Descriptions and evidence of outputs

The Generic SitSim Application for Climate Change Predictions is an integral part of the Vágar 3D model. The integration has enabled us to provide better context and a meaningful environment for exploring how changes in the climate, since the last ice age, up until today and into the future, have interacted with cultural activity in the various periods. As a deliverable, however, it remains a separately packaged product (compilation of templates) for free use by others. The templates are available for download on CINE GATE (www.cineg.org).

The aim of this deliverable has proven to be very ambitious. Based on earlier experience we anticipated that time was mature for better performance and higher resolution while showing how vegetation will change with global warming. The complexity of the data sets related to terrains informing about geology, productivity, deposit, vegetation etc. has increased and it is unevenly distributed from municipality to municipality. We have found it very difficult, and far beyond the resources of the CINE project, to provide a solution that can display visualisations of datasets for specific localities in an automatic or semi-automatic way. Consequently, we have tried to find a middle way, which demands manual preparation but still provides a continual time dimension of the climatic changes in the event of temperature increases. IMK combined this with high 3D vegetation detail close to the position of the user. Due to the pandemic we also had to cancel several planned testing and evaluation of the climsim–solution on site. Thus we do not have the same concrete testimonials as from the other deliverables.

Output indicators OT1.3.1

Number of organisations introducing a decision-making tool or governance concept facilitating sustainable environmental management (output indicators):

1. Historic Environment Scotland - case study Adapt Northern Heritage project
2. SKREI - adaptation of tool and concept
3. Sortland Museum - development opportunity for T1.3.1 as part of Gaia Vesterålen

A demo is available on the CINE Wayfinder site

https://www.cinewayfinder.eu/climsim-demo/

ClimSim demo

What is it? Video demo of a prototype tool

What does it allow you to do? Gain inspiration for future projects

Cost? Free

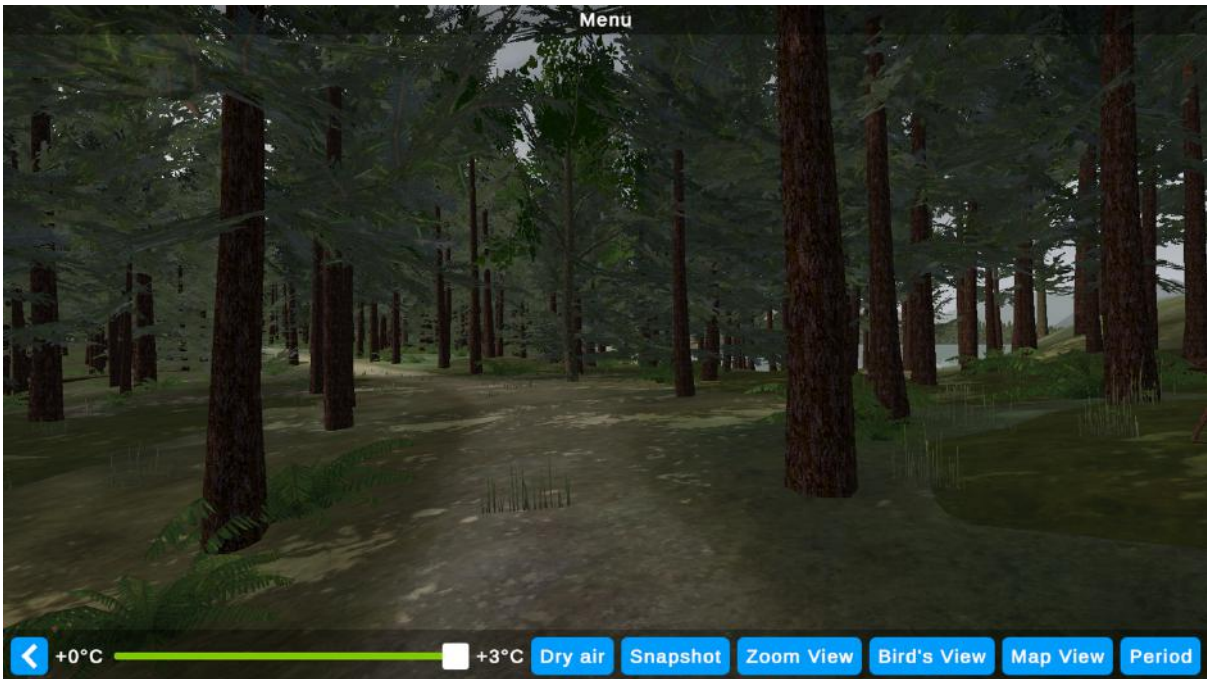**Who is it for?**

A community worker   A school teacher

A small museum or heritage organisation

How will the warming global climate affect heritage sites in the future? ClimSim is a prototype tool that can help show viewers what the landscape around them may well look like if the global temperature rises by 3 or even 6 degrees Celsius.

The central Vágar area in an imagined future with 3 degrees incrase in average temperature and a humid climate. The vegetation is dominated by spruce.

The central area of Vágar (same position as above) with 6 degrees increase in average temperature. The vegetation is dominated by oak in the parts with a rich and nutritious cultural layer, and pine beyond.