PaITuli spatial data service

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PalTuli

🌐 www.csc.fi/paituli

- Open to everybody, but targeted for academic users

- Data of Finland, mostly from governmental organizations

- Finnish universities and research institutes can hare own data

- Includes historical versions of data (2005 ->)

- Main statistics: 13 Tb data, 266 datasets, 2600+ users

- CSC operates the service, Ministry of Culture and Education supports the service, free of charge for end-users

PalTuli datasets
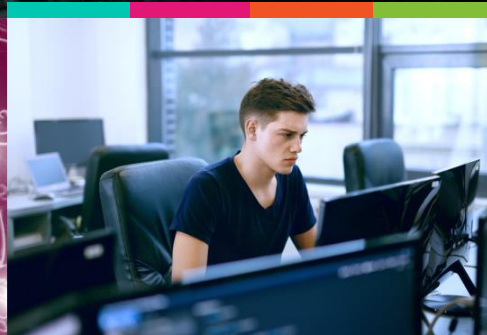
Paituli datasets producers

- Finnish Digital and Population Data Services Agency

- Finnish Food Agency

- Finnish Meteorological Institute (FMI)

- Finnish Transport Infrastructure Agency, Digiroad

- Institute for the Languages of Finland (KOTUS)

- Latuviitta

- National Land Survey (MML)

- Natural resource institute Finland (LUKE)

- Statistics Finland
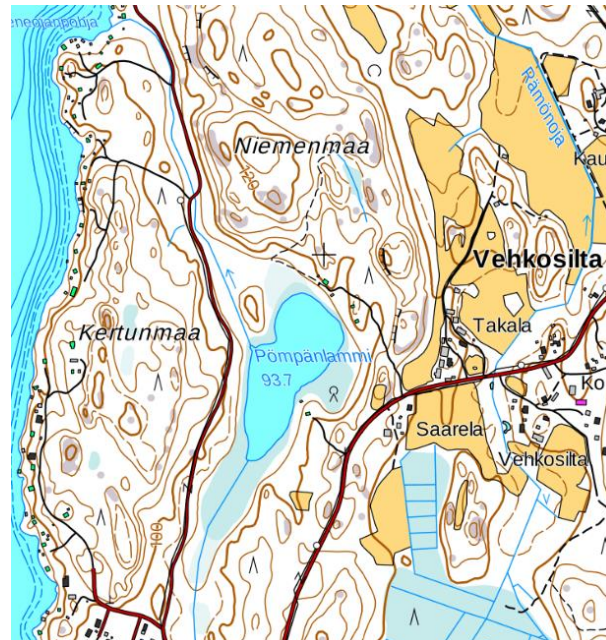
- University of Helsinki, Digital Geography Lab
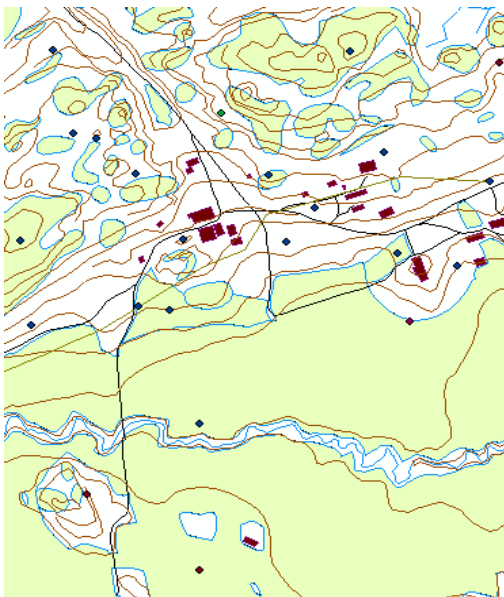
- 1:20 000
- 2005->
- PNG, TIFF

