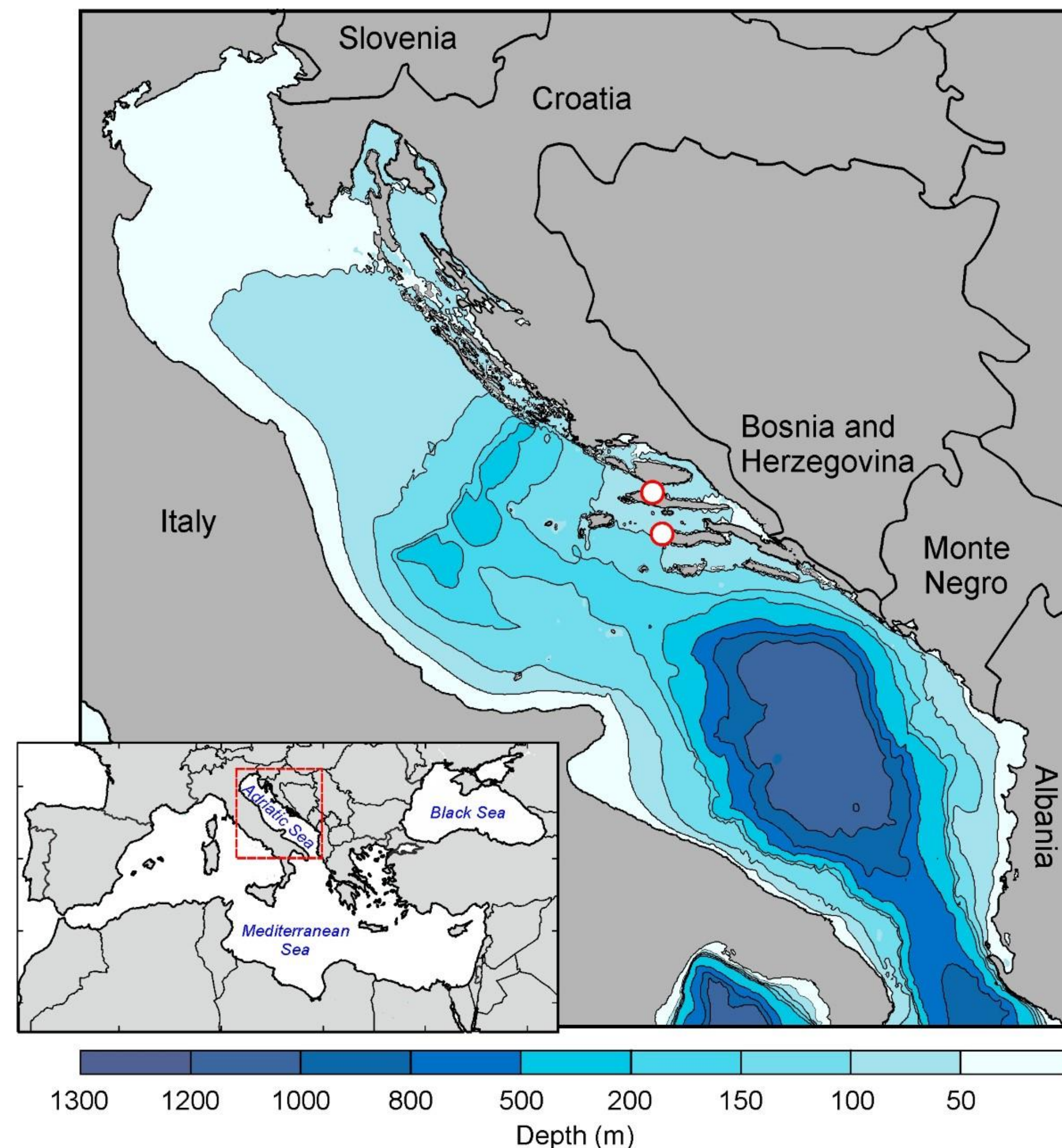


Analysis of the eastern Adriatic sea-level extremes

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