

Structure and dynamics of Green Belt forest tracts

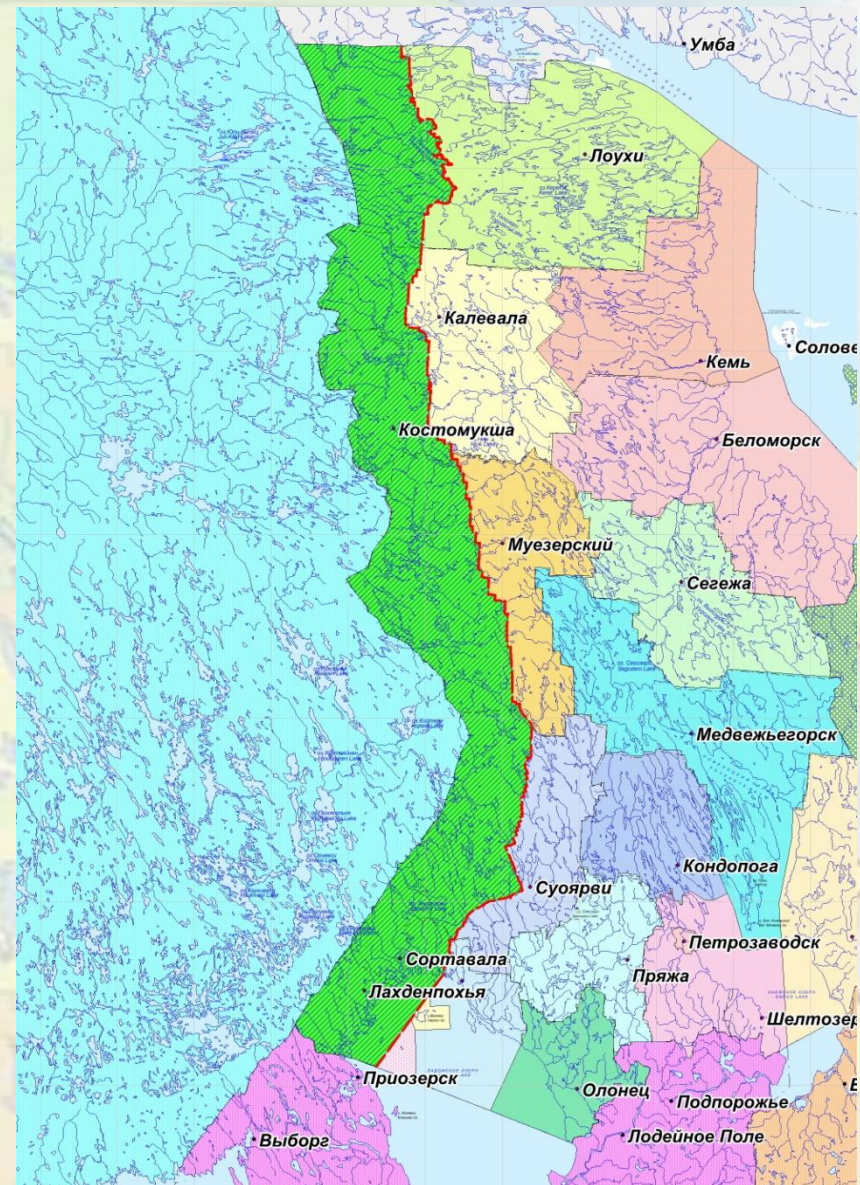
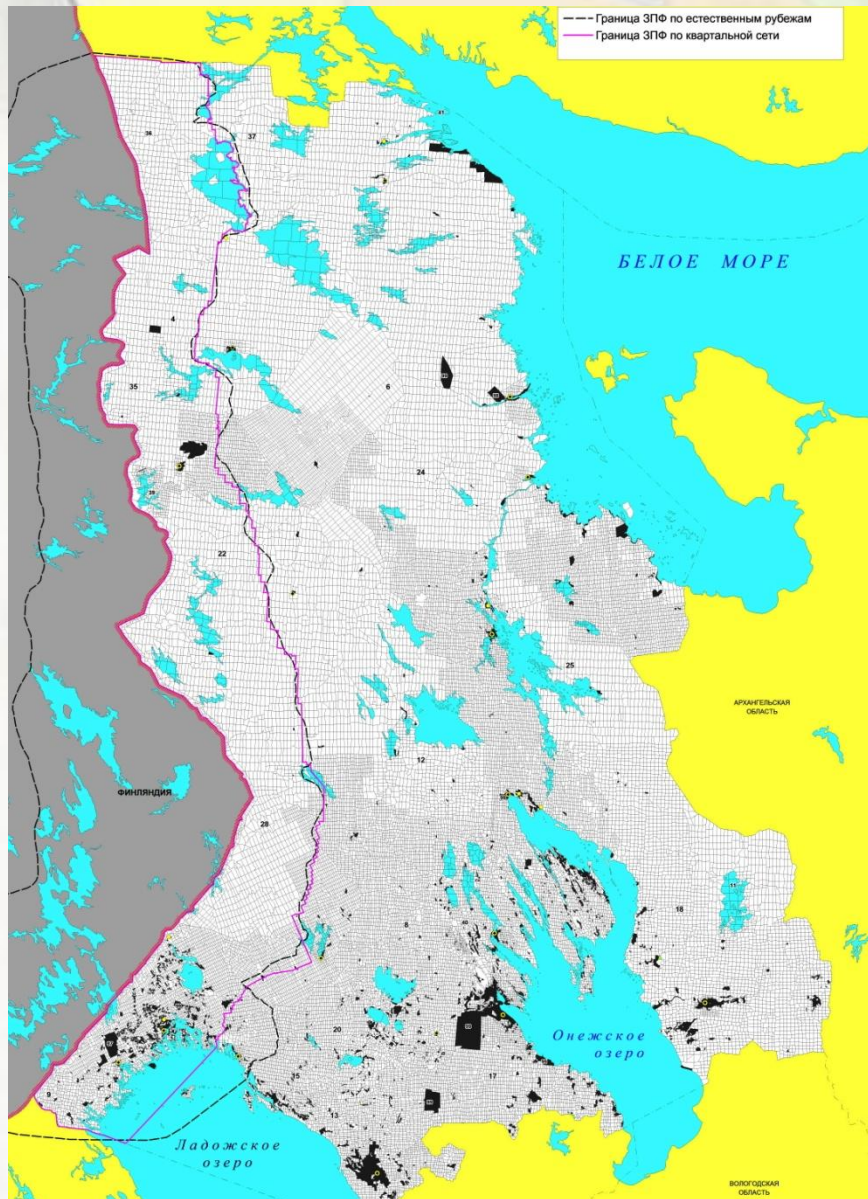
Структура и динамика лесных массивов Зеленого пояса Фенноскандии

