

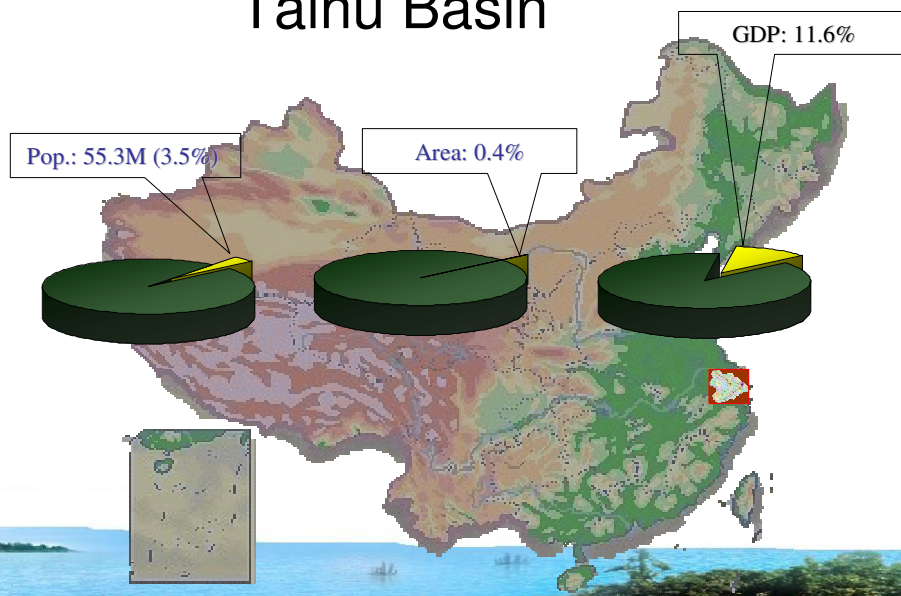


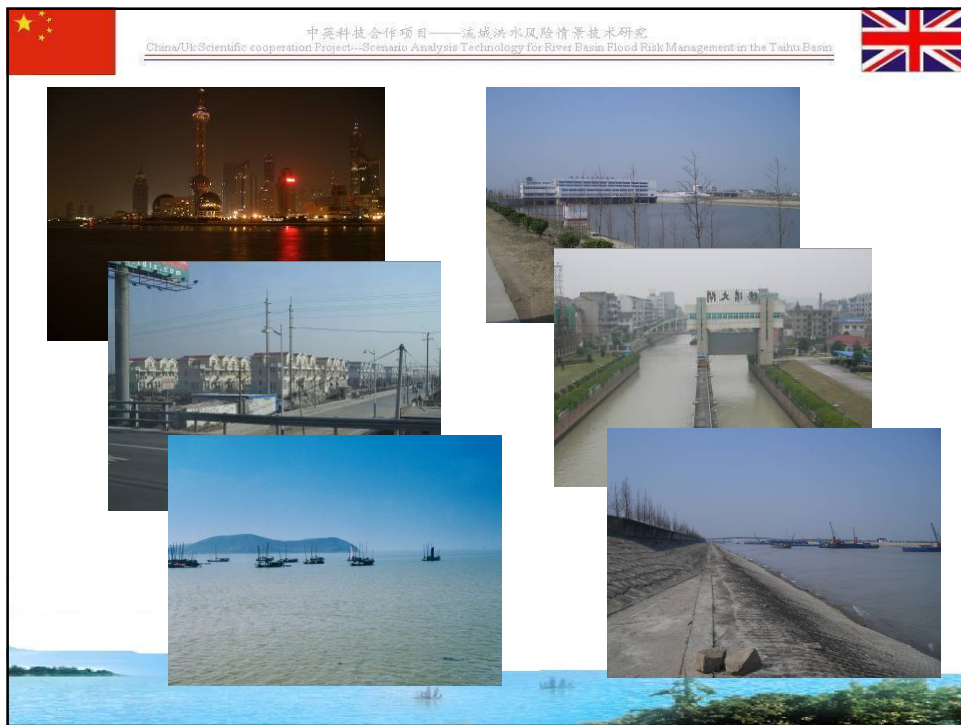
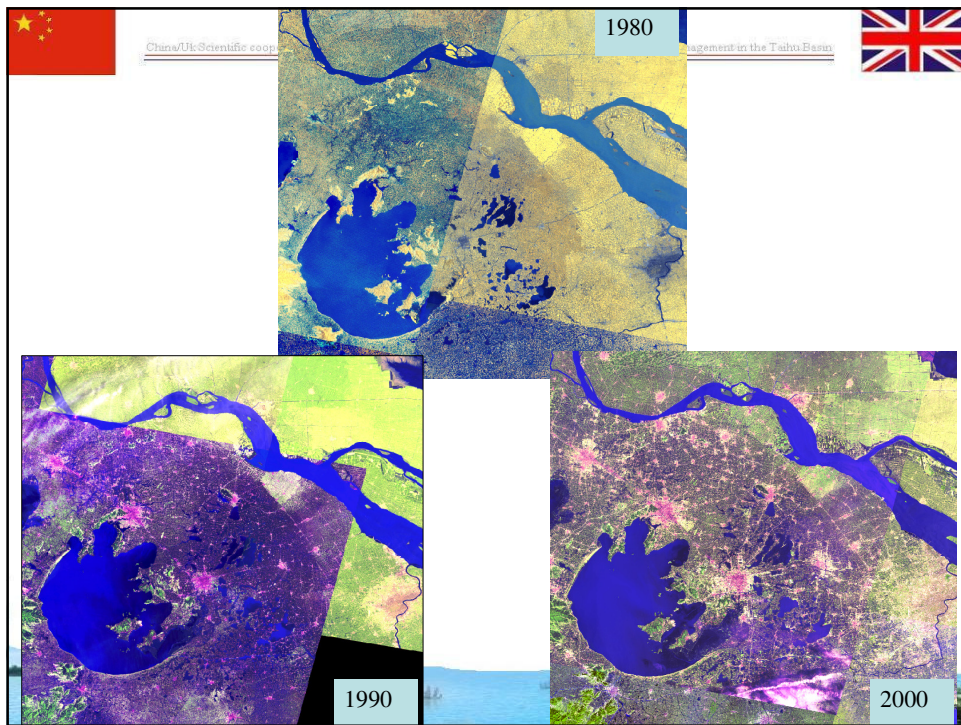
Quantified analysis of flood risk at a basin scale in China

