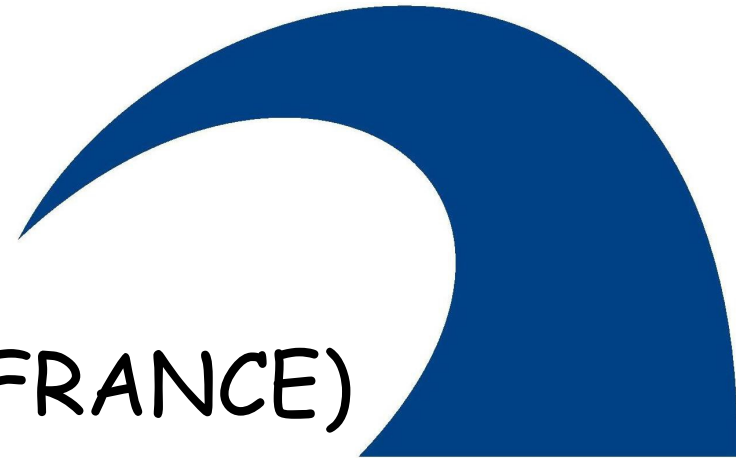
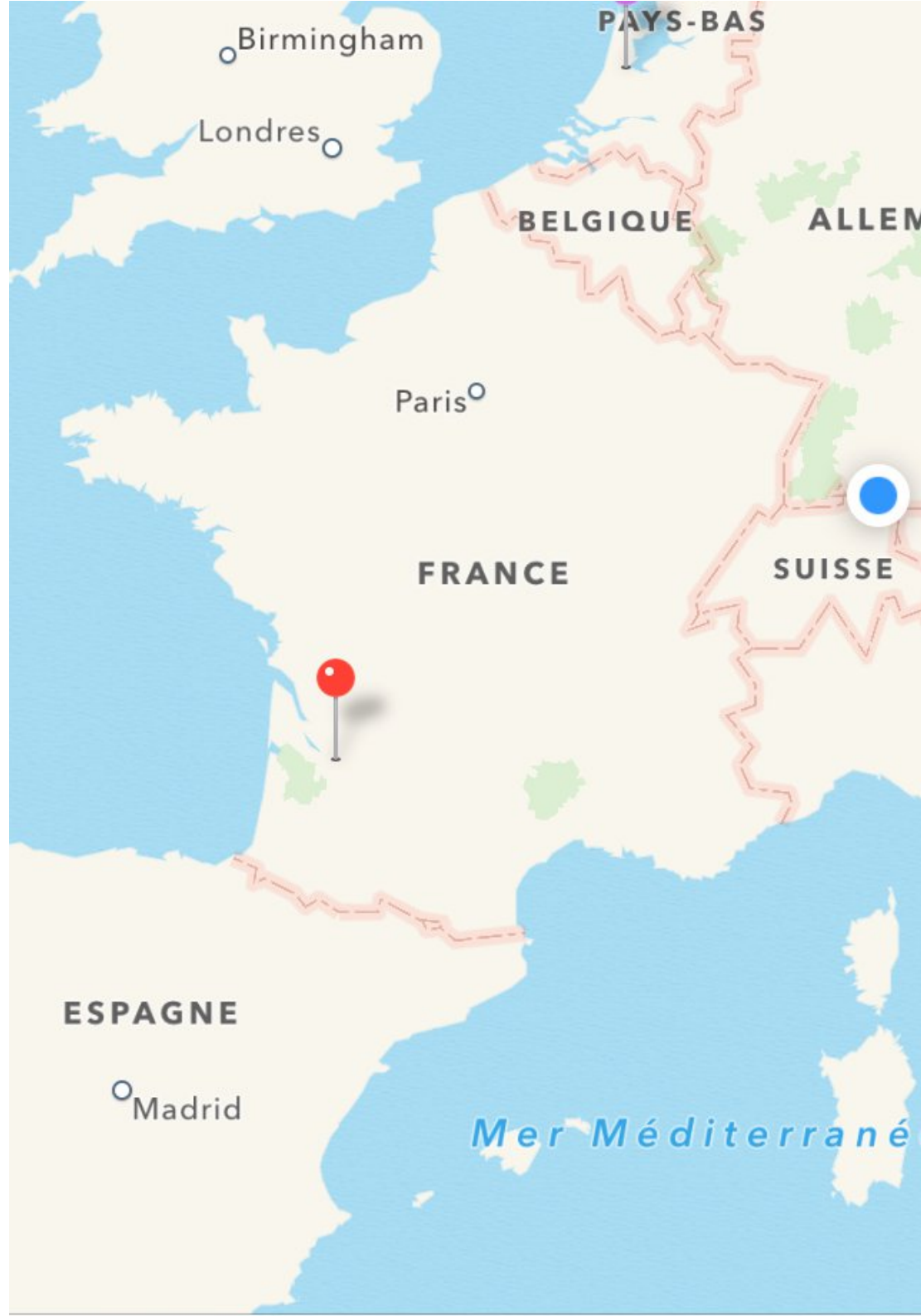




Paul Esquinance Middle school

LA RÉOLE (FRANCE)





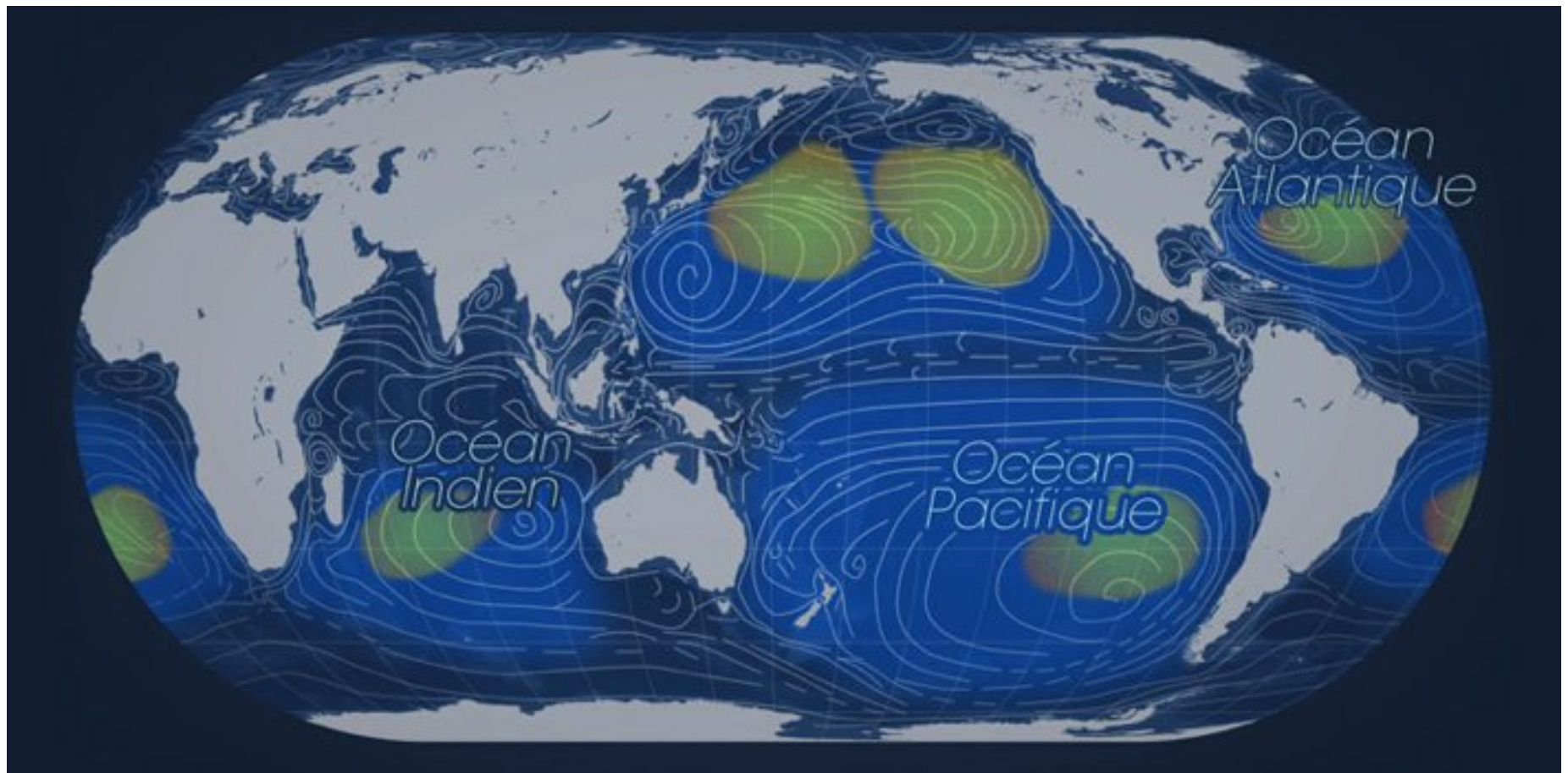
The 7th

continent

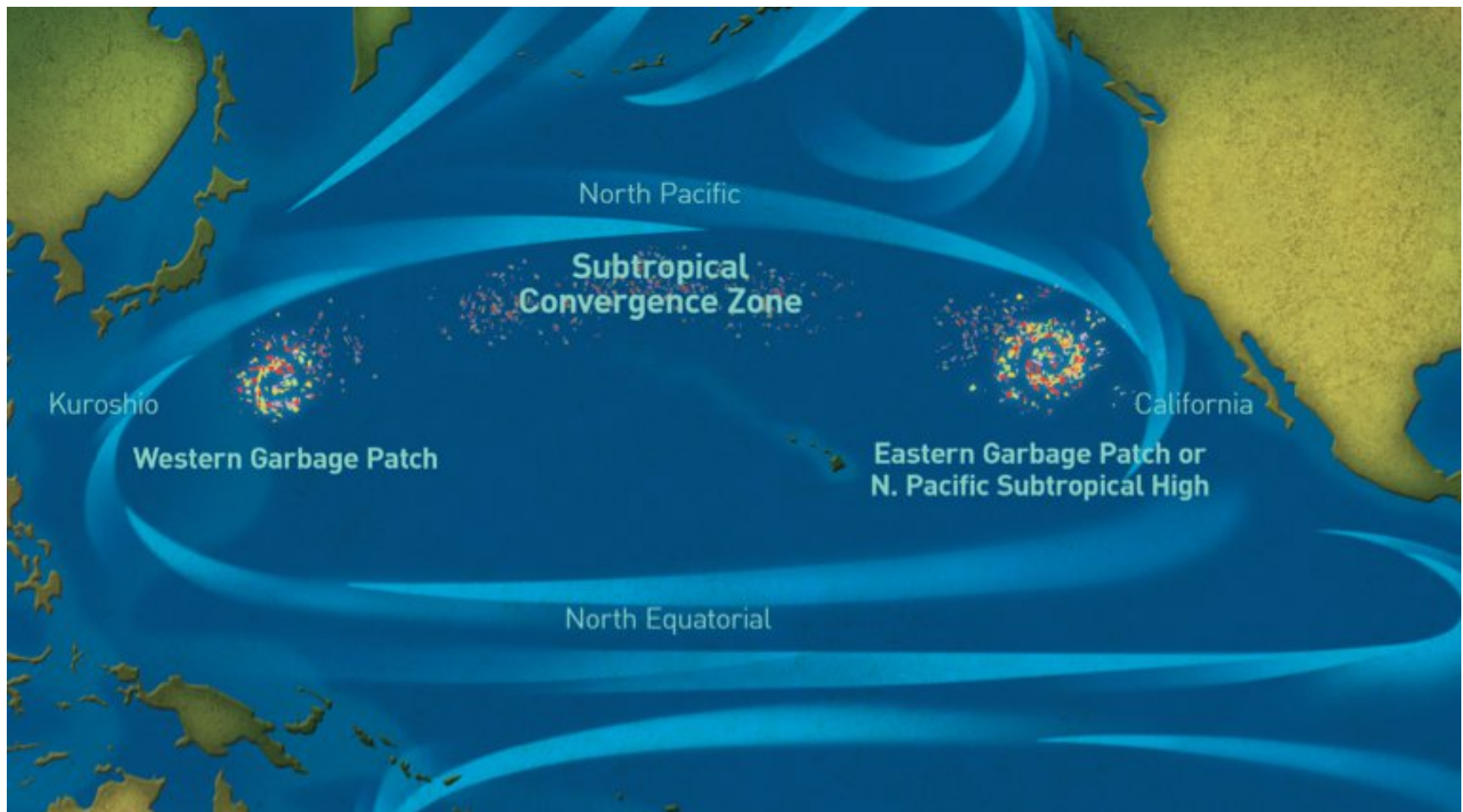


« Plastic islands »
in the oceans

Plastic – soup in the oceans



How can garbages be trapped far from coasts ?



