

# Océanides Project

*Between mythology and oceans*



From Venus to Neptune...

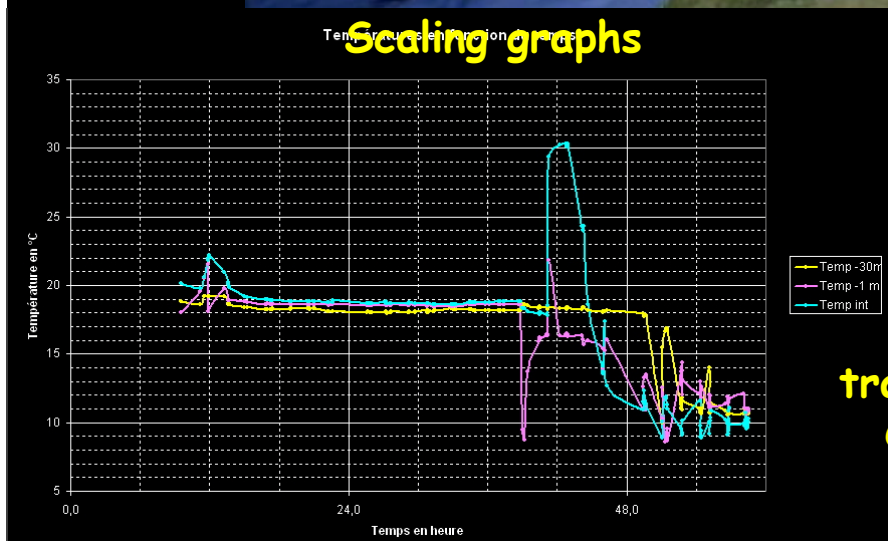
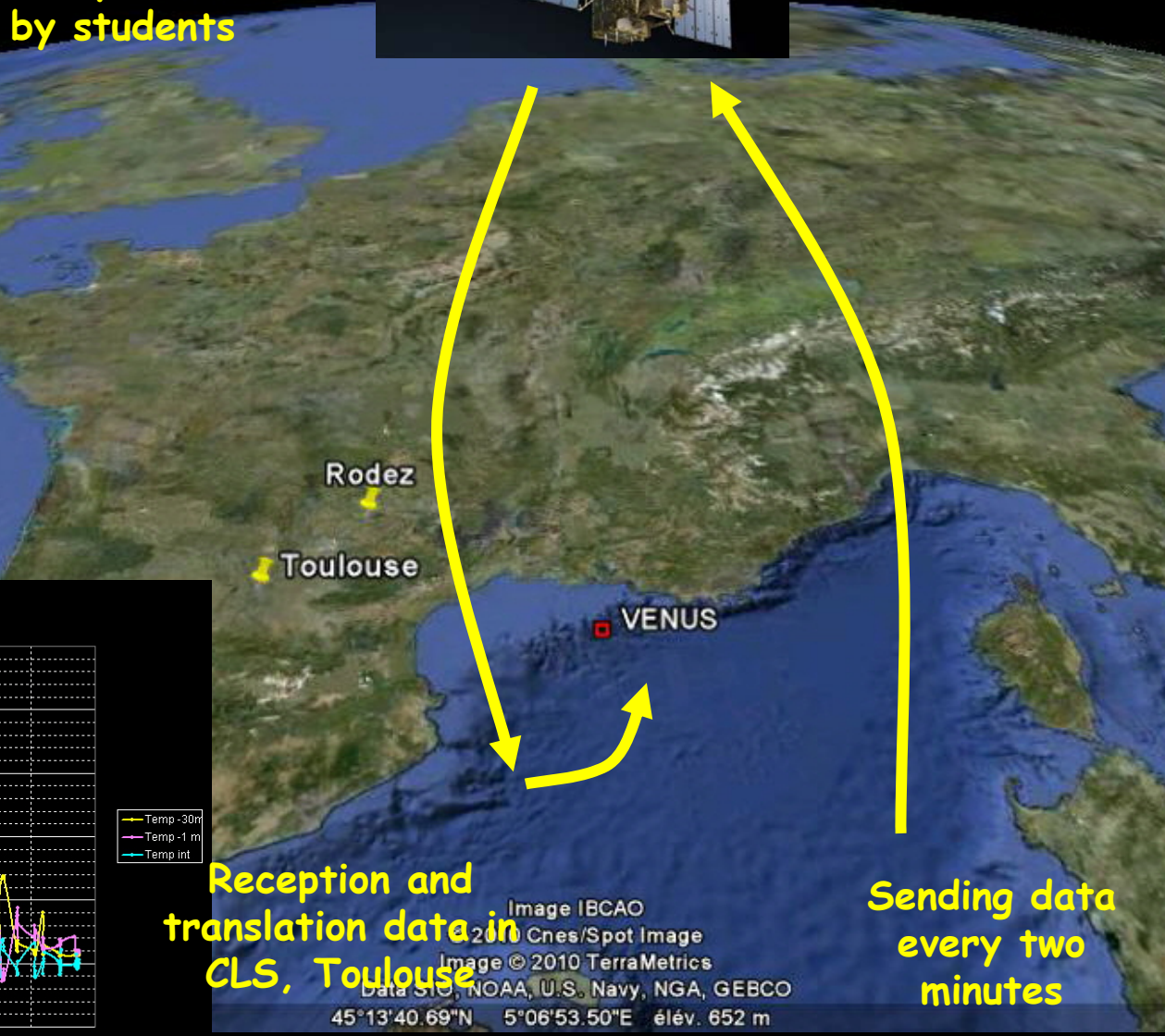
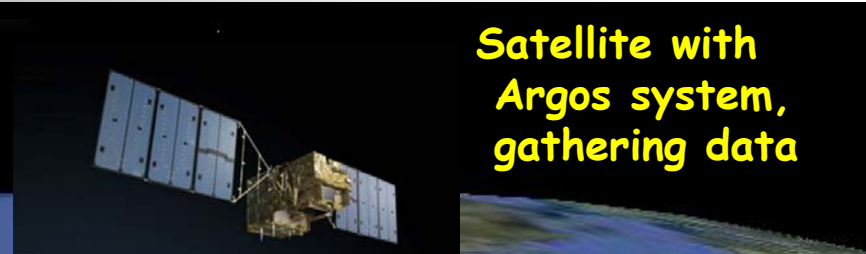
*Lycée Monteil - Rodez - France*

