



Schweizerische Eidgenossenschaft
Confédération suisse
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Dipartimento federale dell'interno DFI
Ufficio federale di meteorologia e climatologia MeteoSvizzera

Retrospettiva giugno – novembre 2020

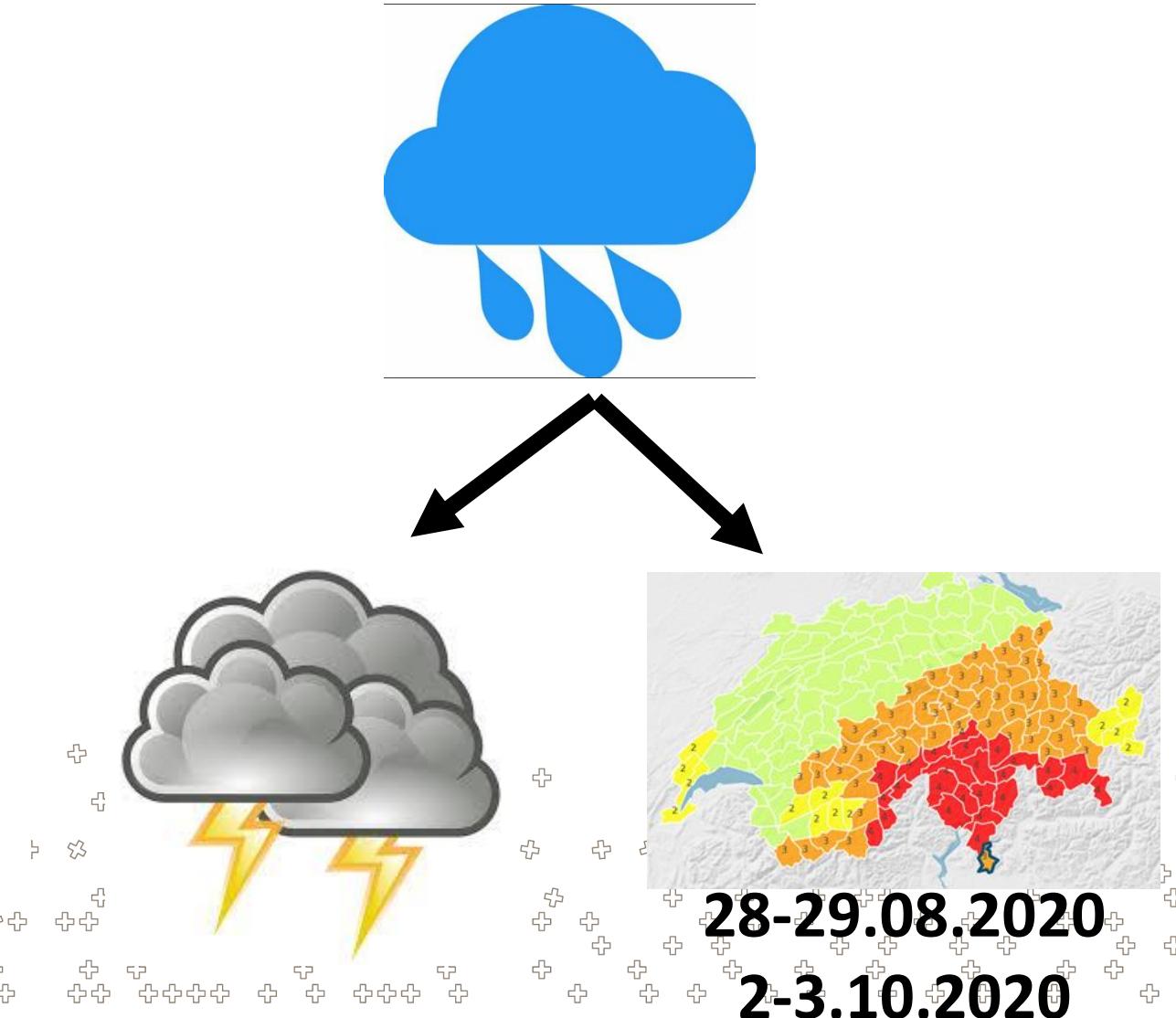
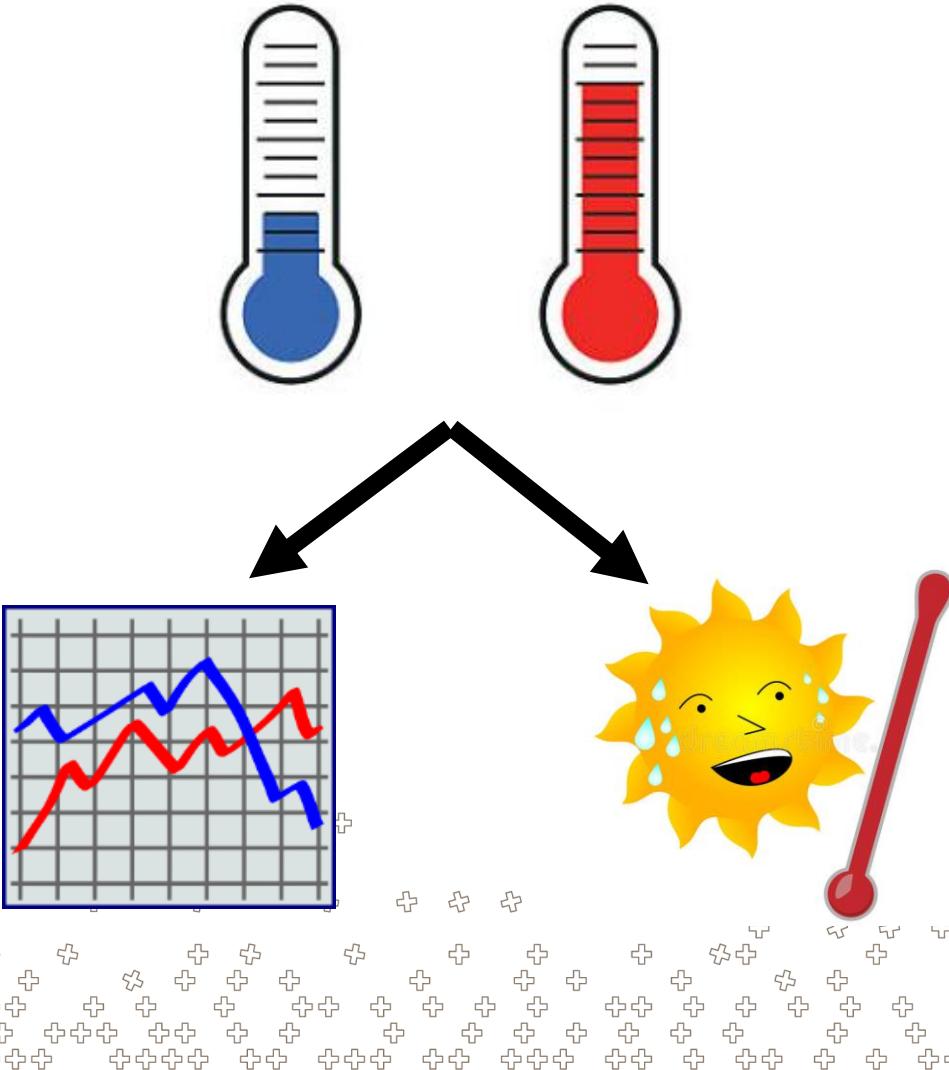
Luca Nisi, Luca Panziera

MeteoSvizzera, Centro Regionale Sud, Locarno-Monti



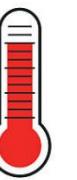
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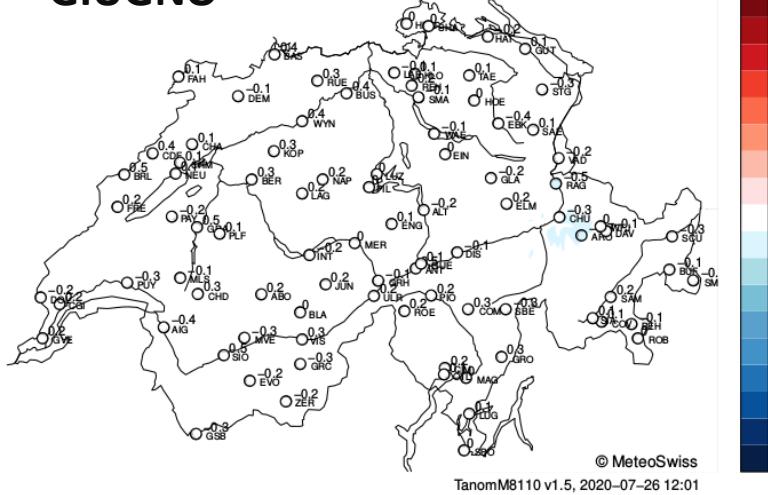




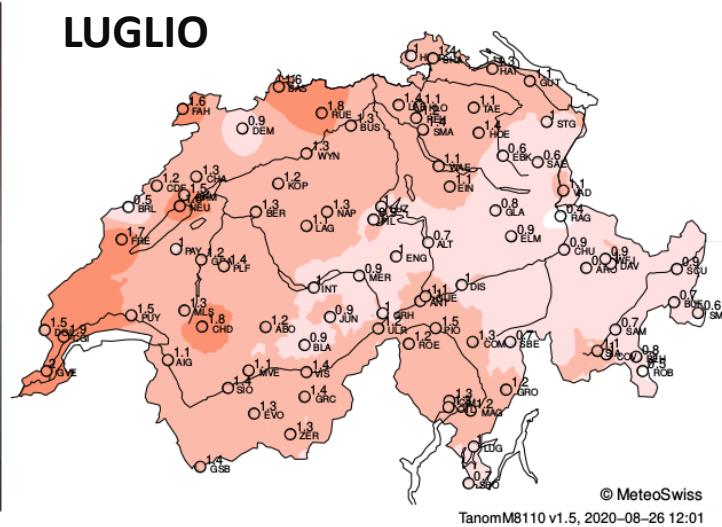
Tempertura media mensile (anomalia)



