REPUBLIC OF CYPRUS
MINISTRY OF AGRICULTURE,
RURAL DEVELOPMENT
AND ENVIRONMENT

DEPARTMENT OF METEOROLOGY
1418 NICOSIA, CYPRUS

1. **Medium-Range Forecast Bulletin for the Eastern Mediterranean for Weather with potentially above normal characteristics**

2. **A review of the situation concerning the total precipitation for the Hydrological Year 2019, from October 2018 up to the present**

Issued on 13/2/2019, 1200 Local Time

1. Medium-Range Forecast Bulletin for the Eastern Mediterranean for Weather with potentially above normal characteristics

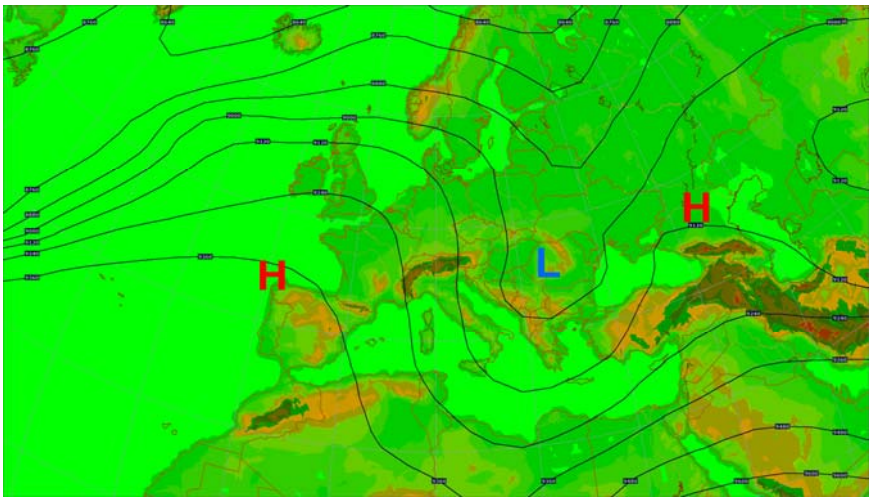
Validity Period: 13/2/2019 until 19/2/2019

According to the directive 201808-u18 of the Climate Watch Advisory Group, the cold wave that affects the regions of west, north and central Europe is in a recession state and it is being replaced by a barometric High, which tends to displace cold air masses towards the warmer regions of the Eastern Mediterranean. Consequently, there is an extension of the zone of increased precipitation of the last fifteen days even southern, affecting the area of Cyprus as well. To be more specific, with a certainty beyond 90%, the whole Eastern Mediterranean region will be affected by precipitations of total value higher than normal, for the whole week.

Outline of the synoptic weather situation for the forecast period:

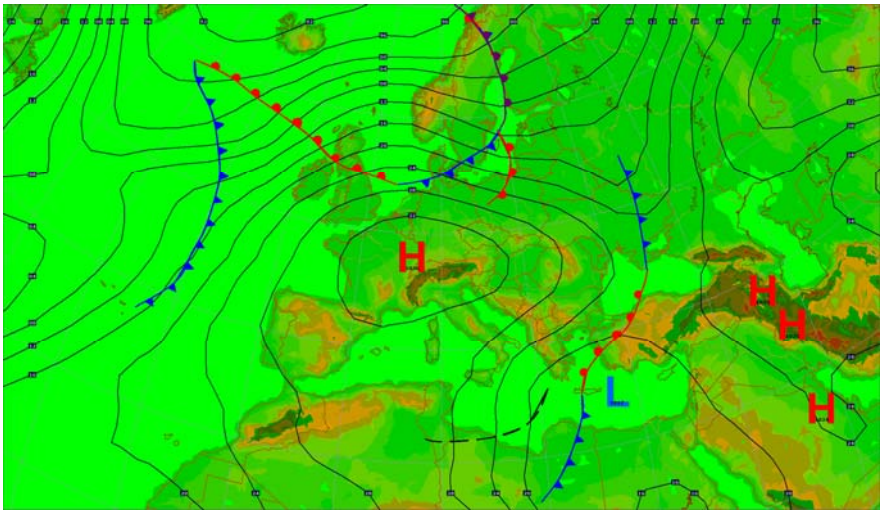
The meteorological conditions prevailing for the time being in the upper troposphere are depicted by the 300hPa upper air chart for the 13/2/2019, wherein is shown the ridge of high pressure from the Atlantic to central Europe, as well as, the trough of low pressure in eastern Europe, extending into north Africa. Seen also is a part of the Siberian Anticyclone. The special distribution of these atmospheric systems is such as to cause a meridional circulation in the upper atmosphere, which favours and sustains the creation of cyclogenesis with associated systems of low pressure in the Eastern Mediterranean, as one can see on the surface chart for the 13/2/2019 (0800 local time).

***The present bulletin has been issued as an Advisory Bulletin and is a result of the collaboration of the Department of Meteorology with the Climate Watch Advisory Group of WMO.



