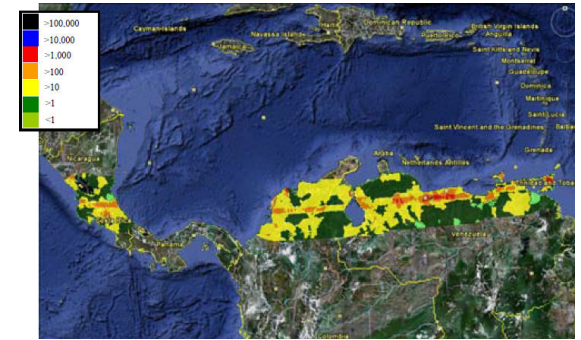


Inputs from UK Academia

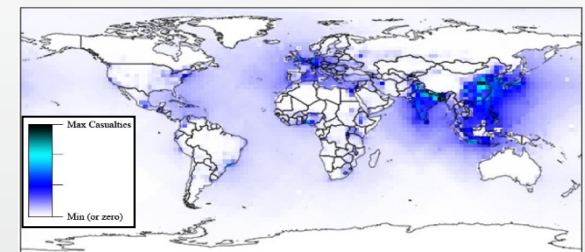
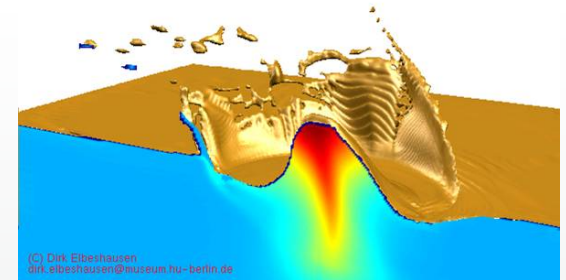
Dr Hugh Lewis
Astronautics Research Group
University of Southampton

Inputs from UK academia

- **University of Southampton**
 - Space mission studies
 - NEO mitigation decision-support tools
 - NEOImpactor, NEOMiSS, ARMOR
- **Imperial College London**
 - Computational modelling of impact processes
 - Impact Earth!, iSALE
- **The Open University**
 - Space mission studies
 - Understanding large scale impacts
 - Hypervelocity impact studies
 - NEOShield
- **University of Kent – Canterbury**
 - Hypervelocity impact processes
- **University of Strathclyde**
 - Space mission studies
 - Stardust EU FP7 asteroid & space debris network

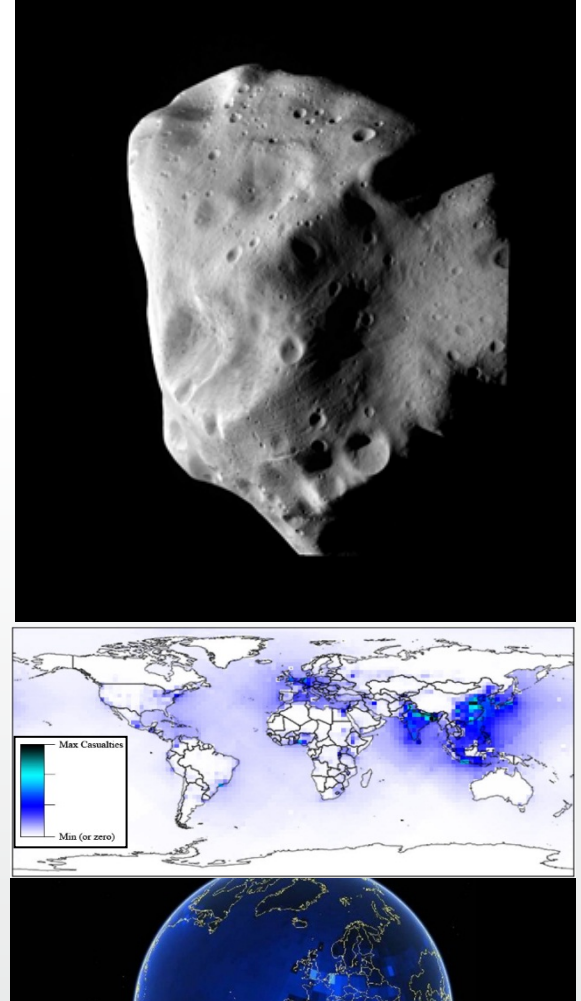


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Inputs from UK academia (contd) UNIVERSITY OF Southampton

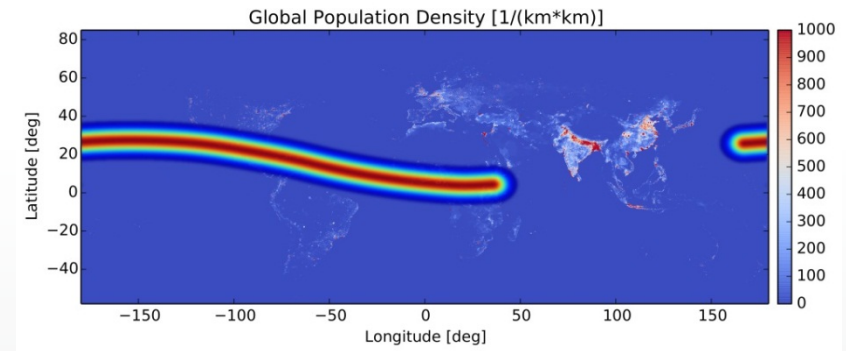
- **University of Glasgow**
 - NEO deflection technologies
 - Assessment of NEO mitigation methods
- **University of Surrey**
 - New space concepts & missions
 - NEO deflection concepts including gravity tractor
 - NEOShield



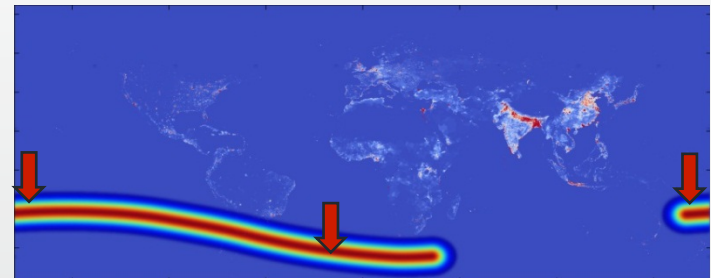
ARMOR Tool

Asteroid Risk Mitigation and Optimization Research Tool

- A decision-support system under development
- Determine:
 - Possible impact locations
 - Impact risk (expected casualty number)
- Assess deflection mission design
 - Simulate deflection missions
 - Analyse effect on risk
 - Optimize mission design for minimum risk



World population map with superimposed impact corridor.



Relocated impact corridor during/after deflection mission.