Microsoft Excel - relevés\_maxime.xls

Formule: =0,7769\*EXP(((HEXDEC(G17)\*256)+HEXDEC(H17))\*11,972/1024)

	A	B	C	D	E	F	G	H
		Date Mesg		SENSOR #01	SENSOR #02		SENSOR #03	SENSOR #04
1								
2		10:40:56	10,70	02	32	12,2	00	00
3		10:44:56	10,76	03	B1	16,4	00	00
4		10:50:56	10,85	03	B1	16,4	00	00
5		11:26:56	11,46	03	B0	16,4	00	00
6		11:28:56	11,50	03	B0	16,4	00	00
7		11:30:56	11,53	03	B0	16,4	00	00
8		11:32:56	11,56	03	B4	16,5	00	00
9		11:36:56	11,63	03	B0	16,4	00	00
10		12:22:56	12,40	03	AD	16,4	00	79
11		12:24:56	12,43	03	AE	16,4	00	71
12		12:26:56	12,46	03	AD	16,4	00	68
13		14:04:57	14,10	01	99	10,5	00	01
14		14:06:57	14,13	01	95	10,5	00	00
15		14:08:57	14,17	01	92	10,4	00	00
16		14:10:57	14,20	01	90	10,4	00	02
17		15:24:57	15,44	01	8B	10,4	00	00
18		15:26:57	15,47	01	8B	10,4	00	00
19		15:28:57	15,50	01	8A	10,4	00	00
20		15:30:57	15,54	01	8A	10,4	00	00
21		15:46:57	15,80	01	85	10,3	00	00
22		15:48:57	15,84	01	85	10,3	00	00
23		15:50:57	15,87	01	84	10,3	00	00
24		15:52:57	15,90	01	85	10,3	00	00
25		15:54:57	15,94	01	8A	10,4	00	00
26		17:02:57	17,07	01	90	10,4	00	00

Analysis in Rodez by students



Reception and translation data in CLS, Toulouse

Sending data every two minutes

Image IBCAO  
© 2010 Cnes/Spot Image  
Image © 2010 TerraMetrics  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
45°13'40.69"N 5°06'53.50"E élév. 652 m

