

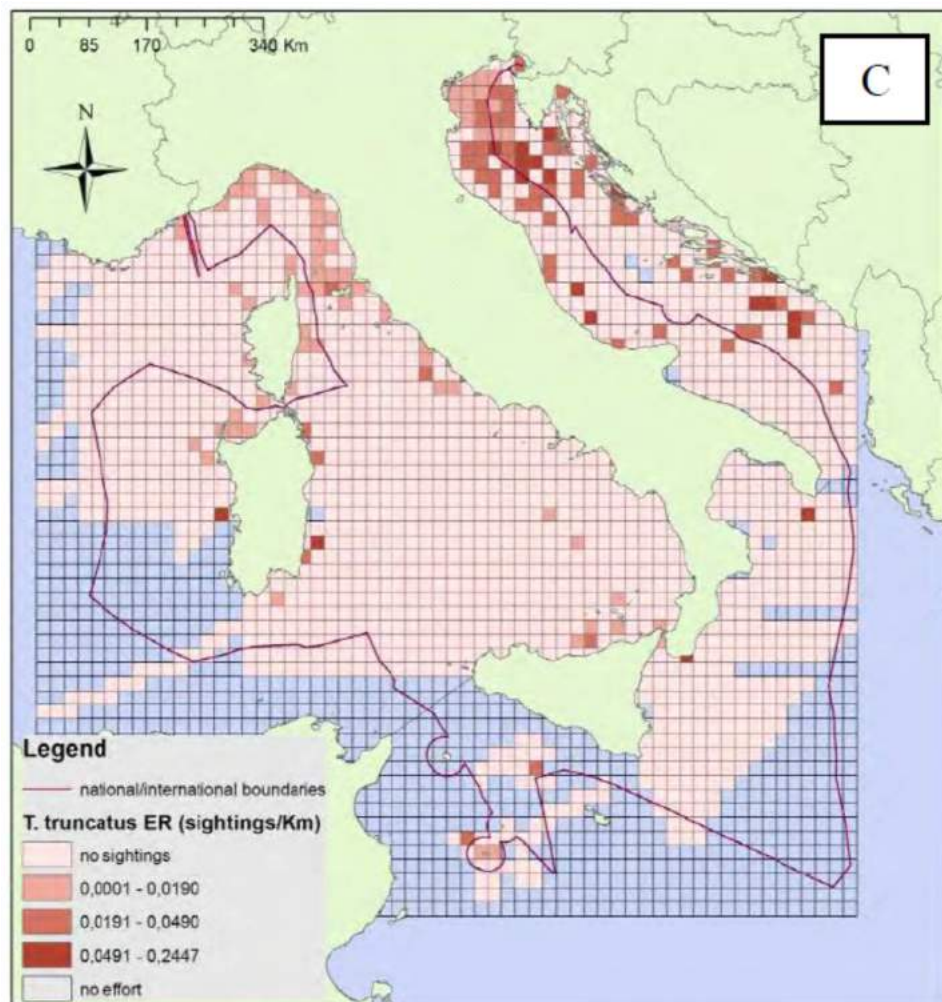
# **Toscana: Nuovi SIC Marini e Aree Marine Protette: informazione e confronto 29 novembre 2018 Villa Pertusati-Rosignano Marittimo**



**Marine Strategy: risultati della campagna 2018 di  
rilevamenti su Tursiope in Toscana**

**ARPAT Cecilia Mancusi**

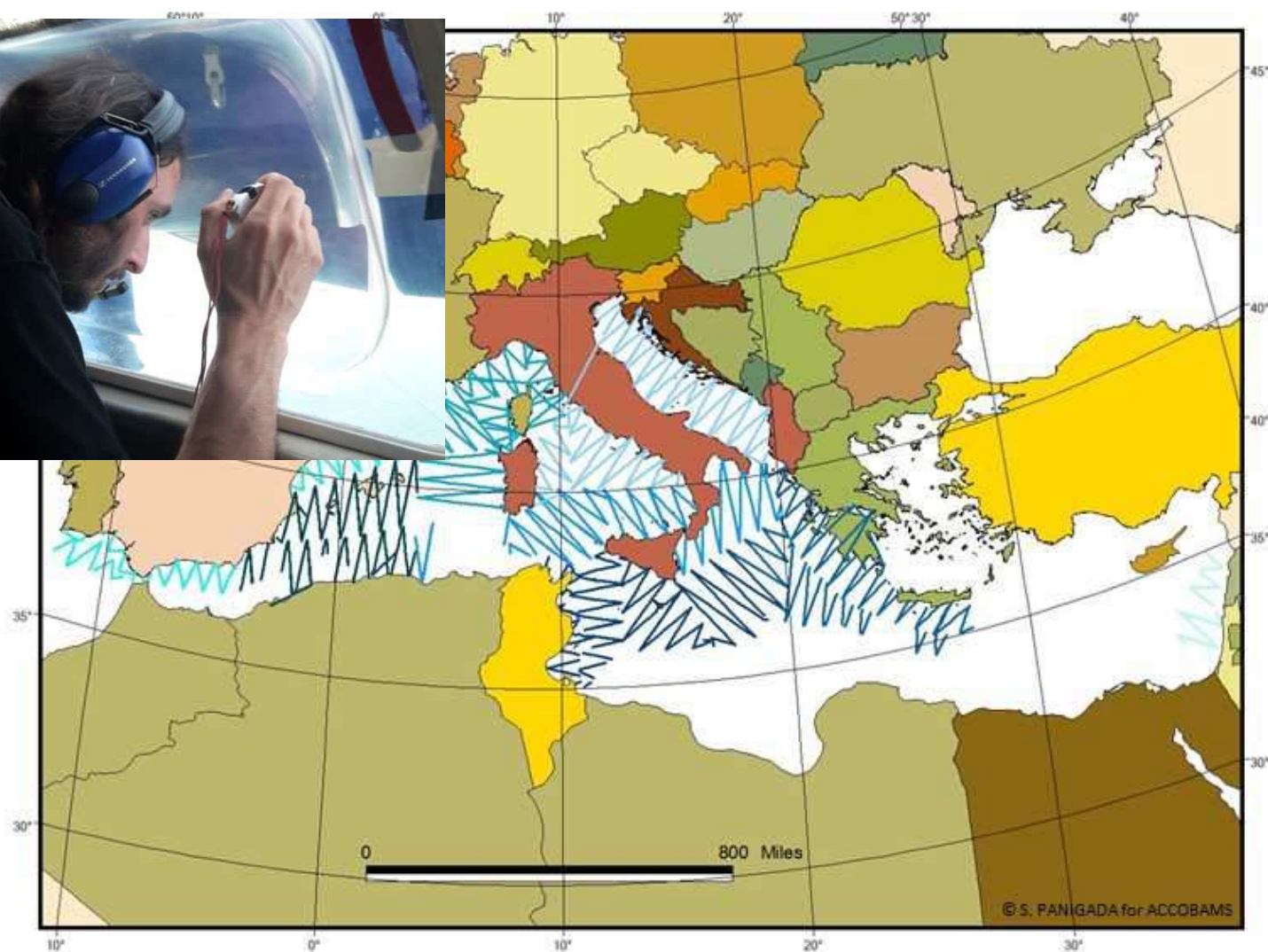
# TURSIOPE-Tursiops truncatus



- Cetaceo odontocete
- Costiero
- Grande adattabilità
- Specie molto studiata
- No stime complessive per il Med
- 1000-1700 (1223) animali Santuario
- Interesse comunitario  
(All. II Dir.92/43 CE)

