omii-uk
www.omii.ac.uk

engage
Engaging research with e-Infrastructure

Using Research Software to ask new questions

Neil Chue Hong

Director, OMII-UK & Software Sustainability Institute

JISC Conference 2010

www.omii.ac.uk / www.software.ac.uk

RESEARCH COUNCILS UK

UNIVERSITY OF Southampton

MANCHESTER 1824

THE UNIVERSITY OF EDINBURGH

NGS

JISC

Engaging Researchers with e-Infrastructure

- Original goal:

  "Make high-end computational tools available to more researchers"

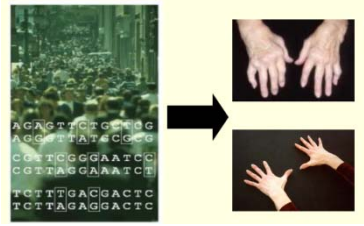
- *Trivial barriers often seem insurmountable*

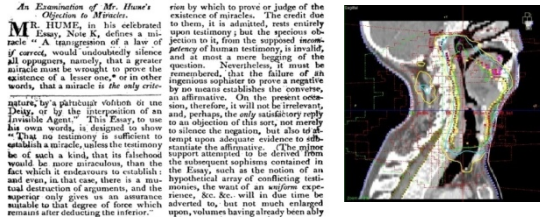
Engaging Research with e-Infrastructure

engage
Engaging research with e-Infrastructure

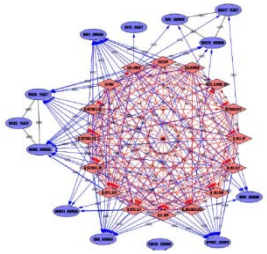
JISC

