



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Dipartimento federale dell'interno DFI
Ufficio federale di meteorologia e climatologia MeteoSvizzera

Autunno 2010

Retrospettiva meteoclimatica

Matteo Buzzi (Fosco Spinedi, Tanja Weusthoff)



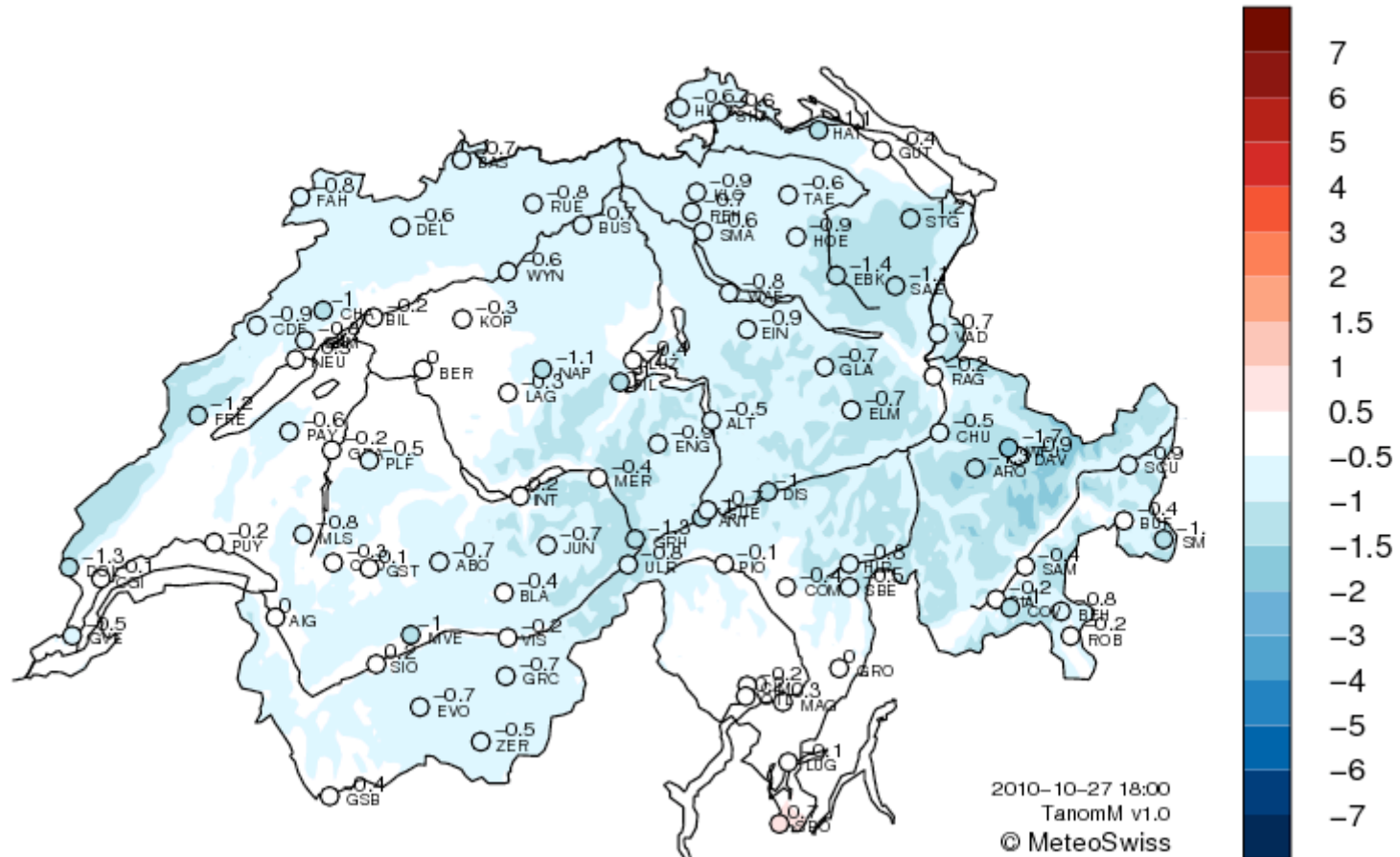
Panoramica

- Andamento rispetto ai valori normali 1961-1990
 - Temperatura
 - Precipitazioni
 - Soleggiamento
- Situazioni meteorologiche preponderanti
 - Situazioni a sud delle Alpi
 - Definizioni della classificazione
 - Distribuzione nell'autunno 2010
- Alcuni casi interessanti



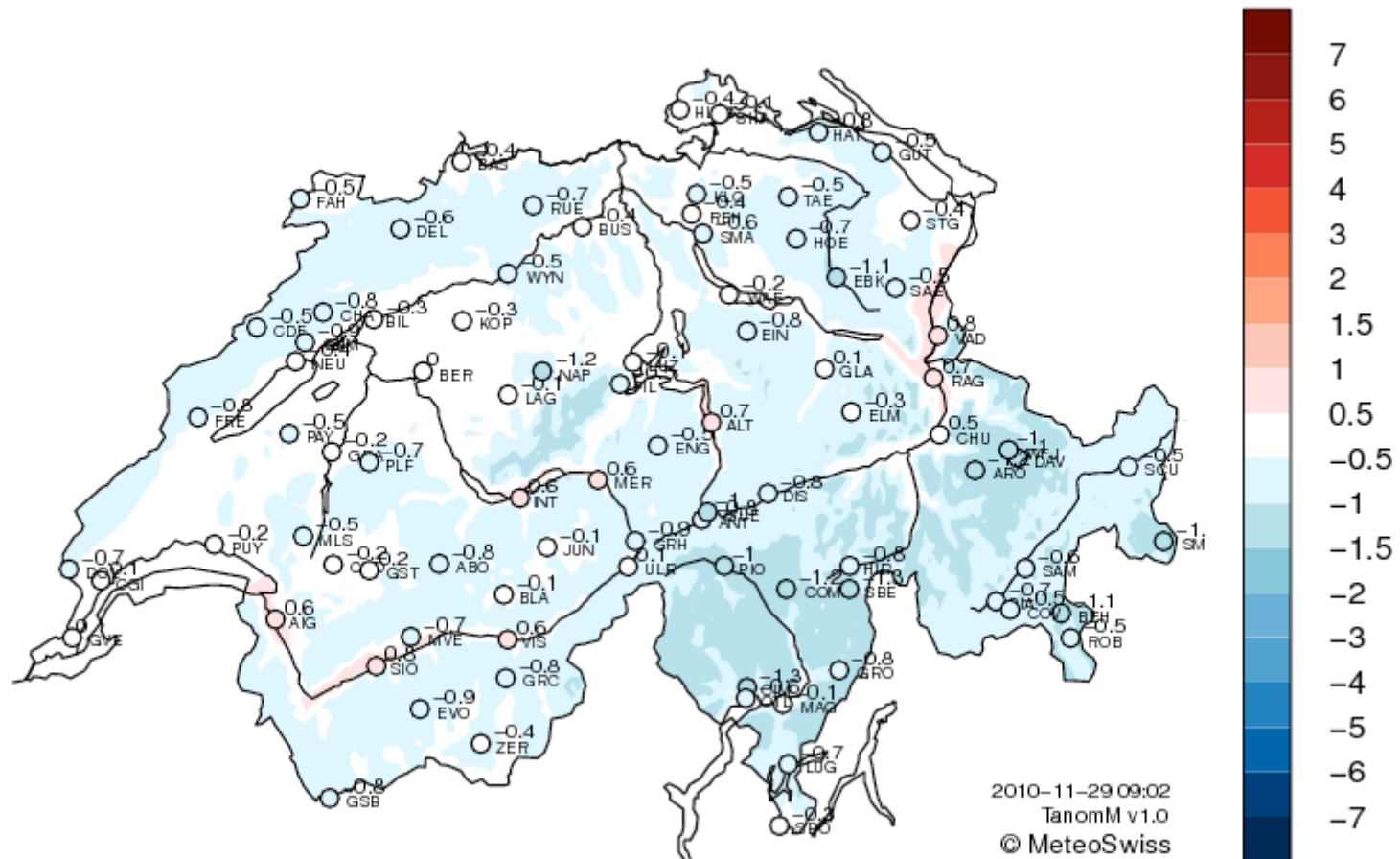
Temperatura

Monthly Temperature Anomaly (degC) Sep 2010



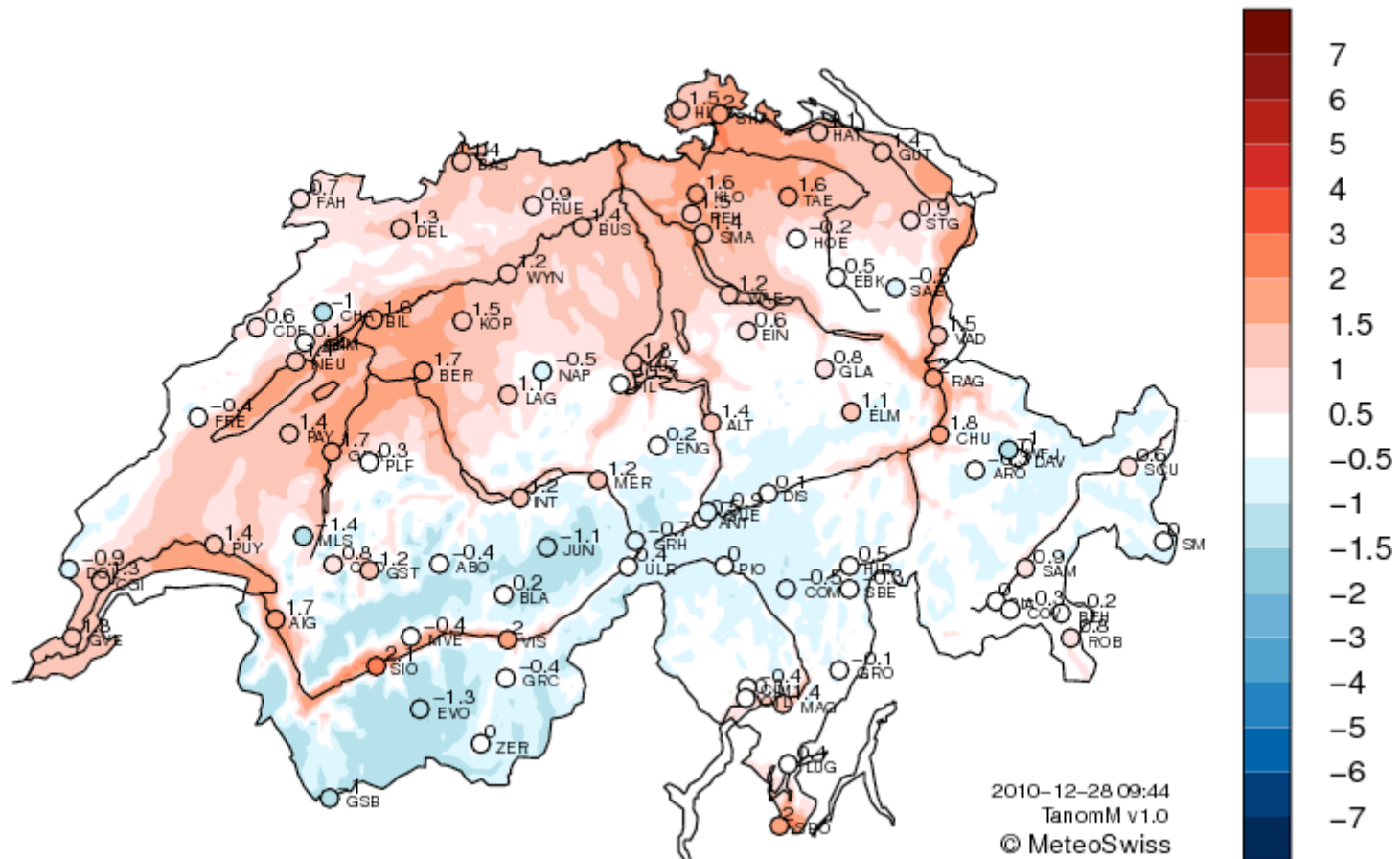


Monthly Temperature Anomaly (degC) Oct 2010





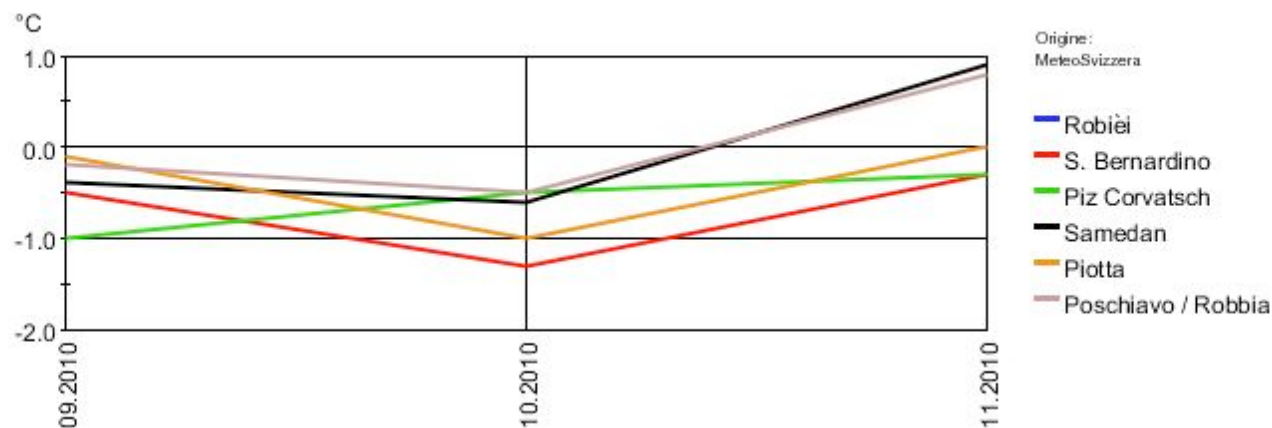
Monthly Temperature Anomaly (degC) Nov 2010



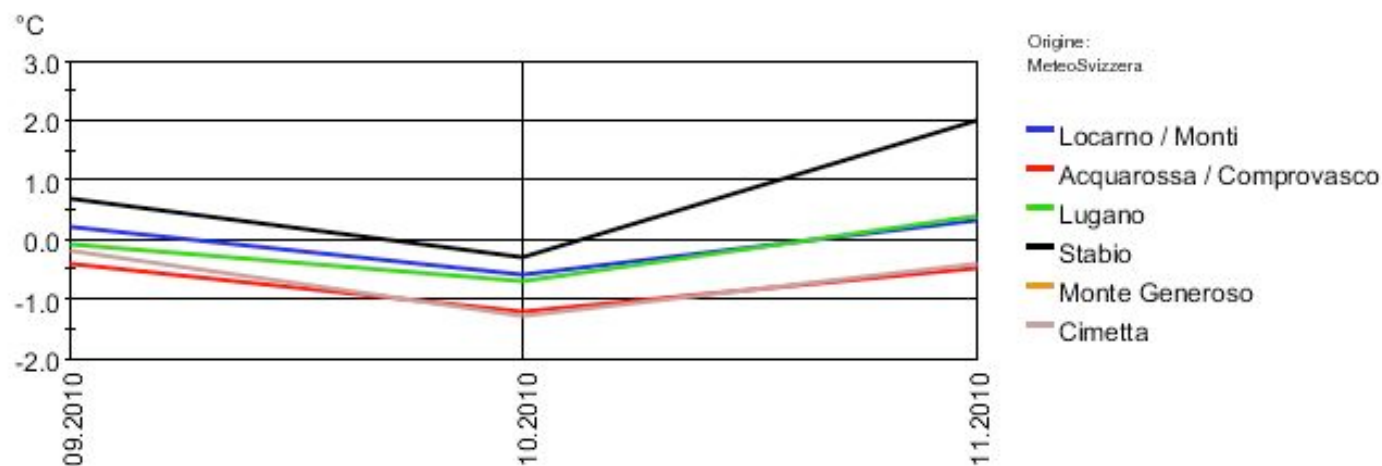


Temperatura

Temperatura dell'aria a 2 m; deviazione dalla norma della media mensile [°C] Settembre 2010 - Novembre 2010



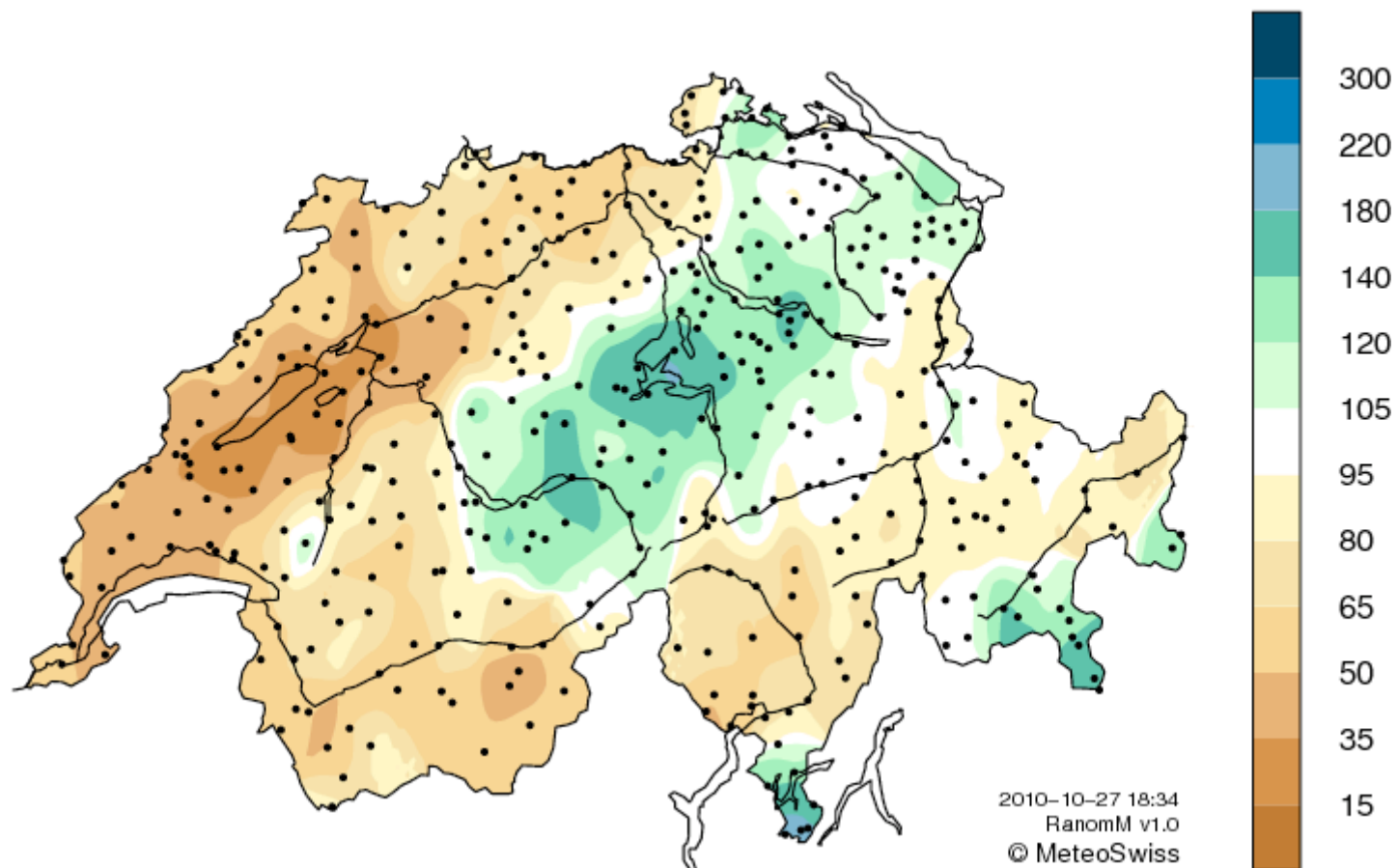
Temperatura dell'aria a 2 m; deviazione dalla norma della media mensile [°C] Settembre 2010 - Novembre 2010





Precipitazioni

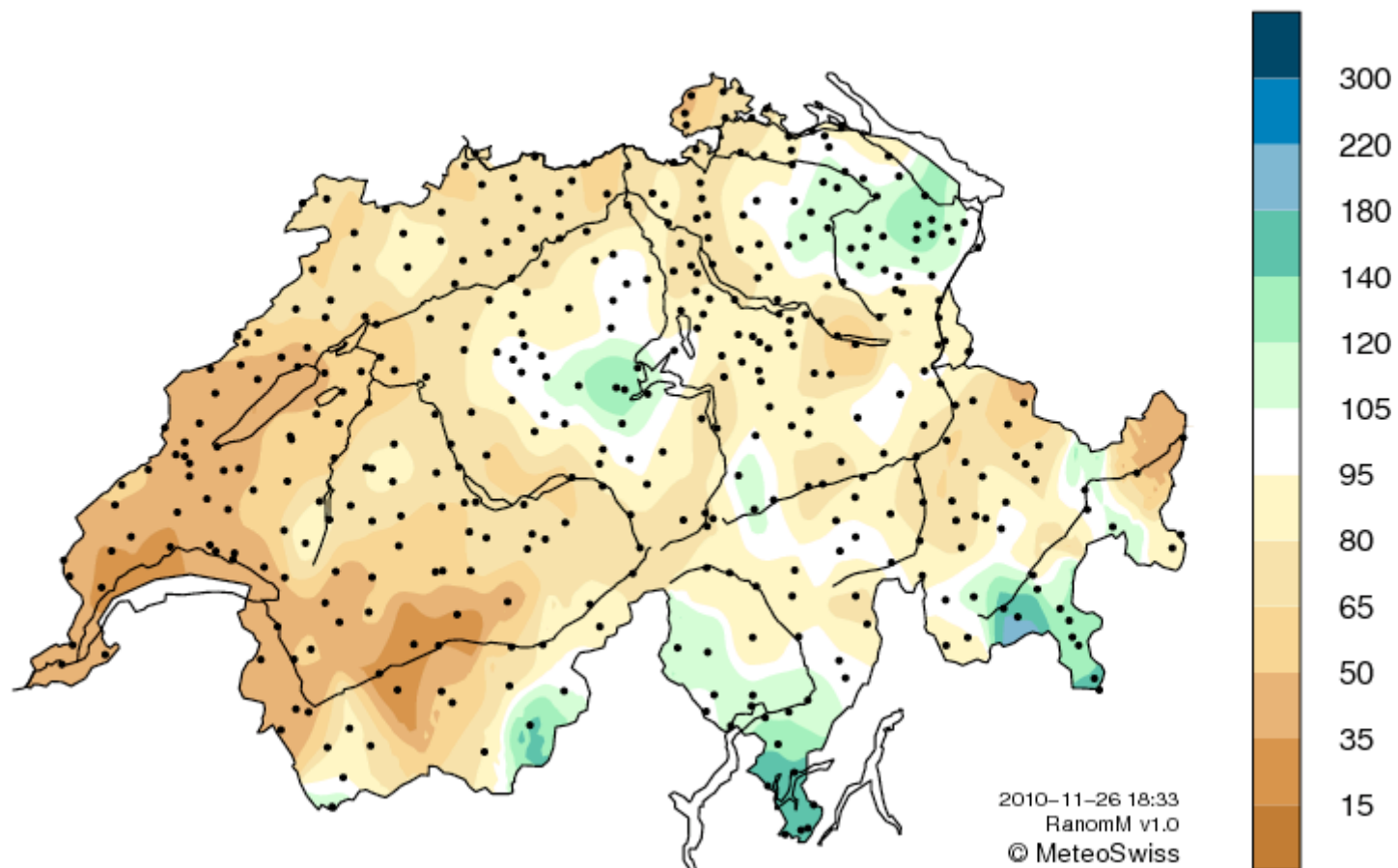
Monthly Precipitation Anomaly (%) Sep 2010





Precipitazioni

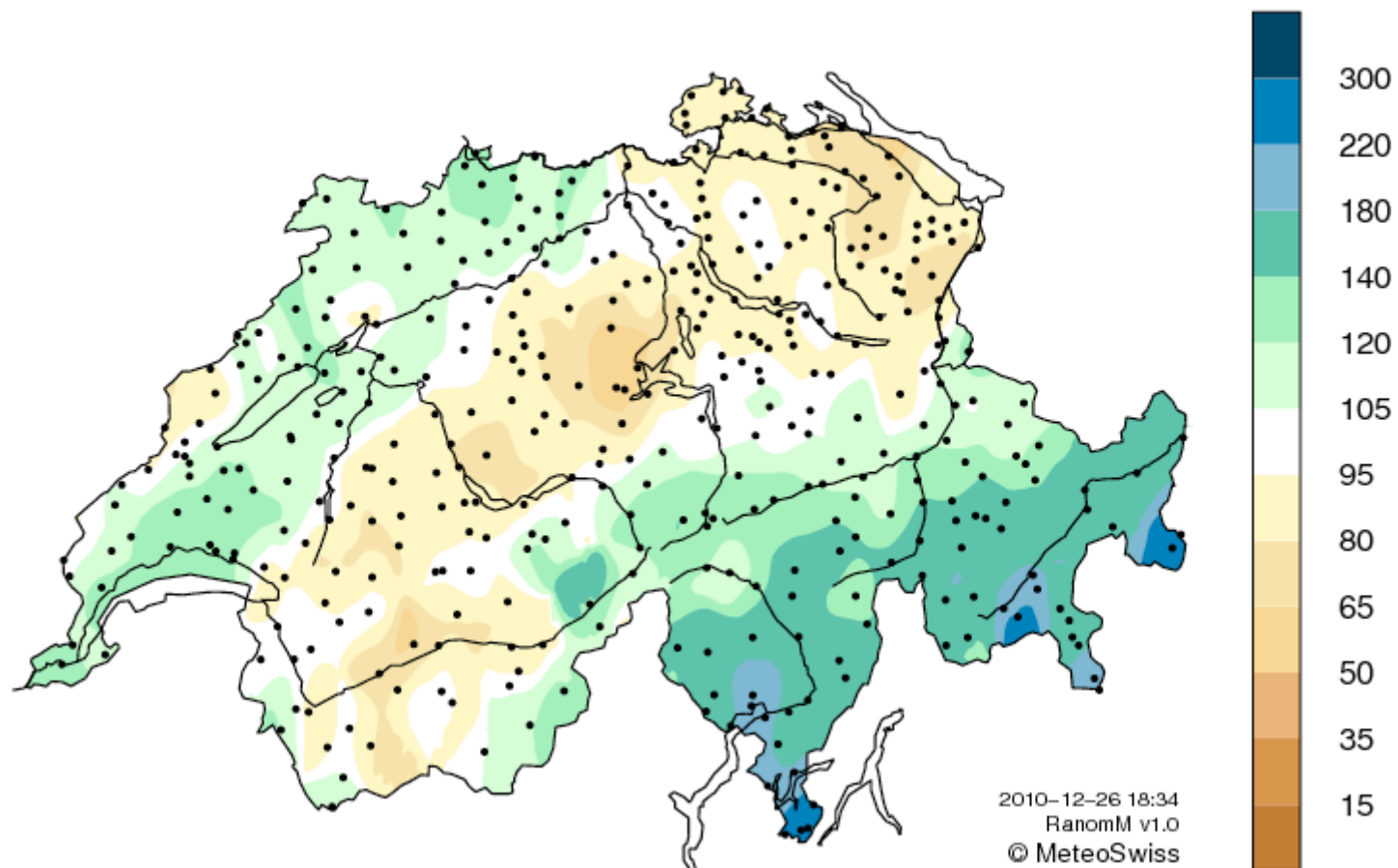
Monthly Precipitation Anomaly (%) Oct 2010





Precipitazioni

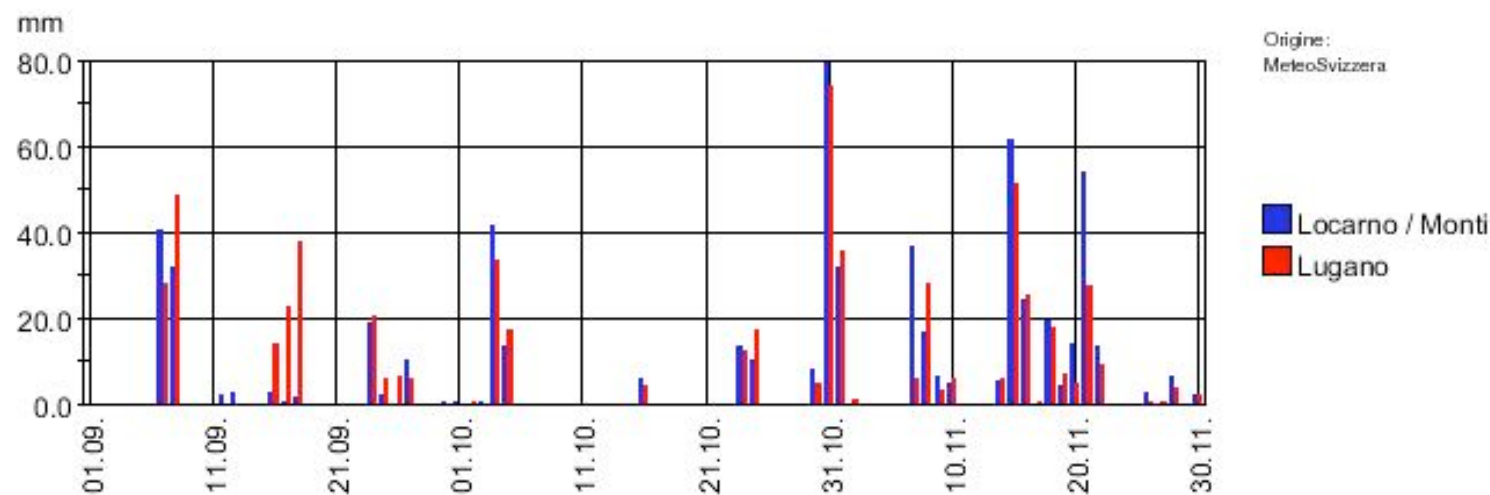
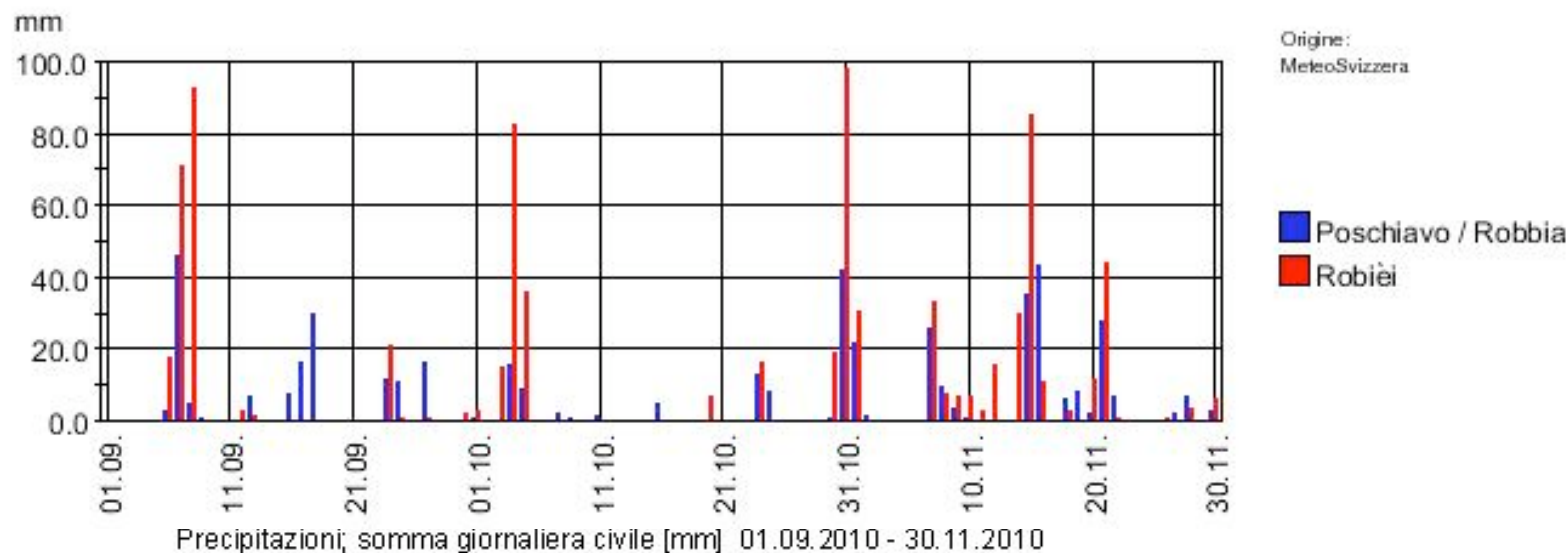
Monthly Precipitation Anomaly (%) Nov 2010





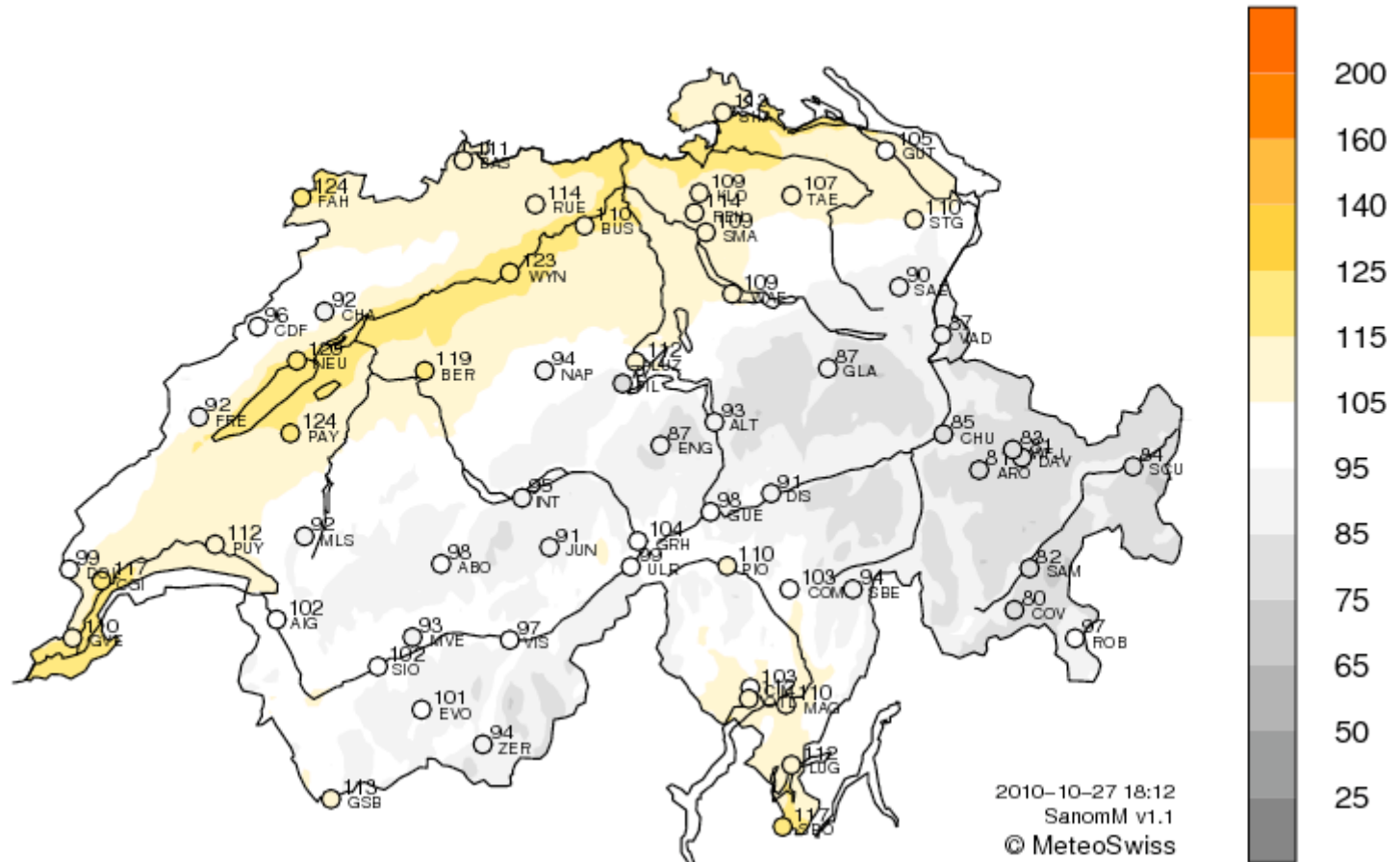
Precipitazioni giornaliere

Precipitazioni; somma giornaliera civile [mm] 01.09.2010 - 30.11.2010





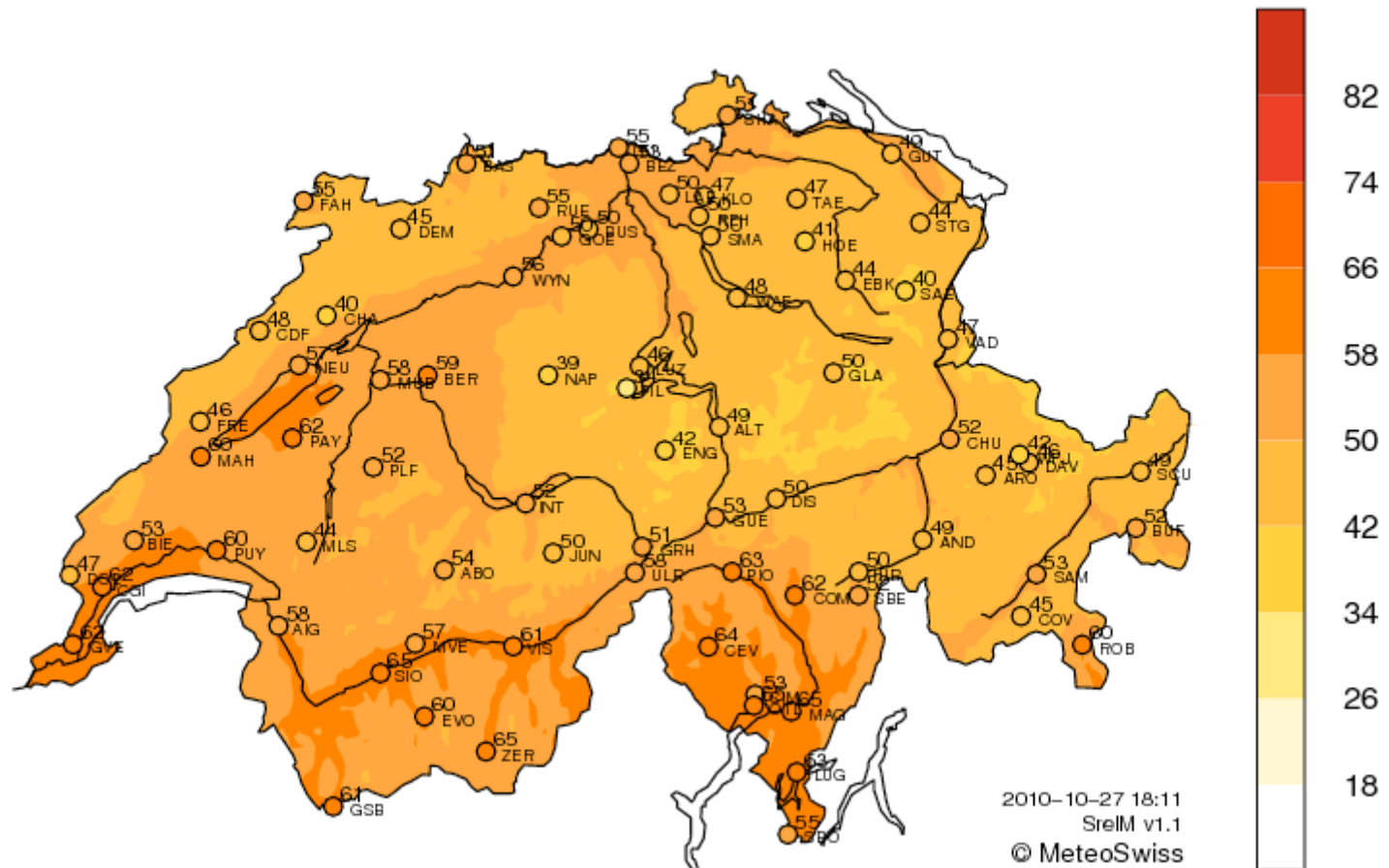
Monthly Sunshine Duration Anomaly (%) Sep 2010





