



# Ecological issues of Marseille, France



Faculty  
of Forestry  
and Wood  
Technology

Landscape ecology  
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Mendel  
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in Brno



# Why I chose the city of Marseille ?

- I have been living in the city for 8 years
- Second city in number of inhabitant in France
- A beautiful city in a beautiful area
- Lot a nature around the city with picturesque landscape

# Character of the landscape of the area

- Wide city following the coast and with a clear cut between the city and the natural area with hills.
- Shallow soil and only limestone rocks in the region.
- Mediterranean climate protected by high air pressure most of the year.
- Main forest stands is composed of pine trees (*Pinus pinea*, *Pinus halepensis*) + *Quercus pubescens*.
- Rare but strong and intense precipitations.





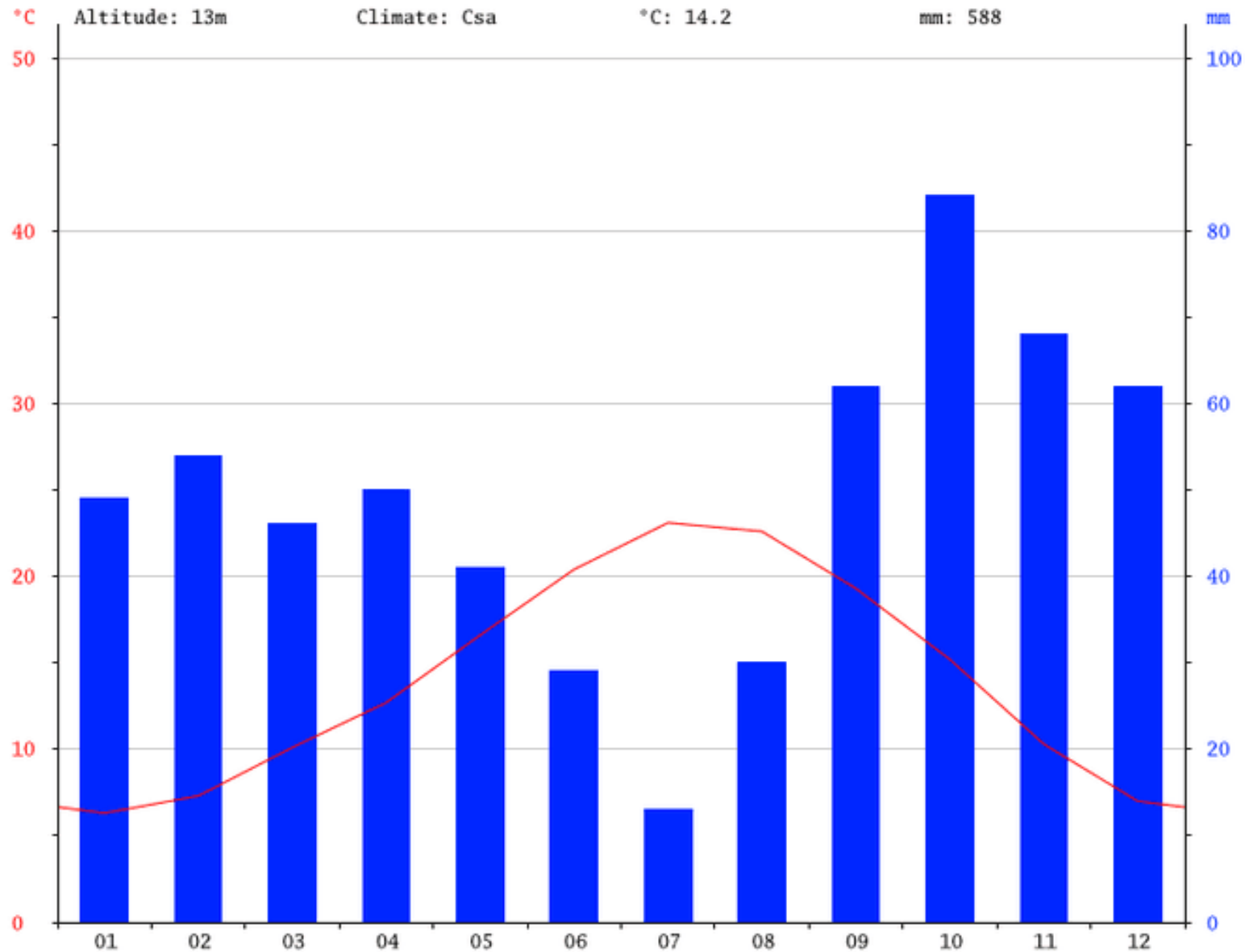




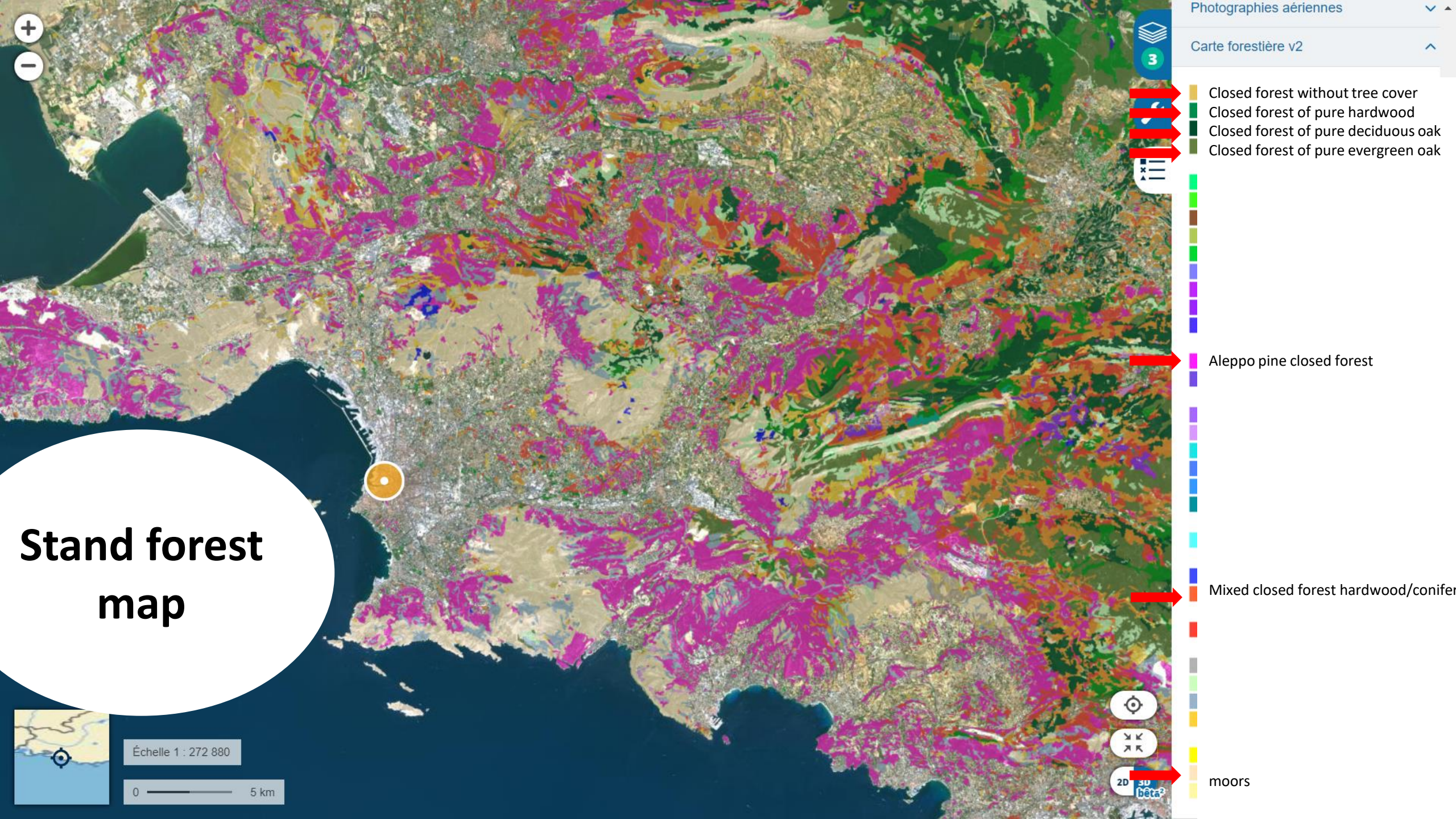
**Limestone cliffs**

# Climate

- In the city, average precipitation in the year represent 588 mm.
- Average year temperature : 14.2°C
- The region is often plagued by wind episode.