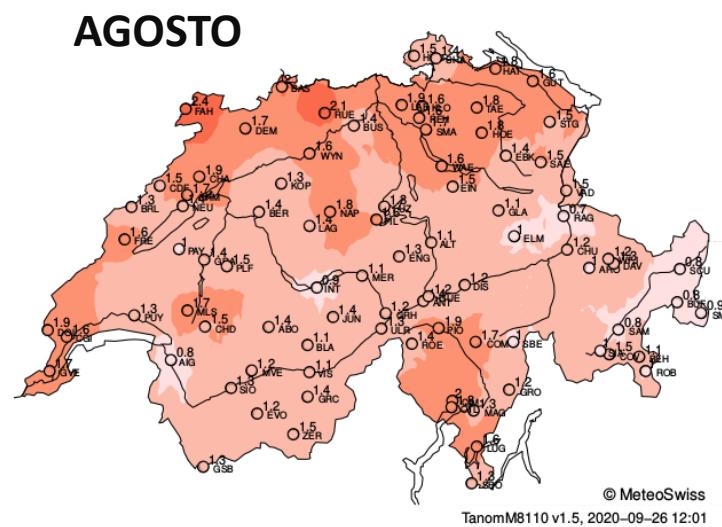
GIUGNO



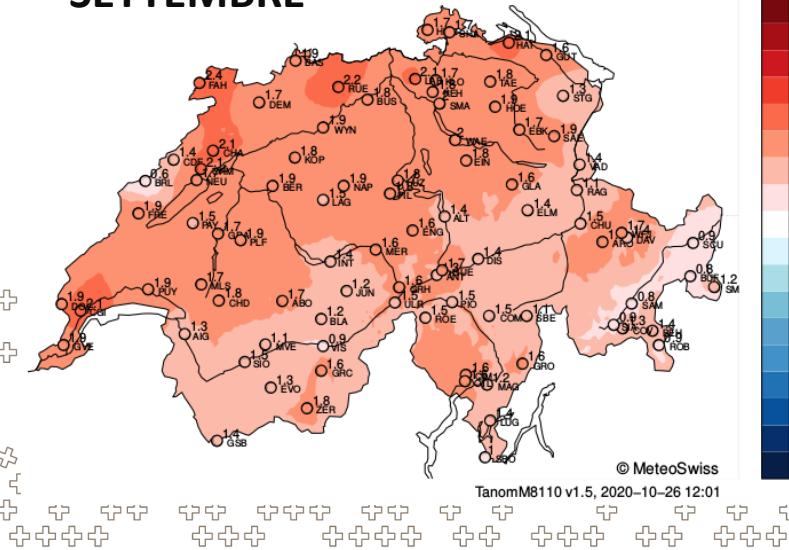
LUGLIO



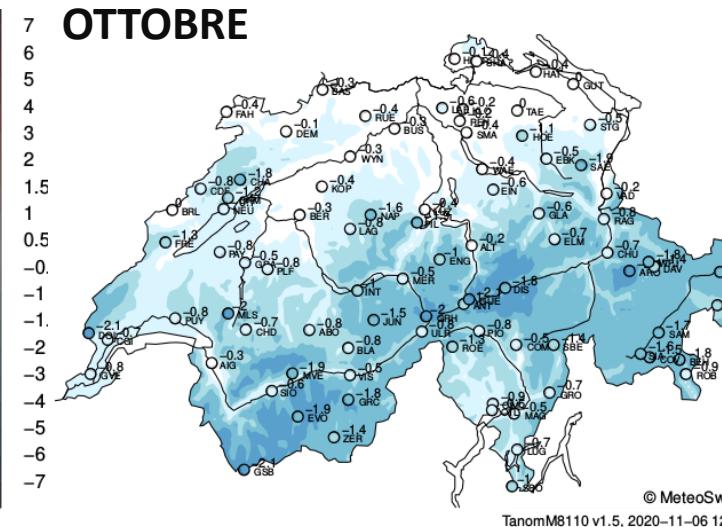
AGOSTO



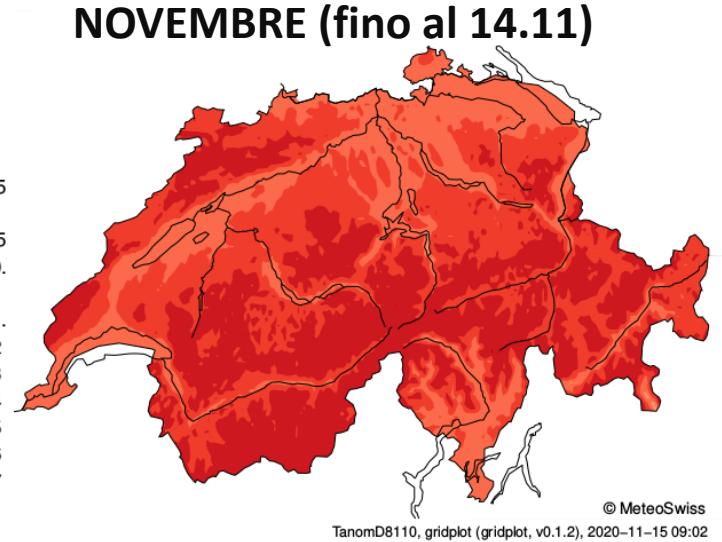
SETTEMBRE



OTTOBRE



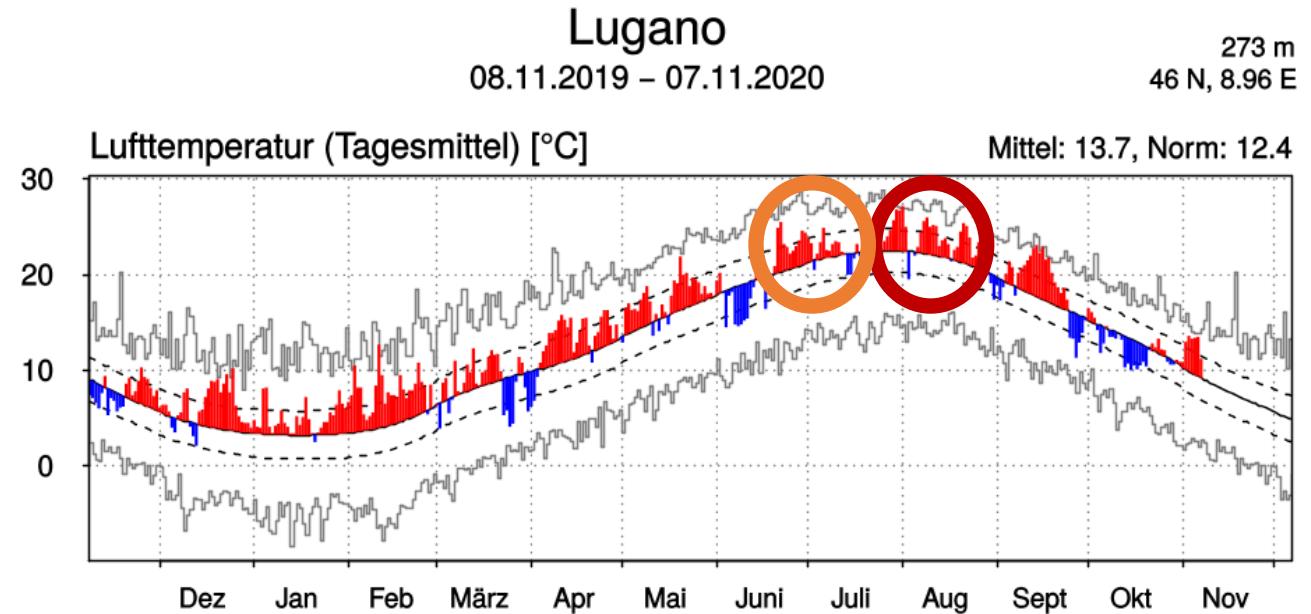
NOVEMBRE (fino al 14.11)





Canicola: un'estate non troppo «agitata»

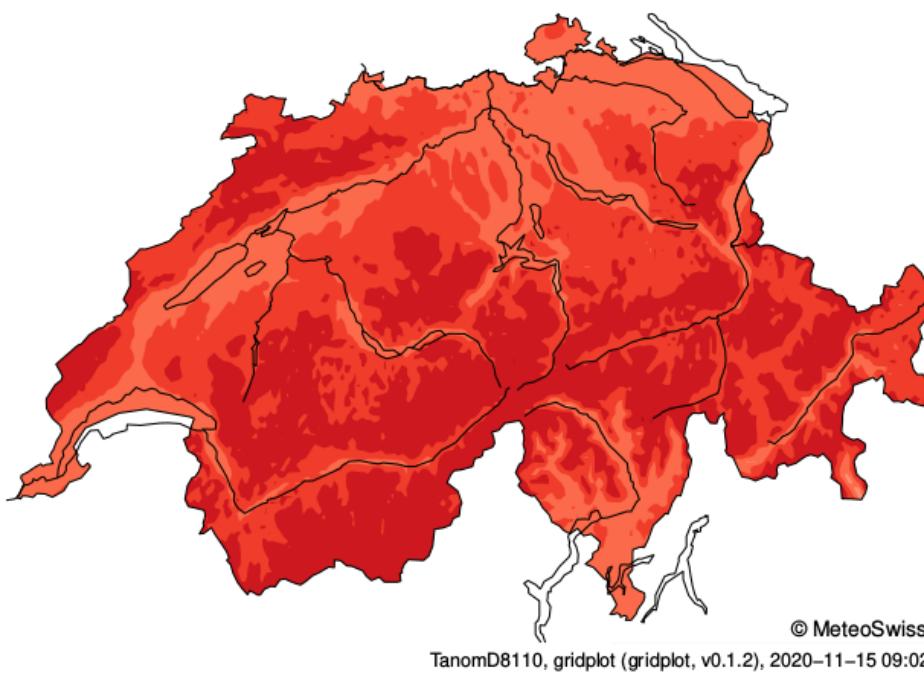
- Luglio: fino a metà luglio
non particolarmente caldo afoso
- Fine Luglio – inizio agosto
2 ondate di caldo
(28.7 – 2.8) e (08.08 – 12.08)
Da metà agosto, di nuovo più fresco
- 2 allerte a Sud delle Alpi, entrambe di livello 3





Ottobre fresco, novembre caldo

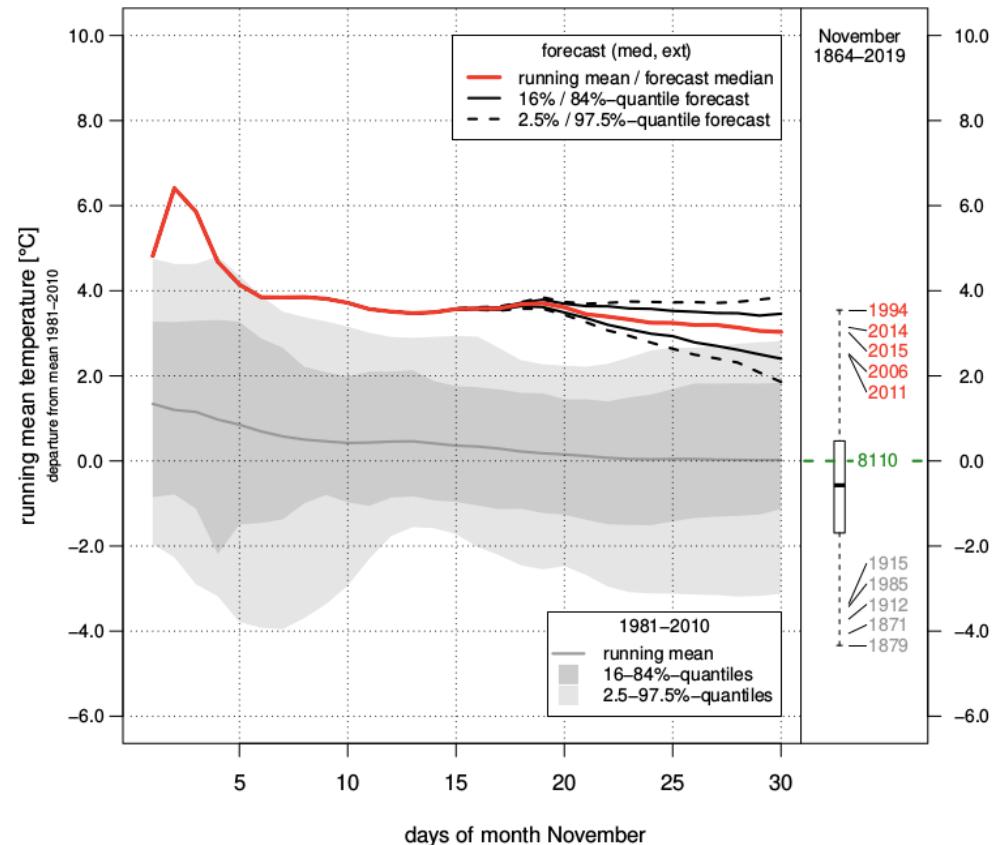
Temperature Anomaly (%) 01.-14.11.2020
(PRELIMINARY RESULTS)



MeteoSvizzera

Monthly Mean Temperature Outlook

Switzerland: November 2020



monthly departure outlook

97.5% - q:	3.9°C	rank 1
84% - q:	3.5°C	rank 2
50% - q:	3.0°C	rank 4 (of 157)
16% - q:	2.4°C	rank 6
2.5% - q:	1.9°C	rank 11

probabilities for rank 1 to 5 (high)

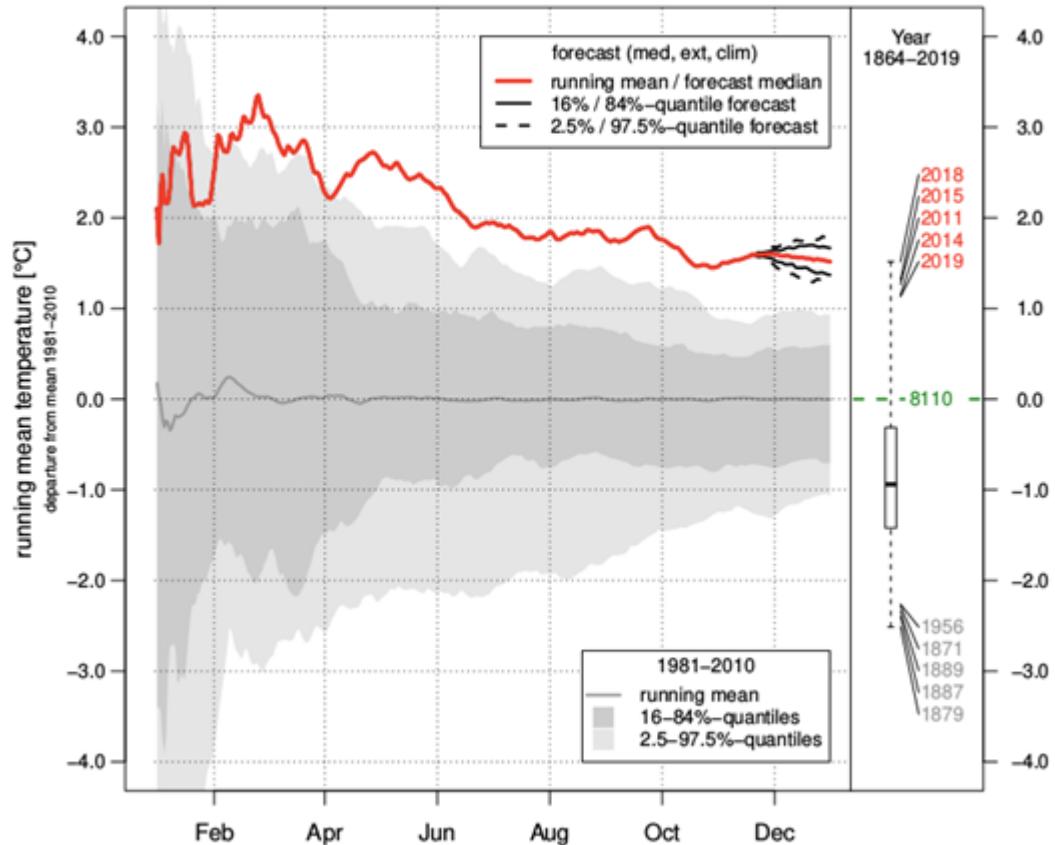
rank 1:	10%
rank 2:	31%
rank 3:	53%
rank 4:	80%
rank 5:	80%



Temperatura media 2020 (outlook)

Yearly Mean Temperature Outlook

Switzerland: Year 2020



yearly departure outlook

97.5% - q:	1.8°C	rank 1
84% - q:	1.7°C	rank 1
50% - q:	1.5°C	rank 2 (of 157)
16% - q:	1.4°C	rank 2
2.5% - q:	1.3°C	rank 3

probabilities for rank 1 to 5 (high)

