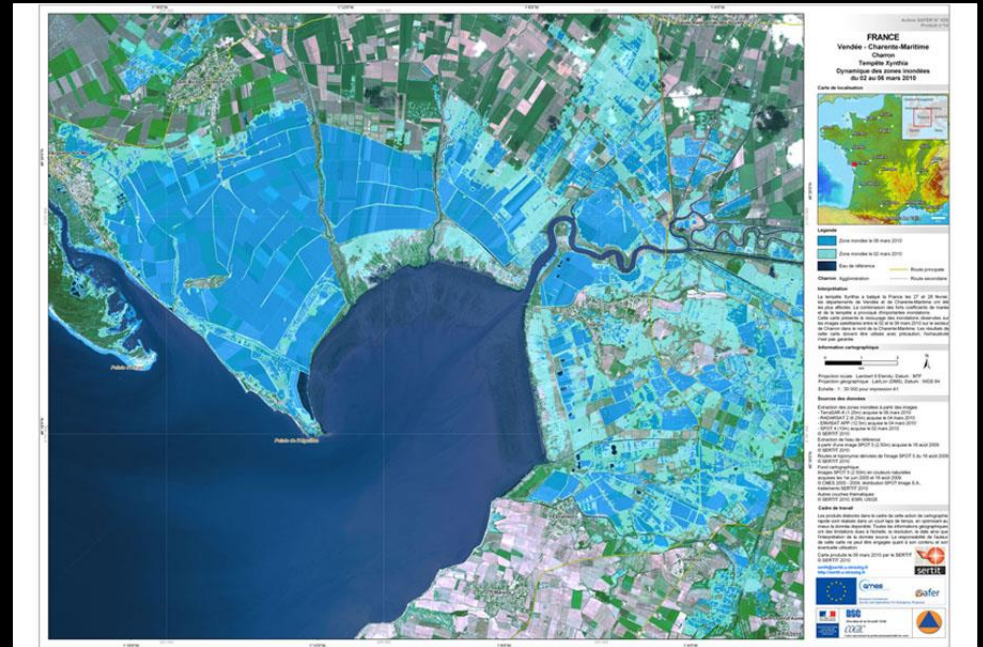


# Best effort: the uses of satellite cartography in disaster monitoring

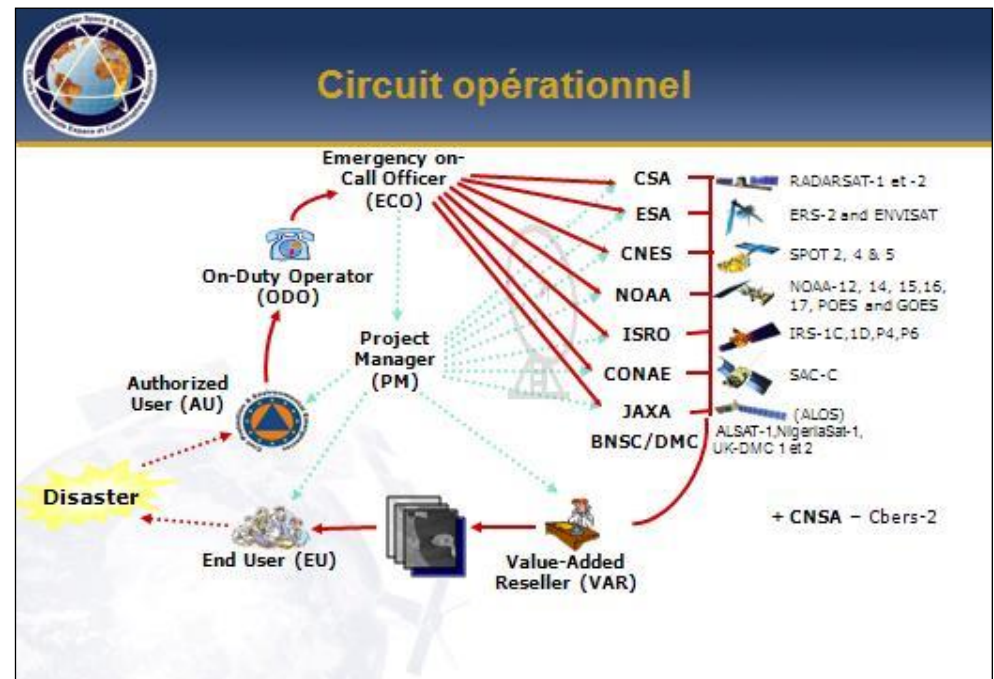


Flood monitoring map, Xynthia Tempest, Charente, maritime mars 2010. Crédits : SERTIT