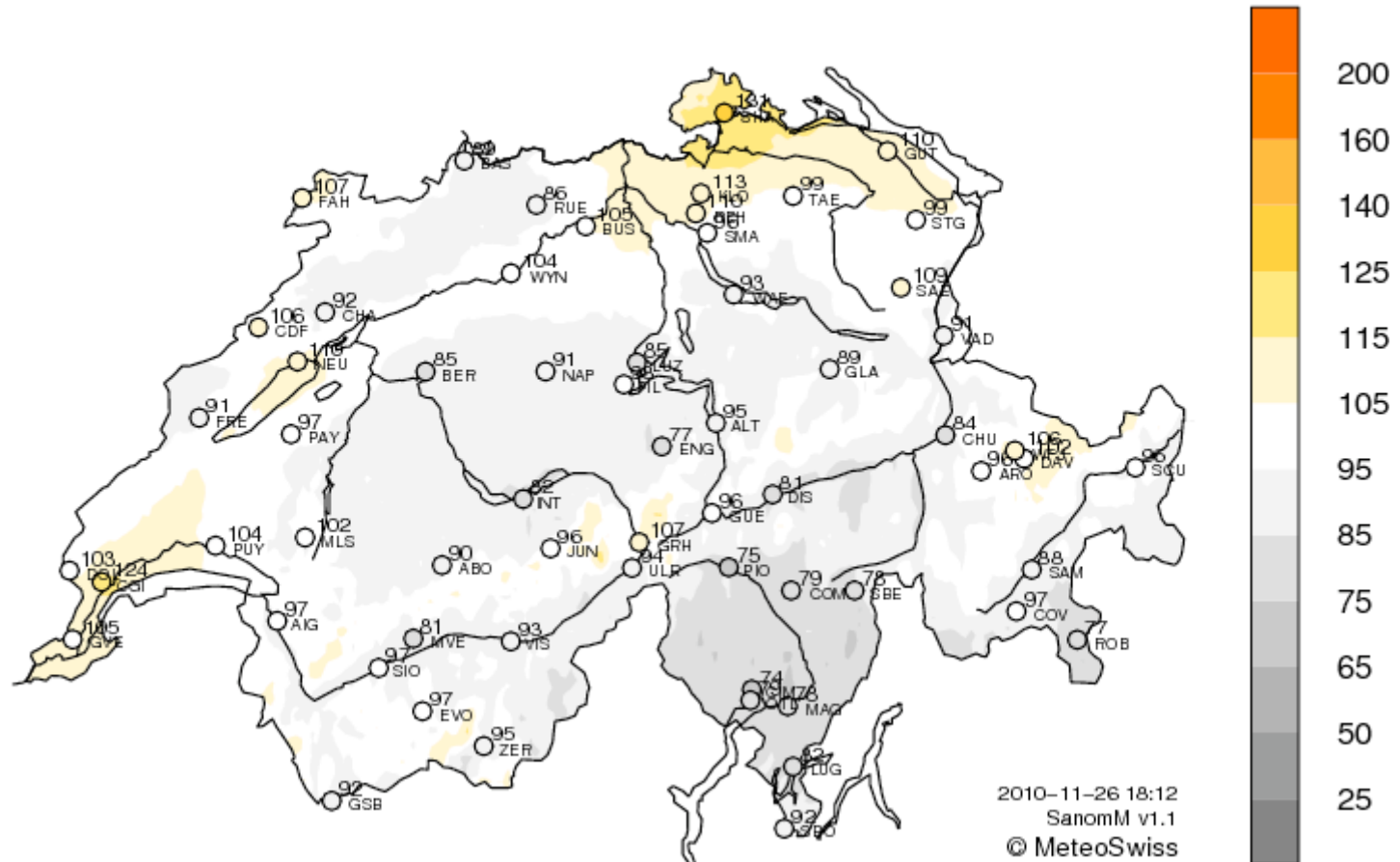
Soleggiamento

Monthly Relative Sunshine Duration (%) Sep 2010





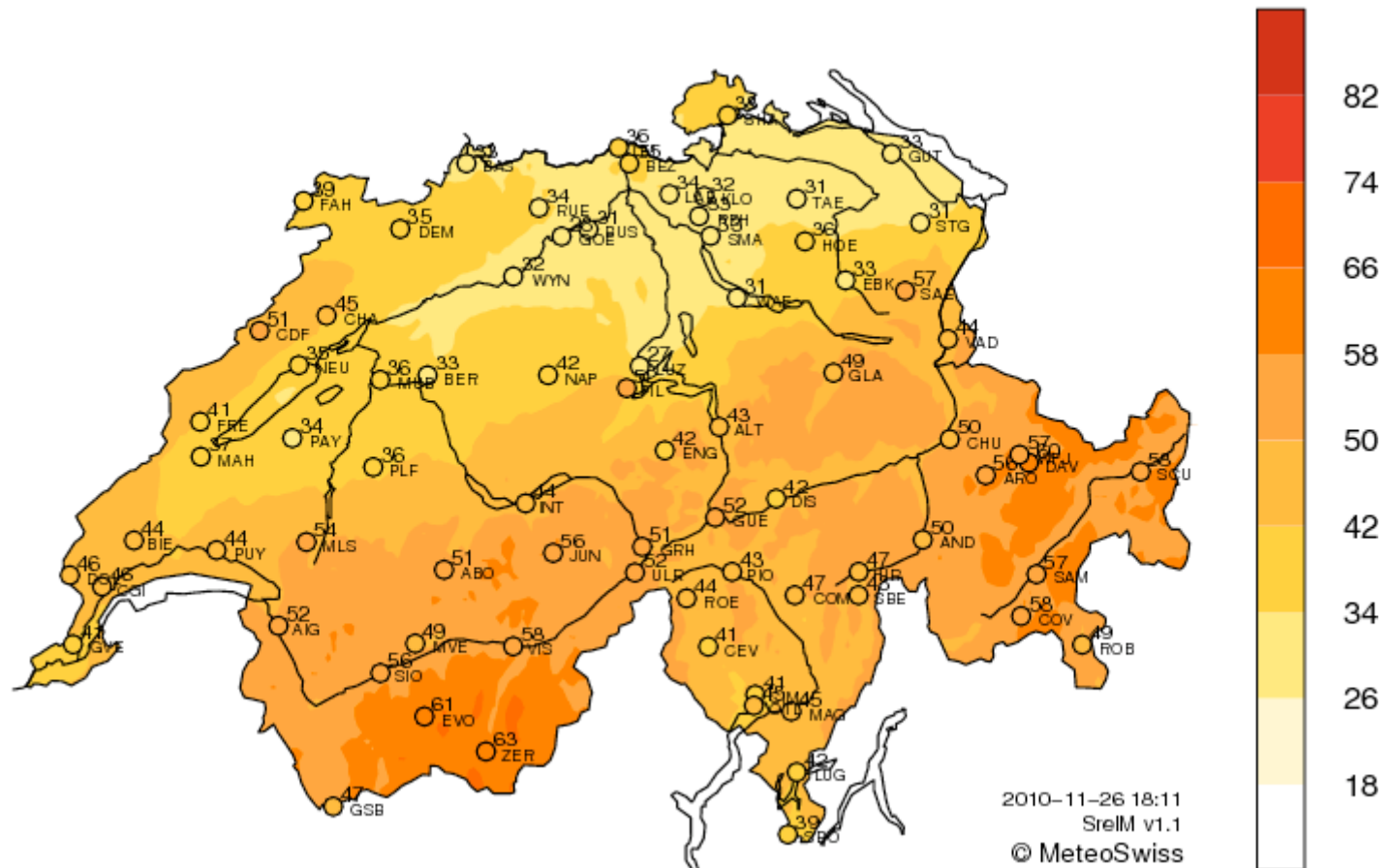
Monthly Sunshine Duration Anomaly (%) Oct 2010





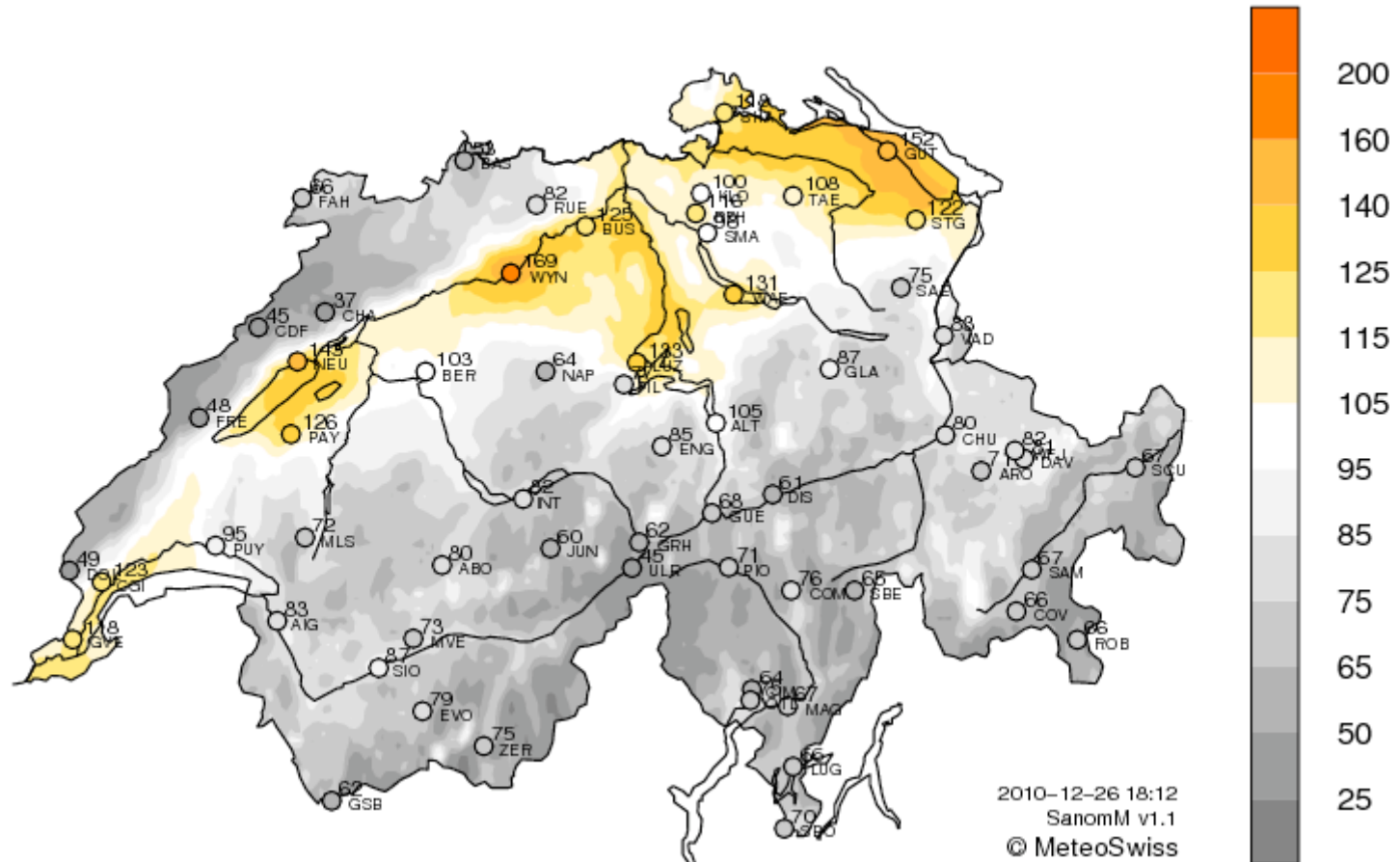
Soleggiamento

Monthly Relative Sunshine Duration (%) Oct 2010



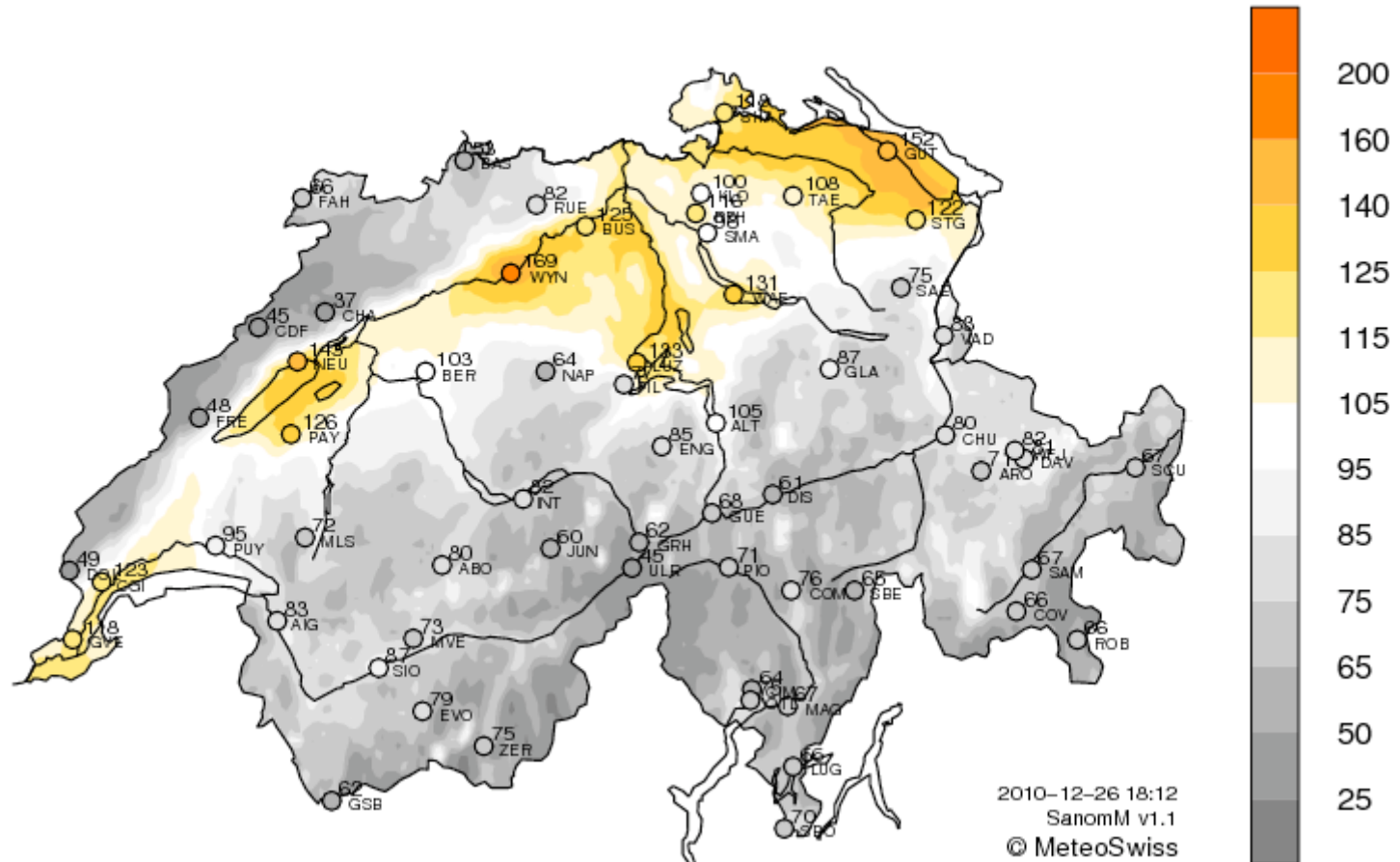


Monthly Sunshine Duration Anomaly (%) Nov 2010



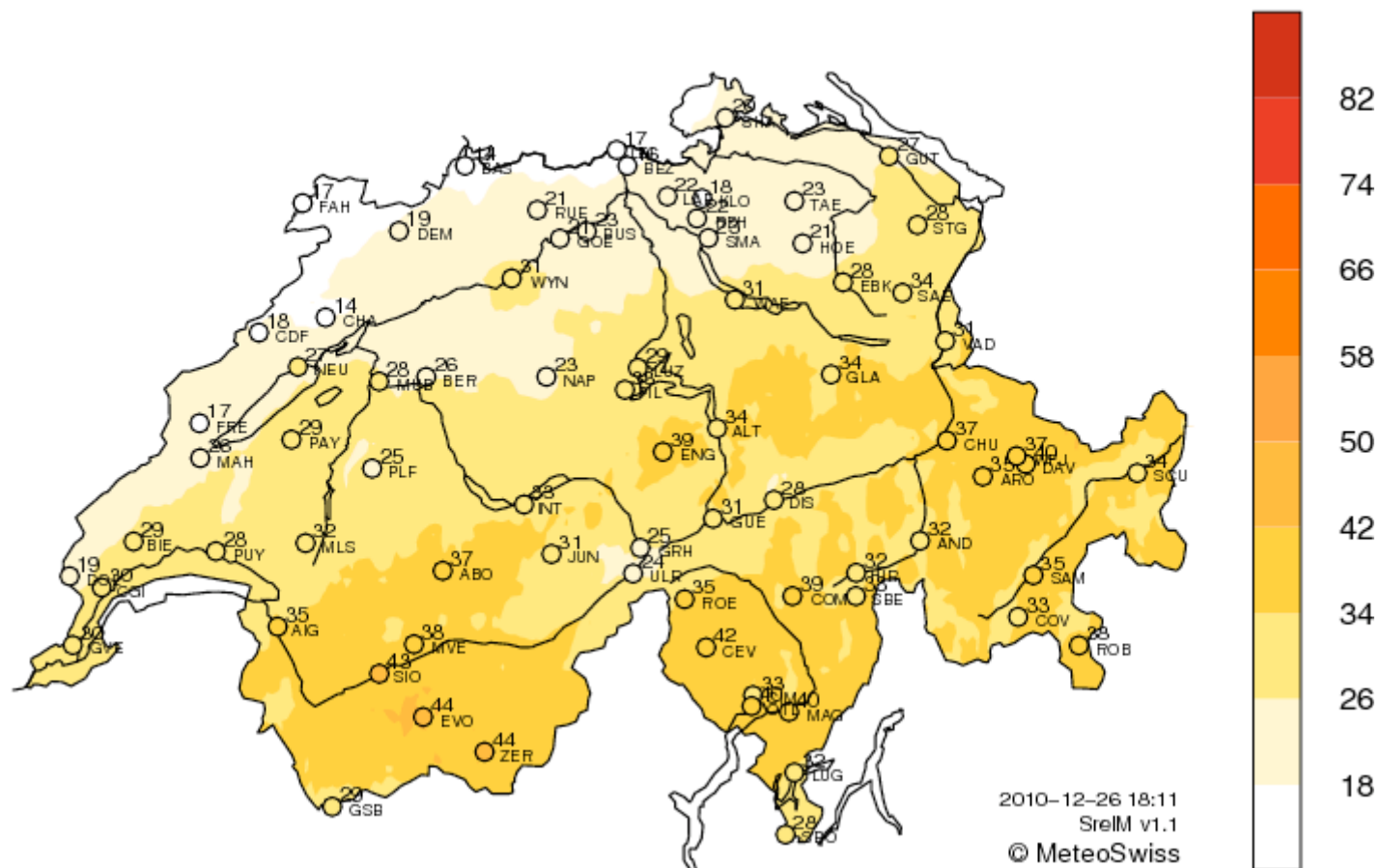


Monthly Sunshine Duration Anomaly (%) Nov 2010



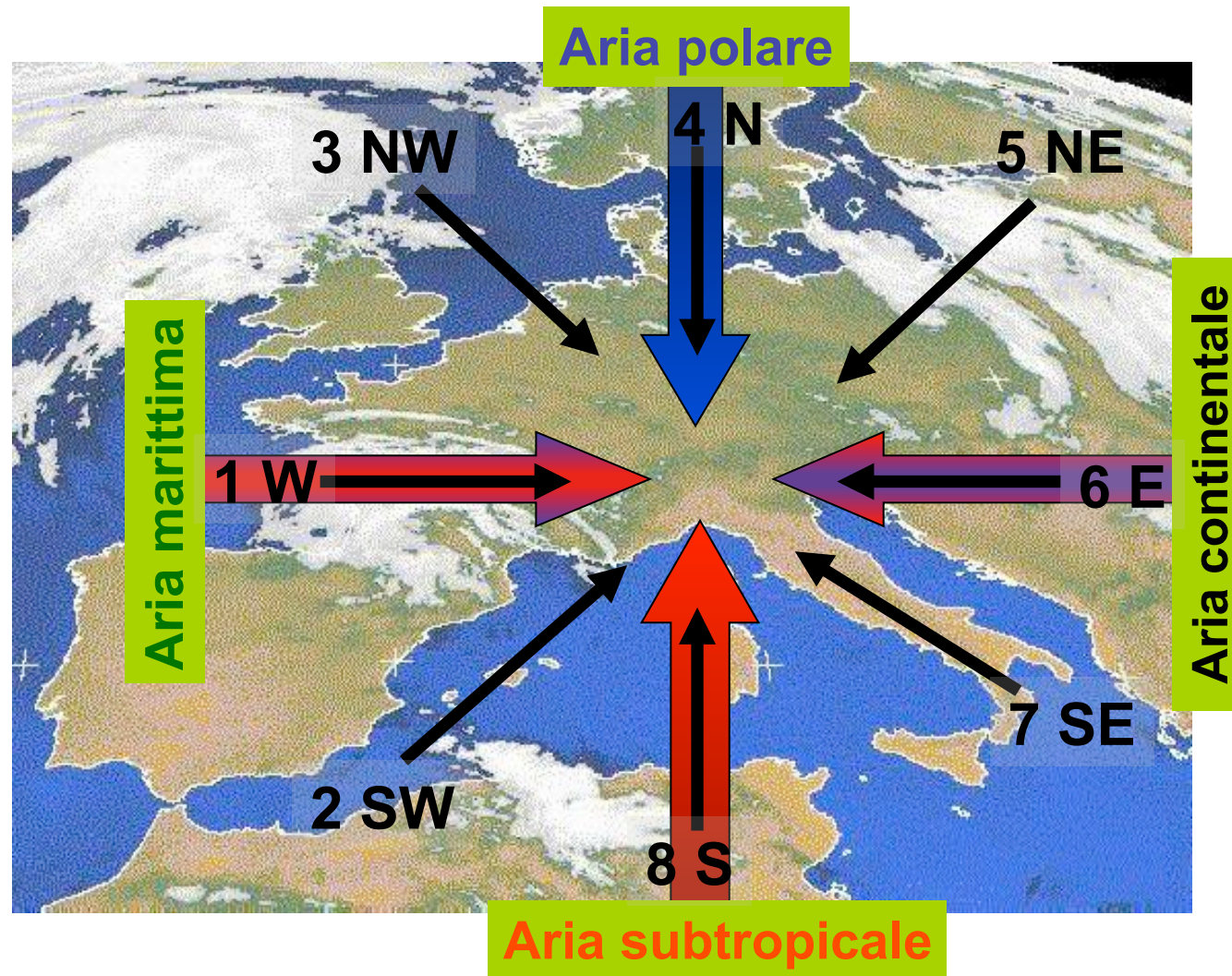


Monthly Relative Sunshine Duration (%) Nov 2010



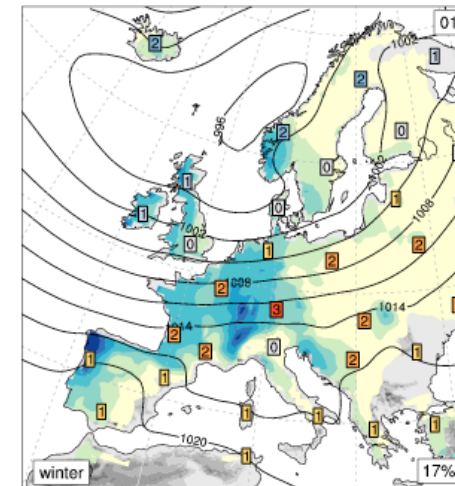
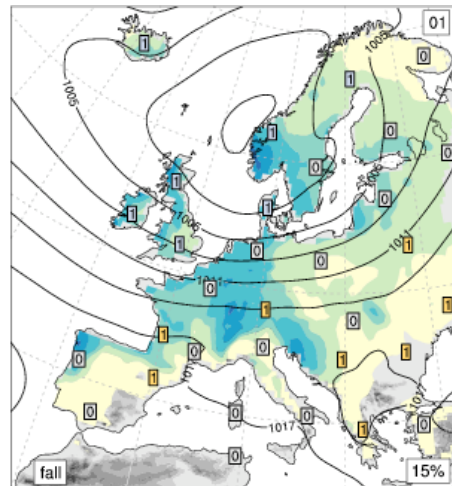
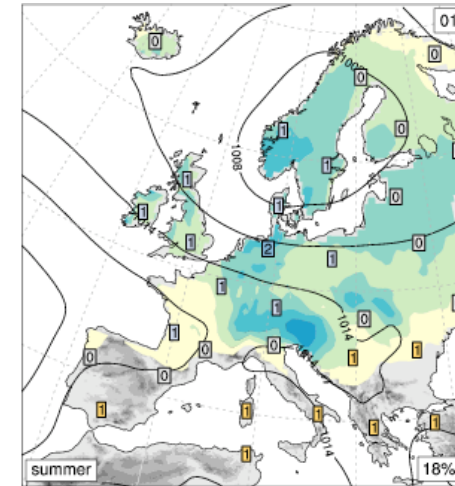
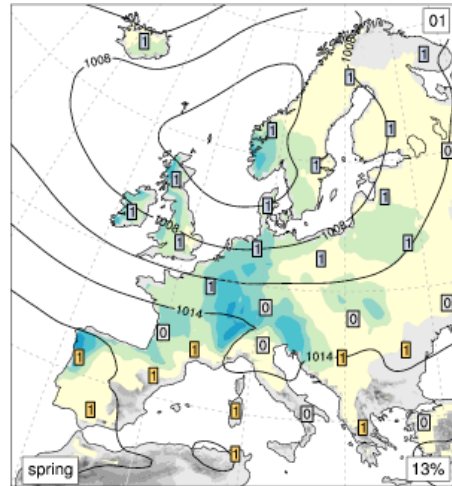


Masse d'aria diverse, tempo diverso, situazioni diverse

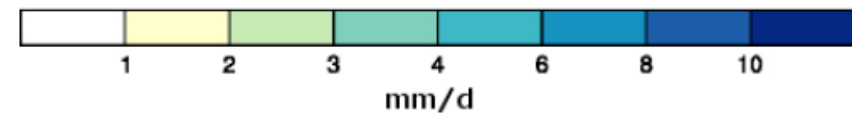




1. W – ovest: Europa

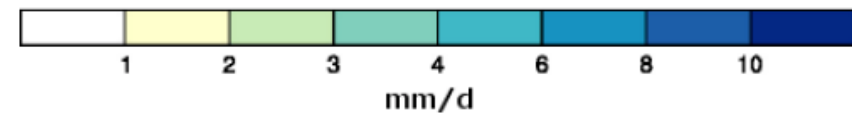
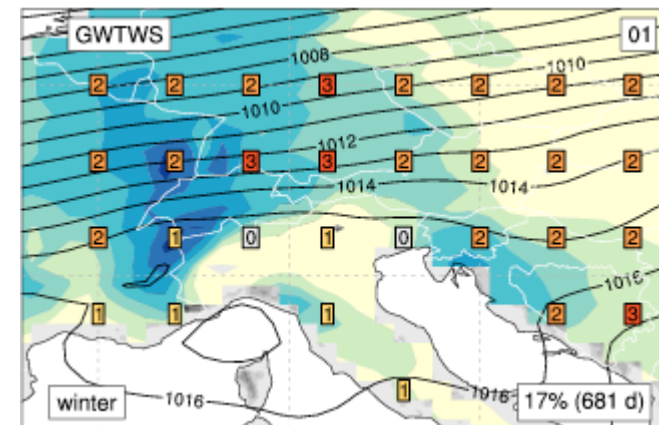
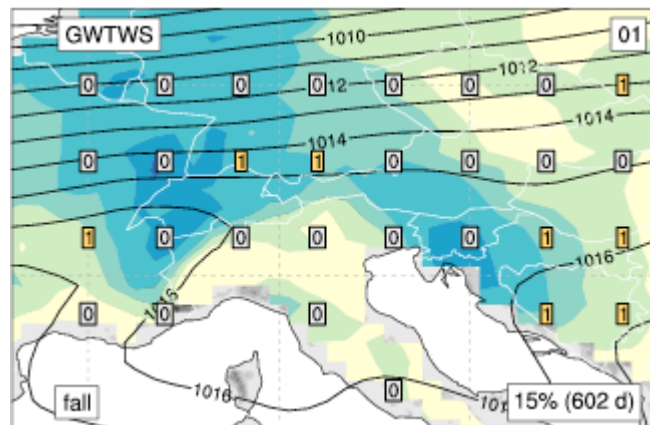
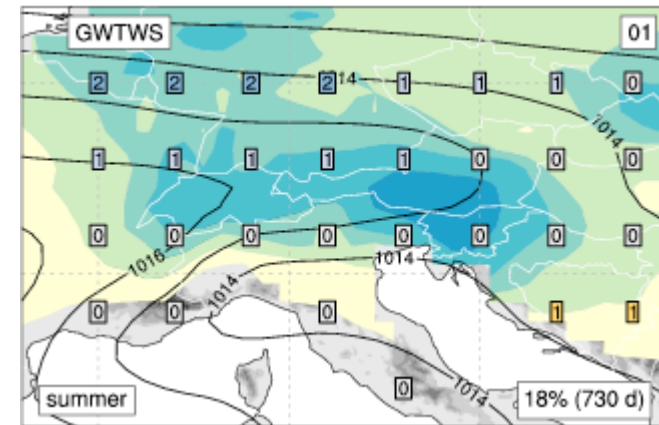
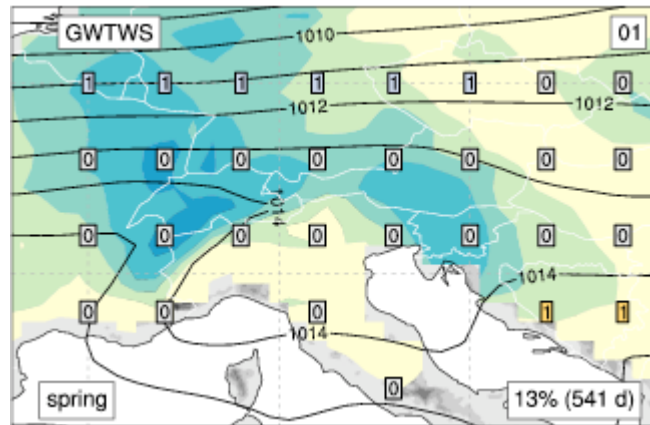


P a livello mare e precipitazioni



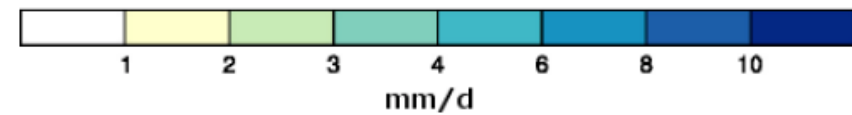
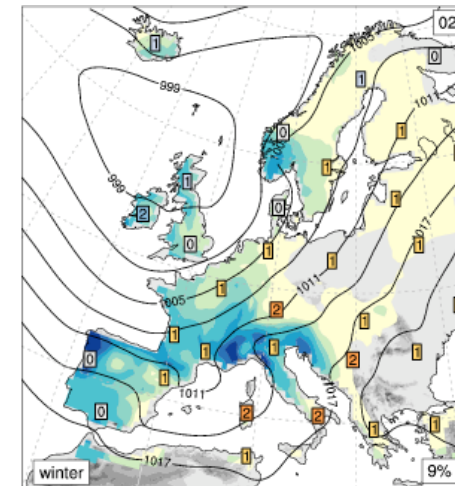
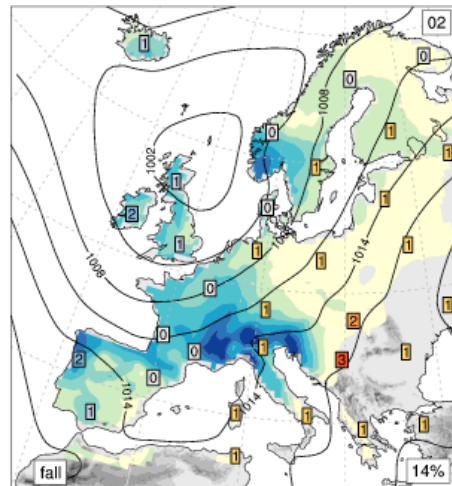
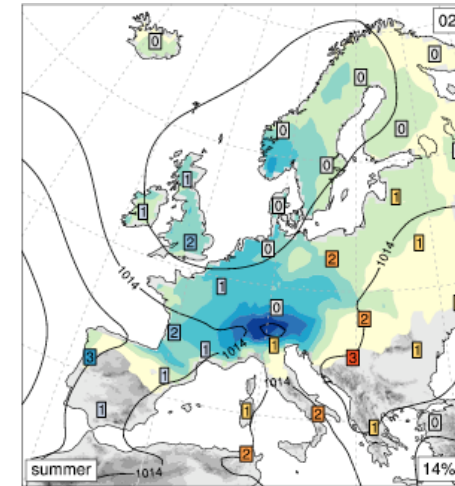
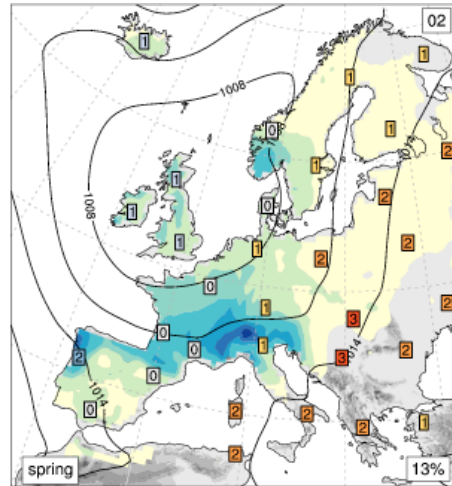


1. W – ovest: Alpi



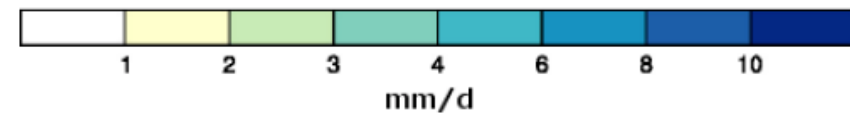
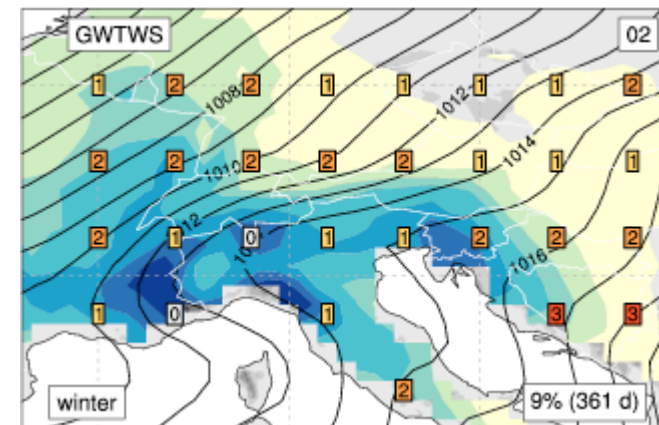
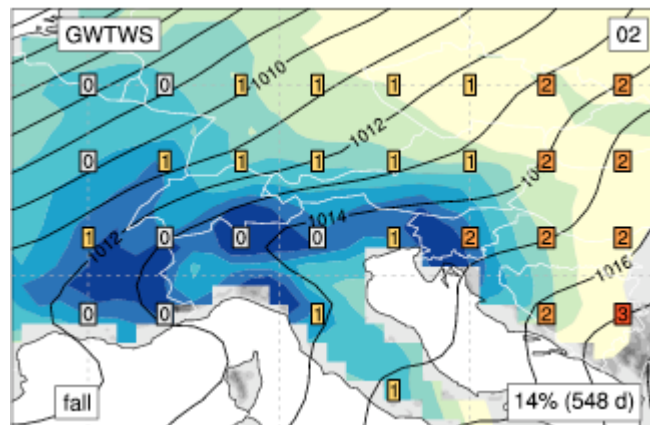
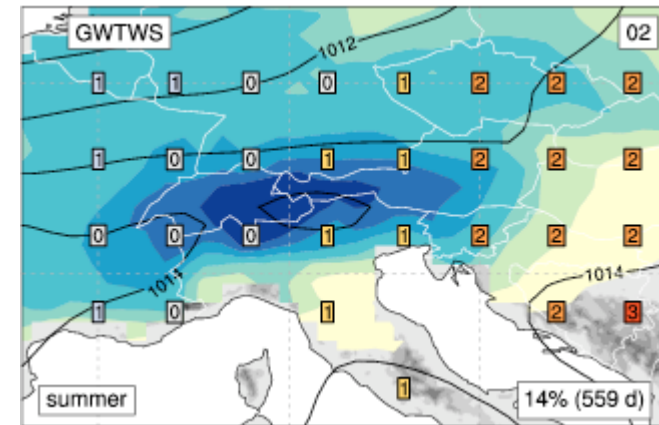
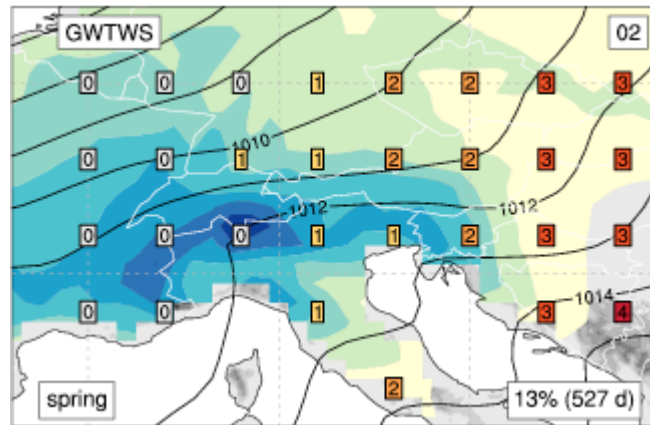


