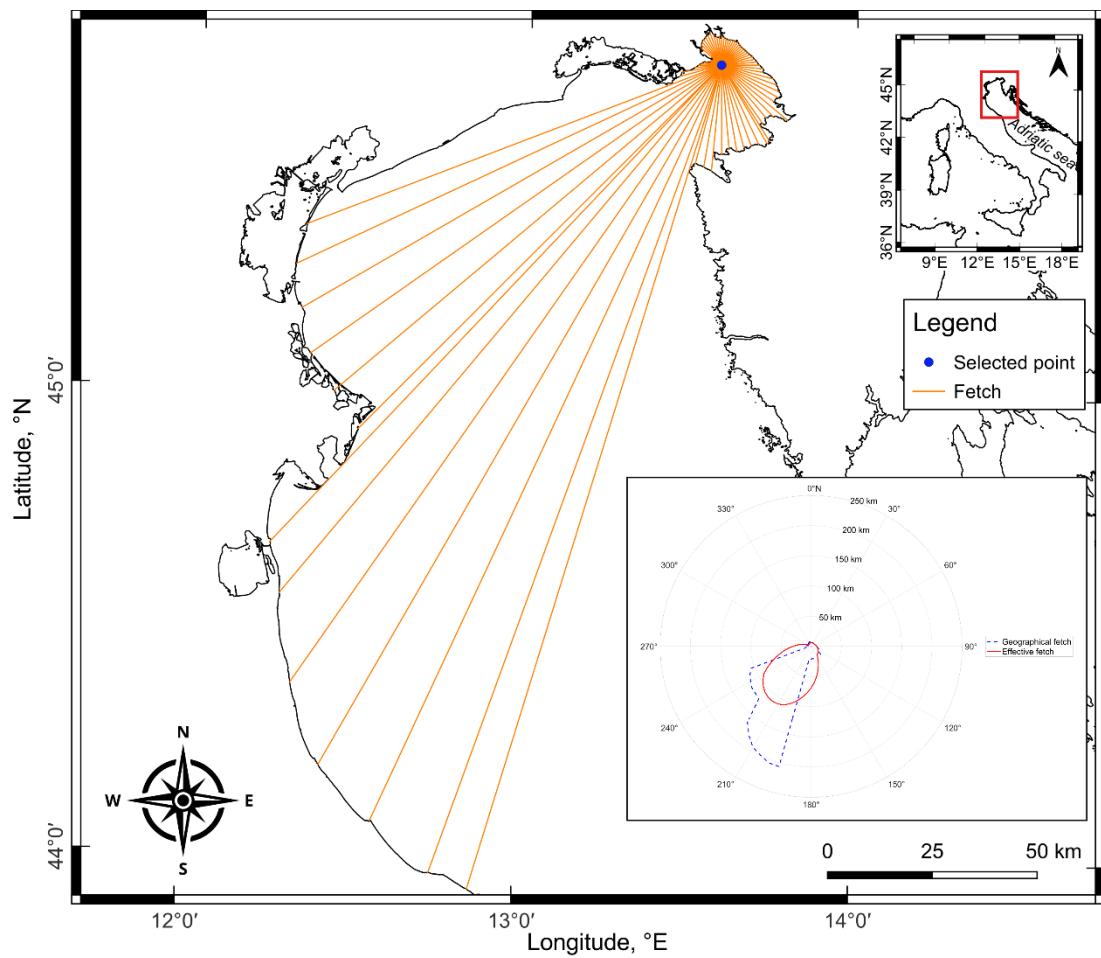
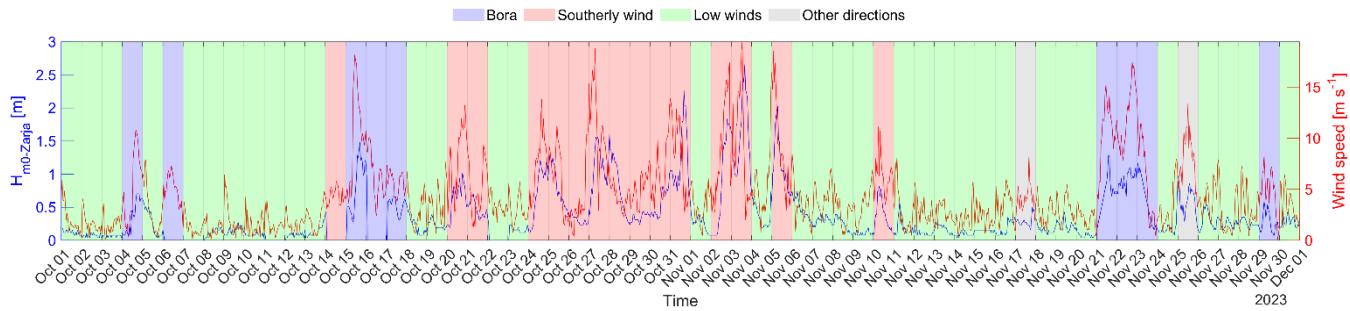


## Supplementary materials



**Figure S1: Fetch and selected point.**



**Figure S2:** Time series of significant wave height,  $H_{m0}$ -Zarja, from Zarja wave buoy (blue), wind speed in WRFo point (red). The coloured bands represent the same (daily averaged) wind regimes described in the previous paragraph, extracted from the WRFo point.



a)



b)



c)



d)

10 **Figure S3:** Coastal storm (a-b) and storm damage (c-d) in Barcola coast from <https://www.triesteprima.it/foto/cronaca/mareggiata-a-barcola-i-danni-4-novembre/>.