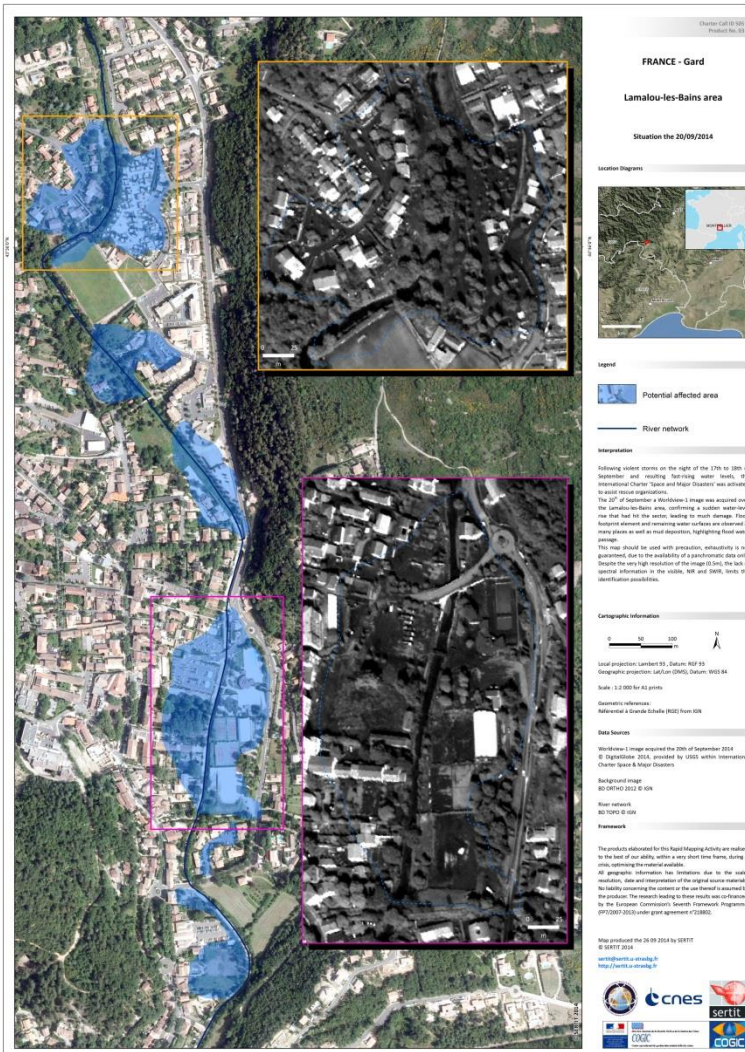
Arnaud Saint-Martin, CNRS

# Introduction

- Rapid mapping in the context of “disaster management”: a case study in the domestication of satellite imagery
- The Charter Disaster (if you are connected now, just have a look at [disastercharter.org](http://disastercharter.org))
- How it works in a few words
- Two parts: 1/ the very idea of “cartographic production”; 2/ “productive” examples of the possible uses of satellite imagery



