

TECHNICAL SPECIFICATIONS OF THE EXHIBITION

DESCRIPTION:

16 banner display 80 x 200 cm Eyelets on upper and lower edges and stabilizing bars

INSTALLATION:

Minimum space: 30 linear metres Hanging system: on grille frameworks or on walls (with nails), exclusive of any other system. Interior or exterior

PACKING:

1 case – weight: 30 kg Dimensions: 85 x 30 x 30 cm

VERSIONS AVAILABLE:

English, Spanish, French (Accompanying texts in Arabic)

FOR A VIEW OF THE EXHIBITION ON LINE:

www.ird.fr/fr/info/expo/

FOR ALL INFORMATION:

cst@paris.ird.fr

BOOKINGS:

Ministère des Affaires étrangères et européennes, DGCID

culturescientif.dgcid@diplomatie. gouv.fr ou cst@paris.ird.fr

Exhibition devised by the scientific education section - DIC (IRD) :

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The climate plays a decisive role in the lives of humanity, resources, human development and health. The ocean has an essential part in the complex mechanisms that govern climate. By storing heat received from the sun and subsequently moving it from the tropics towards the temperate regions, the ocean interacts with the atmosphere and thus helps to make our planet inhabitable. The onset of global warming makes the study of the relationships between the ocean and the climate more than ever a vital challenge for science.

This exhibition aims to inform the public - and especially young people - about the huge role the ocean plays in the Earth's climate and the climatic changes now taking place. The ocean plays a crucial role, yet this is still not well-known to the general public.

The exhibition has earned the International Year of



Planet Earth 2008 seal of approval designated by the French Academy of Sciences.

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It has been devised and produced by the IRD with the support of the Ministry for Foreign and European Affairs.



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General public: From upper secondary school grade Diffusion in France and abroad

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THEMES OF THE EXHIBITION





Viewed from space, the Earth looks blue, as two thirds of its

surface is covered by oceans and seas. Water is a fundamental component for life on Earth, and its presence links the different environments that together form the climatic system. So the oceans play a huge role in the regulation of the world's climate.



OBSERVING THE OCEANS

The observations provided by satellites and instruments deployed at sea give access to an overall view of the ocean and its relations in real time with the atmosphere and the terrestrial environment. Observing the oceans helps research scientists understand the interactions between the ocean and the climate.

IN THE HEAT OF THE TROPICAL OCEANS!

The sun's radiation is at its most intense in the tropics. These regions are therefore the heat source that powers our planet's thermal machine. So the tropical oceans play a special decisive role in the climate variability.





longer-term scales.

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Floods in Peru, devastating cyclones in the Polynesian islands, drought in Indonesia... Strong episodes of El Niño spread turmoil in the climate of many regions of the Pacific and in the lives of the people who live there. But it also disturbs the climate of the whole Earth...



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Episodes occur of an oceanic and climatic anomaly, called El Niño, appearing in the eastern part of the equatorial Pacific ocean. The event involves the arrival of warm water which stays for several months and is accompanied by violent weather disturbances.

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EL NIÑO'S CONTRADICTIONS



THE MONSOON'S CAPRICIOUS CHARACTER

Many populations of the tropics live in a climate where the year is divided between alternating dry season and rainy season. This situation is governed by the monsoon. The interactions between oceans, continents and atmosphere are central to this climate system which still raises many unsolved questions for scientists.

IN SEARCH OF PAST CLIMATES

The Earth's climate has experienced some wide variations in the past. To reconstruct ancient climates, scientists look for signs in the natural records built up and left in both terrestrial settings and in the oceans. For this they survey the sea floor in search of precious clues.

HEAT WAVE ON PLANET EARTH

The Earth's climate has always undergone natural variations. However, the extent and rate of development of the current global warming exceed all such episodes that have occurred in the past 400,000 years. The ocean plays an essential role in tempering the strength of this warming and partially regulating the carbon cycle.



THE CLIMATE MAKES WAVES

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The oceans are showing clear signs of the ongoing global warming: rise in sea level, acidification of ocean waters, increased fragility of the marine biodiversity.

THE OCEAN AND CLIMATE OF THE FUTURE

Studying the ocean is essential for predicting the climate. The development of ocean observation networks that feed oceanographic models has led to significant advances in climate prediction at seasonal or even