



Knowledge For Tomorrow

UNISPACE+50 – 1. High Level Forum Dubai

DLR's role in the fields of space science and technology

Prof. Dr. Pascale Ehrenfreund

20 November 2016



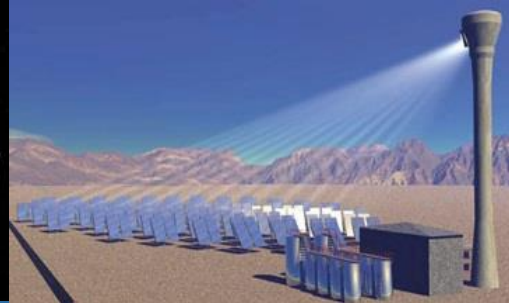
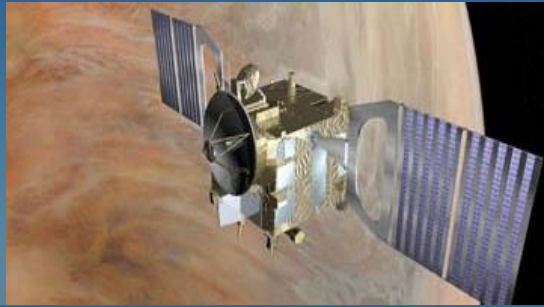
Aeronautics

