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SKIING AREA DEVELOPMENT AND SUSTAINABILITY ISSUES IN ROMANIAN CARPATHIANS

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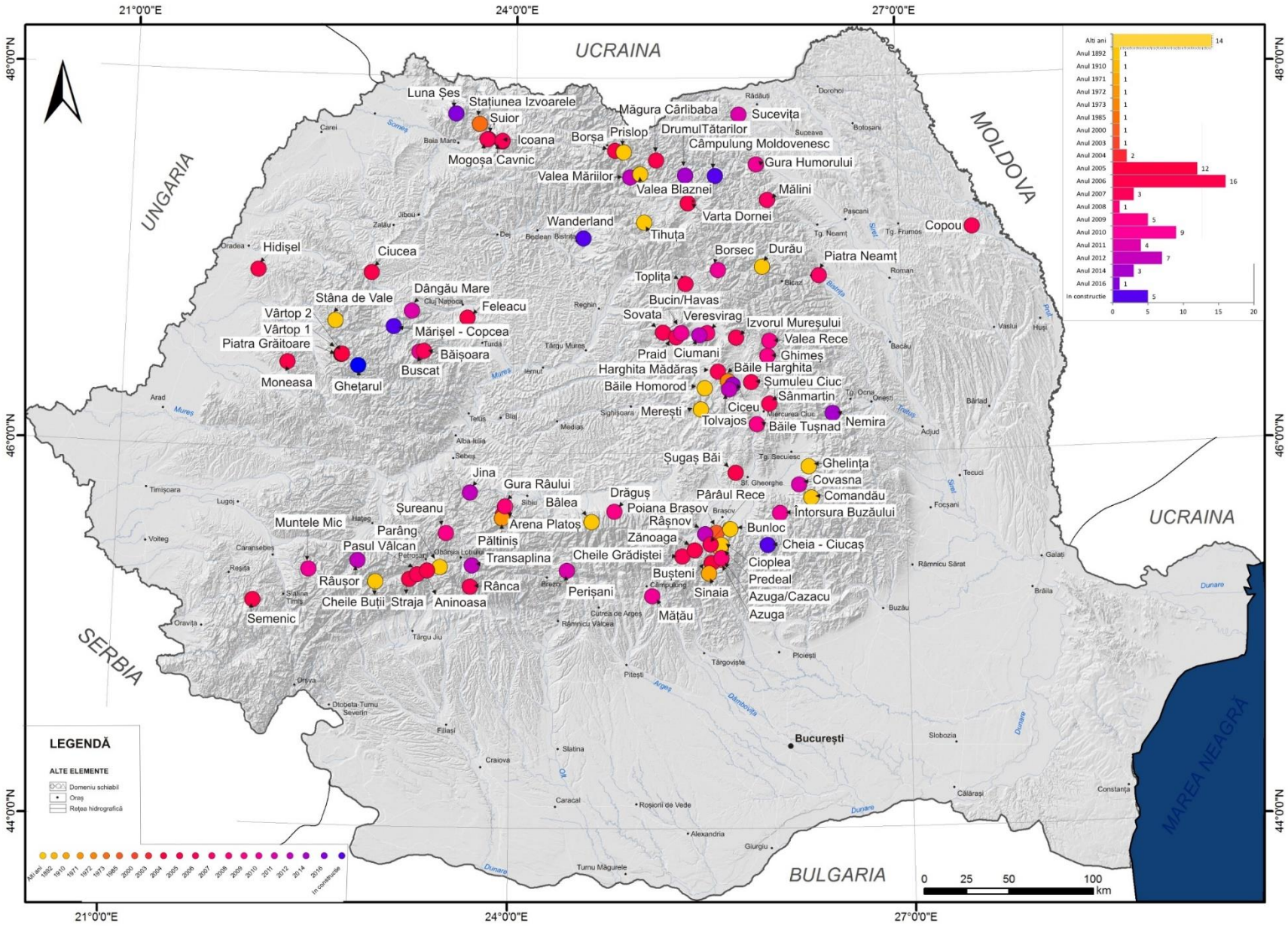
What are the changing resources for tourism?