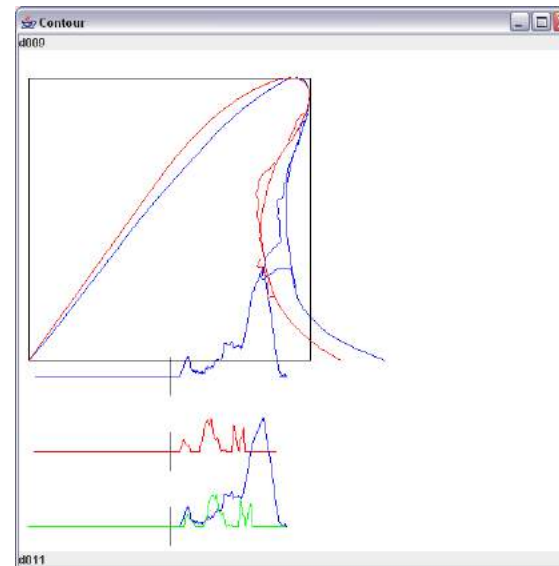
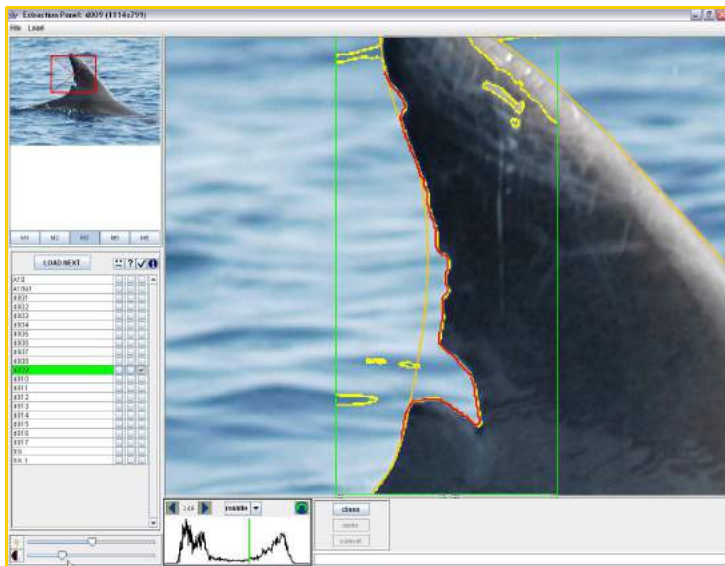
# Aerial Survey

## Updated effort - August 1<sup>st</sup> 2018





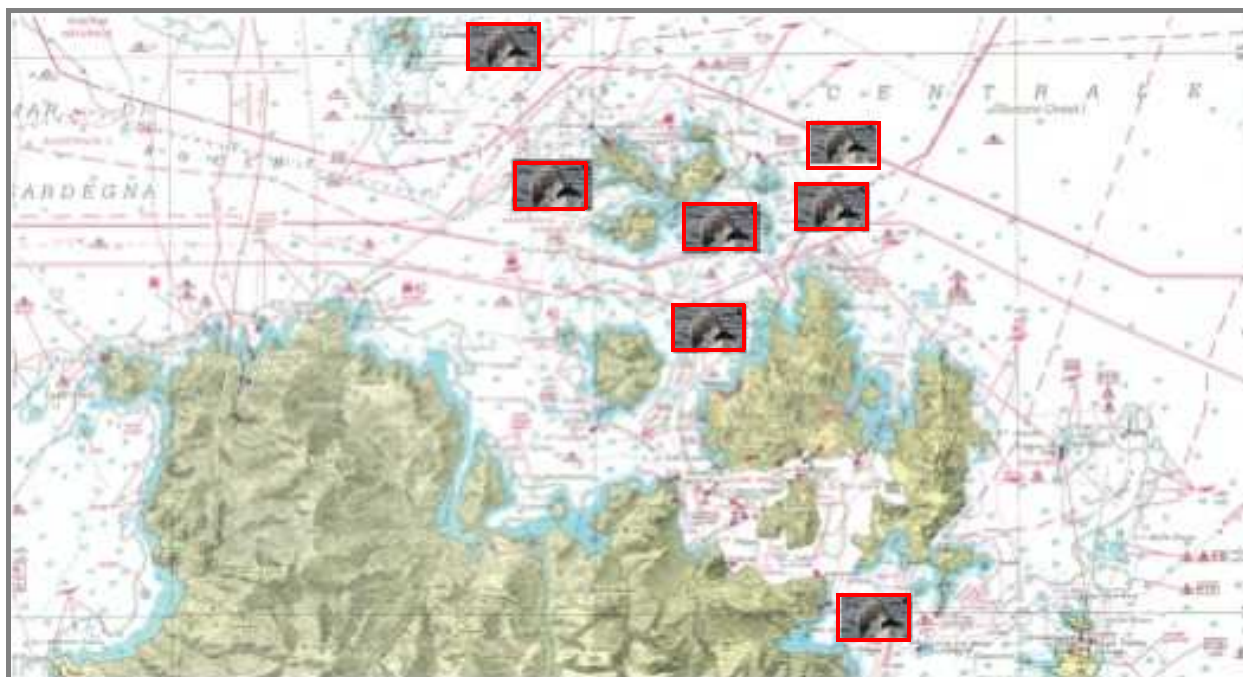
**LINE TRANSECT LINEAR SAMPLING**    abbondanza e distribuzione  
**LA FOTOIDENTIFICAZIONE**    ecologia ed etologia