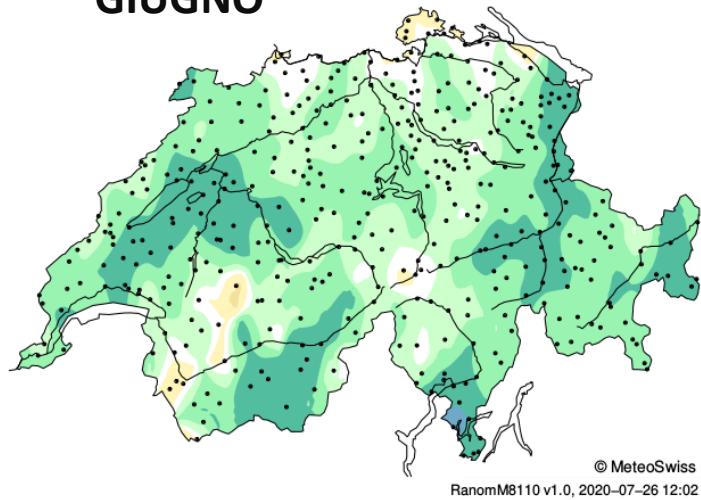
rank 1:	50%
rank 2:	93%
rank 3:	97%
rank 4:	>98%
rank 5:	>98%



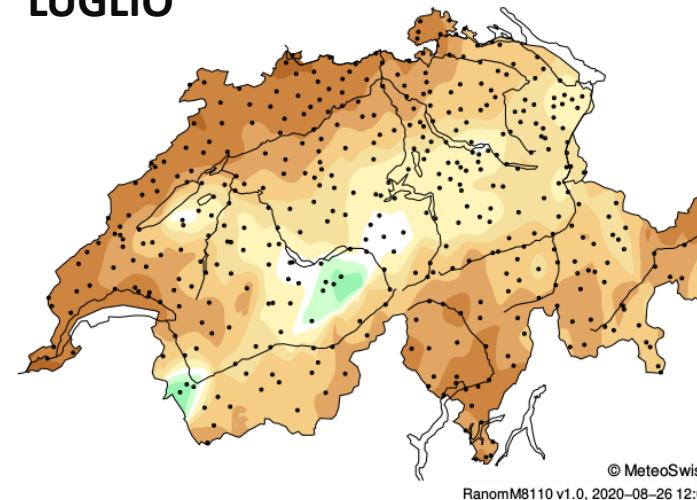
Precipitazioni mensili (anomalia)



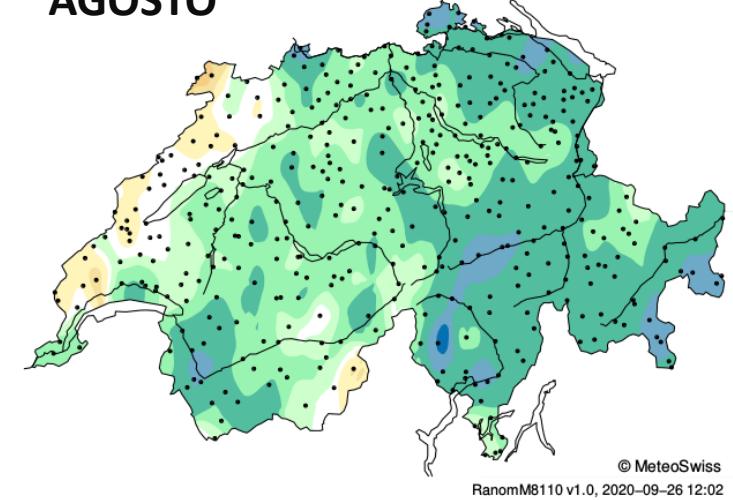
GIUGNO



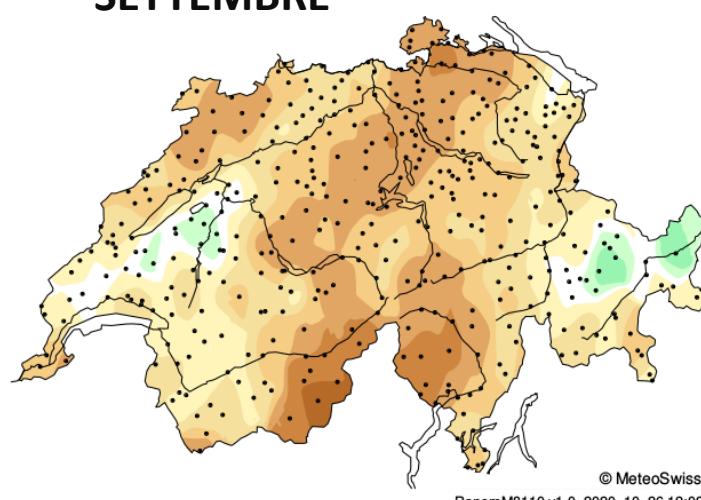
LUGLIO



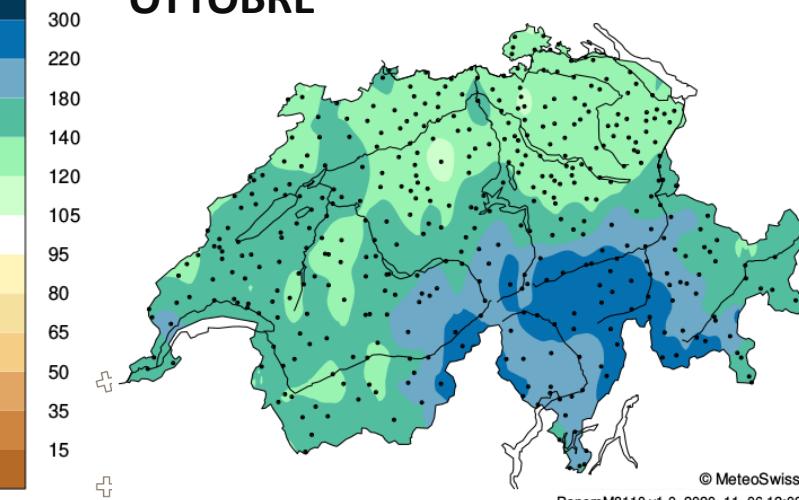
AGOSTO



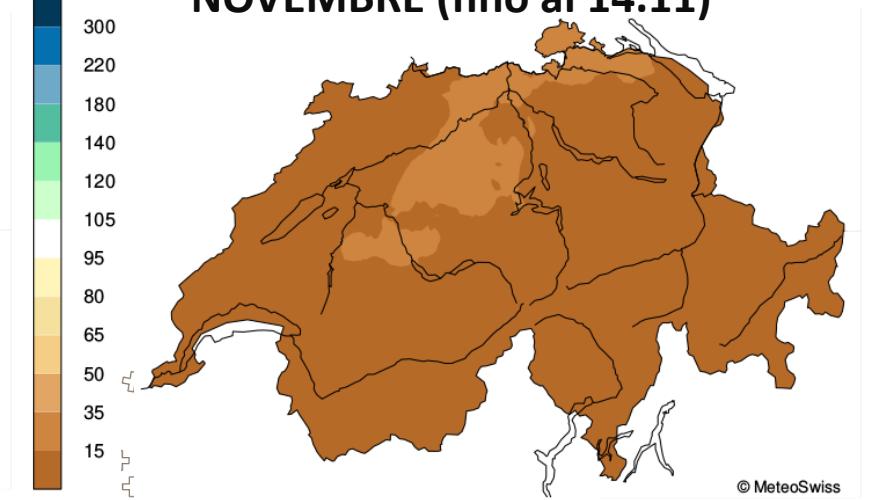
SETTEMBRE



OTTOBRE



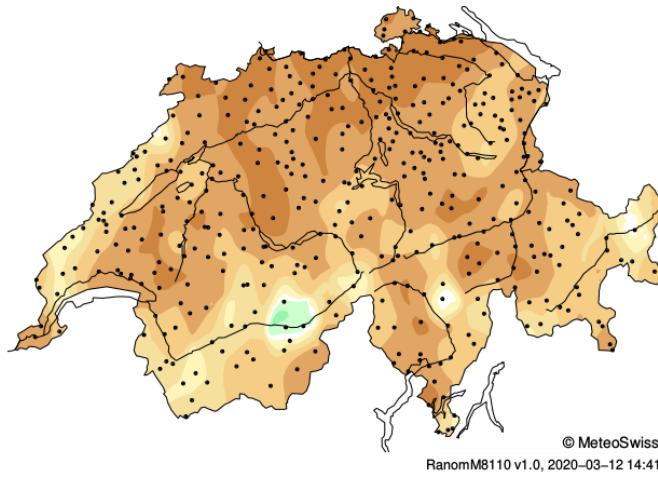
NOVEMBRE (fino al 14.11)



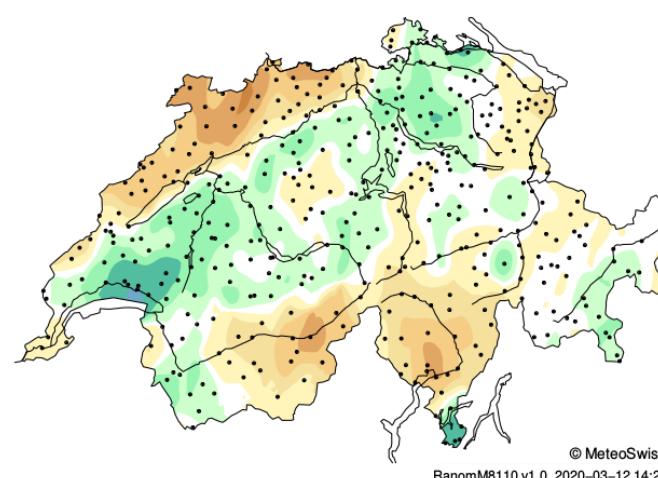


Mese di luglio, 2015 - 2020

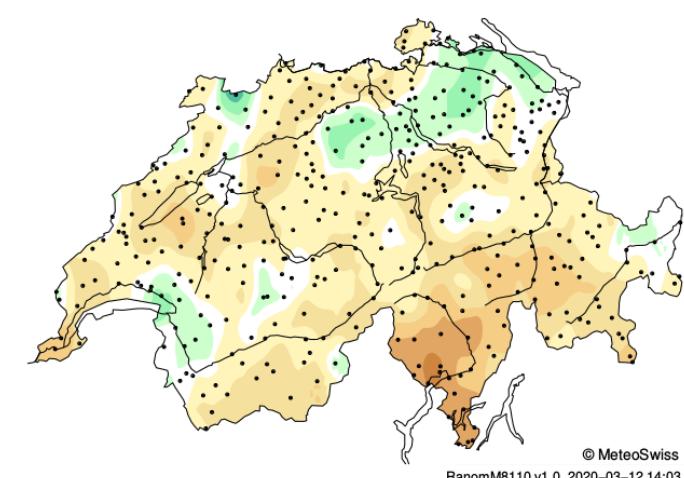
Monthly Precipitation Anomaly (%) Jul 2015 (Ref. 1981–2010)



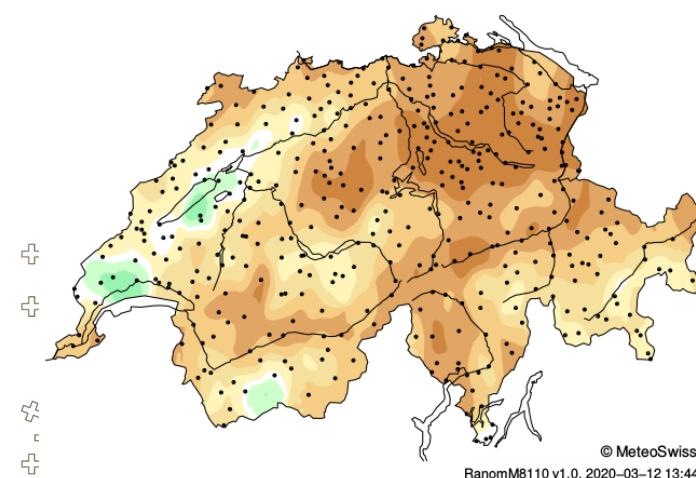
Monthly Precipitation Anomaly (%) Jul 2016 (Ref. 1981–2010)



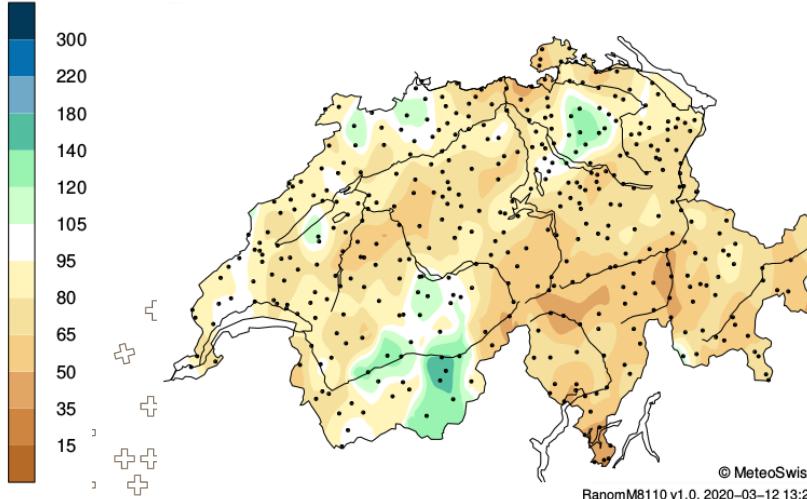
Monthly Precipitation Anomaly (%) Jul 2017 (Ref. 1981–2010)