# Oceans - climate

Study  
the Gulf stream

influence the  
French climate

Study  
local coastal current

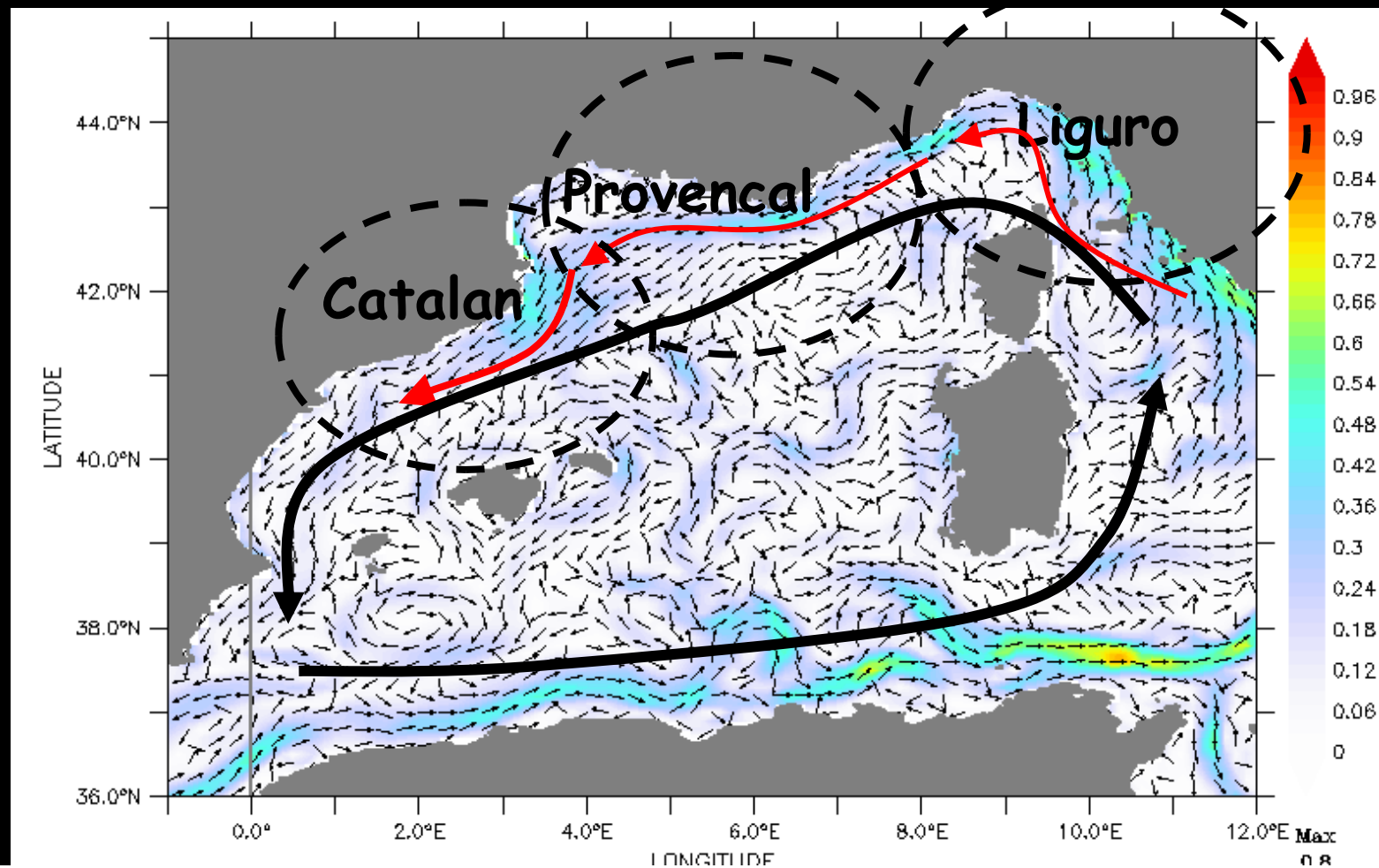
influence the climate  
of the south of  
France, temperate,  
hot and dry