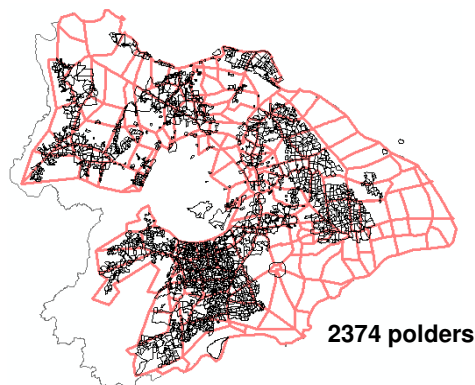
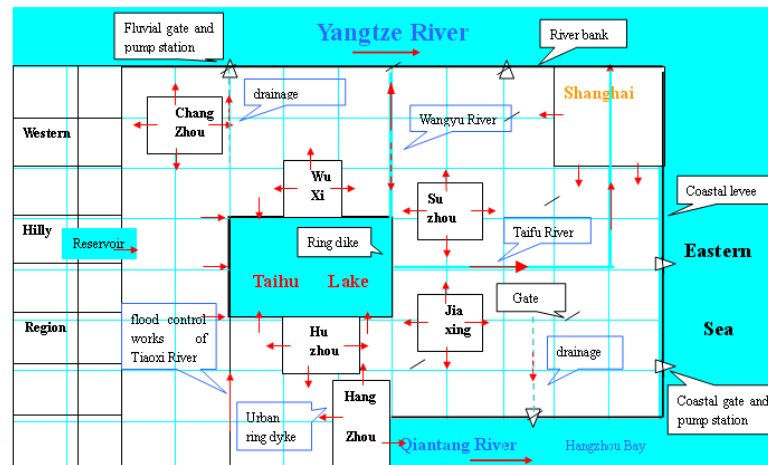
Jim Hall, Newcastle University,
UK



Taihu Basin

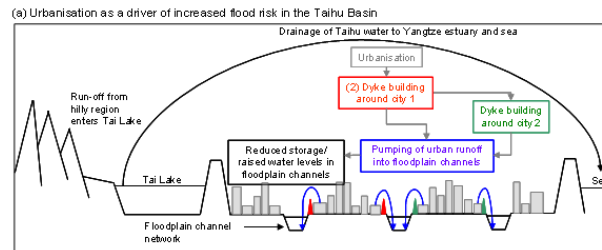




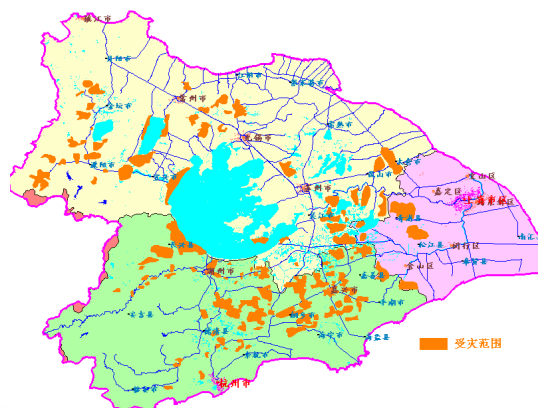




Conceptual model of flooding in the Taihu Basin



Recorded flooding 1999





Flood management in the Taihu Basin

- **Challenge:** Sustainable flood risk management in a rapidly developing region
- **Questions**
 - How might the risks of flooding change in Taihu Basin over the next 50 years?
 - Urbanisation and economic development
 - Climate change
 - Deliberate and unplanned water management
 - Land subsidence caused by over pumping
 - How does flooding interact with other water management issues e.g. water quality?
 - How do flood risk management options perform in the long term



Background

- 16-23 March 2005: scoping mission
- 20 December 2005, Sir David King, the UK Government Chief Scientific Advisor visits Beijing to promote the project
- In the 4th UK/China Science and Technology Joint Commission meeting in Beijing on 28 April 2006, both sides of China and the UK agreed that the project should be implemented as a flagship project in the field of environmentally sustainable development.
- Ten UK experts visited Beijing and Taihu basin again during Nov.16 – Dec. 3, gave lectures in MWR, and formed a draft of implementation program.
- At the end of 2006, the MST approve this 3-year cooperation research project.





