



Vittore Negretto Ph.D
Università IUAV di Venezia
vnegretto@iuav.it





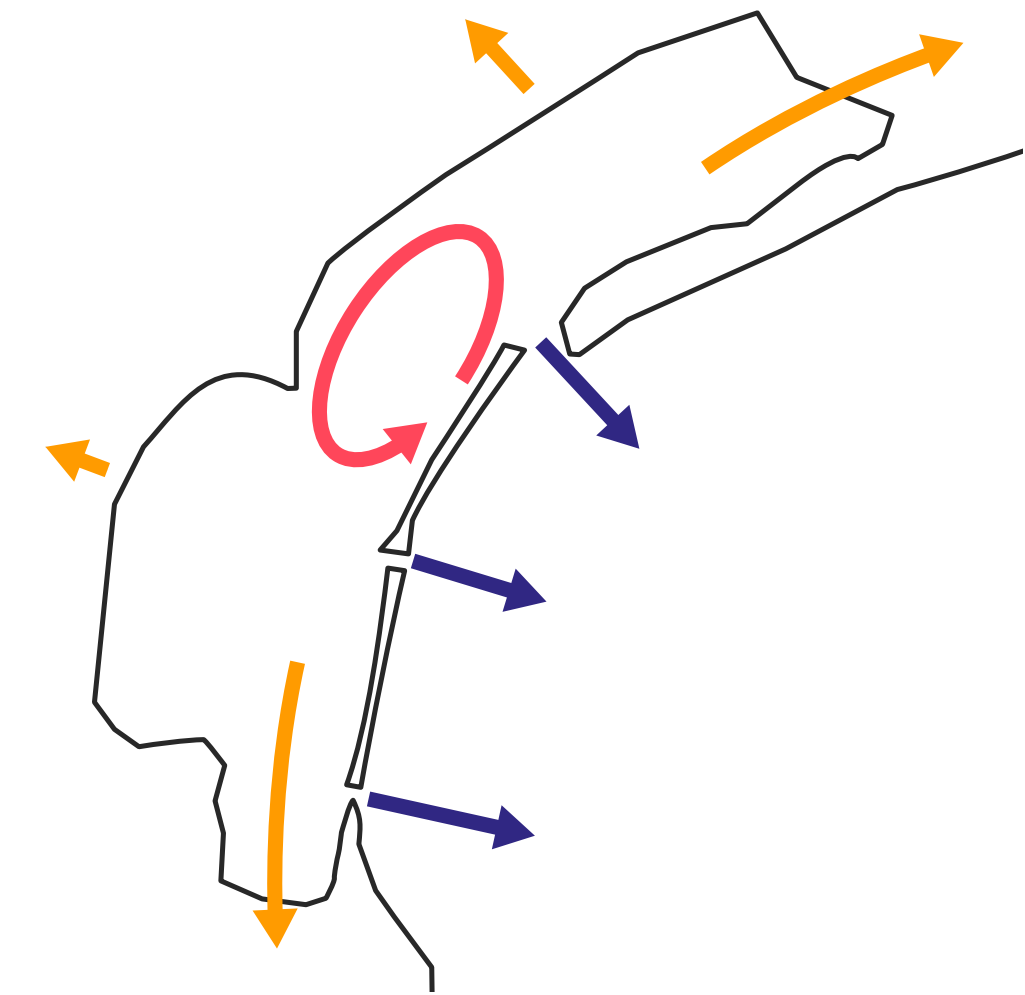
Focus

The Venice Lagoon as a portual system, focusing on its (natural and manmade) modifications connected to shipping.