1st part – our starting points

2nd part - real studies

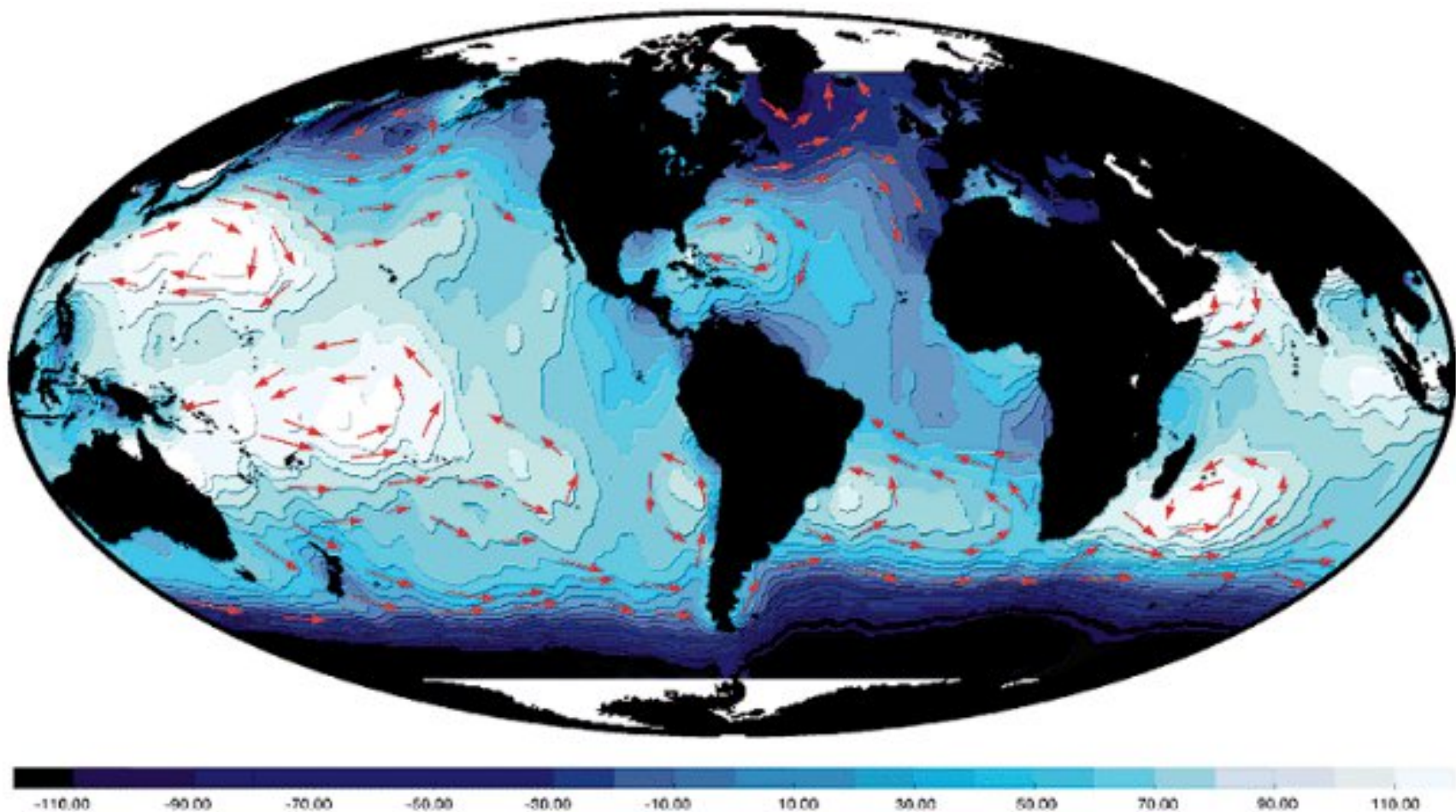
3rd part - closer to reality

4th part - a mission : to inform

Main causes :

- Coriolis effect
- Ekman deflection
- Sea surface topography

Ocean topography : shaping the sea surface



1st part – our starting points

2nd part - real studies
- a modeling experimentation

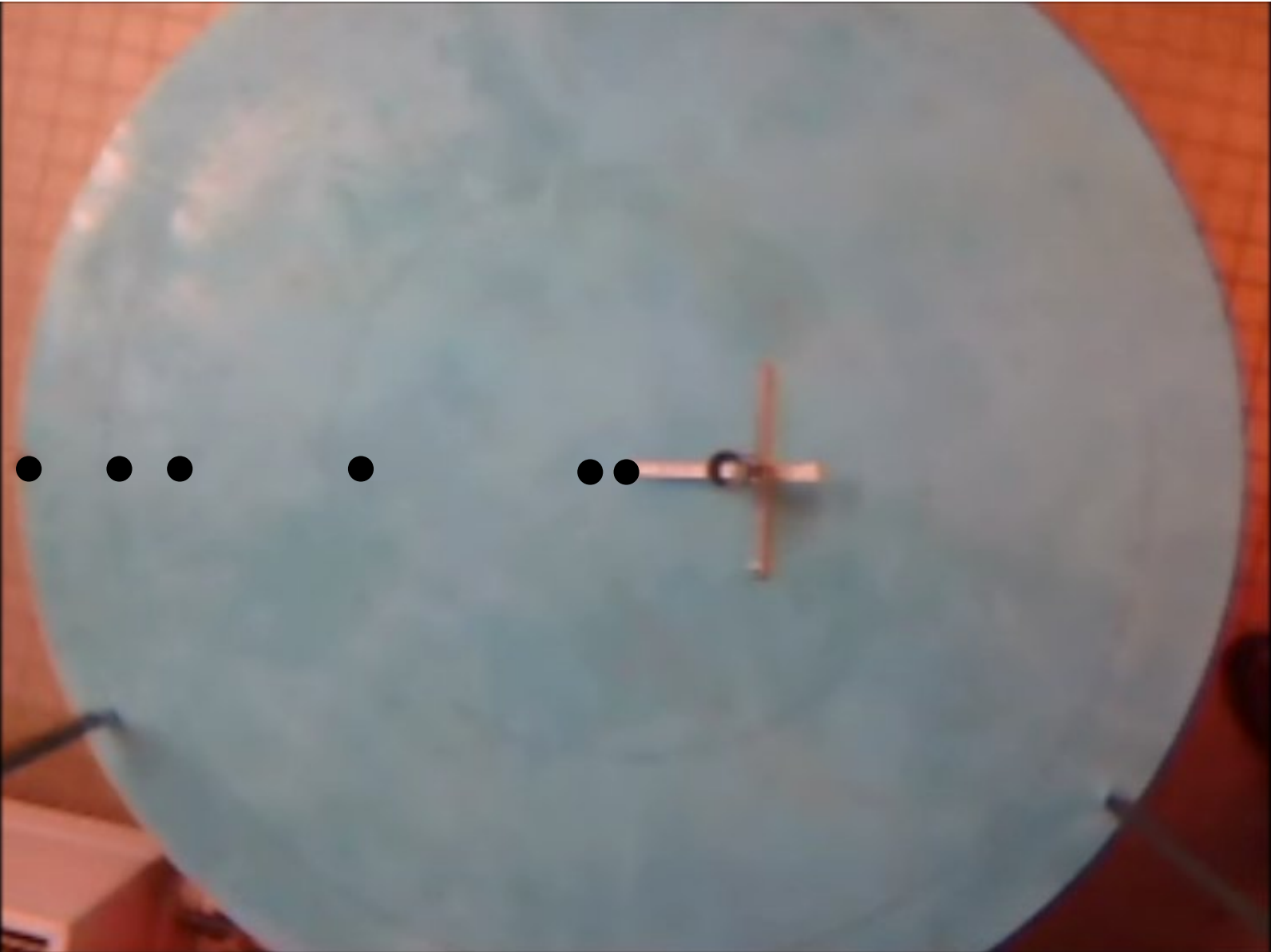
3rd part - closer to reality

4th part - a mission : to inform

An experimentation about the Coriolis effect



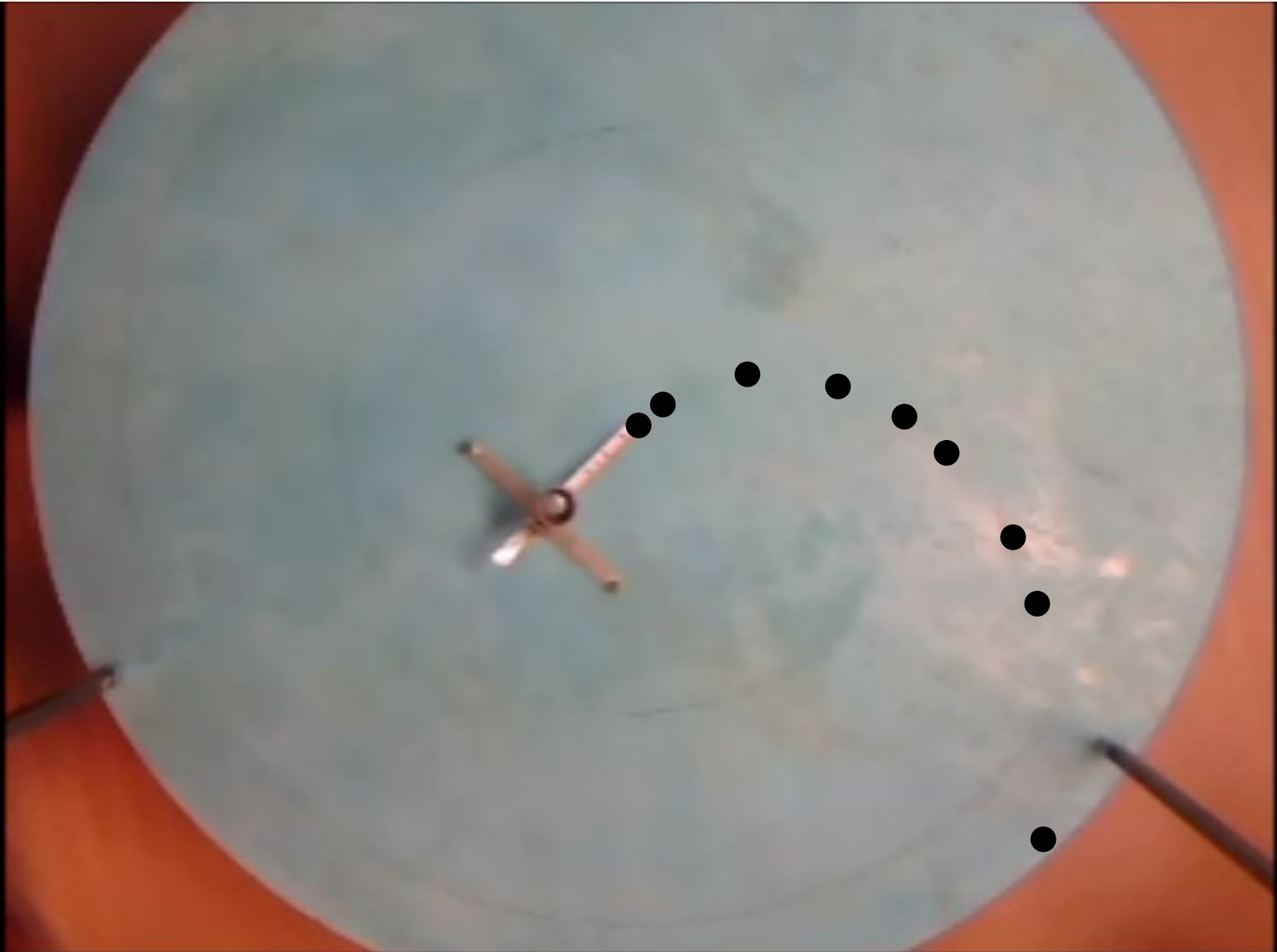
First video : the marble starts to roll from the center of the table.
Table rotational speed : 0 rpm