2. SW – sudovest: Europa



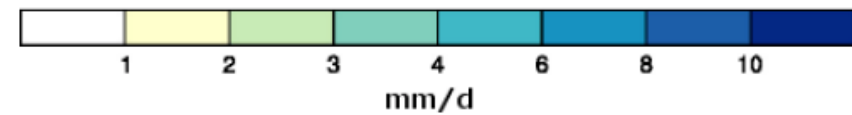
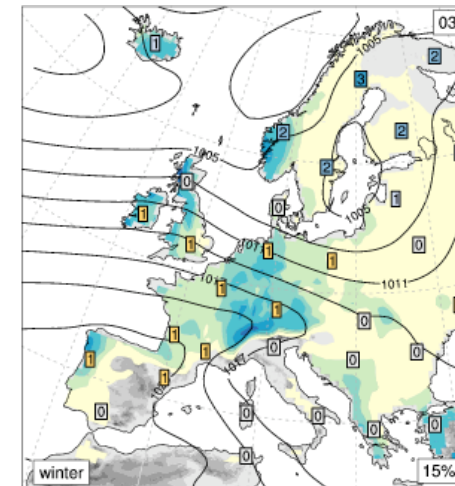
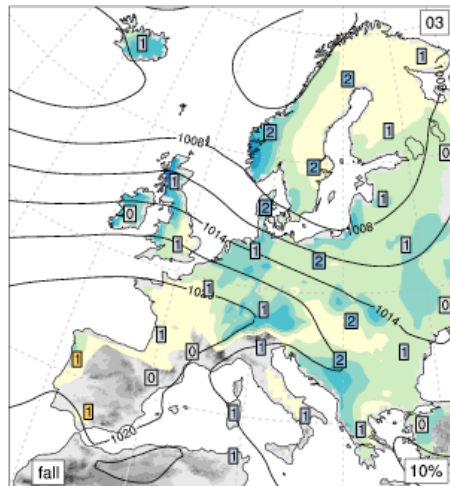
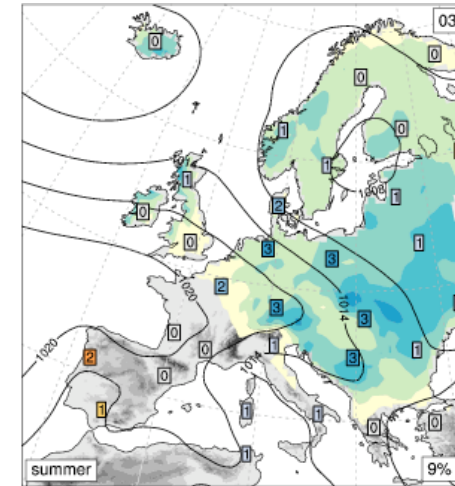
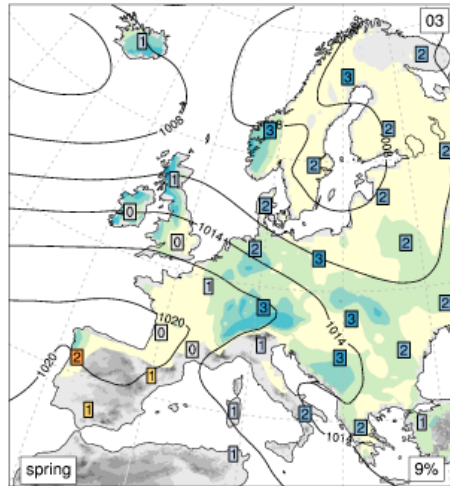


2. SW – sudovest: Alpi



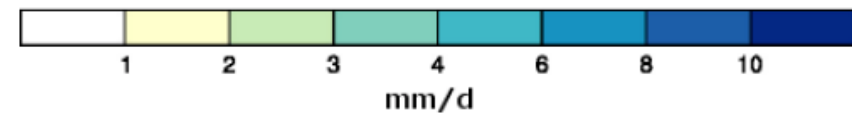
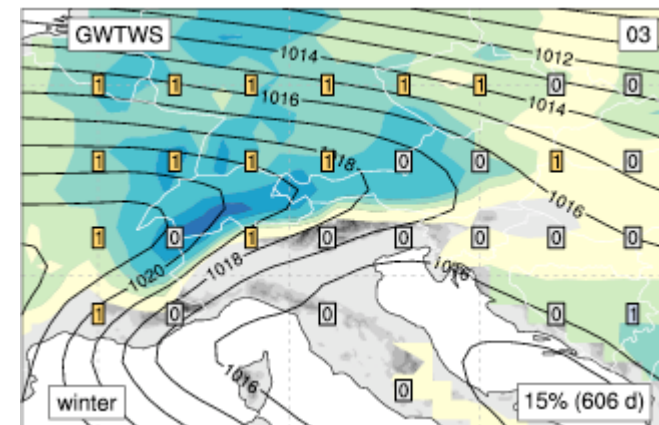
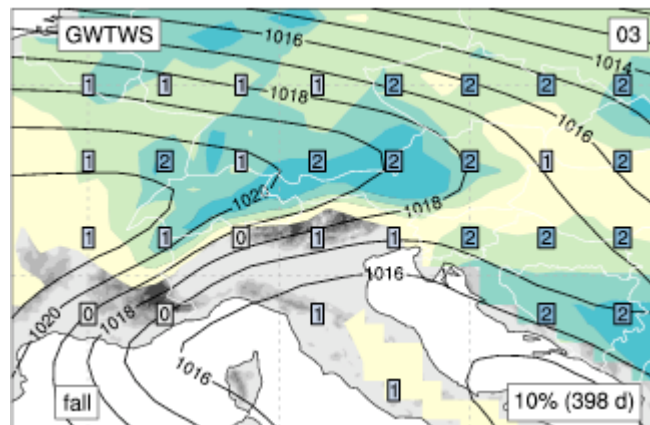
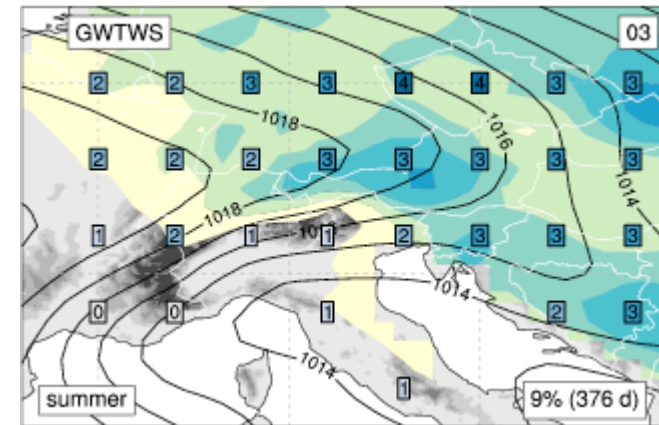
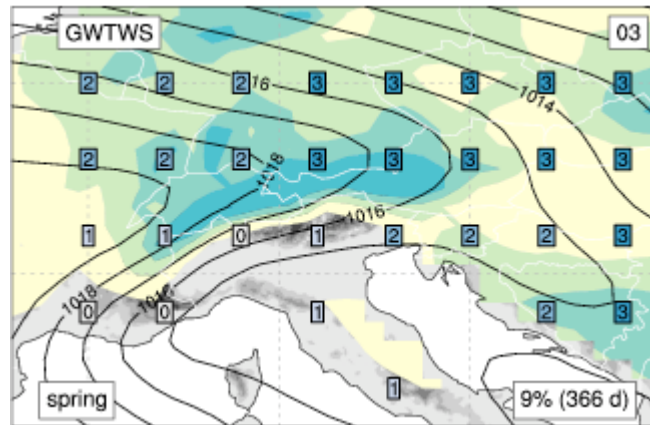


3. NW – nordovest: Europa



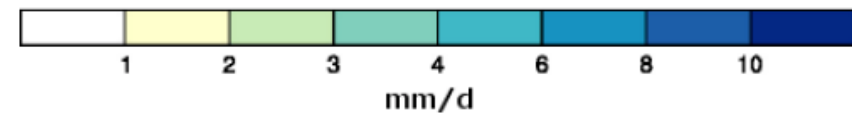
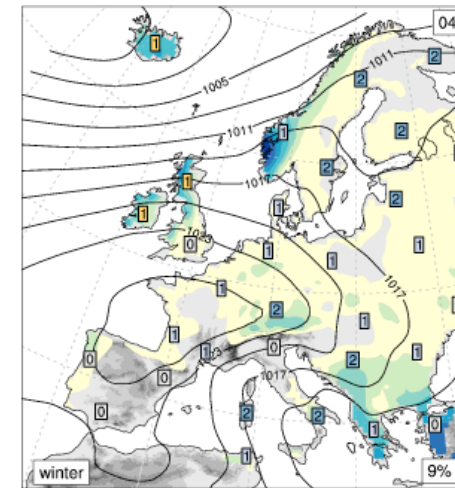
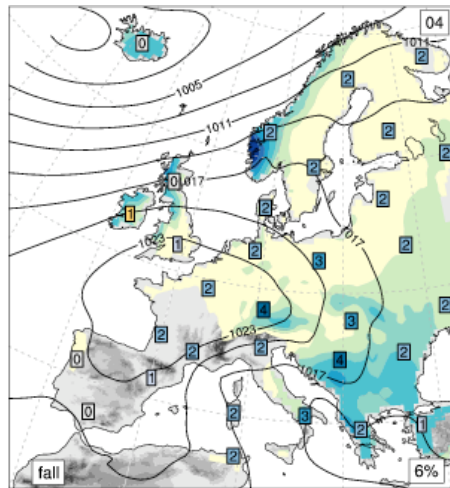
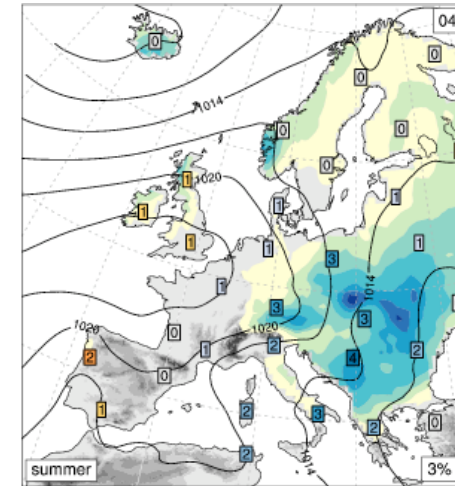
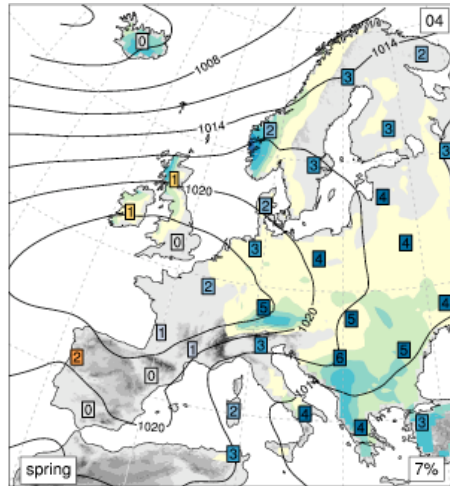


3. NW – nordovest: Alpi



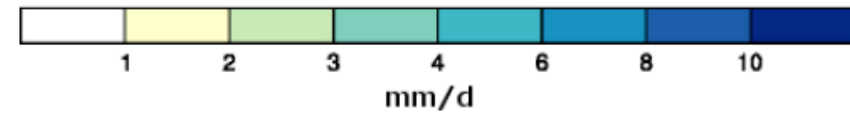
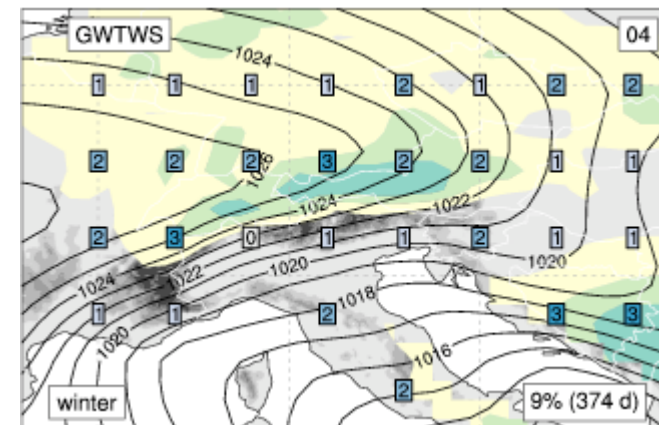
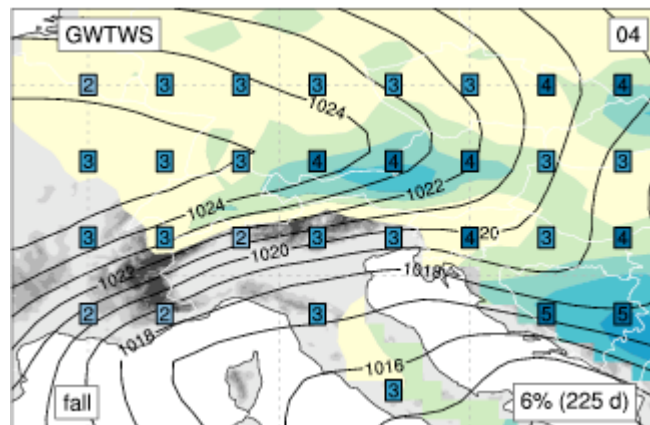
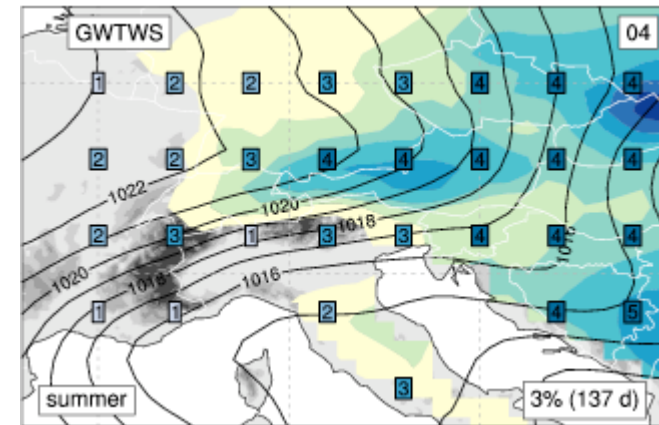
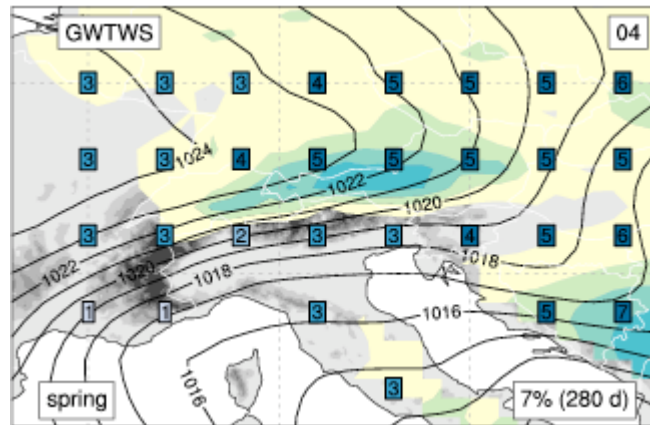


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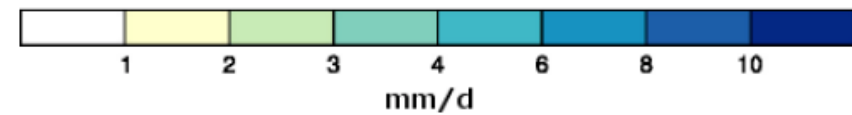
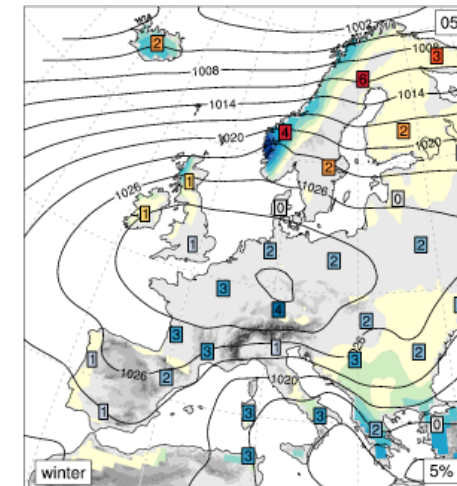
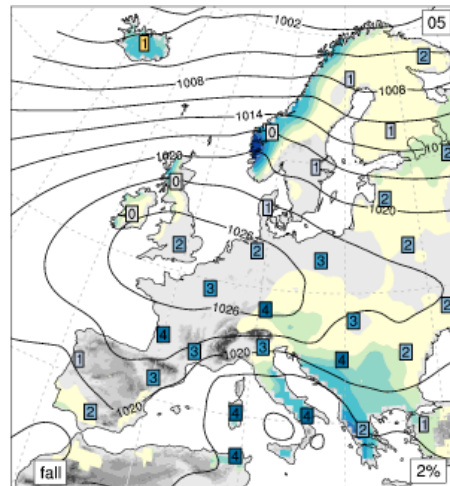
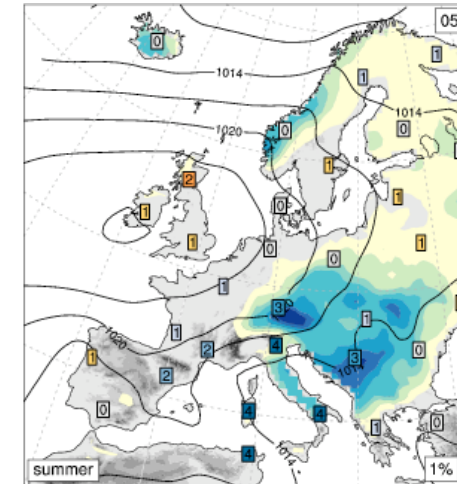
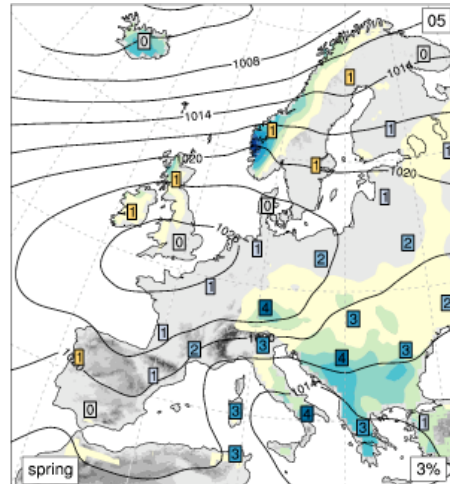


4. N – nord: Alpi



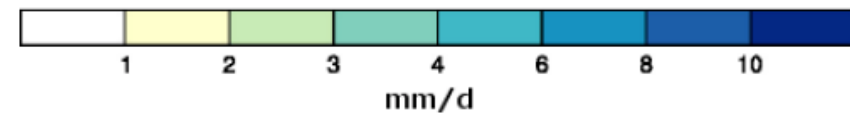
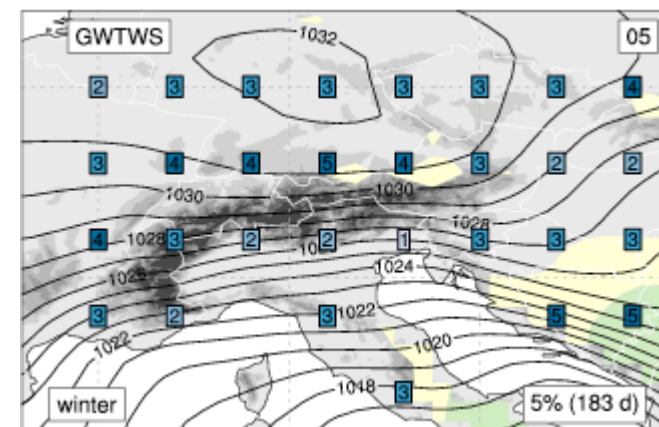
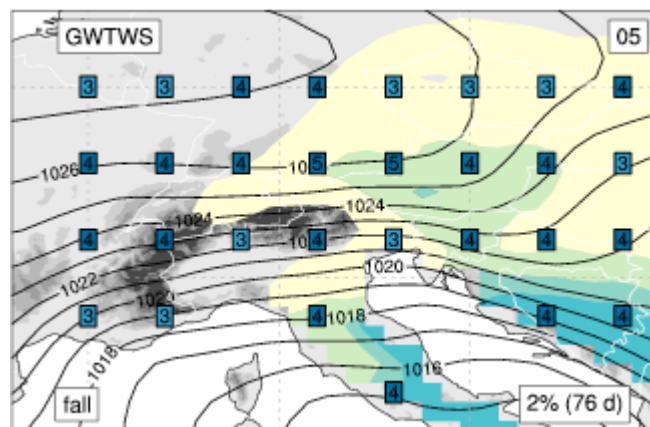
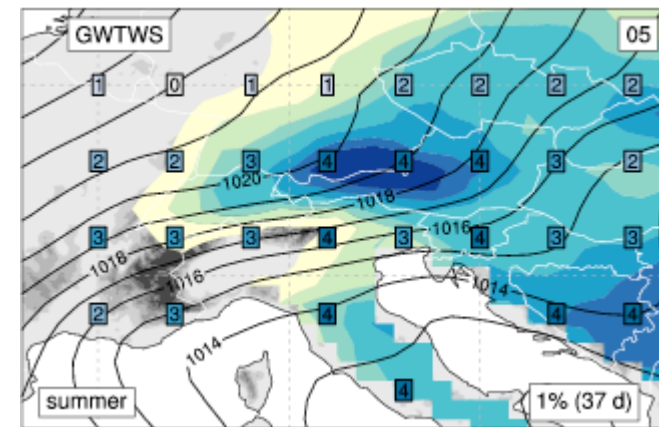
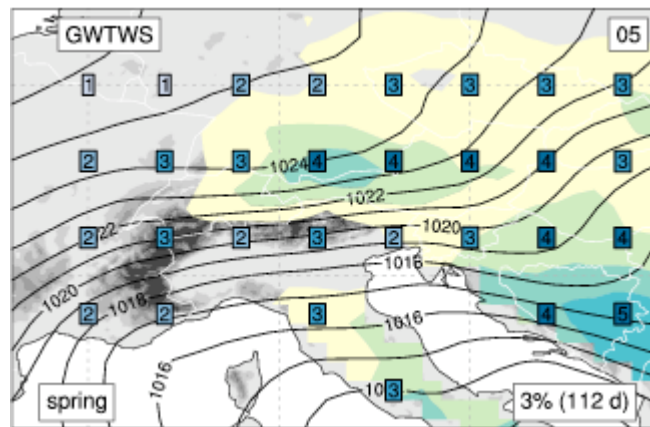


5. NE – nordest: Europa



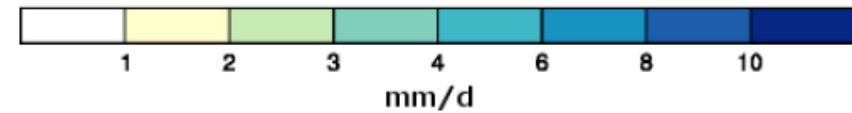
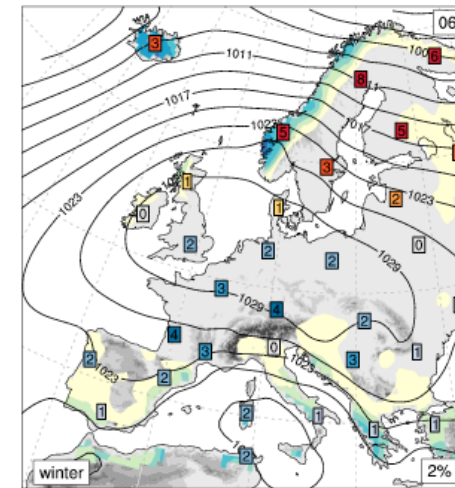
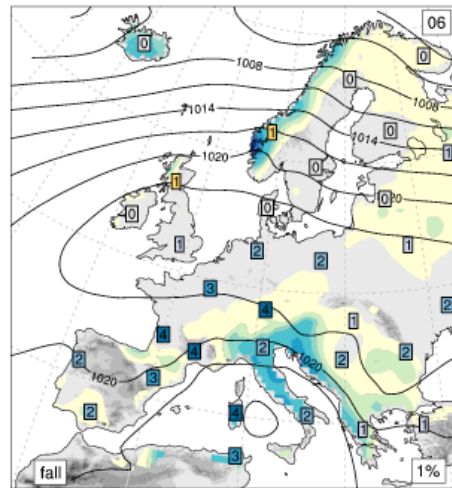
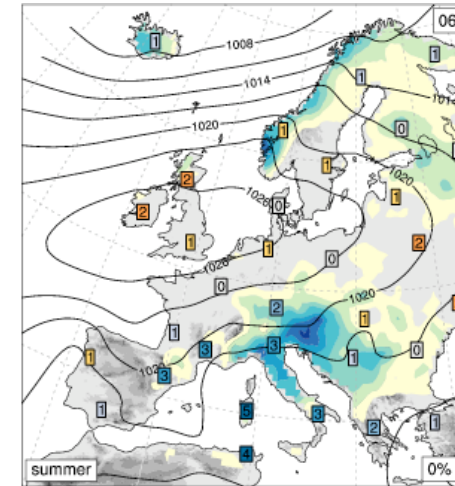
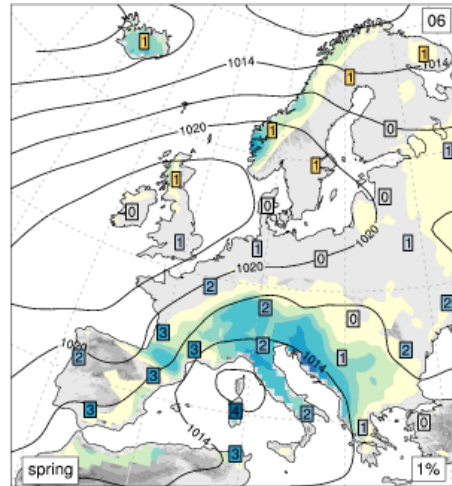


5. NE – nordest: Alpi



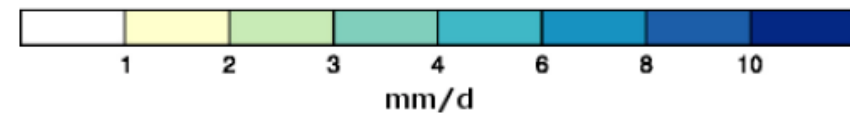
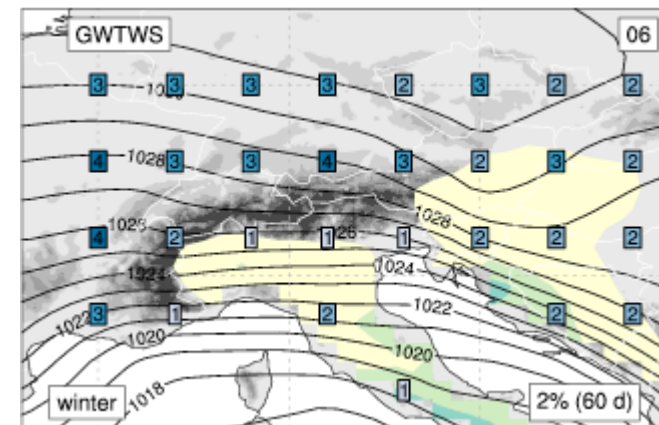
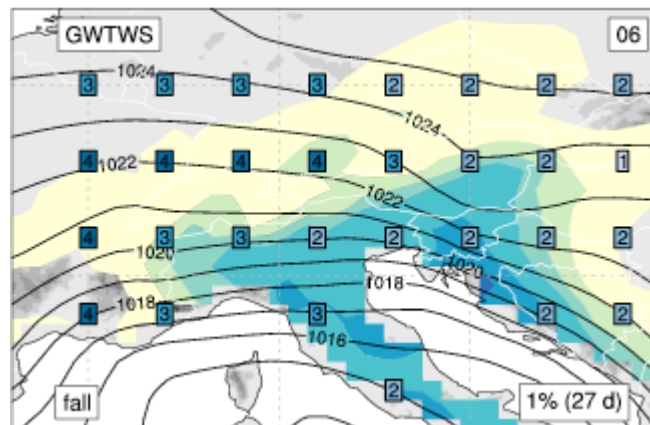
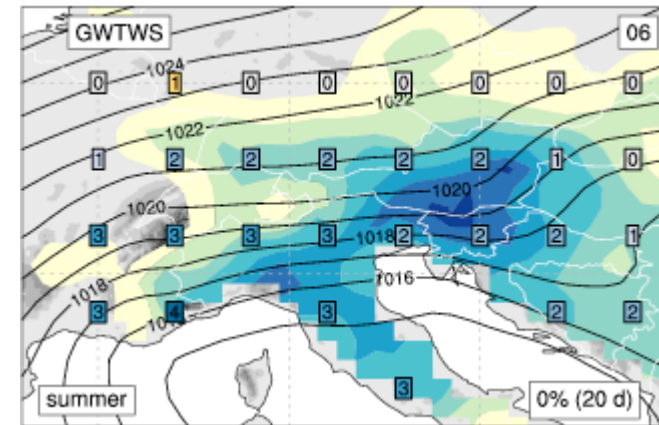
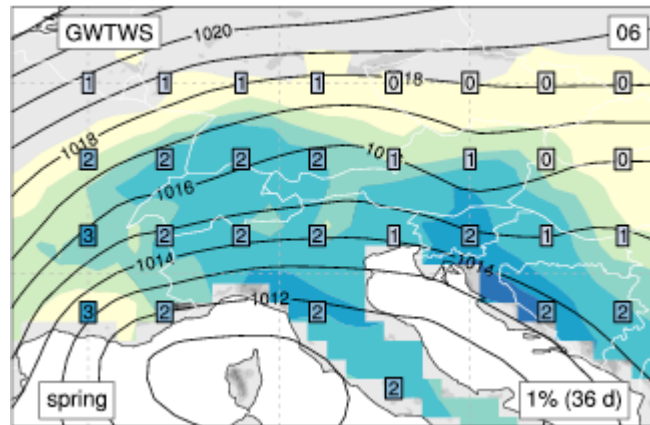


6. E – est: Europa



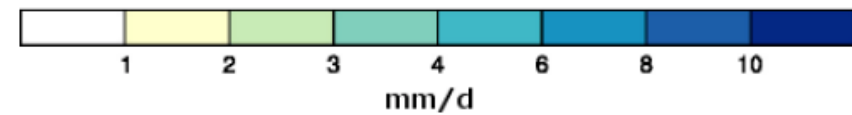
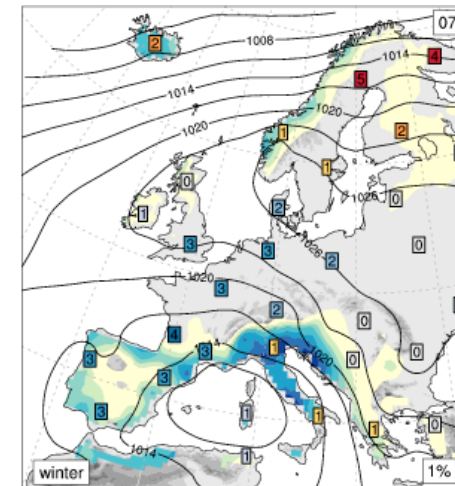
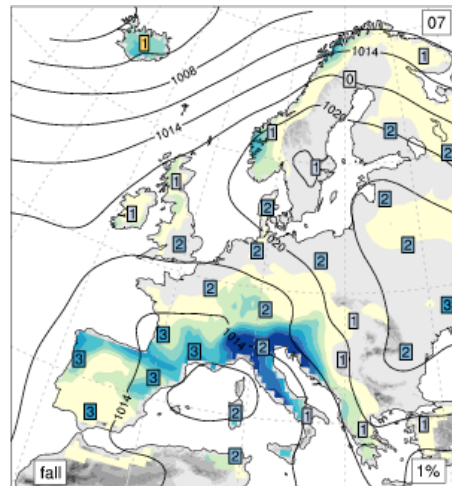
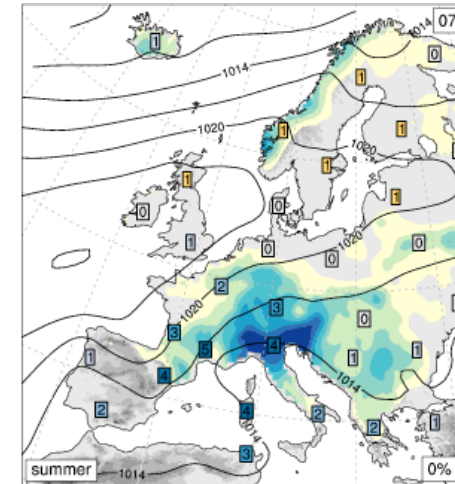
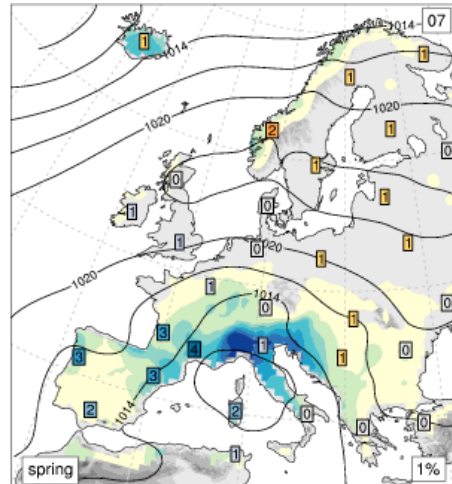


6. E – est: Alpi



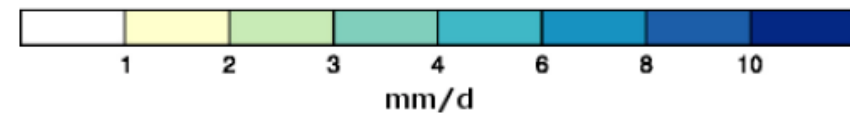
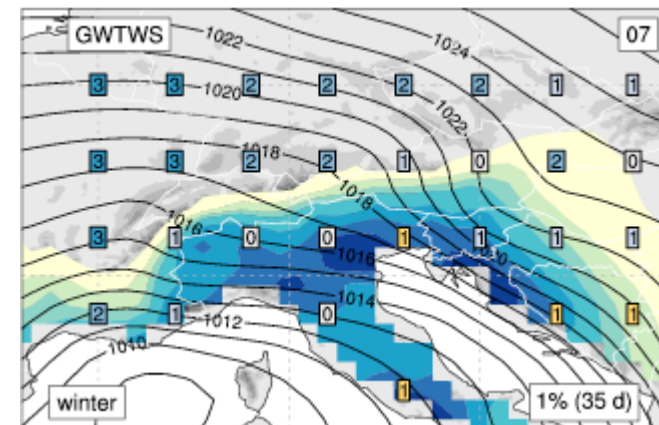
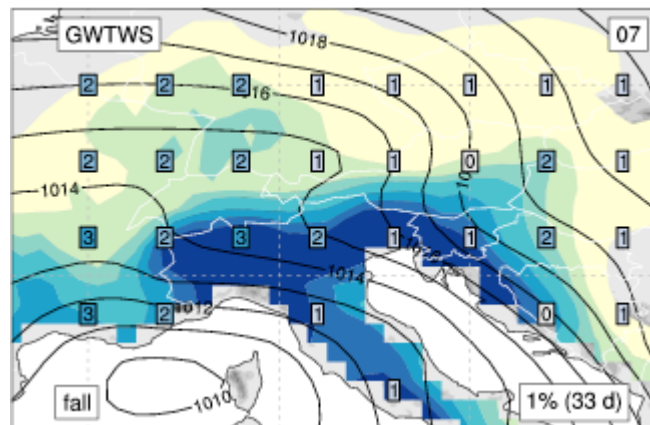
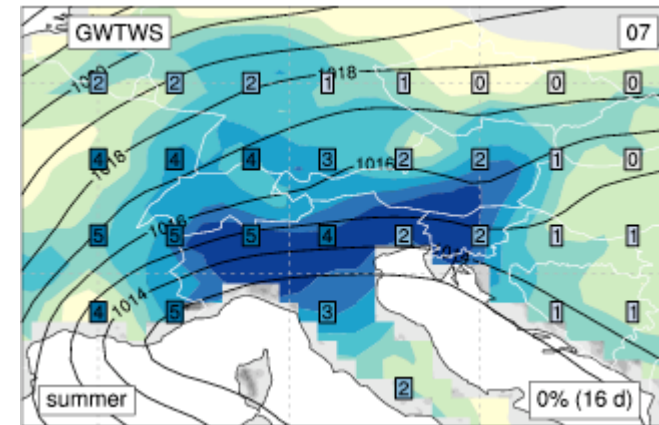
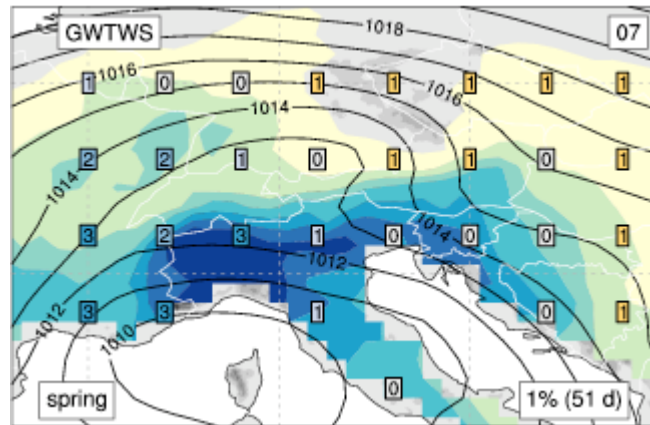


7. SE – sudest: Europa



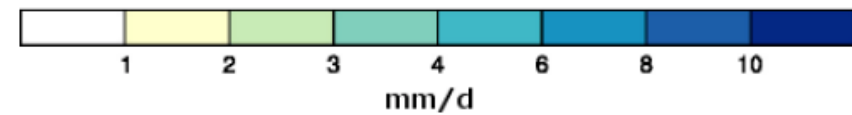
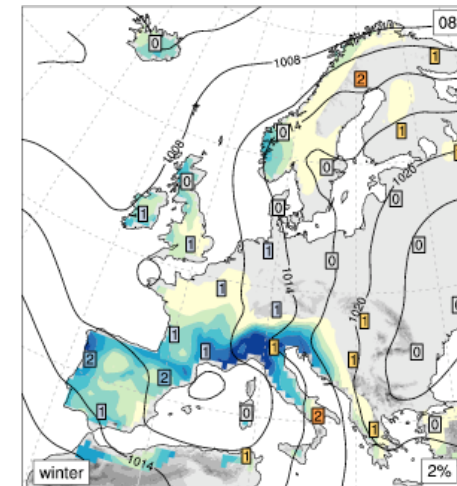
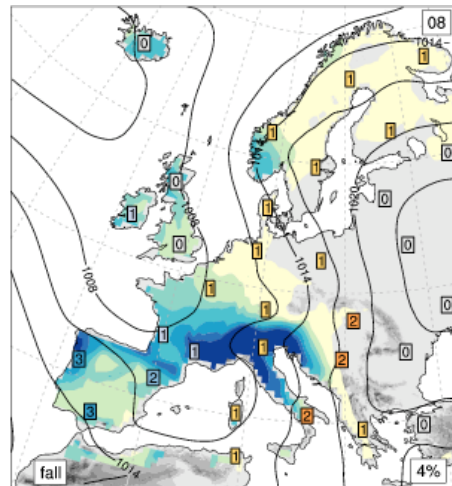
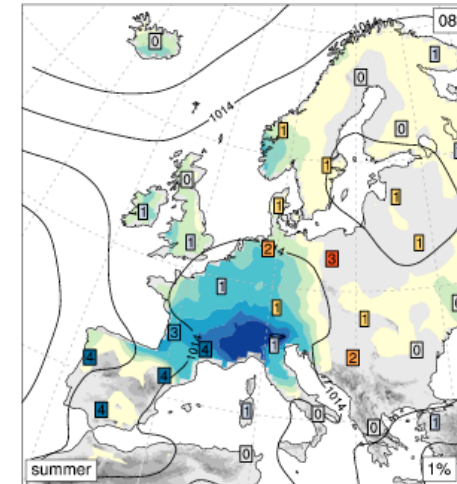
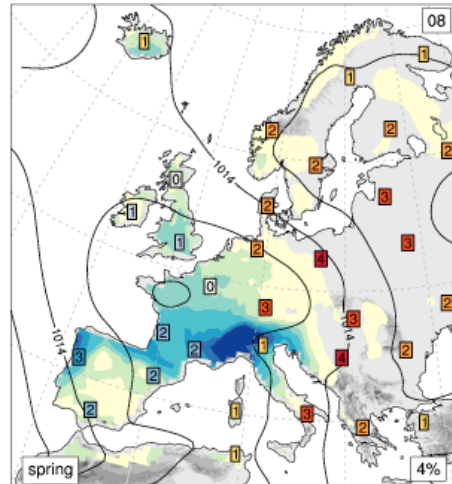