Project team

China:

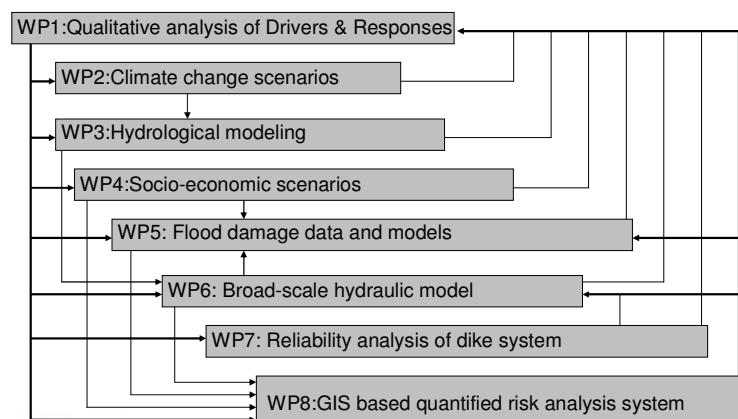
- Institute of Water Resources and Hydropower Research
- Taihu Basin Authority
- Beijing Normal University
- Chinese Academy of Social Science

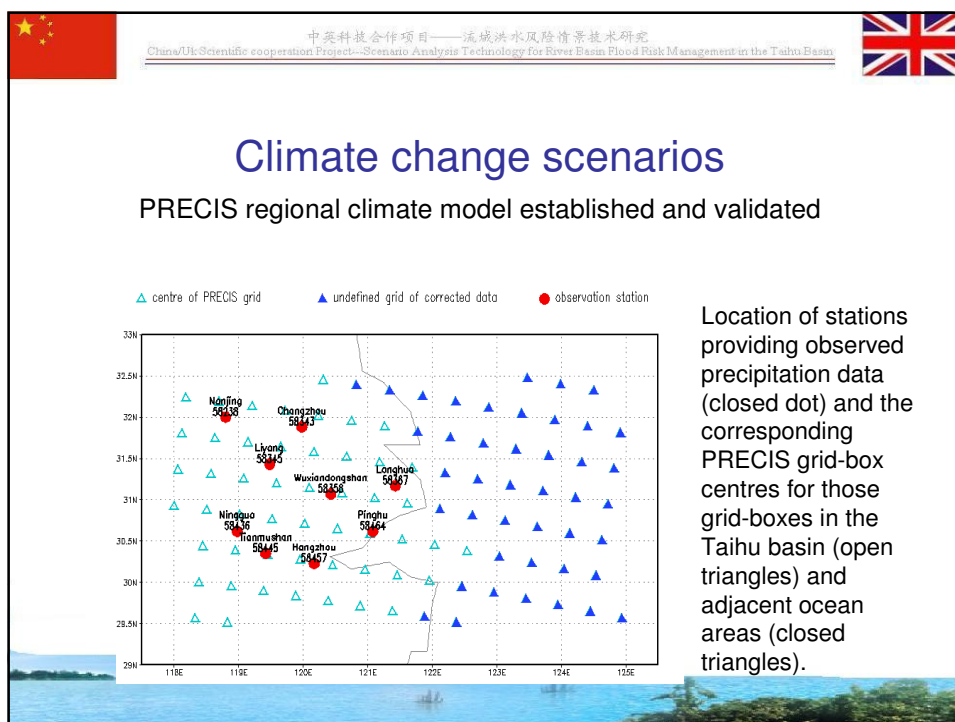
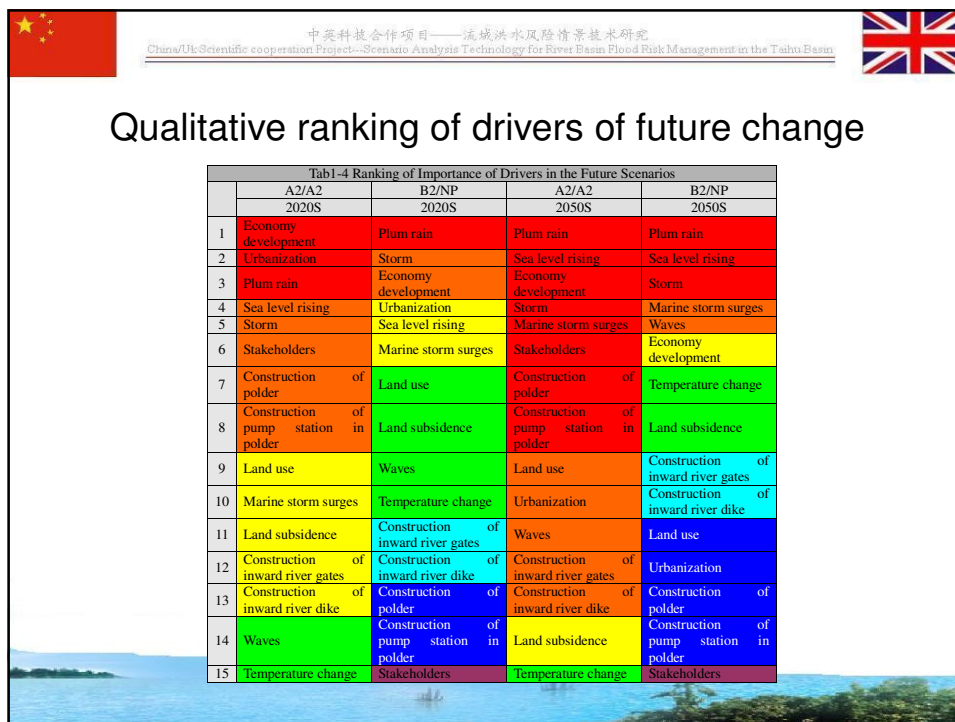
UK