Space

Energy

Transport

Security



~8.000 Employees

**39 Institutes & facilities spread over
20 Sites across Germany**



DLR



DLR

Research Center

Space Administration

Project Management





184 Large-Scale Research Infrastructures

Jointly used with 108 research and industry partners

Wind Tunnels



Research Aircrafts



Simulators



Research Vehicles & Platforms



Control Stations



Test Facilities



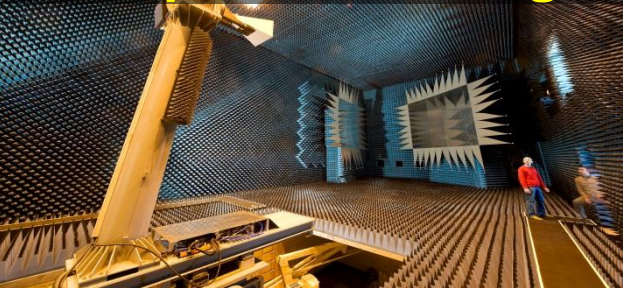
Medical Infrastructures



Research Power Plants



Compact Test Range



Energy Storage Test Facilities



High-Performance Computers



Sounding Rockets





Global Challenges Solutions from SPACE

TerraSAR-X & TanDEM-X



> 1400 operational
Satellites in space



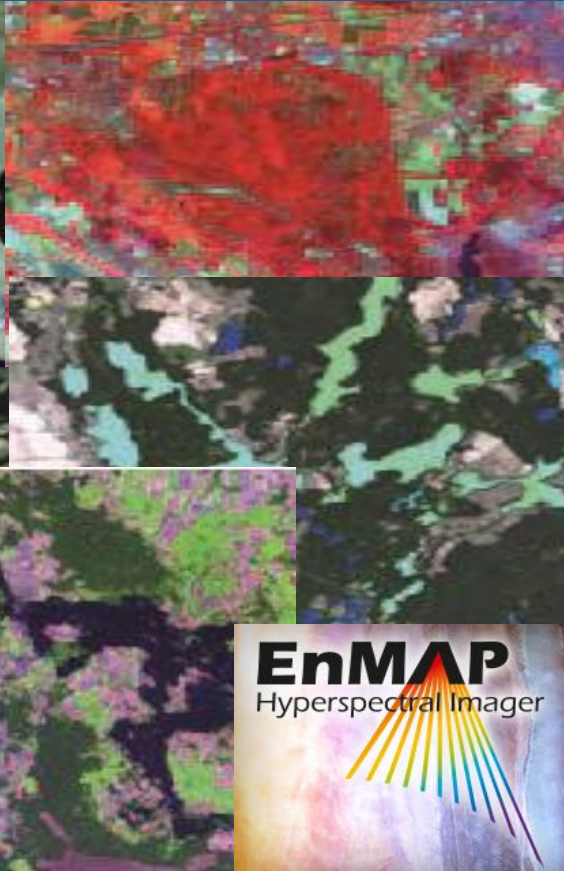
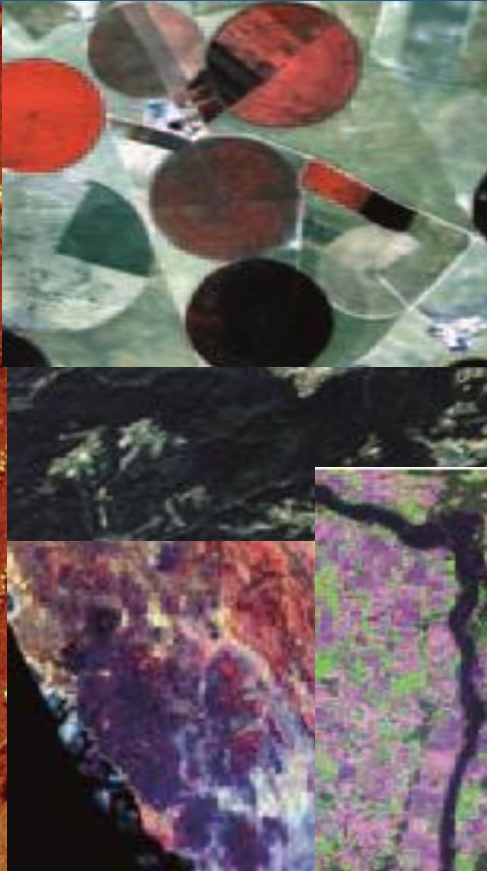
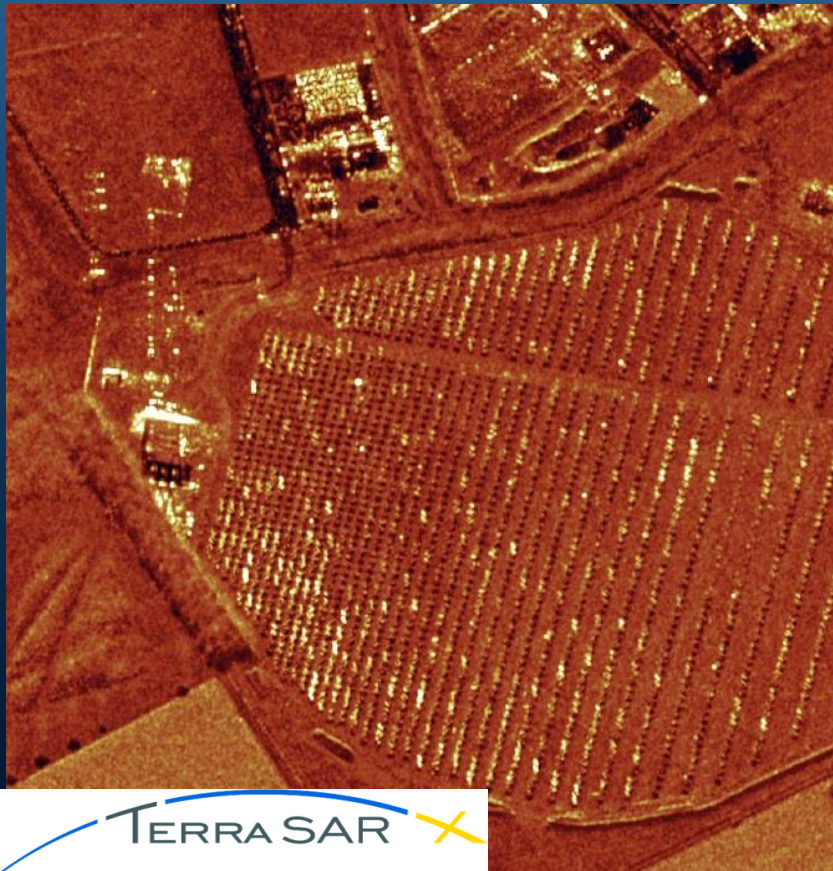


