

FLORENCE RADIOCARBON DATES III

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This list comprises age measurements carried out from January 1976 to July 1976. Dated samples are all of archaeological interest, from Italian territory. Pretreatment of samples, production of purest CO₂ and counting techniques have been described elsewhere (Azzi, 1972; Azzi *et al*, 1973; Azzi *et al*, 1974). Ages of samples are calculated using the conventional half-life of 5570 ± 30 yr and refer to 1950. Errors are stated in terms of one standard deviation of counting statistics.

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SAMPLE DESCRIPTIONS

I. ARCHAEOLOGIC AND HISTORIC SAMPLES

A. Italy

Grotta Paglicci series

Charcoal from Grotta Paglicci on left side of Settepenne V on S side of Gargano promontory near Rignano Garganico, 15km E St Severo, prov Foggia, Apulia (41° 39' 8" N, 15° 36' 51" E). Coll 1972 to 1975 and subm 1975 by A Palma di Cesnola, Ist Antropol e Paleontol Umana, Siena. Layers of this series contain different cultural horizons of Superior Paleolithic Age. Detailed information about the structure of the site was previously reported (Azzi *et al*, 1974).

F-94. Grotta Paglicci 3,a **11,440 ± 180**
9490 BC

Charcoal from Layer 3,a. Final Epigravettian industry with many geometric miroliths.

F-95. Grotta Paglicci 4,a,c **11,950 ± 190**
10,000 BC

Charcoal from Layer 4,a,c. Final Epigravettian industry.

F-96. Grotta Paglicci 5,b,c **13,590 ± 200**
11,640 BC

Charcoal from Layer 5,b,c. Final Epigravettian industry with truncated backed blades.

F-64. Grotta Paglicci 6 **14,270 ± 230**
12,320 BC

Charcoal from Layer 6 related to final Epigravettian industry.

F-65. Grotta Paglicci 7 **14,820 ± 210**
12,870 BC

Charcoal from Layer 7. Last layer with final Epigravettian industry.

F-66. Grotta Paglicci 8 **15,460 ± 220**
13,510 BC
Charcoal from Layer 8. Evolute Epigravettian.

F-67. Grotta Paglicci 9 **15,270 ± 220**
13,320 BC
Charcoal from Layer 9. Industry like F-66.

F-68. Grotta Paglicci 10 **15,320 ± 250**
13,370 BC
Charcoal from Layer 10. Industry probably related to initial phase of Evolute Epigravettian age.

General Comment (APC): ages of Layers 10 to 8 agree with chronology of Evolute Epigravettian found in Riparo C, Grotta delle Cipolliane, Str 3 (Lecce, Apulia); dates of Layers 7 to 5 resemble Final Epigravettian of Ugento, Lecce (R-271: 14,170 ± 170; R-272: 13,870 ± 110) and Riparo Tagliente, Layers 15 and 16 (R-605a: 13,430 ± 180; R-605: 13,330 ± 160). Dates of Layers 4, 3, and 2 can be related to many settlements of Final Epigravettian found in N and S Italy: Grotta Romanelli, Lecce, Layers A and B (R-56: 11,930 ± 520; R-58: 11,800 ± 600), (Alessio *et al.*, 1964); Grotta Erica, Salerno, Str C, Sec B, Cut 3 and 4 (F-38: 11,275 ± 360; F-39: 11,690 ± 370); Grotta Perciata, Palermo (F-27: 11,960 ± 330); Grotta dei Genovesi, Trapani (F-19: 11,710 ± 295); Nicchia Gamba, Salerno (F-25: 11,630 ± 230); Grotta del Romito, Cosenza, Lev 6a (R-299: 11,500 ± 200); Grotta della Cala, Salerno, Str H (F-21: 12,030 ± 220); Grotta della Madonna, Praia a Mare, Cosenza, Str X inf (R-293: 12,100 ± 150); Riparo Tagliente, Verona, Str 14 (R-604: 12,000 ± 400; R-371: 12,040 ± 170), (Alessio *et al.*, 1970).

F-69. Torre Mozza **4020 ± 150**
2070 BC
Charcoal from open site with fireplace and pottery from Località Torre Mozza, com Piombino, prov Livorno (42° 56' 33" N, 14° 12' 08" E). Coll 1976 by A Galimberti, Ist Antropol, Siena, and subm 1976 by A Palma di Cesnola. Charcoal from base of anthropozoic level with pottery probably related to Final Bronze age. Date does not agree with typology (pers commun).

F-70. Grotta della Cala Atrio **29,850 ± 870**
27,900 BC
Charred bones from the front part of Cala Cave, Salerno, S Italy (40° 00' 02" N, 15° 22' 57" E). Coll and subm 1975 by P Gambassini, Ist Antropologia, Siena. Layer contains an Aurignacoid lithic industry with carinated, muzzle and scrapers; it underlies Q Layer of Gravettian age (F-22, F-23 and F-24: R, 1973, v 15, p 483).

Castelcivita series

Charred bones from base (Lev 10-11) and middle (Lev 9) levels of a reddish sand layer in Castelcivita Cave, Salerno, S Italy (40° 29' 41" N,

15° 12' 36" E). Coll and subm 1975 by P Gambassini. Layers contain a lithic industry of an early phase of Upper Paleolithic with marginal backed blades of Dufour type. Fauna include *Equus*, *Cervus*, and micro-mammals (Gambassini, 1976).

F-71. Castelcivita 10,11 **32,470 ± 650**
30,520 BC
Charred bones from Level 10 and 11.