7. SE – sudest: Alpi



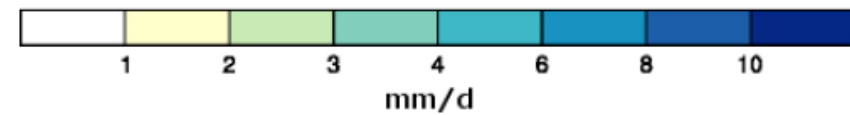
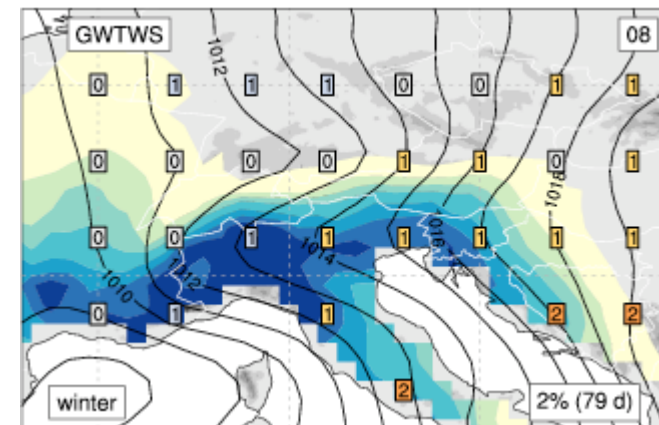
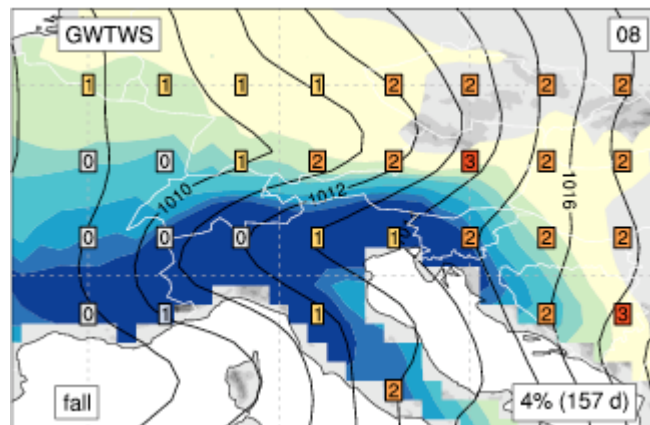
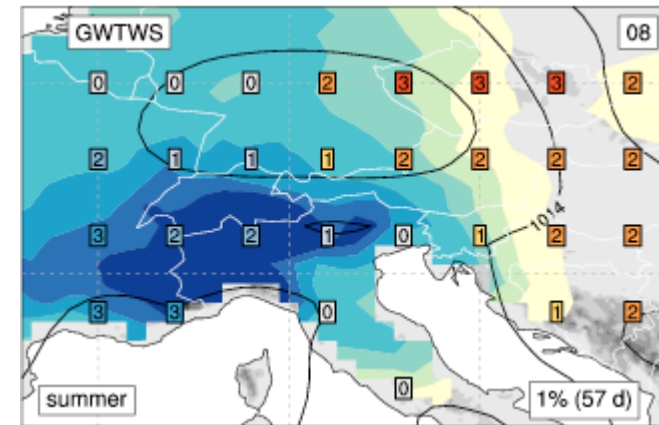
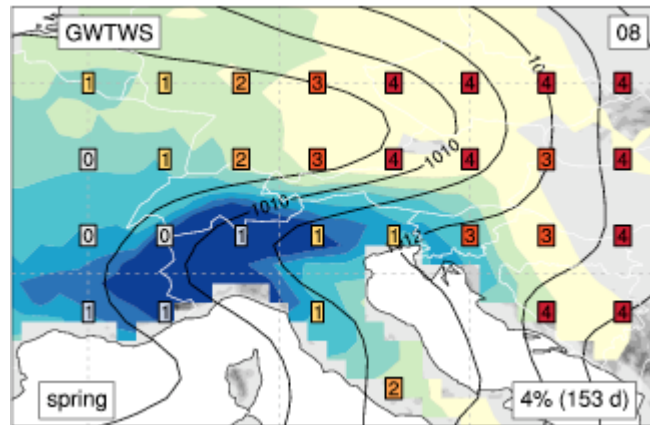


8. S – sud: Europa



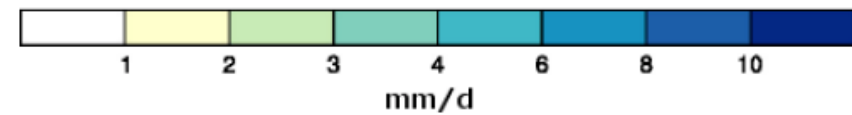
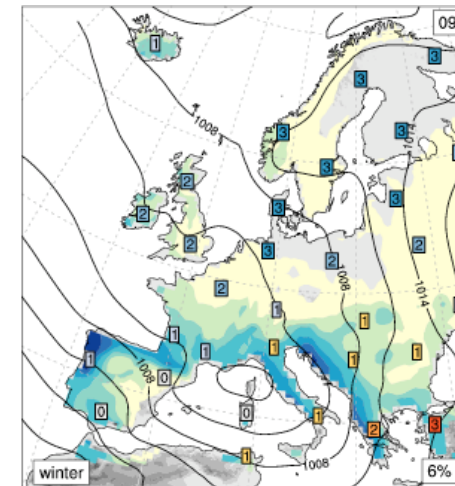
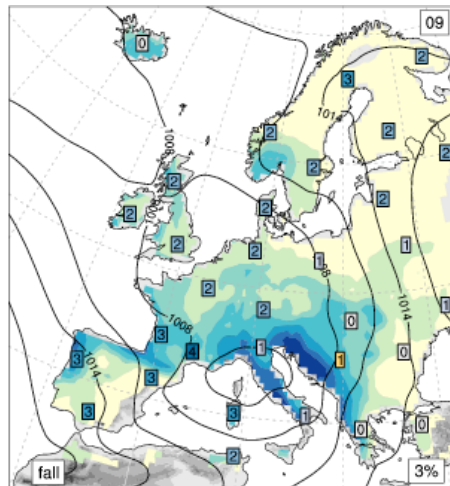
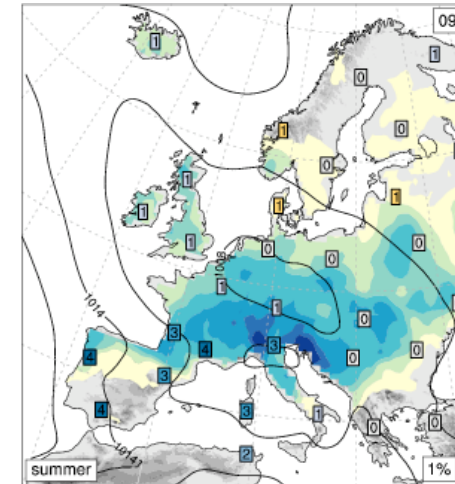
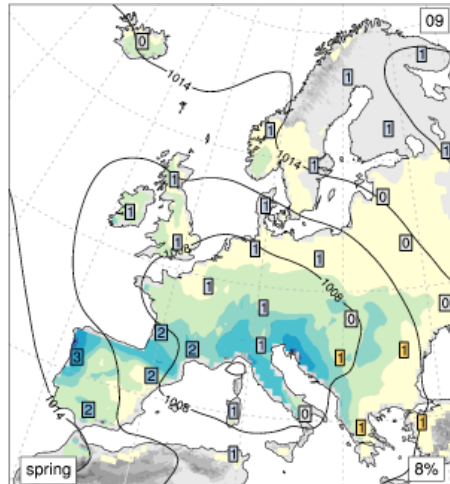


8. S – sud: Alpi



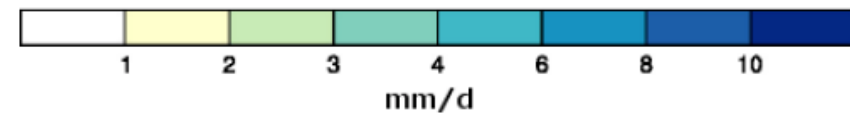
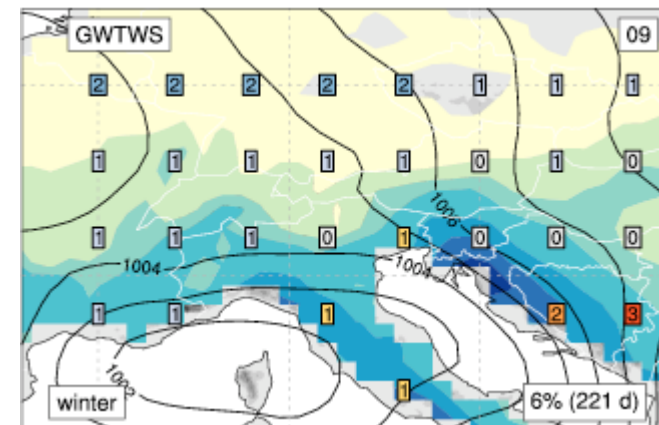
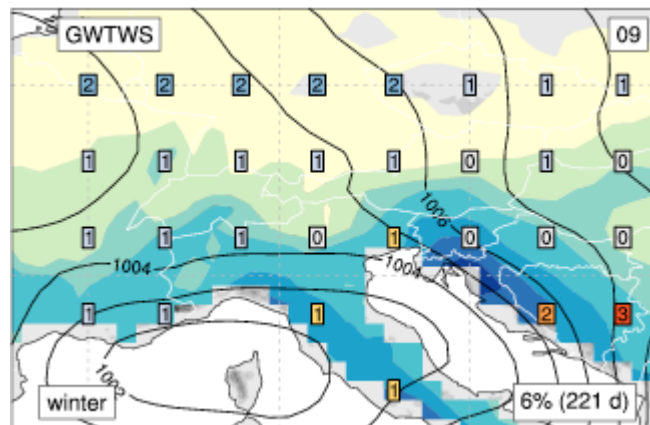
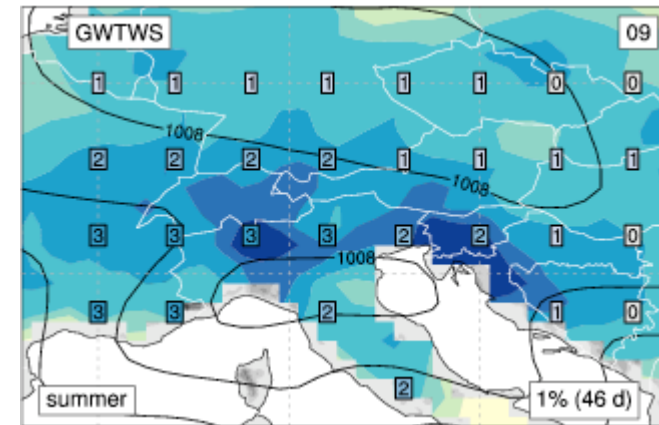
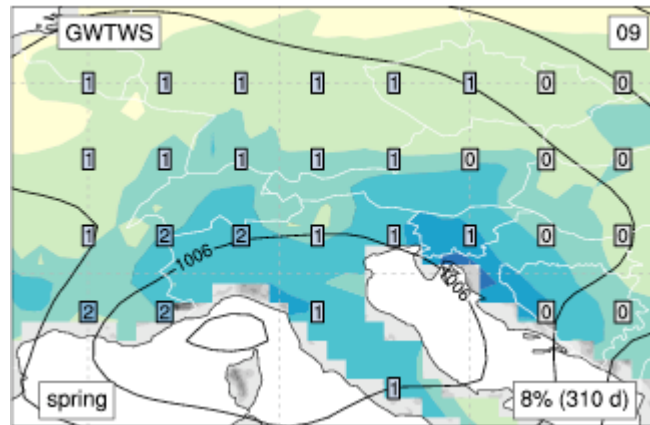


9. LOW – bassa pressione: Europa



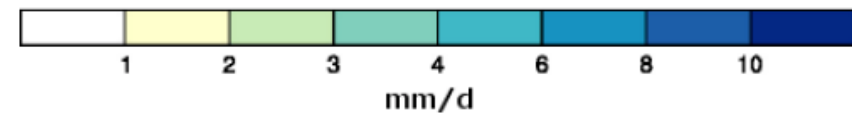
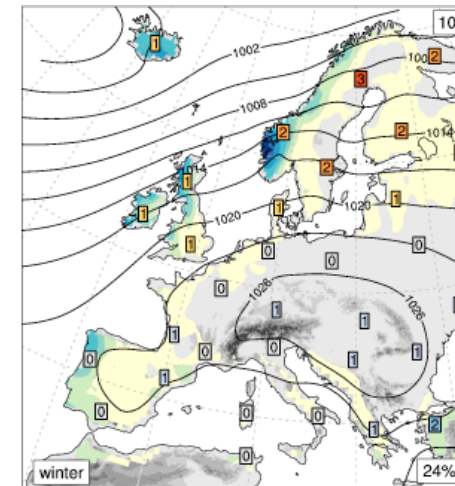
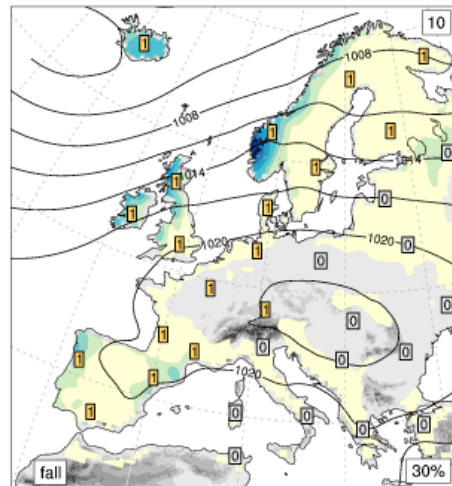
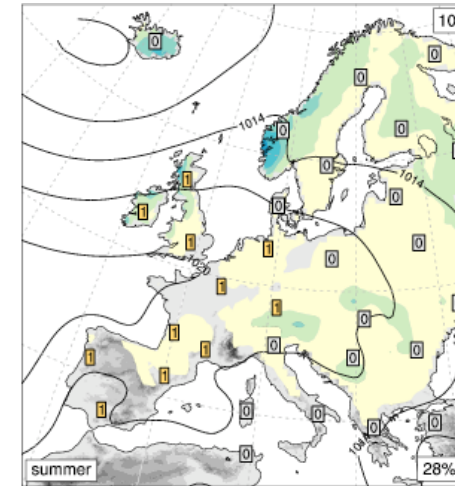
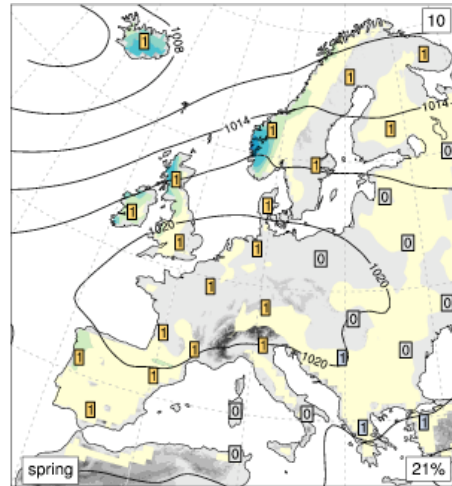


9. LOW – bassa pressione: Alpi



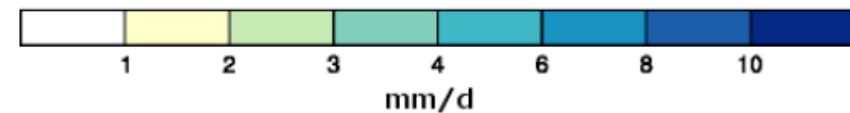
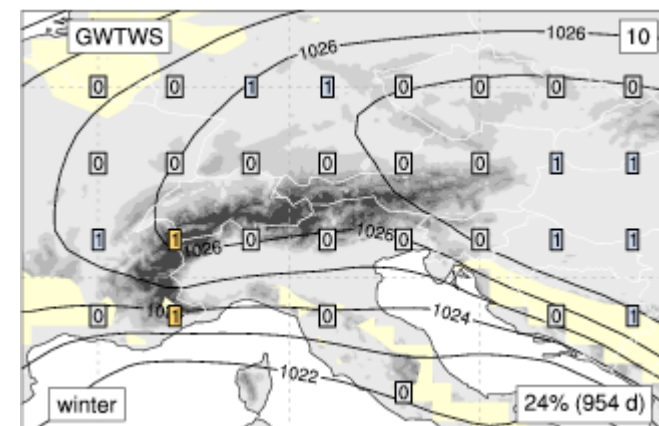
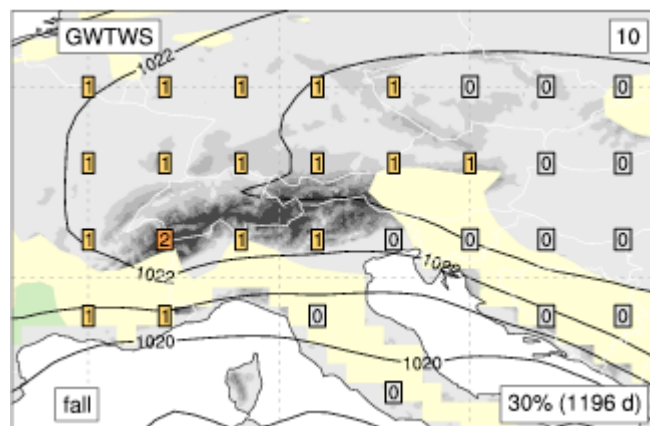
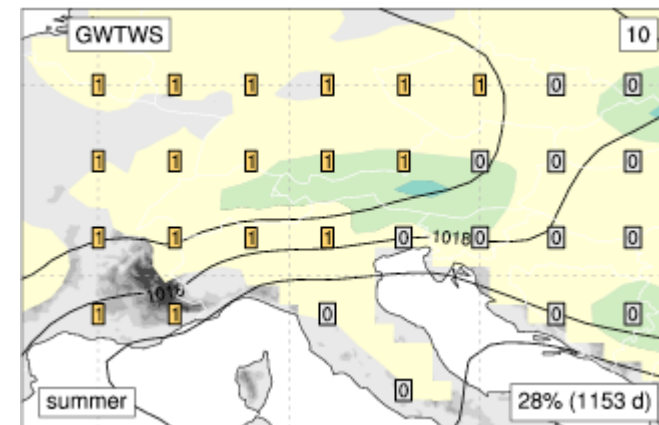
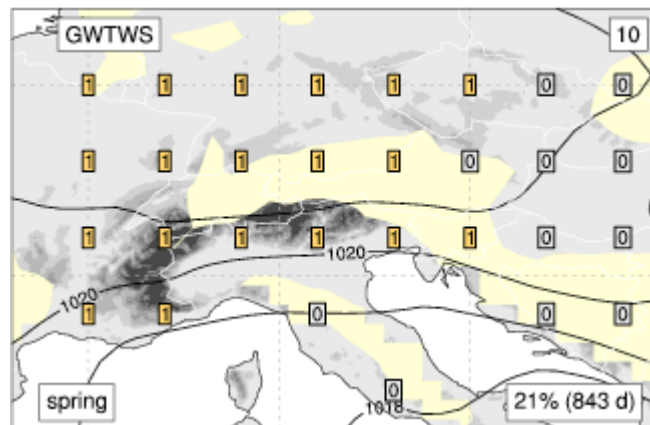


10. HIGH – alta pressione: Europa



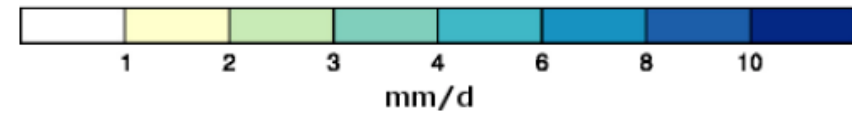
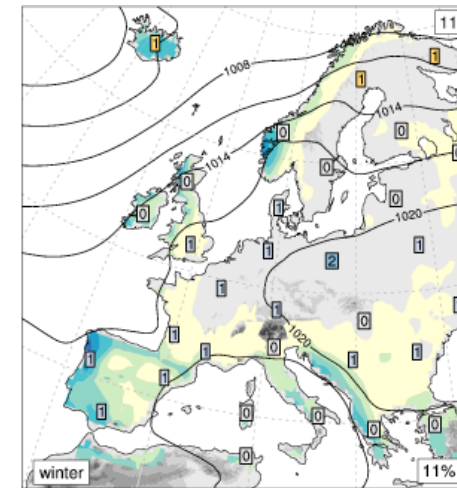
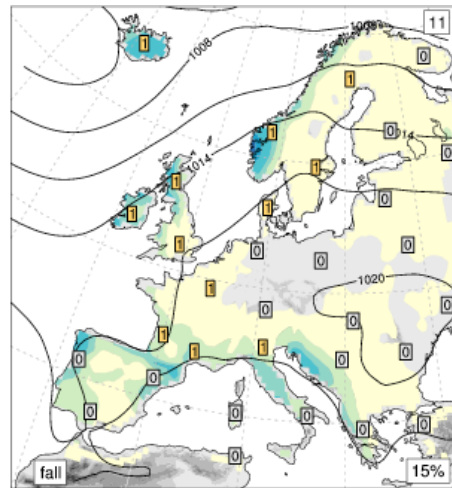
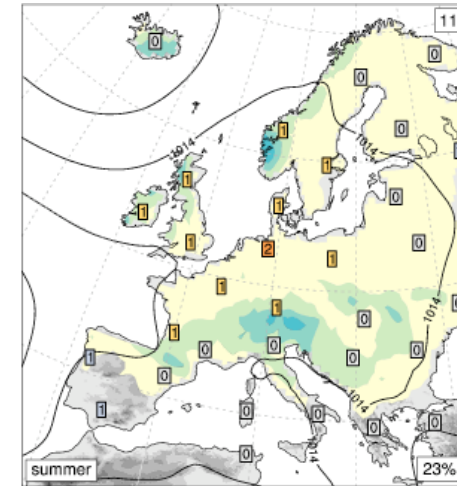
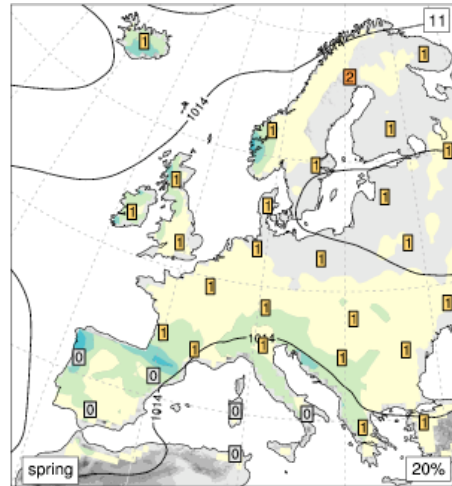


10. HIGH – alta pressione: Europa



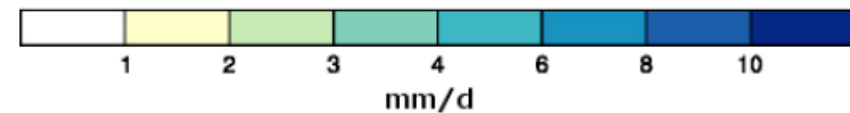
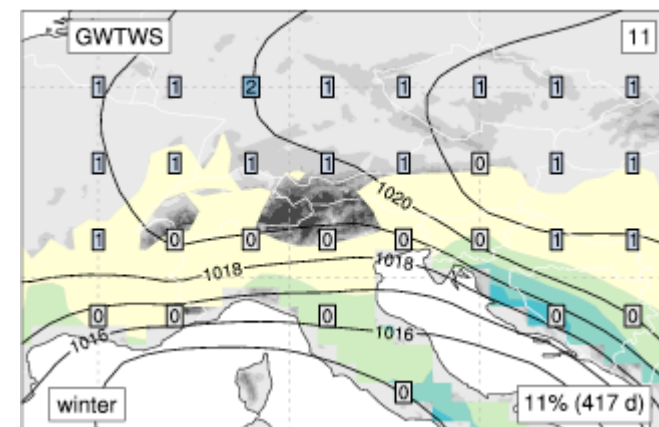
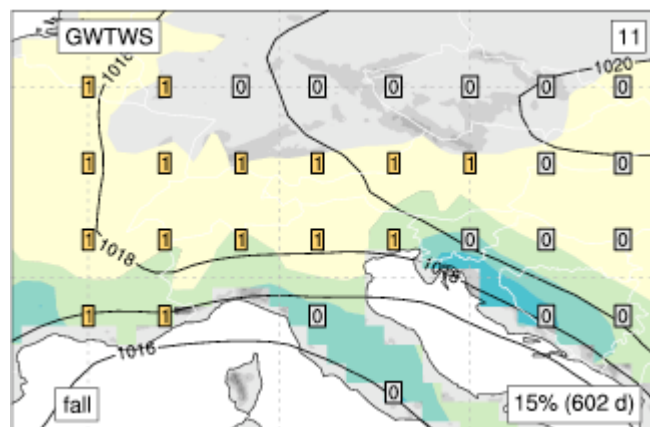
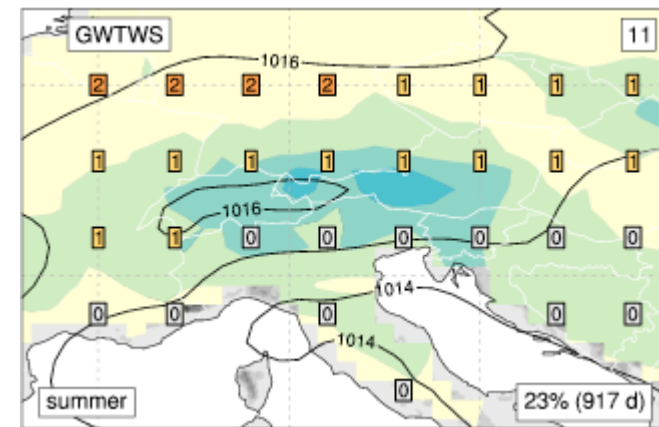
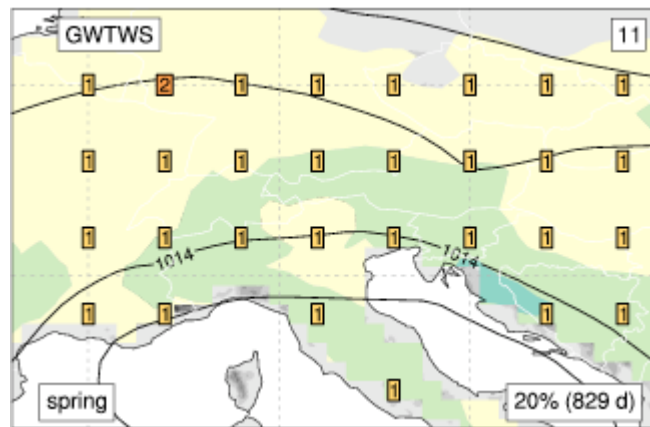


11. FLAT – pressione livellata: Europa



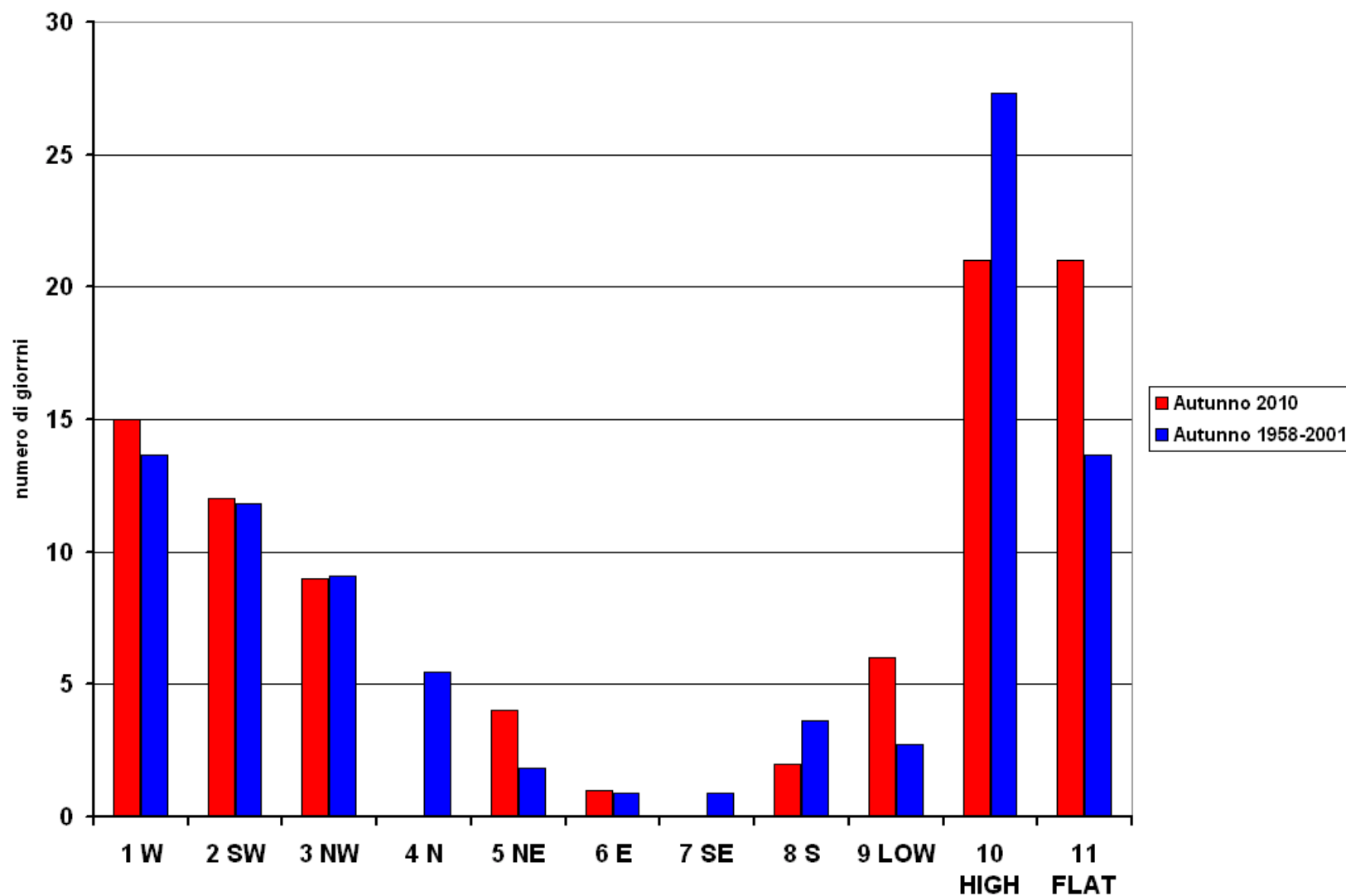


11. FLAT – pressione livellata: Alpi



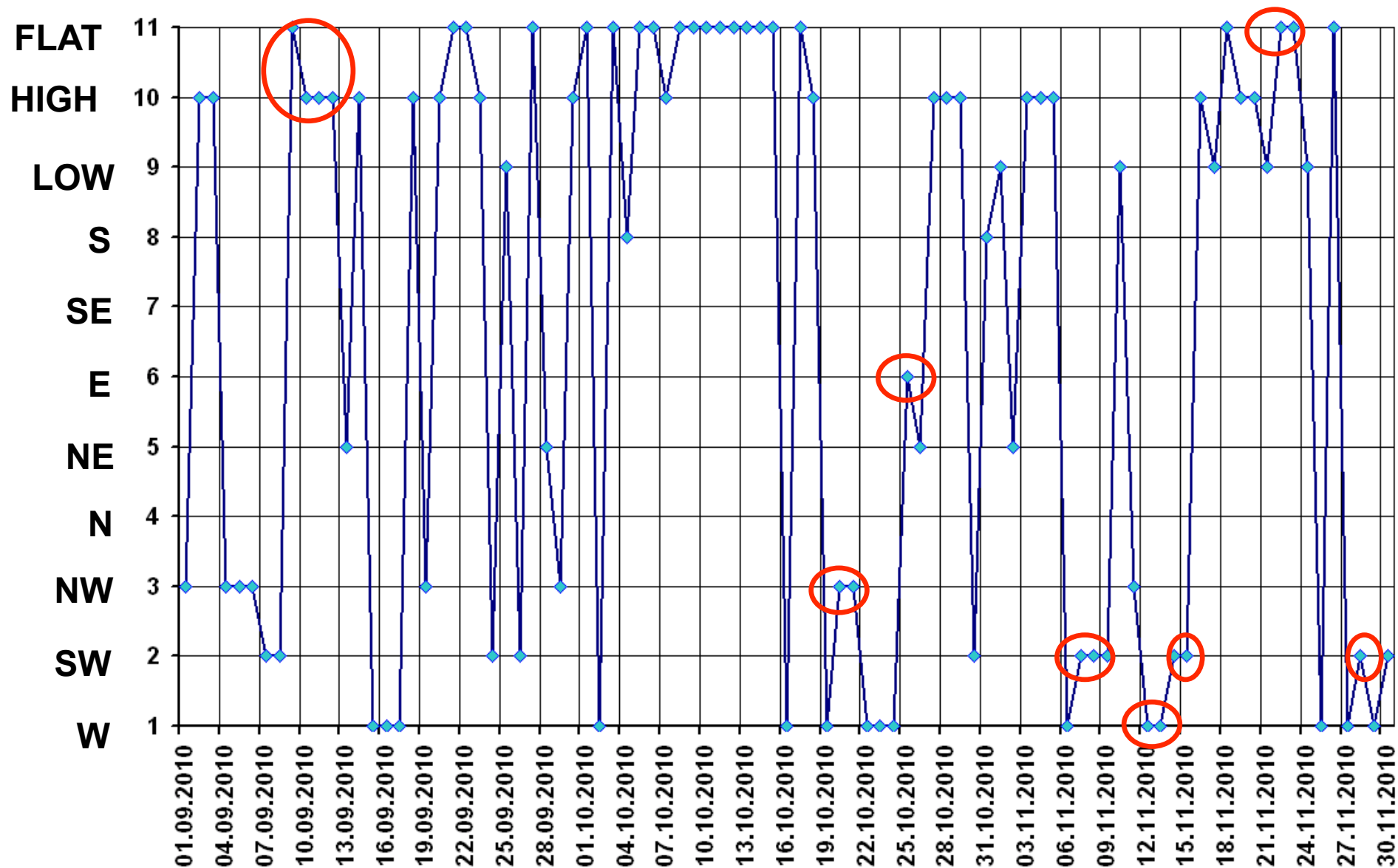


Le situazioni dell'autunno 2010





Le situazioni dell'autunno 2010



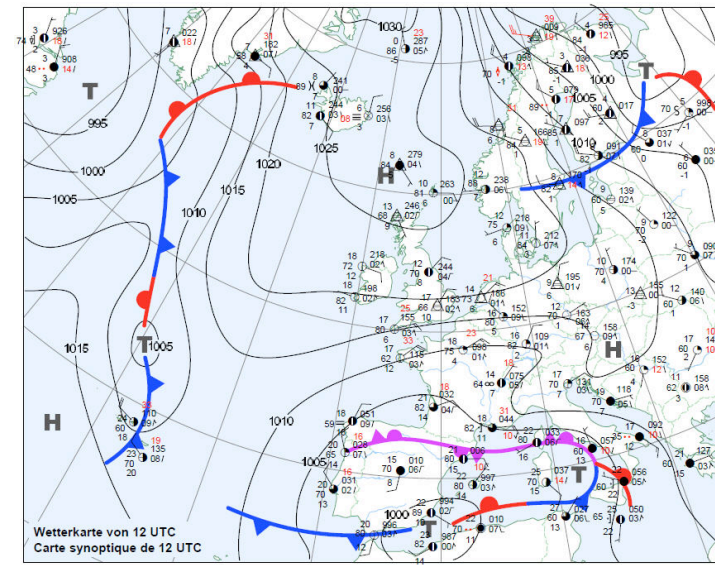
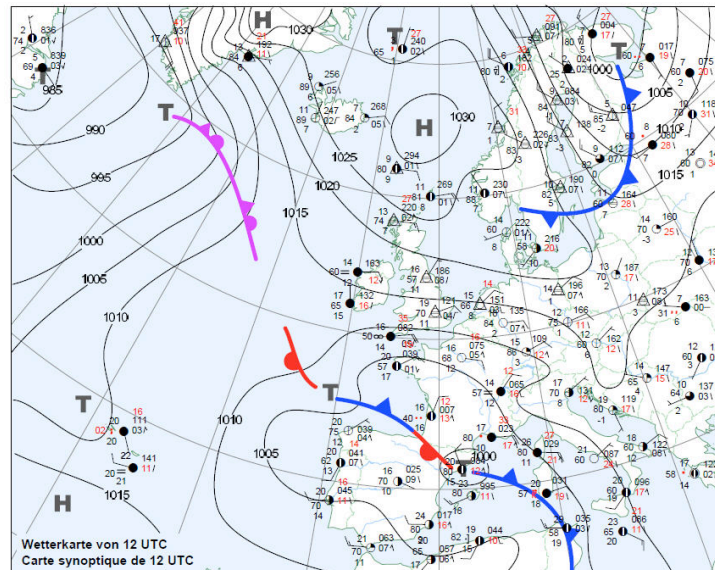
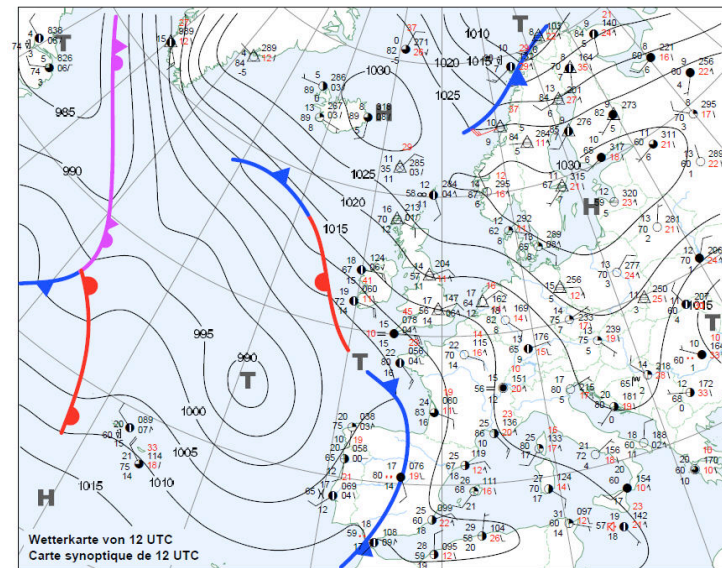
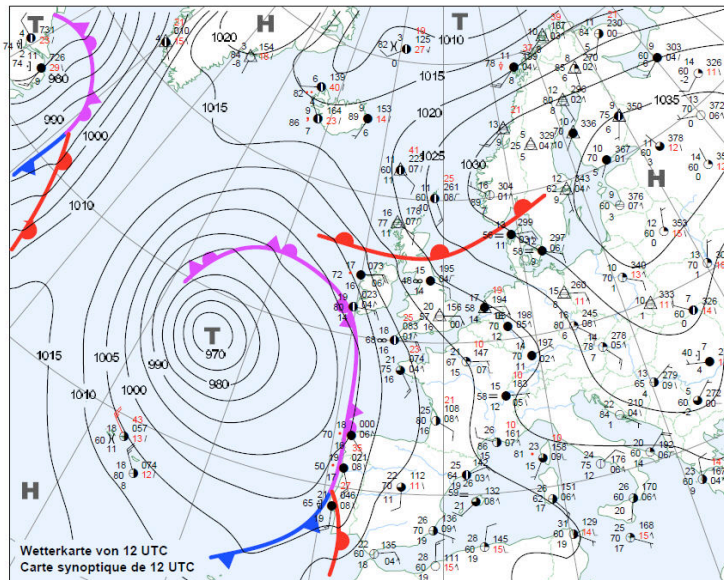