**D23-A14**

*“CALIPSO”*

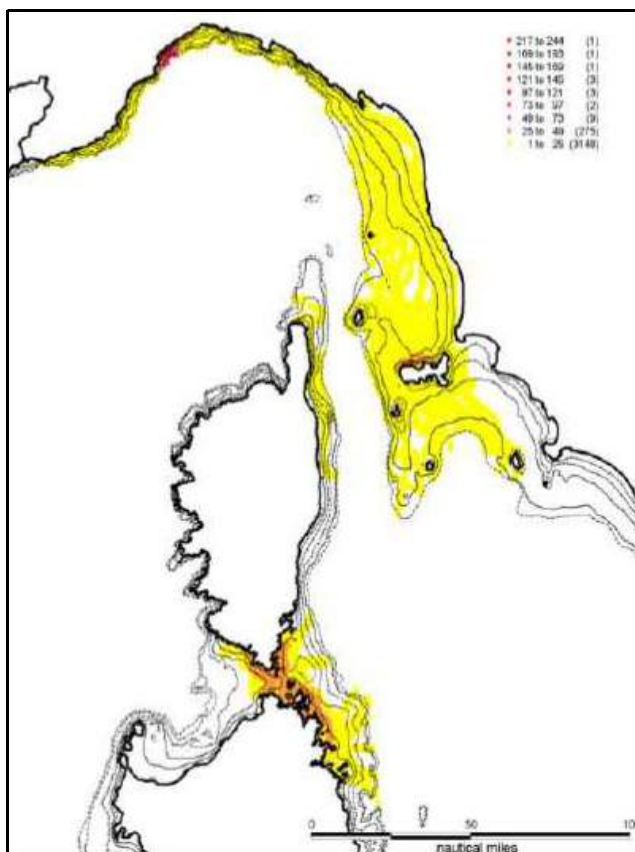




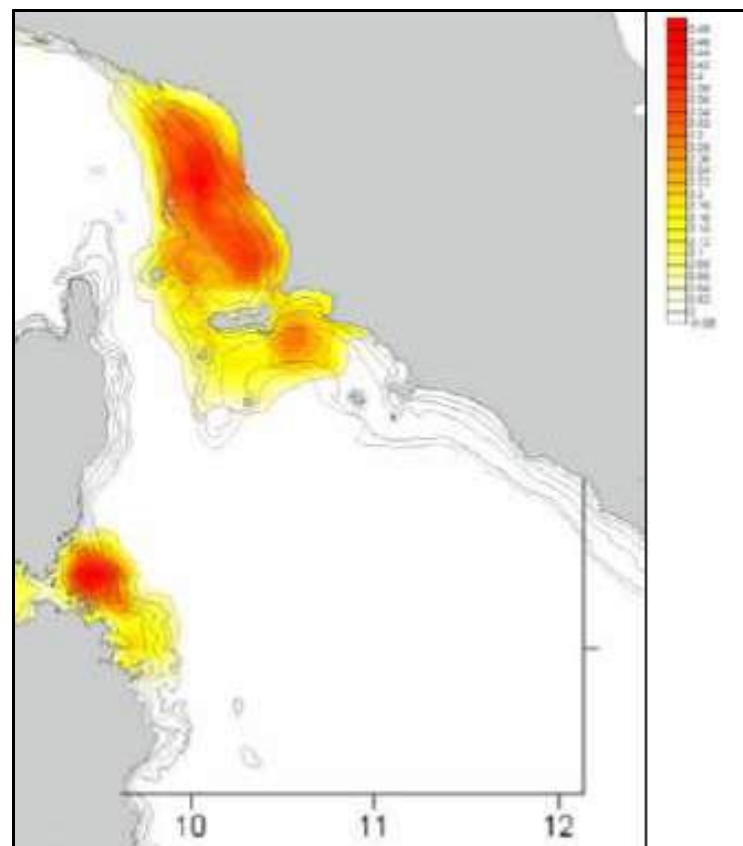
D14  
“UNCINO”



# Progetto Gionha: analisi dati 2005-2011



Sforzo di campionamento



Concentrazione tursiopi

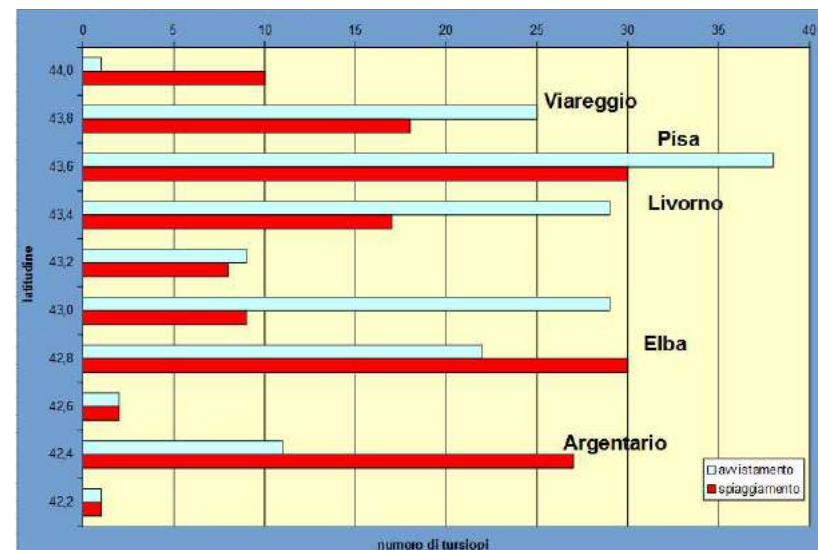
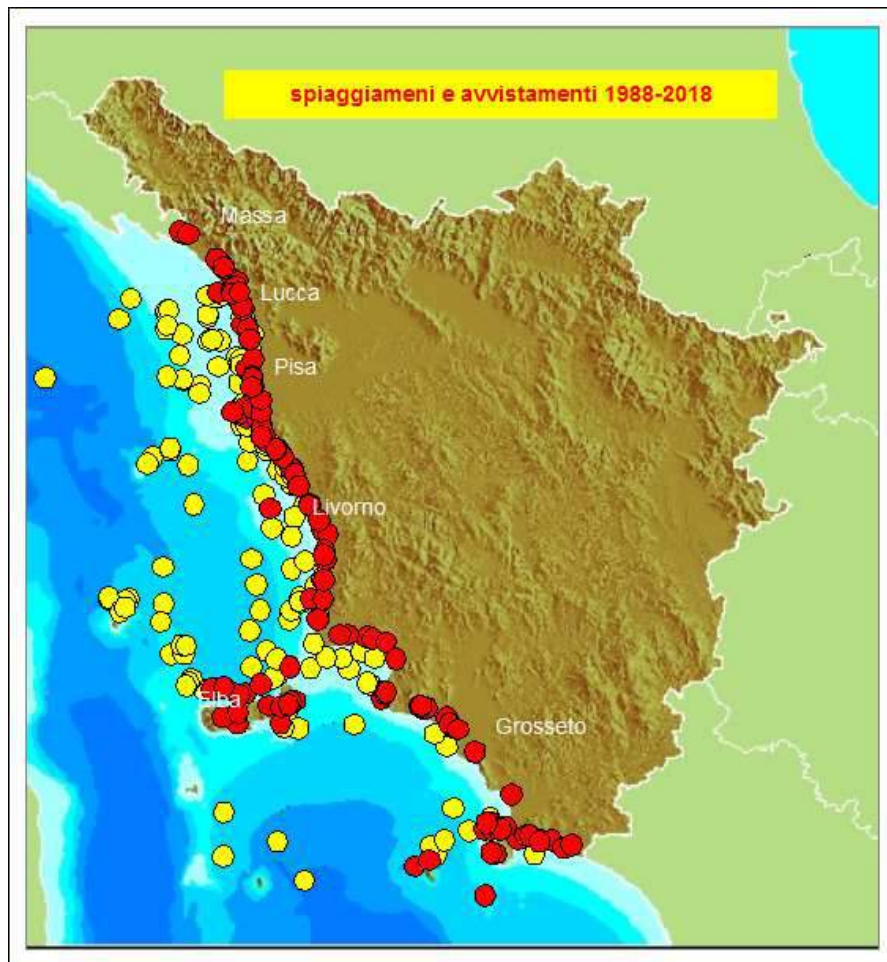
UniGE (DISTAV), CETUS, OEC, Regione Sardegna

4356 mn

1192 animali ➡ catalogo INTERCET

# Osservatorio Toscano Biodiversità: L.R. 30/2015

(ex Osservatorio Toscano Cetacei- DGR del 10 aprile 2007, n. 247)