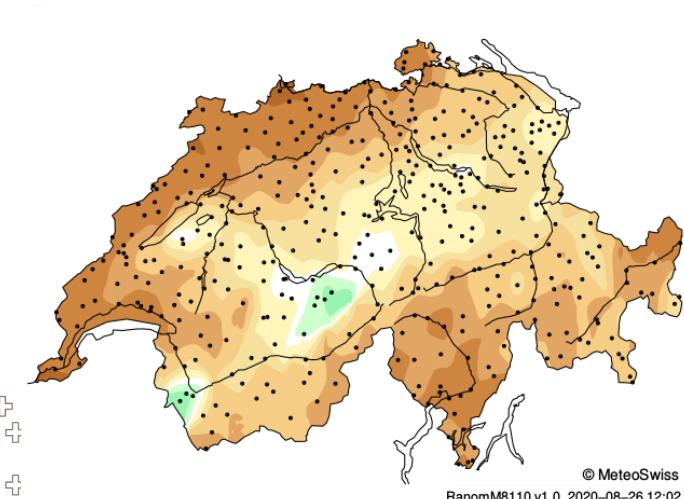
Monthly Precipitation Anomaly (%) Jul 2018 (Ref. 1981–2010)



Monthly Precipitation Anomaly (%) Jul 2019 (Ref. 1981–2010)

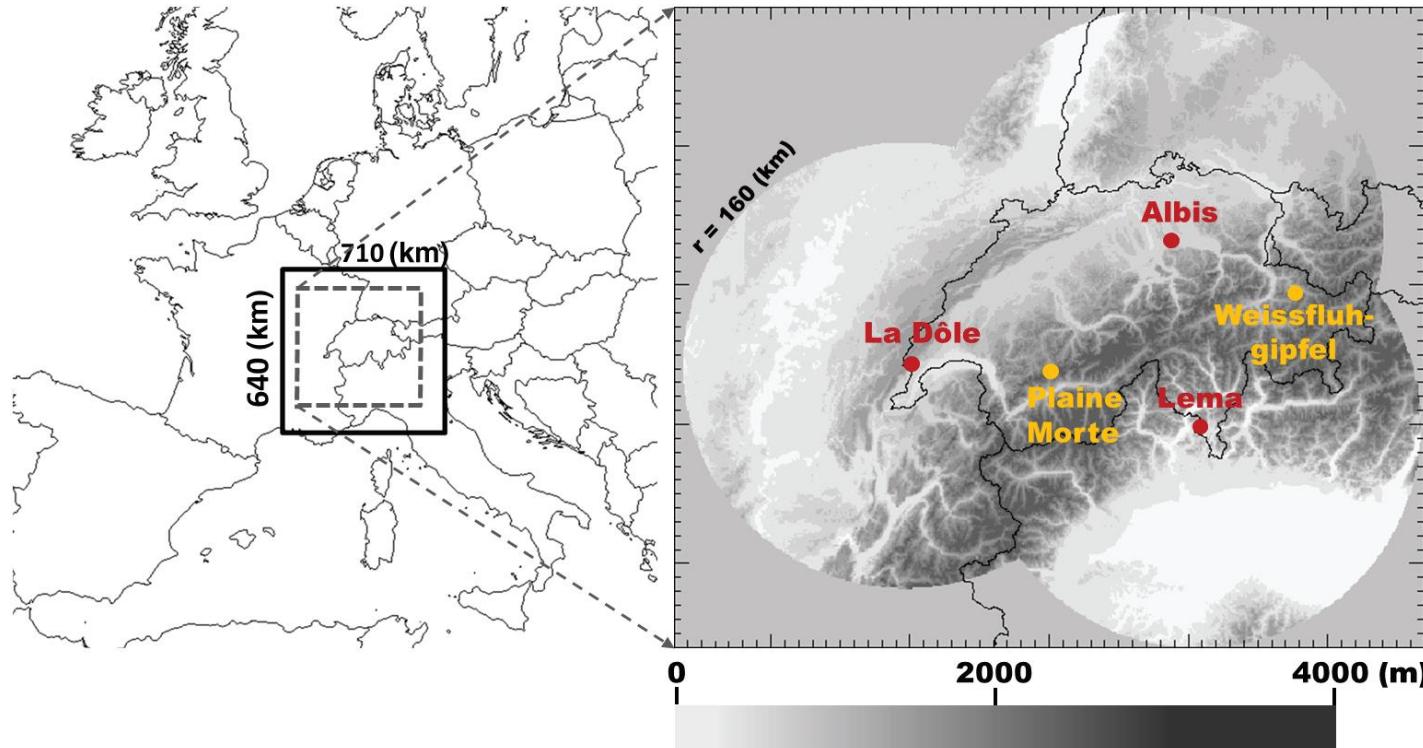


Monthly Precipitation Anomaly (%) Jul 2020 (Ref. 1981–2010)





Attività temporalesca estate 2020



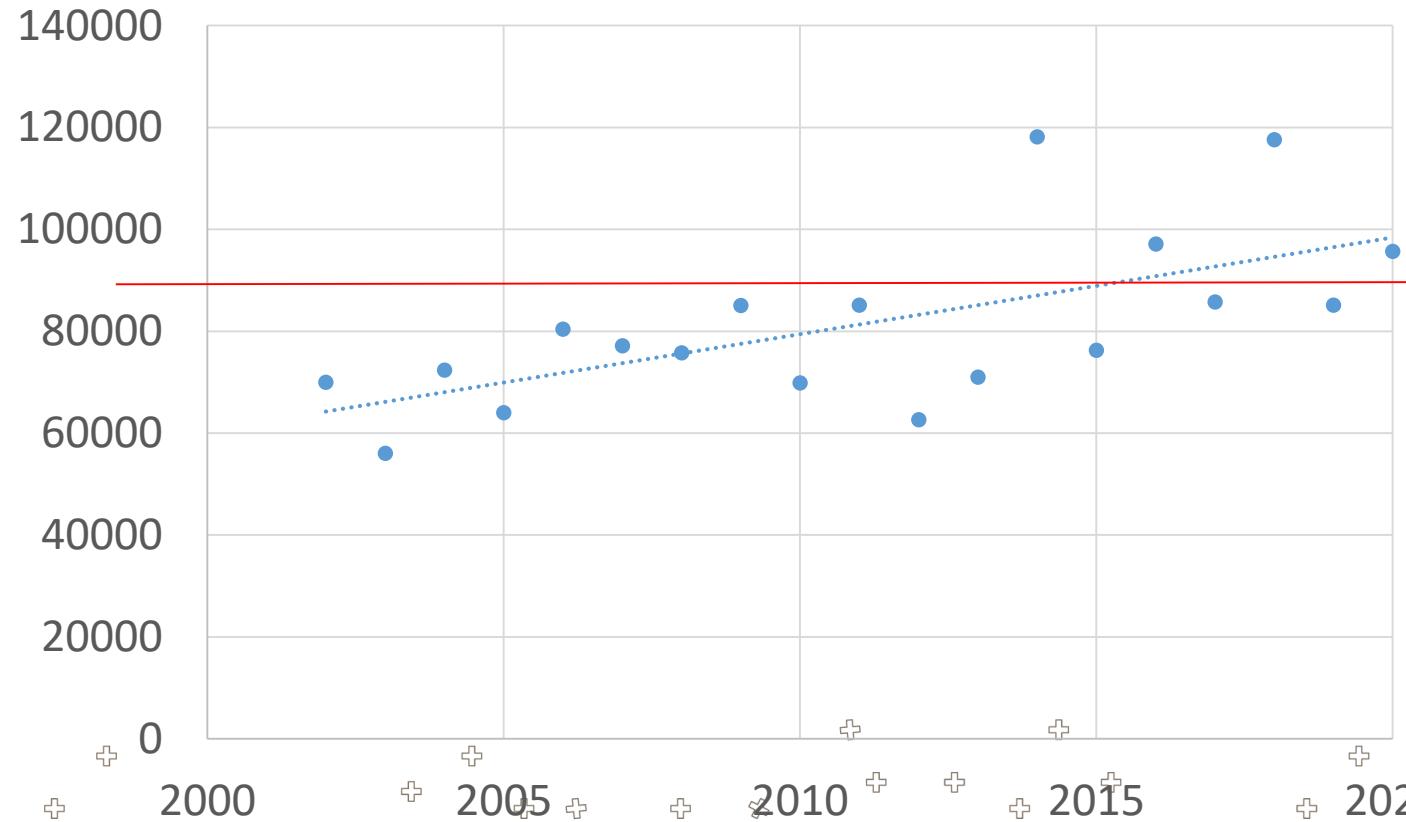
http://www.tencia.ch/data/doc/2018_Nisi_etal_QJRMS_15-YearHailStreakClimatologyForTheAlpineRegion.pdf

MeteoSvizzera



Attività temporalesca estate 2020

Numero di celle convettive



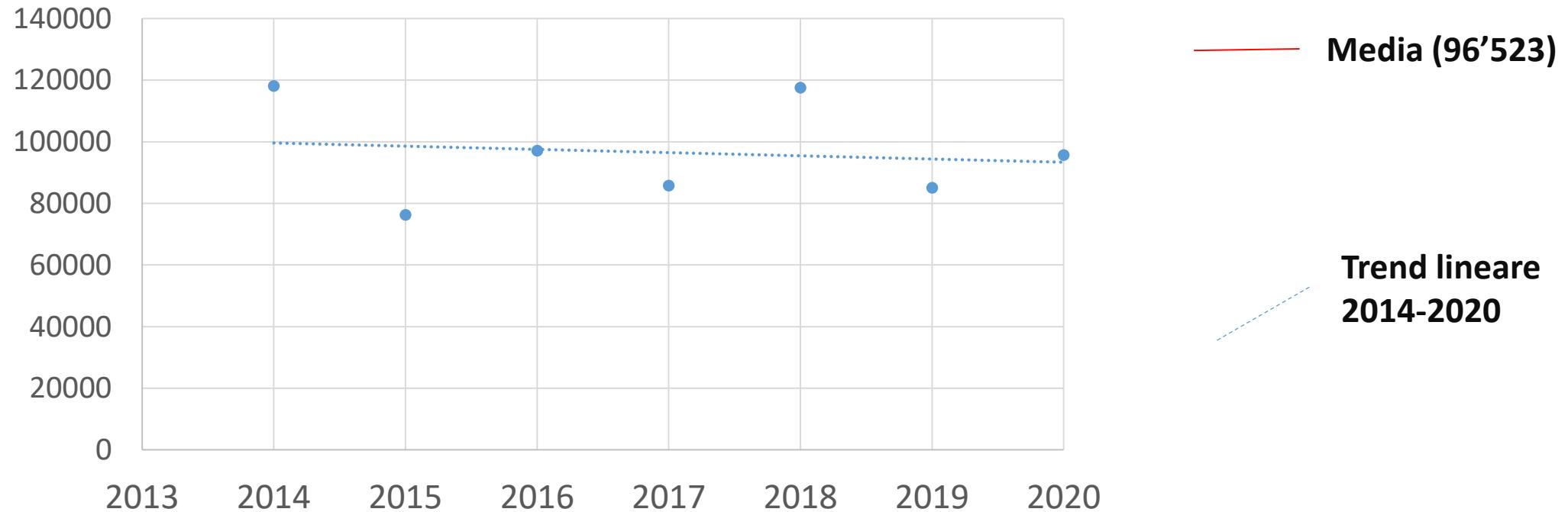
Media (81'316)

Trend lineare
2002-2020



Attività temporalesca estate 2020

Numero di celle convettive



MeteoSvizzera



Nuovo studio sul ciclo diurno dei temporali grandinigeni nelle Alpi

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RESEARCH ARTICLE

Quarterly Journal of the
Royal Meteorological Society



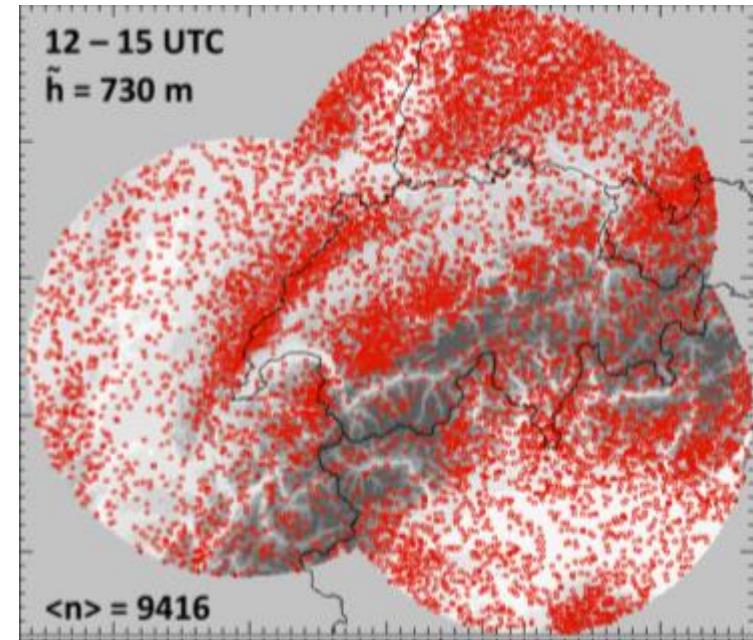
Hailstorms in the Alpine region: Diurnal cycle, 4D-characteristics, and the nowcasting potential of lightning properties