Skiing areas and resorts generations in Romania

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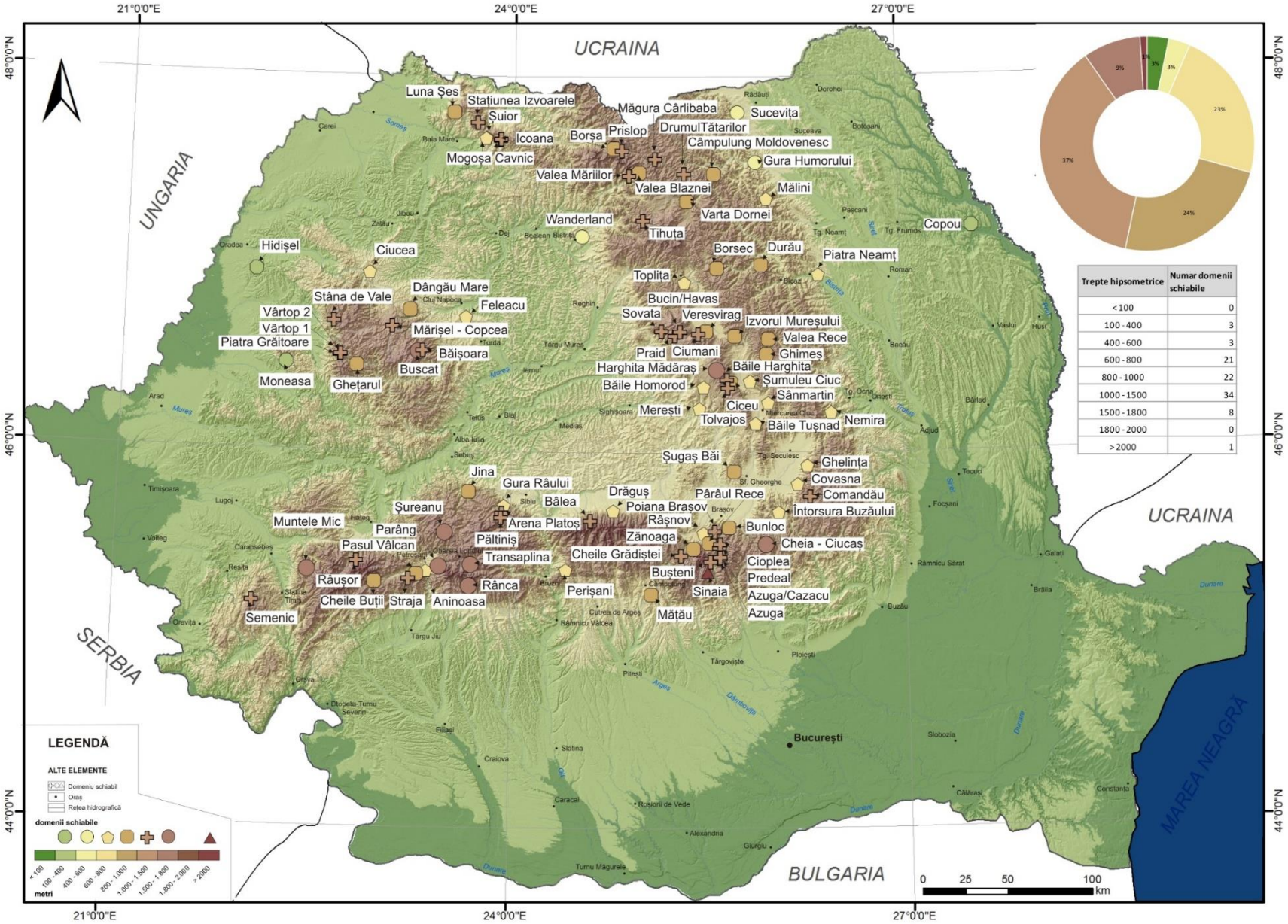

Trepte hipsometrice	Numar domenii schiabile
< 100	0
100 - 400	3
400 - 600	3
600 - 800	21
800 - 1000	22
1000 - 1500	34
1500 - 1800	8
1800 - 2000	0
> 2000	1

Skiing areas and resorts by altitude

What are the drivers of change?

