

MARINE-TERRESTRIAL BEACH MONITORING FACILITY



FIELDWORK CAMPAIGN DEFINITION

Issue:	PLATJA DE PALMA, JANUARY 2011
Date:	27.01.2012
Description:	This document summarizes the field campaign definition, preparation and development of the campaign PLATJA DE PALMA – JANUARY 2012
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A. SCIENTIFIC-TECHNOLOGICAL OBJECTIVES

The fieldwork campaign is prepared to address three major scientific-operational issues according to SOCIB implementation plan:

- (a) to provide a continuous dataset on beach topography-bathymetry evolution.

B. PARTICIPANTS AND LOGISTICS

B.1 Participants

Name	Division	Filiation	Contact details
Casas Pérez, Benjamín (BCP)	ETD	IMEDEA SOCIB	bcasas@socib.es 629 006 192
Castilla Álvarez, Carlos (CCA)	ETD	SOCIB	carlos.castilla@uib.es 971 610 508
Lizarán Esperilla, Irene (ILE)	ETD	SOCIB	ilizaran@imedeia.uib- csic.es 971 610 508
Álvarez Ellacuría, Amaya (AAE)	Beach monitoring	SOCIB	a.alvarez@uib.es 649 626 039
Gómez-Pujol, Lluís (LGP)	Beach monitoring	SOCIB	lgomez-pujol@uib.es 661 728393

List of the people involved in fieldwork campaign by tasks

#	Task	People	Dates	Observations
1	Sea equipment preliminary works	ILE CCA	30 jan 2012	
2	Bathymetry profiles	ILE CCA	31 jan 02 feb 2011	
3	Terrestrial profiles	LGP AAE	31 jan 01 feb 2012	
5	Sea material cleaning and storage	ILE CCA	02 feb 2012	
6	Terrestrial material cleaning and storage	AAE LGP	01 feb 2012	
7	Terrestrial survey pre-process	AAE	06-10 feb 2012	
8	Profiles and bathymetry pre-process	ILE CCA	06-10 feb 2011	
9	Profiles post-process	LGP	13-17 feb 2011	Need from task 7 & 8

B.2 Logistics*B.2.1. Dates*

Monday	30 Harbours needs and contact (LGP) Sea material preliminary works (CCA) Terrestrial material prel. works (AAE)	6 Terrestrial survey pre-process (AAE)
Tuesday	31 S1: profiles (BCP+ILE+CCA) T1: beach survey (AAE+LGP)	7 Terrestrial survey pre-process (AAE)
Wednesday	1 S2: profiles (BCP+ILE+CCA) T1: beach survey (AAE+LGP)	8
Thursday	2 S2: profiles (BCP+ILE+CCA) Terrestrial material cleaning & st. (AAE)	9
Friday	3 Sea material cleaning & storage (CCA+ILE)	10 Bathymetry pre-process (ILE, CCA) Profile post-process until 17 feb (LGP)
Saturday	4	11
Sunday	5	12

B.2.2. Material

ECHOSOUNDER	
Description	BioSonics Inc DT-X Scientific Echosounder
Configuration	
Responsible	BCP
Catalogue	TMOOS, IMEDEA (CSIC-UIB)
Location	IMEDEA, TMOOS warehouse, Floor -2

RTK SURVEY STATION	
Description	Leica Viva GS15
Configuration	
Responsible	AAE
Catalogue	ICTS SOCIB
Location	IMEDEA, TMOOS warehouse, Floor -2

COASTAL SAMPLING RUBBER BOAT	
Description	Valiant DR650 (6m)
Configuration	
Responsible	BCP
Catalogue	TMOOS, IMEDEA (CSIC-UIB)
Location	IMEDEA, TMOOS warehouse, Floor -2

B.2.3. Harbour needs

For fieldwork campaign purposes the pneumatic boat should remain and operate few days at CM Sant Antoni de la Platja (Can pastilla). Contact details are:

CM Sant Antoni de la Platja

C/. Virgilio, 27
07610 Can Pastilla

Telf. 971 745976 (Amador)
Fax. 971 261638
E-mail: cmsap@cmsap.com

B.2.4. TMOOS-IMEDEA resources

Material and equipment from TMOOS-IMEDEA used for fieldwork campaign:

- SOCIB Sprinter van
- TMOOS Valiant DR650

B.2.3. Navigational warnings and sea-works authorization

Sea-works authorization application to:

Demarcación de Costas en Islas Baleares

c/ Ciudad de Queretaro s/n

07007 Palma

Telf. 971 774 949

C. FIELDWORK CAMPAIGN DEFINITION

C.1 Environmental properties

The study area is a seaside tourist resort located in the western part of Mallorca, at the Bay of Palma. Waves approaching from SW and SE come into THE BAY. Meteorological and wave observations from Puertos del Estado (<http://www.puertos.es>) show mean significant wave height is around 1 m and periods of 4-6 s. Forcing by tides is almost negligible in the Mediterranean with a spring tidal range of less than 0.25 m, although combined changes between tides, atmospheric pressure and wind setup can account for sea level elevations close to 1 m.