NLS, basic map

Background color

Print color
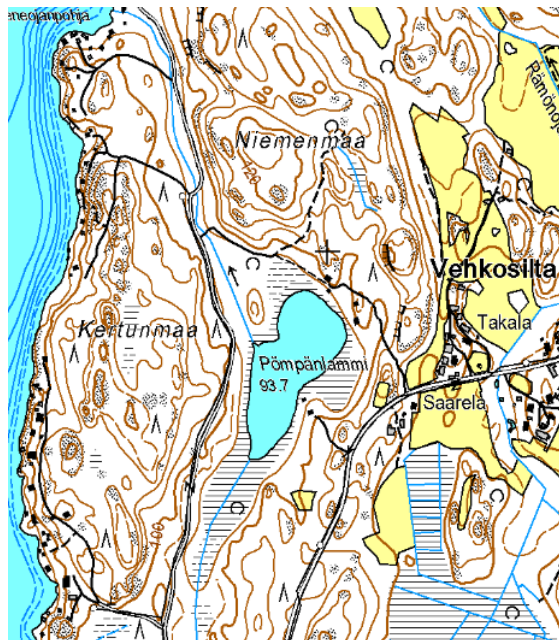
NLS, topographic database

- 1:10 000
- 2005->
- SHP for map sheets
- GeoPackage all Finland in one thematic file

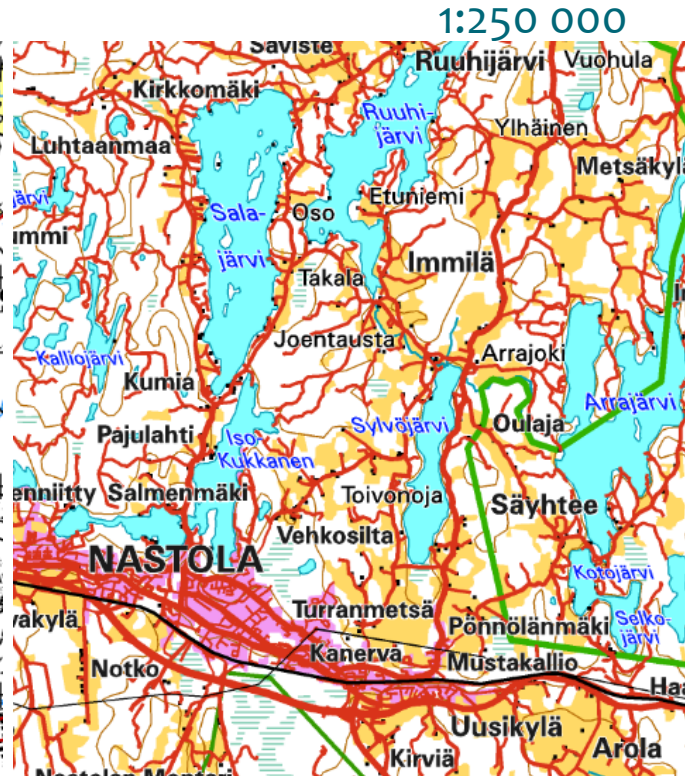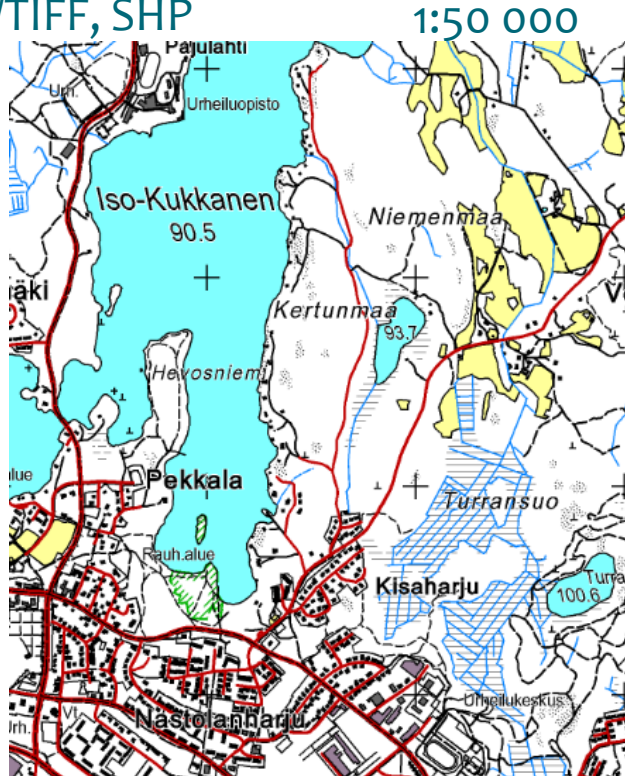© Maanmittauslaitos 2010

- Traffic
  - Road, streets, tracks, railways, ferries, airports

- Buildings

- Administrative borders

- Place names

- Land use

- Water
  - Sea, lakes, rivers, streams, springs

- Contours, height and depth

- ...

