CONSORZIO LaMMA

meteo

REPORT METEOROLOGICO

Ottobre 2019

Per info: previsori@lamma.rete.toscana.it

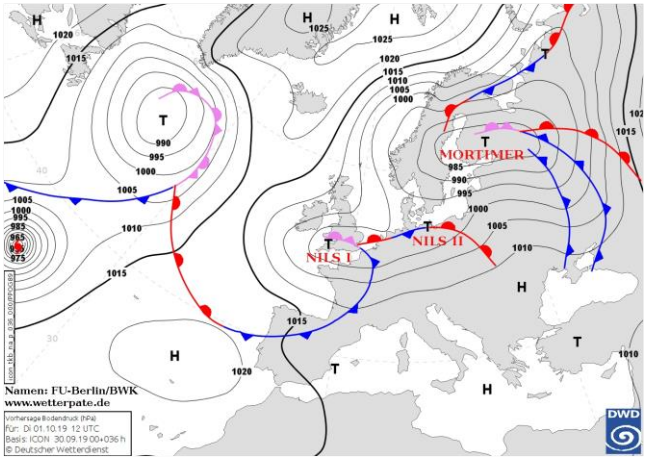
Consorzio LaMMA - Laboratorio di Monitoraggio e Modellistica Ambientale

Regione Toscana

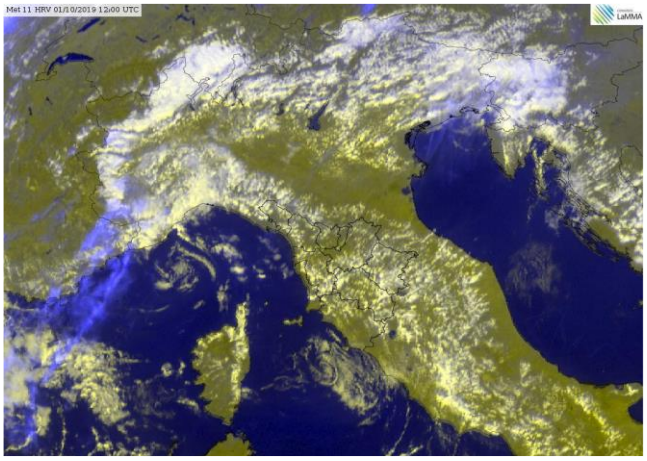
Consiglio Nazionale delle Ricerche

Martedi' 1 Ottobre 2019

Situazione: alta pressione, tempo stabile.

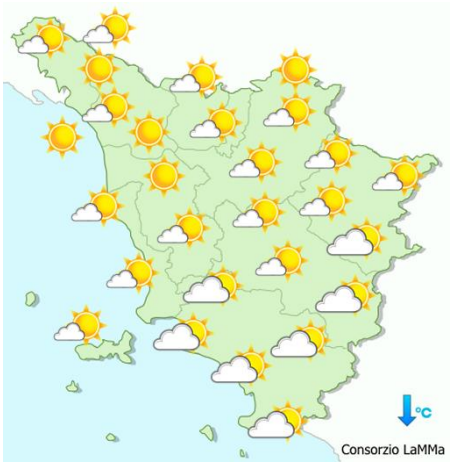


Pressione al suolo e fronti del 01 Ottobre alle 12 UTC

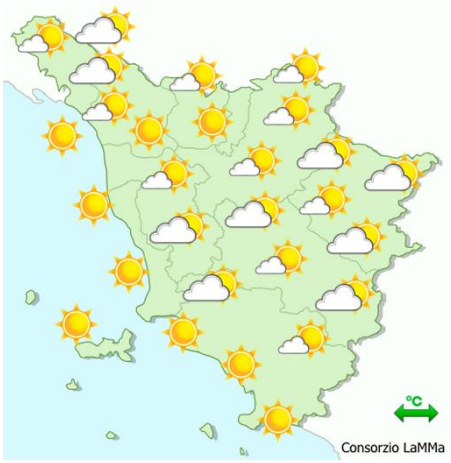


Meteosat HRV del 01 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: poco nuvoloso.

Fenomeni: nessuno.

Venti: deboli meridionali.

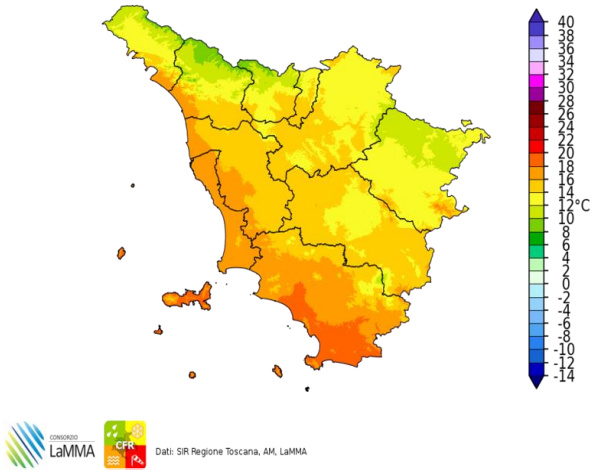
Mari: mossi in attenuazione.

Temperature: minime in calo sulle zone settentrionali, in aumento in Maremma; massime in calo in Maremma, in aumento su quelle settentrionali.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	12	14	17	19	15	18	15	14	17	16
	anomalia*	3	1	4	3	2	4	2	2	3	3
T. max	osservata	25	28	28	26	27	25	27	26	27	26
	anomalia*	3	5	4	3	4	2	4	3	4	5
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

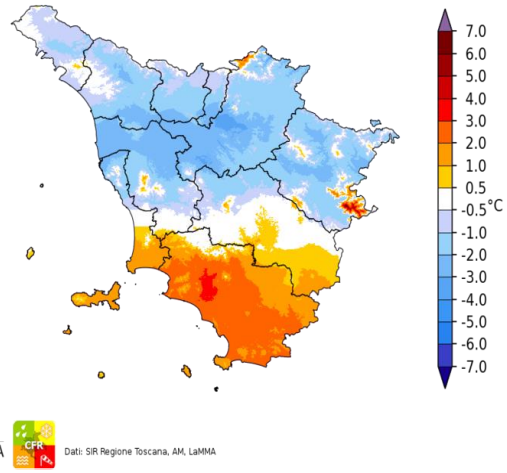
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 01/10/2019



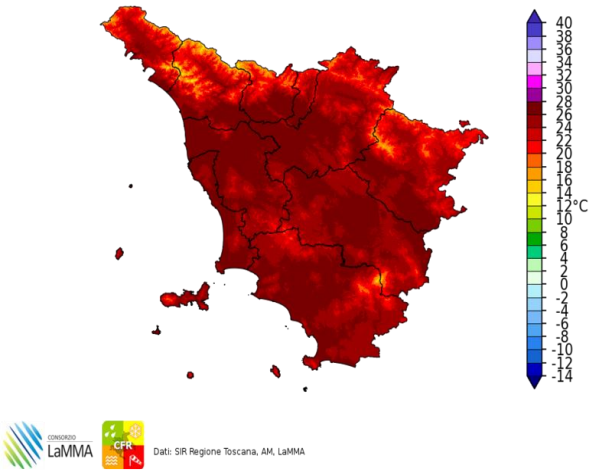
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 01/10/2019 e 30/09/2019



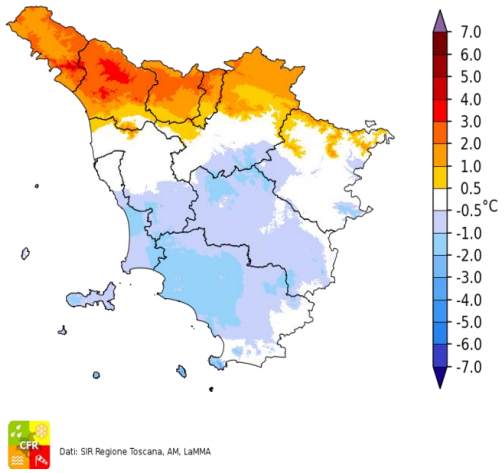
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 01/10/2019



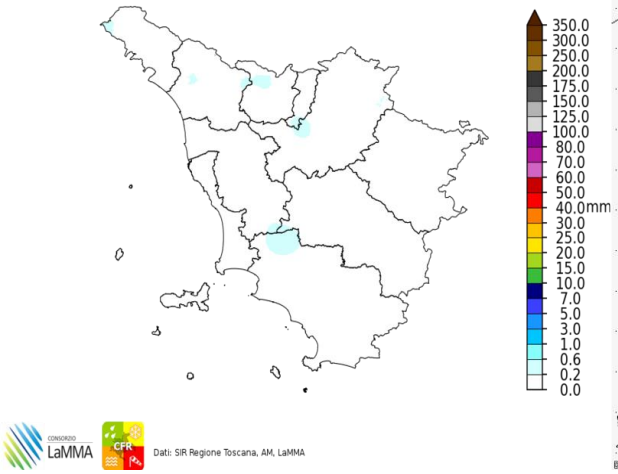
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 01/10/2019 e 30/09/2019



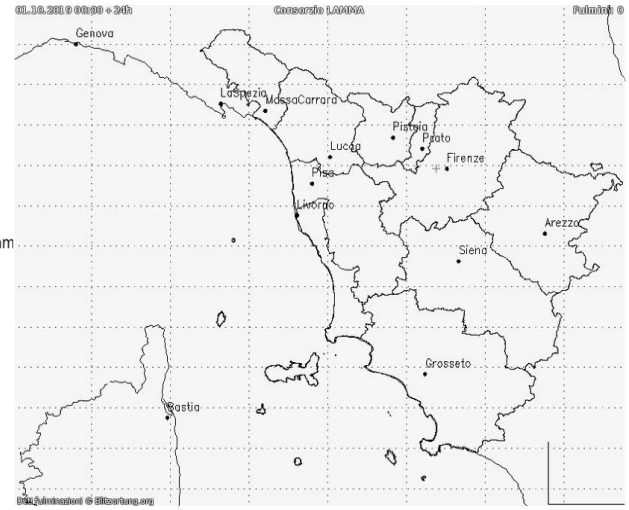
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 01/10/2019



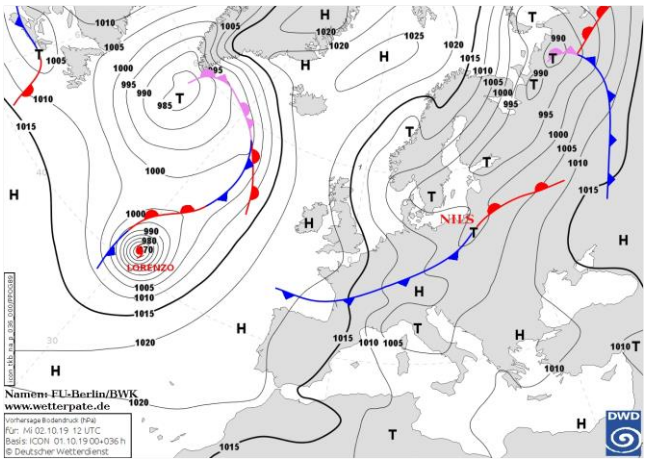
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 01 Ottobre

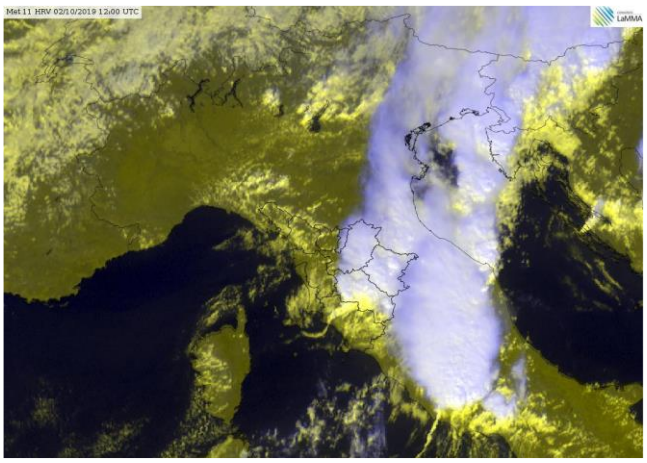


Mercoledi' 2 Ottobre 2019

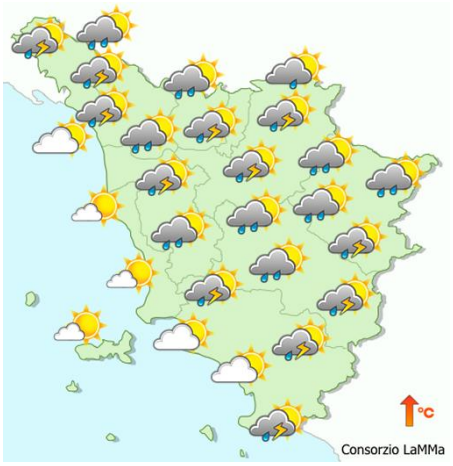
Situazione: una saccatura di origine atlantica, associata ad aria fresca ed elevata vorticità alla media troposfera, è in rapido transito sulla nostra penisola; dal pomeriggio pressione in aumento a partire dalle regioni nord-occidentali.



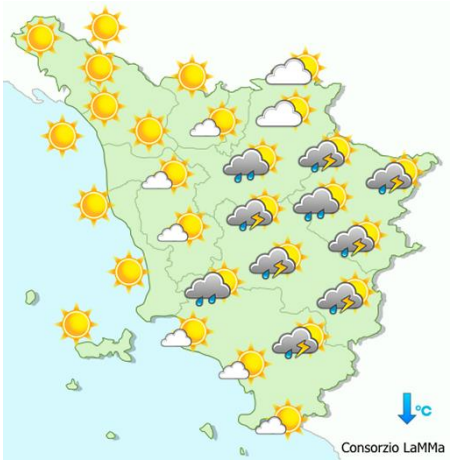
Pressione al suolo e fronti del 02 Ottobre alle 12 UTC


Meteosat HRV del 02 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: molto nuvoloso con miglioramento dal pomeriggio a partire dal mare.

Fenomeni: piogge e temporali.

Venti: di Libeccio moderati o forti sulla costa, deboli sulle zone interne.

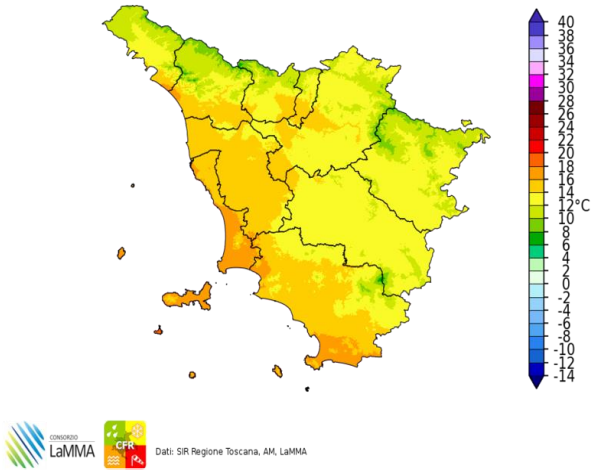
Mari: molto mossi.

Temperature: in calo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	14	20	14	19	15	16	14	14	16	15
	anomalia*	4	7	1	3	2	2	2	2	3	2
T. max	osservata	23	20	26	23	23	23	24	23	24	22
	anomalia*	1	-4	2	1	0	-1	1	0	1	0
Precipitazione (mm/24ore)		N.D.	2	0	3	11	31	N.D.	15	15	10

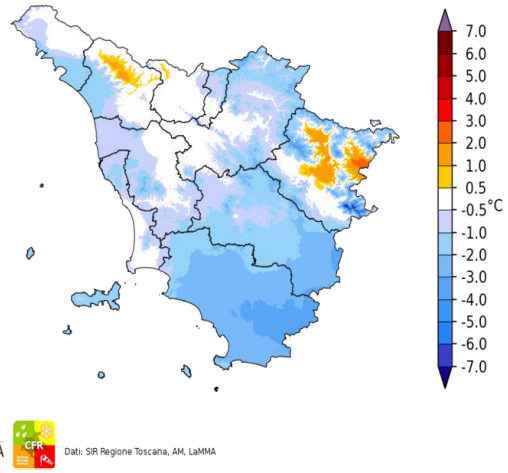
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 02/10/2019



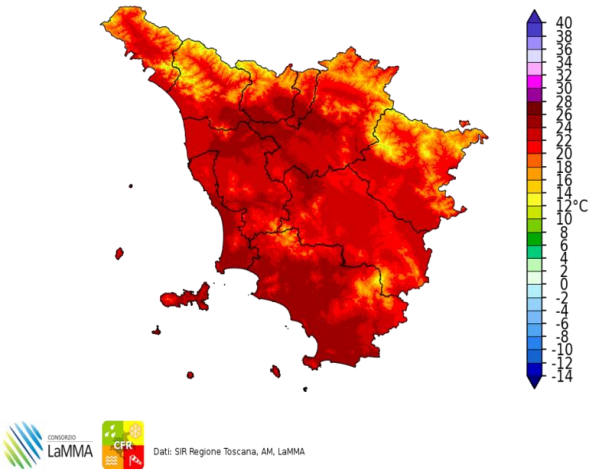
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 02/10/2019 e 01/10/2019



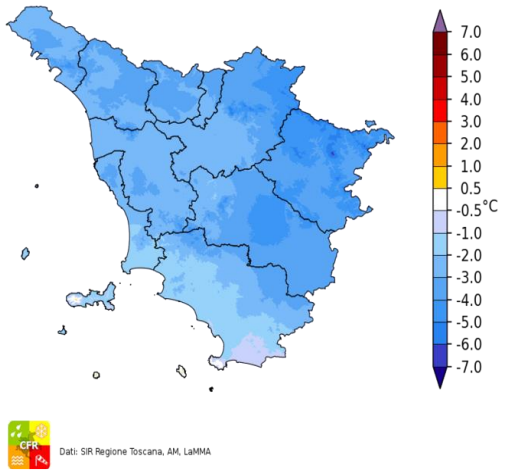
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 02/10/2019



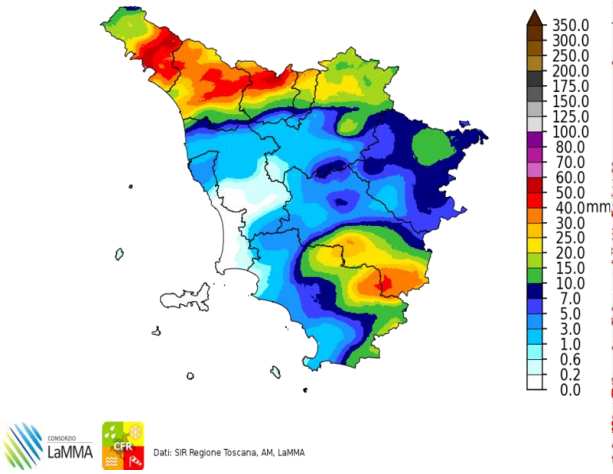
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 02/10/2019 e 01/10/2019



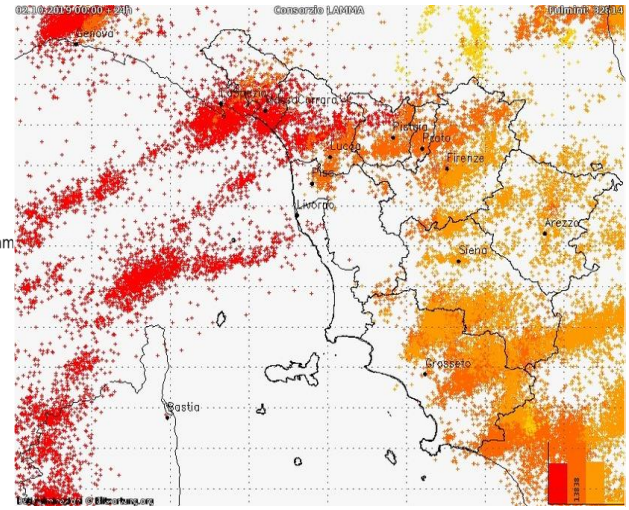
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 02/10/2019



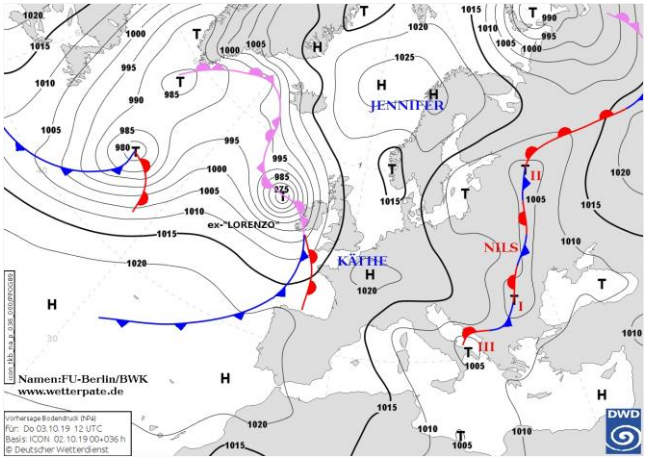
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 02 Ottobre

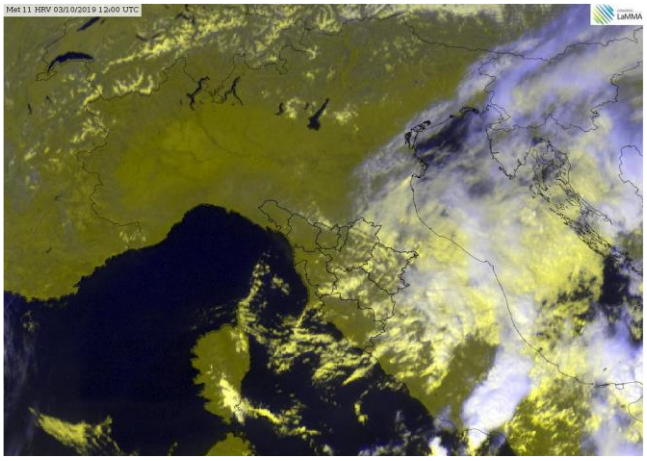


Giovedi' 3 Ottobre 2019

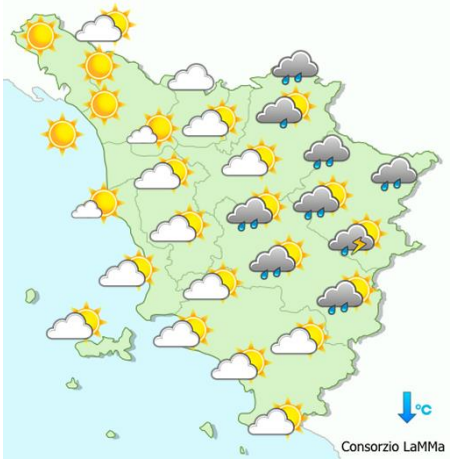
Situazione: minimo (1006 hPa) in spostamento dal Tirreno settentrionale a quello meridionale, alta pressione (1006-1020 hPa) a nord delle Alpi; venti forti di Grecale su buona parte della penisola.



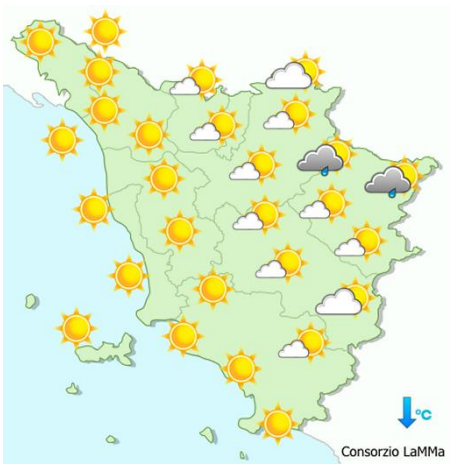
Pressione al suolo e fronti del 03 Ottobre alle 12 UTC


Meteosat HRV del 03 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: sereno o poco nuvoloso sul nord-ovest con addensamenti in Appennino. Parzialmente nuvoloso o nuvoloso altrove con attenuazione della nuvolosità nel corso del pomeriggio. Sereno o poco nuvoloso in serata.

Fenomeni: rovesci sparsi e temporali tra la notte e la prima parte della mattina, in particolare sulle zone orientali della regione.

Venti: forti di Grecale. In attenuazione dal tardo pomeriggio.

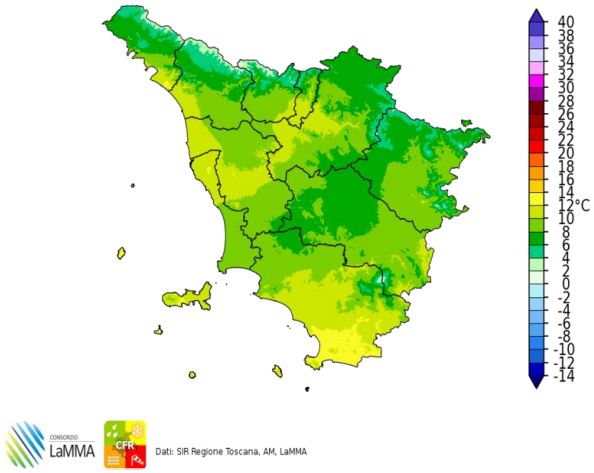
Mari: poco mossi sottocosta, mossi al largo.

Temperature: in lieve diminuzione.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	13	12	10	16	8	11	10	8	12	10
	anomalia*	3	-1	-2	0	-4	-3	-3	-4	-2	-4
T. max	osservata	17	19	20	21	20	23	22	18	18	16
	anomalia*	-5	-4	-4	-2	-2	0	-1	-5	-5	-5
Precipitazione (mm/24ore)		11	0	0	0	0	0	0	0	0	2

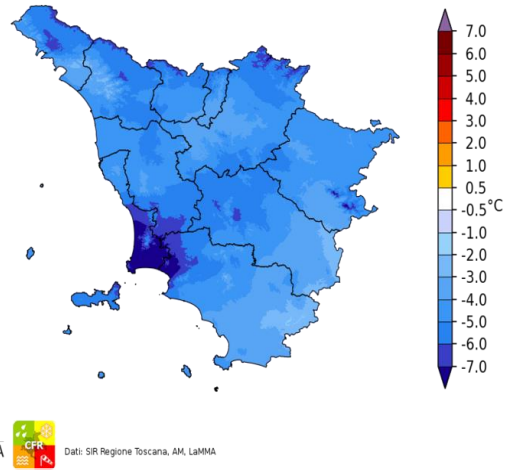
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 03/10/2019



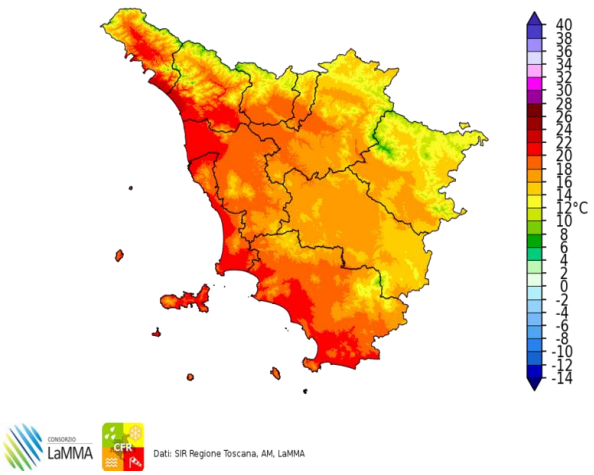
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 03/10/2019 e 02/10/2019



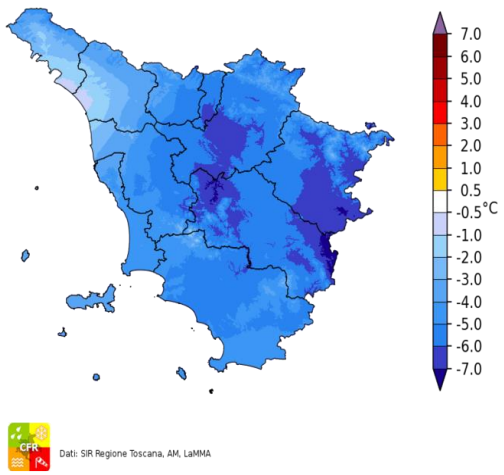
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 03/10/2019



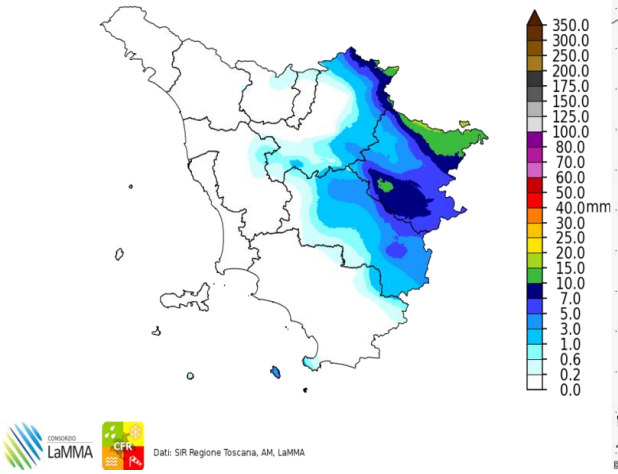
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 03/10/2019 e 02/10/2019



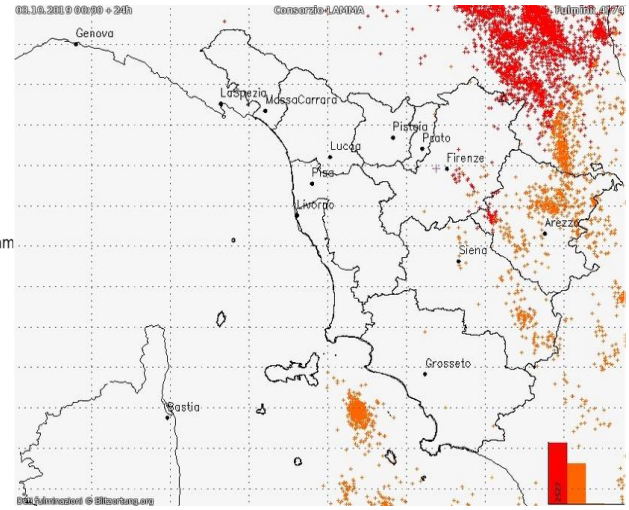
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 03/10/2019



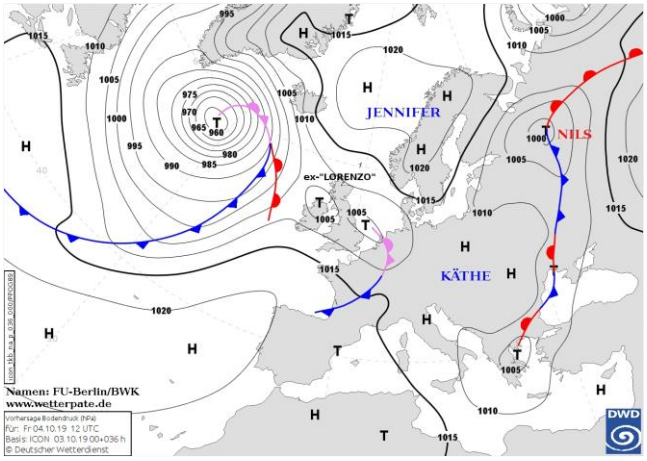
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 03 Ottobre

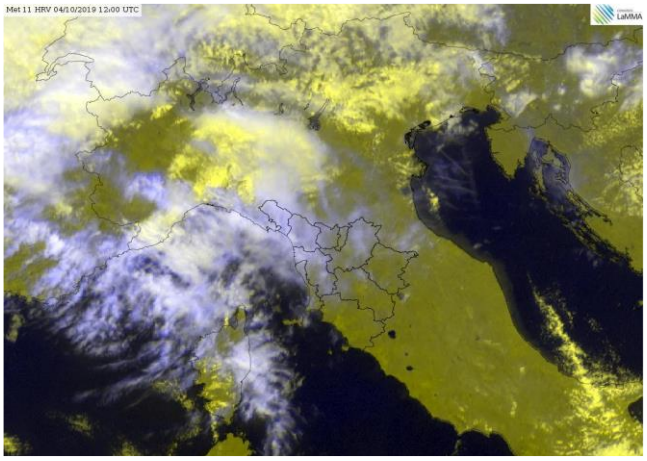


Venerdi' 4 Ottobre 2019

Situazione: pressione in temporaneo aumento sul centro nord Italia. Dalla nuovo calo della pressione sul Ligure.

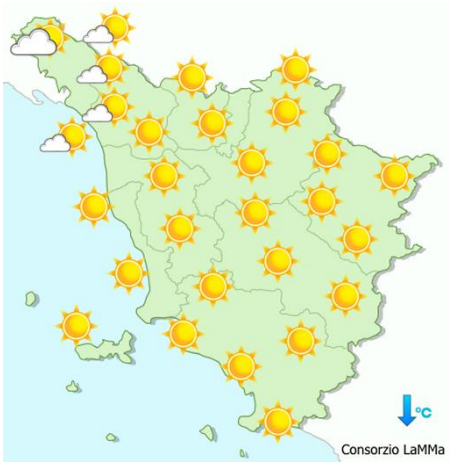


Pressione al suolo e fronti del 04 Ottobre alle 12 UTC

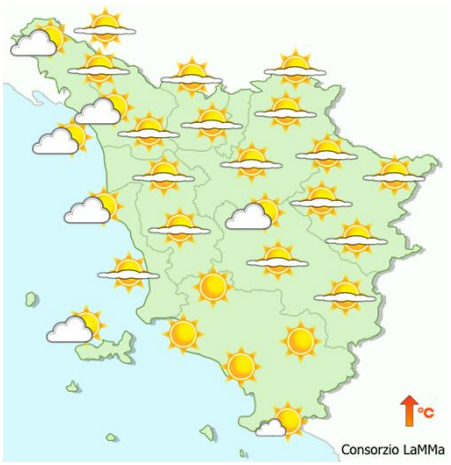


Meteosat HRV del 04 Ottobre alle 12 UTC

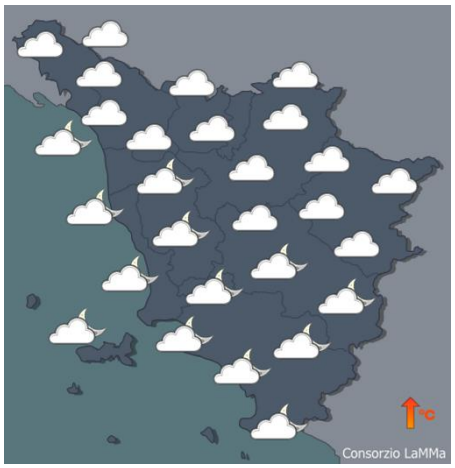
situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: sereno o poco nuvoloso con nubi in aumento dal primo pomeriggio a partire dalle zone di nord-ovest.

Fenomeni: nessuno.

Venti: deboli occidentali, in rinforzo dalla sera sulla costa centrale.

Mari: poco mossi con moto ondoso in aumento sul litorale livornese in serata.

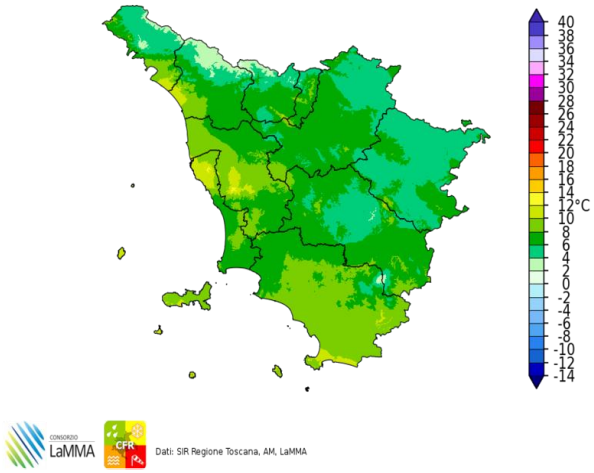
Temperature: minime in sensibile calo; massime in aumento fatta eccezione per il nord ovest (lieve diminuzione).

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	N.D.	10	11	15	7	10	10	7	10	9
	anomalia*	N.D.	-3	-2	-1	-6	-4	-3	-5	-3	-4
T. max	osservata	N.D.	10	11	22	20	20	10	19	21	20
	anomalia*	N.D.	-14	-13	-1	-2	-4	-13	-4	-2	-1
Precipitazione (mm/24ore)		N.D.	0	0	0	0	0	N.D.	0	0	0

*anomalia calcolata sulla base della normale climatica decadale 1981-2010

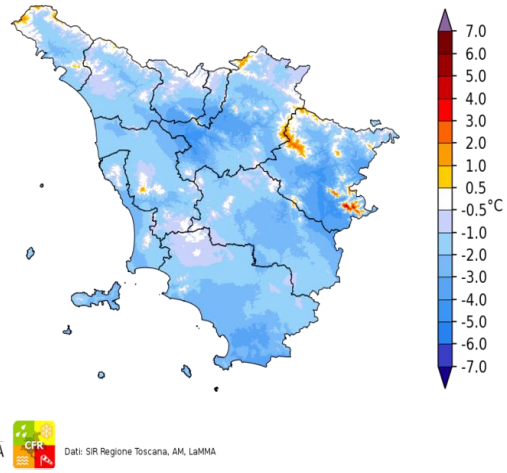
Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 04/10/2019



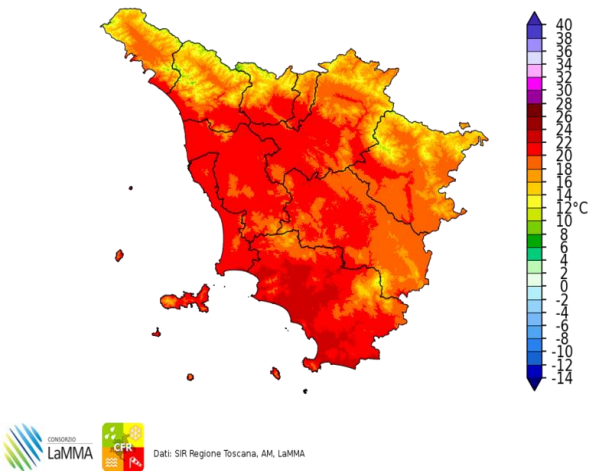
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 04/10/2019 e 03/10/2019



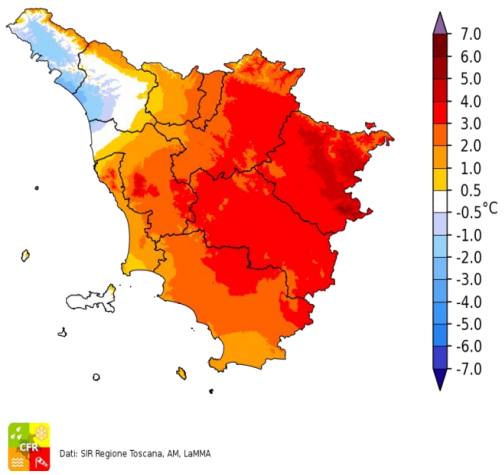
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 04/10/2019



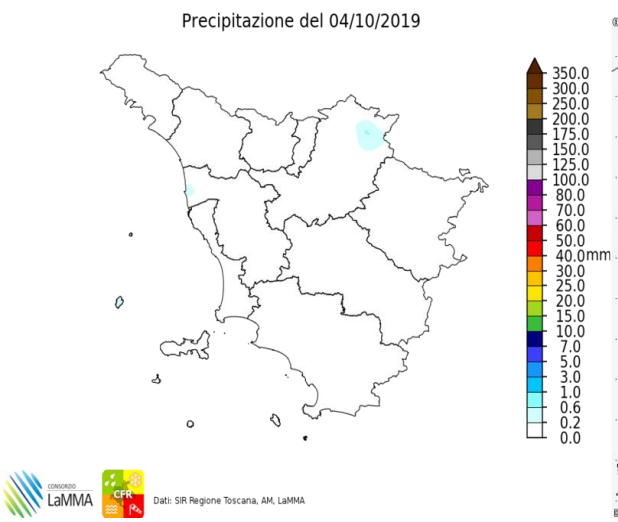
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 04/10/2019 e 03/10/2019



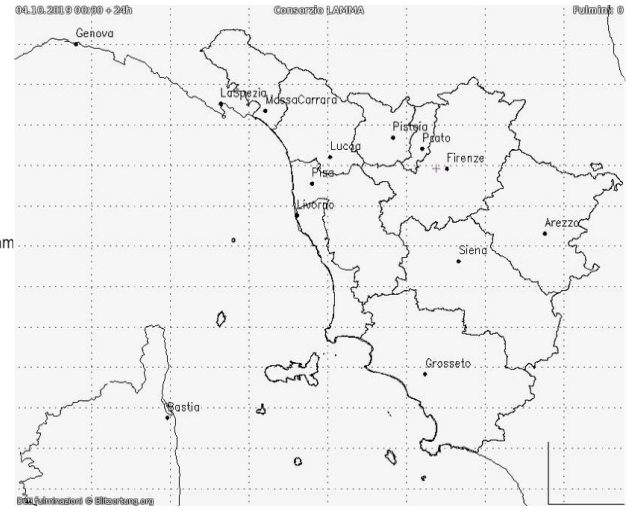
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 04/10/2019



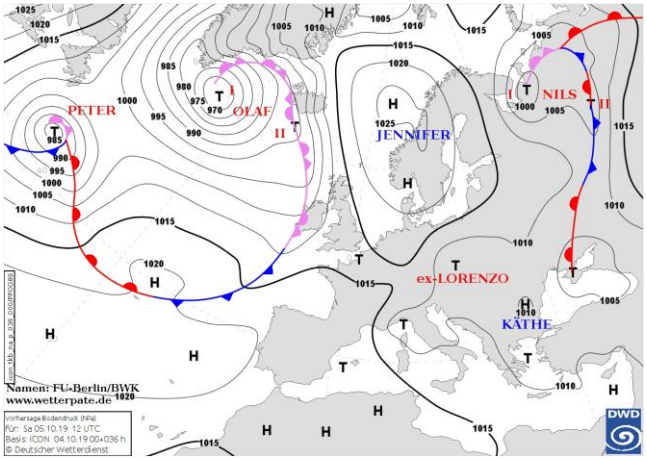
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 04 Ottobre

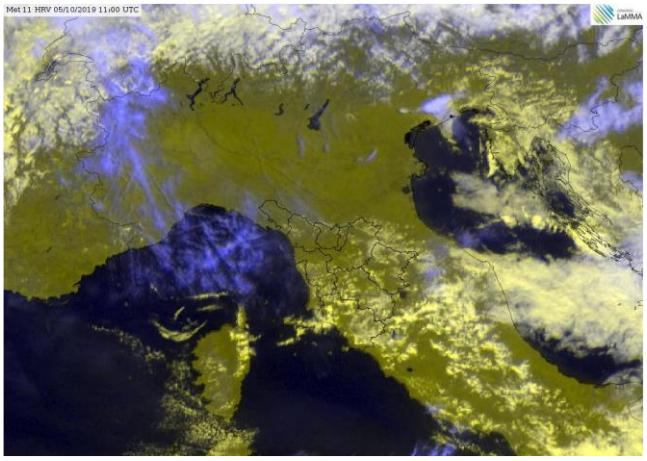


Sabato 5 Ottobre 2019

Situazione: pressione in nuovo temporaneo aumento sul Mar Ligure e tempo stabile.

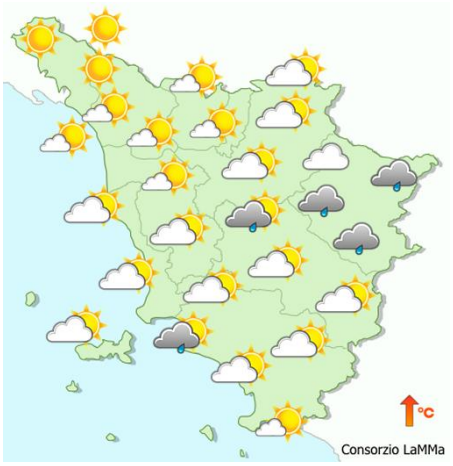


Pressione al suolo e fronti del 05 Ottobre alle 12 UTC

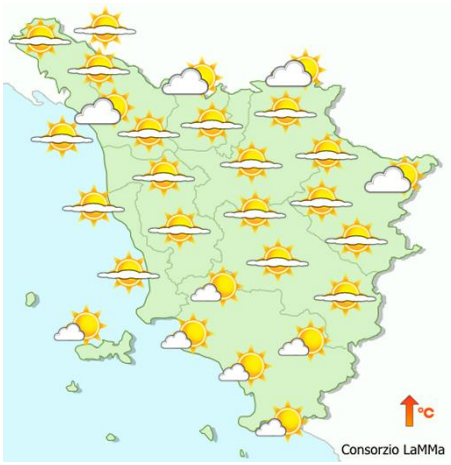


Meteosat HRV del 05 Ottobre alle 11 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: coperto in nottata, nuvoloso in mattinata. Poco nuvoloso o parzialmente nuvoloso nel pomeriggio. Sereno o poco nuvoloso in serata.

Fenomeni: deboli piogge sparse tra la notte e le prime ore della mattina sulle zone centro-settentrionali, isolate altrove.

Venti: deboli variabili nell'interno; in prevalenza occidentali lungo la costa fino a moderati.

Mari: mossi, temporaneamente molto mossi in mattinata sul litorale centrale.

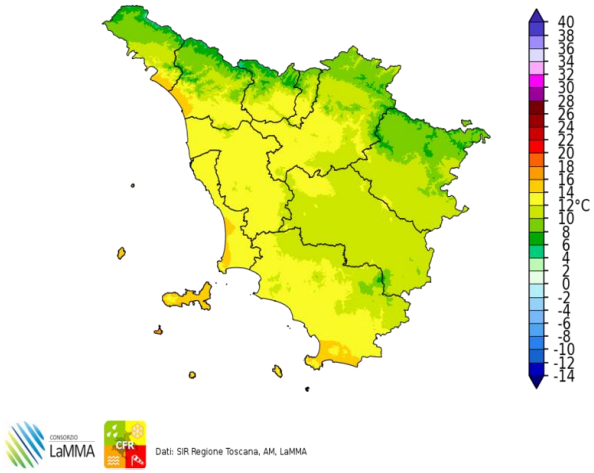
Temperature:

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	12	13	12	15	13	15	12	12	14	13
	anomalia*	2	1	-1	0	0	1	-1	0	0	0
T. max	osservata	21	24	25	24	23	22	24	22	24	23
	anomalia*	0	1	1	1	0	-1	2	-1	0	2
Precipitazione (mm/24ore)		0	0	0	4	1	0	0	1	1	0

*anomalia calcolata sulla base della normale climatica decadale 1981-2010

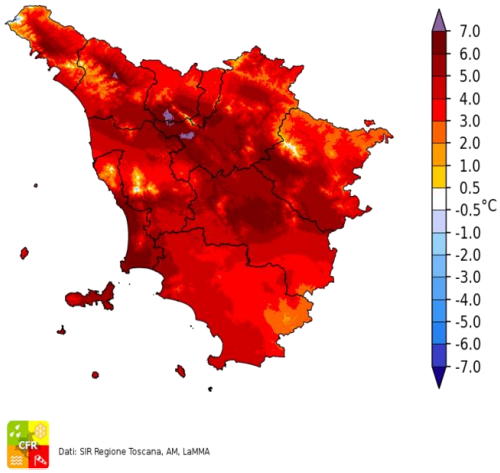
Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 05/10/2019



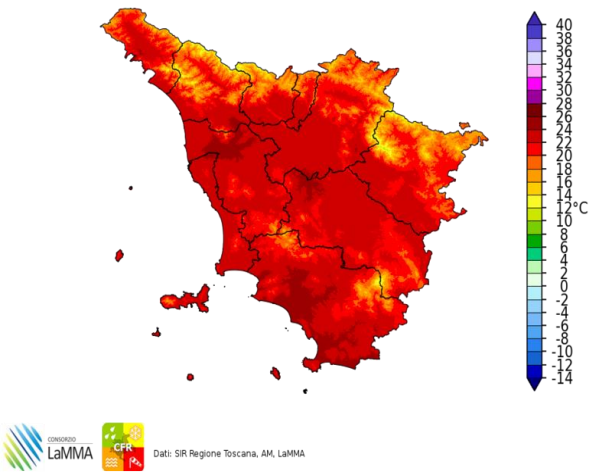
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 05/10/2019 e 04/10/2019



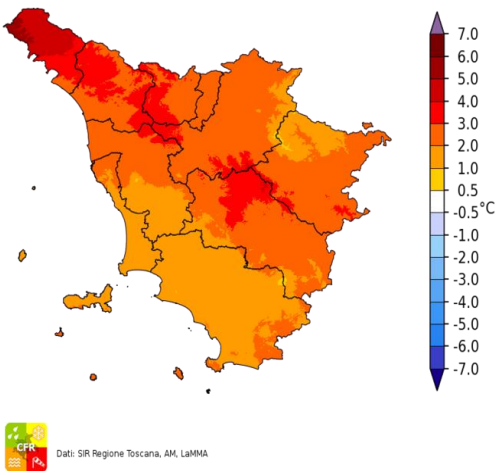
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 05/10/2019



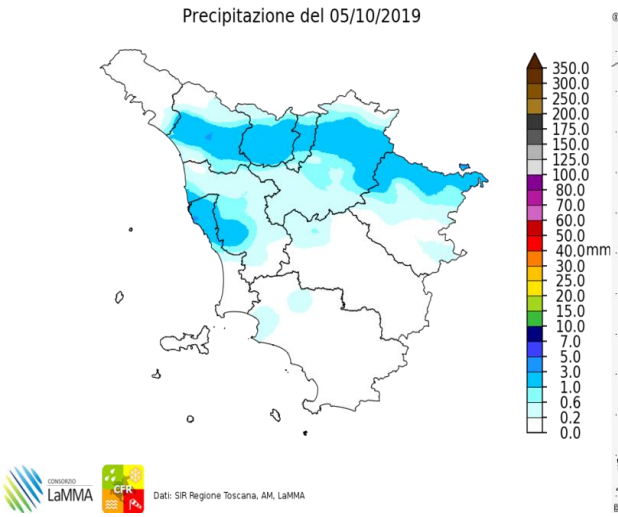
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 05/10/2019 e 04/10/2019



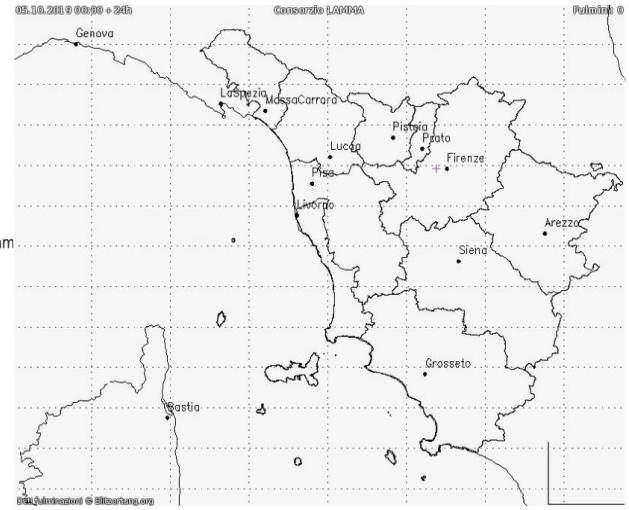
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 05/10/2019



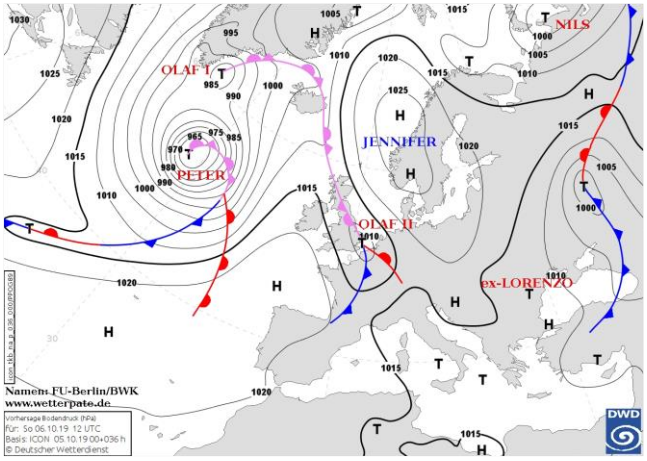
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 05 Ottobre

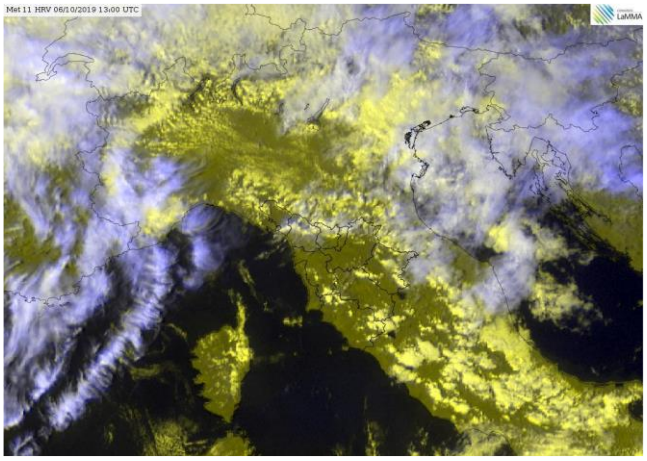


Domenica 6 Ottobre 2019

Situazione: la nostra penisola è interessata da un flusso di correnti occidentali. Dalla sera nuovo calo della pressione sul Ligure per l'approssimarsi di una veloce perturbazione atlantica.

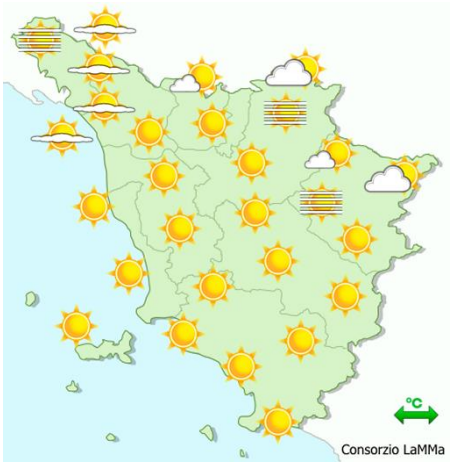


Pressione al suolo e fronti del 06 Ottobre alle 12 UTC

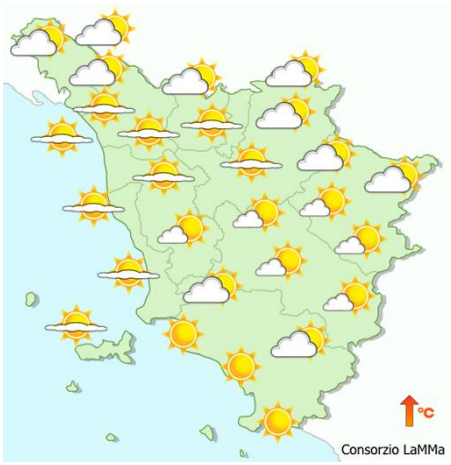


Meteosat HRV del 06 Ottobre alle 13 UTC

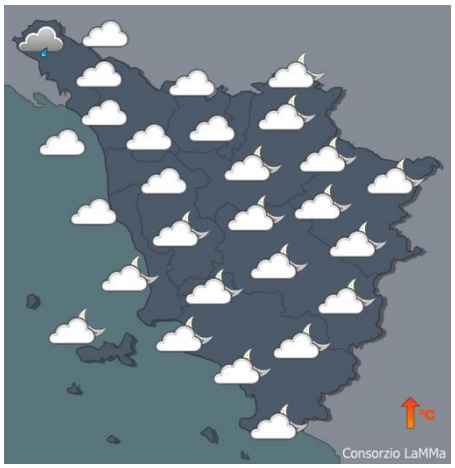
situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: sereno o poco nuvoloso in mattinata con locali banchi di nebbia. Poco nuvoloso nel pomeriggio per transito di nubi alte e addensamenti in Appennino. Molto nuvoloso o coperto in serata.

