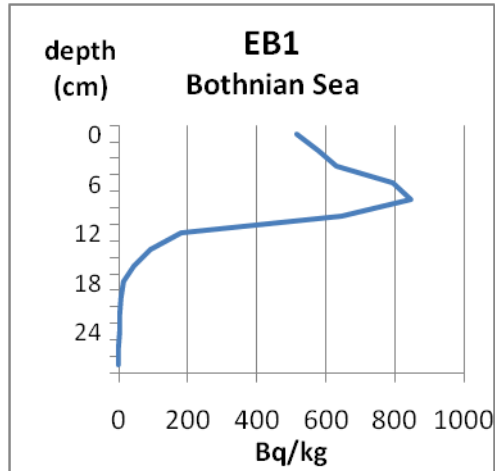


^3H in seawater (Bq/l) in 2012

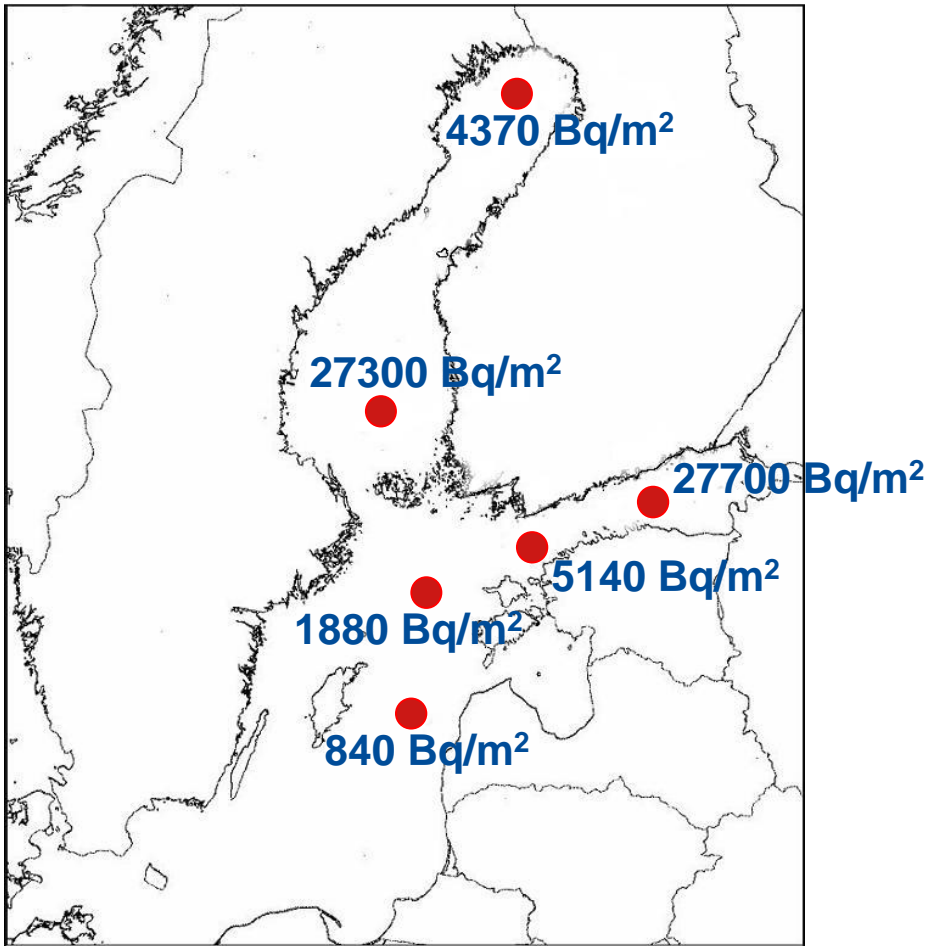
Surface/Bottom



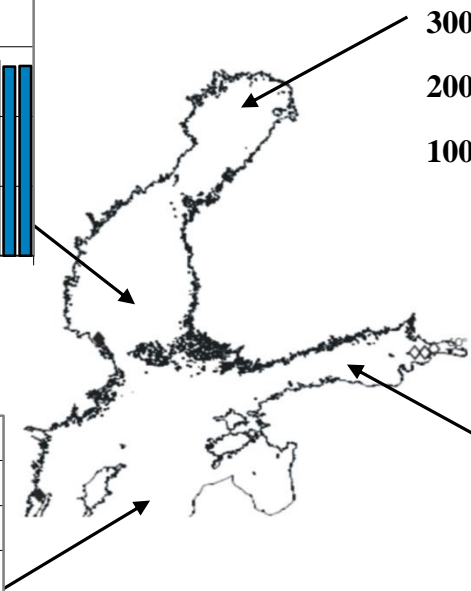
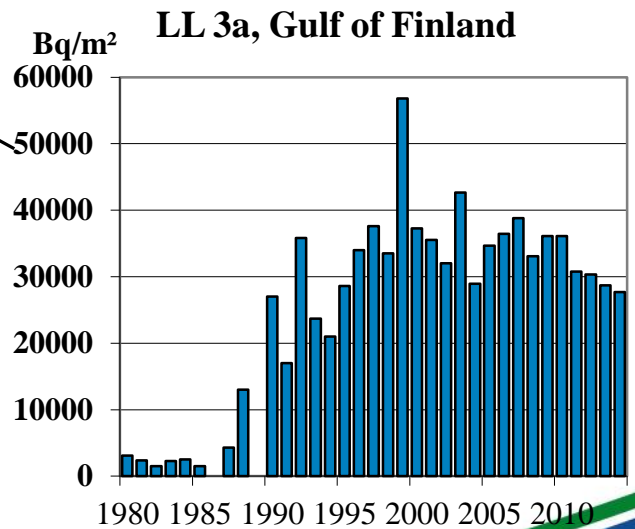