Karelian Research Centre RAS

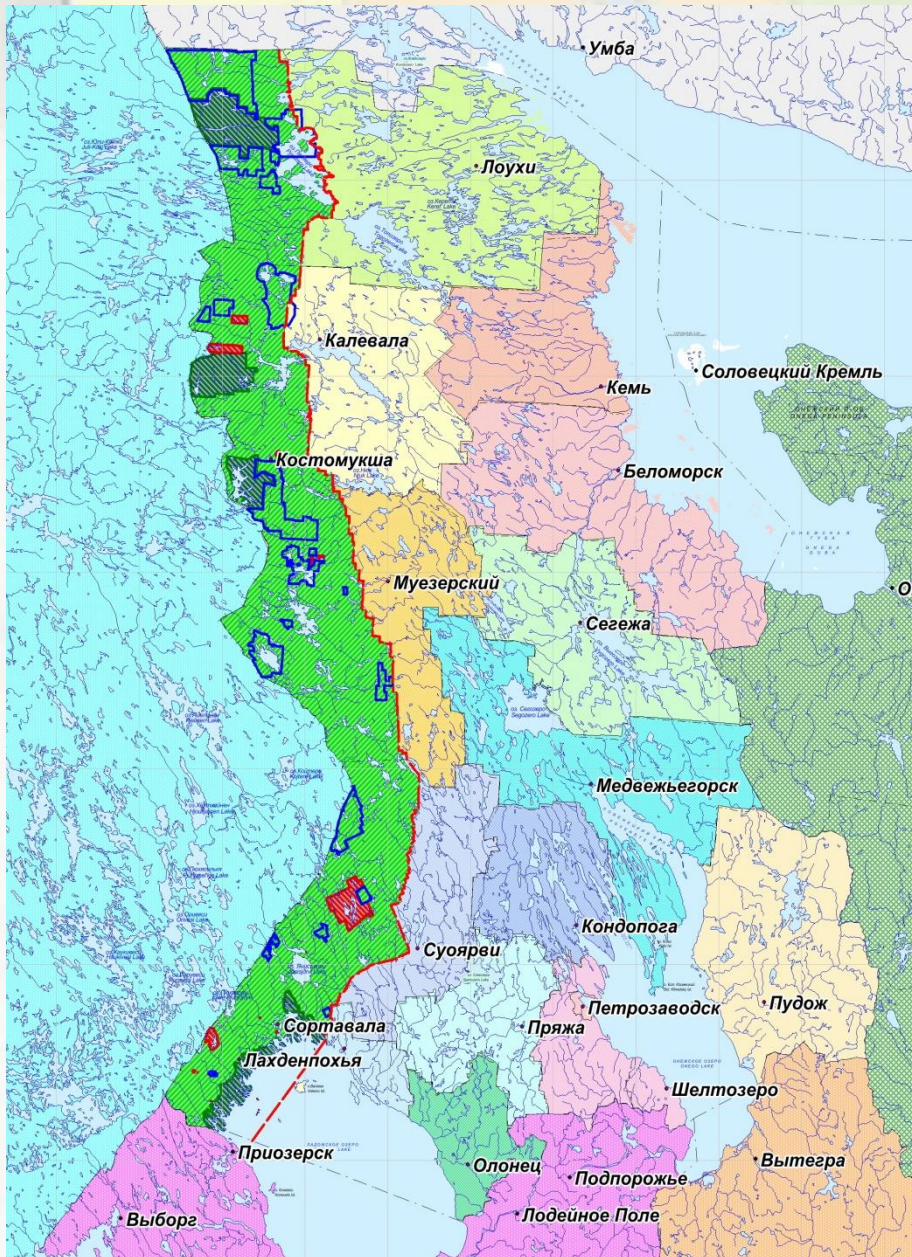
B. Raevsky

V. Tarasenko

Green Belt bounds with internal edge along eastern forest blocks (quarters, compartments) cutting lines



Some figures concerning Green Belt forests in Karelia, ha

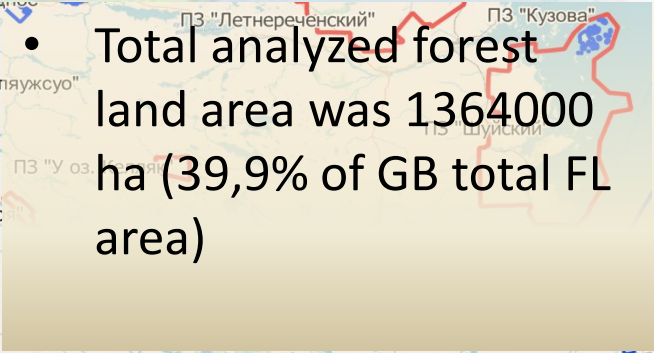


- **Total area of GB** – 3664000 (21,3% of Karelia area);
- **GB forest landscapes (FL) area** – 3422631 (93,4% of GB area);
- **Operating Federal PA** – 350087 (10,2% of GB FL area);
- **Operating regional PA** – 83735,8 (2,4% of GB FL area);
- **Total operating PA** – 433822,8 (12,7% of GB FL area);
- **Perspective PA** – 454200;
- **Totally all PA** – 888022,8 (25,9% of GB FL area).

[illegible]

- The United States Geological Survey, USGS
<https://www.usgs.gov/>
- Totally 5 images (resolution- 30 m/pixel) , apprx. 3731 thousand ha each.

(Арханг.)