Fenomeni: deboli piogge dalla tarda serata a partire dalla provincia di Massa-Carrara.

Venti: deboli variabili.

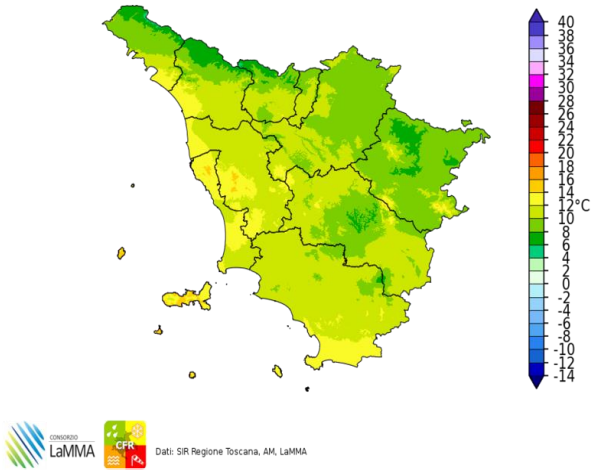
Mari: mossi in attenuazione.

Temperature: minime in diminuzione, massime stazionarie o in lieve aumento.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	8	8	10	16	11	13	11	10	13	12
	anomalia*	-2	-4	-3	0	-2	-1	-2	-3	-1	-1
T. max	osservata	23	25	25	24	24	23	25	23	25	25
	anomalia*	1	2	2	1	1	-1	2	0	2	3
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

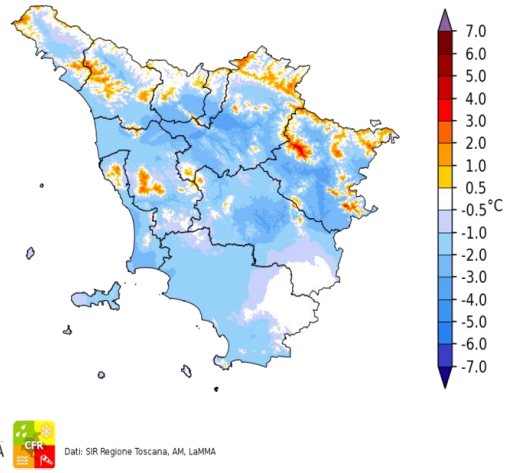
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 06/10/2019



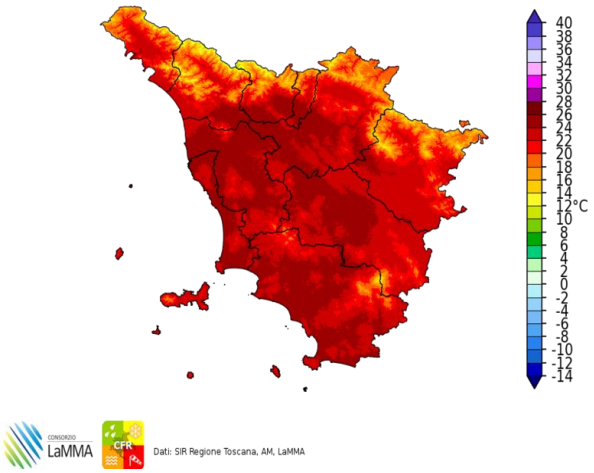
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 06/10/2019 e 05/10/2019



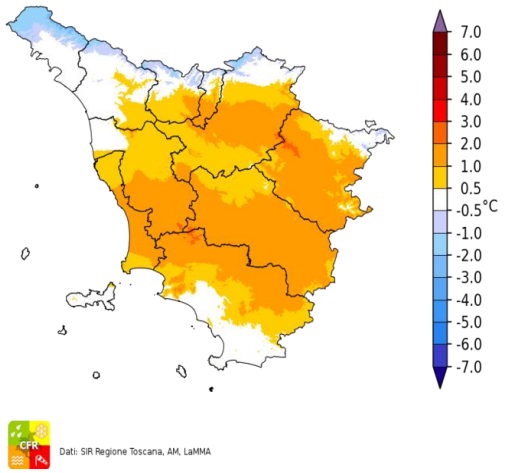
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 06/10/2019



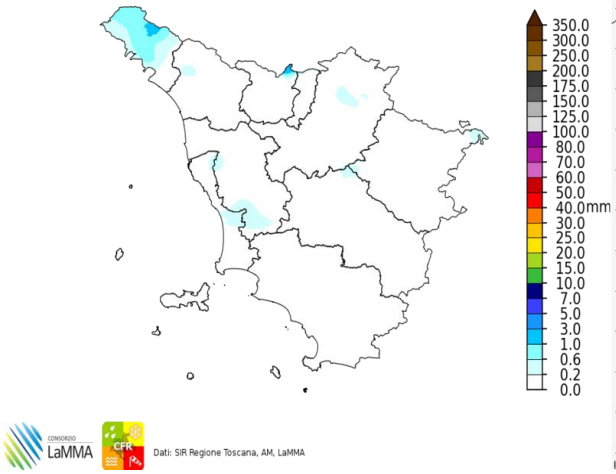
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 06/10/2019 e 05/10/2019



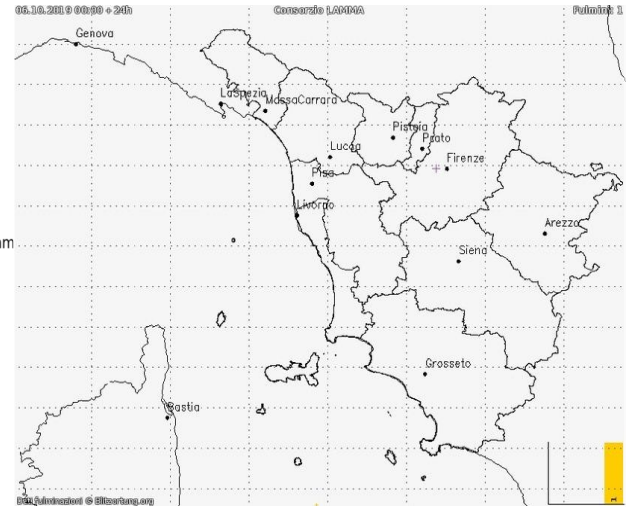
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 06/10/2019



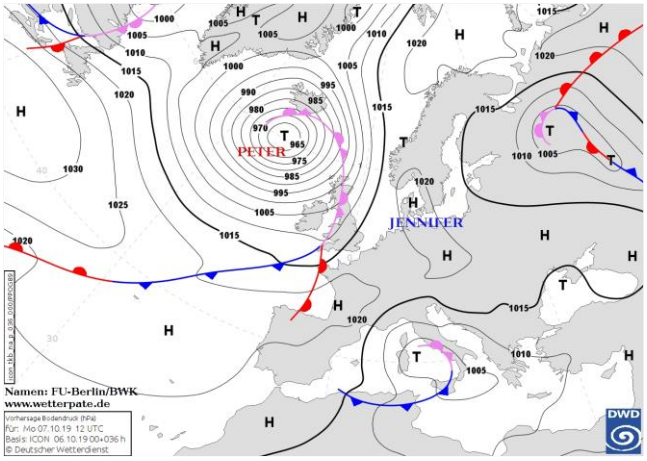
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 06 Ottobre

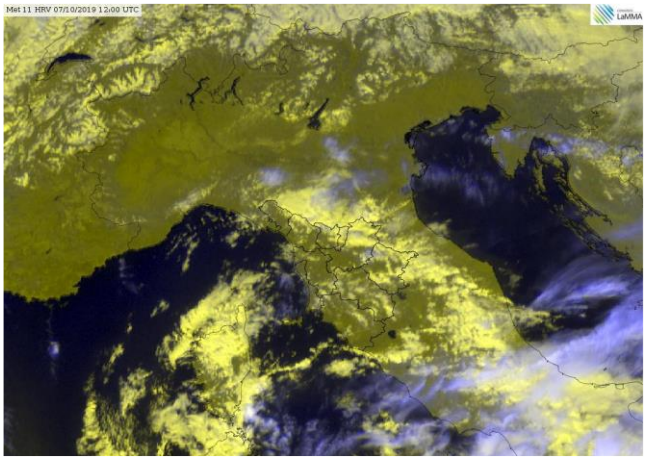


Lunedi' 7 Ottobre 2019

Situazione: una perturbazione è in transito sull'Italia e si muove rapidamente verso sud. Al suo seguito rapido aumento dell pressione.

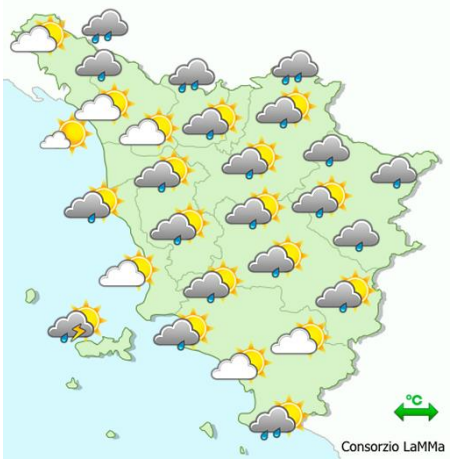


Pressione al suolo e fronti del 07 Ottobre alle 12 UTC

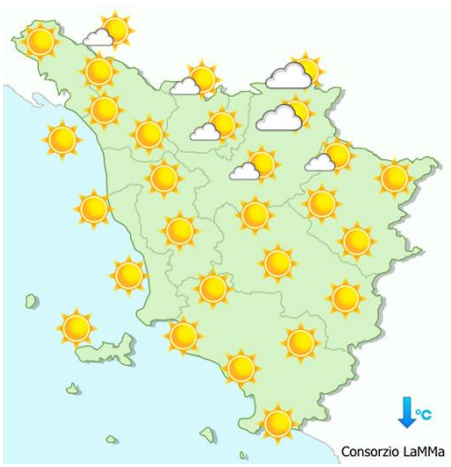


Meteosat HRV del 07 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: nuvoloso nella notte e in mattinata. Ampie schiarite dal pomeriggio con residui addensamenti sull'Appennino.

Fenomeni: temporali nella notte e nelle prime ore della mattina sulla costa e soprattutto sull'Arcipelago. Locali deboli piogge sulle altre zone.

Venti: di Grecale, fino a forti, in progressiva attenuazione dalla tarda serata.

Mari: mossi o temporaneamente molto mossi al largo, poco mossi o temporaneamente mossi sottocosta.

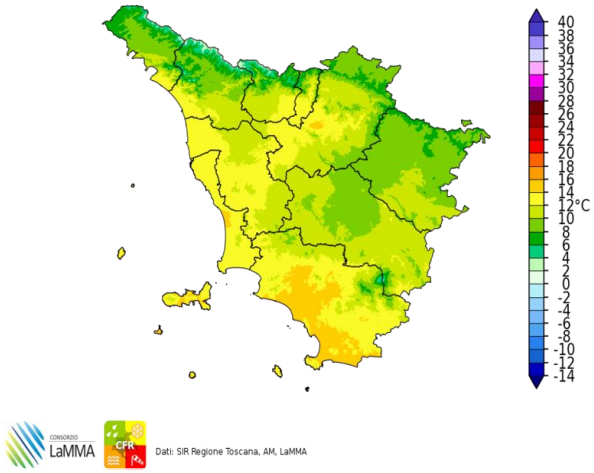
Temperature: minime in aumento, massime in calo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	10	14	15	15	10	14	12	10	15	13
	anomalia*	0	2	2	0	-2	-1	-1	-2	1	0
T. max	osservata	20	22	25	22	22	24	22	19	20	19
	anomalia*	-2	-2	1	-1	-1	0	-1	-4	-3	-2
Precipitazione (mm/24ore)		2	1	1	20	2	6	16	1	1	0

*anomalia calcolata sulla base della normale climatica decadale 1981-2010

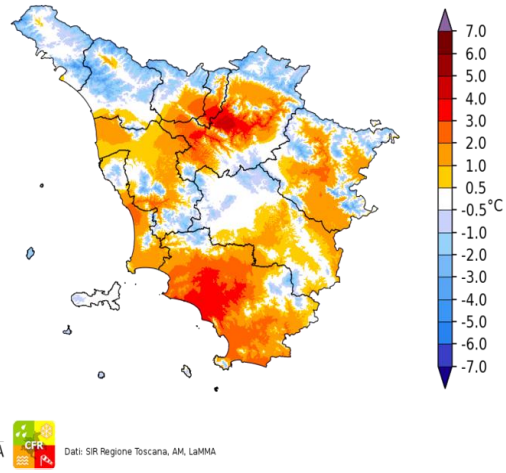
Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 07/10/2019



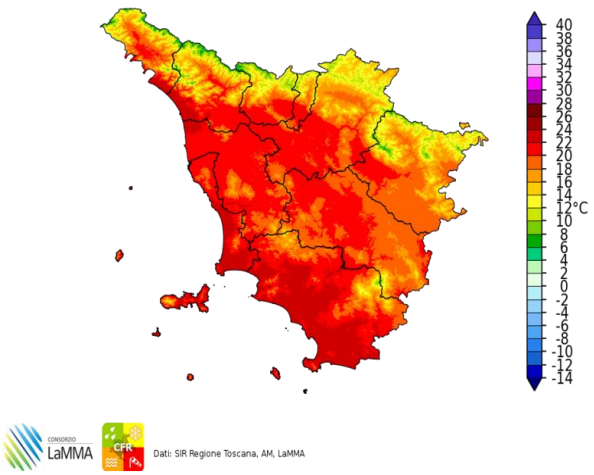
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 07/10/2019 e 06/10/2019



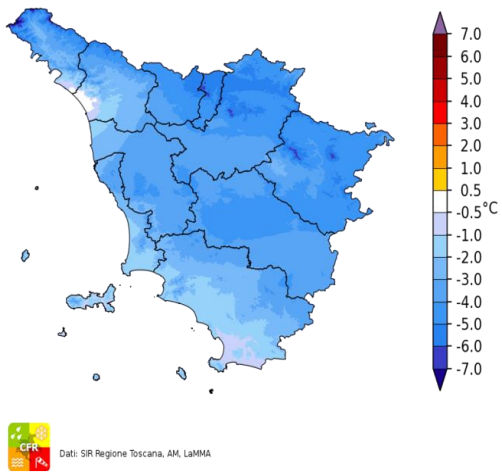
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 07/10/2019



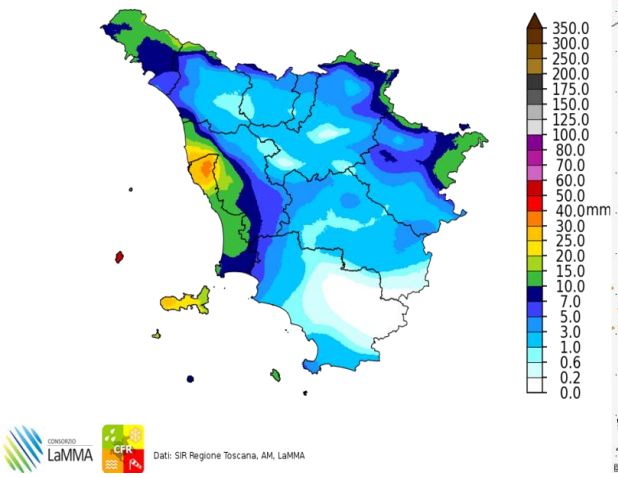
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 07/10/2019 e 06/10/2019



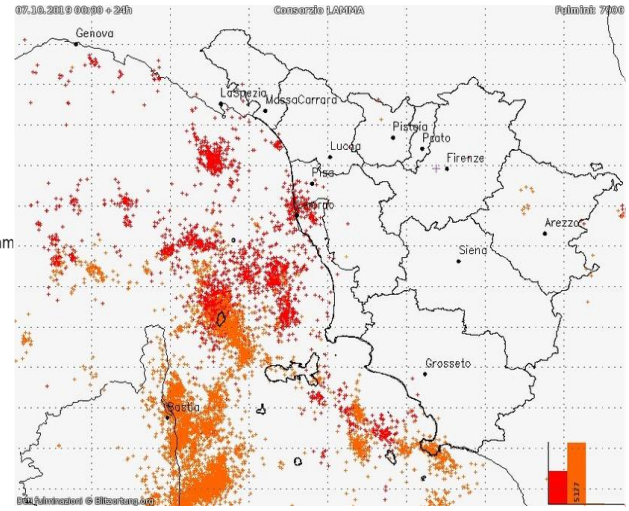
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 07/10/2019



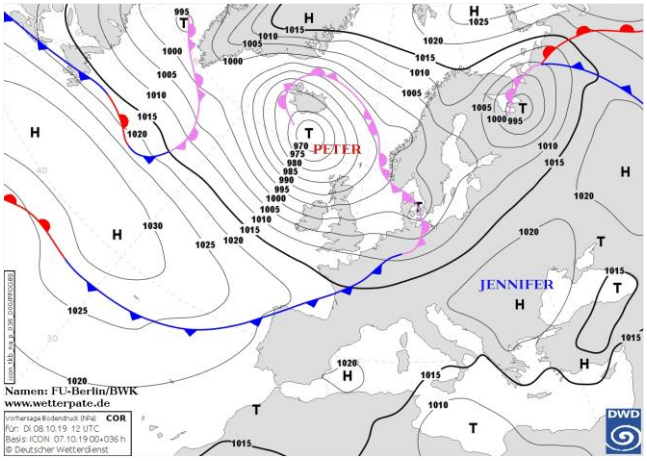
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 07 Ottobre

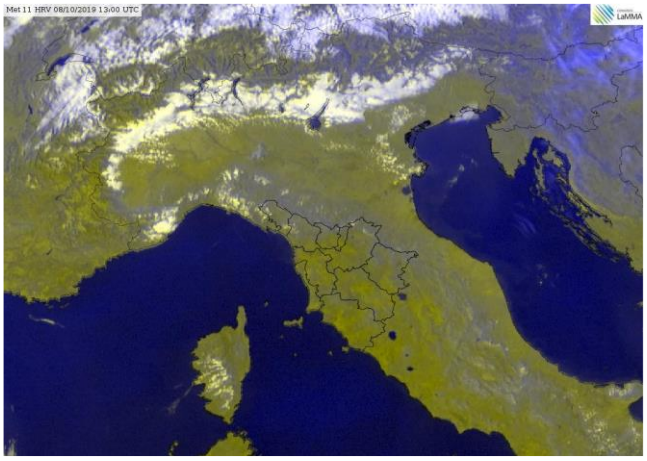


Martedi' 8 Ottobre 2019

Situazione: aumento della pressione con tempo in prevalenza stabile su tutta la penisola con debole circolazione orientale.

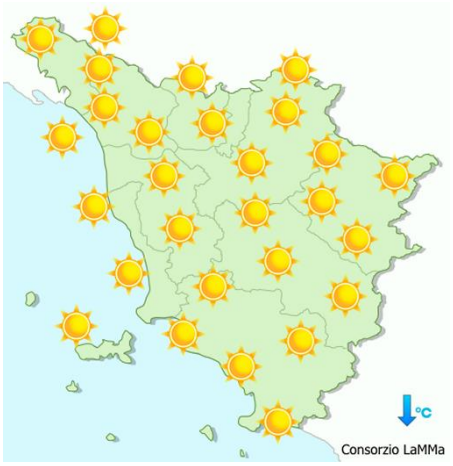


Pressione al suolo e fronti del 08 Ottobre alle 12 UTC

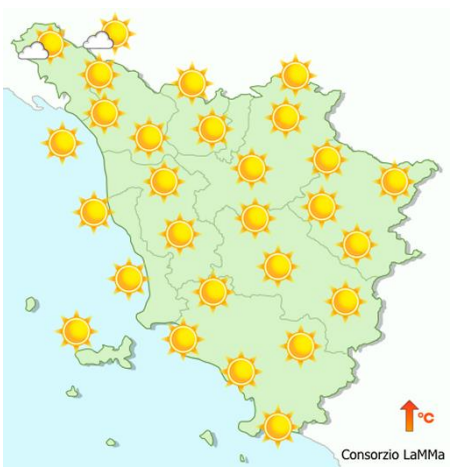


Meteosat HRV del 08 Ottobre alle 13 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: in prevalenza sereno.

Fenomeni: nessuno.

Venti: deboli nord-est.

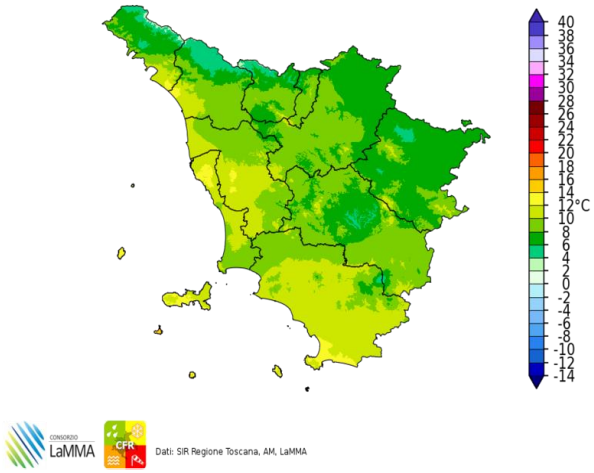
Mari: poco mossi sottocosta, mossi al largo in attenuazione.

Temperature: minime in diminuzione, massime in aumento su valori al di sopra delle medie del periodo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	8	9	10	16	9	11	10	7	12	11
	anomalia*	-2	-4	-3	0	-4	-3	-3	-5	-1	-2
T. max	osservata	21	25	27	22	23	21	24	23	24	23
	anomalia*	0	2	3	-1	0	-2	1	0	1	2
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

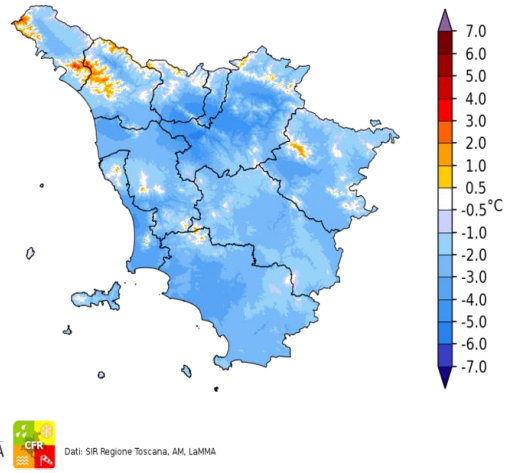
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 08/10/2019



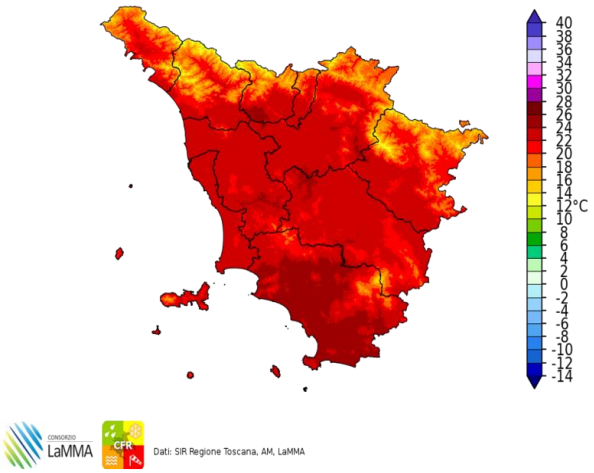
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 08/10/2019 e 07/10/2019



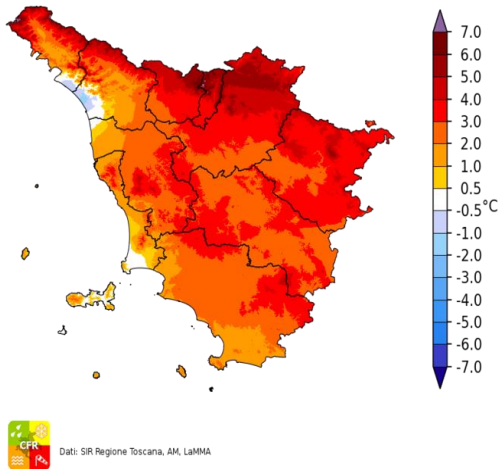
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 08/10/2019



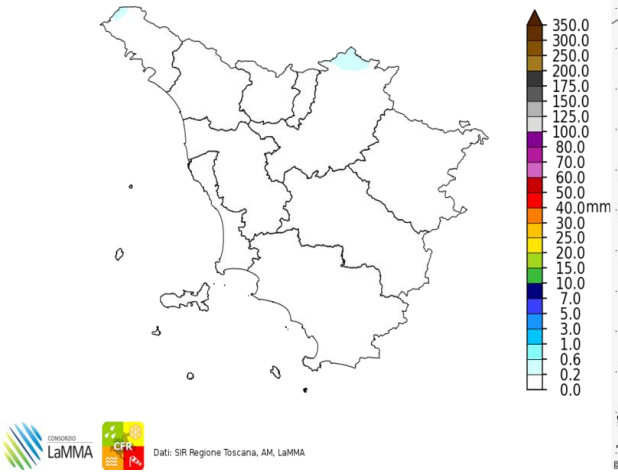
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 08/10/2019 e 07/10/2019



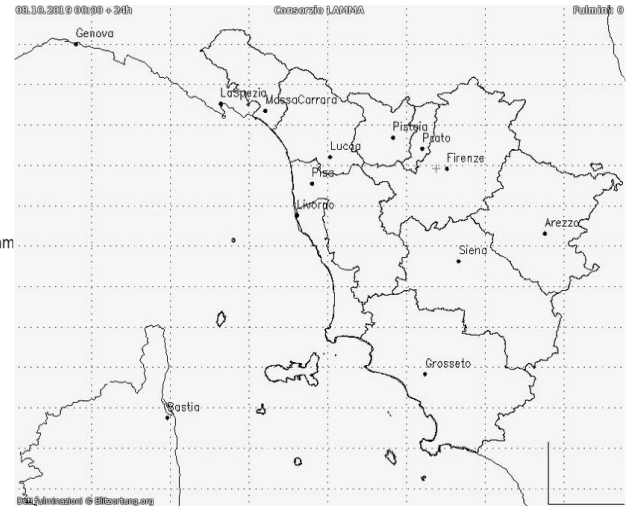
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 08/10/2019



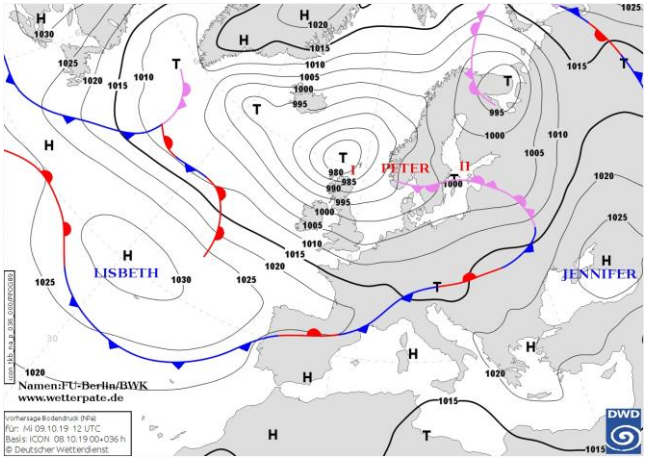
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 08 Ottobre

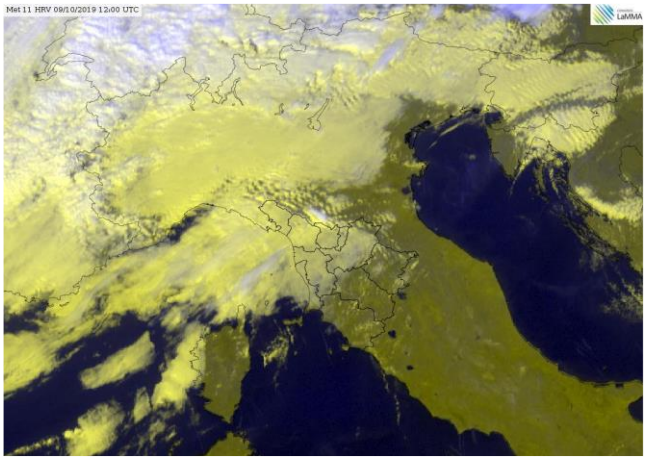


Mercoledi' 9 Ottobre 2019

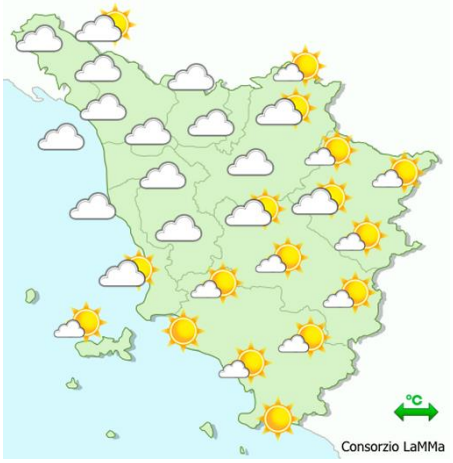
Situazione: una saccatura legata al flusso atlantico si approfondisce temporaneamente sull'Italia settentrionale e determina la formazione di una bassa pressione sul Golfo Ligure, associata a un intenso flusso di Libeccio sul litorale settentrionale della Toscana.



Pressione al suolo e fronti del 09 Ottobre alle 12 UTC


Meteosat HRV del 09 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: nuvoloso o moloto nuvoloso sulle zone centro-settentrionali, in particolare quelle di nord-ovest. Poco o parzialmente nuvoloso sul sud della regione.

Fenomeni: piogge sulle zone nord-occidentali (province di Ms, Lu e parzialmente Pt, Po e Pi).

Venti: deboli-moderati da sud, sud-ovest con rinforzi sulla costa e sull'Appennino, in particolare versanti sottovento.

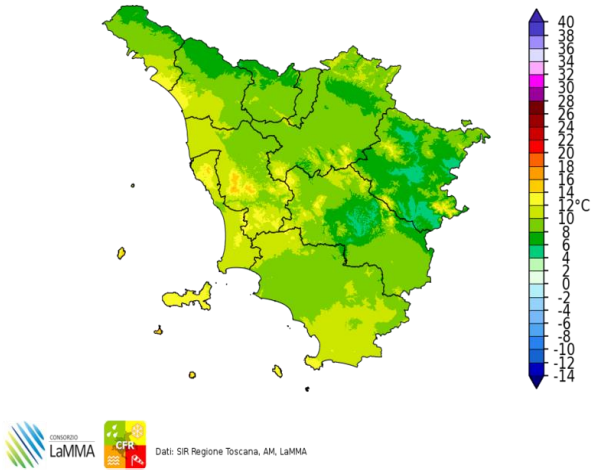
Mari: da poco mossi a mossi, in aumento a molto mossi in serata a nord dell'Elba.

Temperature: minime in aumento, massime in calo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	6	8	8	15	10	12	10	8	11	11
	anomalia*	-4	-4	-4	-1	-3	-2	-3	-4	-2	-2
T. max	osservata	22	23	25	22	21	20	22	20	22	22
	anomalia*	0	0	1	-1	-2	-3	0	-3	-2	1
Precipitazione (mm/24ore)		0	0	0	3	6	22	1	8	1	0

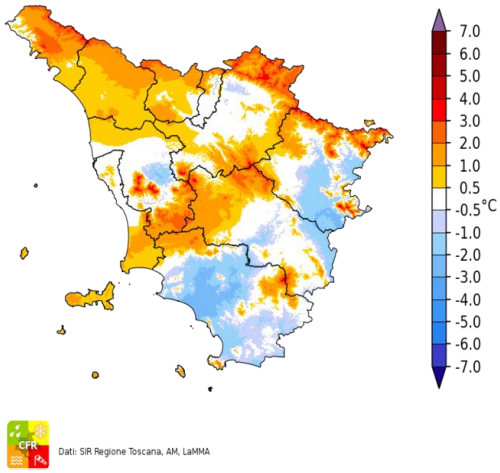
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 09/10/2019



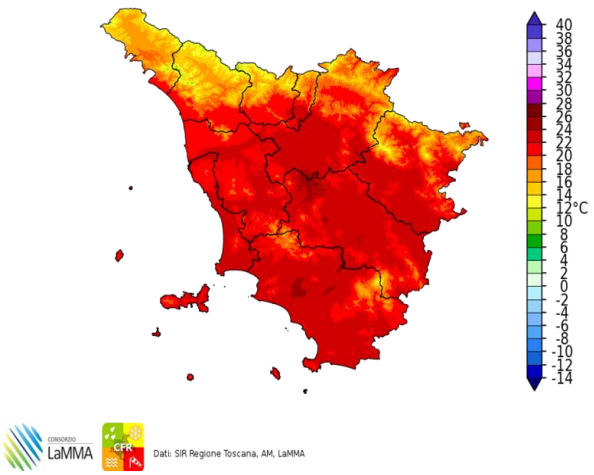
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 09/10/2019 e 08/10/2019



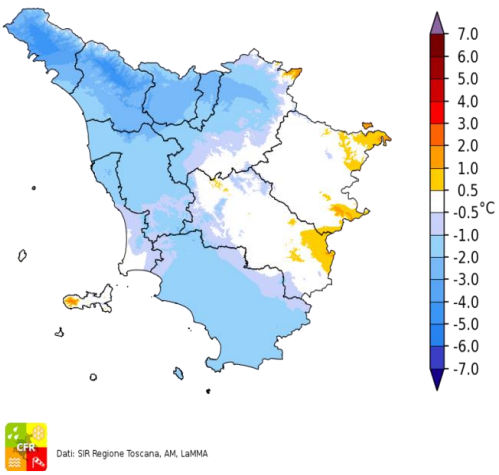
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 09/10/2019



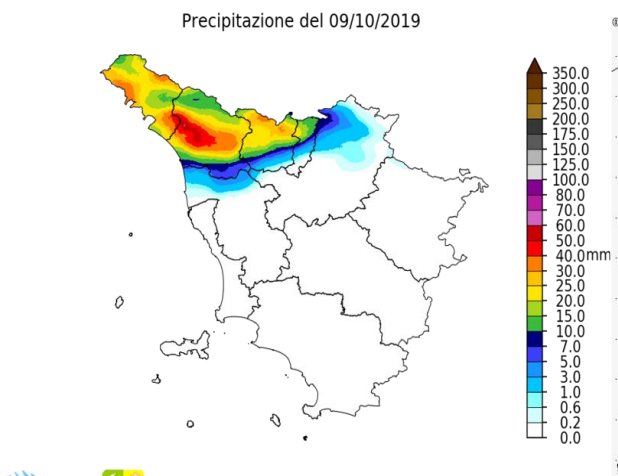
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 09/10/2019 e 08/10/2019



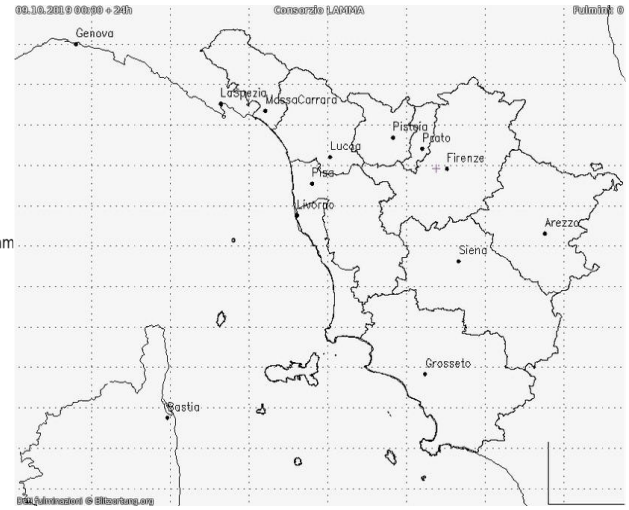
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 09/10/2019



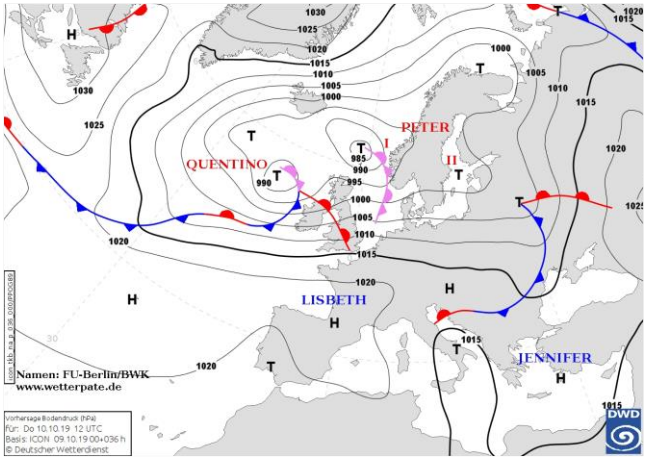
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 09 Ottobre

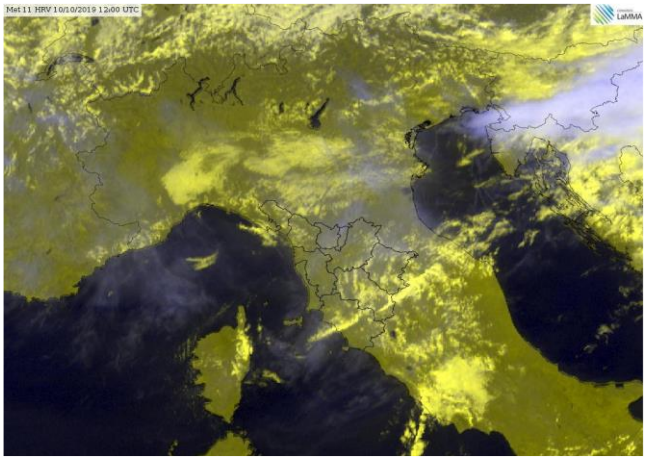


Giovedi' 10 Ottobre 2019

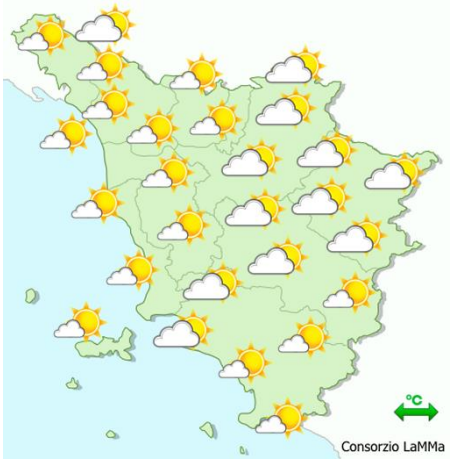
Situazione: una bassa pressione sul Golfo Ligure, associata a un intenso flusso mite e umido di Libeccio, interessa la Toscana, ma tende rapidamente a colmarsi e favorendo un miglioramento delle condizioni atmosferiche.



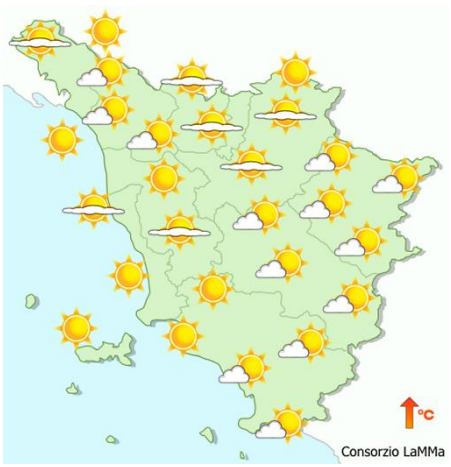
Pressione al suolo e fronti del 10 Ottobre alle 12 UTC


Meteosat HRV del 10 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: in mattinata fra parzialmente nuvoloso e nuvoloso; dal pomeriggio poco nuvoloso.

Fenomeni: deboli piogge sparse sulle zone settentrionali durante la notte e al primo mattino; isolate piogge nel pomeriggio sulle zone meridionali.

Venti: di Libeccio fino moderati o localmente forti sulla costa centro-settentrionale, deboli nell'interno.

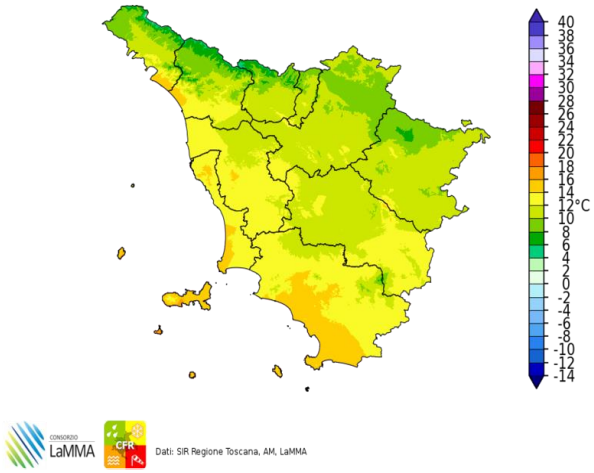
Mari: molto mossi i settori a nord dell'Elba, mossi altrove, ma in graduale attenuazione.

Temperature: in aumento, soprattutto le minime.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	15	11	13	16	12	14	11	11	14	14
	anomalia*	5	-1	0	0	-1	0	-2	-2	0	0
T. max	osservata	21	24	25	22	22	21	22	21	23	22
	anomalia*	0	0	2	-1	-1	-2	-1	-2	0	1
Precipitazione (mm/24ore)		1	2	0	0	0	0	0	0	1	0

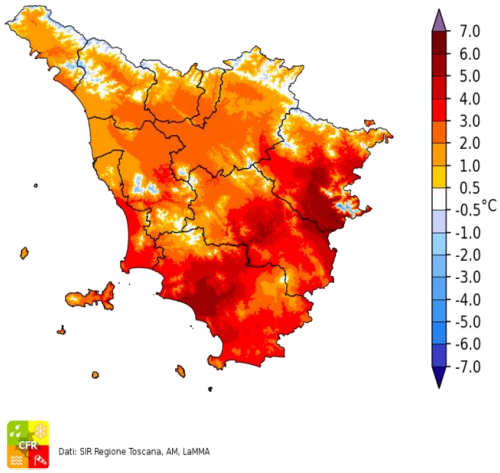
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 10/10/2019



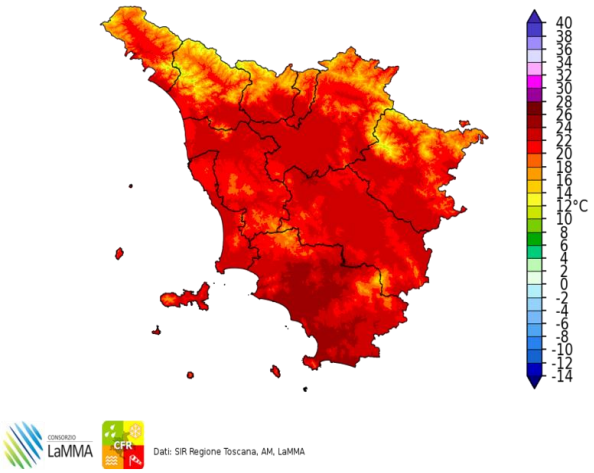
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 10/10/2019 e 09/10/2019



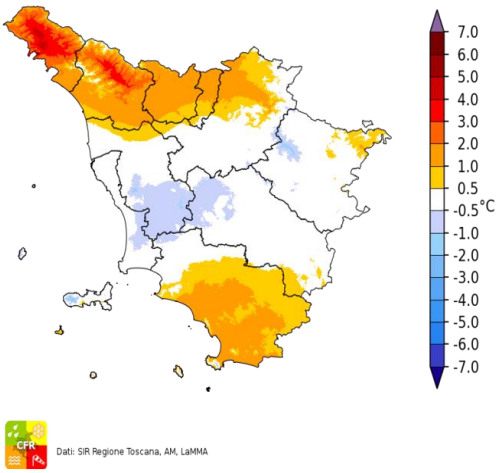
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 10/10/2019



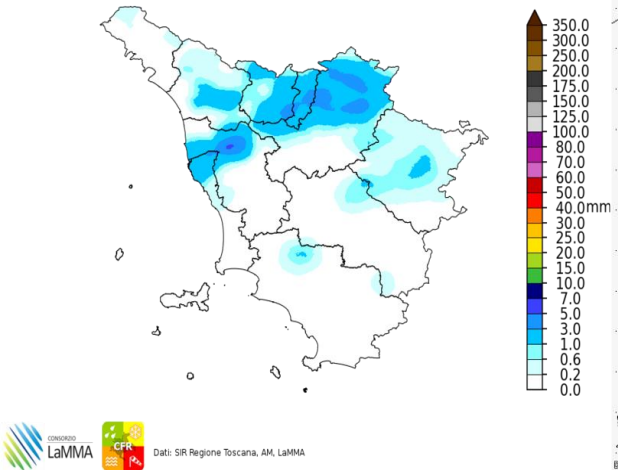
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 10/10/2019 e 09/10/2019



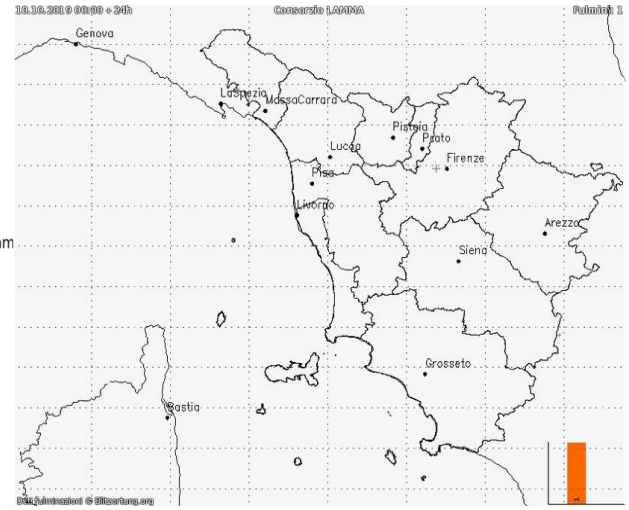
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 10/10/2019



Dati: SIR Regione Toscana, AM, LaMMA

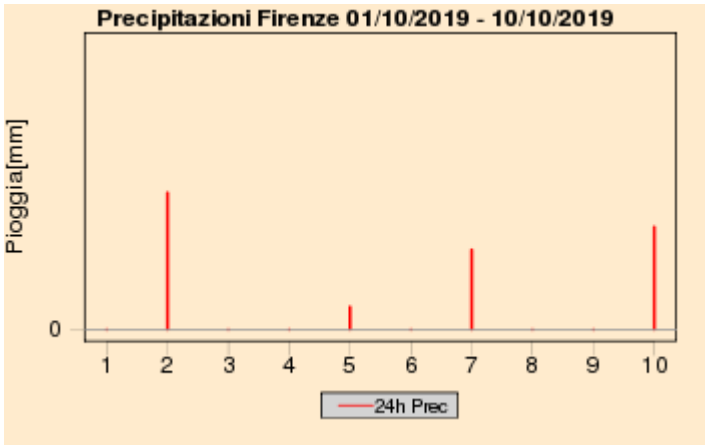
Fulminazioni osservate il giorno 10 Ottobre

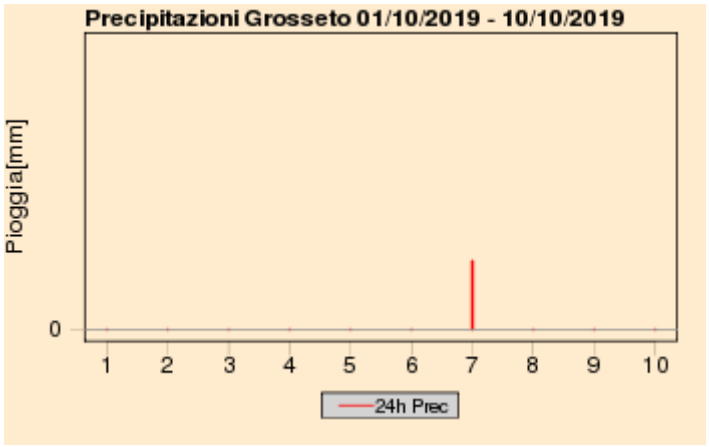


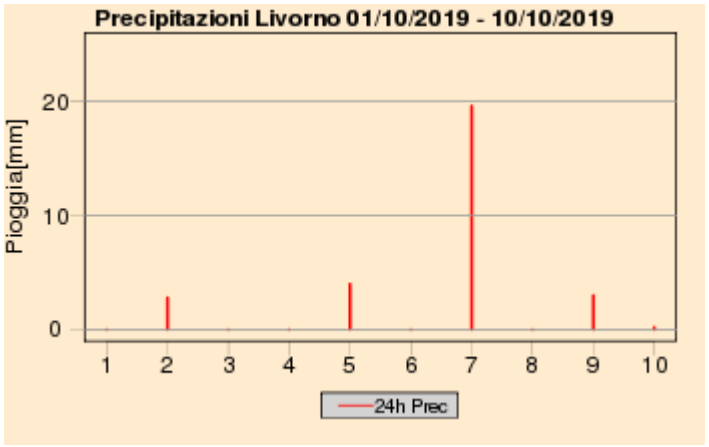
I decade - Quadro regionale – Precipitazioni

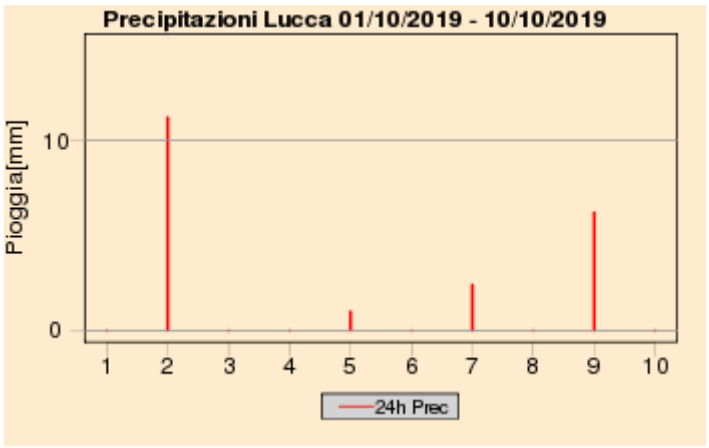
Nel corso della prima decade di Ottobre si sono osservate un paio di perturbazioni in transito sulla Toscana che hanno favorito precipitazioni in particolare sulle zone settentrionali e appenniniche, mentre su ampie zone della Toscana centro meridionale le piogge sono state scarsamente significative con cumulati anche inferiori a 10 mm. Nel complesso la decade risulta leggermente meno piovosa rispetto alle precipitazioni che mediamente si registrano nel periodo.