# GO GREEN Mare 2012

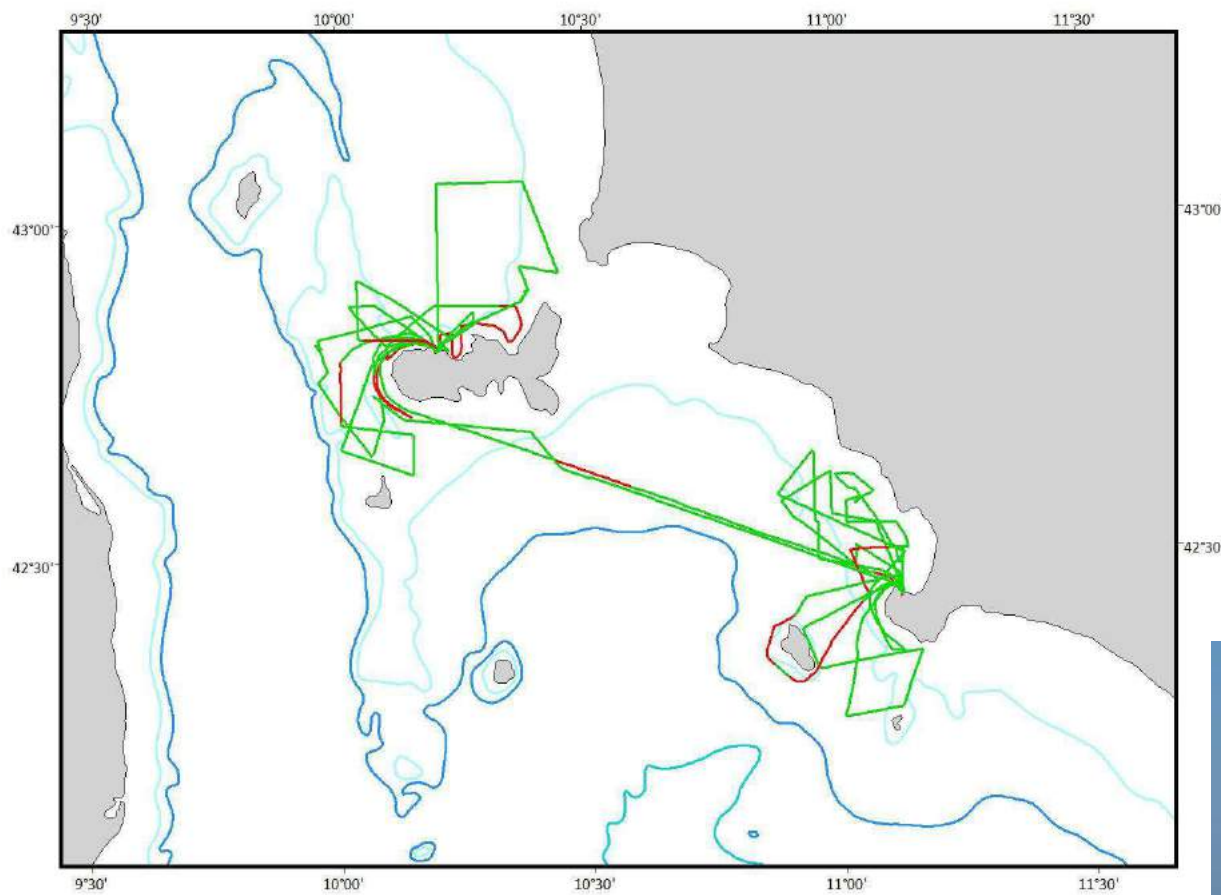
Tethys

ott-nov

13 uscite

104 ore-1065 km

10 gruppi, 87 animali



## Zona "Elba"



## Zona "Orbetello"

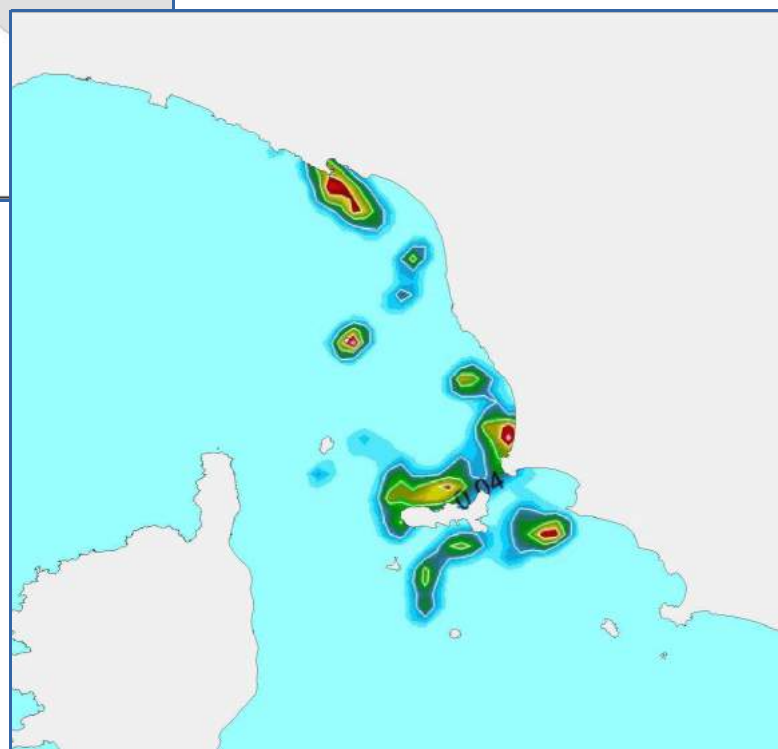
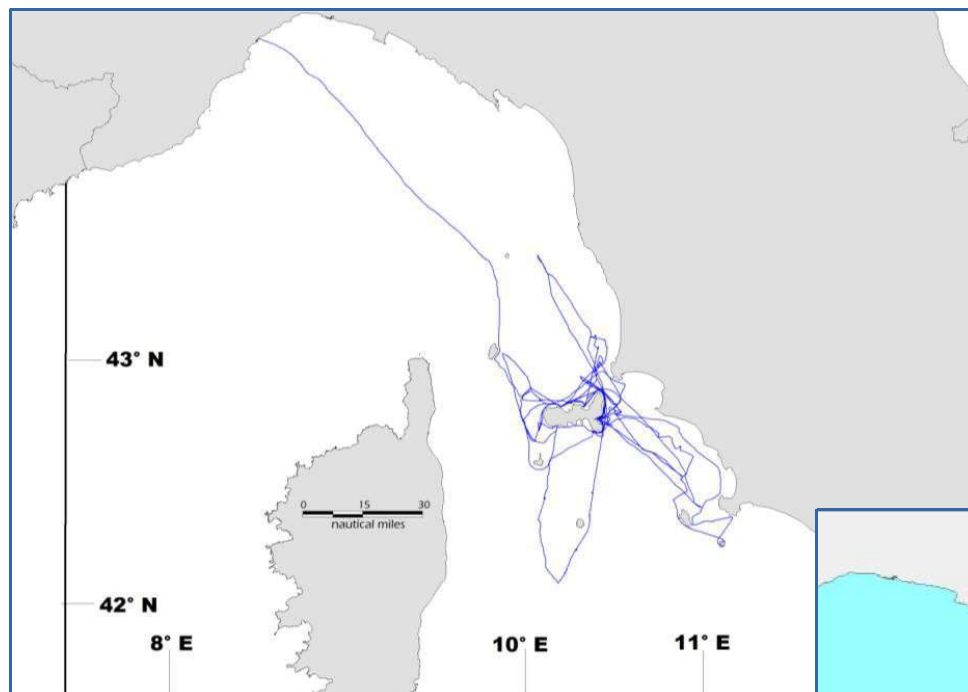


