

**Dmitriy Gerasimov** (*Peter the Great Museum of Anthropology and Ethnography /Kunstkamera/ Rus.Acad.Sci.*)

**Aivar Kriiska** (*University of Tartu*)

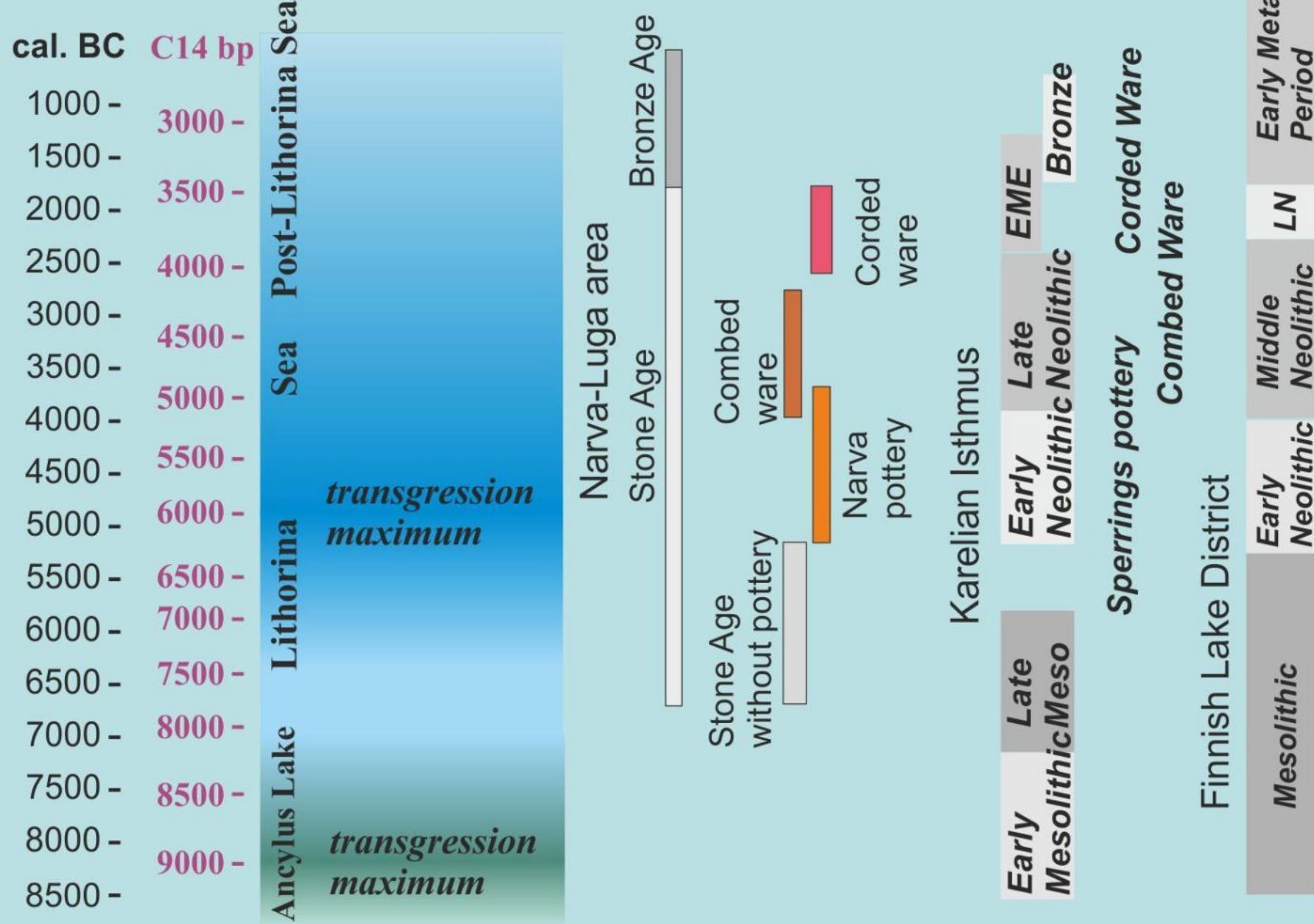
**Kerkko Nordqvist** (*University of Helsinki*)

**Margarita Kholkina** (*St.-Petersburg State University, A.P.Karpinsky Russian Geological Research Institute*)

# Cross-Gulf cooperation in the Stone Age study: new results, continuing projects and research perspectives



# 150 years of study - different archaeological periodizations and typological nomenclature



# Karelian Isthmus and North-West Ladoga

1998-2007

MAE (Kunstkamera) Rus.Acad.Sci.

Inst. Hist. Material Culture Rus.Acad.Sci.

University of Helsinki

National Board of Antiquities, Finland

Lahti Historical Museum, Finland



a new stage of the Stone Age research in the region

- *trilateral cooperation*
- *shared fix points*
- *developing of common methodology*



**Narva-Luga area – 2005 – 2018**

University of Tartu

MAE (Kunstkamera) Rus.Acad.Sci.