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O. Martius^{2,3,4}

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Meteorology MeteoSwiss, Zürich,
Switzerland

Abstract

Nowcasting of hailstorms still poses a major challenge to weather services,
because of the limited availability of reliable large datasets and the short



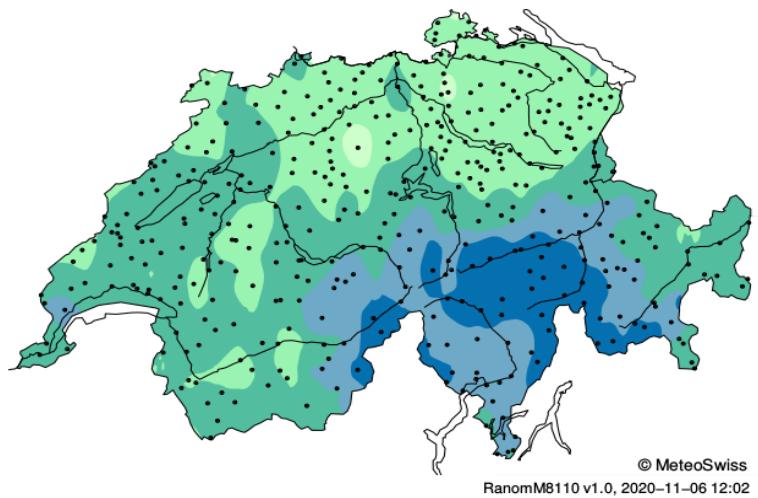
http://www.tencia.ch/data/doc/2020_Nisi_etal_QJRMS_Hailstorms_in_the_Alpine_region_Diurnal_cycle_4D_characteristics_and_the_nowcasting_potential_of_lightning_properties.pdf

MeteoSvizzera



Precipitazioni concentrate in pochi eventi

Monthly Precipitation Anomaly (%) Oct 2020 (Ref. 1981–2010)



28-30 agosto 2020



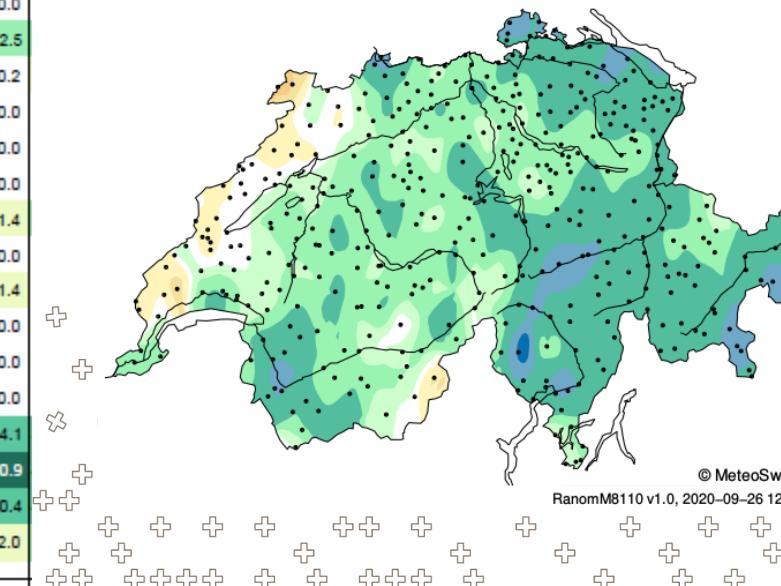
MeteoSvizzera

Alpensüdseite

DIS	SBE	PIO	OTL	MAG	LUG	SBO	ROB
10.5	0.5	2.4	0.0	11.2	0.0	0.0	0.0
7.8	10.2	14.7	1.6	0.6	0.5	6.7	14.6
16.7	11.9	0.6	4.4	4.0	21.2	20.5	20.5
4.7	3.4	2.1	0.0	0.0	0.0	2.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.3	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	6.2	
1.4	7.1	2.6	0.0	1.1	0.0	0.7	0.5
0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
0.7	26.3	1.3	0.6	24.9	31.0	0.9	0.5
1.3	5.7	3.0	0.5	8.5	2.0	22.5	4.8
8.4	2.4	3.3	7.1	14.9	0.1	0.4	1.2
0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
0.0	0.1	0.2	29.1	13.5	9.7	15.6	0.0
25.0	36.6	32.1	15.7	40.5	8.5	4.5	12.5
1.3	2.2	0.1	0.0	0.0	0.0	0.2	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2.0	4.6	4.5	11.8	17.9	0.0	0.0	1.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32.0	47.4	14.4	86.0	138.5	5102.7	28.0	44.1
89.8	110.7	104.1	1146.8	103.8	14.4	15.6	80.9
46.2	37.6	92.2	28.2	9.6	10.2	15.8	30.4
0.3	0.1	0.0	0.1	0.0	0.0	1.4	2.0
248	306	278	332	389	200	134	224

2-3 ottobre 2020

Monthly Precipitation Anomaly (%) Aug 2020 (Ref. 1981–2010)

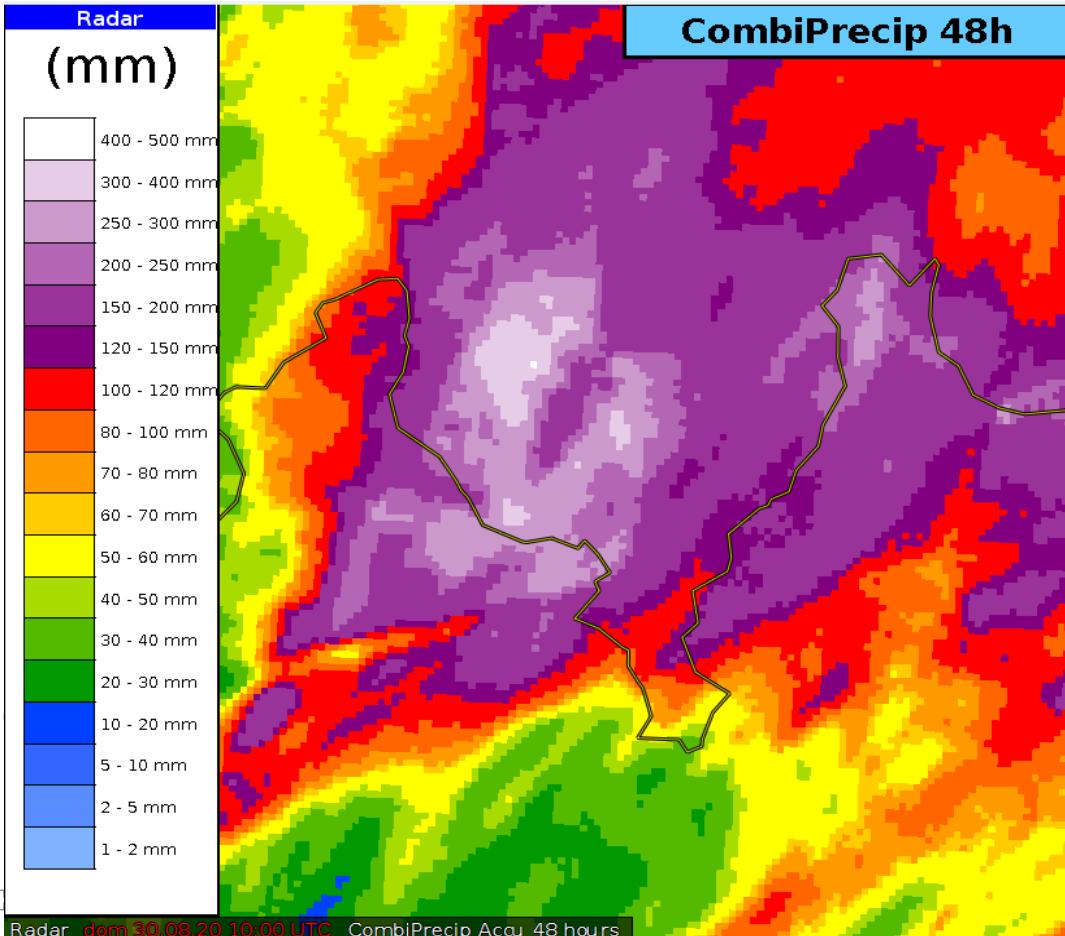


DIS	SBE	PIO	OTL	MAG	LUG	SBO	ROB
0.6	1.6	4.0	4.8	3.8	0.0	0.0	0.0
84.9	99.6	123.7	159.1	1106.8	107.1	97.0	36.3
59.2	70.5	87.4	59.5	46.3	46.1	42.0	49.6
36.7	37.6	47.1	53.0	49.3	27.7	30.6	14.6
2.2	6.0	4.2	2.1	4.7	4.8	1.8	4.4
3.8	9.9	10.4	1.6	1.7	1.0	1.2	3.4
2.2	0.7	0.4	0.0	0.1	0.0	0.1	2.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.3	2.3	0.0	0.2	0.5	2.2	0.3	0.1
1.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.1	0.9	0.9	2.8	1.3	3.4	8.2	0.0
0.2	0.0	0.0	0.0	0.0	0.0	1.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.7	9.3	7.7	5.3	3.4	0.9	3.6	0.2
6.4	44.5	29.8	34.7	31.5	29.4	28.7	29.7
2.7	1.9	0.1	0.1	0.2	0.0	0.1	1.9
0.0	2.3	1.2	1.2	0.5	2.4	3.3	0.3
43.1	76.2	44.6	46.0	79.4	60.0	59.2	58.0
1.8	1.2	0.0	0.5	1.7	2.8	11.1	0.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
257	366	362	371	331	288	288	201

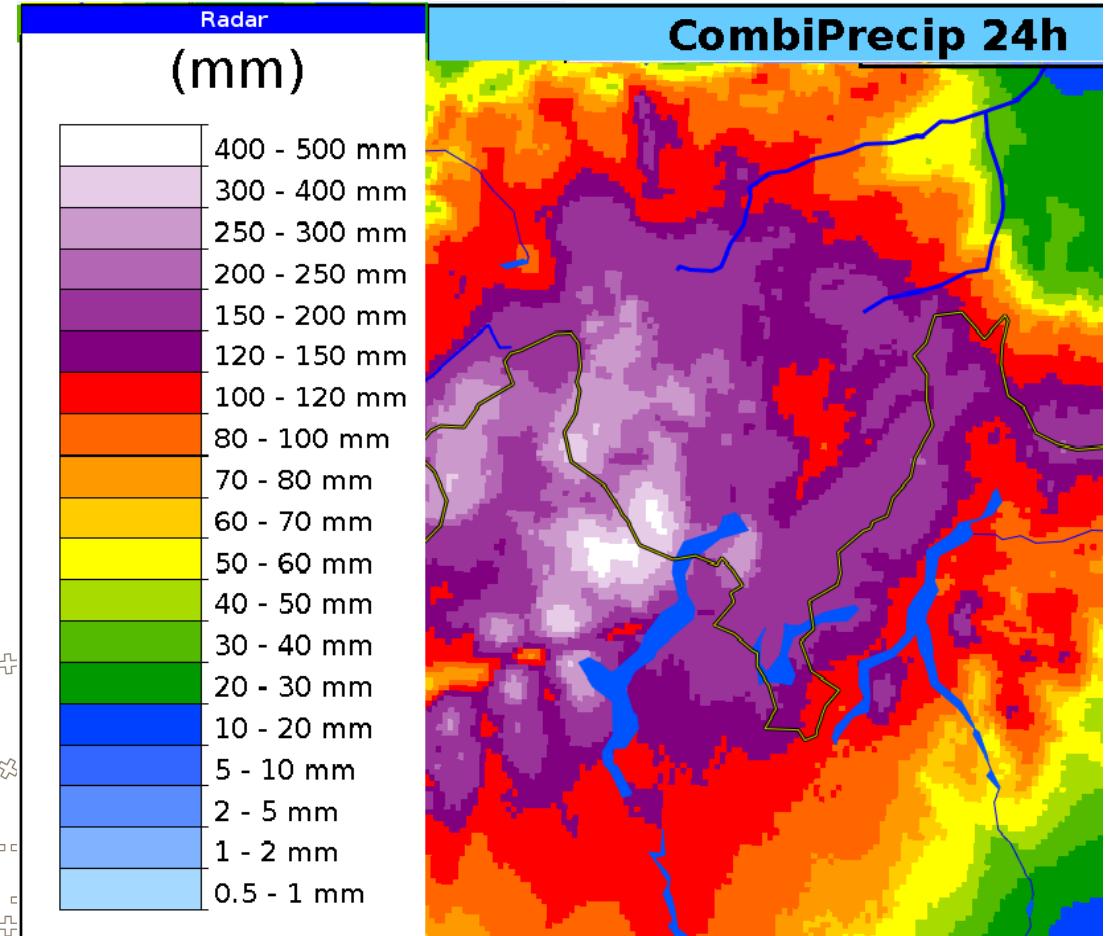


2 eventi con forti precipitazioni in poche settimane...