Groups and subgroups extracted from Forest data base

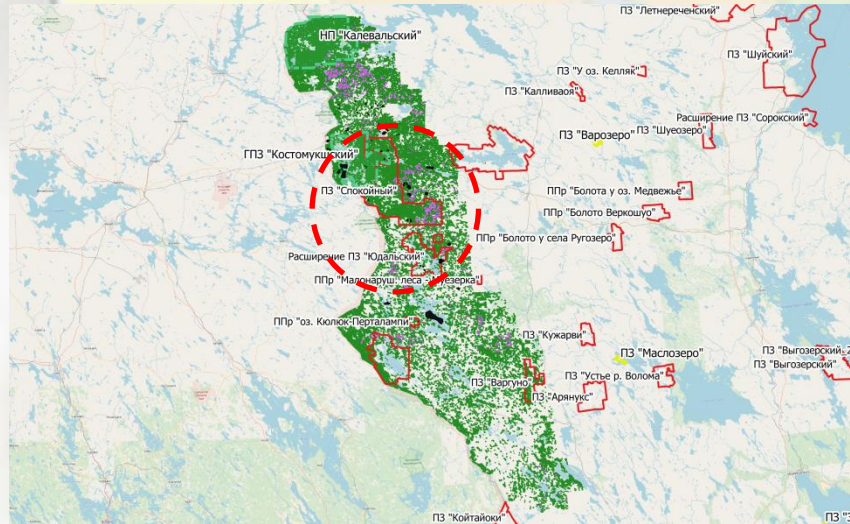
- **Lands with forest stands:**

- conifer(«pine-spruce») forests, age: 0-40 years;
- conifer forests, age: 41-80;
- conifer forests, age : 81-100 ;
- conifer forests, age : 101-120 ;
- conifer forests, age : 121-140 ;
- conifer forests, age : 141-and older;
- deciduous(«birch-aspen») forests, age: 0-50;
- deciduous(«birch-aspen») forests, age: 51-and older;

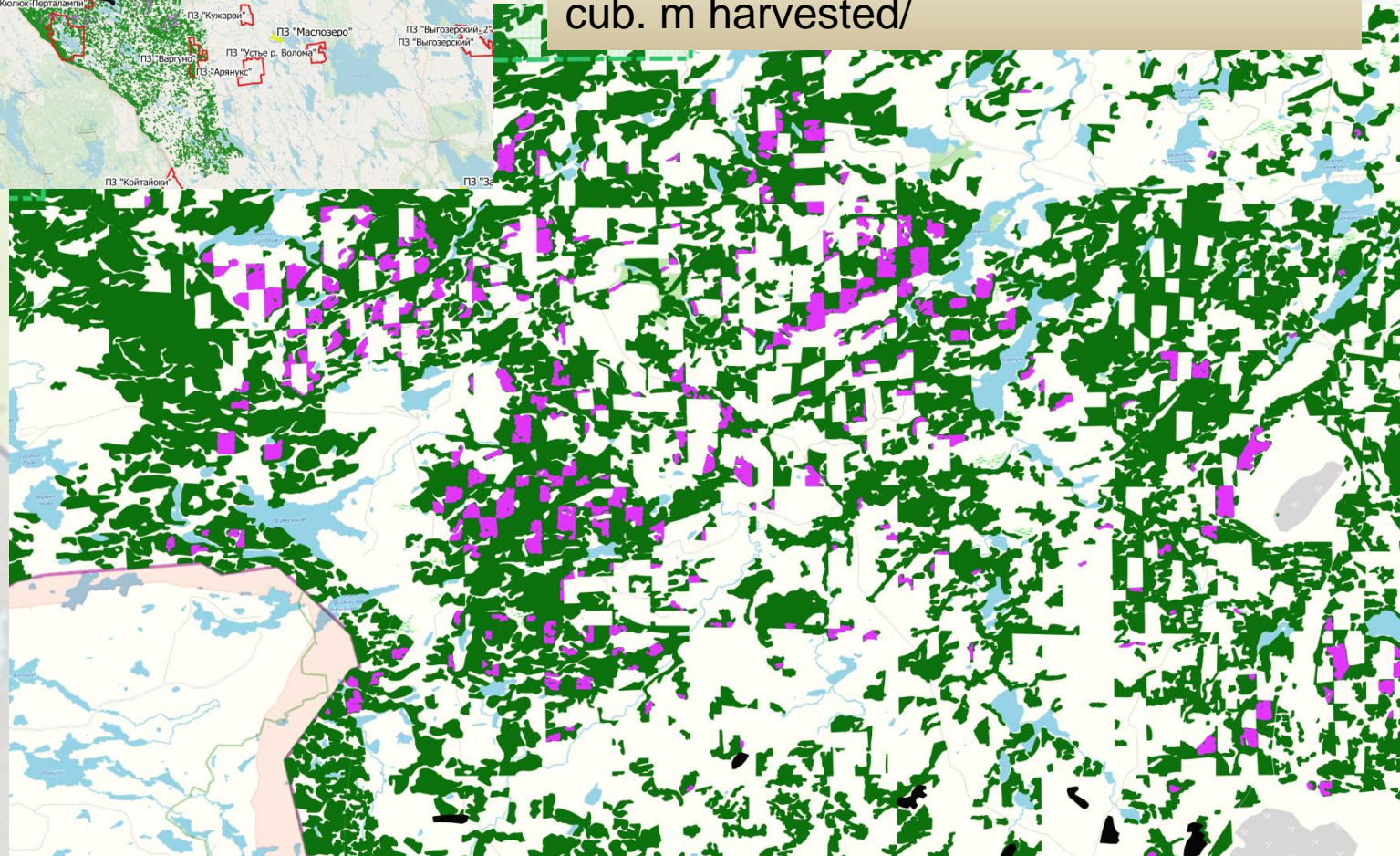
- **Nonforest lands:**

- fellings;
- bushes;
- settlements;
- roads;
- open mines;
- burned areas;
- water bodies

Old-growth forests layer from Forest DB and clear cuttings layer from classified image