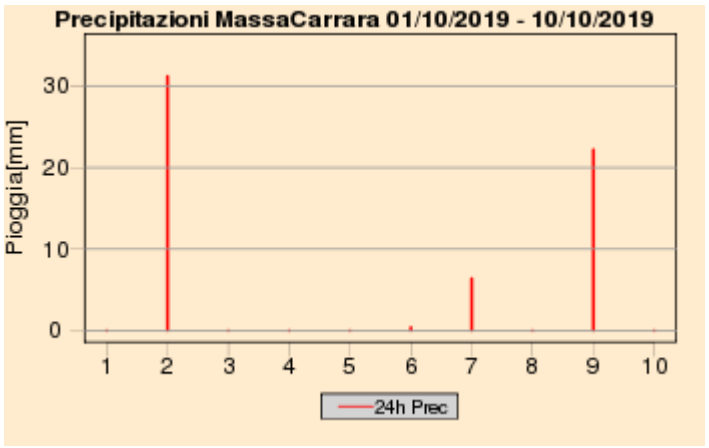


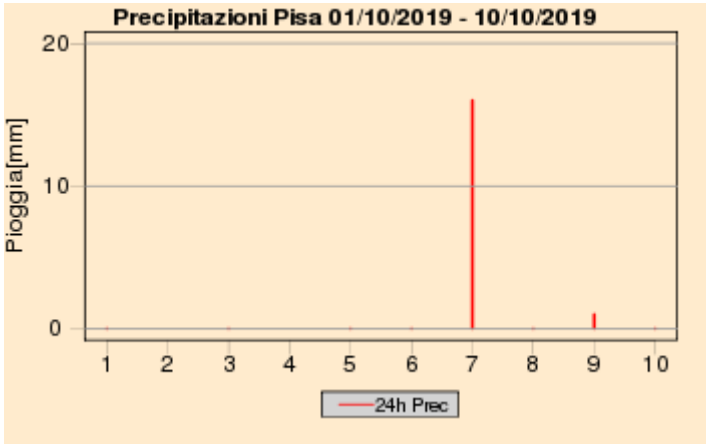


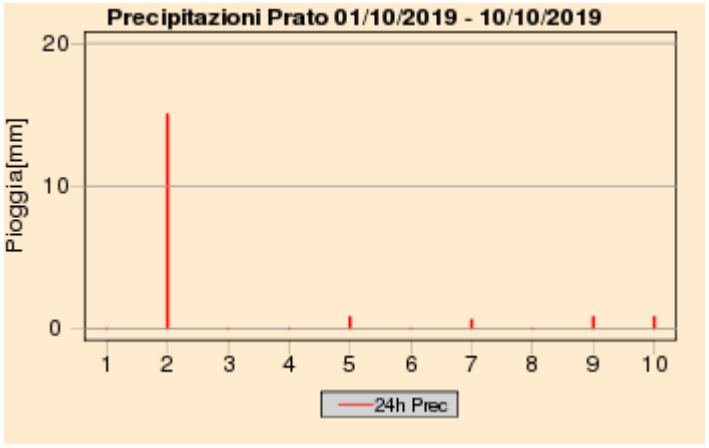


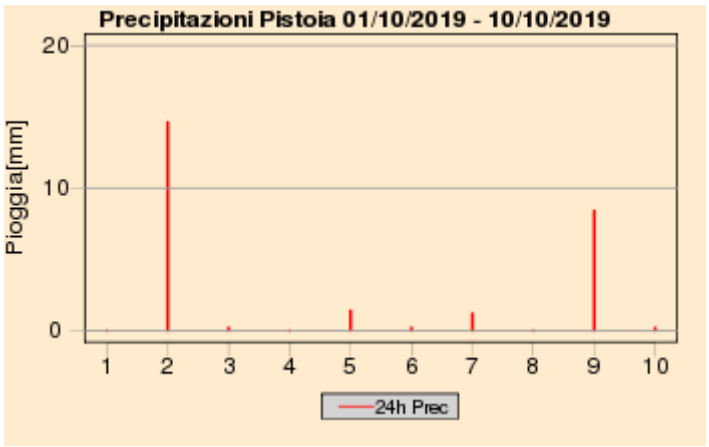


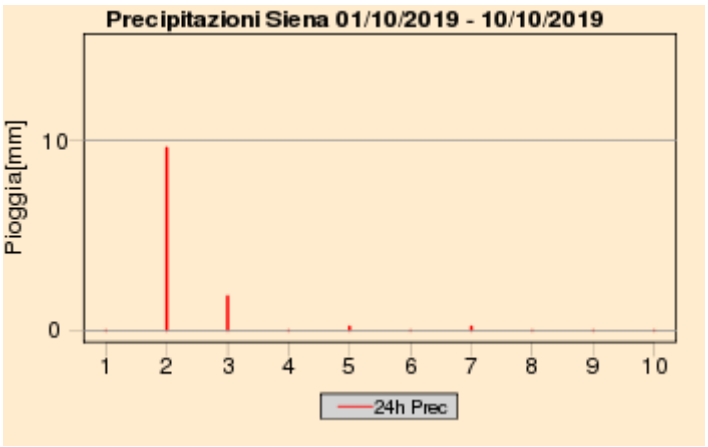




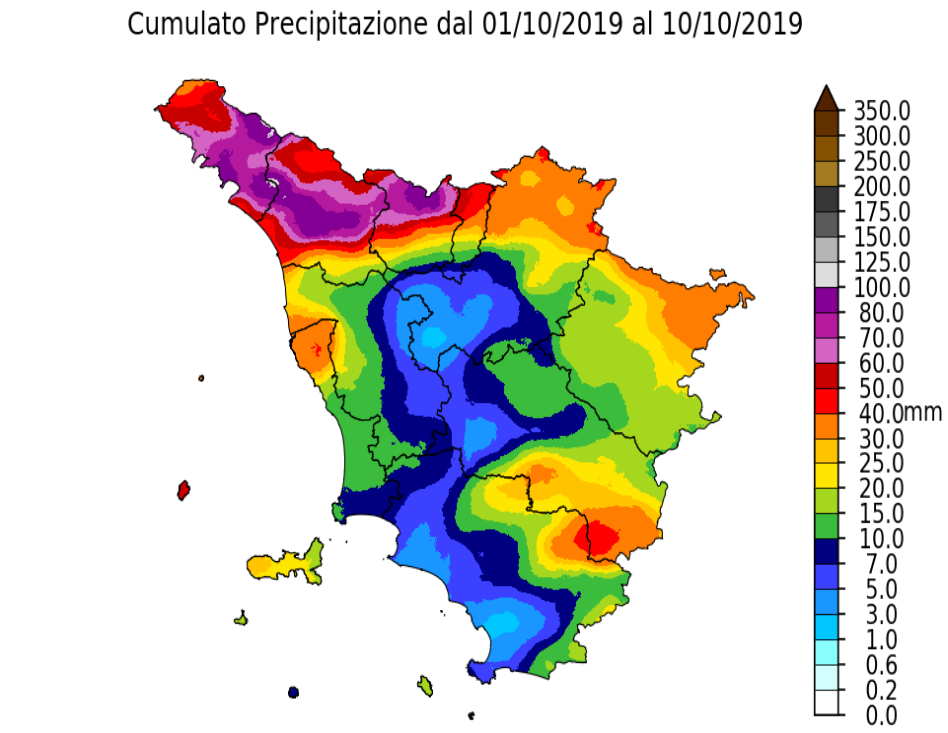






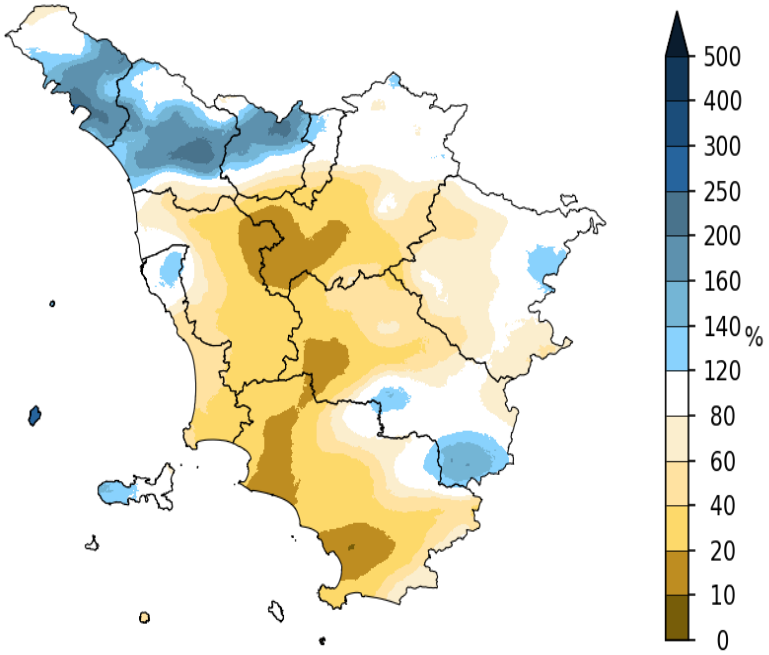


Quadro regionale – Cumulati decadali di precipitazione, anomalia di precipitazione e numero di giorni di pioggia



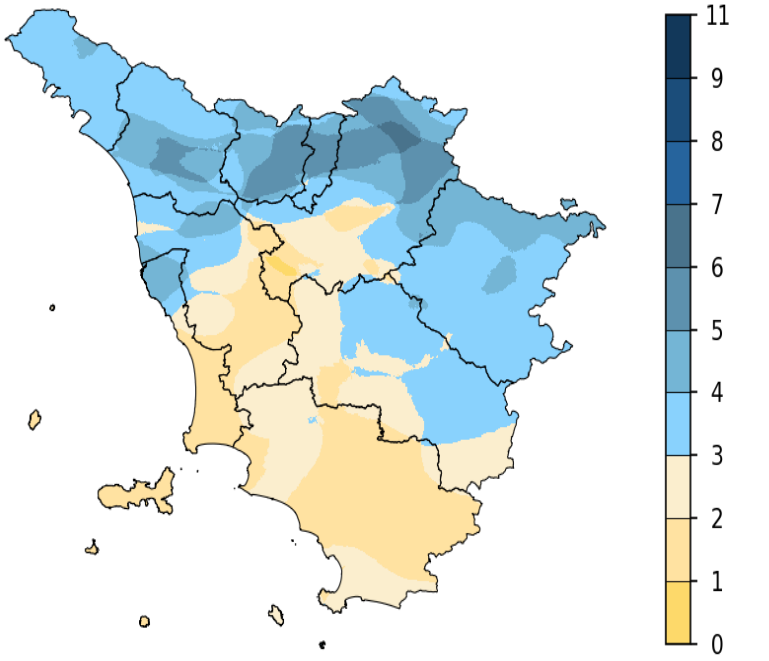
Dati: SIR Regione Toscana, AM, LaMMA

Percentuale di Precipitazione rispetto alla media climatica
dal 01/10/2019 al 10/10/2019



Dati: SIR Regione Toscana, AM, LaMMA

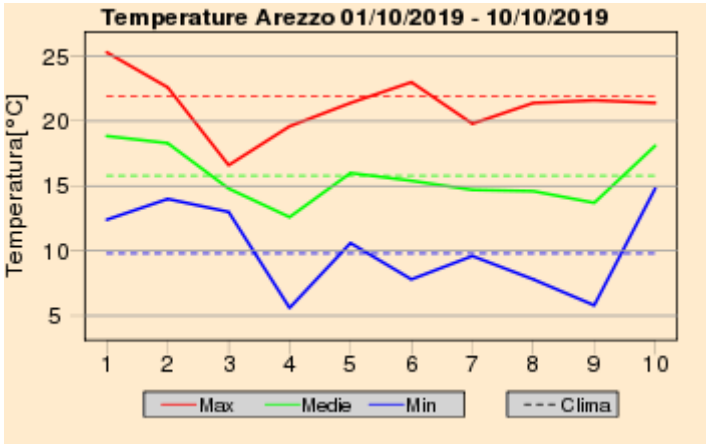
Giorni con Pioggia ≥ di 1 mm dal 01/10/2019 al 10/10/2019

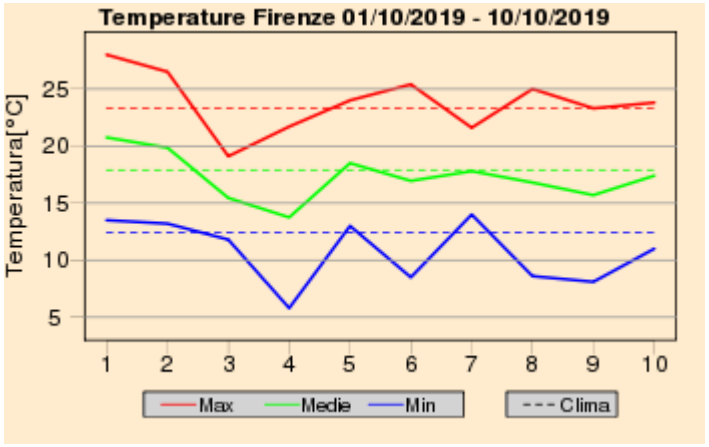


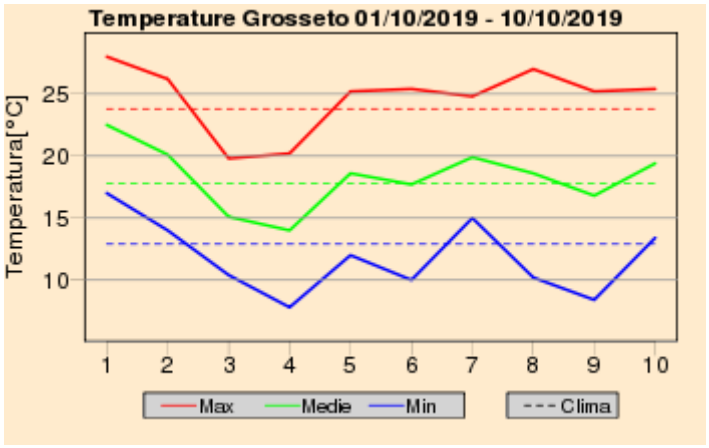
Dati: SIR Regione Toscana, AM, LaMMA

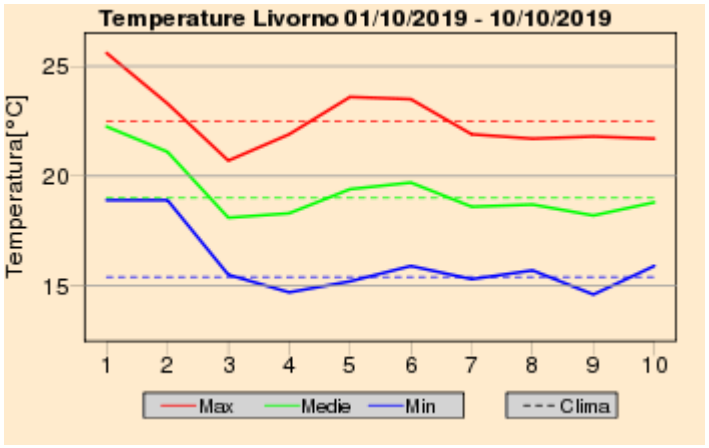
I decade - Quadro regionale – Temperature

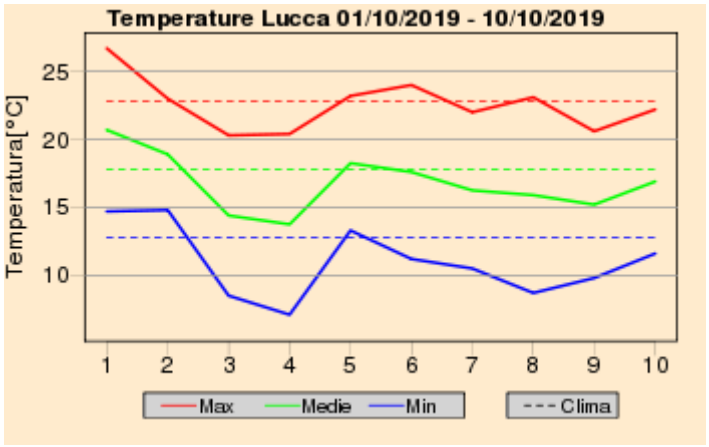
Nel corso della prima decade di Ottobre non si sono osservate particolari anomalie termiche; le temperature registrate sia nei valori minimi che in quelli massimi si sono infatti mantenute complessivamente in linea con le medie climatologiche calcolate nel trentennio 1981-2010.

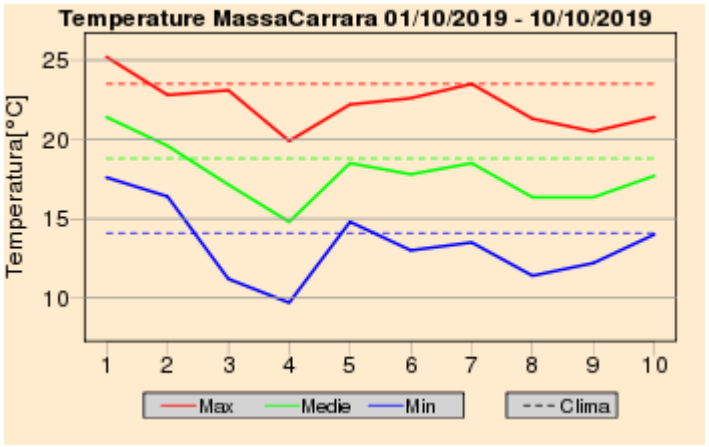


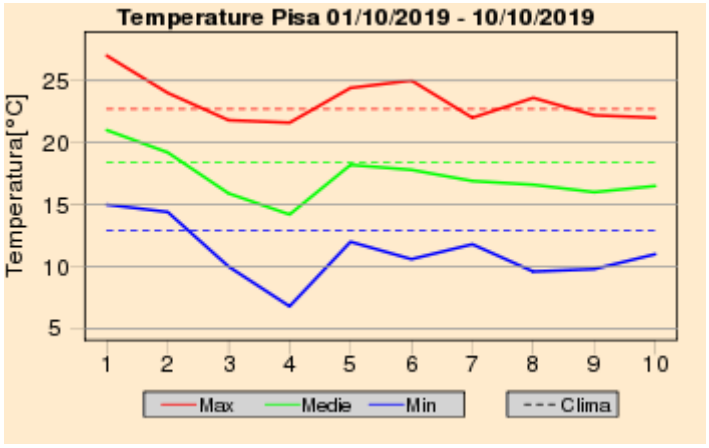


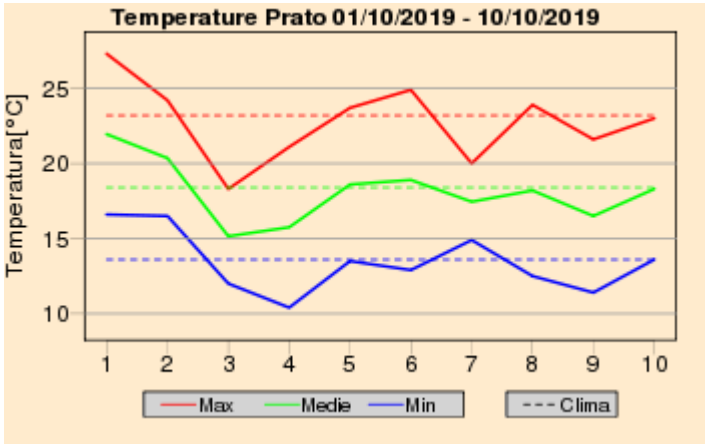


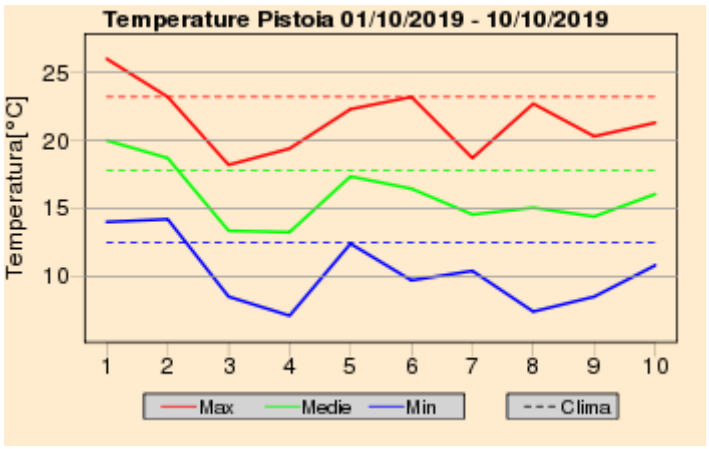


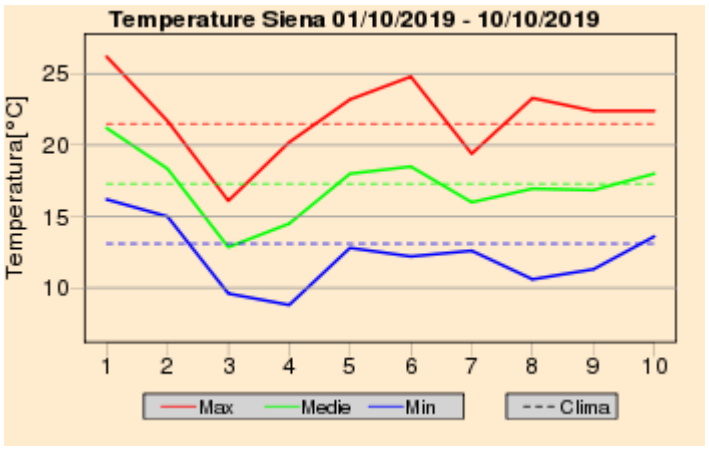




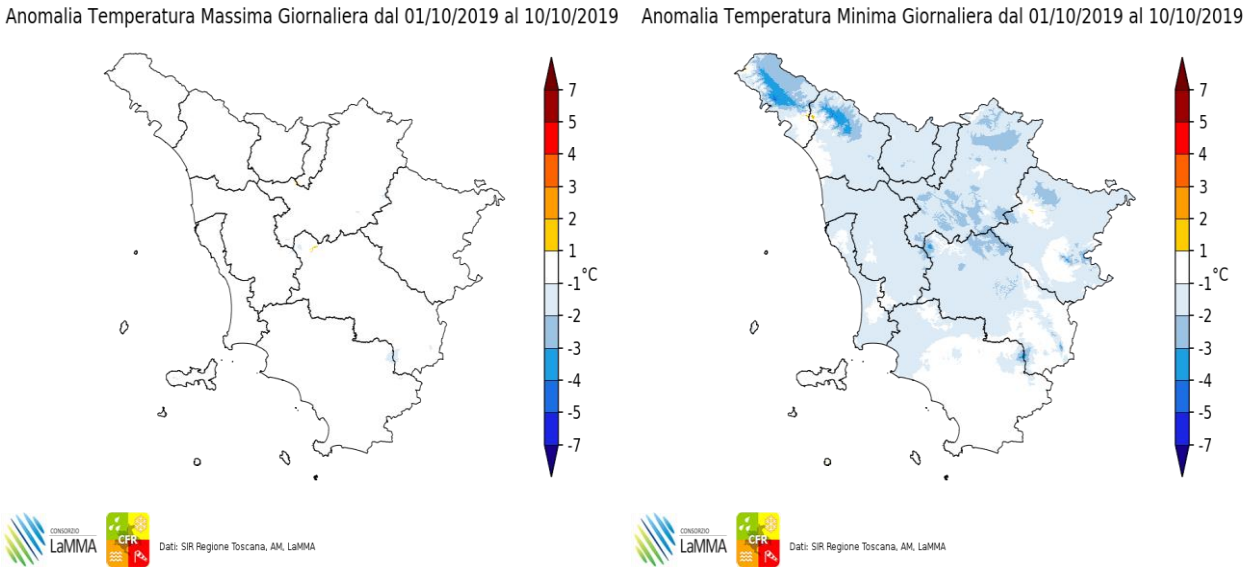








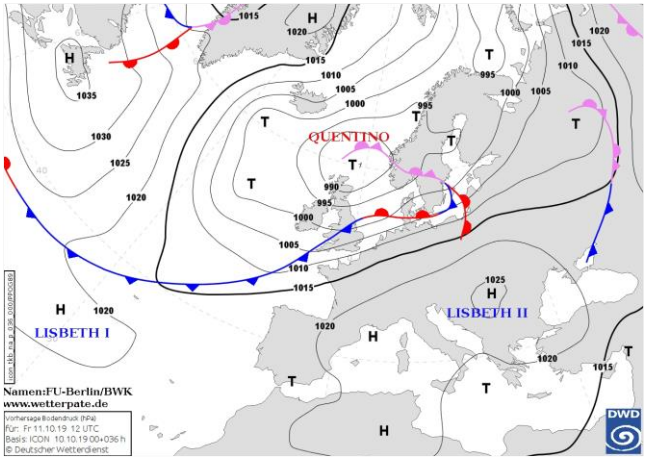
Quadro regionale – Anomalie termiche



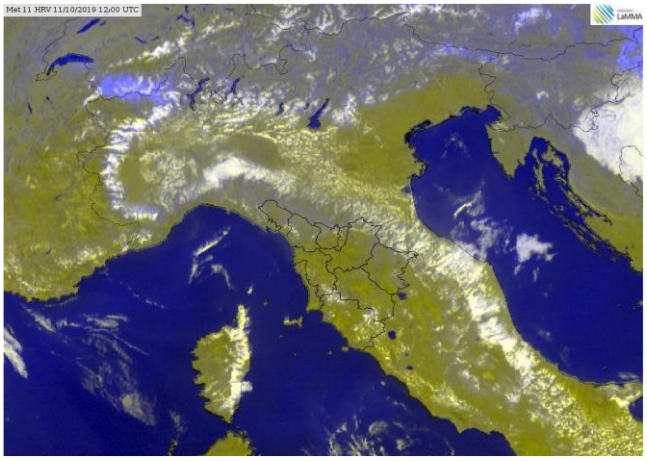
Anomalia termica decadale per le temperature massime e minime giornaliere

Venerdi' 11 Ottobre 2019

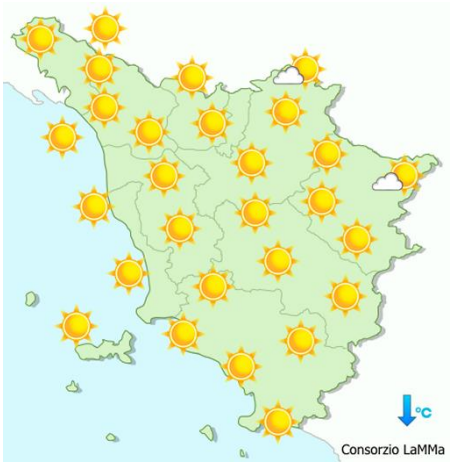
Situazione: alta pressione con tempo stabile e flusso di aria decisamente mite e a tratti umida.



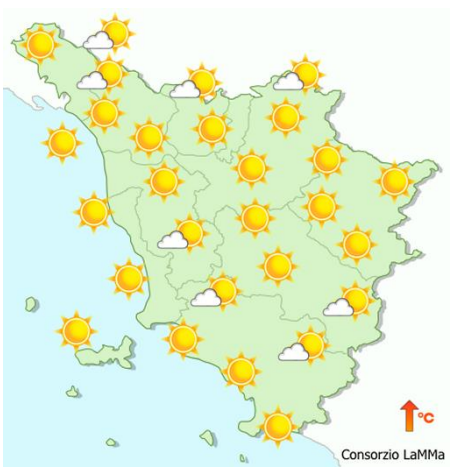
Pressione al suolo e fronti del 11 Ottobre alle 12 UTC


Meteosat HRV del 11 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: sereno.

Fenomeni: nessuno.

Venti: fra deboli e localmente moderati di Grecale su Arcipelago e litorale.

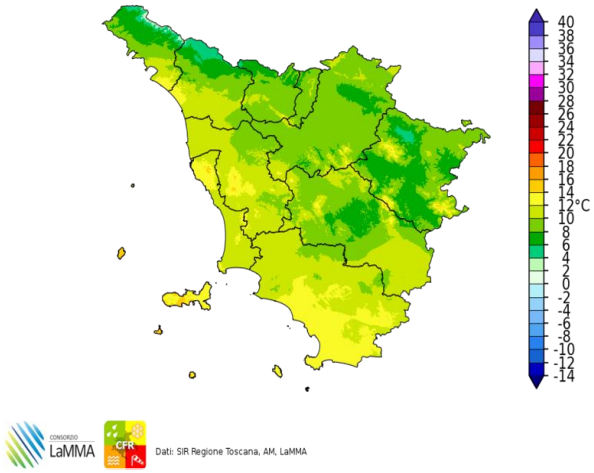
Mari: poco mossi.

Temperature: minime in calo, massime in aumento.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	7	8	11	16	10	12	10	9	12	11
	anomalia*	-1	-3	-1	2	-1	-1	-2	-2	0	-1
T. max	osservata	22	25	26	23	24	23	25	24	25	25
	anomalia*	2	4	4	2	3	1	3	2	3	5
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

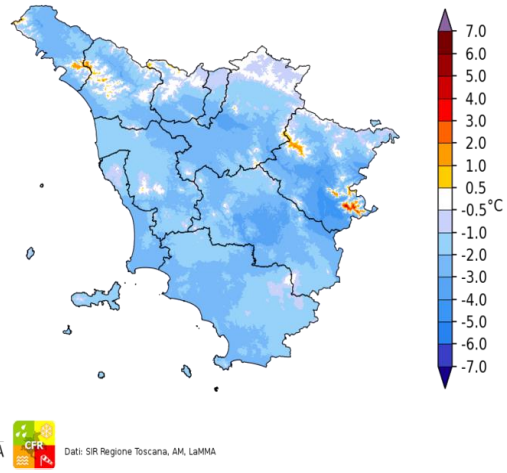
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 11/10/2019



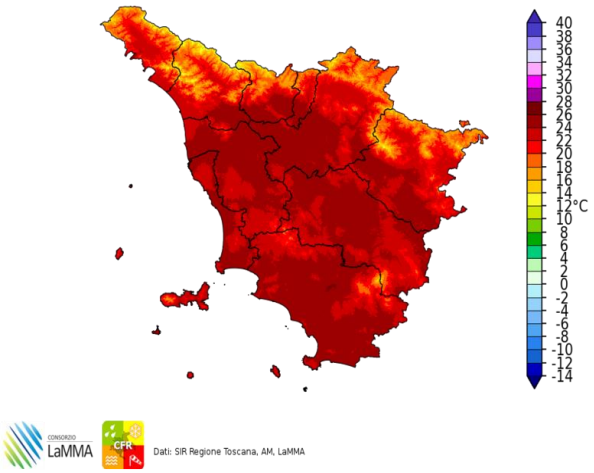
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 11/10/2019 e 10/10/2019



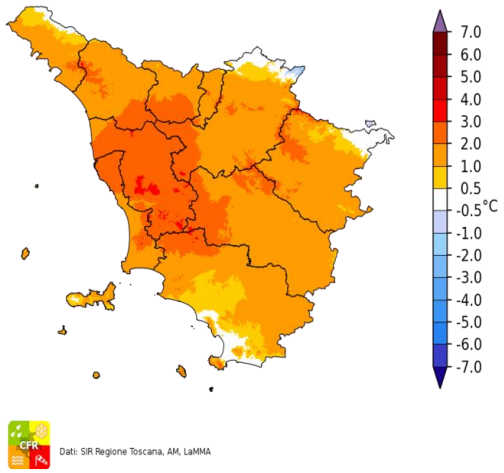
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 11/10/2019



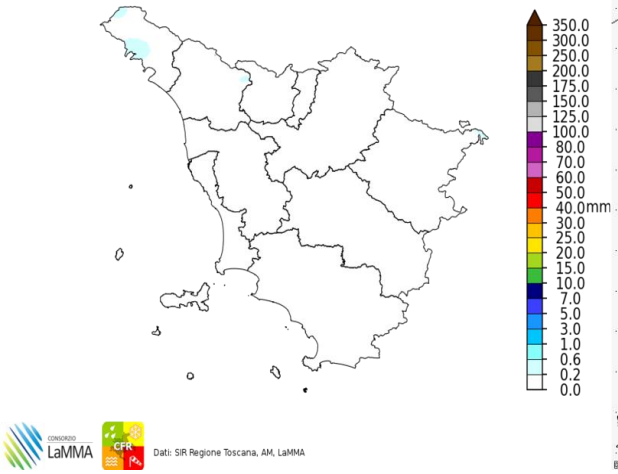
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 11/10/2019 e 10/10/2019



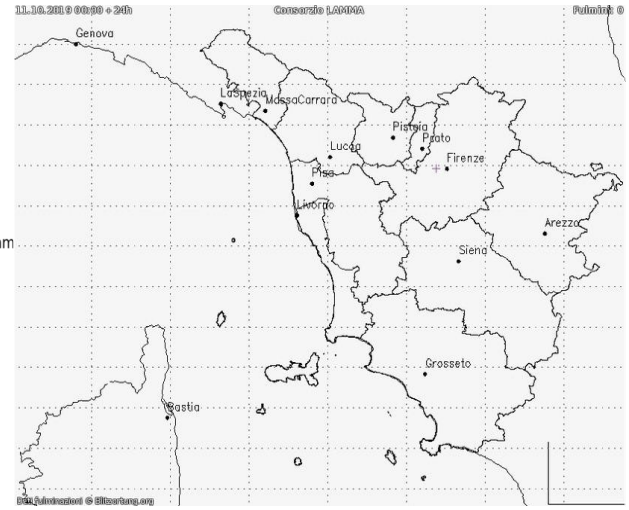
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 11/10/2019



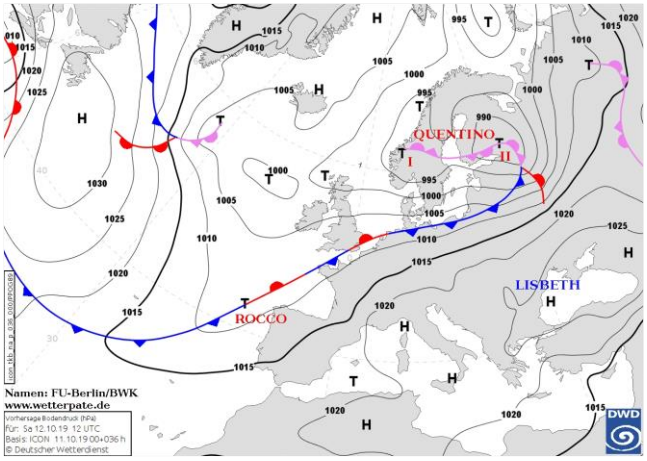
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 11 Ottobre

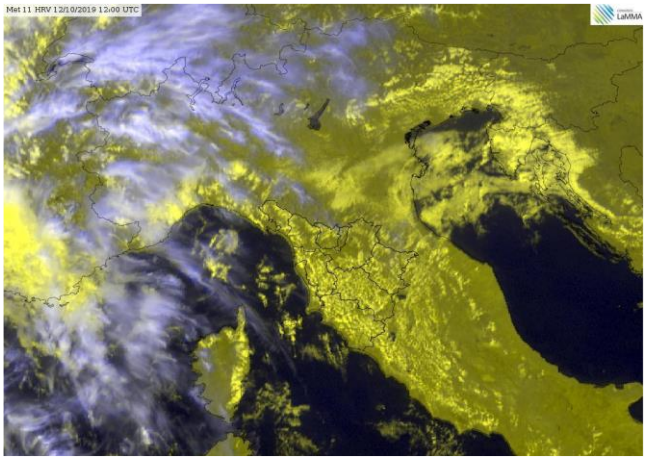


Sabato 12 Ottobre 2019

Situazione: il Mediterraneo è interessato da un campo di alta pressione che tuttavia tende a mostrare i primi segni di cedimento sul suo margine occidentale.

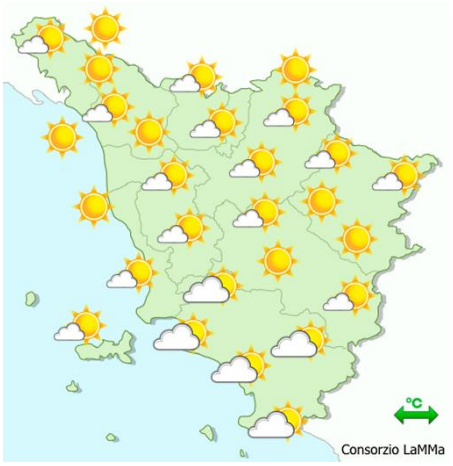


Pressione al suolo e fronti del 12 Ottobre alle 12 UTC

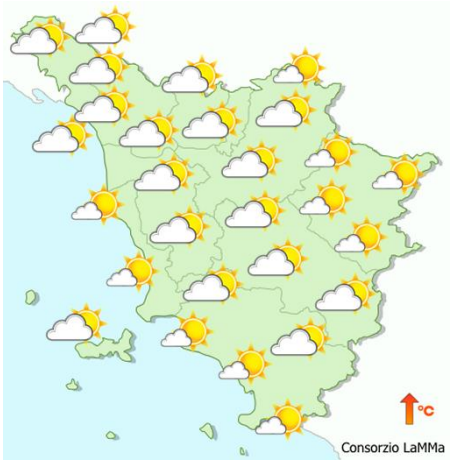


Meteosat HRV del 12 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: inizialmente poco nuvoloso; dal pomeriggio aumento della nuvolosità a partire dalle zone più occidentali della regione.

Fenomeni: nessuno.

Venti: deboli variabili, in prevalenza da sud.

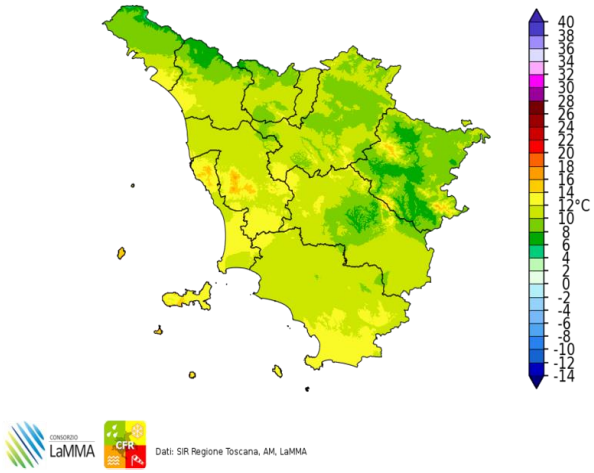
Mari: calmi o poco mossi.

Temperature: minime in lieve aumento, massime in lieve calo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	7	9	12	15	11	13	10	10	13	13
	anomalia*	-1	-2	0	1	0	0	-1	-1	1	1
T. max	osservata	22	25	25	24	24	22	24	23	25	23
	anomalia*	2	4	2	2	2	0	2	2	3	3
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

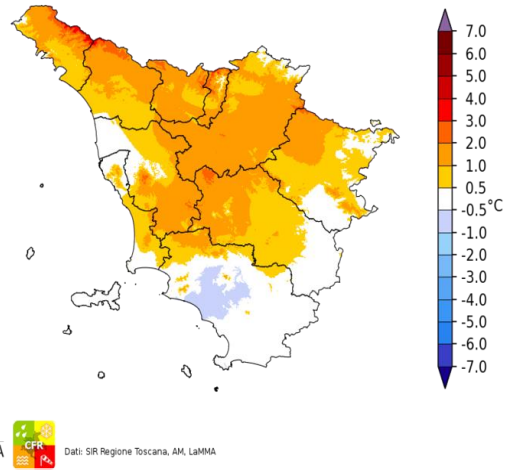
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 12/10/2019



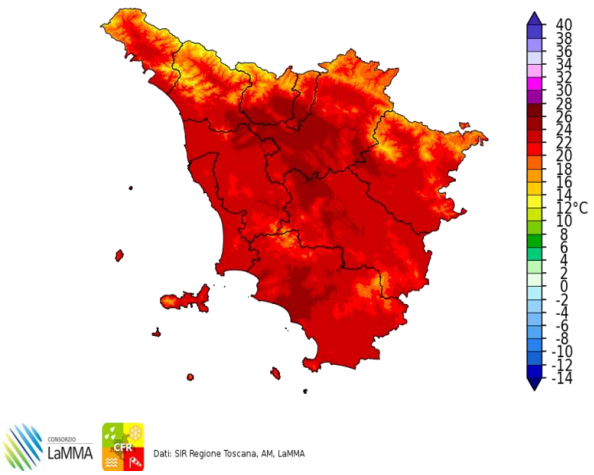
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 12/10/2019 e 11/10/2019



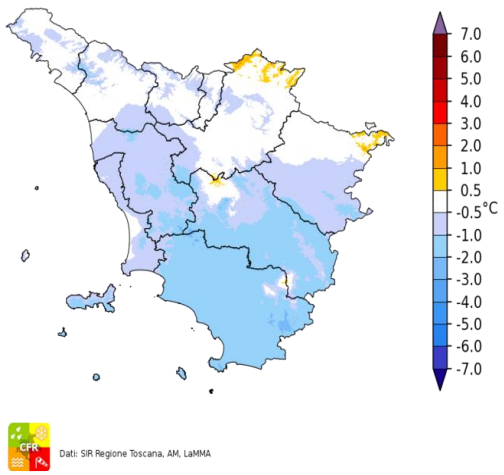
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 12/10/2019



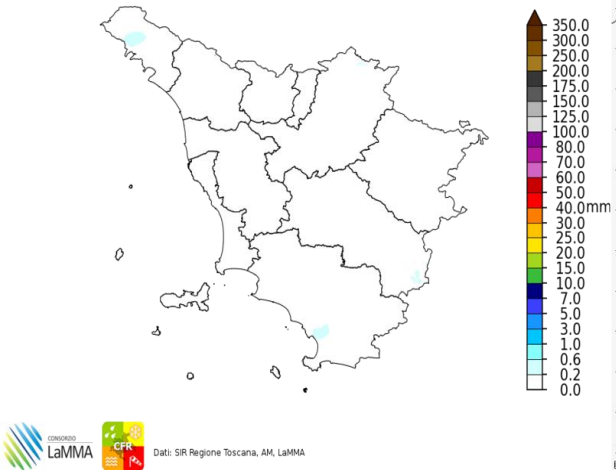
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 12/10/2019 e 11/10/2019



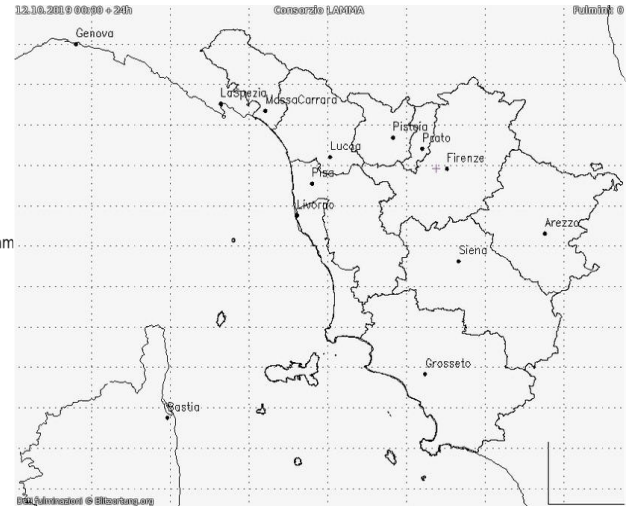
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 12/10/2019



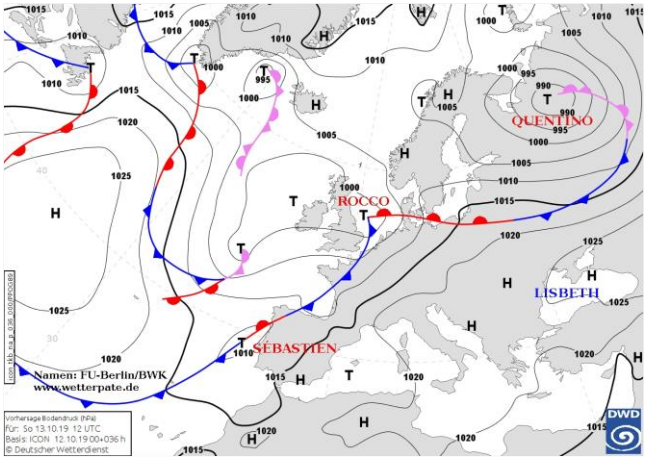
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 12 Ottobre

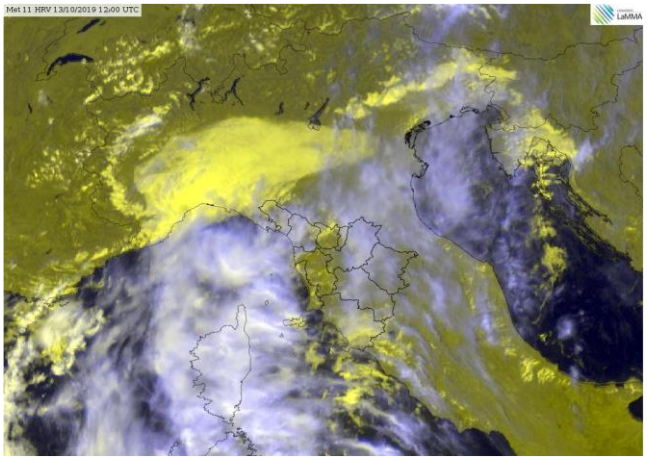


Domenica 13 Ottobre 2019

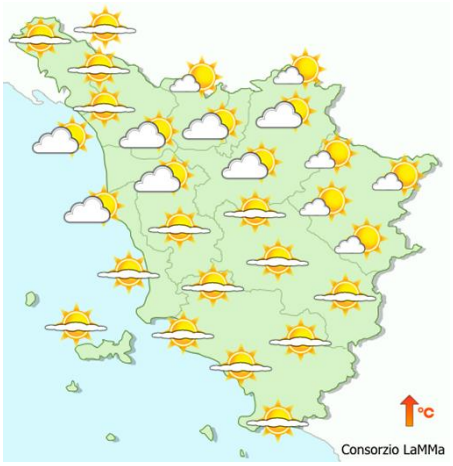
Situazione: il Mediterraneo è interessato da un campo di alta pressione che tuttavia tende a mostrare i primi segni di cedimento sul suo margine occidentale; una saccatura depressionaria atlantica tende infatti ad interessare il Mediterraneo occidentale.



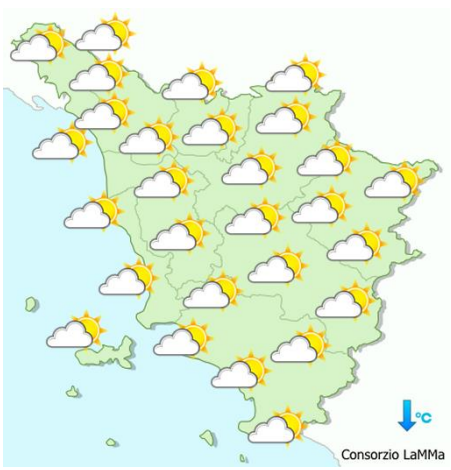
Pressione al suolo e fronti del 13 Ottobre alle 12 UTC


Meteosat HRV del 13 Ottobre alle 12 UTC

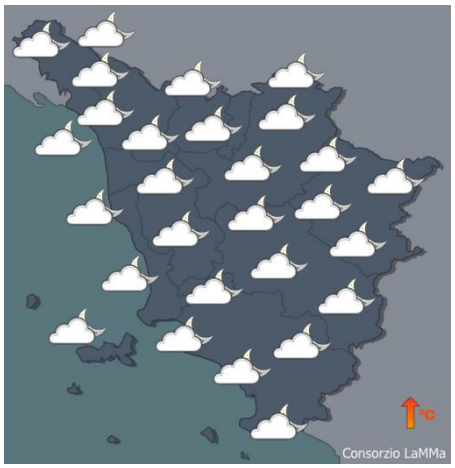
situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: nuvoloso.

Fenomeni: nessuno.

Venti: deboli di Scirocco con rinforzi sulla costa.

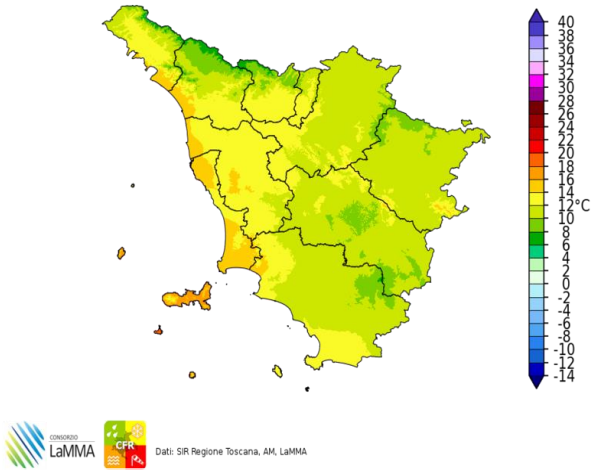
Mari: poco mossi in aumento a mossi dal pomeriggio.

Temperature: minime in aumento, massime in calo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	12	12	11	16	13	16	13	13	14	12
	anomalia*	4	1	-1	2	2	3	2	2	2	0
T. max	osservata	21	24	25	23	22	22	23	22	23	21
	anomalia*	1	2	2	2	0	0	1	0	1	1
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

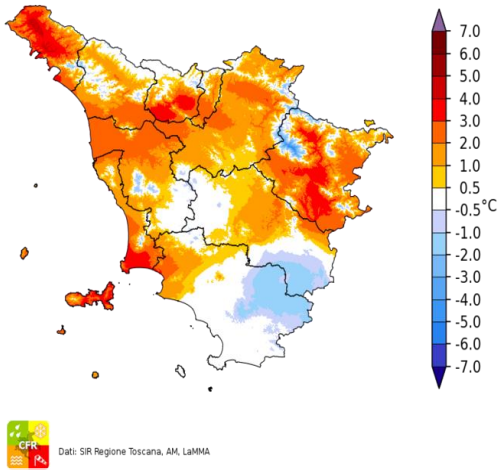
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 13/10/2019



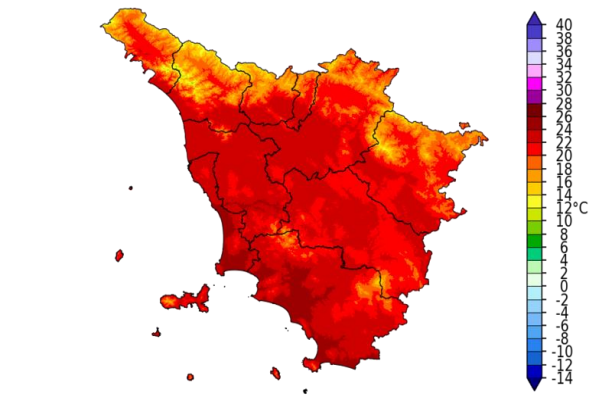
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 13/10/2019 e 12/10/2019



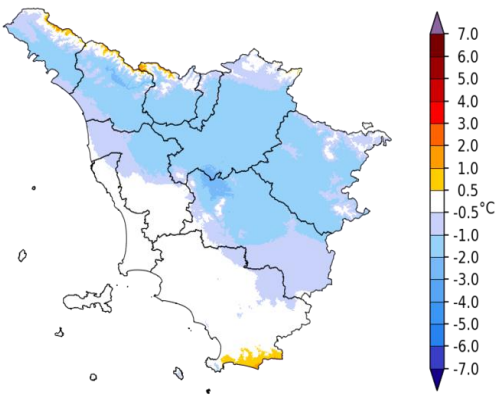
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 13/10/2019



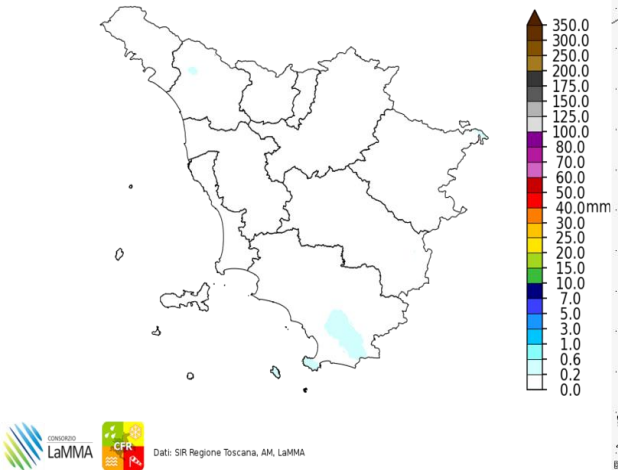
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 13/10/2019 e 12/10/2019



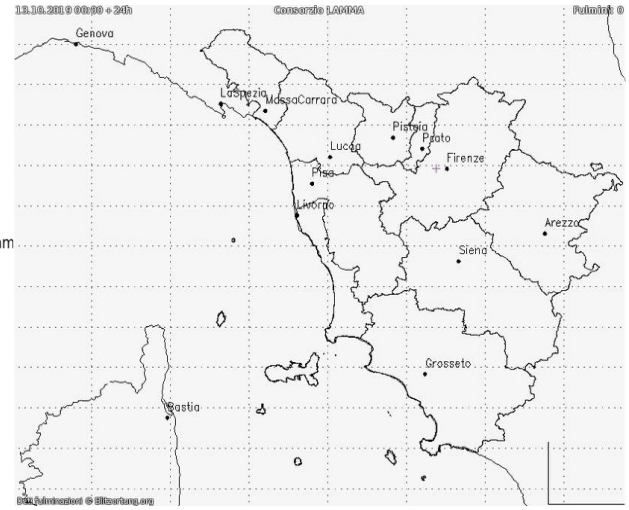
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 13/10/2019



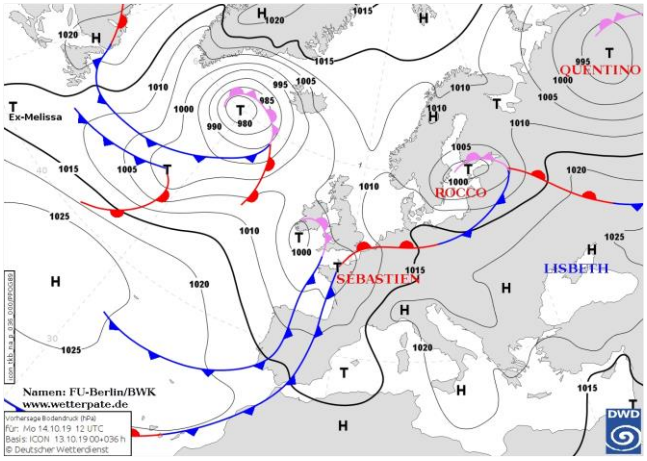
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 13 Ottobre

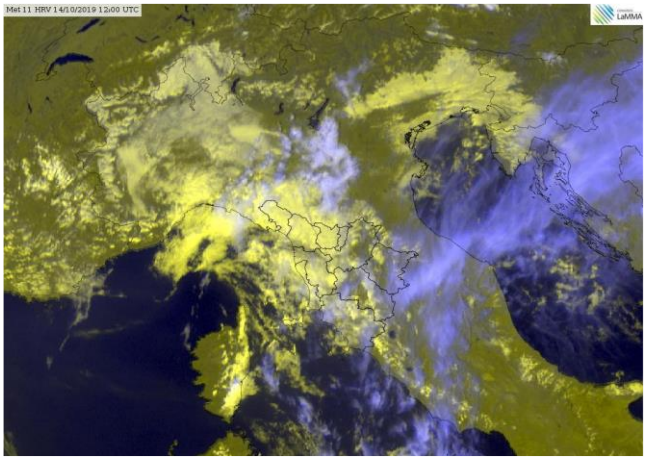


Lunedi' 14 Ottobre 2019

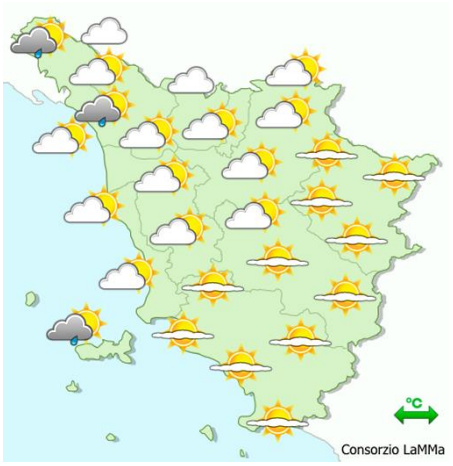
Situazione: una saccatura atlantica interessa il Mediterraneo occidentale e risulta in movimento verso est.



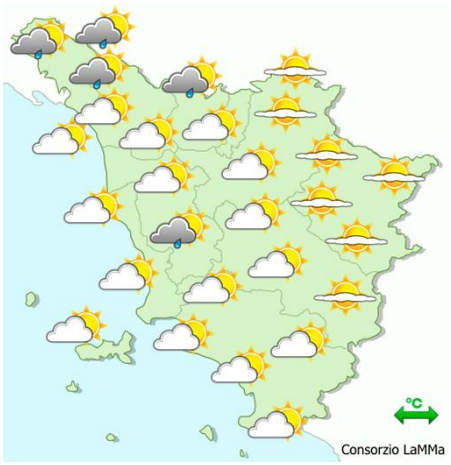
Pressione al suolo e fronti del 14 Ottobre alle 12 UTC


Meteosat HRV del 14 Ottobre alle 12 UTC

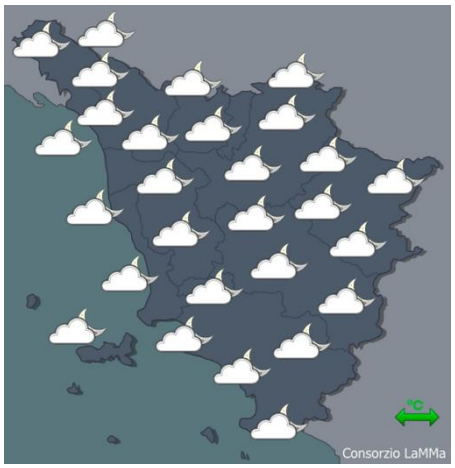
situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: parzialmente nuvoloso sulle province centro-meridionali, nuvoloso sulle aree di nord ovest.

Fenomeni: deboli piogge a carattere sparso su Lunigiana, Garfagnana e alto Appennino pistoiese. Isolati rovesci sull'Elba. Cumulati generalmente inferiori ai 5 mm.

Venti: fino a moderati di Scirocco sulla costa, deboli nell'interno.

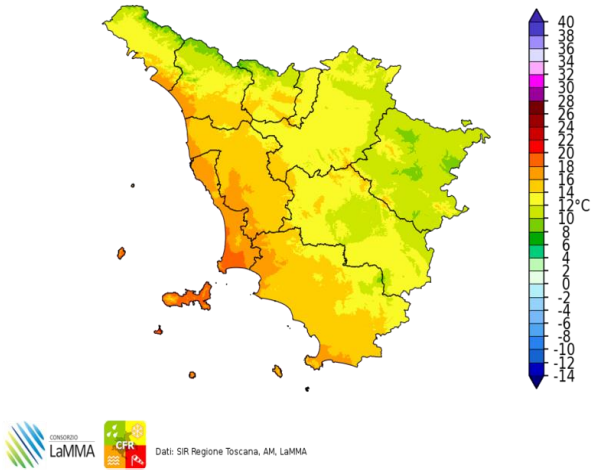
Mari: tra poco mossi e mossi.