28-30.08.2020



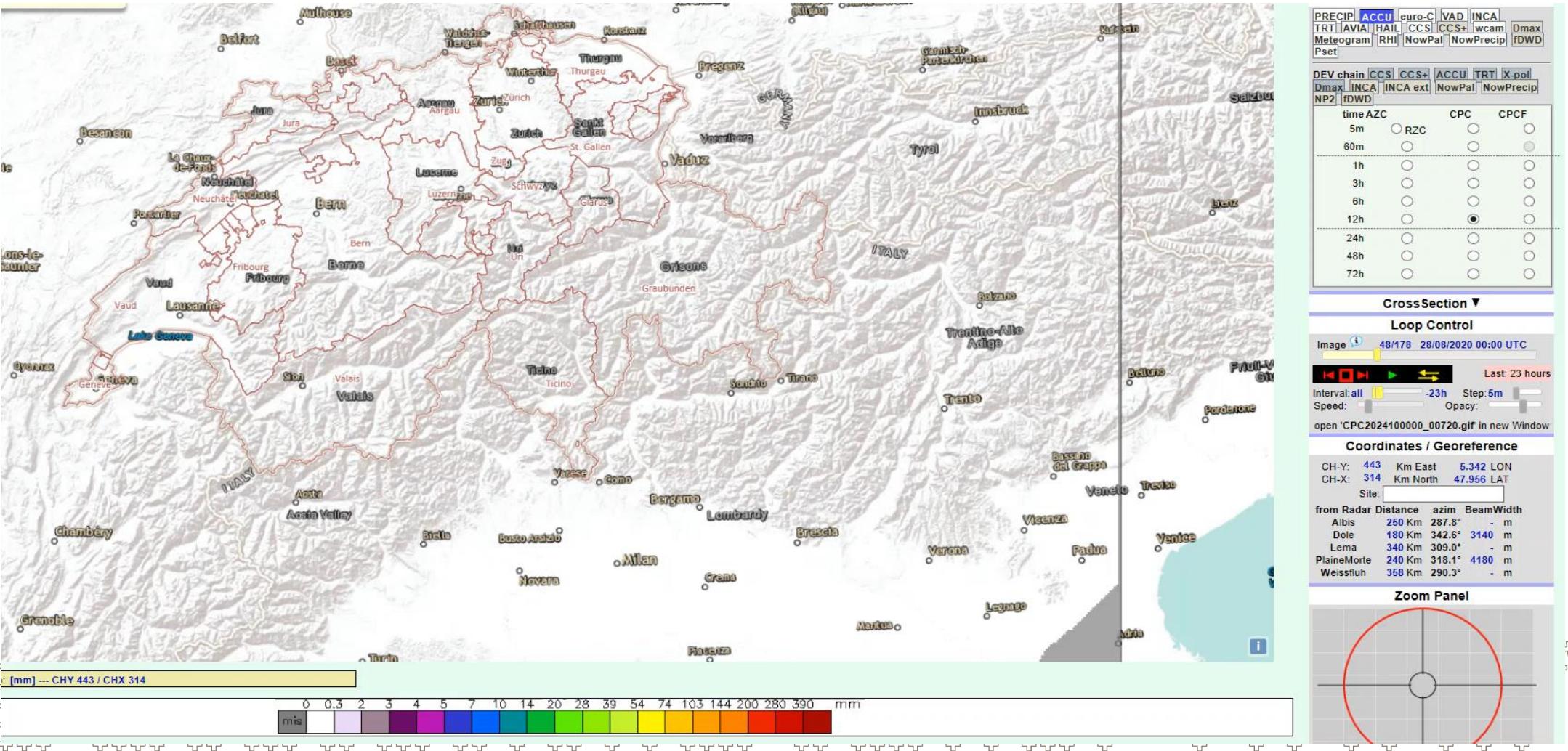
02-03.10.2020





Caratteristiche 28-30.08.2020

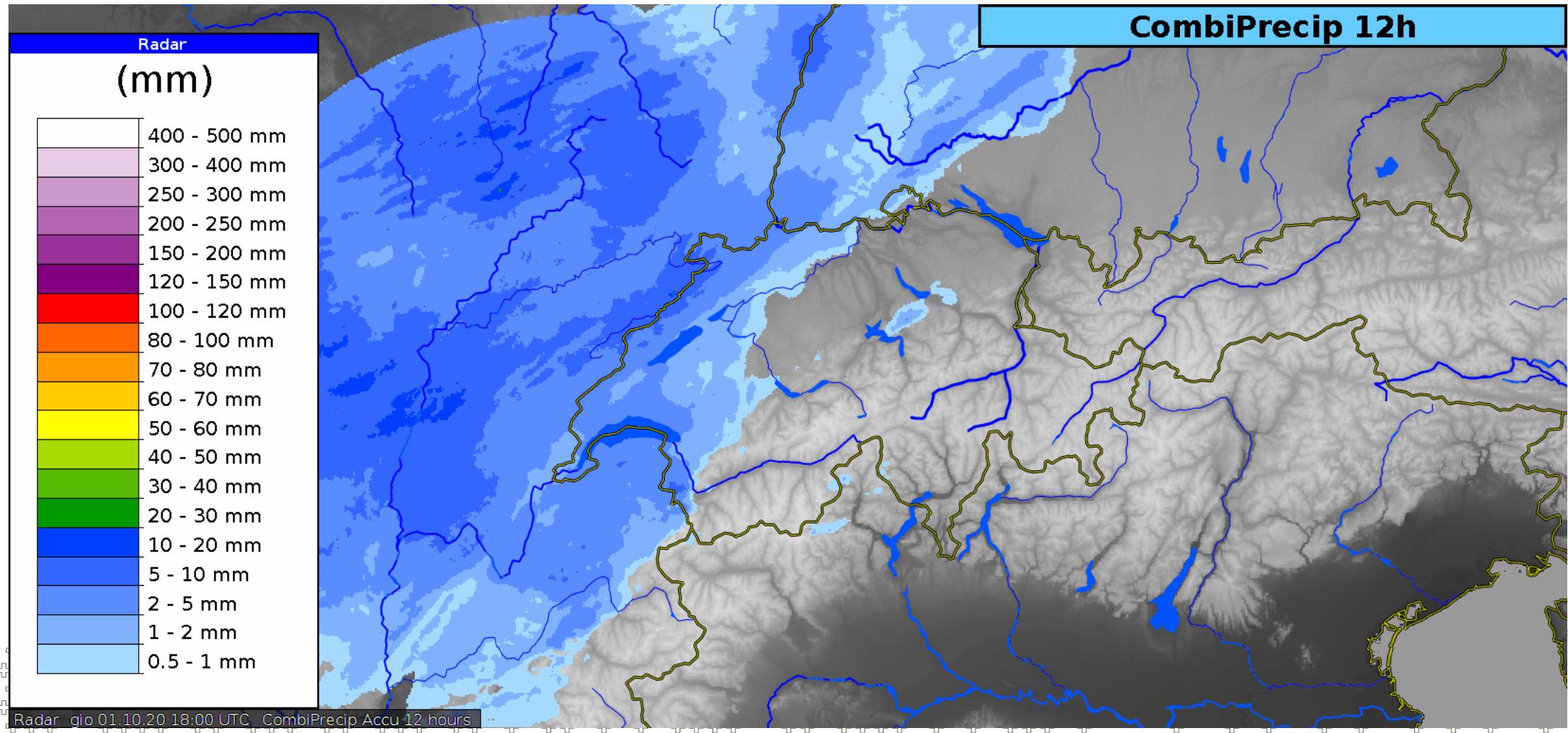
Linee temporalesche





Caratteristiche 02-03.10.2020

Precipitazioni estese (pochi temporali)





Livello del Lago Maggiore

Der Pegel des Lago Maggiore steigt in 11 Tagen um 3 Meter

Von einem Extrem ins andere: Der Lago Maggiore ist nach dem Dauerregen im Tessin über die Ufer getreten.

🕒 Aktualisiert: 08.11.2018, 15:55

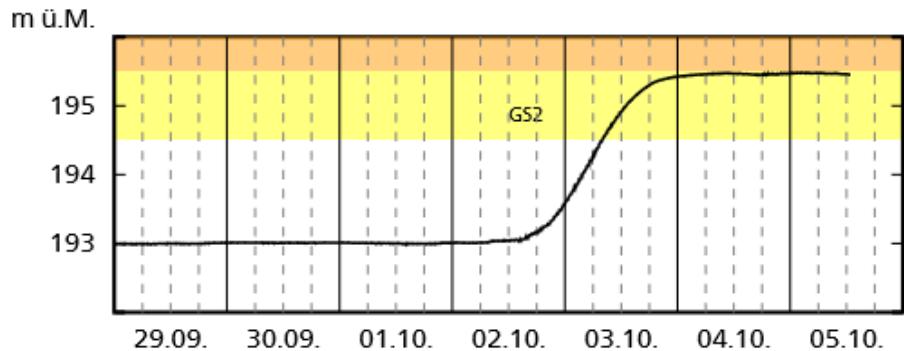


Der See könnte sogar innerhalb von nur 24 Stunden um einen Meter ansteigen, sagt Hydrologe Daniel Streit. Video: sda