Inst. Hist. Material Culture Rus.Acad.Sci.

University of Helsinki

our  
knowledge on  
the Stone Age  
transformed  
and expanded  
a lot in the  
last 20 years

# Interdisciplinary studies:

AMS dating:

Karelian Isthmus - 69 dates;

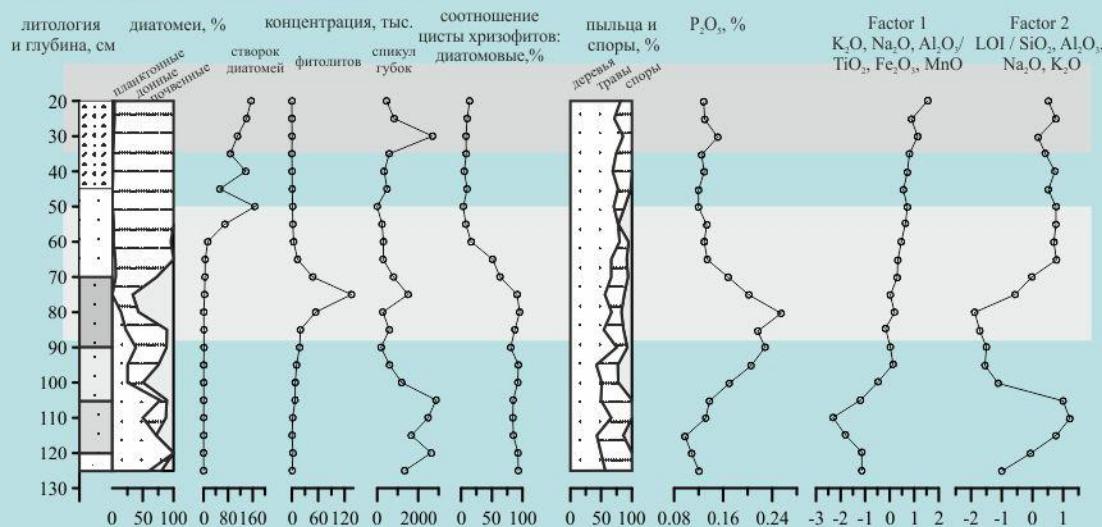
Narva-Luga area – 29 dates

palaeozoological

studies



granulometry  
mineralogy  
geochemistry  
palinology  
diatom analysis



palaeogeographical studies  
of the sites' surrounding

