



UNIVERSITY OF TRENTO - Italy

Department of Civil, Environmental
and Mechanical Engineering

LAKE GARDA WINDS

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Manerba del Garda, 10 May 2018

GARDEN - Second International Scientific Workshop

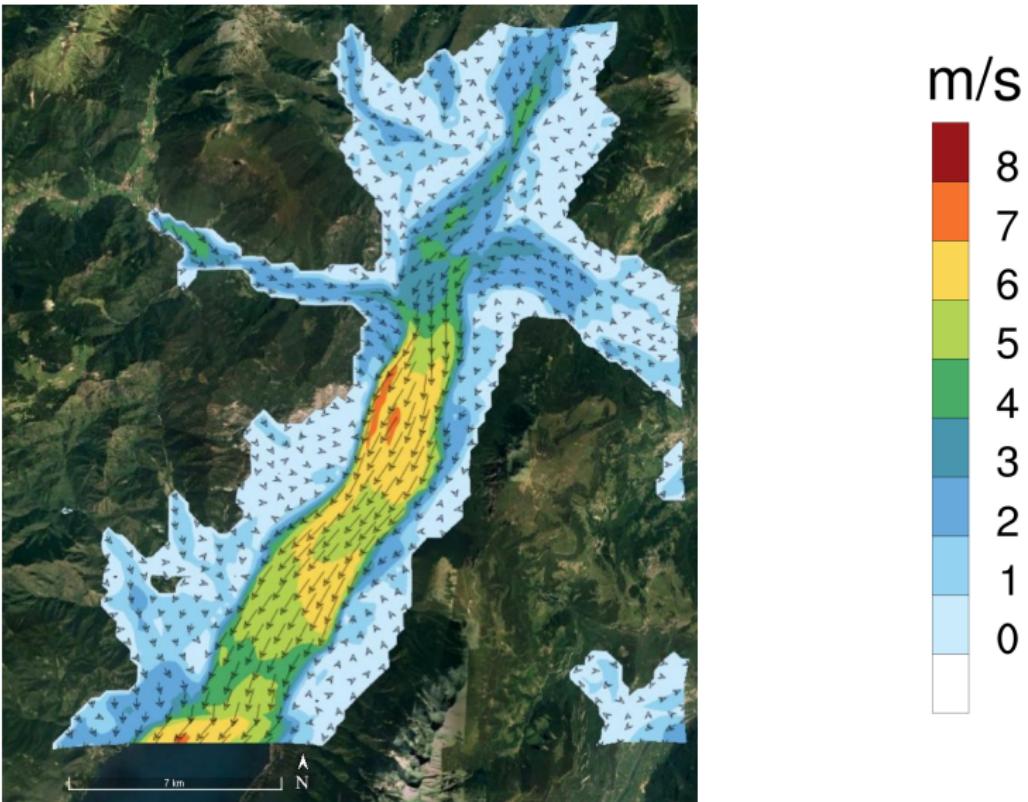
LAKE GARDA WINDS



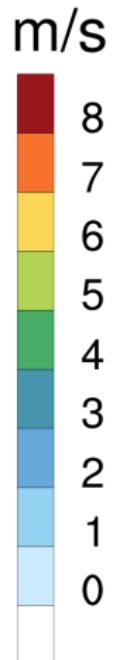
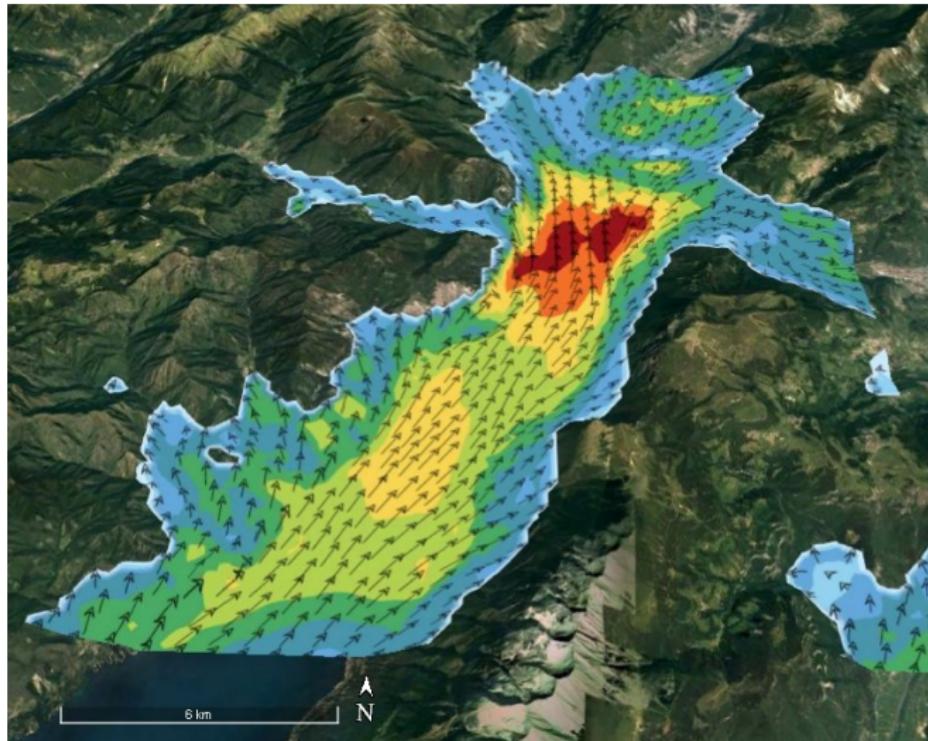
LAKE GARDA WINDS