Temperature: minime in generale aumento, massime in lieve calo sulle province di nord ovest e sulla costa, in lieve aumento sul resto della regione.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	10	13	14	18	14	17	15	14	15	15
	anomalia*	2	3	2	4	3	4	4	3	4	3
T. max	osservata	23	25	27	24	21	21	24	21	23	24
	anomalia*	2	4	4	2	0	-1	2	0	2	4
Precipitazione (mm/24ore)		0	0	0	0	0	1	0	0	0	0

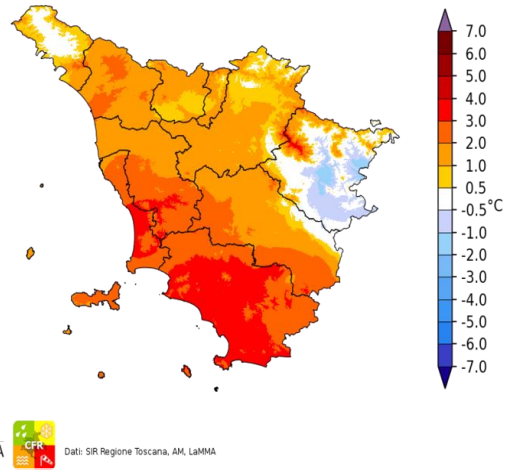
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 14/10/2019



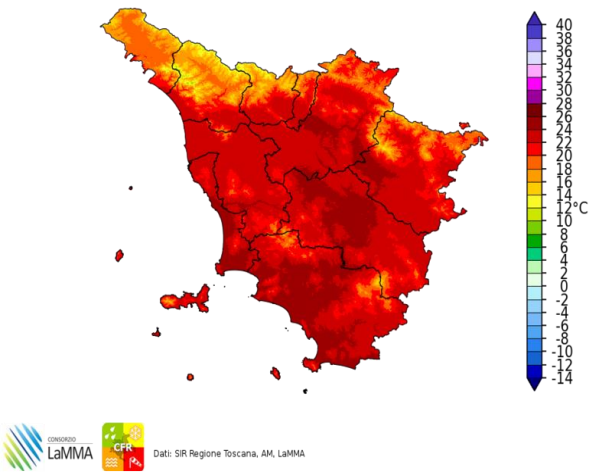
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 14/10/2019 e 13/10/2019



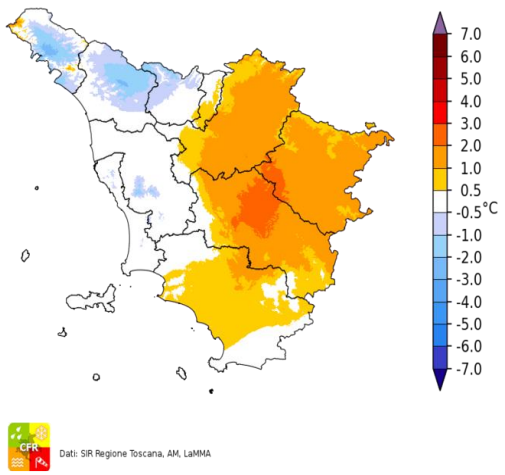
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 14/10/2019



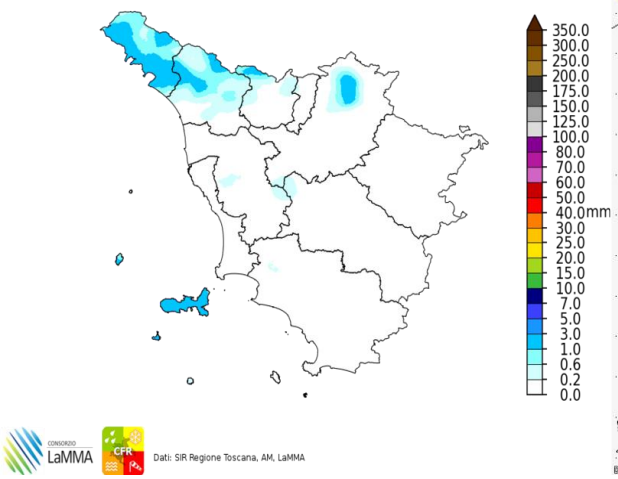
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 14/10/2019 e 13/10/2019



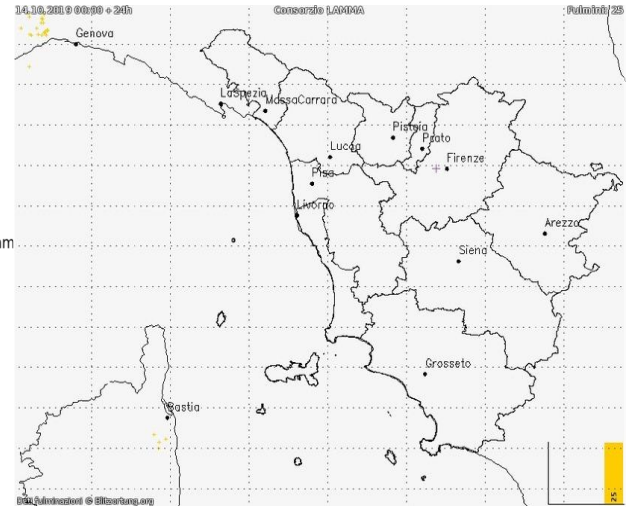
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 14/10/2019



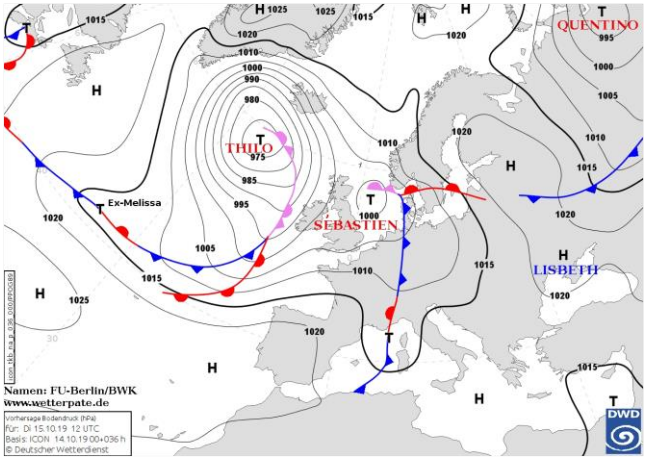
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 14 Ottobre

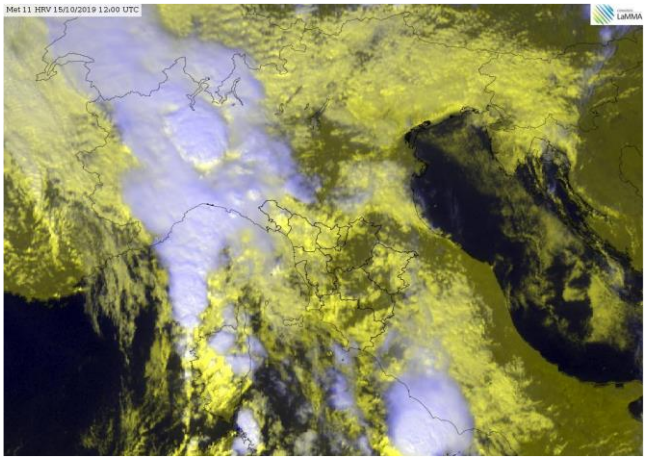


Martedi' 15 Ottobre 2019

Situazione: una perturbazione temporalesca interessa la penisola a partire dalle zone occidentali.



Pressione al suolo e fronti del 15 Ottobre alle 12 UTC


Meteosat HRV del 15 Ottobre alle 12 UTC

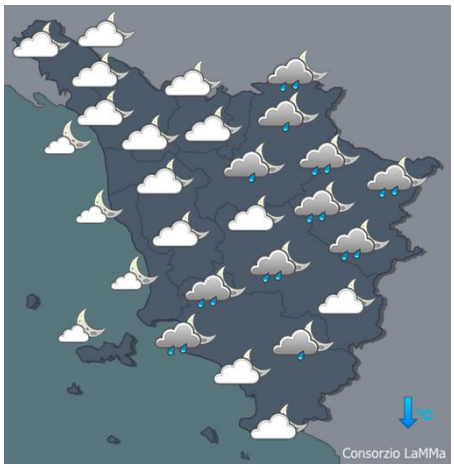
situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: nuvoloso o molto nuvoloso

Fenomeni: piogge e temporali

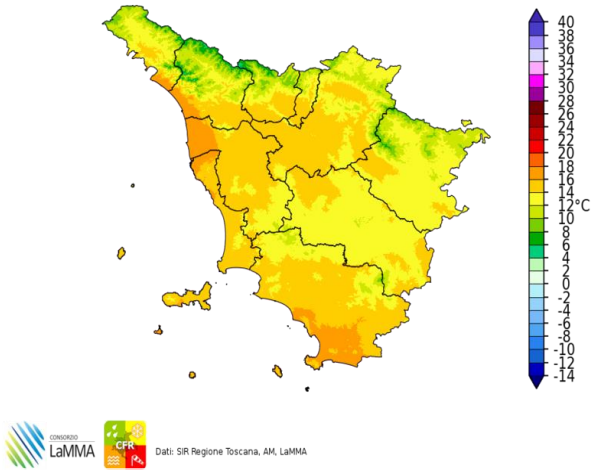
Venti: moderati o localmente forti di Scirocco sulla costa, sull'Arcipelago e sui rilievi; deboli o localmente moderati nell'interno. In serata tendenza del vento a ruotare a Libeccio e a rinforzare sulla costa centrale.
Mari: mossi, in aumento a molto mossi in serata.

Temperature: massime in lieve calo

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	13	16	14	18	15	17	16	14	16	14
	anomalia*	5	5	2	4	3	4	5	3	4	2
T. max	osservata	23	25	25	23	21	23	23	20	24	22
	anomalia*	3	3	3	2	-1	1	1	-2	2	2
Precipitazione (mm/24ore)		0	25	7	15	5	28	7	26	19	40

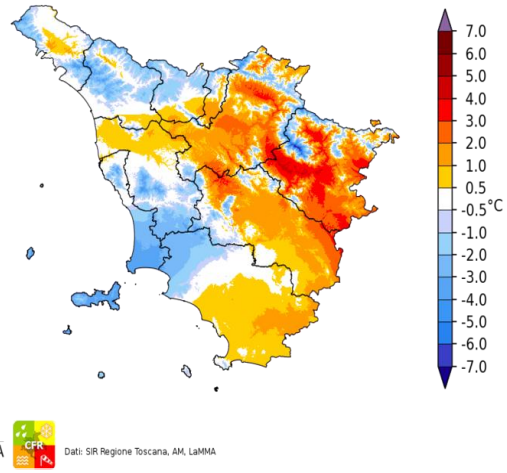
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 15/10/2019



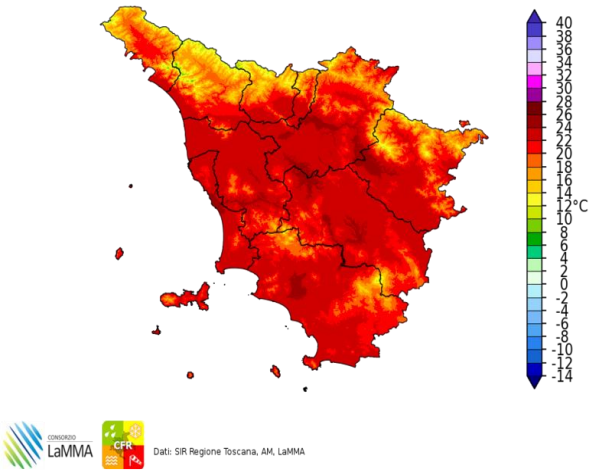
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 15/10/2019 e 14/10/2019



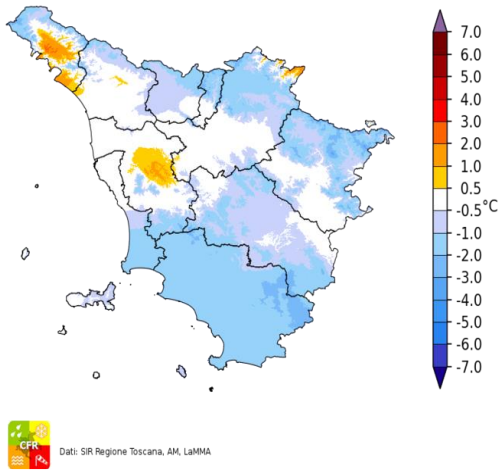
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 15/10/2019



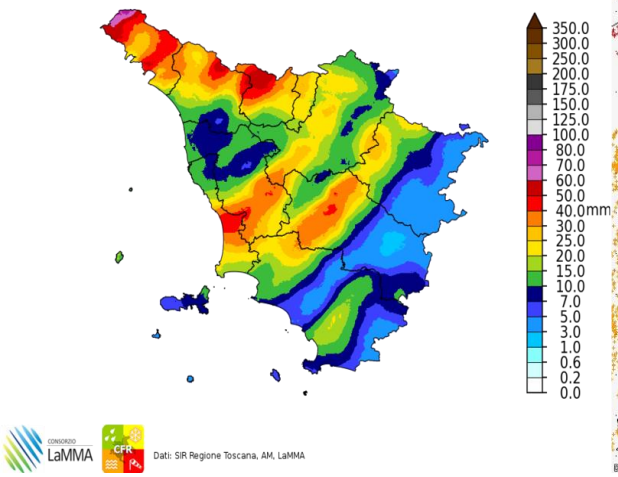
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 15/10/2019 e 14/10/2019



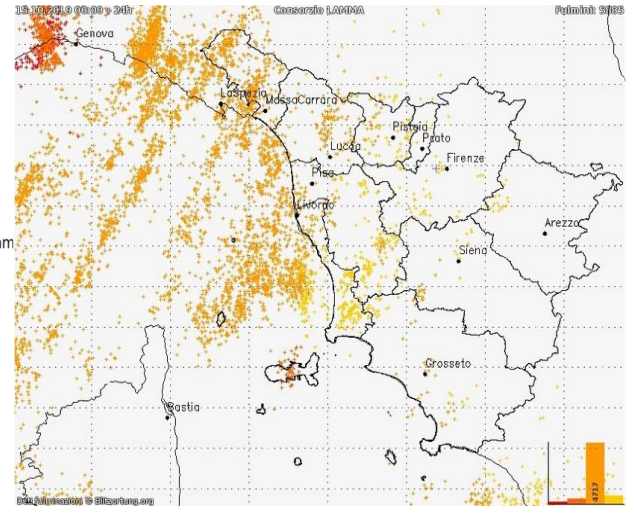
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 15/10/2019



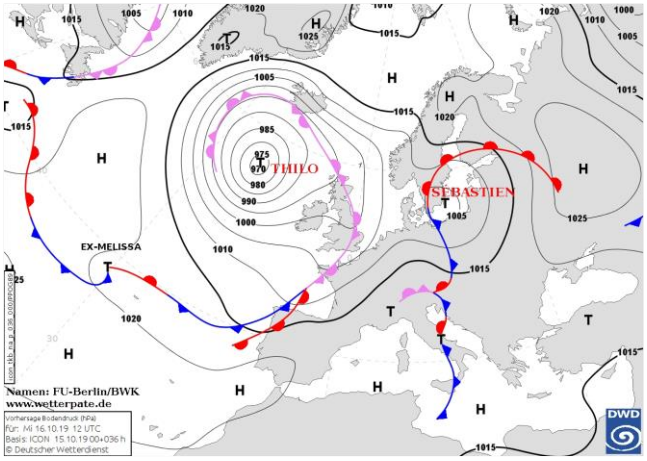
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 15 Ottobre

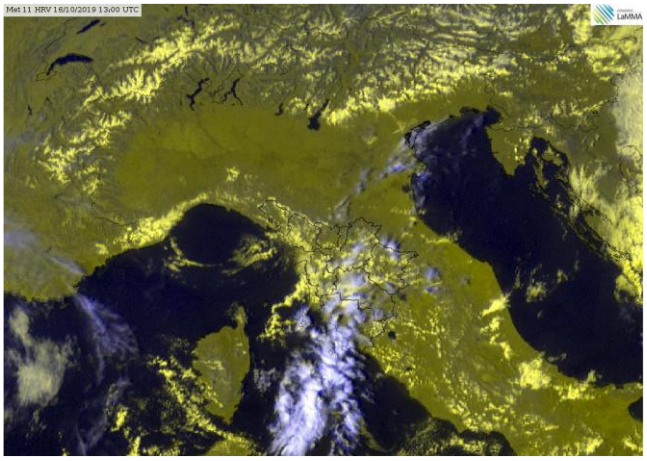


Mercoledi' 16 Ottobre 2019

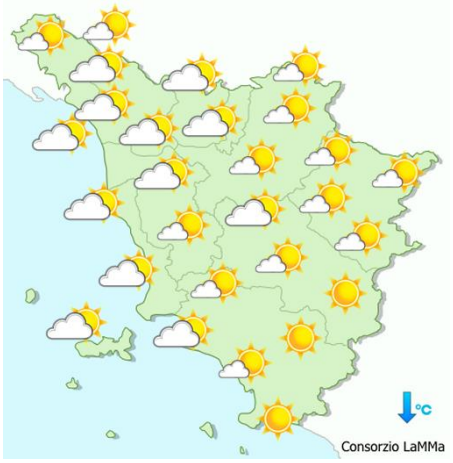
Situazione: dopo il transito di una perturbazione temporaneo aumento della pressione sul Mediterraneo centrale.



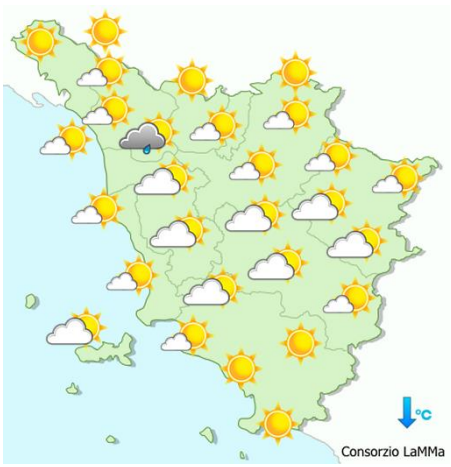
Pressione al suolo e fronti del 16 Ottobre alle 12 UTC


Meteosat HRV del 16 Ottobre alle 13 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: parzialmente nuvoloso con temporanei addensamenti.

Fenomeni: isolate deboli piogge nel pomeriggio sui rilievi lucchesi.

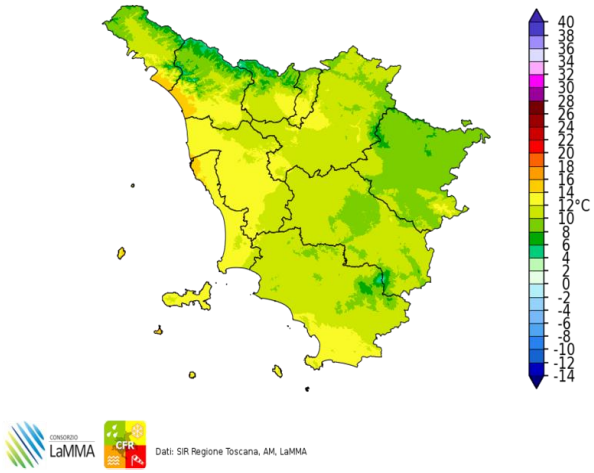
Venti: ancora moderati o forti di Libeccio sulla costa centrale e sui rilievi, ma in attenuazione; deboli o localmente moderati sulle zone interne.
Mari: molto mossi sui settori centro-settentrionali in lenta attenuazione, mossi altrove.

Temperature: in diminuzione.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	12	12	11	18	12	15	12	12	14	11
	anomalia*	4	1	0	3	1	2	1	1	2	-1
T. max	osservata	20	22	23	21	21	21	21	20	21	20
	anomalia*	-1	0	1	-1	-1	-2	0	-2	0	0
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	1	0	0

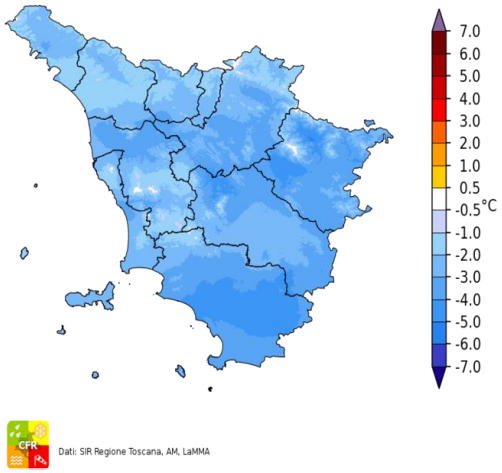
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 16/10/2019



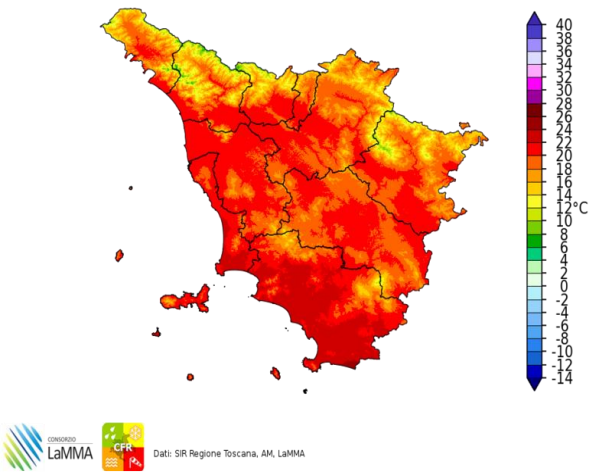
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 16/10/2019 e 15/10/2019



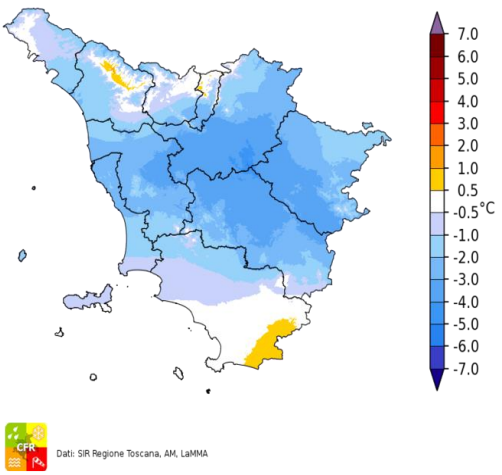
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 16/10/2019



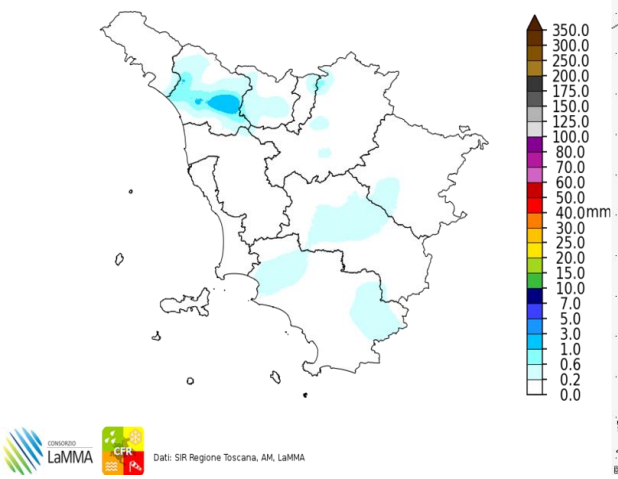
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 16/10/2019 e 15/10/2019



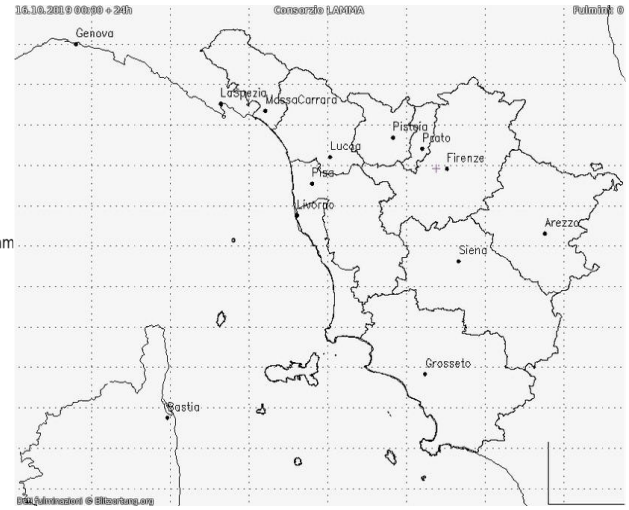
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 16/10/2019



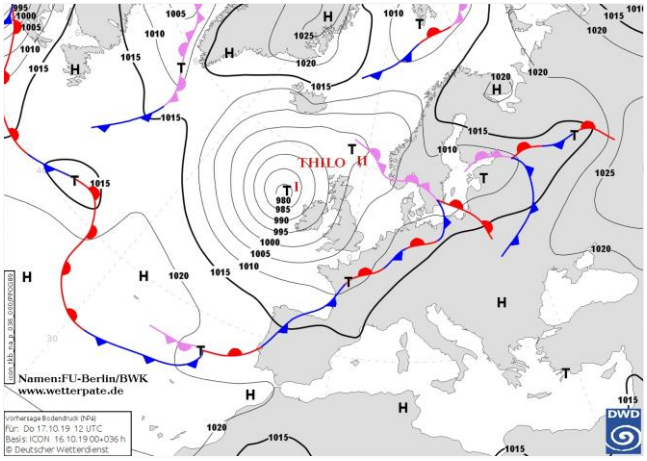
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 16 Ottobre

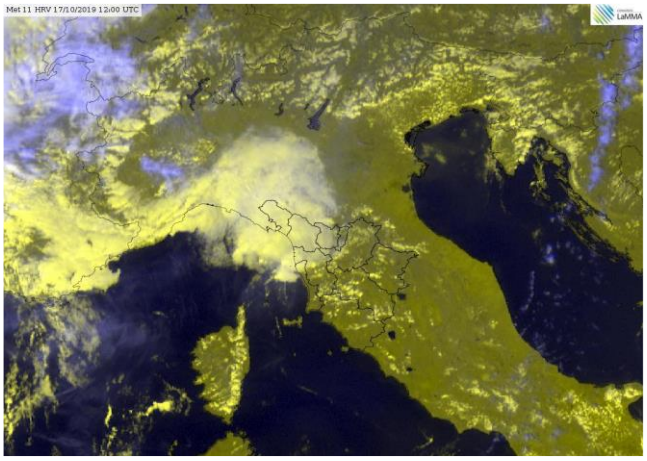


Giovedi' 17 Ottobre 2019

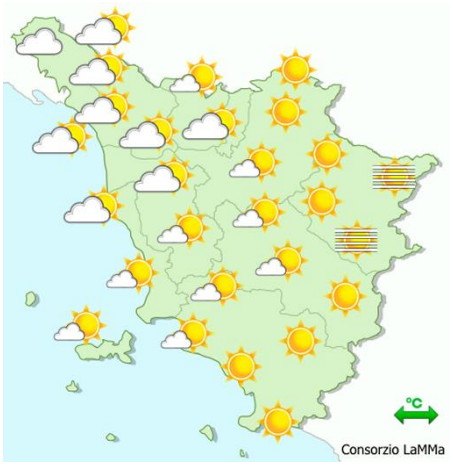
Situazione: la pressione sul Mediterraneo occidentale è in fase di graduale diminuzione attivando un flusso di correnti umide sciroccali in graduale intensificazione nei prossimi giorni.



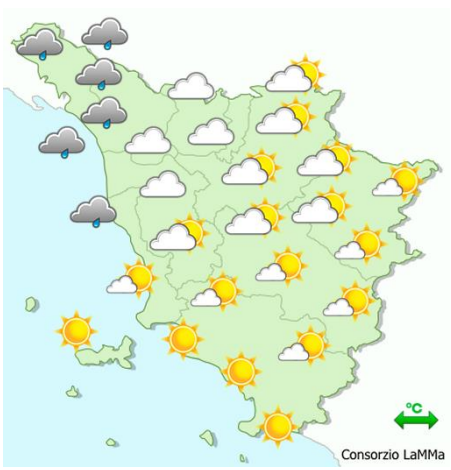
Pressione al suolo e fronti del 17 Ottobre alle 12 UTC


Meteosat HRV del 17 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: molto nuvoloso sul nord-ovest, sereno o poco nuvoloso al centro-sud e su gran parte della provincia di Firenze e Prato.

Fenomeni: deboli piogge sulla provincia di Massa-Carrara, parte di quella di Lucca e Pisa. Cumulati inferiori a 5 mm.

Venti: deboli variabili.

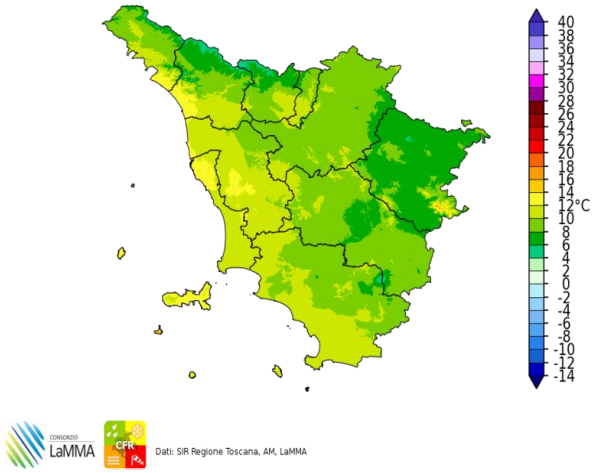
Mari: mossi a nord dell'Elba, poco mossi altrove. In attenuazione.

Temperature: minime in calo, massime in aumento al centro-sud.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	6	9	9	15	10	13	11	10	12	10
	anomalia*	-2	-1	-2	0	-1	0	-1	-1	1	-2
T. max	osservata	19	22	23	21	18	19	19	18	21	22
	anomalia*	-1	0	1	-1	-3	-3	-3	-3	-1	3
Precipitazione (mm/24ore)		0	0	0	1	0	2	1	0	0	0

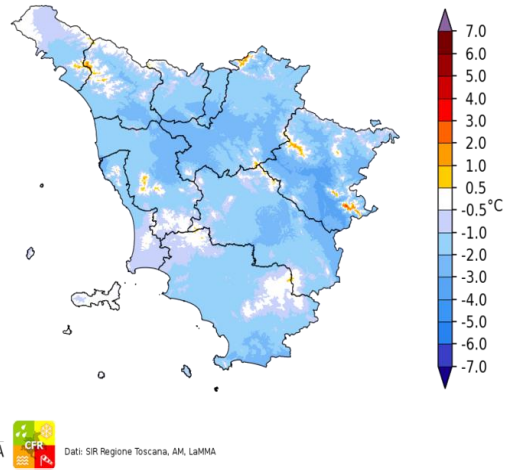
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 17/10/2019



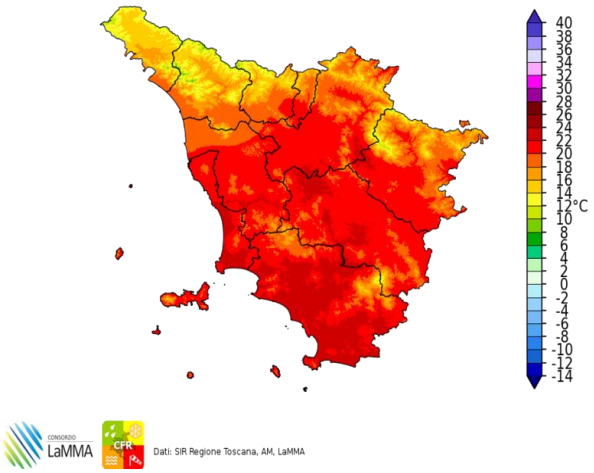
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 17/10/2019 e 16/10/2019



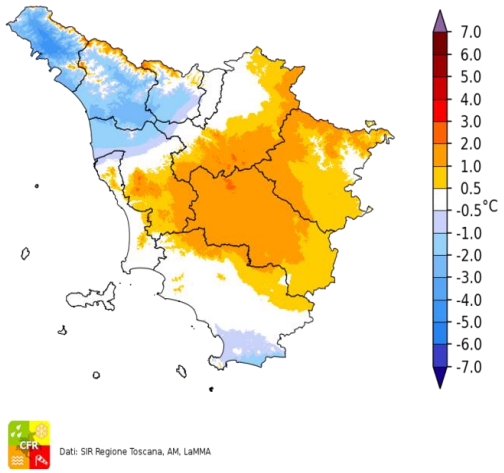
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 17/10/2019



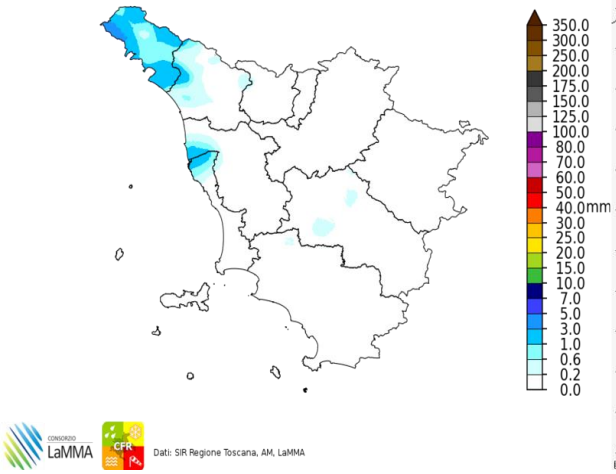
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 17/10/2019 e 16/10/2019



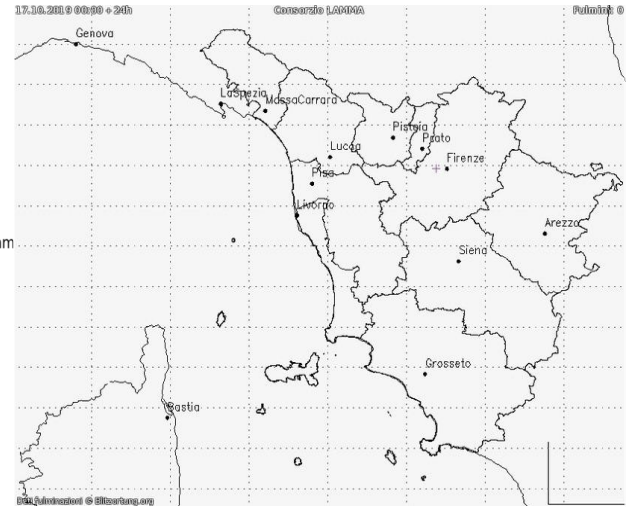
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 17/10/2019



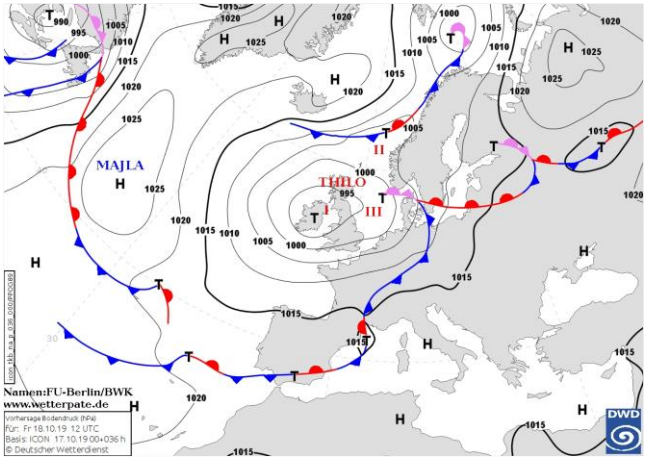
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 17 Ottobre

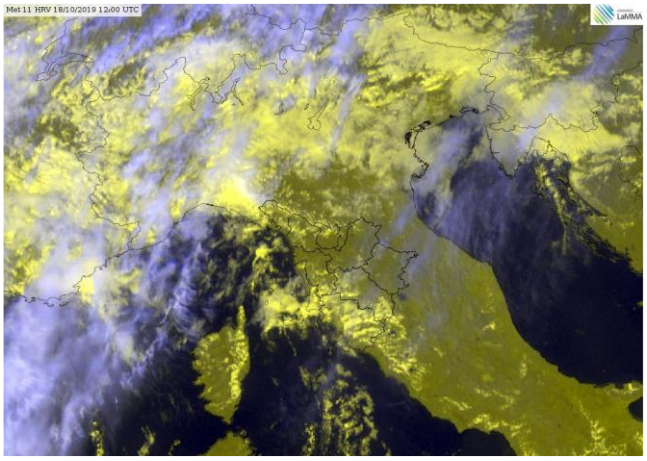


Venerdi' 18 Ottobre 2019

Situazione: pressione in calo sul Mediterraneo Occidentale per l'approfondimento di una saccatura sulla penisola Iberica.

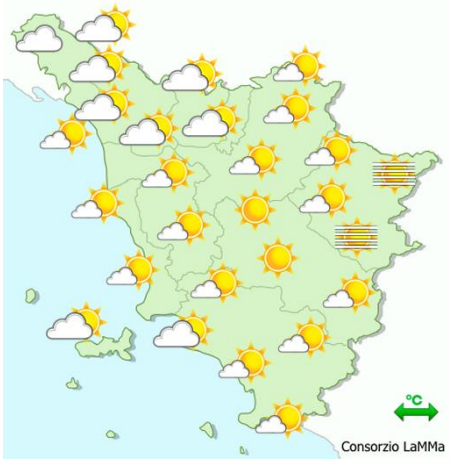


Pressione al suolo e fronti del 18 Ottobre alle 12 UTC

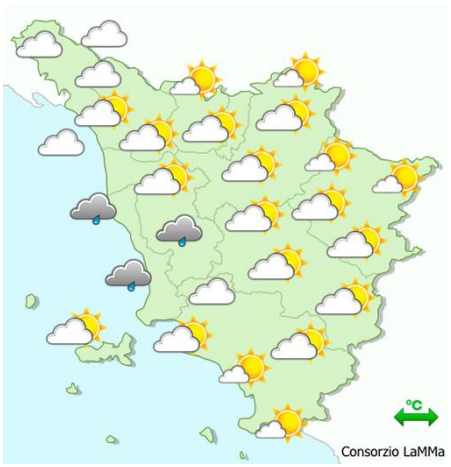


Meteosat HRV del 18 Ottobre alle 12 UTC

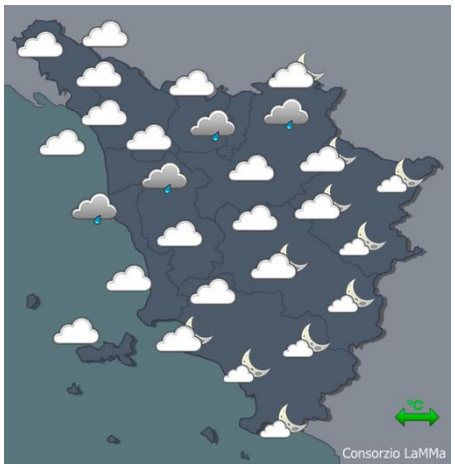
situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: poco nuvoloso in mattinata, aumento della nuvolosità a partire dalla costa fini a cielo nuvoloso o molto nuvoloso sul centro-nord della regione.

Fenomeni: piogge sparse tra le province di Livorno, Pisa, Pistoia e Prato tra il pomeriggio e la sera.

Venti: deboli di Scirocco sulla costa. Deboli variabili o assenti nelle zone interne.

Mari: poco mossi, localmente mossi in serata a sud dell'Elba.

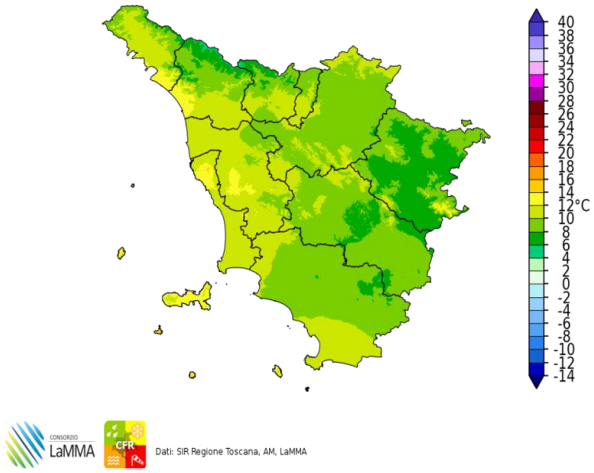
Temperature: massime in aumento sulle zone settentrionali.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	7	10	9	14	11	13	11	10	12	10
	anomalia*	-1	-1	-3	0	0	0	-1	-1	0	-1
T. max	osservata	19	23	23	23	21	21	23	21	22	20
	anomalia*	-1	1	1	1	0	-2	1	-1	1	0
Precipitazione (mm/24ore)		0	0	0	3	0	0	1	2	0	0

*anomalia calcolata sulla base della normale climatica decadale 1981-2010

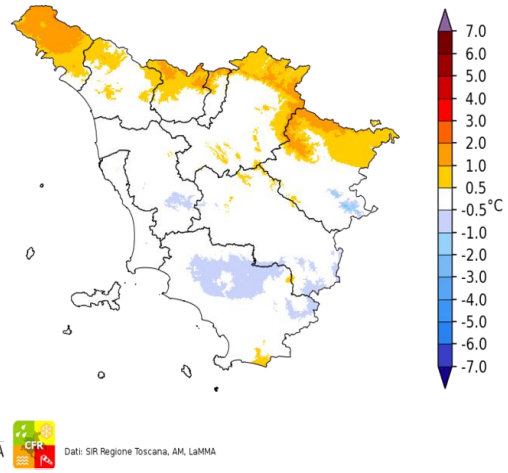
Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 18/10/2019



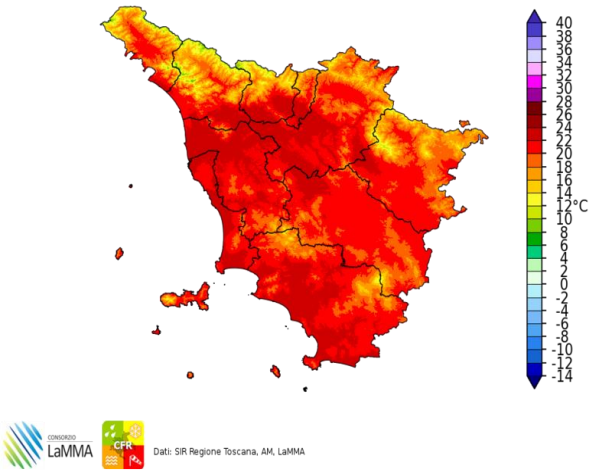
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 18/10/2019 e 17/10/2019



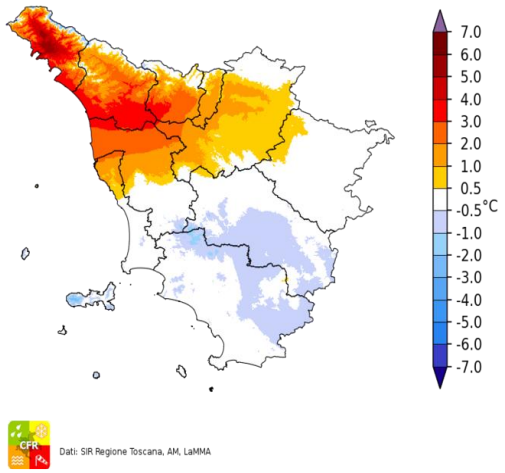
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 18/10/2019



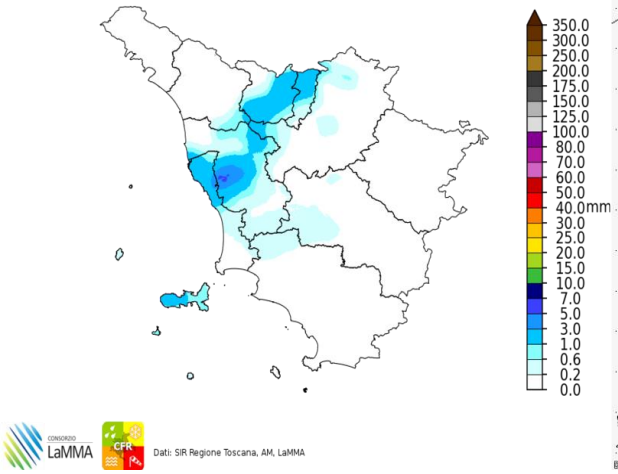
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 18/10/2019 e 17/10/2019



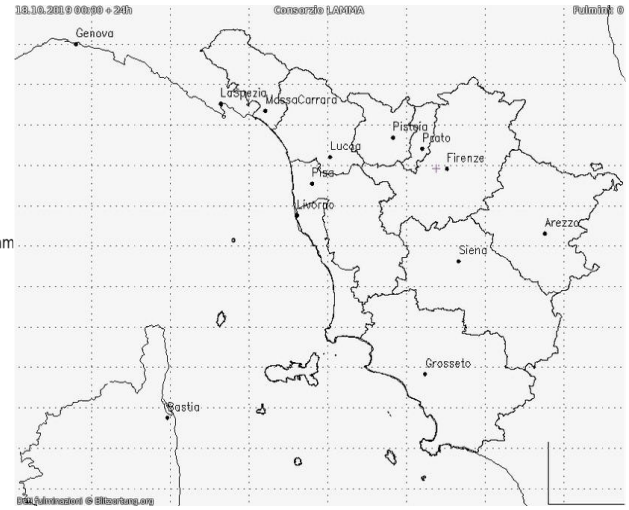
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 18/10/2019



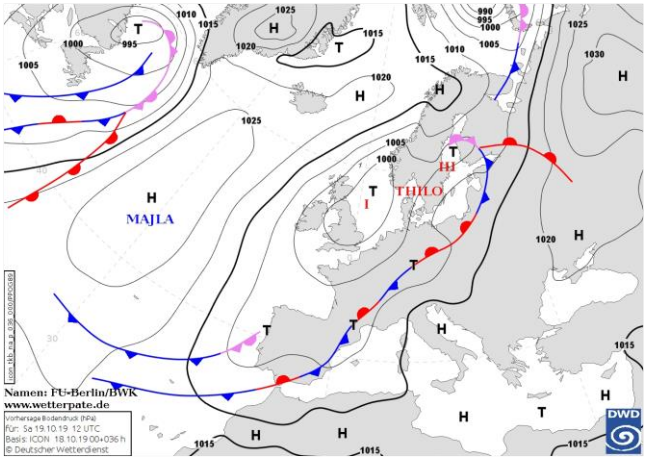
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 18 Ottobre

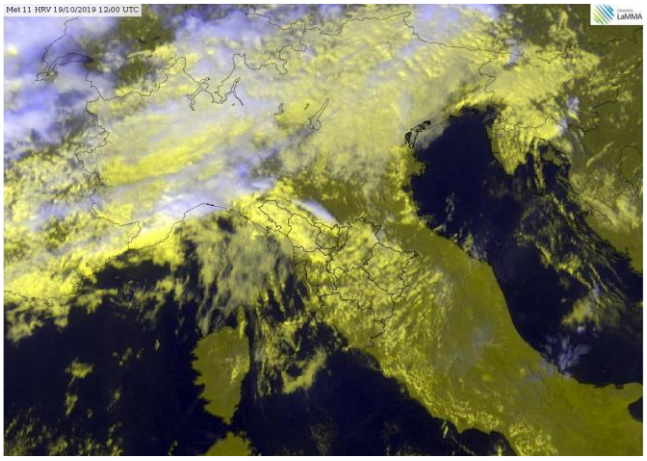


Sabato 19 Ottobre 2019

Situazione: una saccatura si approfondisce sulla Penisola Iberica attivando un flusso decisamente mite e umido dai quadranti meridionali, con tempo instabile limitato al nord-ovest della penisola fino a lambire la Toscana.

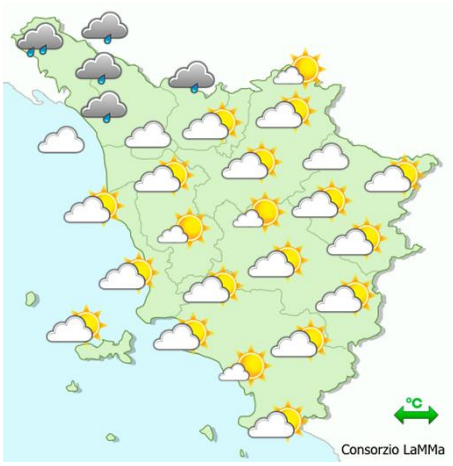


Pressione al suolo e fronti del 19 Ottobre alle 12 UTC

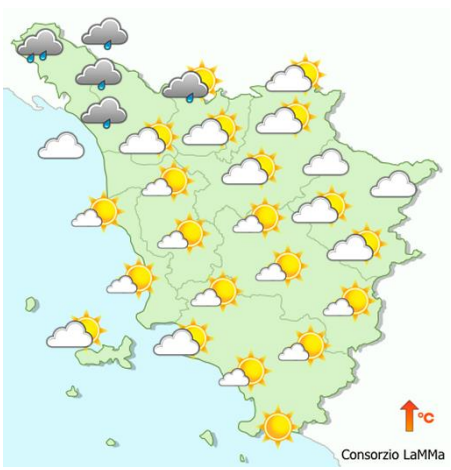


Meteosat HRV del 19 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: parzialmente nuvoloso o nuvoloso con addensamenti consistenti sul nord-ovest.

Fenomeni: piogge sul nord-ovest, generalmente deboli, più frequenti sulla Lunigiana dove a tratti hanno assunto carattere di rovescio. Cumulati massimi attorno a 70 mm sui rilievi della Lunigiana.

Venti: di Scirocco, deboli sulle zone interne, moderati con locali rinforzi sulla costa e sull'Arcipelago.

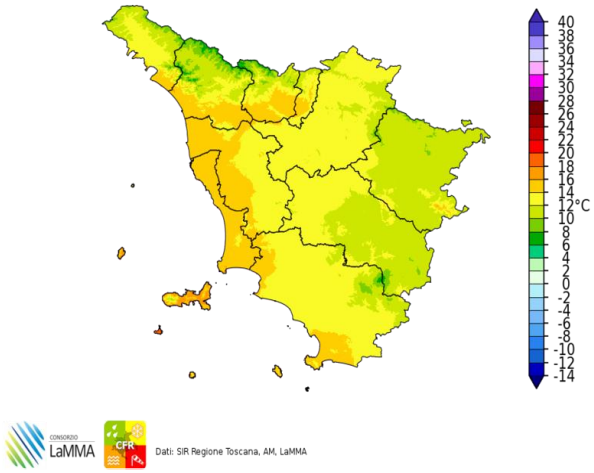
Mari: mossi.

Temperature: in lieve aumento al centro-sud, in lieve calo sul nord-ovest.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	12	14	12	16	14	16	15	14	16	14
	anomalia*	4	3	0	2	3	3	3	3	4	2
T. max	osservata	21	24	24	22	21	21	24	22	24	20
	anomalia*	0	2	1	1	-1	-1	2	0	2	0
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

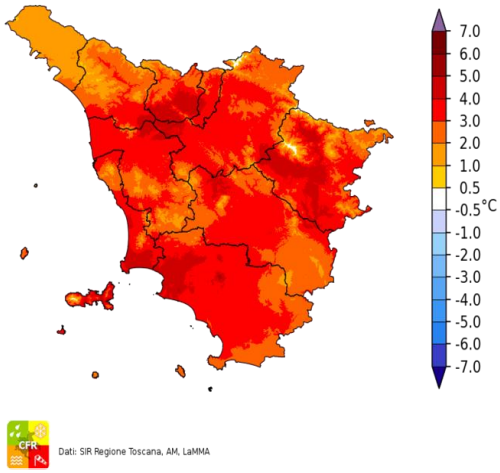
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 19/10/2019



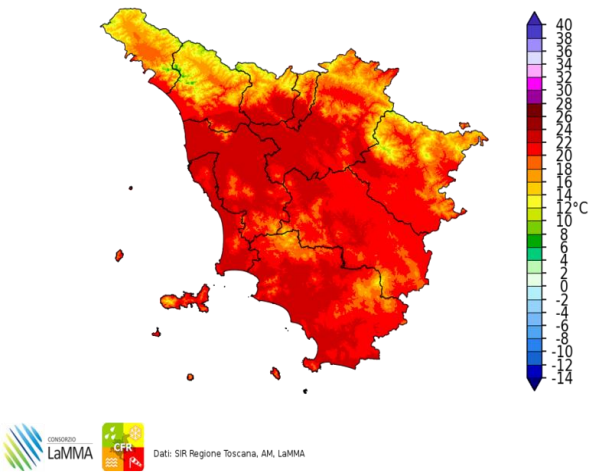
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 19/10/2019 e 18/10/2019



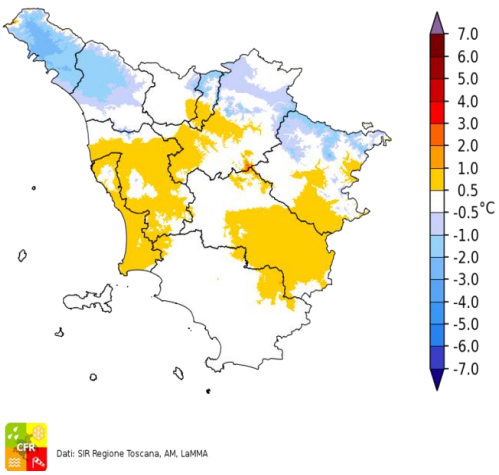
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 19/10/2019



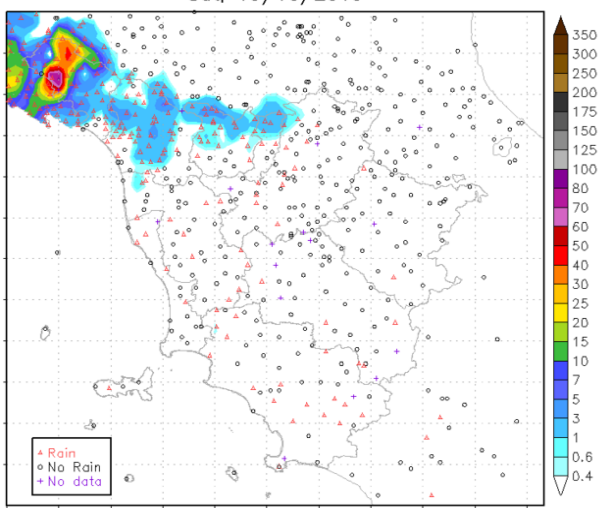
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 19/10/2019 e 18/10/2019

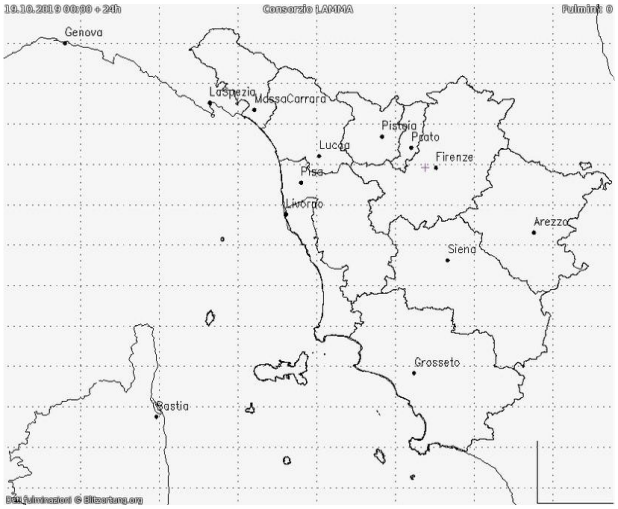


Dati: SIR Regione Toscana, AM, LaMMA

Total Precipitation [mm] cumulated on Sat, 19/10/2019

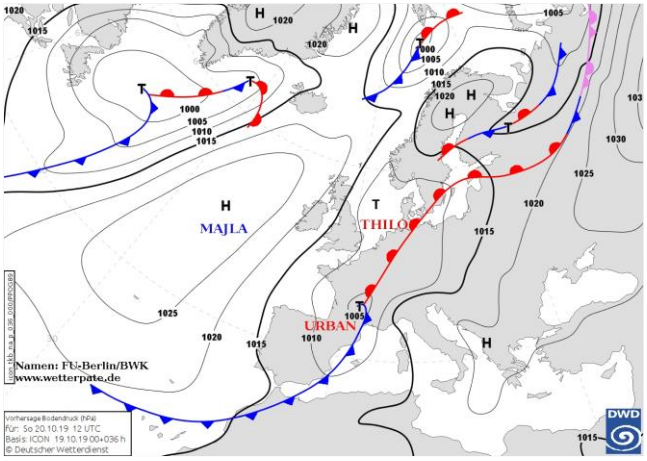


Fulminazioni osservate il giorno 19 Ottobre

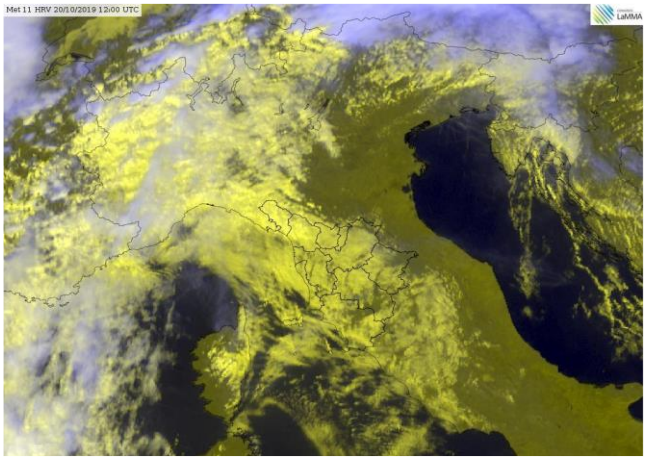


Domenica 20 Ottobre 2019

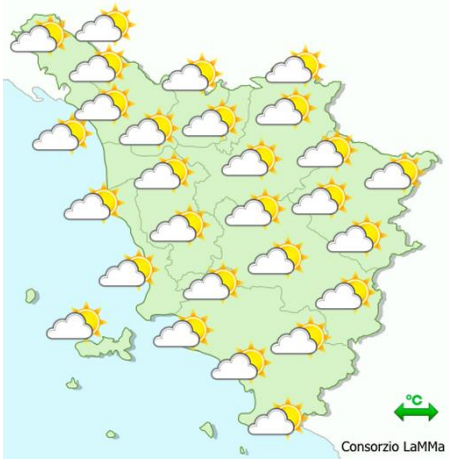
Situazione: una saccatura sulla Penisola Iberica attiva un flusso decisamente mite e umido dai quadranti meridionali, con tempo instabile limitato al nord-ovest della penisola fino a lambire la Toscana.



