TSUNAMI - Projects Grouped by Theme

Reference Title

Reference	Title	
Agriculture and	d aquaculture	
T024	Seasonal predictions of climatic hazards to agriculture in US and Europe	
T026	Risk estimates from storm damage to fish farms	
T029	CROPWATCH - Medium range forecasting of water availability for crop futures and insura	nce
		3
Climate variability		
T003	Prediction of Global Warming Effect on Tropical Cyclone Activity	
T013	Influence of surface temperature of the North Atlantic on extreme climate events	
T018	Seasonal prediction of tropical cylcone activity	
T027	Forcing and ocean response in climatic extrema (FORCE)	
T028	Hydroclimatology: large-scale interactions between atmosphere and hydrosphere	
1018	Influence of North Atlantic Oscillation and climate variability.	
		6
Earthquake		
T001	Global earthquake data and intensity forecasting (GEDIF)	
T053	Real time earthquake observations	
T056	Identification of active faults using SPOT-generated digital elevation models	
1001	Estimation of Hong Kong earthquake risks	
1003	Estimation of earthquake or land/seabed slip in the Caribbean Region.	
1015	Earthquake damage estimates for San Francisco and Los Angeles.	
1020	Earthquake estimates for Western Europe particularly Italy.	
		7
Flood		
T012	Flood forecasting for the insurance industry	
T022	Real-time flood forecasting	
T051	Direct observation of flooding from extreme rain storm events	
1005	Estimation of risks from flood for the UK.	
		4
General		
T021	Extreme rain-storm events in the UK	
T048	Improved estimates of post loss cost development by analysis of changing supply curves.	
T059	Ice risks to navigation and offshore structures - changes and innovations	
1010	Application of understanding of demographic behaviour to incurred risk and consumer	
I011	Correlations between economic behaviour and insurance loss.	
1012	Psychological analysis to assist in assessing fraud risk.	
1016	New business creation through better estimation of currently uninsured risks.	
T060	The use of earth observation data in natural hazard risk assessment and damage	
T061	The psychology of insurance fraud	
		9
Information Te	chnology	
1023	Meta-data management methods applied to insurance.	
		1
Marine		
T010	Better risk profiling for marine underwriting	
T015	Risk to shipping	
1022	Risk estimating in marine underwriting.	
		3

TSUNAMI - Projects Grouped by Theme

T057

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Reference Title **Mathematical Methods** T031 Alpha-stable processes and mixture models with applications to insurance forecasting T032 New mathematical methods for extreme statistical analysis T038 Estimating aggregate exposure to extreme events T039 PURSE - Managing and integrating risks for loss control: development of a prototype T046 Relating expected payouts and risks for portfolios of nonindependent insured events subject T047 Singular systems analysis of low frequency events within multiple time series data, with T055 ADEPT II - Analysis of spatial dependence due to natural loss exposures 1009 Application of new mathematical methods for the analysis of extreme statistics. 1021 Credit and economic risk correlations using new mathematical methods. 9 Offshore platforms T008 Increases in local wave heights and impact velocities due to wave diffraction T009 Wave and wind exposure to offshore platforms T014 Medium range forecasting of wave conditions in the Northern Hemisphere T025 Wave and wind exposure to offshore platforms T034 Quantification of risk arising from weather related incidents on offshore platforms 1008 Improving single event and aggregated offshore oil platform loss estimates. 6 Rejected T011 Rejected T041 - 45 Rejected T049 Assessing environmental risks from liquid product pipelines. 3 **Satellite** T002 Direct measurement of land subsidence from space with SAR interferometry T004 Evaluation of the risks to satellites from the radiation belts T005 Satellite risk T050 Satellite damage estimation from debris 1024 Correlation of satellite life losses and space weather events. 5 Sea floor instabilities T007 Seafloor instability T016 Risks associated with seafloor instability T030 Volcanic hazard from the Kick 'Em Jenny seamount in the South-West Caribbean T058 Hazard assessment of the impact of continental slope and oceanic island volcano instability Storm surges T020 UK storm surge hazards T052 Land risk marine erosion observations T054 Observation of real-time storm surge events from satellite imagery 3 Subsidence/landslip T023 Climatic controls on subsidence losses in the UK T040 Forecasting long-term soil moisture content for subsidence risks

Identification and characterisation of terrains prone to large-volume slope movements.

Estimation of subsidence risk by forecasts of prolonged dry periods.

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TSUNAMI - Projects Grouped by Theme

Reference	TITLE	
Teleconnection		
T017	Teleconnections of extra-tropical climate extremes	
T036	Teleconnections of extra-tropical extremes	
T037	Investigation of Antarctic sea ice anomalies as a potential ENSO predictor	
		3
Well control		
T006	Well control/facilities and oil production business interruption insurance	
T035	Risk assessment for well control events from geologically induced loss of control.	
1007	Improved estimates of well control, facilities loss and business interruption for oil and gas	
		3
Windstorm		
T019	Windstorm hazard in NW Europe	
T033	Storm-to-surface transfer functions	
1002	Refinement of the Gray model for tropical storm prediction	
1004	Impact of climatic change on UK storm modelling.	
1013	Sea surface temperature changes and northern limit of hurricane tracks.	
1014	Fall off of hurricane strength as hurricanes move from sea to land.	
1017	Correlation between sea surface temperature and NW Europe storm tracks.	
1019	Correlations between mean wind speeds and gust speeds.	
		8
		81