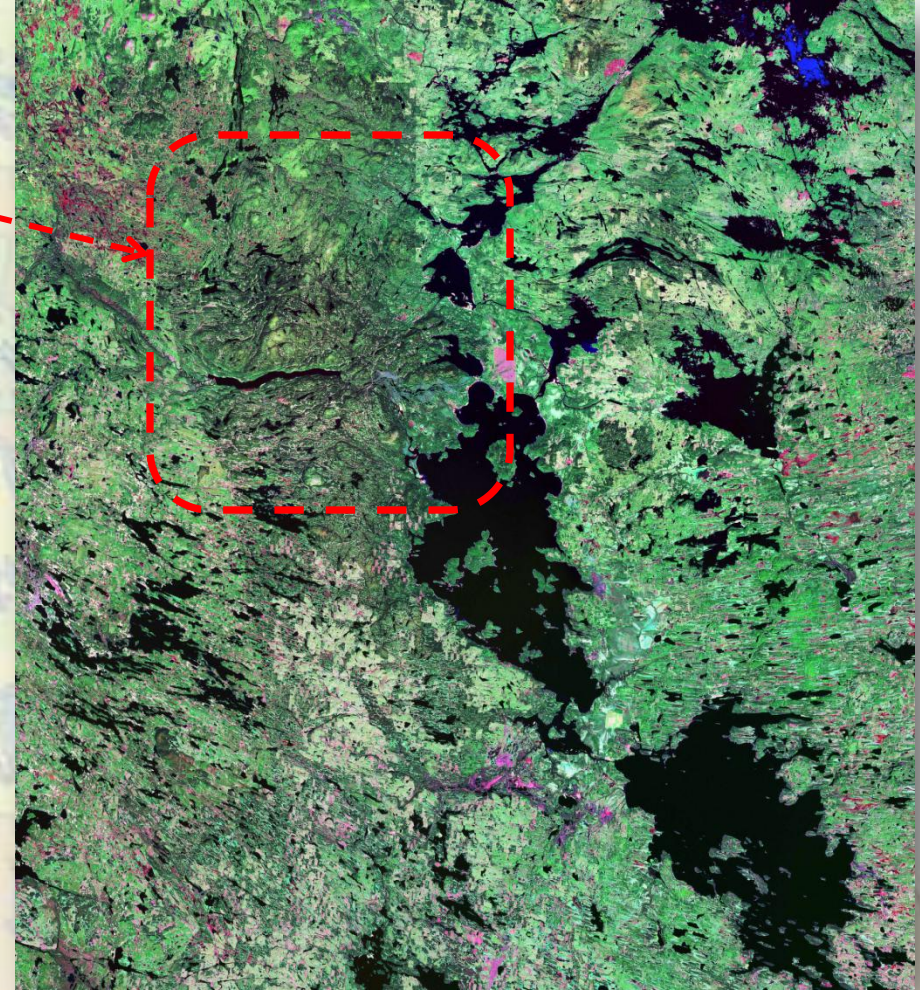
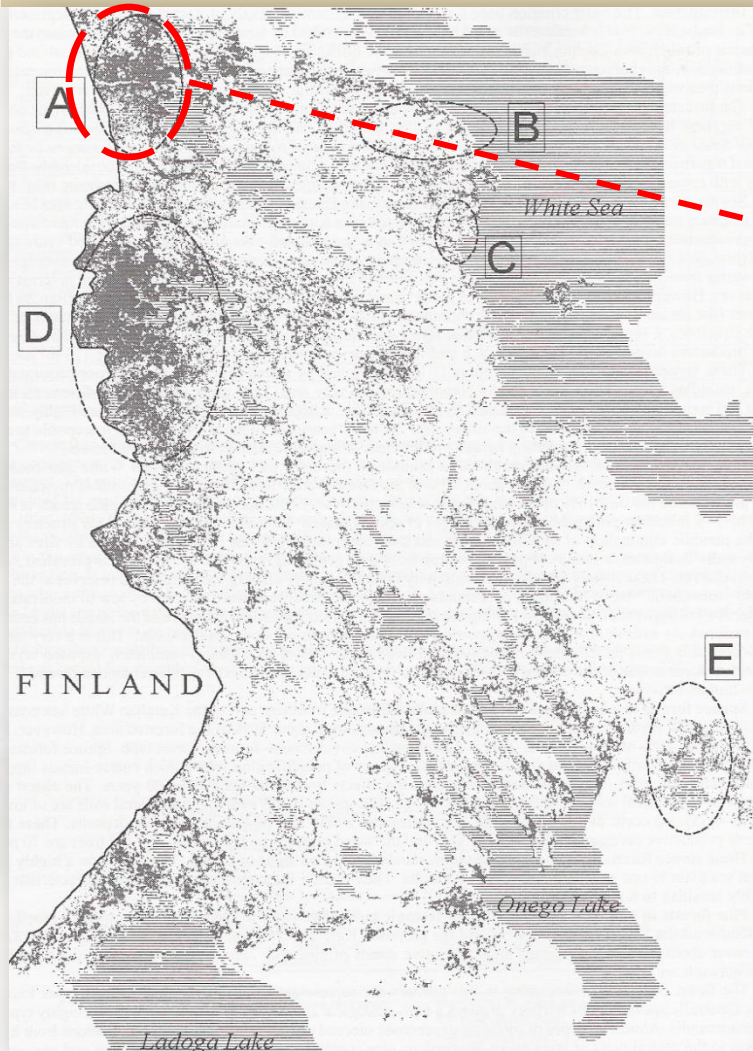
Total area of old-growth forests- 306612 ha (22,5% of the analyzed FL area)
5815 ha (1,9%) of clear cuttings in these forests in 15-year period (2000-2015) with more than 800 thousand cub. m harvested/