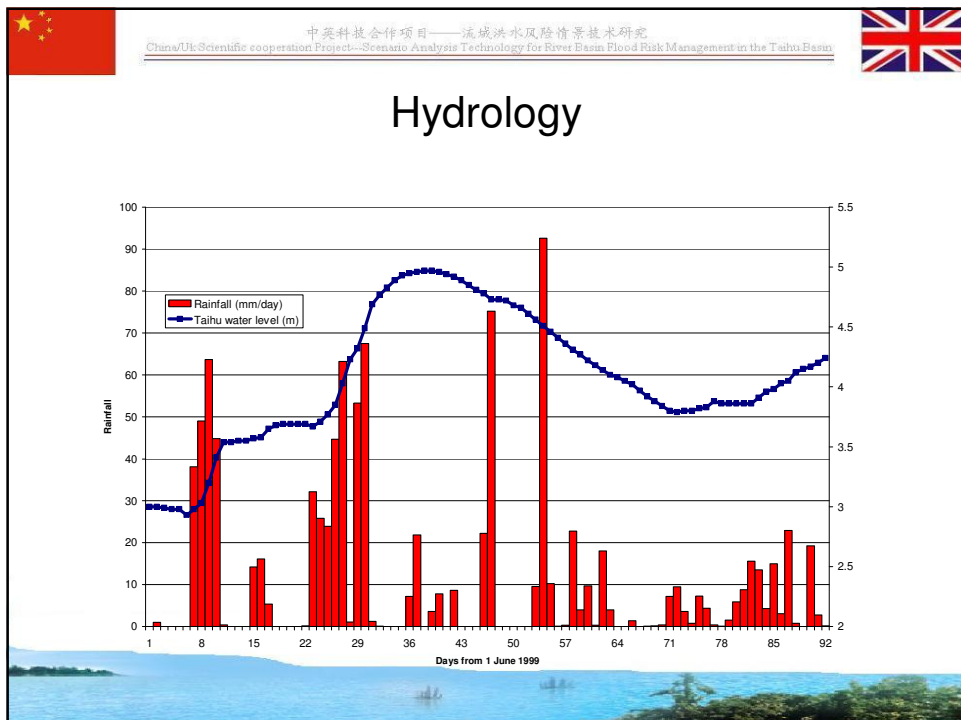
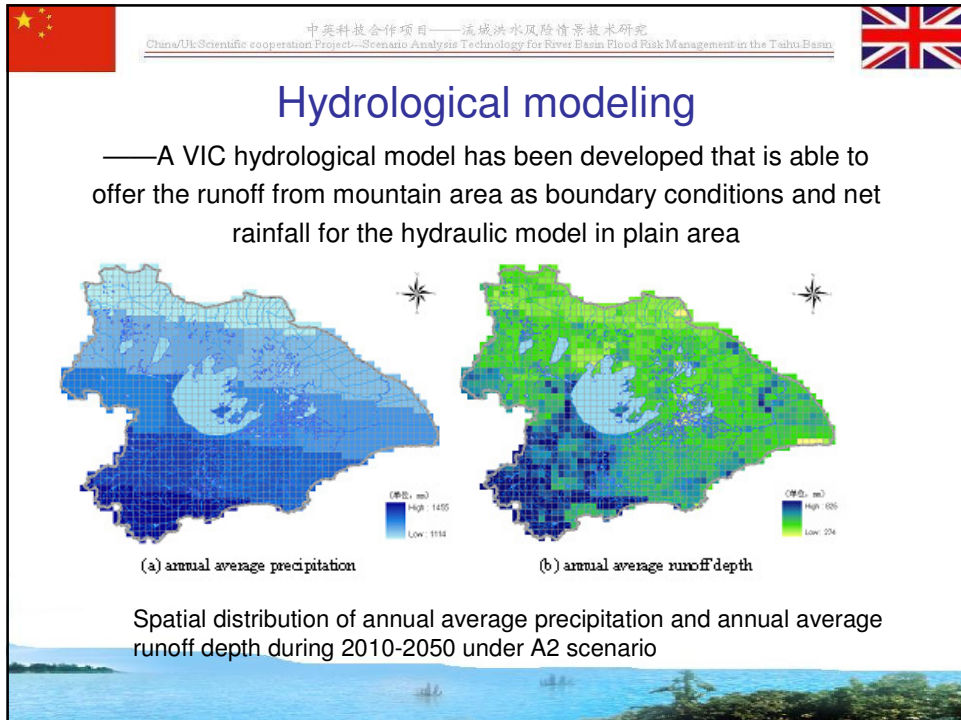
- Nottingham University
- Newcastle University
- Middlesex University
- University of East Anglia
- HR Wallingford
- CEH Wallingford
- Halcrow
- Met Office Hadley Centre