A 300hPa Upper Air chart indicating the distribution of atmospheric systems in the upper atmosphere on the 13/2/2019 08:00 LST

The main features of this chart is the establishment of an anticyclone in central Europe and the creation of a barometric low in the Eastern Mediterranean, centred over the island of Crete. This Low will slowly move eastwards, causing increased amounts of precipitation.



Surface Chart depicting the distribution of barometric systems and weather fronts on 13/2/2019 08:00 LST

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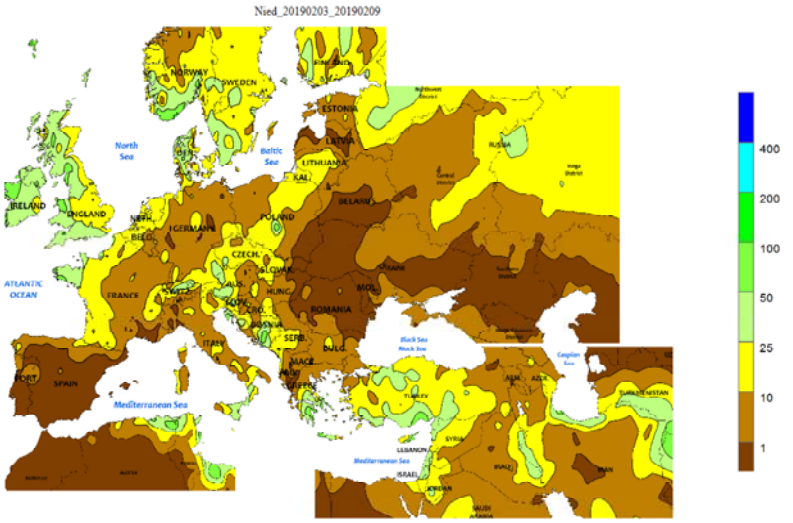
2. A review of the situation concerning the total precipitation for the Hydrological Year 2019, from October 2018 up to the present

In the following chart is presented the total precipitation for the period 3-9 February, 2019. The amount of the precipitation is judged to be satisfactory.



Total precipitation chart for the period 3-9/2/2019

The total amount of precipitation for the period from 1/10/2018 until 11/2/2019 is ranked as the ninth best historically, since 1901, as regards the first five months of each hydrological year (beginning in October). Given that the current month of February is yet to go (measurements as already stated are only up to 11/2/2019), and the fact that increased amounts of precipitation are expected until the end of the month, this year's ranking as regards precipitation is due to significantly improve.

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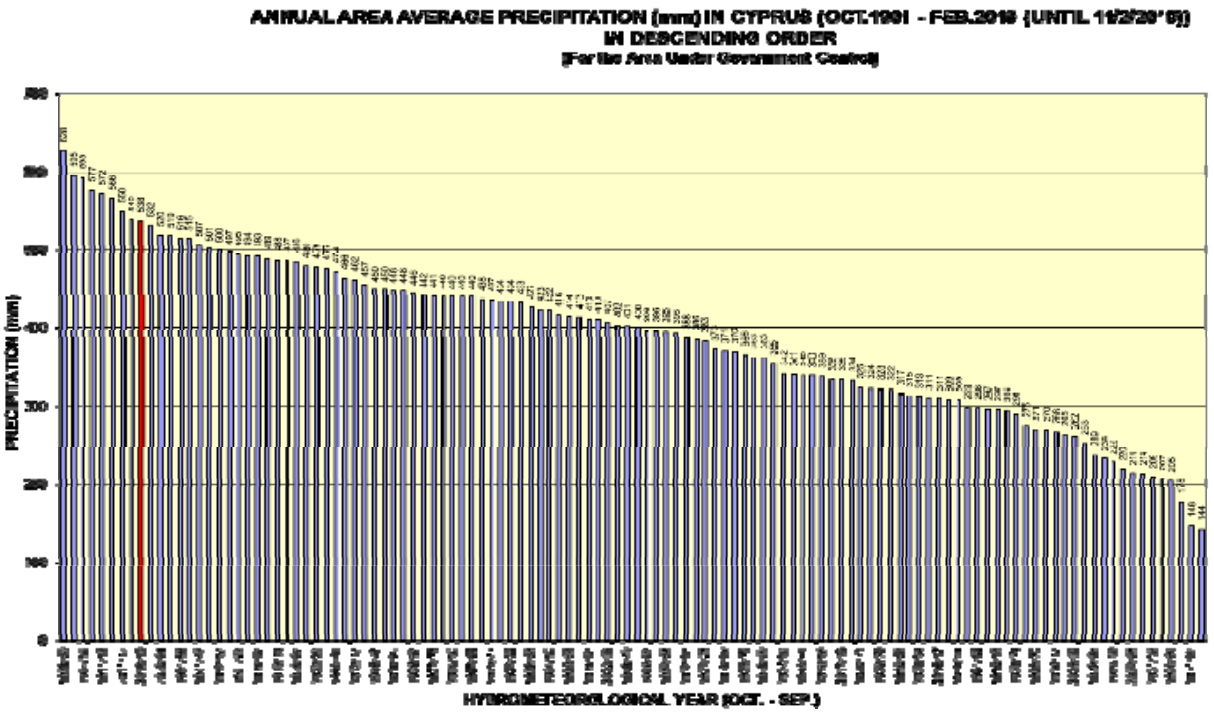

The following table depicts the ranking of the hydrological years as regards their total precipitation for the first five months of each year. The current year, as one can see, is ranked second with only a slight difference from the first (2011-2012).

