

Reconstructing Palaeoenvironmental Evolution in the Aléria Plain (Corse) during the last 6000 yr

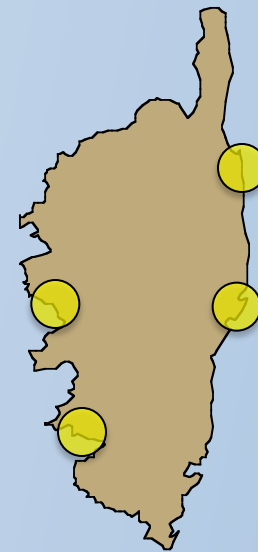
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Projet Collective de Recherche (PCR-CORSE): *Géoarchéologies des vallées de Corse (2013-2015)* directed by Matthieu Ghilardi.

Reconstruction of palaeoenvironmental dynamics and human-nature interactions in littoral areas of Corsica.



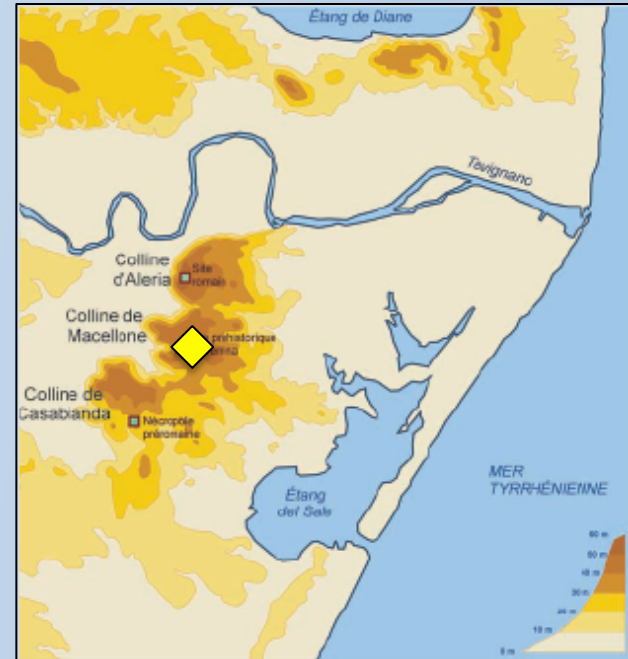
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- The Aléria Plain as an **strategic area** for the development of complex societies through the last 6000 yr

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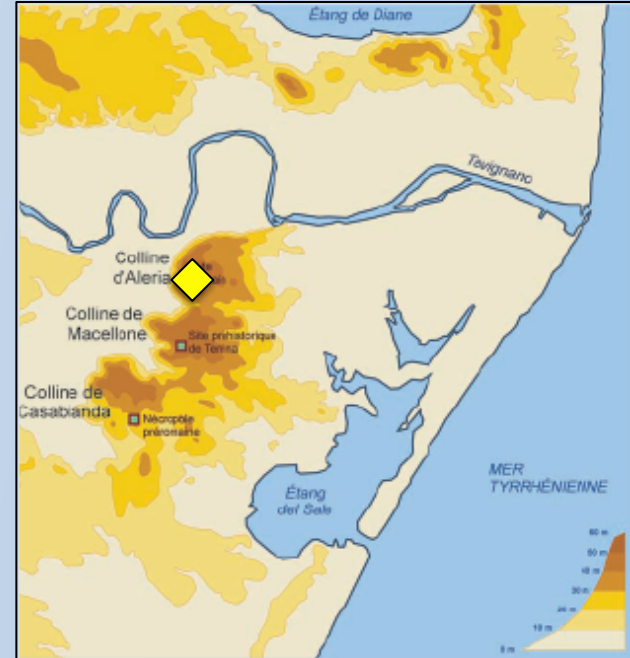
- Development of complex human societies since the Neolithic (5th mil. BC).
- **Terrinien Culture** for the Calcolithic period (3rd mil. BC) and Bronze Age. Archeological site of Terrina IV.



