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## Limited Mediterranean sea-level drop during the Messinian salinity crisis inferred from the buried Nile canyon

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**The extreme Mediterranean sea-level drop during the Messinian salinity crisis has been known for >50 years, but its amplitude and duration remain a challenge. Here we estimate its amplitude by restoring the topography of the Messinian Nile canyon and the vertical position of the Messinian coastline by unloading of post-Messinian sediment and accounting for flexural isostasy and compaction. We estimate the original depth of the geomorphological base level of the Nile River at ~600-m below present sea level, implying a drawdown 2-4 times smaller than previously estimated from the Nile canyon and suggesting that salt precipitated under 1-3-km deep waters. This conclusion is at odds with the nearly-desiccated basin model (>2 km drawdown) dominating the scientific literature for 50 years. Yet, a 600-m drawdown is ca. five times larger than eustatic fluctuations and its impact on the Mediterranean continental margins is incomparable to any glacial sea-level fall.**