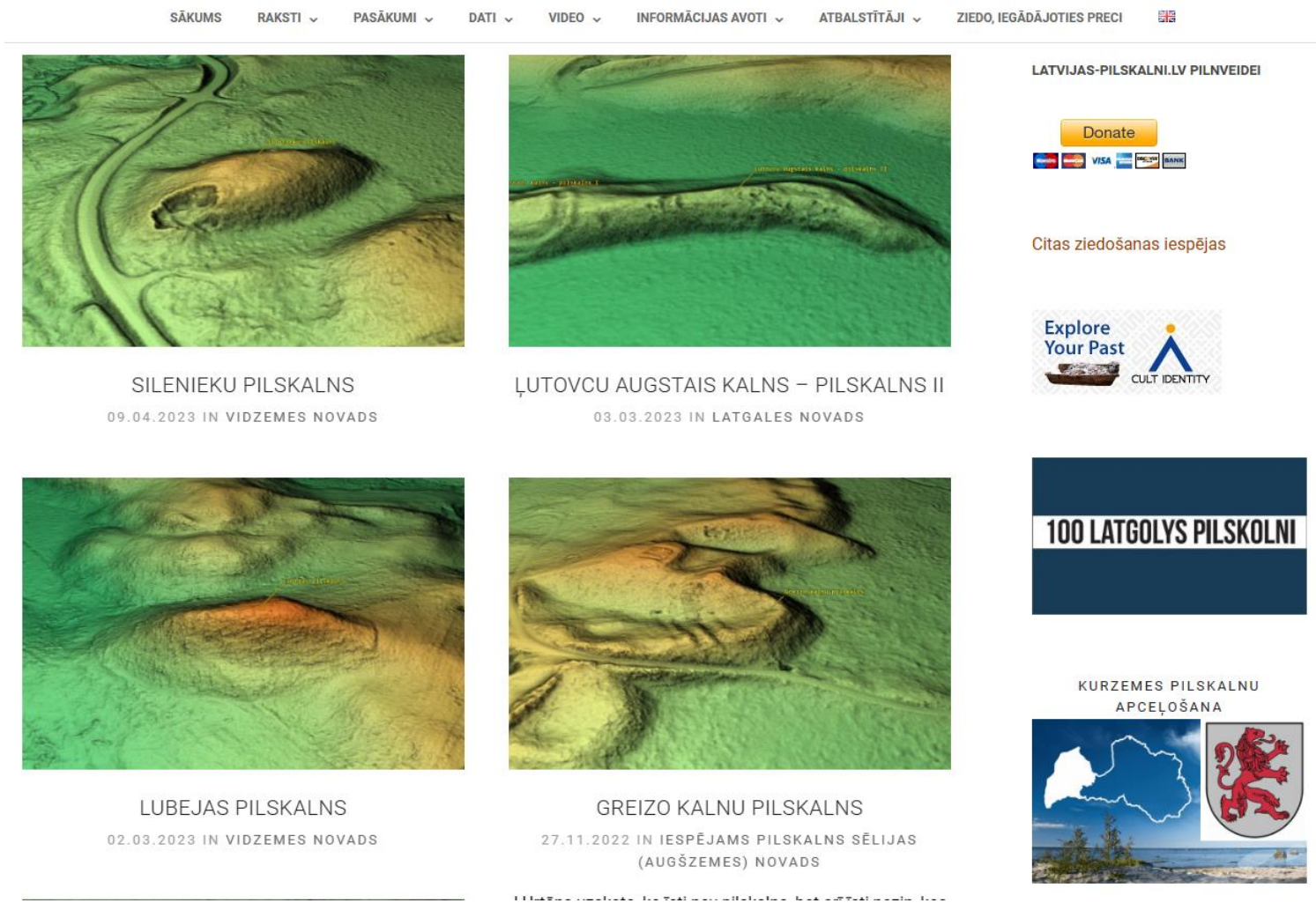
EUROPEAN IRON AGE HILLFORTS MAPPING, 3D MODELING, RESURVEYING AND HISTORICAL OPEN DATA