## UniGE (DISTAV)

ott-genn

15 uscite

18 gruppi, 73 animali

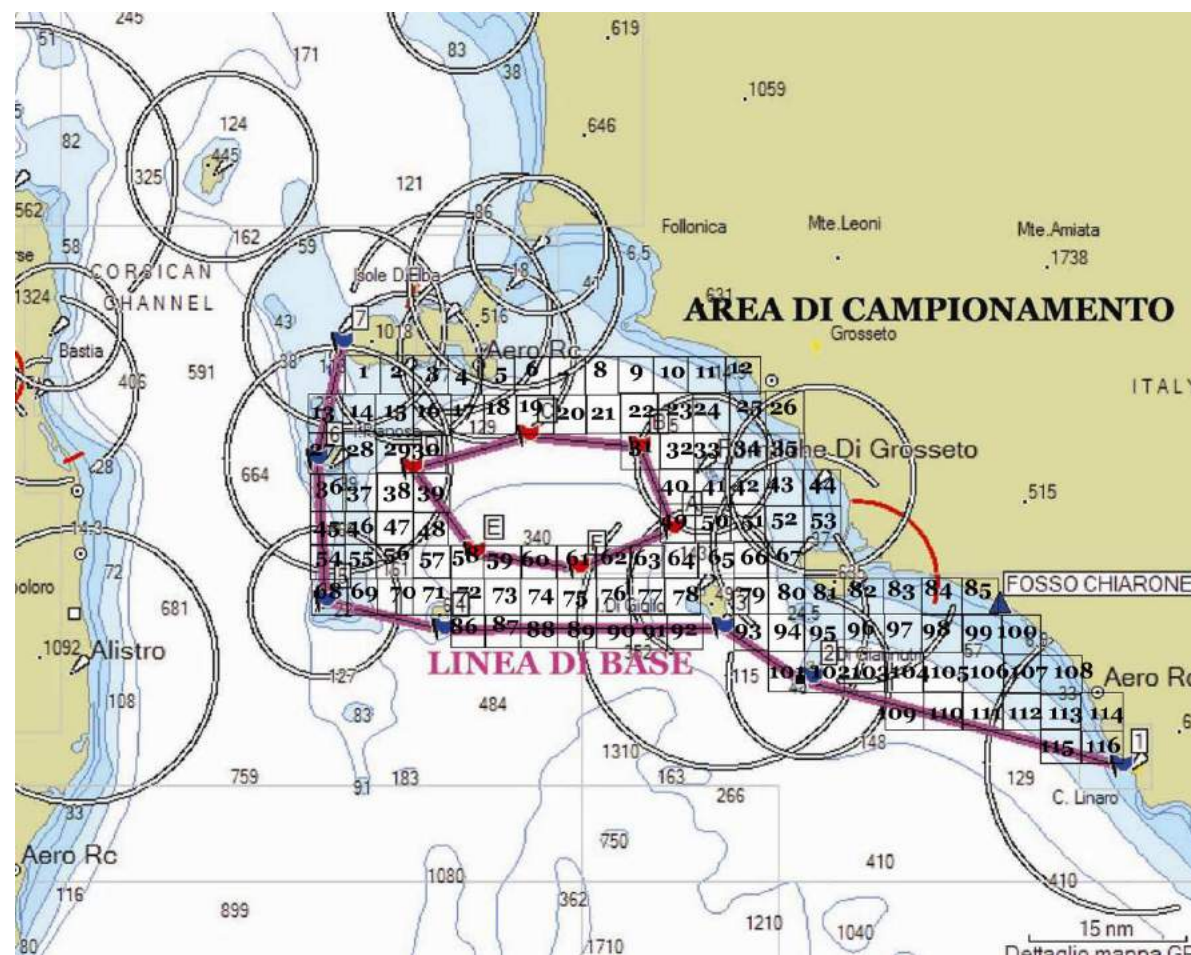




## CETUS (Viareggio)

ott-nov

778 km-67h



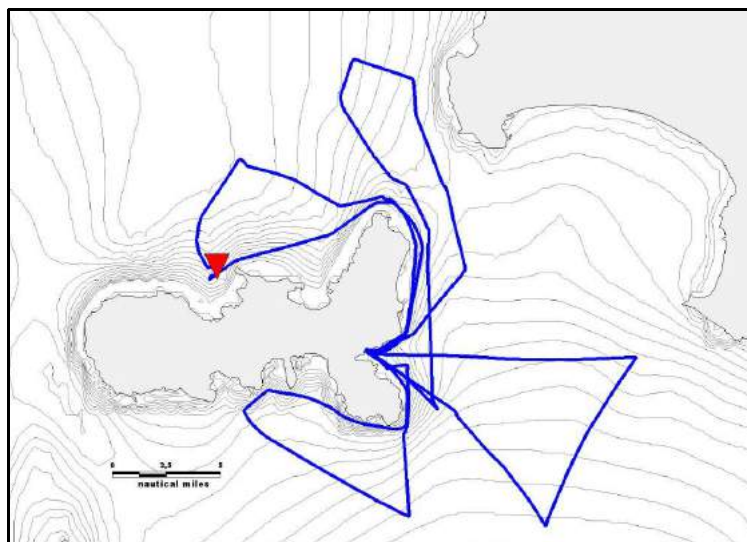
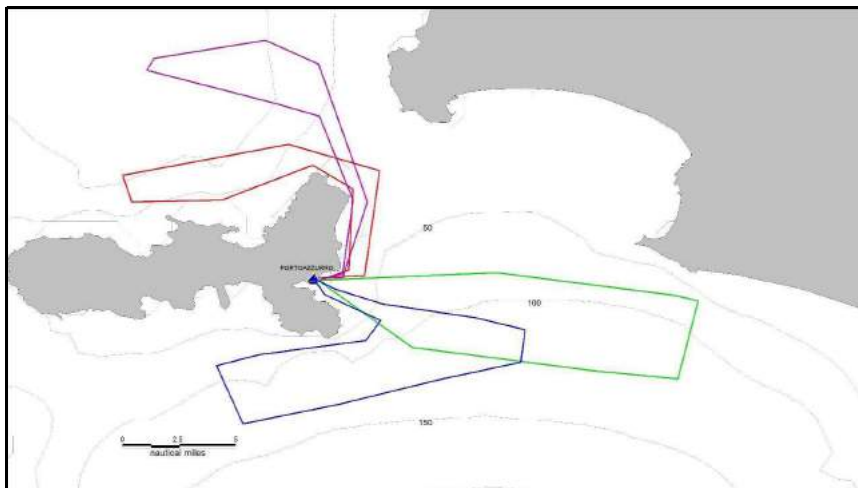
# GO GREEN Mare 2014