- **Past role**
- **Current uses**
- **Future challenges**

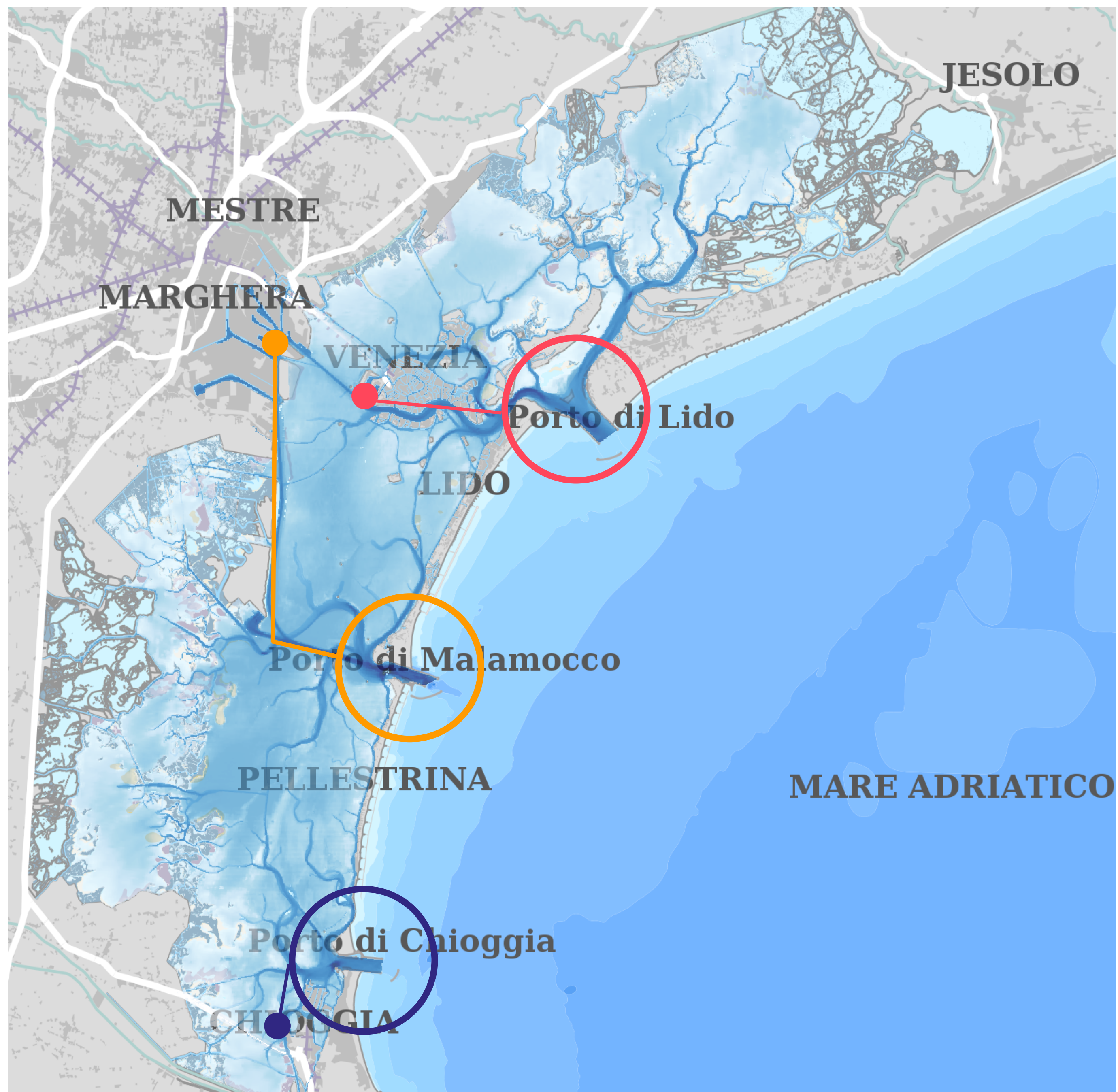


Inner-coastal, fluvial and marine navigation routes

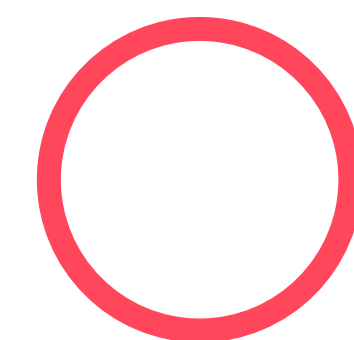


**Main water and land routes
in the Upper Adriatic in the
Imperial Roman Age. Inner-
coastal route from Ravenna to
Aquileia.**

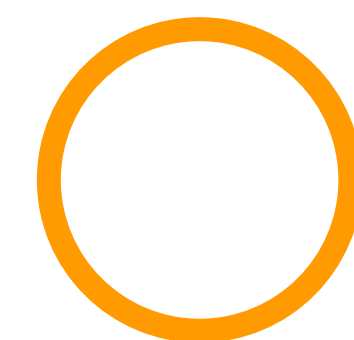
(S.Vasini based on Barrington
Atlas of the Greek and Roman
World, 2001)