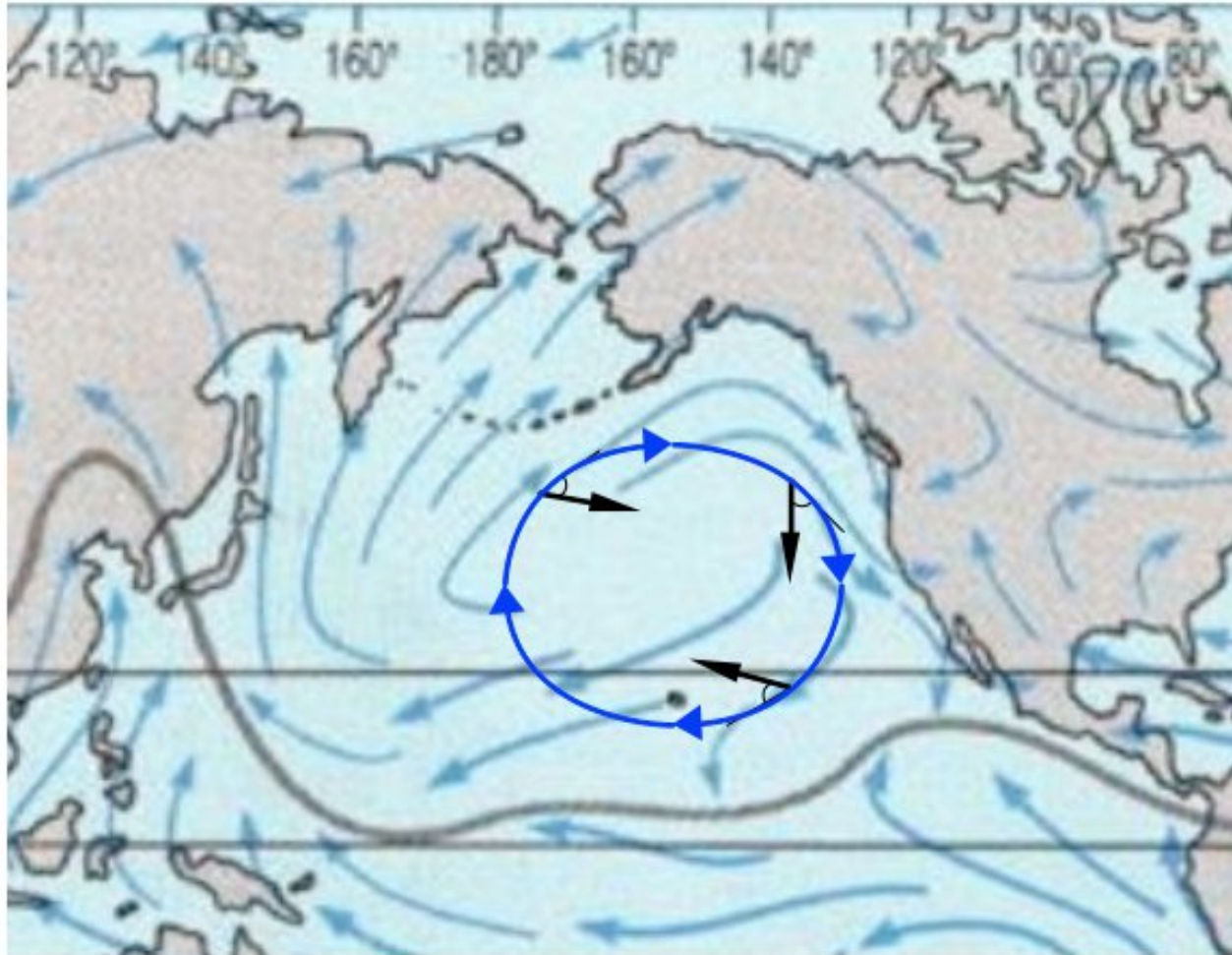
Second video : the marble starts to roll from the center of the table.
Table rotational speed : 10 rpm



Second video : the marble starts to roll from the center of the table.
Table rotational speed : 20 rpm



Influence of winds



1st part – our starting points

2nd part - real studies

- a modeling experimentation
- following buoys

3rd part - closer to reality

4th part - a mission : to inform

Free access to data every week

The screenshot shows the Argonautica website interface. The top navigation bar includes links for 'Le CNES', 'Nos missions', 'Actualités / Agenda', 'S'informer sur l'espace', 'Nous rejoindre', and 'Tout l'espace Education'. A search bar is on the right. The left sidebar contains a menu for 'ARGONAUTICA' with options like 'Argonautica : les données', 'Mode d'emploi rapide', 'Guide plus approfondi', 'Connaitre l'océan', 'Focus sur...', 'Études de cas', 'Archives', and 'English Version'. Below this is a 'SÉLECTION DES DONNÉES' section with 'Affichage des données' and 'Bouées 2014-2015'. A 'Choix de la balise' dropdown is set to 'Bouée BOA', and a 'Date' dropdown is set to '2014/09/30'. Buttons for 'Afficher les positions' and 'Afficher les cartes' are at the bottom of the sidebar.

The main content area displays the title 'Bouée "BOA"' and 'Données du 2014/09/30'. It includes two download links: 'Télécharger le fichier des positions ci-dessous' and 'Télécharger le fichier de toutes les positions'. Below these is a table of data:

num	cl.	date	h.	lat.	lon.
-	-	yyyy/mm/dd	hh:mm	deg.	deg.
0118404	2	2014/09/24	00:35	28.484	-47.475
0118404	2	2014/09/24	01:30	28.490	-47.486
0118404	1	2014/09/24	02:16	28.495	-47.495
0118404	1	2014/09/24	03:46	28.497	-47.489
0118404	2	2014/09/24	05:25	28.505	-47.495
0118404	2	2014/09/30	06:28	28.358	-47.751
0118404	3	2014/09/30	08:08	28.356	-47.754
0118404	2	2014/09/30	10:00	28.366	-47.769
0118404	3	2014/09/30	11:44	28.373	-47.766
0118404	3	2014/09/30	12:31	28.372	-47.771
0118404	2	2014/09/30	13:23	28.372	-47.769
0118404	3	2014/09/30	14:18	28.369	-47.771
0118404	3	2014/09/30	15:48	28.378	-47.773
0118404	3	2014/09/30	17:24	28.380	-47.762
0118404	2	2014/09/30	17:56	28.378	-47.772
0118404	2	2014/09/30	19:38	28.382	-47.760
0118404	3	2014/09/30	20:48	28.384	-47.767
0118404	2	2014/09/30	21:20	28.383	-47.765
0118404	3	2014/09/30	22:36	28.387	-47.765
0118404	3	2014/09/30	23:53	28.383	-47.760

<http://argonautica.jason.oceanobs.com/html/argonautica/>

ARGONAUTICA

- ▢ Argonautica : les données
 - + Mode d'emploi rapide Argonautica
 - + Guide plus approfondi
 - + Connaître l'océan
 - + Focus sur...
 - + Études de cas
 - + Archives
- ▢ English Version

SÉLECTION DES DONNÉES

- ▢ Affichage des données
 - + **Bouées 2014-2015**

Choix de la balise :

Bouée BOA

Date :

2014/09/30
 2014/09/23
 2014/09/16
 2014/09/09
 2014/09/02
 2014/08/26

Afficher les positions

Afficher les cartes

Accueil CNES > Enseignants et Médiateurs > Tout l'espace Education > Enseignants > Projets pour la classe > Argonautica

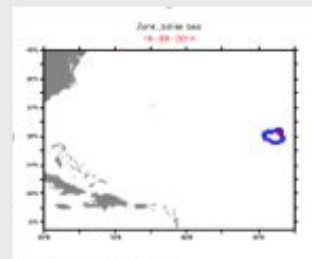
Bouée "BOA"

Cartes du 2014/09/16

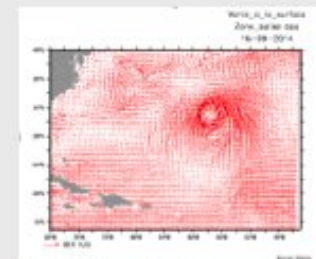
Cliquez sur les images pour les agrandir

 Téléchargez toutes les images

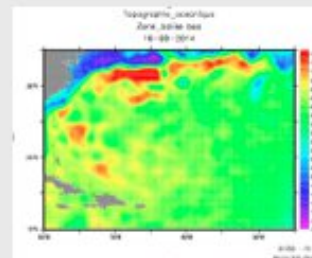
 **VISUALISEZ LES CARTES AVEC GOOGLE EARTH**



