UNITED NATIONS
Office for Outer Space Affairs

esa

MY PLANET FROM SPACE

FRAGILITY AND BEAUTY

July 9th
September 9th, 2015
Visitors' Lobby

An exhibition organized by the European Space Agency and the United Nations Office for Outer Space Affairs

Antarctica Peninsula from Sentinel-1A - 15/04/2014 - © ESA

Through satellite images and videos, the exhibition takes visitors on a journey to some of the most beautiful and remote places on Earth. Satellite eyes provide images of an ever-changing planet: glaciers melting, sea levels rising, rainforests threatened by deforestation, growing desertification affecting croplands and uncontrolled urban sprawl. The collection of images demonstrates the fragility of our planet and the challenges posed by climate change. They highlight the importance of satellites in the management and protection of natural resources and the global environment.

'My Planet from Space: Fragility and Beauty' is designed to address a wide audience, with particular focus on the younger generation. It aims to increase awareness towards a more environmentally responsible lifestyle, promote the sustainable exploitation of natural resources and highlight the great potential of innovative space technology.

The exhibition has been coordinated and produced by the European Space Agency (ESA). It has been realised in close partnership with the United Nations Office for Outer Space Affairs, the Italian Space Agency, the 2014 Italian Presidency of the Council of the European Union and the European Commission. It is open to the public from 9 July to 9 September 2015.

The exhibition is divided into six main areas: ICE, WATER, ATMOSPHERE, FORESTS AND AGRICULTURE, DESERTS, CITIES.

Namib Desert © KARI/ESA

UN Headquarters
Visitors' Lobby
1st Avenue at 46th St, New York, NY 10017

Opening hours
Monday through Friday from 9:30 am to 4:30 pm
Saturday and Sunday from 10:00 am to 4:30 pm
Government-issued photo identification required
All visitors must exit the building by 5:30pm

The exhibition is a project promoted by the
European Space Agency

in collaboration with the
United Nations Office for Outer Space Affairs

European Commission

Italian Space Agency

Media Partner
Discovery - Focus

USA, Los Angeles © USGS/ESA

ICE

Polar regions are the most sensitive to climate change and considered the best indicators of our planet's health. The melting of sea ice and the ice sheets injects large amounts of fresh water into the oceans. This influx not only contributes to sea level rise, but also changes the salinity and temperature of the water, influencing the global ocean circulation pattern that regulates Earth's climate. Satellite images and other data show recent developments in ice cover in the Arctic and Antarctic.

WATER

Water covers nearly two thirds of Earth's surface and is vital for all forms of life. But less than 3% of water is fresh – and most of that is stored in glaciers or underground, leaving a very small fraction accessible to humans. Because of its scarcity, especially in arid areas, water can be the source of conflict as people struggle to control this precious resource. These satellite images emphasise phenomena like rising sea levels and threats to aquatic ecosystems. The exhibit also addresses the risks posed to major rivers and lakes worldwide by the intense exploitation of their waters.

ATMOSPHERE

Earth's atmosphere is a layer of gases around the planet that regulates temperature, protects us from solar radiation and is fundamental for weather and our understanding of climate change. Satellites can map the impact that CO_2 emissions have on the global environment. They acquire data on air pollution, water vapour concentration in the atmosphere, ozone and other trace gases.

FORESTS AND AGRICULTURE

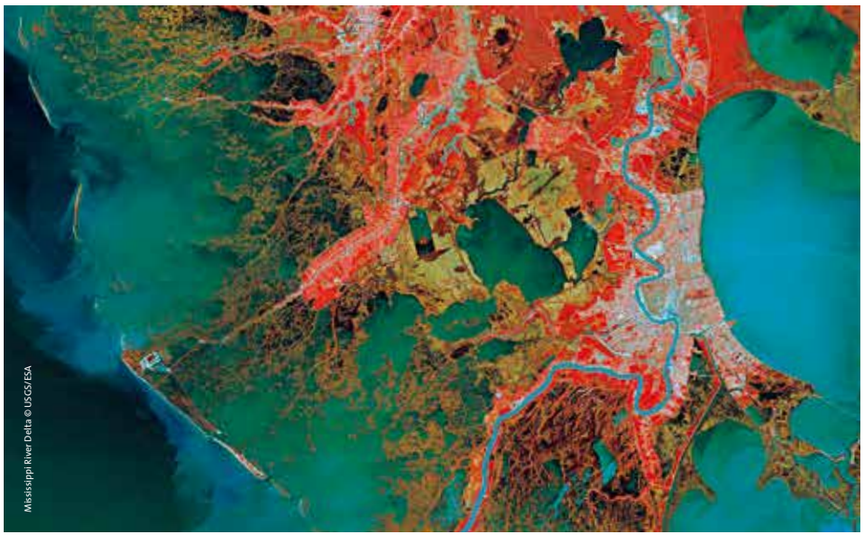
Part of the exhibition reminds us of the importance of forests for the global ecosystem. Forests are essential to biodiversity and act as a natural laboratory for the absorption of CO_2, but are under threat by deforestation. Agriculture is essential for feeding the world, but can only support the growing population if it is sustainable. Satellite images document the conversion of forests to agricultural landscapes such as rice paddies, olive groves and farming with centre pivot irrigation. They highlight how satellites can support crop cultivation and forecast crop yield.

DESERTS

About one third of Earth's land surface is categorised as arid or semi-arid, with a severe lack of water and vegetation. Dryland ecosystems are extremely vulnerable to over-exploitation and inappropriate land use such as overgrazing and badly planned irrigation systems. This area introduces images of the planet's major deserts like the Sahara, Rub al-Khali, Taklamakan, Atacama and other areas threatened by desertification.

CITIES

A global map of city distribution indicates the impact that urban areas have on our environment. A night-time image of Earth, showing the concentration of lights, gives the viewer the immediate understanding of the degree of overcrowding on our planet. Today, there are over 30 metropolitan areas with more than 10 million people each. As more people move f rom rural areas to cities, this growth needs to be monitored to ensure it proceeds on a sustainable basis and does not affect the quality of life or safety of urban dwellers.



Mississippi River Delta © USGS/ESA

VERTIGO DESIGN