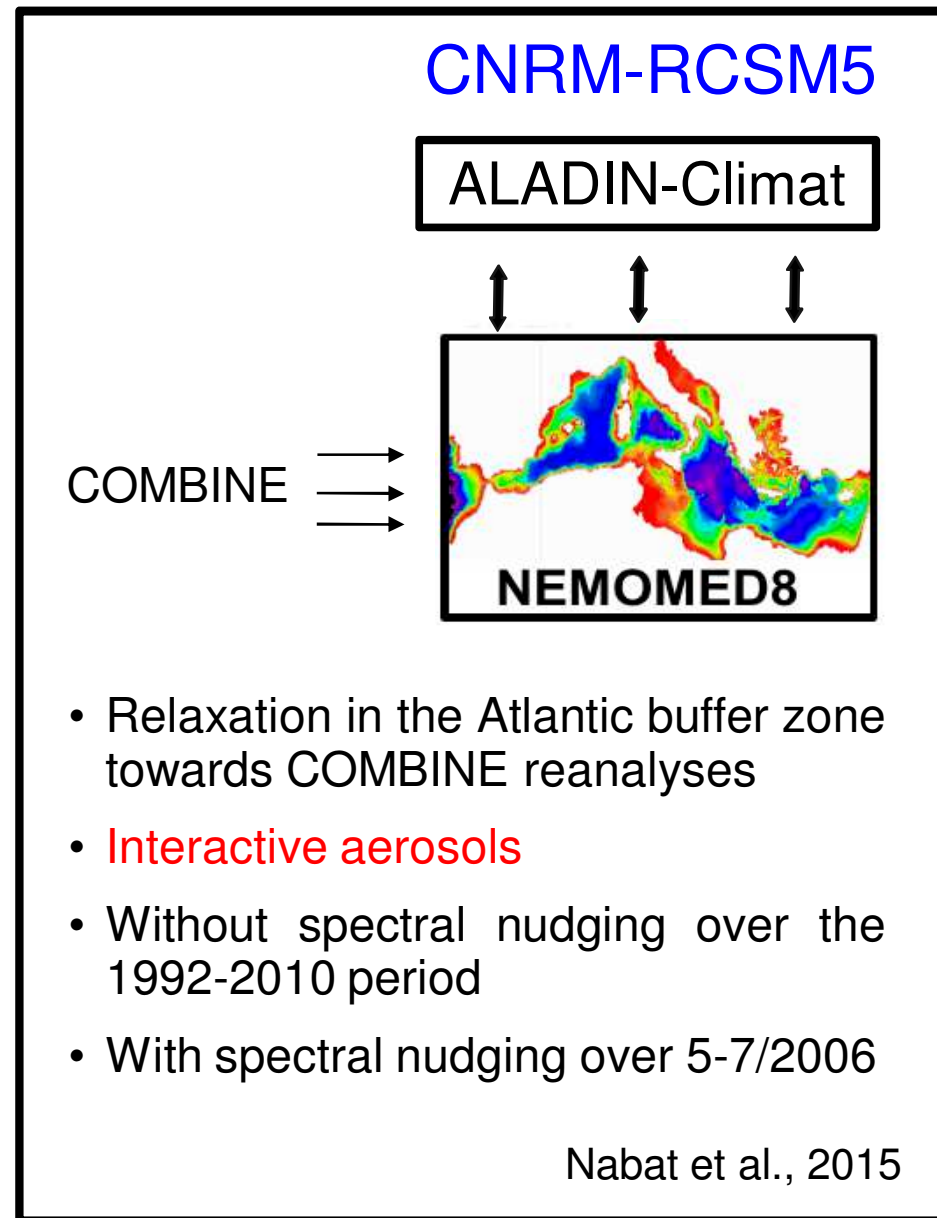
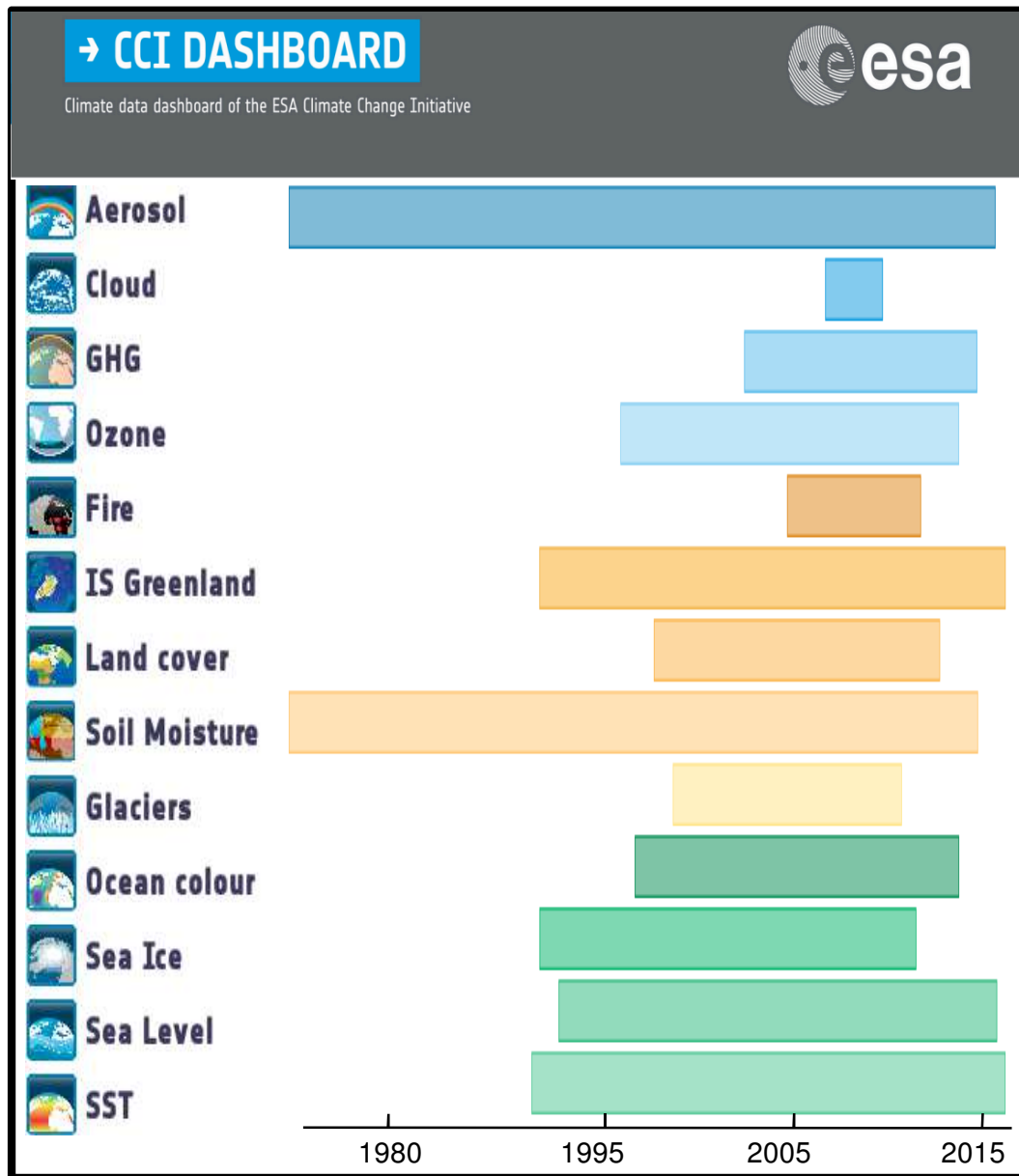