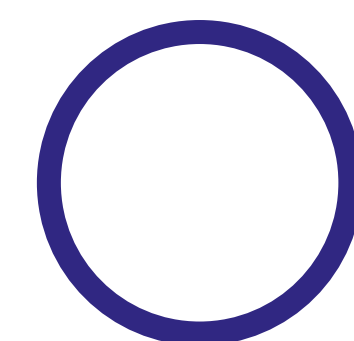
Access routes and main ports



Northern access
Touristic port

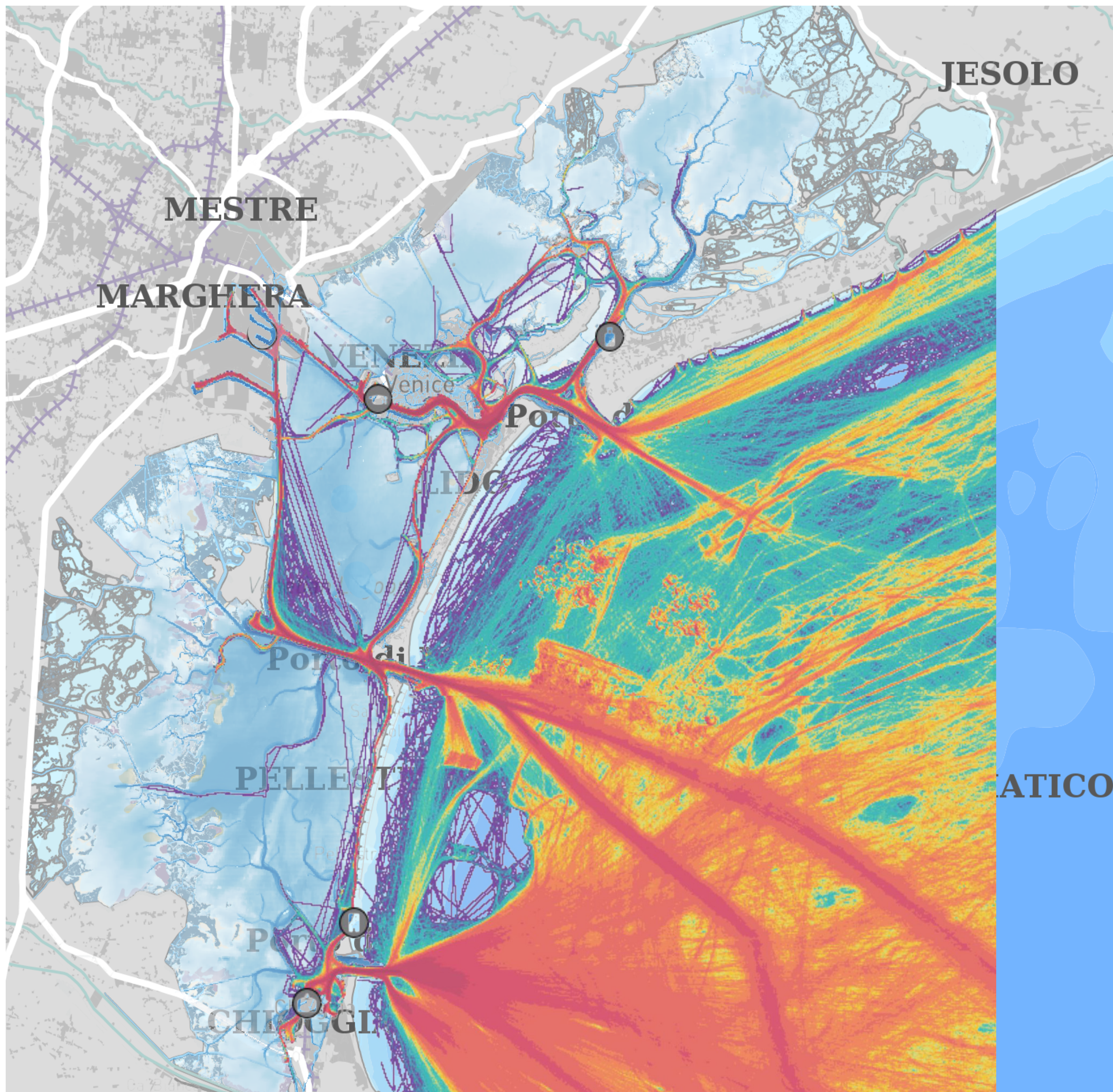


Middle access
Industrial port



Southern access
Fisheries

(Atlante della Laguna, 2006)



