



## **Characterising the Last Interglacial: High-resolution palaeoclimatic records from the Mediterranean**

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Evidence of abrupt climate variability during the Last Interglacial (approximately equivalent to MIS 5e) and glacial inception is detected in a variety of palaeoarchives but the nature of the variability is not yet satisfactorily resolved, nor are the causes fully understood. To improve our understanding of the climatic forcing and response to abrupt variability, detailed palaeoclimate data from a range of sites are required. The sensitivity of the Mediterranean region to global climate change makes it an ideal location from which to investigate variability during interglacials on decadal to millennial- timescales. We present a high-resolution palaeoclimatic record from the Central Mediterranean Sea with an aim of better understanding interglacial climate evolution and variability in the Mediterranean and its links to high- and low-latitude climate systems. High-resolution alkenone- and faunal-based sea surface temperature and pollen data are presented for the mid-latitude ODP Site 963 in the Strait of Sicily. This coupled terrestrial–marine record allows in situ assessment of the leads and lags of climate change in the terrestrial and marine environments. The new data provide evidence for intra-interglacial variability both on land and in the ocean, with a similar level of climate variability to that seen in the North Atlantic marine and Greenland ice core records. Our results suggests a close relation between the high northern latitudes and the Mediterranean during the Last Interglacial.