7-11.10.2010: 4 giorni di nebbia





7-11.10.2010: 4 giorni di nebbia





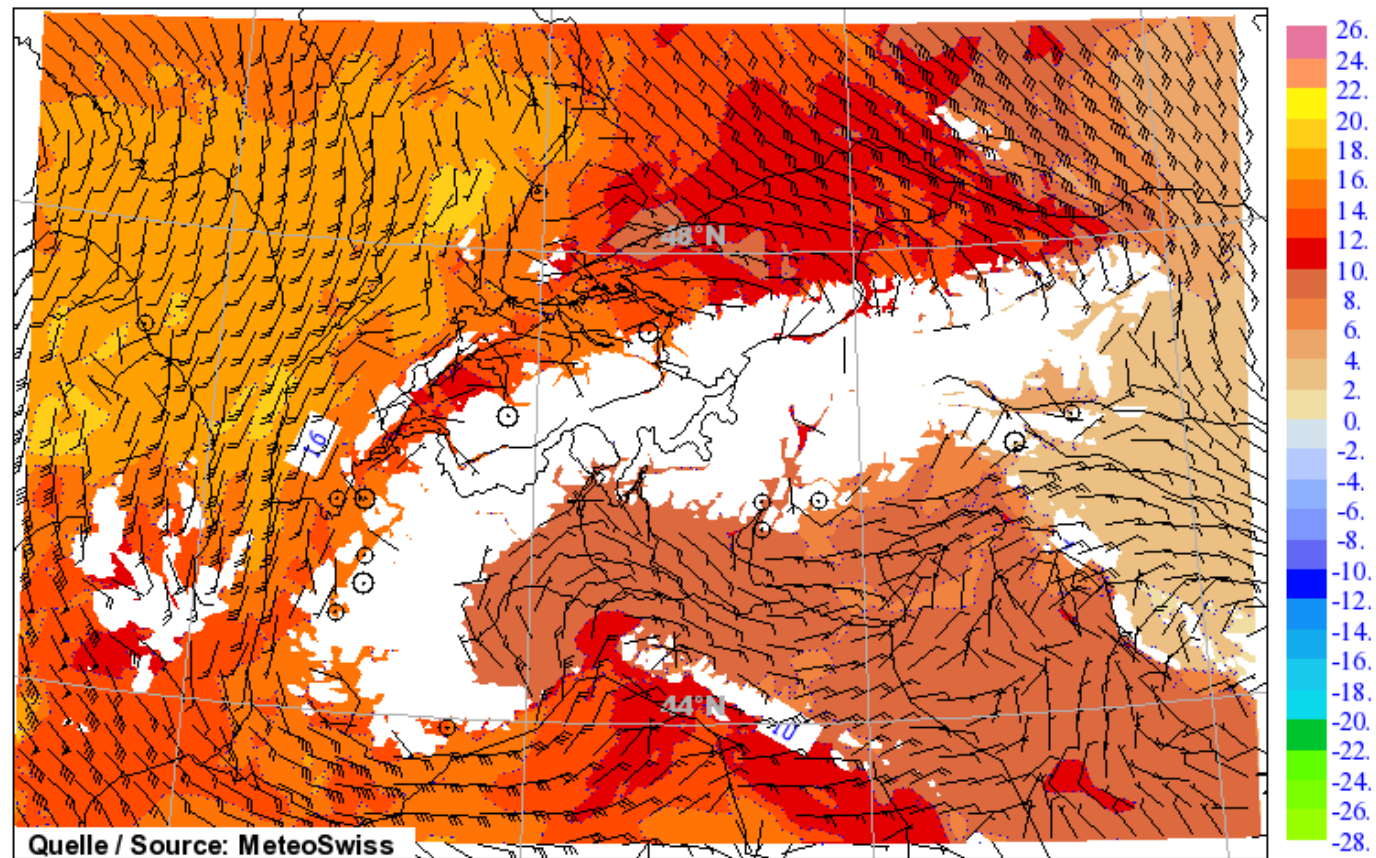
Rientro da est persistente

COSMO-2 Analysis for: Sat 9 Oct 2010 00 UTC

Version: opr 2km (891)

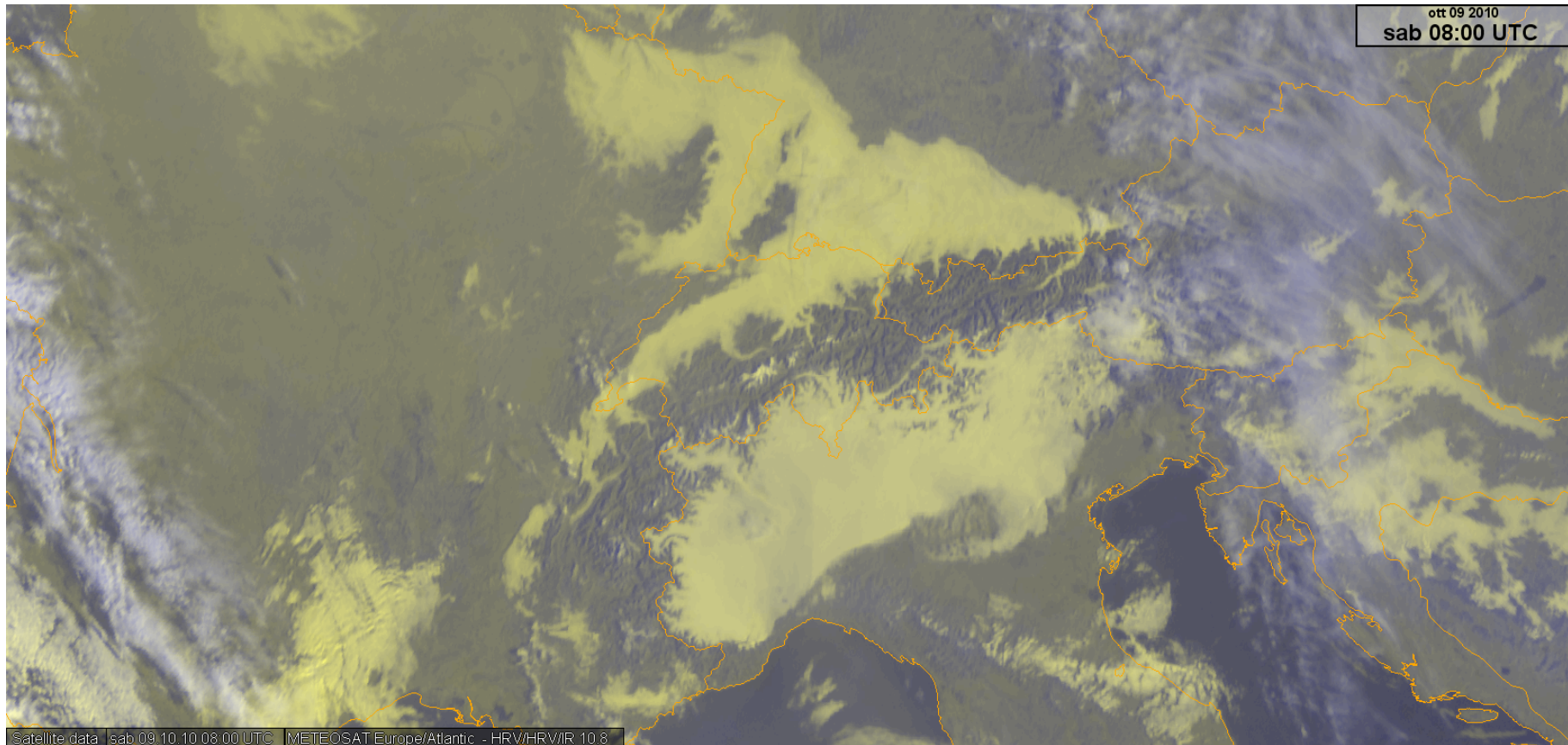
Temperature in °C at 1km height and wind every 12 grid points

Run: 09.10.2010 00UTC+0h





La nebbia alta dal satellite





7-8.10.2010: L'entrata in Engadina

2010-10-07 14:00 UTC

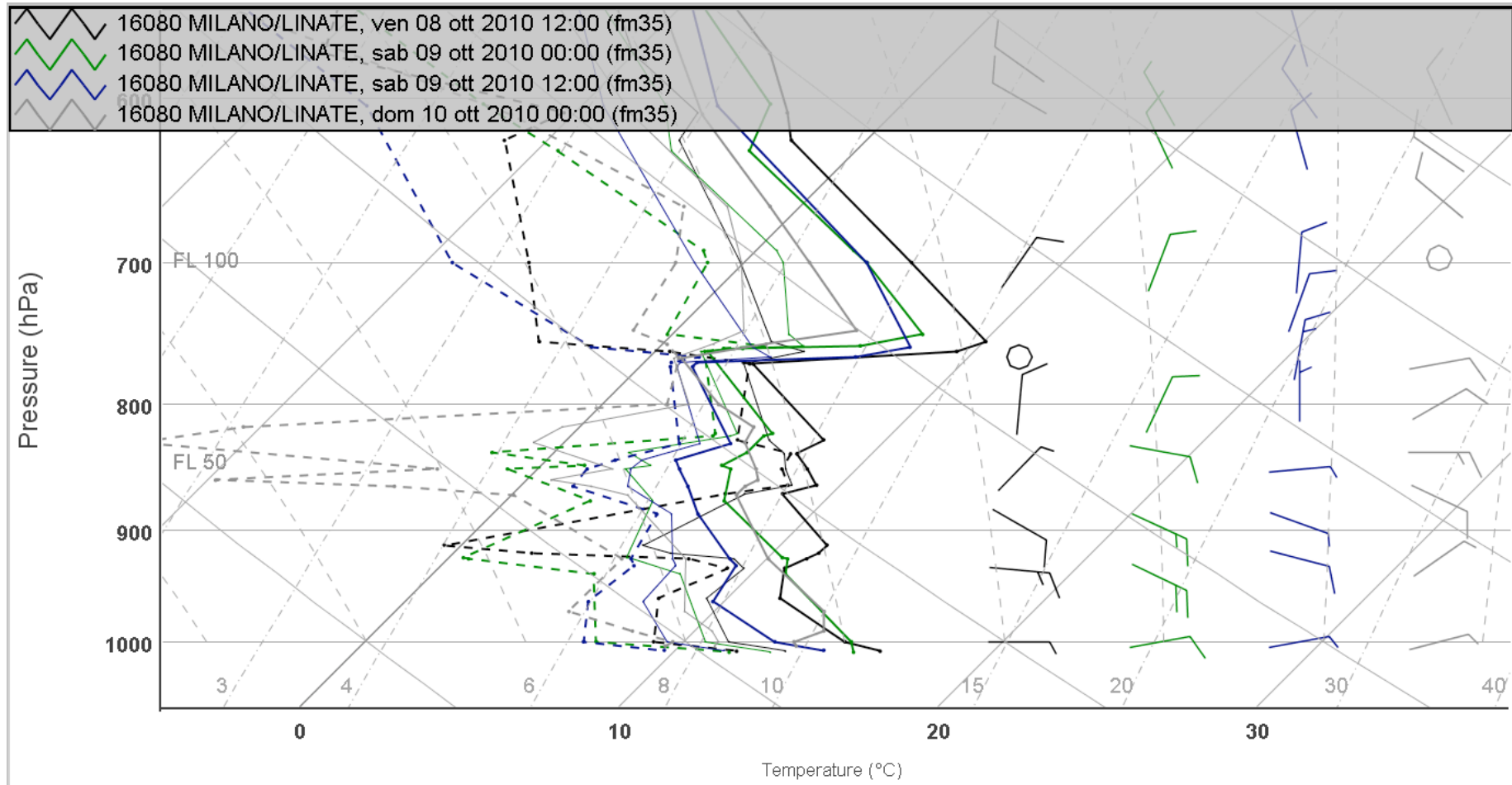


2010-10-08 08:00 UTC



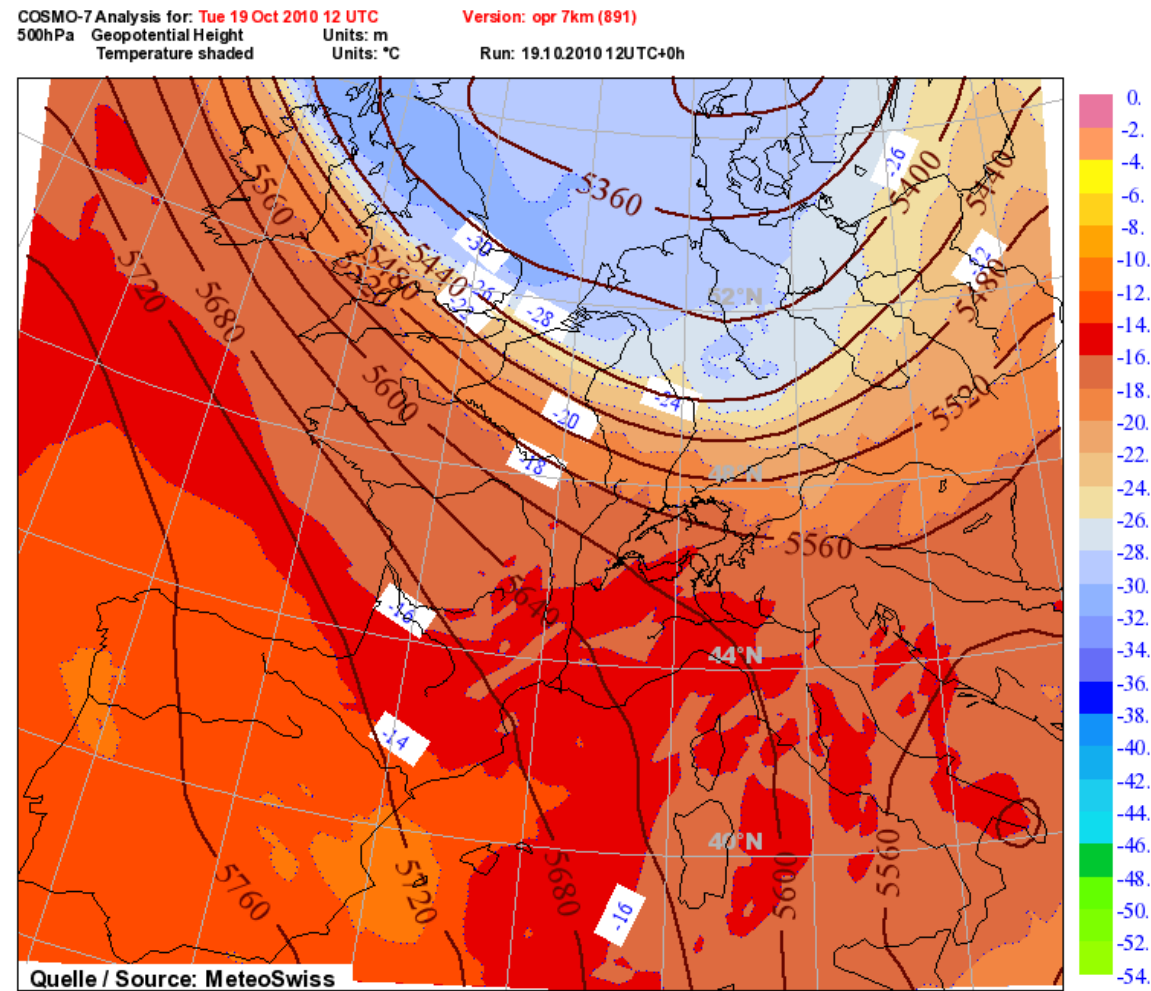


Radiosondaggi



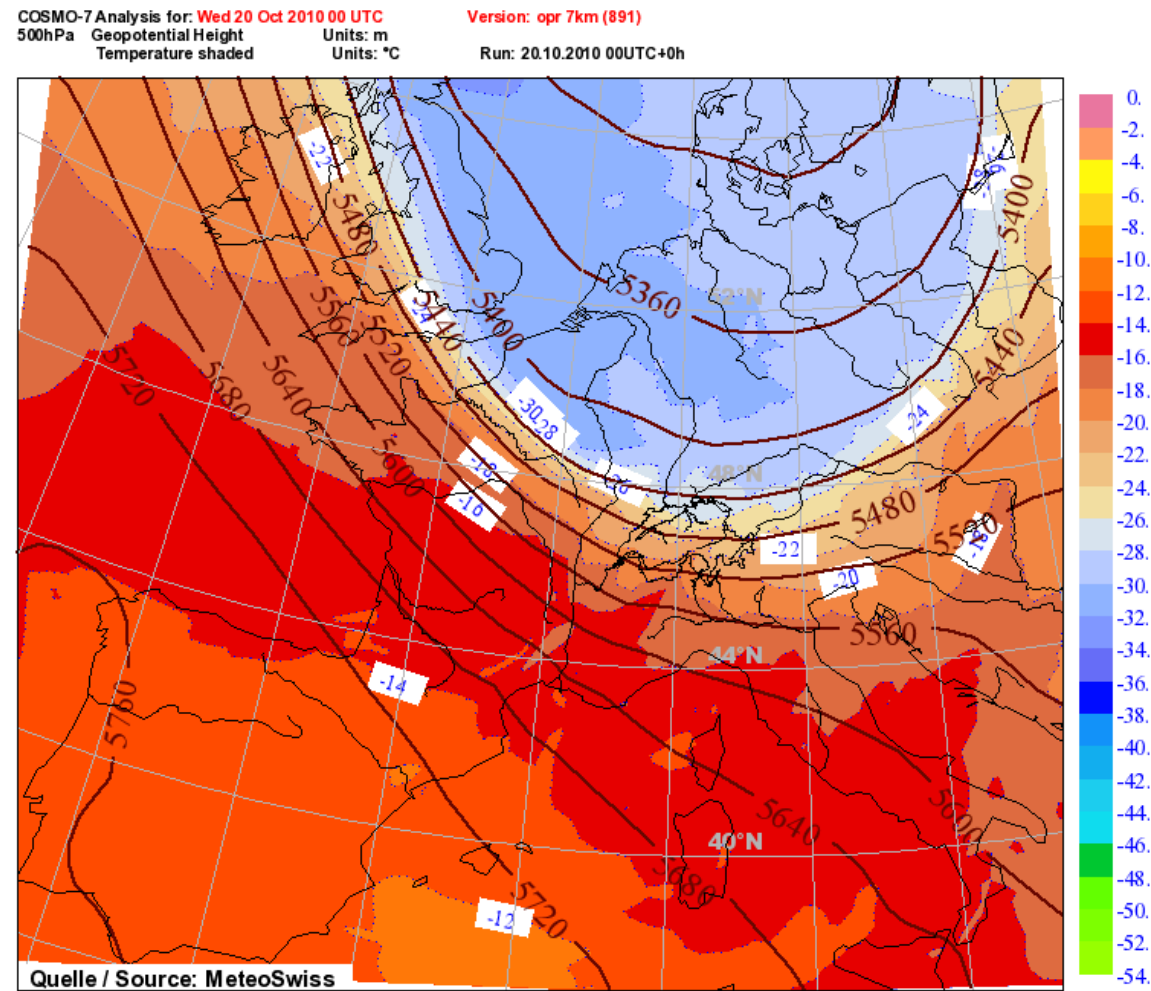


19-20.10 Favonio avvezione fredda



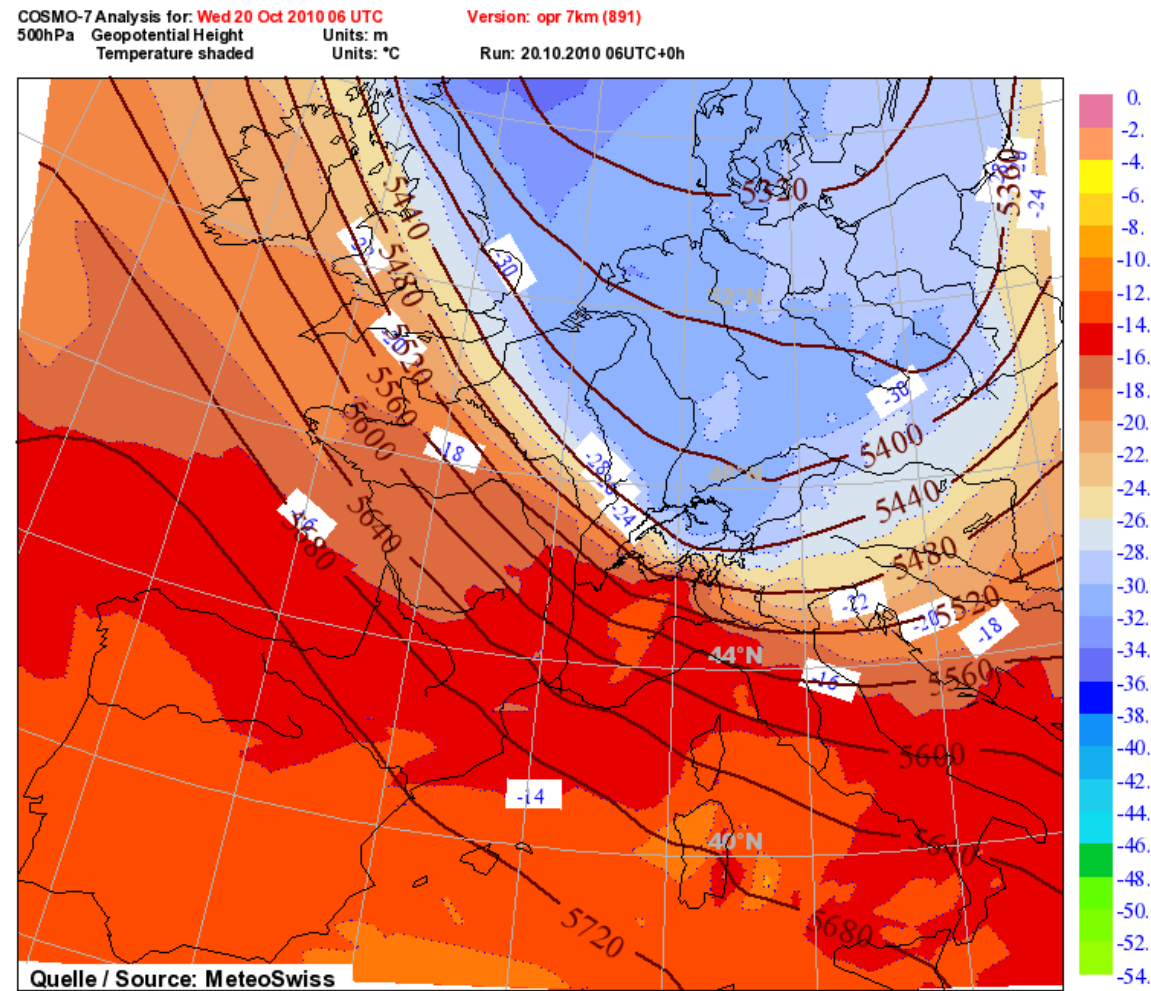


19-20.10 Favonio avvezione fredda



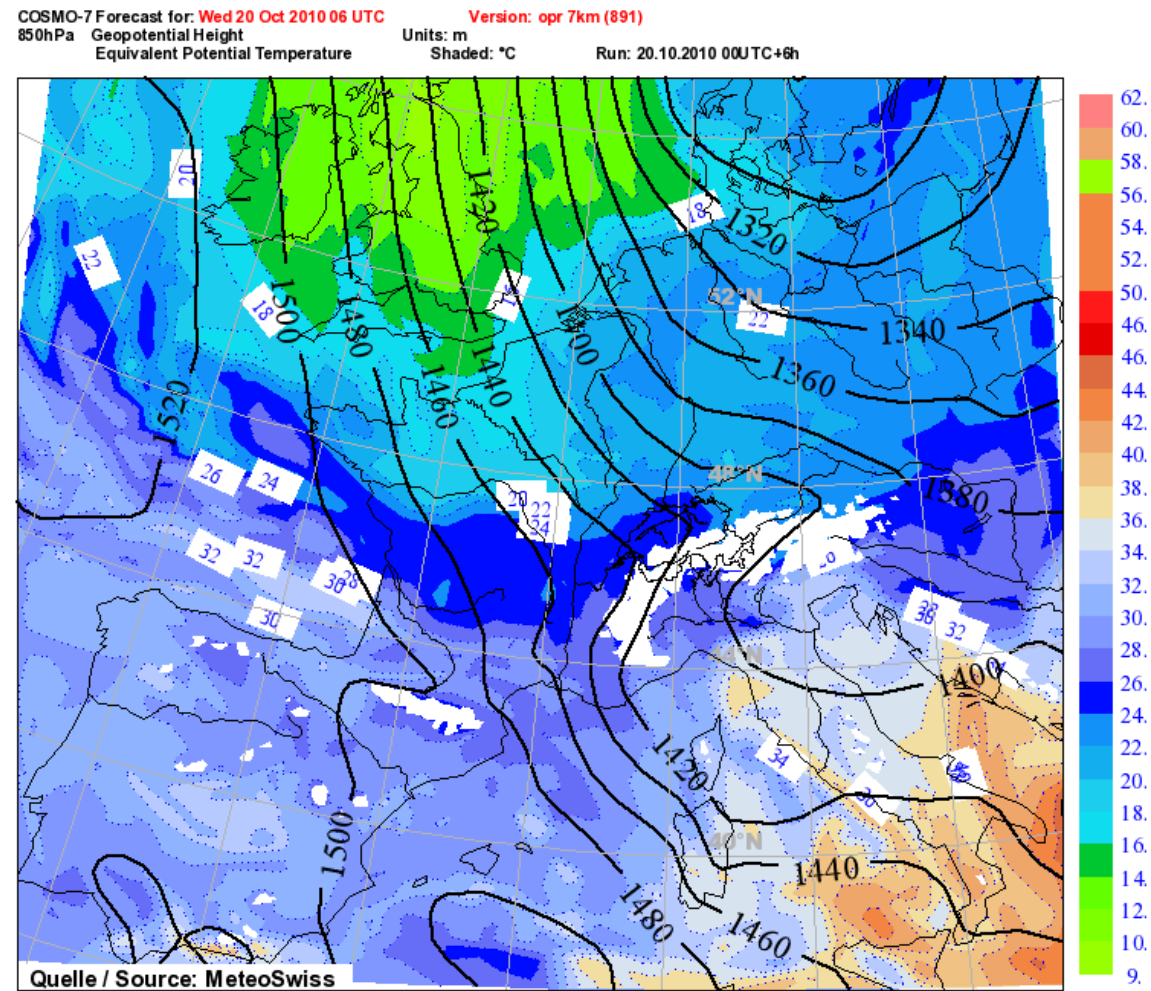


19-20.10 Favonio avvezione fredda



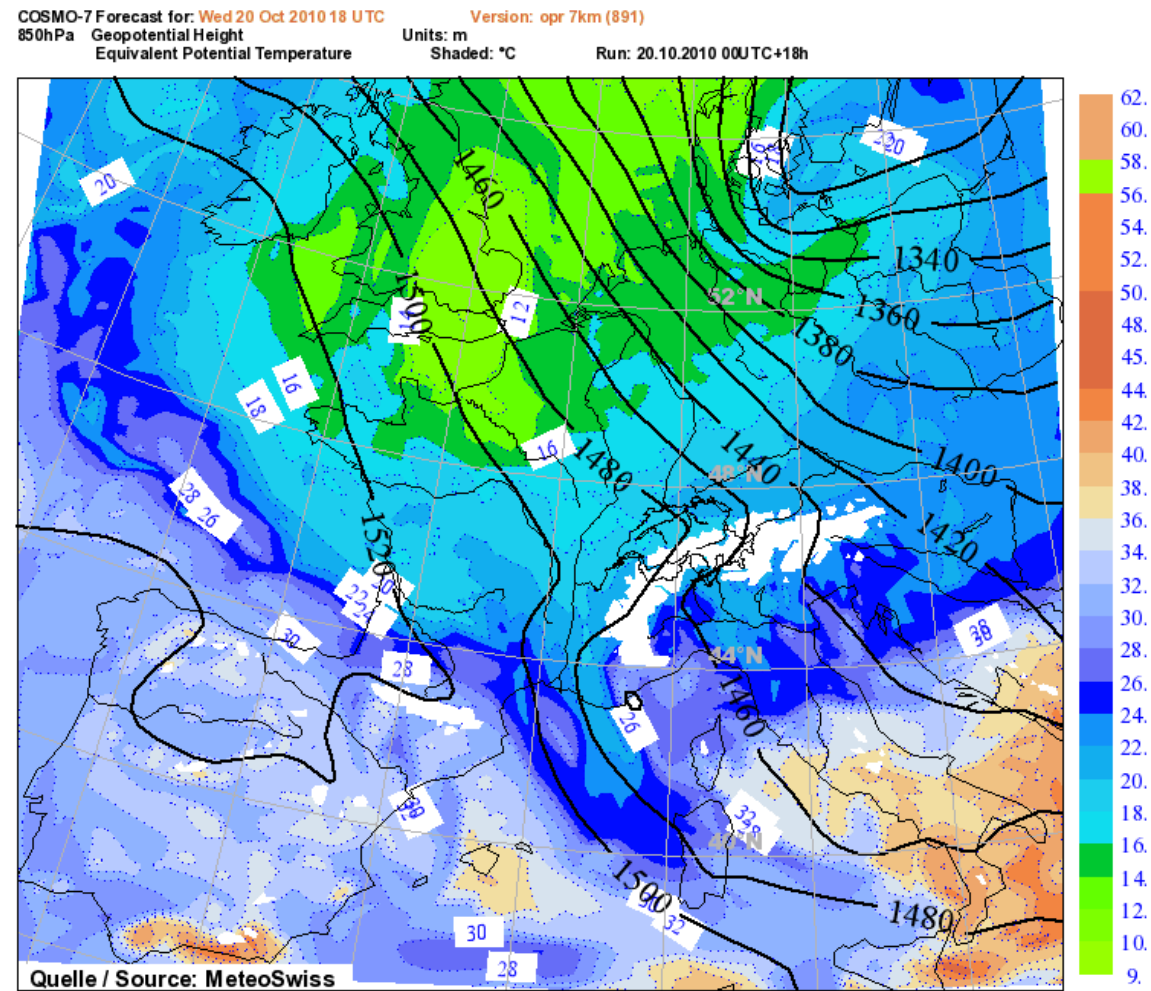


19-20.10 Favonio avvezione fredda





19-20.10 Favonio in avvezione fredda





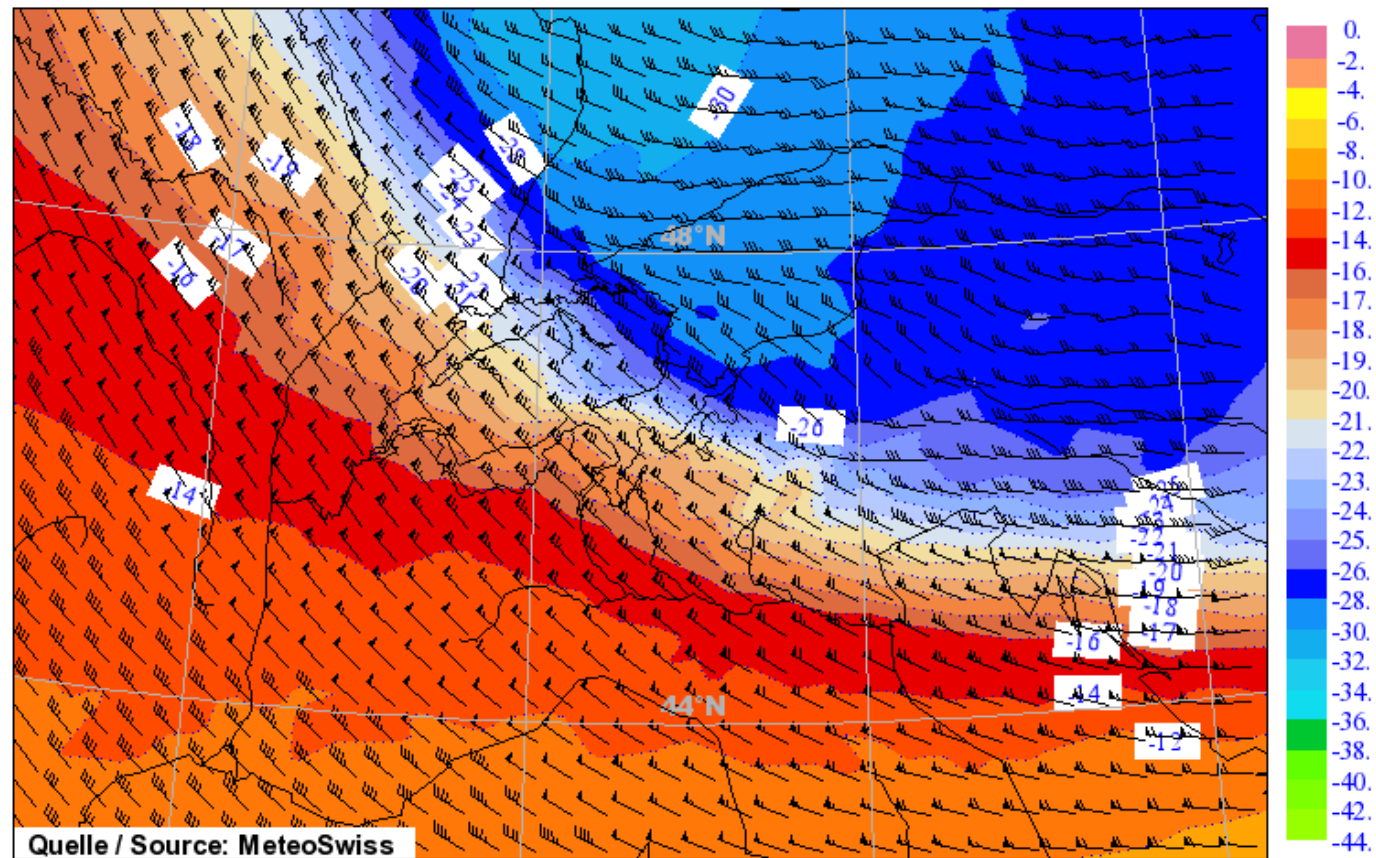
19-20.10 Favonio in avvezione fredda

COSMO-7 Forecast for: **Wed 20 Oct 2010 18 UTC**

Version: opr 7km (891)

Temperature in °C at 5km height and wind every 5 grid points

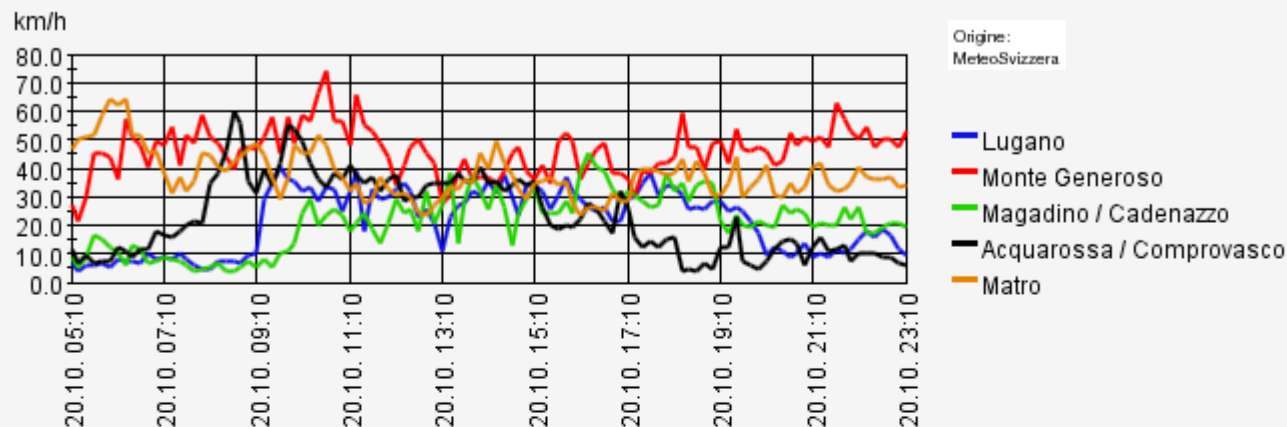
Run: 20.10.2010 06UTC+12h



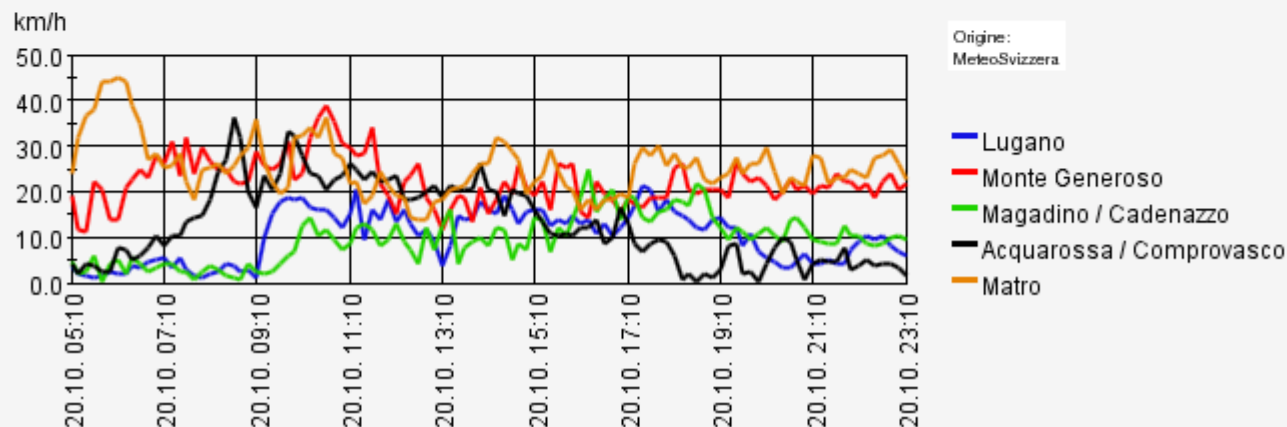


19-20.10 Favonio in avvezione fredda

Raffica del vento (su un secondo); massima [km/h] 20.10.2010 05:10 UTC - 20.10.2010 23:10 UTC