Lago Maggiore - Locarno 2022

Aktuelle Situation

Wasserstand



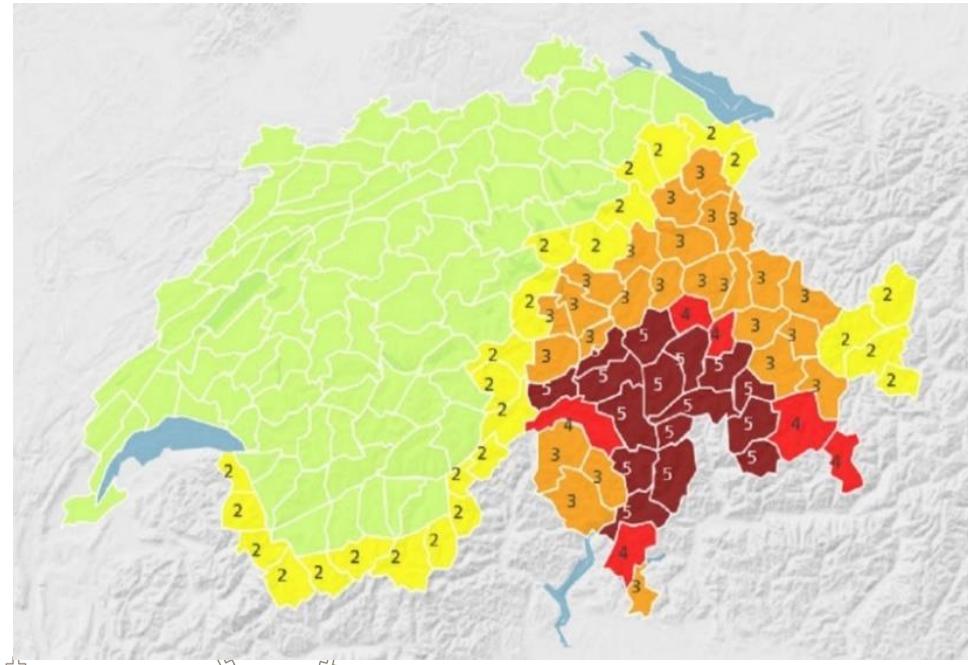
Oltre 2 metri in 24 ore

Messwerte	Wasserstand
	05.10.2020 13:10
Letzter Messwert	195.45



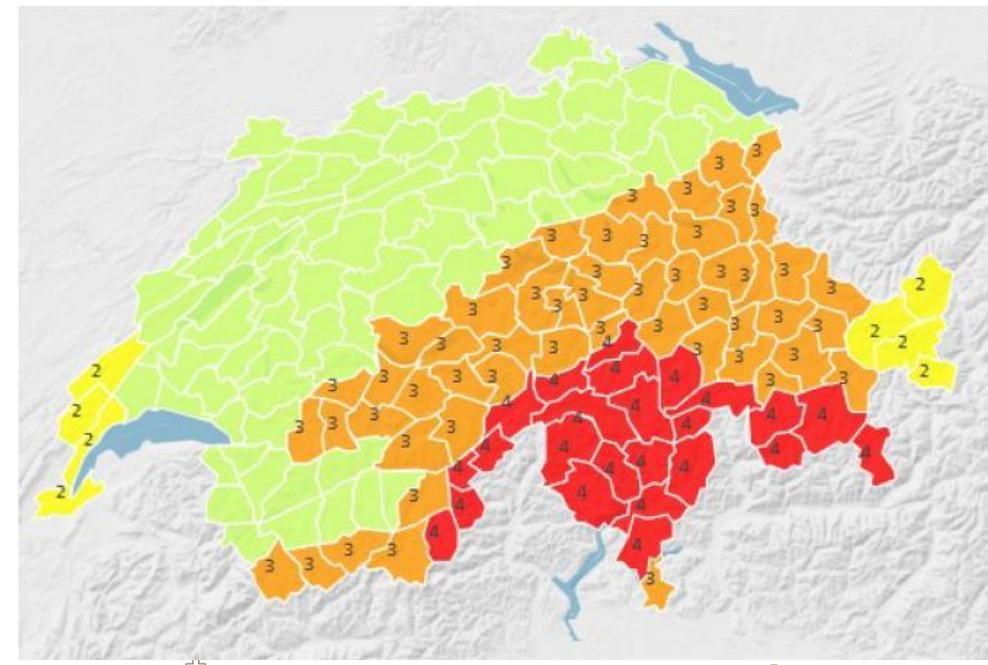
Allerte

28-30.08.2020



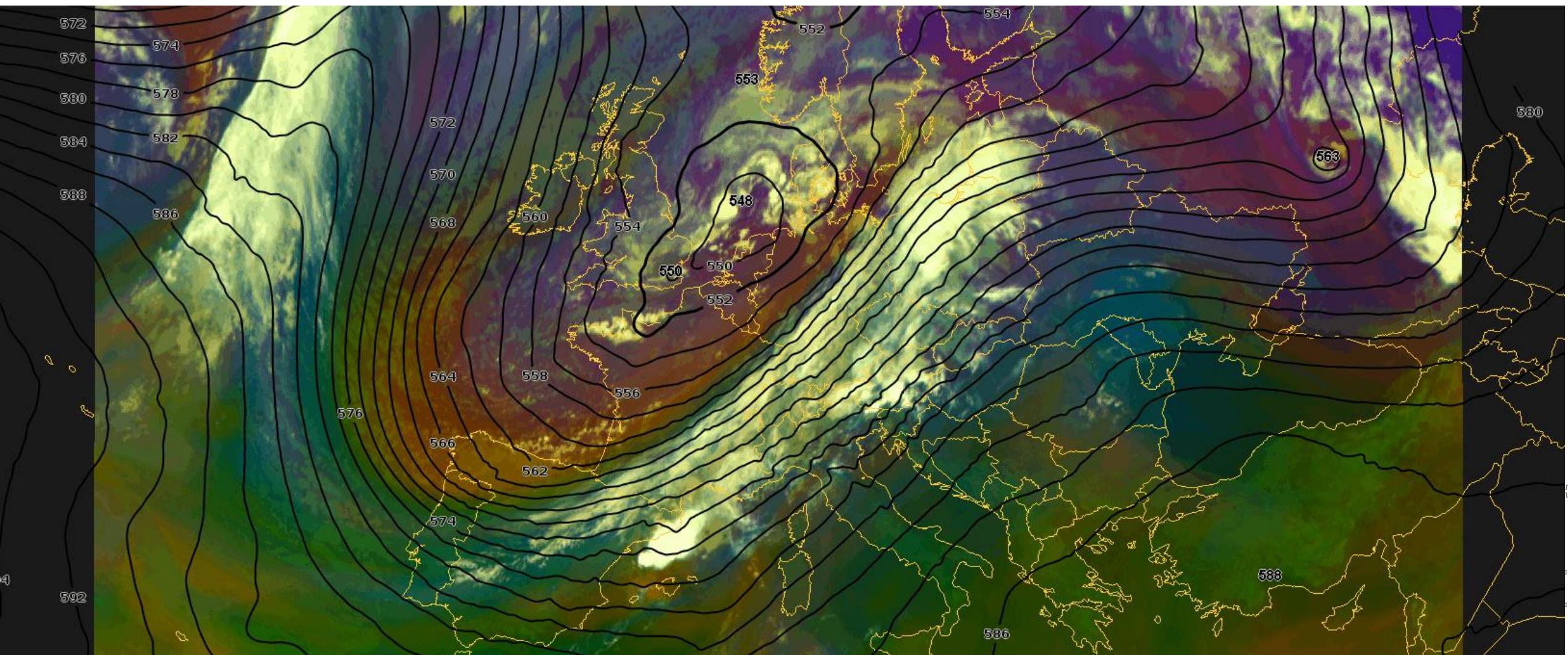
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02-03.10.2020



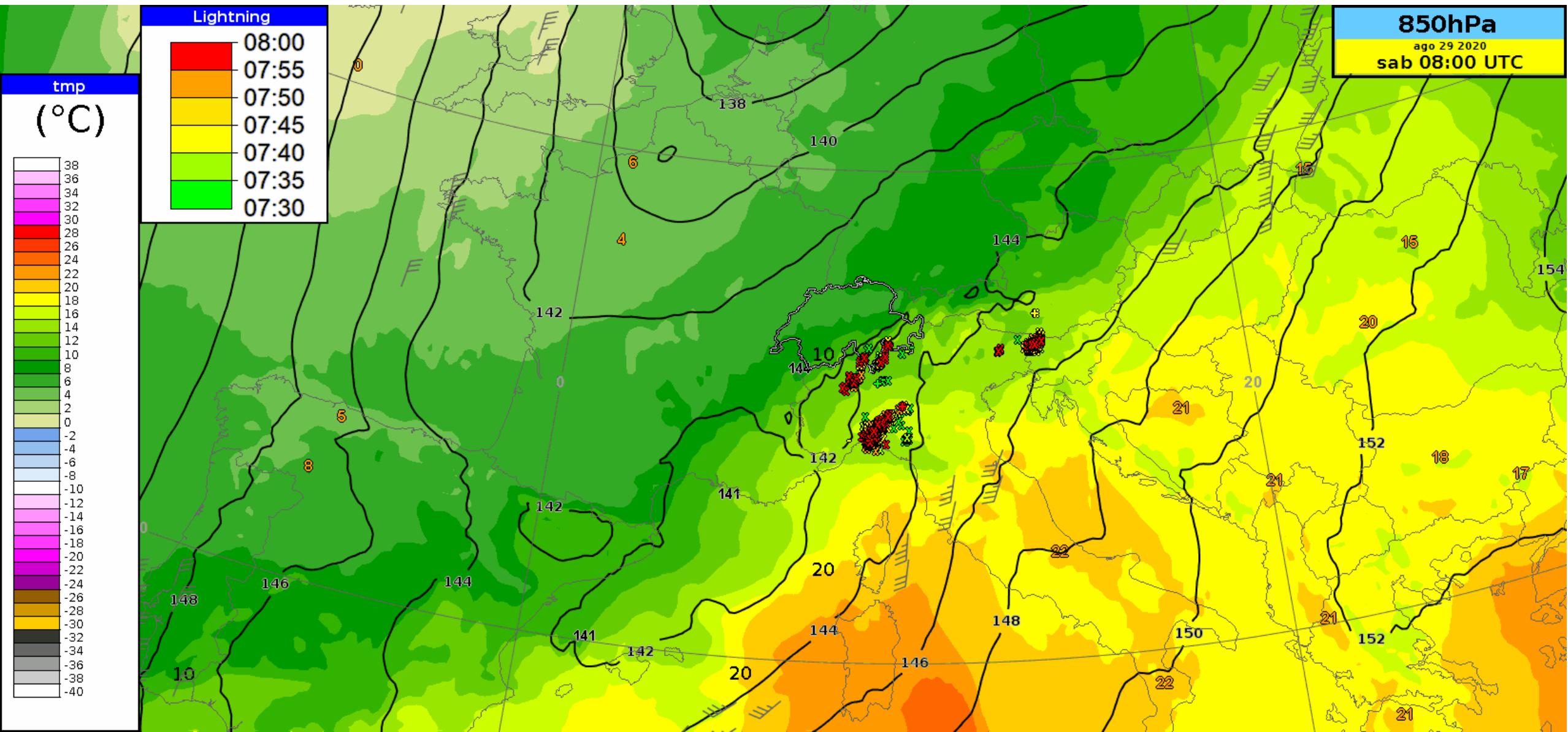


28-30.08.2020



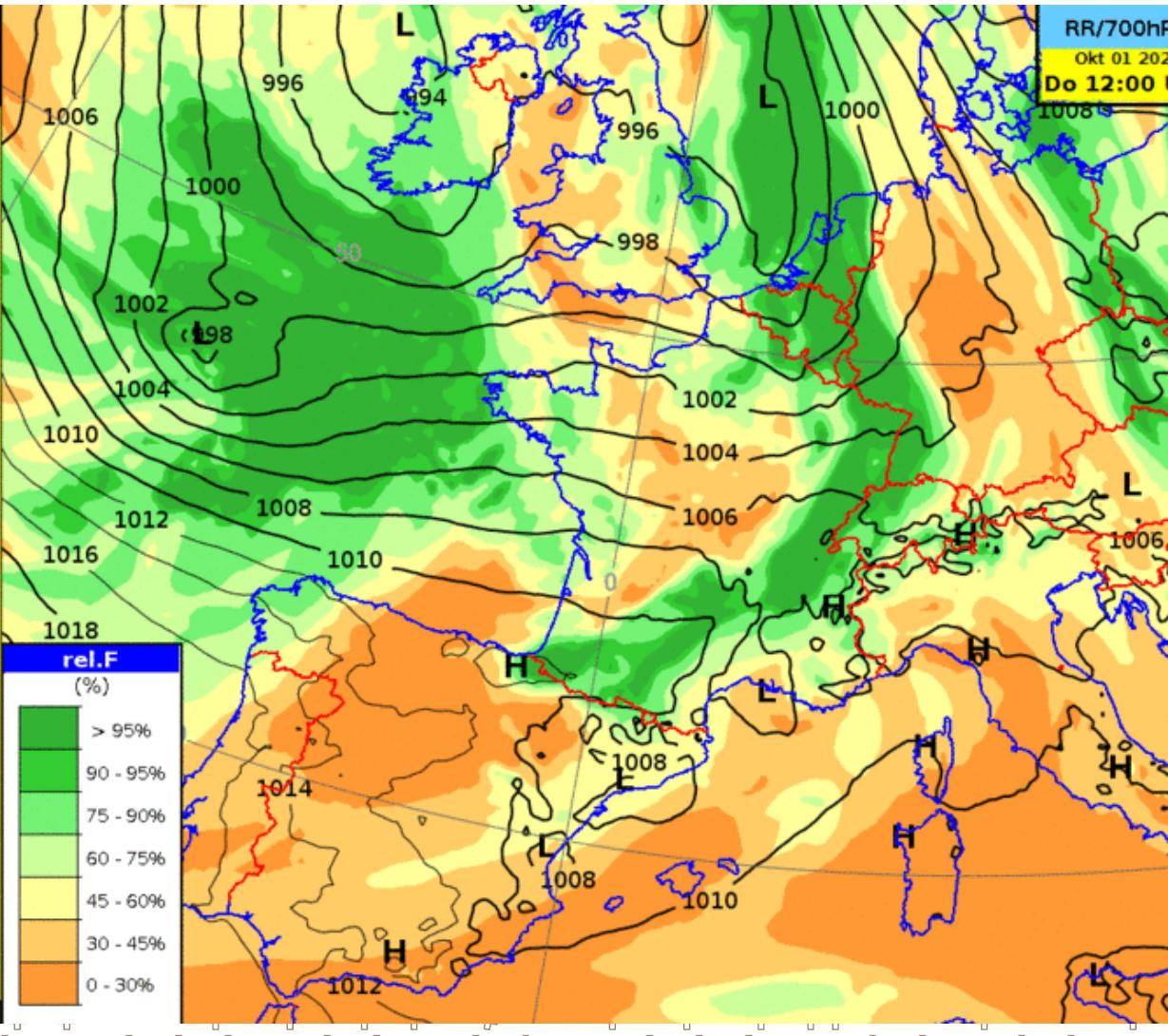
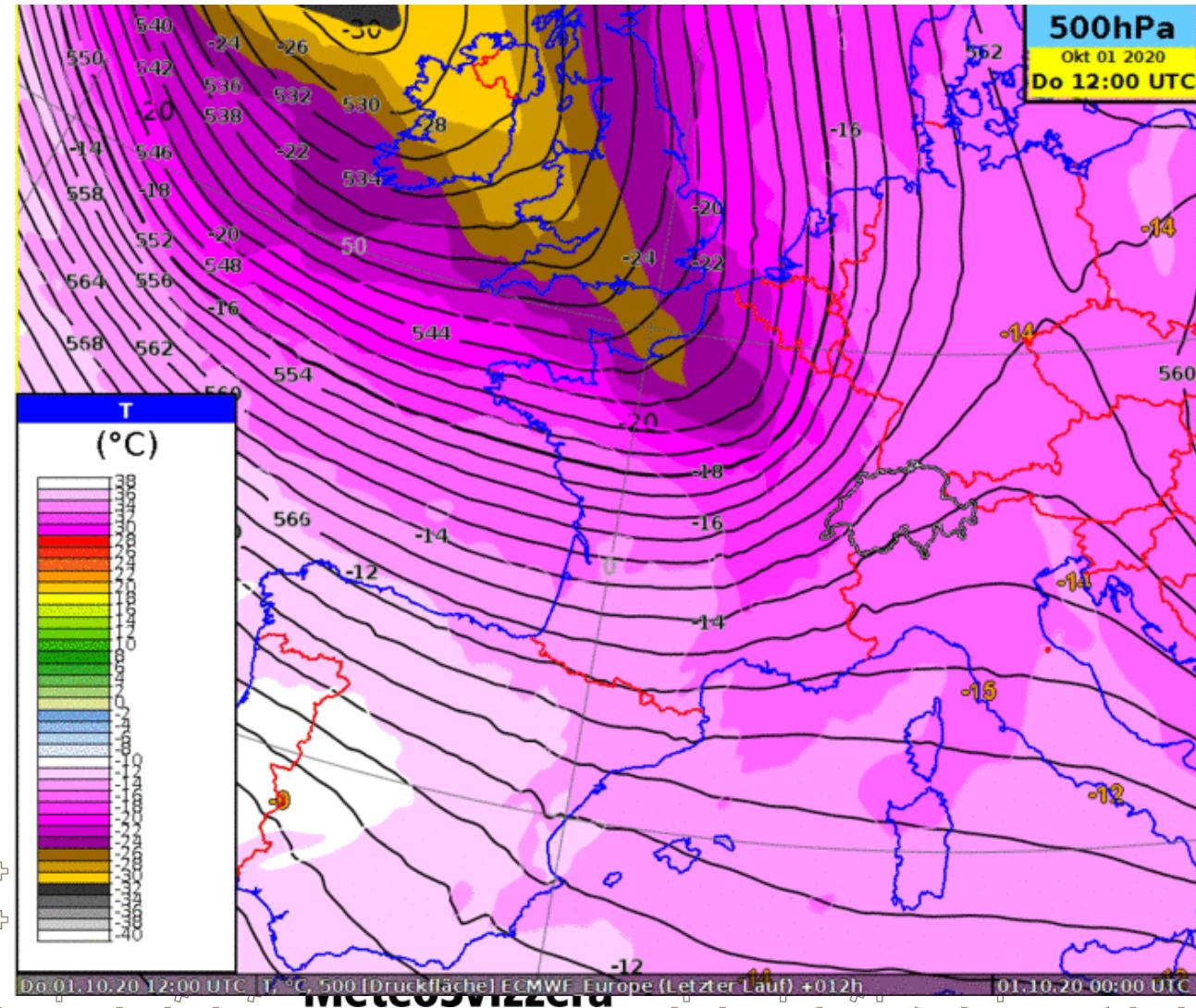