Access routes and main ports

Northern access

Incoming from coastal and touristic locations

Middle access

High-sea routes and waiting areas

Southern access

Vessels incoming from fishing areas

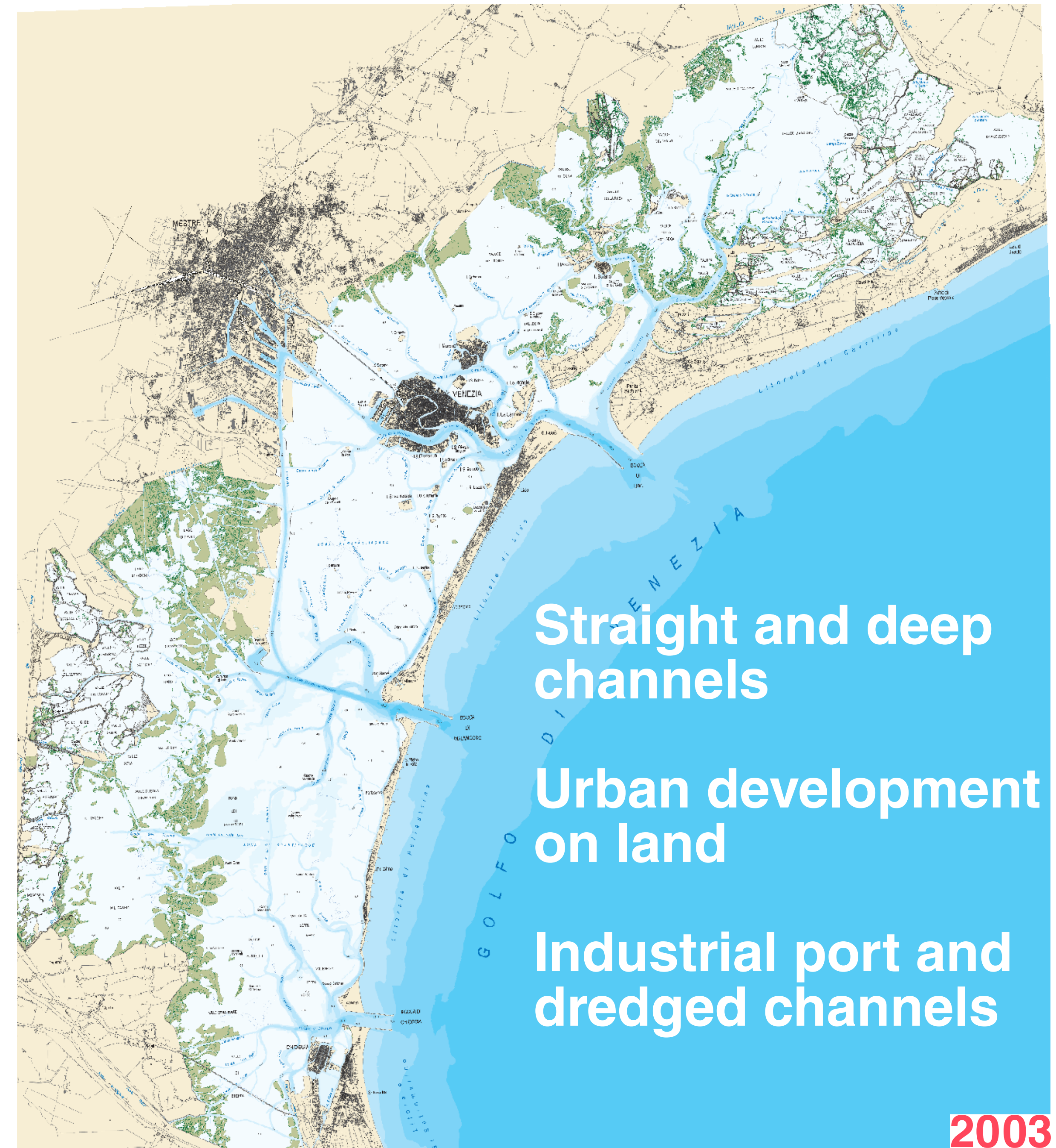
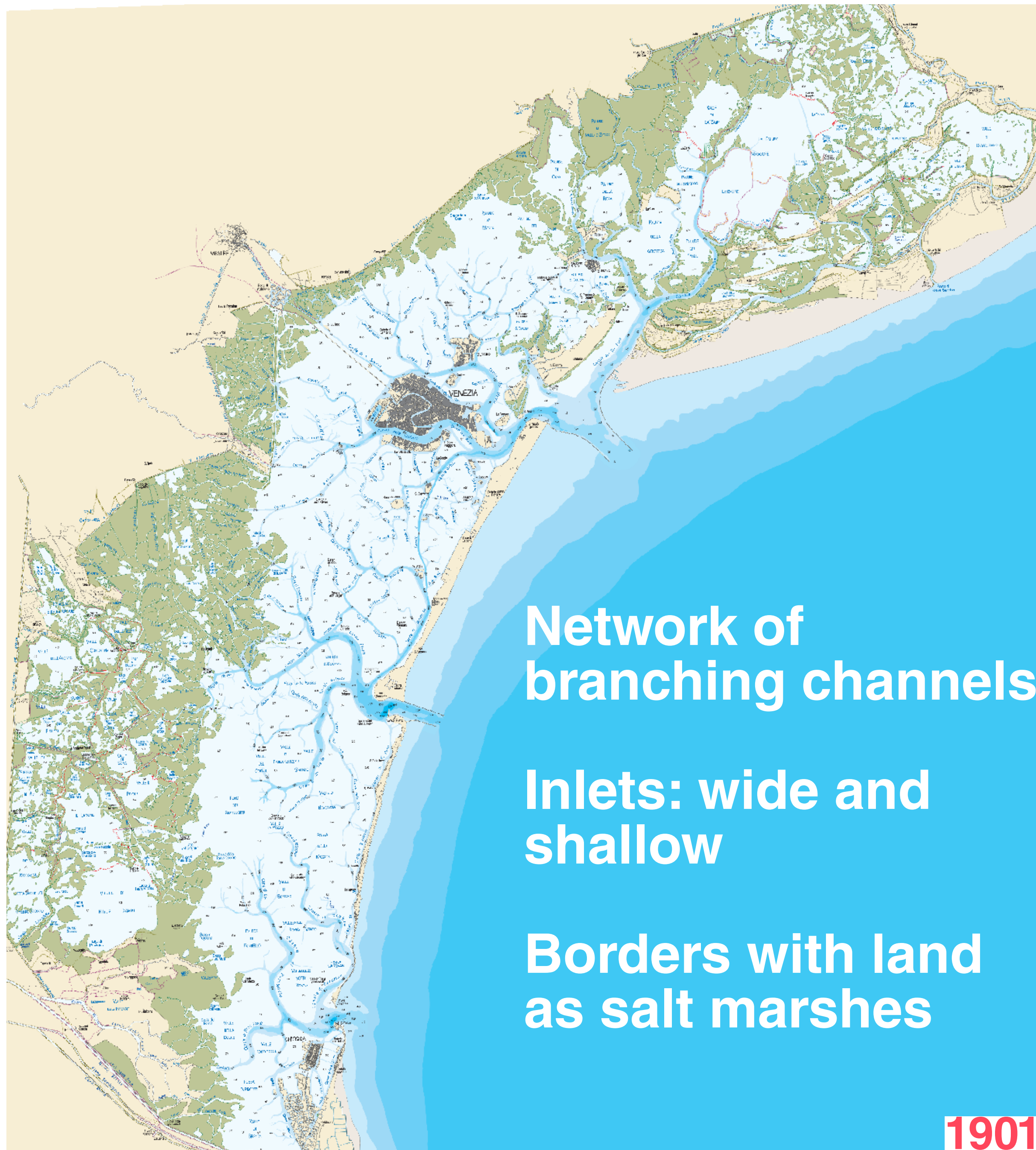
(Atlante della Laguna, 2006; Marinetraffic.com 2021)