- 1:50 000 – 1:4 500 000
- 2005->
- PNG/TIFF, SHP

NLS, topographic and general maps

CSC

1:50 000

1:250 000

© Maanmitt

- 1:10 000
- 1997->
- JPG2000

NLS, ortho images

Normal color

Infrared

Black-and-white
(some old images)

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- 25m, 10m and 2m
- 2005->
- TIFF

NLS, DEM, digital elevation model

25m

2m

© Maanmitt...
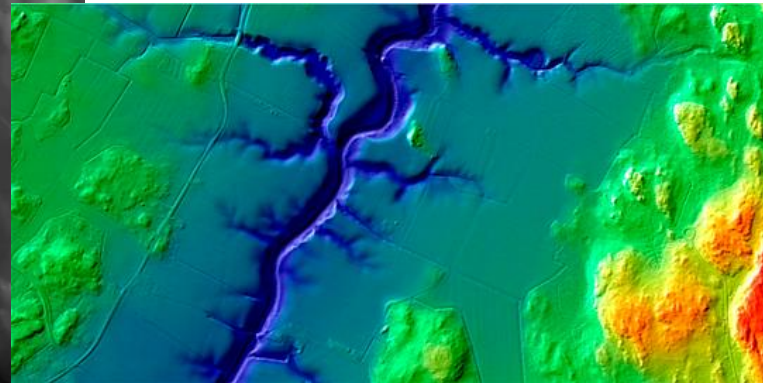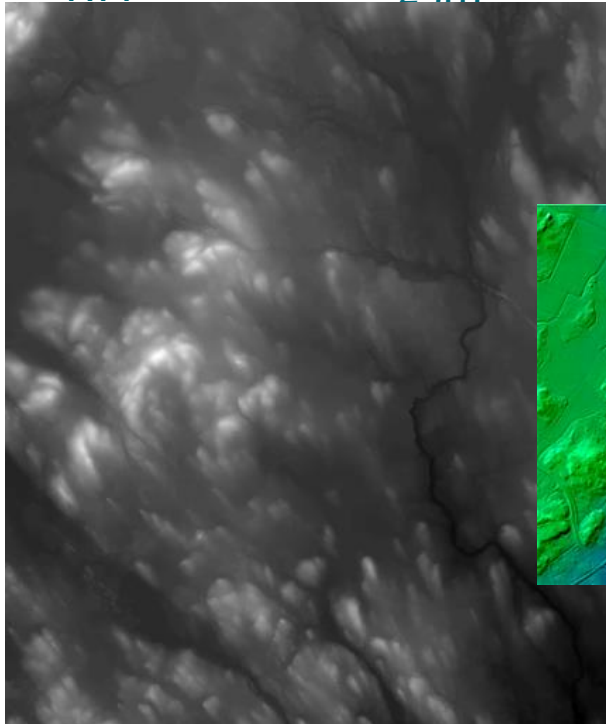
NLS, lidar

