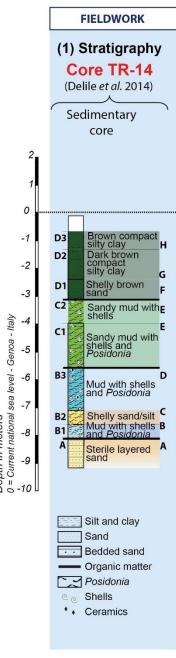
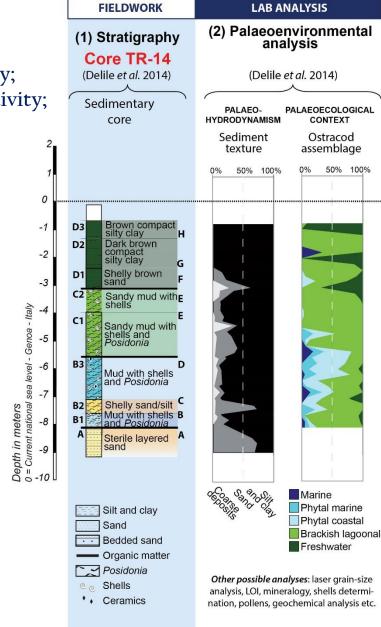


To cite: Ferréol Salomon, Simon Keay, Nicolas Carayon, Pascal Arnaud, Jean-Philippe Goiran, 2019, From the harbour to the city-port: A geoarchaeological approach of navigability and accessibility using the PADM chart, In La Tyrannie du tirant d'eau / Drafts and depths, 19/04/2019 – CRESEM – Perpignan University (France) / Port-Vendres

(1) Sediment archive availability;



- (1) Sediment archive availability;
- (2) Degree of exposure/connectivity;



(1) Sediment archive availability;

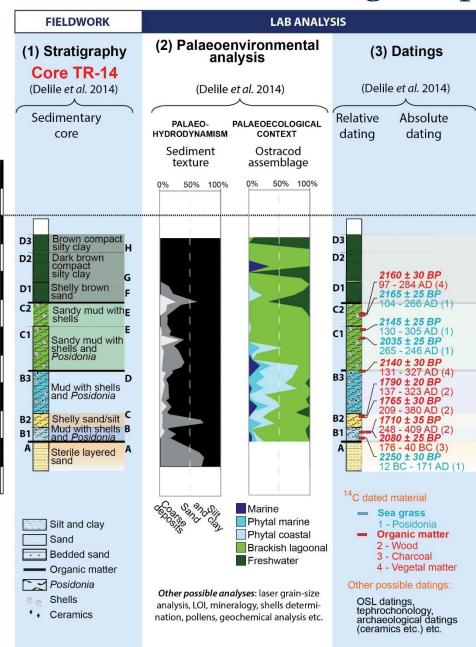
(2) Degree of exposure/connectivity;

-3

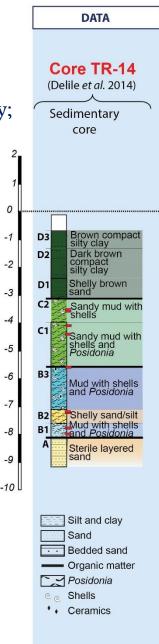
-5

(3) Time span recorded

in the sediments;



- (1) Sediment archive availability;
- (2) Degree of exposure/connectivity;
- (3) Time span recorded in the sediments;
- (4) Water column evolution;