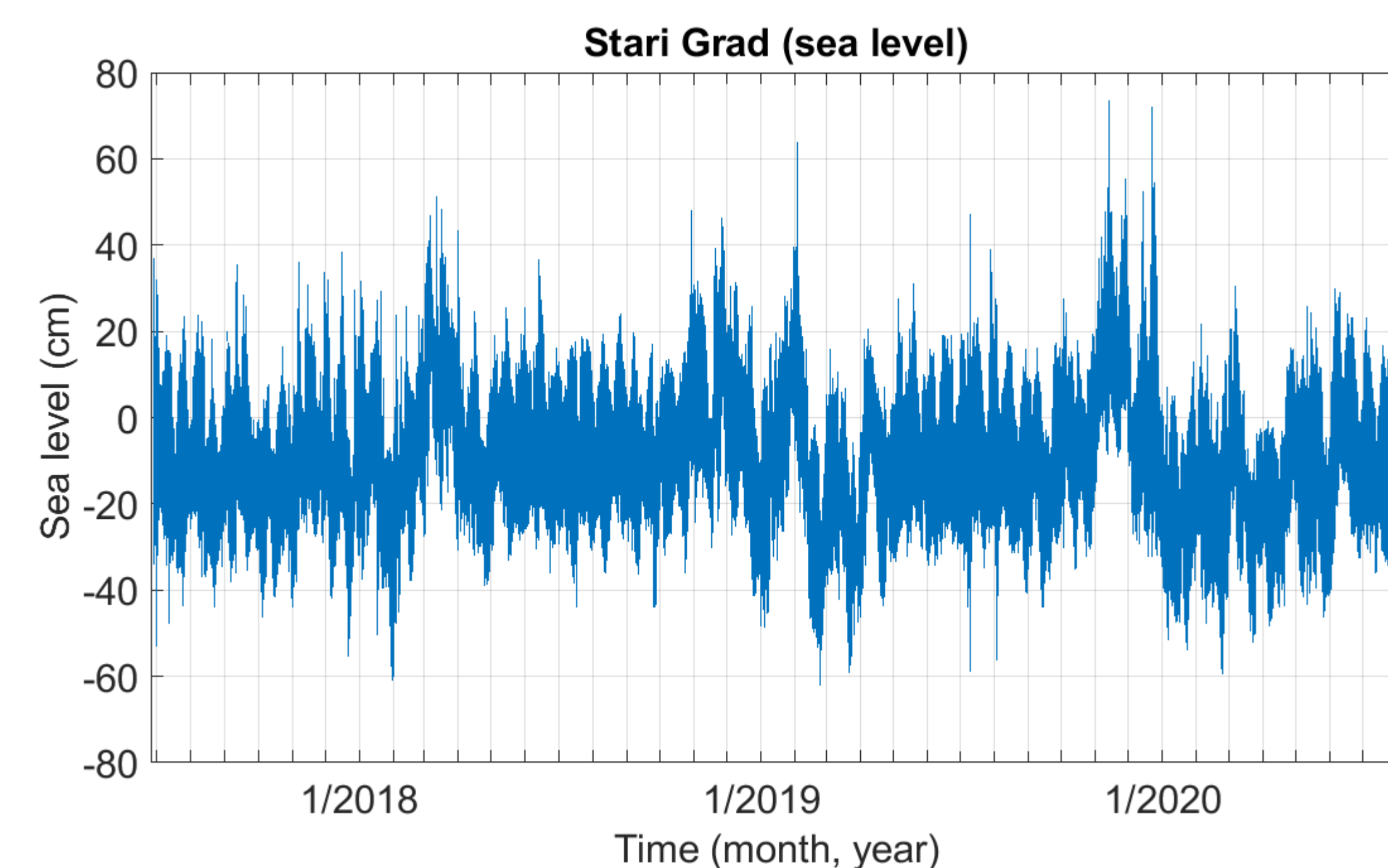
1 Introduction

Adriatic sea-level extremes usually happen due to storm surges and meteotsunamis.