- 0,8 points / m2
- 2008->
- LAZ
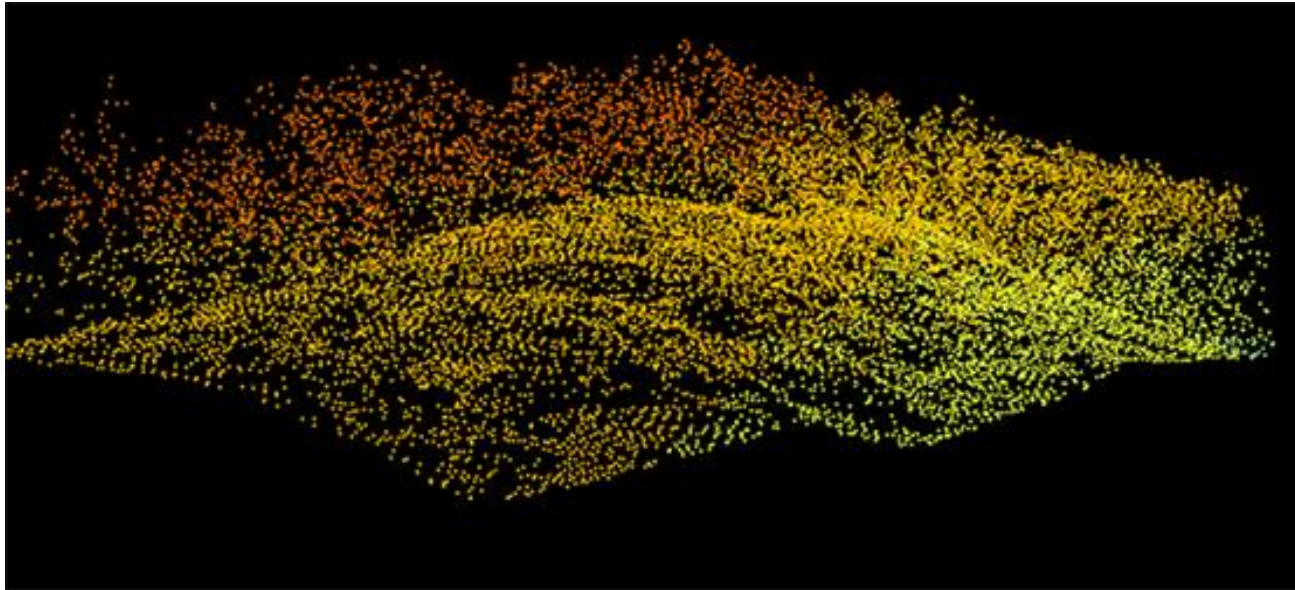
- 1:10 000 – 1:1 000 000
- 2005->
- SHP