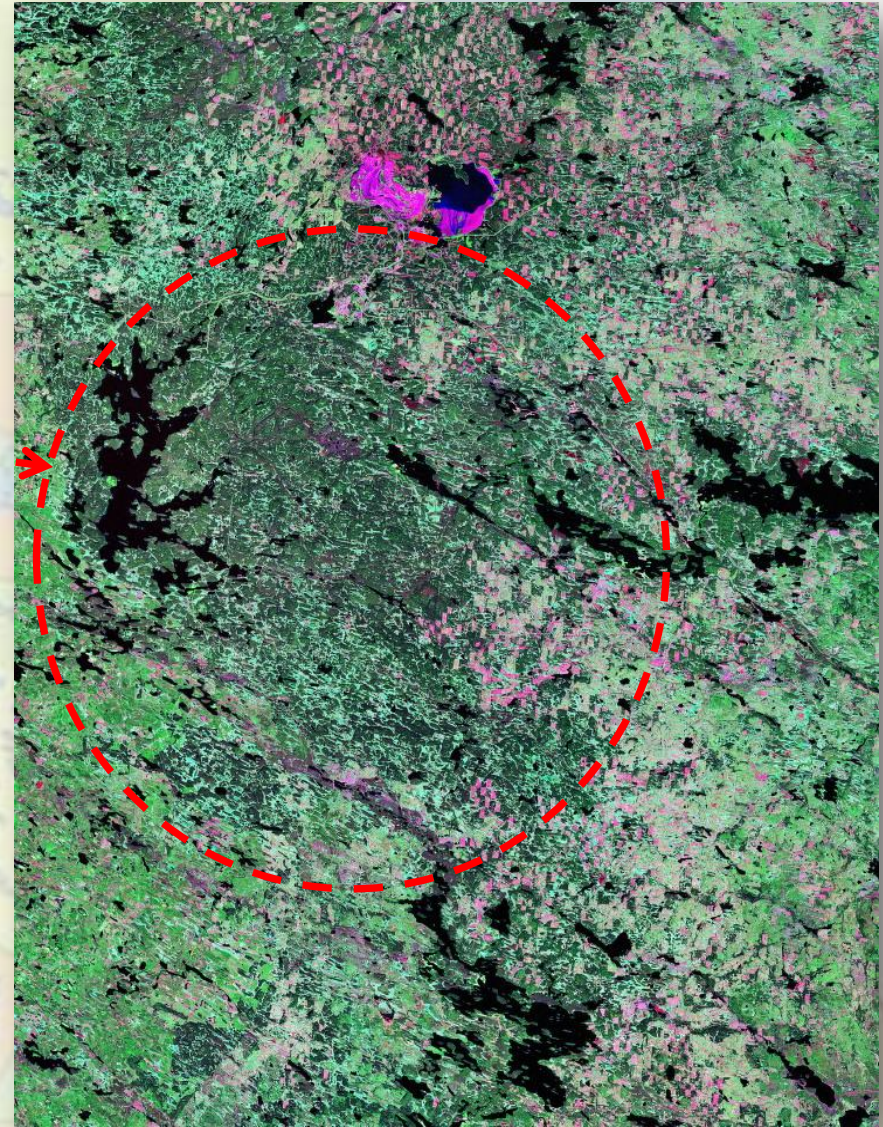
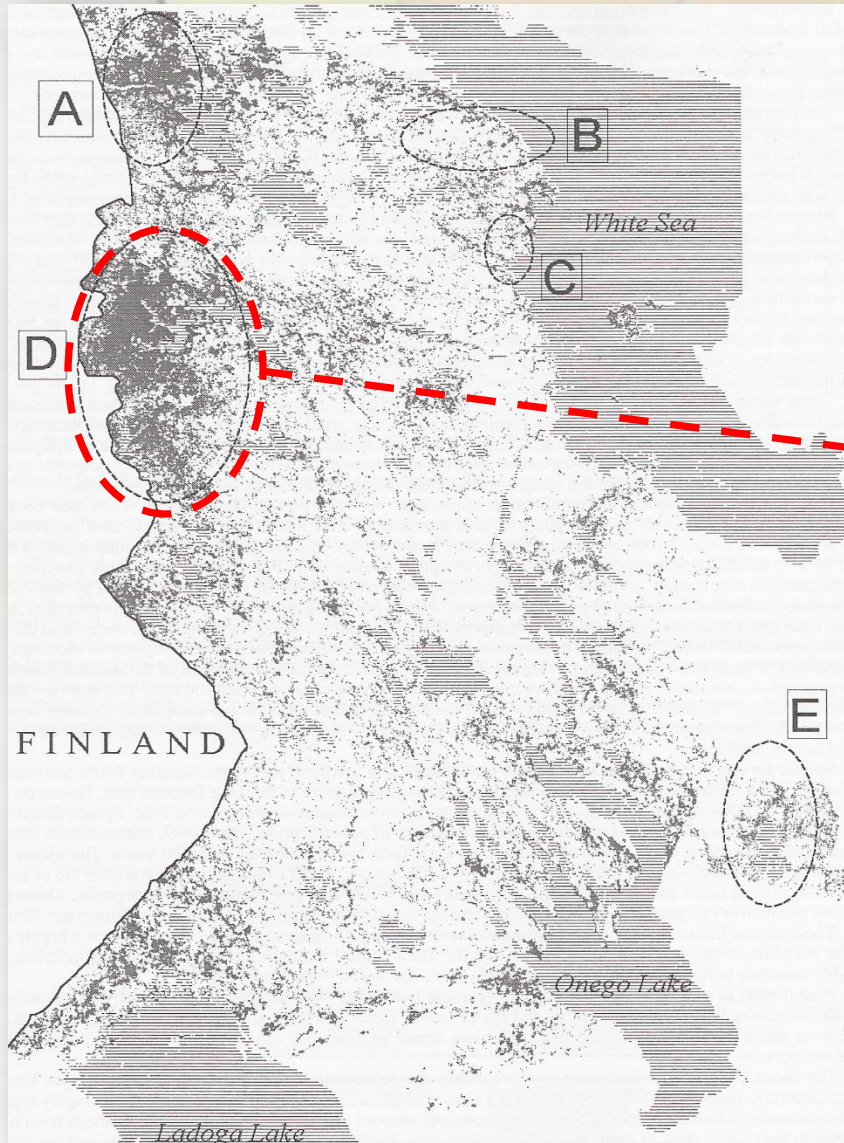
Intact forest landscapes