## MARELIBERO (Elba)

ott-nov

170 mn-30h

1 esemplare



# CATALOGO MARELIBERO 2013-2014

## >> Database fotografico <<

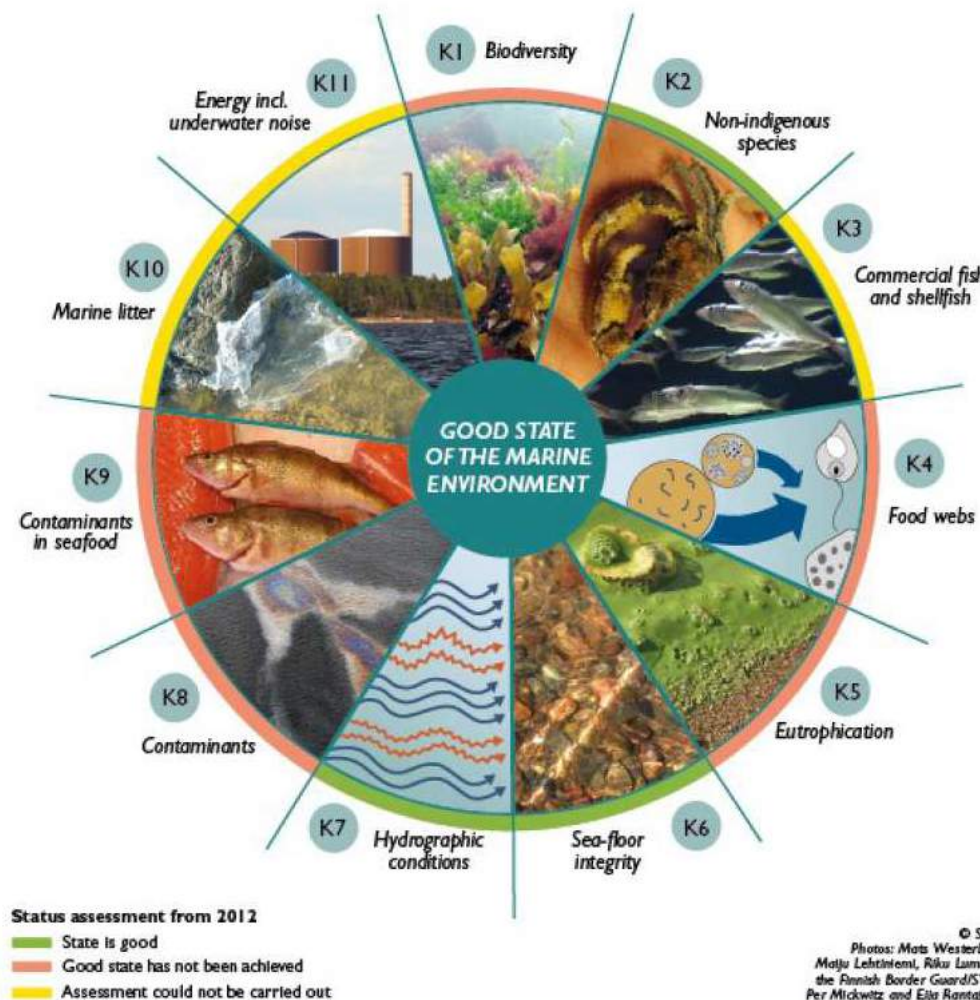


# Marine Strategy Framework Directive

## *La Direttiva quadro sulla strategia per l'ambiente marino*

### MSFD – 2008/56/CE

D.gls. 190/2010



## Moduli: piani di monitoraggio

N	Modulo	n. aree	note
1	Colonna d'acqua, habitat pelagici	8	contaminazione nell'acqua e nei sedimenti
2	Analisi microplastiche	4	
3	Specie non indigene	1	
4	Rifiuti spiaggiati	5	
5	Contaminazione	5	per traffico marittimo e impianti industriali
6	Input di nutrienti	1	da fonti fluviali
7	Habitat coralligeno	3	
8	Habitat fondi a Maerl	1	
9	Habitat di fondo marino sottoposti a danno fisico	1	
10	Habitat delle praterie di Posidonia oceanica	1	
11	Specie bentoniche protette	12	Patella ferruginea e Pinna nobilis
12	Mammiferi marini: Tursiops truncatus	1	delfino = Tursiops truncatus
13	Avifauna marina	5	marangone, gabbiano corso, berta minore e maggiore

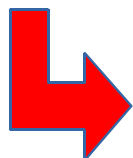


## Poseidon (ARPAT)

Monitoraggio di opportunità,  
transetti mod. 1 e 2

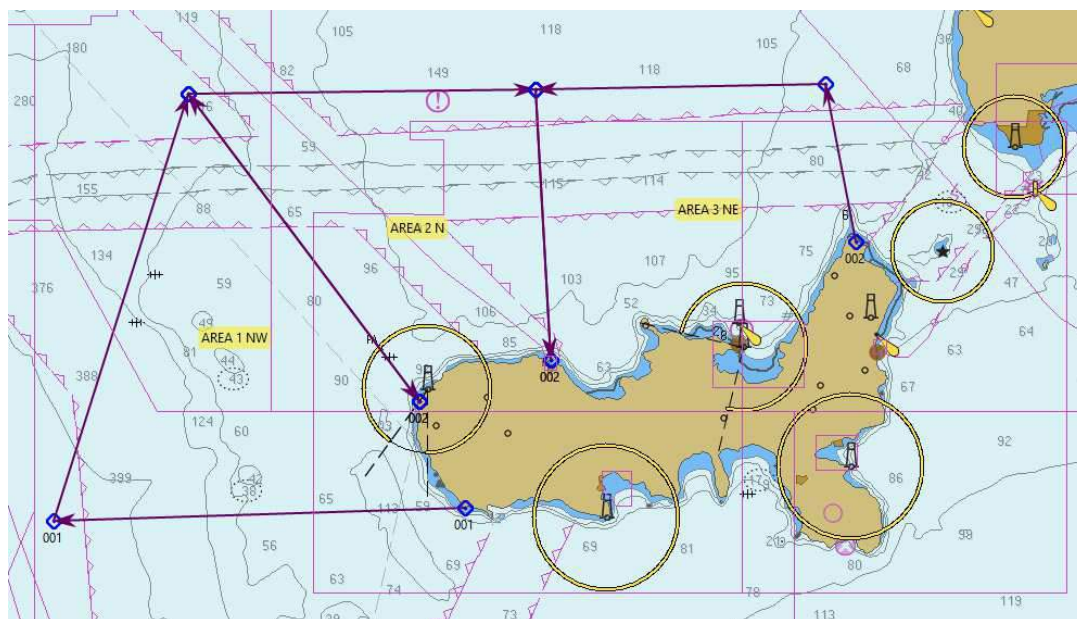
## Krill (CETUS)

Monitoraggio “dedicato”, line  
transect sampling; mappe di  
distribuzione, abbondanza,  
movimenti, elementi  
demografici