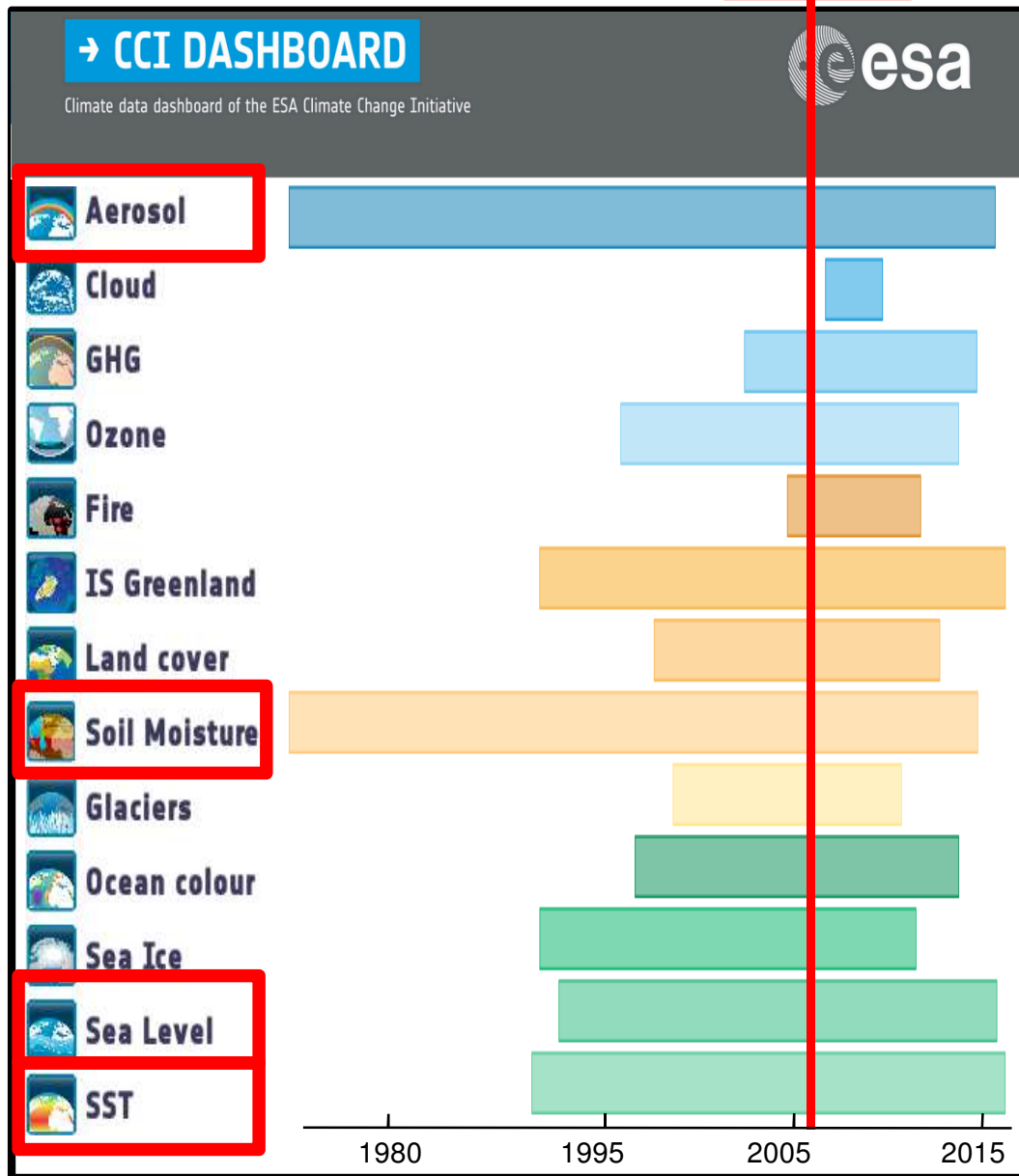
WP3.10 : Cross-assessment of CCI-ECVs and RCSM simulations over the Mediterranean domain