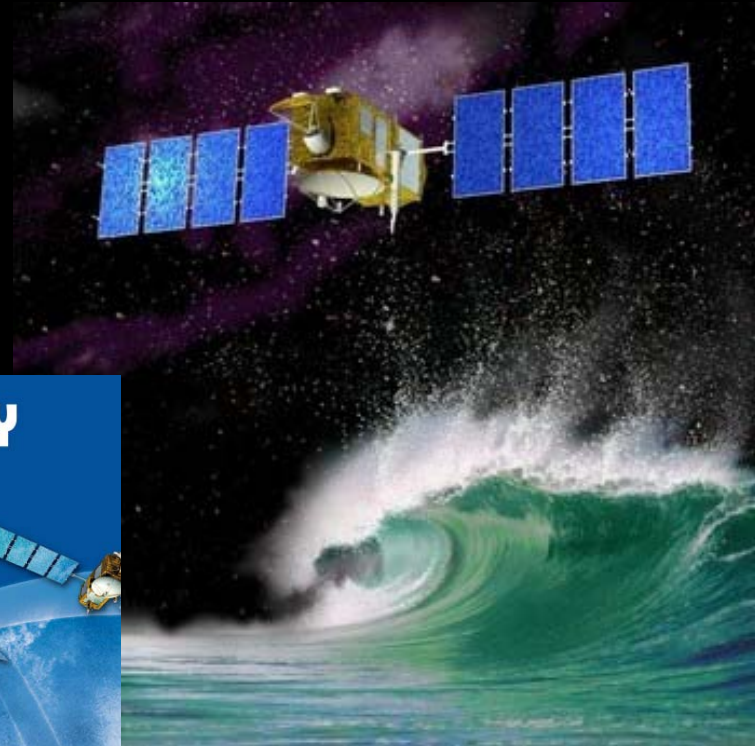
# The study

## Liguro - Provençal -Catalan current

### And its variations

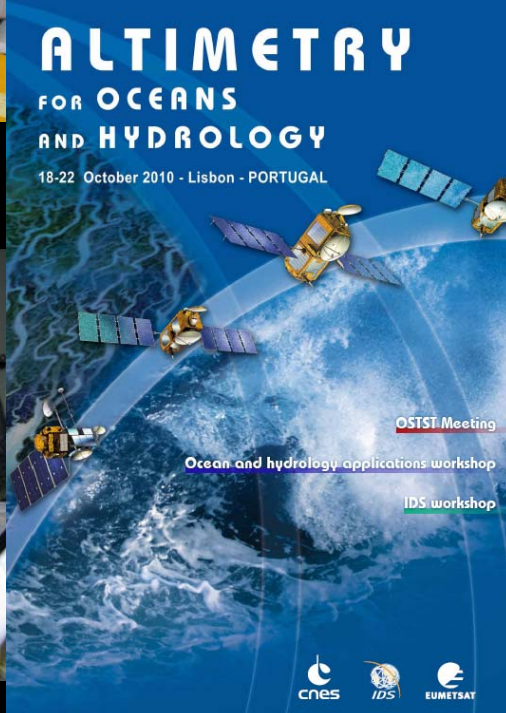


# Argonautica and education Jason and Scientists



**ALTIMETRY**  
FOR OCEANS  
AND HYDROLOGY  
18-22 October 2010 - Lisbon - PORTUGAL

OSTST Meeting  
Ocean and hydrology applications workshop  
IDS workshop

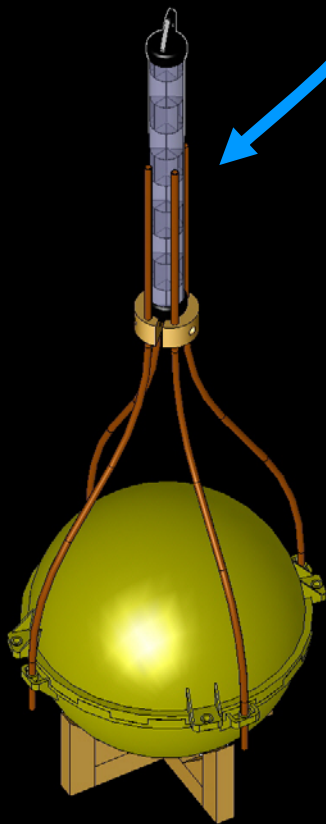


cnes IDS EUMETSAT

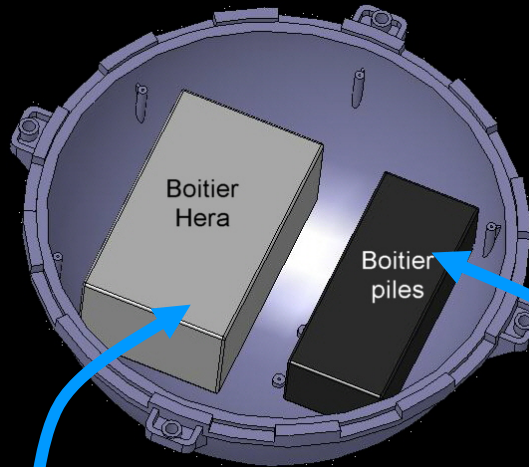
- Measures of
- temperature
  - luminosity
  - movements of seas...

