Dataset S2

BAYESIAN MODEL CODES

NORTHWEST FRANCE

Pre-megalithic structures and pre-megalithic funeral rites in Northwest France

M1-1-1-30 Necropolis Passy, Paris Basin

The necropolis is divided into two sectors

```
Plot()
 {
  Sequence("A")
  {
   Boundary("start A");
   Phase("A all ")
   {
    R_Date("Lyon-7808", 5545, 50)
    {
    };
    R_Date("Lyon-6348/SacA-17058", 5730, 40);
    Sequence("A Sablonniere")
    {
     R_Date("Lyon-6364/SacA-17074", 6050, 40);
     R_Date("Lyon-6362/SacA-17072", 6090, 35);
     R_Date("Lyon-6349/SacA-17059", 5855, 50);
     R_Date("Lyon-6350/SacA-17060", 5845, 40);
     R_Date("Lyon-6353/SacA-17063", 5655, 40);
    };
    First("A first");
    Last("A last");
    Span("duration A");
   };
   Boundary("end A");
  };
  Sequence("B")
  {
   Boundary("start B");
   Phase("B Richebourg")
   {
    R_Date("Lyon-6363/SacA-17073", 5910, 40);
    R_Date("Lyon-6355/SacA-17065", 5730, 50);
    Phase("monument 14")
    {
     R_Date("Lyon-6354/SacA-17064", 5635, 40);
     R_Date("Lyon-6358/SacA-17068", 5425, 40);
    };
    Phase("monument 17")
    {
     R_Date("Lyon-6359/SacA-17069", 5675, 40);
     R_Date("Lyon-6360/SacA-17070", 5690, 45);
     R_Date("Lyon-6356/SacA-17066", 5960, 40);
    };
    Phase("monument 18")
    {
     R_Date("Lyon-6357/SacA-17067", 5695, 40);
     R_Date("Lyon-6361/SacA-17071", 5635, 40);
    };
    First("B first");
    Last("B last");
    Span("duration B");
   };
   Boundary("end B");
  };
  Order("first and last")
  {
   Date("=A first");
   Date("=B first");
```

```
  Date("=A last");
  Date("=B last");
 };
};
```

M2-1-2-13 Necropolis Balloy, Paris Bassin

```
Plot()
 {
  Sequence("Balloy,Le Réaudins,")
  {
   Boundary("start");
   Phase("all")
   {
    R_Date("Ly-5587,burial 24",5500,50);
    Phase("monument VI")
    {
     R_Date("Ly-5885,burial 24",5500,70);
    };
    Phase("monument IV")
    {
     R_Date("Ly-5587,burial 25",5500,50);
     R_Date("Ly-5886,burial 25",5500,50);
    };
    Phase("monument I")
    {
     R_Date("Ly-5549,burial 35",5532,50);
    };
    Phase("monument II")
    {
     R_Date("Ly-5989,burial 5",5615,55);
     R_Date("Ly-6406,burial 3",5305,75);
     R_Date("Ly-5547,burial 7",5376,50);
    };
    Span("Balloy all");
    First("first burial");
    Last("last burial");
   };
   Boundary("end");
  };
 };
```

M3-1-3-23 Goumoisière, Central West France

```
Plot()
 {
  Sequence("Goumoiziere")
  {
   Boundary("dead first individual");
   Phase("Goumoiziere all")
   {
    Phase("cist 1,ossuary")
    {
     R_Date("Beta-217475,humerus left",5570,40);
     R_Date("Beta-217474,humerus left",5530,40);
     R_Date("Beta-217477,humerus left",5460,40);
     R_Date("Beta-217478,humerus left",5440,40);
     R_Date("Beta-217479,humerus left",5440,40);
     R_Date("Beta-217476,humerus left",5360,40);
    };
    Phase("cist 2")
    {
     R_Date("OxA-9337, human bn",5770,50);
    };
    Phase("cist 3 ")
    {
     R_Date("OxA-9102,human bn",5620,50);
    };
    Phase("cist 4")
    {
```

```
    R_Date("Beta-217480,humerus left",5560,40);
   };
   Phase("cist 5,ossuary?")
   {
    R_Date("GifA-97293,bn fragm.",5940,50);
    R_Date("Ly-1048,bn fragm.",5825,55);
    R_Date("Beta-217481,occipital",5730,40);
    R_Date("Ly-2494,femur left",5675,50);
    R_Date("Ly-2488,humerus left",5605,55);
    R_Date("Ly-2490,femur left",5610,45);
    R_Date("Ly-2491,femur left",5590,50);
    R_Date("Beta-217483,femur left",5590,40);
    R_Date("Ly-2489,femur left",5555,50);
    R_Date("Ly-2492,femur left ",5520,45);
    R_Date("Ly-2493,femur left",5360,45);
    R_Date("Beta-217482,femur left",5350,40);
   };
  };
  Boundary("dead last individual");
 };
};
```

Transitional structures and the emergence of megaliths in Northwest France

M4-1-4-6 St. Michel, Brittany

```
Plot()
 {
  Sequence(St.Michel)
  {
   Boundary("start");
   Phase("central chamber")
   {
    R_Combine("calc.bone central chamber")
    {
     R_Date("UB-6869",5854,38);
     R_Date("GrA-20197",5780,45);
    };
    R_Date("Sa-96,ch",5720,300);
    R_Date("AA-42784,ch",5665,54);
   };
   Phase("mound")
   {
    R_Date("Gsy-89,ch",4980,150);
   };
   Boundary("end");
  };
 };
```

M5-1-5-11 Lannec er Gadouer, Brittany

```
Plot()
 {
  Sequence("Lannec er Gadouer")
  {
   Boundary("start TPQ-dates");
   Phase("TPQ-activities")
   {
    R_Date("AA-9241,pit 2",5835,65);
    R_Date("AA-9240,hearth 1",5770,80);
    R_Date("AA-10009,pit 5",5700,55);
    R_Date("AA-29391,ceramic concentration",5660,55);
    R_Date("AA-20130,hearth 2",5640,80);
   };
   Boundary("end TPQ-activities");
   Boundary("start monument");
   Phase("construction and use")
   {
    R_Date("AA-8819,chamber",5445,60);
```

```
   R_Date("AA-29390,ditch 1",5210,55);
  };
  Boundary("end monument");
 };
};
```

M6-1-6-13 Er Grah, Brittany

```
Plot()
 {
  Sequence("Er Grah")
  {
   Boundary("start TPQ-activities");
   Phase("TPQ-activities/Castellic settlement")
   {
    R_Date("A-8914,structure c3",6305,70);
    R_Date("A-8913,pit with ox bn.",5960,70);
    R_Date("A-8916,hearth c1 under tumulus",5760,70);
    R_Date("Ly55/OxA,ancient soil, sector E",5650,90);
    R_Date("A-8915,pit e13 under tumulus",5495,60);
    R_Date("Gif-7692,hearth C5 under tumulus",5260,70);
    R_Date("Ly-56/OxA,ancient soil,sector E",4885,65)
    {
     Outlier("ancient soil");
    };
   };
   Boundary("end TPQ-activities");
   Boundary("start monument");
   Phase("construction and use monument")
   {
    R_Date("Gif-7693, tumulus south,ch",5370,70);
   };
   Boundary("end monument");
  };
 };
```