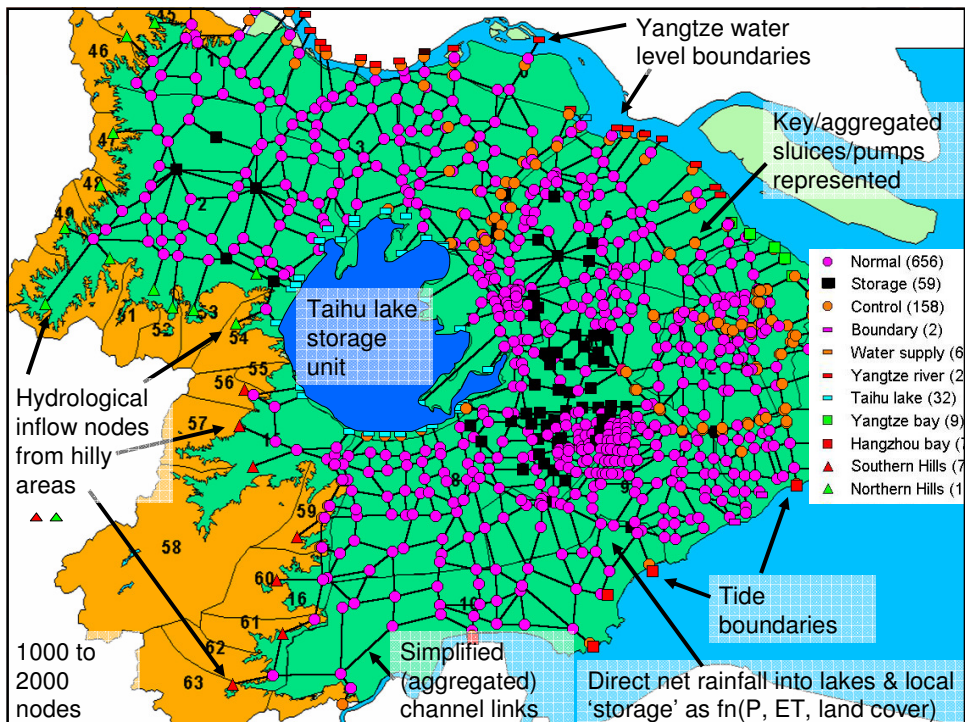
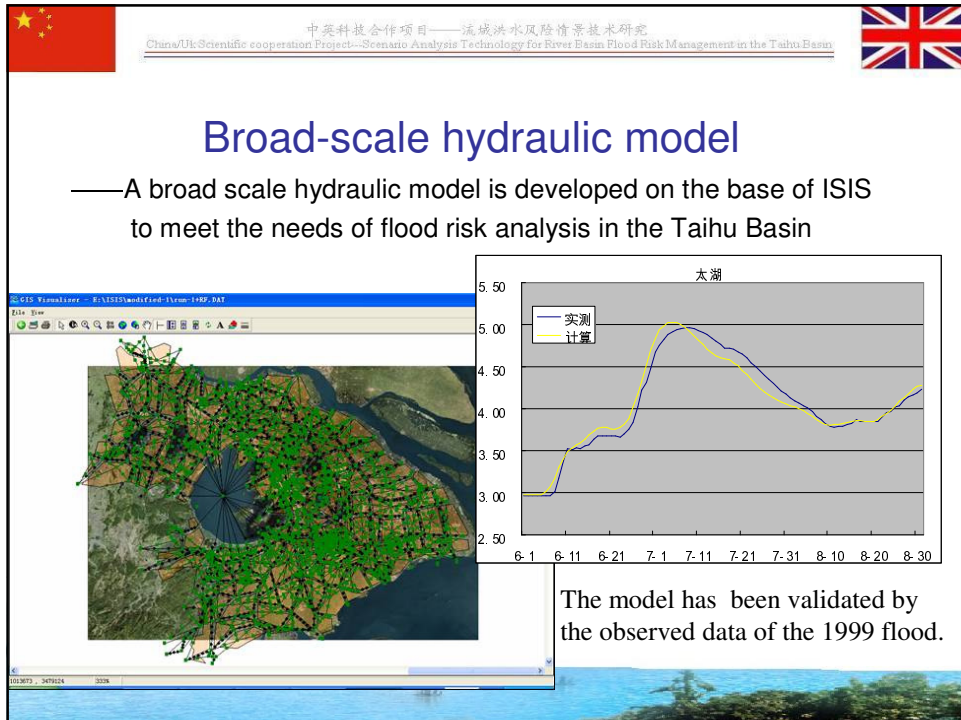