# **developing shoreline chronology in relation with coastal Stone Age sites location**

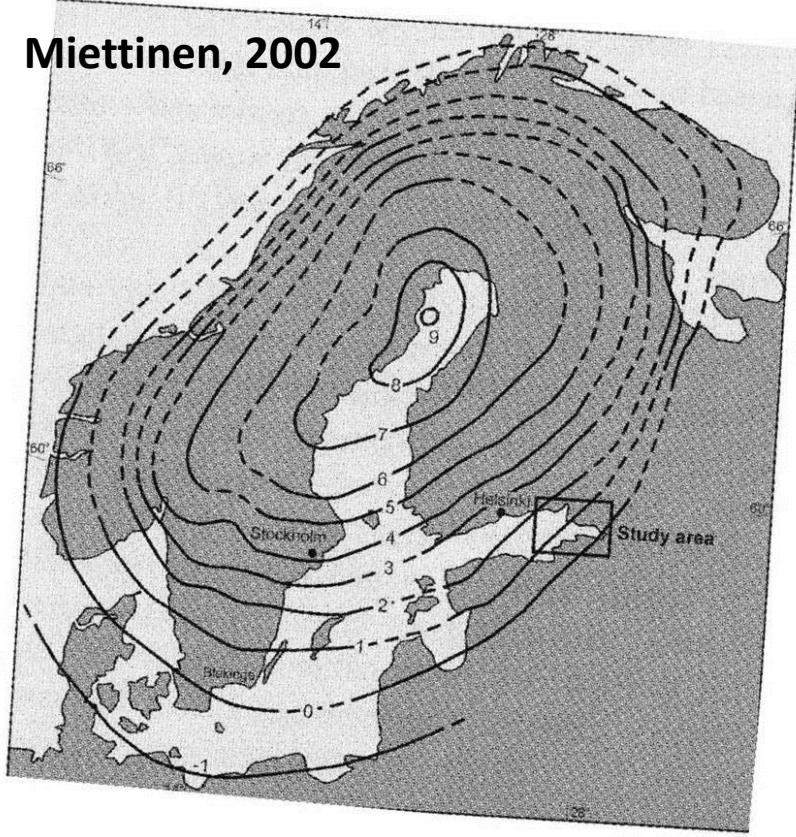


**Ari P. Siiriäinen  
(1939-2004)**

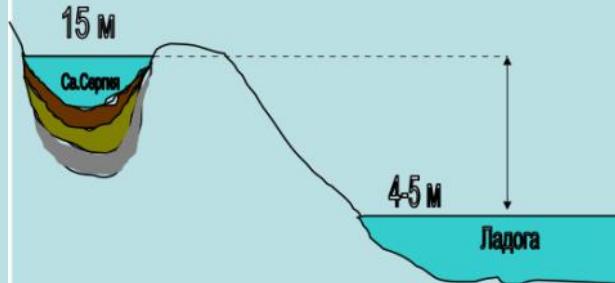


**Vladimir I. Timofeev  
(1947-2004)**

Miettinen, 2002



lake and bog sediments - lowest limit  
coastal Stone Age sites - upper limit



cascade lakes method

Subetto, 2007

isolated lake  
Ladoga

Jussila, 1994

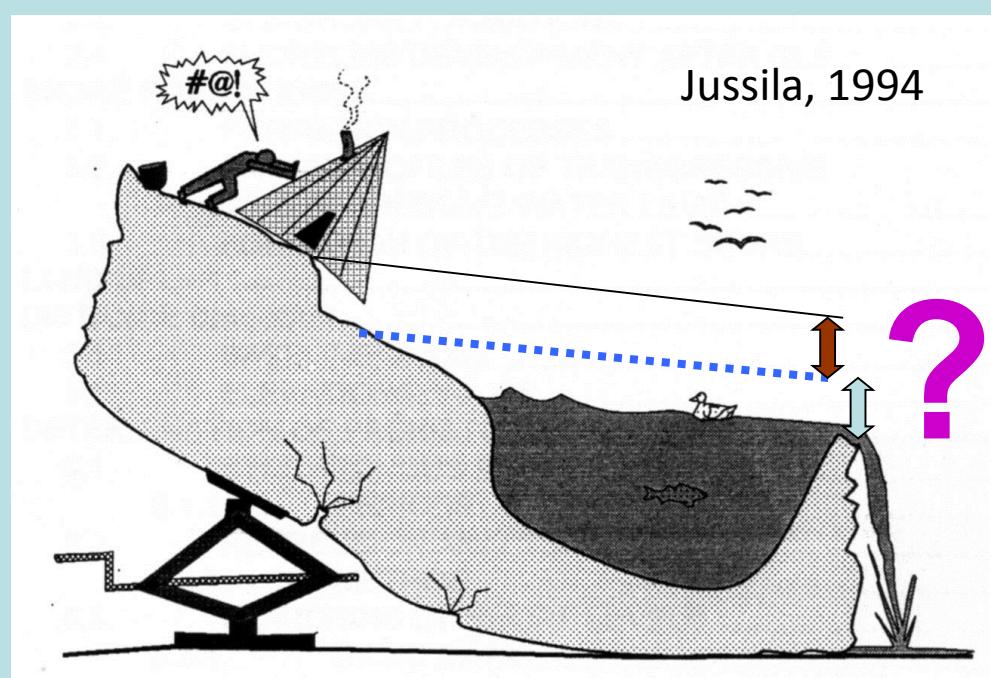
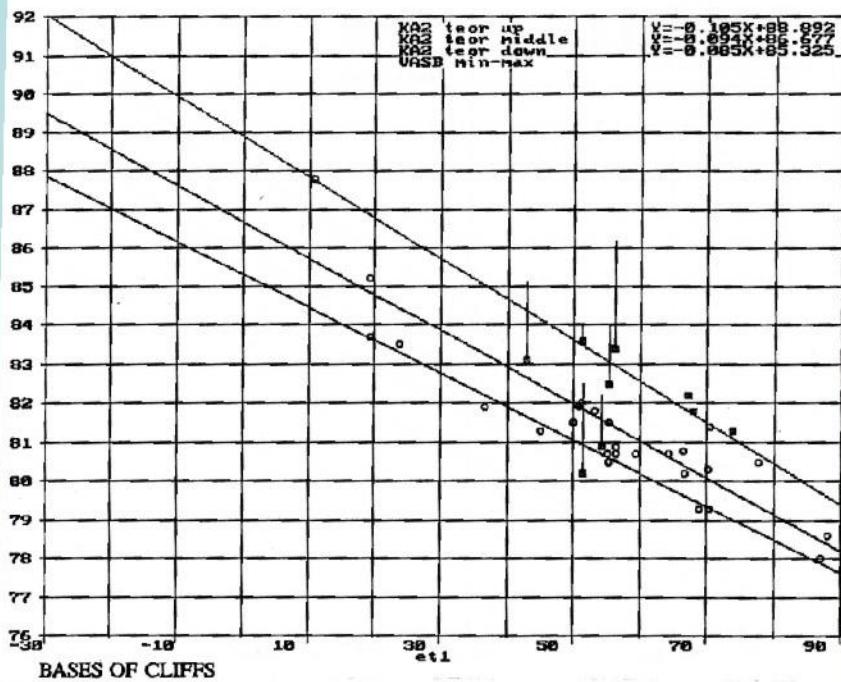