WP3.10 : Cross-assessment of CCI-ECVs and RCSM simulations over the Mediterranean domain

2006



CNRM-RCSM5

ALADIN-Climat

COMBINE →

NEMOMED8

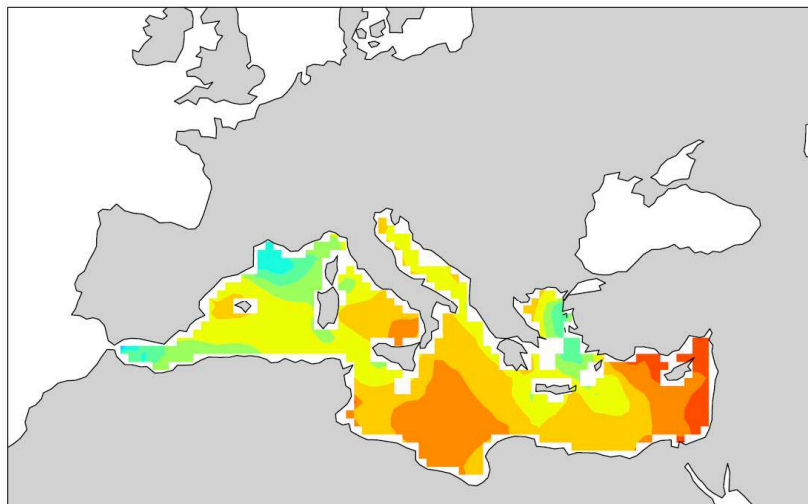
- Relaxation in the Atlantic buffer zone towards COMBINE reanalyses
- **Interactive aerosols**
- Without spectral nudging over the 1992-2010 period
- With spectral nudging over 5-7/2006

