Rockfall in protection forests: Sylvicultural measures

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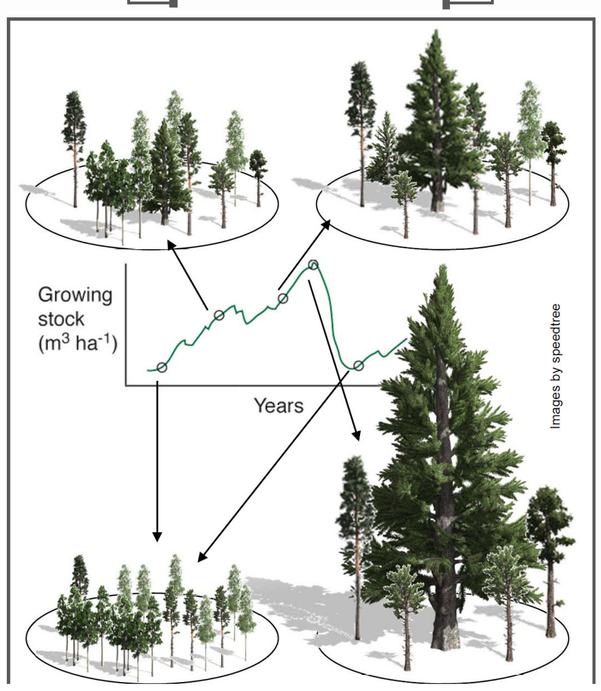
Study goal:
Testing management systems that are conducive to the protective function with ForClim (climate-sensitive forest succession gap model) and Rockyfor3D - rockfall simulation model

Study site:
Ljublelj pass
Karavanke
1000 - 1400 m a.s.l.
Anemono trifoliae-Fagetum
Protection forest

ForClim

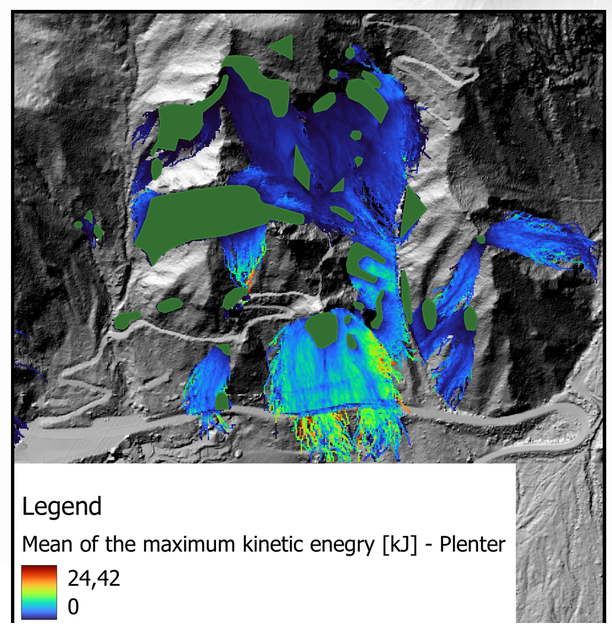


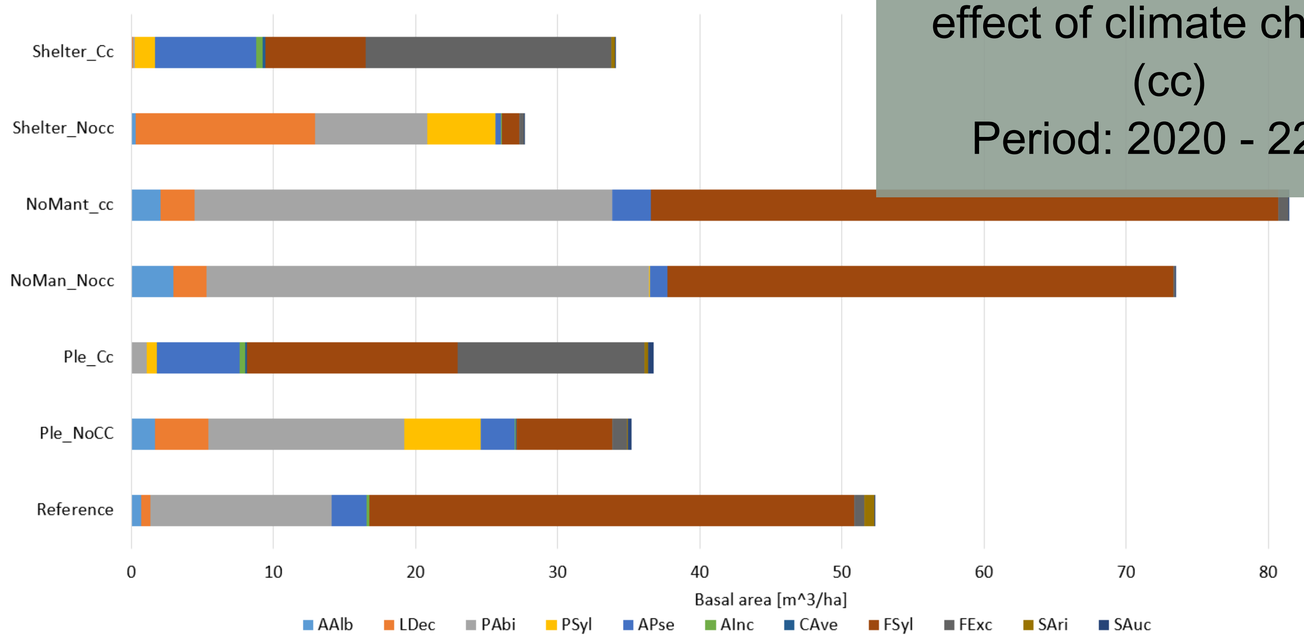
3 silviculture scenarios:

