



**Barcelona
Supercomputing
Center**

Centro Nacional de Supercomputación

Insurance Sector

SECTEUR kick-off meeting

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Reading, June 6th, 2016

Background and focus areas

- Insurance picks up risk in all sectors of activity
- Based on partners, will focus on risk to
 - Infrastructure
 - Agriculture/farming
- Climate indicators for
 - High-impact events (hurricanes, tornadoes, windstorms, hail, ...)
 - Frequency in extreme temperatures and precipitations
 - Change in ocean conditions (temperature, pH, sea level at local level)
 - Climate conditions linked to disease outbreak (e.g. West Nile Virus, African Horse Sickness)
- Will need to look globally due to high exposure of (re)insurers in U.S. and Asia
- Timescales:
 - 1-5 years -> can react quickly
 - 5-10 years -> develop/implement long-term business plan
 - 20-25 year -> long-term steering

Positioning of U. Reading/BSC within Insurance Sector

- University of Reading (Len Shaffrey)
 - XWS windstorm catalogues (www.europeanwindstorms.org)
 - Knowledge Transfer with Willis Research Network on tropical cyclone risk
- Barcelona Supercomputing Center
 - Multi-annual forecasts of Atlantic hurricanes (RPI+RMS)
 - Web portal on seasonal forecasting of Atlantic hurricanes (XL Catlin)
 - Diversification of risk across time, space and perils (RPI)

Sector Champion and other partners

- XL Catlin – Sector Champion
 - Specialist property/casualty insurer & reinsurer with offices in 160 countries
 - Largest insurer at Lloyd's of London, writing ~10% of all premiums
 - 8th largest property & casualty reinsurer worldwide
 - Member of Risk Prediction Initiative and Lighthill Network
- Risk Management Solutions (RMS)
 - Catastrophe risk modeling firm
 - Model risks of hurricanes, floods, infectious disease, convective storms, windstorms, ...
- Consorcio de Compensacion de Seguros (CCS)
 - Public Spanish Organization
 - Extraordinary risk, agricultural insurance
- Willis Research Network
 - Largest collaboration b/w academic and the finance and insurance industries

Links to other projects

- Within SECTEUR
 - Infrastructure
 - Health
 - Agriculture
 - Coastal areas
- C3S
 - Windstorm Information Service (WISC)
 - Variability and climate change impact location, frequency and severity of windstorms
 - Possibly AgriCLASS, Urban SIS
- European
 - PRIMAVERA (WP10–Physics and statistics of meteorological hazards)
 - EUPORIAS
 - IMPREX
 - IMPACT2C
 - ENHANCE
- National/International
 - DEXSTER (BSC-UQAM)

Relevant Conferences/Meetings/Workshops

- 6th European Windstorms Workshop (August 31st – September 2nd)
- Risk Prediction Initiative Meeting (September 2016)
- 6th International Summit on “Hurricanes and Climate Change: From Hazard to Impact” (June 4th-9th 2017)



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Thank you!

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