Nabat et al., 2015

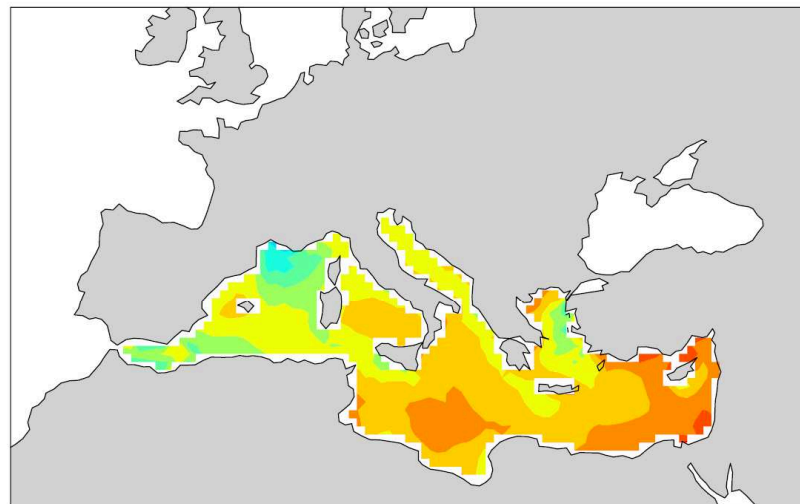


Sea Surface Temperature (1992-2010) over the Mediterranean domain

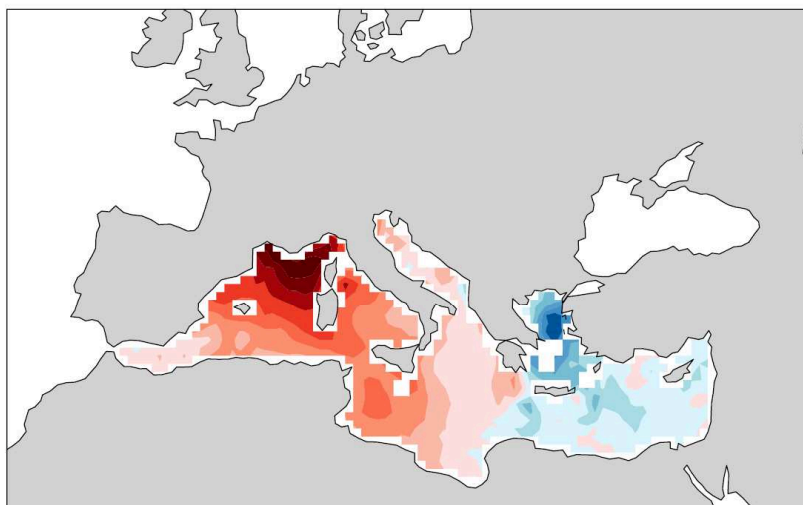
CCI Climatology July



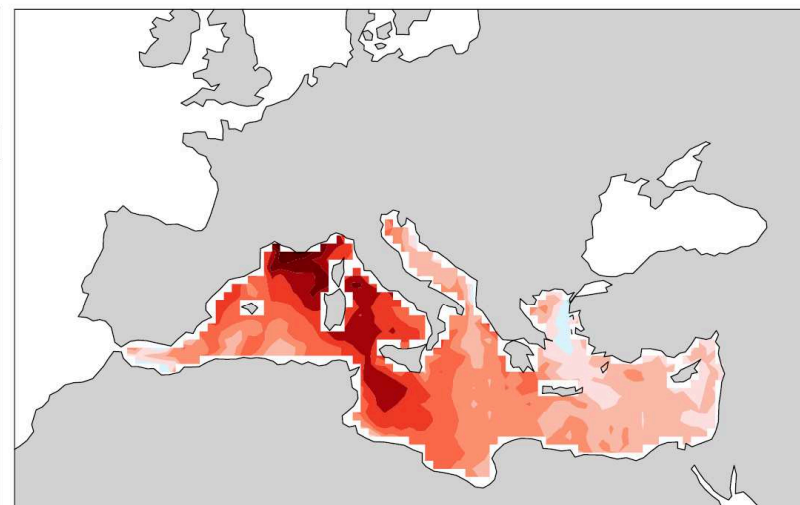
Model Climatology July



CCI Anomaly July 2006



Model Anomaly July 2006

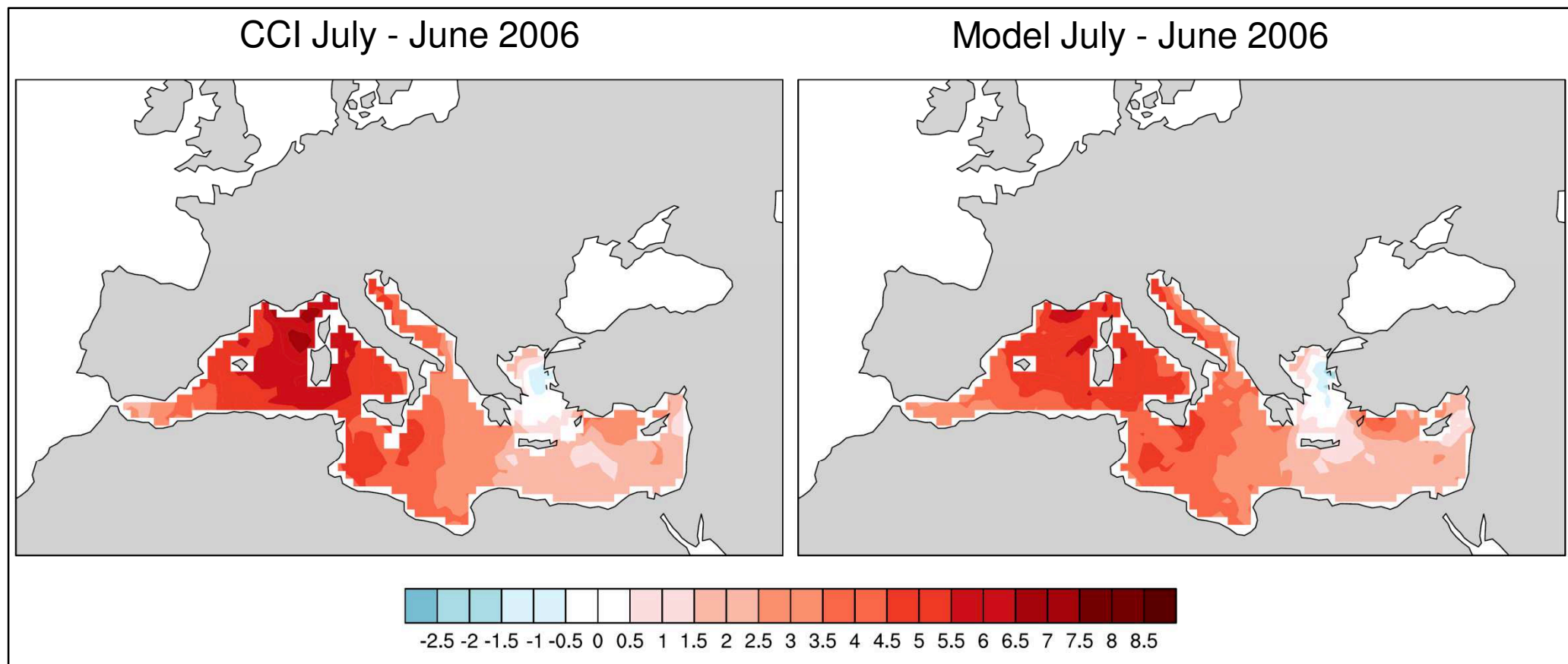




Sea Surface Temperature 2006

difference between July and June

- The development of the heat wave in July 2006 is evident in CCI SST as well as in the simulated SST
- The model simulation (with spectral nudging) is close to the observation