German Space Missions: Contributions to Climate Change Research & Societal Needs

TerraSAR-X/TanDEM-X
Launched 2007 / 2010

EnMAP
Launch in 2019

MERLIN
Launch in 2021



Monitoring of Refugee Camps – EU Hot Spot island

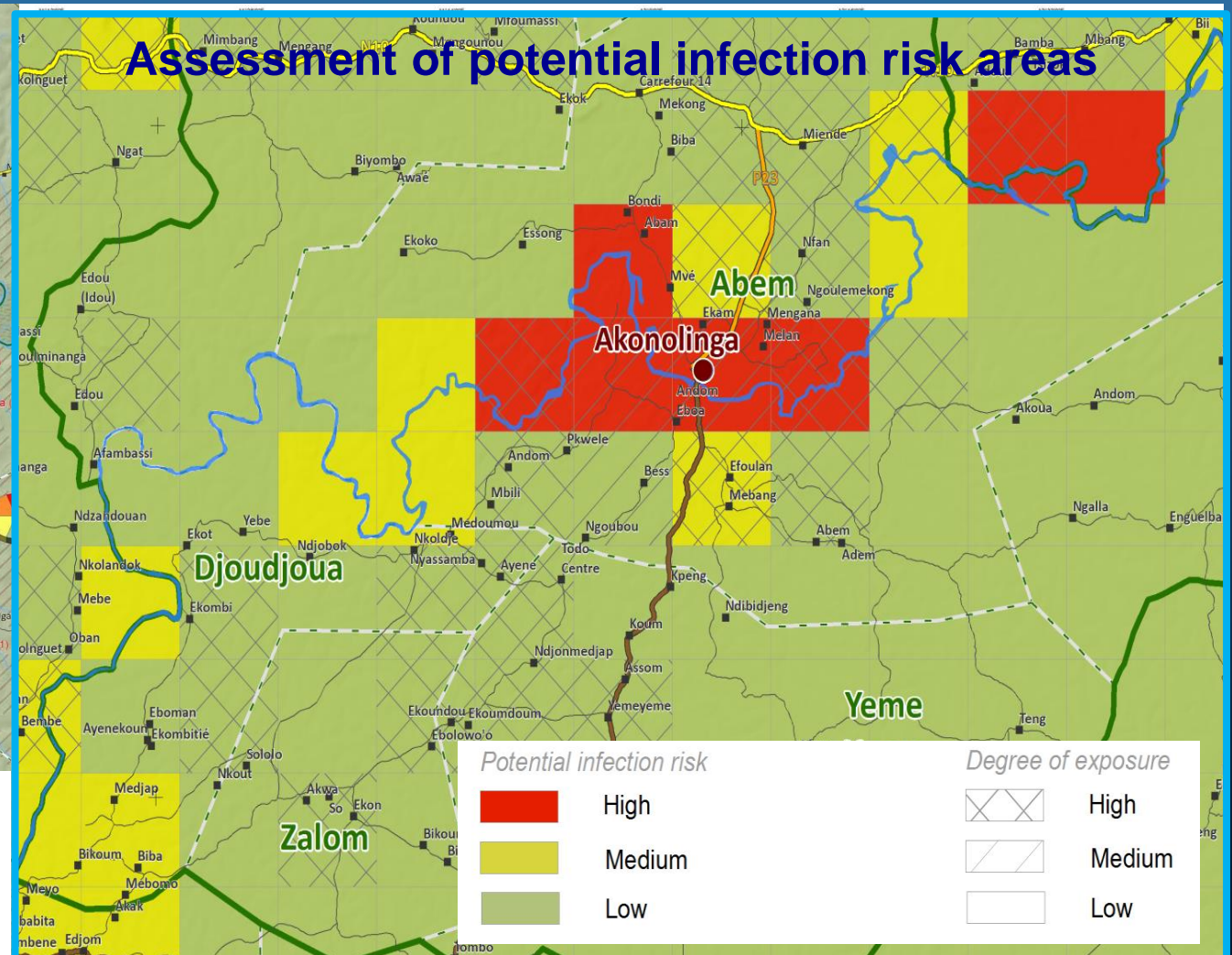
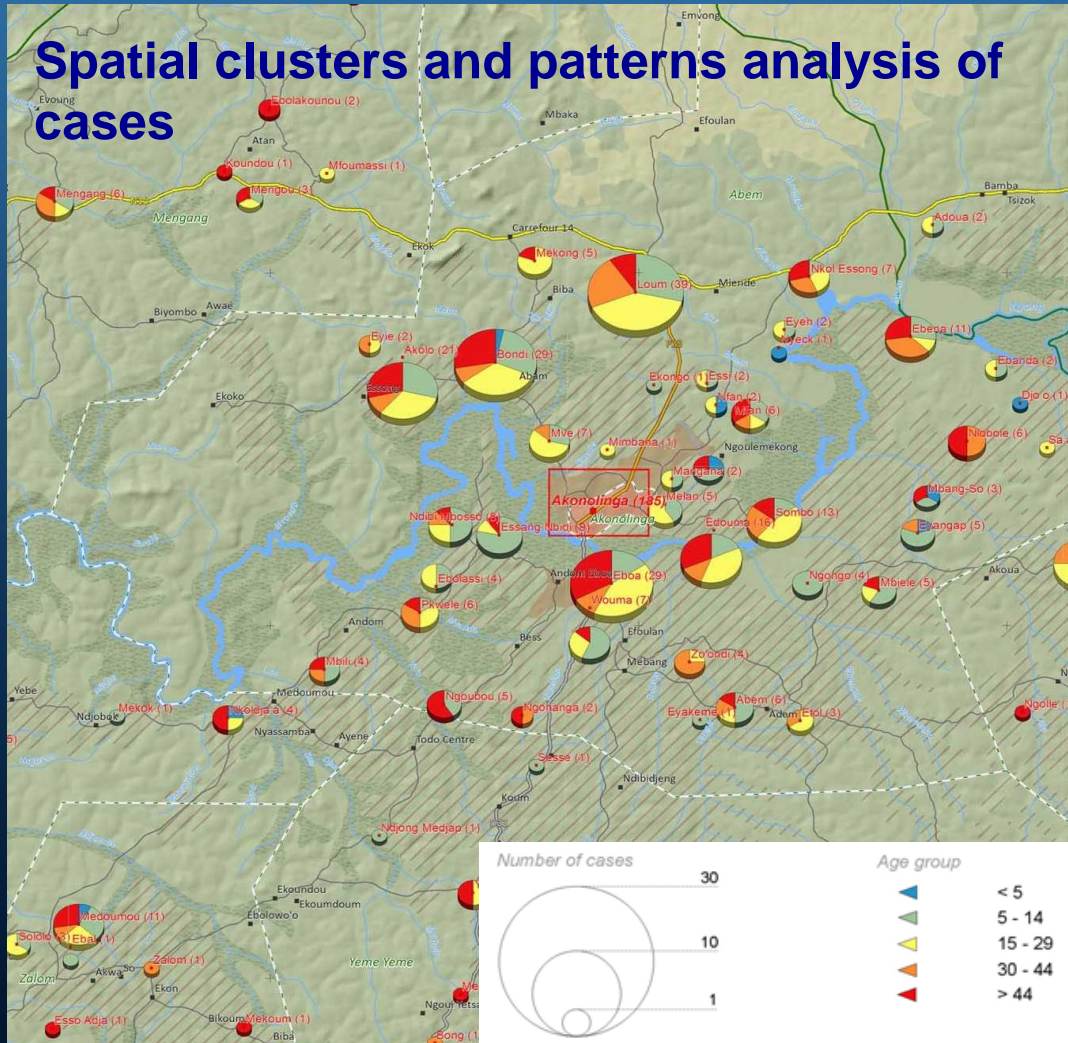
Kara Tepe Refugee Camp on Lesbos Island, Greece
2. November 2015