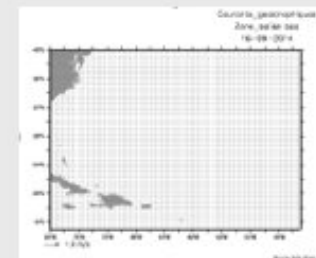
Trajet de la balise



Vents à la surface



Topographie de l'océan



Courants géostrophiques

<http://argonautica.jason.oceanobs.com/html/argonautica/>



Current around
a hollow

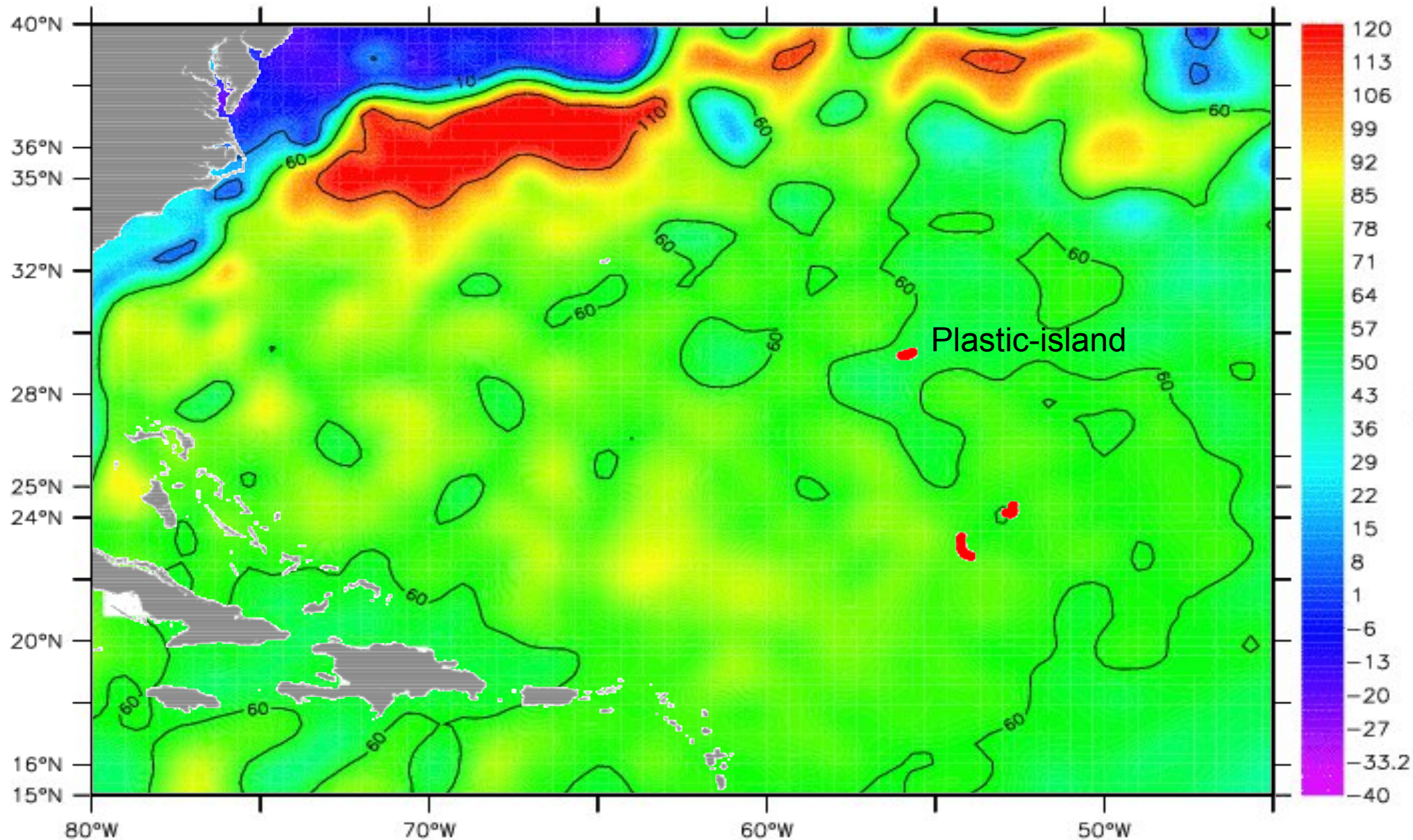


Current around
a bump



Current forming an
angle of 45° with the
wind direction

26-11-2013



Unite : cm

Source CLS-Cnes



Current around
a hollow

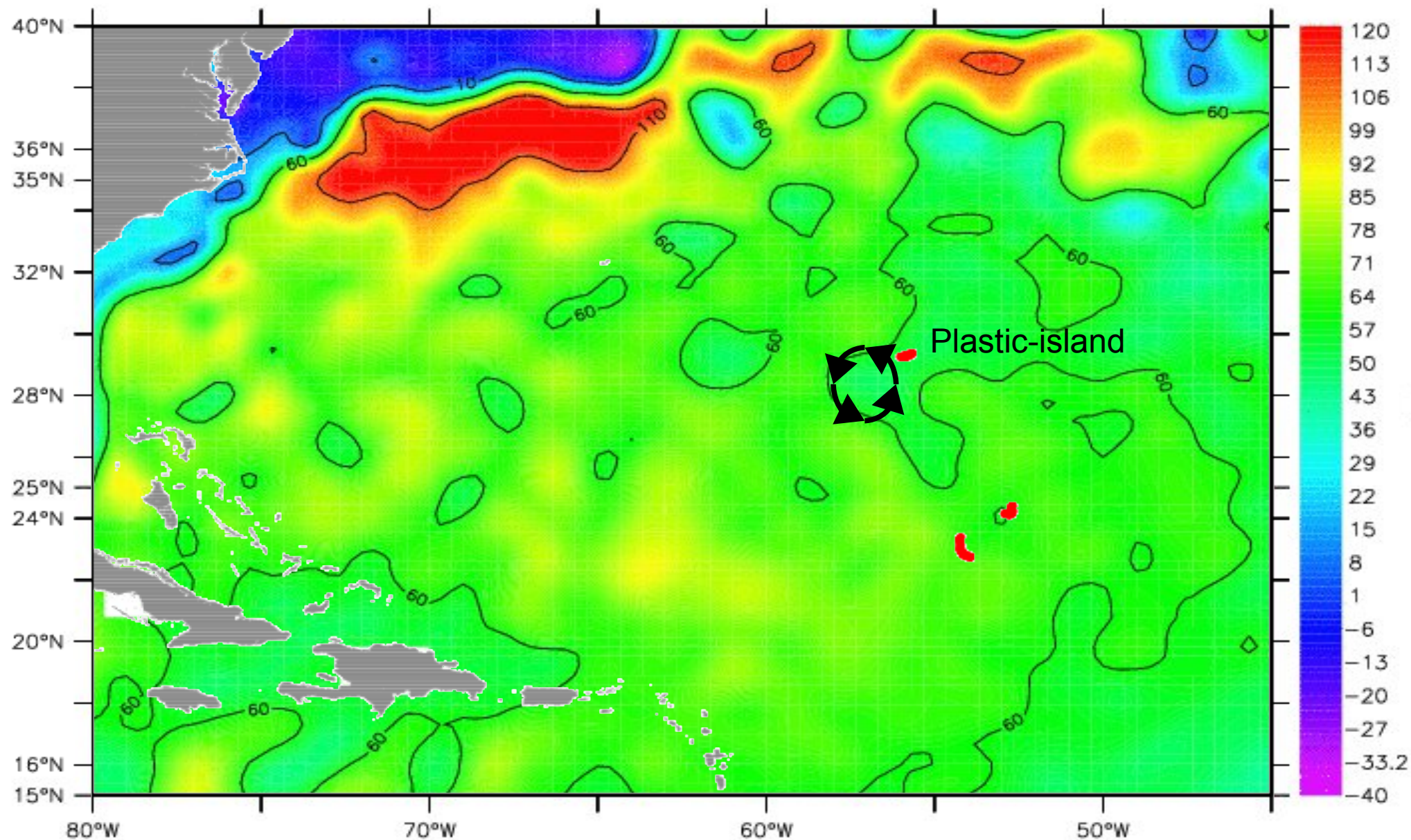


Current around
a bump



Current forming an
angle of 45° with the
wind direction

26-11-2013



Unite : cm

Source CLS-Cnes



Current around
a hollow

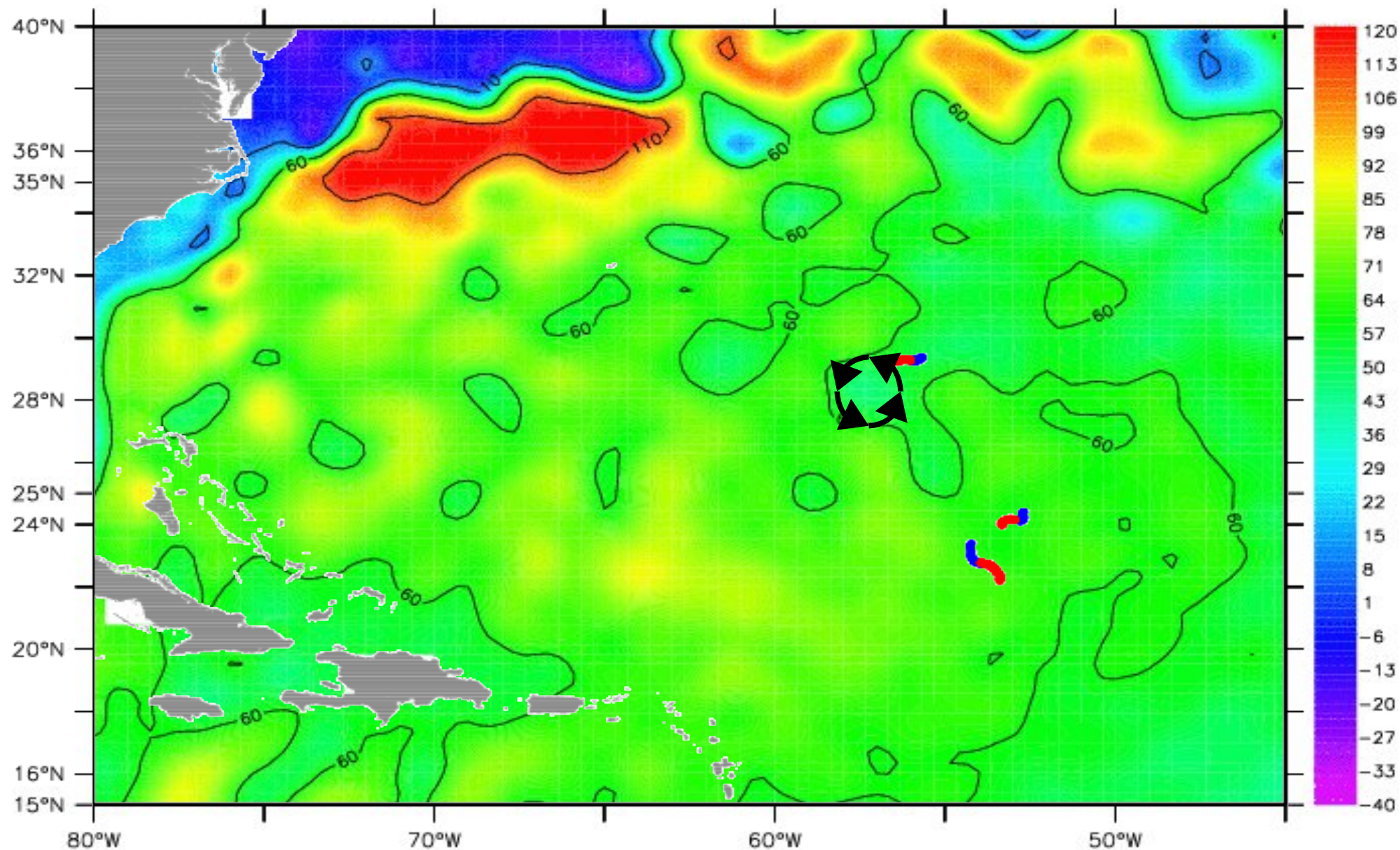


Current around
a bump



Current forming an
angle of 45° with the
wind direction

03-12-2013



Unite : cm

Source CLS-Cnes



Current around
a hollow