Climate data source: WorldClim 2.0

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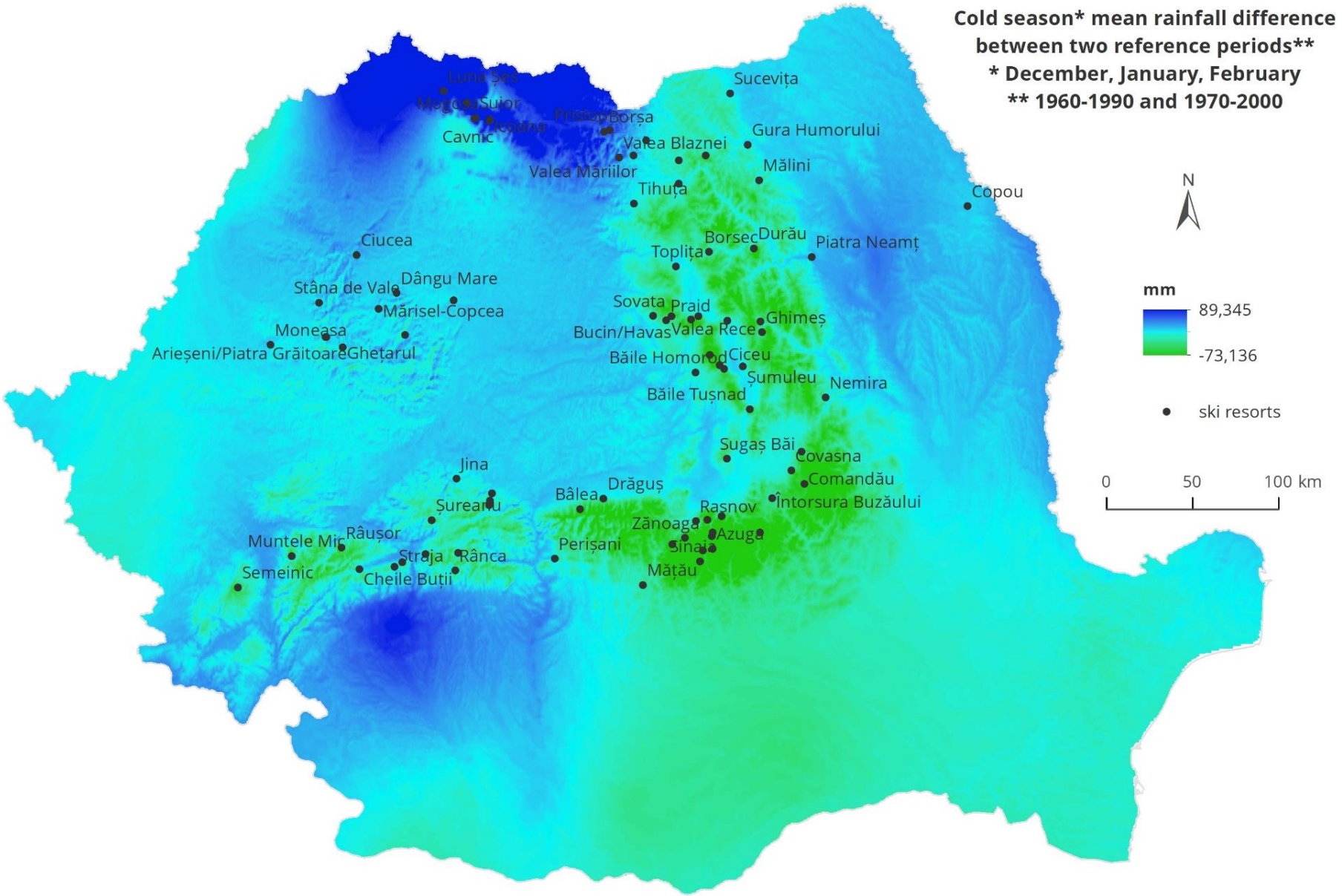