Spruce forests tract in low mountain
northern taiga landscape

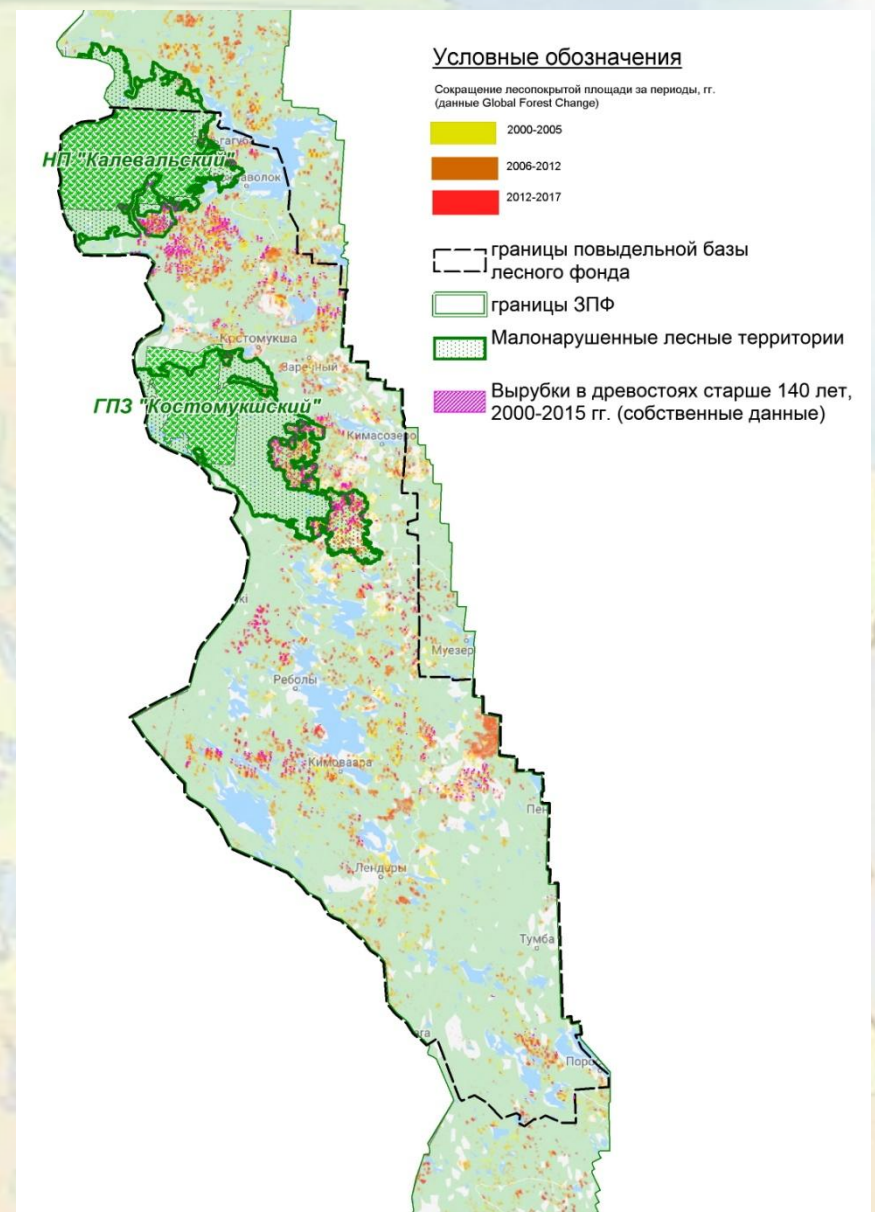
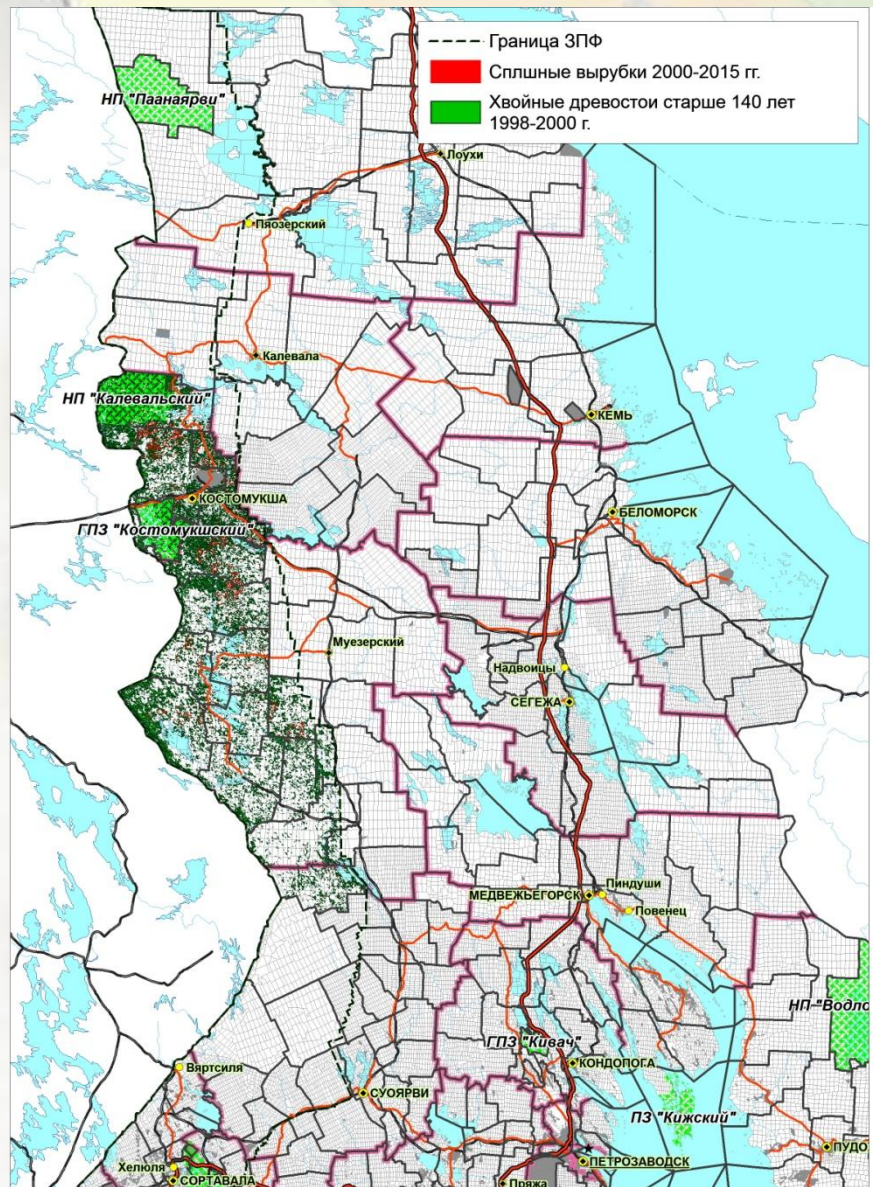
National Park "Panajarvi"