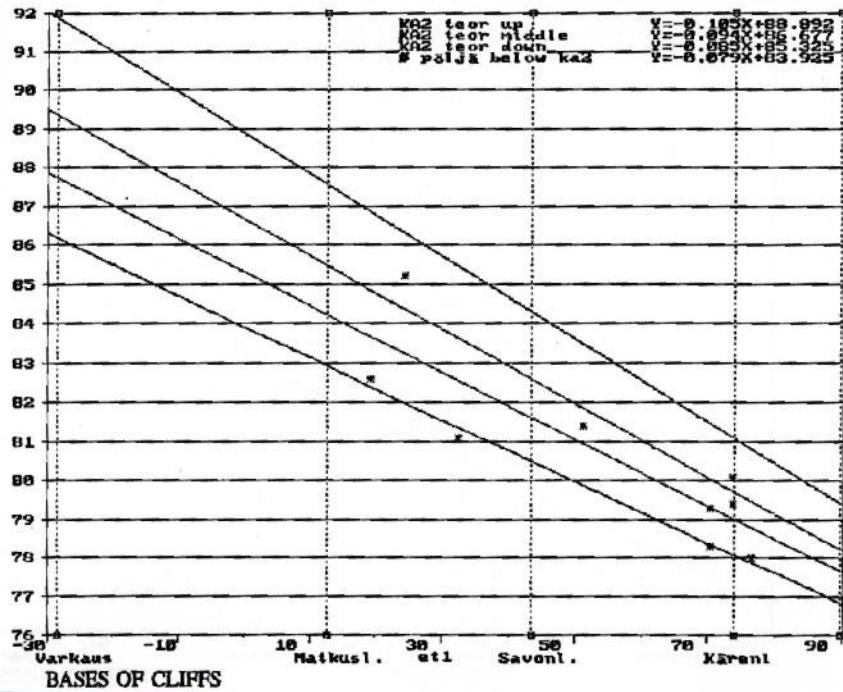
Diagram 3. VASB AND KA2 SITES. Vasb sites are with min-max line or rectangle point.



