

**The General Circulation of the Eastern Mediterranean**

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A review is first given of the past phenomenological beliefs and the related structure of the general circulation. Major water mass formation processes are identified and the water masses pathways are discussed. This historical picture is then reanalyzed in view of the most recent observational evidence provided by the general surveys of the POEM program. This new picture of the general circulation reveals sub-basin scale gyres to be the building blocks of the circulation, interconnected by jets and coastal currents that transport and mix the surface and intermediate water masses. The deep circulation is comprised of a single thermohaline cell that originates in the southern Adriatic - northern Ionian sea with the deep water spreading towards the eastern Levantine Basin. Numerical modelling simulations are finally reviewed and discussed with relationship to the above new phenomenology.