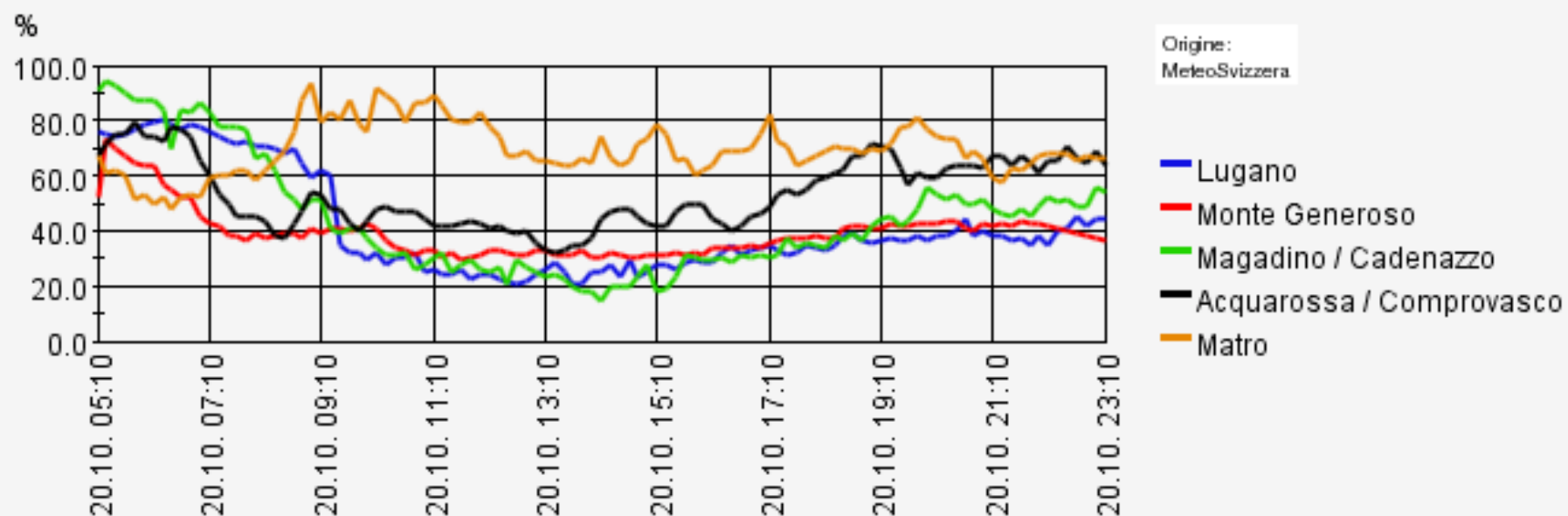
Velocità del vento; media su 10' [km/h] 20.10.2010 05:10 UTC - 20.10.2010 23:10 UTC





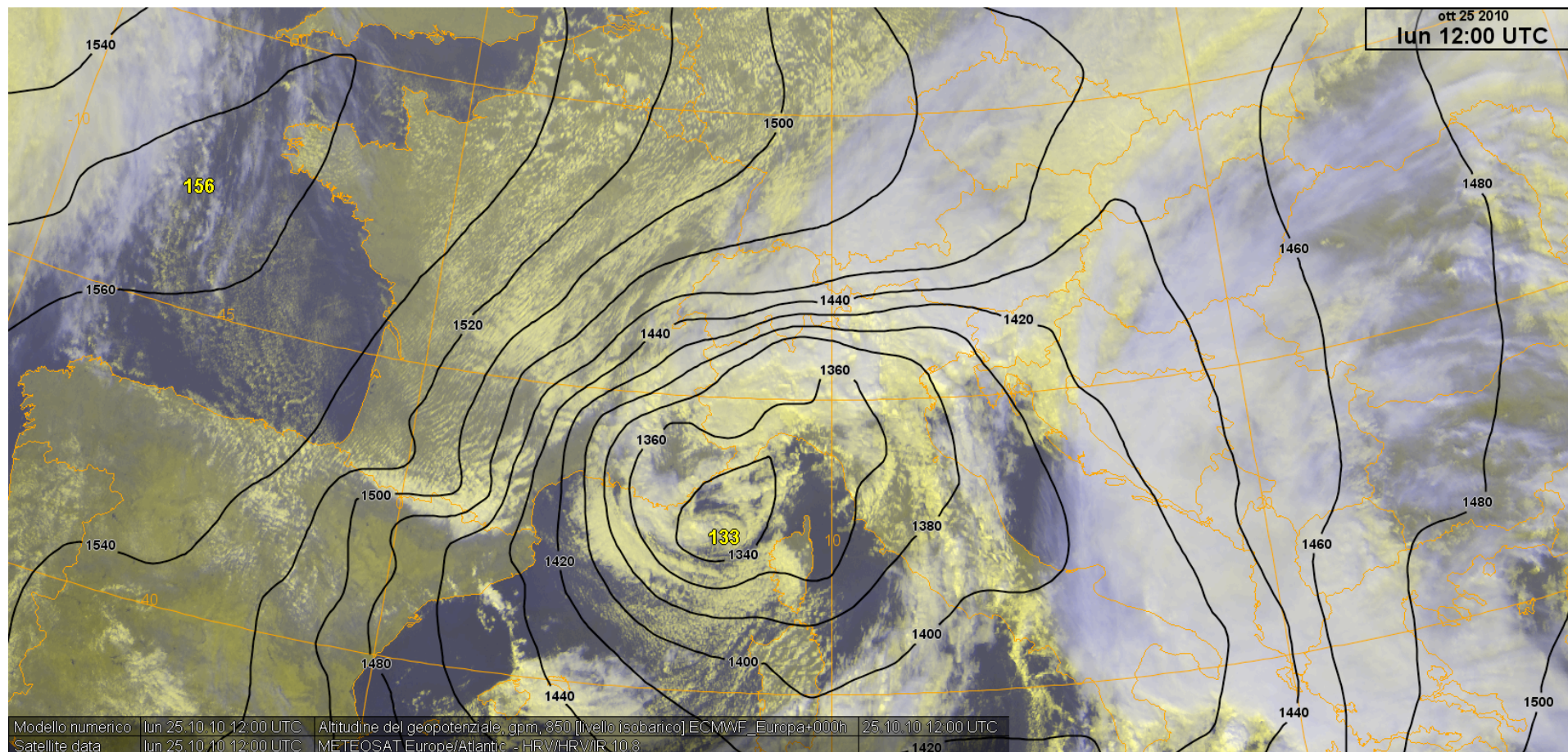
19-20.10 Favonio in avvezione fredda

Umidità relativa dell'aria a 2 m; valore momentaneo [%] 20.10.2010 05:10 UTC - 20.10.2010 23:10 UTC



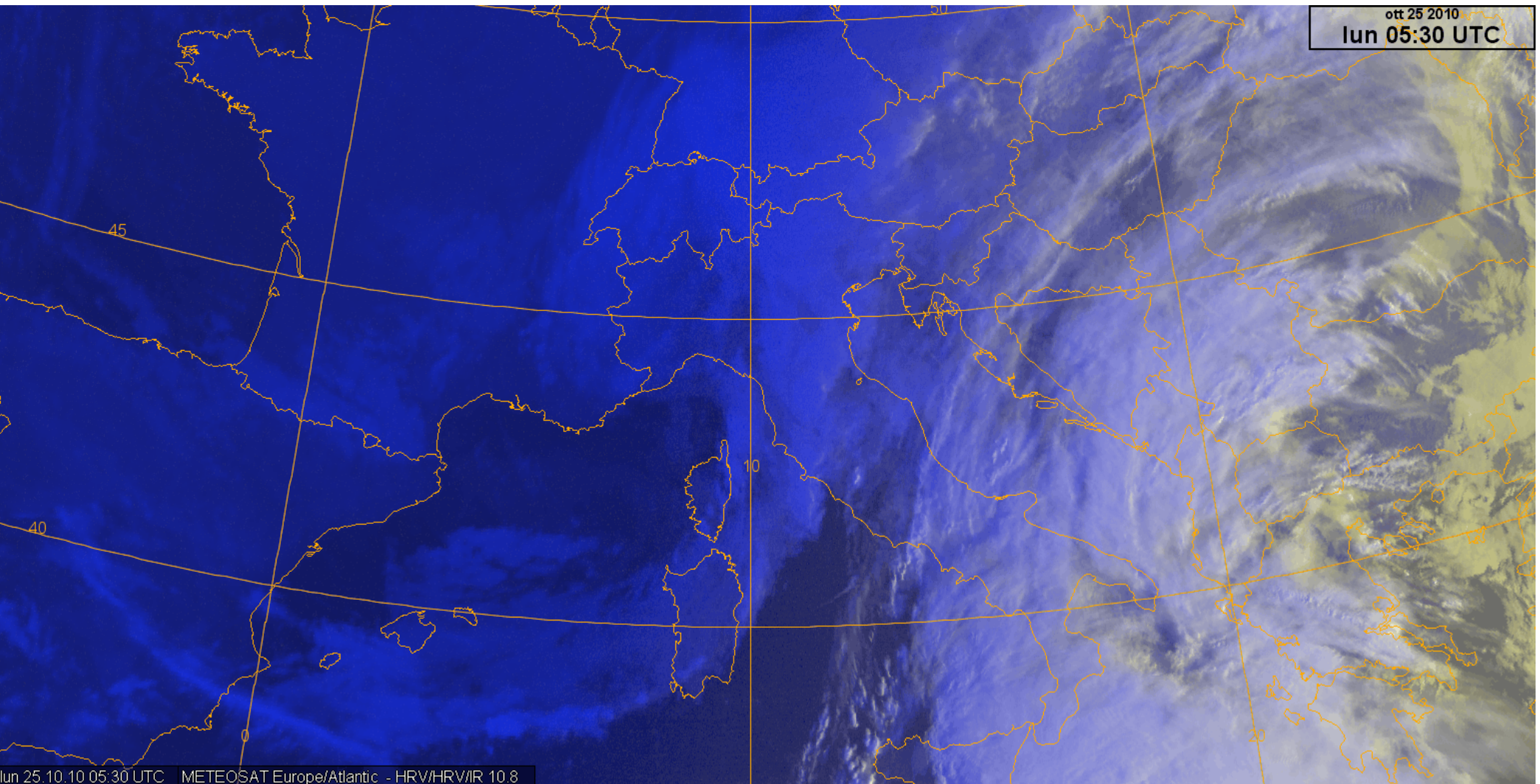


25.10 Depressione Golfo di Genova





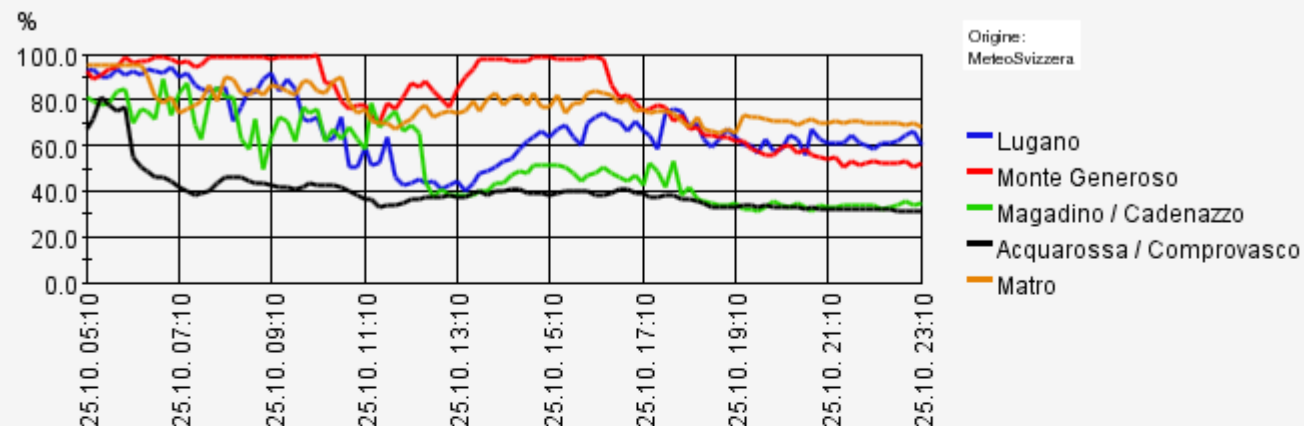
25.10 Depressione Golfo di Genova



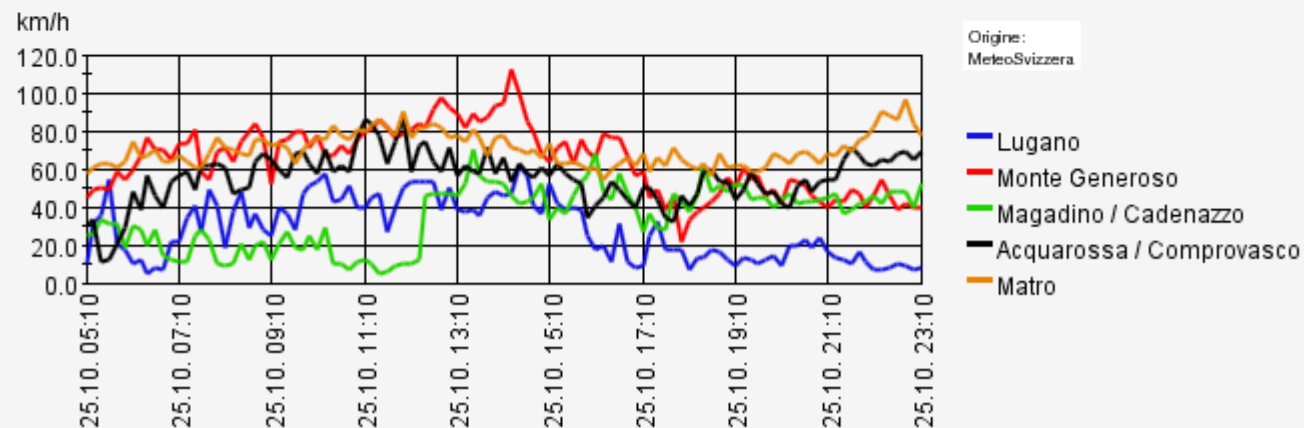


25.10 Depressione Golfo di Genova

Umidità relativa dell'aria a 2 m; valore momentaneo [%] 25.10.2010 05:10 UTC - 25.10.2010 23:10 UTC

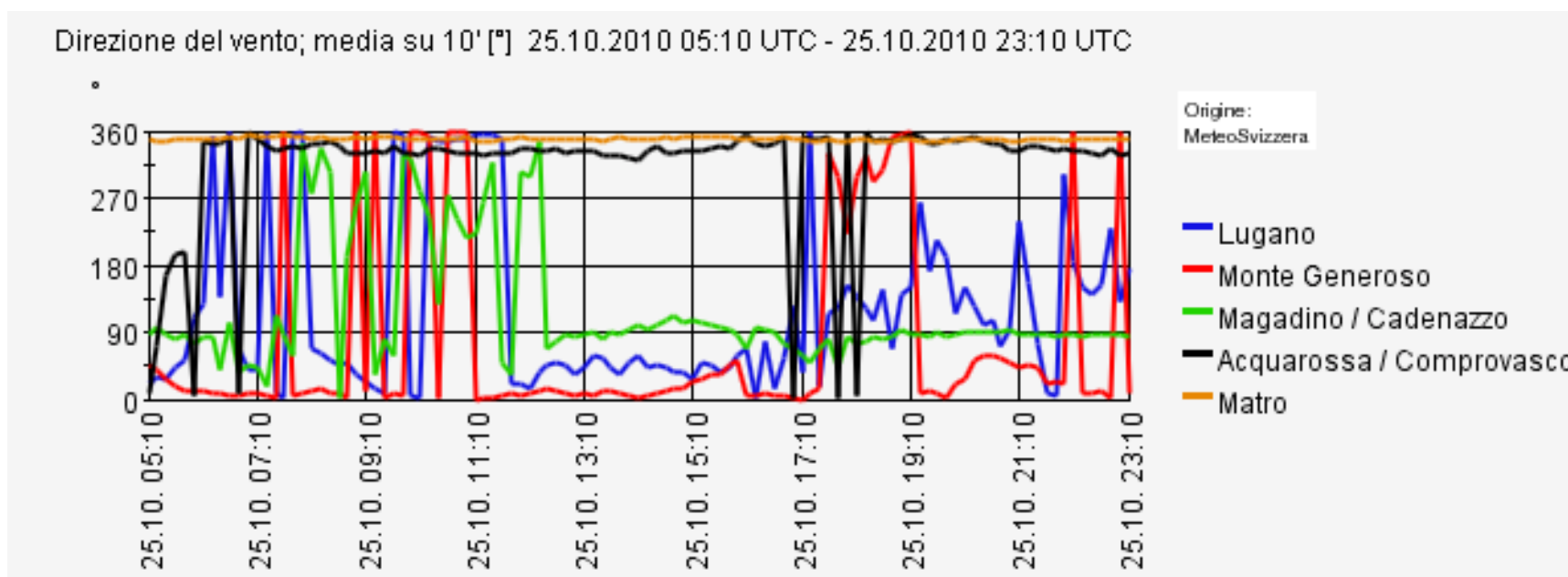


Raffica del vento (su un secondo); massima [km/h] 25.10.2010 05:10 UTC - 25.10.2010 23:10 UTC





25.10 Depressione Golfo di Genova





5-7.11 forte nevicata in montagna

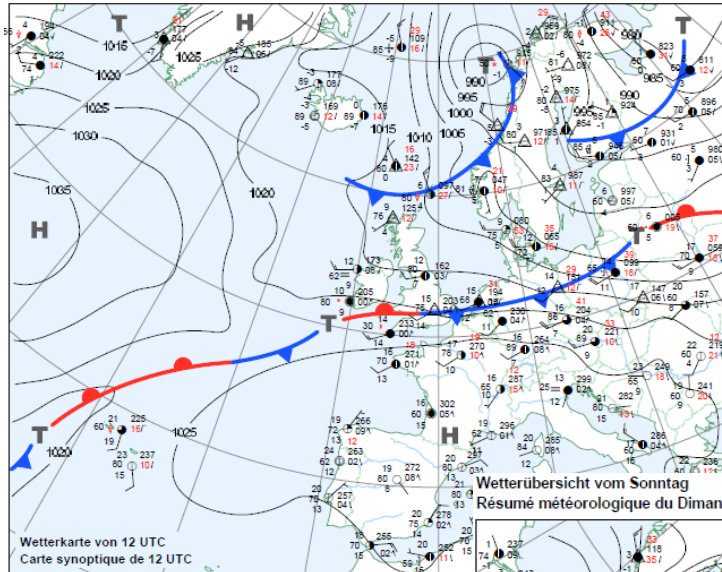
Wetterübersicht vom Freitag
Résumé météorologique du Vendredi

5.11.2010



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement des Innern EDI
Département fédéral de l'intérieur DFI
Bundesamt für Meteorologie und Klimatologie MeteoSwiss
Office fédéral de météorologie et de climatologie MétéoSuisse



Wetterkarte von 12 UTC
Carte synoptique de 12 UTC

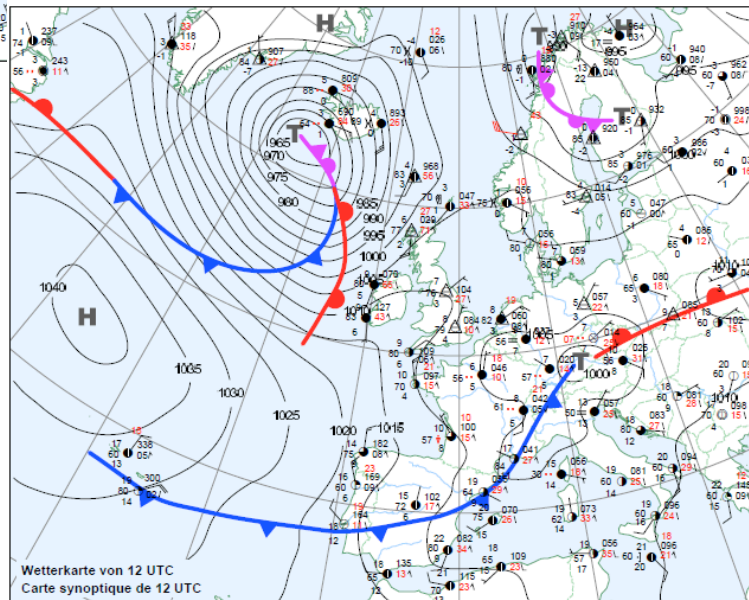
Wetterübersicht vom Sonntag
Résumé météorologique du Dimanche

7.11.2010



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement des Innern EDI
Département fédéral de l'intérieur DFI
Bundesamt für Meteorologie und Klimatologie MeteoSwiss
Office fédéral de météorologie et de climatologie MétéoSuisse



Wetterkarte von 12 UTC
Carte synoptique de 12 UTC

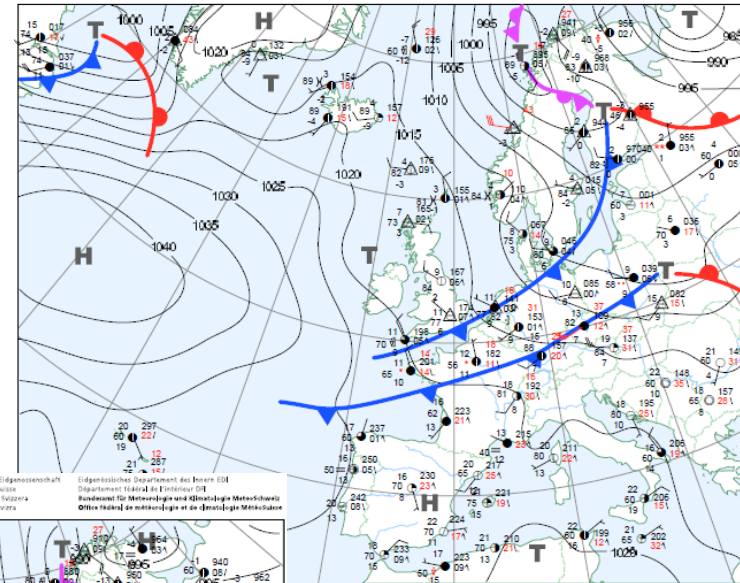
Wetterübersicht vom Samstag
Résumé météorologique du Samedi

6.11.2010



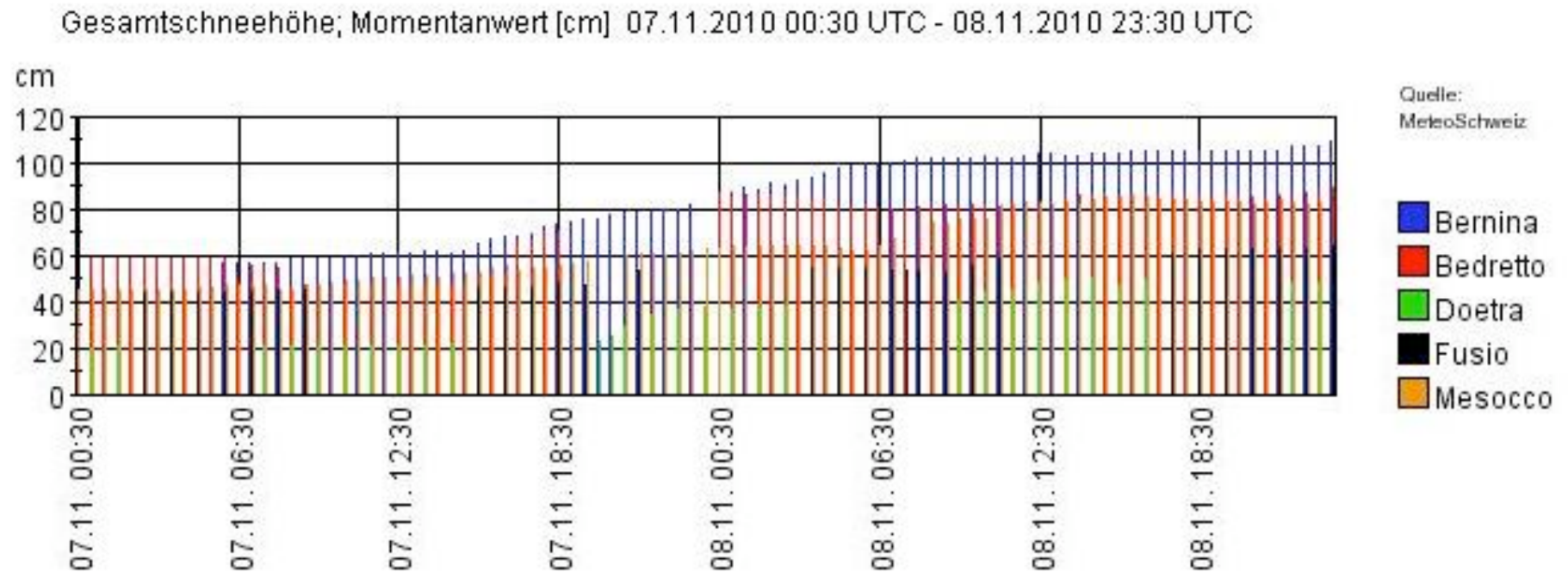
Schweizerische Eidgenossenschaft
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Office fédéral de météorologie et de climatologie MétéoSuisse





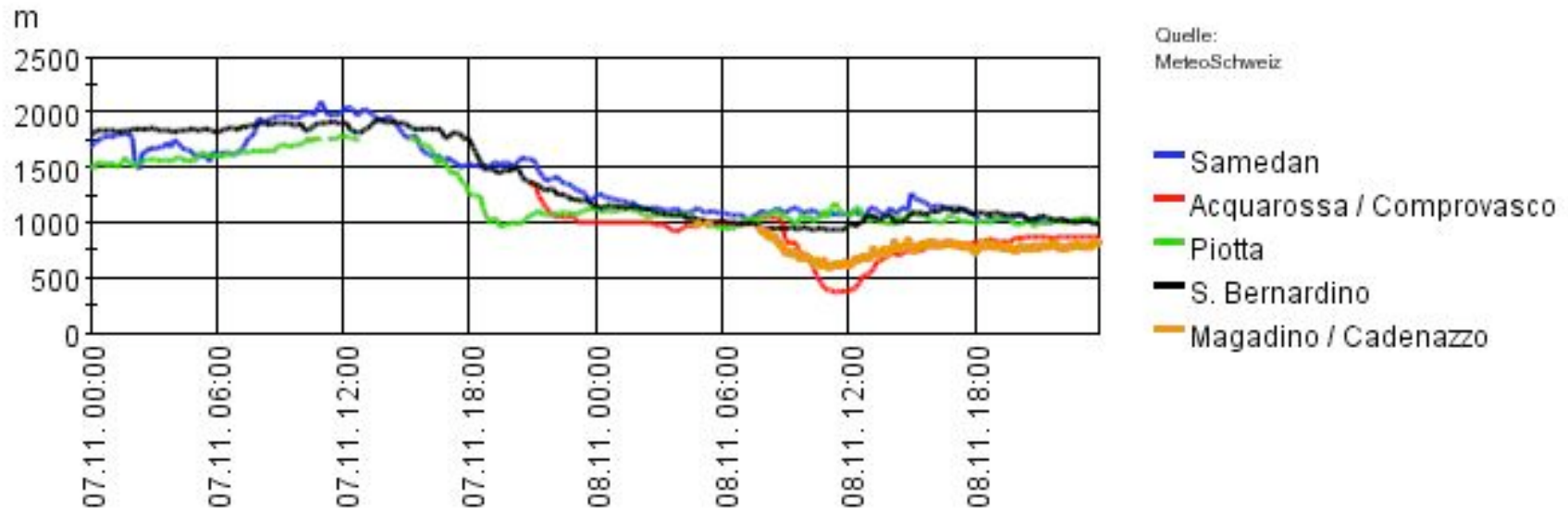
5-7.11 forte nevicata in montagna



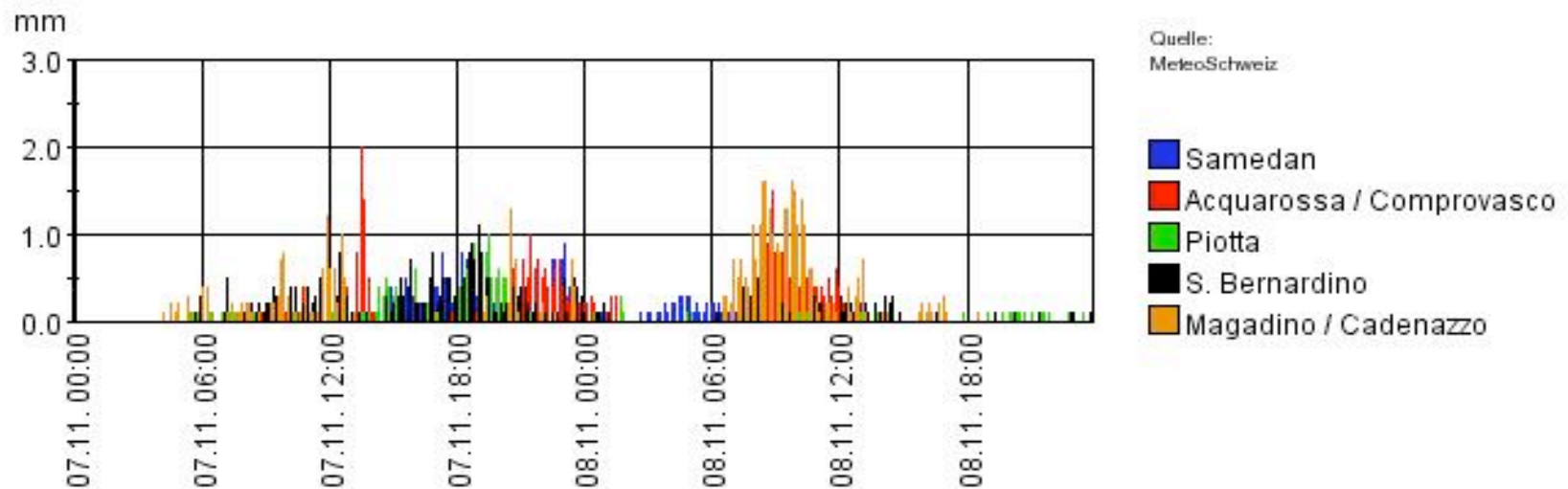


5-7.11 forte nevicata in montagna

Schneefallgrenze; berechnet [m] 07.11.2010 00:00 UTC - 08.11.2010 23:50 UTC

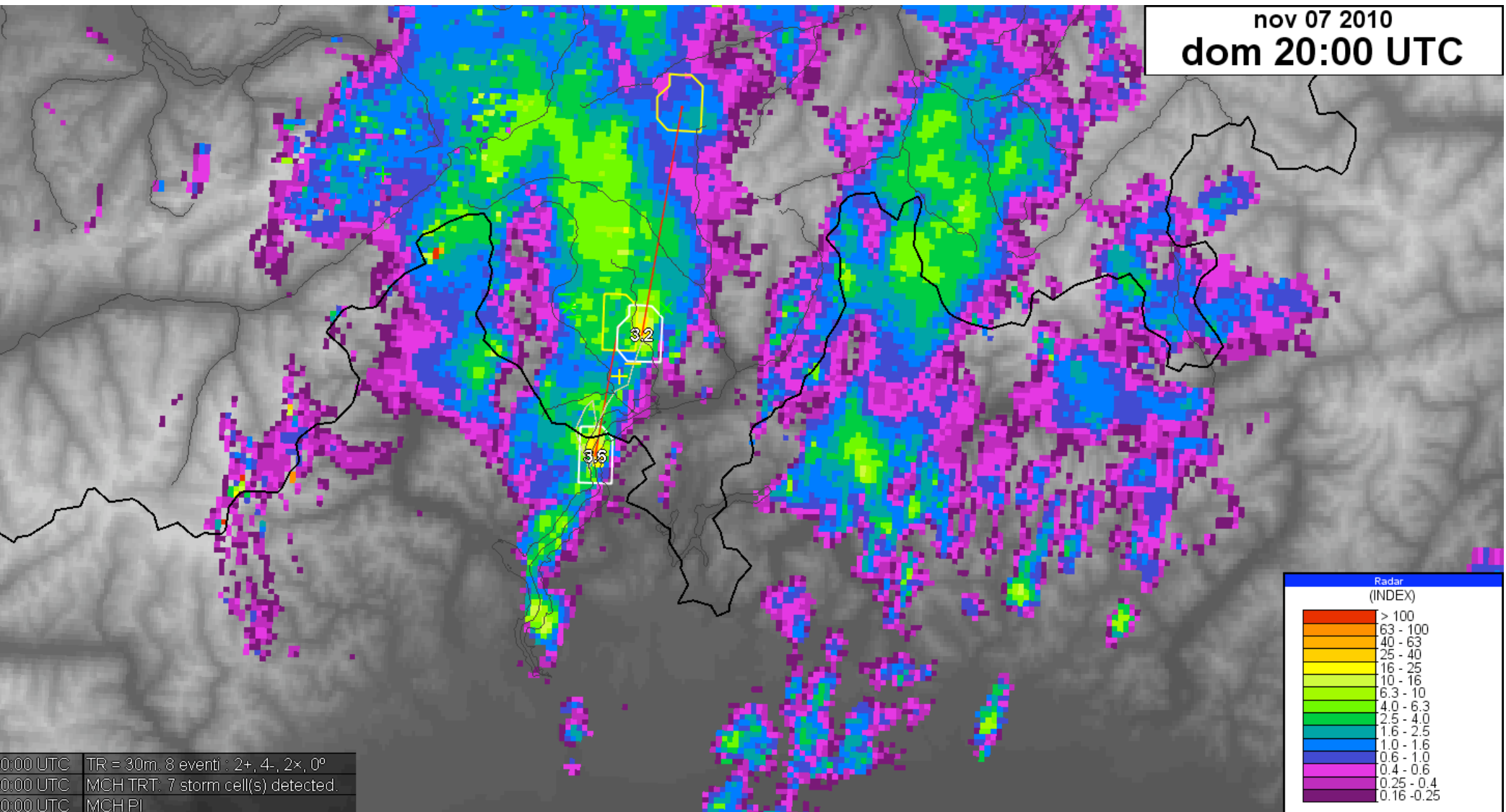


Niederschlag; Zehnminutensumme [mm] 07.11.2010 00:00 UTC - 08.11.2010 23:50 UTC



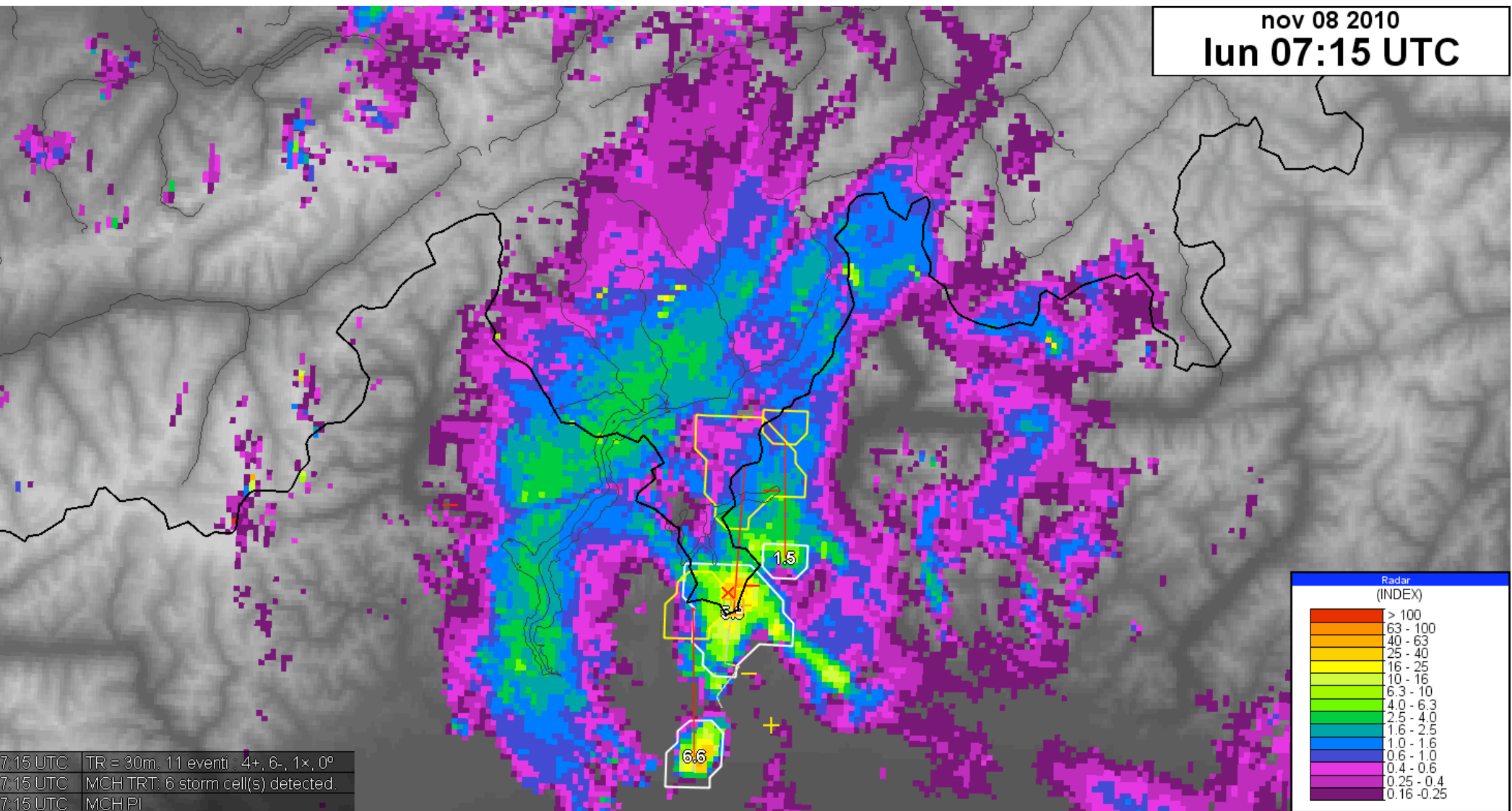


5-7.11 attività convettiva



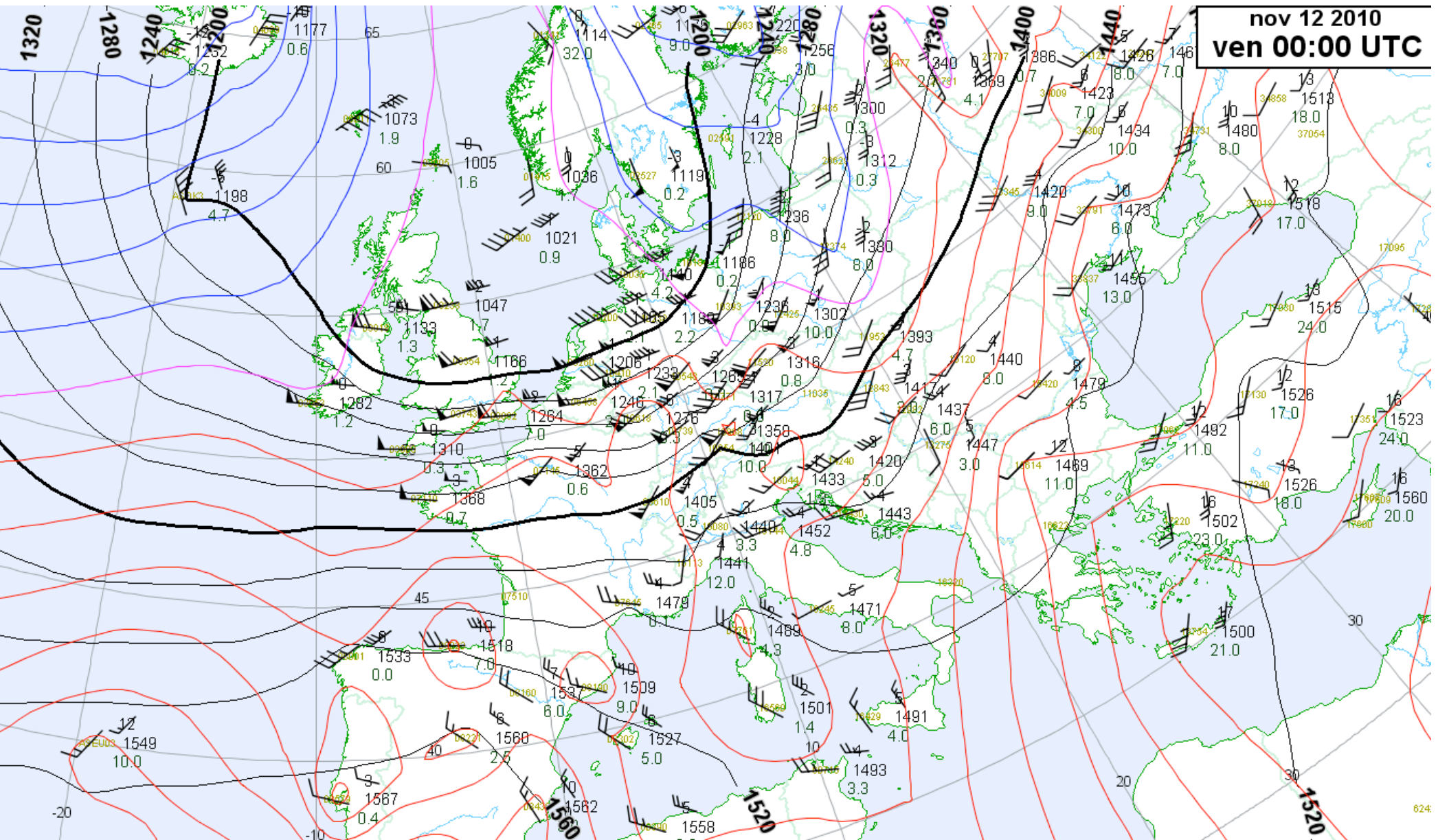


5-7.11 attività convettiva





12.11 radiosondaggi @850 hPa





12.11 precipitazioni trasportate





12.11 avvisi vento

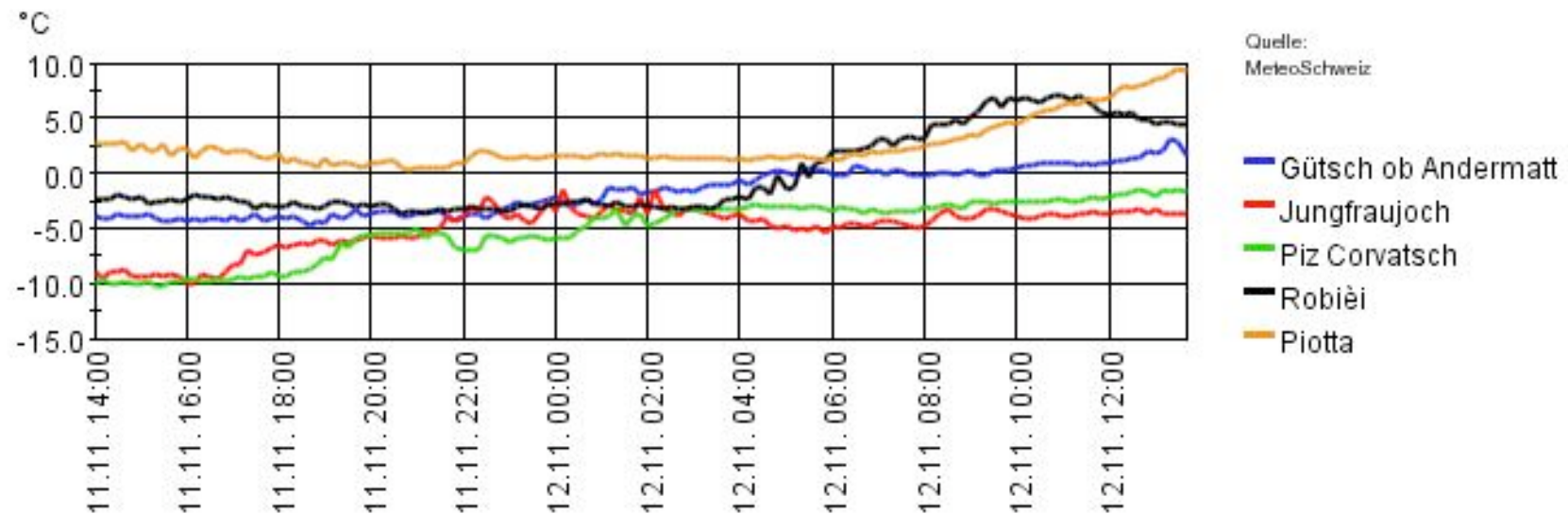


[illegible]