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Roman Aleria



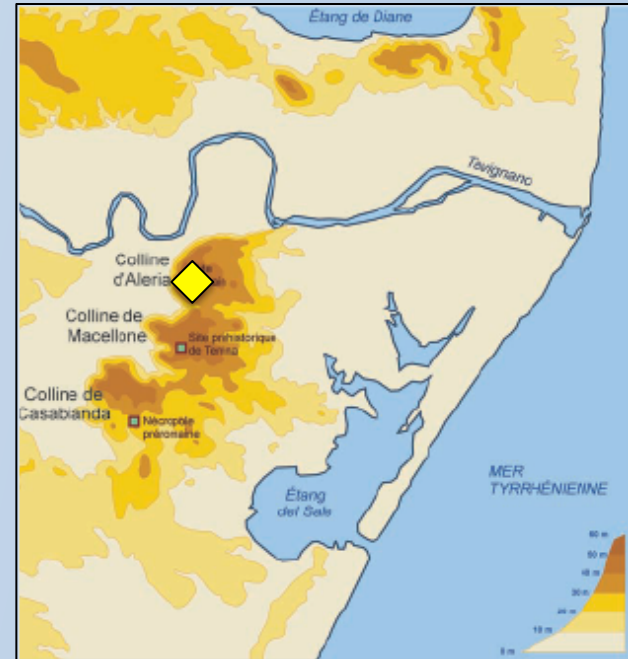
- Greek and Etrurian Alalia (ca 9th BC).
- Roman Aleria Colonia (80 BC), capital of Corsica.



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Roman Aléria



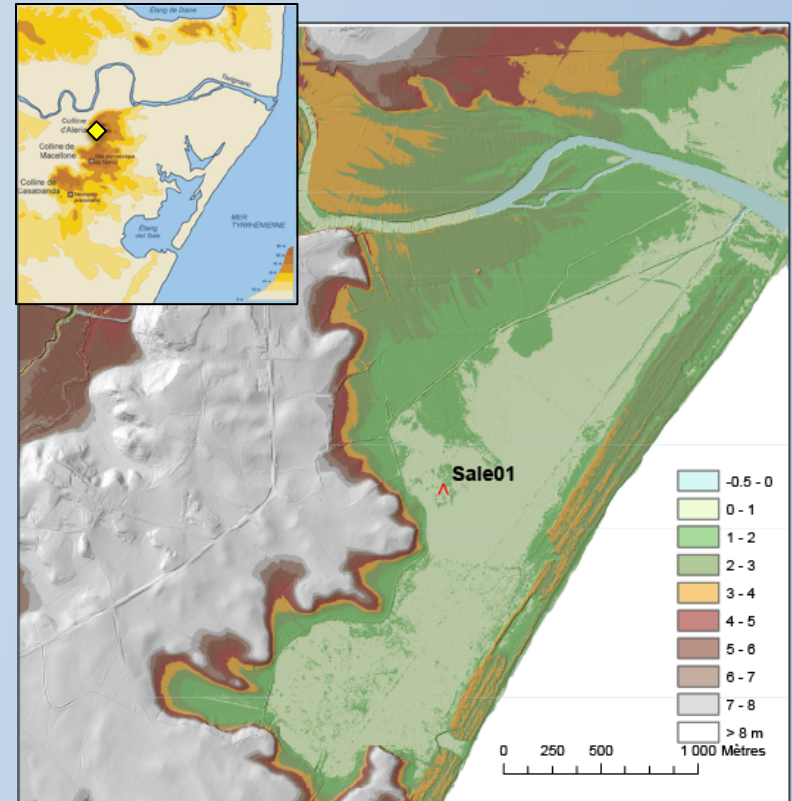
- Population decay in High Medieval.
- Late Medieval, Genoan and French occupation until present.
- Continuous occupation. Tracking changes.



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Sedimentary sampling



Étang del Sale

-3 km² surface.