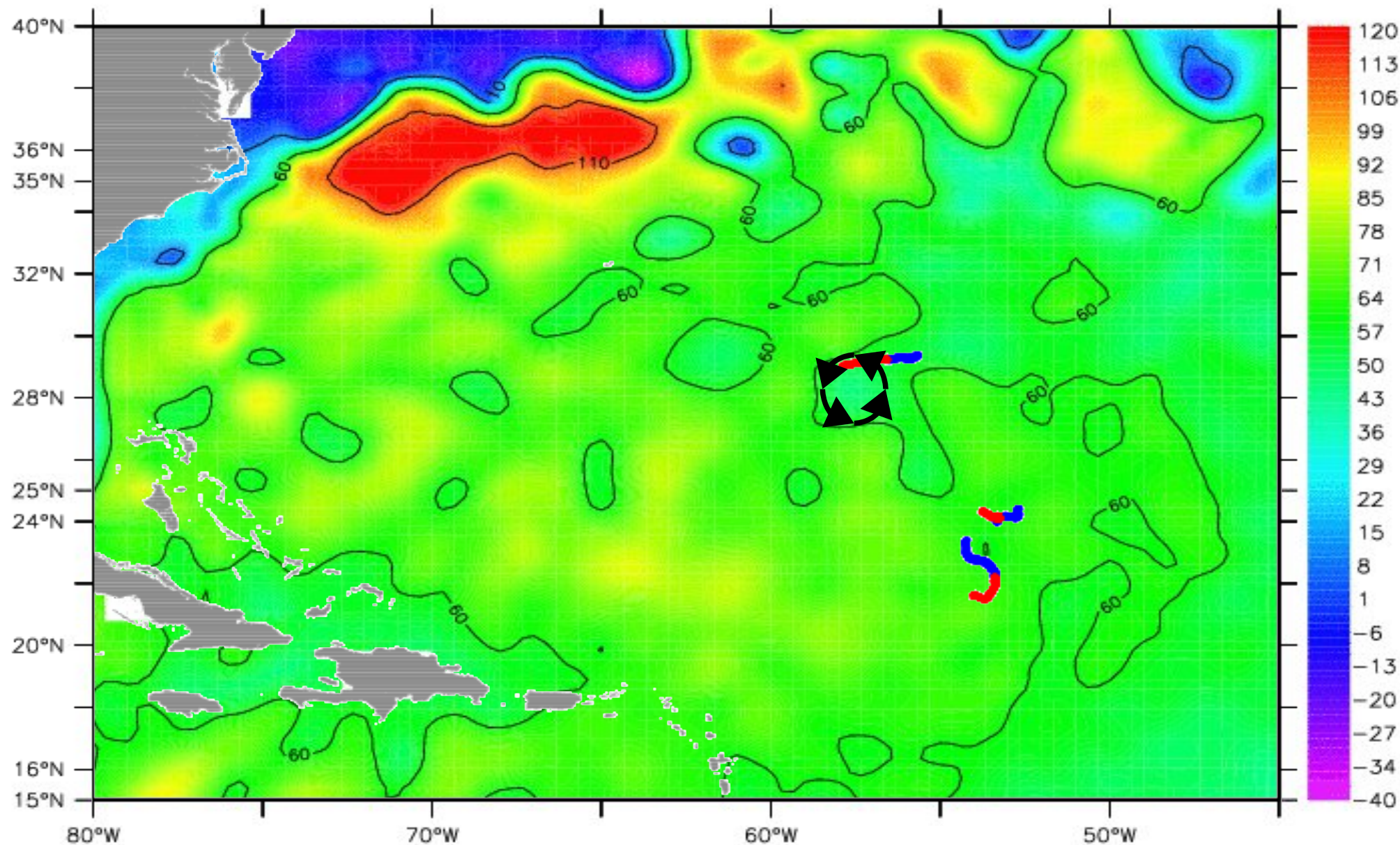


Current around
a bump



Current forming an
angle of 45° with the
wind direction

10-12-2013



Unite : cm

Source CLS-Cnes



Current around
a hollow

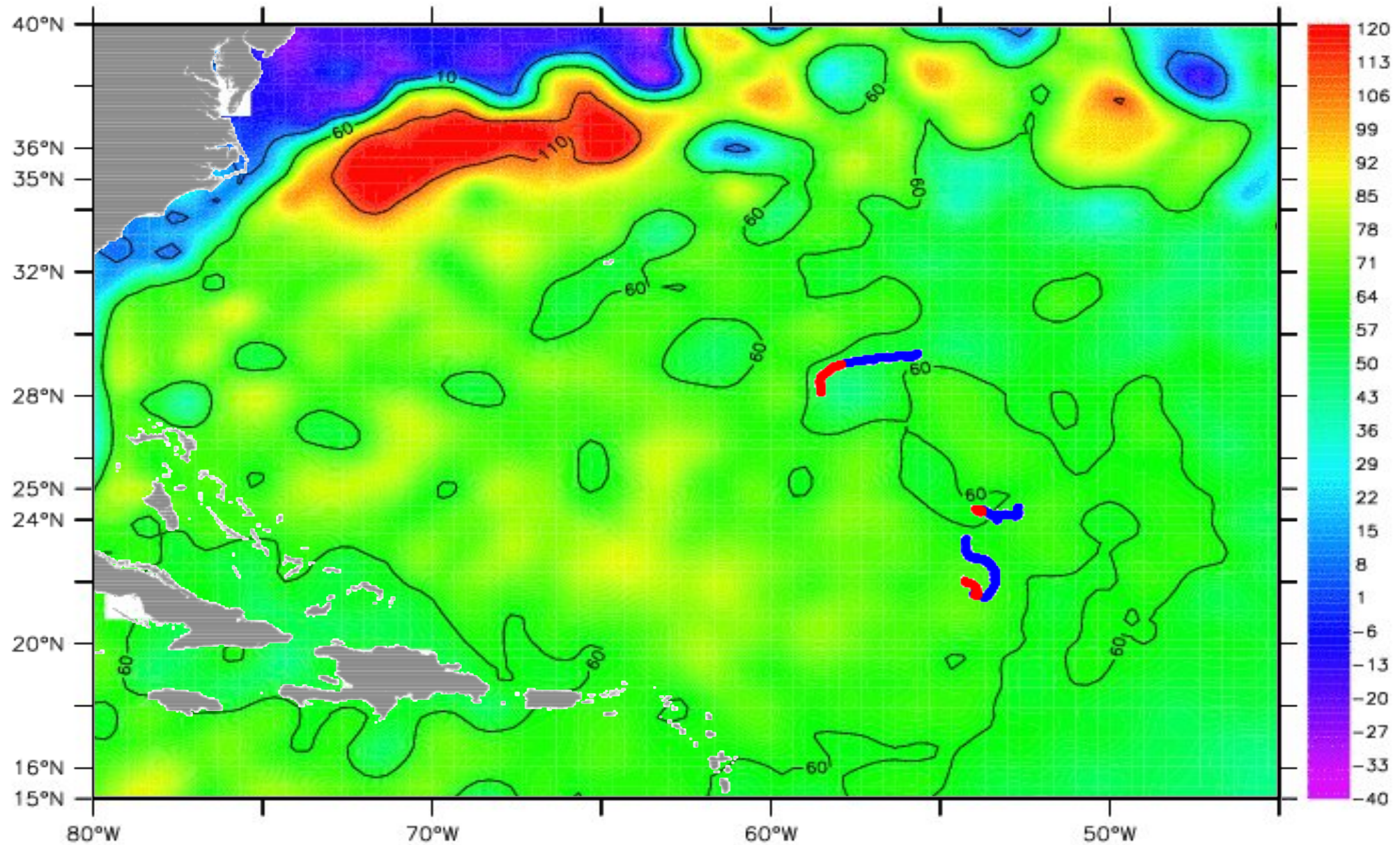


Current around
a bump



Current forming an
angle of 45° with the
wind direction

17-12-2013



Unité : cm

Source CLS-Cnes



Current around
a hollow

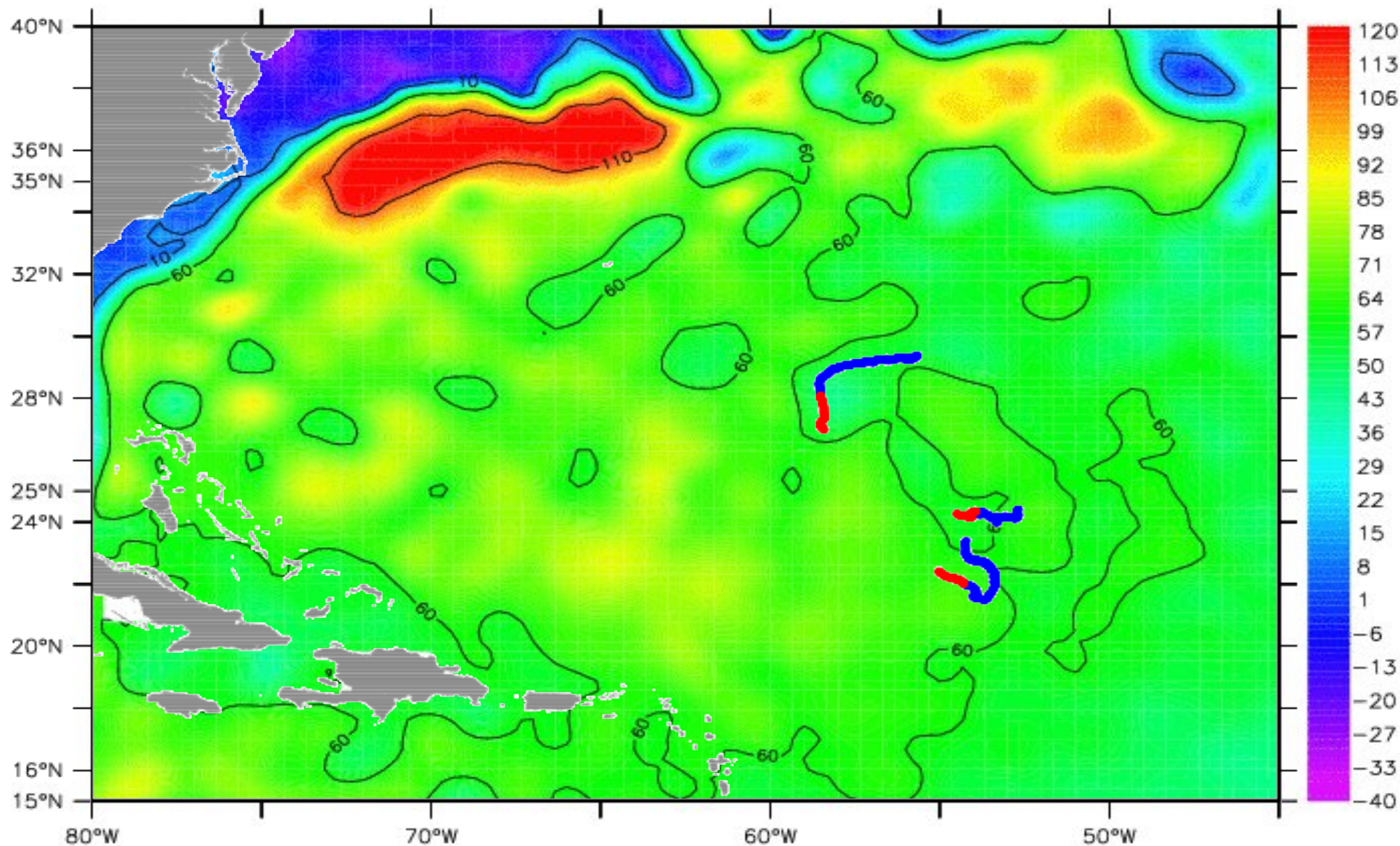


Current around
a bump



Current forming an
angle of 45° with the
wind direction

24-12-2013



Unite : cm

Source CLS-Cnes



Current around
a hollow

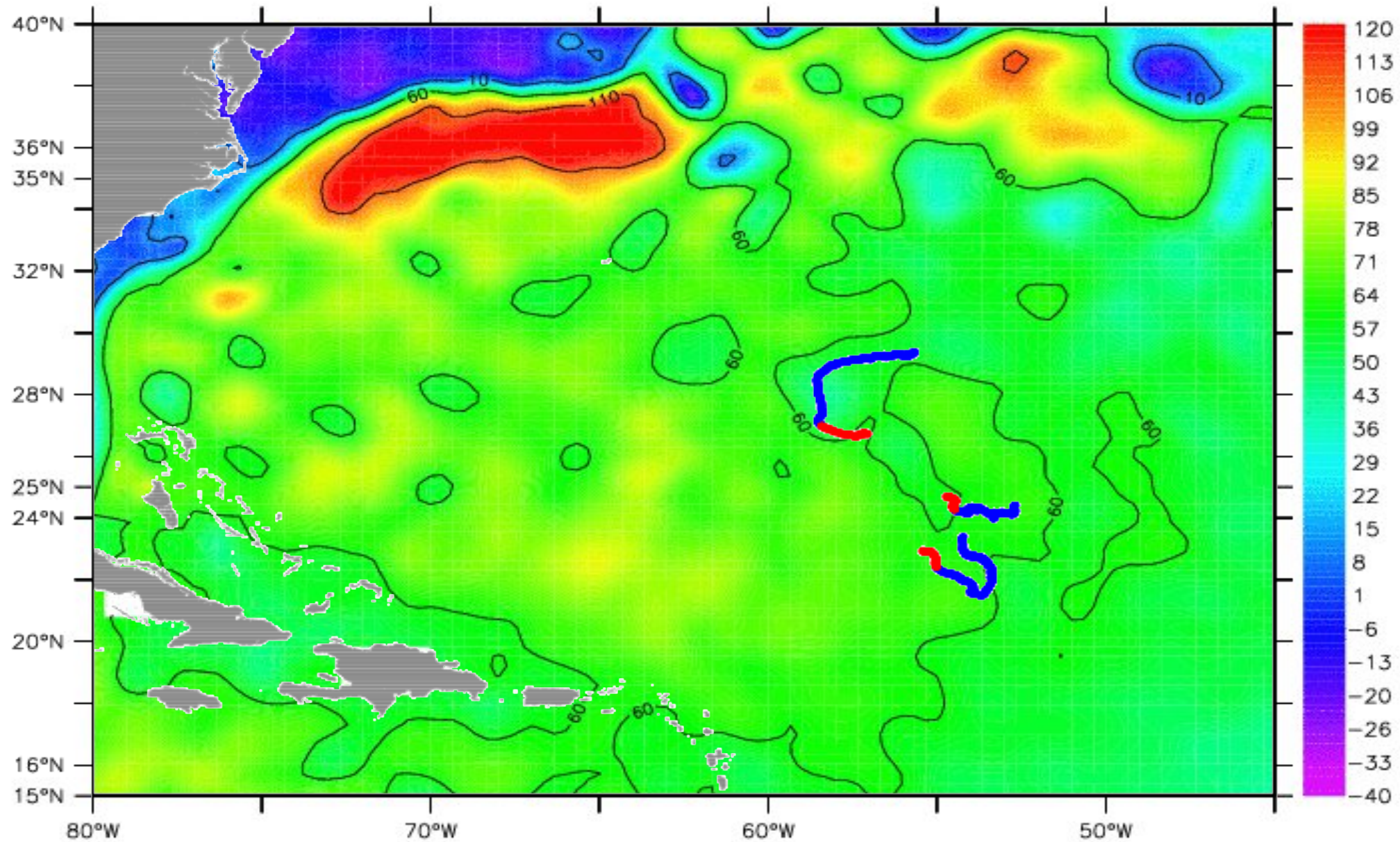


Current around
a bump



Current forming an
angle of 45° with the
wind direction

31-12-2013



Unite : cm

Source CLS-Cnes



Current around
a hollow

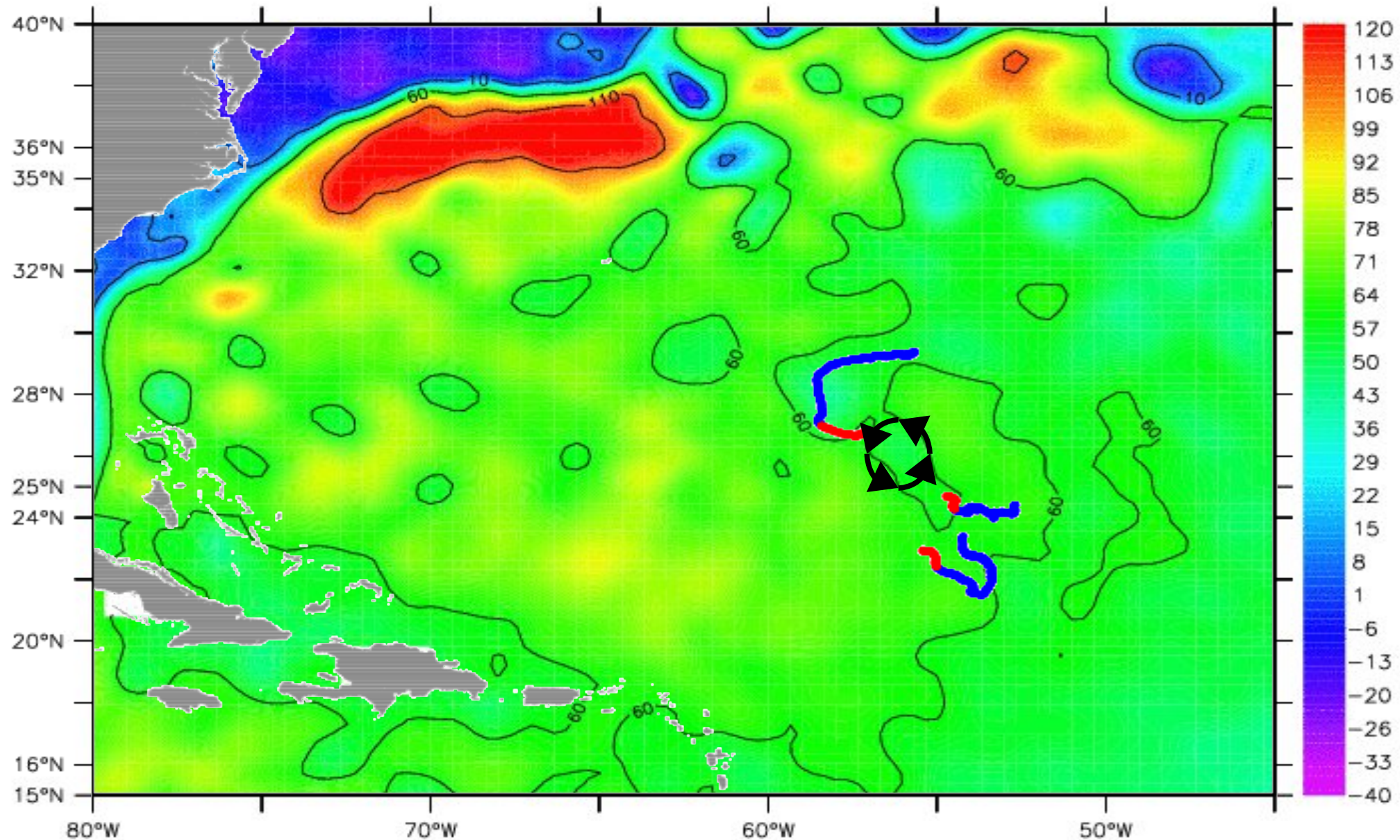


Current around