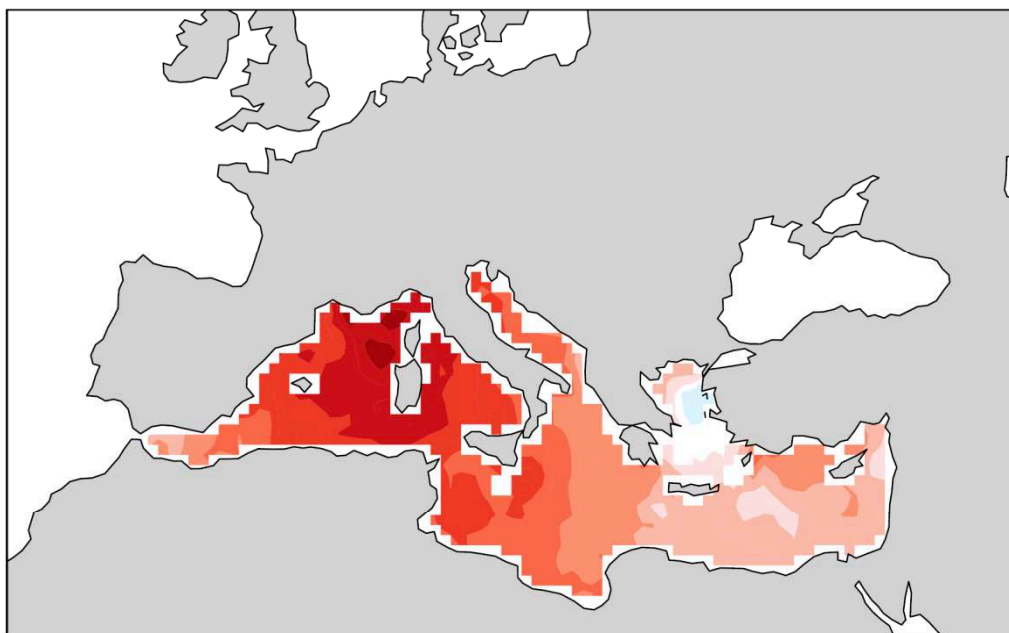


Sea Surface Temperature 2006

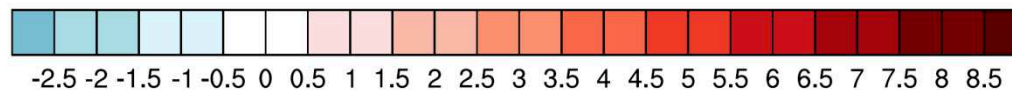
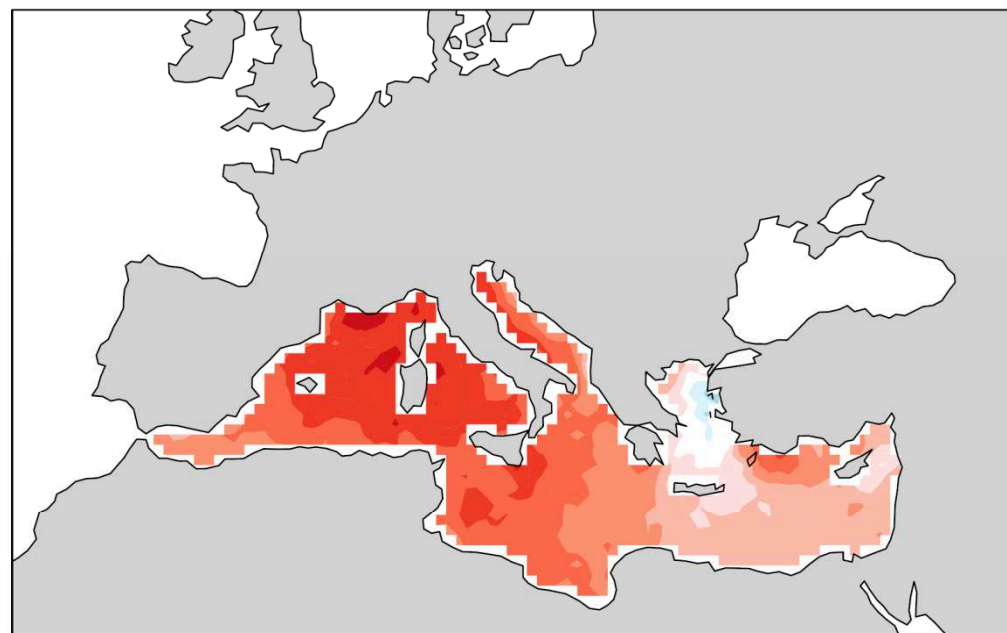
difference between July and June