28-30.08.2020



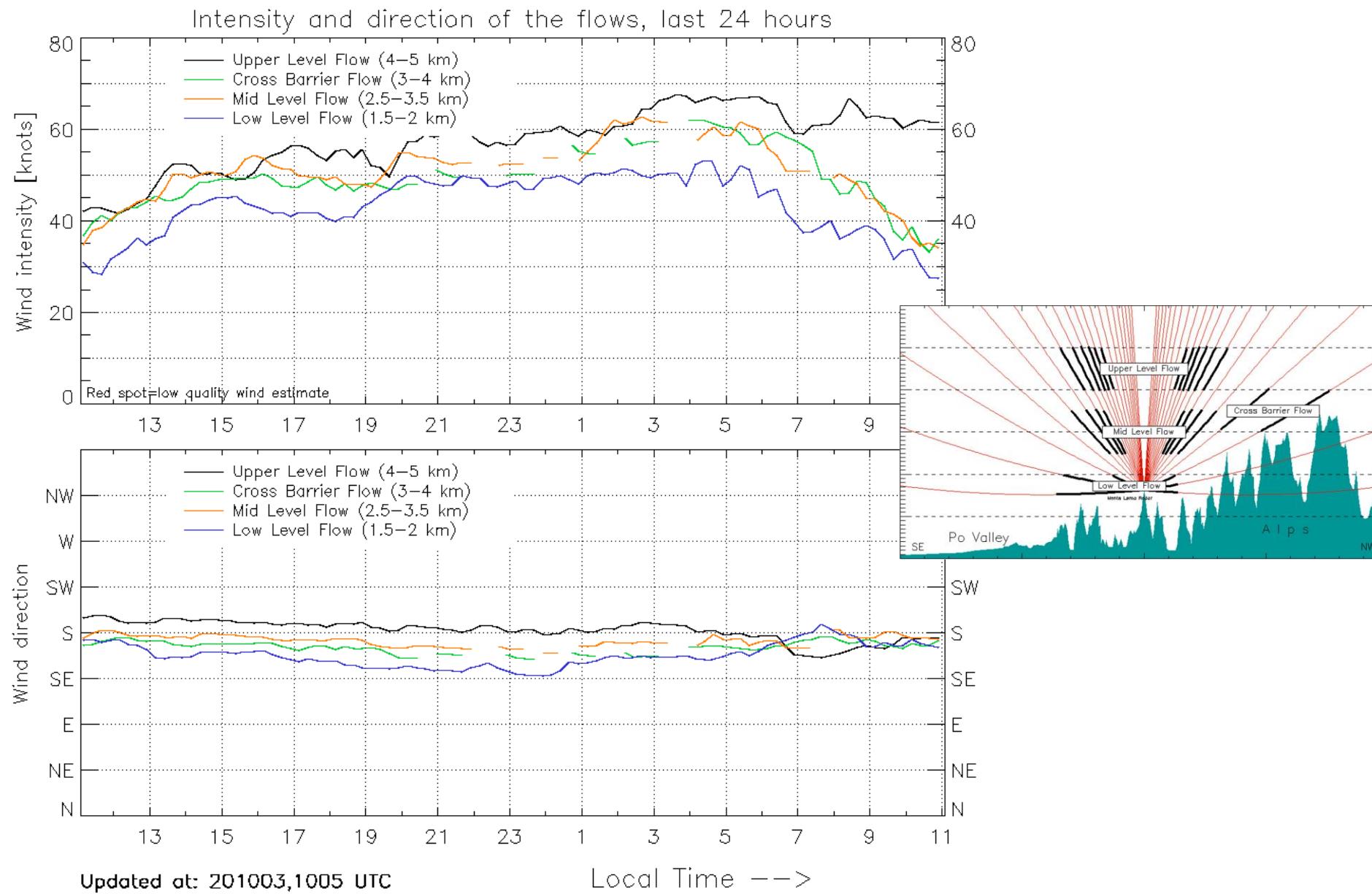


02-03.10.2020



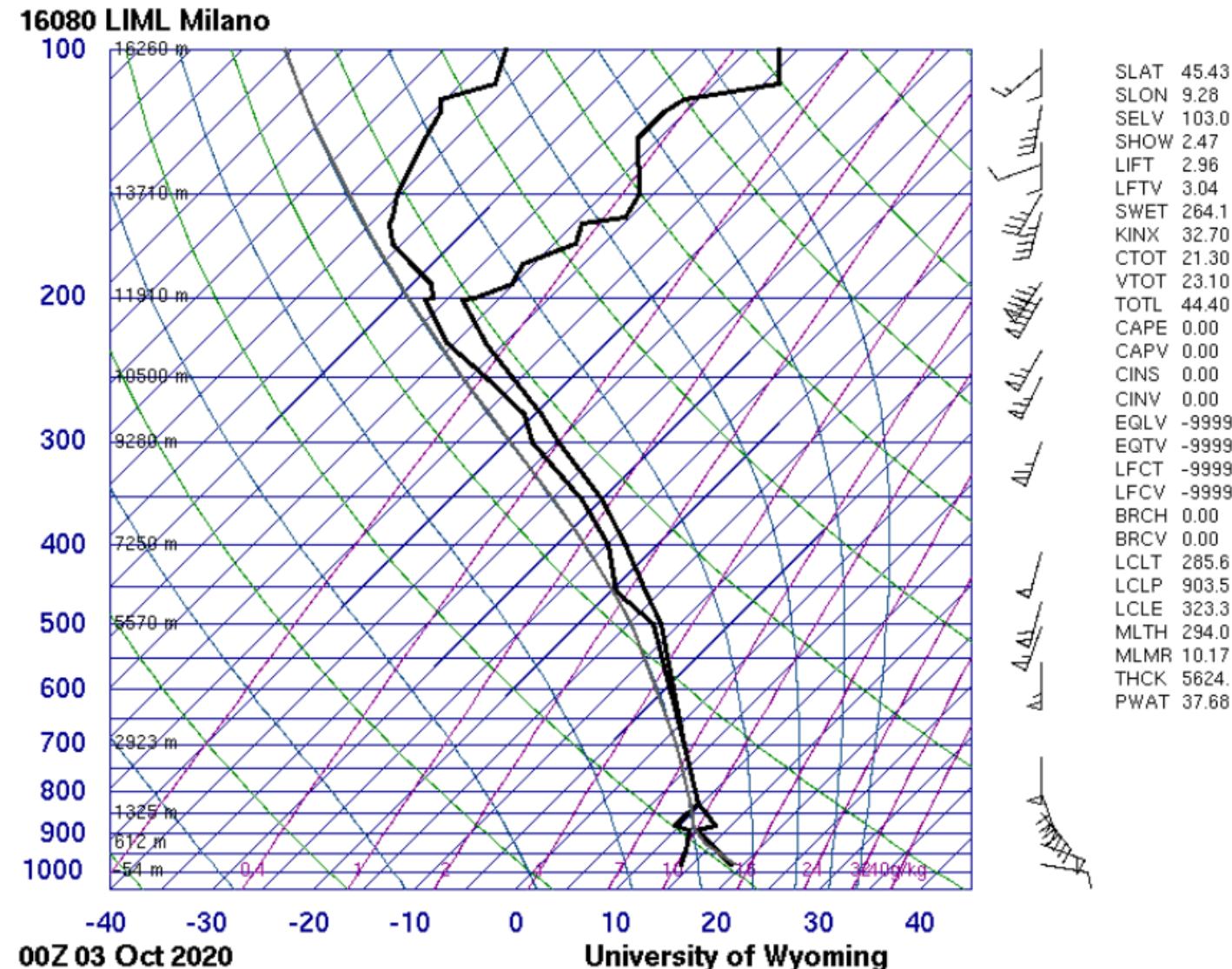
Heavy orographic rainfall event 2 – 3 October 2020

Mesoscale winds



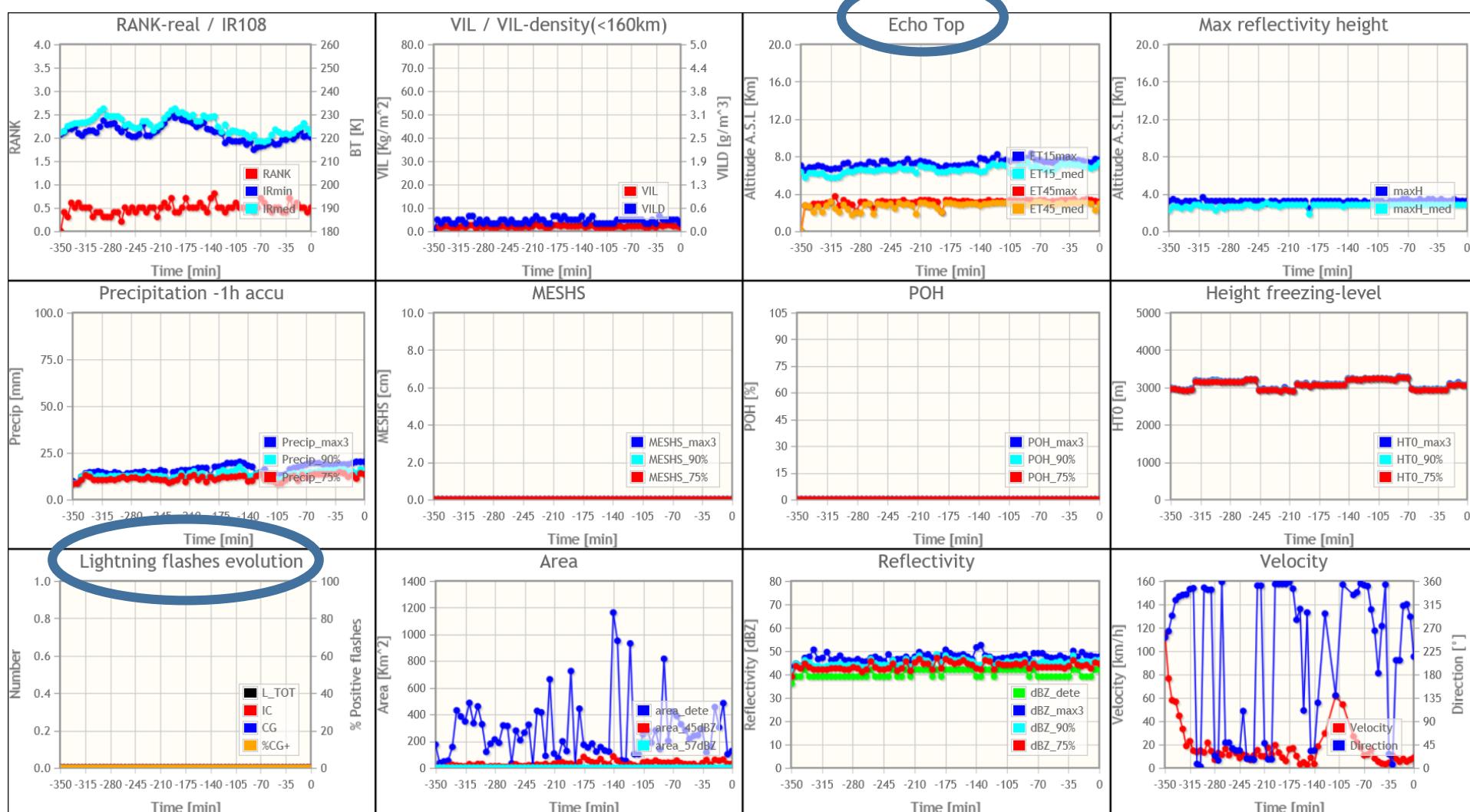
Heavy orographic rainfall event 2 – 3 October 2020

Milano sounding during the event



Heavy orographic rainfall event 2 – 3 October 2020

A very weak (convective) cell from TRT: Max Refl. > 36 dBZ (+6 dBZ)





Schweizerische Eidgenossenschaft
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