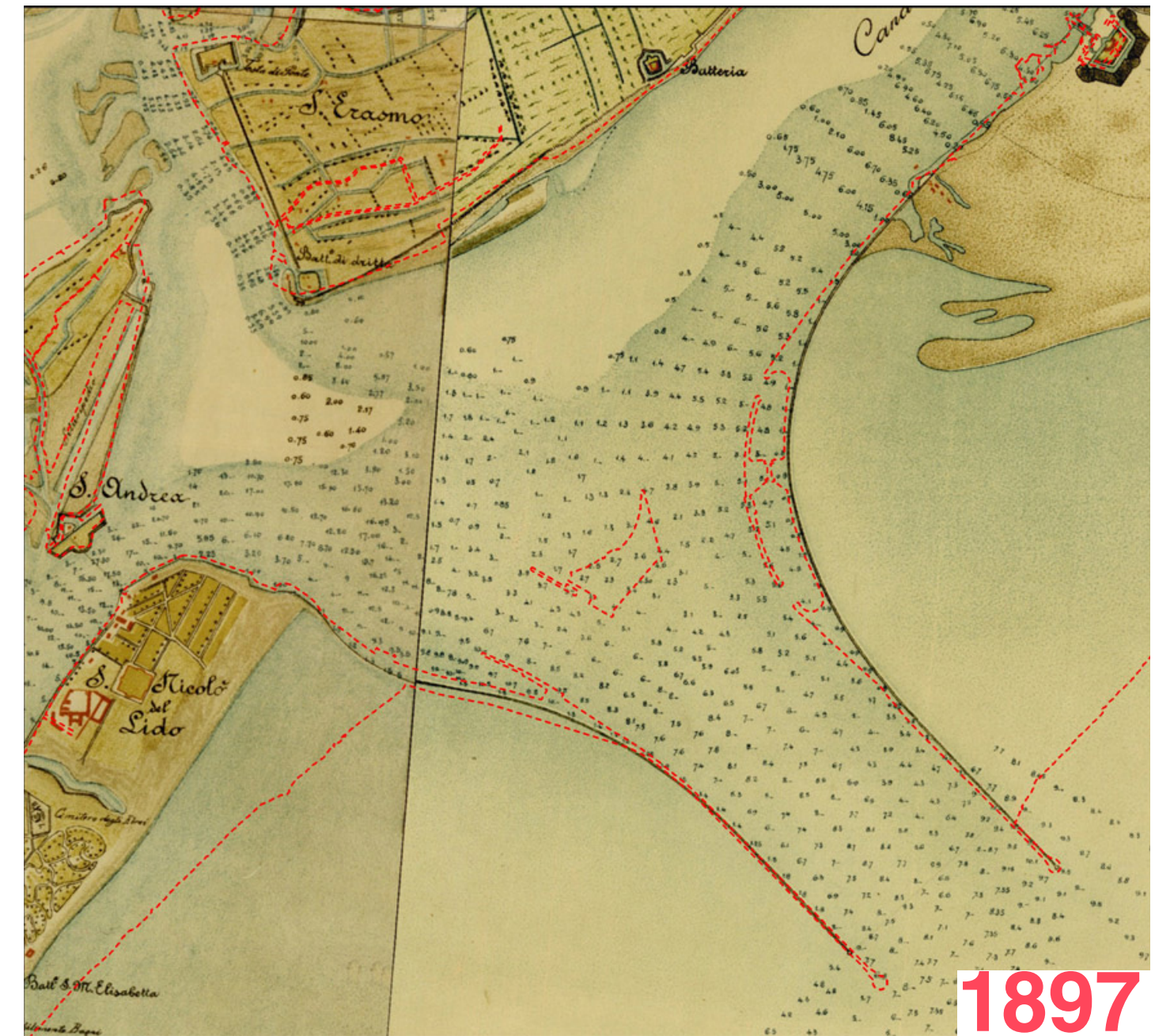
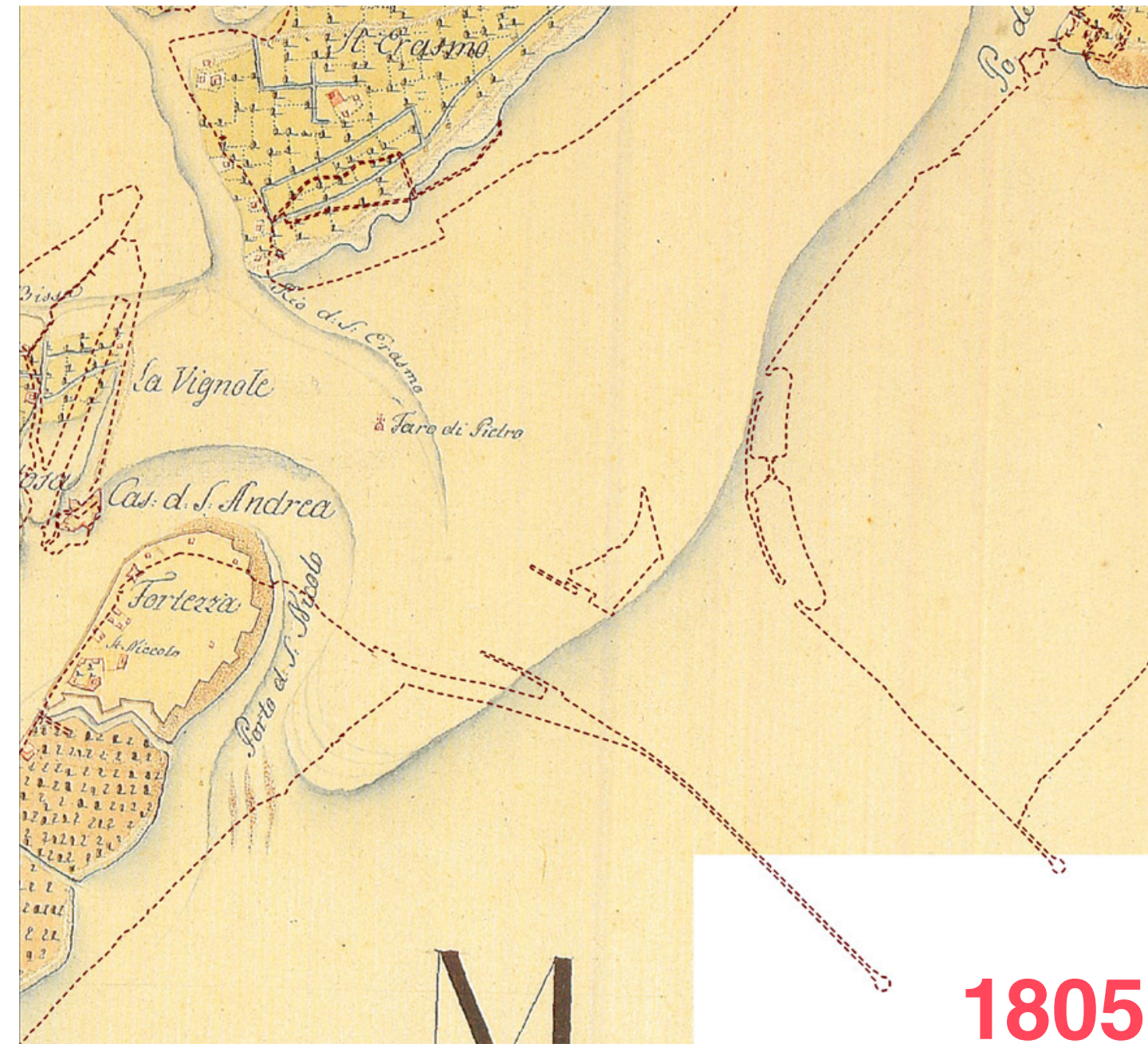