Basic  
environmental / ecological  
issues of the area



# Forest and vegetation fires with human origins







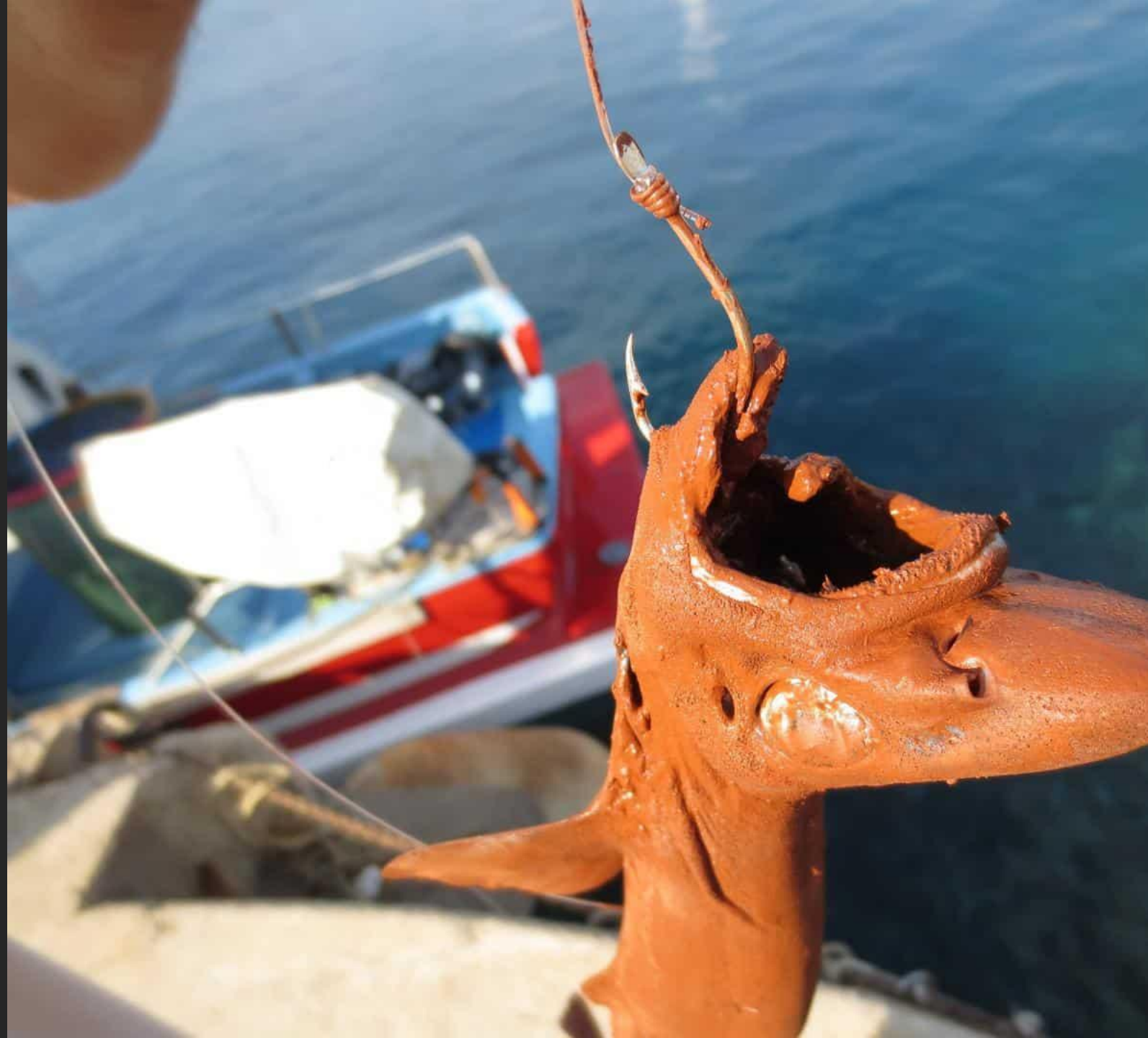
# Chemical water pollution

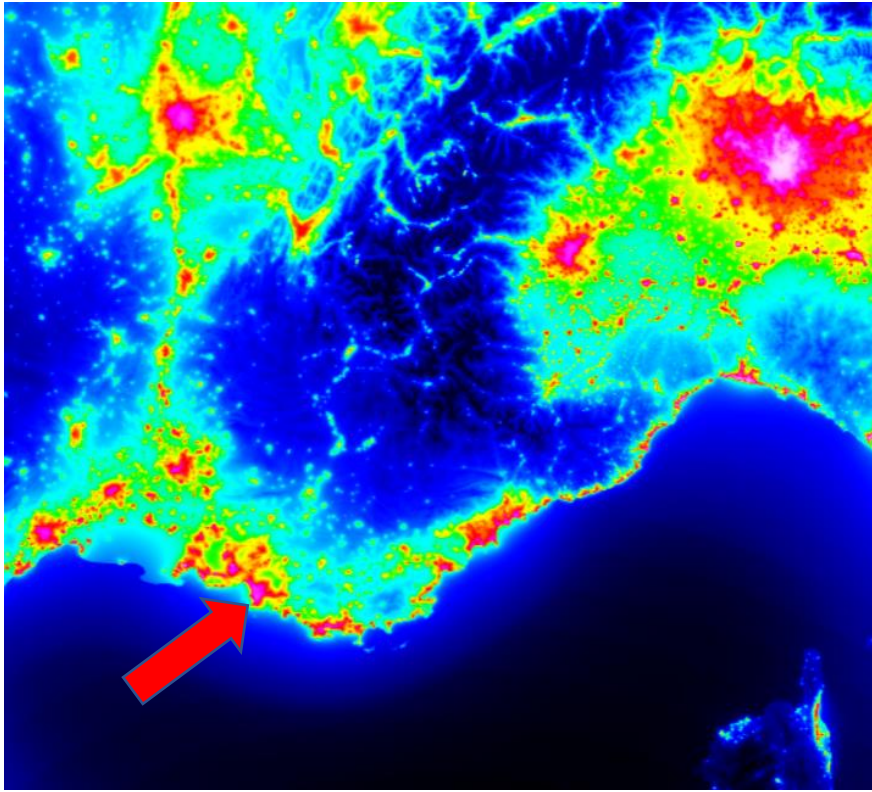


An alumina factory in Gardanne produce toxic red mud and waters polluted by heavy metals.

The factory spill these pollutants directly in the National park of the Calanques.

Factory has a special derogation by the government to be able to spill these pollutants beyond regulatory limits.





# Light pollution

The second photograph show the pass of a satellite above my flat (iridium).

Only few stars are visible and light pollution is in background.





*Posidonia oceanica*

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# Geographic distribution

Living conditions :

- between 0 and 40 meters.
- Water between 10 and 28°C
- Habitat of many fish species
- Reproduction places of fish
- Space of feeding of fish







*Caulerpa taxifolia* (invasive species)



Plastic pollution



Careless anchorage

# Disappearing and Threats

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