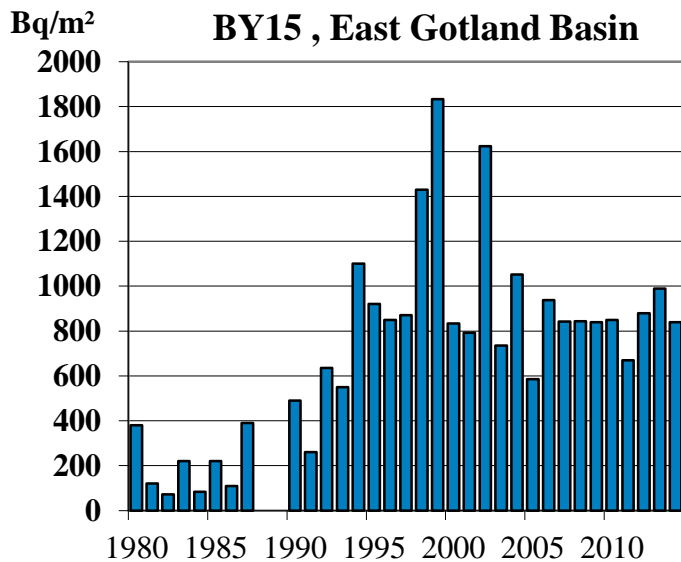
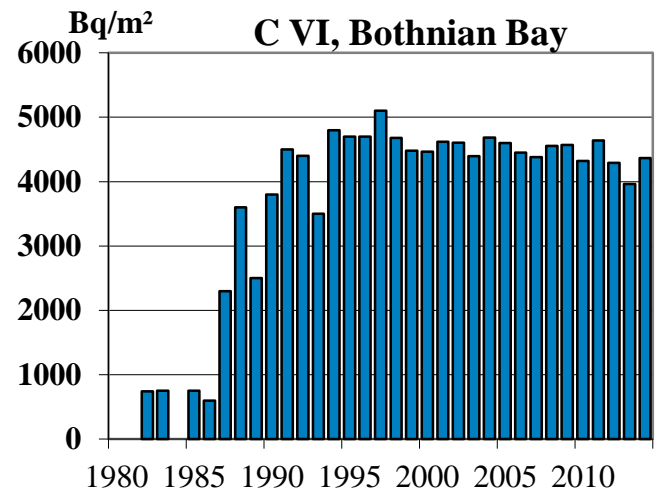
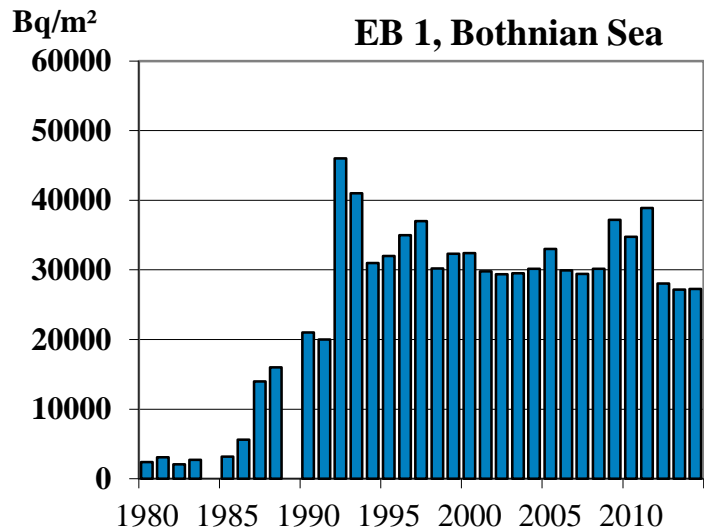
Concentrations of ^{137}Cs (Bq/kg) in sediment as a function of depth in 2014