LAKE GARDA WINDS: PELÉR



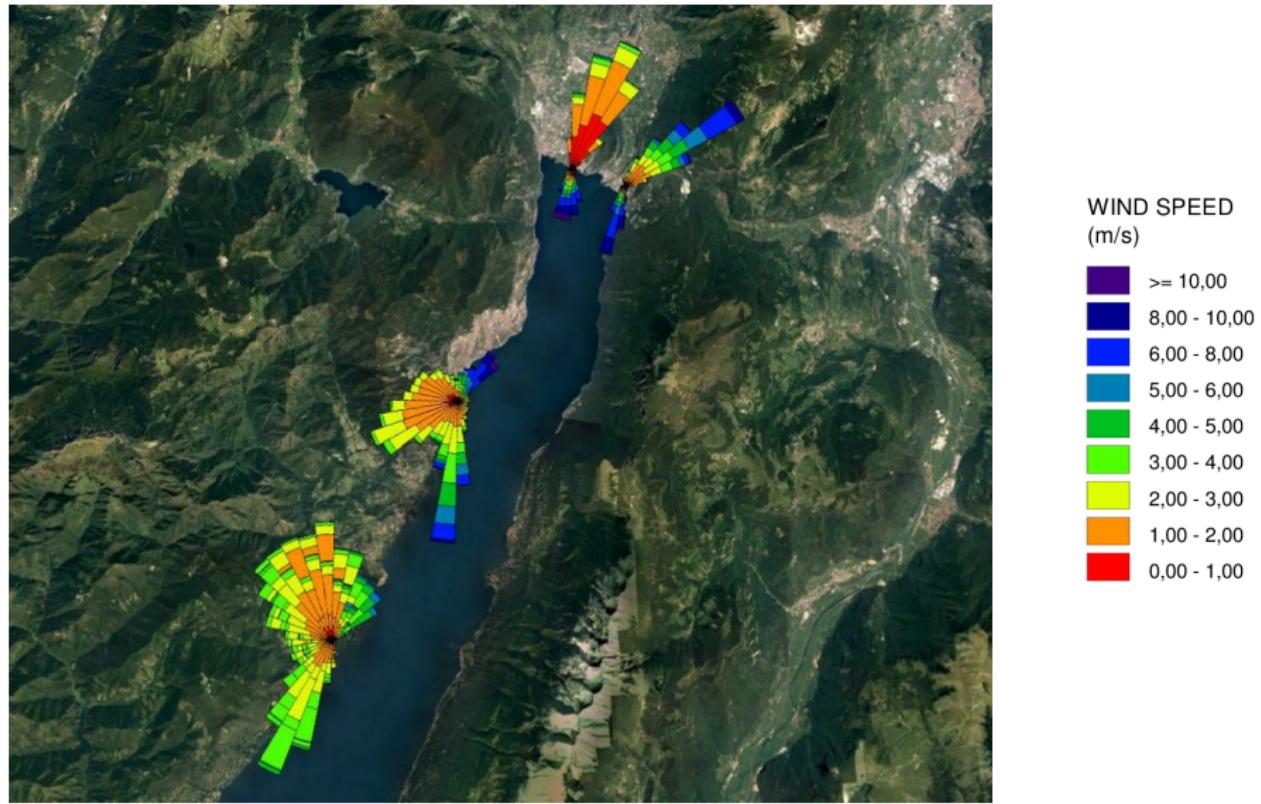
LAKE GARDA WINDS: ORA



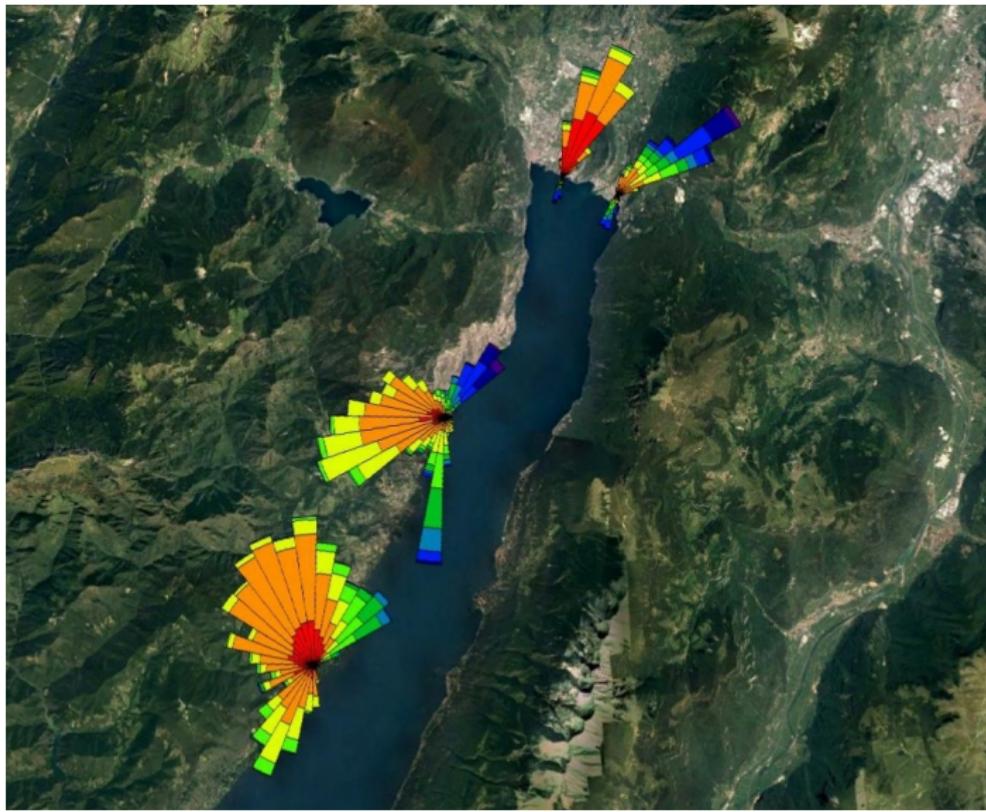
LAKE GARDA WEATHER STATIONS



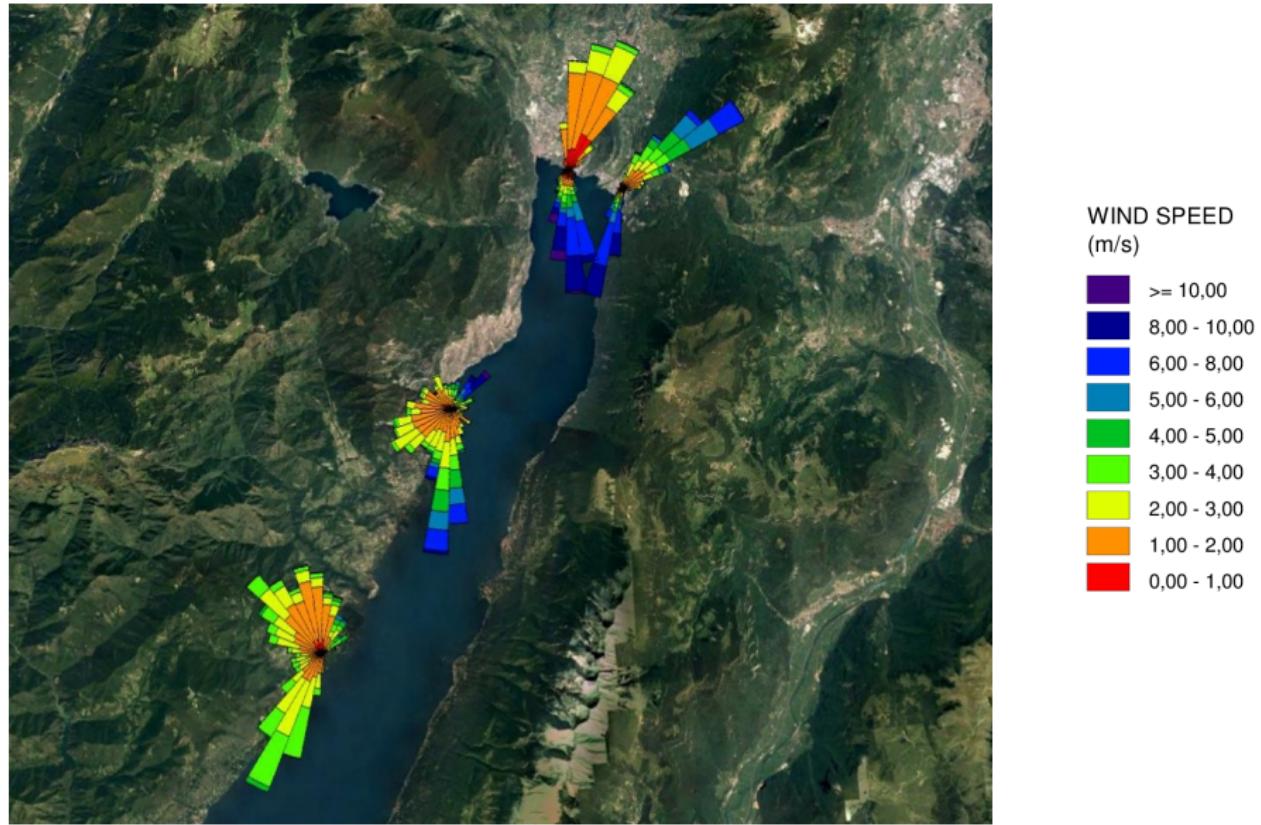
