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Seismic atlas of the "Messinian Salinity Crisis" markers in the Mediterranean and Black seas – Volume 2

Johanna Lofi and the Atlas Contributors Team

University of Montpellier, Géosciences Montpellier, Montpellier, France (johanna.lofi@gm.univ-montp2.fr)

The Seismic atlas of the "Messinian Salinity Crisis" markers in the Mediterranean and Black seas – Volume 2 is a publication project in the framework of the study of the Messinian Salinity Crisis. It follows the publication of a first volume in 2011 (see Editors' websites: <http://ccgm.free.fr> & <http://sgfr.free.fr>) and aims to illustrate the seismic characteristics of the MSC markers over new study areas.

The Messinian Salinity Crisis is a huge outstanding succession of events that deeply modified the Mediterranean area within a short time span at the geological scale.

In 2011, a seismic atlas of the Messinian markers in the Mediterranean and Black seas has been published [1]. This collective work summarizes, in one publication with a common format, the most relevant seismic features related to this exceptional event in the offshore domain. It also proposes a new global and consistent terminology for the MSC markers in the entire offshore Mediterranean area in order to avoid nomenclature problems. Throughout 13 study areas, the seismic facies, geometry and extent of the Messinian markers (bounding surfaces and depositional units) are described. The Atlas however does not provide a complete description of all what that is known about the MSC and about the geology of each study area. Accordingly, illustrations in the Atlas should be used for a global description of the offshore imprints of the MSC at a broad scale, or for local information or site-specific general interpretations. Interpreted seismic data were carefully selected according to their quality, position and significance. Raw and interpreted seismic profiles are available on CD-Rom.

Volume 2 is currently under preparation with the objectives : (1) to image the Messinian seismic marker from margins and basins that have not been illustrated in the first volume and (2) to complete the extension map of the MSC markers in the offshore and onshore domains at the Mediterranean scale. As the first volume, Volume 2 will also aim to share the geological interpretation of seismic reflection data imaging Messinian markers, to make this information accessible to the non geophysician community and to be a reference work that can be used by teachers and future researchers working on the Messinian event.

This publication project is still open to anybody from industry and academia willing to contribute. At the present time, 16 new sites have been identified. Publication of the Seismic atlas of the "Messinian Salinity Crisis" markers in the Mediterranean and Black seas – Volume 2 is planned for Fall 2014. For more details, contact presenting author J. Lofi (atlas coordinator).

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[1] : Lofi J., Deverchère J., Gaullier V., Gillet H., Gorini C., Guennoc P., Loncke L., Maillard A., Sage F. and Thinon I., 2011. Seismic atlas of the "Messinian Salinity Crisis" markers in the Mediterranean and Black Seas. Commission for the Geological Map of the World (CGMW) / Mémoires de la Société Géologique de France, n.s., 179, 72 pp., 1 CD.

Atlas contributors (first authors): A. Camerlenghi, A. Del Ben, D. Do Couto, F. Estrada, F. Gallais, M. Garcia, V. Gaullier, A. Maillard, A. Micallef, M. Rossi, F. Sage, U. Schattner, A. Tassy, R. Urgeles