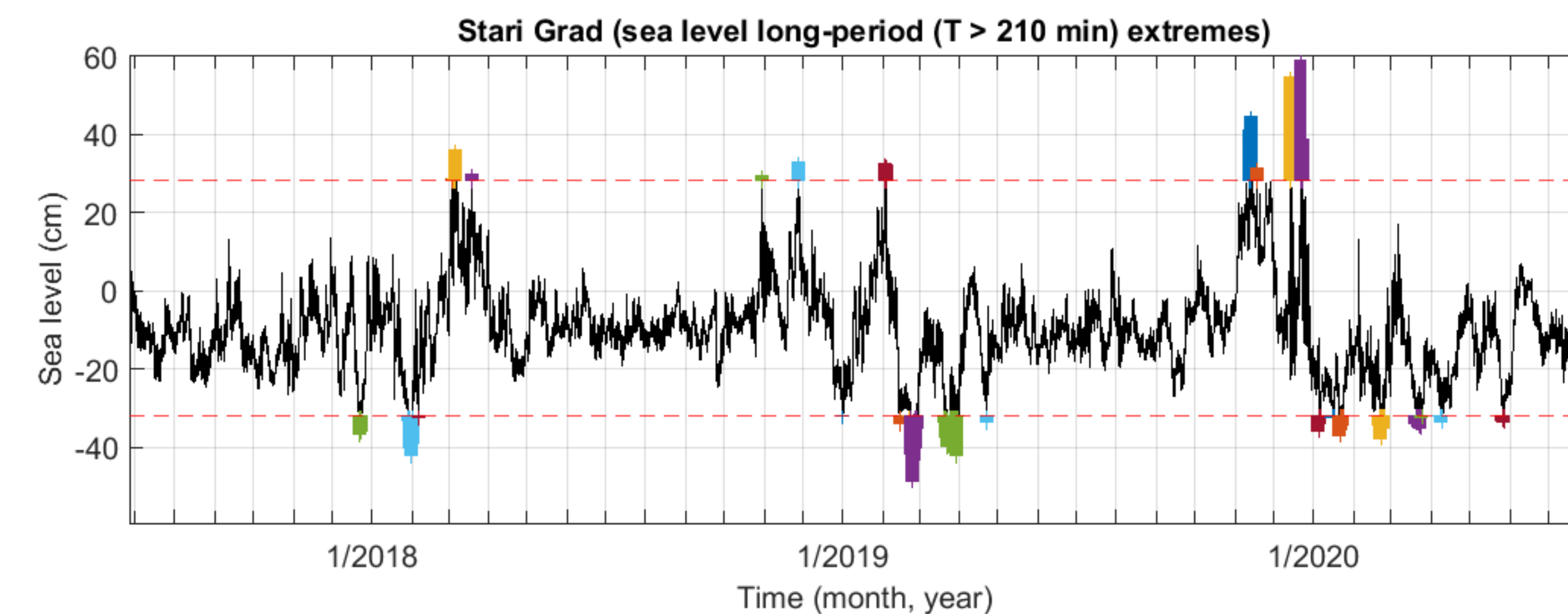


2 Materials

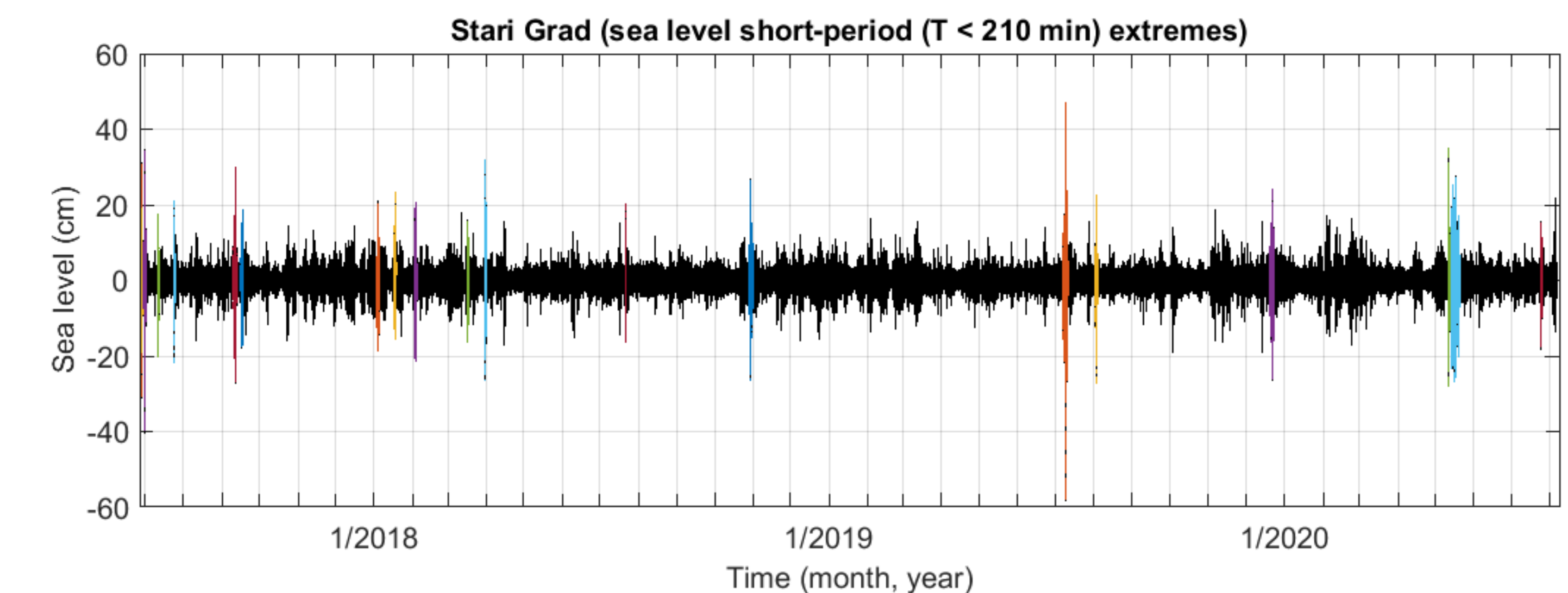
One of the location which is hit by both storm surges and meteotsunamis is Stari Grad on Hvar Island.