Gatis Kalniņš. Riga, 2023

A BRIEF HISTORY OF THE PROJECT

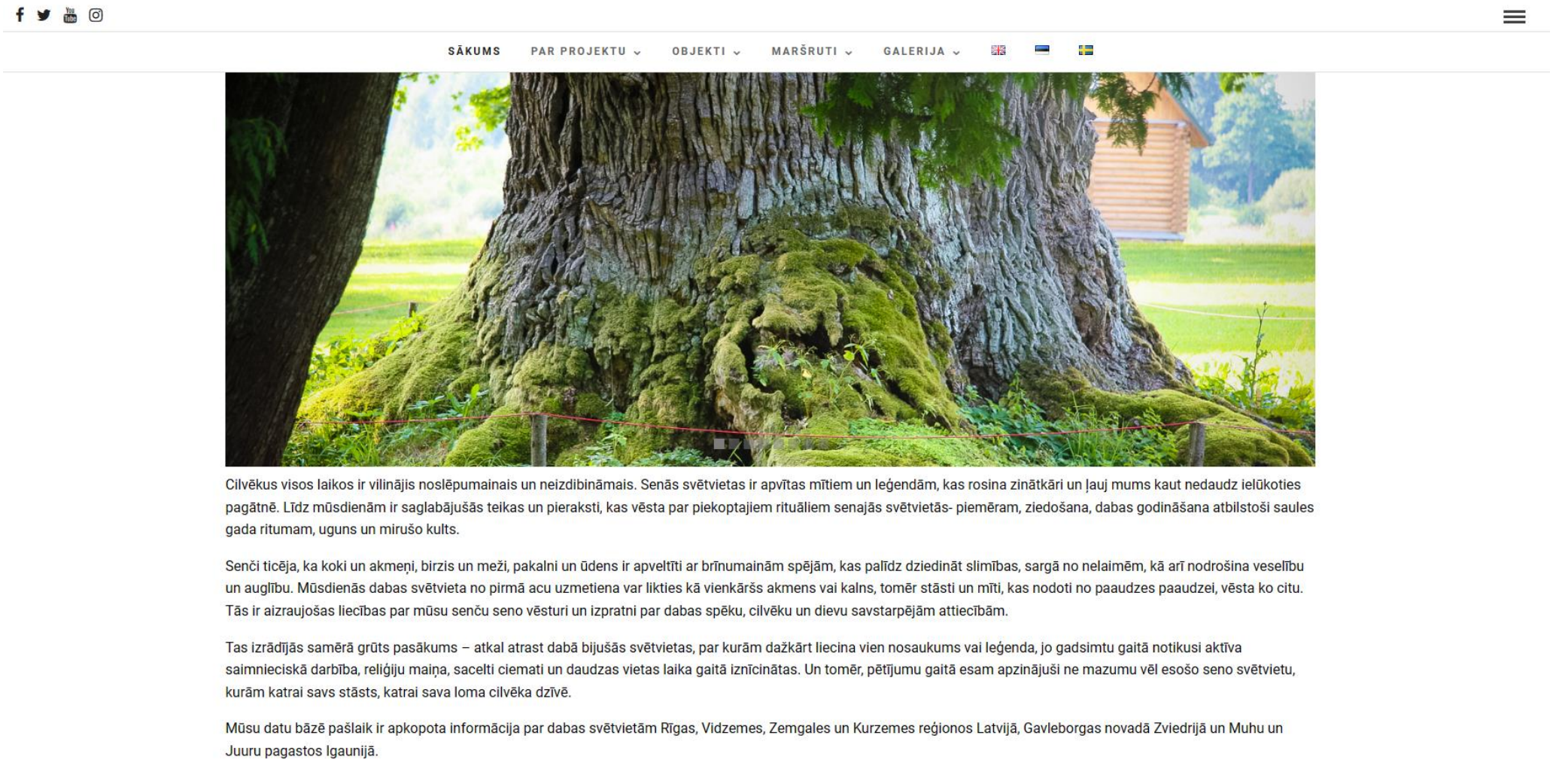
Private initiative without state funding. The website **www.latvijas-pilskalni.lv** was launched in July 2017



Open data repository **opendata.latvijas-pilskalni.lv** launched in October 2019.