14.10.2013

Earth Observation for Health-Environment Analysis

Satellite-based information can contribute to better understand, assess and uncover complex **disease dynamics and health risks (Buruli ulcer disease)**



High-resolution time series 2003-2005





15 km





DLR contributions to UNISPACE+50 relevant activities

DLR is Member of the

- Space Mission Planning Advisory Group (SMPAG)
- International Asteroid Warning Network (IAWN)
- Long-term Sustainability WG
- Expert Group on Space Weather
- Expert Group on Global Health



DLR
CONFERENCE
ON CLIMATE
CHANGE
2016

- Close cooperation with UN SPIDER (Bonn Office)
- German Chair of Working Group „Status and Applications of the 5 UN Treaties on Outer Space” (UNCOPUOS/LSC)
- German Initiative “Space Traffic Management” (UNCOPUOS/LSC)



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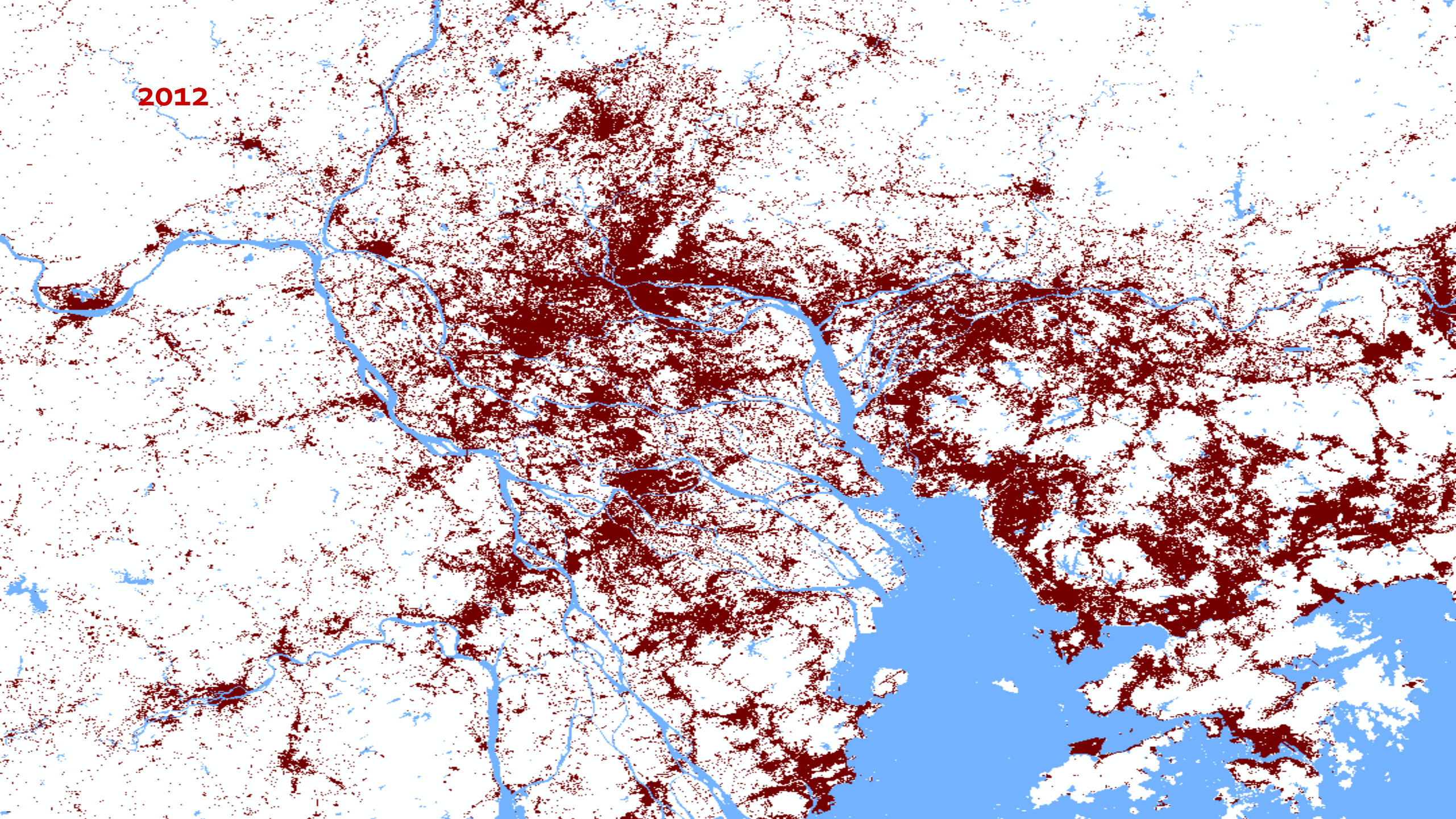
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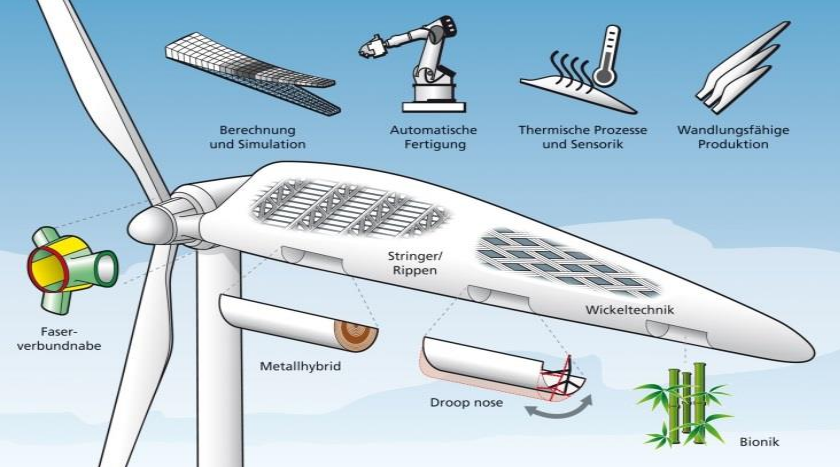
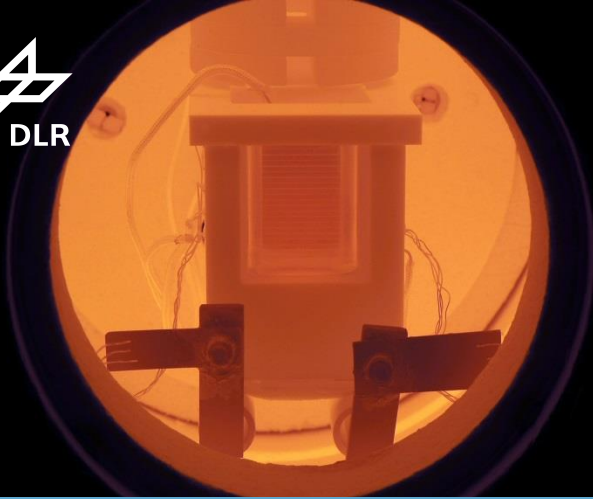
Contact:

pascale.ehrenfreund@dlr.de



2012





Synergies

Aeronautics, Space, Energy & Transportation for Global Challenges