3 Results

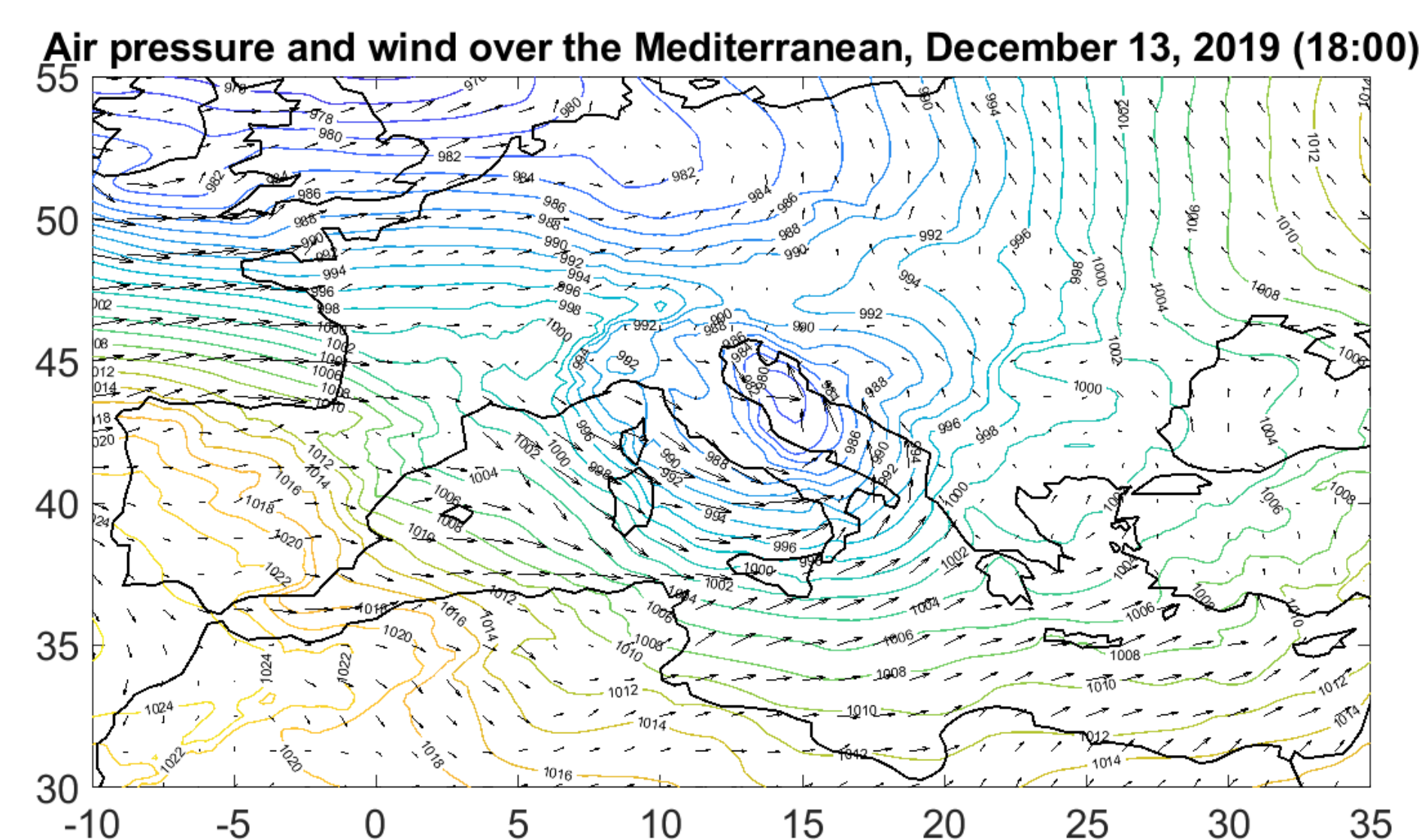
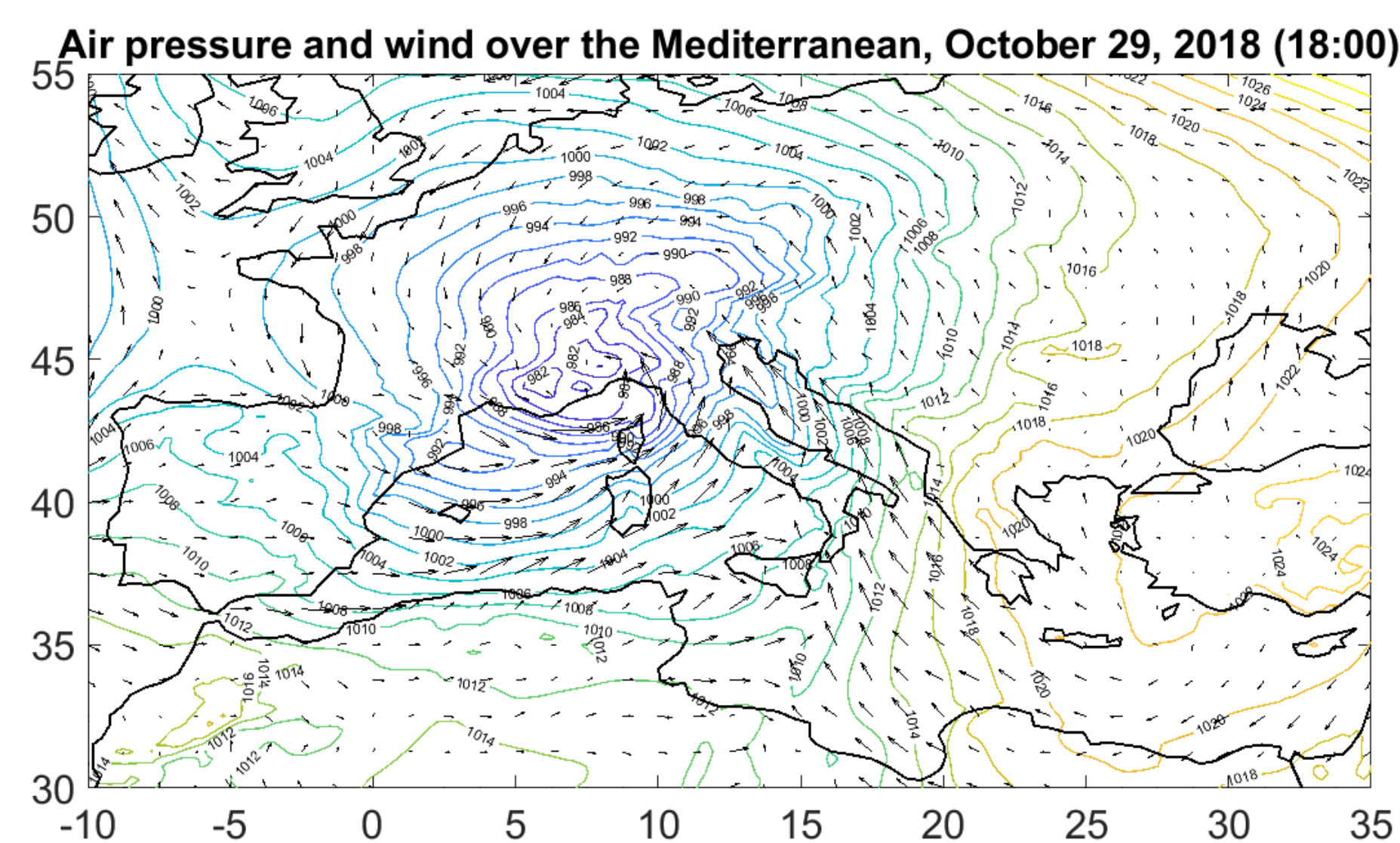