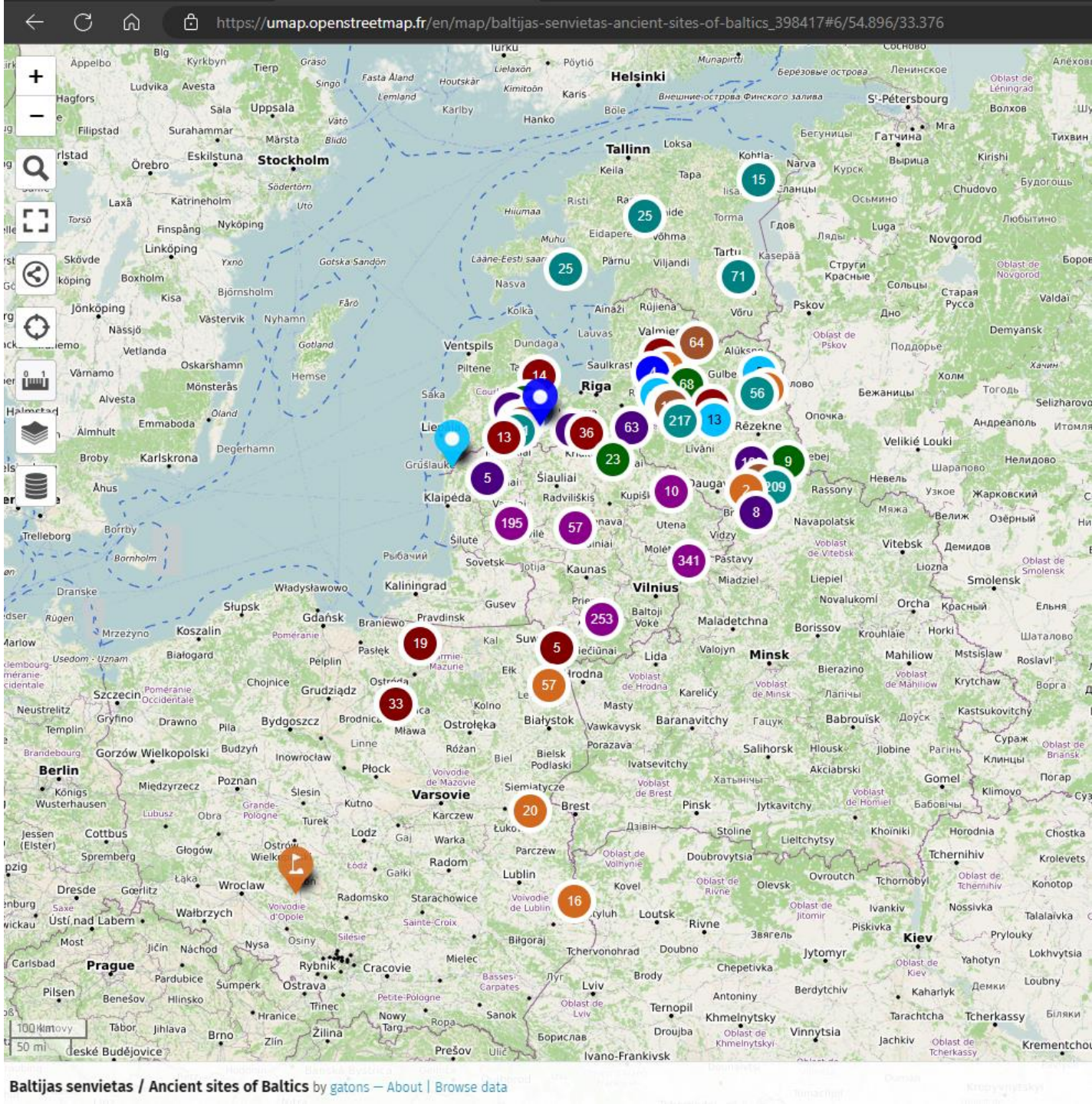
File Name ↓	File Size ↓	Date ↓
Citi_objekti	-	April 29, 2021
Macibu_materiali	-	February 22, 2022
Merijumi	-	April 26, 2023
Pilskalnu_3D_modelji	-	March 13, 2023
Pilskalnu_fotografijas	-	April 30, 2023
Senvietu_3D_modeli	-	October 23, 2020
Senvietu_fotografijas	-	August 18, 2022
Vesturiski_militari_objekti	-	March 19, 2021
json	-	April 29, 2020
xml	-	January 6, 2020
Apliecinajums_par_datu_brivu_izmantosanu_signed..>	81.1 KiB	January 5, 2023

Content of the website **ancientsites.eu** (after project «Cult identity» ends) opened on domain **www.senvietas.lv** in December 2019.