# 1. Producing maps for disaster management

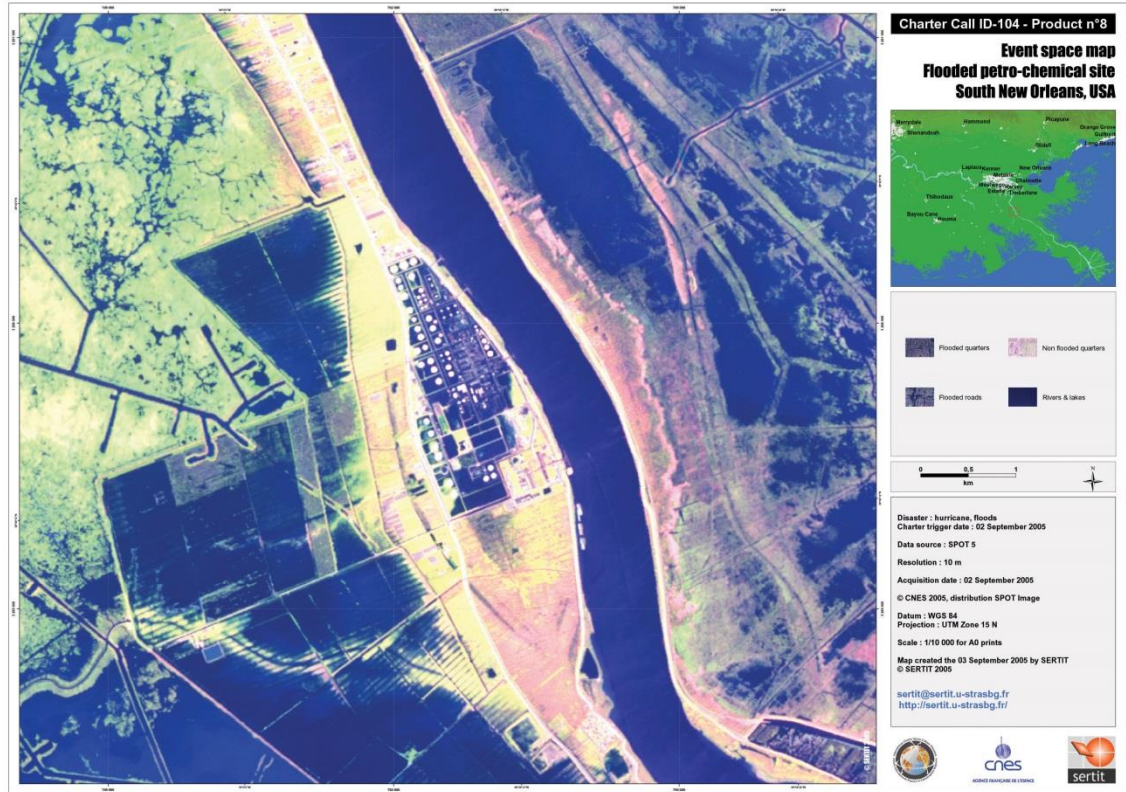


- The various meanings of “production”
- The taken-for-granted view of satellite maps as “constructions”
- The normative foundations of the “operational loop”
- The social dimensions and implications of satellite maps and GIS

Last activation of the Charter, situation Map, Lamalou-les-Bains area, Gard, France. Source: WorldView-1. Copyright: DigitalGlobe 2014 . Map produced by SERTIT.

# 1. Producing maps for disaster management (bis)

- Images for practical concerns
- Instituting a stratification of knowledge (and its producers)
- Maps and epistemic authority
- “Satellite ocularcentrism” (Barney Warf)
- Crisis mapping and the sciences of disaster: the “social order” paradigm (Dodier)



Event space map on a petro-chemical site, New-Orleans, USA, Katrina Hurricane, sept. 2005. Crédits: SERTIT.

# 2. Satellite images that are talked

- The social and cultural incorporation of crisis space maps
- The Fukushima accident: the dramatic view from above



March 16, 2011. Credits : DigitalGlobe



Japan, Honshu Island, Fukushima Daiichi Nuclear Power Plant, situation the 16th of March 2011, Credits : SERTIT

HOME PAGE | TODAY'S PAPER | VIDEO | MOST POPULAR | U.S. Edition | Log In | Register Now | Help

**The New York Times** **Asia Pacific** Search All NYTimes.com

WORLD | U.S. | N.Y. / REGION | BUSINESS | TECHNOLOGY | SCIENCE | HEALTH | SPORTS | OPINION | ARTS | STYLE | TRAVEL | JOBS | REAL ESTATE | AUTOS