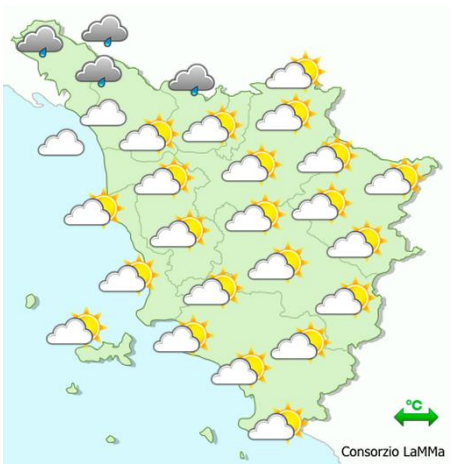
Pressione al suolo e fronti del 20 Ottobre alle 12 UTC


Meteosat HRV del 20 Ottobre alle 12 UTC

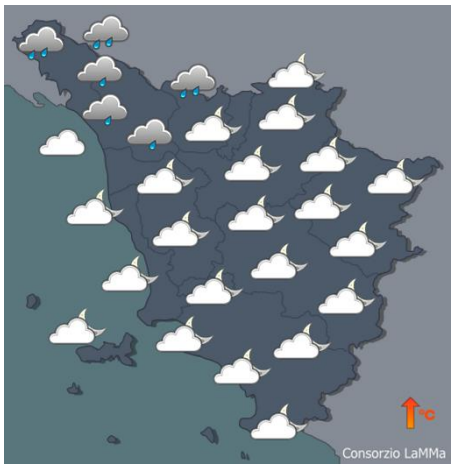
situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: generalmente nuvoloso con addensamenti anche consistenti sulle province di Massa-Carrara e Lucca.

Fenomeni: piogge sparse sul nord-ovest, più frequenti sulla Lunigiana e rilievi della Garfagnana. Cumulati massimi fino a 70-80 mm sui rilievi della Lunigiana.

Venti: di Scirocco, moderati nell'interno, forti sulla costa e crinali appenninici.

Mari: generalmente mossi, fino a molto mossi al largo.

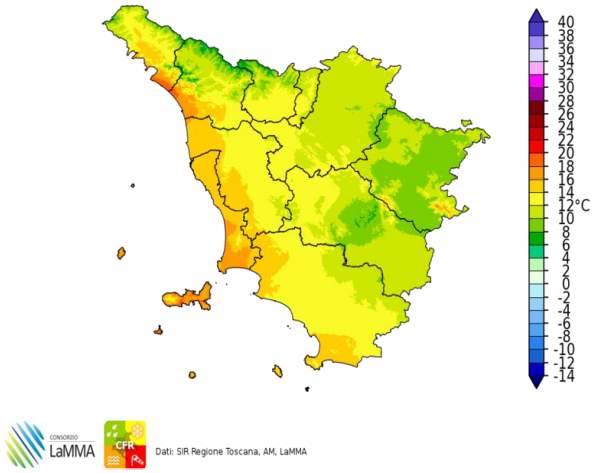
Temperature: pressoché stazionarie.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	9	11	11	17	14	19	15	12	14	13
	anomalia*	1	0	0	2	3	6	4	2	3	1
T. max	osservata	21	22	25	22	20	23	22	20	21	20
	anomalia*	1	0	3	0	-2	0	1	-2	-1	0
Precipitazione (mm/24ore)		0	0	0	0	1	0	0	0	0	0

*anomalia calcolata sulla base della normale climatica decadale 1981-2010

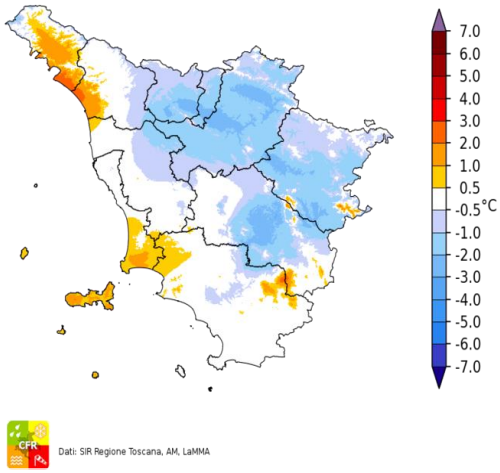
Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 20/10/2019



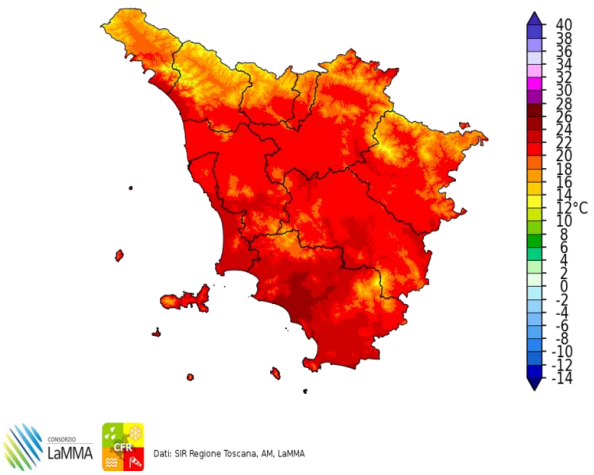
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 20/10/2019 e 19/10/2019



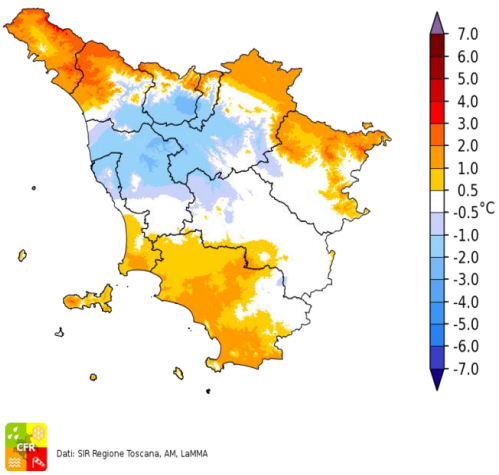
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 20/10/2019



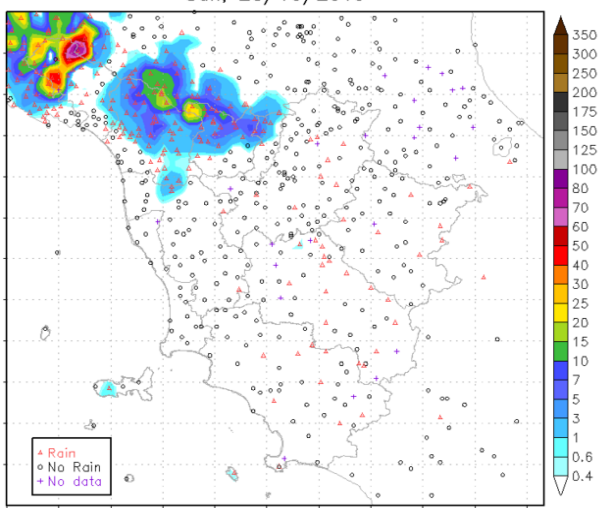
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 20/10/2019 e 19/10/2019

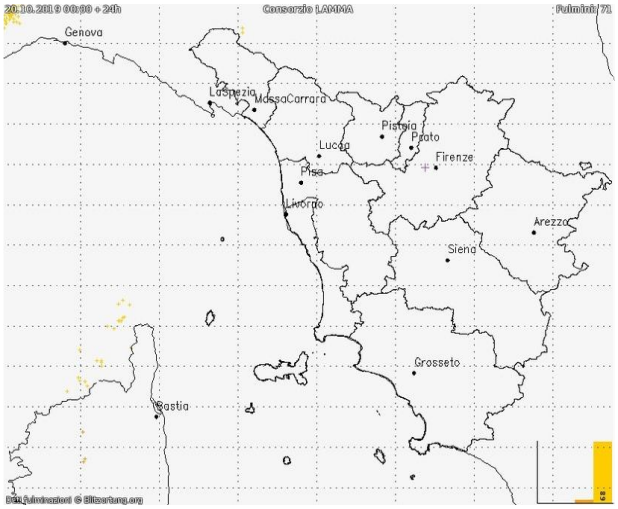


Dati: SIR Regione Toscana, AM, LaMMA

Total Precipitation [mm] cumulated on Sun, 20/10/2019



Fulminazioni osservate il giorno 20 Ottobre

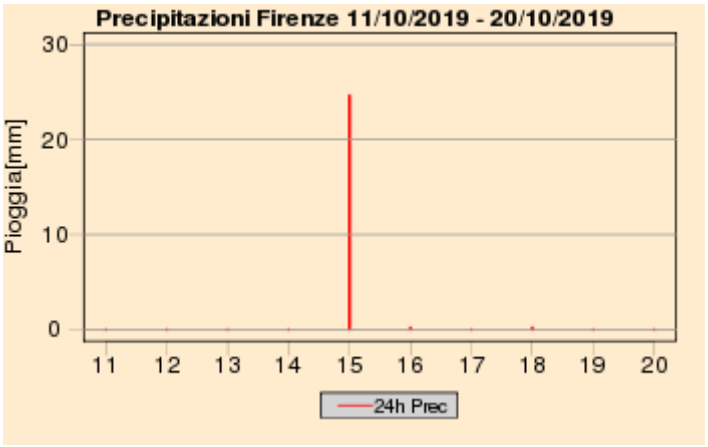


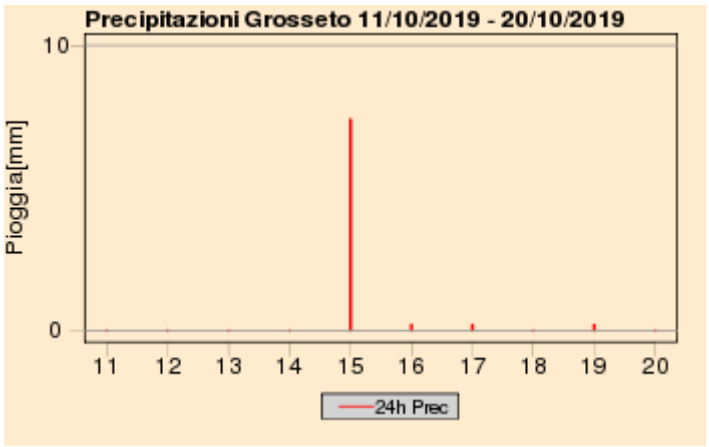
II decade - Quadro regionale – Precipitazioni

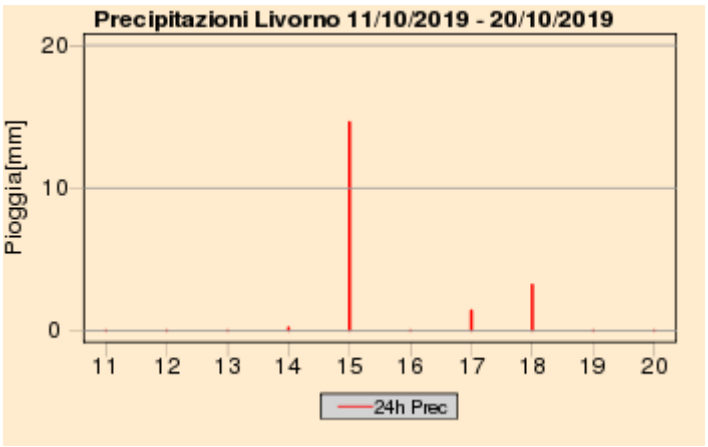
Le precipitazioni osservati nel corso della seconda decade di Ottobre sono legate prevalentemente al transito di una perturbazione che, il giorno 15, ha determinato precipitazioni diffuse, e localmente anche abbondanti; negli altri giorni della decade le precipitazioni sono risultate assenti o isolate e di scarso rilievo.

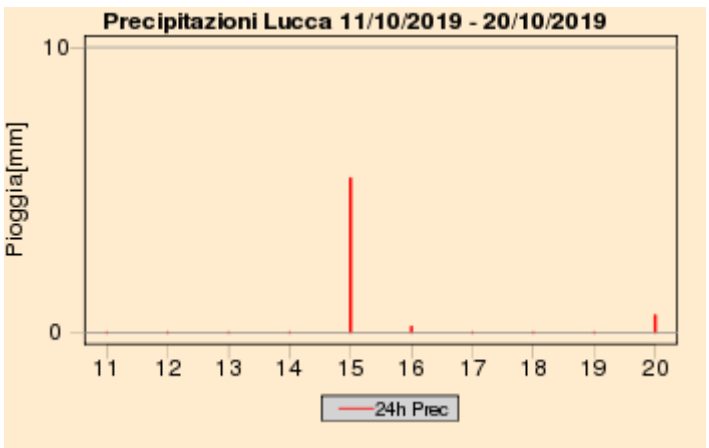
Complessivamente i cumulati decadali risultano inferiori a quelli tipici del periodo.

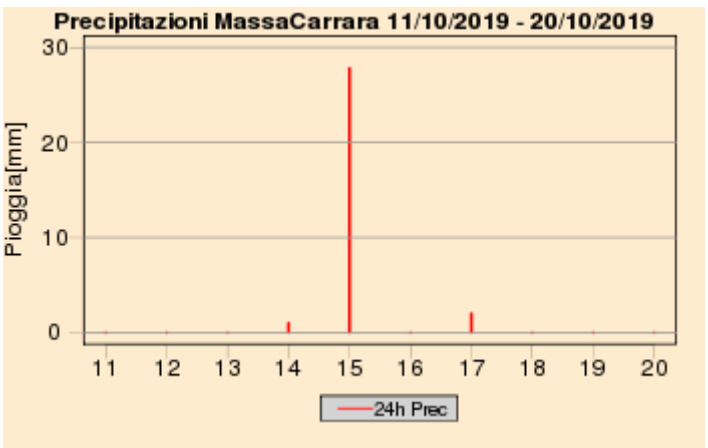


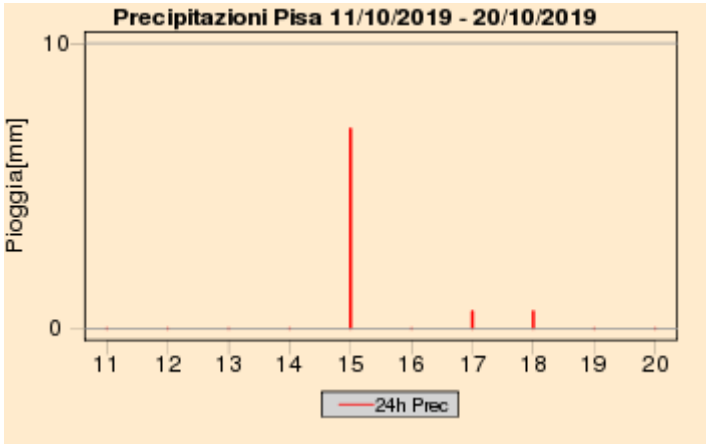


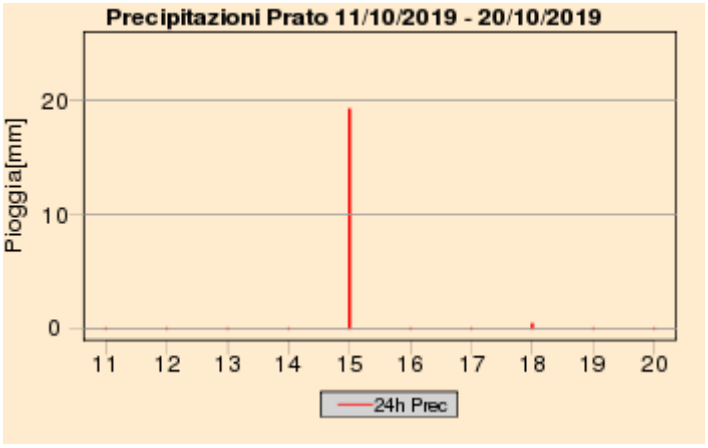








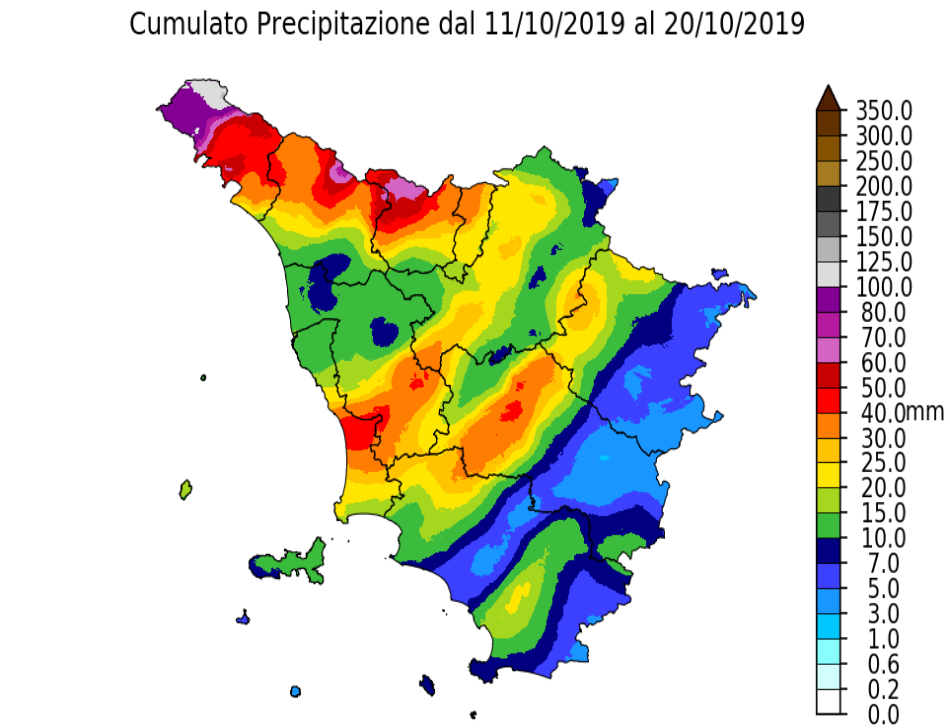






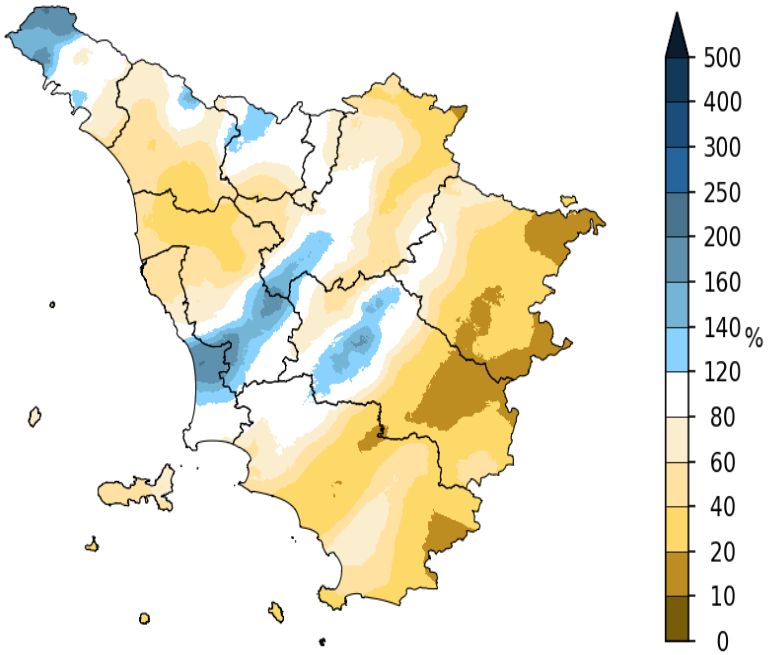


Quadro regionale – Cumulati decadali di precipitazione, anomalia di precipitazione e numero di giorni di pioggia



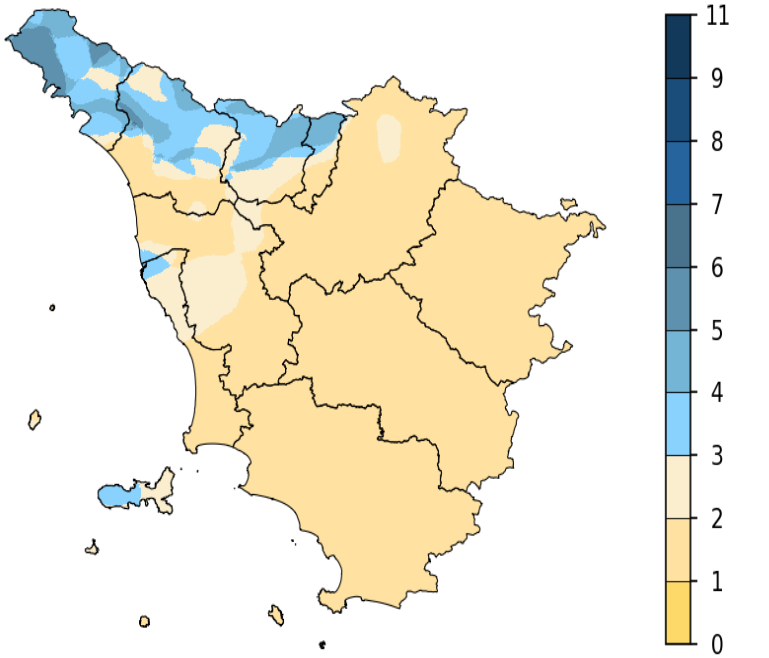
Dati: SIR Regione Toscana, AM, LaMMA

Percentuale di Precipitazione rispetto alla media climatica
dal 11/10/2019 al 20/10/2019



Dati: SIR Regione Toscana, AM, LaMMA

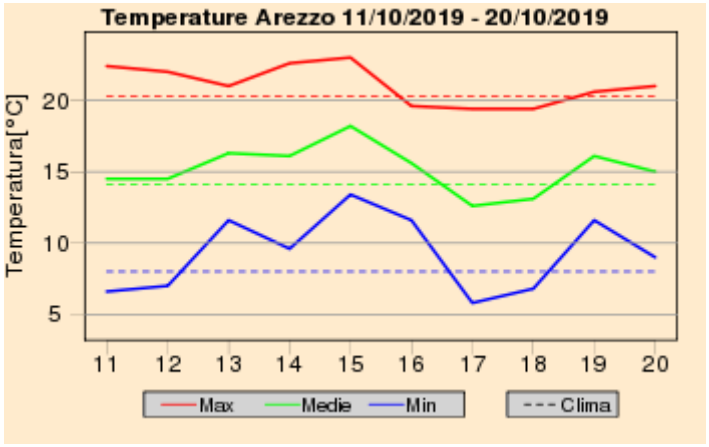
Giorni con Pioggia ≥ di 1 mm dal 11/10/2019 al 20/10/2019

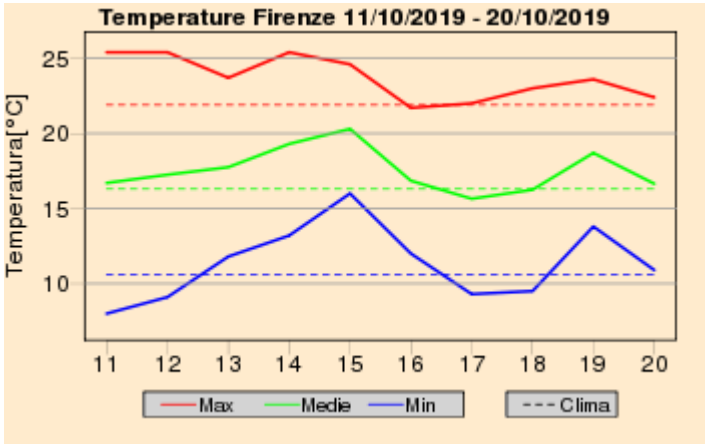


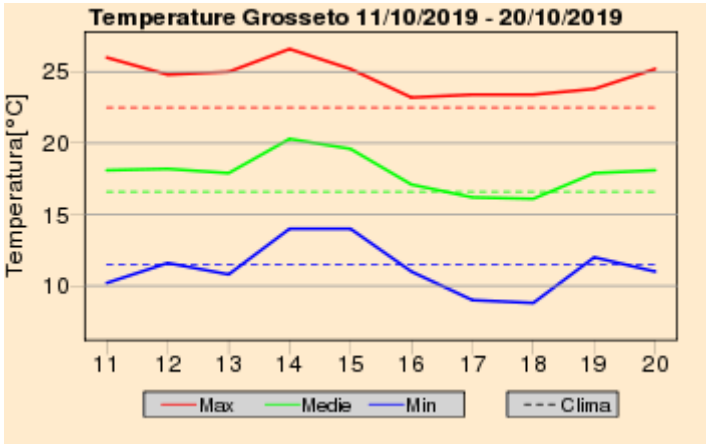
Dati: SIR Regione Toscana, AM, LaMMA

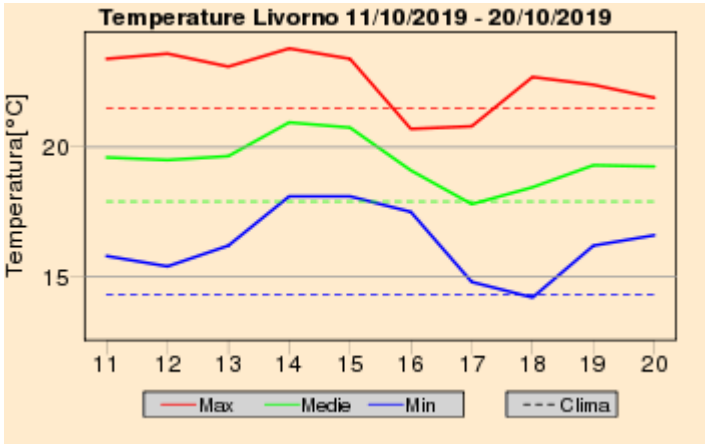
II decade - Quadro regionale - Temperature

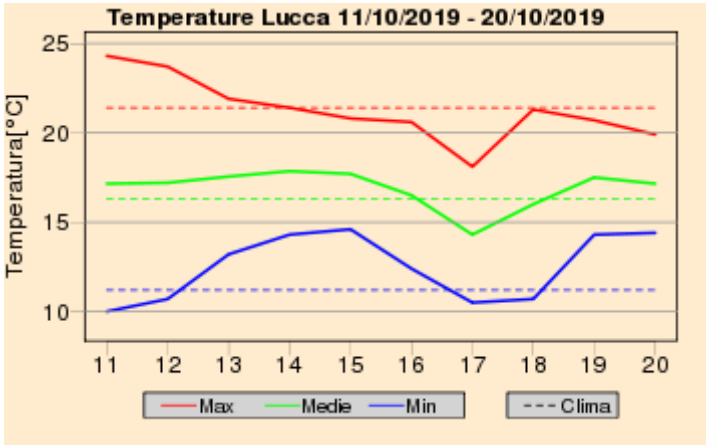
Nel corso della seconda decade del mese di Ottobre le temperature osservate sul territorio regionale toscano sono risultate complessivamente leggermente superiori a quelle tipiche del periodo calcolate sul trentennio 1981-2010. Sia i valori massimi che quelli minimi giornalieri hanno infatti fatto registrare una anomalia positiva di circa un grado su gran parte del territorio.

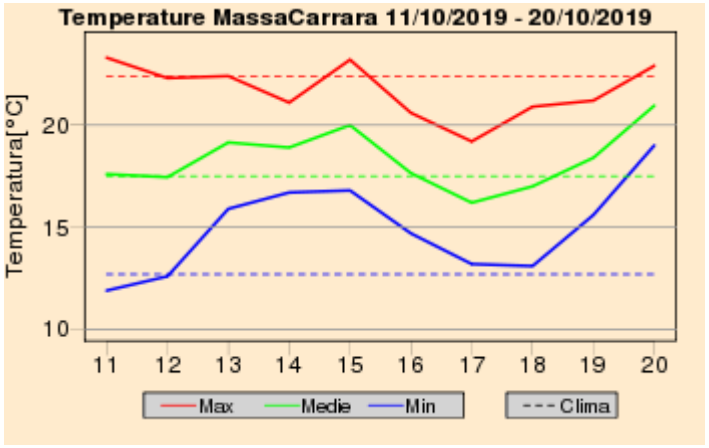


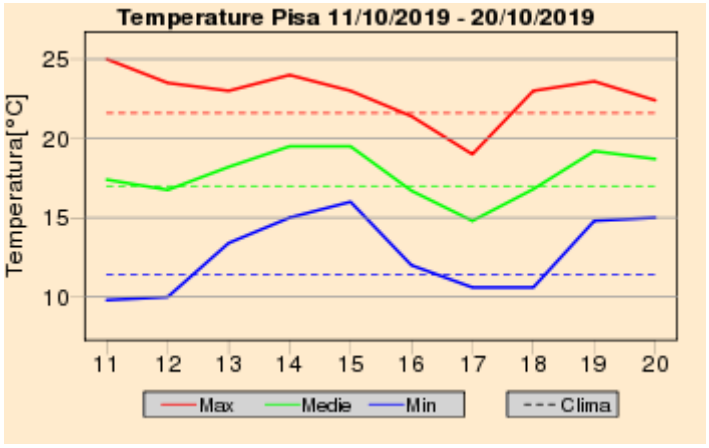


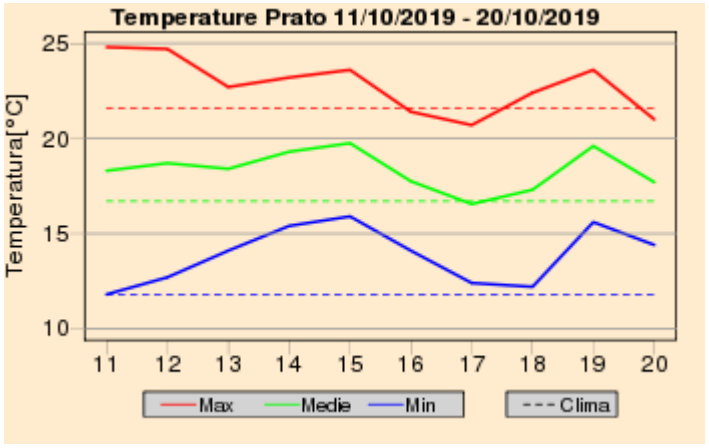


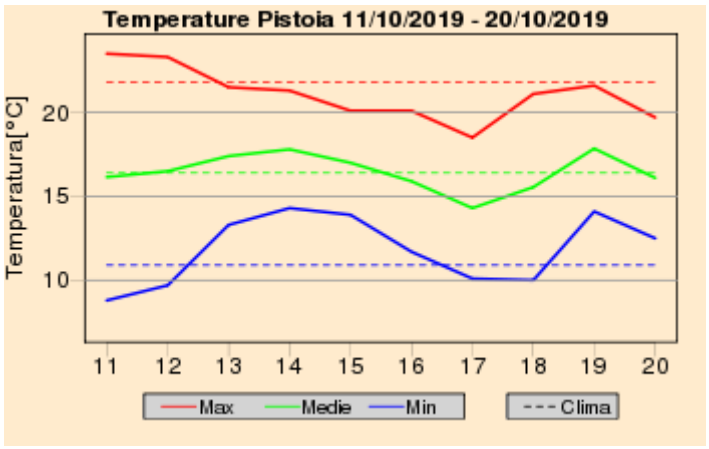


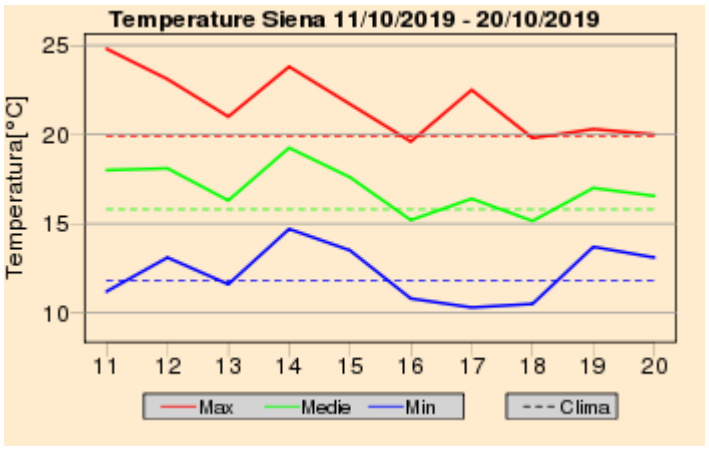




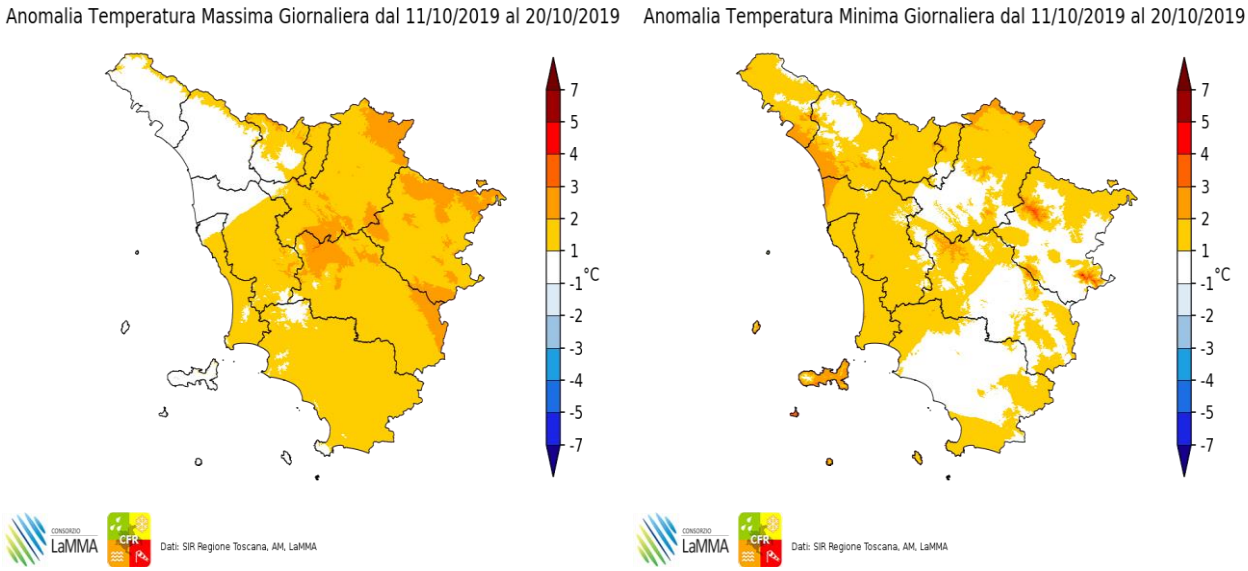








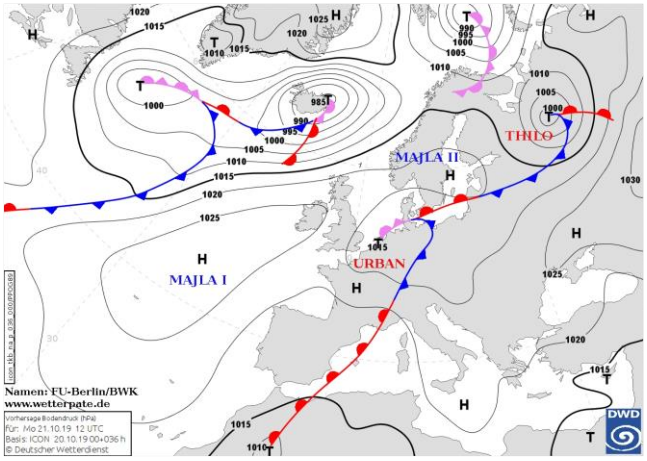
Quadro regionale – Anomalie termiche



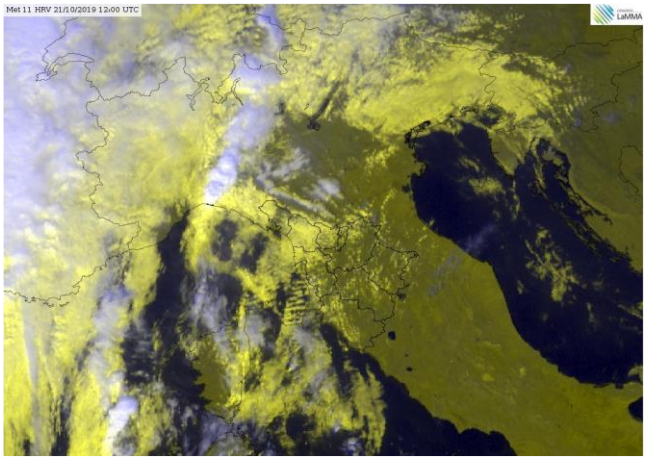
Anomalia termica decadale per le temperature massime e minime giornaliere

Lunedi' 21 Ottobre 2019

Situazione: una saccatura sulla Penisola Iberica attiva un flusso decisamente mite e umido dai quadranti meridionali, con tempo instabile sul nord-ovest della penisola fino a lambire la Toscana.



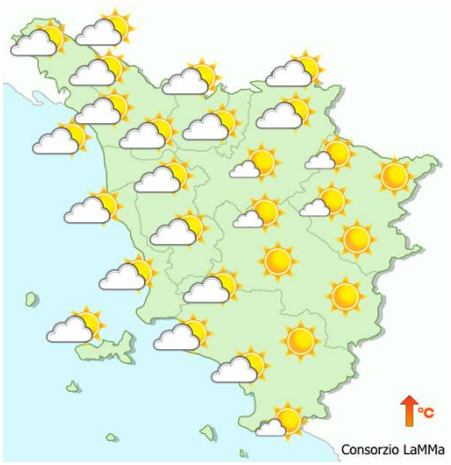
Pressione al suolo e fronti del 21 Ottobre alle 12 UTC


Meteosat HRV del 21 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: parzialmente nuvoloso o nuvoloso. Addensamenti più consistenti sul nord-ovest.

Fenomeni: piogge in nottata e serata. A carattere sparso, in nottata, sull'Appennino Tosco-Emiliano.

Venti: di Scirocco, moderati su Arcipelago e costa con locali rinforzi, deboli altrove.

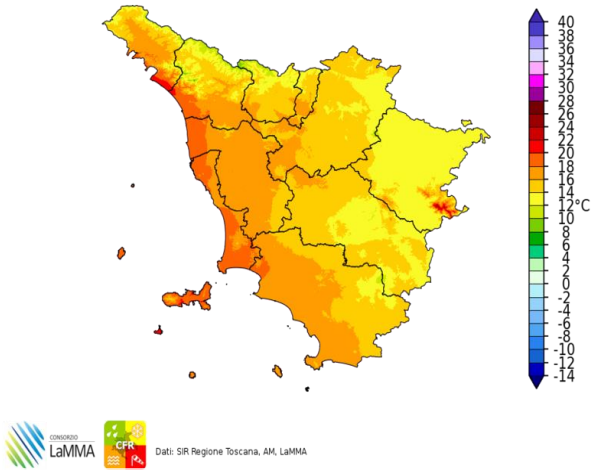
Mari: mossi o molto mossi in attenuazione.

Temperature: in aumento.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	11	15	17	21	17	19	17	15	17	16
	anomalia*	4	6	7	8	7	8	7	5	7	6
T. max	osservata	24	27	28	26	24	25	25	24	27	24
	anomalia*	7	8	7	6	5	5	6	5	8	7
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

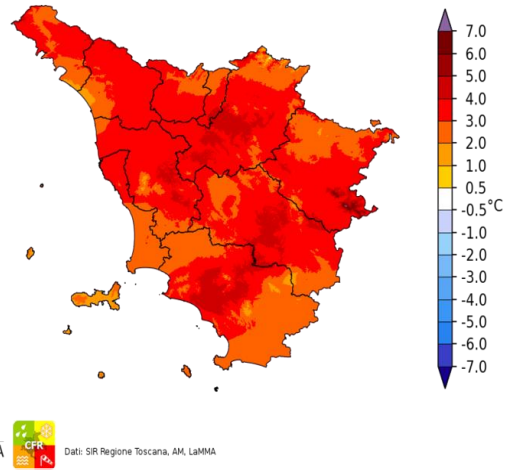
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 21/10/2019



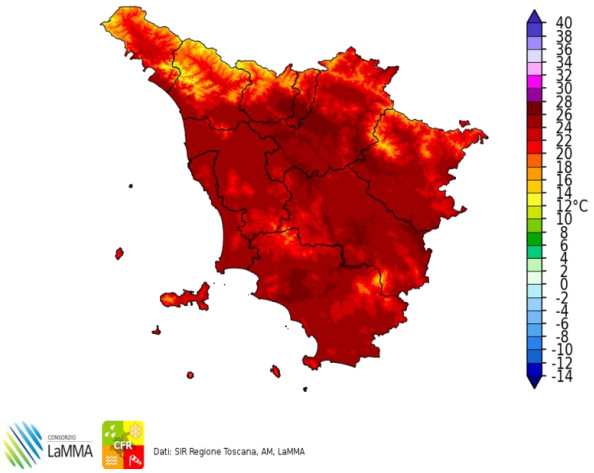
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 21/10/2019 e 20/10/2019



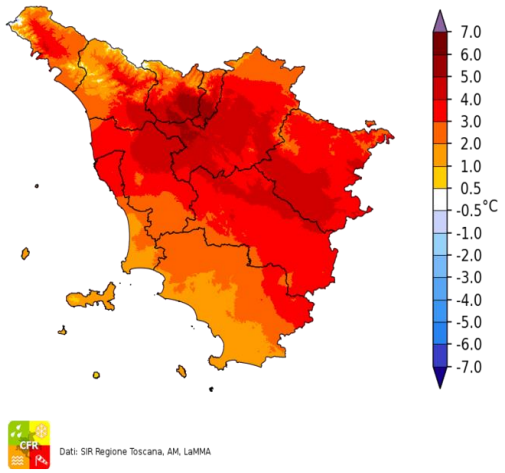
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 21/10/2019



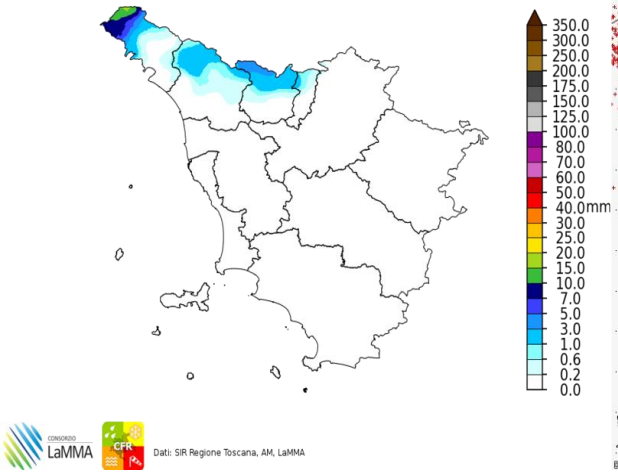
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 21/10/2019 e 20/10/2019



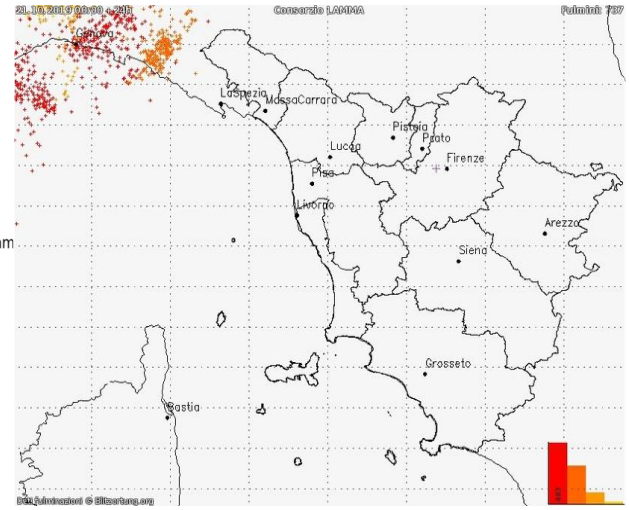
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 21/10/2019



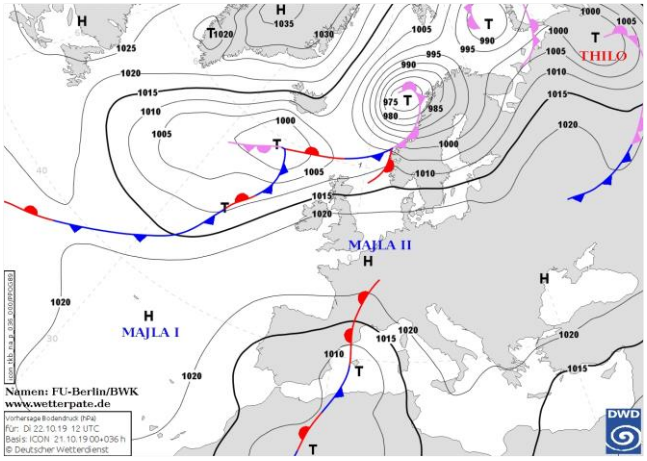
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 21 Ottobre

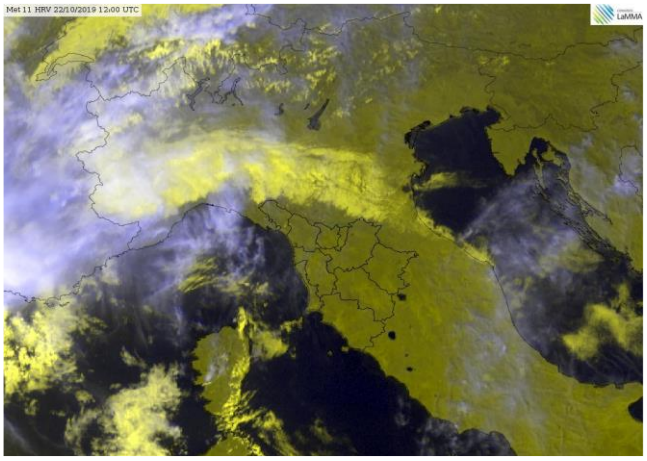


Martedi' 22 Ottobre 2019

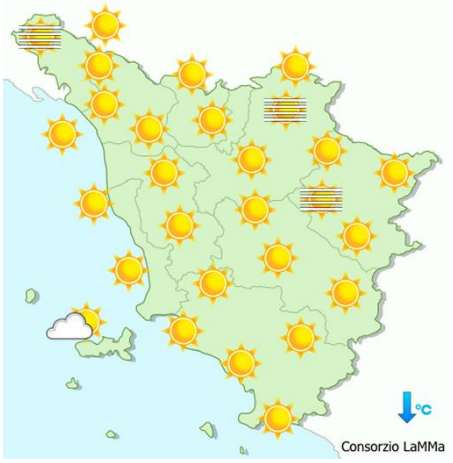
Situazione: una profonda saccatura tra la Spagna e il Marocco attiva un flusso sciroccale decisamente mite e umido sul Mediterraneo centrale.



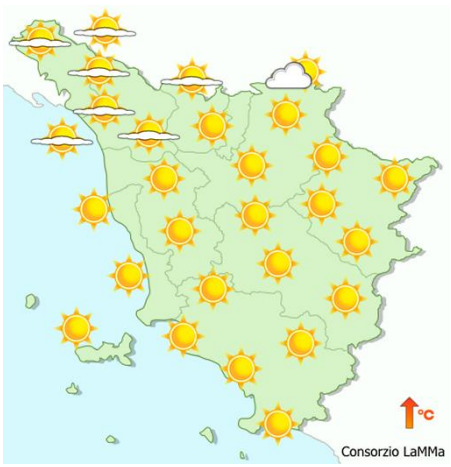
Pressione al suolo e fronti del 22 Ottobre alle 12 UTC


Meteosat HRV del 22 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: sereno

Fenomeni: nessuno.

Venti: deboli in prevalenza meridionali.

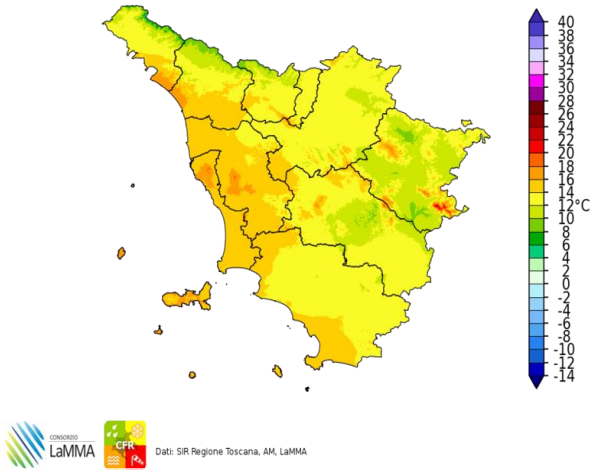
Mari: poco mossi, temporaneamente mossi sul settore meridionale ma in attenuazione.

Temperature: minime in calo; massime in aumento su valori superiori alle medie del periodo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	10	12	13	18	14	17	15	13	16	16
	anomalia*	3	2	3	5	4	6	5	3	5	6
T. max	osservata	25	28	27	25	27	26	27	28	28	26
	anomalia*	8	9	6	6	8	5	8	9	9	9
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

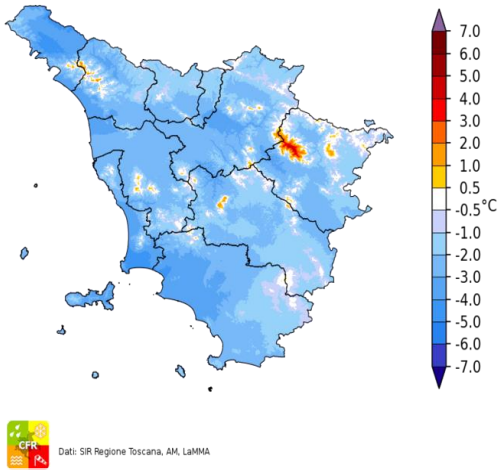
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 22/10/2019



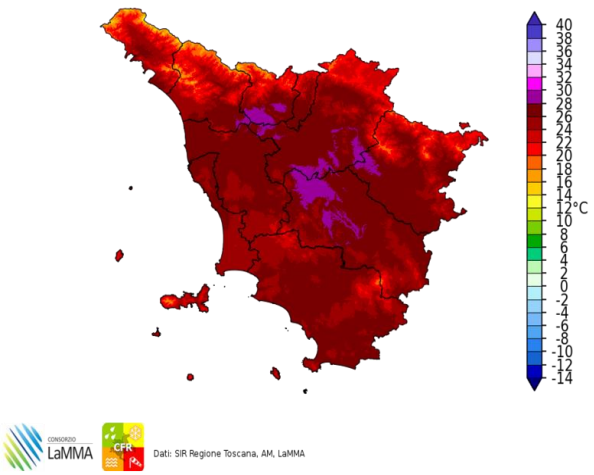
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 22/10/2019 e 21/10/2019



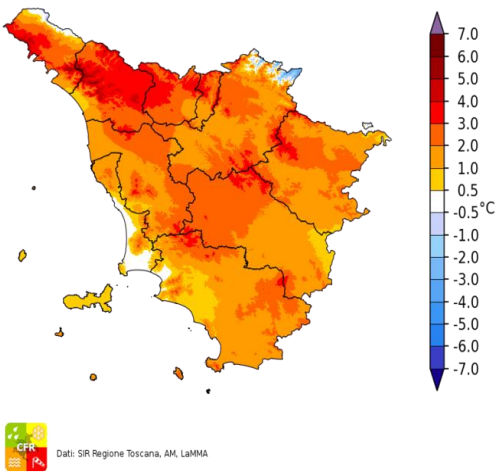
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 22/10/2019



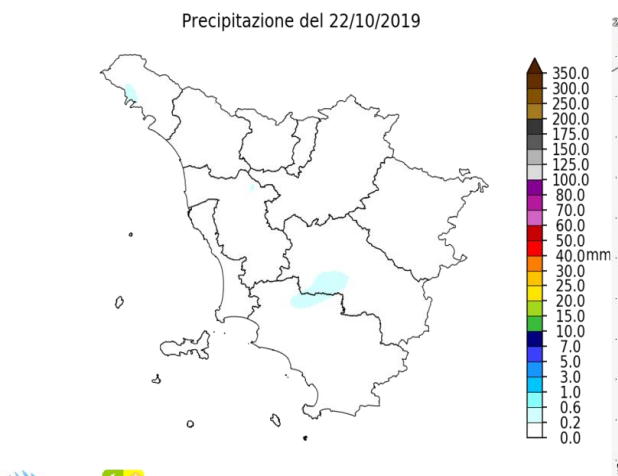
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 22/10/2019 e 21/10/2019



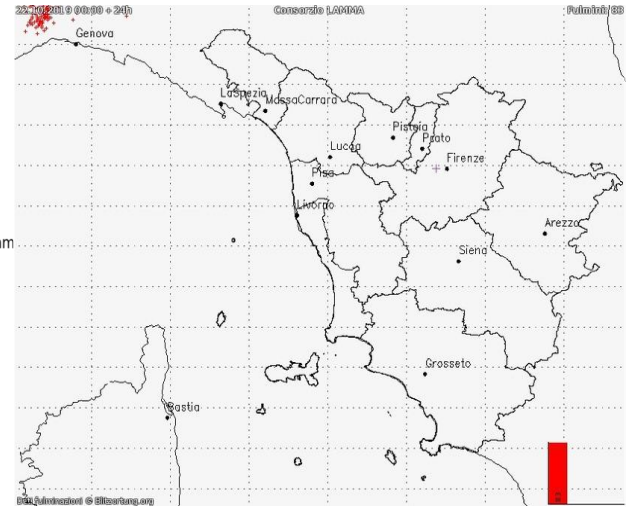
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 22/10/2019



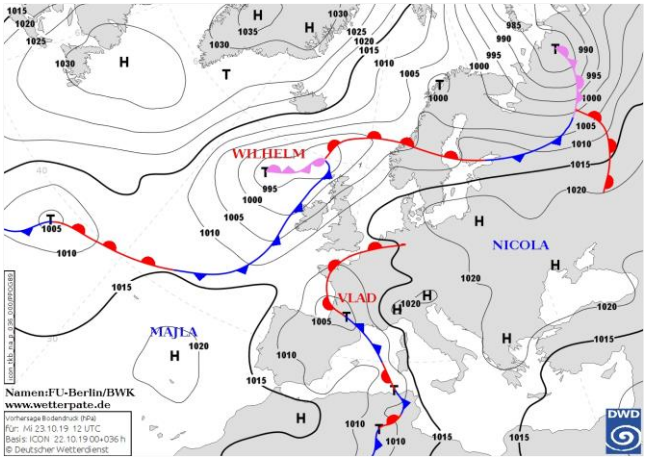
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 22 Ottobre

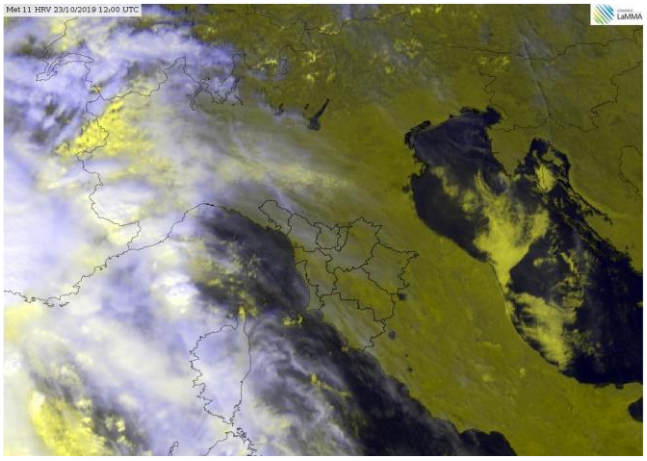


Mercoledi' 23 Ottobre 2019

Situazione: una profonda saccatura tra la Spagna e il nord Africa si sposta gradualmente verso levante.