LAKE GARDA WINDS: ALL YEAR



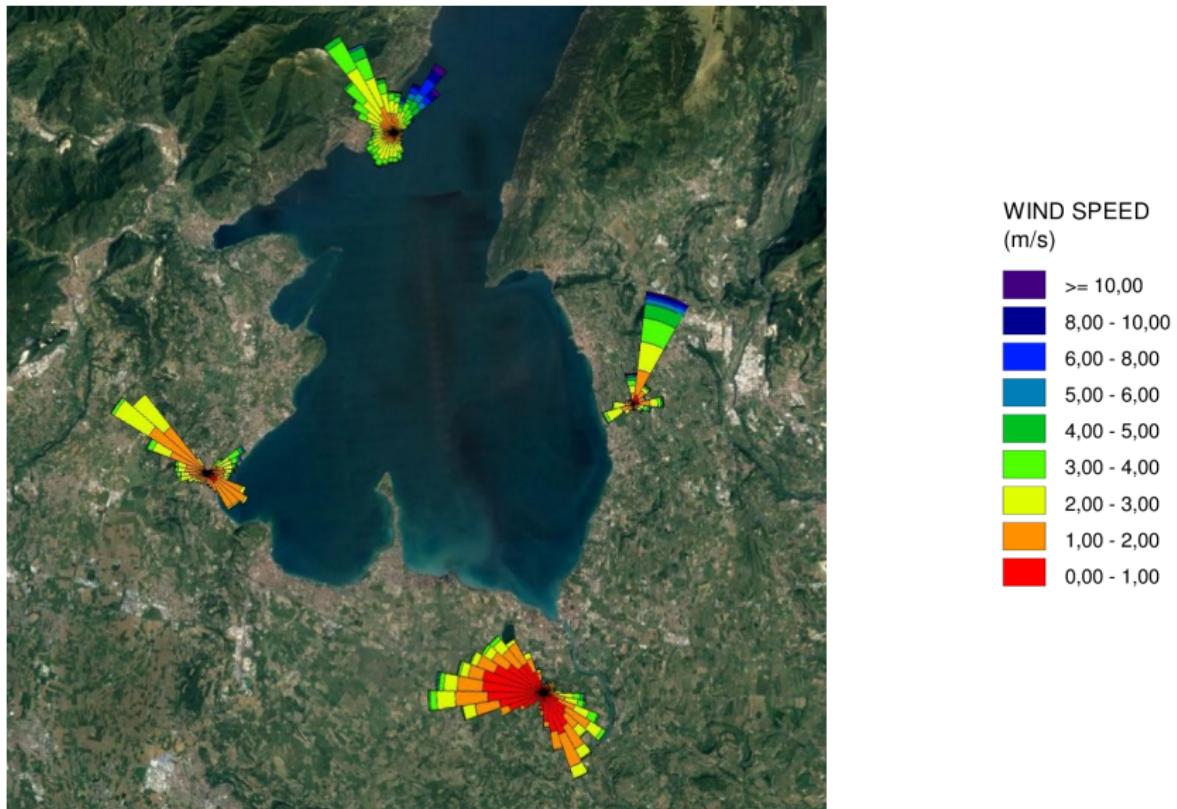
LAKE GARDA WINDS: WINTER



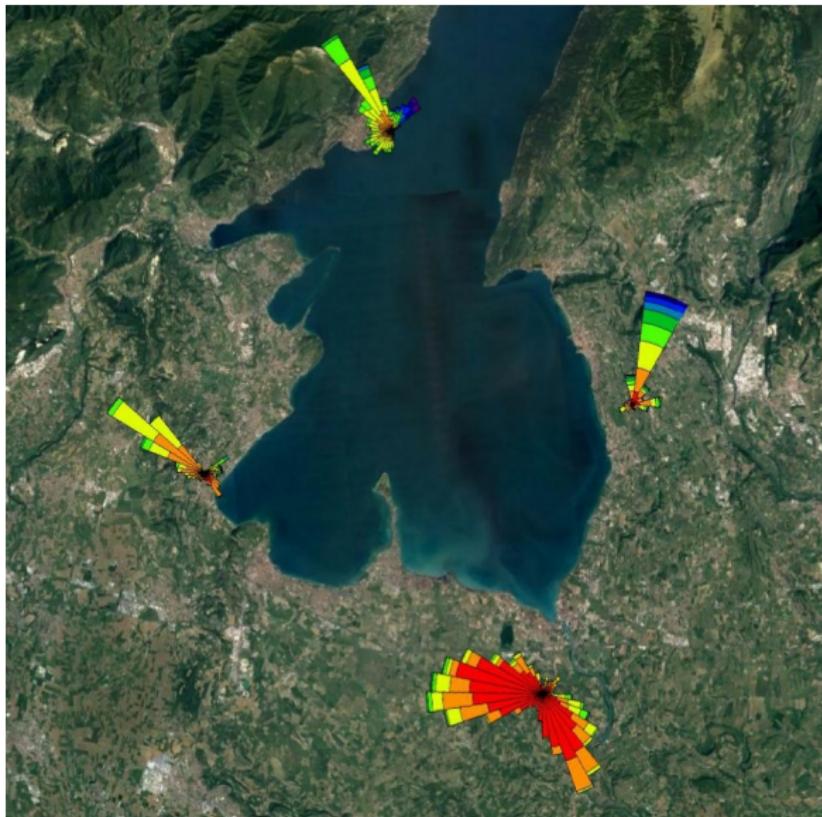
LAKE GARDA WINDS: SUMMER