a bump



Current forming an
angle of 45° with the
wind direction

31-12-2013



Unite : cm

Source CLS-Cnes



Current around
a hollow

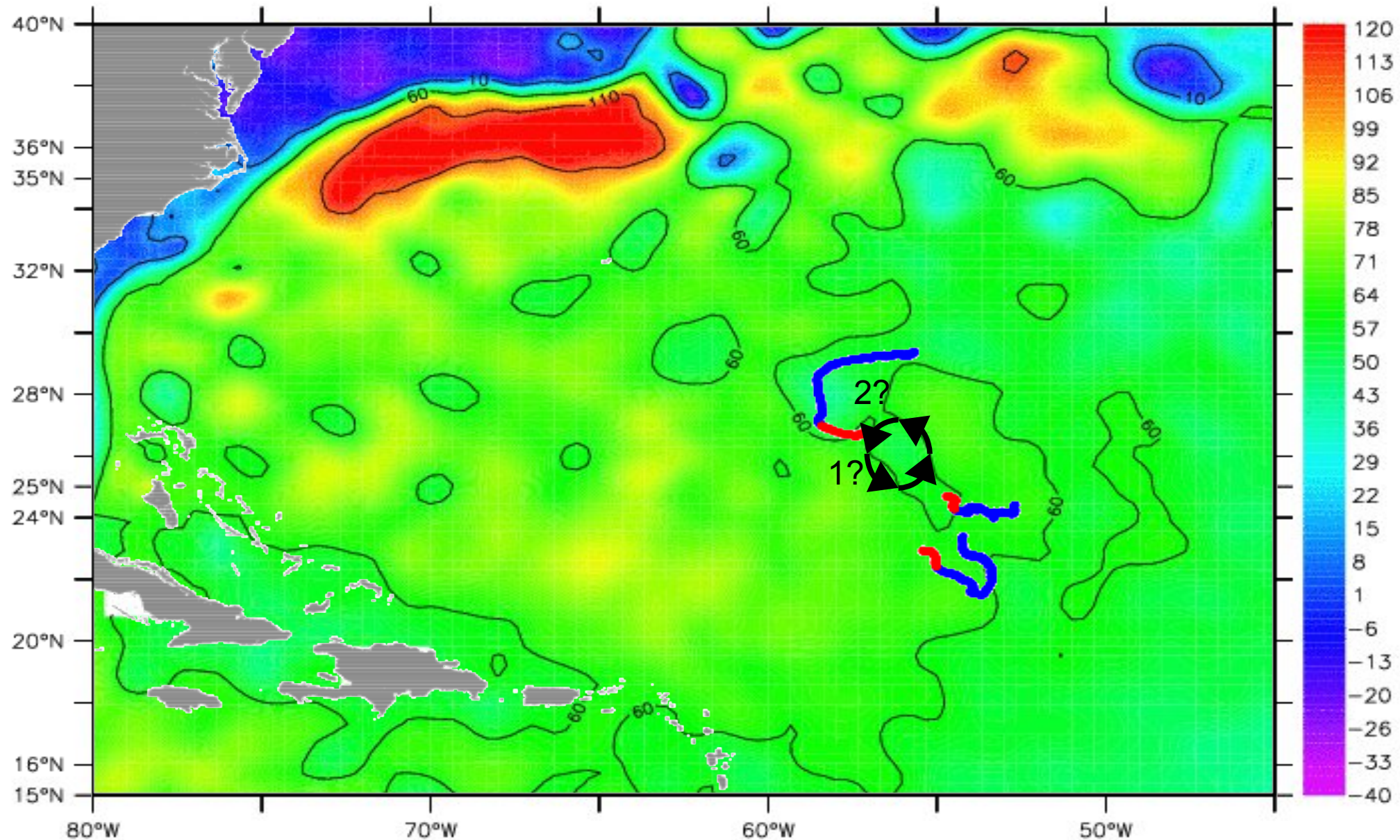


Current around
a bump



Current forming an
angle of 45° with the
wind direction

31-12-2013



Unite : cm
Source CLS-Cnes



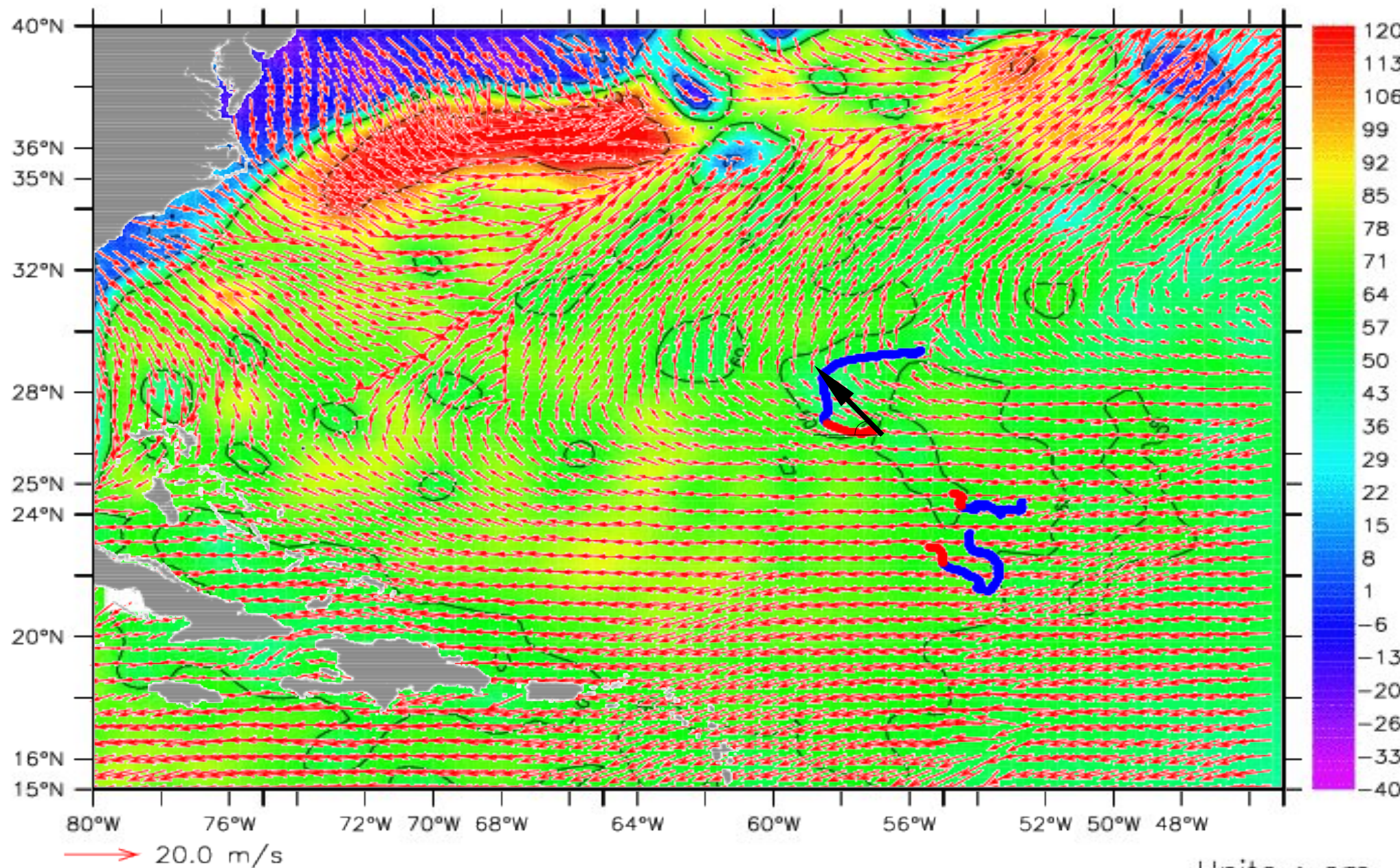
Current around
a bump



Current forming an
angle of 45° with the
wind direction

31-12-2013

31-12-2013



Unite : cm

Source: CERS



Current around
a hollow



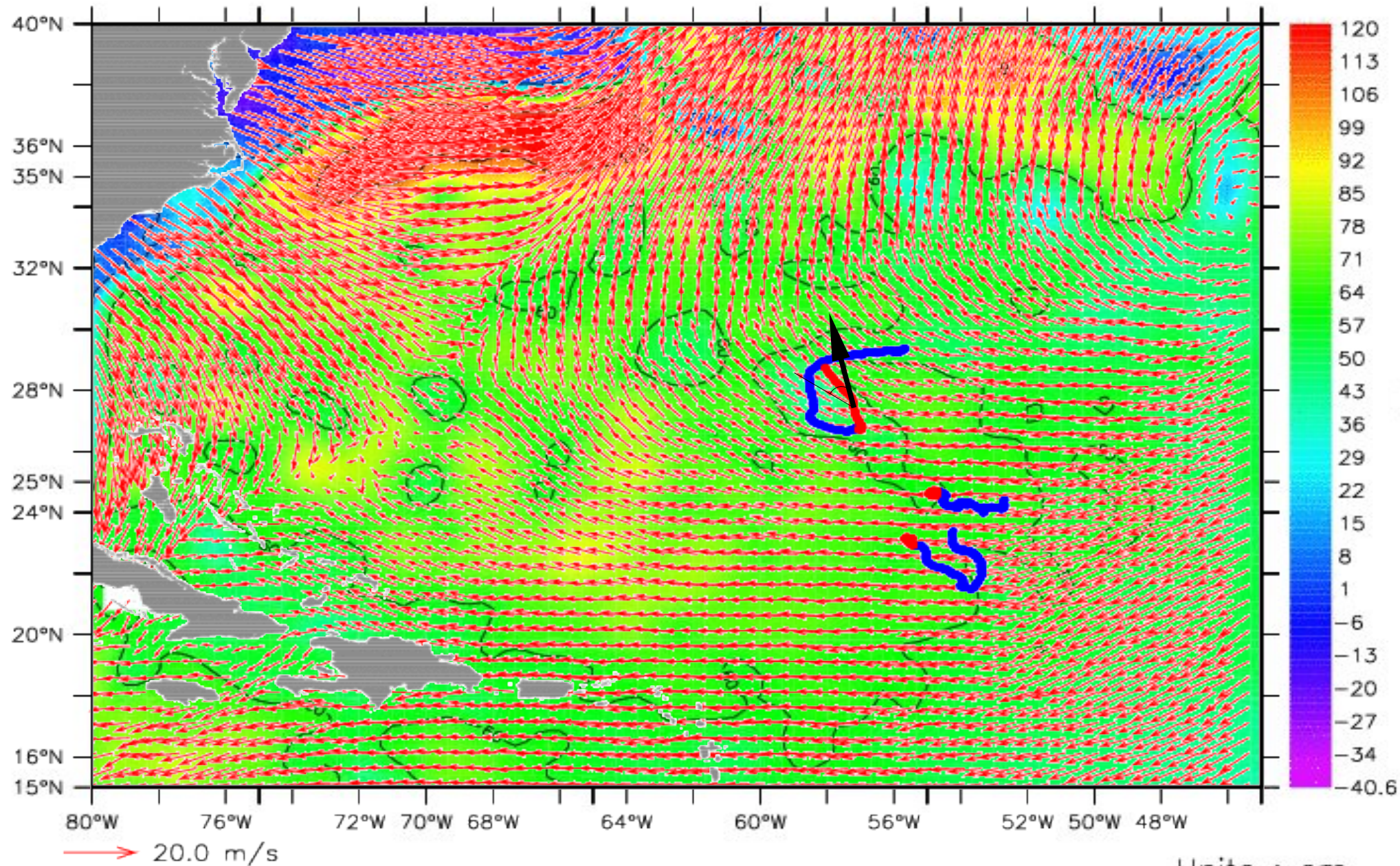
Current around
a bump



Current forming an
angle of 45° with the
wind direction

07-01-2014

07-01-2014



Unite : cm

Source: JGOFS



Current around
a hollow

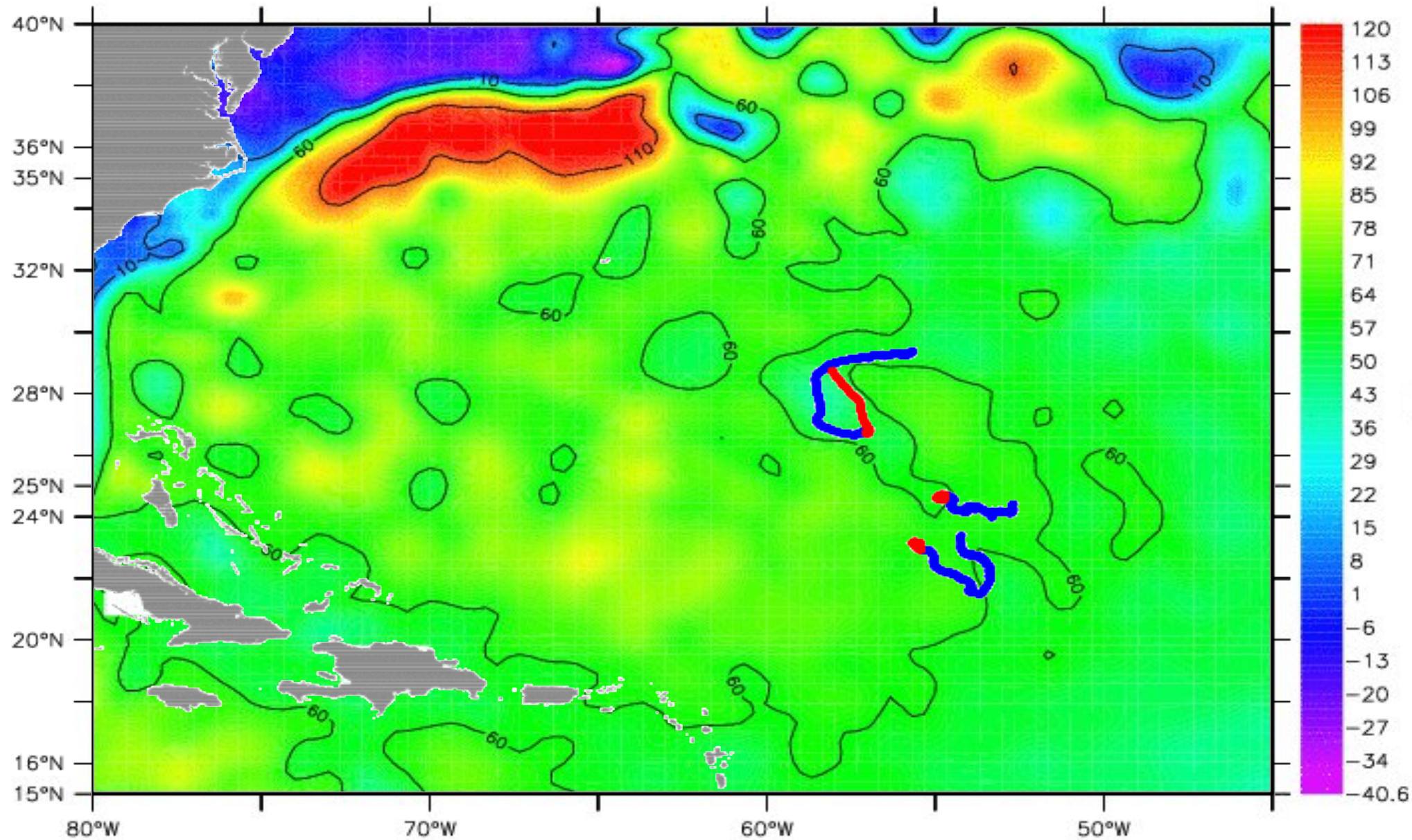


Current around
a bump



Current forming an
angle of 45° with the