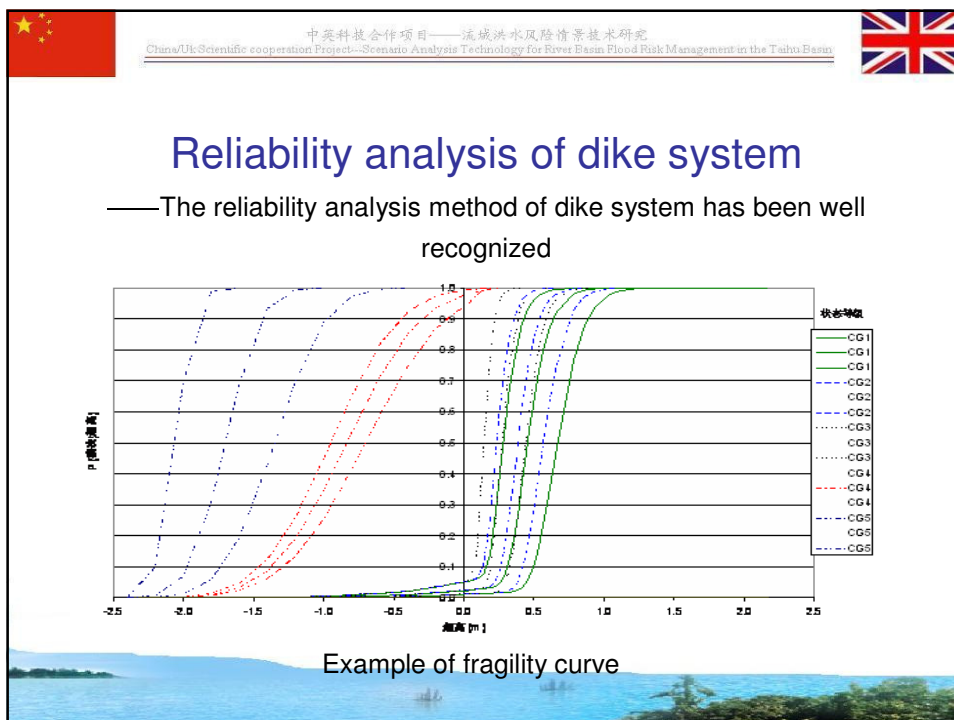
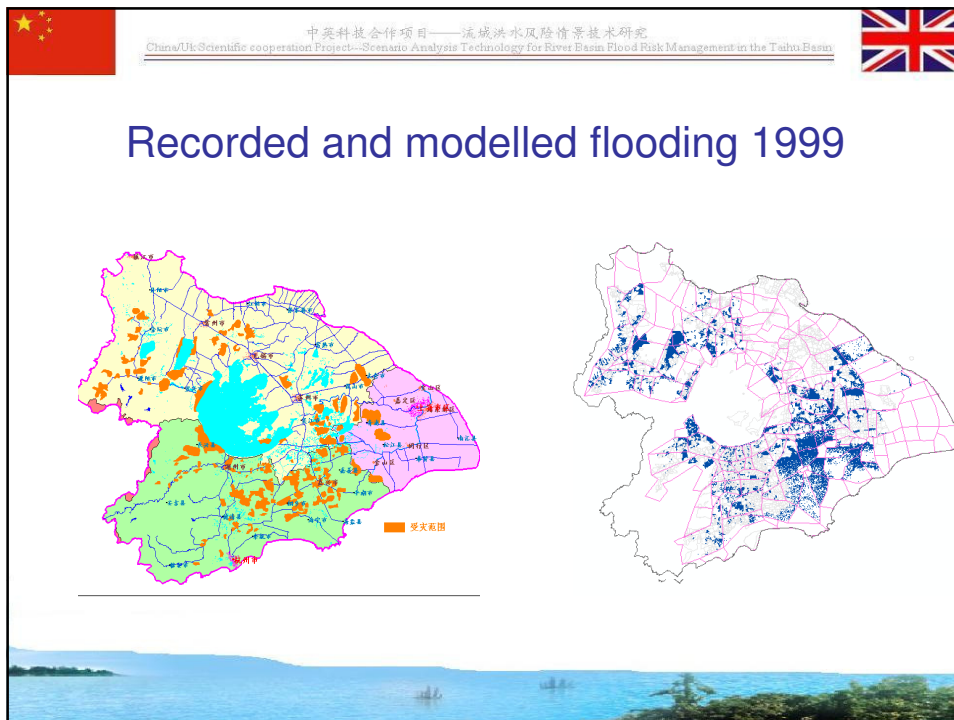
Technical framework

