



# The Earth Observation and GIS communities fighting the climate crisis

WWW.PLANET-ACTION.ORG

co-founder

leading supplier of satellite imagery and geoinformation technologies.





Planet Action is a non profit initiative launched by Spot Image,











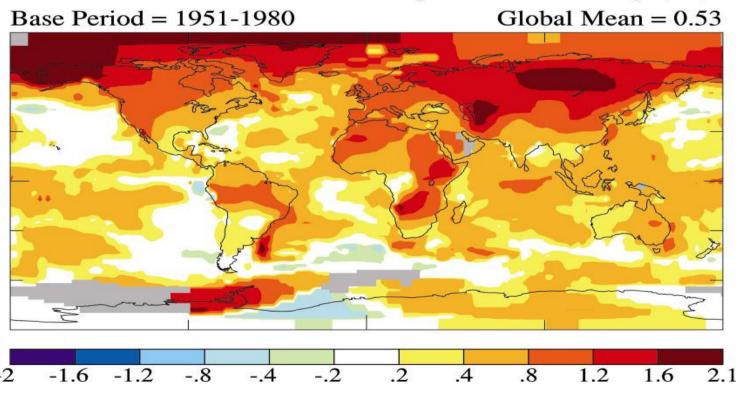


## **Climate Change is a reality**



#### Mean Temperatures during 2001-2005 have increased compared to 1951-1980

2001-2005 Mean Surface Temperature Anomaly (°C)

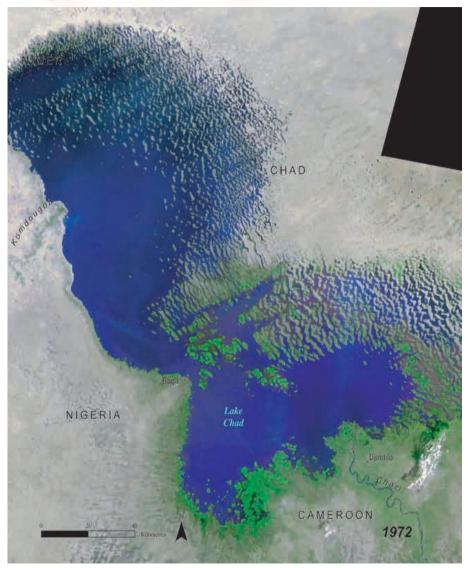


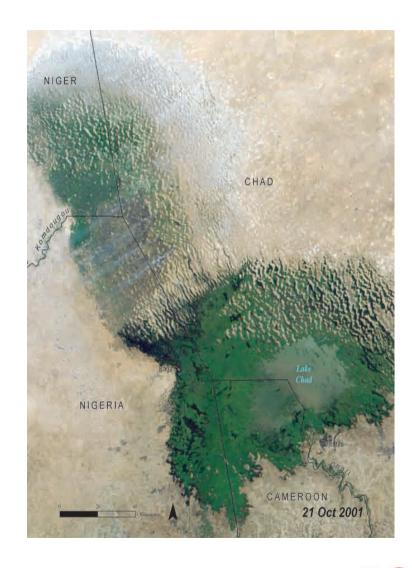
J. Hansen et al., PNAS 103: 14288-293 (2006)



## Witnessing environmental changes





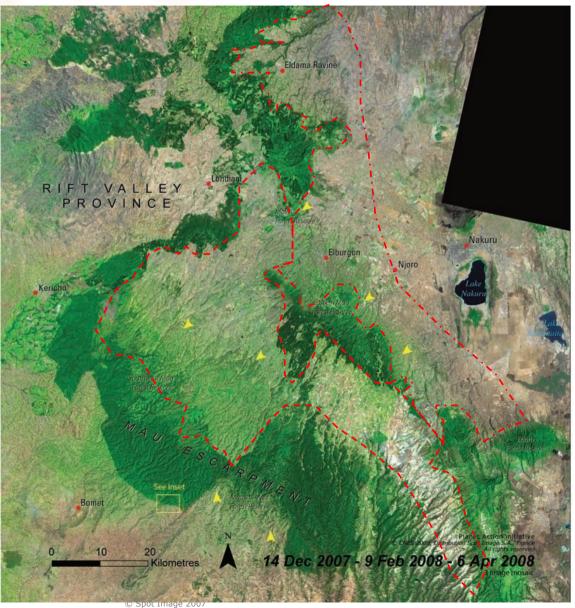


Lake Chad – Landsat Images 1972 and 2001 Credit: UNEP, Atlas of our changing environment