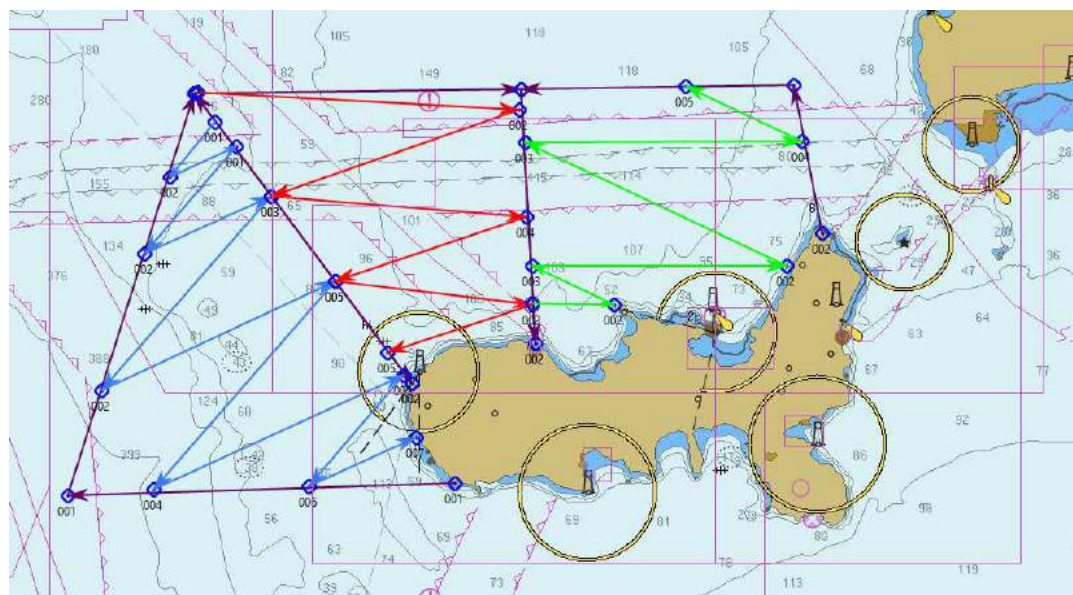


Chiusura EU pilot  
834/16/ENVI

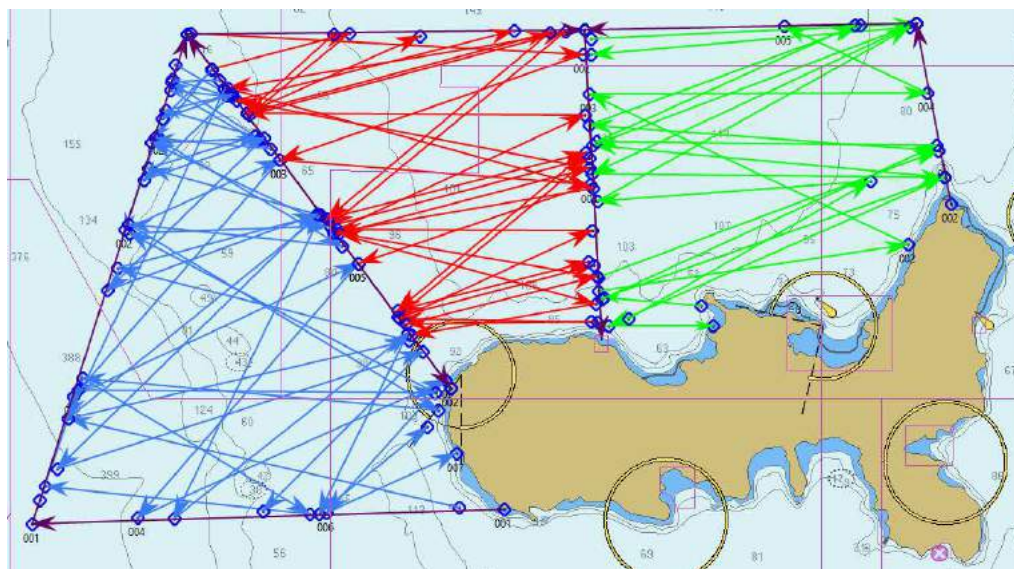




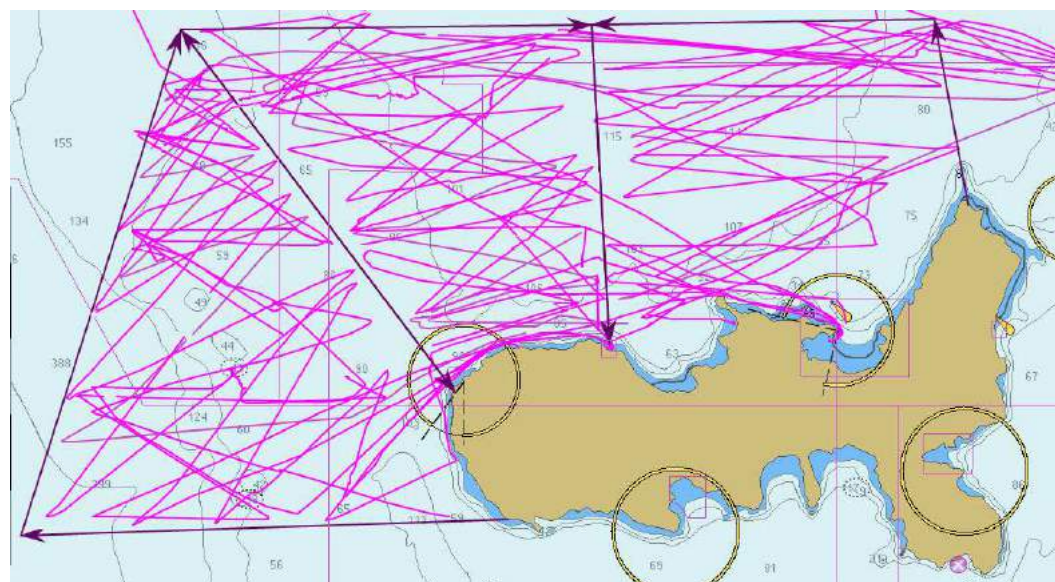
Tre sotto aree



Transetti ad  
angolo  
costante

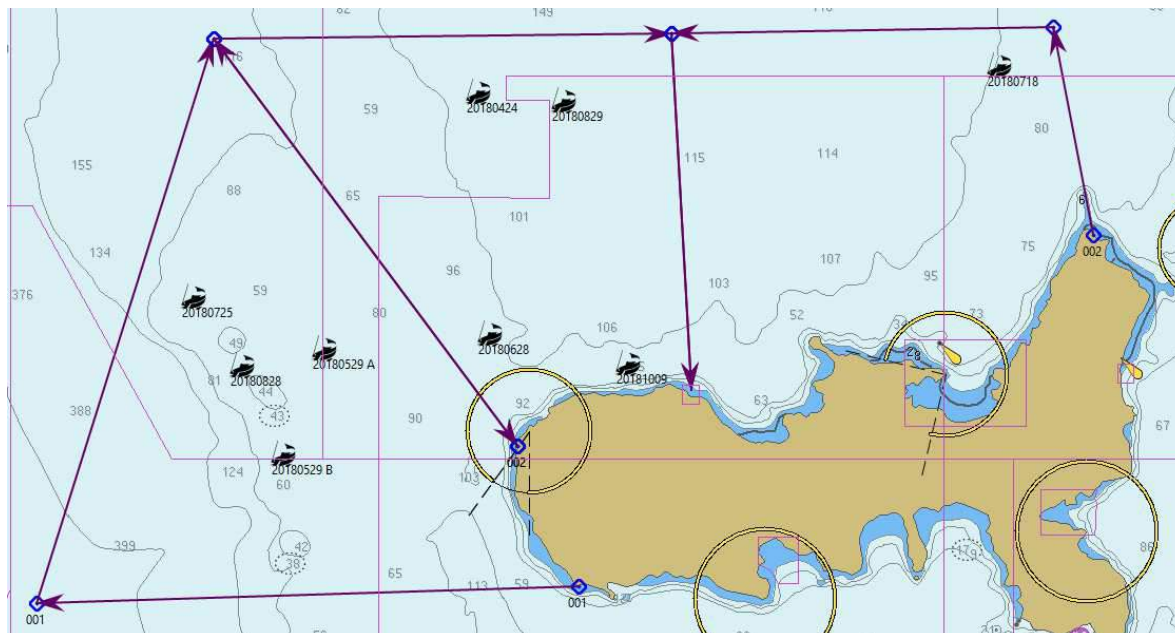


aprile-settembre  
18 giorni in mare  
968 mn-147h

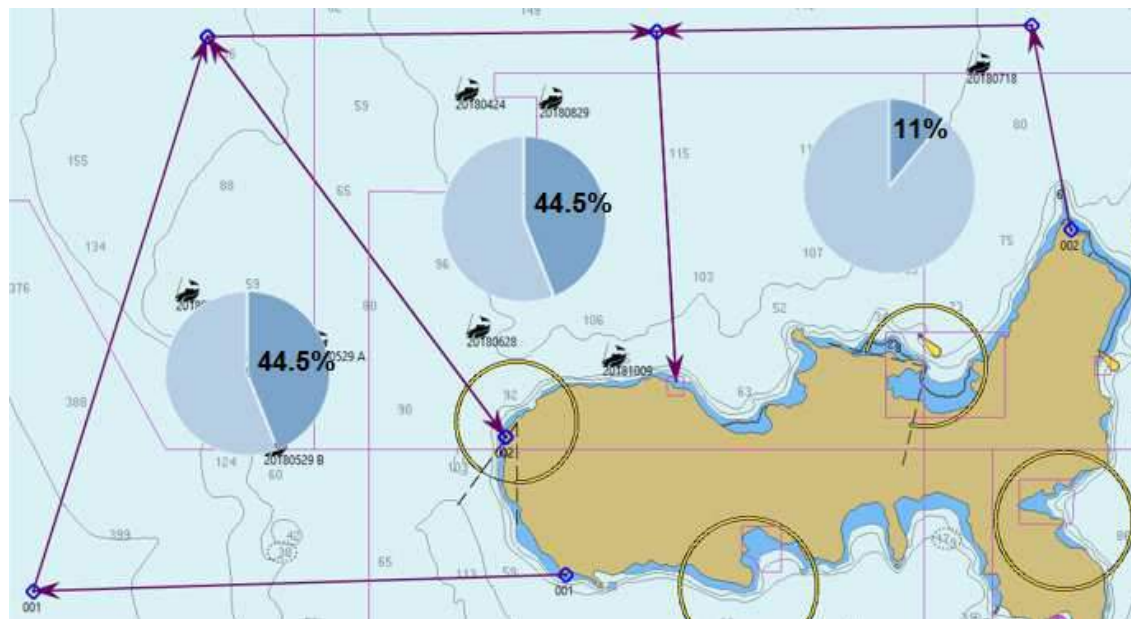