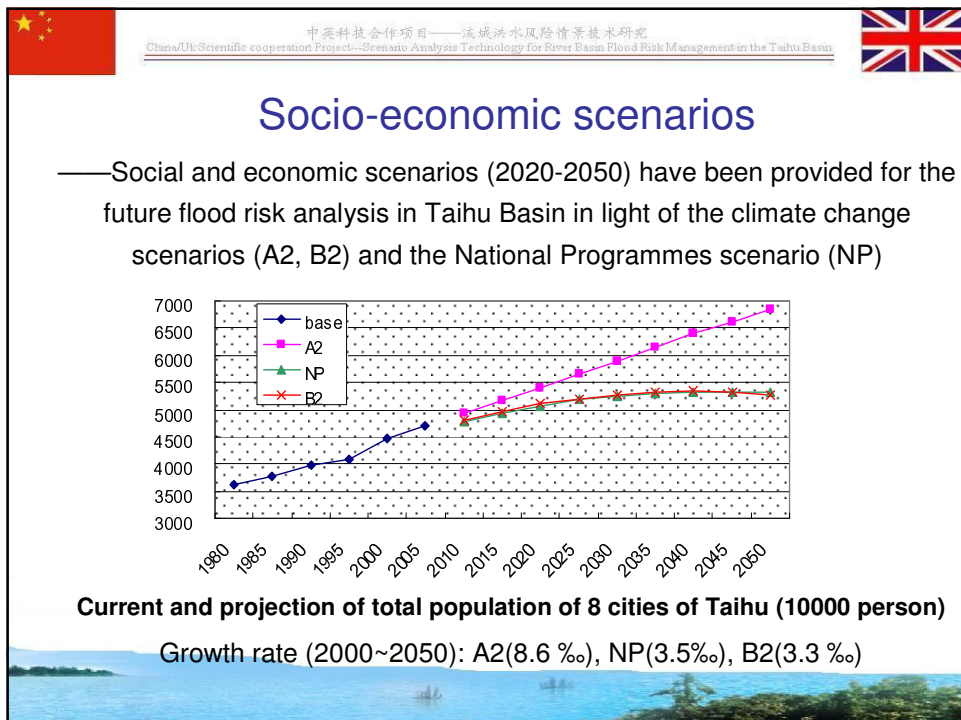
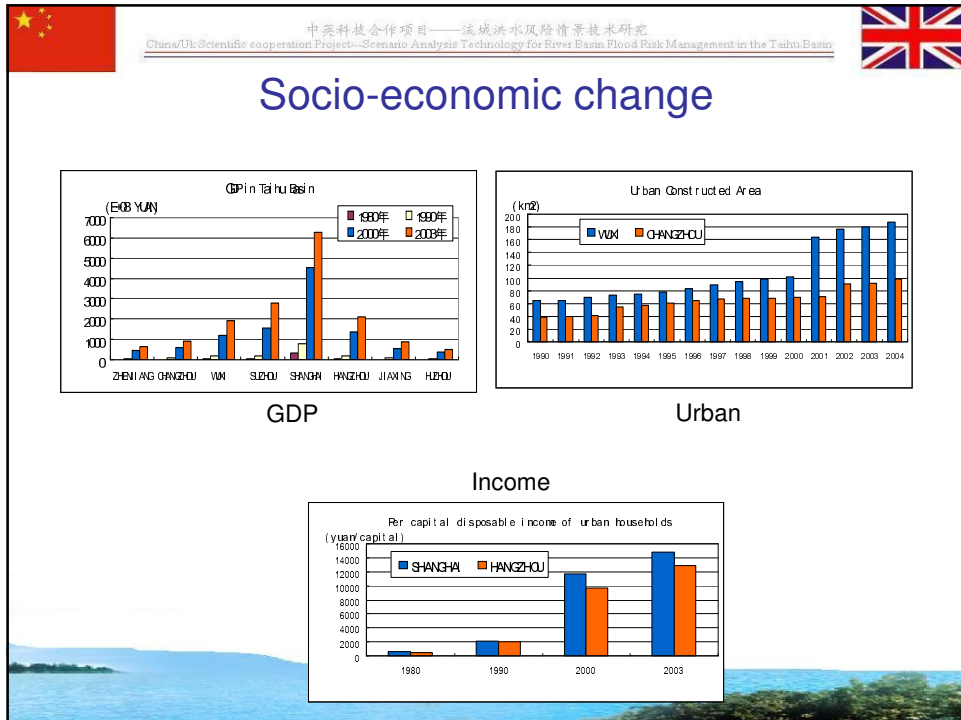


