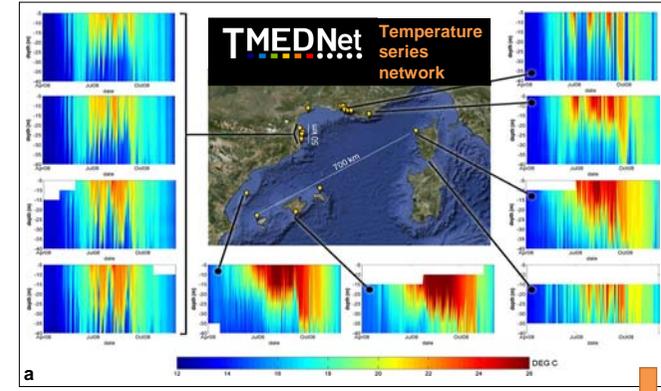
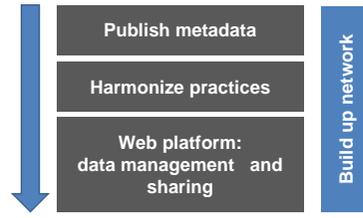
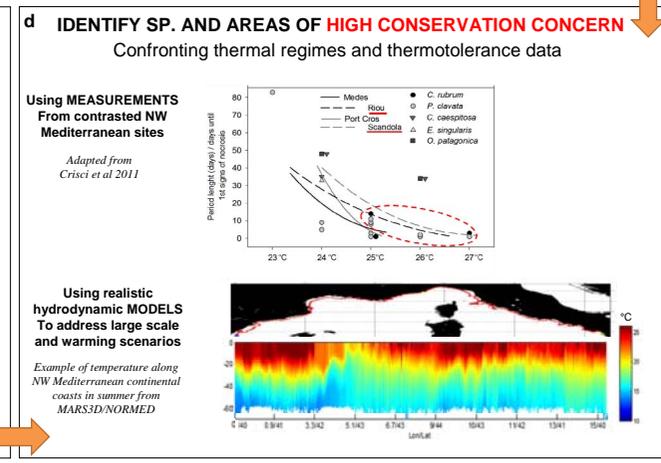
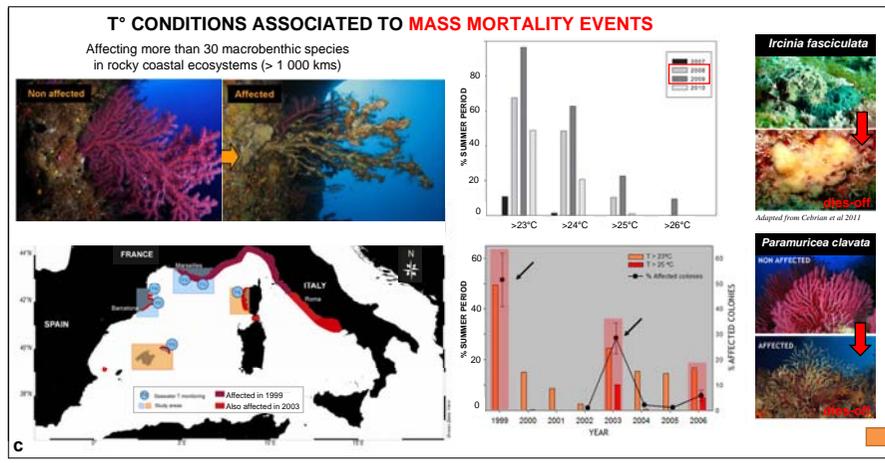
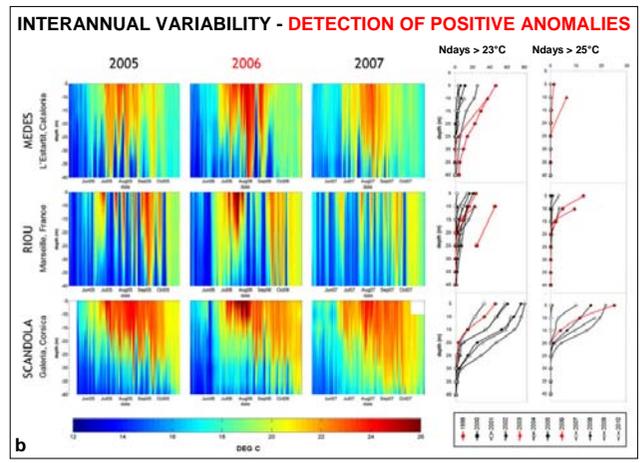


T-MEDNet initiative T-MEDNet concerted initiative is contributing to spread the acquisition of quality, high resolution and long-term temperature series in Mediterranean coastal waters (0-40 m), as well as to facilitate data sharing and analysis. The main aims of the T-MEDNet network are:

- to gather information on high resolution temperature records currently available
 - to harmonize practices by furnishing information on "how to" set up and conduct quality in situ temperature series
 - to develop a platform for managing data and sharing knowledge on marine coastal thermal regimes at regional scale
- To reach these goals we are conducting a **joint action with Medpan** - Scandola workshop 2012 - and are continuously upgrading the content of the t-mednet.org portal.

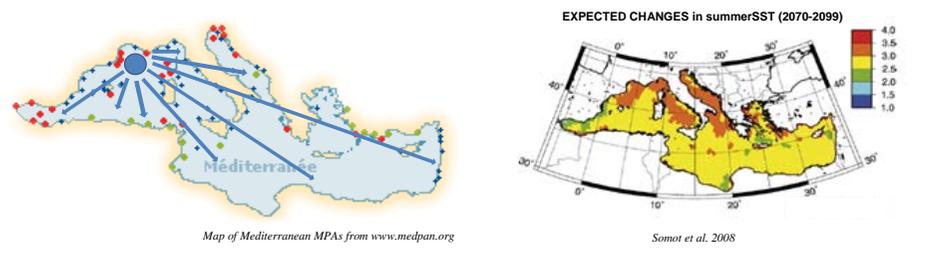


Main results High resolution temperature records collected in T-MEDNet provide insights on thermal stratification dynamics in marine coastal ecosystems over extensive spatial and temporal scales for the very first time in the Mediterranean (a,b). Some of the data series have already provided valuable insights on temperature regimes of coastal benthic ecosystems, temperature conditions during mass mortality events (c), and for the validation of high resolution hydrodynamic modeling. Finally, data series allow the development of **risk assessment face to climate change** (d) on biological processes affected by temperature such as mass mortalities which might be useful for management plans of coastal areas. For full reference list check www.t-mednet.org/publications/papers.



Conclusions and perspectives
T-MEDNet: an opportunity for searching synergies between MPAs networks and different Mediterranean institutions (e.g. CIEM Tropical Signals project and MEDPAN) to build up a **climate change observatories for the Mediterranean**.

- Building on experience acquired in the NWM
- To acquire large scale high resolution observations
- To detect and analyze impacts of coastal warming
- To increase our adaptation/mitigation abilities face to climate change



HOME TAKE MESSAGE: T-MEDNet is contributing to build up a long term and large scale database on temperature conditions and to raise awareness on climate change impacts in Mediterranean coastal ecosystems. The support of MPAs networks would be key to collect temperature records covering most of the Mediterranean coastal areas in an efficient manner and at reasonable costs. The data series obtained would enhance the development of tools to assess risk analysis associated to climate change. The expected results of such analysis will be useful to address meaningful conservation and management plans face to expected warming scenarios at local and basin scales.

Materials and Methods Vertical temperature profiles (5:5:40 m) are continuously acquired at hourly interval in more than 30 Med. sites.