## FOTOIDENTIFICAZIONE – Catalogo fotografico





**9 avvistamenti**  
**63 animali**  
**34 “nuovi” esemplari**  
**7 “ricatture”**  
**e.r. =0.005 basso ma in**  
**linea con dati**  
**pregressi**



## RIASSUMENDO

2005-2018

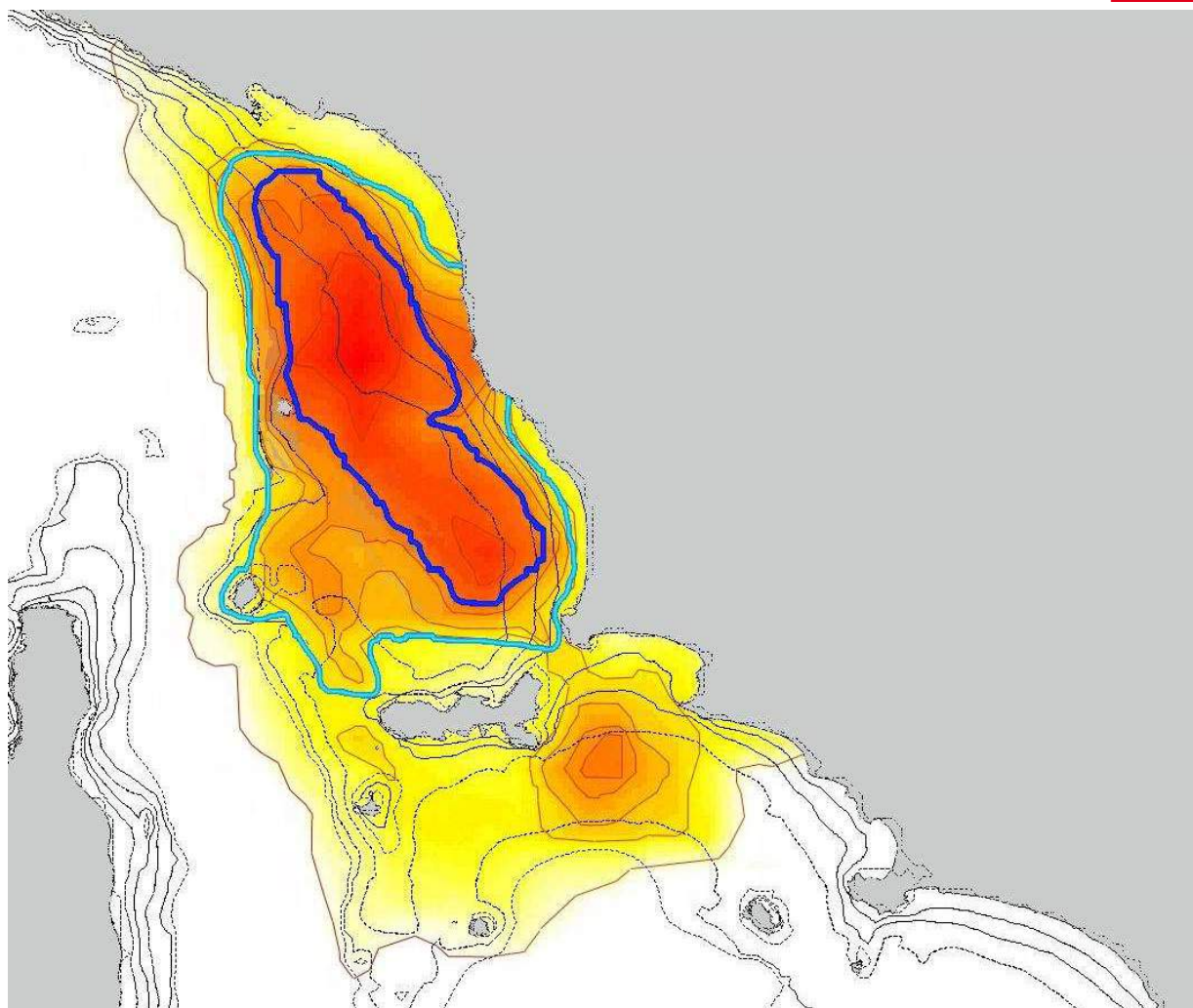
11.645 miglia nautiche

132 uscite

1416 tursiopi avvistati

205 fotoidentificati

Catalogo INTERCET



Area di concentrazione del tursiopo in Toscana - possibile zona di tutela

???



GRAZIE