Long period (> 210) positive and negative sea-level extremes (left) and short period (< 210) sea-level extremes (right).



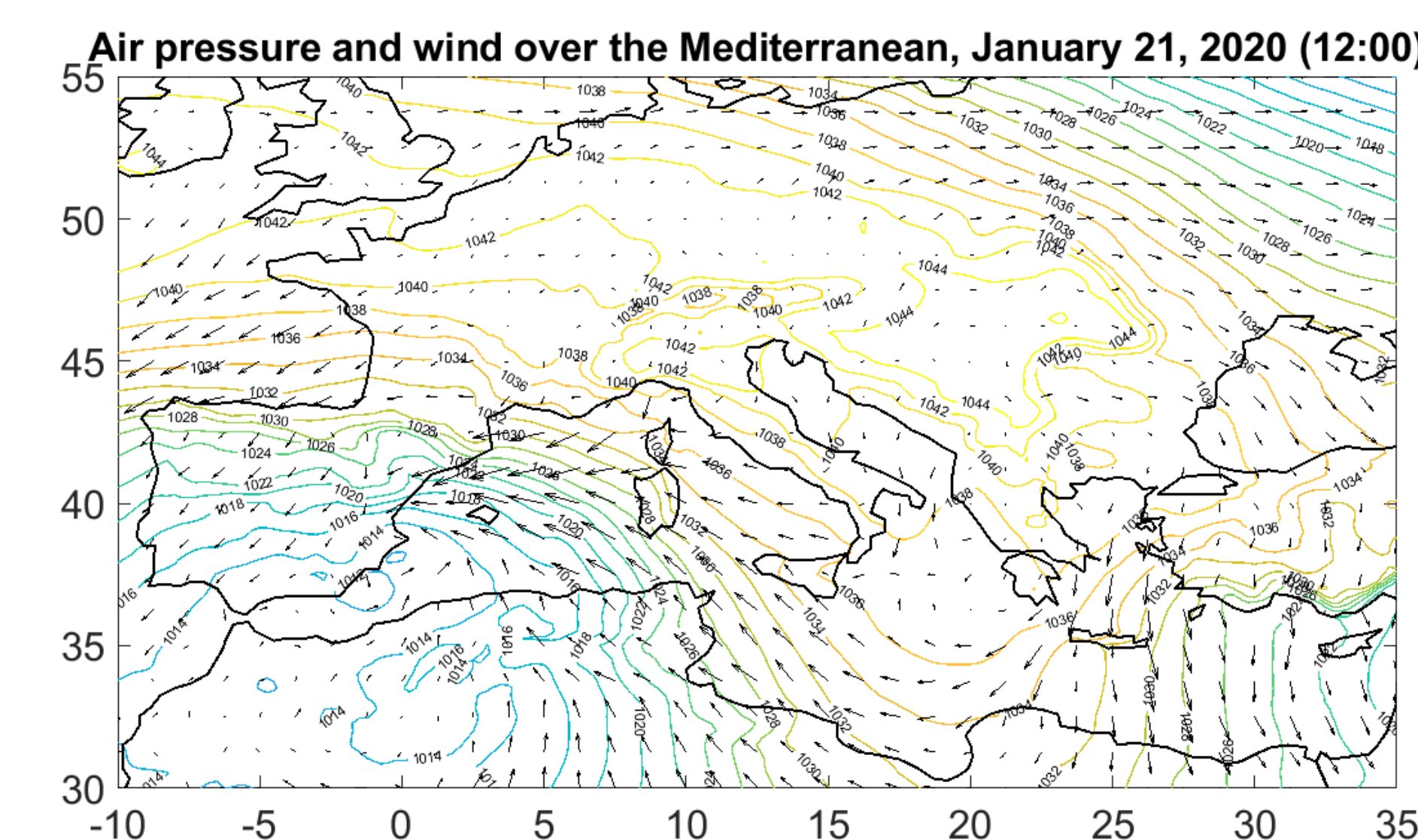
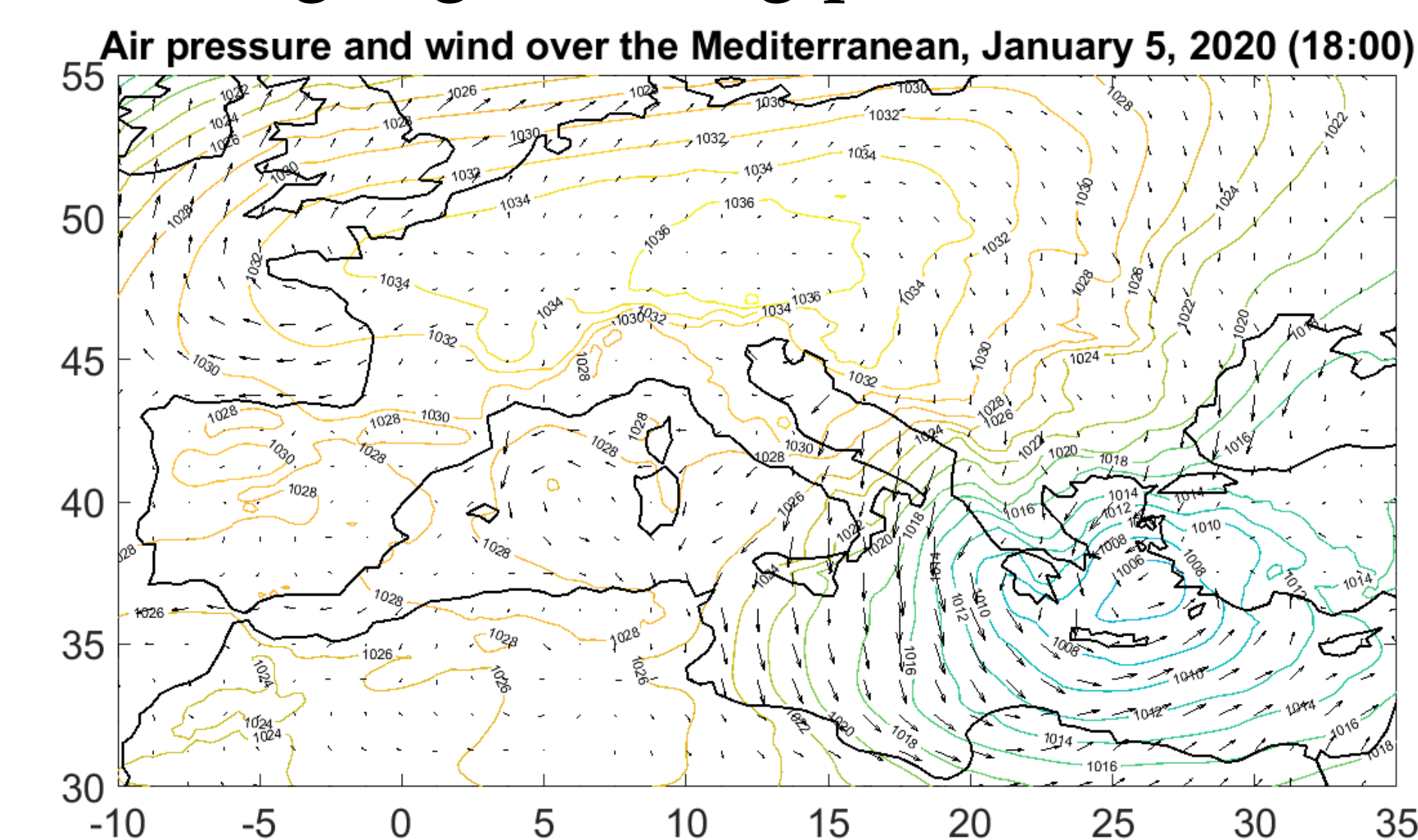
4 Characteristic atmospheric situations