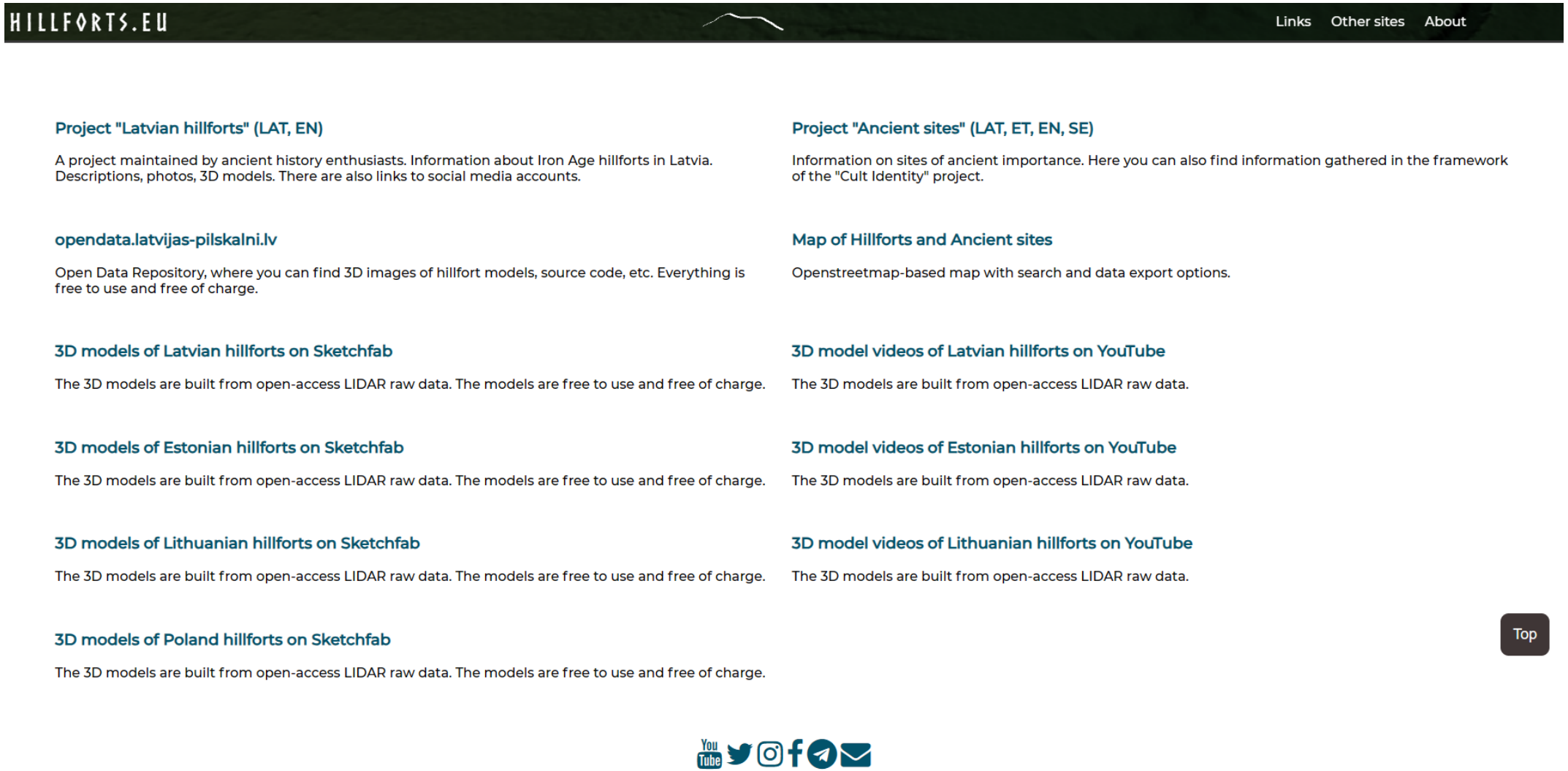
In March 2020 hillforts data layer provided in **LVM Geo** application