## **Deforestation in progress**





The Mau forest region in Kenya has been subject to a very high deforestation and degradation activity for the last decades

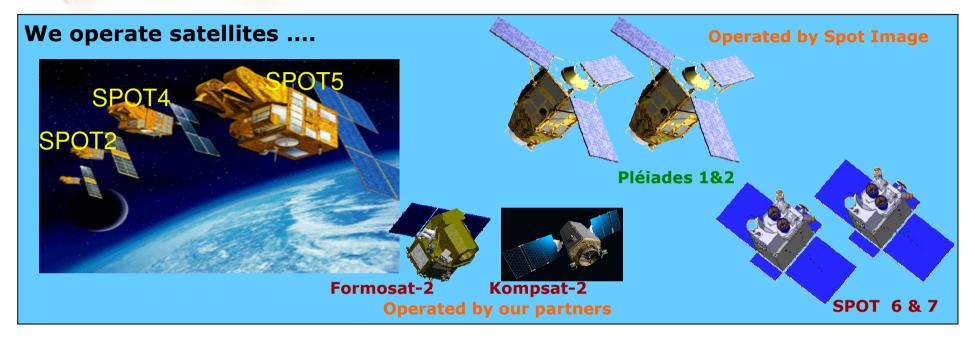
1973

2008



## Spot Image, an outstanding system

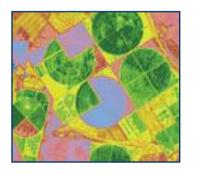




## And we deliver products, services and solutions to our customers











## **Committed against Climate Change!**



- Planet Action was launched by Spot Image in June 2007 :
  - "The nature of our business means that we can and must engage in this kind of corporate citizenship initiative."
- The human impact and causes of climate change are no longer contested. It is urgent to act.
- **n** Earth observation and GIS industries can help:
  - Earth observation services and technologies, frequent revisit capacity
  - Vast image archives (20 years/+20 million scenes), time series
  - Extensive experience in analyzing and understanding Earth imagery
  - GIS software and dynamic users' networks
  - A worldwide network of partner operators and receiving stations









### **Corporate Social Responsibility**



- Planet Action is a non-for profit social initiative launched by Spot Image committed in the fight against Climate Change
- Non-governmental organizations, institutions, universities and research laboratories engaged in action addressing climate change causes, impacts and solutions can benefit from <u>support</u> from Planet Action
- Planet Action provides <u>free</u> satellite imagery, GIS software, image processing software for <u>selected projects</u> and helps raising awareness about climate change
- Two main activities:
  - Grants
    - Support local projects engaged in action related to climate change
  - Outreach
    - n Develop and implement global education and awareness activities
- Planet Action is open to partners



#### How does it work?



Non-governmental organizations, institutions, and research laboratories engaged in action addressing climate change causes, impacts and solutions submit their projects to Planet Action

#### **Projects should comply to the following criteria**

- assess climate change related issues and propose a course of actions;
- deal with at least one of the 5 Planet Action focus areas;
- have a member who resides in the country where the project takes place (at least for the project duration);
- be proposed by a non-profit organisation. Business organisations do not qualify for direct support;
- confirm that the project has no commercial objective;
- confirm that the project has no religious or ideological content or objective.
- Planet Action reviews and validates each proposal
- Imagery & software are provided
- Feedback is expected for knowledge-sharing



#### **An active network of Partners**











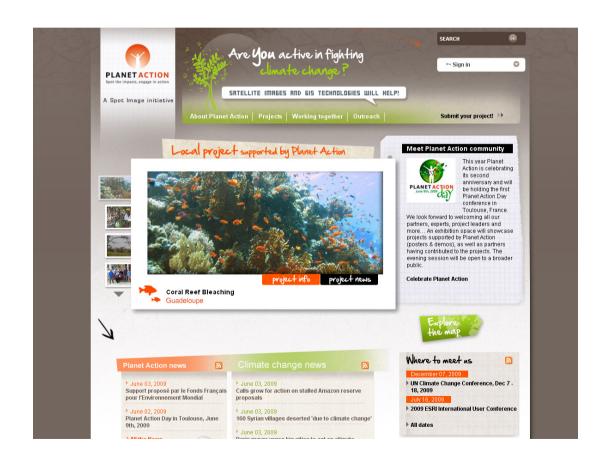
Stéphane Lévin
Planet Action Ambassador



#### The Planet Action website



- n All projects are submitted on the website
- validated and active projects are displayed
- n Project organizations can upload contents on their projects: works, feedback...
- **n** Forum based on Facebook