NLS, administrative borders

CSC
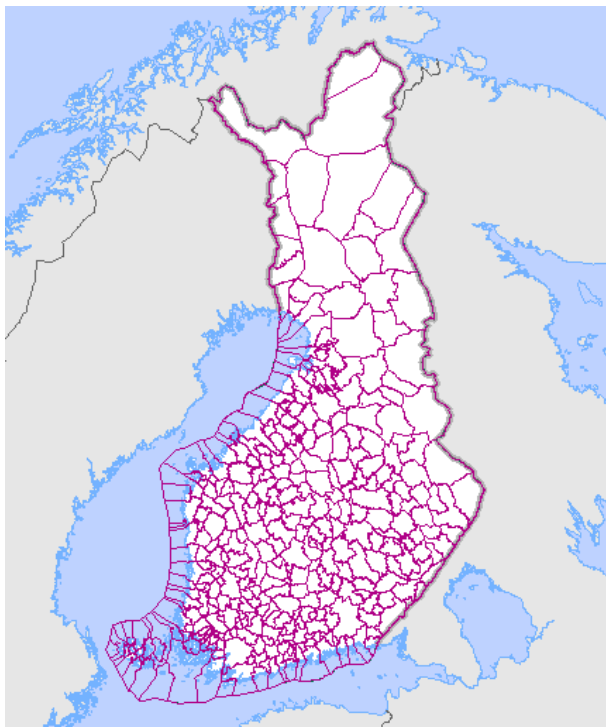
1:10 000

1:1 000 000, for thematic maps

© Maanmitt
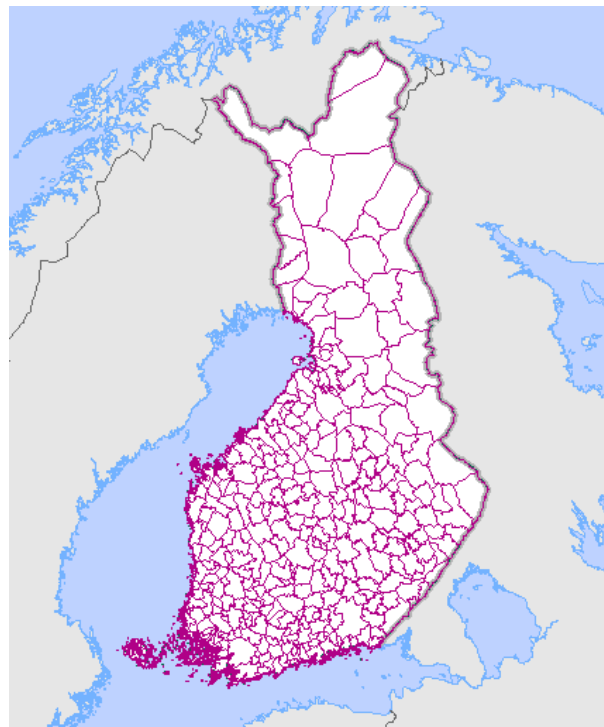
Finnish Transport Infrastructure Agency, Digiroad

- Roads and streets
- Addresses -> **geocoding**
- Speed limits, turning restrictions etc -> **routing**
- Bridges and tunnels
- Parking areas and houses
- Bus stops
- ...

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- 1 x 1 km
- 2005, 2010-2018
- SHP

Statistics Finland, Population grid data

Statistics Finland, road accidents

© Tilastokeskus

FMI
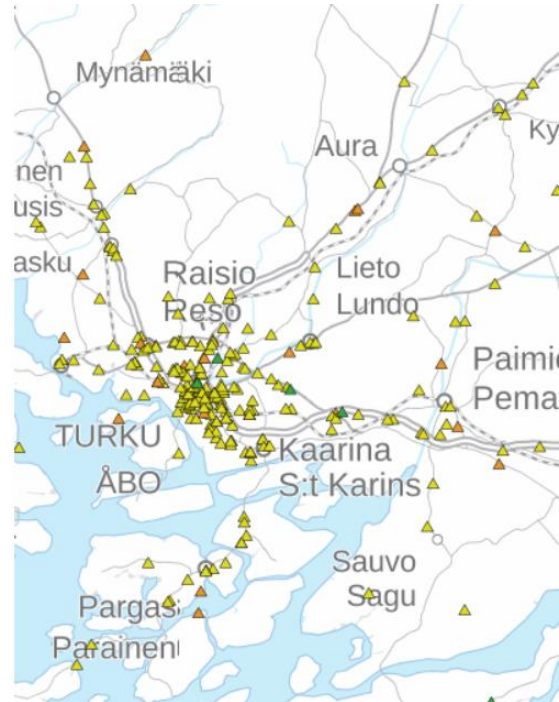
- 10 x 10 km
- 1961->
- TIFF, NetCDF

- Min and max temperature
- Air pressure
- Snow depth
- Relative humidity
- Radiation
- etc

