



Met Office

Climate Service UK

Working together to prepare for tomorrow



Preparing for future challenges

- Managing our water
- Protecting our cities
- Feeding the world



Taking the planet into uncharted territory

- Do we know what levels of climate variability and change could be dangerous, where and for whom?
- Can we provide society with a 'road map' indicating what climate changes may be expected to occur, where, and with what implications?
- What should society do to adapt to climate variability and mitigate climate change to avoid its worst impacts?

Climate services:

A revolution in the application of climate science

- From mitigation to **mitigation** and **adaptation**
- Climate change to **climate change and climate variability**
- Global, century-scale scenarios to **regional predictions, days to decades ahead**
- Global climate to **characteristics of hazardous weather and climate extremes**
- From **few** to **many** customers – public, governments, business and industry
- **Operational delivery** – from IPCC Assessment Reports to regularly updated monitoring, forecasts, products and services

A sense of urgency...

Natural variations compounded by global warming may cause more damaging extremes



Pakistan flooding, 2010



Moscow heatwave, 2010



UK drought, 2012



Australian fires, 2012



Cold winters, UK, 2009, 2010

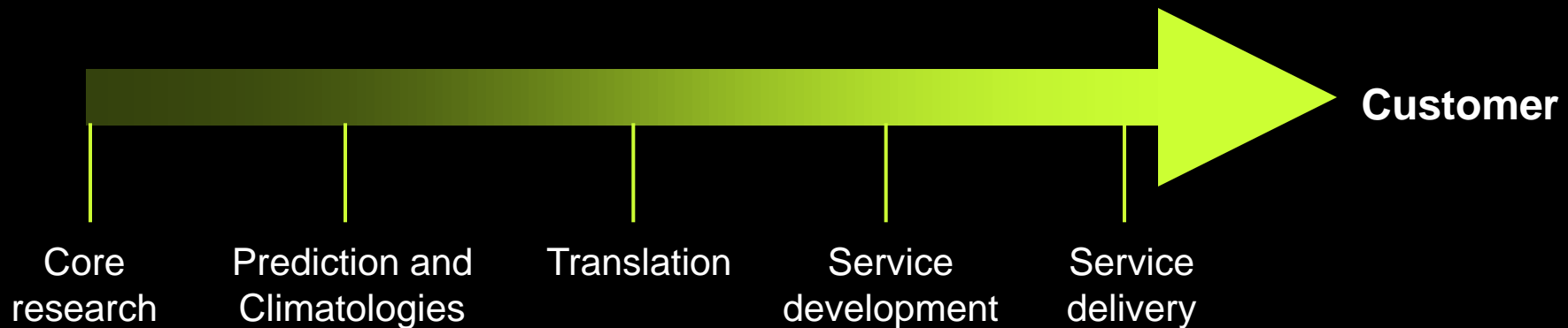


UK flooding, 2012

What is a Climate Service?

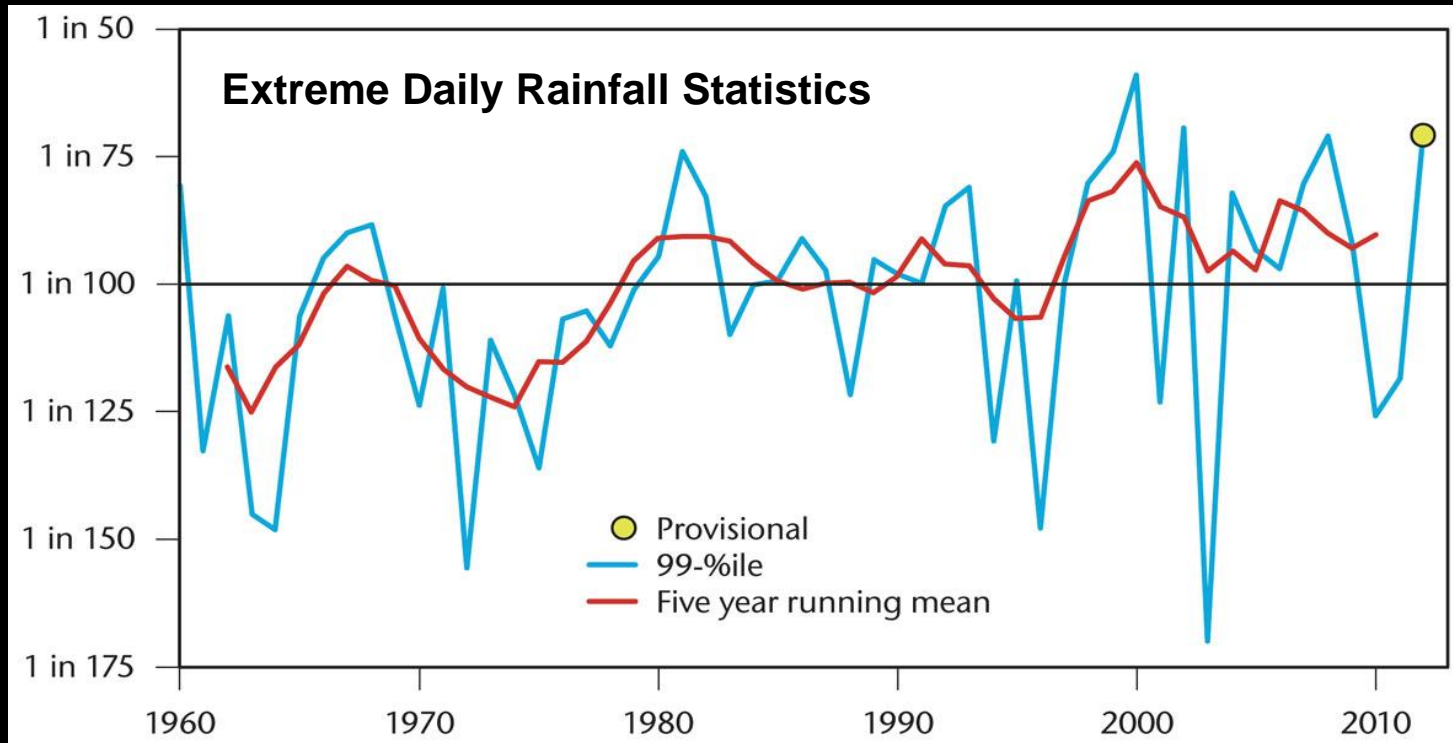
Climate science is now at the stage where it can provide global services to meet the adaptation needs of Government, businesses and the public, at regional and local levels.