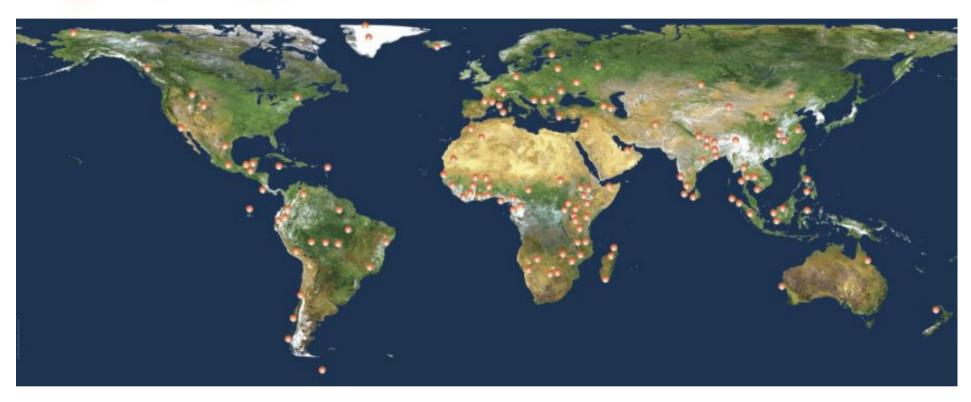


# Project-related activities



# A large community of projects supported by Planet Action



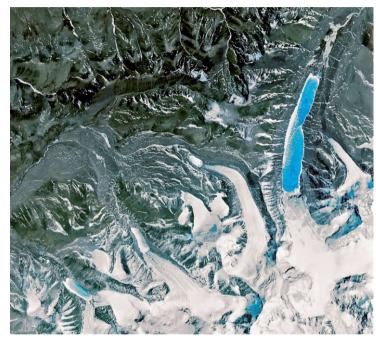


- More than 150 projects have been selected
- More than 100 projects have already received images or software



# **Human Issues GLOF Risk Assessment, Nepal**







#### **Issues**

Glaciers are retreating rapidly due to Climate Change and causing glacial lakes susceptible to outburst floods with the potential to cause widespread destruction in India, China and Nepal.

#### **Objectives**

- Monitor the development of glacial lakes.
- Assess the risk of potential glacial lake outburst flood in the river basin.

#### **Results**

- GLOF modeling and inundation mapping.
- GLOF impact assessment for risk management.
- Production of visibility materials and dissemination.





# Human Issues Project Green Hands, India







#### **Issue**

Project Green Hands is an ecological initiative to prevent and reverse environmental degradation and enable sustainable living.

#### **On-going work**

- 7,1 million trees planted by 1 million people in 3 years.
- Raising awareness about environmental care and sustainability.
- Counteracting the effects of climate change through building social and environmental resilience.







# Outreach and education activities



# Planet Action outreach activities: raising awareness...



#### **Each Planet Action project tells a story**

- n These stories can be told in schools, once adapted to any age
- n Young people are the key to raising awareness

#### **L** Planet Action is actively cooperating with Outreach partners

- n Stéphane Lévin, Explorer, as an Ambassador
- n Young Explorers of the Pangaea Expedition
- n National Geographic
- n Cité de l'Espace, a first-rate science museum.

#### **Possible Planet Action outreach initiatives include:**

- n Training for teachers to use PA projects in the classroom
- Publications, poster presentations

## **2** Other ideas for outreach and raising awareness...

- n Planet Action for Kids/Planet Action for Teens
- n "Sister Schools"
- n **E-learning...**



# Awareness Education on Climate Change, Togo







#### **Issue**

Need to educate people on Climate Change local impacts and the sustainable management of natural resources

### **On-going work**

- Raise awareness about the protection of natural resources, namely water
- Develop a GIS database using satellite images to illustrate local impacts of Climate Change
- Over 80 public sessions conducted
- TV and radio programs forecasted...





# **Exhibit at the Cité de l'Espace, Space Science Park in Toulouse**



- Exhibition on Planet Action supported projects
- Training kit for schools





# Awareness action with Stéphane Lévin Planet Action ambassador



Planet Action and Stéphane Lévin have met the Green Belt Movement in Kenya

Video produced to develop awareness on this remarkable action on the

ground







## Thank you for your attention

Spot the Impacts. Engage in Action.

www.planet-action.org

Contacts: Louis-François Guerre

<u>louis-francois.guerre@spotimage.fr</u>

Planet Action Coordinator

Algis Kucinskas

<u>algis.kucinskas@noos.fr</u>

Planet Action Independent Partner