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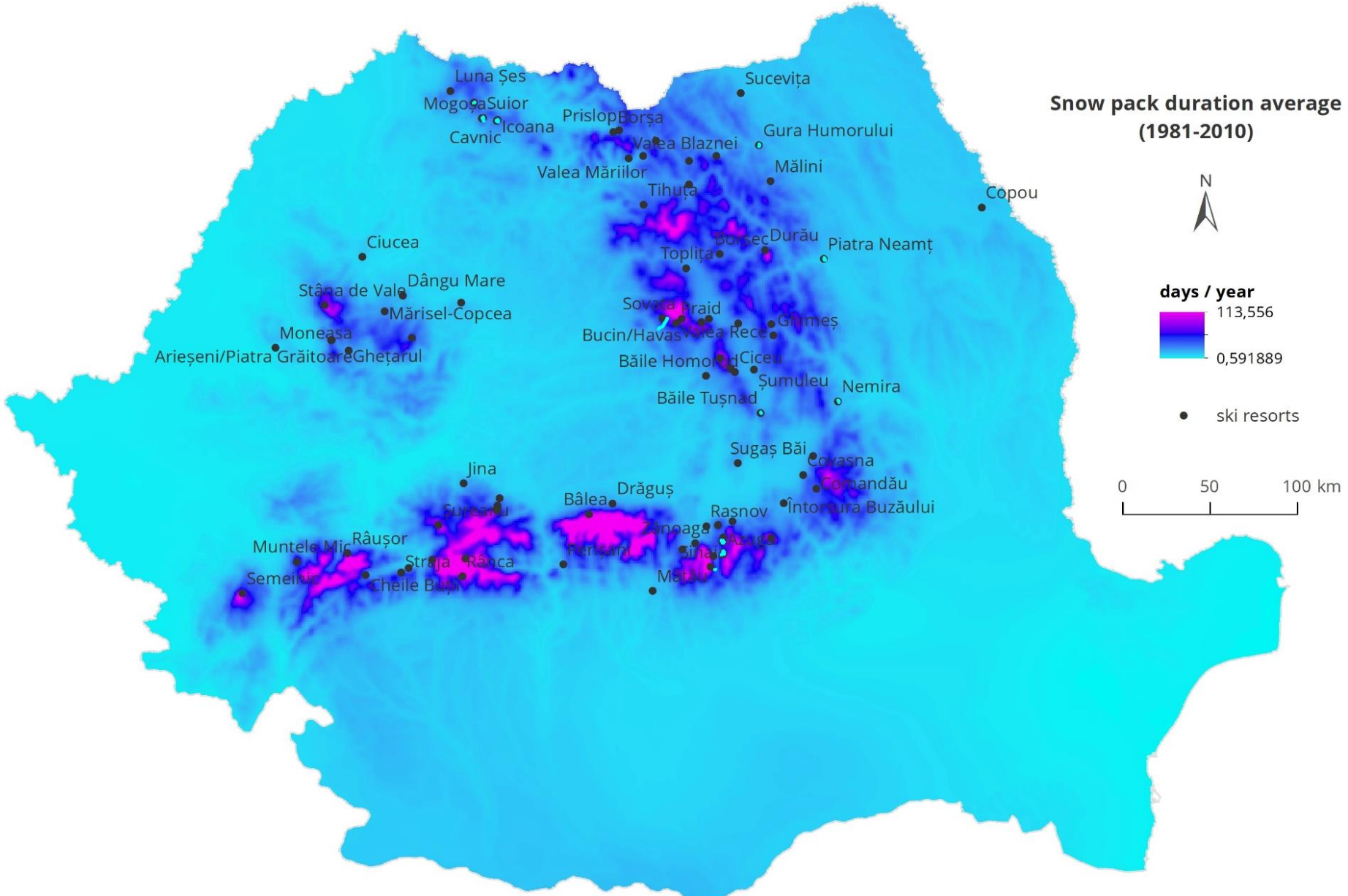