HYDROLOGICAL YEAR (OCT-FEB)	OCT	NOV	DEC	JAN	FEB	TOTAL OCT-FEB	RANK
2011/12	14.5	80.5	117.2	238.4	99.4	550.0	1
2018/19	57.2	48.7	178.3	197.3	56.4	537.9	2
2009/10	40.3	44.5	152.1	149.5	107.5	493.9	3
2014/15	45.0	48.3	84.2	168.1	104.6	450.2	4
2012/13	53.4	84.4	209.4	59.2	41.7	448.1	5
2017/18	32.9	64.0	35.2	143.0	59.5	334.6	6
2016/17	23.5	32.3	163.8	79.7	11.8	311.1	7
2010/11	9.2	0.1	109.9	105.9	73.6	298.7	8
2015/16	54.7	10.2	34.3	82.1	25.8	207.1	9
2013/14	16.1	25.1	58.0	36.9	41.5	177.6	10

The total precipitation of the year 2018/19, up until now, is considered to be exceptional in comparison to that of other years. The total precipitation amount since October 2018 has already exceeded the normal average for the whole hydrological year 1/10/2018-30/9/2019 and occupies the 50th position of the ranking list.

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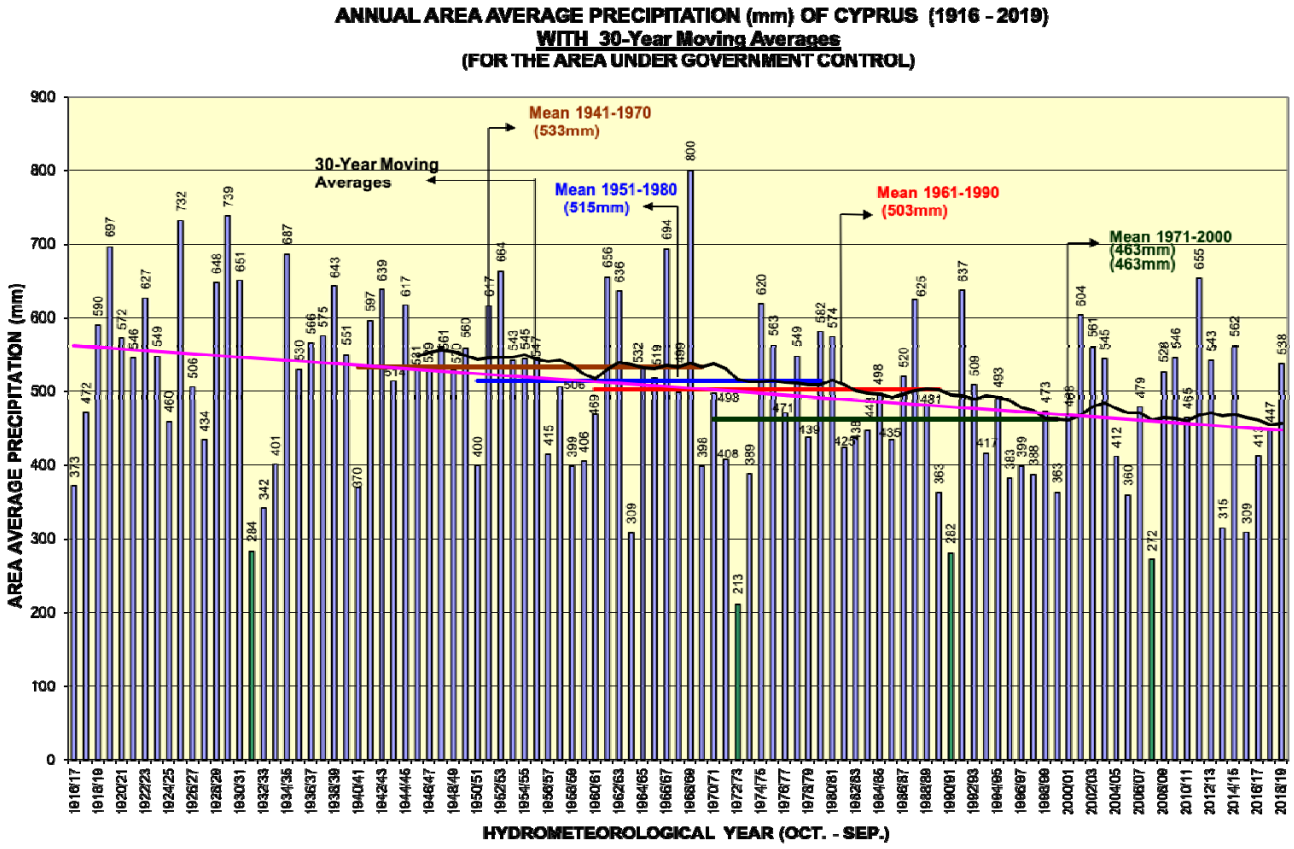

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