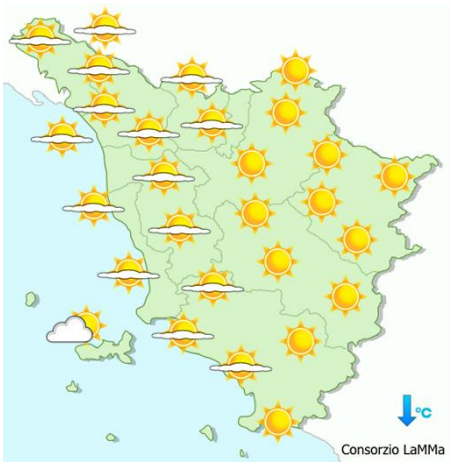
Pressione al suolo e fronti del 23 Ottobre alle 12 UTC


Meteosat HRV del 23 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: sereno o poco nuvoloso per nubi alte e sottili. Aumento della nuvolosità in serata a partire dalla costa.

Fenomeni: nessuno.

Venti: di Scirocco, deboli sulle zone interne, moderati su Arcipelago e costa centro-meridionale.

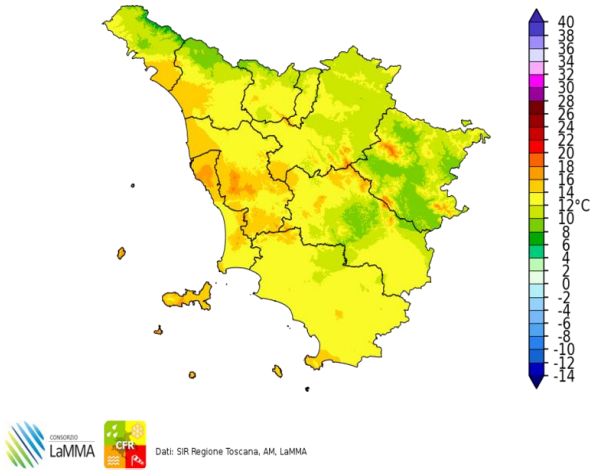
Mari: poco mossi tendenti a mossi.

Temperature: in lieve calo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	9	11	11	19	13	15	14	12	16	16
	anomalia*	2	2	0	6	3	4	4	3	5	5
T. max	osservata	26	27	27	25	26	27	27	26	27	25
	anomalia*	8	8	6	6	7	6	7	7	8	7
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

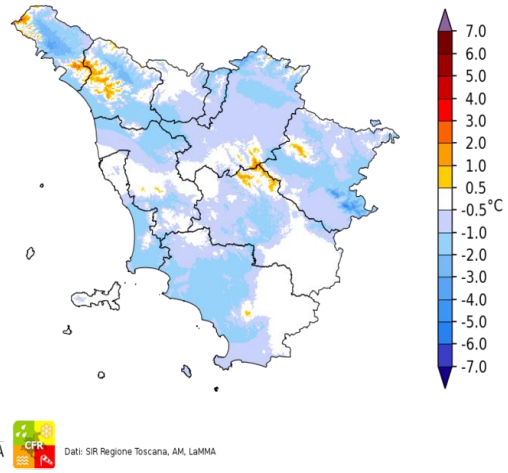
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 23/10/2019



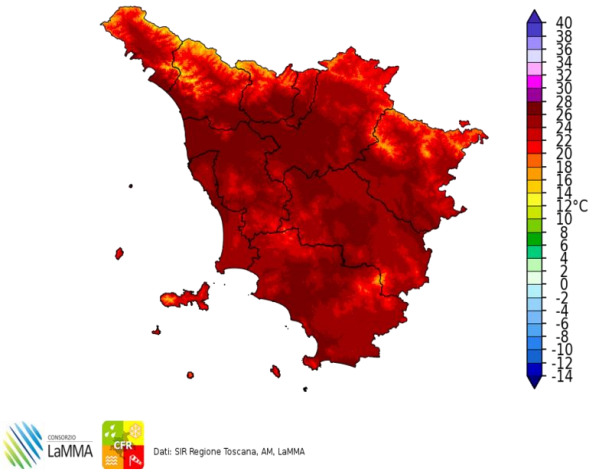
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 23/10/2019 e 22/10/2019



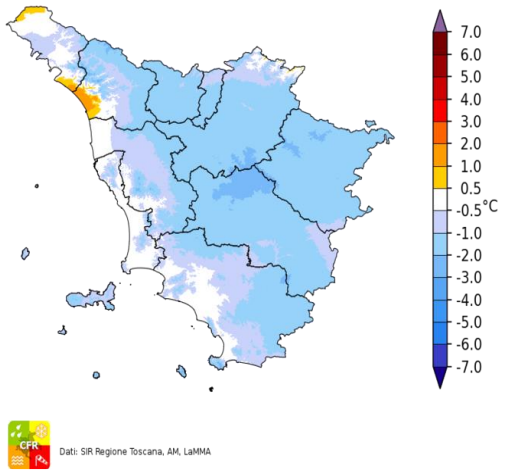
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 23/10/2019



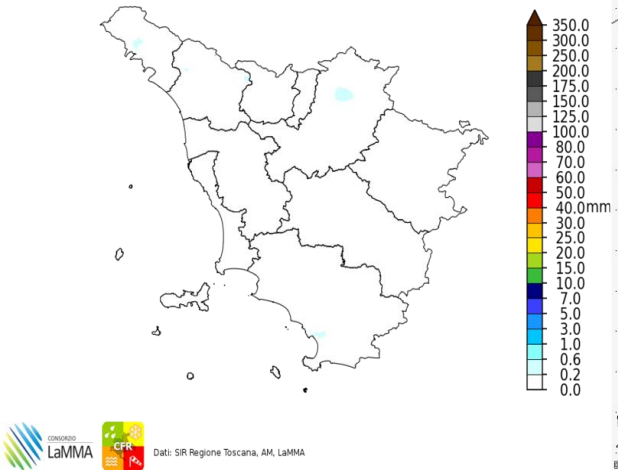
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 23/10/2019 e 22/10/2019



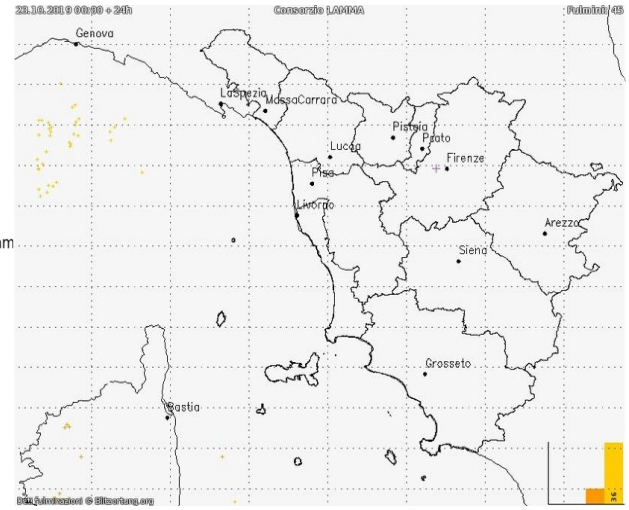
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 23/10/2019



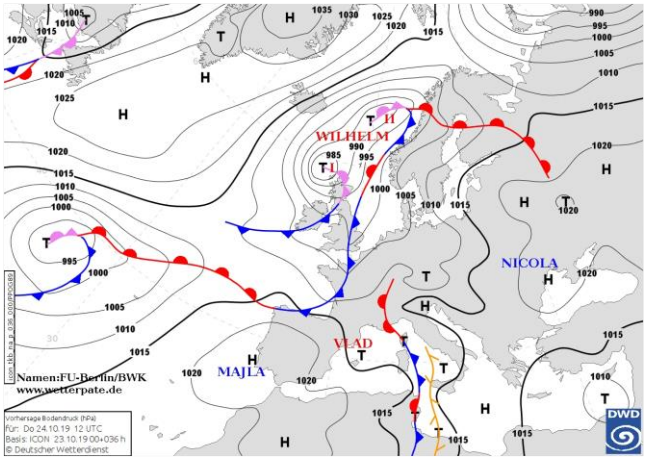
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 23 Ottobre

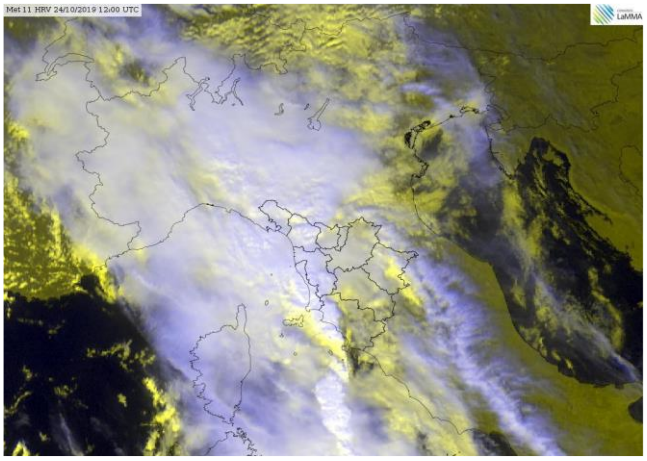


Giovedi' 24 Ottobre 2019

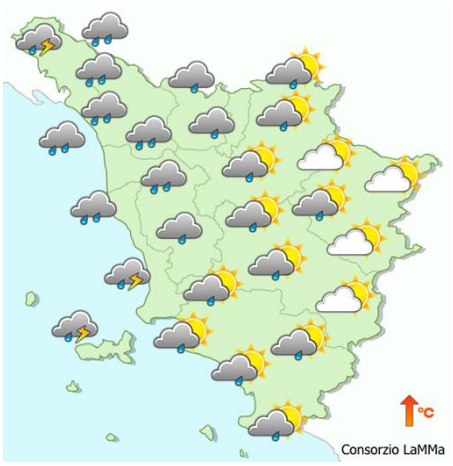
Situazione: una profonda saccatura sul Mediterraneo Occidentale è in lento spostamento verso levante e interessa la nostra regione.



Pressione al suolo e fronti del 24 Ottobre alle 12 UTC


Meteosat HRV del 24 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: molto nuvoloso o coperto.

Fenomeni: precipitazioni a partire dalle zone costiere e dall'Arcipelago, dove i fenomeni sono risultati anche più intensi e a carattere temporalesco.

Venti: moderati o forti da sud-est su costa e Arcipelago, in attenuazione serale. Deboli altrove con rinforzi sui rilievi.

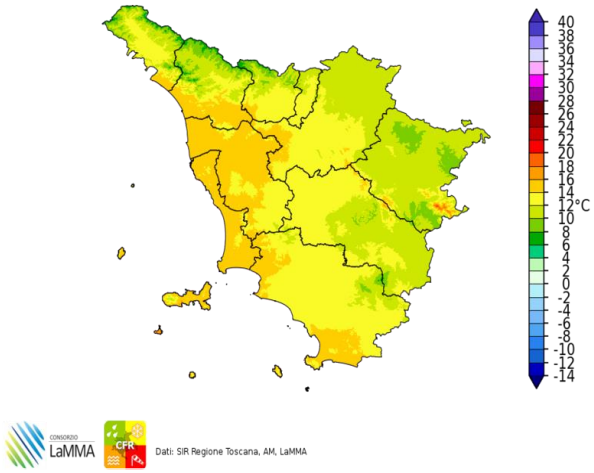
Mari: molto mossi al largo e sulla costa meridionale; mossi sul litorale centro-settentrionale. Lenta attenuazione del moto ondoso dalla sera.

Temperature: in calo le massime.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	11	13	11	16	15	15	15	13	15	14
	anomalia*	4	3	1	4	5	4	5	3	5	4
T. max	osservata	19	19	22	20	17	19	19	17	19	18
	anomalia*	2	-1	1	1	-2	-2	0	-2	0	0
Precipitazione (mm/24ore)		7	10	25	36	31	47	35	18	10	20

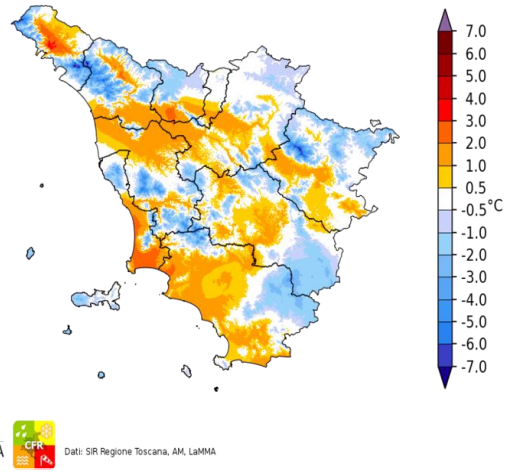
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 24/10/2019



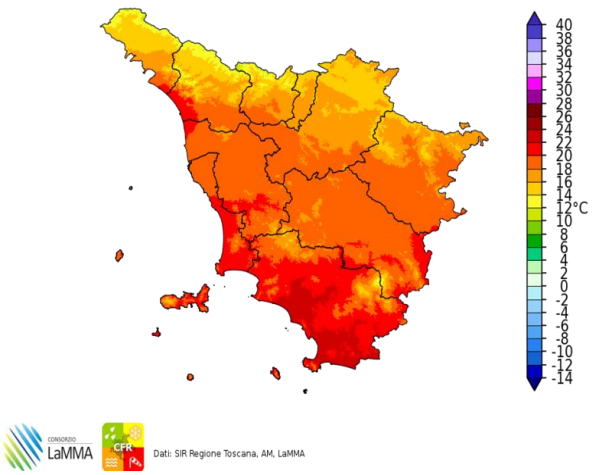
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 24/10/2019 e 23/10/2019



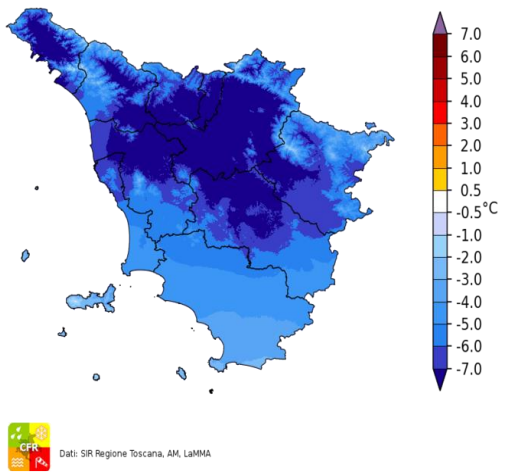
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 24/10/2019



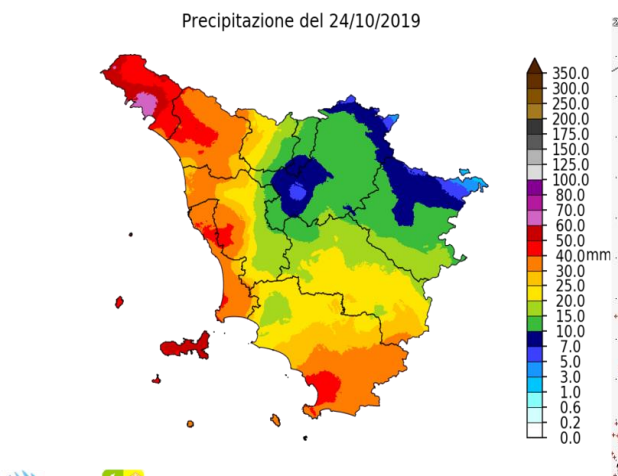
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 24/10/2019 e 23/10/2019



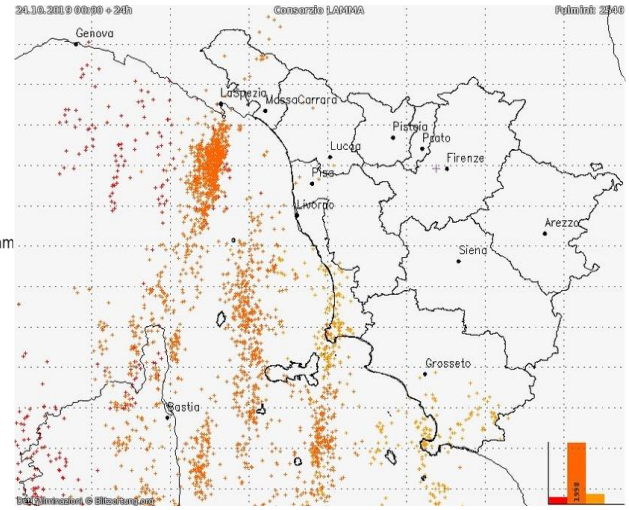
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 24/10/2019



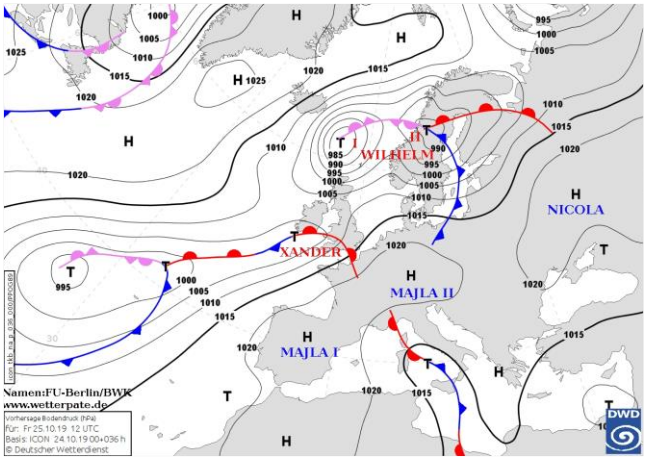
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 24 Ottobre

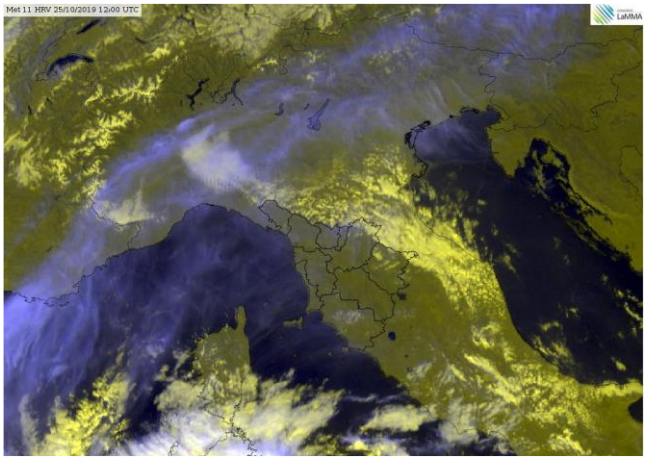


Venerdi' 25 Ottobre 2019

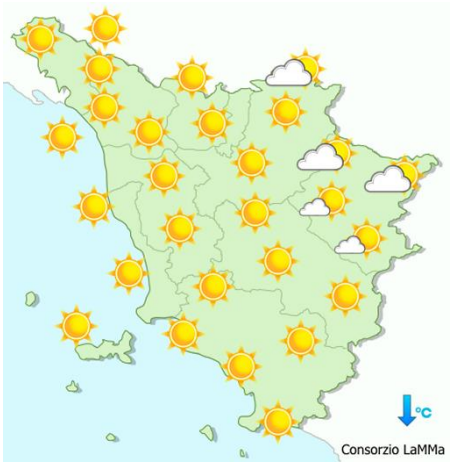
Situazione: rimonta dell'alta pressione sul nord Italia, mentre una perturbazione interessa il sud della penisola.



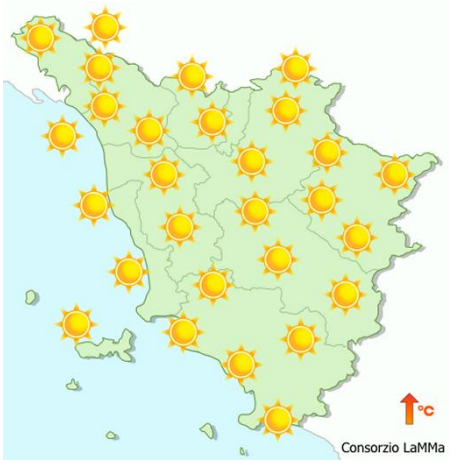
Pressione al suolo e fronti del 25 Ottobre alle 12 UTC


Meteosat HRV del 25 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: rapido miglioramento fino a cielo sereno.

Fenomeni: nessuno.

Venti: deboli o moderati da nord-est con locali rinforzi.

Mari: mossi con moto ondoso in graduale attenuazione.

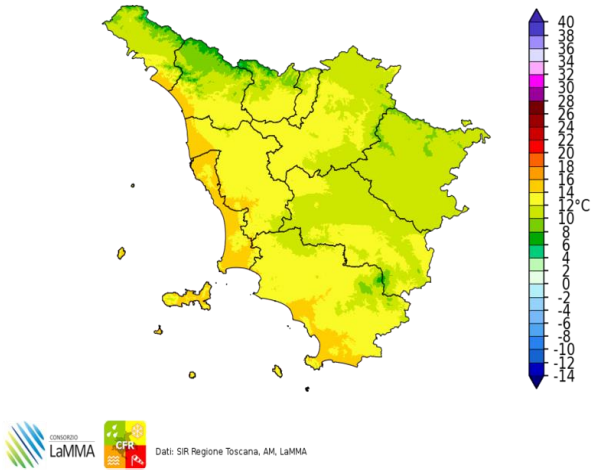
Temperature: in leggero calo le minime, in aumento le massime con punte fino a 22-24 °C.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	12	13	13	16	13	15	14	12	14	13
	anomalia*	5	3	3	4	3	4	4	3	4	3
T. max	osservata	22	23	24	24	23	22	24	22	22	22
	anomalia*	4	4	3	5	4	2	5	3	3	4
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

*anomalia calcolata sulla base della normale climatica decadale 1981-2010

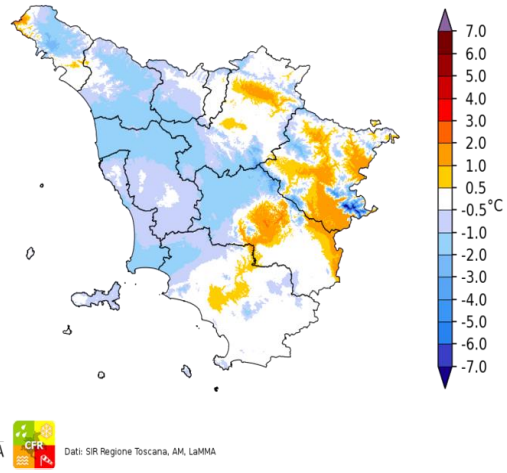
Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 25/10/2019



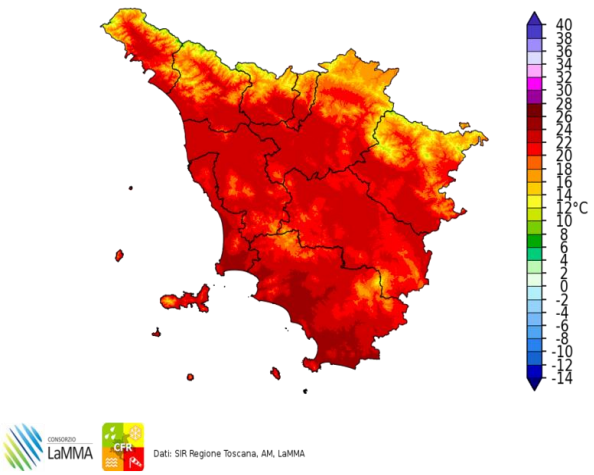
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 25/10/2019 e 24/10/2019



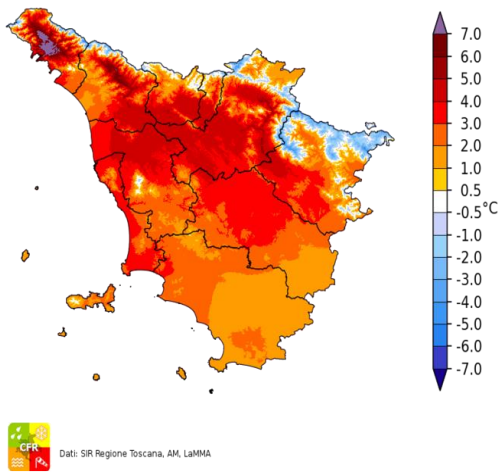
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 25/10/2019



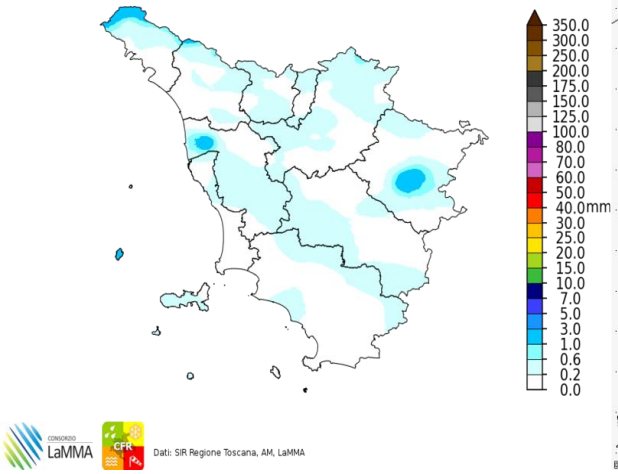
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 25/10/2019 e 24/10/2019



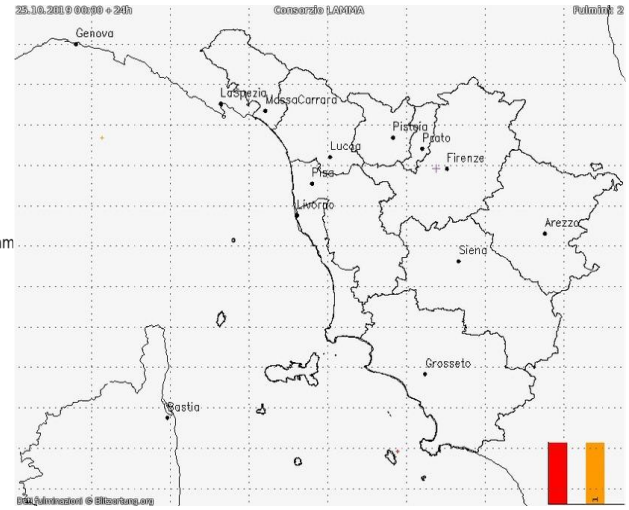
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 25/10/2019



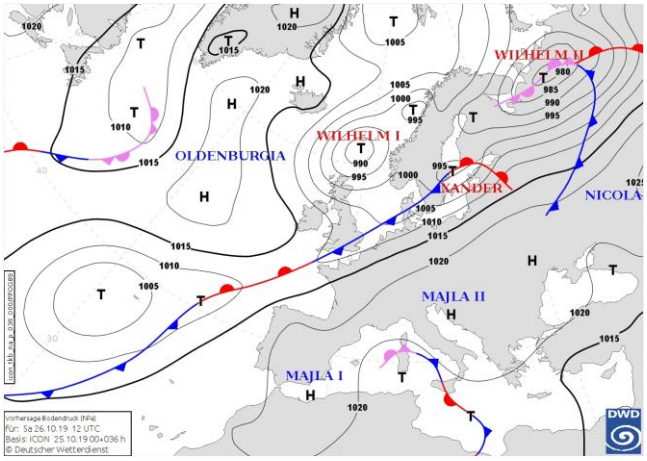
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 25 Ottobre

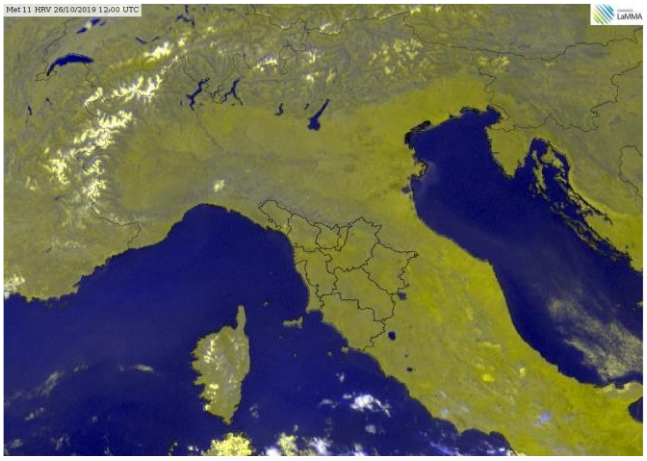


Sabato 26 Ottobre 2019

Situazione: alta pressione con tempo stabile su tutta la regione.

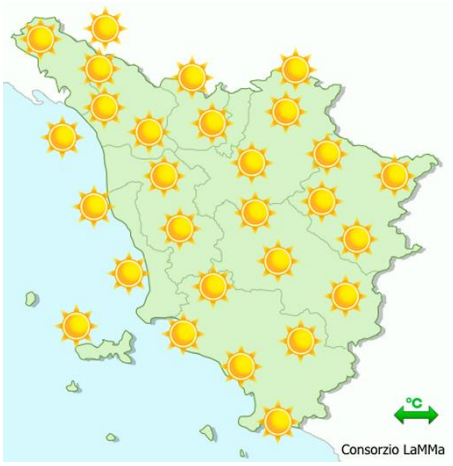


Pressione al suolo e fronti del 26 Ottobre alle 12 UTC

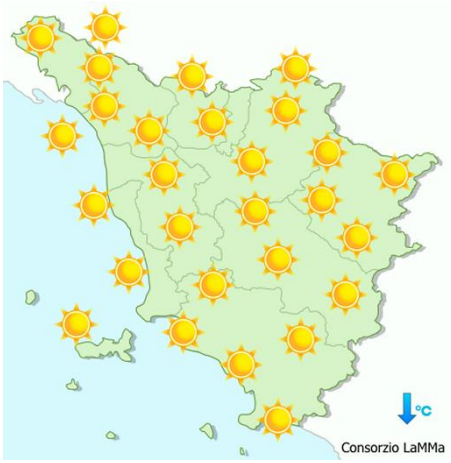


Meteosat HRV del 26 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: sereno.

Fenomeni: nessuno.

Venti: deboli in prevalenza orientali.

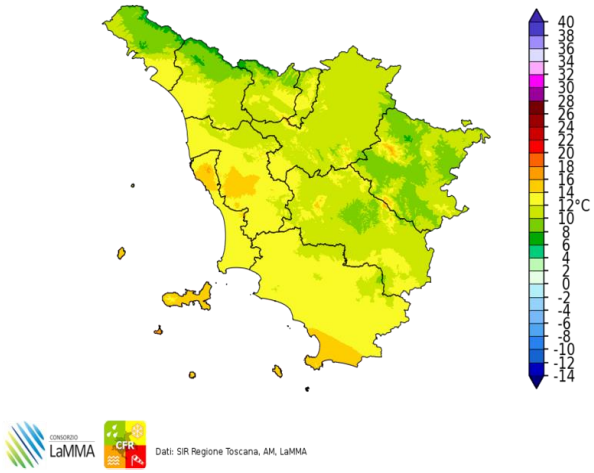
Mari: poco mossi.

Temperature: in lieve calo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	10	10	13	17	11	13	12	12	15	14
	anomalia*	3	1	2	4	1	2	2	2	5	4
T. max	osservata	23	26	26	24	24	24	24	25	26	26
	anomalia*	6	7	5	5	5	4	5	6	7	8
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

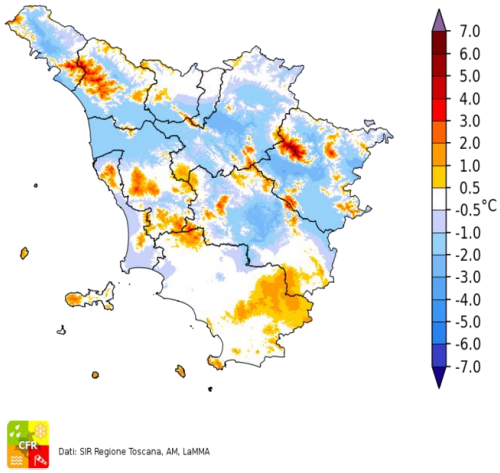
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 26/10/2019



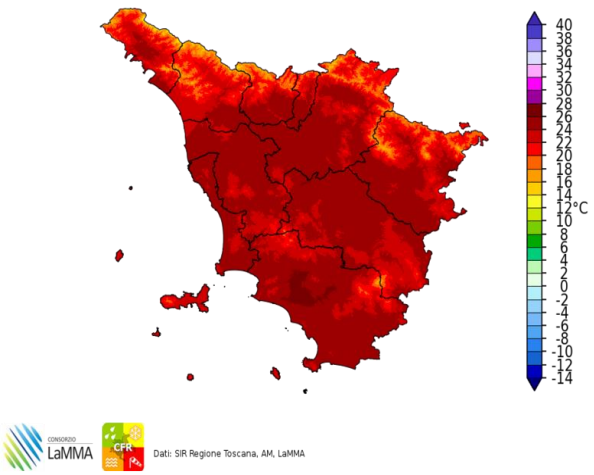
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 26/10/2019 e 25/10/2019



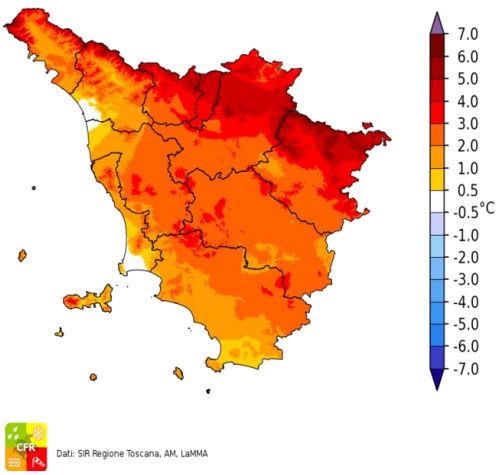
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 26/10/2019



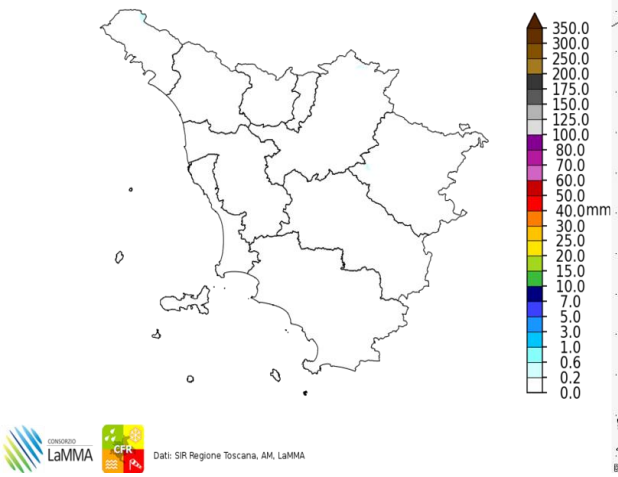
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 26/10/2019 e 25/10/2019



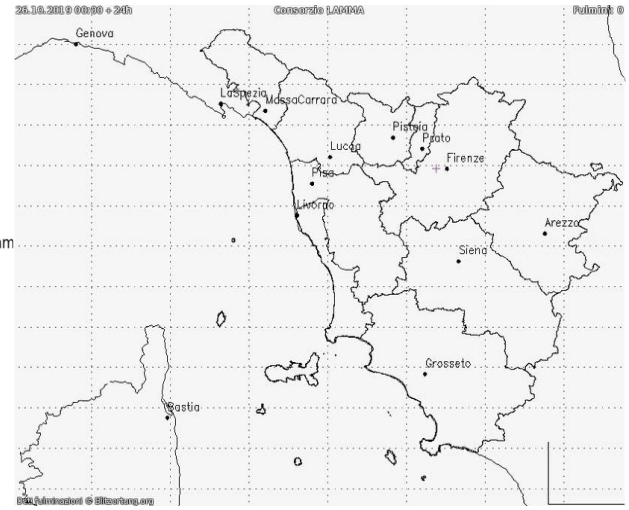
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 26/10/2019



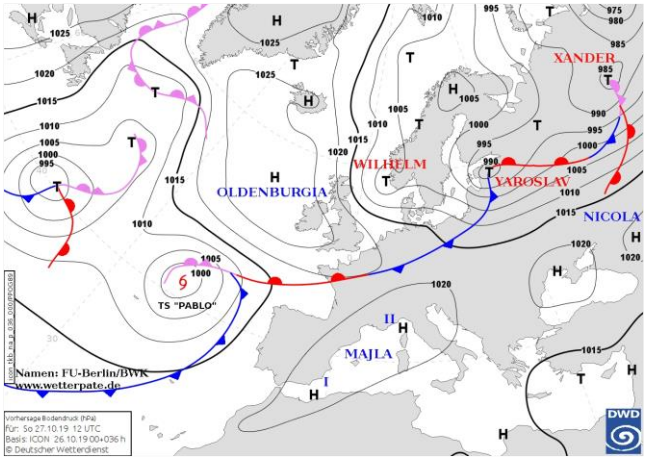
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 26 Ottobre

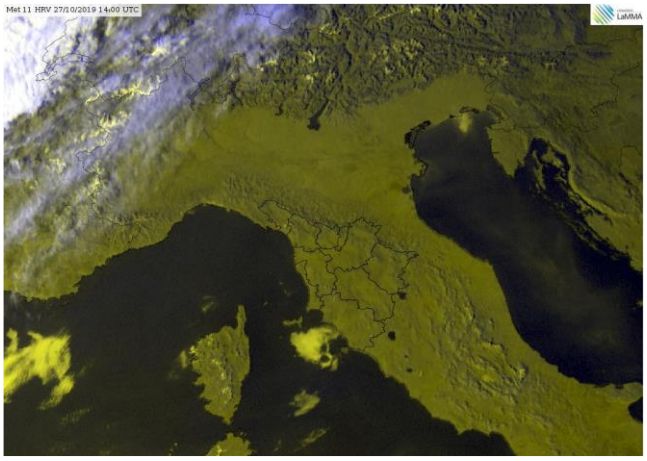


Domenica 27 Ottobre 2019

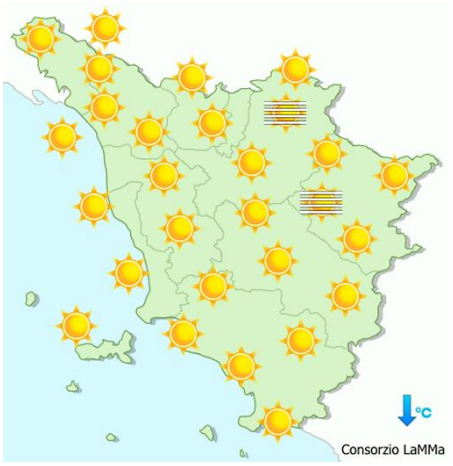
Situazione: alta pressione sulla penisola con tempo soleggiato e temperature sopra la media.



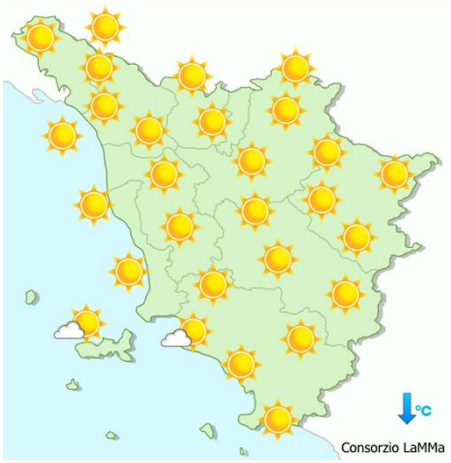
Pressione al suolo e fronti del 27 Ottobre alle 12 UTC


Meteosat HRV del 27 Ottobre alle 14 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: sereno o poco nuvoloso. Banchi di nebbia durante la notte e le prime ore del mattino su Mugello, Valdarno Superiore e localmente su senese e aretino e nubi basse dal tardo pomeriggio-sera su Elba e grossetano.

Fenomeni: nessuno.

Venti: deboli variabili.

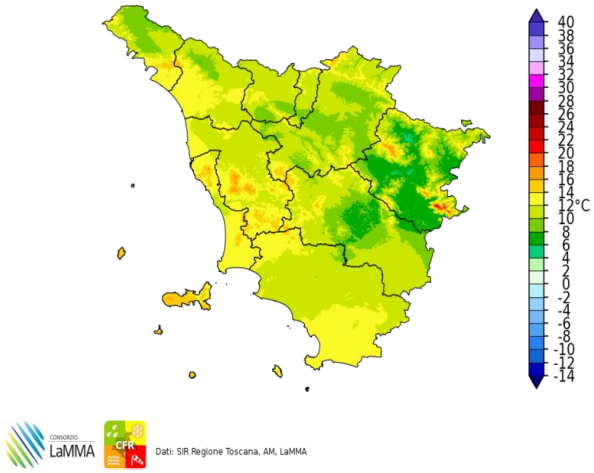
Mari: poco mossi.

Temperature: in lieve diminuzione, ma su valori decisamente superiori alla media.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	6	8	10	16	11	13	11	10	13	13
	anomalia*	-1	-1	-1	3	1	2	1	0	2	3
T. max	osservata	22	25	24	23	23	23	25	24	25	24
	anomalia*	4	5	4	4	4	2	5	5	6	6
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

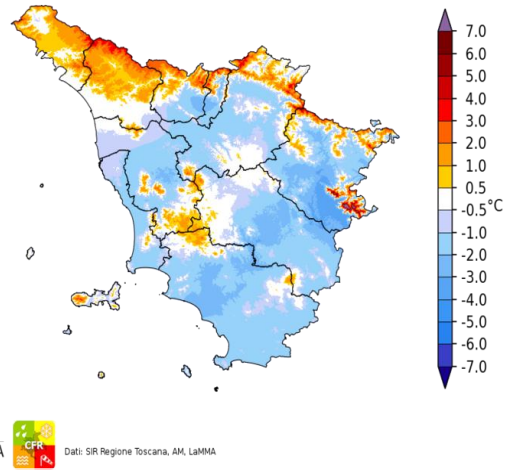
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 27/10/2019



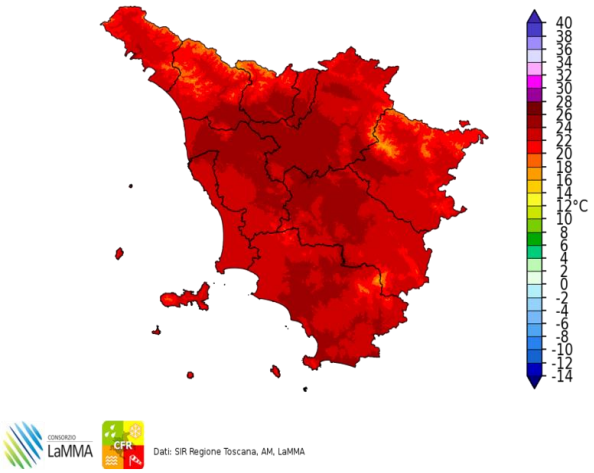
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 27/10/2019 e 26/10/2019



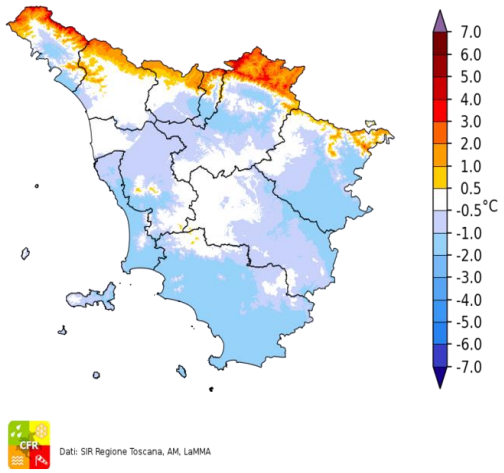
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 27/10/2019



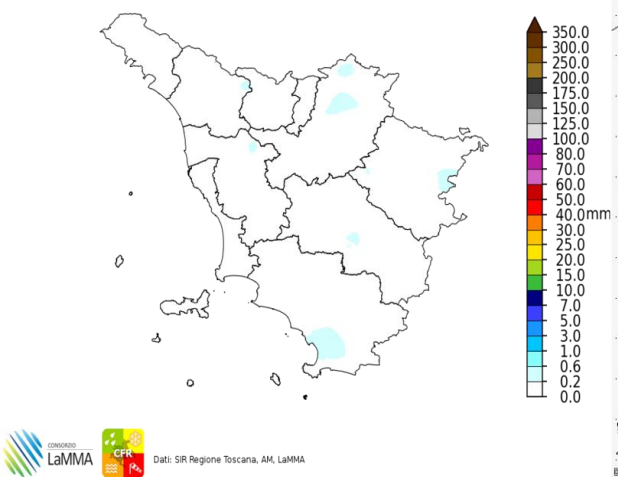
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 27/10/2019 e 26/10/2019



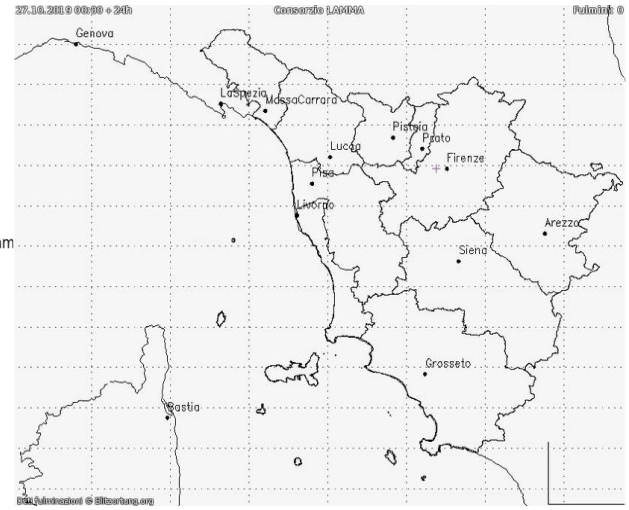
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 27/10/2019



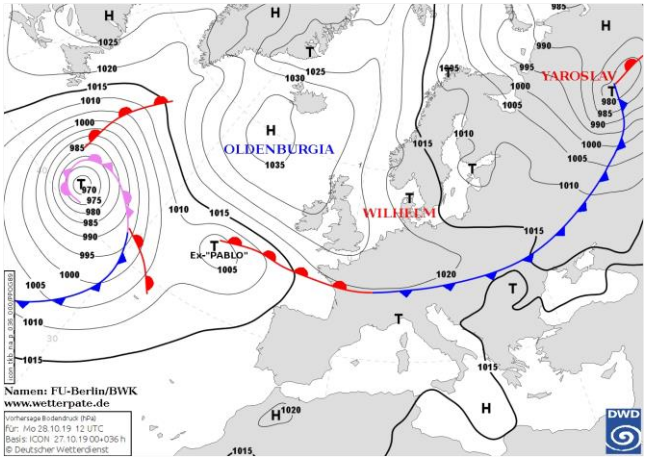
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 27 Ottobre

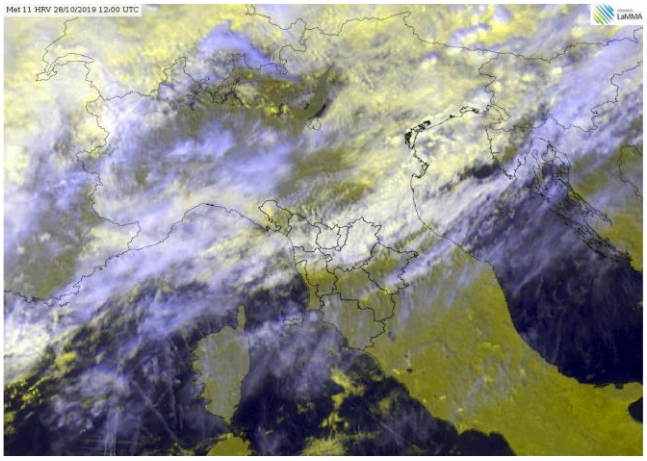


Lunedi' 28 Ottobre 2019

Situazione: una perturbazione sull'Europa centrale comincia a far sentire i suoi effetti sulla Toscana.

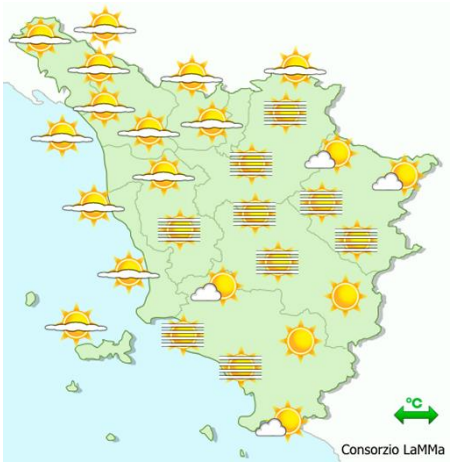


Pressione al suolo e fronti del 28 Ottobre alle 12 UTC

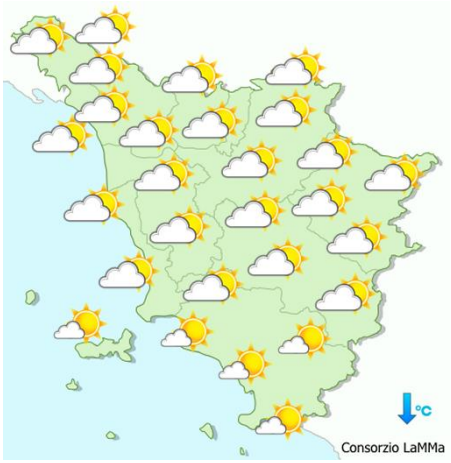


Meteosat HRV del 28 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: nuvoloso.

Fenomeni: nessuno.

Venti: deboli meridionali, tendenti a disporsi da Libeccio sulla costa centrale.

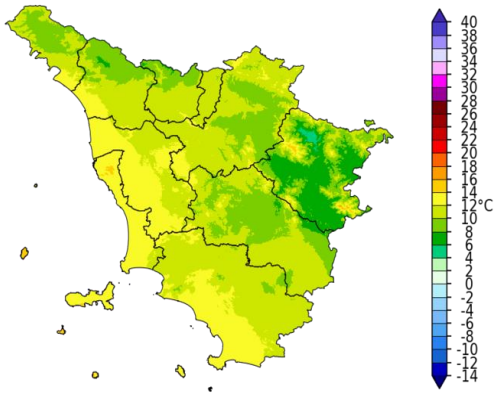
Mari: da poco mossi a mossi.