In September 2020 united **Baltic Hillforts and Ancient sites map** created

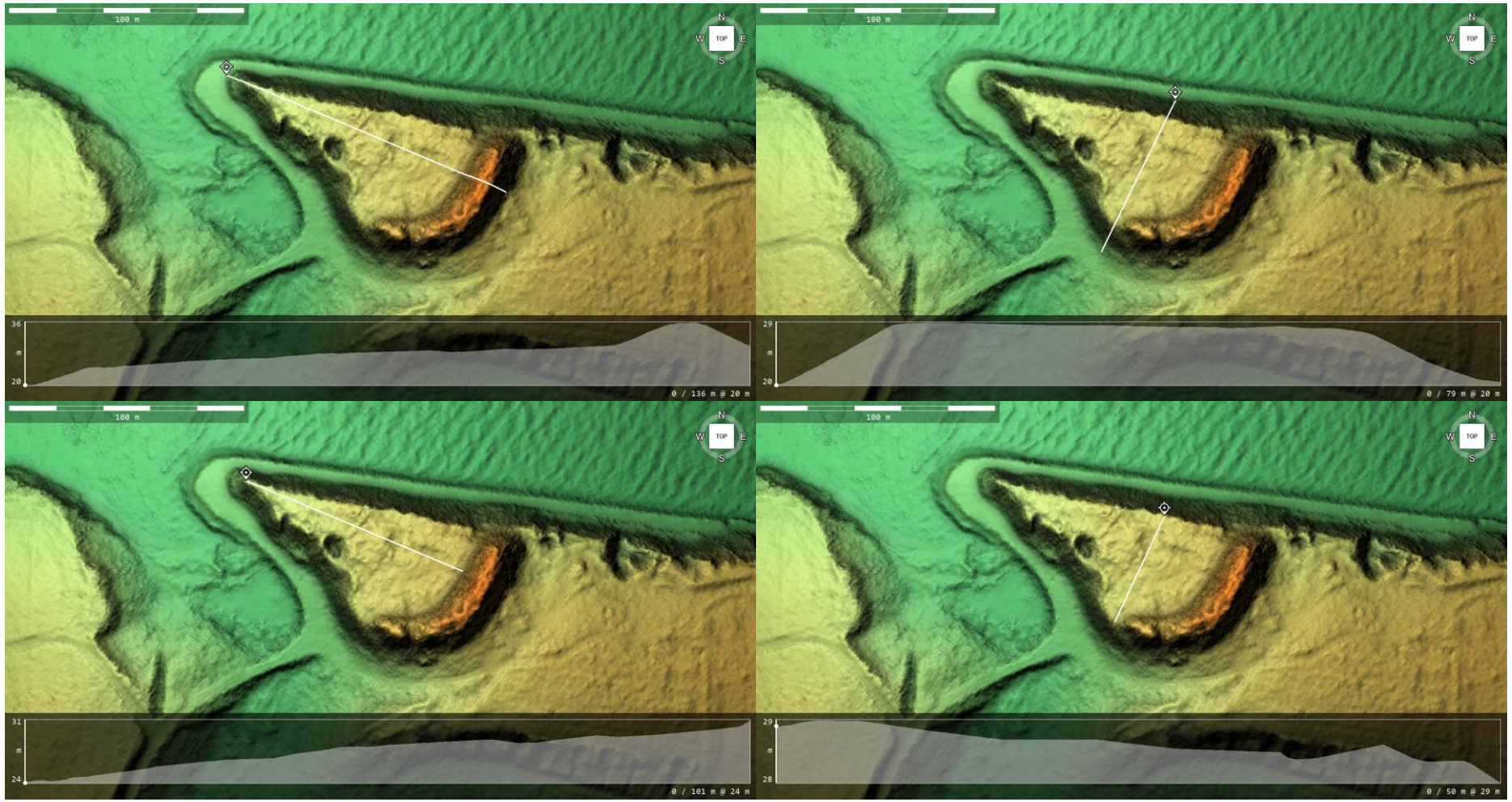


2020 the project wins the **LATA annual award** in the private sector for the data repository **opendata.latvijas-pilskalni.lv**