Morphological changes and human interventions

Rerouting of rivers
Canal dredging
Coastal protection

1557 map by C.Sabbadino of the Venice Lagoon and surroundings.





Map details
Sabbadino, Von Zach, MAV
(Mosevenezia.eu)

Land transformations



Land transformations

Change in routes and channels had effects on the uses on land

3 areas:

- **Arsenale**
- **Tronchetto**
- **Fusina**

Arsenale



Historic shipyard, which gradually fell into disuse as ships grew in size and draught.

Conversion to a cultural, scientific and exhibition hub.

Ironically, still hosts the heart of the defence of Venice (fleet -> dikes system operational headquarters)

Tronchetto and Fusina



**Declaration of S.Marco as
a national monument, and
resulting ban of the related
route for ships over:**

**25.000 Tons weight or
180m length or
35m height**



Tronchetto and Fusina



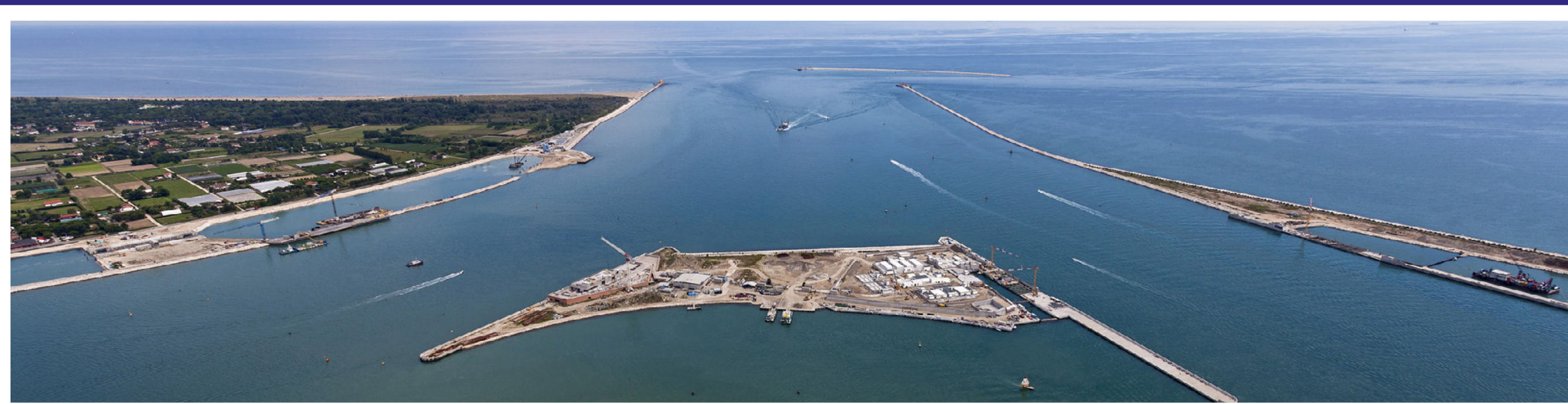
Cruises enter the lagoon through the “Oil channel” and reach Fusina