Genoa - Italy

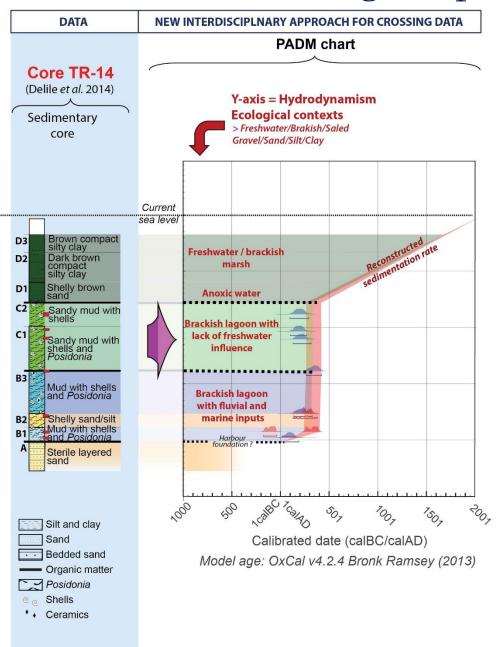
(1) Sediment archive availability;

(2) Degree of exposure/connectivity;

-3

-5

(3) Time span recorded in the sediments;

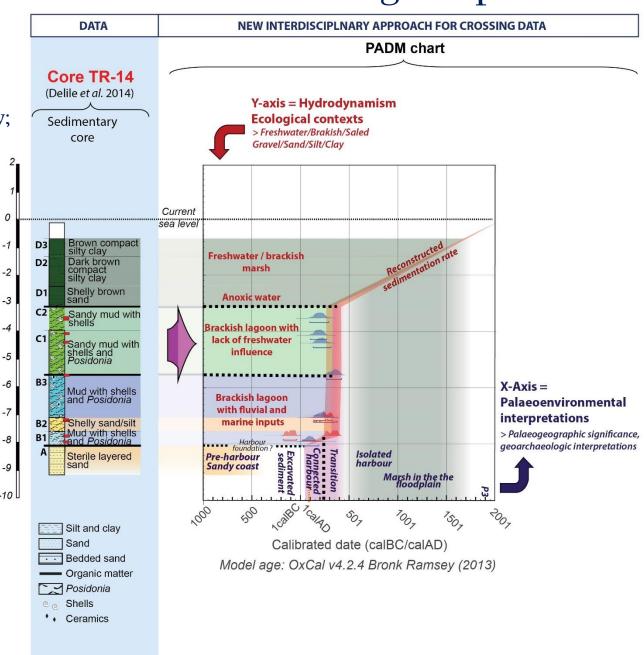


(1) Sediment archive availability;

(2) Degree of exposure/connectivity;

(3) Time span recorded

in the sediments;



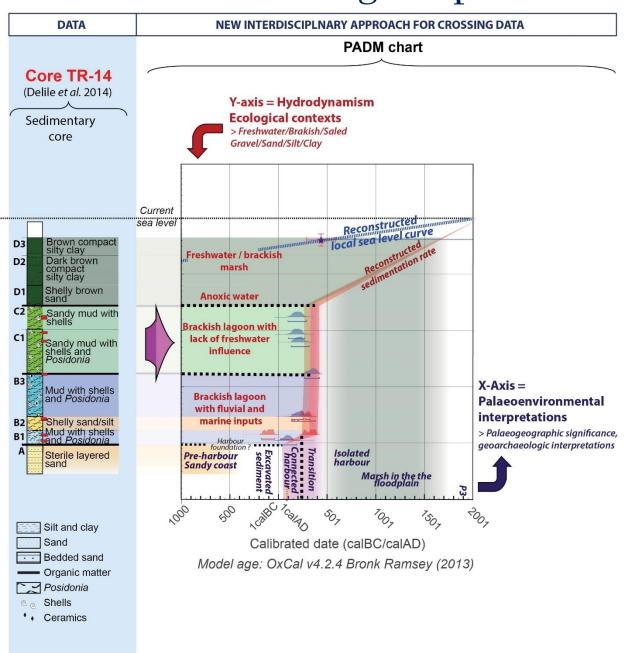
(1) Sediment archive availability;

(2) Degree of exposure/connectivity;