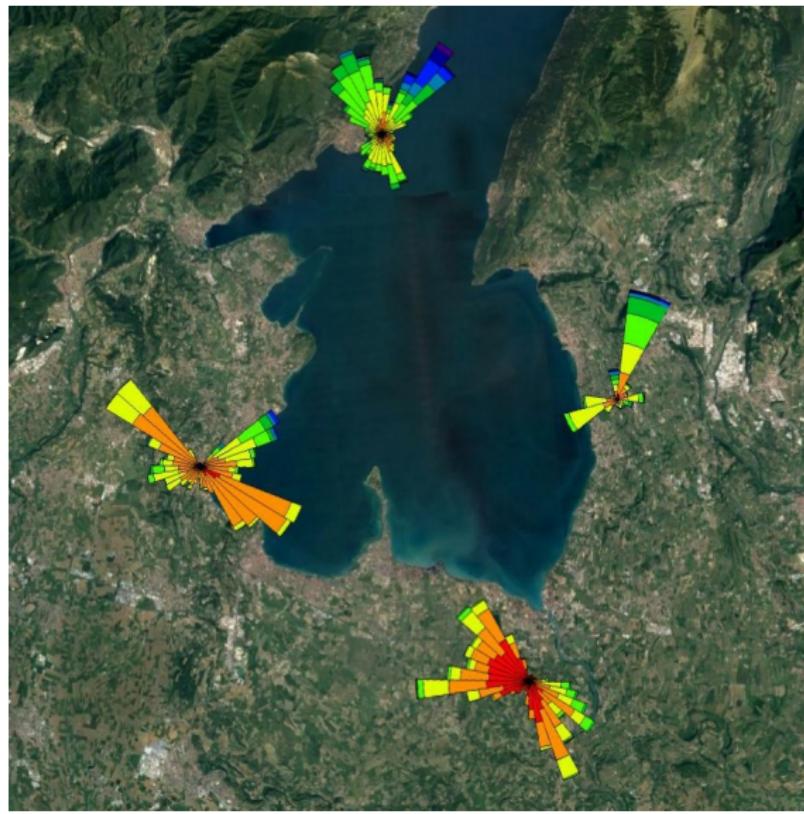
LAKE GARDA WINDS: ALL YEAR



LAKE GARDA WINDS: WINTER



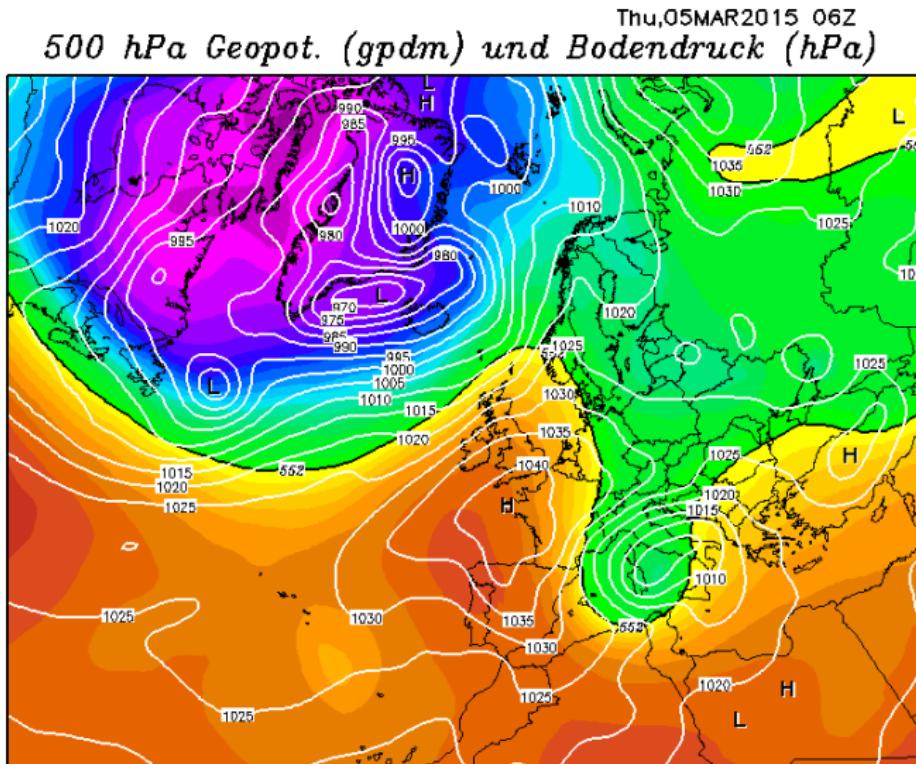
LAKE GARDA WINDS: SUMMER



WIND SPEED
(m/s)