Temperature: in calo in particolare nei valori massimi.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	7	10	12	16	11	13	13	10	12	11
	anomalia*	-1	0	1	3	1	2	3	0	2	1
T. max	osservata	19	20	21	22	20	20	21	18	19	21
	anomalia*	2	1	0	3	1	0	2	-1	0	4
Precipitazione (mm/24ore)		0	0	0	0	0	0	0	0	0	0

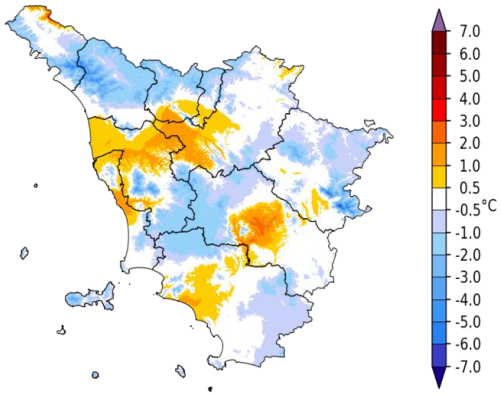
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 28/10/2019



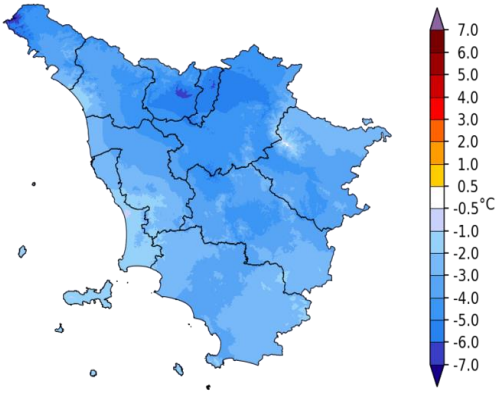
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 28/10/2019 e 27/10/2019



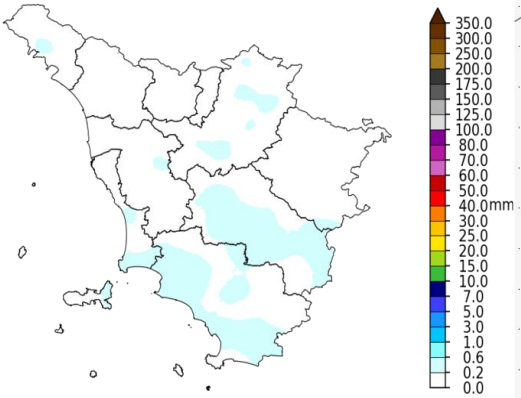
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 28/10/2019 e 27/10/2019



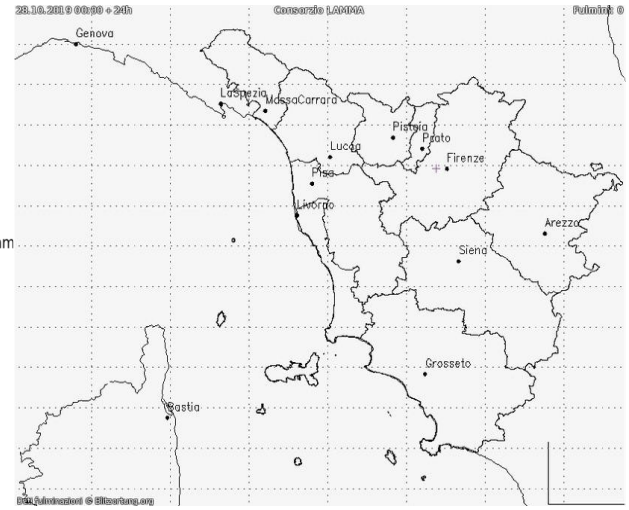
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 28/10/2019



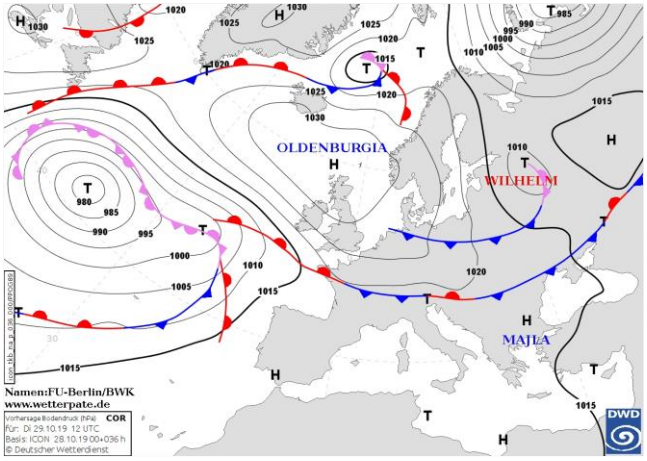
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 28 Ottobre

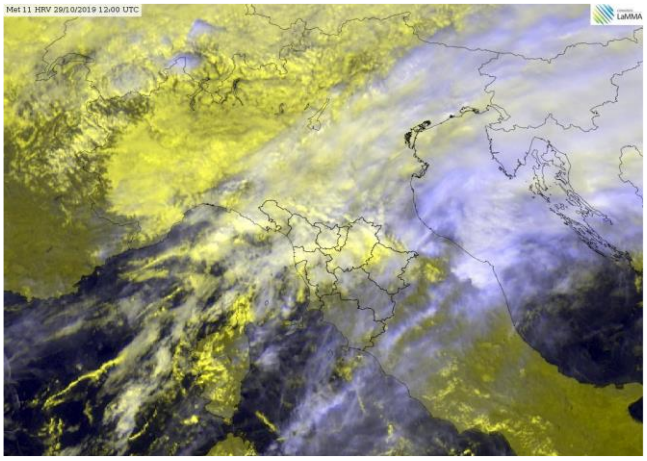


Martedi' 29 Ottobre 2019

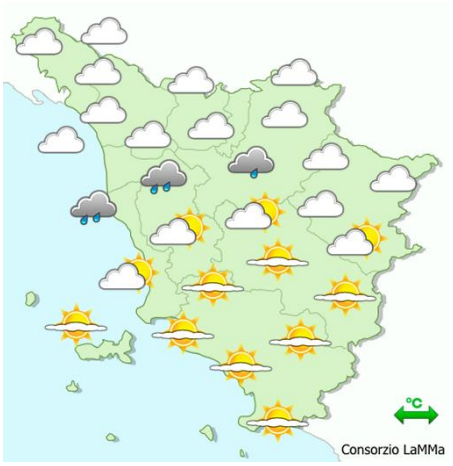
Situazione: minimo relativo tra Golfo del Leone e Golfo Ligure (1016 hPa) con flusso umido occidentale sulla regioni centro settentrionali della nostra penisola. Il quadro sinottico è in lenta evoluzione con fronte perturbato quasi stazionario a nord delle Alpi.



Pressione al suolo e fronti del 29 Ottobre alle 12 UTC


Meteosat HRV del 29 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: molto nuvoloso per nubi più compatte sulle zone centro settentrionali.

Fenomeni: piogge sparse e temporali. Precipitazioni più abbondanti su Arcipelago settentrionale e costa a nord di Cecina.

Venti: deboli da sud ovest, moderati su Arcipelago, litorale settentrionale e crinali appenninici,

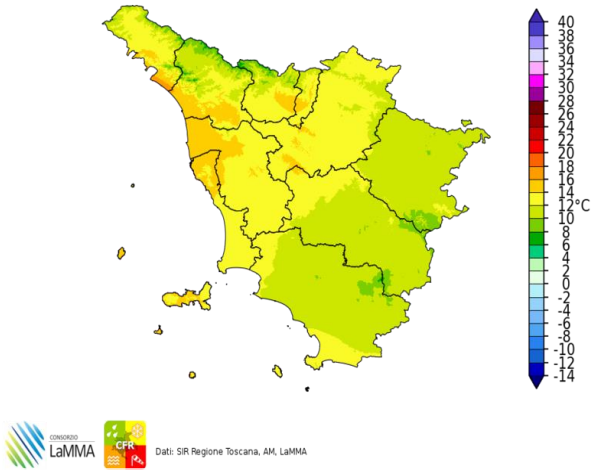
Mari: mossi a nord di Capraia, poco mossi altrove.

Temperature: minime in aumento e massime in calo.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	11	14	10	16	14	17	14	14	15	12
	anomalia*	4	4	0	3	4	5	4	5	5	1
T. max	osservata	18	19	24	21	18	21	18	18	18	20
	anomalia*	0	0	3	2	-1	1	-1	-1	0	2
Precipitazione (mm/24ore)		0	6	0	56	30	22	84	11	11	4

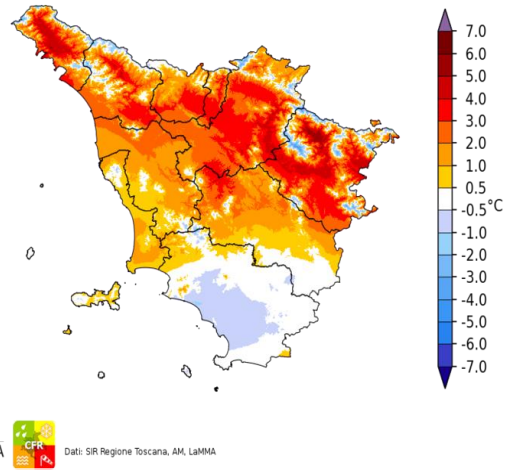
*anomalia calcolata sulla base della normale climatica decadale 1981-2010 Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 29/10/2019



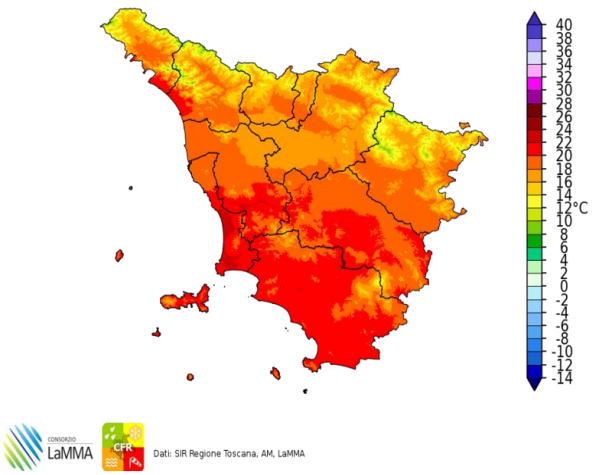
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 29/10/2019 e 28/10/2019



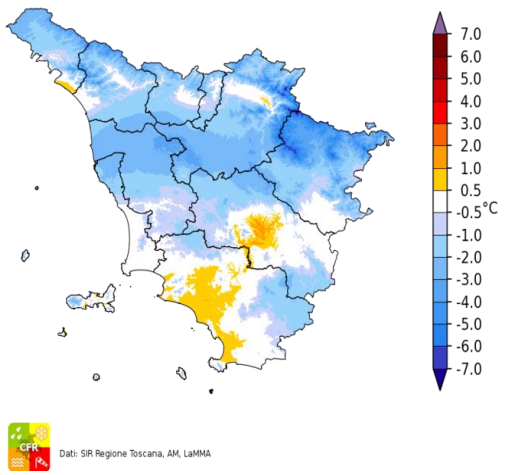
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 29/10/2019



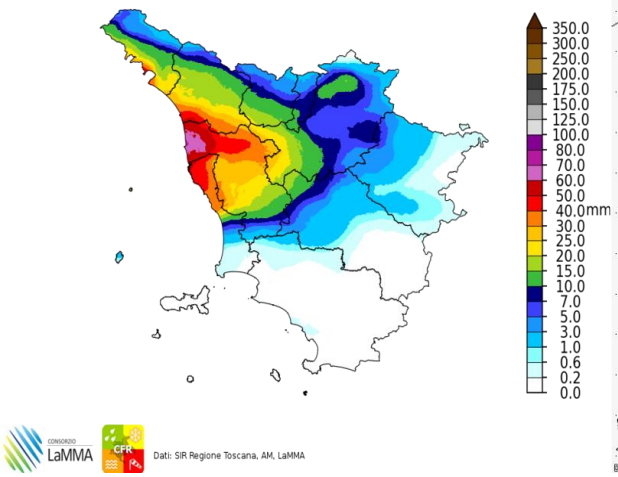
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 29/10/2019 e 28/10/2019



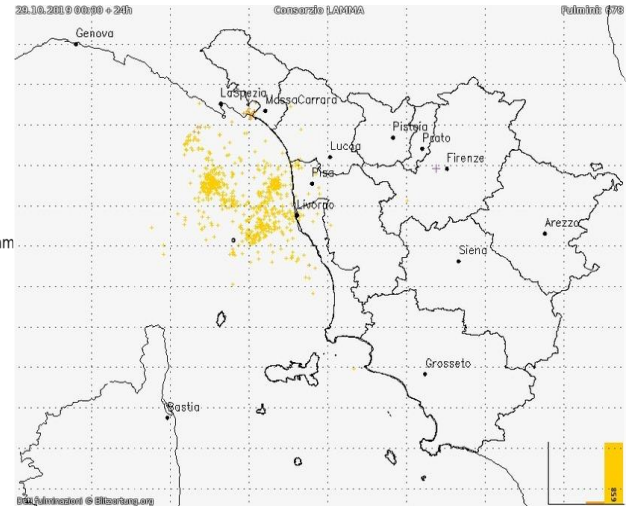
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 29/10/2019



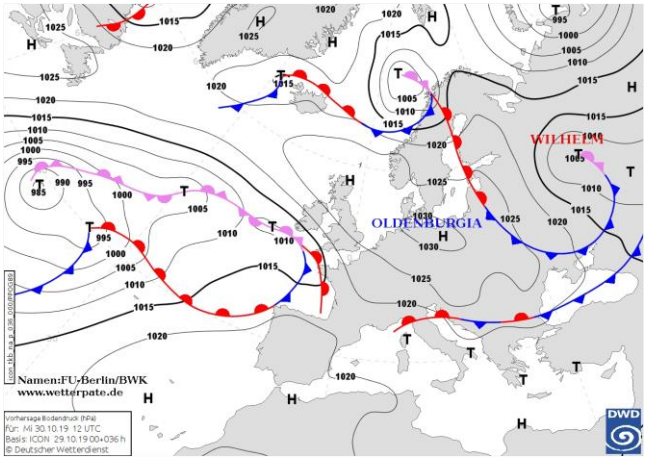
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 29 Ottobre

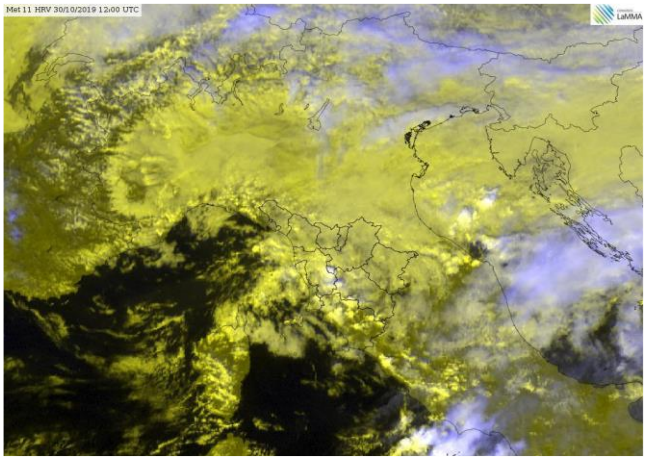


Mercoledi' 30 Ottobre 2019

Situazione: un campo di alta pressione centrato sull'Europa settentrionale si estende anche sull'Italia. Tuttavia infiltrazioni di aria fredda in quota determinano locali fenomeni di instabilità.



Pressione al suolo e fronti del 30 Ottobre alle 12 UTC



Meteosat HRV del 30 Ottobre alle 12 UTC

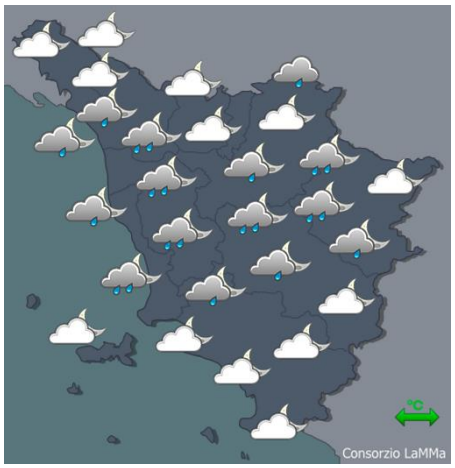
situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: nuvoloso.

Fenomeni: piogge sparse.

Venti: deboli variabili in rotazione da nord-est.

Mari: poco mossi o localmente mossi al largo

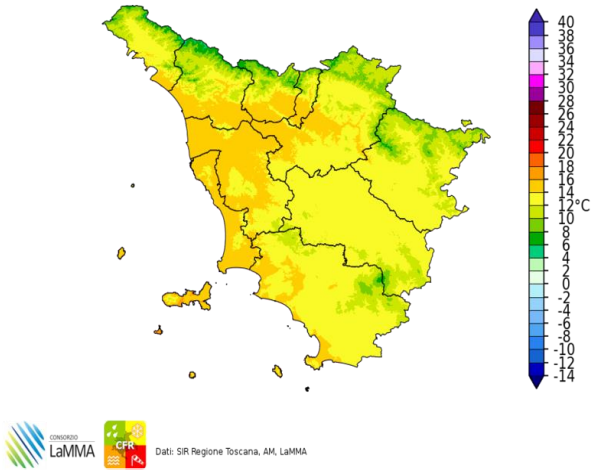
Temperature: stazionarie o in lieve aumento.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	14	14	13	16	16	16	15	15	15	14
	anomalia*	7	5	3	3	5	4	5	5	5	3
T. max	osservata	18	20	22	20	19	20	18	19	20	18
	anomalia*	0	1	1	0	0	0	-1	0	1	0
Precipitazione (mm/24ore)		2	0	2	8	8	1	2	0	0	1

*anomalia calcolata sulla base della normale climatica decadale 1981-2010

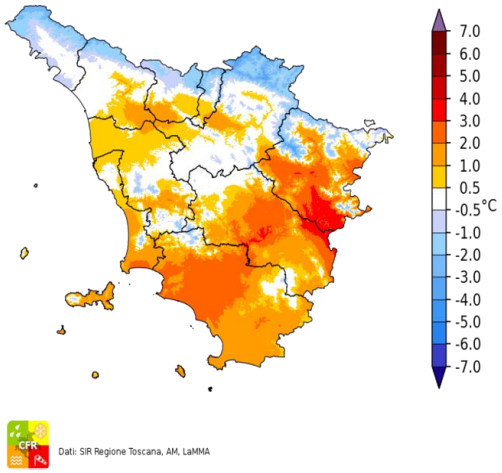
Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 30/10/2019



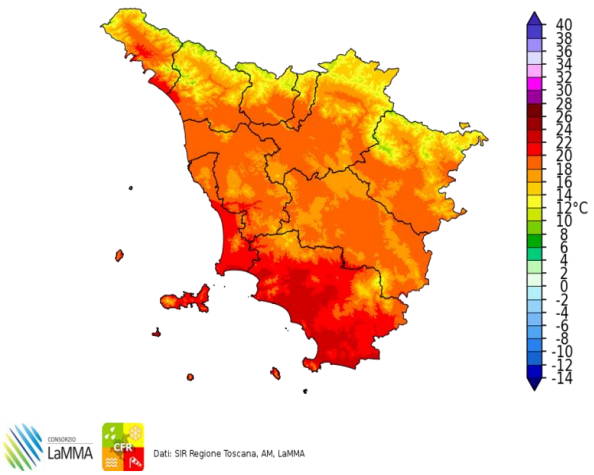
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 30/10/2019 e 29/10/2019



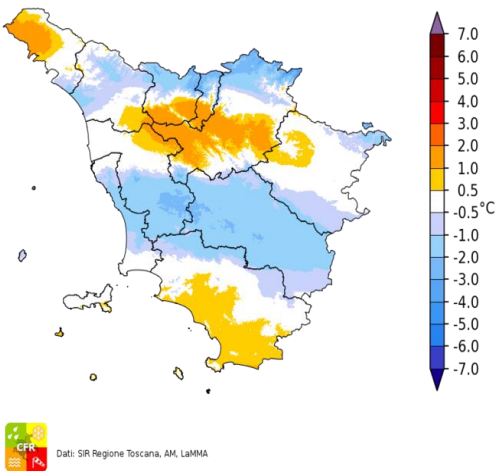
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 30/10/2019



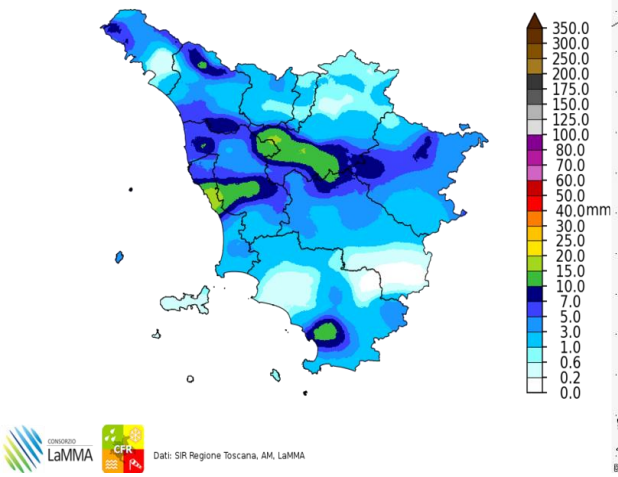
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 30/10/2019 e 29/10/2019



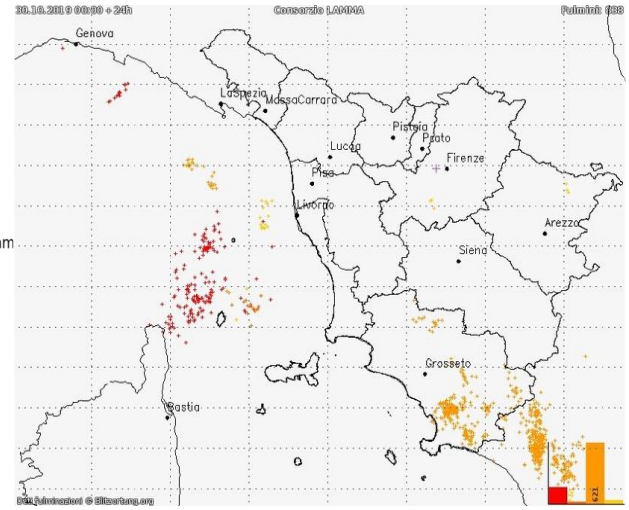
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 30/10/2019



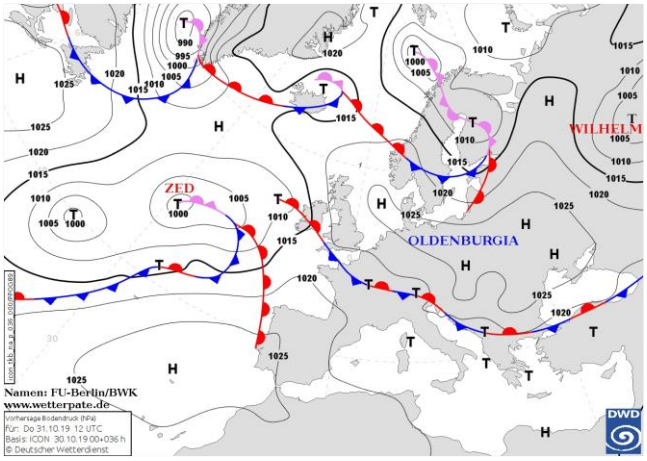
Dati: SIR Regione Toscana, AM, LaMMA

Fulminazioni osservate il giorno 30 Ottobre

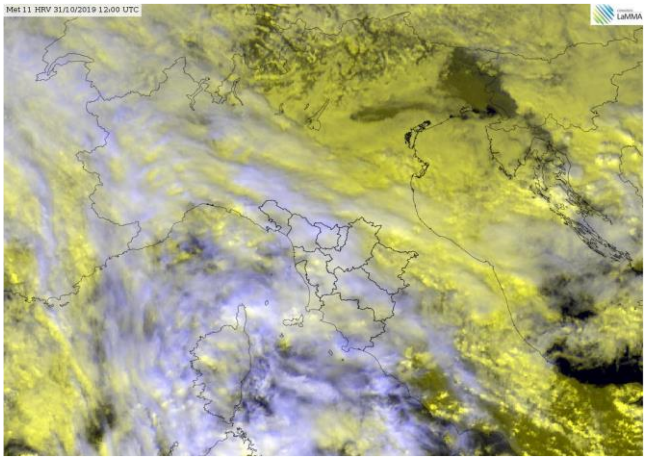


Giovedi' 31 Ottobre 2019

Situazione: l'Italia è inserita in un flusso di correnti umide ed instabili di origine nord atlantica.



Pressione al suolo e fronti del 31 Ottobre alle 12 UTC



Meteosat HRV del 31 Ottobre alle 12 UTC

situazione in Toscana



mattina



pomeriggio



sera

Stato del cielo: molto nuvoloso o coperto

Fenomeni: piogge diffuse e temporali in particolare su costa e Arcipelago.

Venti: deboli o localmente moderati di Grecale con rinforzi su Arcipelago e crinali in serata.

Mari: poco mossi sottocosta, mossi al largo.

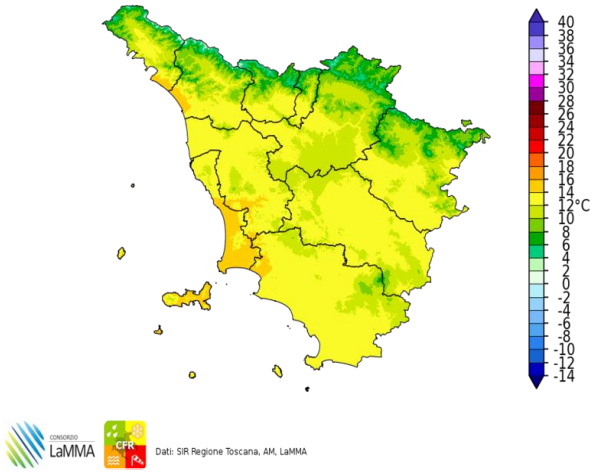
Temperature: in calo in particolare le massime.

		Arezzo	Firenze	Grosseto	Livorno	Lucca	Massa	Pisa	Pistoia	Prato	Siena
T. min	osservata	13	13	13	14	13	15	14	12	14	13
	anomalia*	6	4	2	1	3	3	4	3	3	3
T. max	osservata	17	18	17	18	16	19	18	16	17	16
	anomalia*	-1	-1	-3	-2	-2	-1	-1	-3	-2	-2
Precipitazione (mm/24ore)		6	2	4	5	10	1	1	1	0	16

*anomalia calcolata sulla base della normale climatica decadale 1981-2010

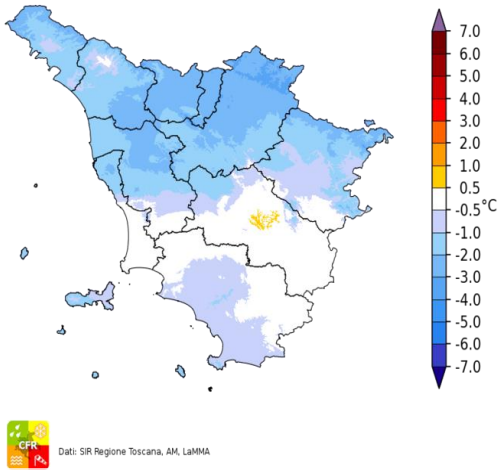
Dati: SIR-Regione Toscana, AM, LaMMA

Temperatura Minima del 31/10/2019



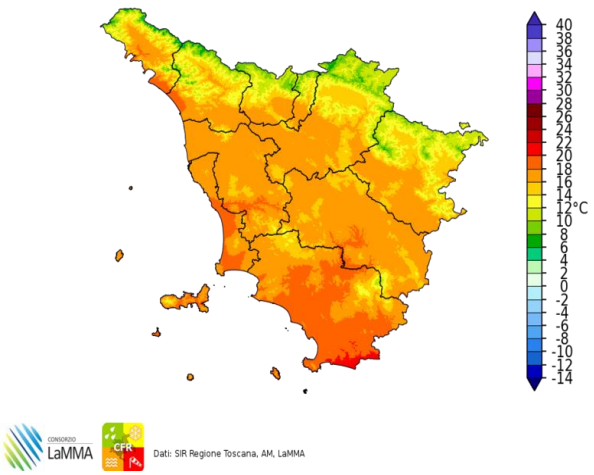
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Minima tra 31/10/2019 e 30/10/2019



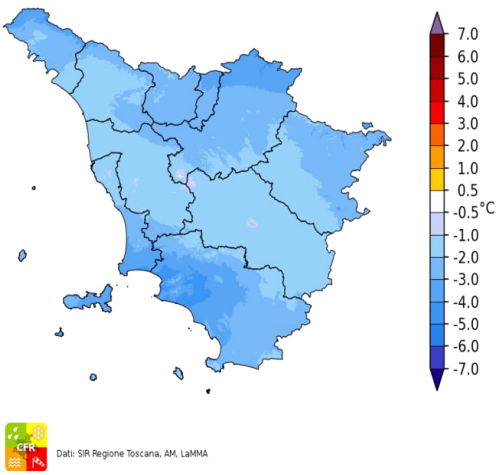
Dati: SIR Regione Toscana, AM, LaMMA

Temperatura Massima del 31/10/2019



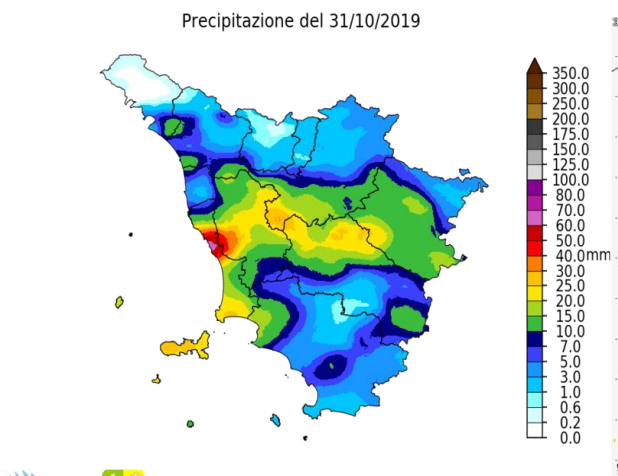
Dati: SIR Regione Toscana, AM, LaMMA

Differenza della Temperatura Massima tra 31/10/2019 e 30/10/2019



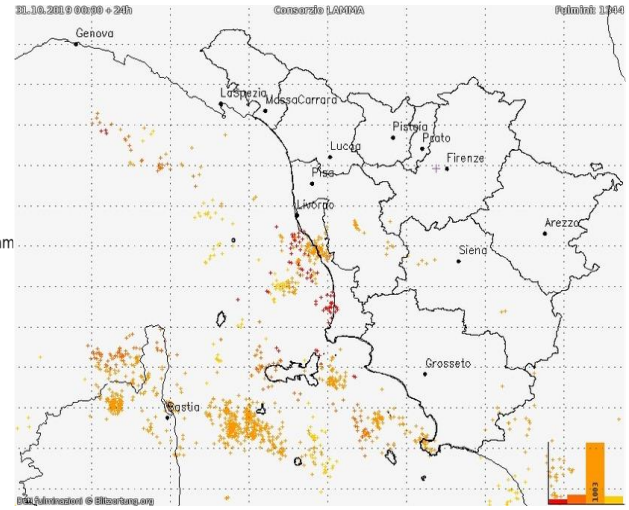
Dati: SIR Regione Toscana, AM, LaMMA

Precipitazione del 31/10/2019



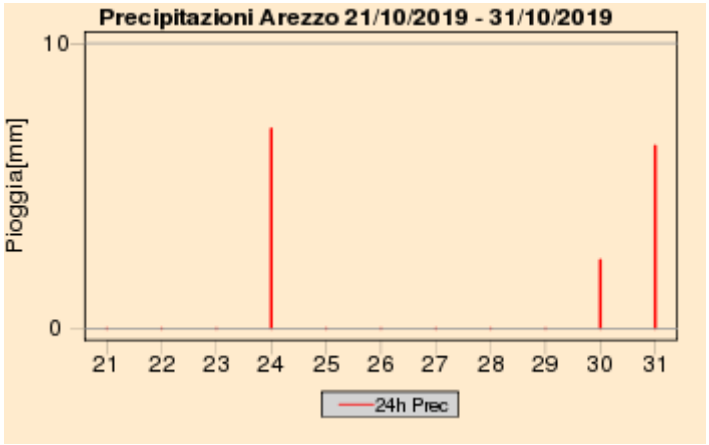
Dati: SIR Regione Toscana, AM, LaMMA

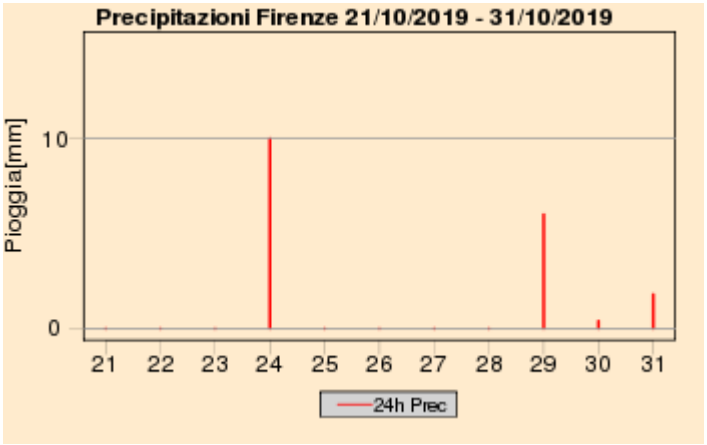
Fulminazioni osservate il giorno 31 Ottobre

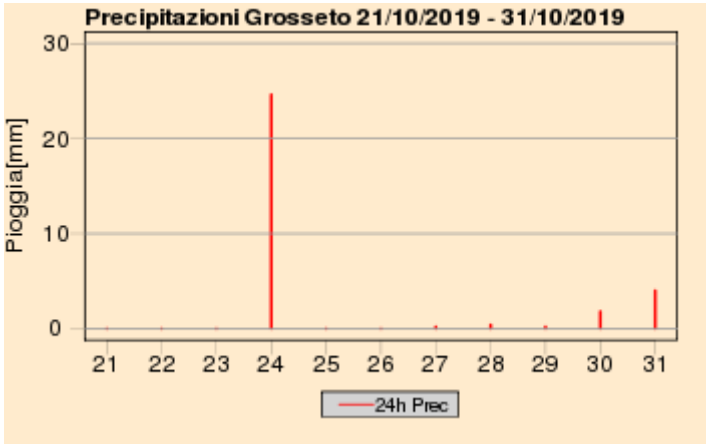


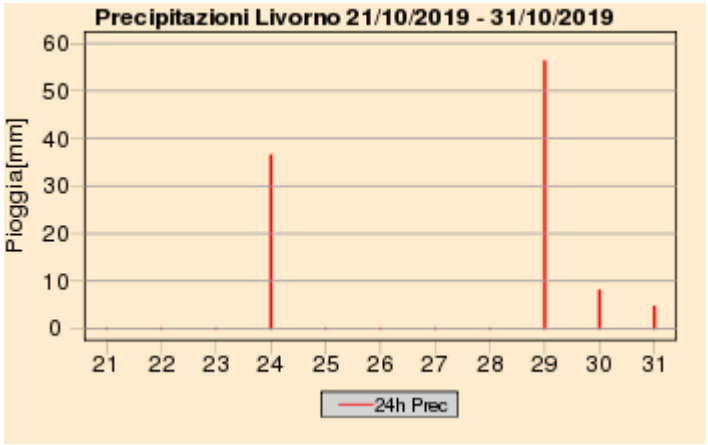
III decade - Quadro regionale – Precipitazioni

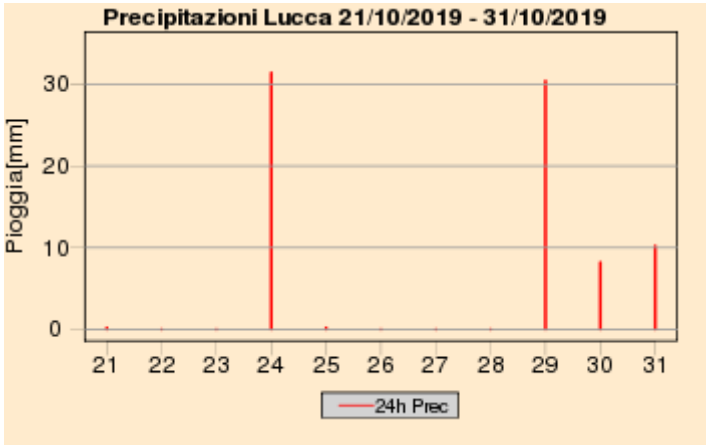
Nel corso della terza decade di Ottobre si è assistito al transito di due perturbazioni (una il giorno 24 e una seconda il giorno 29, seguita poi da condizioni di instabilità) che hanno determinato precipitazioni anche abbondanti in particolare sulle zone costiere e occidentali; sulla costa pisana e livornese infatti i cumulati decadali hanno superato i 100-150 mm e su gran parte della fascia costiera le piogge sono comunque risultate superiori alle medie. Più scarse invece sono risultate le precipitazioni sulle zone orientali e in Appennino ove i cumulati risultano inferiori a quelli tipici del periodo.

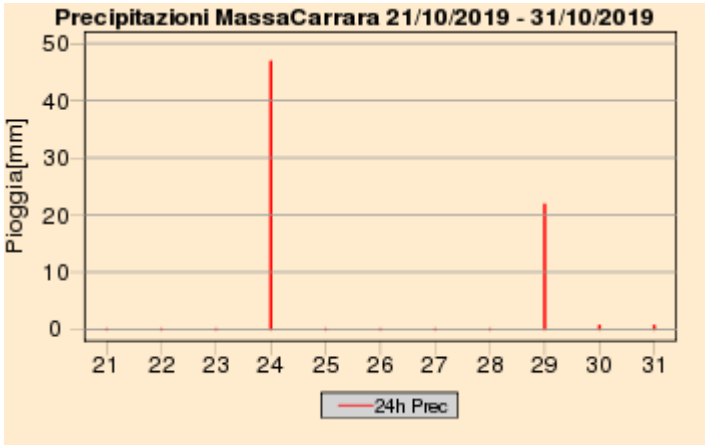


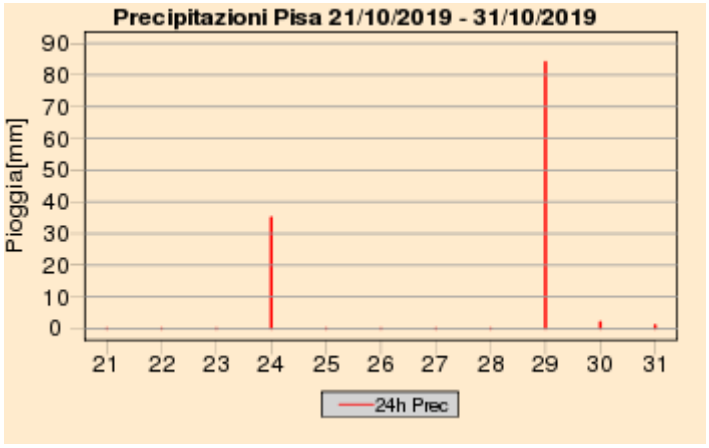


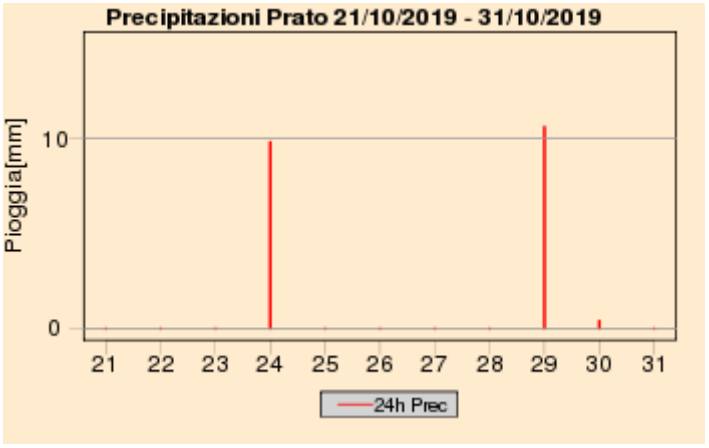


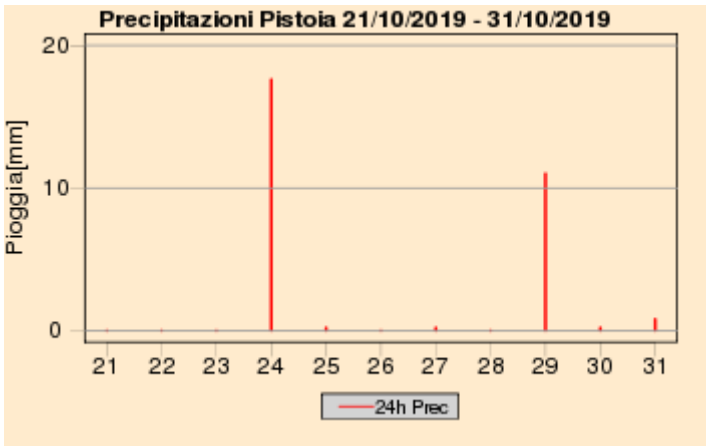


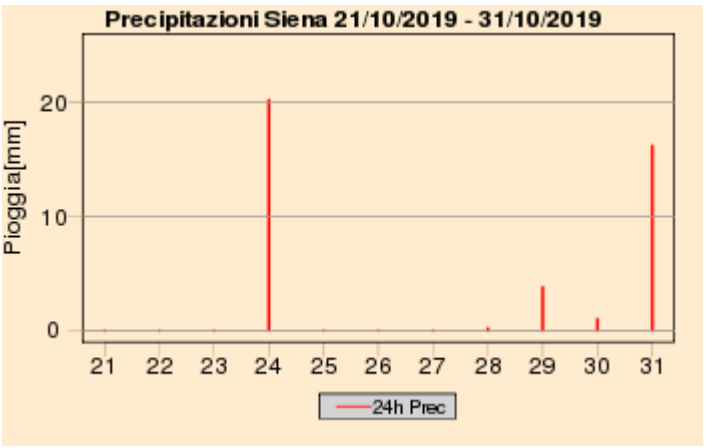




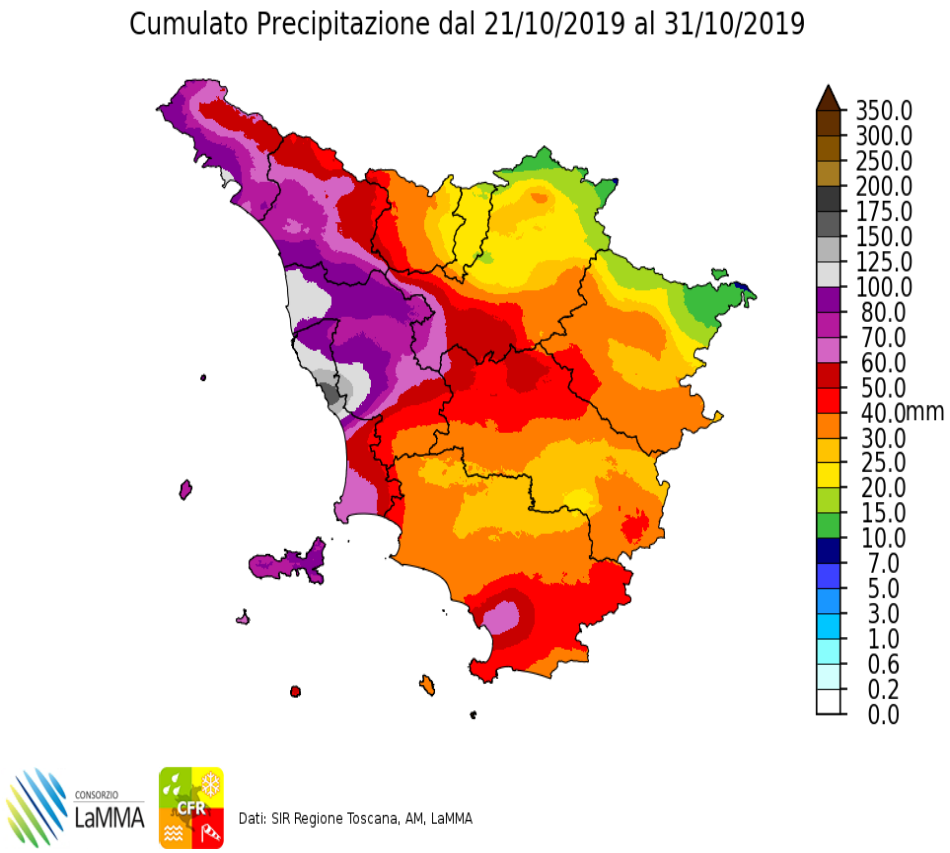




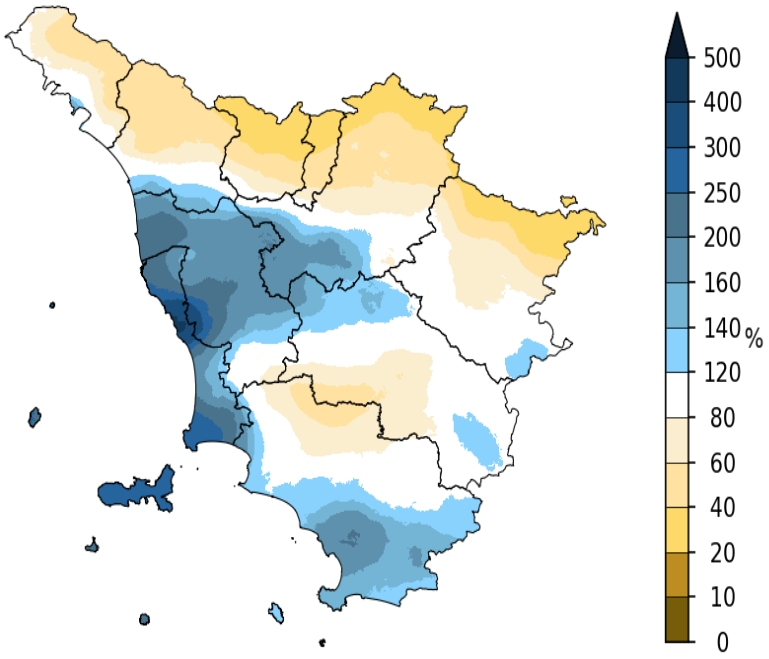




Quadro regionale – Cumulati decadali di precipitazione

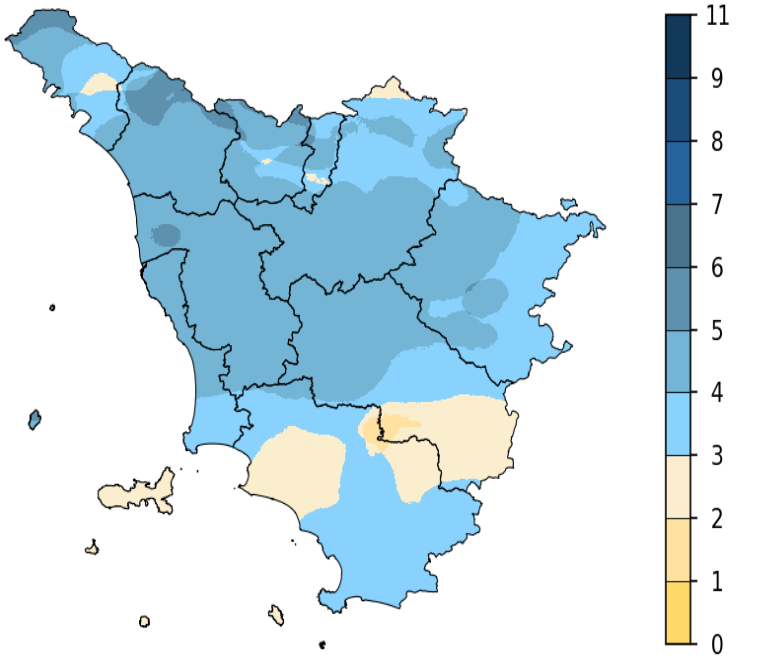


Percentuale di Precipitazione rispetto alla media climatica
dal 21/10/2019 al 31/10/2019



Dati: SIR Regione Toscana, AM, LaMMA

Giorni con Pioggia ≥ di 1 mm dal 21/10/2019 al 31/10/2019

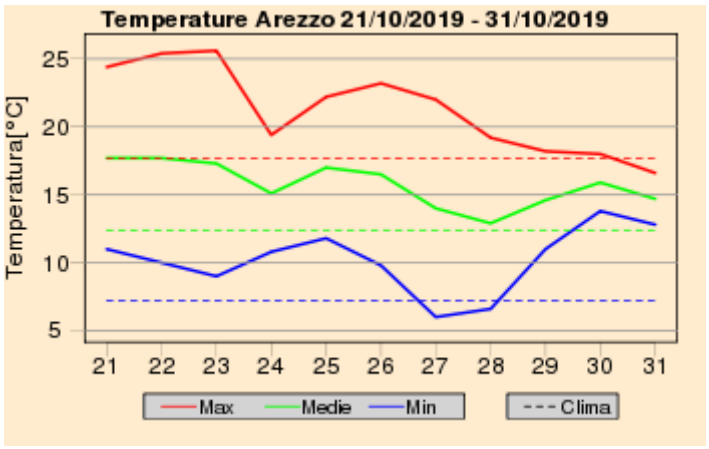


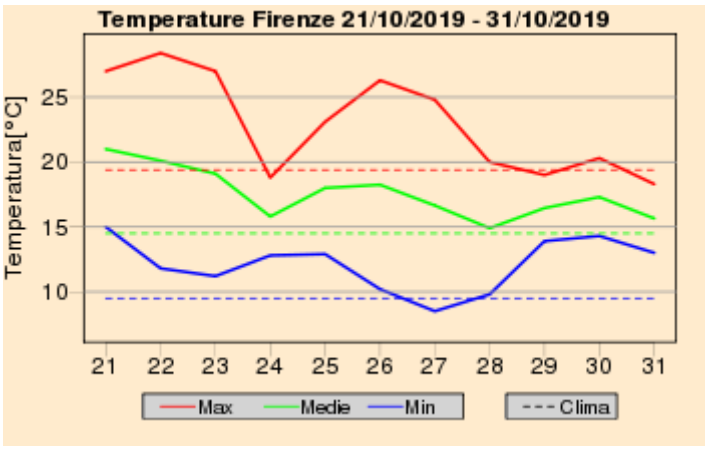
Dati: SIR Regione Toscana, AM, LaMMA

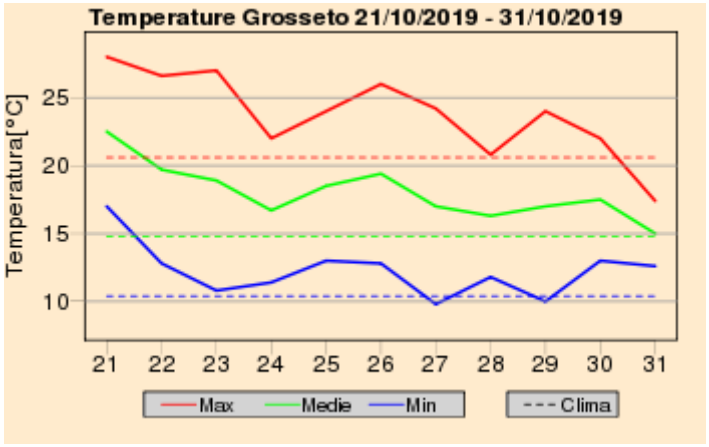
III decade - Quadro regionale – Temperature

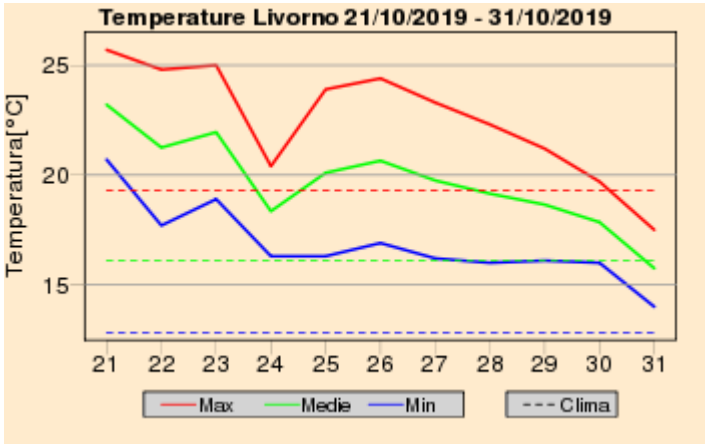
Dal punto di vista termico la terza decade di Ottobre è risultata molto mite ha fatto registrare temperature decisamente più elevate di quelle tipiche del periodo.

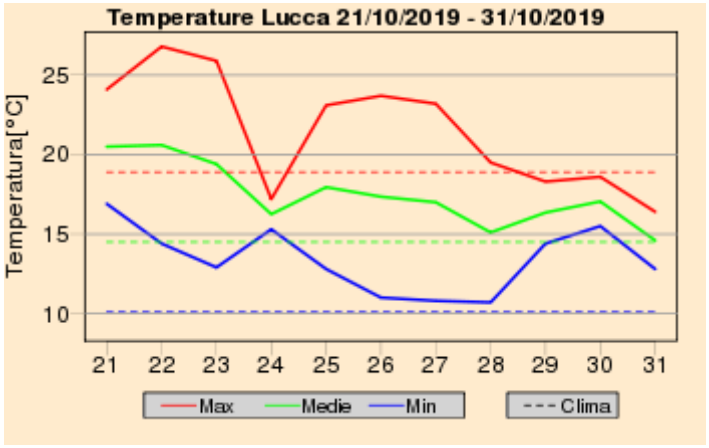
Sia le massime che le minime giornaliere si sono infatti mantenute complessivamente di 3-4 gradi superiori alle medie.