Pine forests in rocky tectonic northern taiga landscape



Joint map with our and Global Forest Change data

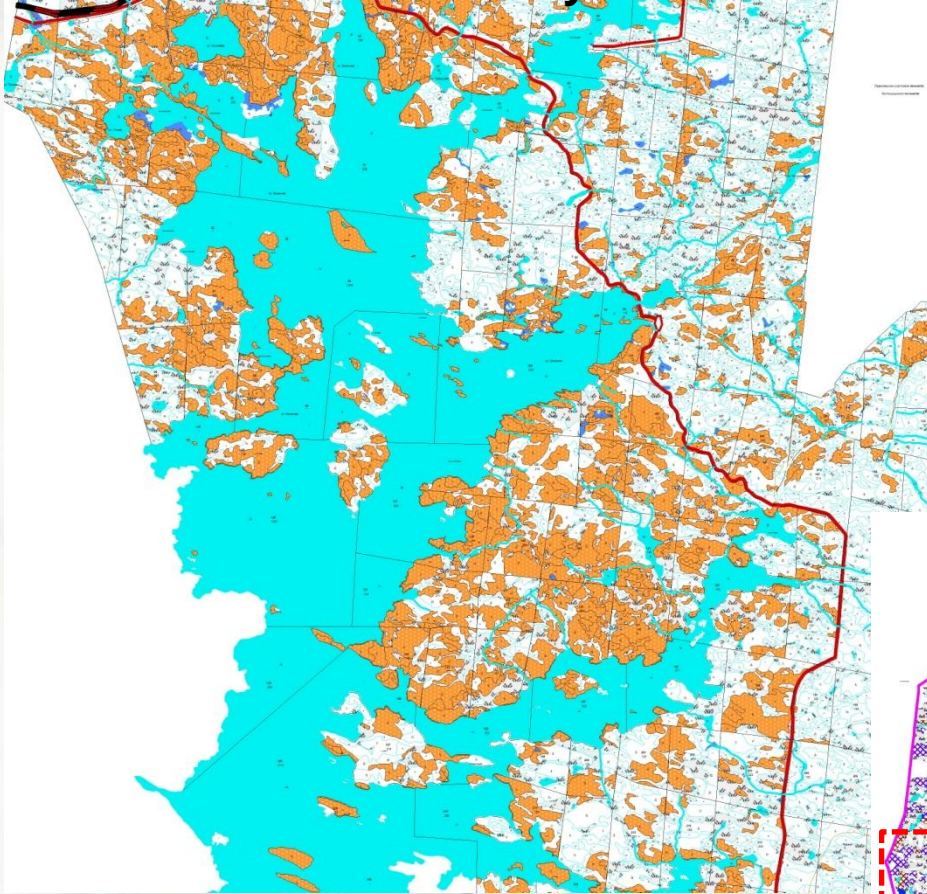


(Арханг.)

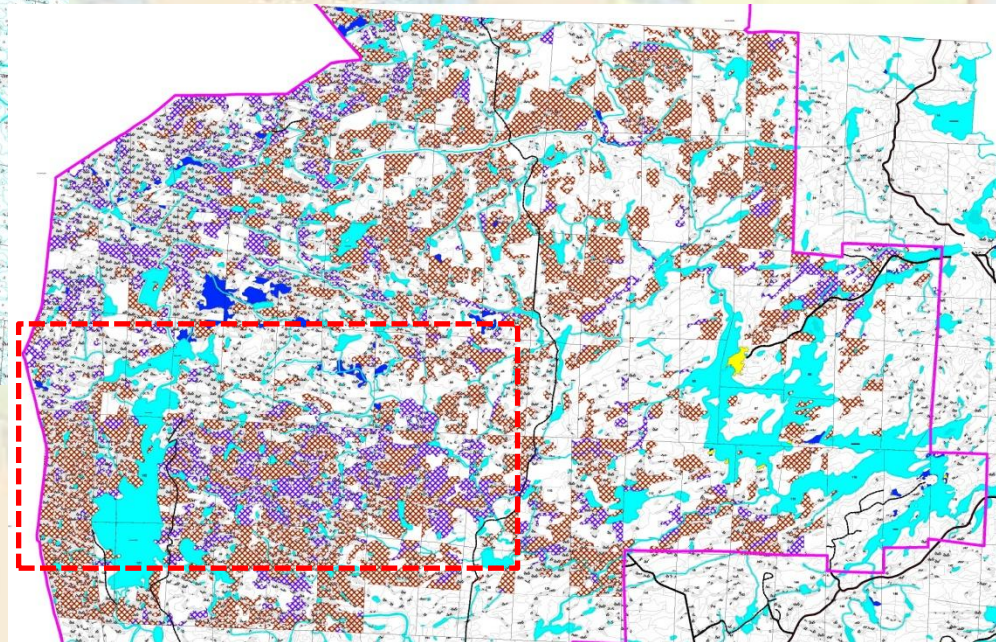


Zones with pronounced traces of human activities in the past

NR “Kostomukshskiy”