M7-1-M7-13 Castellic, reliable contexts, Brittany. The earliest megalithic graves emerge within the Ancient Castellic horizon

```
Plot()
{
  Sequence("Castellic contexts")
  {
   Boundary("start ancient Castellic");
   Phase("Ancient Castellic")
   {
    R_Date("UB-6869, St. Michel,main chamber,animal bn.",5854,38);
    R_Date("GrA-20197, St. Michel, main chamber, animal bn.",5780,45);
    R_Date("AA-42784,St. Michel,main chamber,ch",5665,54);
    R_Date("Miami Beta-161034, Le Souc´h,chamber tertre",5630,40);
    R_Date("Sa-96,St. Michel,main chamber,ch",5720,300);
   };
   Boundary("start recent Castellic");
   Phase("Recent Castellic")
   {
    R_Date("AA-29390,Lannec er Gadouer,ditch 1",5210,55);
    R_Date("Ly-8(OxA),TDM, ancient soil",5260,80);
    R_Date("A-8854, TDM,ancient soil",5175,100);
    R_Date("LGQ555,TDM, ancient soil",4990,180);
    R_Date("LGQ554,TDM,ancient soil",4910,150);
   };
   Boundary("end recent Castellic");
  };
};
```

Megalithic structures with radiocarbon sequences and radiocarbon dates in Northwest France

M8-1-8-9 La Pierre Tourneresse, Normandy

```
Plot()
 {
  Sequence("La Pierre Tourneresse")
  {
   Boundary("start");
   Phase("burial activity")
   {
    R_Date("Ly-11310",5235,55);
    R_Date("Ly-11312",5190,50);
    R_Date("Ly-9259",5040,35);
    R_Date("Ly-9260",5020,35);
    R_Date("Ly-1440",4830,40);
    R_Date("Ly-11311",4825,40);
    R_Date("Ly-10544",4370,40);
   };
   Boundary("end");
  };
 };
```

M9-1-9-13 Paris Basin, all available radiocarbon dates gained from human bones in gallery graves

```
Plot()
 {
  Sequence("Paris Basin, human bones in gallery graves")
  {
   Boundary("start burial activites");
   Phase("burial activites")
   {
    Phase("La Chaussée Tirancourt")
    {
     R_Date("GifTAN-94186",4540,70);
     R_Date("Gif-6260",4090,70);
     R_Date("Gif-6259",3790,70);
    };
    Phase("La Butte Saint Cyr")
    {
     R_Date("Ly-123",4690,90);
     R_Date("Ly-125",4590,100);
     R_Date("Ly-4822",4270,35);
     R_Date("Ly-124",4130,55);
    };
    R_Date("Gif-5740,Vers-sur-Selles",4240,120);
    R_Date("Gif-3329,La Cave-aux-Fées",4170,130);
    R_Date("Gif-3329, Bois Coutourier",3640,100);
    R_Date("Gif-3329, Guiry-en-Vexin",3640,100);
   };
   Boundary("end burial activities");
  };
 };
```

M10-1-10-11 Brittany, all available radiocarbon dates gained from human bones in megalithic graves.

```
Plot()
 {
  Sequence("Brittany bone results")
  {
   Boundary("start");
   Phase("bone results passage grave ")
   {
    R_Date("Gif-A92374,Roc´h Avel",5260,90);
    R_Date("Ly-122,Beg-an-Dorchem",4140,55);
    Phase("Port Blanc")
    {
     R_Date("OxA-10615",5070,50);
     R_Date("OxA-10936",5050,40);
     R_Date("OxA-10699",4200,45);
    };
    Phase("Er Yoh")
```

```
   {
    R_Date("OxA-10843",4240,55);
    R_Date("OxA-10844",3130,40);
   };
   Phase("Conguel")
   {
    R_Date("OxA-10937",3630,35);
    R_Date("OxA-10938",3610,35);
   };
  };
  Boundary("end");
 };
};
```

M11-1-11-7 Barnenez, Brittany

```
Plot()
 {
  Phase("Barnenez")
  {
   R_Date("Gif-1310 chamber A,TPQ",5450,150);
   R_Date("Gif-1311 chamber B",3200,120);
   R_Date("Gsy-147 chamber C",2690,105);
   R_Date("Gsy-30 chamber E",2200,200);
   R_Date("Gif-1116 chamber F",5100,140);
   R_Date("Gif-1556 chamber F,TAQ?",5550,140);
   R_Date("Gif-1309 chamber G,TPQ",5750,150);
  };
 };
```

M12-1-12-19 Le Souc´h, Brittany

```
Plot()
 {
  Sequence("Le Souc´h")
  {
   Boundary("start TPQ-activities");
   Phase("TPQ-activities/mesolithic occupation")
   {
    R_Date("Gröningen A-30245",7985,45);
    R_Date("Gröningen A-30243",7680,45);
    R_Date("Ly-2853",6440,65);
    R_Date("Miami Beta-161035",6090,100);
   };
   Boundary("end TPQ-activities");
   Boundary("start long tumulus tertre");
   Phase("pit burial")
   {
    R_Date("Miami Beta-161034",5630,40);
   };
   Boundary("end long tumulus/tertre");
   Boundary("start passage graves");
   Phase("construction and use passage graves")
   {
    Phase("grave 1")
    {
     R_Date("debris,CIRAM 022",5105,30);
     R_Date("debris,Miami Beta-187969",4840,140);
    };
    Phase("grave 2")
    {
     R_Date("tumulus,CIRAM AA 021",4645,30);
     R_Date("passage,Miami Beta-176517",4440,40);
    };
    Phase("quarry")
    {
     R_Date("quarry,Gröningen A-30248",4800,40);
     R_Date("quarry,Gröningen A-30249",4795,40);
    };
```

```
  Phase("grave with lateral entrance")
  {
   R_Date("CIRAM AA 020",3775,50);
   R_Date("chamber,UL-2739",3460,90);
  };
 };
 Boundary("end passage graves");
};
};
```