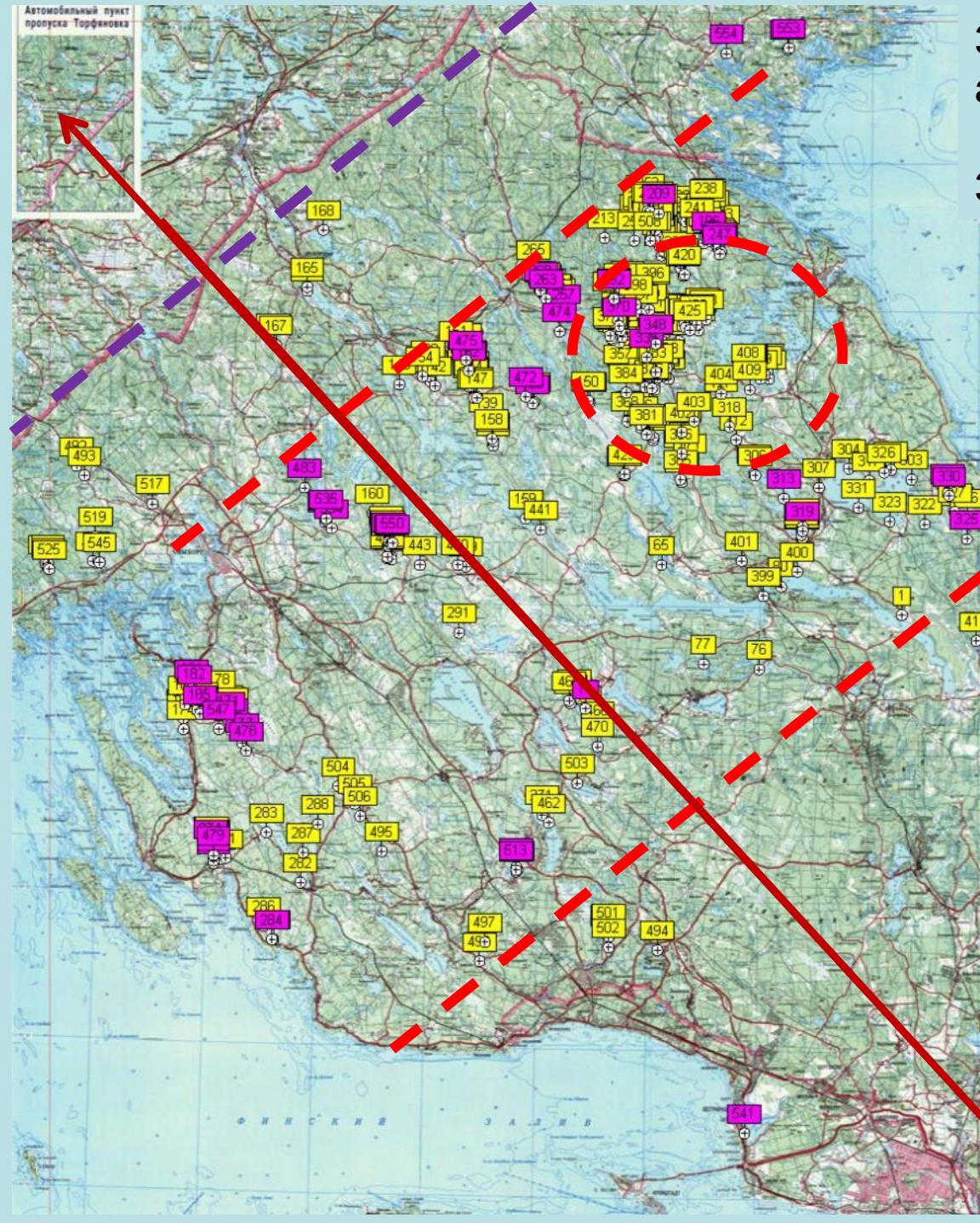
## Elevation chronology

# Ancient Lake Saimaa project 1992-1996

Diagram 4. PÖLJÄ AND KIERIKKI SITES AND NEOLITHIC "DUMMY" GRADIENTS

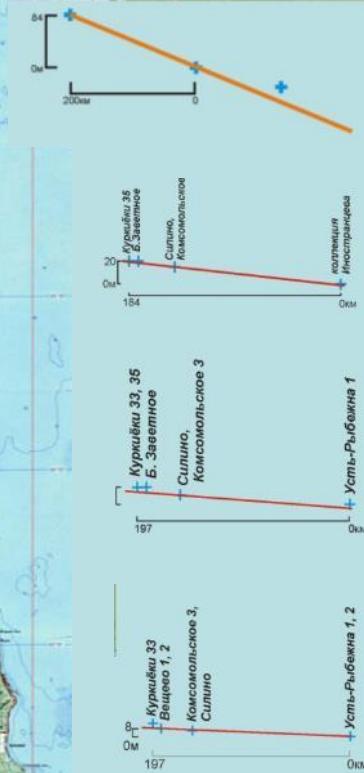


no: Jussila, 1994

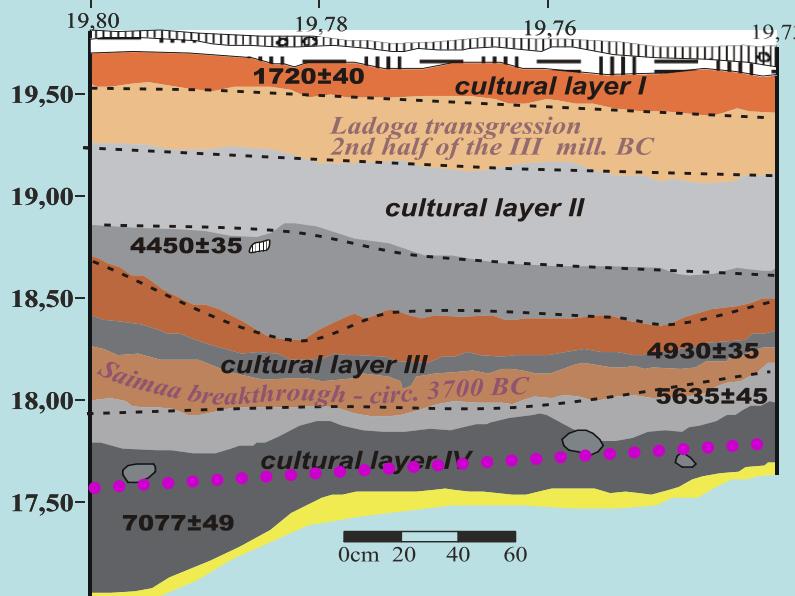


398 Stone Age sites:  
about 200 discovered  
in 1998-2007  
32 – excavations of different scale

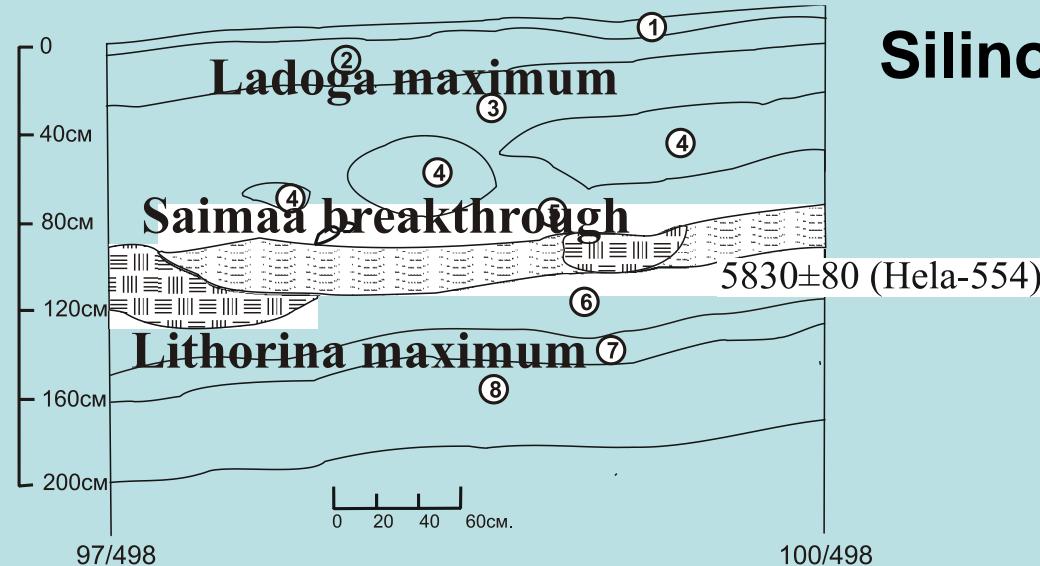
- *significant discrepancies with the normal gradient model*
- *estimation of the tectonic faults chronology*