-3

-5

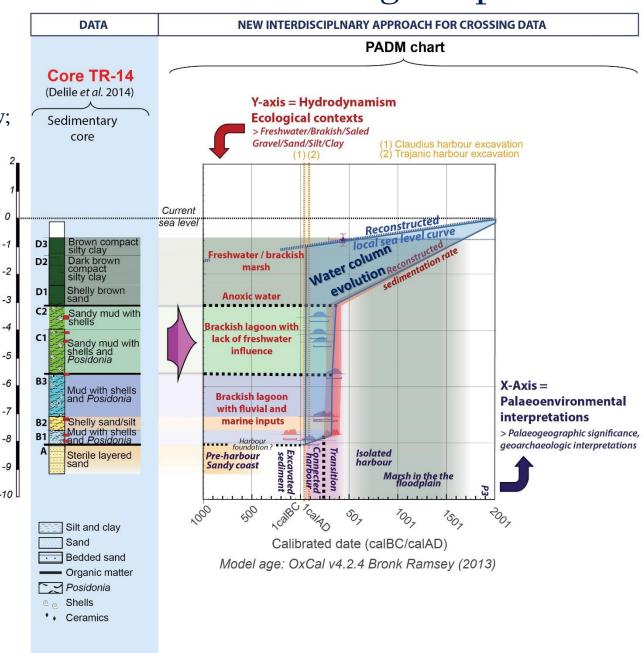
(3) Time span recorded in the sediments;



(1) Sediment archive availability;

(2) Degree of exposure/connectivity;

(3) Time span recorded in the sediments;



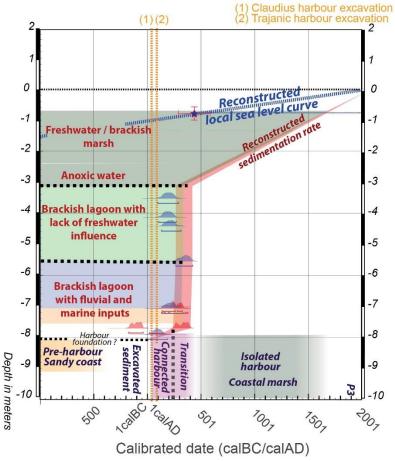
### Maintaining the operability of the harbour basin: (1) Navigability