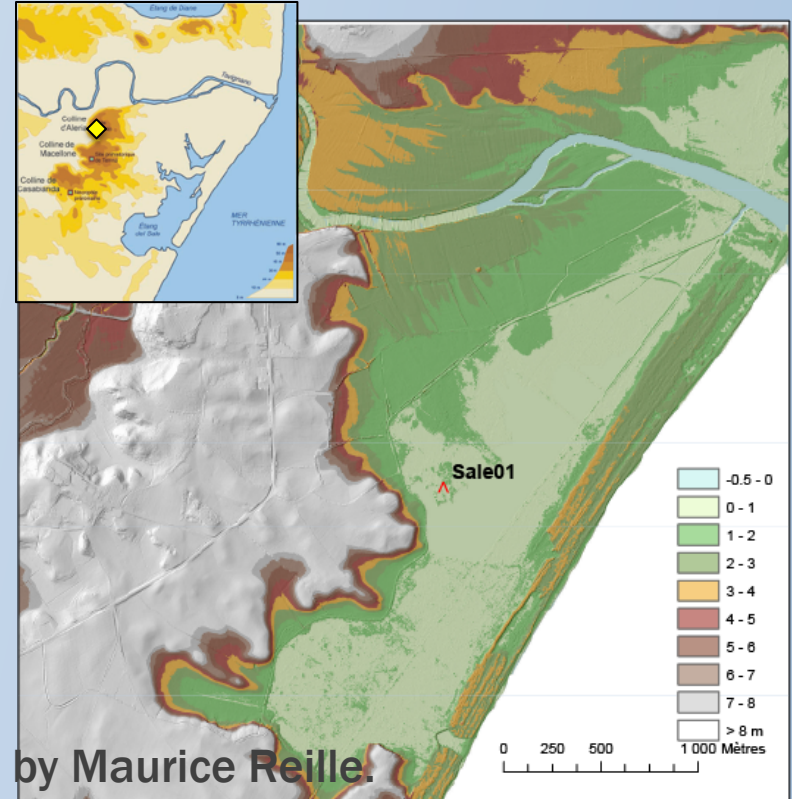
-2 km away from Terrina site

-Partially-dried littoral swamp (Salicornia, Juncus, Juniperus, Pinus, Cistus, Lamiaceae, Quercus)

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Sedimentary sampling



- 1984 pollen analysis of Étang del Sale by Maurice Reille.

Excellent palynological study.

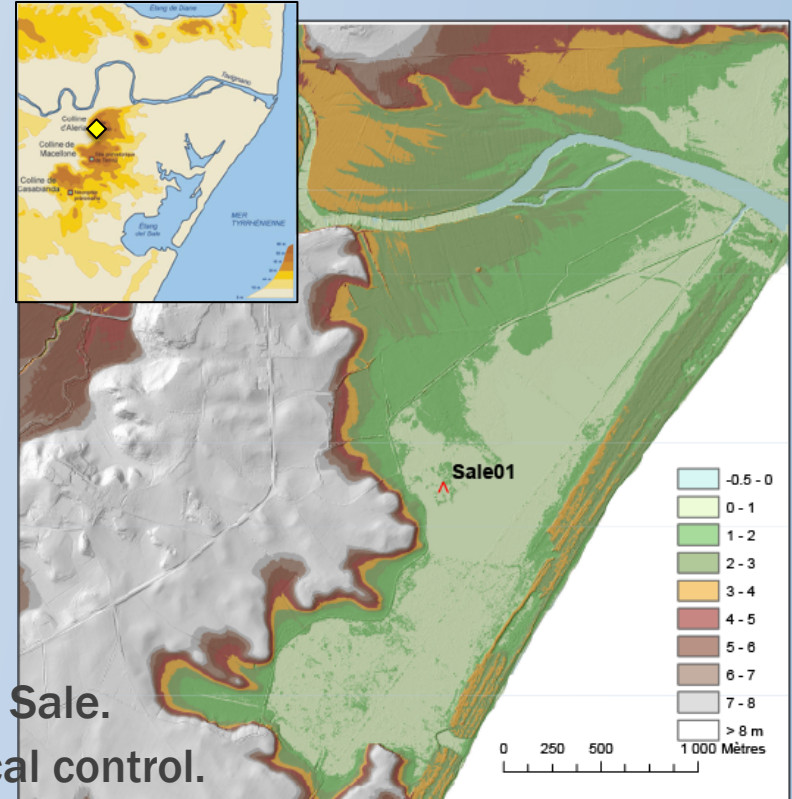
Only two ¹⁴C dates (5920 BP and 5650 BP).

Low-resolution analysis of phases of human impact.