# Multilayer sites – archives of cultural and natural events with well-defined chronology



## Komsomolskoye 3 (Pyhajärvi Kunnaniemi 1)



## Silino (Muola)



## Okhta 1

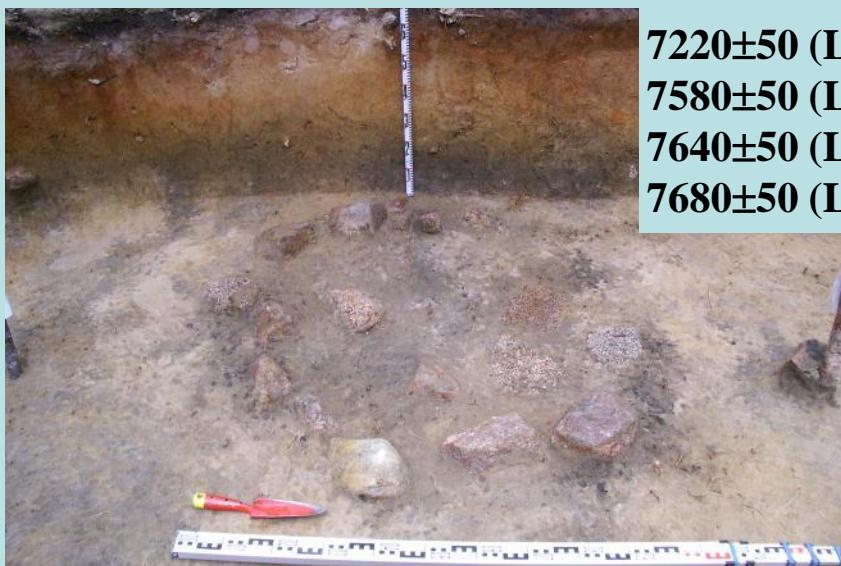
- *presents a full sequence of cultural contexts for about 6 thousand years of the history of the Gulf of Finland region*
- *one of the most important archaeological discoveries for the beginning of the 21 cent.*



САНКТ-ПЕТЕРБУРГ

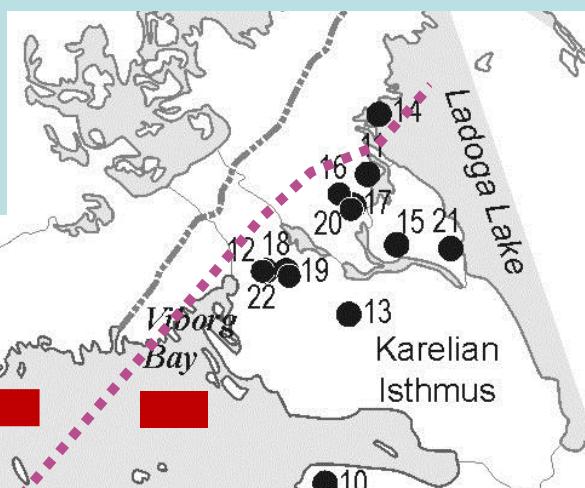
По: Сорокин П.Е., Гусенцова Т.М., Глухов В.О., Екимова А.А., Кулькова М.Н.,  
Мокрушин В.П. Некоторые результаты изучения поселения Охта-1 в Санкт-  
Петербурге: Эпоха неолита – раннего металла //Археологическое наследие Санкт-  
Петербурга. - СПб., 2009. - Вып. 3.

# Ozernoye 3 - 6450-6380 cal. BC



7220±50 (Le-7539)  
7580±50 (Le-7538)  
7640±50 (Le-7541)  
7680±50 (Le-7540)

## Isostatic vs Eustatic land uplift

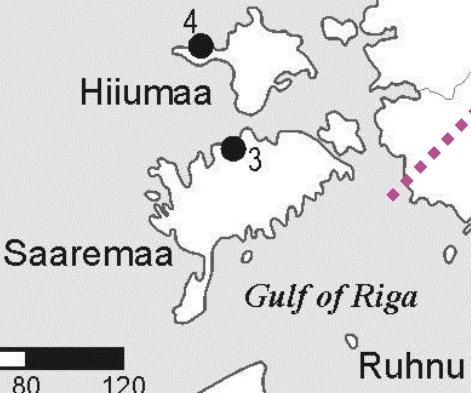


*submerged during the transgression culmination*

BALTIC SEA

ESTONIA

RUSSIA



## Sindi-Lodja II

6900 cal. BC (8035±80, Ta-2769)