Data source: National Meteorological Authority (ANM) Bucharest

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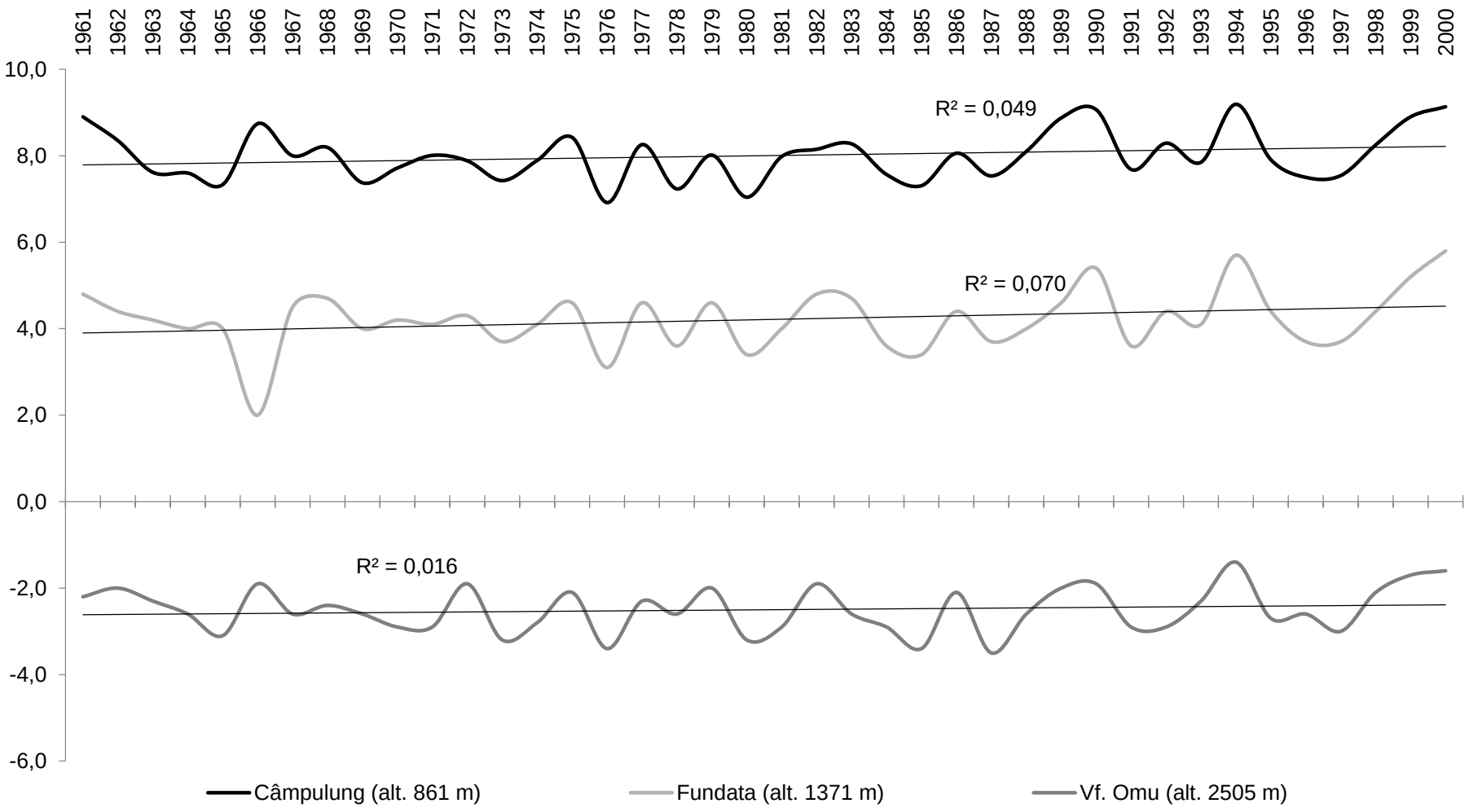
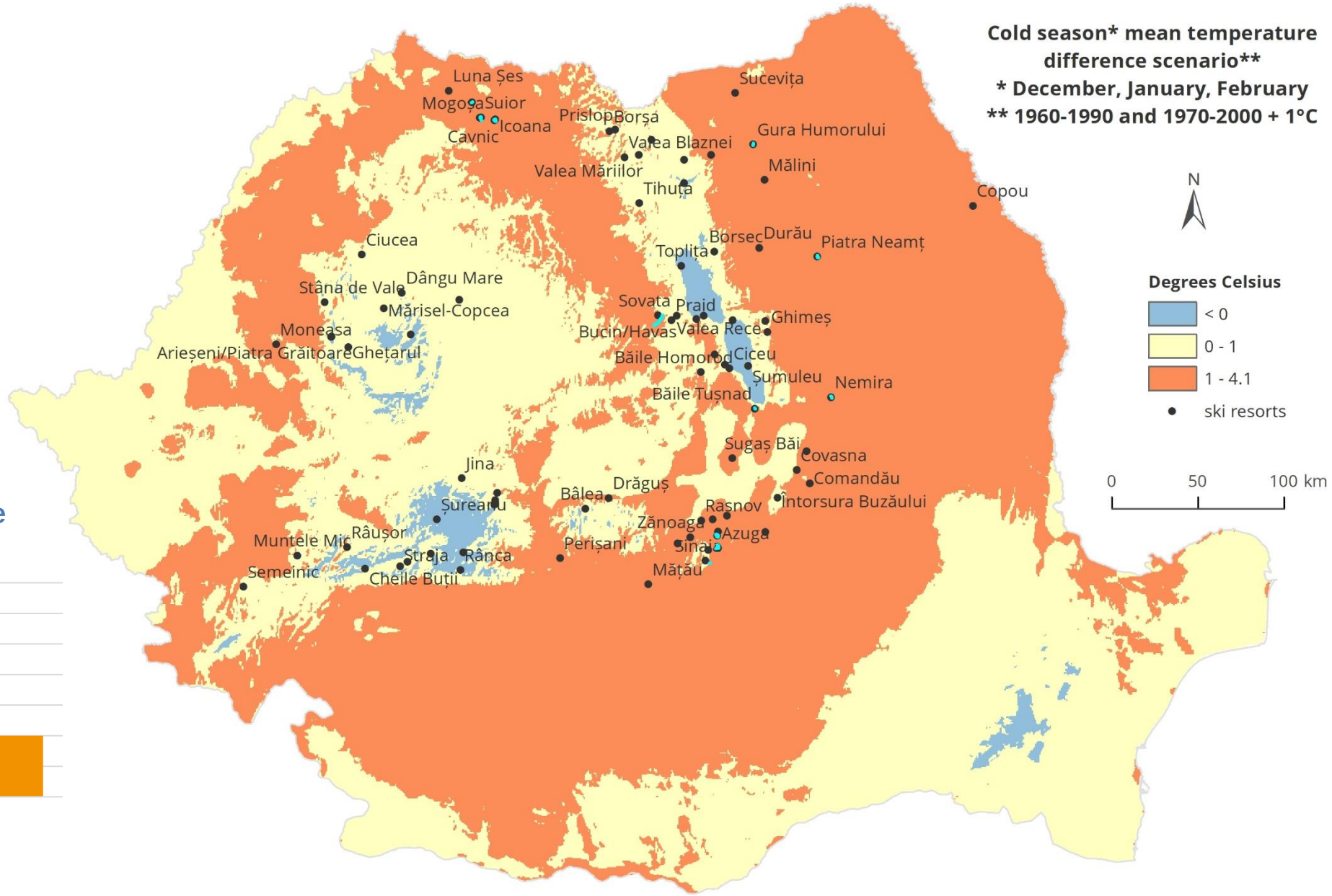