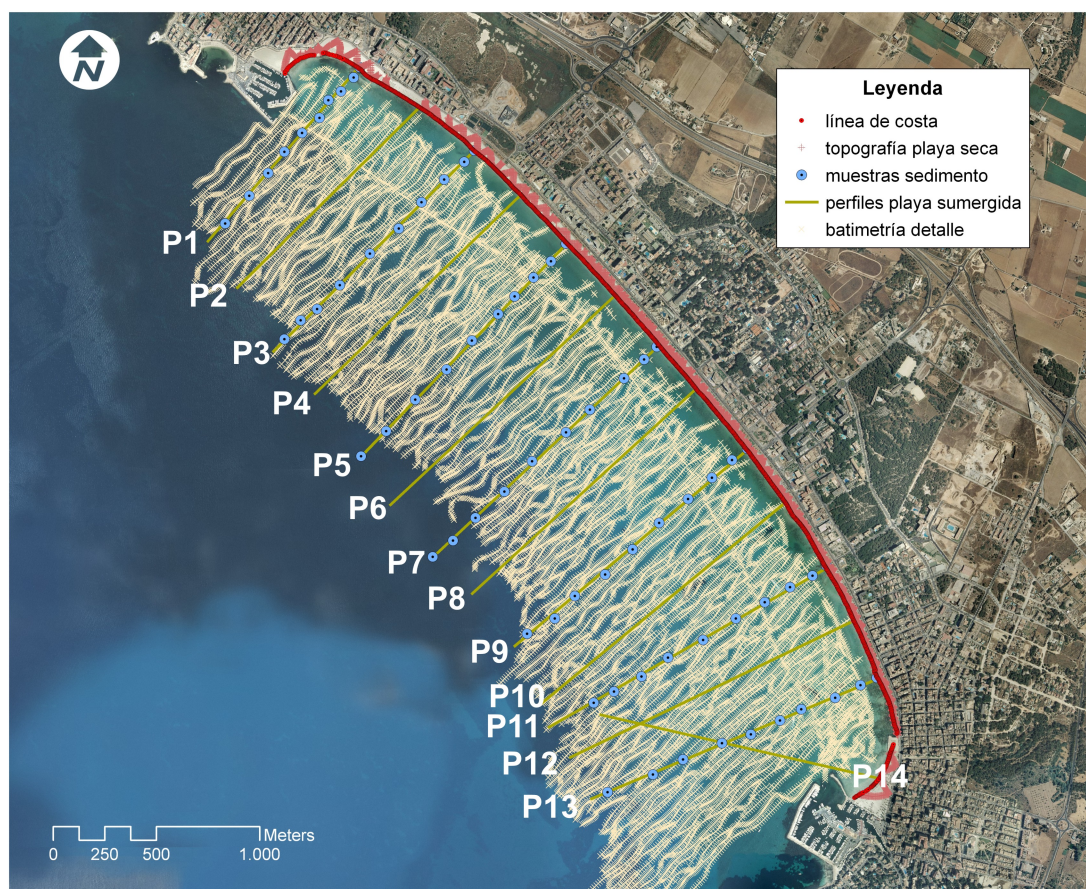
Platja de Palma is a beach backed by a boulevard, hotels and residential houses, and bounded by two rocky headlands. It is a sandy beach near 5000 m long with a concave shape. From a morphodynamic point of view, Platja de Palma is an intermediate beach with shallow bars. The sediment consists of medium carbonate bioclastic sands, being the median sediment size (D50) on the beach around 2.81 phi. *P. oceanica* meadows appear at 8 m in depth nearly a hundred meters from the shoreline.

C.2 Fieldwork campaign specifications

The aim of the fieldwork campaign at Platja de Palma consists on providing the annual dataset described at SOCIB - MTBMF implementation plan. Main products would be

- 14 subaerial - submerged beach profiles

C.3 Data sampling



C.4 Contact information

CM Sant Antoni de la Platja

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E-mail: cmsap@cmsap.com

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