Mattunud kultuurkiht Sindi-Lodja II asulakohal, suvi 2001

*all the coastal sites older than the Lithorina maximum were submerged – and versa*

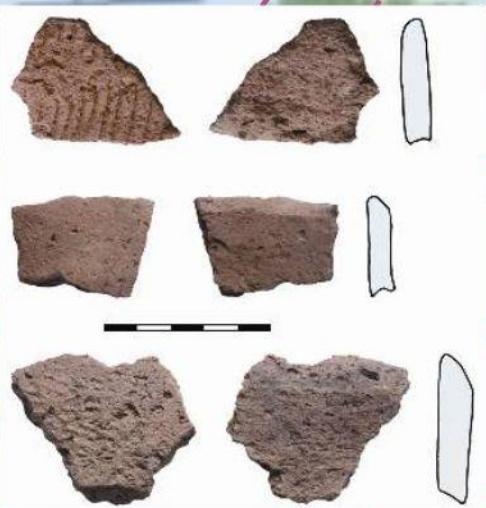


Sperrings pottery

5 500 cal. BC (6 500 bc):  
Lithorina maximum =  
Mesolithic/Neolithic border?

Ladoga lake

- *no use of pottery before the Lithorina maximum*
- *simultaneous appearance of two totally different pottery traditions*
- *all the coastal sites without pottery are covered by Lithorina sediments*
- *there are no sites with pottery under Lithorina sediments*