M13-1-13-29 Table des Marchands, Brittany

```
Plot()
 {
  Sequence("Table des Marchand")
  {
   Boundary("start TPQ-activities");
   Phase("TPQ-activities/Lost Alignment (LA)")
   {
    Phase("TPQ-TDM")
    {
     R_Date("Ly-13083,base stele inside TDM",5930,45);
     R_Date("Ly-12314,hearth outside TDM",5500,45);
    };
    Phase("hearth 5")
    {
     R_Date("A-8857,hearth 5",5440,60);
     R_Date("LGQ558,hearth 5",5220,130);
    };
    Phase("structures west of LA")
    {
     R_Date("AA20403",5835,65);
     R_Date("Ly-3016(sacA3320)",5720,60);
     R_Date("Ly-3014(sacA3318),",5430,60);
     R_Date("A-8856,",5325,60);
    };
    Phase("pits LA")
    {
     R_Date("Ly-2508(Poz),pit 5",6210,50);
     R_Date("Ly-3015 (sacA-3319,pit 13)",5770,90);
     R_Date("Ly-13084,pit 3",5715,45);
     R_Date("Ly-3013 (sacA-3317),pit 8",5480,60);
     R_Date("Ly-3017 (sacA-3321),pit 19",5440,60);
     R_Date("Ly-2509 (Poz.),pit 6",5415,45);
    };
    Phase("quarry")
    {
     R_Date("A-8855",5395,75)
     {
      Outlier();
     };
     R_Date("Ly-5979",5585,135)
     {
      Outlier();
     };
     R_Date("AA20404",5590,65)
     {
      Outlier();
     };
     R_Date("Ly-8(OxA)",5260,80)
     {
      Outlier();
     };
     R_Date("A-8854",5175,100)
     {
      Outlier();
     };
     R_Date("LGQ555",4990,180)
     {
      Outlier();
```

```
    };
    R_Date("LGQ554",4910,150)
    {
     Outlier();
    };
    R_Date("LGQ556",4580,140)
    {
     Outlier();
    };
   };
  };
  Boundary("end TPQ-activities/alignment");
  Boundary("start construction use");
  Phase("construction/use TDM")
  {
   R_Date("Gif-7554",5170,70);
   R_Date("Gif-7555",5040,70);
   R_Date("Ly-12313",4025,40);
  };
  Boundary("end activities TDM");
 };
};
```

M14-1-14-14 Petit Mont, Brittany

```
Plot()
 {
  Sequence("Petit Mont")
  {
   Boundary("start TPQ-activities");
   Phase("ancient soil")
   {
    R_Date("Gif-6846",5600,70);
   };
   Boundary("end TPQ-activities");
   Boundary("start monument");
   Phase("long tumulus/tertre")
   {
    R_Date("Gif-6844",5650,70);
   };
   Boundary("end long tumulus/tertre");
   Boundary("start construction?or TPQ-chamber II");
   Phase("under flagging chamber and passage II")
   {
    R_Date("under flagging chamber II,Gif-7307",5230,70);
    R_Date("hearth under flagging corridor II,Gif-7014",5020,70);
   };
   Boundary("end construction?or TPQ-chamber II");
   Boundary("start construction passage graves and tumuli");
   Phase("passage graves and tumuli")
   {
    Phase("grave II")
    {
     Phase("chamber II")
     {
      R_Date("hearth,center chamber,Gif-6845",4990,70);
      R_Date("hearth,basement chamber,Gif-6843",4970,70);
      R_Date("hearth,entrance chamber,Gif-6842",4650,70);
     };
     Phase("passage II")
     {
      R_Date("C2,Gif-8288",4820,60);
     };
    };
    Phase("grave III")
    {
     R_Date("Gif-8287",5130,40);
    };
    Phase("facade east")
    {
```

```
    R_Date("Gif-7015",4900,70);
   };
   Span("construction and use passage graves");
  };
  Boundary("end use passage graves");
 };
};
```

M15-1-15-8 Necropolis Liscuis, Brittany

```
Plot()
 {
  Sequence("Liscuis")
  {
   Boundary("start ");
   Phase("Liscuis I-II")
   {
    Phase("Liscuis I")
    {
     R_Date("Gif-3099",5140,110);
    };
    Phase("Liscuis II")
    {
     R_Date("Gif-3944",4450,110);
     R_Date("Gif-3585",4170,110);
    };
    Phase("Liscuis III")
    {
     R_Date("Gif-4076",4200,110);
     Phase("after use ")
     {
      R_Date("Gif-4075",3680,110);
      R_Date("Gif-3943",2250,90);
     };
    };
   };
   Boundary("end");
  };
 };
```

M16-1-16-5 Le Déhus, Channel Islands

```
Plot()
 {
  Sequence("Le Déhus")
  {
   Boundary("start measured burials Southern part");
   Phase("burials Southern part")
   {
    R_Date("OxA-12540",5215,40);
    R_Combine("individual chamber C")
    {
     R_Date("OxA-12541",5194,39);
     R_Date("OxA-21199",5222,35);
    };
    R_Date("OxA-12542",5263,38);
   };
   Boundary("end Southern part");
  };
 };
```

M17-1-17-15 La Hogue Bie, Channel Islands

```
Plot()
 {
  Sequence("La Hogue Bie17")
  {
   Boundary("start pre-terrace burning");
```

```
  Phase("1a")
  {
   R_Date("Beta-77360/ETH-13185",5410,70);
  };
  Boundary("transition 1a/1b");
  Phase("1b")
  {
   R_Date("Beta-57925/ETH-9972",5360,60);
   R_Date("Beta-77359/ETH-13184",5400,70);
   R_Date("Beta-77361/ETH-13186",5210,70);
   R_Date("Beta-57926/ETH-9973",5245,60);
  };
  Boundary("end pre-terrace burning");
  Boundary("start blocking");
  Phase("1c blocking")
  {
   R_Date("Beta-77357/ETH-13182",4760,70);
  };
  Boundary("end blocking");
  Boundary("start clay clapping");
  Phase("1d cairn cover")
  {
   R_Date("Beta-57923/ETH-9970",4110,60);
   R_Date("Beta-57924/ETH-9971",4260,60);
  };
  Boundary("clay clapping end");
 };
};
```

M18-1-18-22 Chiron/Bougon, Central West

```
Plot()
 {
  Sequence("Chirons/Bougon")
  {
   Boundary("start human bones");
   Phase("burials")
   {
    Phase("monument E")
    {
     Phase("chamber E1")
     {
      R_Date("Ly-966 TPQ?",5800,230);
     };
     Phase("chamber E2")
     {
      R_Date("Ly-1195",4700,140);
     };
    };
    Phase("monument B")
    {
     Phase("chamber B1")
     {
      R_Date("Q-3233",5280,60);
     };
     Phase("chamber B2")
     {
      R_Date("Q-3232",5190,50);
     };
    };
    Phase("monument A")
    {
     R_Date("OxA-9106/Ly-1051",5365,50);
     R_Date("Q-3215",5195,55);
     R_Date("Q-3214",5085,60);
     R_Date("Beta-156350",4680,40);
    };
    Phase("monument C in front of the tumulus")
    {
     R_Date("Birm-1118",4960,170);
```

```
    R_Date("Q-3216",4950,150);
   };
   Phase("monument F")
   {
    Phase("chamber FO")
    {
     R_Date("Q-3234,TPQ",5860,65);
     R_Date("Ly-1700,TPQ",5830,140);
     R_Date("Ly-1699,TPQ",5480,170);
     R_Date("Q-3235,TPQ",5250,65);
     R_Date("Q-3218,TPQ",5230,70);
     R_Date("Q-3217,TPQ",5145,90);
    };
    Phase("chamber F2")
    {
     Phase("quarry F2, construction F2?")
     {
      R_Date("OxA-9183",5415,65);
     };
     R_Date("Ly-967",4790,220);
     R_Date("Ly-968",4470,230);
    };
    Phase("after use F")
    {
     R_Date("Q-3219",4410,120);
    };
   };
  };
  Boundary("end human bones");
 };
};
```

