

## GORDION TREE-RING MEASUREMENTS

The following information was recently posted on the International Tree-Ring Data Bank (ITRDB) at <http://www.ncdc.noaa.gov/paleo/treering.html>.

Tree-ring measurements for GOR-2ABCD, a section of *Juniperus foetidissima* from Tumulus MM with 431 rings.

Tree-ring measurements for GOR-3E, a section of *Juniperus excelsa* from Tumulus MM with 759 rings.

Tree-ring measurements for GOR-161AB, a section of *Juniperus excelsa* from the Kizlarkaya Tumulus with 863 rings.

These are the three overlapping specimens for which wiggle-matching determinations were reported in *Science* (Dec. 2001). See articles by Kromer et al., and by Manning et al. Links to these publications appear on our web-page below this note.

We have also posted the 1028-year-long Gordion juniper chronology from these two tumuli so that readers may inspect for themselves the quality of the fits. When the Gordion monograph (DeVries et al.) is published late this autumn or early next spring, we plan to post the remaining sets of raw measurements from these tumuli, as well as those from the lesser tumuli and from the citadel mound. At that time we will break down the master chronologies by species: *Juniperus excelsa*, *Juniperus foetidissima*, and *Pinus nigra/silvestris*.

A note about MMTRD (or Midas Mound Relative Dating): Several pieces from Tumulus MM end in Relative Year 1764 with the bark of the felling year present. On GOR-3E which ends in RD 1762 the last two rings were countable but not measurable. We have resisted converting these relative dates for some 188 timbers at Gordion to proper BC dates because the link to the living trees of the Anatolian Plateau has not yet been established. When that happens, we will do it at once. Our best estimate for MMTRD 1764 is 740 BC  $\pm 4/-7$  years, although as noted in the *Antiquity* articles we think the error margin may be lower.

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