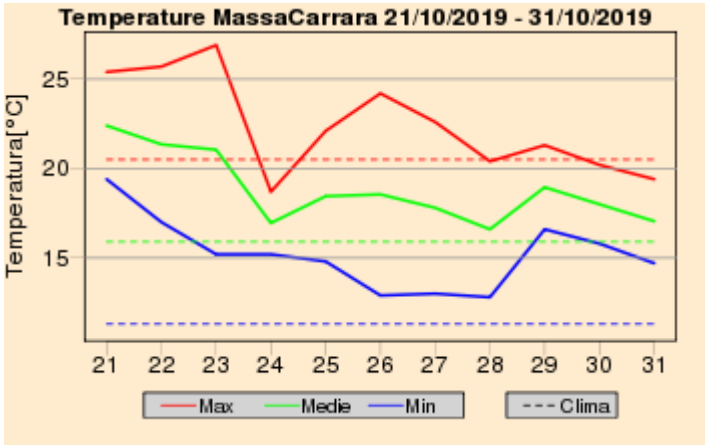


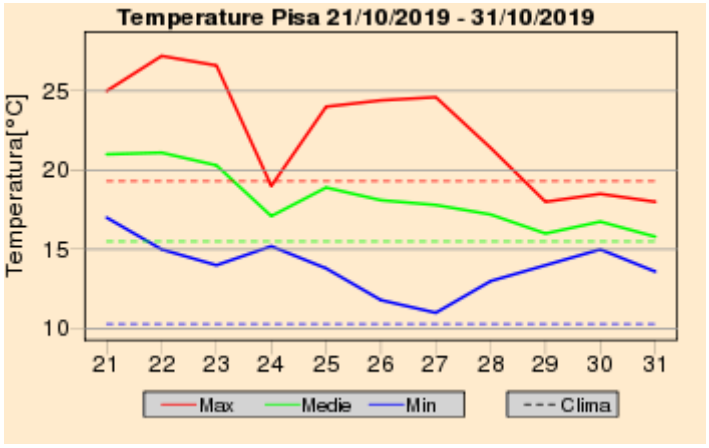


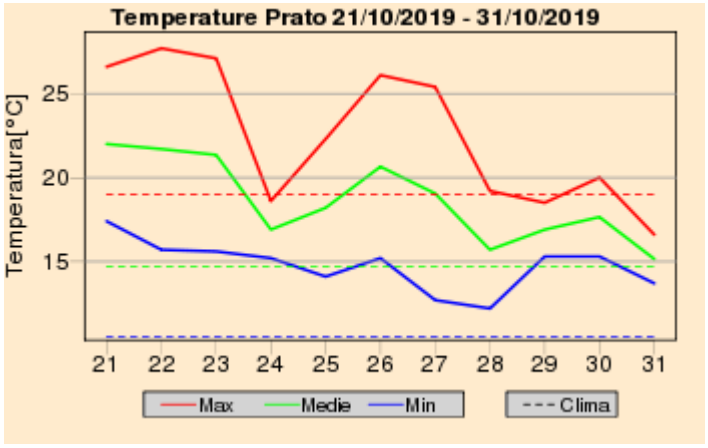


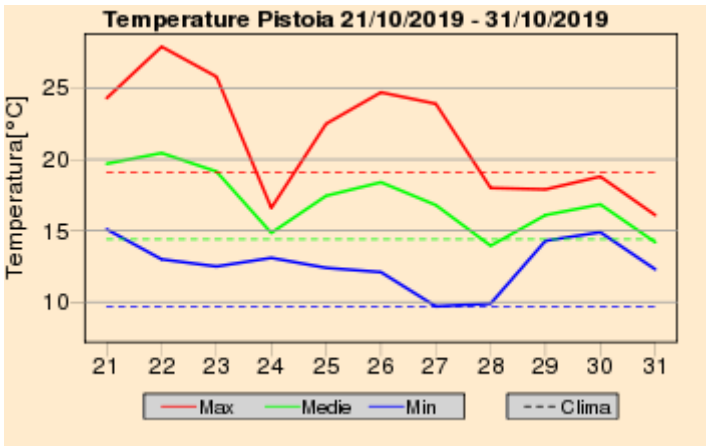


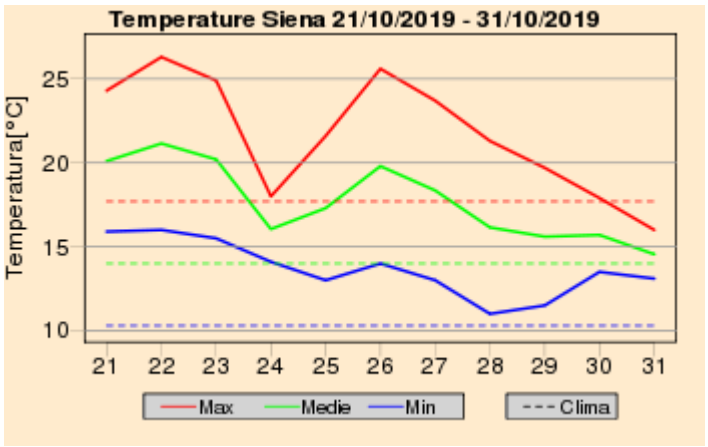




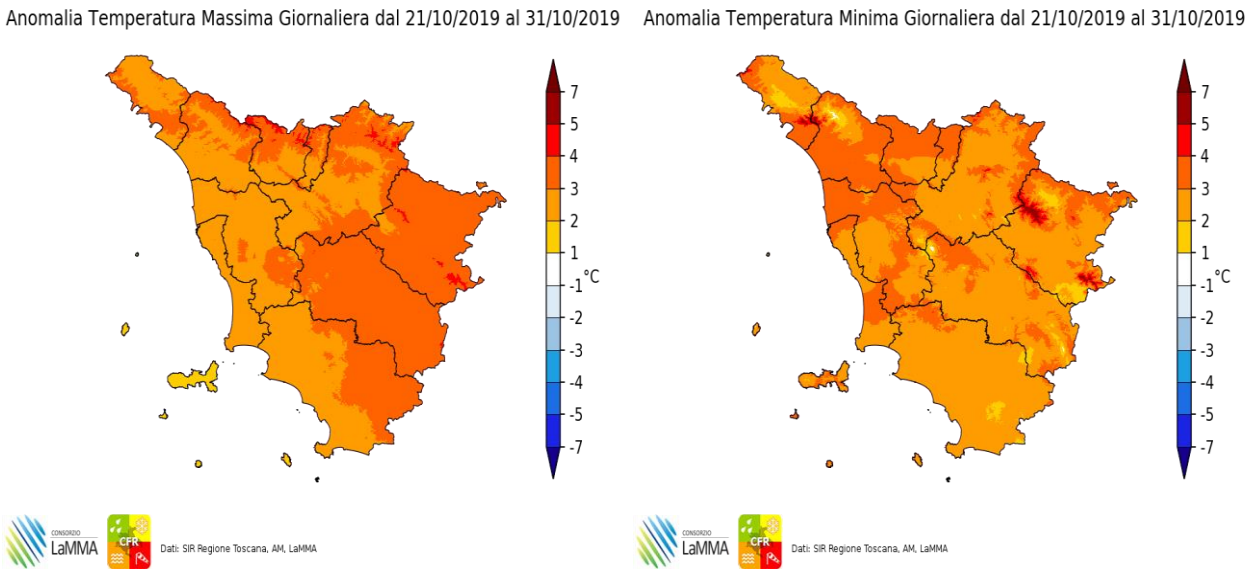








Quadro regionale – Anomalie termiche

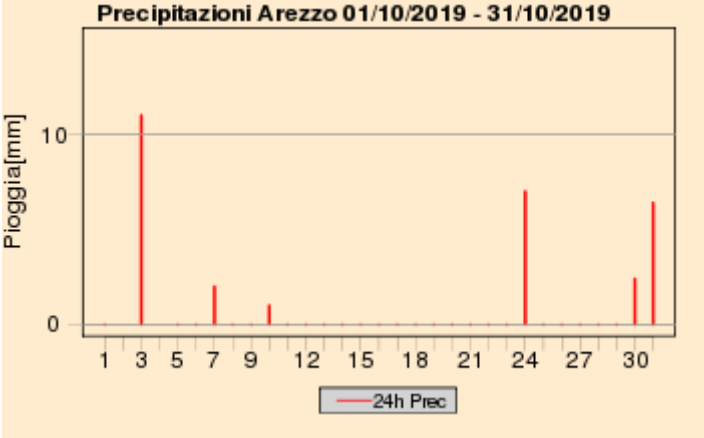


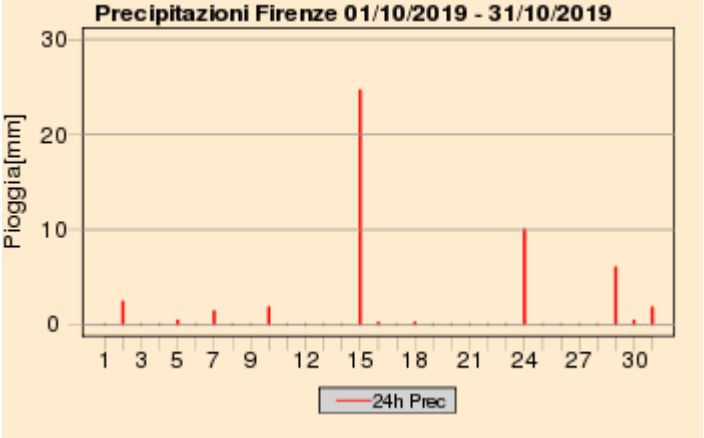
Anomalia termica decadale per le temperature massime e minime giornaliere

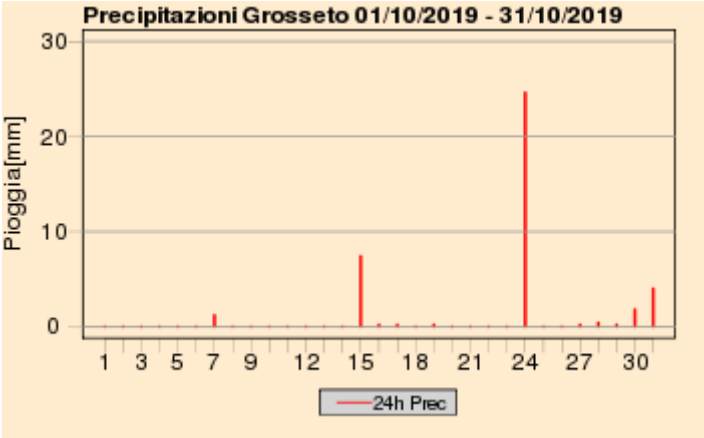
Grafici mensili: Precipitazioni

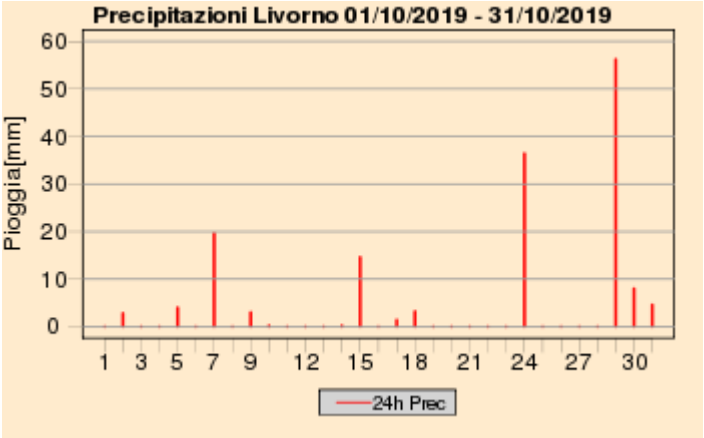
Le piogge osservate nel mese di Ottobre sono risultate inferiori alla media climatologica 1981-2010: i cumulati più abbondanti si sono registrati sul nord ovest e sulla costa centro settentrionale, ove si sono registrati fino a oltre 200 mm, mentre su gran parte delle zone interne e sul centro sud della regione i cumulati non hanno generalmente raggiunto i 100 mm.

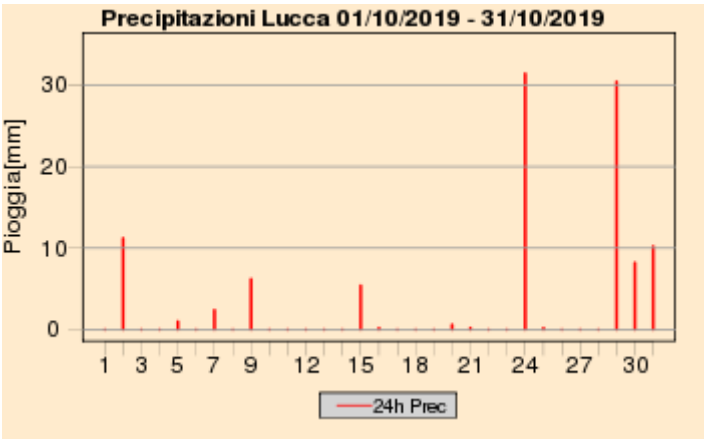
Quadro regionale – Precipitazioni osservate nei capoluoghi

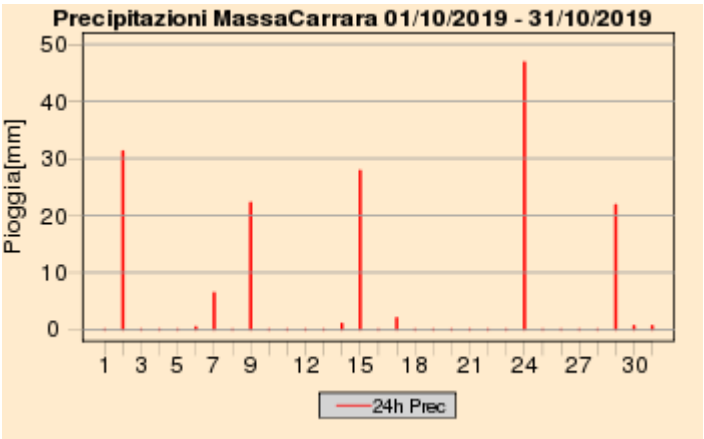


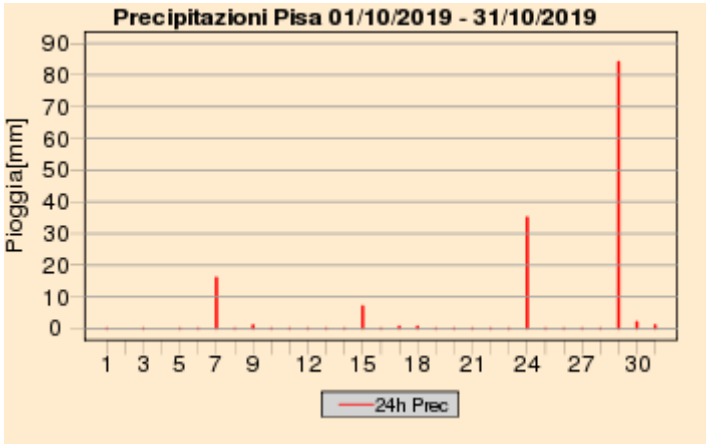


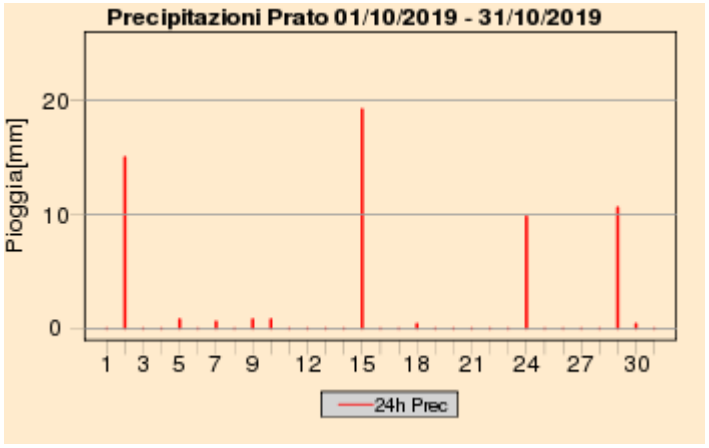


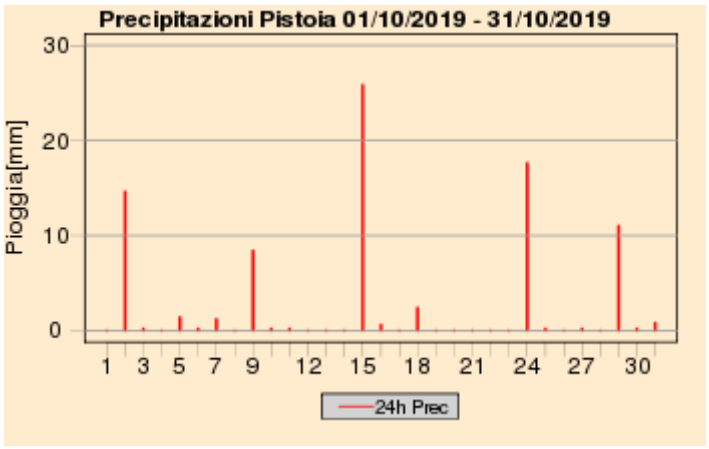


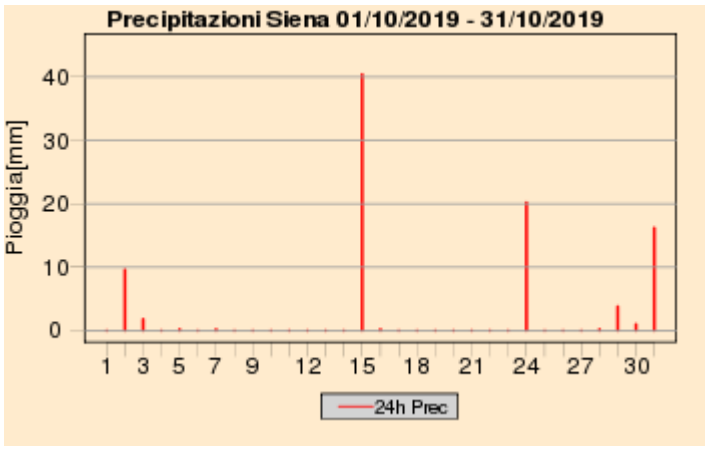




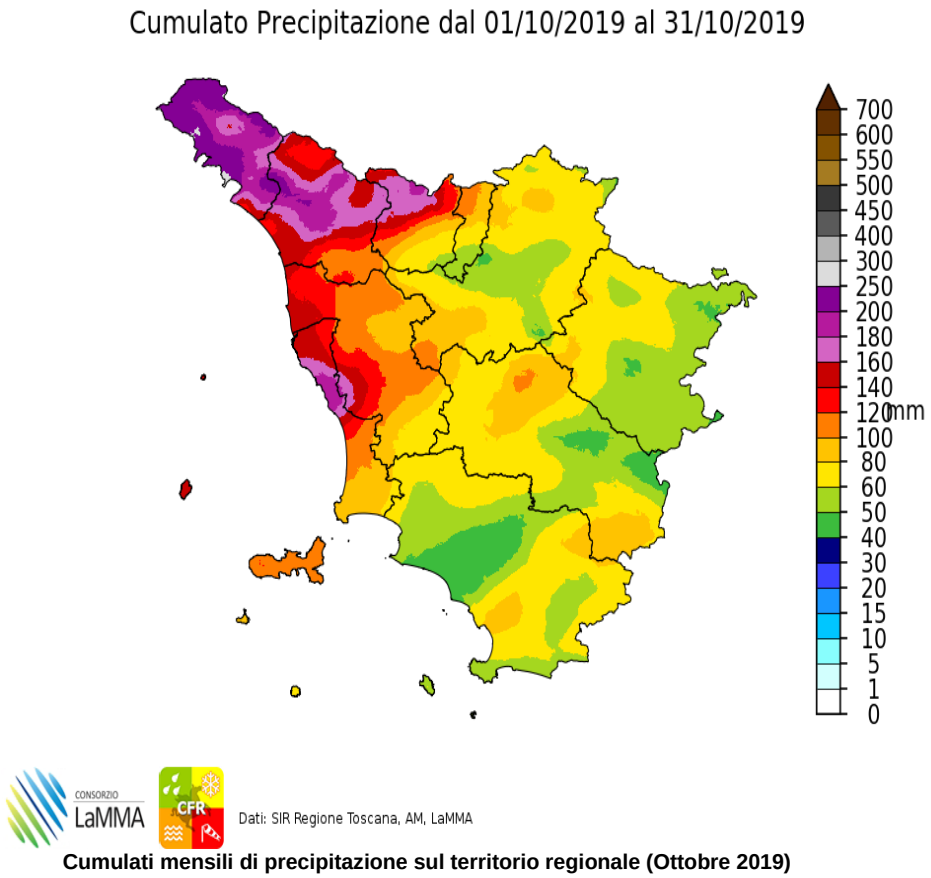






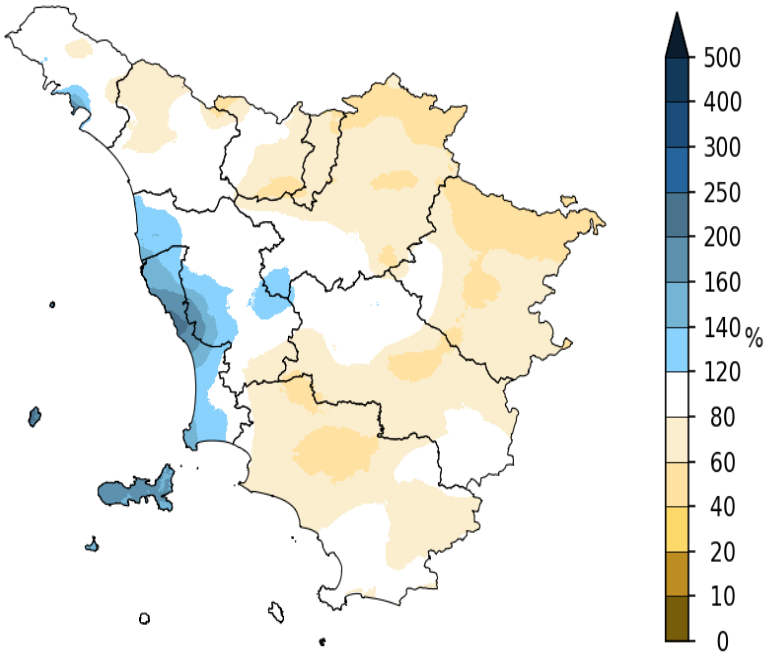


Quadro regionale – Cumulati mensili di precipitazione, anomalia di precipitazione e numero di giorni di pioggia



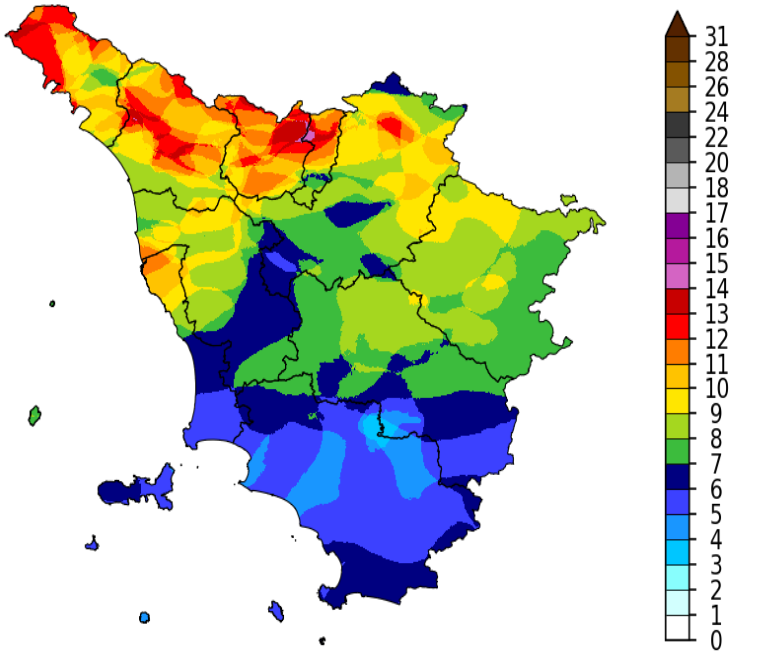
Cumulati mensili di precipitazione sul territorio regionale (Ottobre 2019)

Percentuale di Precipitazione rispetto alla media climatica
dal 01/10/2019 al 31/10/2019



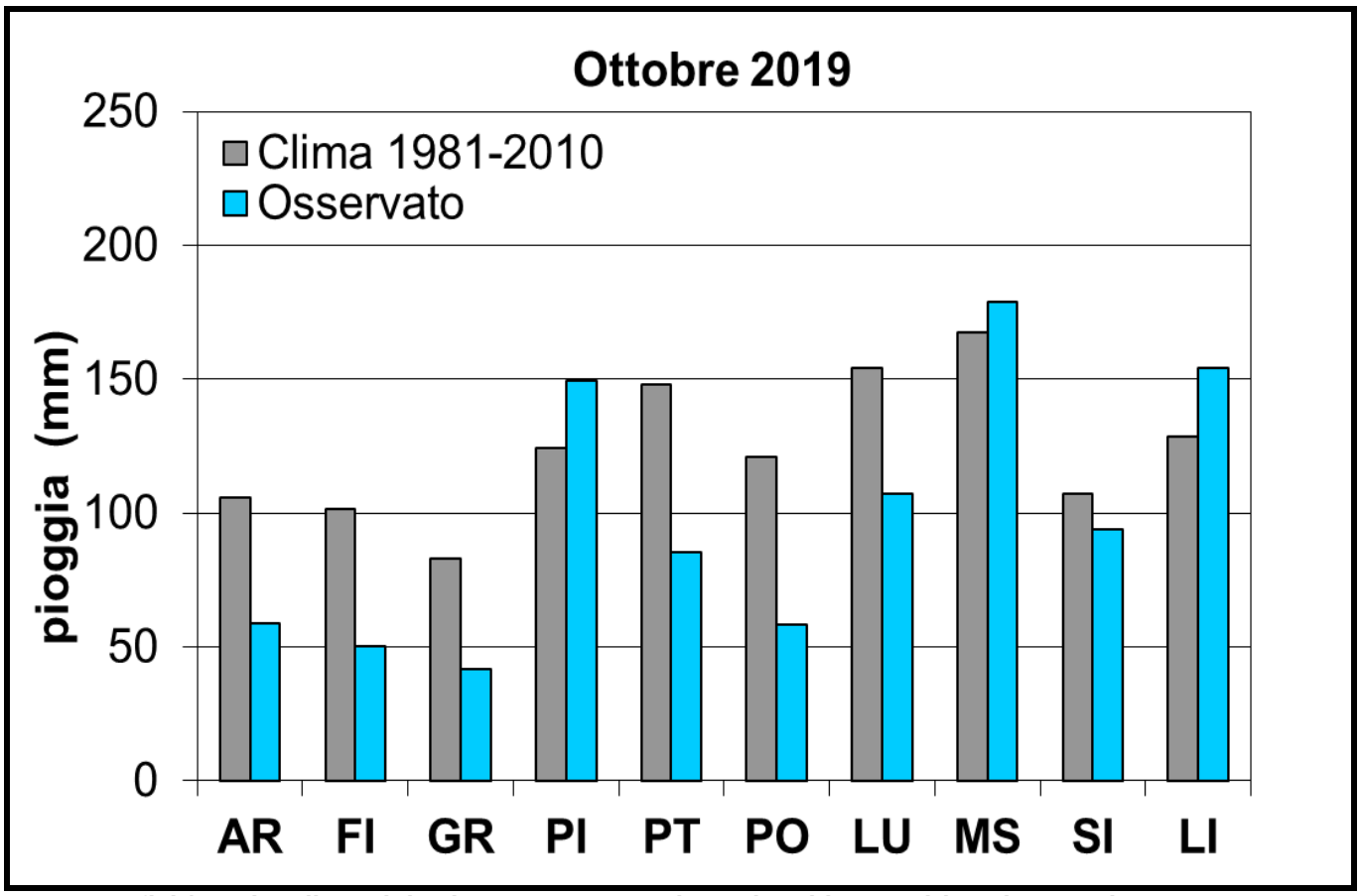
Dati: SIR Regione Toscana, AM, LaMMA

Giorni con Pioggia ≥ di 1 mm dal 01/10/2019 al 31/10/2019

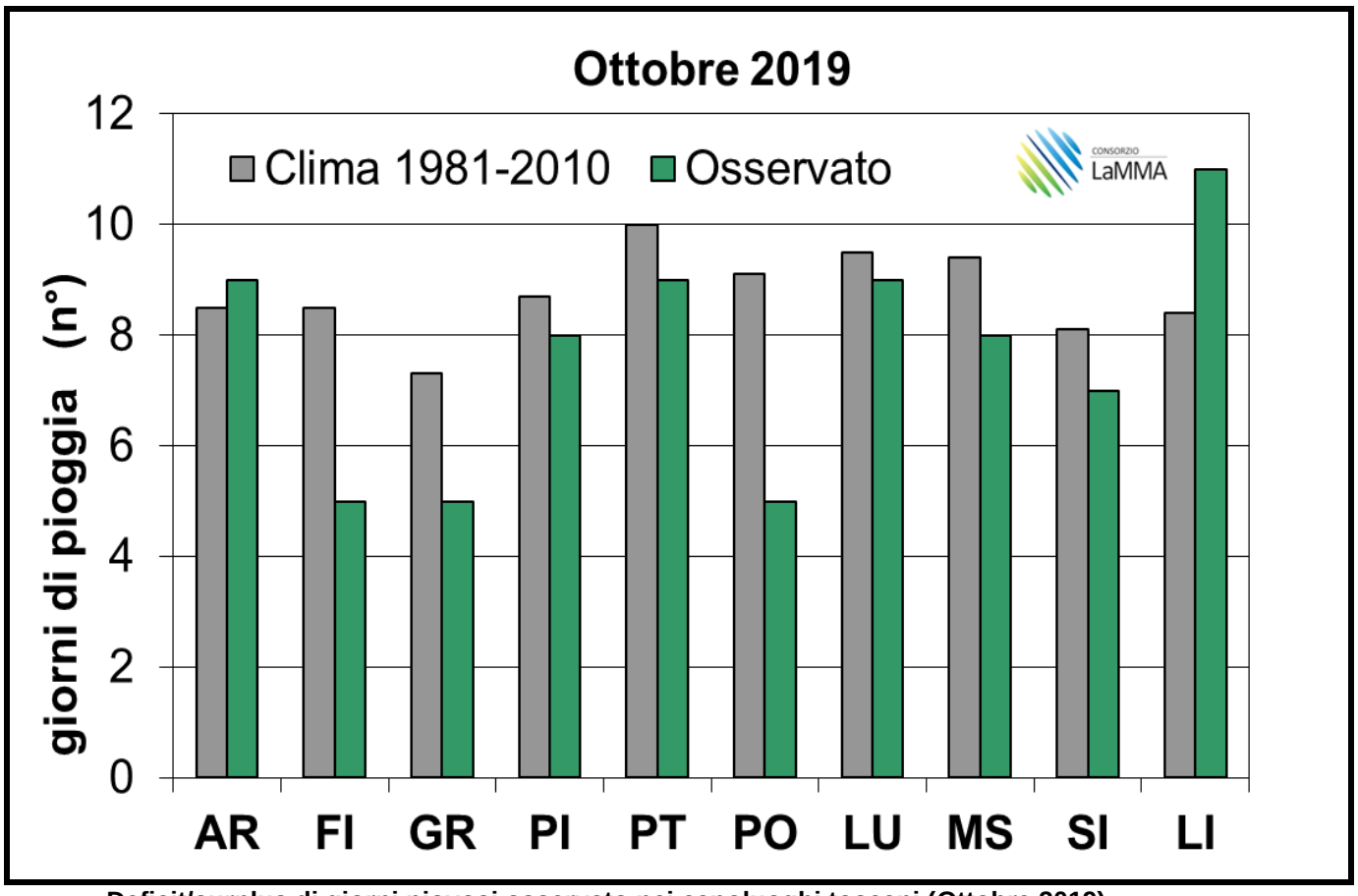


Dati: SIR Regione Toscana, AM, LaMMA

Quadro regionale – Anomalie di precipitazione e del numero di giorni piovosi nei capoluoghi



Deficit/surplus di precipitazione osservato nei capoluoghi toscani (Ottobre 2019)

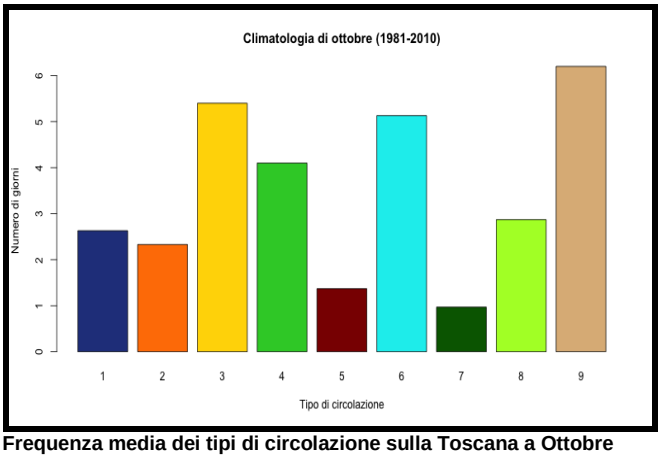


Deficit/surplus di giorni piovosi osservato nei capoluoghi toscani (Ottobre 2019)

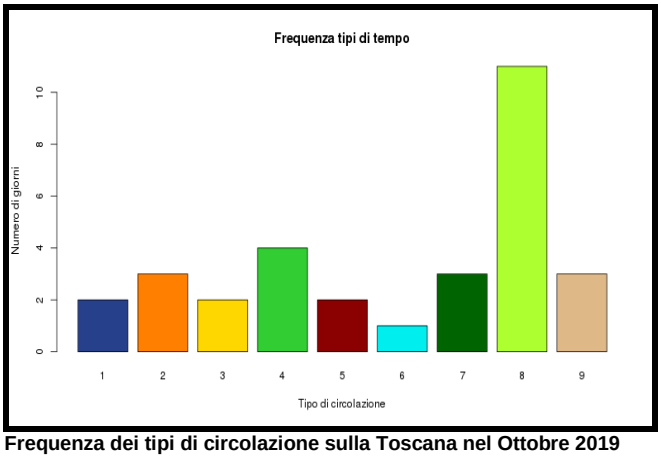
tipi di circolazione prevalenti nel mese di Ottobre e impatto sulle precipitazioni

Per approfondimento sulle analisi dei tipi di circolazione si rimanda alla pagina web
www.lamma.rete.toscana.it/clima-e-energia/climatologia/tipi-di-circolazione-eobs

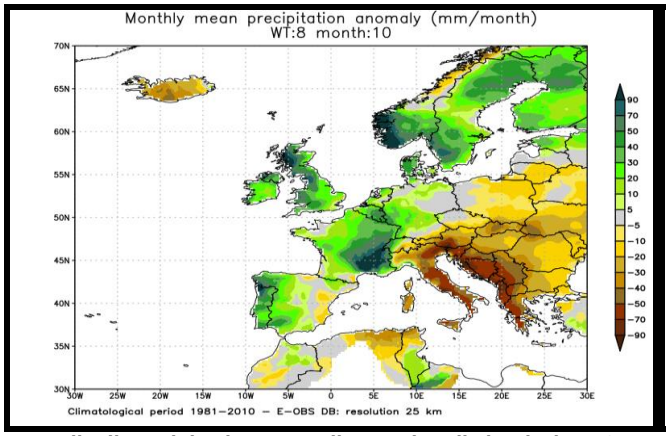
La circolazione prevalente nel corso del mese di Ottobre 2019 secondo la classificazione PCT (Principal Component Transversa) è risultata la 8 (***pressione medio alta con minimo oltralpe***), osservata ben 12 giorni su 31; si tratta di una configurazione che favorisce un clima asciutto con precipitazioni sotto la media.
Il secondo tipo di tempo più frequente nel mese di Ottobre è risultata la numero 4 (***circolazione ciclonica con intenso flusso da SSO***), un tipo di circolazione che, invece, favorisce precipitazioni ben superiori alle medie su tutta la regione.



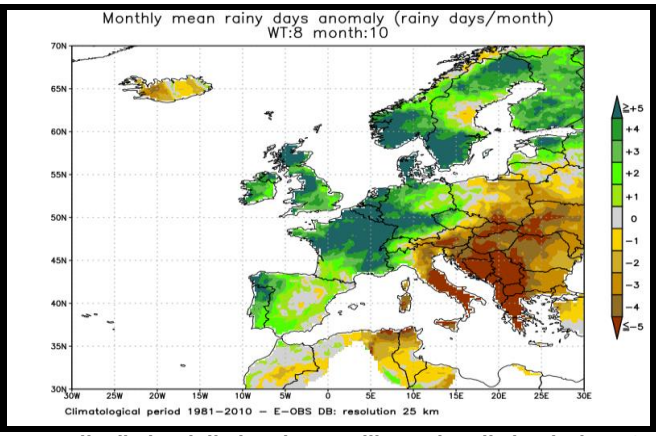
Frequenza media dei tipi di circolazione sulla Toscana a Ottobre



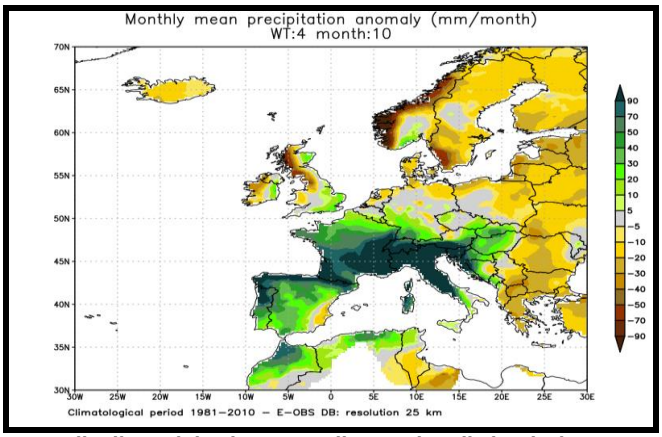
Frequenza dei tipi di circolazione sulla Toscana nel Ottobre 2019



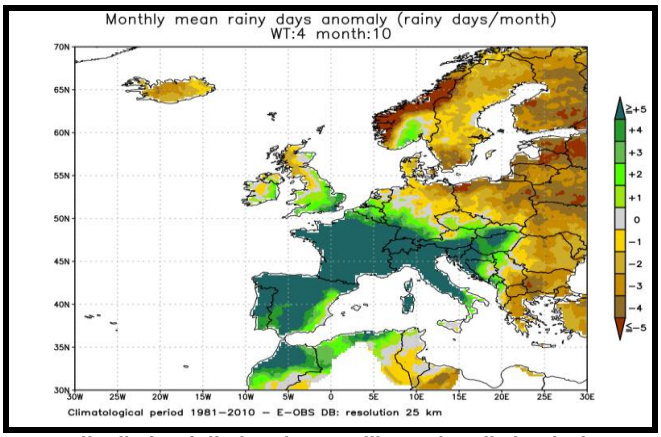
Anomalia di precipitazione mensile con tipo di circolazione 8



Anomalia di giorni di pioggia mensili con tipo di circolazione 8



Anomalia di precipitazione mensile con tipo di circolazione 4

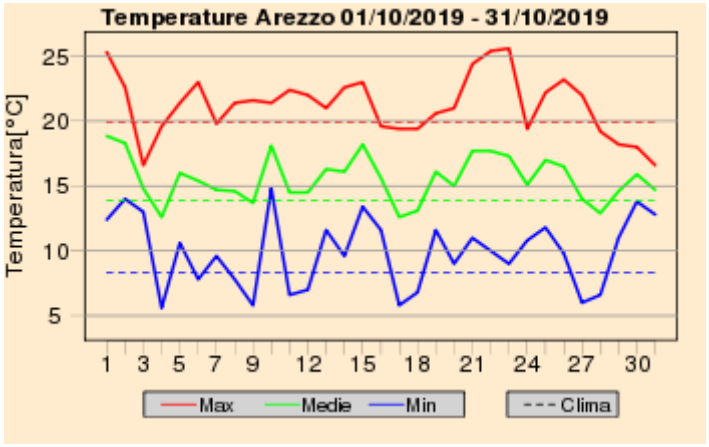


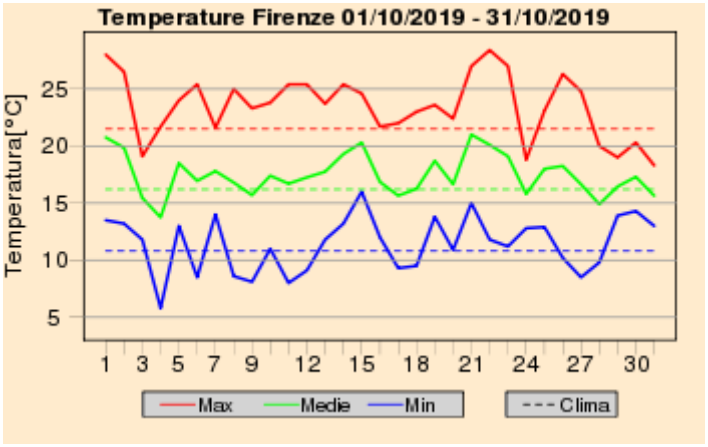
Anomalia di giorni di pioggia mensili con tipo di circolazione 4

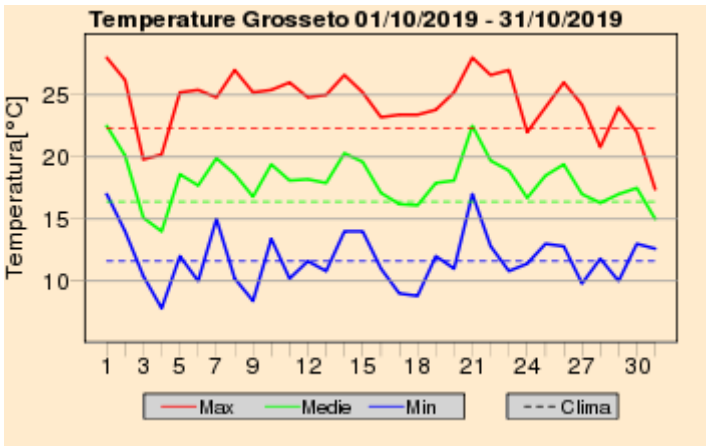
Grafici mensili: Temperature

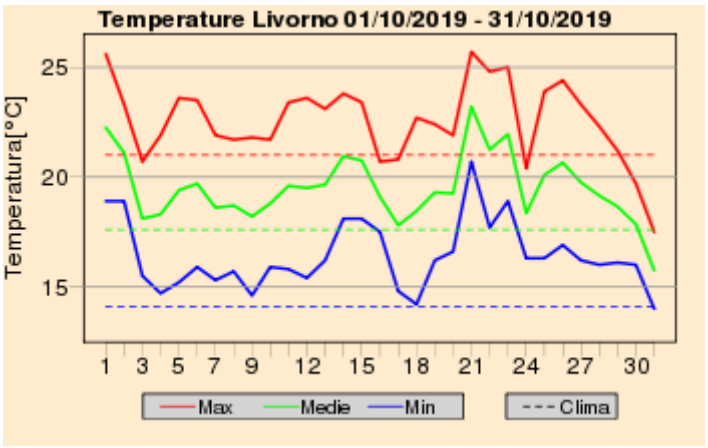
Dal punto di vista termico il mese di Ottobre è risultato più caldo rispetto alla normale climatica calcolata sul trentennio 81-2010.

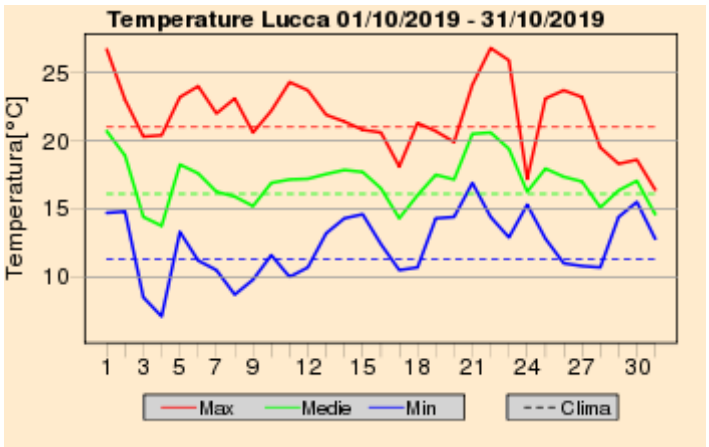
Le maggiori anomalie negative sono state osservate per i valori massimi giornalieri, che sono risultati superiori di circa 2-3 °C rispetto alla media; più contenente le anomalie positive per quanto riguarda invece i valori minimi giornalieri, cha hanno fatto registrare anomalie di circa 1-2 °C.

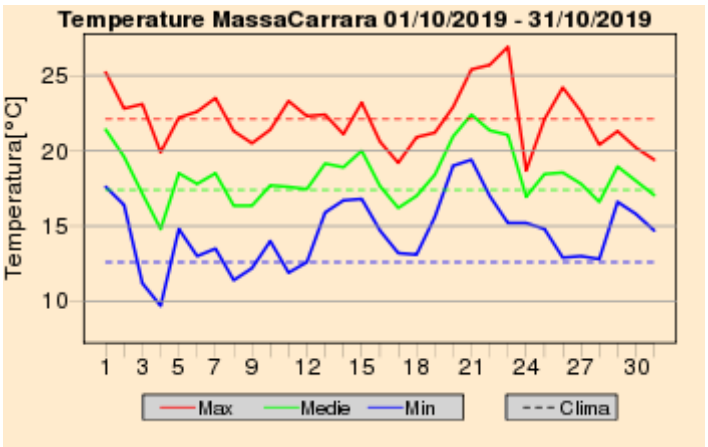


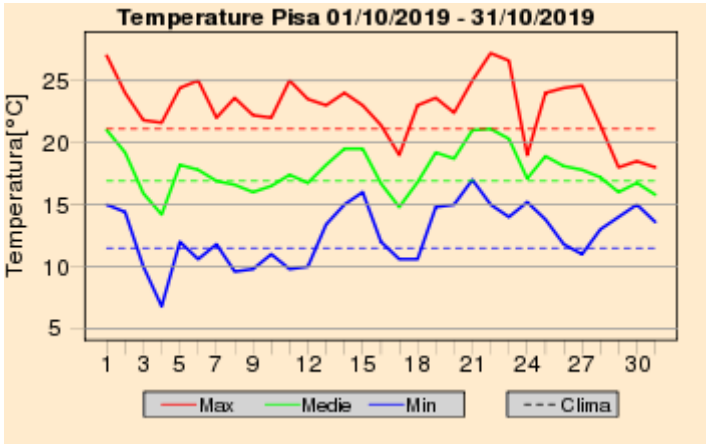


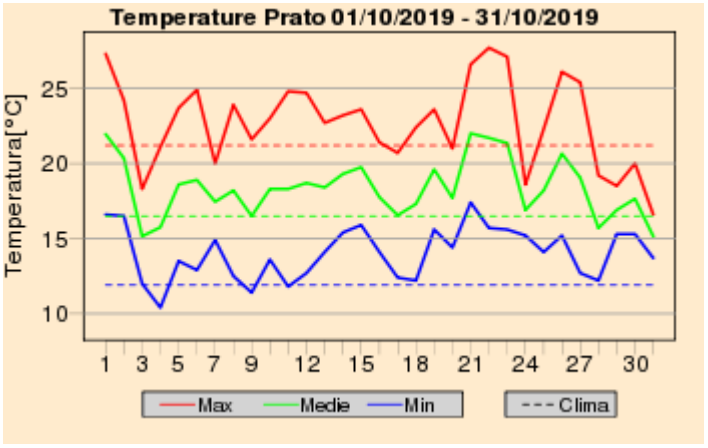


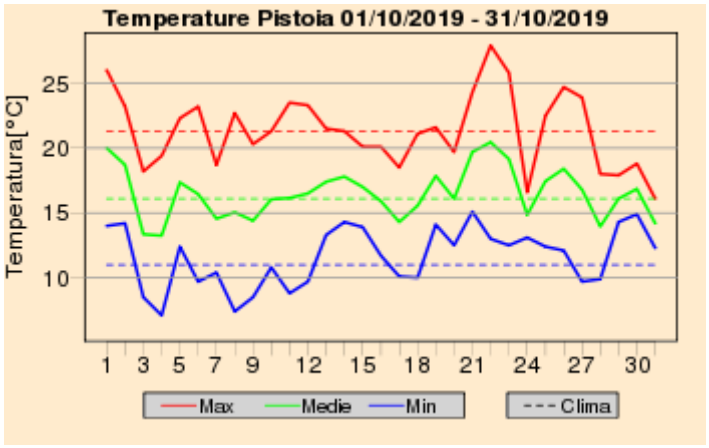


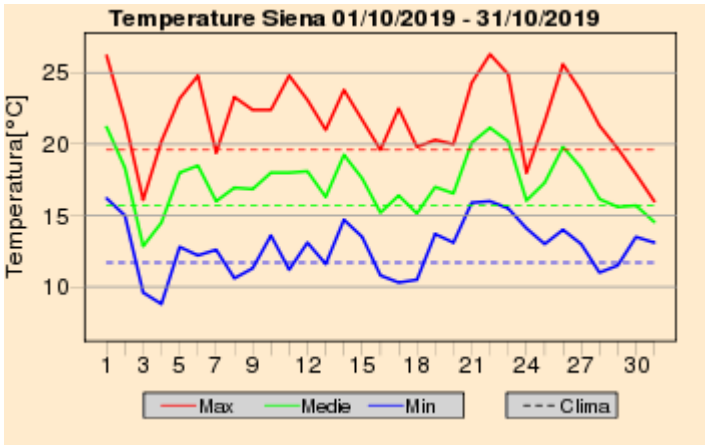




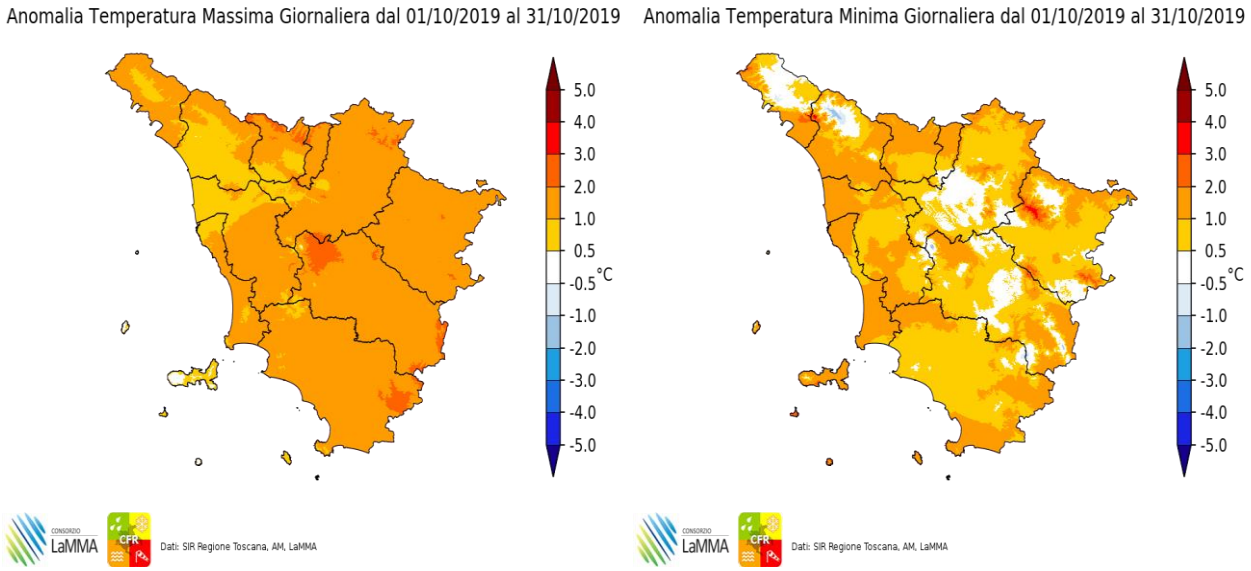








Quadro regionale – Anomalie termiche

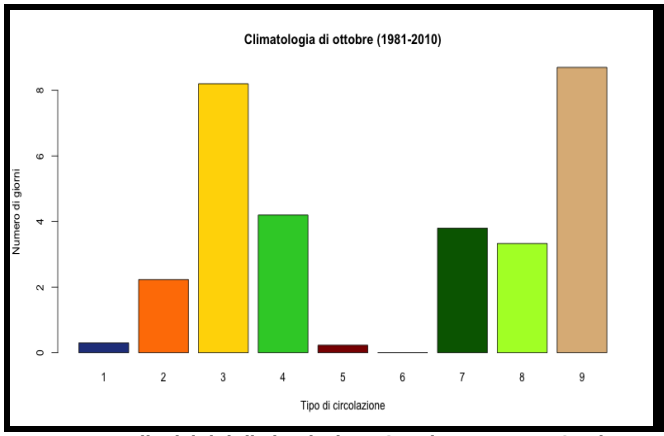


Anomalia termica mensile per le temperature massime e minime giornaliere

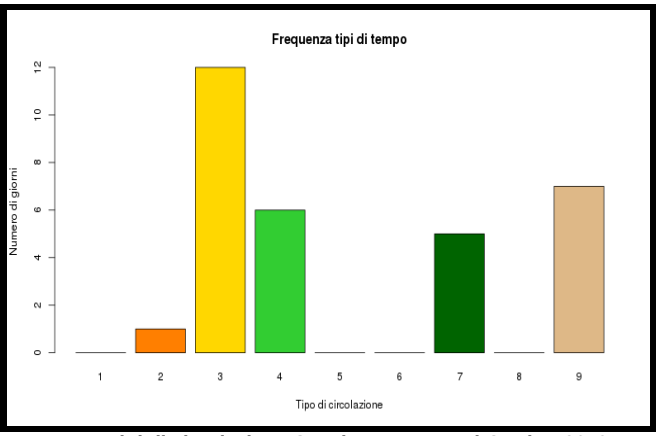
Quadro regionale – tipi di circolazione prevalenti nel mese di Ottobre e impatto sulle temperature

Per approfondimento sulle analisi dei tipi di circolazione si rimanda alla pagina web
www.lamma.rete.toscana.it/clima-e-energia/climatologia/tipi-di-circolazione-eobs

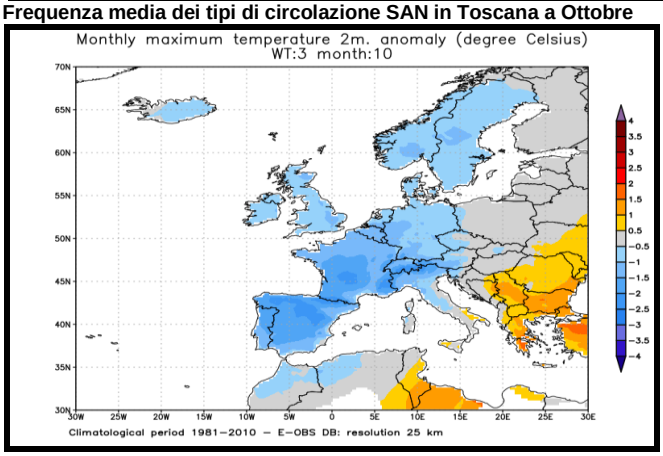
I tipi di tempo osservati nel corso del mese di Ottobre secondo il metodo di classificazione SAN (classificazione SAN - Simulated Annealing) sono risultati quelli più tipicamente presenti a livello climatologico.
Il tipo di tempo più frequente è risultato infatti il numero 3 (***flusso occidentale di matrice atlantica***), presente ben 12 giorni su 31; questo tipo di circolazione è associato a temperature generalmente in linea con le medie, o leggermente inferiori per quanto riguarda le massime.
Un altro tipo di tempo che è risultato abbastanza presente è stato il tipo di tempo 9 (***promontorio con flusso da NO di origine atlantica***), osservato per 6 giorni. Anche questo tipo di circolazione non favorisce particolari anomalie termiche sulla nostra regione.



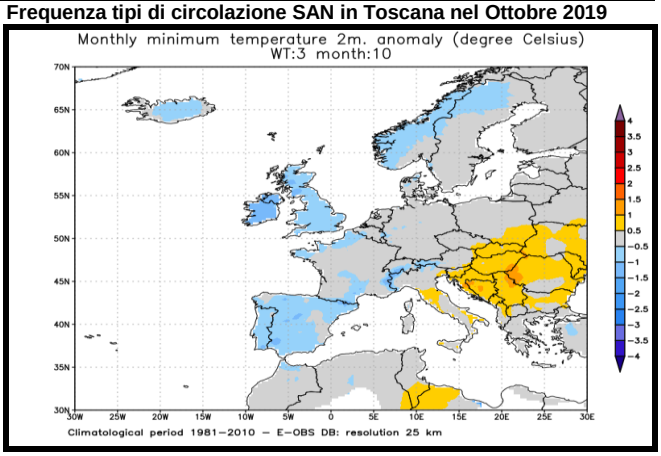
Frequenza media dei tipi di circolazione SAN in Toscana a Ottobre



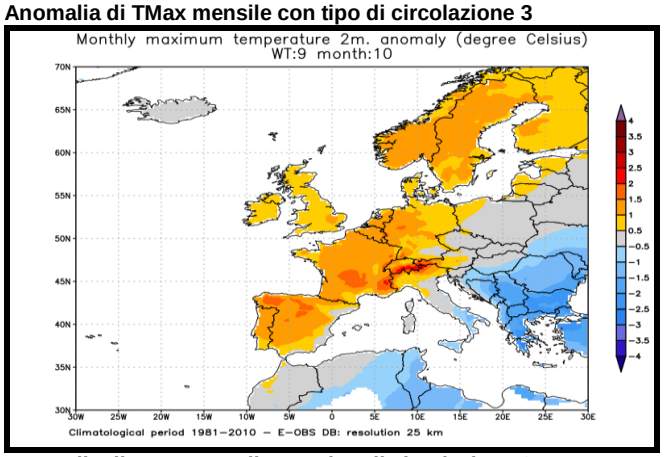
Frequenza tipi di circolazione SAN in Toscana nel Ottobre 2019



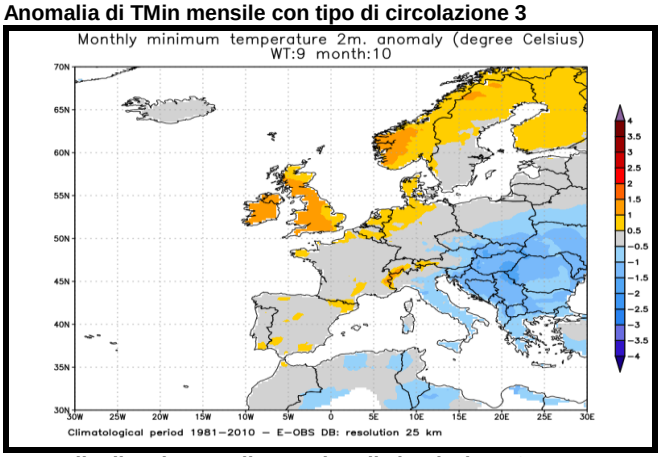
Anomalia di TMax mensile con tipo di circolazione 3



Anomalia di TMin mensile con tipo di circolazione 3



Anomalia di TMax mensile con tipo di circolazione 9



Anomalia di TMin mensile con tipo di circolazione 9

A cura di:

GIORGIO BARTOLINI

GIULIO BETTI

VALERIO CAPECCHI

LUCA FIBBI

DANIELE GRIFONI

GIANNI MESSERI

FRANCESCO PASI

FRANCESCO PIANI

MATTEO ROSSI

CLAUDIO TEI

TOMMASO TORRIGIANI

ROBERTO VALLORANI

BERNARDO GOZZINI

Fonte Dati:

SERVIZIO IDROLOGICO REGIONALE - SERVIZIO METEOROLOGICO DELL'AERONAUTICA MILITARE - CONSORZIO LAMMA