

28 Shvat 5785

February 6, 2025

Weather event February 5-6, 2025

Winter weather has prevailed across our region over the past two days, characterized by strong winds, precipitation, low temperatures, and thunderstorms. At the peak of the event, from yesterday afternoon until this morning, a full-fledged storm developed, featuring wind gusts exceeding 80 km/h and accumulated rainfall amounting to several tens of millimeters. Temperatures also dropped below average for the first time in a significant period, with snow settling in the northern mountains. By morning, a thin layer had accumulated above 1000 meters elevation in the northern Golan Heights and on Mount Meron.

Synoptic Situation and Winds

A deep low-pressure system traversed our area over the past 24 hours, accompanied by an upper-level trough channeling cold air from the north. This constitutes the first significant winter system to pass through during the current rainy season (a significant rain system did occur at the end of December; however, it lacked strong winds and cold temperatures as the low-pressure core was positioned far to the west).

Temporary wind strengthening occurred with the initial rain front's entry on the 5th in the morning, but significant intensification commenced during the afternoon hours. Winds peaked overnight and into the following morning. During this period, sustained winds of 30-50 km/h were recorded, with gusts reaching 70-80 km/h. Several coastal and mountainous stations even measured gusts exceeding 90 km/h. Winds of this intensity occur nearly every winter but typically only during the season's significant storms. Nevertheless, isolated, less frequent values were also observed. For instance, a gust of 112 km/h was recorded at Hadera Port beneath a developed convective cloud cell passing through on the 5th during the afternoon. This

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represents an exceptional intensity; since measurements began at the station approximately 30 years ago, only one other event featured a stronger gust (132 km/h on 25.10.2015). Notably, significant weakening of the winds set in during the morning hours, and they are forecast to continue diminishing in the near term. Table 1 presents the peak gust intensities recorded at several stations.

Rainfall Accumulations

The highest rainfall totals were deposited across the northern and central mountainous regions. These areas had previously experienced extreme rainfall deficits due to the weak winds associated with prior precipitation systems. Jerusalem and its vicinity measured approximately 60-65 mm, while 40-50 mm fell across the Judean Mountains, northern Golan Heights, Upper Galilee, and Samaria. Driven by the strong winds, rain clouds crossed the Judean Mountains watershed (over 40 mm measured in Ma'ale Adumim), contributing to flash flooding in the Judean Desert.

In the Lower Galilee, Hula Valley, Jezreel Valley, and Yatir region, 30-40 mm accumulated. The coastal plain, Shfela, and Gaza Envelope area received 15-30 mm, while the northern Negev recorded 10-15 mm. The central Negev saw 2-6 mm (Table 2). The precipitation was accompanied by thunderstorms, primarily during the afternoon and evening hours of the 5th. Snow fell on Mount Hermon, as well as in the northern Golan Heights and on Mount Meron. Snowfall was observed in the Upper Galilee and Golan even down to 700 meters elevation, but accumulation, albeit brief, occurred only above 1000 meters.

The rainfall that fell somewhat narrows the substantial precipitation deficit. However, significant additional accumulations are still required to close the gaps.

Table 1: Maximum Wind Gusts at Several Stations on February 5-6, 2025

Station	Maximum Wind Gust (km/h)	Station	Maximum Wind Gust (km/h)
Rosh Haniqra	93	Merom Golan Picman	73
Haifa (Technion)	86	Ma'ale Gilboa	82
Hadera Port	112	Itamar	87
Tel Aviv Coast	92	Jerusalem Center	78
Bet Dagan	70	Rosh Zurim	87
Ashdod Port	95	Gilat	77
Ashkelon Port	97	Arad	84

Table 2: Rainfall Amounts at Several Stations on February 5-6, 2025 (Until Afternoon)

Station	Rainfall Amount (mm)	Station	Rainfall Amount (mm)	Station	Rainfall Amount (mm)
Acre	17	Yakhini	24	Zova	52
Haifa (Technion)	30	Besor	20	Jerusalem	60
Zichron Yaakov	35	El Rom	60	Ma'ale Adumim	41
Ramat HaKovesh	22	Merom Golan Picman	40	Tzur Hadassah	39
Hakfar Hayarok	17	Zefat Har Kenaan	26	Arad	15
Bet Dagan	17	Afula Nir HaEmek	21	Beer Sheva	19
Negba	18	Har Brakha	36	Sede Boqer	2