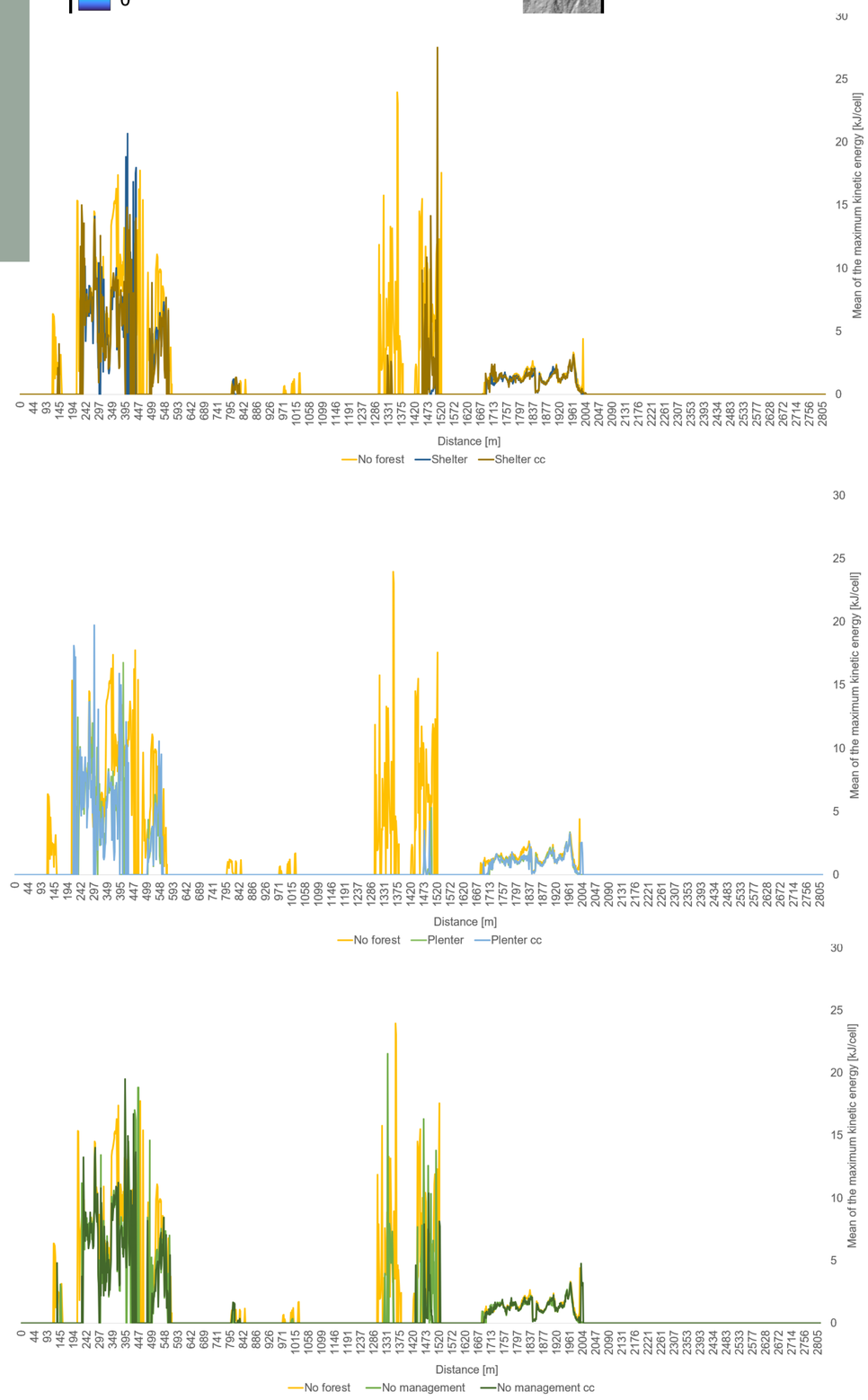
No management (NoMan)
Plenter (Ple)
Shelterwood (Shelter)

Each one tested with and without the effect of climate change (cc)
Period: 2020 - 2220

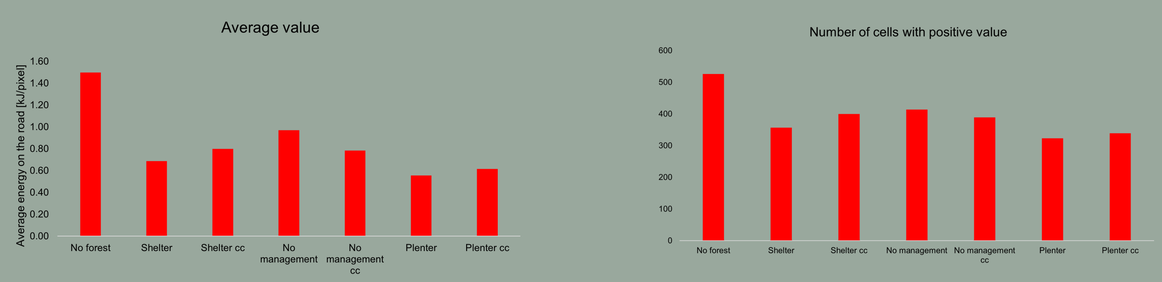
RockyFor3D







The mean kinetic energy measured in pixels of a linear polygon following a road on a mountain pass.



Conclusions: Management has a positive effect on the protective forest function.
The plenter forest system seems to be best suited for the protective function.
The shelterwood system seems to work well, but has the disadvantage that it leads to different situations over time (the final cut leaves a small density of trees)

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