hillforts.eu website launched in 2022

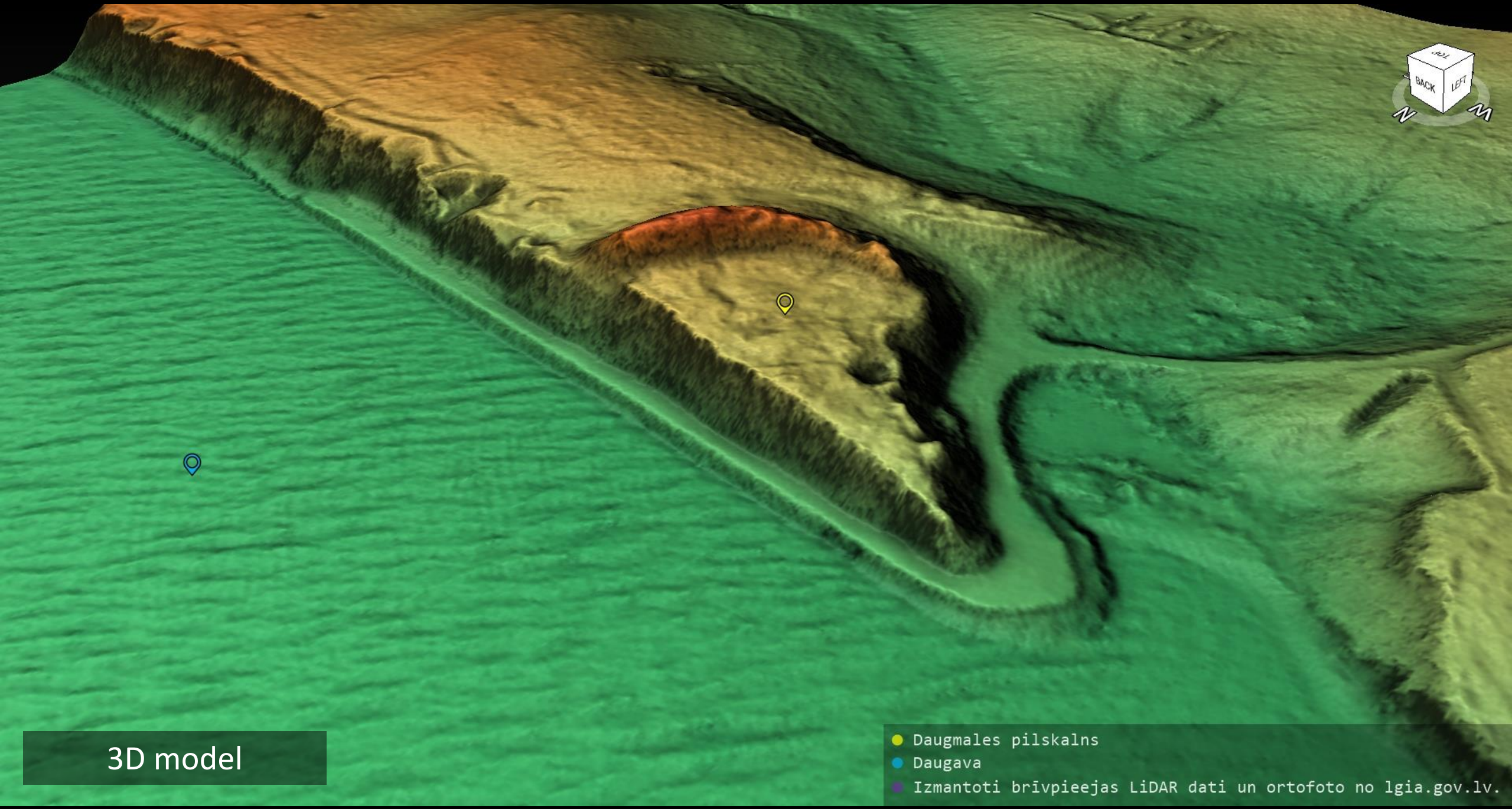


2022 – 2023 Digital resurveying of hillforts of Latvia, Estonia, Lithuania using 3D models