From Science to Service: the end-to-end delivery chain



Climate information and tools

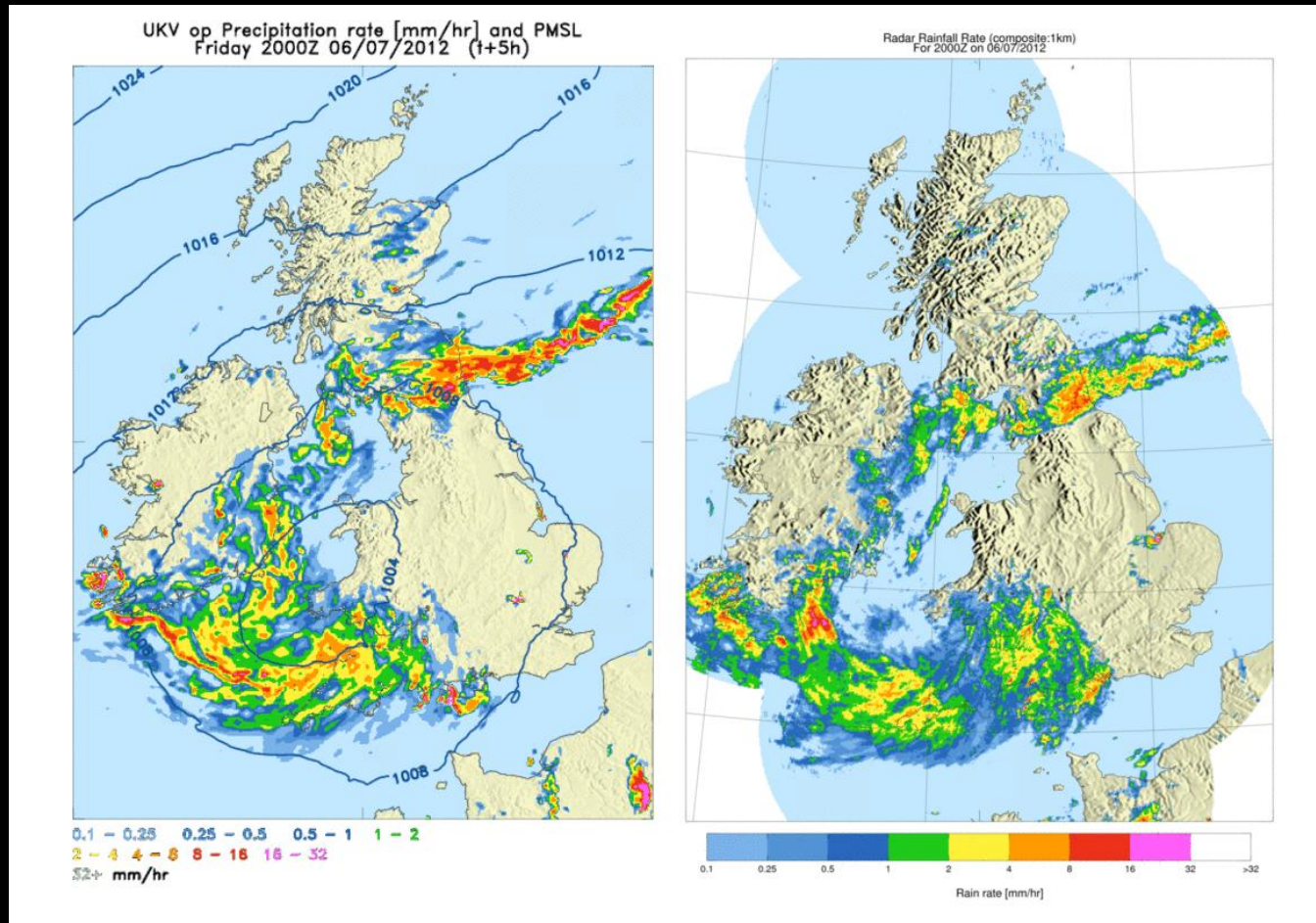
National Climate Information Centre:
putting the climate into context



Observations allow us to put the climate into context by monitoring trends. This climate information, provided as maps and graphics via the web, enables the provision of advice relevant to adaptation.

Science and technology of weather forecasting today can be used to assess the climate risks of tomorrow

Extreme rainfall forecast 6–7 July 2012



Building climate capacity abroad

Singapore Centre for Climate Research

Long-term partnership to develop Singapore's climate science, and inform adaptation strategies

- How high may sea level rise and how may the severity of storm surges change?



Next generation scientists
at the opening ceremony
for the Centre for Climate
Research Singapore



Climate Service UK

Unlocking the potential



Together with our global network of partners across governments, academia and business, we are uniquely placed to rise to the challenge of creating a Climate Service that addresses the needs of societies everywhere.



Professor Julia Slingo, OBE
Met Office Chief Scientist



Met Office
Hadley Centre

Thank you