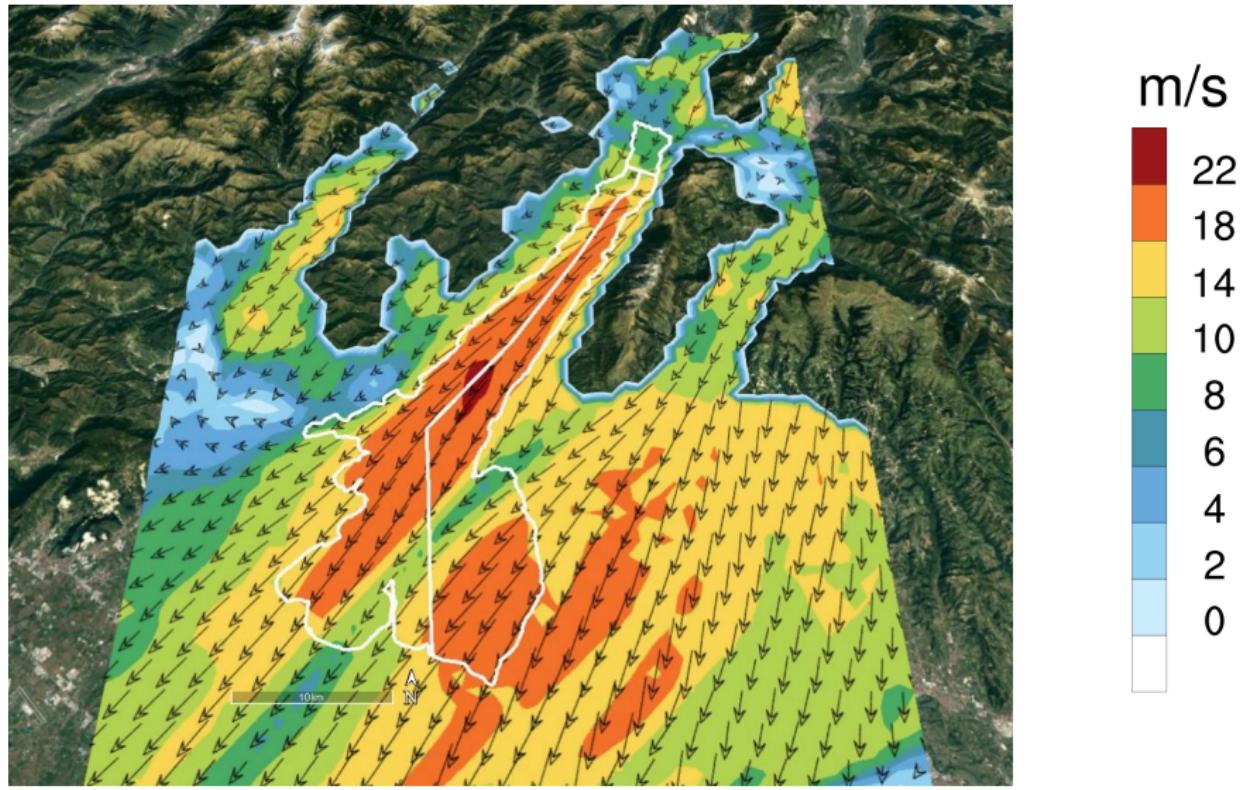
>= 10,00
8,00 - 10,00
6,00 - 8,00
5,00 - 6,00
4,00 - 5,00
3,00 - 4,00
2,00 - 3,00
1,00 - 2,00
0,00 - 1,00

LAKE GARDA WINDS: FOEHN



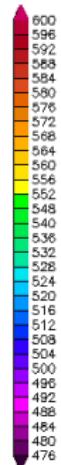
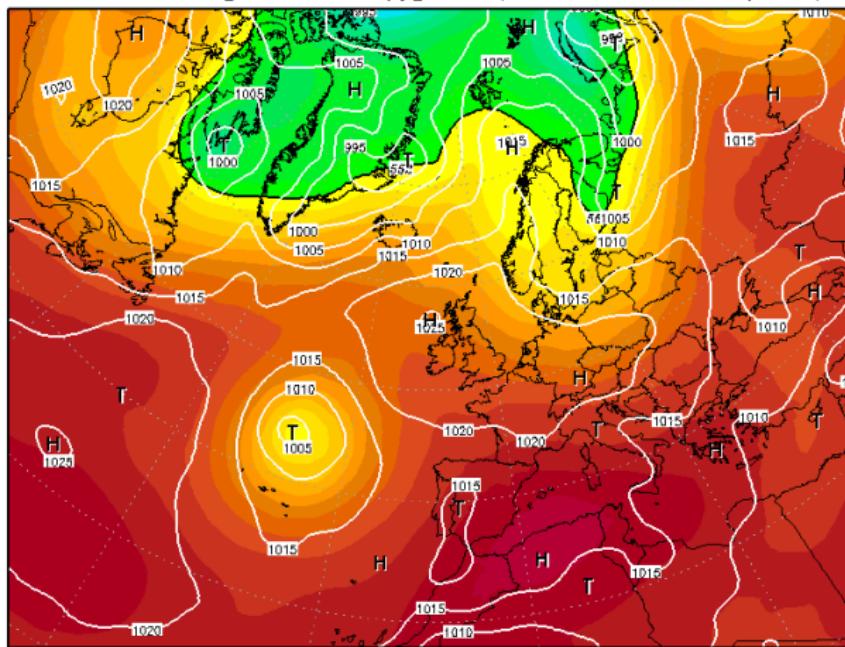
Data: CFS reanalysis
(C) Wetterzentrale
www.wetterzentrale.de