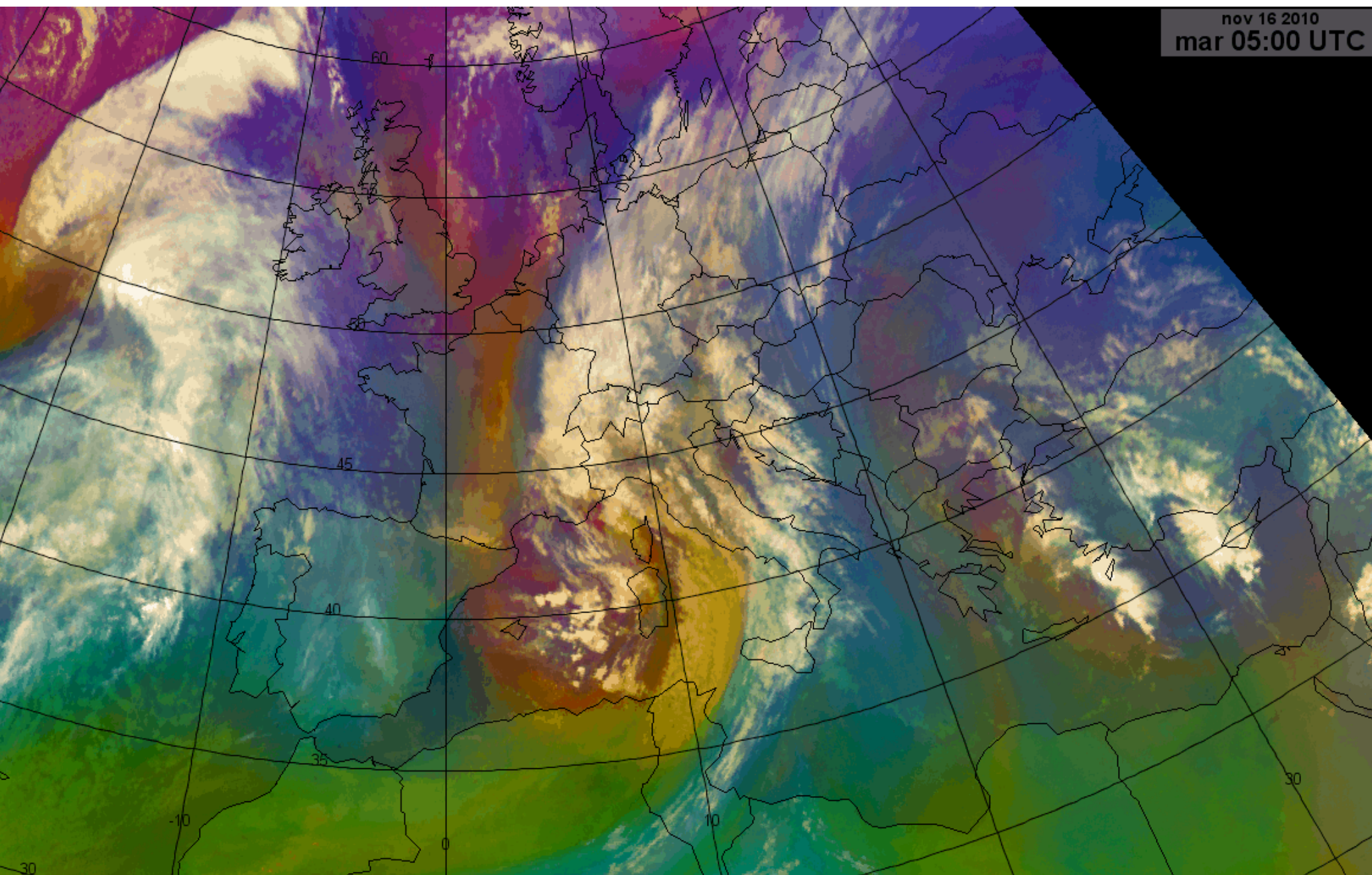
12.11 aria mite dall'Atlantico

Lufttemperatur 2 m über Boden; Momentanwert [°C] 11.11.2010 14:00 UTC - 12.11.2010 13:40 UTC



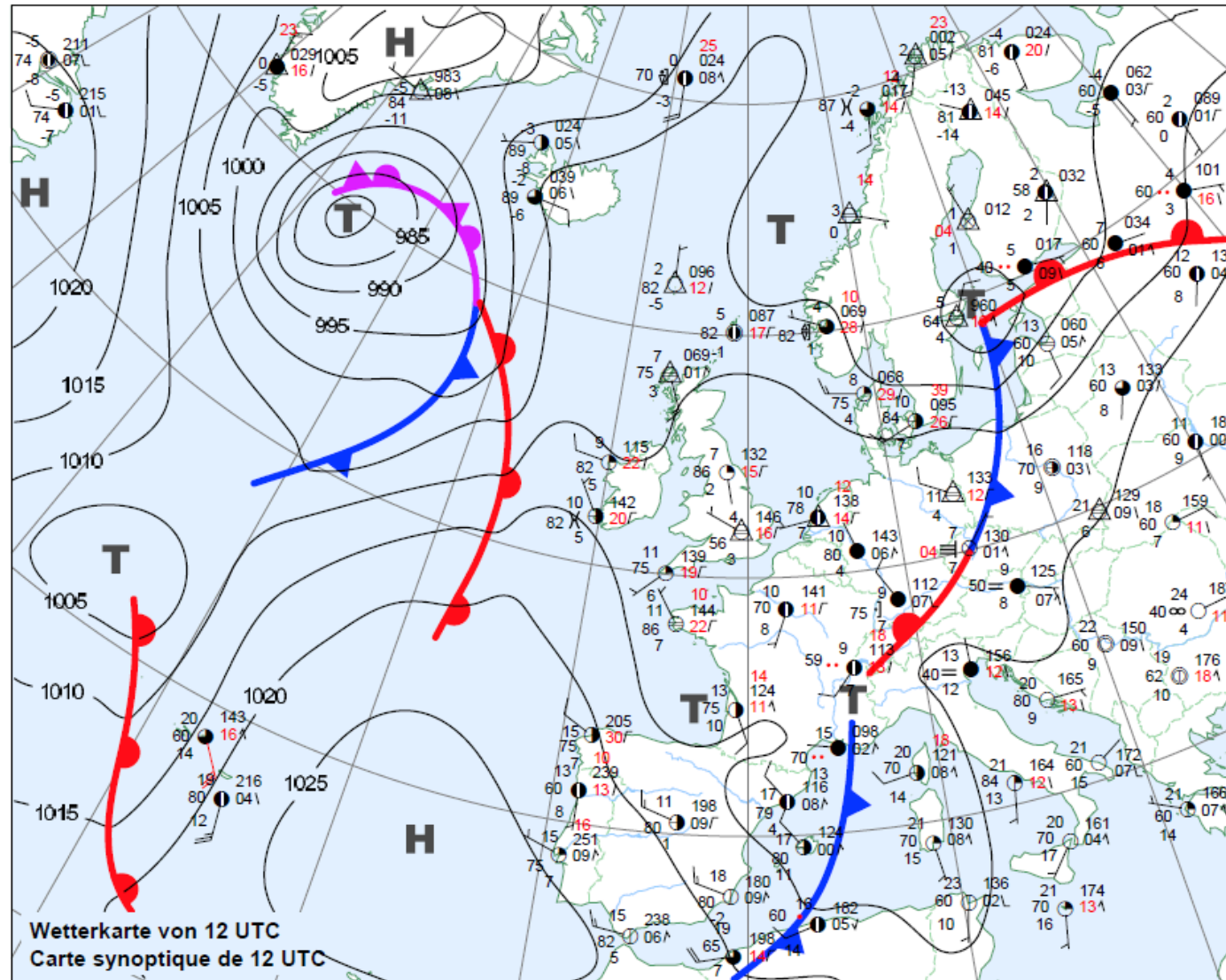


15.11 Depressione Golfo di Genova





15.11 Depressione Golfo di Genova

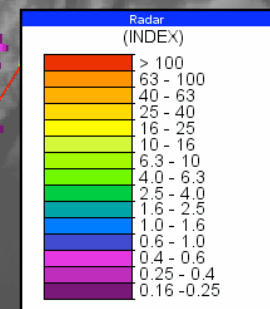




15-16.11 animazione radar

nov 15 2010

lun 14:00 UTC

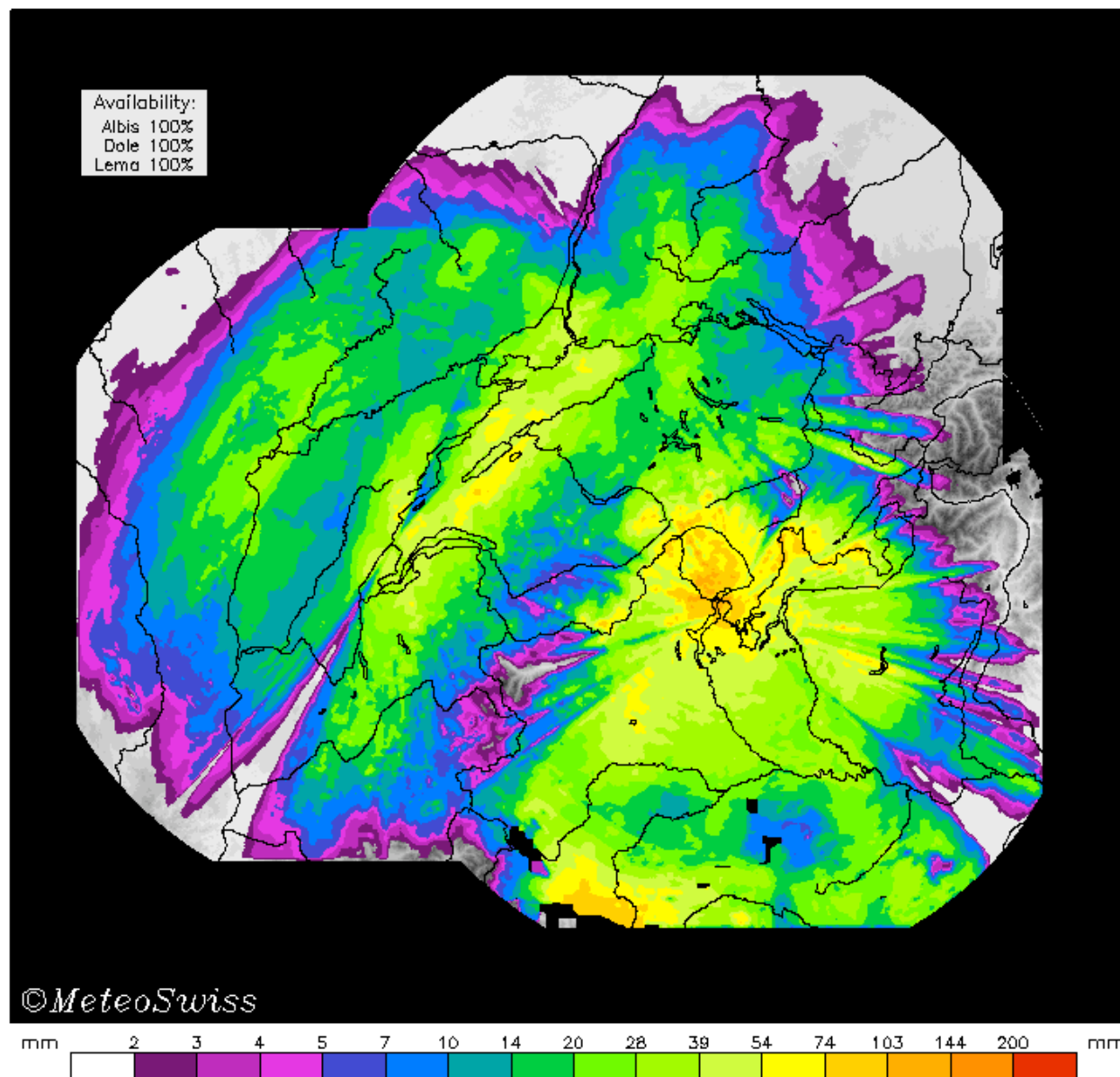


Blitzdaten	lun 15.11.10 14:00 UTC	TR = 30m. Nessuna scarica disponibile
SCIT	lun 15.11.10 14:00 UTC	MCH TRT: 9 storm cell(s) detected.
EPM	mar 16.11.10 17:47 UTC	Tutti i parametri
Radar	lun 15.11.10 14:00 UTC	MCH PI



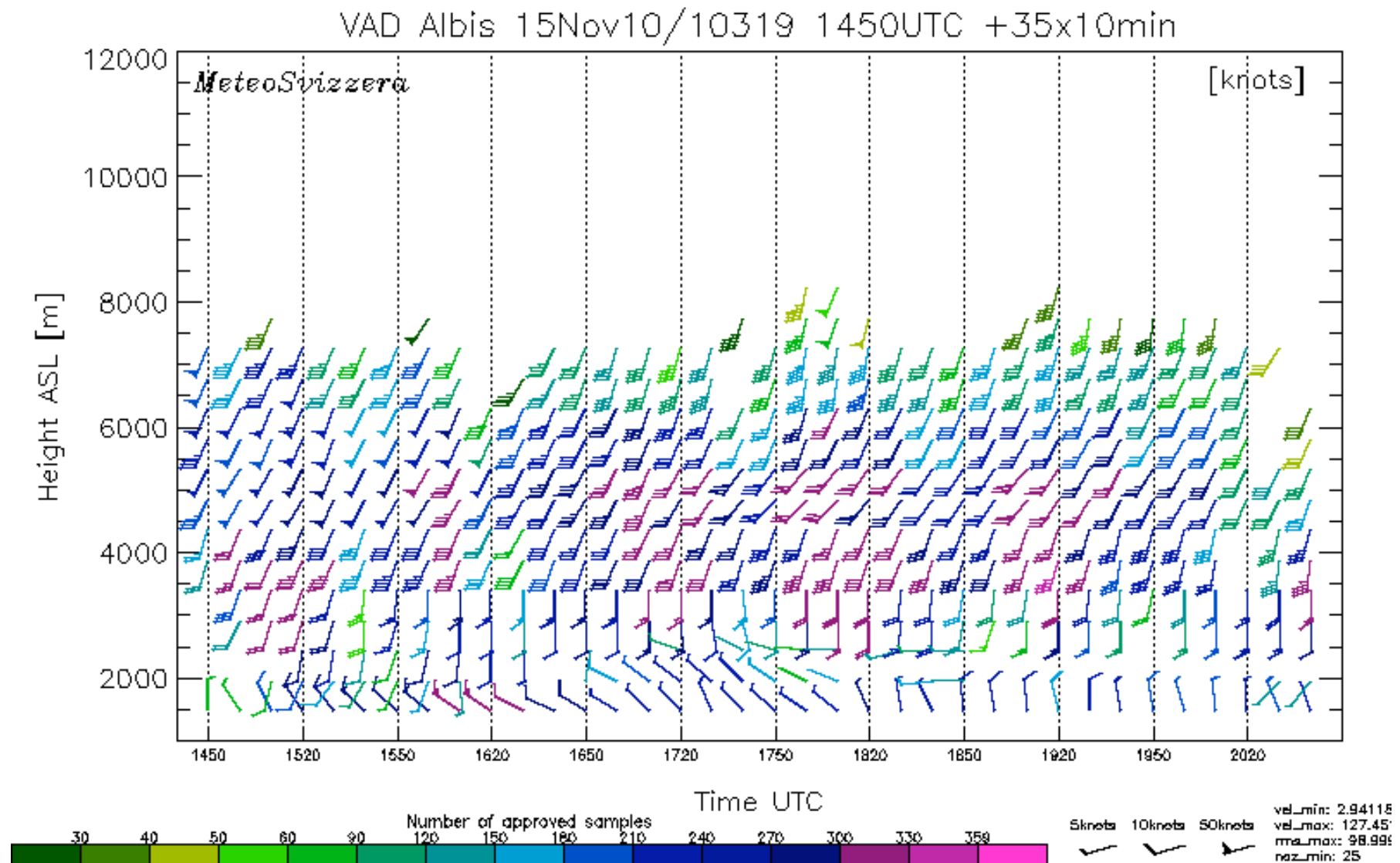
14-16.11 Accumuli stimati dal radar

Radar Accumulation 16.11.2010 17:00UTC -72h



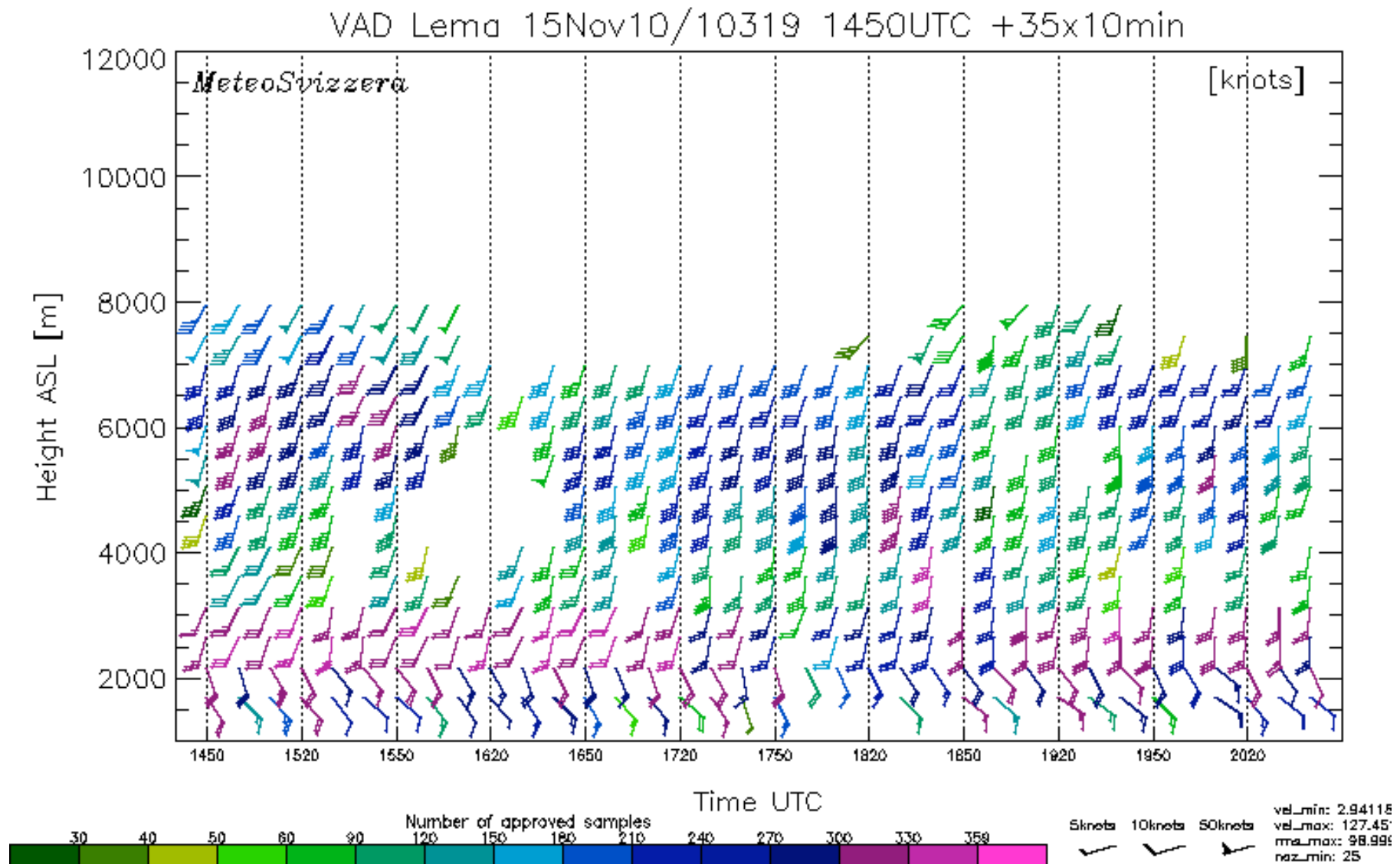


15.11 al nord „Gegenstromlage“



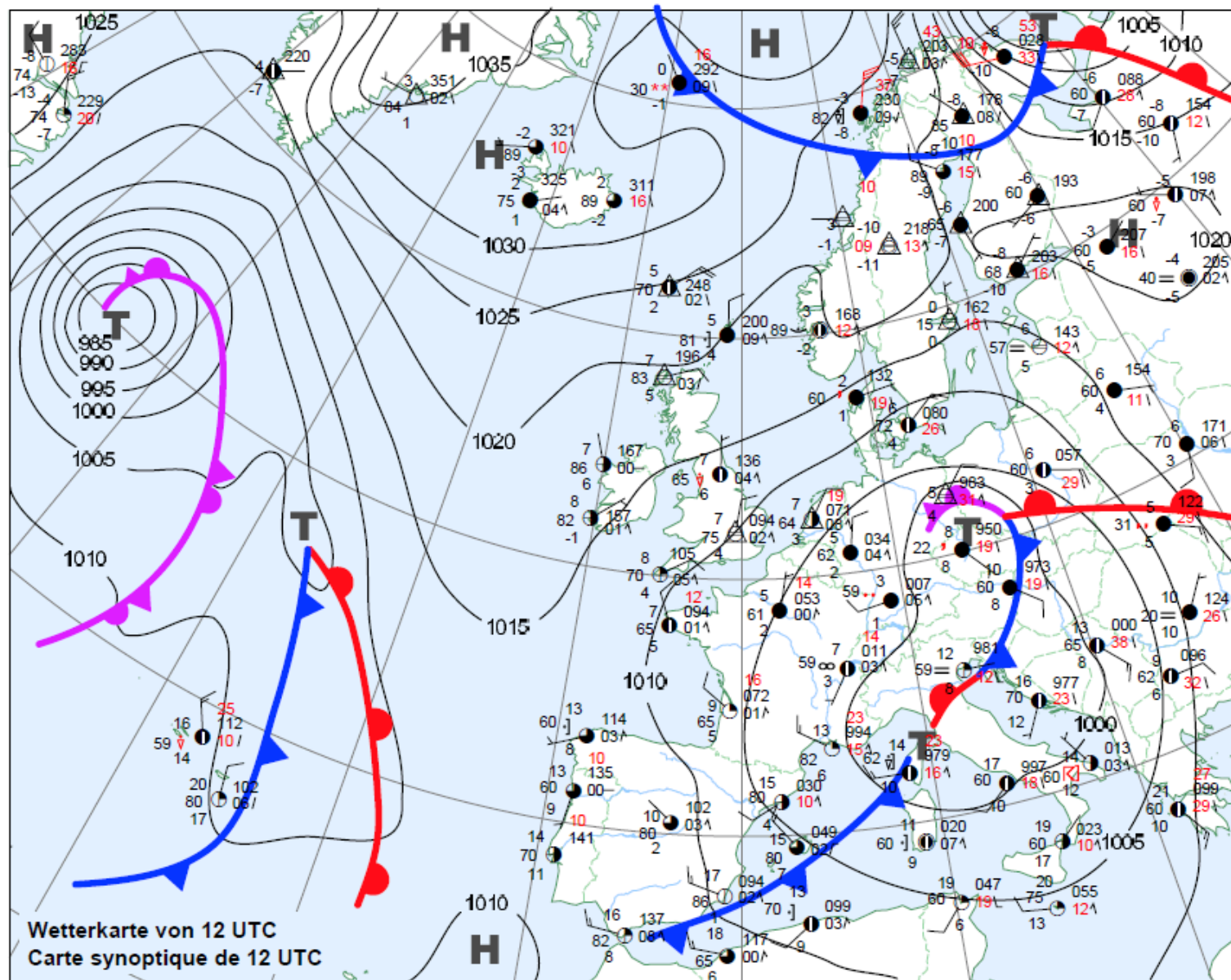


15.11 al sud corrente da sud-sudest



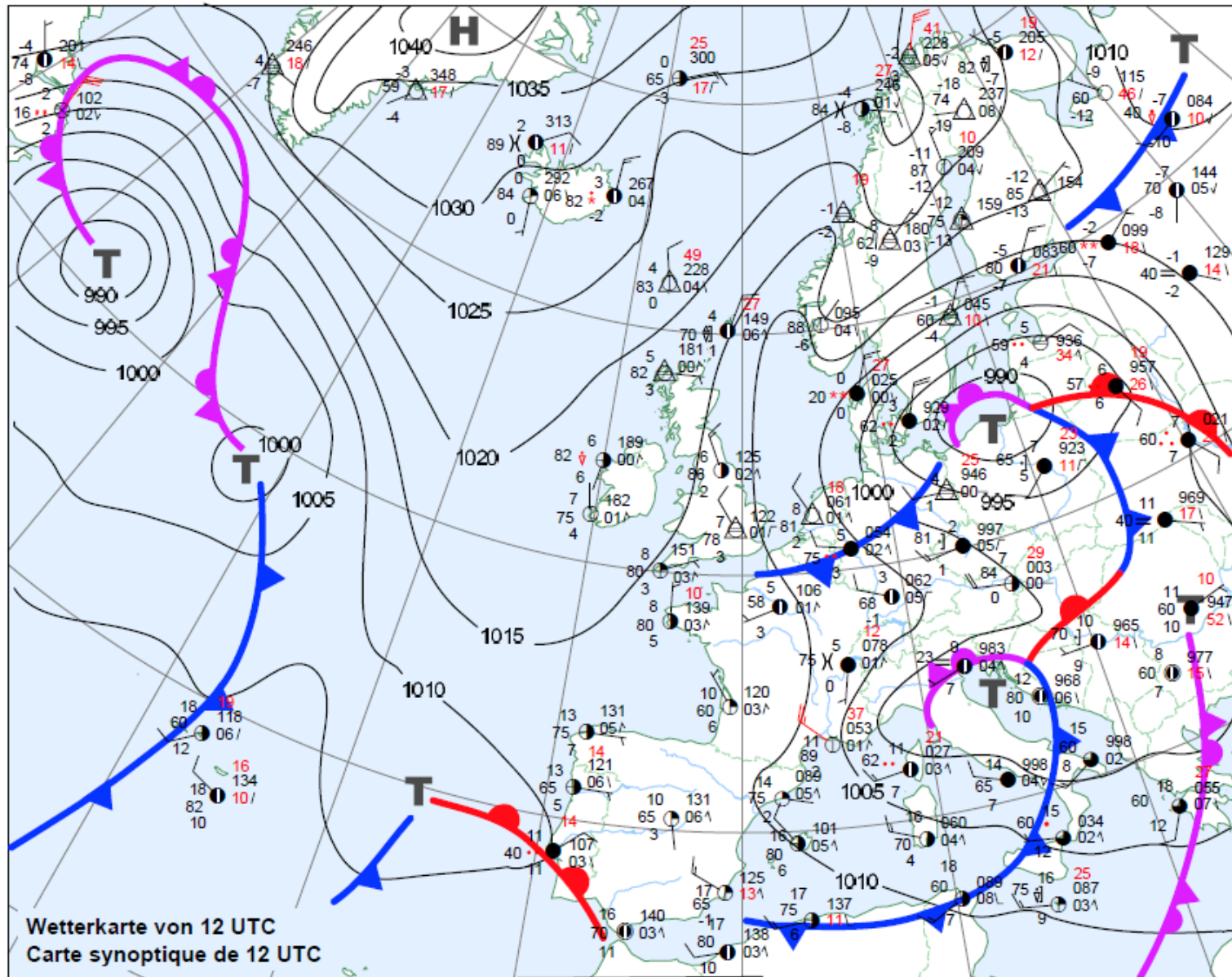


22-23.11 Schiarite e formazione di nebbia





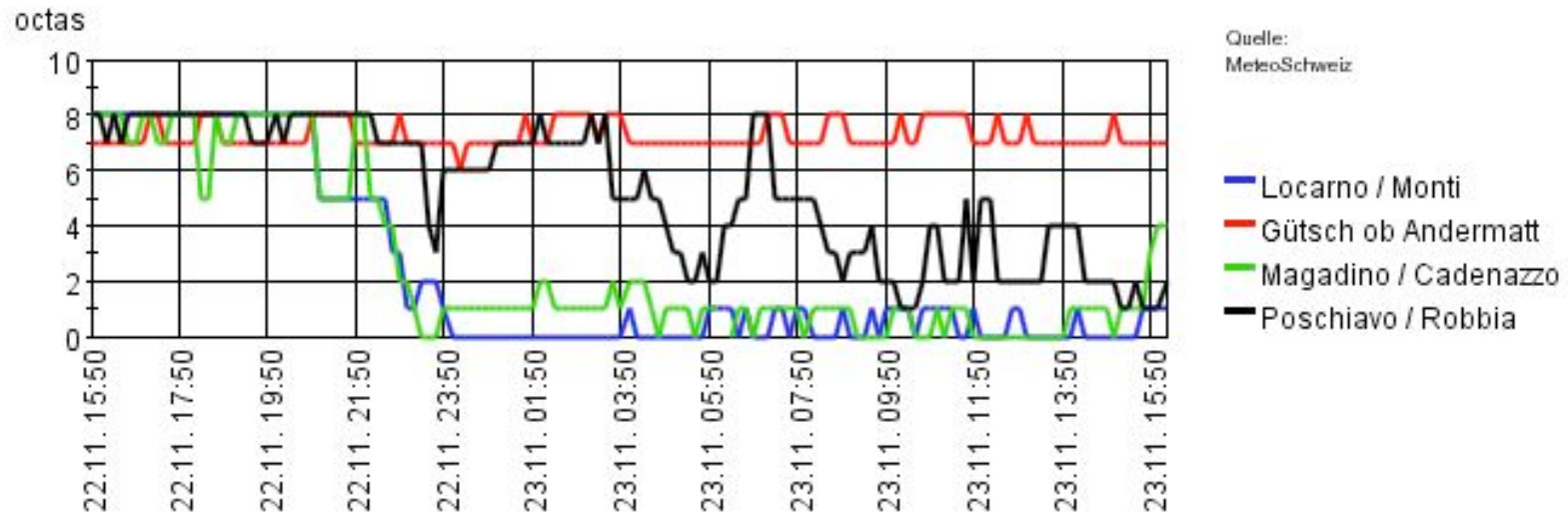
22-23.11 Schiarite e formazione di nebbia





22-23.11 nuvolosità algoritmo

Gesamtbewölkung ohne dünne hohe Cirren; berechnet mit APCADA [octas] 22.11.2010 15:50 UTC - 23.11.2010 16:10 UTC





22-23.11 schiarite e formazione di nebbia

2010-11-22 18:30 UTC



MeteoSwiss

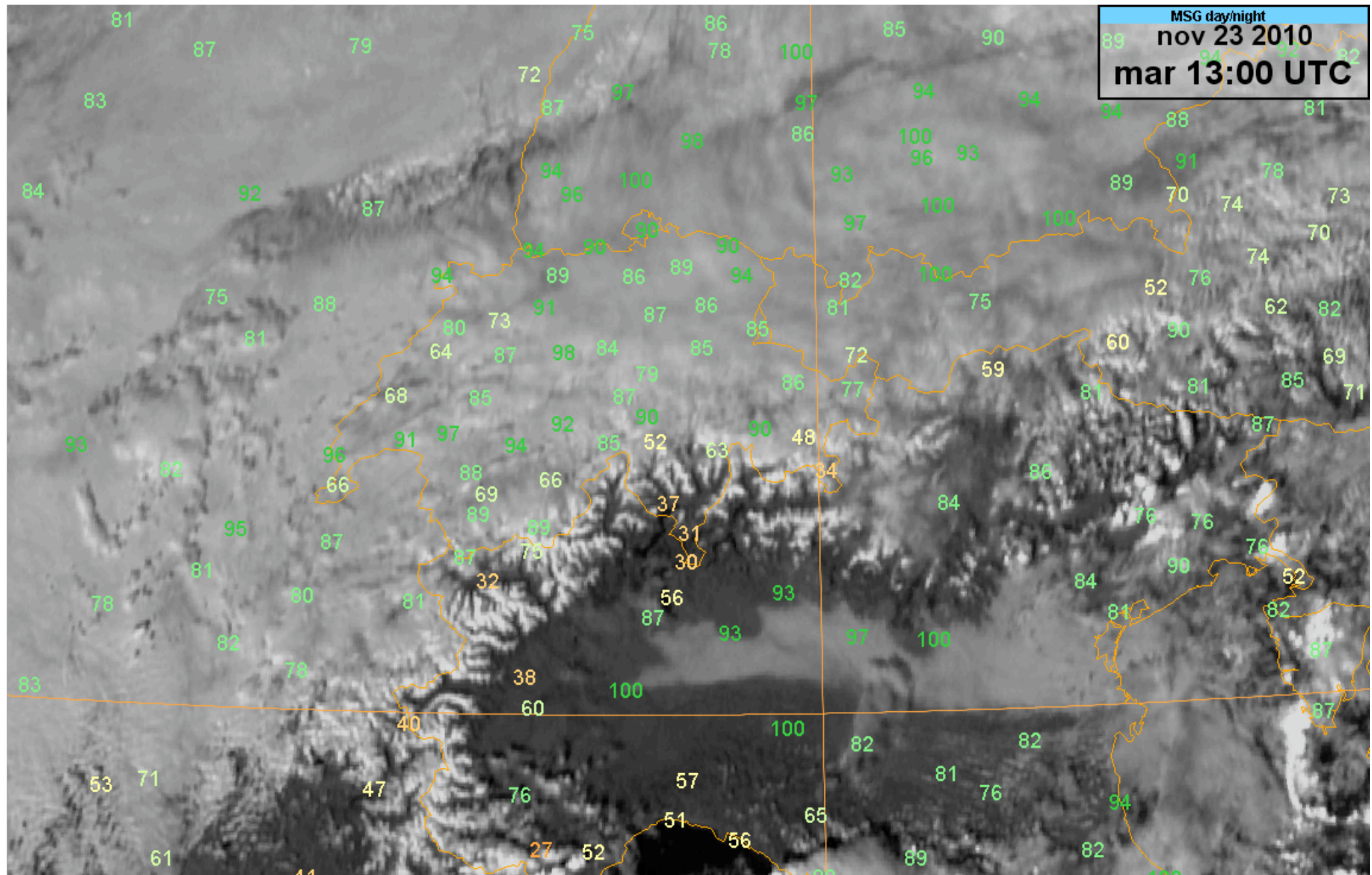
2010-11-22 18:30 UTC



MeteoSwiss



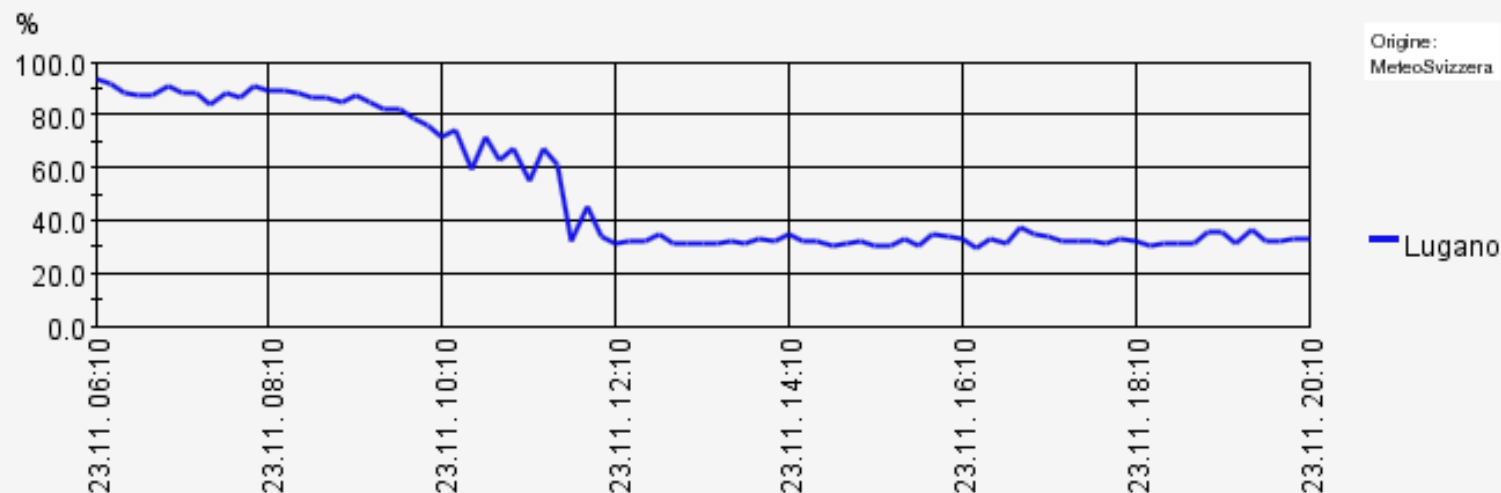
23.11 Il Favonio si mangia la nebbia



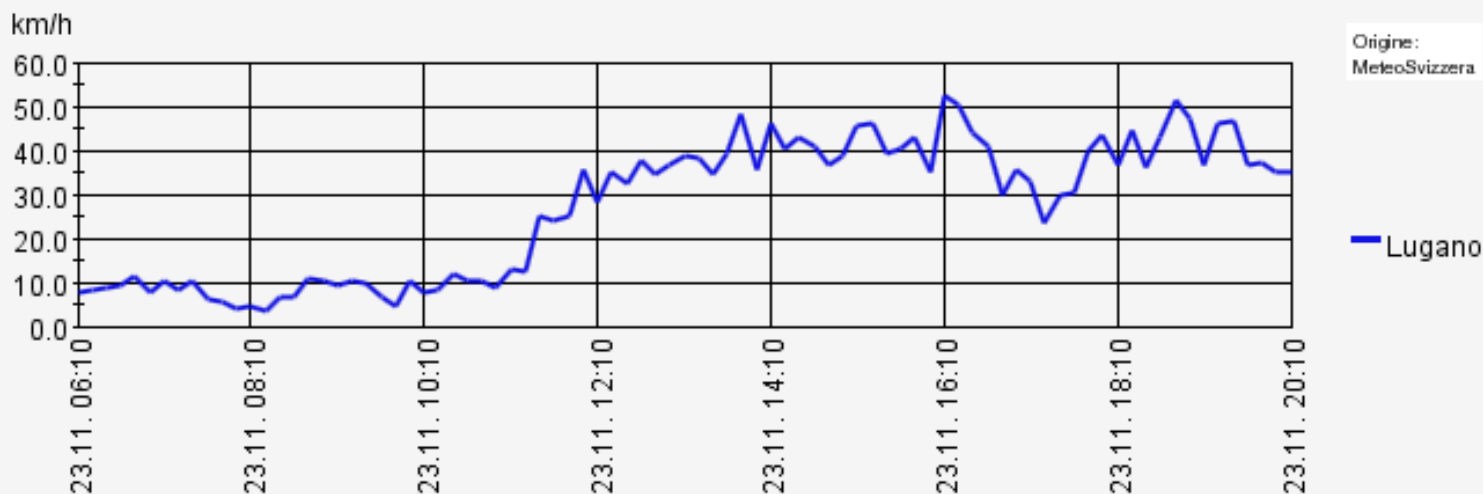


23.11 Il Favonio si mangia la nebbia

Umidità relativa dell'aria a 2 m; valore momentaneo [%] 23.11.2010 06:10 UTC - 23.11.2010 20:10 UTC