# Venus, our drifting buoy

Radar reflector



The buoy



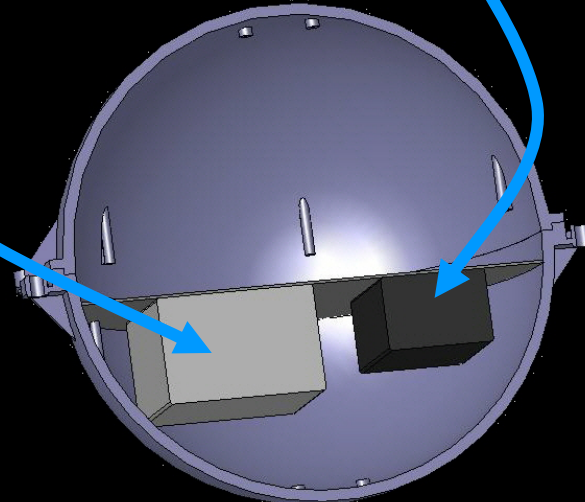
SCHEMA DE LA LIGNE DE MOUILLAGE



2 Epissures  
Manilles  
Epissures

Battery box

Hera box



Temperature and light sensors

- in the buoy,
- -1 m
- -30 m

Cordes  
Environ 25 m



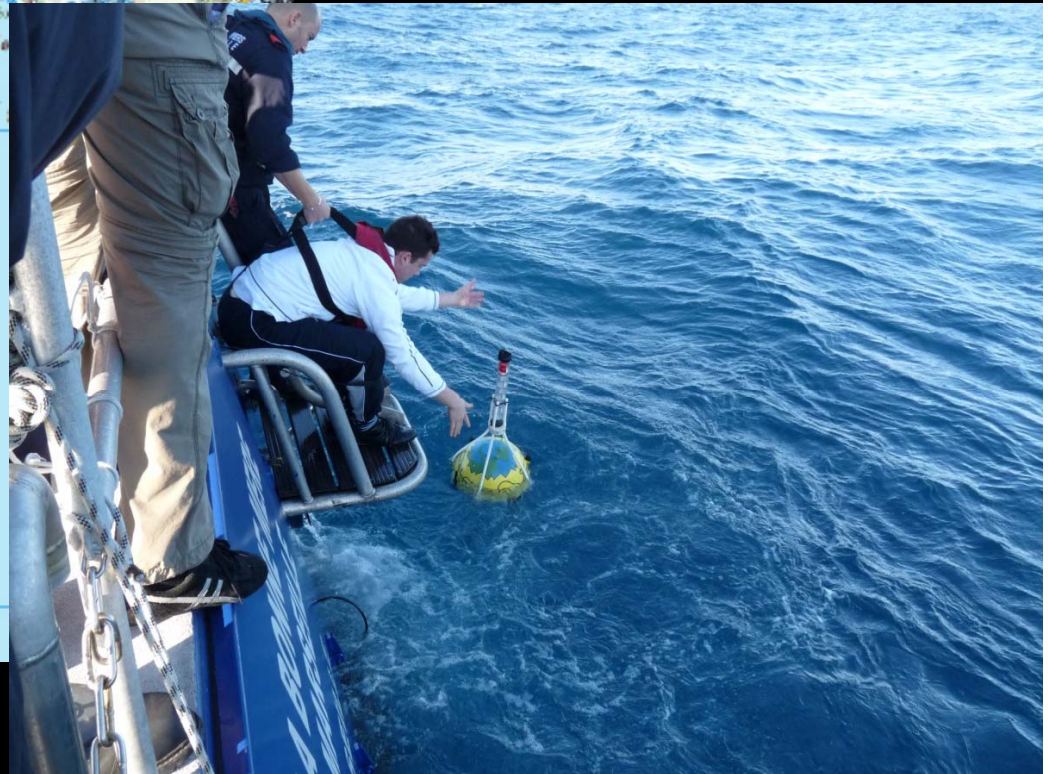
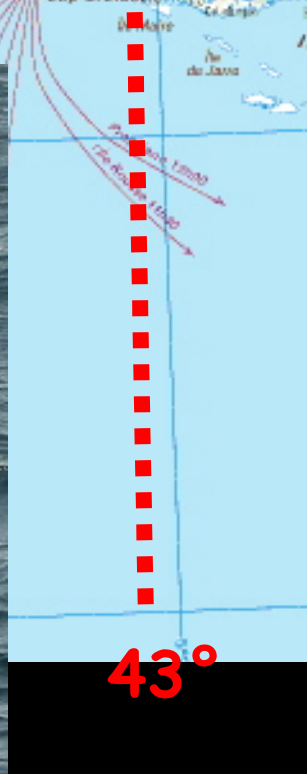
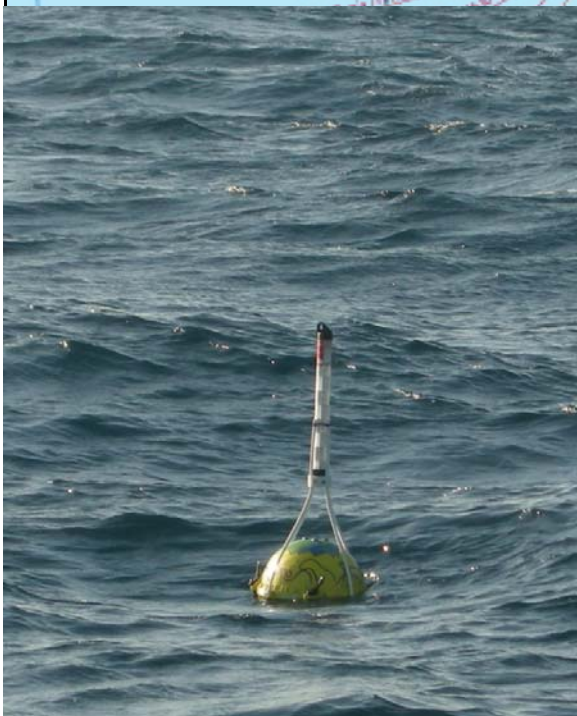
Epissure + cosse coeur  
Manille