LAKE GARDA WINDS: FOEHN



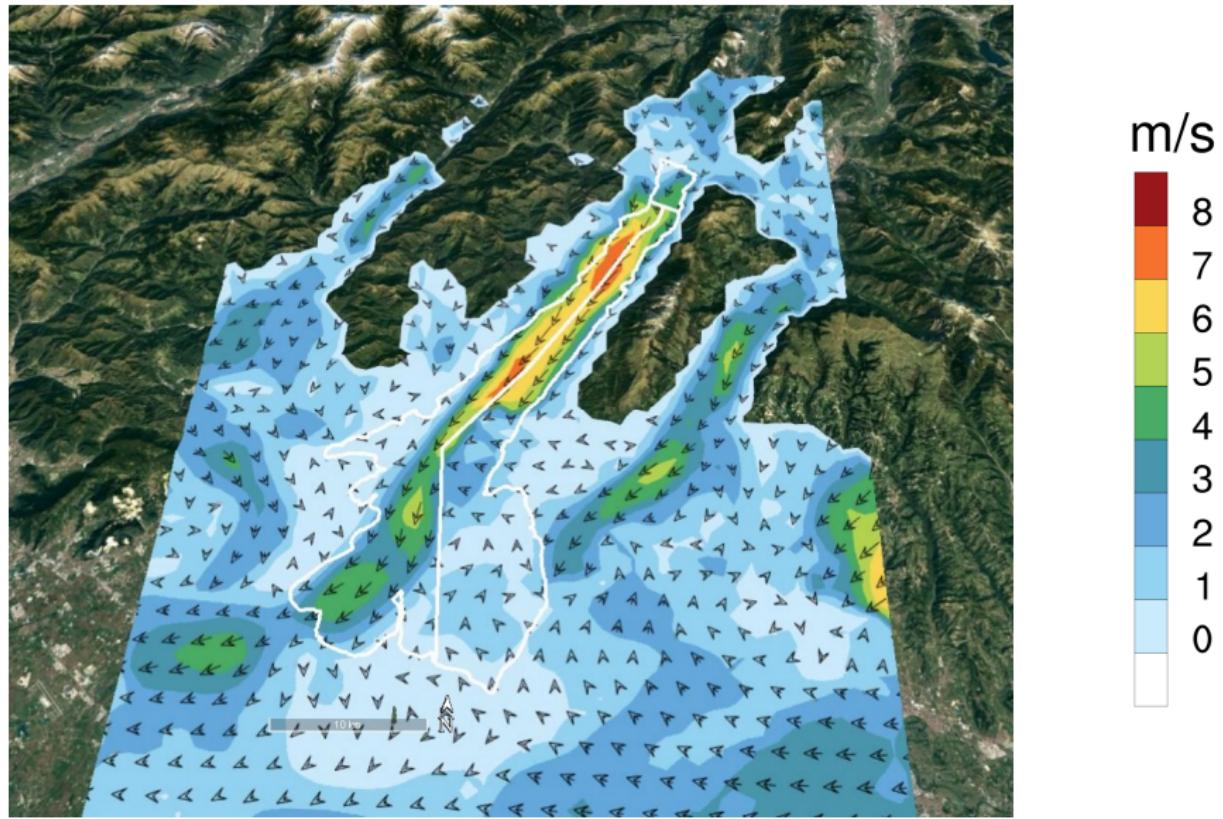
LAKE GARDA WINDS: THERMALLY-DRIVEN WINDS

08AUG2012 18Z
500hPa Geopotential (gpdam), Bodendruck (hPa)

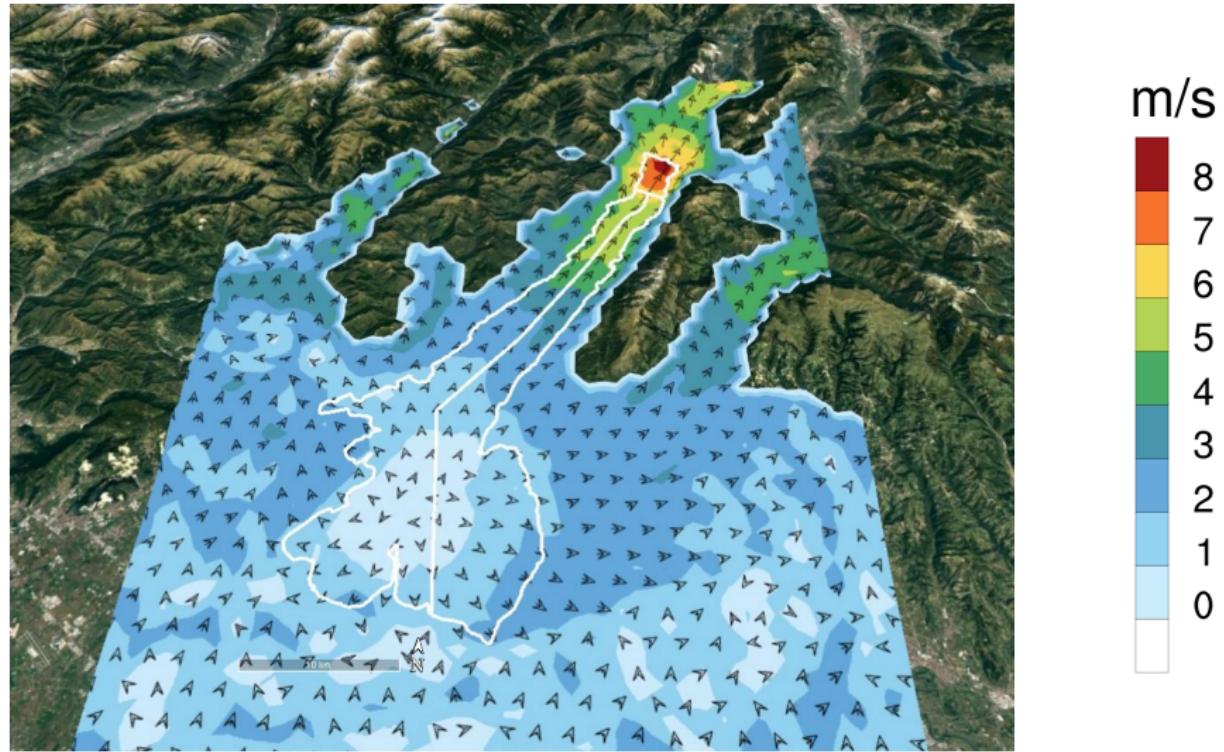


Daten: CFS Reanalysis
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LAKE GARDA WINDS: THERMALLY-DRIVEN WINDS

