

WIND

Intense wind phenomena in the region are assessed.

The indicator used to assess wind hazard is wind intensity, which is classified using the Beaufort scale, shown in the table below.

Beaufort scale of wind speed

BEAUFORT (B)	DESCRIPTION	SPEED (knots)	SPEED (km/h)	SPEED (m/s)
0	Calm	0 - 1	0 - 1	0 - 0.2
1	Light air	1 - 3	1 – 5	0.3 – 1.5
2	Light breeze	4 – 6	6 – 11	1.6 – 3.3
3	Gentle breeze	7 – 10	12 – 19	3.4 – 5.4
4	Moderate breeze	11 - 16	20 – 28	5.5 – 7.9
5	Fresh breeze	17 – 21	29 – 38	8.0 – 10.7
6	Strong breeze	22 – 27	39 – 49	10.8 – 13.8
7	Moderate gale	28 – 33	50 – 61	13.9 – 17.1
8	Fresh Gale	34 – 40	62 – 74	17.2 – 20.7
9	Strong Gale	41 – 47	75 – 88	20.8 – 24.4
10	Whole Gale	48 – 55	89 – 102	24.5 – 28.4
11	Storm winds	56 – 63	103 – 117	28.5 – 32.6
12	Hurricane force winds	> 64	> 118	>32.6

The colour code assessment for wind in the forecast phase is divided into four levels from green to red, and is carried out by comparing the forecast wind with increasing hourly intensity threshold values, which have been associated with event scenarios and the possible effects and consequent damage to the territory, summarised in the following table.

WIND			
COLOUR CODE	INTENSTY (knots; m/s; km/h)	EVENT SCENARIO	POSSIBLE EFFECTS AND DAMAGE
GREEN	<p>< 34 knots</p> <p>< 17,2 m/s</p> <p>< 62 km/h</p>	<p>Winds with hourly intensity below Beaufort 8.</p> <p>Possible temporary gusts or squalls of higher intensity.</p>	Unpredictable localised damage cannot be ruled out.
YELLOW	<p>≥ 34 knots e < 40 knots</p> <p>$\geq 17,2$ m/s e < 20,7 m/s</p> <p>≥ 62 km/h e < 74 km/h</p> <p>for at least 3 consecutive hours during the day</p>	<p>Venti di intensità oraria pari a Beaufort 8 per la durata dell'evento.</p> <p>Possible temporary gusts or squalls of higher intensity.</p>	<ul style="list-style-type: none"> - Localised damage to structures belonging to dwellings (canopies, pergolas and similar), temporary installations or infrastructure (tensile structures, installations for commercial, social and cultural initiatives, construction site structures and similar, and beach facilities, particularly during the summer season). - Local restrictions on road traffic due to the presence of various objects carried by the wind and difficulties for particular categories of vehicles such as tarpaulin-covered vehicles, caravans, motorhomes, lorries or other large vehicles. - Isolated falls of branches and/or trees, road signs and advertising poles. - Suspension of electricity and telephone services due to damage to overhead lines.
ORANGE	<p>≥ 40 knots < 47 knots</p> <p>$\geq 20,7$ m/s e < 24,4 m/s</p> <p>≥ 74 km/h e < 88 km/h</p> <p>for at least 3 hours, even if not consecutive, throughout the day</p>	<p>Winds with an hourly intensity of Beaufort 9 for the duration of the event.</p> <p>Probably temporary gusts or squalls of higher intensity.</p>	<ul style="list-style-type: none"> - Damage to the roofs of residential and industrial buildings (roof tiles, chimneys, antennas), to structures belonging to homes (canopies, pergolas and similar), to industrial buildings (warehouses, farms, industrial complexes, shopping centres), to temporary facilities or infrastructure (tensile structures, installations for commercial, social and cultural initiatives, construction site structures and similar, and beach facilities, particularly during the summer season). - Restrictions or interruptions to road traffic due to the presence of various objects carried by the wind and difficulties in circulation for particular categories of vehicles such as tarpaulin-covered vehicles, caravans, motorhomes, lorries or other large vehicles. - Falling branches and/or trees, road signs and advertising hoardings. - Suspension of electricity and telephone services due to damage to overhead lines. - Interruptions (including planned ones) to the operation of ski lifts in ski resorts.

WIND			
COLOUR CODE	INTENSITY (knots; m/s; km/h)	EVENT SCENARIO	POSSIBLE EFFECTS AND DAMAGE
RED	<p>> 47 knots</p> <p>> 24,4 m/s</p> <p>> 88 km/h</p> <p>for at least 3 hours, even if not consecutive, throughout the day</p>	<p>Winds with an hourly intensity of Beaufort 10 or higher for the duration of the event.</p> <p>Probably temporary gusts or squalls of higher intensity.</p>	<ul style="list-style-type: none"> - Severe damage and/or collapse of roofs on residential and commercial buildings (roof tiles, chimneys, antennas), serious damage to structures belonging to homes (canopies, pergolas and similar), industrial buildings (warehouses, farms, industrial complexes, shopping centres), temporary facilities or infrastructure (tensile structures, installations for commercial, social and cultural initiatives, construction site structures and similar, and beach facilities, particularly during the summer season). - Restrictions or interruptions, including prolonged ones, to road traffic due to the presence of various objects carried by the wind and serious disruption to traffic, especially for particular categories of vehicles such as tarpaulin-covered vehicles, caravans, motorhomes, lorries or other large vehicles. - Widespread falling of branches and/or trees, including tall trees, road signs and advertising poles. - Widespread, even prolonged, suspension of electricity and telephone services due to damage to overhead lines. - Extensive interruptions (including planned ones) to the operation of ski lifts in ski resorts. - Serious disruption to activities at sea and to the operation of port infrastructure, which may be limited or interrupted. - Widespread limitations or interruptions to the operation of railway or airport infrastructure.