



Figure DR1. Dip attribute map of the Horizon N (Base Messinian) covering the full extent of the Gal C survey area (see Fig. 1 for location). Circular to sub-circular craters interpreted as pockmarks are highlighted in red circles. A crudely linear chain of larger craters is seen in the southeastern area (see Fig. 2a). Location of Figures DR3 and DR4 shown with solid black lines (DR3 in the southeast, and DR4 in the north).



Figure DR2. Oblique three-dimensional view of Horizon N in the southeast of the Gal C survey area showing several large crater structures (vertical scale in TWT (s), with grey/red tones-shallow, blue tones - deep), the largest of which has a vertical relief of >200 m. Locations of Figures 2b and 2c are indicated.



Figure DR3. Seismic line from the southeast region of the Gal C survey constructed to transect several of the larger pockmarks and craters on Horizon N (located in Fig. DR1). The erosive bases of the craters and the onlap fill geometry of the basal evaporite units are evident. Note that beneath the larger pockmarks and the feature labeled 'Gal C crater' in particular, there is considerable distortion of the seismic reflection geometry of pre-Messinian units. This distortion is interpreted to be largely artefactual, resulting from velocity pull-up and migration problems due to the lateral velocity contrasts between the evaporate fills of the craters and the lower velocity sediments of the pre-Messinian. However, there may be pipe-like feeder structures vertically beneath the craters and these might contribute to the up-bending geometry (c.f. Berndt, 2005).



Figure DR4. Seismic profile from Gal C survey (located in Fig. DR1), crossing a small crater at Horizon N. Little distortion of pre-Messinian reflections is apparent beneath the crater, in contrast with that seen beneath larger craters (Fig. DR3). This supports the interpretation that the distortion is largely artefactual.