AFRICA | AMERICAS | ASIA PACIFIC | EUROPE | MIDDLE EAST

**5-DAY DREAM GETAWAY** #5DAYS join me by LogMeIn Registrieren und gewinnen

UPDATED March 15, 2011 TWITTER LINKEDIN SHARE

### Satellite Photos of Japan, Before and After the Quake and Tsunami

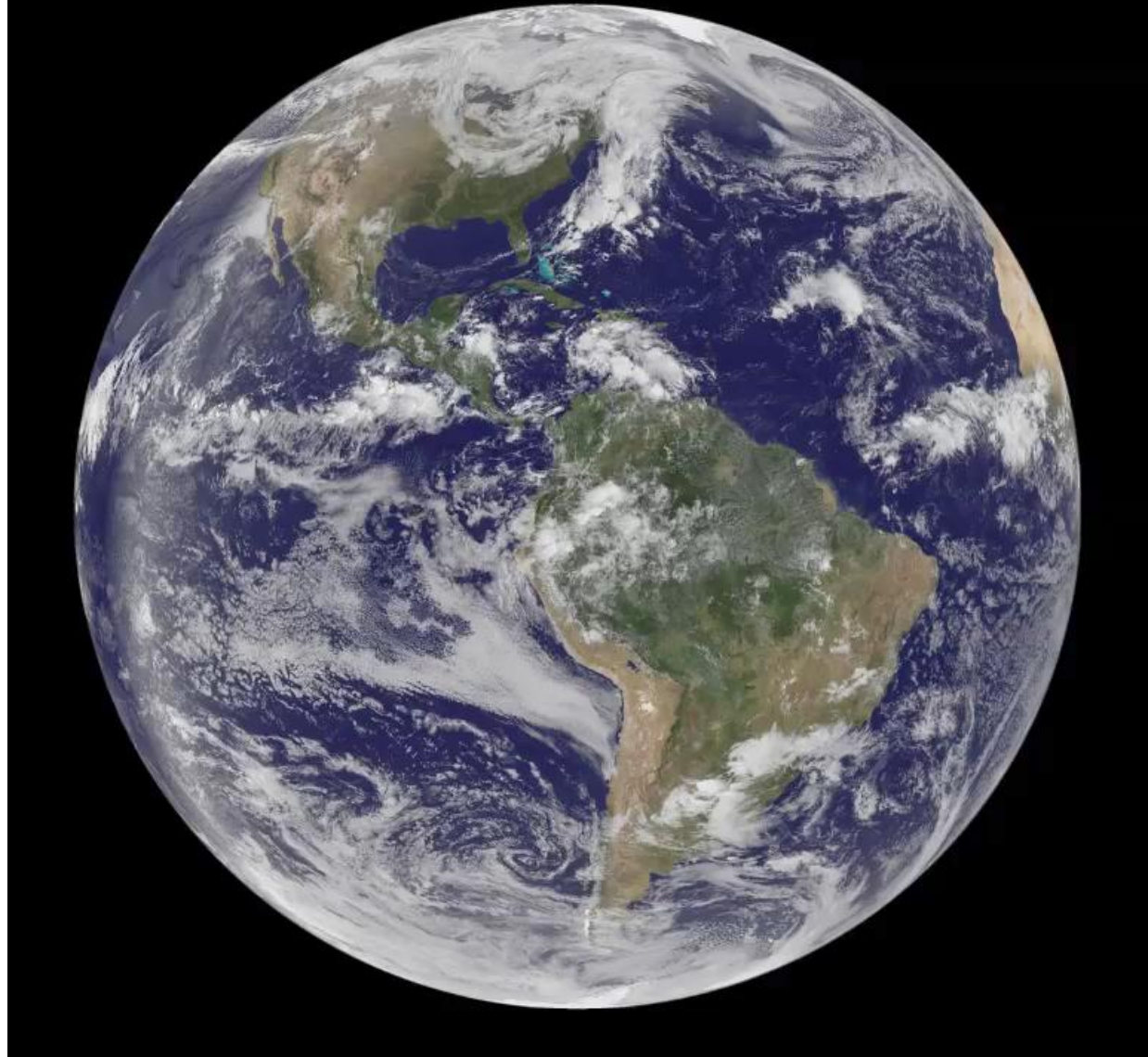
Move the slider to compare satellite images, taken by GeoEye/EyeQ, from before and after the disaster.