Gulf of Finland

Narva pottery

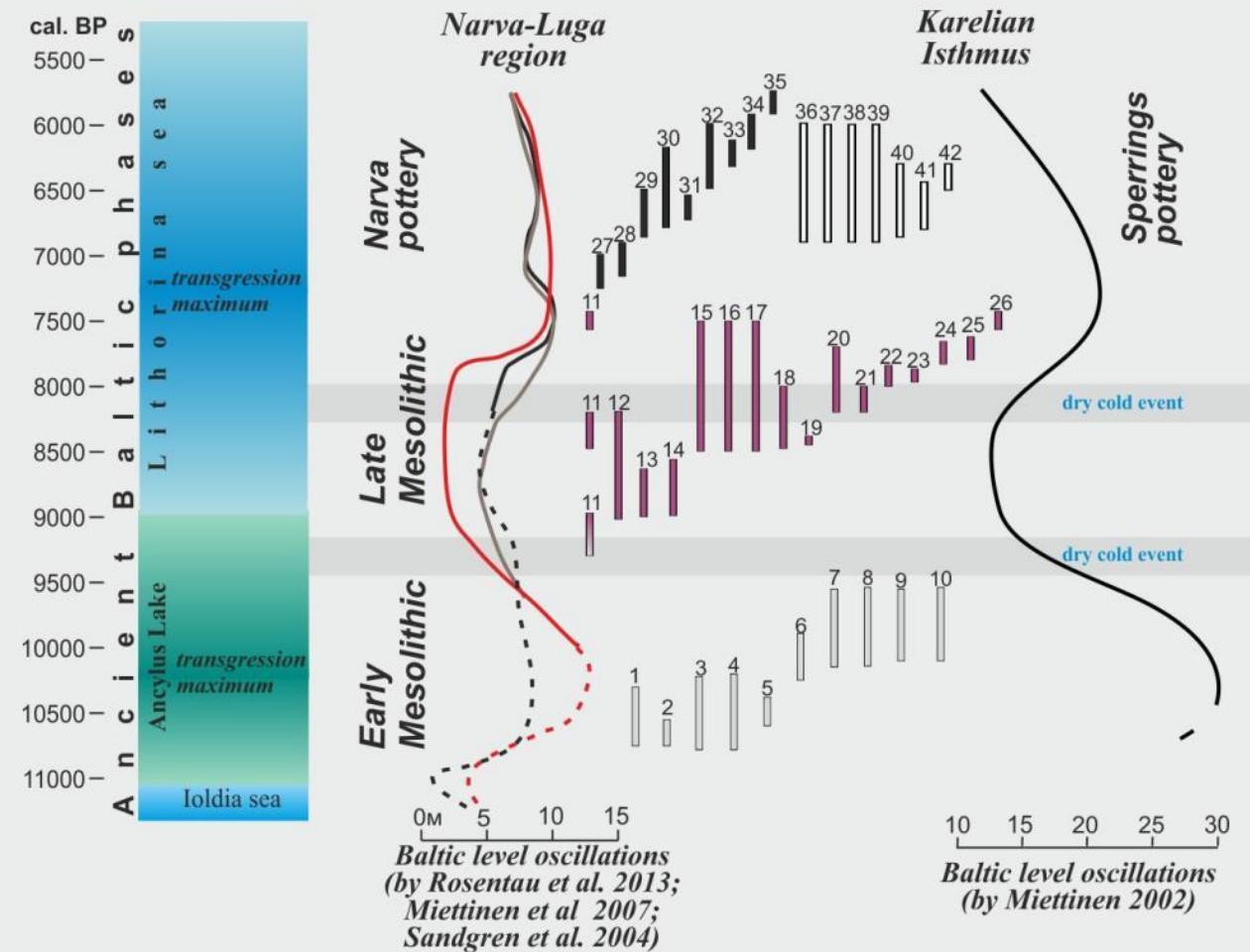
St.-Petersburg

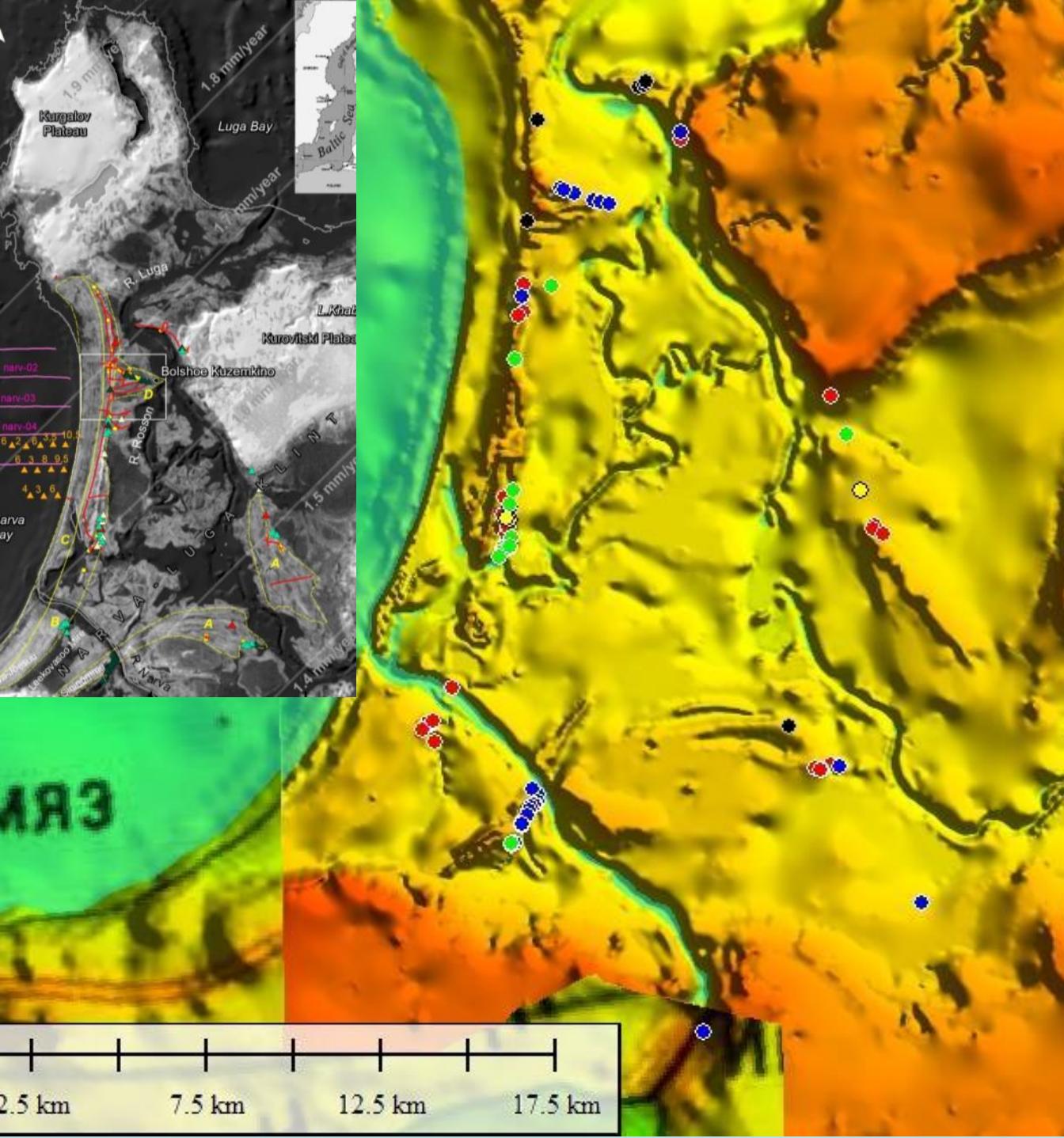
- **obvious correlations between cultural transformations and environmental changes**
- **no cultural response to the 8 200 event**



Early-Middle Holocene archaeological periodization and environmental changes in the Eastern Gulf of Finland: Interpretative correlation

Dmitriy Gerasimov <sup>a,\*</sup>, Aivar Kriiska <sup>b</sup>





## Narva-Luga Klint Bay

### 79 Stone Age sites

### 57 found in 2005-2017

- - after 5500 cal. BC
- - after 4000 cal. BC
- - after 2800 cal. BC

- *strong association of archaeological sites of the certain age and coastal forms of certain generation*
- *perspective of developing a chronology of coastal forms basing on archaeological data*

# Thank you for your attention!