M19-1-19-8 Champ Châlon/Benon, Central West

```
Plot()
 {
  Sequence("Champ Châlon/Benon")
  {
   Boundary("start");
   Phase("Champ Châlon/Benon")
   {
    Phase("monument A")
    {
     R_Date("OXA-9384/Lyon 1124",4870,45);
     R_Date("OXA-9096/Lyon 1041",3335,45);
    };
    Phase("monument B")
    {
     R_Date("OXA-9097, chamber B1",5365,55);
     R_Date("OXA-9595, chamber B2",5090,40);
    };
    Phase("monument C")
    {
     R_Date("OXA-9099",5030,45);
     R_Date("OXA-9098",4980,50);
    };
   };
   Boundary("end");
  };
 };
```

M20-1-20-11 Péré, tumulus C, Central West

```
Plot()
 {
  Sequence("Péré,tumulus C")
  {
   Boundary("construction");
   Phase("accessible dolmen")
```

```
  {
   R_Date("OxA-10249,bn,individual 1",5500,45);
   R_Date("OxA-10248,bn,individual 2",5440,45);
  };
  Boundary("end accessible dolmen");
  Boundary("construction passage grave");
  Phase("passage grave")
  {
   R_Date("OxA-10204, bn,individual 1",5470,45);
   R_Date("OxA-10258, bn,individual 4",5465,45);
   R_Date("OxA-10205, bn,individual 2",5395,45);
   R_Date("OxA-10246, bn,individual 3",5360,45);
   R_Date("OxA-10247, bn,individual 5",5295,45);
  };
  Boundary("end monument");
 };
};
```

M21-1-21-17 Central West, all available radiocarbon dates gained from human bones in megalithic graves

```
Plot()
 {
  Sequence("Central West,passage graves human bn")
  {
   Boundary("start");
   Phase("passage graves human bones")
   {
    Phase("Péré C")
    {
     R_Date("OxA-10204",5470,45);
     R_Date("OxA-10258",5465,45);
     R_Date("OxA-10205",5395,45);
     R_Date("OxA-10246",5360,45);
     R_Date("OxA-10247",5295,45);
    };
    Phase("Champ Châlon")
    {
     Phase("monument B1")
     {
      R_Date("B1,OXA-9097",5365,55);
     };
     Phase("monument B2")
     {
      R_Date("B2,OXA-9595",5090,40);
     };
     Phase("monument C")
     {
      R_Date("C,OXA-9099",5030,45);
      R_Date("C,OXA-9098",4980,50);
     };
     Phase("monument A")
     {
      R_Date("A,OXA-9384/Lyon 1124",4870,45);
      R_Date("A,OXA-9096/Lyon 1041",3335,45);
     };
    };
    Phase("La Pierre Virante II")
    {
     R_Date("Gif-3416",4870,140);
     R_Date("Gif-3762",4040,130);
    };
    Phase("La Boixe B")
    {
     R_Date("Ly-1060",4200,60);
     R_Date("Ly-1053",4085,45);
    };
   };
   Boundary("end");
  };
```

```
};
```

M22-1-22-8 Vierville, Butte á Luzerne, Normandy

```
Plot()
 {
  Sequence("Vierville")
  {
   Boundary("latest start burial activity ");
   Phase("chamber A")
   {
    R_Date("OxA-11395",5690,45);
    R_Date("OxA-11396",5430,45);
    R_Date("OxA-12980",5448,37);
    R_Date("OxA-13018",5339,35);
   };
   Phase("chamber B")
   {
    R_Date("OxA-12896",5375,40);
    R_Date("OxA-13019",5349,34);
   };
   Boundary("earliest end burial activity");
  };
 };
```

M23-1-23-13 La Hoguette, Normandy

```
Plot()
 {
  Sequence("La Hoguette")
  {
   Boundary("start TPQ-dates");
   Phase("TPQ-activities")
   {
    R_Date("Ly-131",5560,150);
   };
   Boundary("end TPQ-activities");
   Boundary("start monument");
   Phase("construction and use")
   {
    Phase("chamber V")
    {
     R_Date("Ly-421,human bn",5160,190);
     R_Date("Gif-1345,ch",5000,130);
    };
    Phase("chamber VII")
    {
     R_Date("Ly-420,human bn",5050,260);
    };
    Phase("after use chamber")
    {
     R_Date("Ly-132",4580,150);
    };
    Phase("crematory")
    {
     R_Date("Gif-1513",4800,120);
     R_Date("Gif-1347",4750,120);
     R_Date("Gif-1514",4720,120);
     R_Date("Gif-1346",4300,120);
    };
   };
   Boundary("end monument");
  };
 };
```

