

Snow and precipitation event February 2021 - Preliminary review

In the current weather event it has been snowing heavily in the northern Mountains and considerable amounts of snow were also measured in the central mountains. The snowfall has ceased, but it is still raining and the rain is expected to increase tomorrow.

Snow

The snowfall started yesterday, Wednesday, in the early morning hours in the northern Golan Heights, and progressed to the lower parts of the Golan Heights and the peaks of the Galilee and Samaria during the day. During the best synoptic conditions for snow, the focus of the precipitation clouds was above the Judean Mountains and thus Jerusalem gained considerable amount of snow in comparison to areas of a similar altitude in the Galilee and Samaria.

Generally, the snow depth reached 40 to 55 cm in the Golan Heights, in areas above 900 m, 5 to 15 cm in the Upper Galilee (mainly east of Meron), 5 to 10 cm in Samaria, 5 to 15 cm in Jerusalem and its surroundings and 15 to 25 cm in Gush Etzion and the peaks of the Hebron Mountains. A major part of the reports on the snow height was delivered by the rain observers and the employees of the IMS, residing in the high altitude areas, as described below:

The largest amount of snow, was reported in Kibbutz El Rom, where 55 cm were measured. Slightly lower, at the altitude of 900 to 950 mm above sea level, 45 cm were measured in Alone Ha'Bashan and 40 to 45 cm in Ortal. In Keshet, at the altitude of 700 m above sea level, 13 cm were measured and even in Yonatan, at the altitude of 560 m, 3 cm were measured.

In the Upper Galilee, on the other hand, the snow amounts were considerably smaller. Snow piled up to several cms in areas at an altitude of 800 m and above. For example, in Bar'am 5 cm and in Matat 2 cm. At the summit of Mount Meron and the high peaks (900 m +) of the Eastern Galilee, there were 10 to 20 cm of snow. In Samaria and in Binyamin, too, there was no good synchronization between the precipitation and the timing of the coldest temperatures - amounts of up to 10 cm were measured in areas at an altitude between 750 to 850 m: 8 cm in Har Beracha and Migdalim, 6 cm in Ofra and 9 cm in Psagot.

In the Mountains of Jerusalem and Hebron, it started to snow during evening time, exactly when the conditions for snow were the most optimal. In the higher neighborhoods of Jerusalem (Givat Shaul and the French Hill), 12 cm of snow were measured in the height of the event. In areas at an altitude of 750-800 m, 8 and 10 cm

were measured. West of Jerusalem, the snow amounts were smaller: in Tzur Hadassha 5 to 7 cm were measured and in Mevaseret Zion 3 to 5 cm.

In Gush Etzion, which is 150 meters higher than Jerusalem, the snow that began in the evening, piled up quickly and reached about 15 to 20 cm during the night: Elazar 21 cm, Kefar Etzion 22 cm, and Rosh Zurim 15 cm. Further south, towards Hebron, 27 cm were measured in Karnei Tzur. Towards night, the snow also reached the Yattir area and the Southern Hebron Mountains, where a few centimeters were measured.

The rainfall amount

Since the beginning of the weather event on February 13, 60 to 100 mm were measured in the northern Mountains, more than 100 mm in the northern and central Golan Heights, 40 to 70 mm in the Hula Valley and the Kinneret In the Coastal Plain, there were similar amounts, but in several stations, more than 100 mm were measured. In Samaria, 80 to 120 mm were measured, in the Judean Mountains 50 to 80 mm and in Gush Etzion 80 to 100 mm. The rainfall amounts decreased sharply southwards with amounts of 10 mm in the Northern Negev and less than 5 mm further south. More precipitation is yet to come in this event.

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