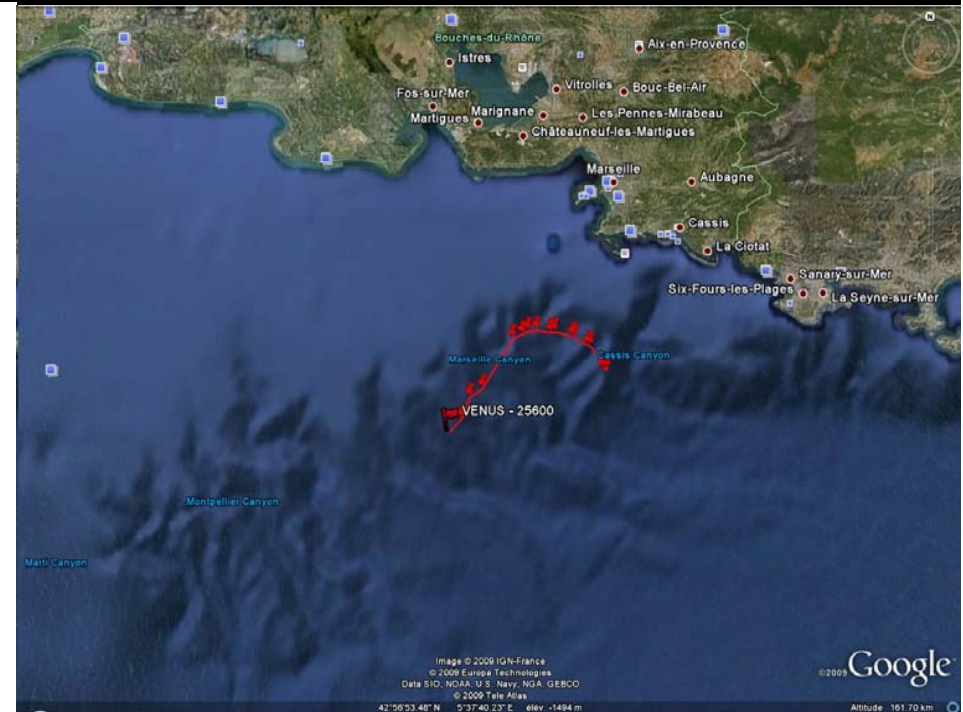
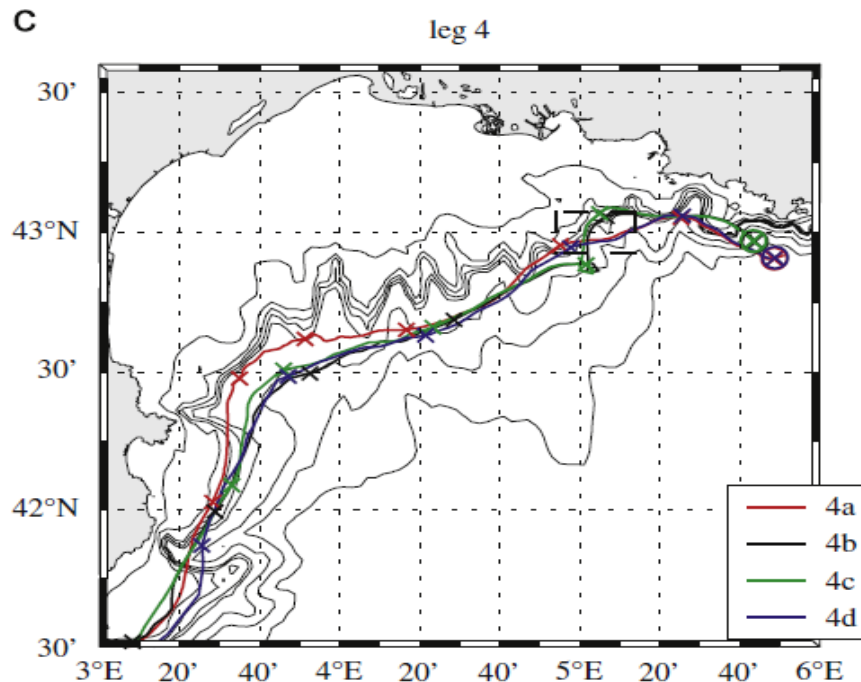
# Venus into the sea