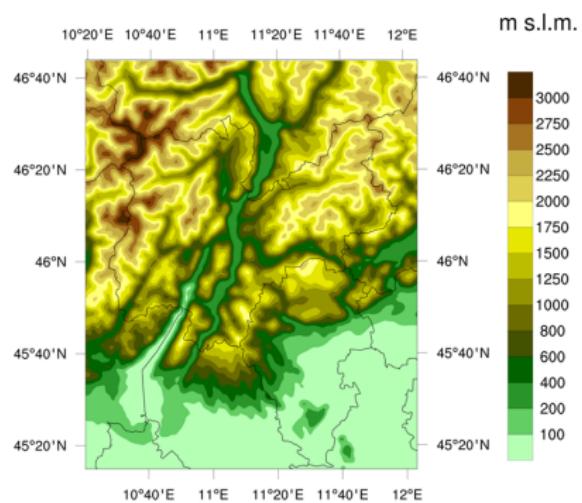
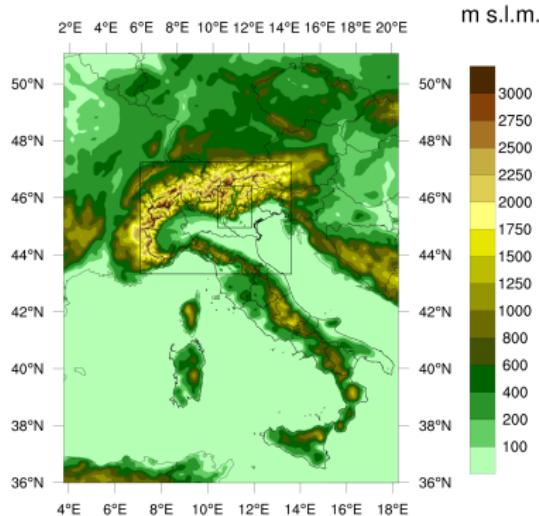


LAKE GARDA WINDS: THERMALLY-DRIVEN WINDS

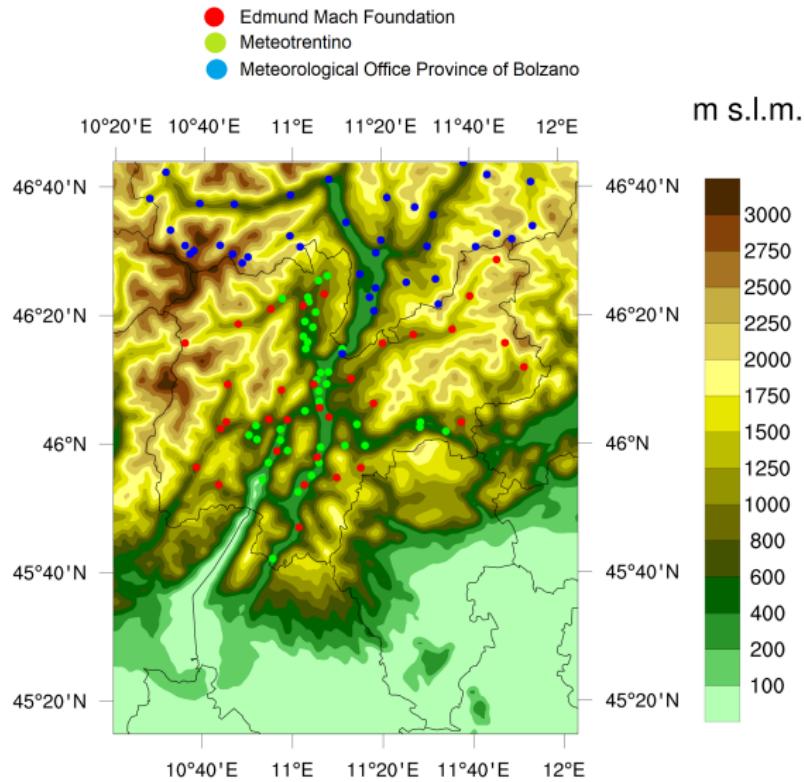


WEATHER FORECASTS FOR LAKE GARDA

- 0.25°GFS data as meteorological input
- 3 nested domains 9-3-1 km
- YSU PBL scheme
- Noah LSM
- observational nudging