CATALONIA

M24-1-24-61 Radiocarbon dates from Neolithic and Copper age contexts in the Central Catalan Depression and the East Pyrenees. The potential earliest radiocarbon date for a megalithic grave is UBAR116, El Padró II,ch",5580,130.

```
Plot()
 {
  Sequence("Catalonia/East Pyrennes and Central Catalonian Depression")
  {
   Boundary("start Cardial");
   Phase("Cardial")
   {
    R_Date("UBAR186, Font del Ros,ch",6980,390);
    R_Date("Ly3289,Balma Margineda,ch",6850,160);
    R_Date("Ly3290,Balma Margineda,ch",6820,170);
    R_Date("Ly2839,Balma Margineda,ch",6670,120);
    R_Date("Ly3288,Balma Margineda,ch",6640,160);
    R_Date("AA16498,Font del Ros,ch",6561,56);
    R_Date("Beta-172521,Font del Ros,ch",6470,40);
    R_Date("AA16502,Font del Ros,ch",6370,57);
    R_Date("AA16501,Font del Ros,ch",6307,68);
    R_Date("AA16499,Font del Ros,ch",6243,56);
    R_Date("AA16500,Font del Ros,ch",6058,79);
   };
   Boundary("transition Cardial/Epicardial-Montbolo-Molinot");
   Phase("Epicardial-Montbolo-Molinot")
   {
    Phase("Epicardial")
    {
     R_Date("Beta74311,Plansallosa,ch",6180,60);
     R_Date("Beta74313,Plansallosa,ch",6130,60);
     R_Date("GAK12933,Cova Avellaner,ch",5920,180);
     R_Date("OXA2592,Plansallosa,ch",5890,80);
     R_Date("Beta74312,Plansallosa,ch",5870,60);
     R_Date("UBAR109,Cova Avellaner,ch",5830,100);
     R_Date("MC1465,Cova del Toll",5810,100);
     R_Date("Beta221900,Codella,animal bn",5720,60);
     R_Date("Beta87965,Plansallosa,ch",5720,70);
     R_Date("Beta221903,La Dou,ch",5660,50);
     R_Date("MC1473,Cova del Toll,ch",5590,100);
     R_Date("Beta221904,La Dou,ch",5520,50);
     R_Date("Beta221905,La Dou,ch",5450,50);
     R_Date("UBAR101,Cova del Pastoral,human bn",5270,70);
    };
    Phase("Montbolo")
    {
     R_Date("UBAR61,Font de la Vena,ch,TPQ",6190,100)
     {
      Outlier();
     };
     R_Date("UBAR115,El Padró II,ch,TPQ",5870,100)
     {
      Outlier();
     };
     R_Date("UBAR60,Font de la Vena,ch,TPQ",5780,290)
     {
      Outlier();
     };
     R_Date("UBAR114,El Padró II,ch,TPQ",5770,80)
     {
      Outlier();
     };
     R_Date("UBAR113,El Padró II,ch,TPQ",5600,130)
     {
      Outlier();
     };
     R_Date("UBAR116,El Padró II,ch",5580,130)
     R_Date("MC1477,Cova del Toll,ch",5490,100);
```

```
   R_Date("MC1476,Cova del Toll,ch",5400,100);
   R_Date("MC1474,Cova del Toll,ch",5300,100);
   R_Date("UBAR119,Cova de Griuteres,ch",5300,180);
   R_Date("UGRA274,Cova de Griuteres,ch",5280,90);
   R_Date("MC1470,Cova del Toll,ch",5100,100);
   R_Date("Beta147811, Ca l´Oliaire,human bn",5080,80);
  };
  Phase("Molinot")
  {
   R_Date("UBAR554,Els Vilar,ch",5340,90);
   R_Date("UBAR666,Els Vilar,ch",5280,90);
   R_Date("MC1471,Cova del Toll,ch",5240,100);
   R_Date("MC1475,Cova del Toll,ch,",5220,100);
   R_Date("MC2139,Cova del Toll,ch",5210,90);
  };
 };
 Boundary("transition Epicardial-Montbolo-Molinot/Veraza-Bell Beaker");
 Phase("Veraza-Bell Beaker")
 {
  Phase("Veraza")
  {
   R_Date("UBAR677,Camp del Rector,ch",4355,55);
  };
  Phase("Veraza")
  {
   R_Date("UBAR108,Institut del Manlleu,ch",4400,120);
   R_Date("GIF6925,Cova 120,ch",4240,70);
   R_Date("Beta90622,Balma del Serrat del Pont,ch",4200,70);
   R_Date("I1518/CSIC31,Savassona,human bn",4180,100);
   R_Date("Beta64940,Balma del Serrat del Pont,ch",4100,100);
   R_Date("Beta64939,Balma del Serrat del Pont,ch",4020,100);
   R_Date("UBAR13,Cova del Pixarelles,ch",3940,220);
   R_Date("Beta69597,Balma del Serrat del Pont,ch",3840,90);
   R_Date("MC1466,Cova del Toll,ch",3800,120);
  };
  Phase("Bell Beaker")
  {
   R_Date("UBAR106,Institut del Manlleu,ch",3810,90);
   R_Date("UBAR104,Institut del Manlleu,ch",3760,90);
   R_Date("UBAR107,Institut del Manlleu,ch",3700,80);
   R_Date("I12396,Clarena,human bn",3700,100);
   R_Date("UBAR661,Les Portes,ch",3630,55);
  };
 };
 Boundary("end construction and use graves");
};
};
```

SOUTHERN FRANCE

Transitional structures and the emergence of megaliths in Southern France

M25-1-25-12 Château Blanc, Ventabren

```
Plot()
 {
  Sequence("Château Blanc")
  {
   Boundary("start");
   Phase("burial phase")
   {
    Phase("collective burial")
    {
     Phase("collective burial")
     {
      R_Date("ETH-15261,first deposition, human bn",4620,60);
      R_Date("ETH-15730,second deposition,human bn",4495,75);
```

```
    };
    Boundary("start dolmen");
    Phase("after use collective burial/dolmen")
    {
     R_Date("ETH-15733,after burial,human bn",4215,70);
    };
   };
   Phase("tumulus I")
   {
    R_Date("ETH-15735,human bn",4155,75);
   };
   Phase("tumulus III")
   {
    R_Date("ETH-15731,human bn",4430,70);
    R_Date("ETH-15260,human bn",4385,60);
   };
   Phase("tumulus IVa")
   {
    R_Date("ETH-15734,human bn",4270,70);
   };
   Phase("tumulus V")
   {
    R_Date("ETH-15732,human bn",4390,85);
   };
  };
  Boundary("end");
  Span("all");
 };
};
```

M26-1-26-24 Dolmen de l´Ubac

```
Plot()
 {
  Sequence("Dolmen de l´Ubac")
  {
   Boundary("start pre-megalithic activities");
   Phase("pre-megalithic activities")
   {
    Phase("under tumulus")
    {
     R_Date("Ly-664,ch",7060,90);
     R_Date("Ly-944,ch",6920,70);
    };
    Phase("basement tumulus")
    {
     R_Date("Ly-794,ch",5220,60);
    };
    R_Date("Ly-1721,ch",6700,70);
   };
   Boundary("end pre-megalithic activites");
   Boundary("start burial activities");
   Phase("burial activites")
   {
    R_Date("Ly-11492,human bn",4440,45);
    R_Date("Ly-11493,human bn",4245,45);
    R_Date("Ly-740,human bn",4190,45);
    R_Date("Ly-900,human bn",4140,40);
   };
   Boundary("end burial activites/start layer east of tumulus");
   Phase("brown-red layer east of tumulus")
   {
    R_Date("Ly-946,ch",4160,50);
   };
   Boundary("end layer east of tumulus");
   Boundary("start post-megalithic activities");
   Phase("filling chamber/re-use tumulus")
   {
    R_Date("Ly-854,ch",3970,40);
    R_Date("Ly-945,ch",3785,50);
```

```
  R_Date("Ly-9125,ch",3640,40);
  R_Date("Ly-855,ch",3635,55);
  R_Date("Gif-10651,ch",3350,60);
  R_Date("Ly-1722,ch",2790,35);
  R_Date("Ly-947,ch",2475,50);
  R_Date("Ly-10055,ch",2060,65);
  };
  Boundary("end post-megalithic activities");
 };
};
```

CORSICA

M27-1-27-12 Monte Revincu, cist/dolmen necropolis

```
Plot()
 {
  Sequence("Monte Revincu")
  {
   Boundary("start cists");
   Phase("cists")
   {
    R_Date("Ly-8396,ch",5405,55);
    R_Date("Ly-9713,ch",5405,70);
    R_Date("Ly-13092,ch",5355,50);
   };
   Boundary("transition cists/dolmens");
   Phase("dolmens")
   {
    R_Date ("Poz-25355,ch",5490,40);
    R_Date ("Poz-25356,ch",5450,40);
    R_Date ("Poz-25357,ch",5440,40);
    R_Date ("Poz-13801,ch",5410,40);
   };
   Boundary("end dolmens");
  };
 };
```