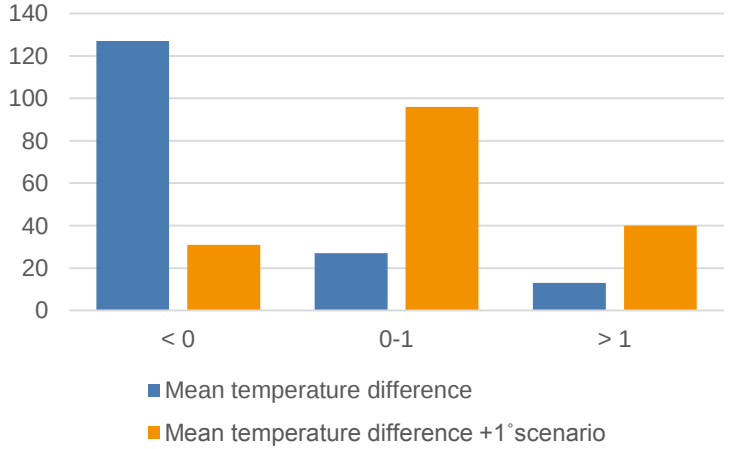
Climatic data for three characteristic weather stations showing the smooth increase of average temperatures.

Data Source: National Meteorological Authority (ANM) Bucharest

Which impacts do these changes have on tourism and livelihood?



Ski slope classification considering mean temperature difference (˚C)



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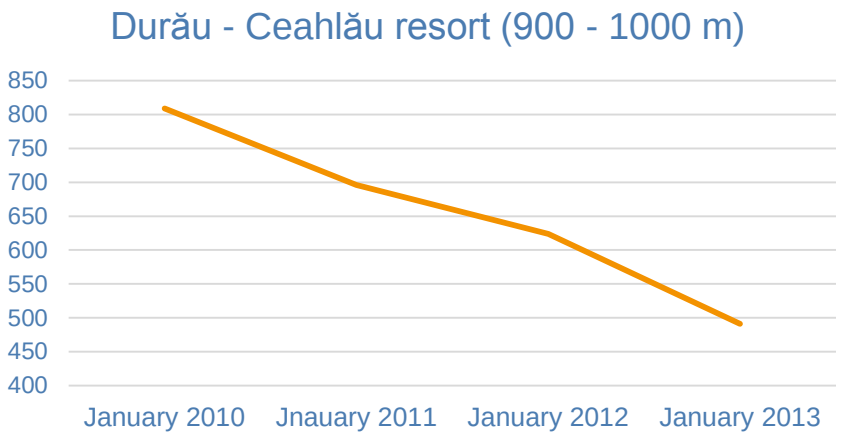

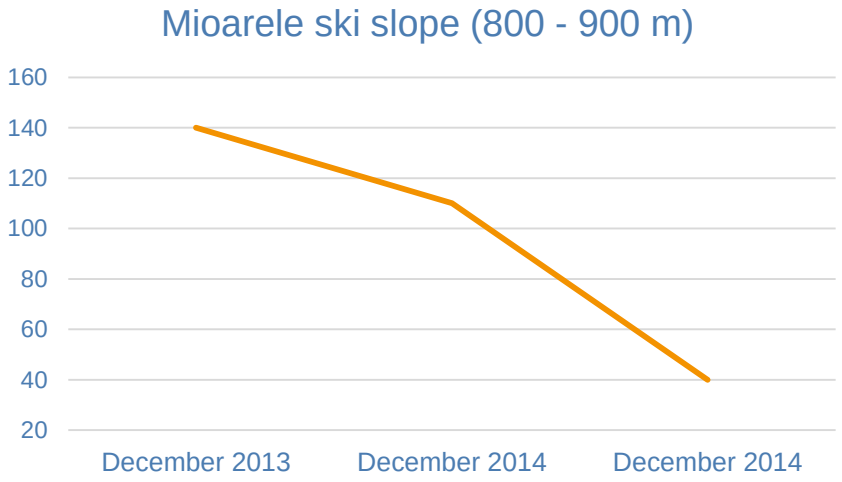

Tourist arrivals for two resorts with potential effects of snow pack duration decrease

Data Source: National Institute of Statistics (INS) Bucharest

Snow pack coverage on low altitude ski slopes in cold season (February). Topliţa (850 m) – Eastern Carpathians

Photos: M. Teodor, February 2016

What are (potential) solutions to these impacts?

- Feasibility studies and tehnical projects must include adapted scenarios to terrain conditions and regional climate change;
- Restrictions in skiing area development in high sensintive areas to climate change;

What is the contribution of science and our role as researchers to help tackle these challenges?

- Searching for project developments strategies for skiing areas adapted to terrain conditions;
- Idetification of sustainable economic solutions in order to help the recovery of the communities with losses from the limited performance of some ski slopes / skiing areas.