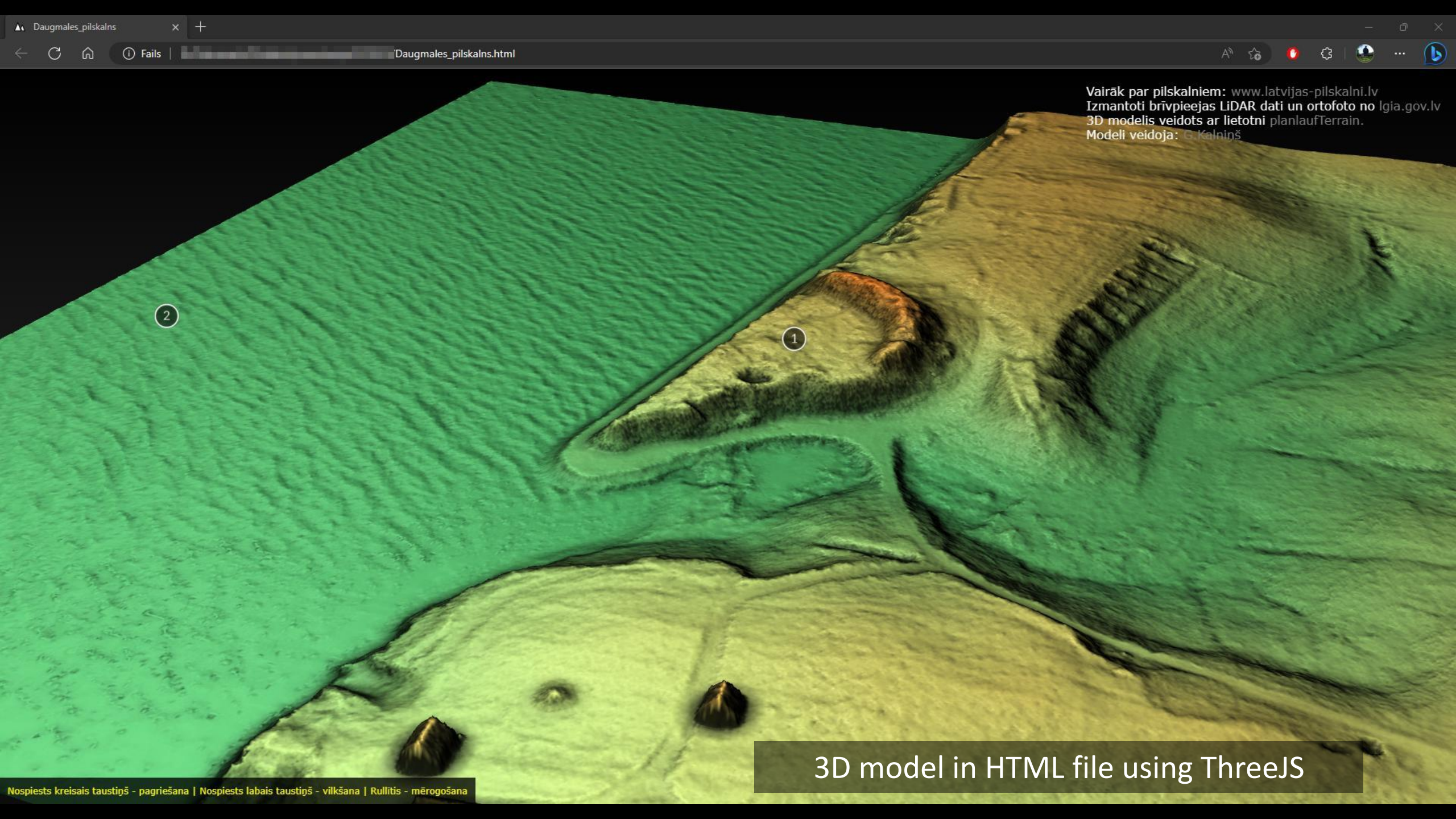
OPEN DATA REPOSITORY

- Opendata.latvijas-pilskalni.lv
- Learning materials
- Measuring data
- 3D models of hillforts (total ~ 1123 models)
- Photos of hillforts
- Xml and Json data files


BACK
LEFT
Daugmales pilskalns
Daugava
Izmantoti brīvpieejas LiDAR dati un ortofoto no lgia.gov.lv.