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Sedimentary sampling



- 2014 New pollen analysis of Étang del Sale.
 - Strong and reliable chronological control.
 - High resolution sample analysis.
 - Pollen and Non Pollen Palynomorphs.
 - Cross-check with new archaeological data from the Aléria Plain.
- Better understanding of socioenvironmental interactions

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- 530 cm sedimentary profile
- Lithological description
- Radiocarbon dates
- Pollen
- Non-Pollen-Palynomorphs
- Organic Matter content
- Granulometry
- Sedimentology

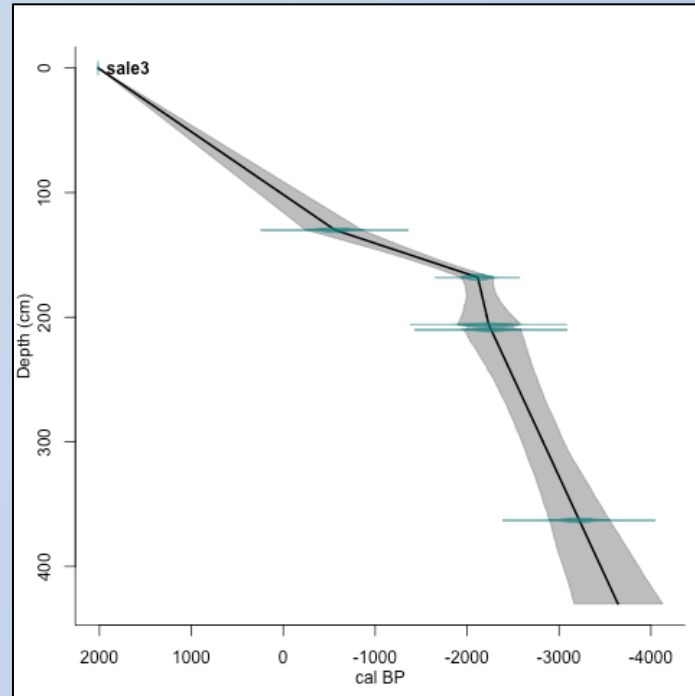


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5920 ± 190 BP
5650 ± 190 BP (M. Reille, 1984)

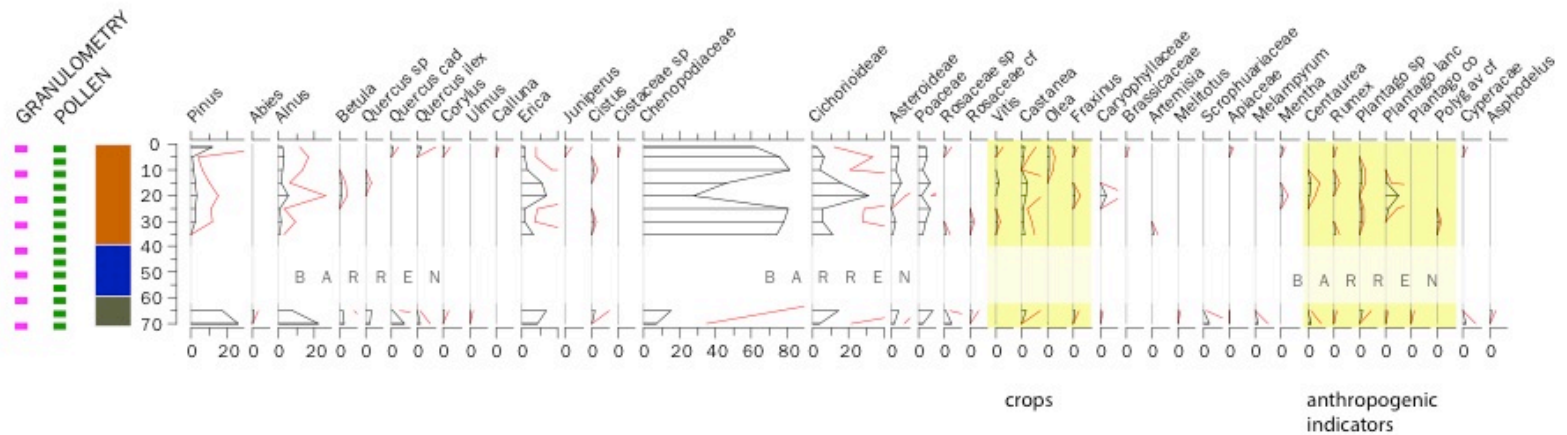
130 cm	2507 ± 160 cal BP
168 cm	2114 ± 92 cal BP
206 cm	2229 ± 170 cal BP
210 cm	2260 ± 165 cal BP
363 cm	3214 ± 166 cal BP