wind direction

07-01-2014



Unite : cm

Source CLS-Cnes



Current around
a hollow

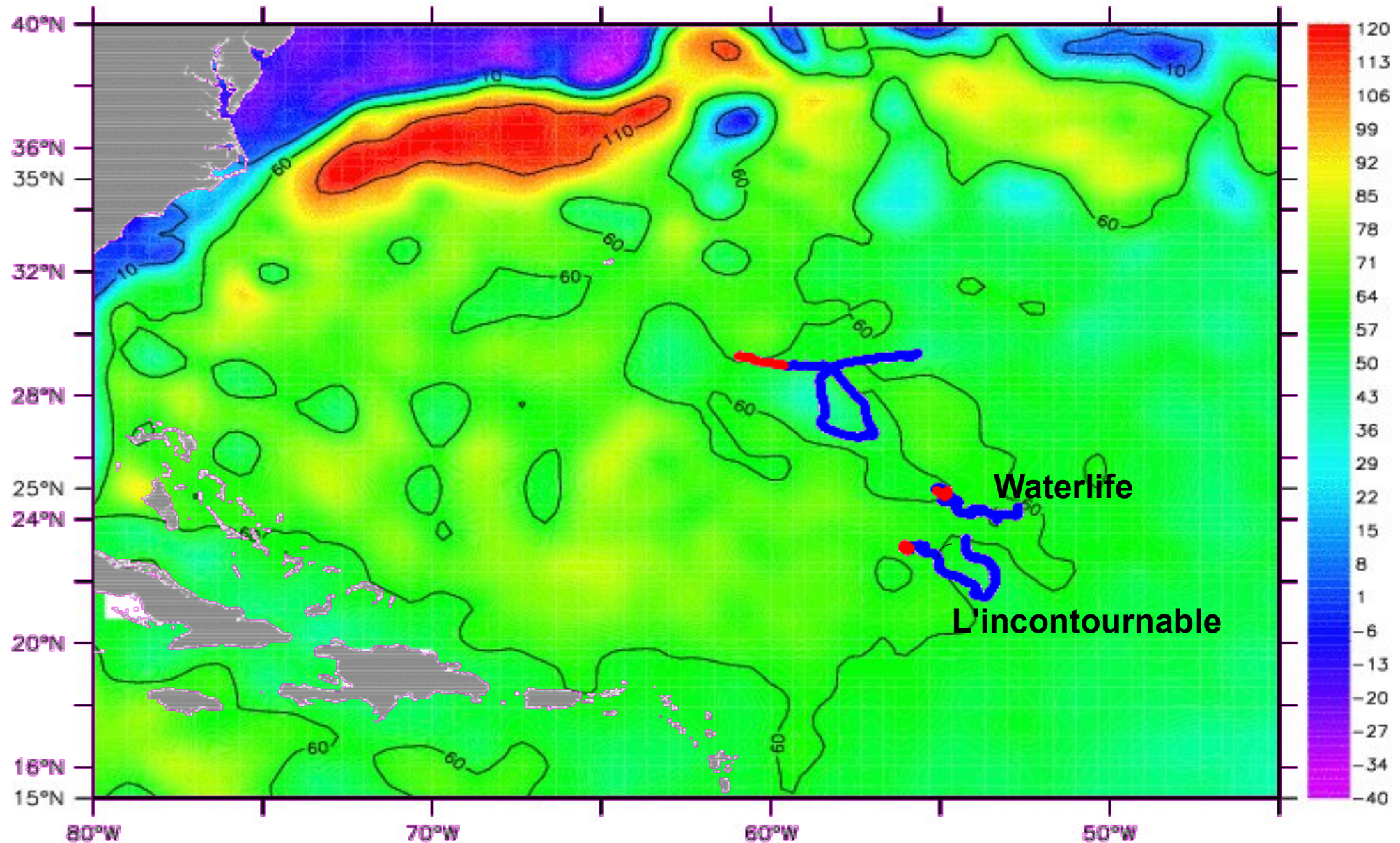


Current around
a bump



Current forming an
angle of 45° with the
wind direction

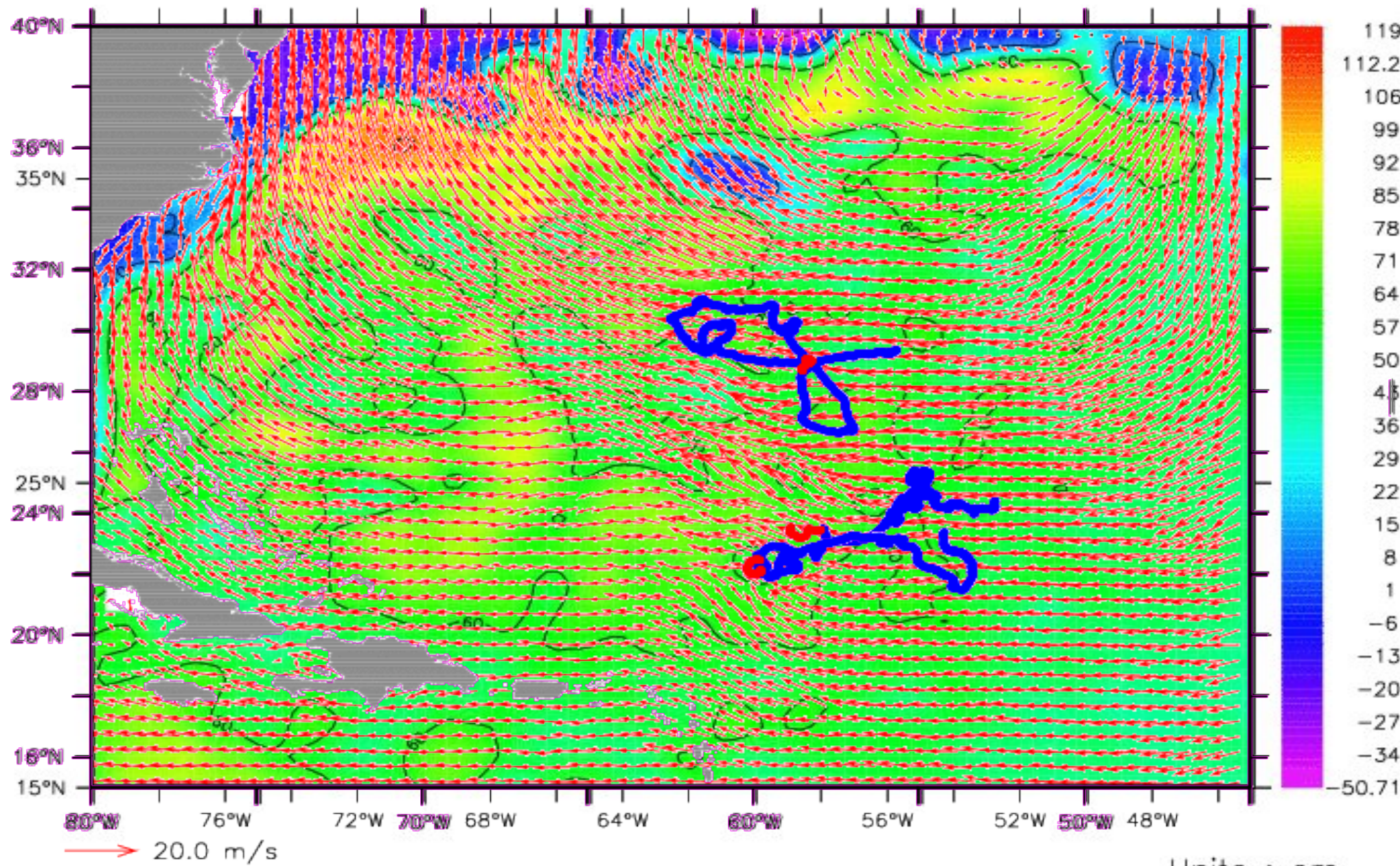
21-01-2014



Unite : cm

Source CLS-Cnes

15-04-2014



Buoys followed on a big map



In conference with Patrick Deixonne in Toulouse

1st part – our starting points

2nd part - real studies

3rd part - closer to reality

- **7th continent project**
- **first expedition in the North Pacific Ocean**
- **second expedition in the North Atlantic Ocean**

4th part - a mission : to inform



Patrick Deixonne

Human adventure

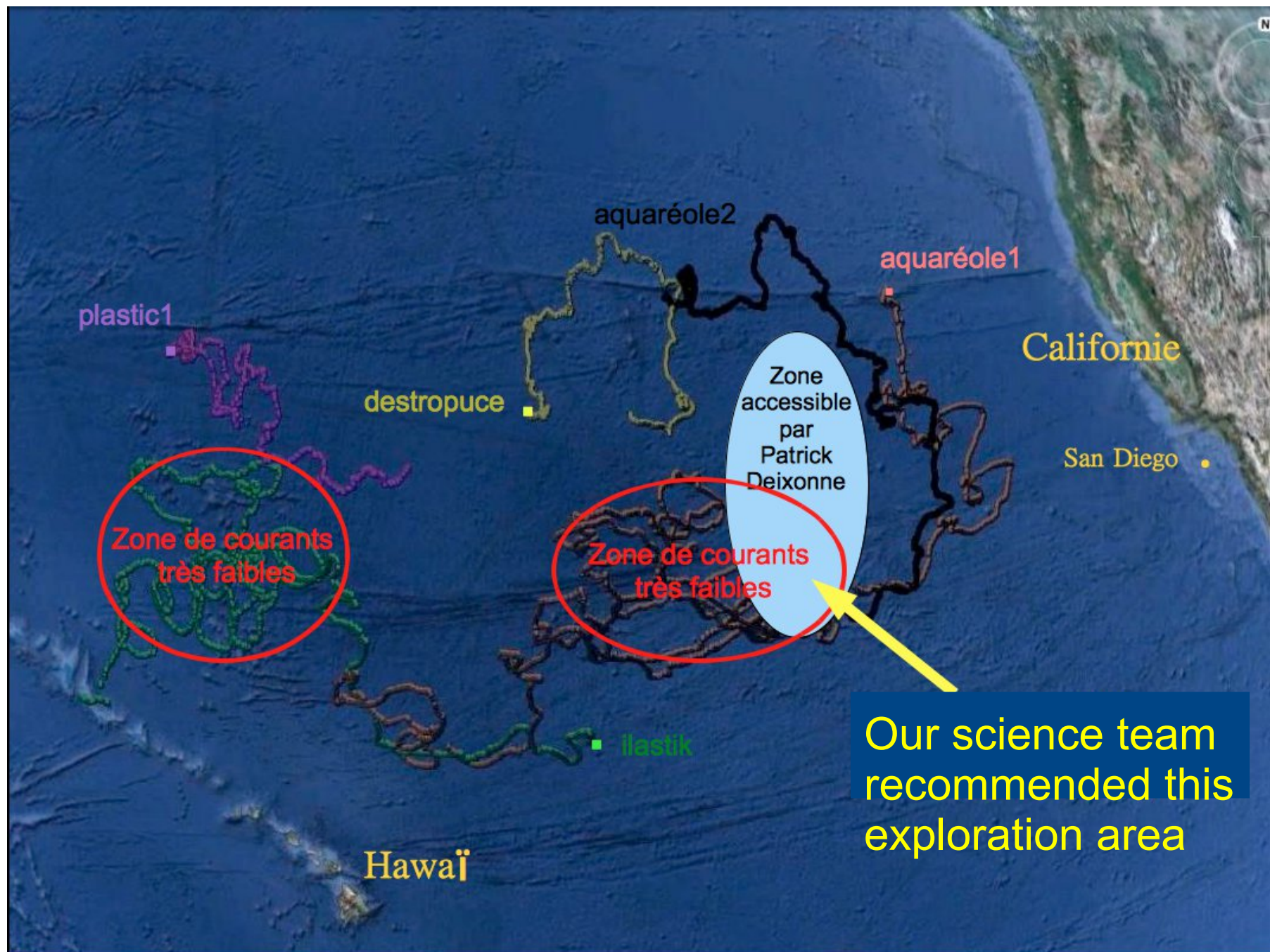


Locate

Analyse

Alert







EXPEDITION PACIFIQUE JUIN 2013

EXPÉDITION 7^e CONTINENT