SARDINIA

M28-1-28-9 Monte d´Accodi, megalithic pyramid

```
Plot()
 {
  Sequence("Monte d´Accodi")
  {
   Boundary("first phase/construction");
   Phase("first phase")
   {
    R_Date("pavement platfom", 4920, 50);
    R_Date("UTC-1465 layer first mound", 4870, 50);
    R_Date("UTC-1466 layer first mound", 4810, 80);
   };
   Boundary("second phase/construction");
   Phase("second phase")
   {
    R_Date("UTC 1464 layer second mound", 4540, 90);
   };
   Boundary("third layer");
   Phase("third layer")
   {
    R_Date("UZ-2475/ETH-4716 third layer", 4440, 85);
   };
   Boundary("end");
```

```
 };
};
```

M29-1-29-37 Radiocarbon dates Sardinia from Late Middle, Recent and end Neolithic contexts (no direct radiocarbon dates available. Earliest megaliths contain San Ciriaco material)

```
Plot()
{
 Sequence("Middle Neolithic/End Neolithic/Chalcolithic Sardinia")
 {
  Boundary("start San Ciriaco");
  Phase("San Ciriaco")
  {
   R_Date("OZC-966, Contraguda",5423,47);
   R_Date("OZC-965, Contraguda",5369,51);
  };
  Boundary("start Ozieri");
  Phase("Ozieri")
  {
   R_Date("GRA-13477,Contraguda",5310,40);
   R_Date("R-884,Sa Ucca",5090,50);
   R_Date("GRA-Beta-149261,Contraguda",5070,40);
   R_Date("AA78327,San Benedetto",5078,58);
   R_Date("AA78328,San Benedetto",5044,58);
   R_Date("AA78329,San Benedetto",4969,52);
   R_Date("AA78330,San Benedetto",4984,52);
   R_Date("UTC-1468,Monte d´Accodi,ch",4920,50);
   R_Date("UTC-1465,Monte d´Accodi,ch",4870,50);
   R_Date("UTC-1466,Monte d´Accodi,ch.,",4810,80);
   R_Date("Beta-72233,San Benedetto,ch.",4920,70);
   R_Date("Q-3028,Filestru",4950,50);
   R_Date("R-883,Sa Ucca",4930,50);
   R_Date("R-879,Sa Ucca",4850,50);
   R_Date("R-1784,Grotta del Guano",4900,60);
   R_Date("R-609a,Grotta del Guano",4900,50);
   R_Date("R-609,Grotta del Guano",4830,50);
  };
  Boundary("start Sub-Ozieri");
  Phase("Sub-Ozieri")
  {
   R_Date("LTL-2930A,Canelles",4708,45);
   R_Date("LTL-295A,Canelles",4554,45);
   R_Date("LTL-1104A,Canelles",4512,50);
   R_Date("AA72148,S.Caterina di Pittinuri",4496,46);
   R_Date("AA64825,Cannas di Sotto",4476,43);
   R_Date("UTC-1464,Monte d´Accodi,ch.",4540,90);
   R_Date("UZ-2475/ETH-4716,Monte d´Accodi,ch.",4440,85);
   R_Date("LTL-2931A,Canelles",4481,50);
   R_Date("LTL-2932A,Canelles",4350,50);
   R_Date("LTL-1105A,Canelles",4345,40);
   R_Date("AA72151,Serra Canigas",4289,47);
   R_Date("AA72793,Scab`e Arriu",4278,42);
   R_Date("AA64828,Scab`e Arriu",4202,45);
   R_Date("AA64826,Mind´e Gureu",3957,56);
  };
  Boundary("end Sub-Ozieri");
 };
};
```

MALTESE ARCHIPELAGO

M30-1-30-37 The Malta Sequence: Bayesian model with all available radiocarbon results of Maltese Neolithic and Bronze age Tarxien cementary contexts. The earliest megalithic temples emerge in the Ggantija phase.

```
Plot()
 {
  Sequence("Malta sequence")
  {
   Boundary("start Ghar Dhalam");
   Phase("Ghar Dalam ")
   {
    R_Date("BM-378",6140,160);
    R_Date("BM-216",5760,200);
   };
   Boundary("start Red Skorba");
   Phase("Red Skorba")
   {
    R_Date("BM-148",5175,150);
   };
   Boundary("start Zebbug");
   Phase("Zebbug")
   {
    R_Date("OxA-3572",5380,70);
    R_Date("OxA-5038",5330,100);
    R_Date("OxA-3568",5170,65);
    R_Date("BM-147",5140,150);
    R_Date("OxA-5039",5170,65);
    R_Date("BM-145",5000,150);
    R_Date("OxA-3567",4860,65);
   };
   Boundary("start Mgarr");
   Phase("Mgarr")
   {
    R_Date("BM-100",4640,150);
   };
   Boundary("start Ggantija");
   Phase("Ggantija")
   {
    R_Date("BM-712",4478,56);
    R_Date("BM-101",4485,150);
    R_Date("Oxa-3566",4600,65);
   };
   Boundary("start Tarxien");
   Phase("Tarxien")
   {
    R_Date("BM-143",4380,150);
    R_Date("SUERC-4389",4035,35);
    R_Date("UBA-10378",4048,28);
    R_Date("UBA-10383",4054,24);
    R_Date("OxA-3571",4080,65);
    R_Date("OxA-3570",4300,65);
    R_Date("OxA-3574",4260,60);
    R_Date("OxA-3575",4225,70);
    R_Date("OxA-3573",4170,65);
    R_Date("SUERC-4390",3920,35);
    R_Date("SUERC-4391",3910,40);
    R_Date("OxA-3569",4250,65);
   };
   Boundary("start Tarxien Cemetery");
   Phase("Tarxien Cemetery")
   {
    R_Date("BM-141",3880,150);
```

```
   R_Date("BM-711",3354,76);
   R_Date("BM-710",3286,72);
  };
  Boundary("end Tarxien Cemetery");
 };
};
```

