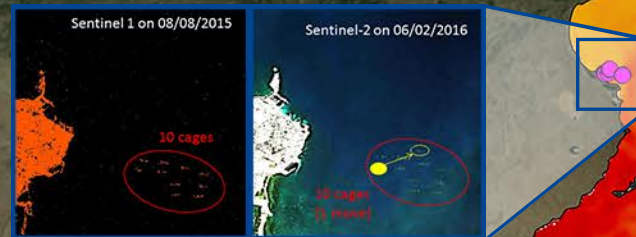# → 4472 FISH CAGES IN THE WESTERN MEDITERRANEAN SEA

esa

Seabass & seabream cages, Cannes (France). Pleiades image on 24/12/2011, CNES.

Example of mussels aquaculture on racks, Spain

Sentinel 1 on 08/08/2015 — Sentinel-2 on 06/02/2016
10 cages

Seabass & seabream cages, St Paul's Bay (Malta). By Frank Vincentz, via Wikimedia Commons.

METHODOLOGY:

i) Collection of at least four Sentinel-1 images above the same location, taken during a 6 months period to cover the whole Western Mediterranean Coastline (in total, 223 S1-SAR scenes were used)

ii) Computation of the minimun of the SAR signal to remove dynamic features

Detection of static features at sea: either mussels racks or finfish cages

VALIDATION:

1) Detection of potential cages with Sentinel-1

2) Validation by an expert with Sentinel-2 true colour or very high resolution images when avaiable

Antoine Mangin (1),
Chloé Vincent (1),
Roberto Pastres (2),
Odile Fanton d'Andon (1),
Olivier Arino (3)

1) ACRI-ST (France),
2) Bluefarm (Italy),
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Cages detection processing from ACRI-ST (SMART project, ESA DUE)
Sea Surface Temperatures from Ifremer (Medspiration project, ESA DUE)

SST Medspiration 01/09/2015 (deg.C)

< 17.0	20.6	29.0
17.0	22.4	31
18.8	26.0	
19.5	27.8	

...es detected, Sentinel 1

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