F-72. Castelcivita 9 **32,930 ± 720**
30,980 BC
Charred bones from Level 9.

Dicomano series

Charcoals from different levels of a Bronze age layer coll in open site of Dicomano, prov Florence (43° 53' 26" N, 13° 04' 26" E). Coll 1974 and subm 1976 by L Sarti, Ist Antropol, Siena. Analyzed layers, contained broken pottery and lithic industry, lay between 2 alluvial layers.

F-73. Dicomano I **2850 ± 80**
900 BC
Charcoal, from -1.45m depth between archaeol and alluvial layer, which contains medieval remains.

F-74. Dicomano 2 **3270 ± 80**
1320 BC
Charcoal, -2.50m deep in core of archaeol layer.

General Comment (PG): typologically, Dicomano settlement belongs to Middle Bronze age; date agrees with typologic estimate.

Riparo del Belvedere series

Charcoals from Monfenera, Low Valsesia, prov Vercelli, Piemonte (45° 42' 30" N, 8° 19' 30" E). Samples set a chronologic frame for Belvedere stratigraphy, unique in N Italy, except for Veneto.

F-75. Riparo del Belvedere MF 4 196:0 **1225 ± 70**
AD 725
Charcoal from D 15 area, R.2 fireplace, R.2 superior layer. Sample assoc with Late Roman and Early medieval materials. Coll 1969 and subm 1976 by F Fedele, Ist Antropol, Torino. *Comment* (FF): date establishes chronologic position of Early Medieval settlements in NW Italy and agrees with hypothesis.

F-76. Riparo del Belvedere MF 4 744:1 **3440 ± 150**
1490 BC
Charcoal from B 22 NE area, Gr-W fireplace, Grcb unit, R.3 layer. Coll 1972 and subm 1976 by F Fedele. Sample assoc with pottery and bones fragments. *Comment* (FF): date of this Neolithic settlement in Piemonte establishes chronology of VBQ culture in NW Italy.
General Comment (FF): first 2 dates of these cultures found in NW Italy.

St Martin de Corléans series

Charcoal from prehistoric and archaeol settlement of St Martin de Corléans, from W suburbs of Aosta, Val d'Aosta (45° 27' N, 17° 40' E) at +586m, near St. Martin de Corléans Church. Samples coll in N part of settlement, which was divided in 2 areas, called, respectively, St Martin Nord and St Martin Sud. Samples belong to a large settlement containing Megalithic constructions raised between end of Neolithic and Eneolithic ages. Materials analyzed coll 1969 to 1971 and subm 1975 by F Mezzena, Sov Antichità, Aosta.

F-77. St Martin de Corléans P7	4720 ± 150 2320 BC
Charcoal from wooden pile, without stone base.	
F-78. St Martin de Corléans P 12	5020 ± 180 3070 BC
Charcoal from wooden pile, with stone base.	
F-79. St Martin de Corléans P 13	4325 ± 170 2375 BC
Charcoal from wooden pile, without stone base.	
F-80. St Martin de Corléans P 15	4800 ± 170 2850 BC
Charcoal from wooden pile, with stone base.	
F-81. St Martin de Corléans P 16	4840 ± 190 2890 BC
Charcoal from wooden pile, with stone base.	
F-82. St Martin de Corléans P 17	4910 ± 200 2960 BC
Charcoal from wooden pile, with stone base.	
F-83. St Martin de Corléans P 19	4450 ± 180 2250 BC
Charcoal from wooden pile, without stone base.	

General Comment (FM): samples were found in big holes, in which were erected probably totemic piles, with alignment NE-SW; perhaps settlement was a worship area (Mezzena, 1974).

Isola Santa series

Charcoal from an open settlement with Mesolithic industry in Isola Santa, in Turríte Secca R Valley, Alpi Apuane, com Careggine, prov Lucca (44° 03' 48" N, 14° 15' 22" E). Samples coll and subm 1975 by C Tozzi, Ist Antropol, Pisa.

F-89. Isola Santa L 3	1270 ± 120 AD 680
Charcoal from L 3 Layer, probably disturbed, supposition confirmed by date that is too recent and does not agree with typology.	

F-90. Isola Santa L 4 a,b,c

Charcoal from superior part of Layer L 4.

**9370 ± 150
7420 BC****F-91. Isola Santa, L 4 d,e**

Charcoal from inferior part of Layer L 4.

**9980 ± 160
8030 BC**

General Comment (CT): F-90 and -91 oldest dates of Mesolithic settlements (Sauveterroid type) and agree with absolute chronology given by Epipaleolithic and Upper Paleolithic of Adige Valley deposits.

F-92. S Maria di Leuca

Charcoal from Level 5 of Sec C in Bronze age village of S Maria di Leuca, prov Lecce (39° 47' N, 18° 22' E). Coll 1975 by G Cremonesi, Univ Lecce, and subm 1975 by C Tozzi. Sample from a level in which a fire-place and much pottery of Apenninic culture were found. Date is probably too old topologically.

**4050 ± 140
2100 BC****F-93. Catignano**

Charcoal from Structure 59 in Neolithic village of Catignano, prov Pescara (42° 21' 27" N, 13° 44' 08" E). Coll and subm 1975 by C Tozzi. Date seems too recent; in relation to pottery and stratigraphy of Grotta dei Piccioni and Grotta S Angelo, Catignano village is older than beginning of Ripoli culture.

**4920 ± 210
2970 BC**

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