The 25th of November 2009



# Predicted route / Real route



Path of the scientific floats

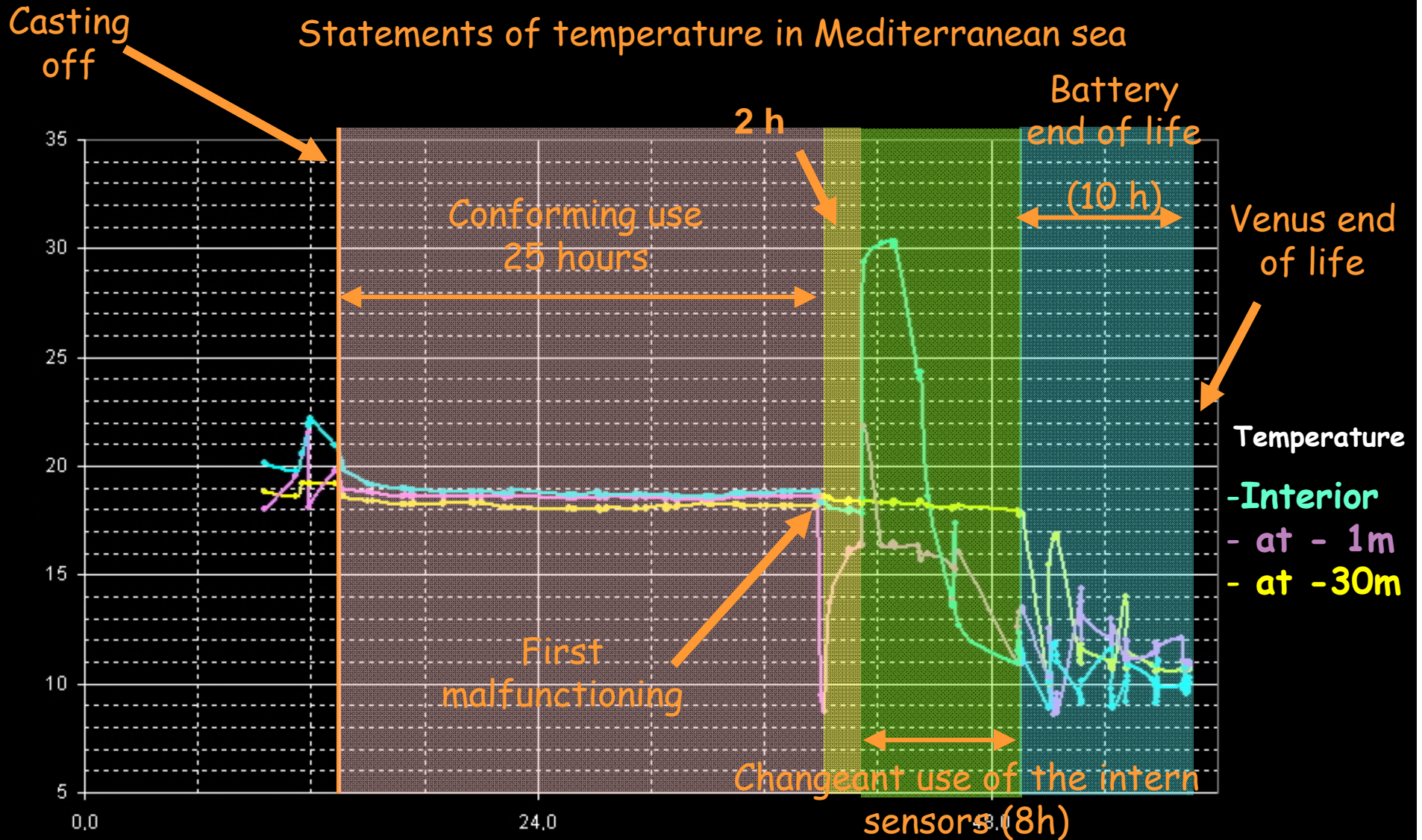
Our buoy has followed  
the relief of the  
continental bank