	SST	
	June	July
DAILY	0.93	0.90

CCI July - June 2006



Model July - June 2006



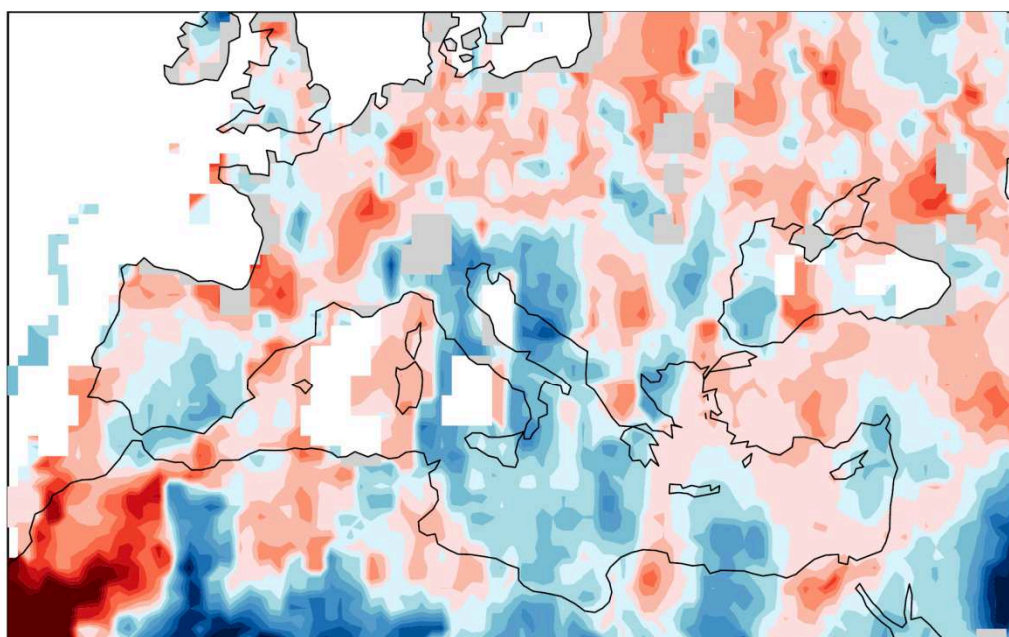


Aerosol Optical Depth 2006

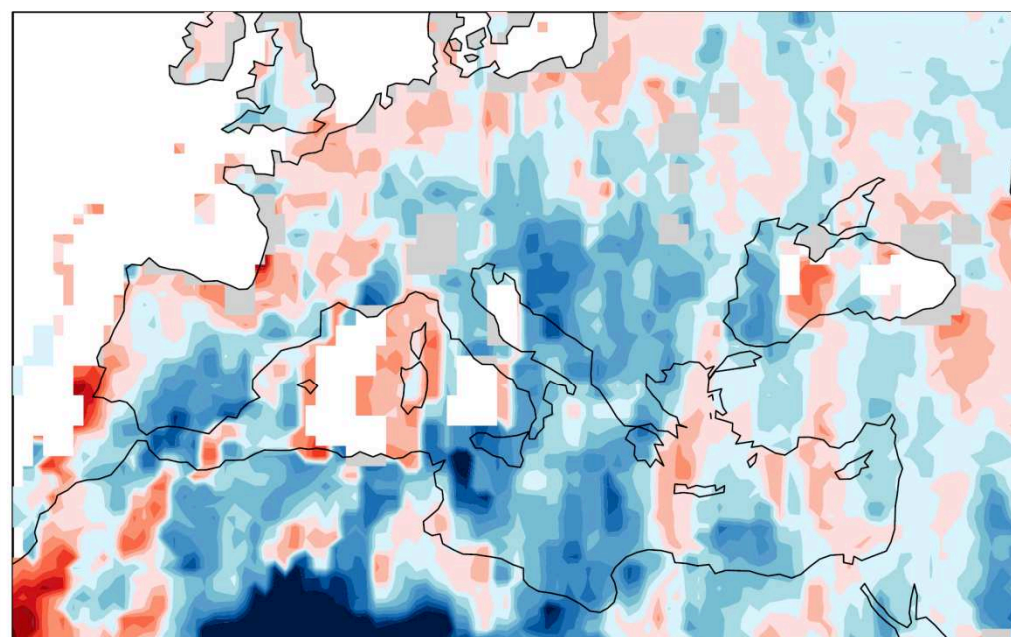
difference between July and June

	ADV		ORAC		SU		MODIS		MISR	
	June	July	June	July	June	July	June	July	June	July
DAILY	0.48	0.36	0.76	0.74	0.85	0.83				
MONTHLY	0.19	0.23	0.65	0.74	0.84	0.82	0.81	0.78	0.56	0.67