Average temperature

Precipitation

LUKE, DTW-depth-to-water index map
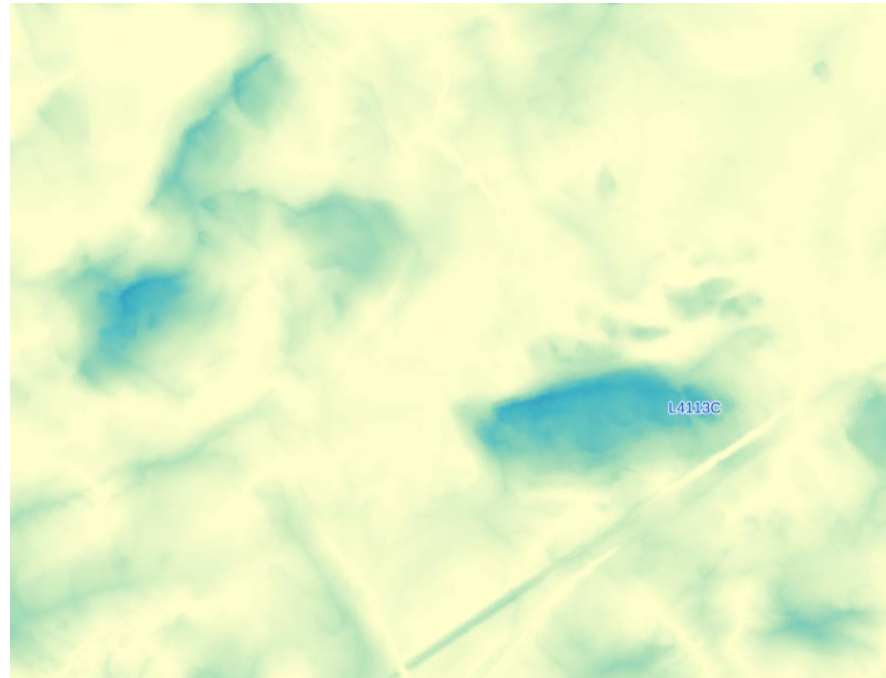
Data access
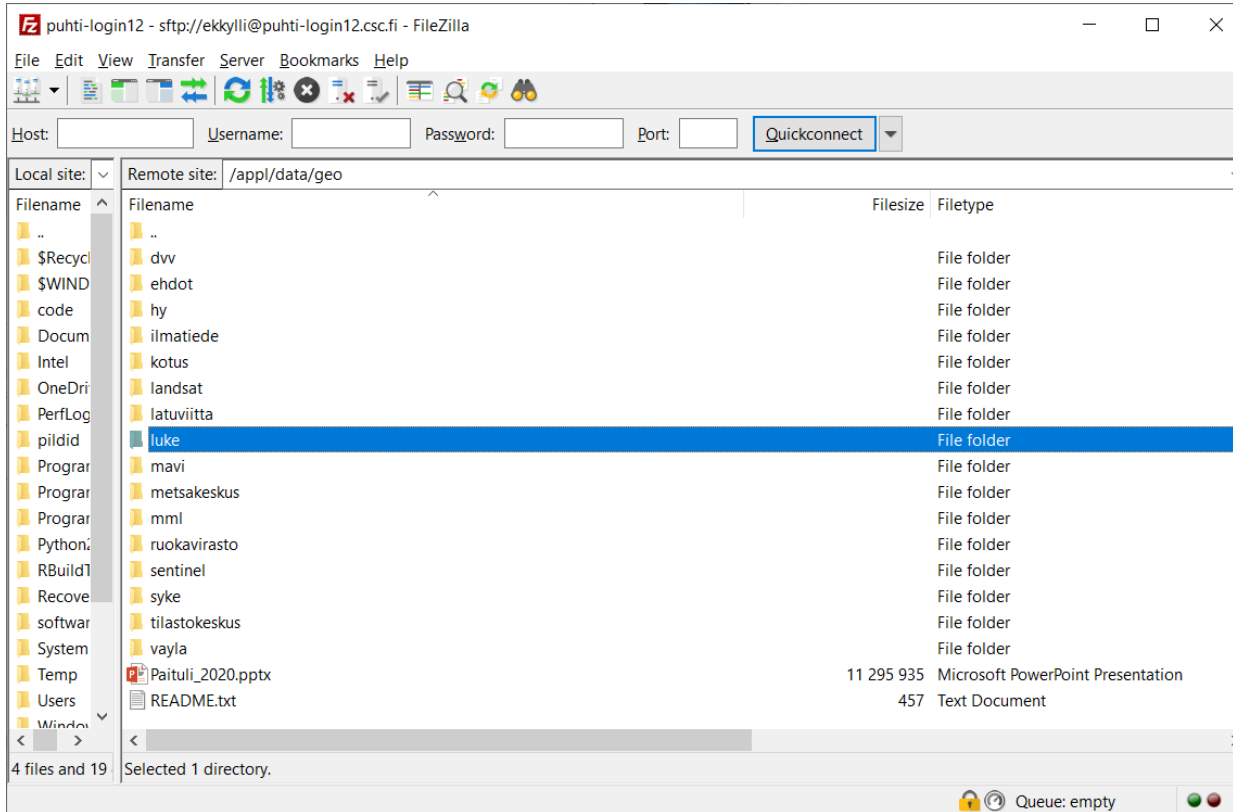
Paituli download / usage options