#### **HARBOUR SYSTEM**

(1) PADM chart - Potential navigability across time

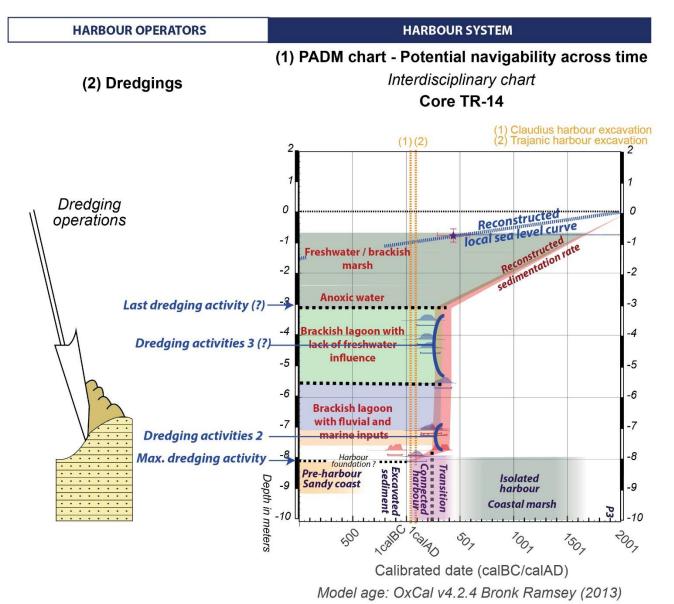
Interdisciplinary chart

Core TR-14

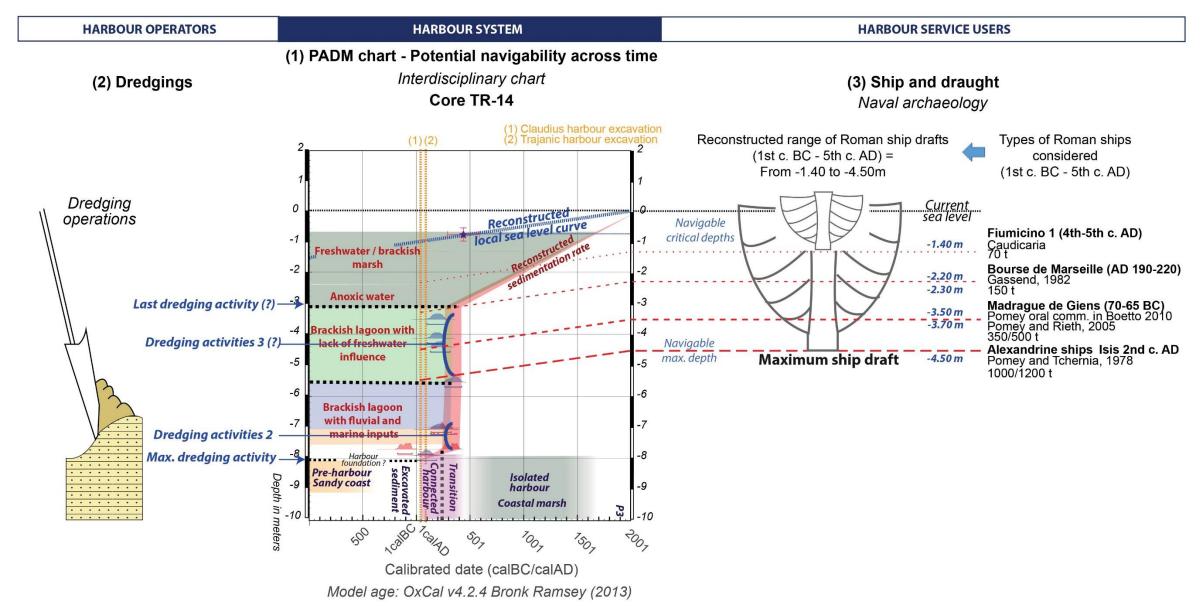


Model age: OxCal v4.2.4 Bronk Ramsey (2013)

# Maintaining the operability of the harbour basin: (1) Navigability



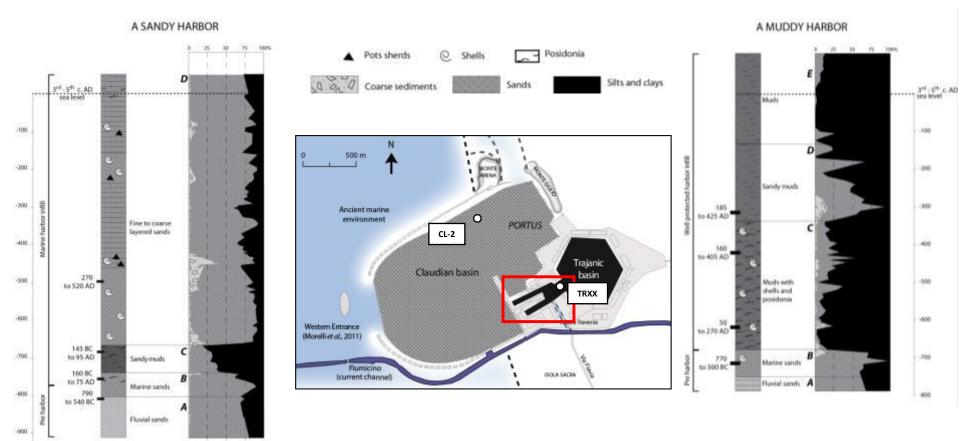
### Maintaining the operability of the harbour basin: (1) Navigability