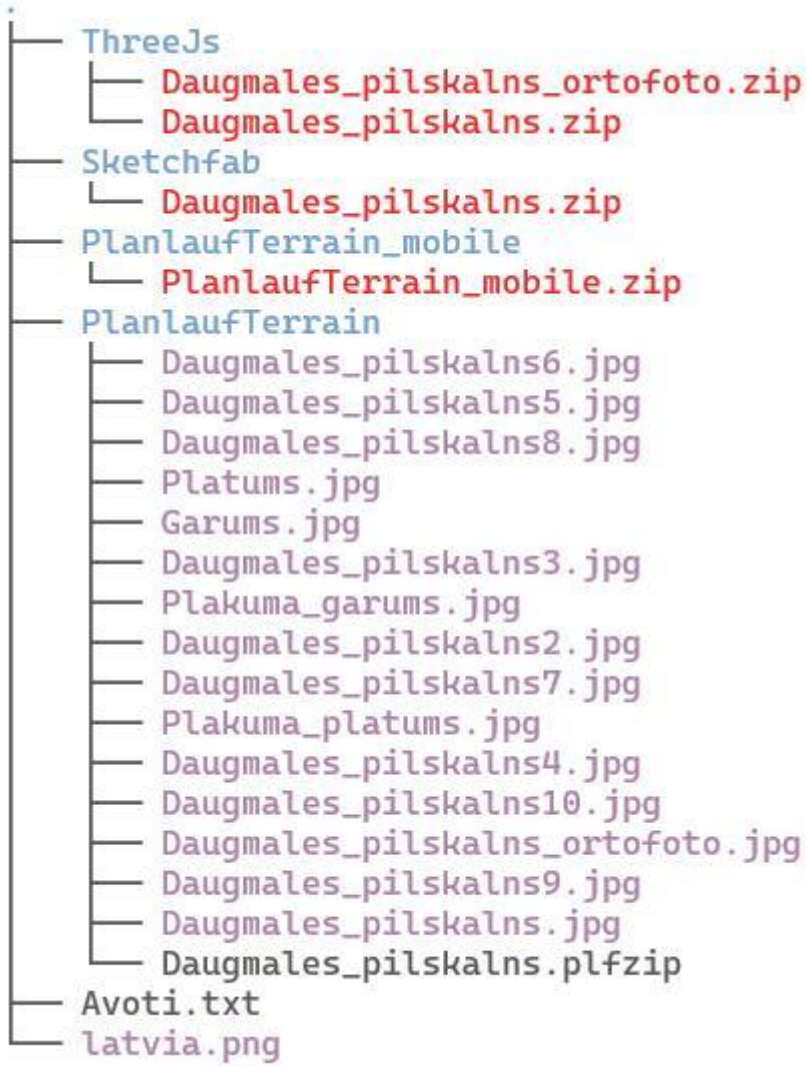
3D model

3D model with ortophoto


Daugmales_pilskalns
Fails
Daugmales_pilskalns.html
Vairāk par pilskalniem: www.latvijas-pilskalni.lv
Izmantoti brīvpieejas LiDAR dati un ortofoto no lgia.gov.lv
3D modelis veidots ar lietotni planlaufTerrain.
Modeli veidoja: G.Kalniņš
2
1
Nospiests kreisais taustiņš - pagriešana | Nospiests labais taustiņš - vilkšana | Rullītis - mērogošana
3D model in HTML file using ThreeJS

E
S
N
W
TOP

Typical folder structure



CHALLENGES AND ISSUES

- Each country has its own approach for Lidar data providing
- Different Lidar data quality
- Citizen science projects currently do not have access to state-provided data repositories for data backup
- Citizen science projects currently do not have a conditional "green corridor" for informing the public about the development of the project (for example, press releases are sent to a national news agency, but this news does not reach the mass media)

DEVELOPMENT PERSPECTIVES

- A new website with united data of ancient sites and mound sites
- Route planner for travelers
- An improved open data repository containing more metadata – dimensions, shape, location characteristics (eg river catchments), etc.
- A mobile app that would make it easier to find objects in nature with the help of augmented reality

THANK YOU FOR YOUR ATTENTION

www.latvijas-pilskalni.lv
opendata.latvijas-pilskalni.lv
www.senvietas.lv
www.hillforts.eu
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Twitter
Mastodon
Instagram