Implementation of a georeferenced data bank of Corsican coastline
Interest of study

Mediterranean basin ➔ biodiversity hotspot
But occupies the 7th place out of the 35 in the list of the most threatened seas

Corsican coastline: relatively preserved
But increasingly confronted with human-induced pressure: sewage outfall, coastal development, mechanical damage...
**Posidonia oceanica (L.) Delile**

**Mediterranean endemic seagrass**

**Ecological role**

**Sedimentary role**

**Biological indicator**

**Economic role**

63,000 Ha (Pascaultini, 1997)
Geographic Information Systems (GIS)

The knowledge of coastal area ➔ effective integrated management

Numerous information concerning Posidonia oceanica Presentation and optimization

GIS: Geographic Information Systems

collect, store, integrate, manipulate, analyze & display data in a spatially referenced environment.
Geographic Information Systems (GIS)

Data format

Vector

Raster

Thematic layers connected by geography
Data organized in six thematic layers

**Raw data**
- Aerial photographs (Corsican coastline, lagoons, PMIBB, PMN)
- Sonograms 1995/1996

**Cartographic data**
- Corsica coastline
- Lagoons
- PIMBB
- Posidonia Monitoring Network
- Others: Calvi, Girolata, Tizzano, Paragano, St- Amanza, Figari, St Florent

**Monitoring systems**
- Posidonia Monitoring Network
- Seagrass net

**Descriptors of the vitality**
- Density
- Coverage
- Phenology
- Lepidochronology

**Chemical contamination and ecologic quality ratio**
- Metals
- PAH
- Phenols

**Bibliographic data bank**
- Articles
- Reports
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**Mise en œuvre d'un Réseau de Surveillance**

**Posidonies le long du littoral de la Corse**

**Rapport de synthèse 2004-2008**

*Gérard Pascu, Rosjolyn Lévy, Céillia Lere, Y.Ravo, Emile Monta, Christiane Pascu*
Data analysis

*Posidonia oceanica meadow*
- 63,000 ha
- Lower limit between 24 and 39 m depth

- Particular structure
- Impact of the impact of natural and anthropogenic pressures
Canari ➔ a hight value of Nickel

Porto ➔ a high value of Cadmium
GIS: powerful tool for the gathering and synthesis of the data necessary to coastline management decision-making.

- Homogenisation and integration of spatial and temporal information
- Generate thematic cartography
- Monitor seagrass evolution
- Assess the impact of development on seagrass
Thank you!