CCI AATSR SU July - June 2006



Model July - June 2006



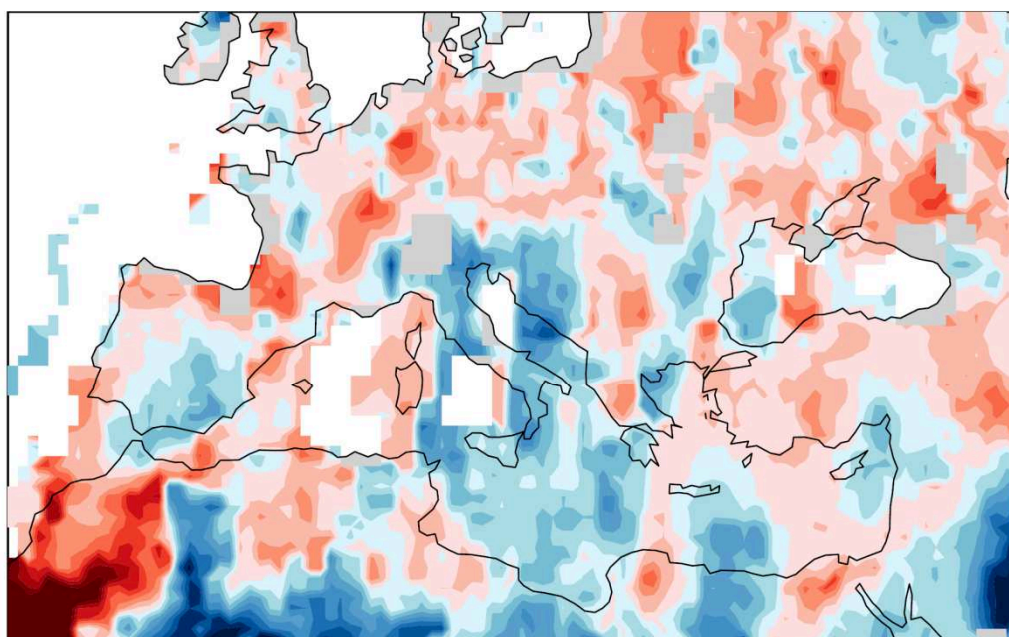


Aerosol Optical Depth 2006

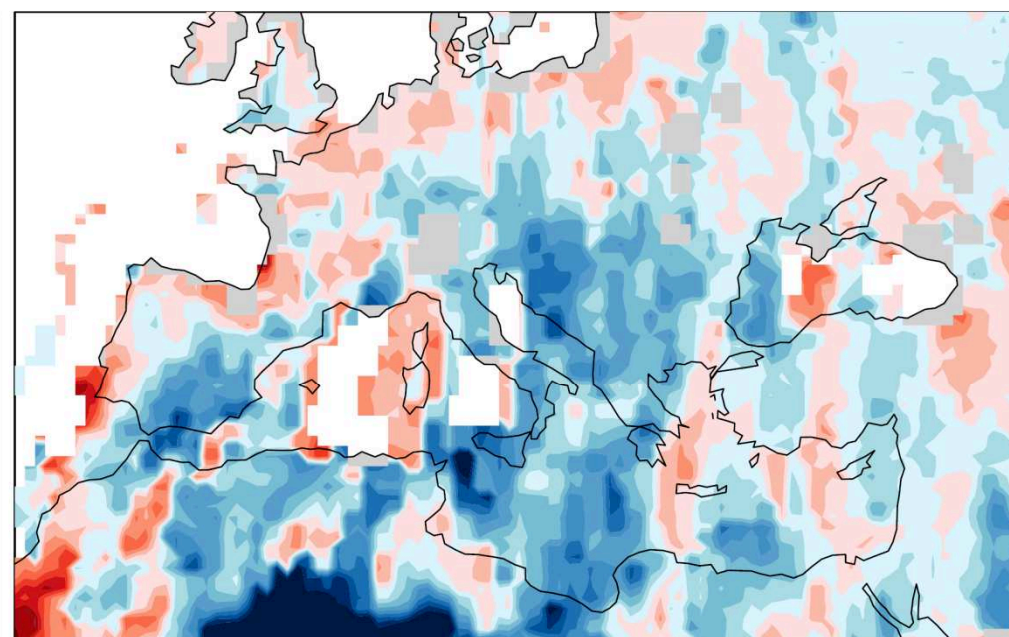
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CCI AATSR SU July - June 2006



Model July - June 2006





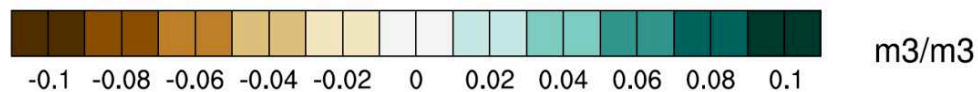
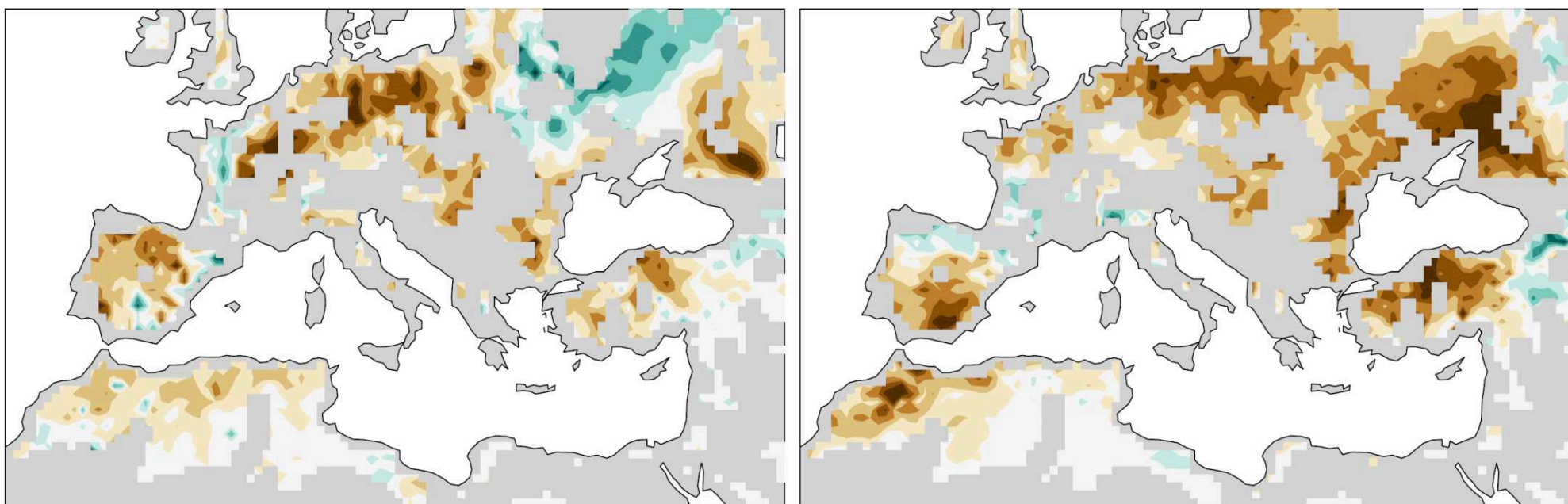
Soil Moisture 2006

difference between July and June

	SM	
	June	July
MONTHLY	0.80	0.80

CCI July - June 2006

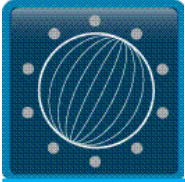
Model July - June 2006





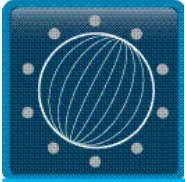
Results

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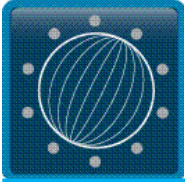
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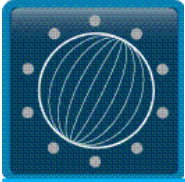
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- The heat wave development has no clear impact on the sea level change.
- The aerosol distribution map is related to the circulation changes implied by higher pressure over western Mediterranean region.