TARA_	YYYY	MM	DD	PORT (CITY)	**LAT** DD	MM.MMM	**LONG** DDD	MM.MMM
Start	2019	08	14	Ampolla	N	40°	41.8	E	000°	56.6
End	2019	08	16	Ampolla	N	40°	48.6	E	000°	31.0

CAMPAING OBJECTIVE

The objective of this campaign is to conduct all protocols at five sites in the Ebro river and to have press communication with journalist from El Pais.

PARTICIPANTS

	ROLE	**NAME, Surname, Affiliation**
1	CREW- Captain	Samuel Audrain
2	CREW- 1st Officer	Yves Tournon
3	CREW- mechanic chief	Leo Boulon
4	CREW- deck chief	François Aurat
5	CREW- voluntary sailor	Lucas Blijdorp
6	CREW- Cook	Carole Pire
7	CREW- Media	
8	GUEST	
9	GUEST	
10	SCIENCE- Chief Scientist	Soline Alligant
11	SCIENCE-	Wolfgang Ludwig
12	SCIENCE-	Lisa Weiss
13	SCIENCE-	Xavier Durieu De Madron
14	SCIENCE-	Mikaël Kedzierski
15	SCIENCE- land team	Leila Meistertzheim
16	SCIENCE- land team	Caroline Pandin

ENVIRONMENTAL CONTEXT

The Ebro is a river lowly industrialised, with many water activities. The entire mouth of the estuary seems to be a well-preserved protected area. Few macro-plastics have been see on the river or on the banks from the semi-rigid boat.

MAJOR ACHIEVEMENTS & SCIENTIFIC INTERESTS

Tara arrived on the site 01 of the Ebro on the 14th august. Sampling of the point EBR S01 began about 10 am (Figure 1). Weather conditions were enough to let the boat drift with current and wind to tow the nets. The tucker trawl was towed in the beginning of the afternoon. Since weather conditions were not optimum, it was decided to only sample at the depth of 10 m, above the thermocline and below the surface. The tucker sample was so full of plankton that filtrations was taking to long. Consequently, 6 flacon 50 ml have been used to collect the entire sample, in addition of the metallic filter. Two manta nets 25 µm mesh and two manta nets 300 µm mesh were towed. An additional 300 µm net was towed for the IFREMER. Some algae get trapped onto the flowmeter of the 300 µm mesh net. Consequently, indicated value on the flowmeter may have been underestimated.

All the sampling on the river were conducted in mooring. On the 15th, sites S02 and S03 were sampled. Sampling team, including Lisa, Mikaël and Soline, went to the site S02 with two semi-rigid boat. The second semi-rigid aimed to carry out journalists from El Pais. On the site 2, surface water was taken using Niskin bottle, 25µm mesh nets were towed about 1min30s and 300 µm mesh net was towed 30 min. Once sampling done, the first boat came back to the Tara, with Lisa on board to begin the samples treatment as soon as possible. Then, site 3 was sampled towing 25 µm mesh between 2 and 3 min; 300 µm mesh was towed 30 min. Nothing to notice sampling surface water with Niskin bottle.

On site S04, sampling was conducted on the morning. It was noticed that 25µm net flowmeter didn't work. Therefore, 300 µm net flowmeter will be used to assess water velocity and hence volume filtered through the 25 µm mesh net. This should be done for site 02 and 03 as well.

Figure 1: Sampling points on the Ebro

CONCERNS & ACTIONS TO TAKE

As indicated above, sampling team encountered issues with the flowmeter of the 25 µm mesh net. Therefore, attention must be paid to the data. However, problem have been solved on the Tara, the mechanism has been cleaned. Likewise, the flowmeter of the 300 µm mesh net (with buoys)

We ran out of petri dishes type analyslide for metallic filters.

SUMMARY OF ACTIVITIES

0##	R##	S##	Date (Z=UTC) YYYYMMDDZ	Latitude	Longitude	Niskin & CTD	Manta 25	Manta 25-P	Manta 300	Manta 300-P	Trucker Trawl	ON SHORE			MUSSELS		PLASTIC
												QUAD	HPK	SED	CTRL	CAGE	CAGE
	EBR	S01	2019.08.14 07:44	N 40°41’	E 000°56’	X	X	X	X	X	X	x	x	X		X	x
	EBR	S02	2019.08.15 07:20	N 40°42’	E 000°51’	X	X	X	X					x		X	X
	EBR	S03	2019.08.15 09:54	N 40°71’	E 000°72’	X	X	X	X							X	X
	EBR	S04	2019.08.16 07:59	N 40°71’	E 000°58’	X	X	X	X							x	X
	EBR	S05	2019.08.16 15:50	N 40°48,6’	E 000°31.0’	X	X	X	X								

INVENTORY OF SAMPLES COLLECTED DURING THE CAMPAIGN

Storage T°C Box size Chemical	+10-40 BOX	+10-40 INCUB	+10-40	+4 DRAWER formol	-20 vertical	-20 bags	-20 barquette	-20 L	-20 M	-20 M gluta	-20 S gluta	LN2
FCM (cryo 2mL)	0	0	0	0	0	0	0	0	0	0	21	0
NUT (bottle 20 mL)	0	0	0	0	7	0	0	0	0	0	0	0
PM (petri slide)	0	0	0	0	0	0	0	0	7	0	0	0
CULT (bottle 250 mL)	0	0	0	0	0	0	0	0	0	0	0	0
S023 (cryo 5 mL)	0	0	0	0	0	0	0	0	0	0	0	14
S325 (cryo 5 mL)	0	0	0	0	0	0	0	0	0	0	0	14
S25 (cryo 5 mL)	0	0	0	0	0	0	0	0	0	0	0	5
P25 (jar 1 L)	5	0	0	0	0	0	0	0	0	0	0	0
S300 (cryo 2 mL)	0	0	0	0	0	0	0	0	0	0	0	21
G300 (cryo 2 mL)	0	0	0	0	0	0	0	0	0	0	3	0
R300 (petri + falcon)	0	0	0	0	0	8 (falcon)	0	0	9 (pétri)	0	0	0
F300 (bottle 250 mL)	0	0	0	1	0	0	0	0	0	0	0	0
HPB (barquette)	0	0	0	0	0	0	6	0	0	0	0	0
HPS (cryo 5 mL)	0	0	0	0	0	0	0	0	0	0	0	0
HPK (Falcon 50 mL)	0	0	0	0	0	0	0	0	0	0	0	0
MBO (Falcon 50 mL)	0	0	0	0	0	0	0	4	0	0	0	0
TOX (Falcon 50 mL)	0	0	0	0	0	0	0	8	0	0	0	0
CG (Falcon 50 mL)	0	0	0	0	0	0	0	20	0	0	0	0
CGG (cryo 5 mL)	0	0	0	0	0	0	0	0	0	20	0	0
SED (Falcon 50 mL)	0	0	0	0	2	0	0	0	0	0	0	0
MUSS (Ziploc)	0	0	0	0	0	0	0	0	0	0	0	0
MUST (papillottes)	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	0	0	1	7	8	6	32	16	20	24	49

REPORT

Fondation tara océan
explorer et partager

Mission 2019
Microplastics

CRUISE SUMMARY REPORT (CSR)