M31-1-31-26 Brochtorff circle, Ggantija

```
Plot()
 {
  Sequence("Brochtorff Circle")
  {
   Boundary("start Zebbug burial activity ");
   Phase("Zebbug ")
   {
    R_Date("OxA-5038,West chamber",5330,100);
    R_Date("OxA-3568,West chamber",5170,65);
    R_Date("OxA-3567,West chamber",4860,65);
    R_Date("OxA-3572,Burial niche",5380,70);
    R_Date("OxA-5039,East chamber",5170,65);
   };
   Boundary("end Zebbug burial activity");
   Boundary("start Ggantija insertion");
   Phase(" Ggantija insertion ")
   {
    R_Date("Oxa-3566,West chamber",4600,65);
   };
   Boundary("end Ggantija insertion");
   Boundary("start Tarxien burial activity");
   Phase("Tarxien ")
   {
    R_Date("OxA-3573,West cave",4170,65);
    R_Date("OxA-3574,West niche",4260,60);
    R_Date("OxA-3575,West niche",4225,70);
    R_Date("SUERC-4391,Upper bowl burials",3910,40);
    R_Date("SUERC-4389,Lower bowl burials",4035,35);
    R_Date("SUERC-4390,East cave",3920,35);
    R_Date("UBA-10378,West cave",4048,28);
    R_Date("UBA-10383,West cave",4054,24);
    R_Date("OxA-3570,Treshold bone pit",4300,65);
    R_Date("OxA-3571,Treshold bone pit",4080,65);
    R_Date("OxA-3569,Treshold bone pit",4250,65);
   };
   Boundary("end Tarxien burial activity ");
   Boundary("start Tarxien cementary");
   Phase("Tarxien cementary")
   {
    R_Date("OxA-3750,Northern edge",3580,75);
   };
   Boundary("end Tarxien cementary");
  };
 };
```

ANDALUSIA

M32-1-32-30 Los Millares, Almeria

```
Plot()
 {
  Sequence("Los Millares")
  {
   Boundary("start settlement");
   Phase("Early Copper Age, Muralla II,IV,Necropolis")
   {
    R_Date("Muralla II Phase 1g, Beta124523",4460,70);
```

```
 R_Date("Muralla II, Phase 2g, Beta124524",4420,70);
 R_Date("Muralla IV, Phase I, Beta124532",4410,60);
 R_Date("Necropolis, Tholos XIX, KN72",4380,120);
};
Boundary("Transition Early/High Copper Age");
Phase("High Copper Age, Muralla I,II,III,IV")
{
 R_Date("Muralla I,H204-247",4295,85);
 R_Date("Muralla I,Beta124526",4220,70);
 R_Date("Muralla I,BM2344",4110,110);
 R_Date("Muralla I,Beta124525",4040,70);
 R_Date("Muralla II,BM2343",4150,40);
 R_Date("Muralla IV, Phase 6,Beta124531",4200,60);
 R_Date("Muralla III, Phase 2,Beta124527",4220,70);
 R_Date("Muralla III,Beta124528",4030,130);
};
Boundary("Transition High/Late Copper Age");
Phase("Late Copper Age, Muralla IV,II")
{
 R_Date("Muralla IV,Phase 7a,Beta124529",4020,60);
 R_Date("Muralla II,Phase 4c,Beta124522",3990,60);
};
Boundary("Transition Late/Final Copper Age");
Phase("Final Copper age, Muralla IV, Fortins I,IV,V")
{
 R_Date("Beta124530",3900,60);
 Sequence("Forts")
 {
  Boundary("start Forts");
  Phase("Fortin I")
  {
   R_Date("Beta125862",4000,70);
   R_Date("Beta125861",3980,40);
   R_Date("Beta125860",3950,40);
   R_Date("BM2536",3920,50);
   R_Date("Beta125859",3880,60);
   R_Date("BM2345",3820,40);
  };
  Phase("Fortin IV")
  {
   R_Date("Beta135669",3830,70);
  };
  Phase("Fortin V")
  {
   R_Date("Beta135670",3840,50);
   R_Date("Beta135671",3840,70);
  };
  Boundary("end Forts");
 };
};
};
};
```

WESTIBERIAN PENINSULA

M33-1-33-21 All available radiocarbon dates from megalithic contexts in the Estremadura

```
Plot()
 {
 Sequence("megalithic graves Estremadura")
 {
  Boundary("start pre-idol plaque phase");
  Phase("pre-idol plaque phase")
  {
   R_Date("Beta-228577,Carascal",4770,40);
   R_Date("Beta-225167,Carascal",4640,40);
   R_Date("Beta-205946,Pedras Grandes",4590,40);
   R_Date("Beta-234136,Pedras Grandes",4530,40);
   R_Date("Beta-228583,Trigache 4",4450,40);
  };
```

```
  Boundary("transition pre-idol plaque phase/idol plaque phase");
  Phase("idol plaque phase")
  {
   R_Date("OxA-5509,Praia das Maças",4410,75);
   R_Date("OxA-5510,Praia das Maças",4395,60);
   R_Date("H-2049,Praia das Maças",4260,60);
   R_Date("Beta-208950,Estria",4180,50);
   R_Date("Beta-228580,Monte Abraão",4180,40);
   R_Date("Beta-225168,Casainhos",4150,40);
   R_Date("Beta-228578,Estria",4110,40);
  };
  Boundary("transition idol plaque phase/post idol plaque phase");
  Phase("post idol plaque phase")
  {
   R_Date("Sac-1556,Paimogo 1",4250,90);
   R_Date("Beta-225170,Carcavelos",4130,40);
   R_Date("Beta-239754,Agualva",4110,40);
   R_Date("Sac-1782,Paimogo 1",4100,60);
   R_Date("UBAR-539,Paimogo 1",4130,90);
  };
  Boundary("end megalithic graves Estremadura");
 };
};
```

M34-1-34-25 All available radiocarbon dates from megalithic contexts in the Alentejo

```
Plot()
 {
  Sequence("megalithic graves Alentejo")
  {
   Boundary("start TPQ-activities");
   Phase("TPQ-activities")
   {
    R_Date("KIA-31381,Vale de Rodrigo 3",4996,29);
    R_Date("Ua-10830,Vale de Rodrigo 2",4905,70);
   };
   Boundary("end TPQ-activities");
   Boundary("start pre-idol plaque phase");
   Phase("pre-idol plaque phase")
   {
    R_Date("Beta-196094,Cabeceira 4",4780,40);
    R_Date("Beta-233283,Sobreira 1",4770,40);
    R_Date("Beta-196091,Cabeço da Areira",4650,40);
    R_Date("Beta-191133,Rabuje 5",4650,50);
    R_Date("To-2090,C.Zambujal",4420,70);
    R_Date("Beta-153911,Santa Margarida 2",4410,60);
   };
   Boundary("transition pre-idol plaque phase/idol plaque phase");
   Phase("idol plaque phase")
   {
    R_Date("ICEN-955,Olival da Pega 2",4290,100);
    R_Date("Wk-17091,Estanque",4182,39);
    R_Date("ICEN-66,Bola da Cera",4182,39);
    R_Date("Beta-176897,Santa Margarida 3",4290,40);
    R_Date("Beta-166416,Santa Margarida 3",4270,40);
    R_Date("Beta-166422,Santa Margarida 3",4270,40);
    R_Date("Beta-176896,Santa Margarida 3",4170,40);
    R_Date("Beta-166423,Santa Margarida 3",4100,40);
    R_Date("ICEN-956,Olival da Pega 2b",4180,80);
    R_Date("ICEN-957,Olival da Pega 2b",4130,60);
   };
   Boundary("transition idol plaque phase/post idol plaque phase");
   Phase("post idol plaque phase")
   {
    R_Date("Ua-10831, Vale de Rodrigo 2",3905,75);
   };
   Boundary("end megalithic graves Alentejo");
  };
 };
```

