

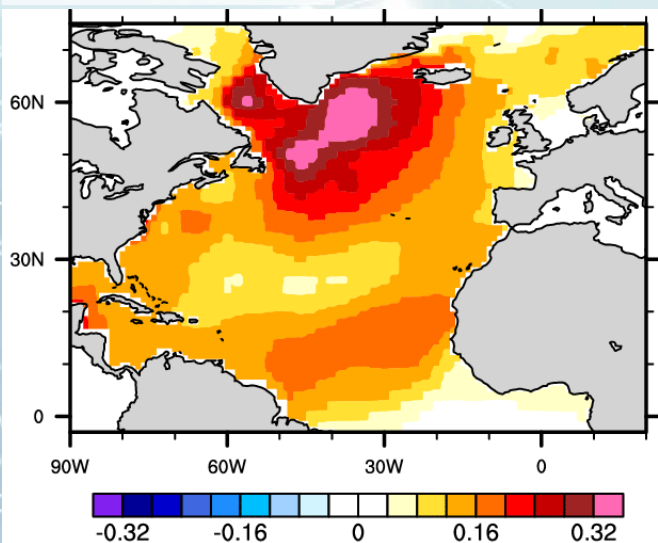
Assessing the climate Impacts of the Atlantic Multidecadal Variability on the Mediterranean basin

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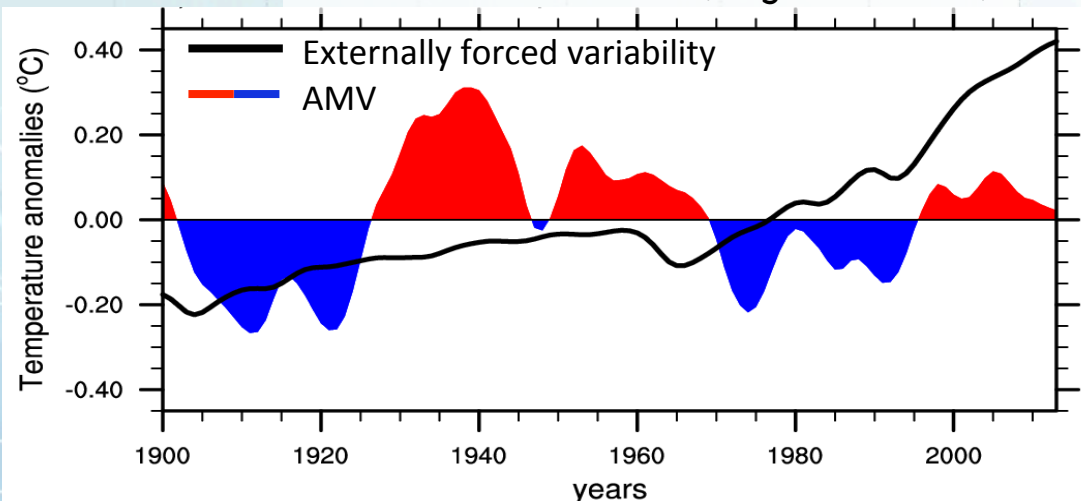
(2)CMCC, Bologna (Italy)