GeoEye/EyeQ GeoEye/EyeQ

**North of Sendai**  
This area, which includes Minamisanriku and the Onagawa nuclear plant, was closest to the

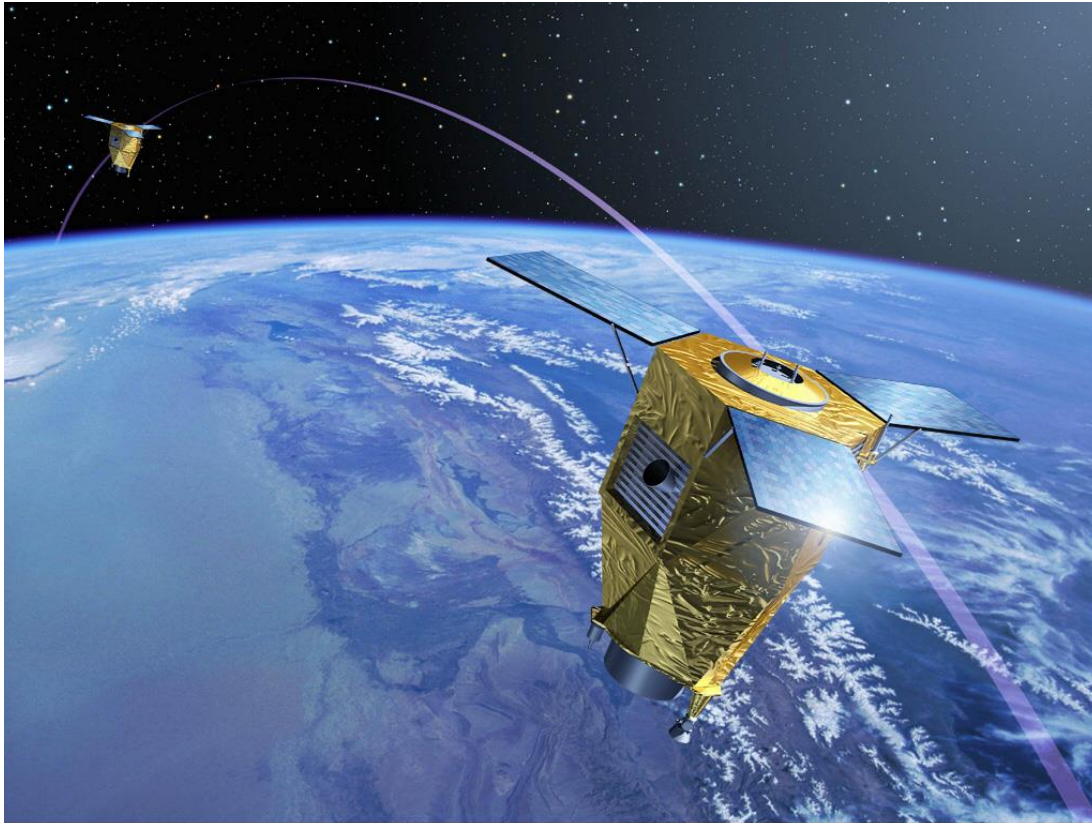
Screenshot from the *NYT* website, March 15, 2011. (*NB*: the surprising contrast between satellite views and the advertisement for a 5 days holidays is accidental.)

- The normalization of catastrophes and their satellite visualizations
- One example: *Sandy*



Satellite animation with NOAA's GOES-13 and GOES-15 observations from Oct. 21-30, 2012. Credit: NASA GOES Project.

# Conclusion



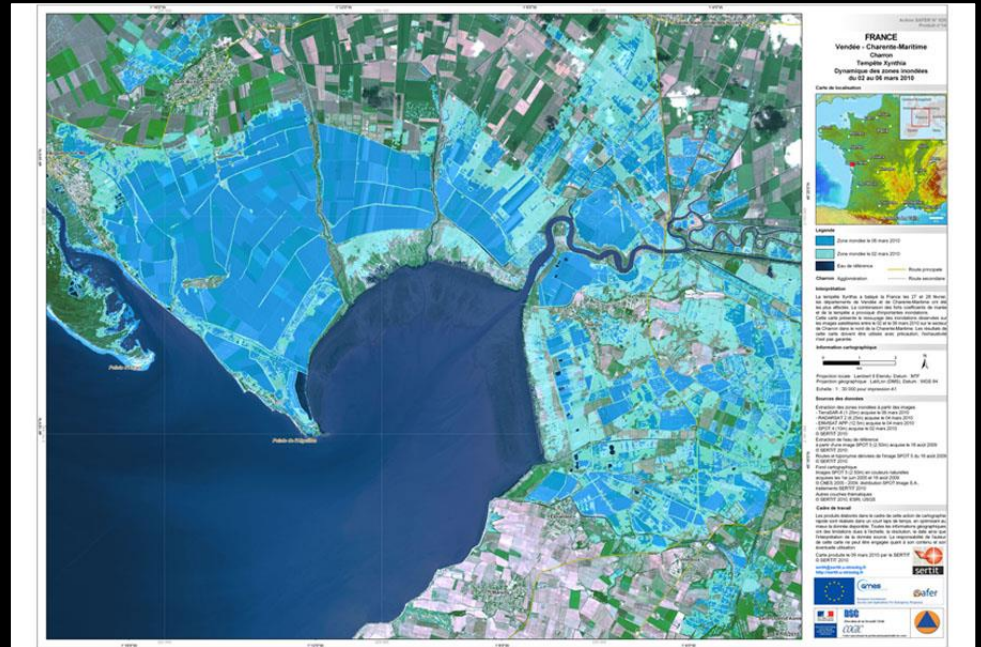
© CNES - Mars 2003 / illustration Pierre CARRIL

Pleiades satellites constellation. Crédits :  
CNES

- Studying environmental images?
- Overinterpretations and hyperbolic conjectures about the satellite imagery



# Best effort: the uses of satellite cartography in disaster monitoring



Flood monitoring map, Xynthia Tempest, Charente, maritime mars 2010. Crédits : SERTIT

Arnaud Saint-Martin, CNRS