5 Radiocarbon dates...



age-depth model

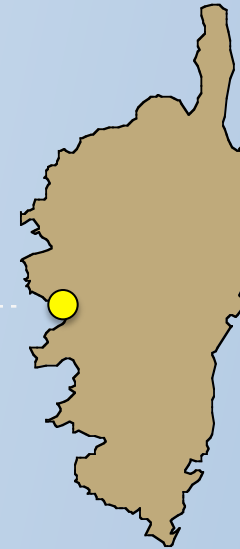
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Pollen analysis

- Similar trends than those studied by M. Reille (1984)
- Local presence of halophilous (salt resistant) plants.
- highly human-perturbed environment
- barren zone at sand layer

Environmental history of Sagone Gulf



- Roman and Early Medieval occupation
- Interest on the Bronze Age

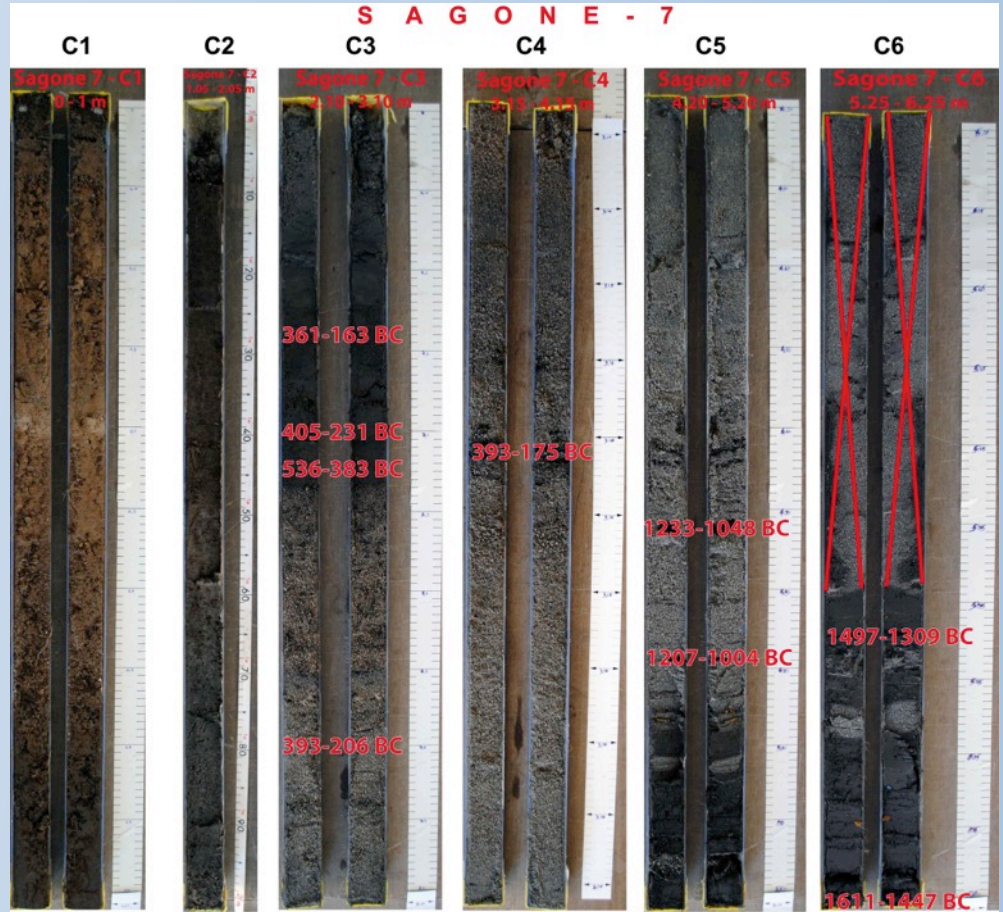
- Palynological, sedimentological and microbiological remains of Sagone fluvial sedimentary cores (800 cm depth)

Environmental history of Sagone Gulf

228 cm	262 ± 99 cal BC
240 cm	318 ± 87 cal BC
245 cm	460 ± 77 cal BC
282 cm	300 ± 94 cal BC
472 cm	1141 ± 93 cal BC
489 cm	1106 ± 102 cal BC
593 cm	1403 ± 94 cal BC
593 cm	1529 ± 82 cal BC

8 Radiocarbon dates

Palynological, sedimentological and macrobiological remains of Sagone fluvial sedimentary cores (625 cm depth)



thank you