

## GSSP for the Pliocene - Pleistocene Boundary.

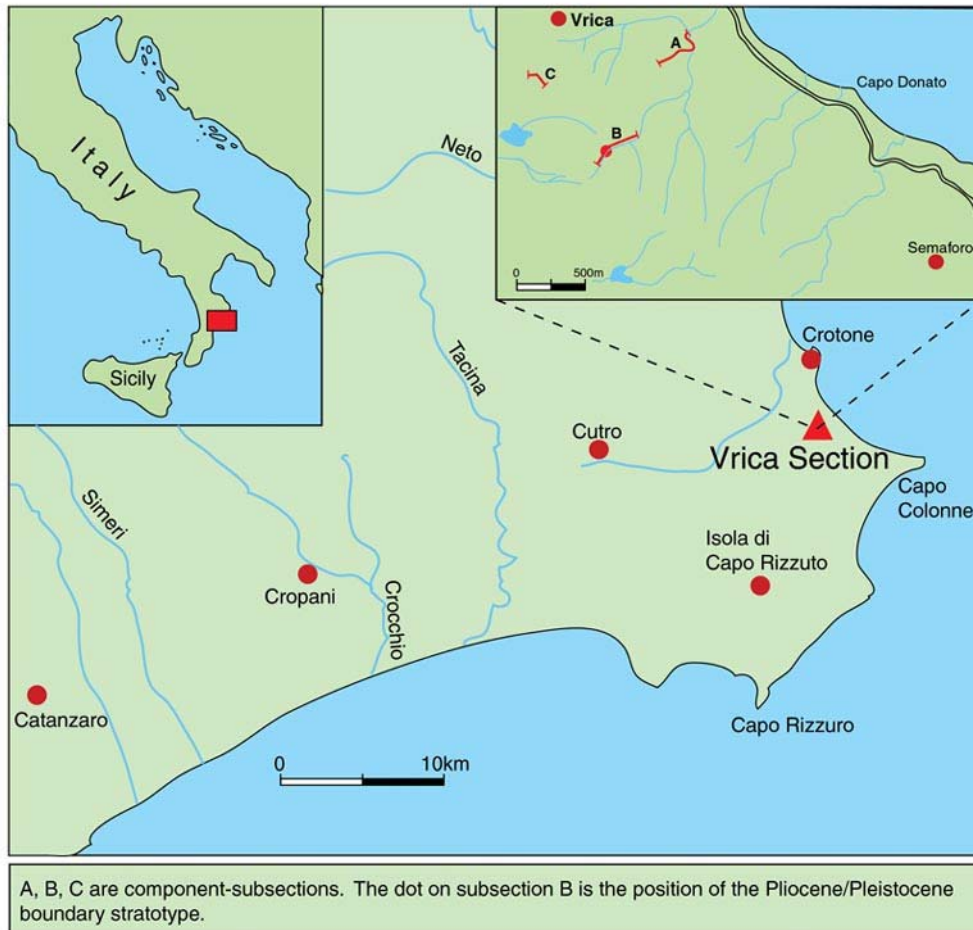
### Definition:

The base of the Pleistocene Series is defined as the base of the marine claystones conformably overlying the sapropelic Marker Bed "e" in the Vrica Section, Italy.

### Location:

The Vrica Section is located 4km south of the town of Crotona in the Marchesato Peninsula, Calabria, Italy. Latitude: 39°02'18.61" north, longitude:17°08'05.79" east.

### Location of the Pliocene/Pleistocene Boundary at the Vrica Section, Italy

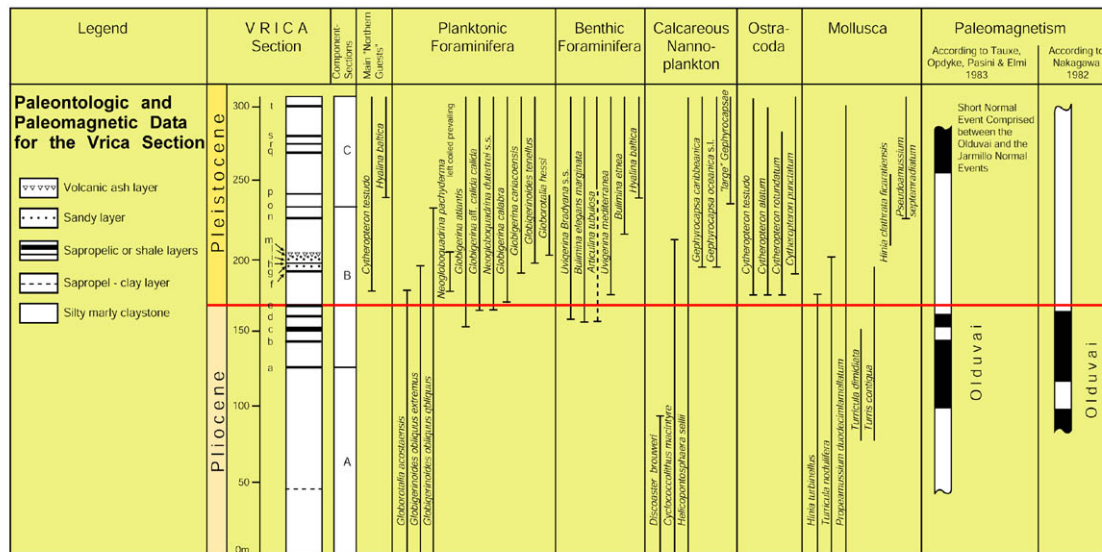


### Sedimentology:

The Vrica section consists of open sea deposits preserved in the emergent portion of a late Cenozoic sedimentary basin. The rocks are bathyal, marly and silty claystones (dark grey or blue-gray in color) with interbedded, fairly conspicuous, pale grey-pink sapropelic marker beds. Some very thin sandy horizons and a volcanic ash layer also

occur within the section. Sedimentation rates through the section range from 310mm to more than 750mm per thousand years.

### Pliocene - Pleistocene Boundary at Vrica, Italy



### Primary Markers:

The base of the Pleistocene Series is defined as the base of the marine claystones conformably overlying the sapropelic Marker Bed "e" in the Vrica Section

### Secondary Markers:

#### Foraminifera and Nannoplankton:

The boundary between the Last appearance Datum of *Discoaster brouweri* (below) and the Last Appearance Datums of *Globigerinoides obliquus extremus* and *Cyclococcolithus macintyreii* and the First Appearance Datums of *Geophyrocapsa oceanica* and *Globigerinoides tenellus* (above); these taxa are distinctive foraminifera and nannoplankton of widespread distribution.

#### Paleomagnetism:

The boundary is some 3 - 6m (representing a period of 10,000 - 20,000 years) above the top of the Olduvai normal polarity subchron.

### References:

Aguirre, E. and Pasini, G., 1985. The Pliocene - Pleistocene Boundary. *Episodes*, **8/2**, 116 - 120.

Bassett, M. G., 1985. Towards a "Common Language" in Stratigraphy. *Episodes*, **8/2**, 87.