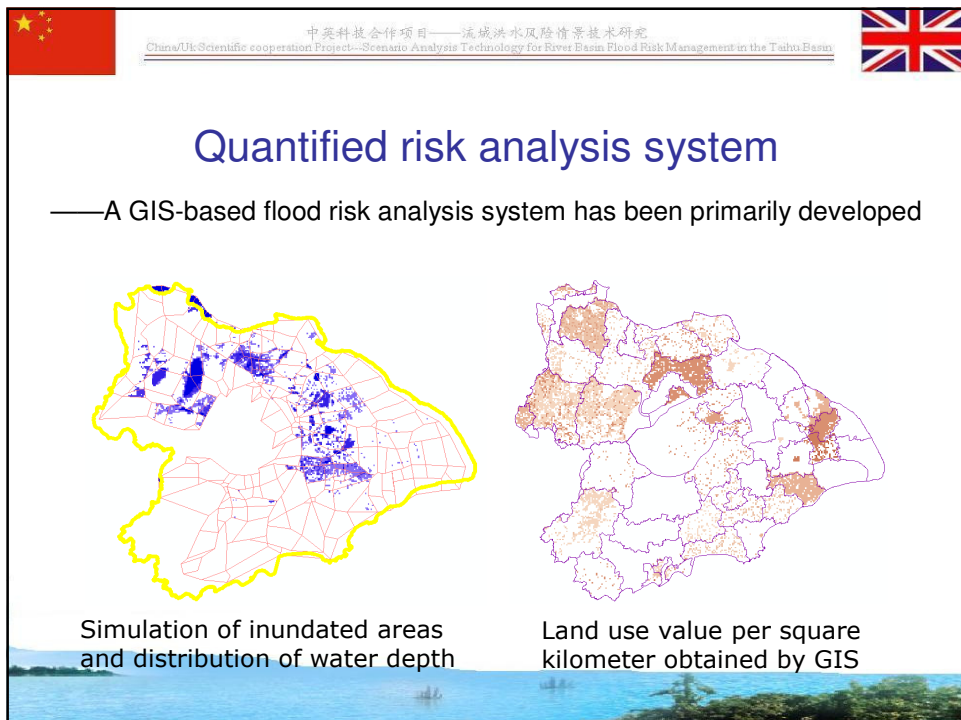
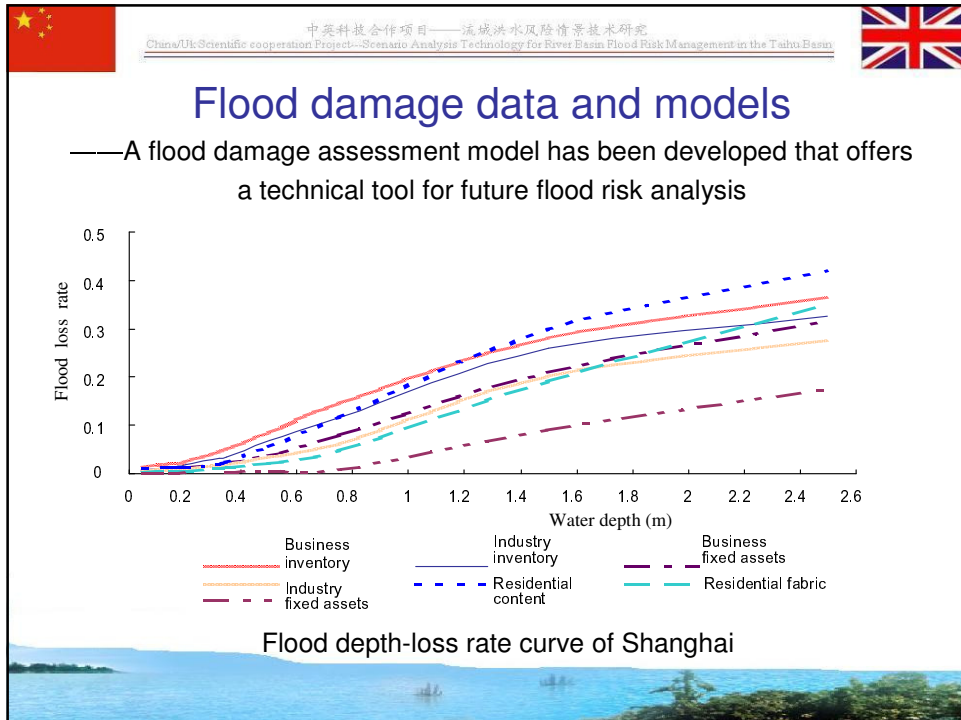


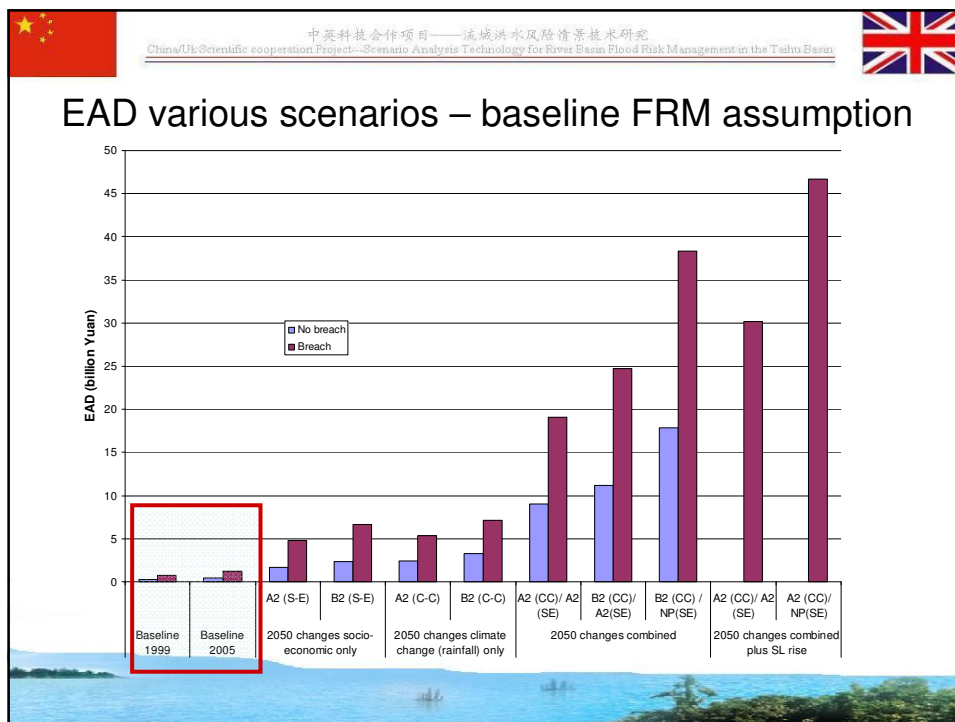












中英科技合作项目——流域洪水风险情景技术研究
China/UK Scientific cooperation Project—Scenario Analysis Technology for River Basin Flood Risk Management in the Taihu Basin

Adaptation strategy

- Using risk assessment to target investment in dike improvement and flood water management
- Accounting for a range of future changes and identifying robust solutions
- Promoting systems approaches that account for interactions and inter-dependencies
- Integrated water management, that addresses water quality and water resources at the same time as flood risk



敬请指正！
Thank you for your attention!