Characteristic atmospheric situations during positive long-period extremes



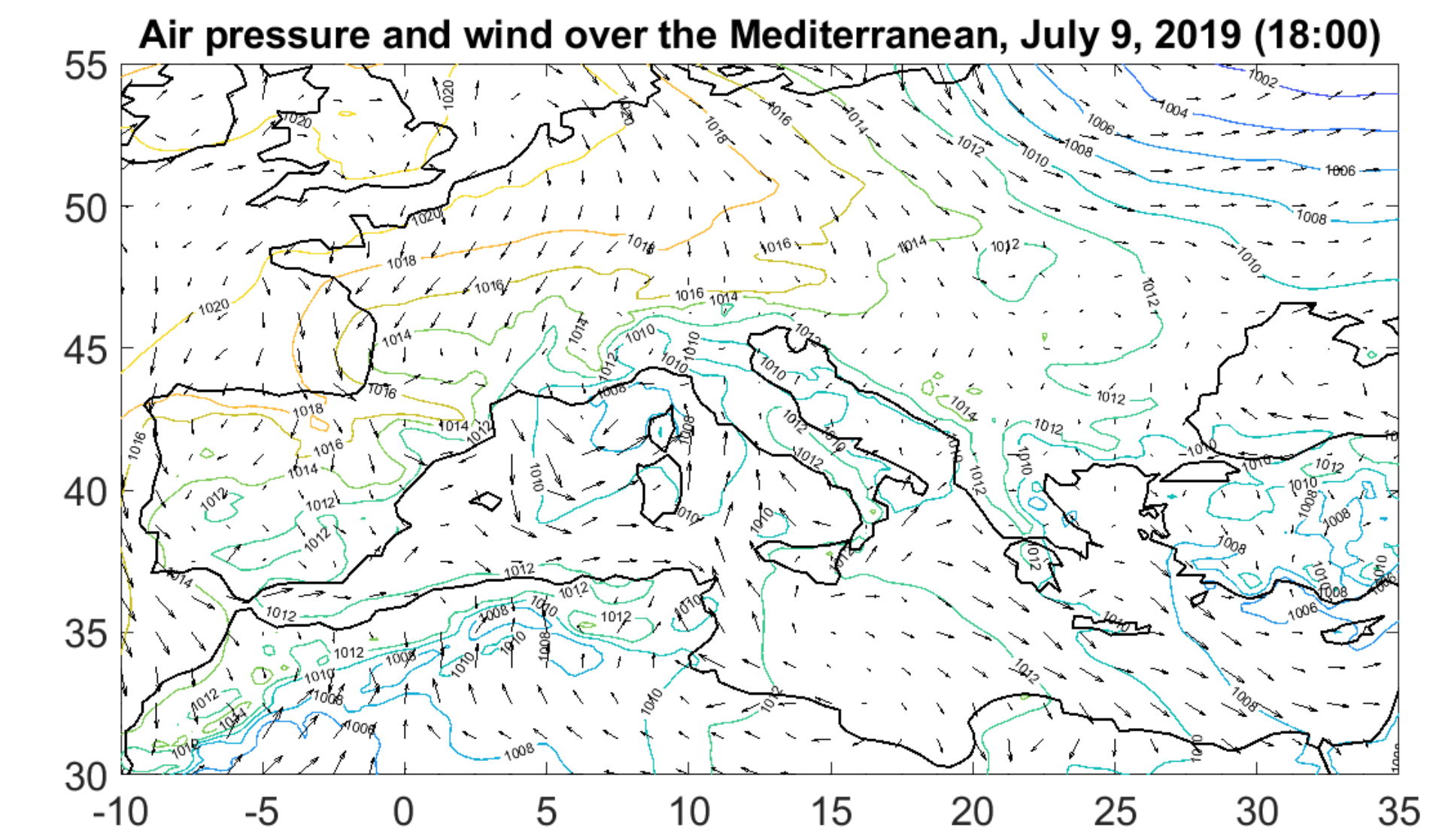
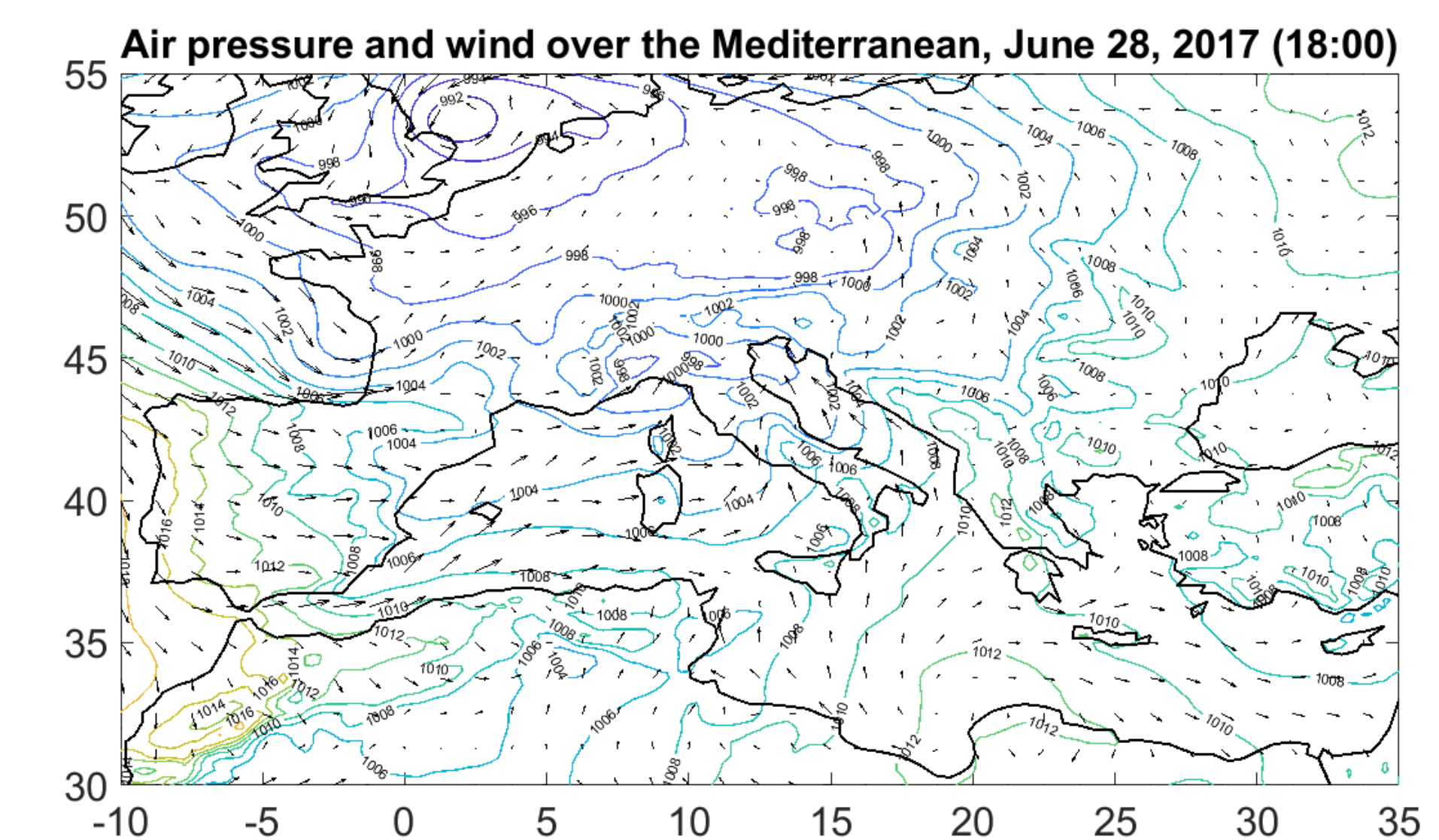
Positive long-period extremes appear during presence of low pressure over the Adriatic, or the Gulf of Genoa associated with strong SE winds.

Characteristic atmospheric situations during negative long-period extremes



Negative long-period extremes are associated to the high atmospheric pressure over the area associated with either strong NE winds, or no winds at all.

Characteristic atmospheric situations during short-period extremes



Short-period sea level extremes are noticed during two types of atmospheric situations corresponding to both “bad” (low pressure, strong SE wind) and “nice” (high pressure, no wind) weather.

References: Vilibić I., Šepić J., Pasarić M., Orlić M., *The Adriatic Sea: A Long-Standing Laboratory for Sea Level Studies*, Pure and Applied Geophysics, **174**, 3765-3811 (2017)

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