AMV pattern

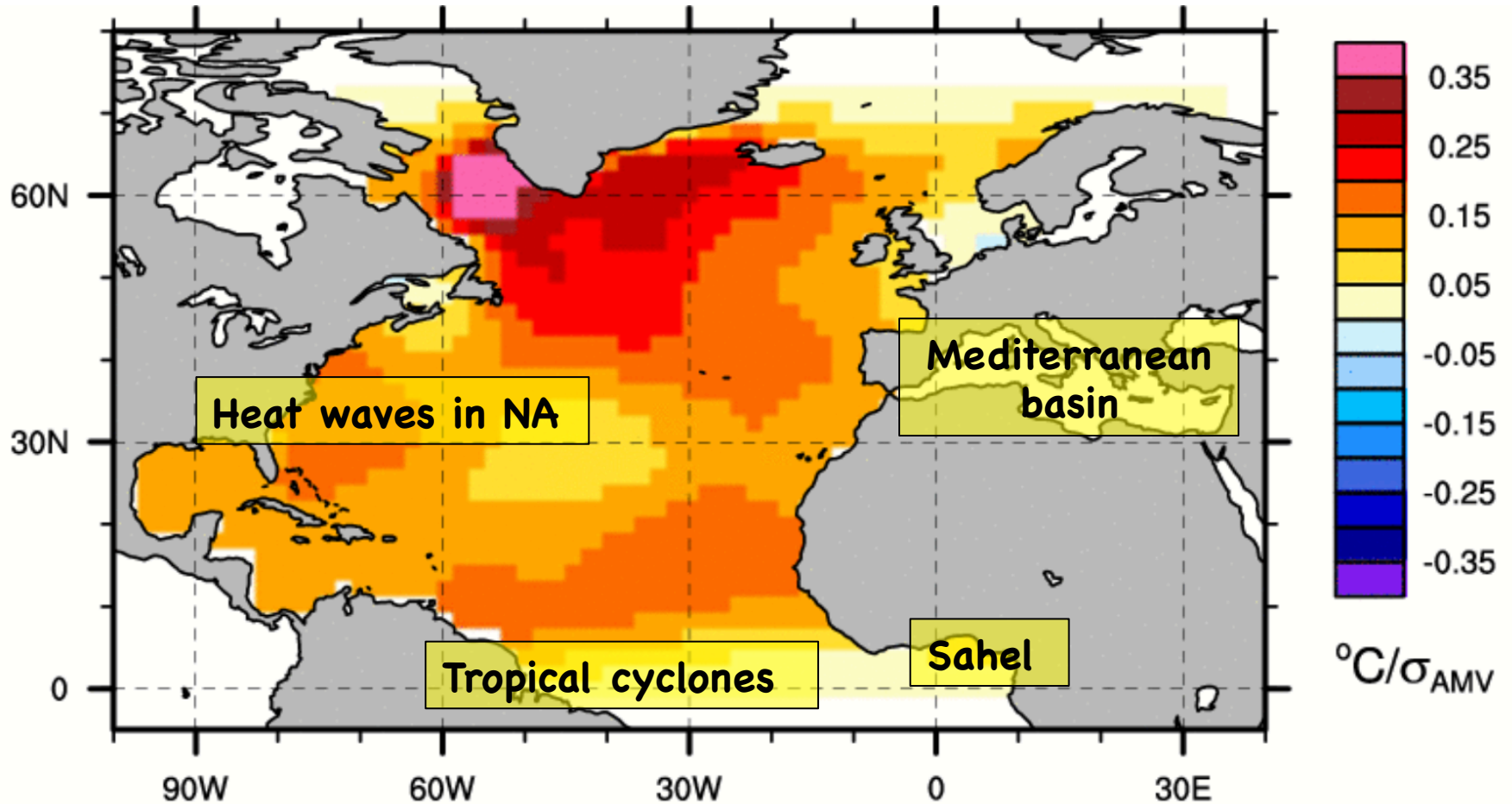


Ruprich-Robert et al. 2017

AMV time series (Ting et al. 2009)

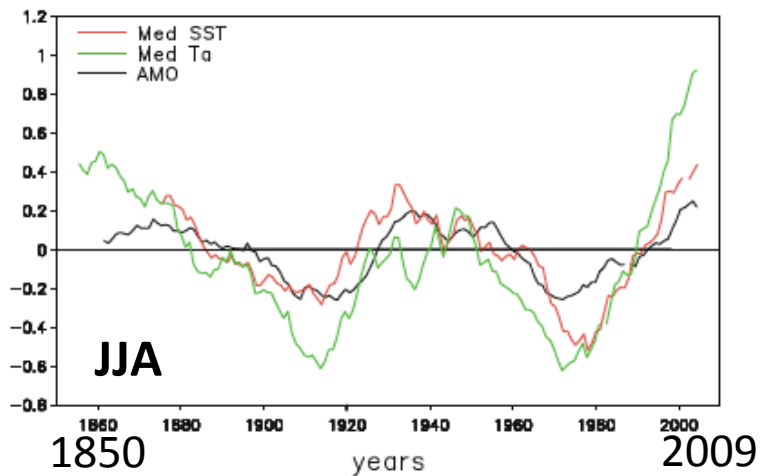
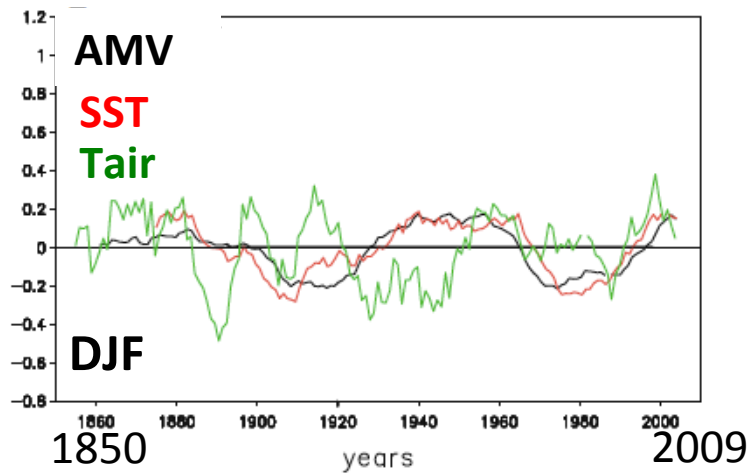


Climate impacts of the AMV

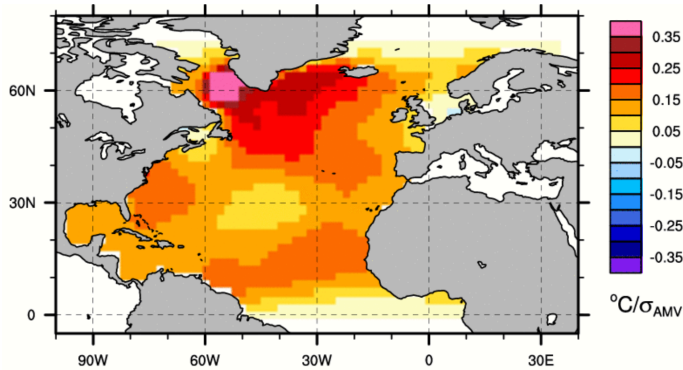


Climate impacts of the AMV

Mediterranean region (Mariotti and Dell'Aquila 2012)



- What are the impacts of the AMV over the Mediterranean region ?
- What are the associated mechanisms ?
- Are these mechanisms robust amongst the climate models ?



Restoring the SST of coupled models to the AMV anomalies:

- AMV+
- AMV-
- **Large ensemble size (> 25 members)**
- **Different AMV amplitudes:**
(1*AMV, 2*AMV, 3*AMV)

- We analyse the difference : (AMV+) - (AMV-)
- Focus on summer (JJA)

- Results** → AMV impacts significantly affects the surface temperature, water budget, SLP.
- Mechanisms ??**