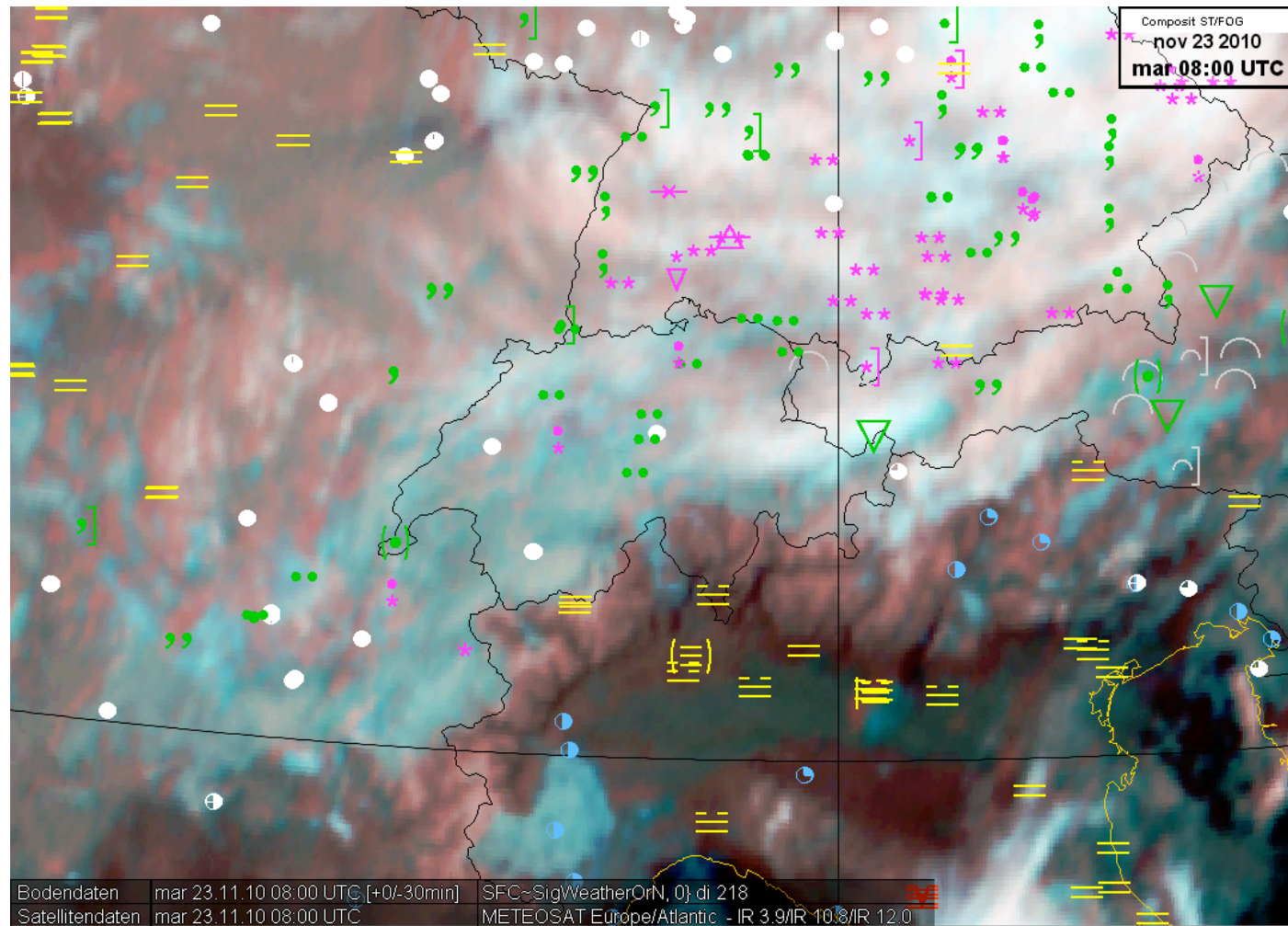


Raffica del vento (su un secondo); massima [km/h] 23.11.2010 06:10 UTC - 23.11.2010 20:10 UTC



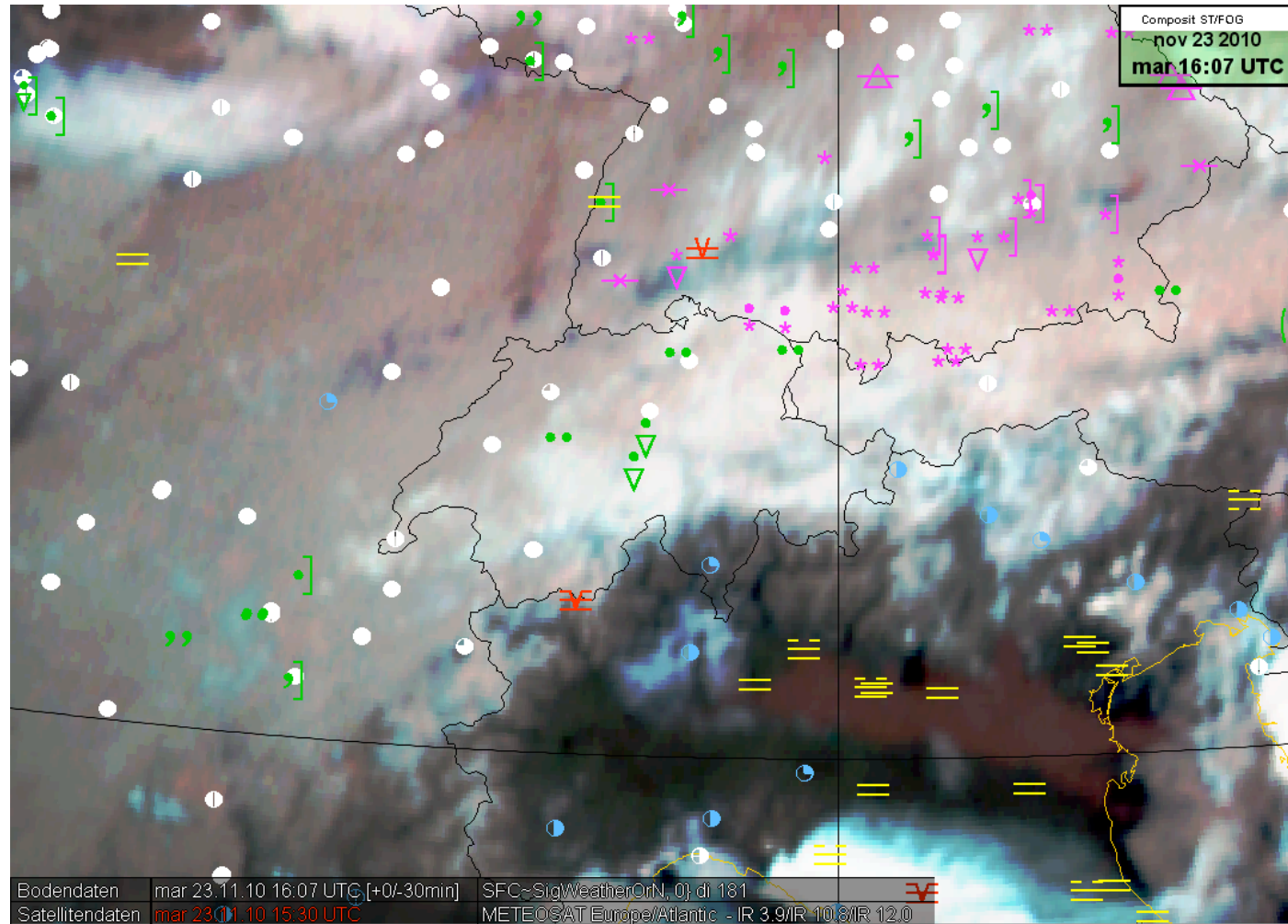


23.11 Il favonio si mangia la nebbia



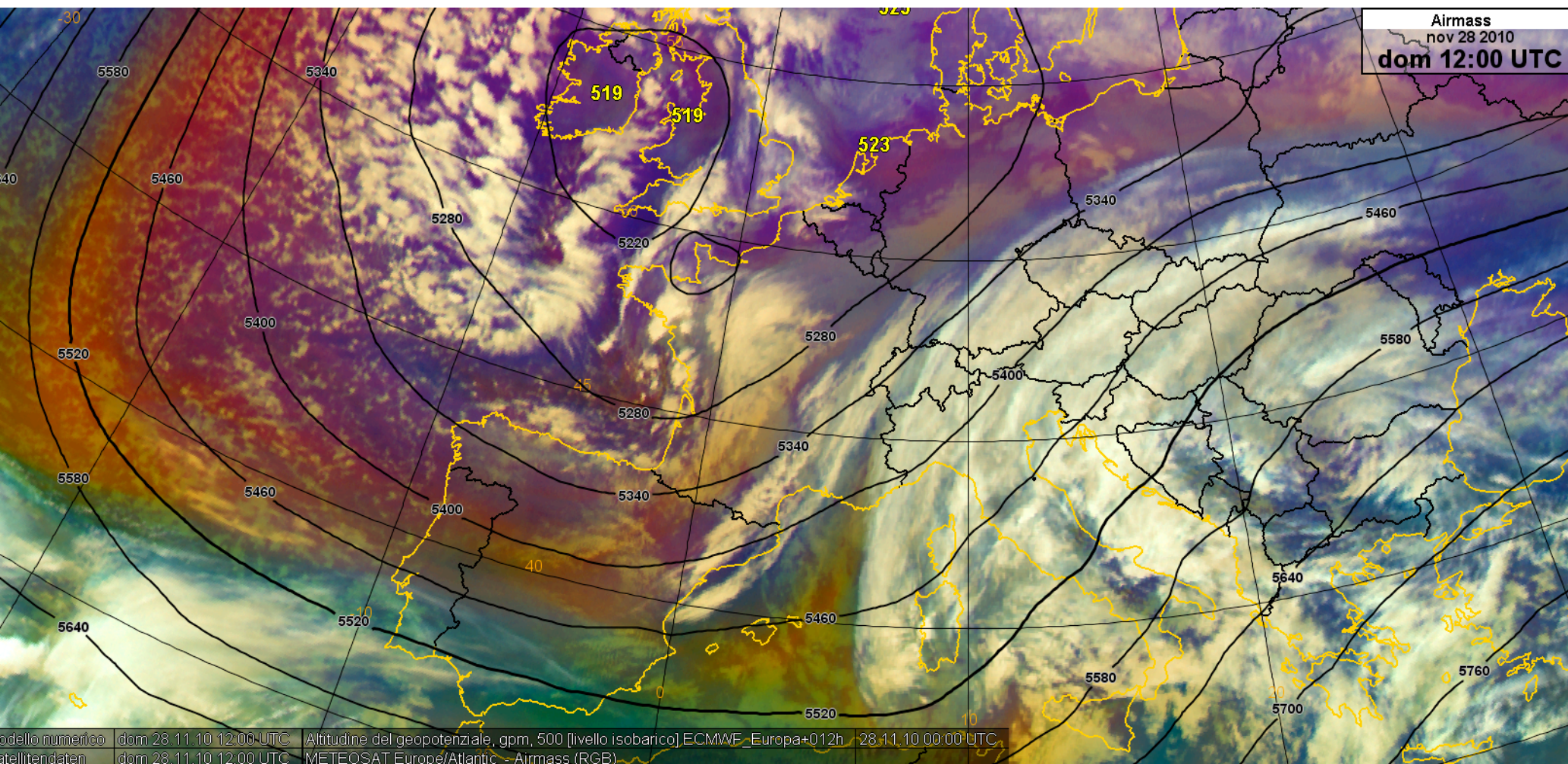


23.11 Il favonio si mangia la nebbia



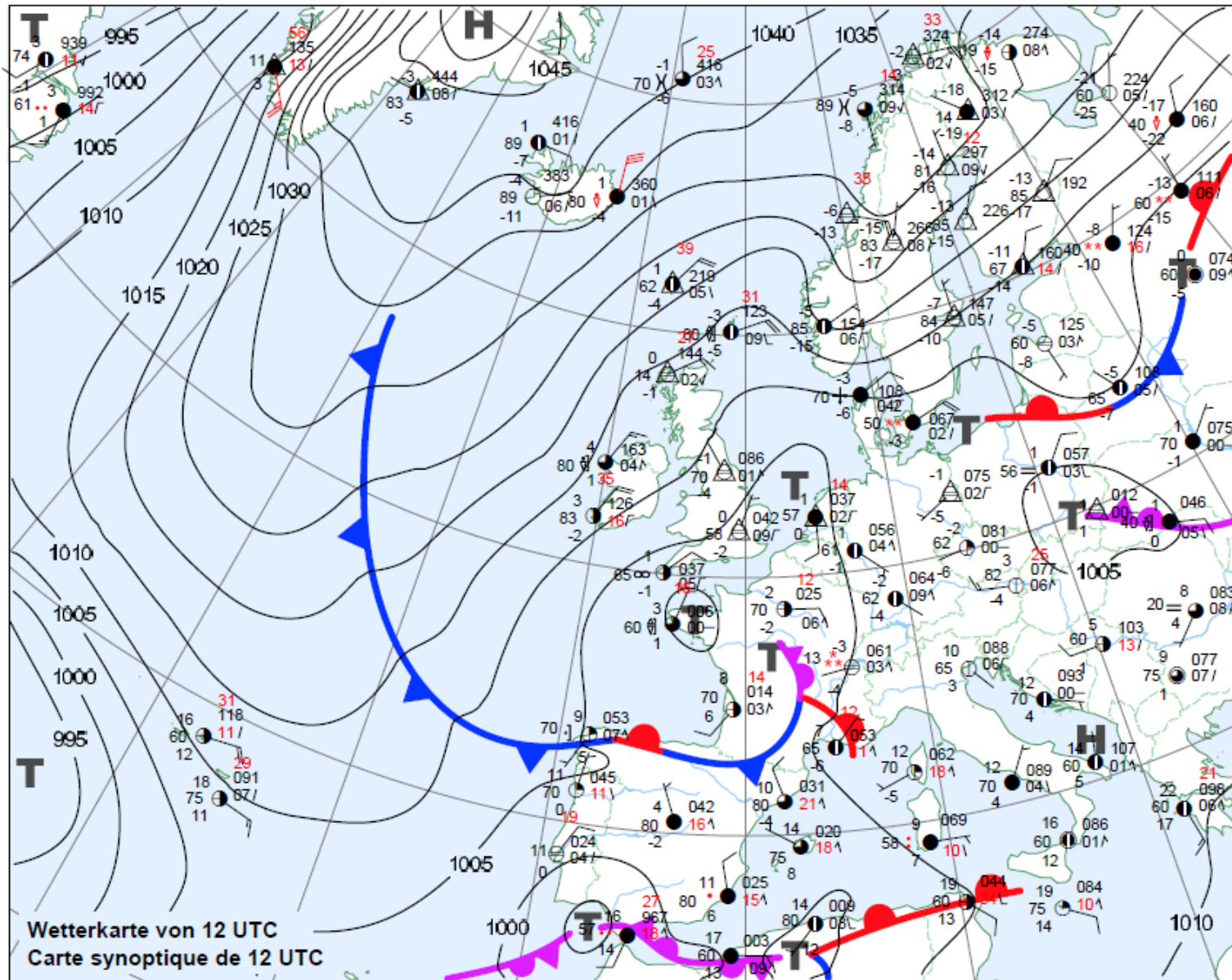


27-28.11 prima nevicata a basse quote



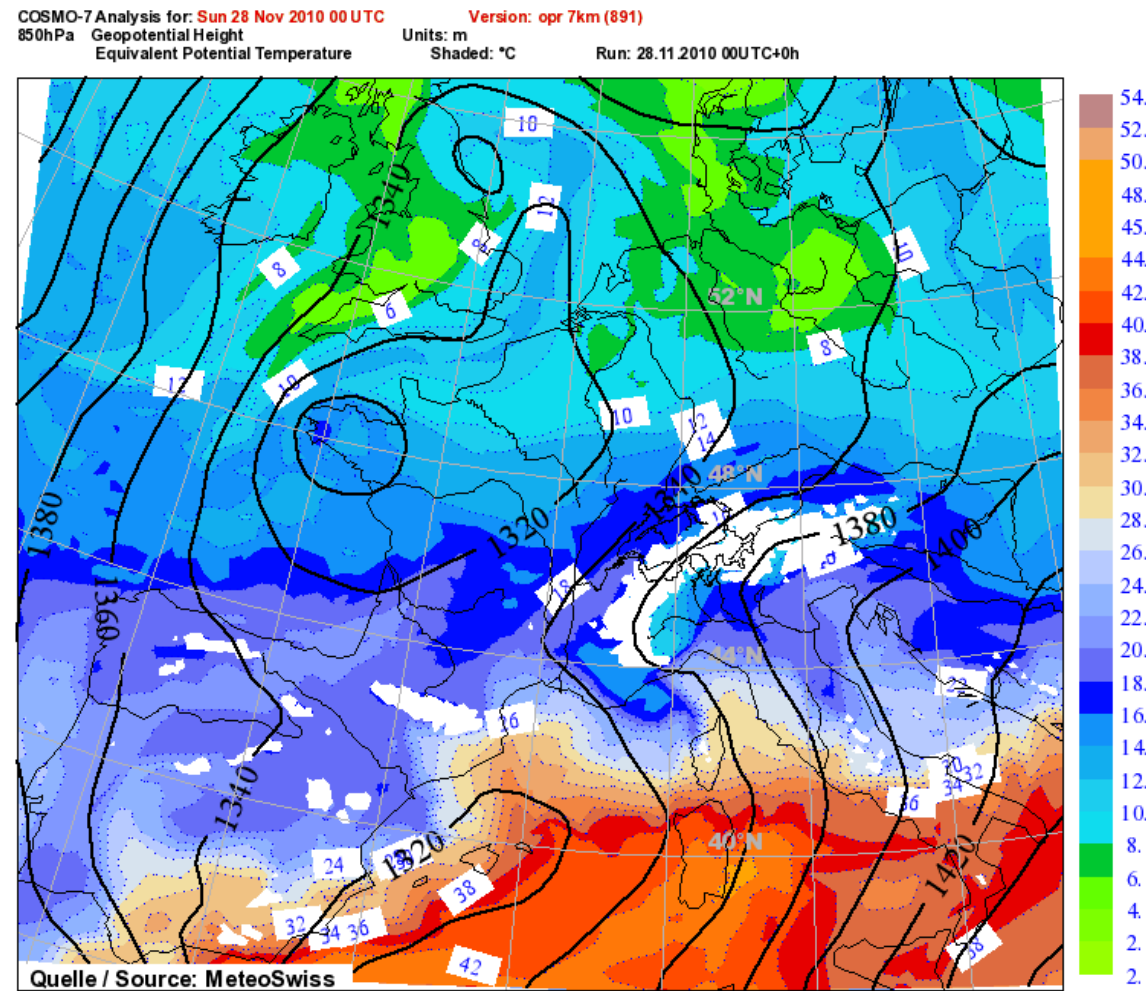


27-28.11 prima nevicata a basse quote



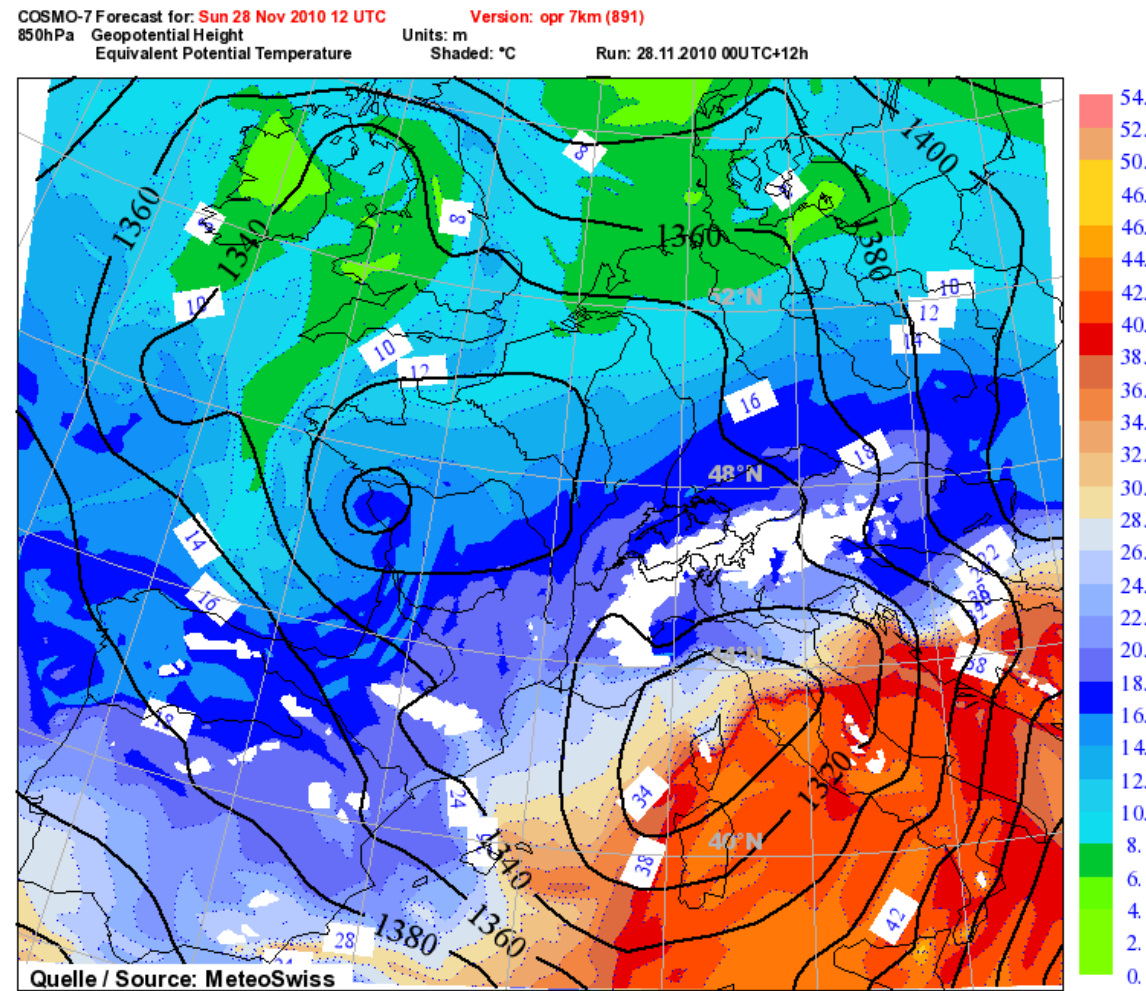


27-28.11 prima nevicata a basse quote



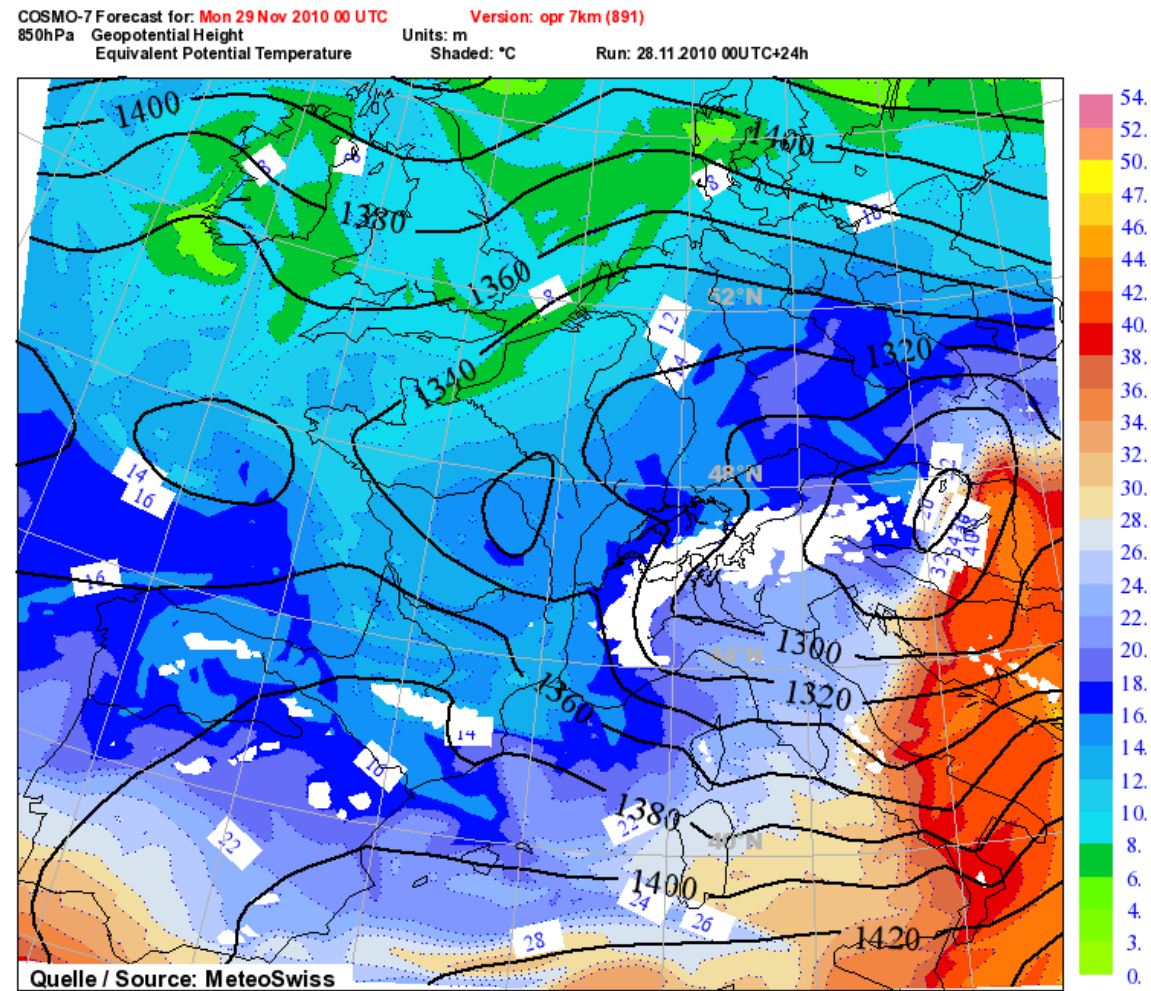


27-28.11 prima nevicata a basse quote



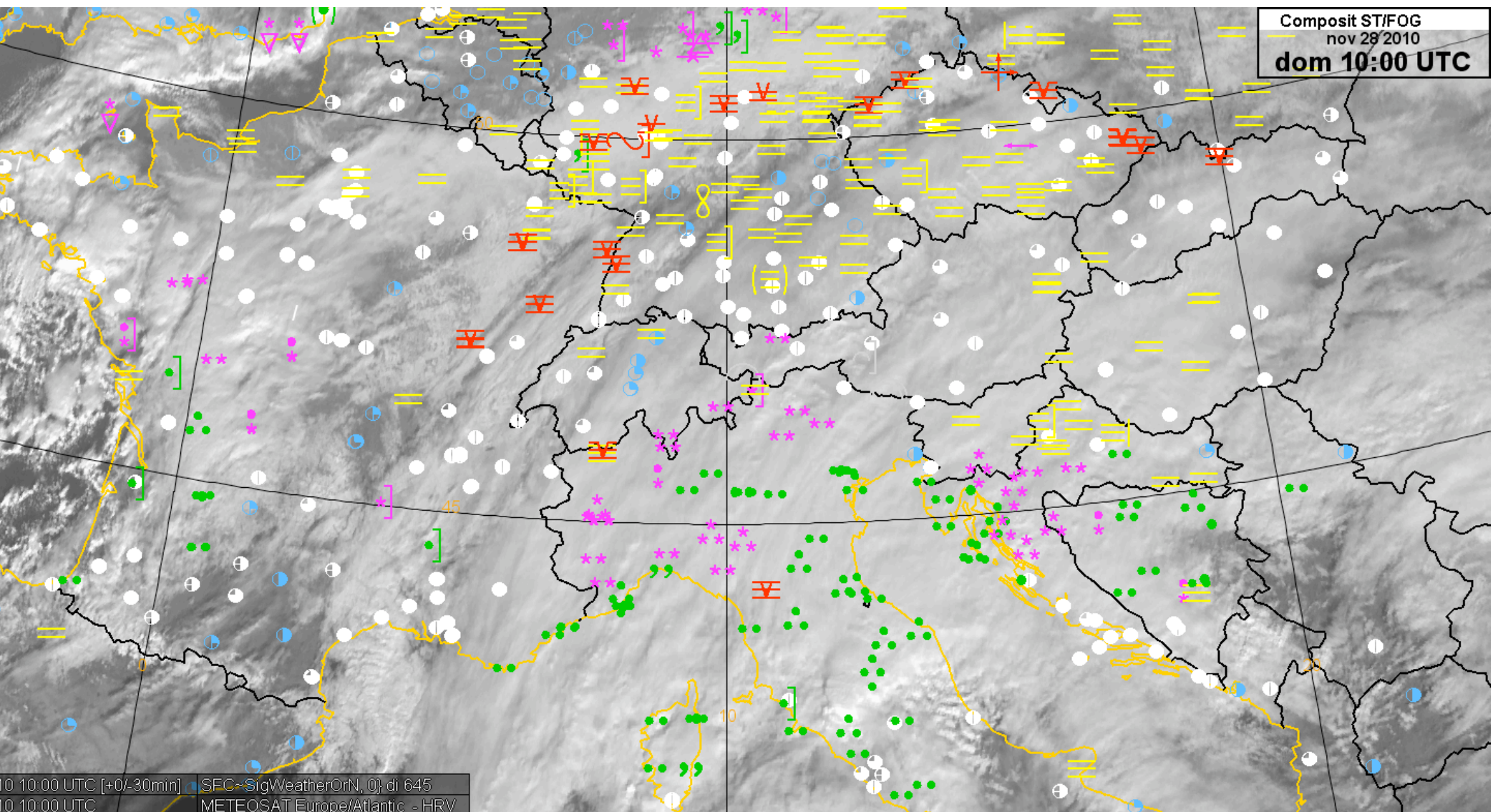


27-28.11 prima nevicata a basse quote





27-28.11 prima nevicata a basse quote

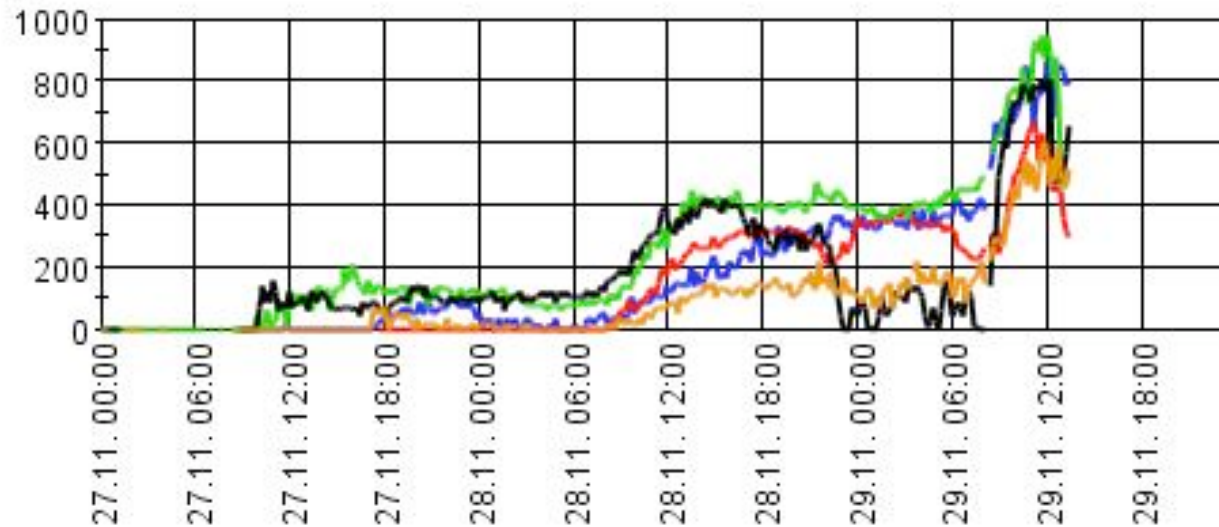




27-28.11 prima nevicata a basse quote

Schneefallgrenze; berechnet [m] 27.11.2010 00:00 UTC - 29.11.2010 23:50 UTC

m



Quelle:
MeteoSchweiz

- Locarno / Monti
- Acquarossa / Comprovasco
- Lugano
- Stabio
- Magadino / Cadenazzo

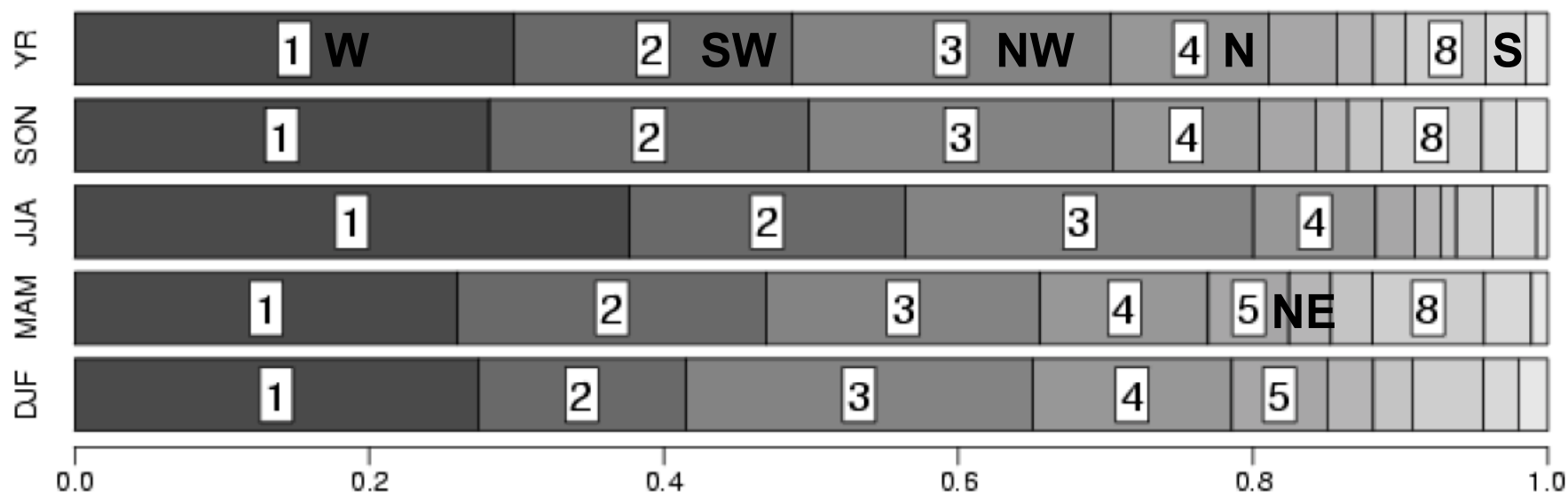


Links: attualità www.meteosvizzera.ch

- http://www.meteosvizzera.admin.ch/web/it/meteo/attualita_sul_tempo/depress_autunno.html
- http://www.meteosvizzera.admin.ch/web/it/meteo/attualita_sul_tempo/Autunno-astro.html
- http://www.meteosvizzera.admin.ch/web/it/meteo/attualita_sul_tempo/4_giorni_di_nebbia.html
- http://www.meteosvizzera.admin.ch/web/it/meteo/attualita_sul_tempo/ghiacciaio_del_basodino0.html
- http://www.meteosvizzera.admin.ch/web/it/meteo/attualita_sul_tempo/7-12_novembre_neve.html
- http://www.meteosvizzera.admin.ch/web/it/meteo/attualita_sul_tempo/Nevicata-16novembre.html



Distribuzione climatologica delle situazioni 1958-2001



	Unit	Presentation	Data Source
Surface temperature	K	boxes: red (blue) represent warm (cold) anomalies	ENSEMBLES ¹
Sea level pressure	hPa	black contour lines	ERA40 ²
Precipitation	mm/d	colour shaded contours (see legend)	ENSEMBLES ¹