Part of Fusina (industrial port) is now being transformed in passenger terminal

Tronchetto passenger terminal will see partial redevelopment for hotels and accommodation facilities



Mose

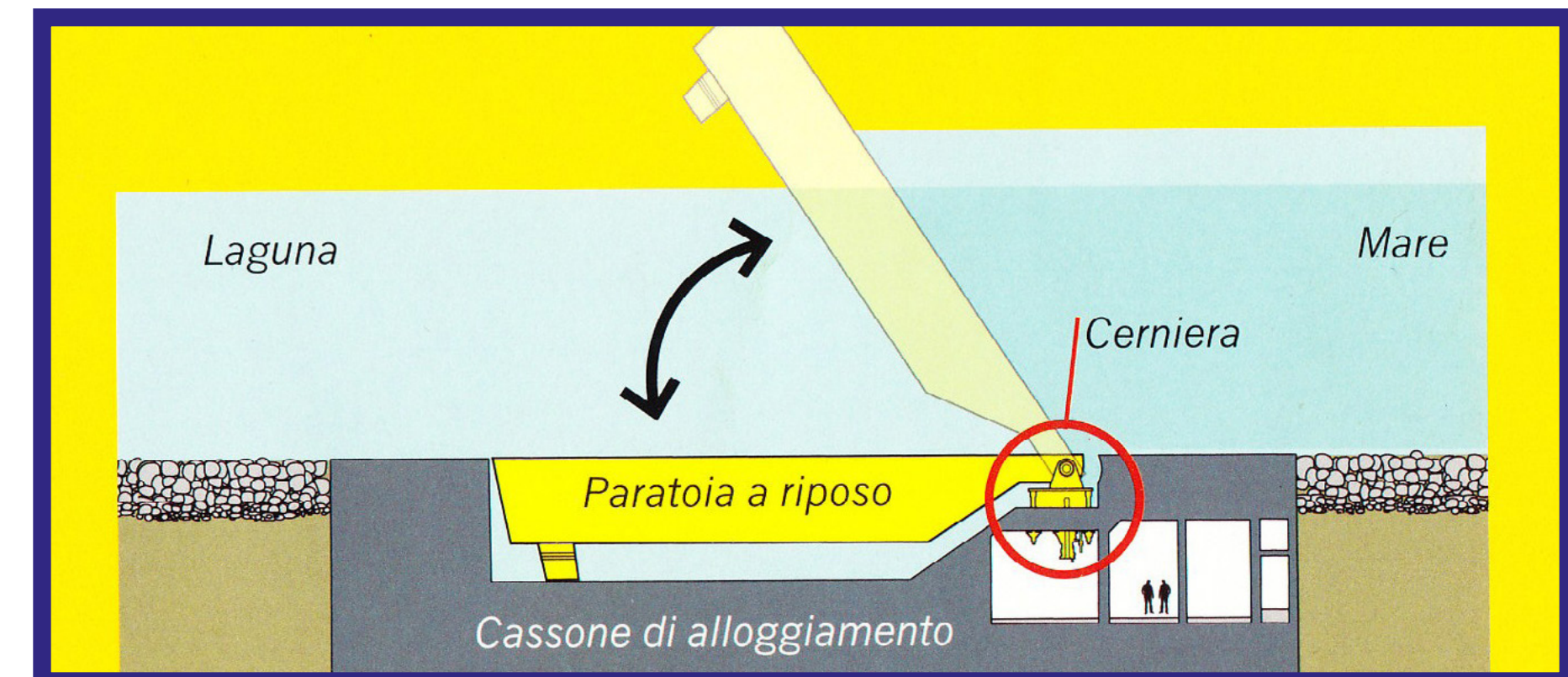


Dike system of rising gates

Based on tide forecast, dikes will rise and separate sea and lagoon

Safe docks allows ships to pass at a low rate

Sea level rise: ordinary tides may require activation



Reference to deepen the topics:

History of the venice port
Il porto di Venezia, L.Candida

Mose: engineering system
mosevenezia.eu

Limits of Mose
SOS Laguna, L. d'Alpaos

Lagoon and env. impacts
Venice2021 research project



Thank you

Vittore Negretto Ph.D
Università IUAV di Venezia
vnegretto@iuav.it

