REFERENCE

Van der Plicht, J and Mook, WG 1988 Calibration of radiocarbon ages by computer. In Long, A and Kra, RS, eds, Internati ¹⁴C conf, 13th, Proc. Radiocarbon 31(3): 805-816.

DATING ARCHAEOLOGICAL ENTITIES IN THE DESERTIC LEVANT

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Assembling the radiocarbon dates for the Holocene period in the Southern Levant and especially from desertic sites, enables us to modify the chronological boundaries between archaeological periods and cultures. The calibration of many dates indicates the need to reconsider several accepted cutural explanations and the meaning of archaeological gaps in sub-regional sequences. Using the calibration curve as a partial indicator for climatic fluctuations, we will examine here a few archaeological cases dated to the mid-Holocene through the historical periods.

COMMON SPECTRAL FEATURES IN THE 5500-YEAR RECORD OF TOTAL CARBONATE IN SEA SEDIMENTS AND RADIOCARBON IN TREE RINGS

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We present the results of the analysis of the carbonate time series obtained from the Ionian Sea core GT90-3 and corresponding Δ^{14} C from trees. The 3.6-m core extends backward in time to 5520 BP, and extends the results obtained earlier (Castagnoli *et al* 1990a,b; in press) from core GT14 and core GT89-3.

REFERENCES

Castagnoli, GC, Bonino, G, Caprioglio, F, Serio, M, Provenzale, A and Bhandari, N 1990a The CaCO₃ profile in a recent Ionian sea core and the tree ring radiocarbon record over the last two millennia. Geophys Research Letters 17:1545.

Castagnoli, G, Bonino, G, Caprioglio, F, Serio, M, Provenzale, A and Zhu Guang-Mei 1990b The carbonate profile of two recent Ionian sea cores: Evidence that the sedimentation rate is constant over the last two meillennia. *Geophys Research Letters* 17:1937.

Castagnoli, GC, Bonino, G, Serio, M and Provenzale, A, in press, Record of solar and climatic variations over the past 5500 years in the carbonate profiles of the coastal Ionian sea cores. *In* Gruppo Italiano Fisica Cosmica conf, 5th, Proc. *Nuovo Cimento C*.