Path of Venus, our buoy

Supposed speed : 23 cm/s  
Real speed : 37 cm/s



# Results analysis

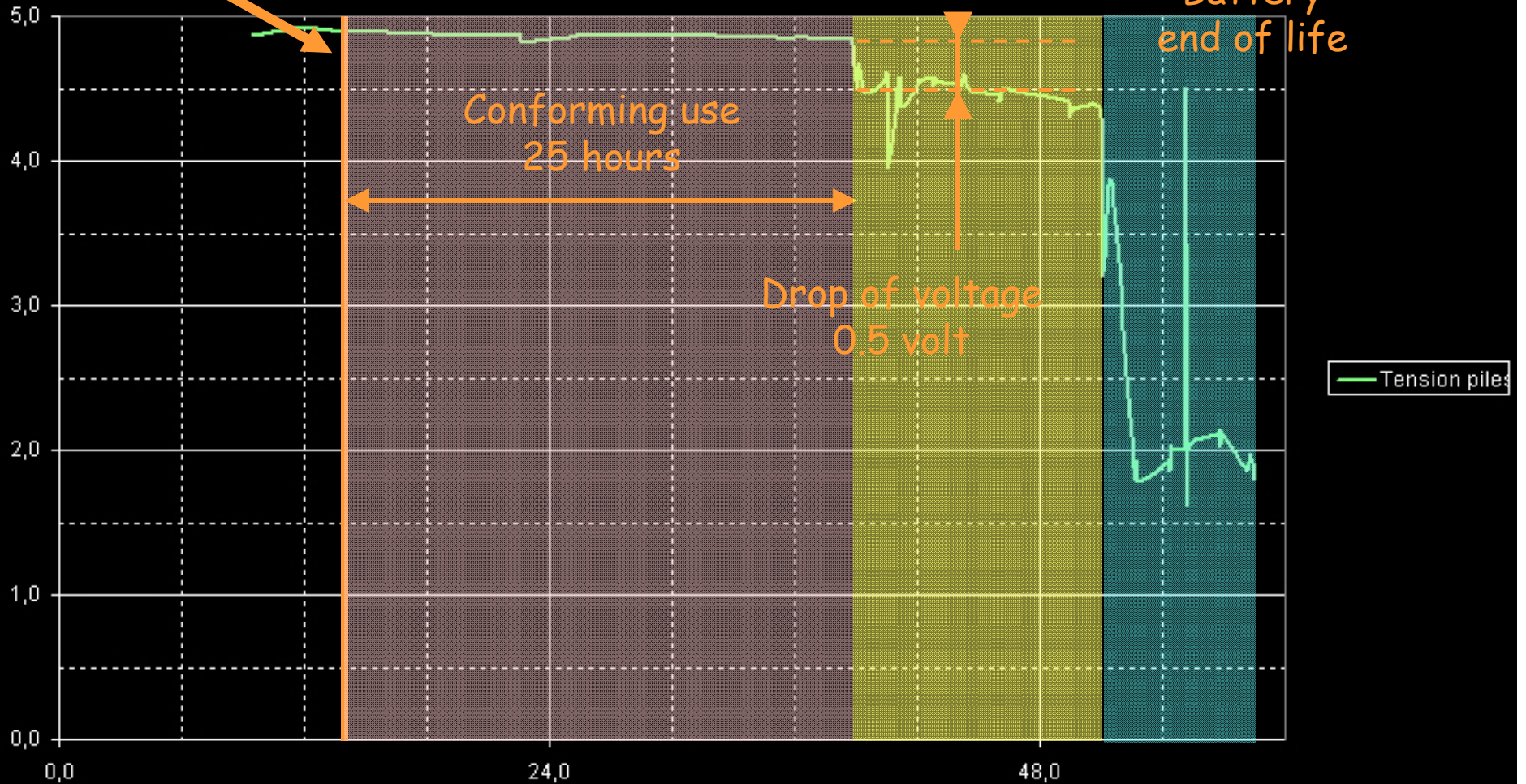


# Results analysis

Casting off

Progress of the battery

Battery end of life



# From Venus to Neptune

Next buoy : Neptune  
using the experience of Venus

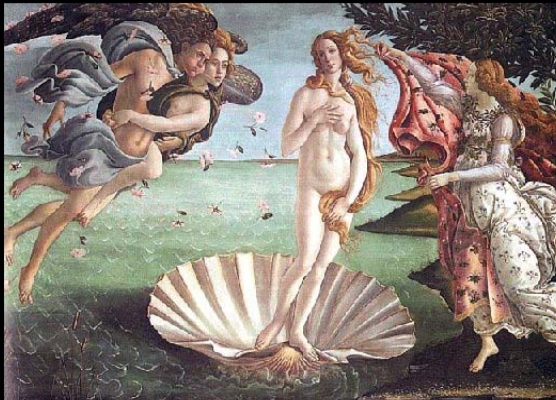
Our research is continuing

- about the « stormmetre »
- about the use of Jason satellite data



# How oceanographic studies lead to mythology...

Venus



Hera



Zeus



Jason's travel with the Argonauts



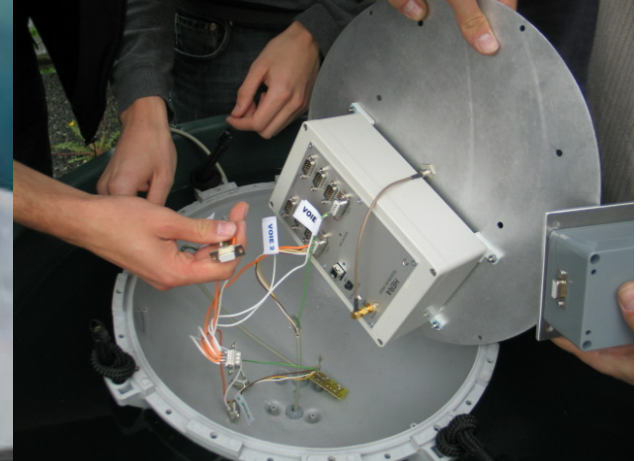
... and Lisbon !



Vasco de Gama

Neptune





Thanks to Argonautica-CNES

LEGOS

CLS

Education nationale etc...