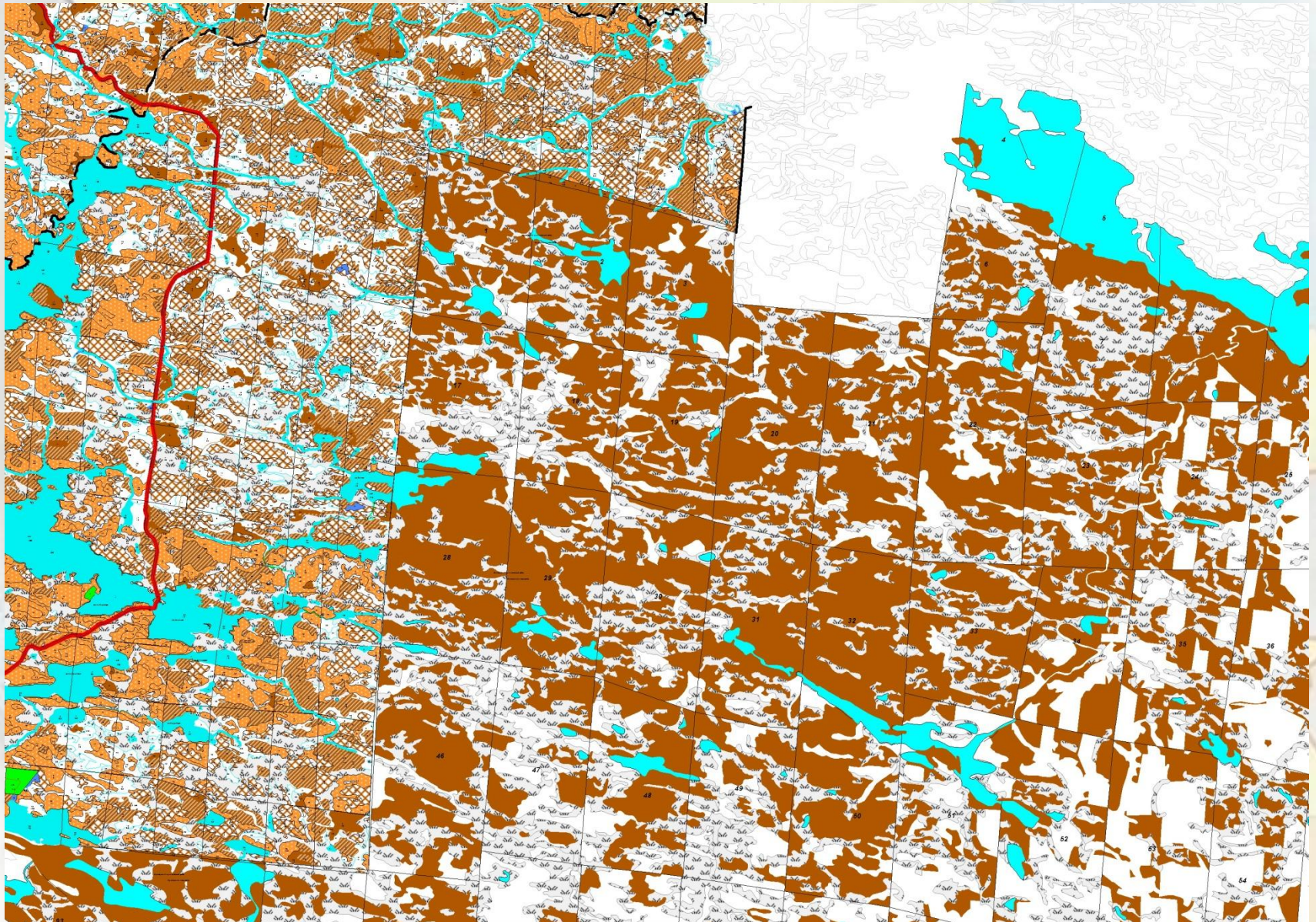
NP “Kalevalsky”



Old-growth pine forests adjacent to NR “Kostomukshskiy” bounds

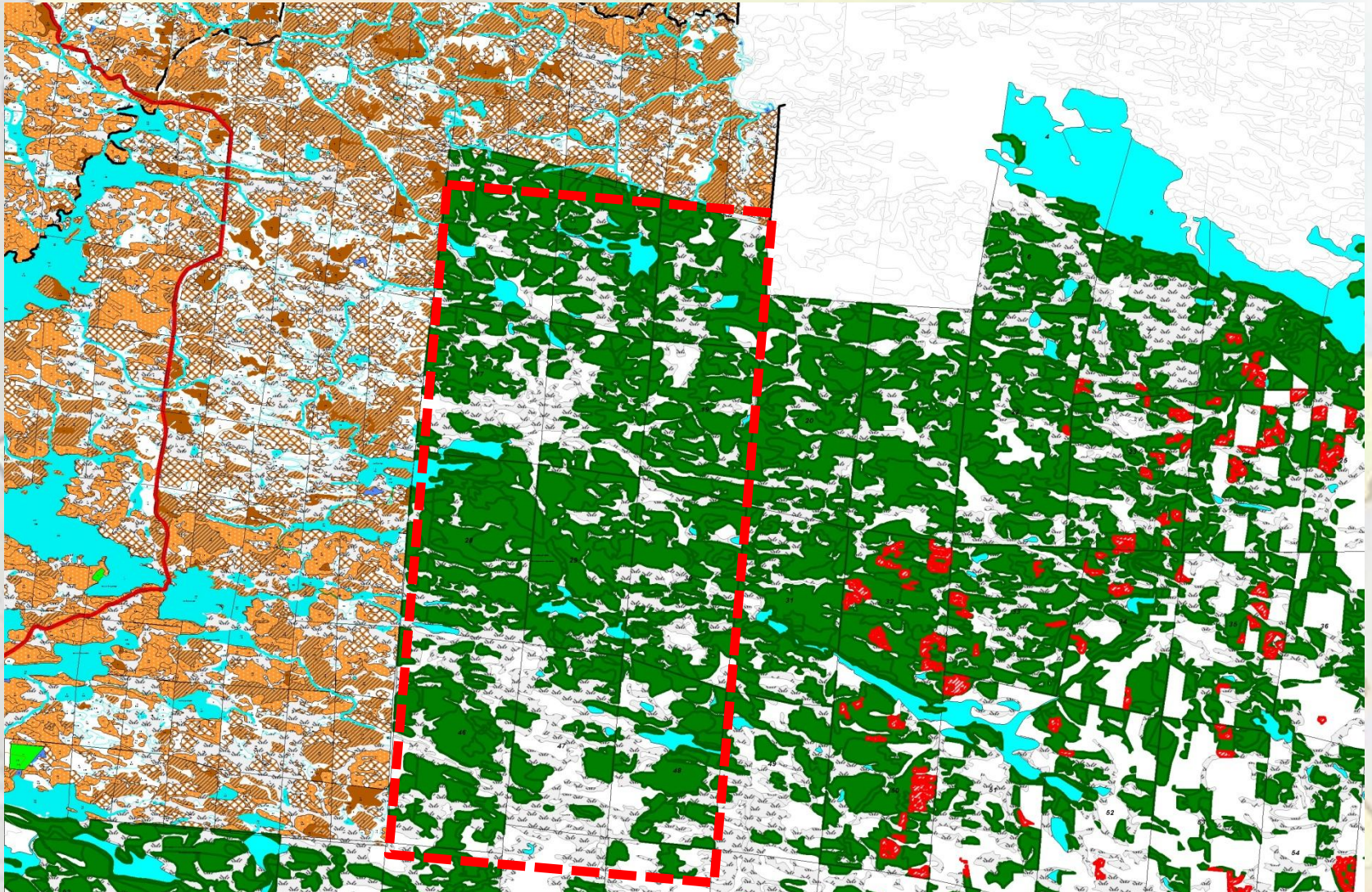


Old-growth pine forests adjacent to NR “Kostomukshskiy” bounds



(Арханг.)

Old-growth pine forests adjacent to NR “Kostomukshskiy” bounds with clear cuttings layer from space images





The End

Thanks for your attention