### Maintaining the operability of the harbour basin: (2) Accessibility

### HARBOUR BASIN ENVIRONMENTS

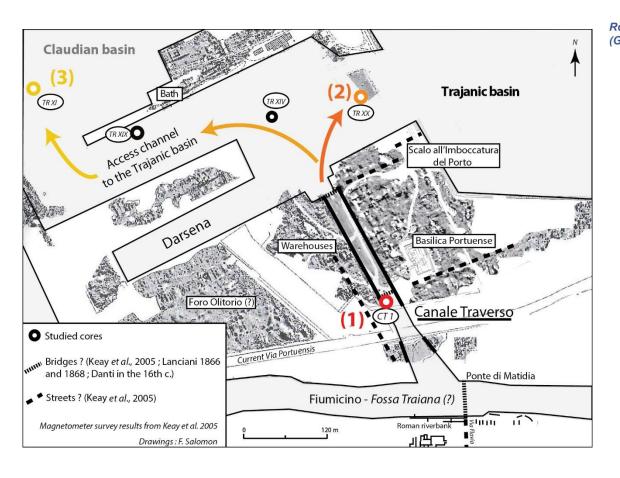
### CLAUDIAN AND TRAJANIC BASINS: TWO DIFFERENT KINDS OF HARBOUR ENVIRONMENT (PORTUS, ITALY)

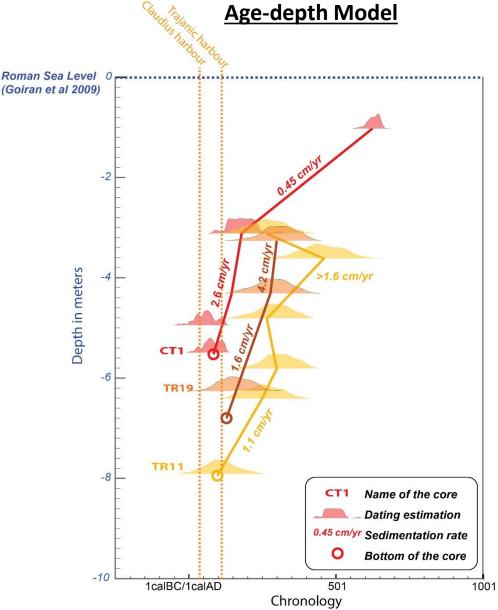


Gradients between Trajanic basin and Claudian basin? (grain size, sedimentation rates etc.)

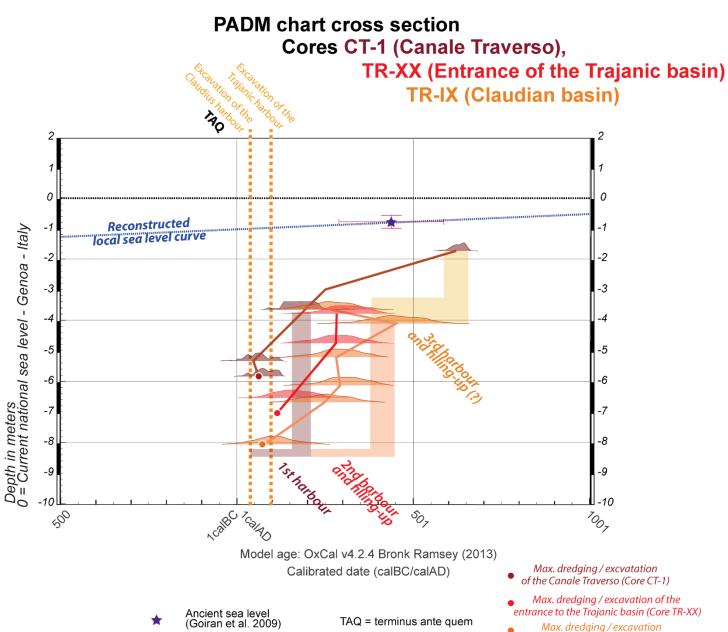
## Maintaining the operability of the harbour basin: (2) Accessibility







### Maintaining the operability of the harbour basin: (2) Accessibility



TPQ = terminus post quem

Depth and date incertainty

of the Claudian basin (Core TR-IX)

# A NEW THEORETICAL MODEL FOR THE STUDY OF THE ANCIENT HARBOURS?

TWO MODELS FOR UNDERSTANDING CORINGS DRILLED IN AN ANCIENT HARBOUR CONTEXT

#### Harbour core models