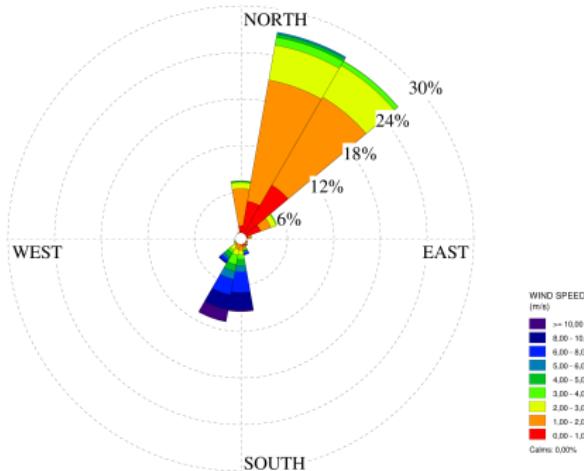


WEATHER FORECASTS FOR LAKE GARDA

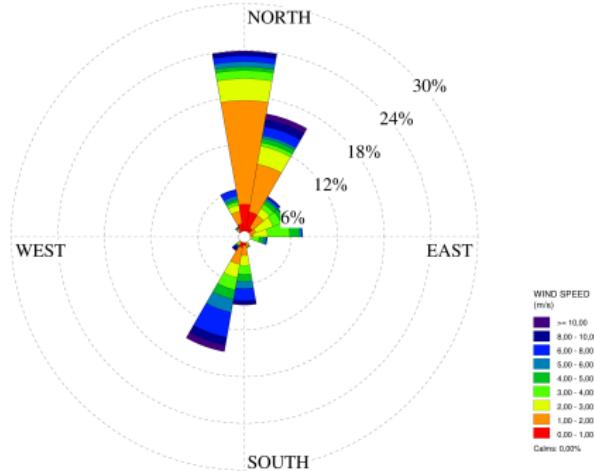


MODEL VALIDATION

Riva del Garda - observations

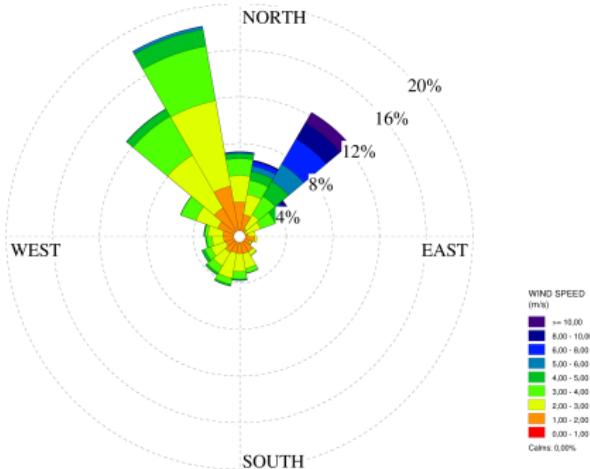


Riva del Garda - model

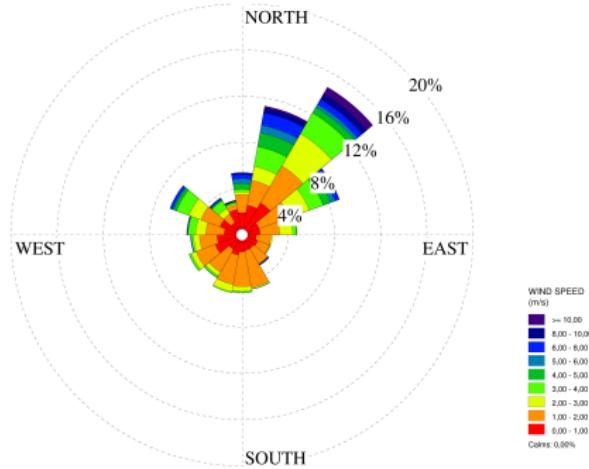


MODEL VALIDATION

Toscolano - observations

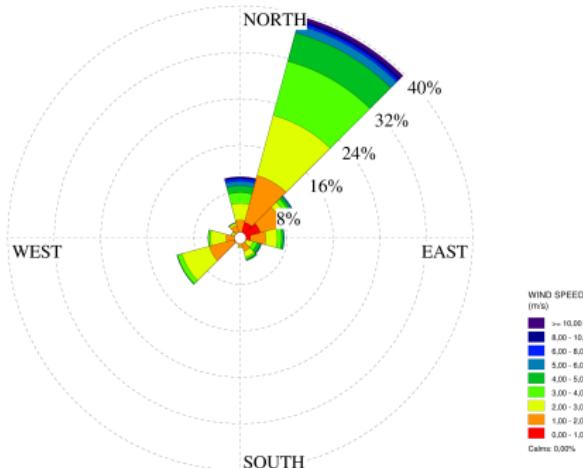


Toscolano - model

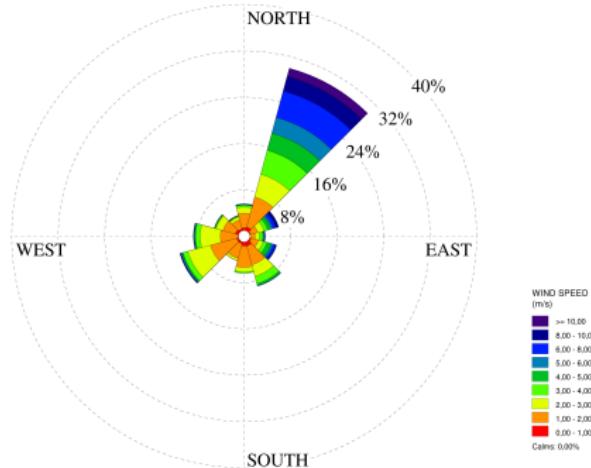


MODEL VALIDATION

Calmasino - observations

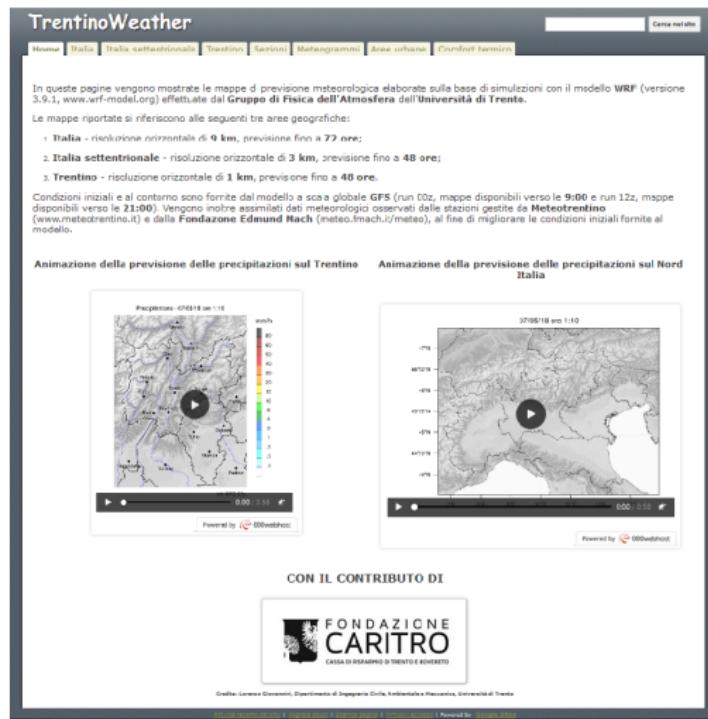


Calmasino - model



WEB SITE

<https://sites.google.it/site/trentinoweather/>



THANKS FOR YOUR KIND ATTENTION!