M35-1-35-51 All available radiocarbon dates from megalithic contexts in Beira alta/interior

```
Plot()
 {
  Sequence("megalithic graves Beira alta/interior")
  {
   Boundary("start TPQ-activities");
   Phase("TPQ-activities")
   {
    R_Date("GrA-17166, Orquinha dos Juncais",8750,70);
    R_Date("OxA-9911,Casinha Derribada",8080,90);
    R_Date("GrA-14771,Orca de Merouços",7740,50);
    R_Date("CSIC-1003,Portela do Pau 2",5440,35);
    R_Date("OxA-5102,Lameira da Cima 2",5360,55);
    R_Date("OxA-4484,Orcas dos Padroes",4960,65)
    {
     Outlier();
    };
    Phase("Areita 1")
    {
     R_Date("CSIC-1327",5699,31);
     R_Date("CSIC-1326",5629,38);
    };
    Phase("Antelas")
    {
     R_Date("OxA-5496",5330,60);
     R_Date("OxA-5497",5295,60);
     R_Date("OxA-5498",5070,65);
    };
    Phase("Carapito 1")
    {
     R_Date("OxA-3733",5125,70);
     R_Date("TO-3336",5120,40);
    };
    Phase("Senhora do Monte")
    {
     R_Date("GrN-20791",5130,40);
     R_Date("ICEN-1200",5100,70);
     R_Date("ICEN-1201",4990,70);
    };
   };
   Boundary("end TPQ-activities");
   Boundary("start construction and use");
   Phase("construction and use")
   {
    Phase("Orca da Seixas")
    {
     R_Date("CSIC-1665",5045,25);
     R_Date("GrN-26226",5045,25);
     R_Date("CSIC-1664",4929,34);
     R_Date("GrN-5734",4900,40);
    };
    Phase("Orca de Castenairas")
    {
     R_Date("OxA-7433",4720,40);
     R_Date("GrN-4925",4610,50);
     R_Date("GrA-9307",4540,50);
     R_Date("GrA-9312",4520,50);
     R_Date("OxA-7432",4510,45);
     R_Date("OxA-7434",4470,45);
     R_Date("GrA-9308",4440,50);
     R_Date("GrA-9313",4380,50);
     R_Date("GrA-9314",4365,50);
     R_Date("OxA-7435",4365,50);
     R_Date("OxA-7436",4365,50);
    };
    Phase("Orca da Penela 1")
    {
     R_Date("GrA-14767",4990,40);
     R_Date("GrN-23064",4590,60);
     R_Date("GrN-9578",4400,50);
```

```
    R_Date("GrA-9256",4320,50);
   };
   Phase("Lameira da Cima 2")
   {
    R_Date("CSIC-1114",4999,29);
    R_Date("GrN-21353",4990,40);
    R_Date("CSIC-1113",4961,27);
    R_Date("OxA-4084",4990,80);
   };
   Phase("Orca de Merouços")
   {
    R_Date("GrA-14768",4980,40);
    R_Date("GrN-14765",4960,40);
    R_Date("GrN-14770",4910,40);
   };
   Phase("Picoto do Vasco")
   {
    R_Date("CSIC-1199",4988,31);
    R_Date("OxA-6910",4930,60);
   };
   R_Date("GrA-18497,Areita 1",4840,60);
   R_Date("GrN-5110,Carapito 1",4850,40);
   R_Date("GrA-8402,Vale de Cerva",4140,45);
  };
  Boundary("end construction and use graves");
 };
};
```

M36-1-36-10 Areita 1, Beira

```
Plot()
 {
  Sequence("Dolmen de Areite 1")
  {
   Boundary("TPQ-activities");
   Phase("TPQ-activities")
   {
    Phase("charcoal basement chamber")
    {
     R_Date("Sac-1514,ch",5970,60);
     R_Date("Sac-1508,ch",5830,50);
    };
    Phase("under the floor of the chamber")
    {
     R_Date("CSIC-1327,ch",5699,31);
     R_Date("CSIC-1326,ch",5629,38);
    };
   };
   Boundary("end TPQ-activities");
   Boundary("start burial activities");
   Phase("human bones chamber")
   {
    R_Date("GrA-18518,human bn",5170,60);
    R_Date("GrA-18497,human bn",4840,60);
   };
   Boundary("end Areite 1");
  };
 };
```

M37-1-37-19 Dombate, Galicia

```
Plot()
 {
  Sequence("Dolmen de Dombate")
  {
   Boundary("TPQ-activities");
   Phase("TPQ-activities")
   {
    Phase("surface ancient soil")
```

```
  {
   R_Date("CSIC-890,ch",4930,70);
   R_Date("CSIC-891,ch",4910,60);
  };
  Phase("debris tumulus")
  {
   R_Date("UtC-3203,ch",4950,70);
   R_Date("CSIC-942,ch",4480,25);
   R_Date("CSIC-893,ch",4450,70);
   R_Date("CSIC-940,ch",4450,70);
   R_Date("CSIC-941,ch",4430,25);
   R_Date("CSIC-939,ch",4410,25);
   R_Date("CSIC-963,ch",4380,35);
   R_Date("CSIC-964,ch",4470,30);
   R_Date("CSIC-948,ch",4200,30)
   {
    Outlier();
   };
   R_Date("CSIC-1066,ch",4090,60)
   {
    Outlier();
   };
  };
 };
 Boundary("Transition TPQ-activities/use of the grave");
 Phase("use of the grave")
 {
  Phase("chamber")
  {
   R_Date("UtC-3202,ch",4430,50);
   R_Date("UtC-3201,ch",3950,60);
  };
  Phase("entrance blocking")
  {
   R_Date("CSIC-892,ch",4230,70);
  };
  Phase("corridor")
  {
   R_Date("UtC-3200,ch",4780,60)
   {
    Outlier();
   };
  };
 };
 Boundary("end Dombate");
};
};
```

M38-1-38-12 The black color sequence from Galician megalithic graves

```
Plot()
 {
  Sequence("Black paintings in megalithic graves")
  {
   Boundary("start black paintings");
   Phase("black paintings in megalithic graves")
   {
    R_Date("CAMS-83116,Coto dos Mouros, TPQ",6050,110);
    R_Date("CAMS-77924,Mámoa do Monte: dos Marxos,TPQ",5330,80);
    R_Date("CAMS-77925,Mámoa do Monte: dos Marxos,TPQ",5540,70);
    R_Date("CAMS-77923,Pedra Cuberta",5010,60);
    R_Date("CAMS-77761, Pedra Moura",4980,70);
    R_Date("CAMS-80501,Forno dos Mouros",4920,60);
    R_Date("CAMS-88195, Anta de Serramo",4900,60);
    R_Date("CAMS-77427,Casota do Páramo",4740,120);
    R_Date("OxA-5433,Dolmen de Antelas",4655,60);
    R_Date("CAMS-83631,Coto dos Mouros",3830,60);
   };
   Boundary("end black paintings");
  }; };
```