^{137}Cs in the Baltic Sea sediments 2014

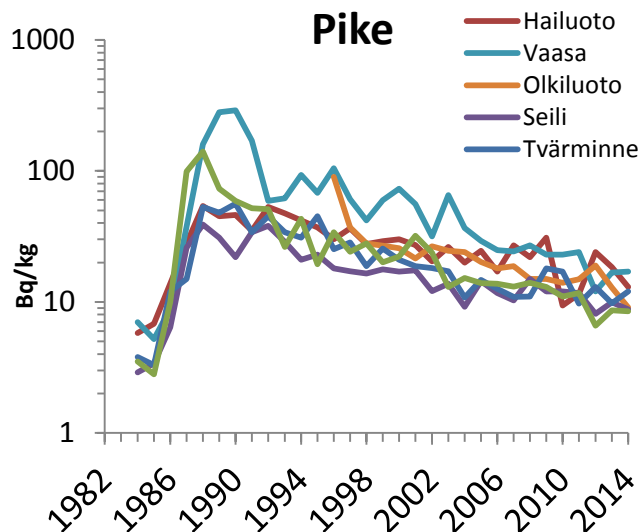
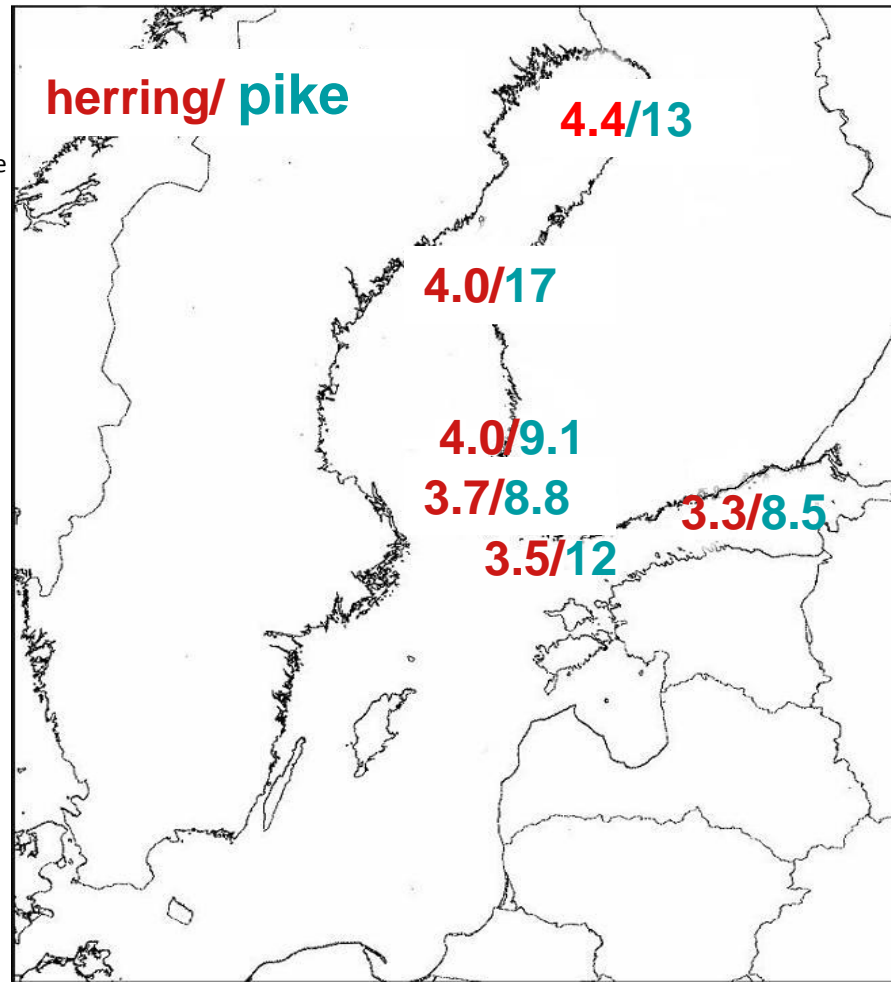
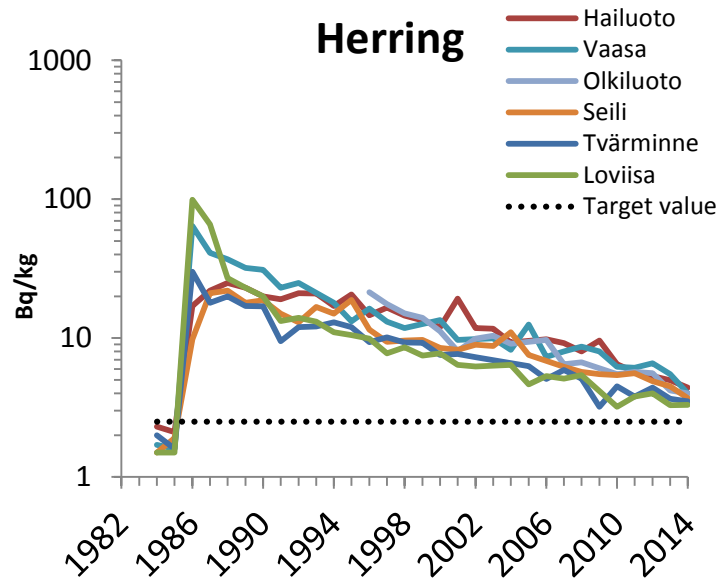


^{137}Cs in Baltic Sea soft sediments 1980-2013



Note different scale in graphs

Cs-137 in fish (Bq/kg f.w.) in 2014



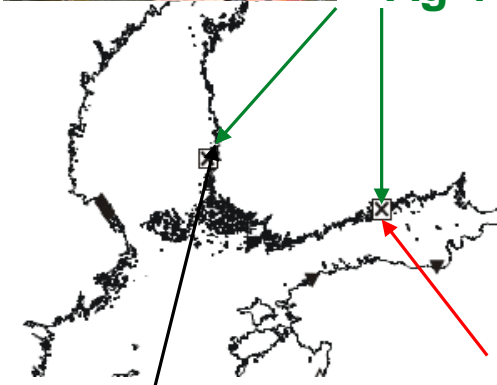
Sr-90 in herring : 0,025-0,056 Bq/kg

Sr-90 in pike: 0,012-0,019 Bq/kg

Concentrations in plants and bottom animals (Bq/kg d.w.) in 2013



Fucus vesiculosus
Cs-137 : 21-25
Co-60 : 2.5
Ag-110m: 1.7



Saduria entomon
Cs-137 : 11
Sr-90 : 9.8
Ag-110m: 5.3
Co-60: 0.43

Mytilus Edulis

Cs-137 : 1.2
Sr-90 : 9.1