EXPEDITION ATLANTIQUE NORD AU
MOIS DE MAI 2014

Samples collected with a “*manta*” net in the North Pacific



The 7th continent !



1st part – our starting points

2nd part - real studies

3rd part - closer to reality

4th part - a mission : to inform

The great game of the 7th Continent

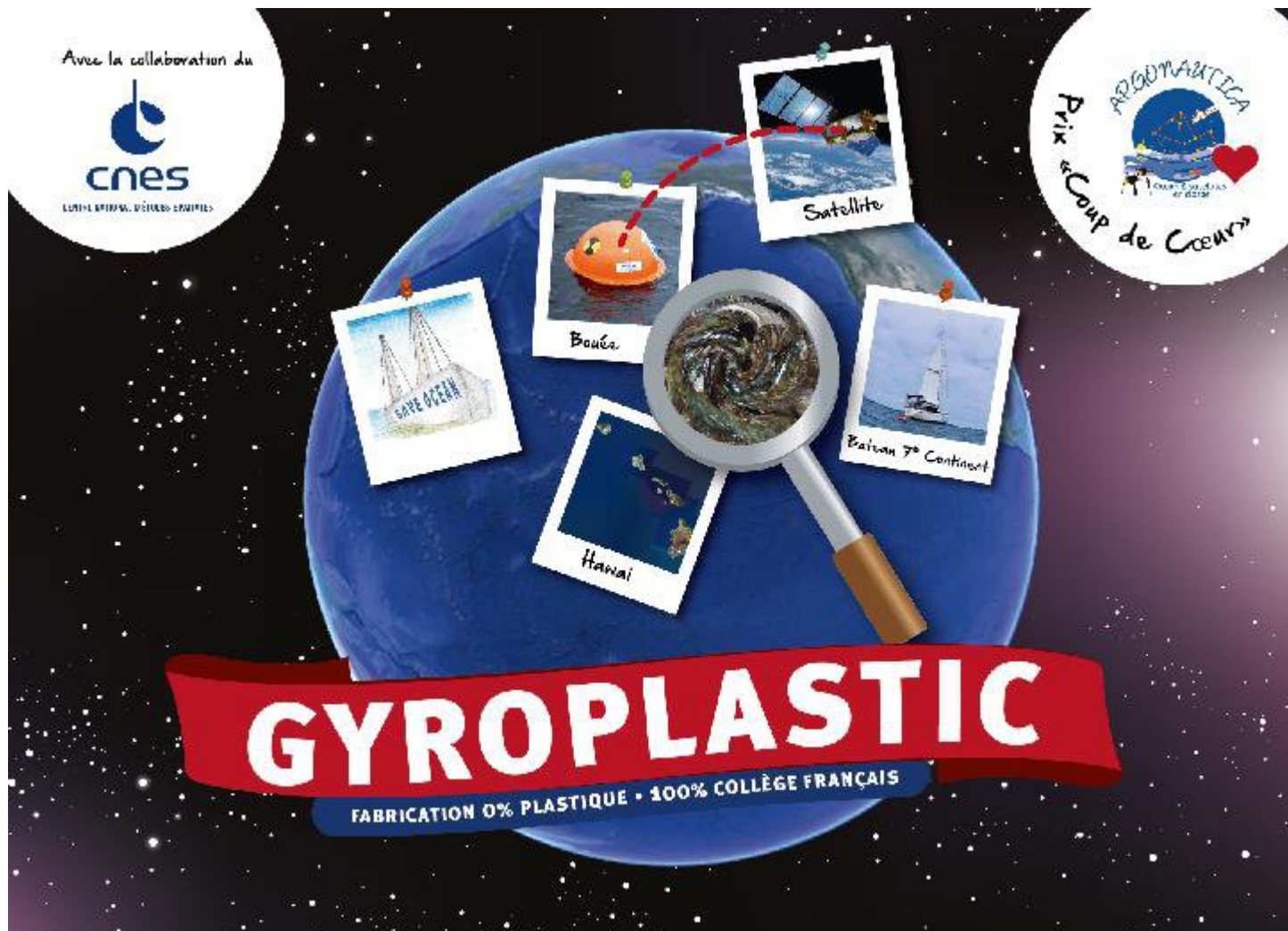


0% plastic and 100% French school !!

The board game commercialized by *SaveOcean* Company



English version for only €15 !



saveocean.gyroplastic@gmail.com

Question card example

Look for the odd one out !

- Longitude
- Attitude
- Latitude



saveocean.gyroplastic@gmail.com

Question card example

What is the name of the
circles formed by the
ocean currents ?

_ Y _ _ _

S L R P M
T O E G I

saveocean.gyroplastic@gmail.com



Paul Esquinance Middle school

LA RÉOLE (FRANCE)

