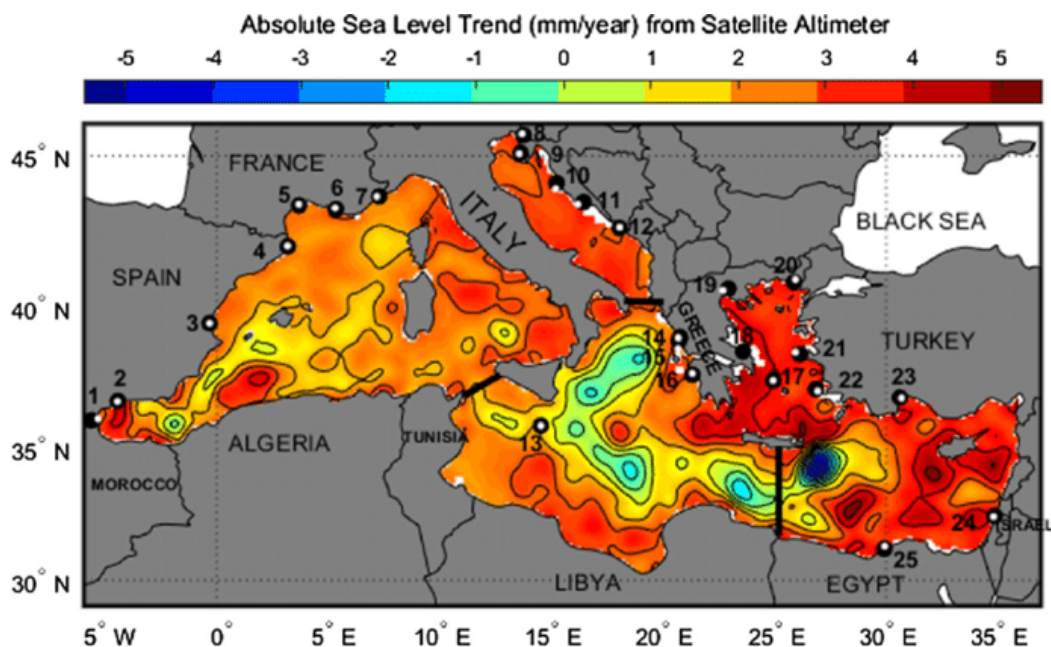


## The effects of climate changes on the Mediterranean Sea

For the marine environment, climate changes are leading to an increase in surface temperatures and sea level, acidification of water and coastal erosion. According to the recent report “State of the environment and Development in the Mediterranean” of UNEP (United Nations Environment Programme), today the atmospheric temperature of the Mediterranean basin is about 1.54 °C (34.772 °F) above pre-industrial levels and it could reach 2.2 °C (35.96 °F) when the global average will reach +1.5 °C (34.7 °F).

The excess of atmospheric heat could cause an increase in the sea temperatures of up to +3.5 °C (38.3 °F) by the end of the century, worsening the acidification of water and endangering the biodiversity of the Mediterranean Sea. This increase in temperatures alone, that is to say, without other contributions, could result in an increase in sea level of 3cm per decade, with foreseeable consequences for coastal erosion and flooding.



Map of the Mediterranean Sea level lineal trends investigated during the period 1993-2017, using gridded dynamic topography from satellite altimetry, tide gauge and gridded sea surface temperatures.

Sources:

- Text: Focus ([www.focus.it](http://www.focus.it))
- Image: ResearchGate ([www.researchgate.net](http://www.researchgate.net))