1. Files as zip from Paituli web service

2. APIs: WFS, WCS, WMS, WMTS, new OGC APIs

3. Files batch download - https/ftp/rsync: curl, wget, Python, R etc.

4. Puhti
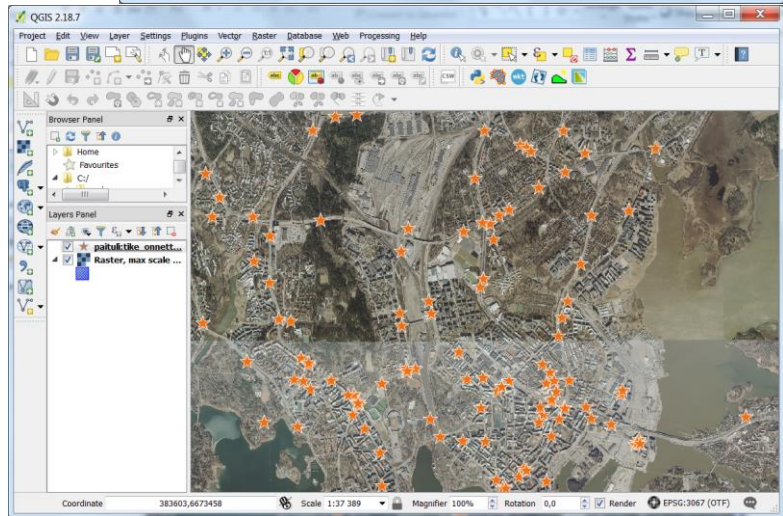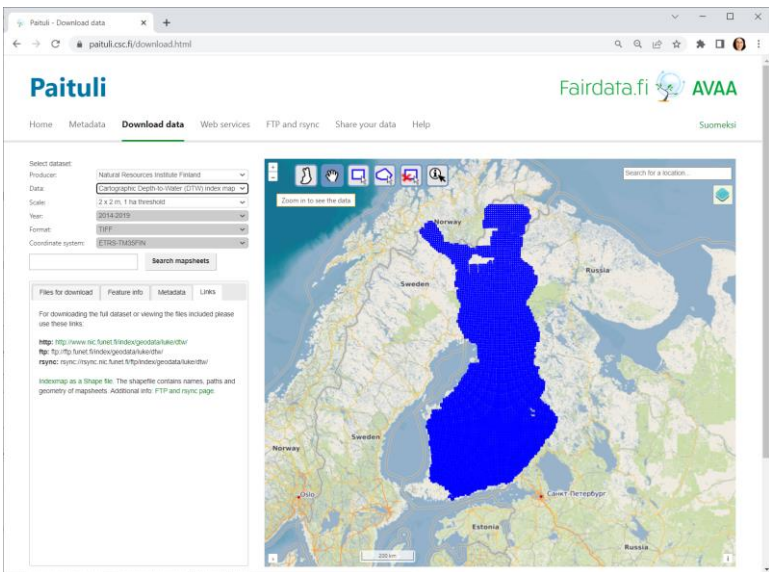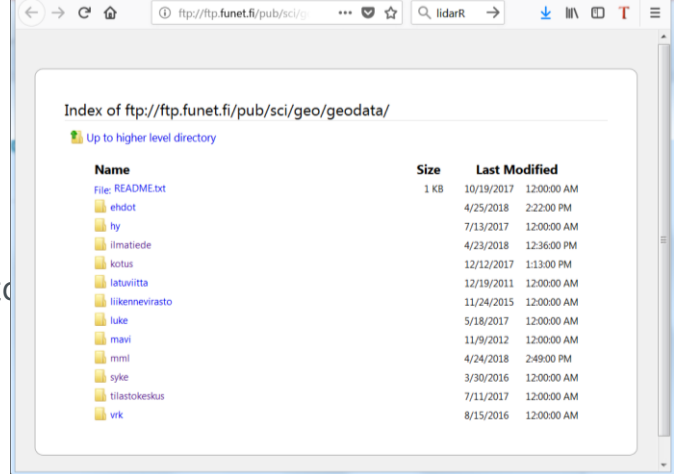
Paituli files in Puhti supercomputer

How to find the file path in Puhti? /appl/data/geo