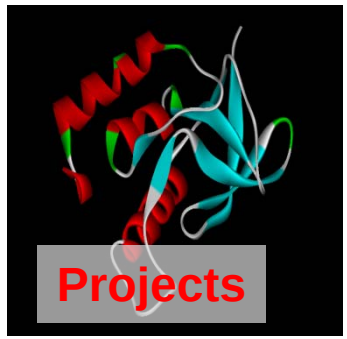
Interviews



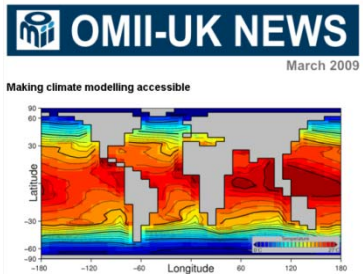


Wider deployment

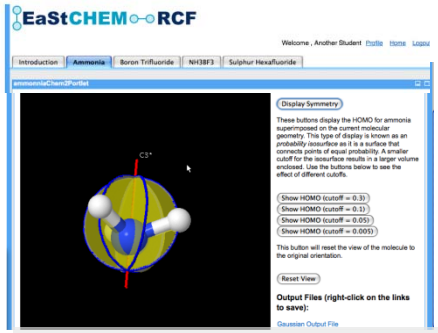




Projects

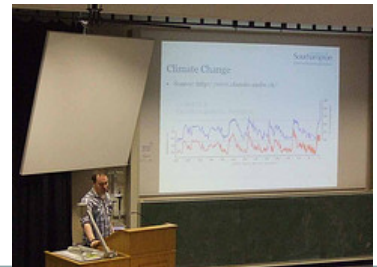


Dissemination



New requirements

Adoption



Engaging Researchers with e-Infrastructure

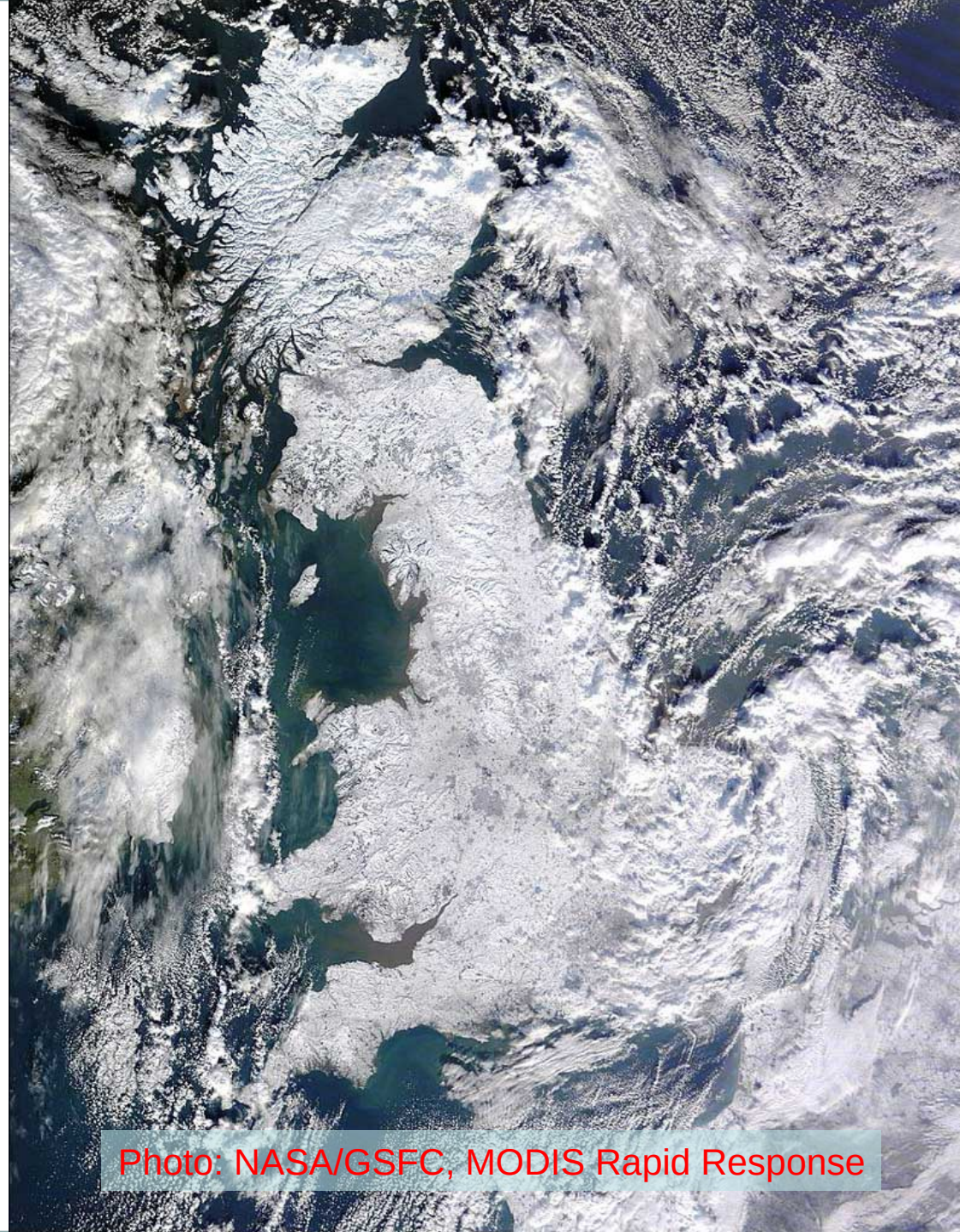
- Adjunct outcome:

  "Make high-end computational tools available to students"

- *Enable students to ask new questions*

Asking questions of the weather

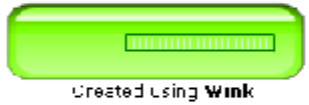
- How can students benefit from utilising the same approaches used in top end research?



Earth Systems Modelling

engage
Engaging research with e-Infrastructure

- Easier interface to state of the art earth systems models
- Desktop access



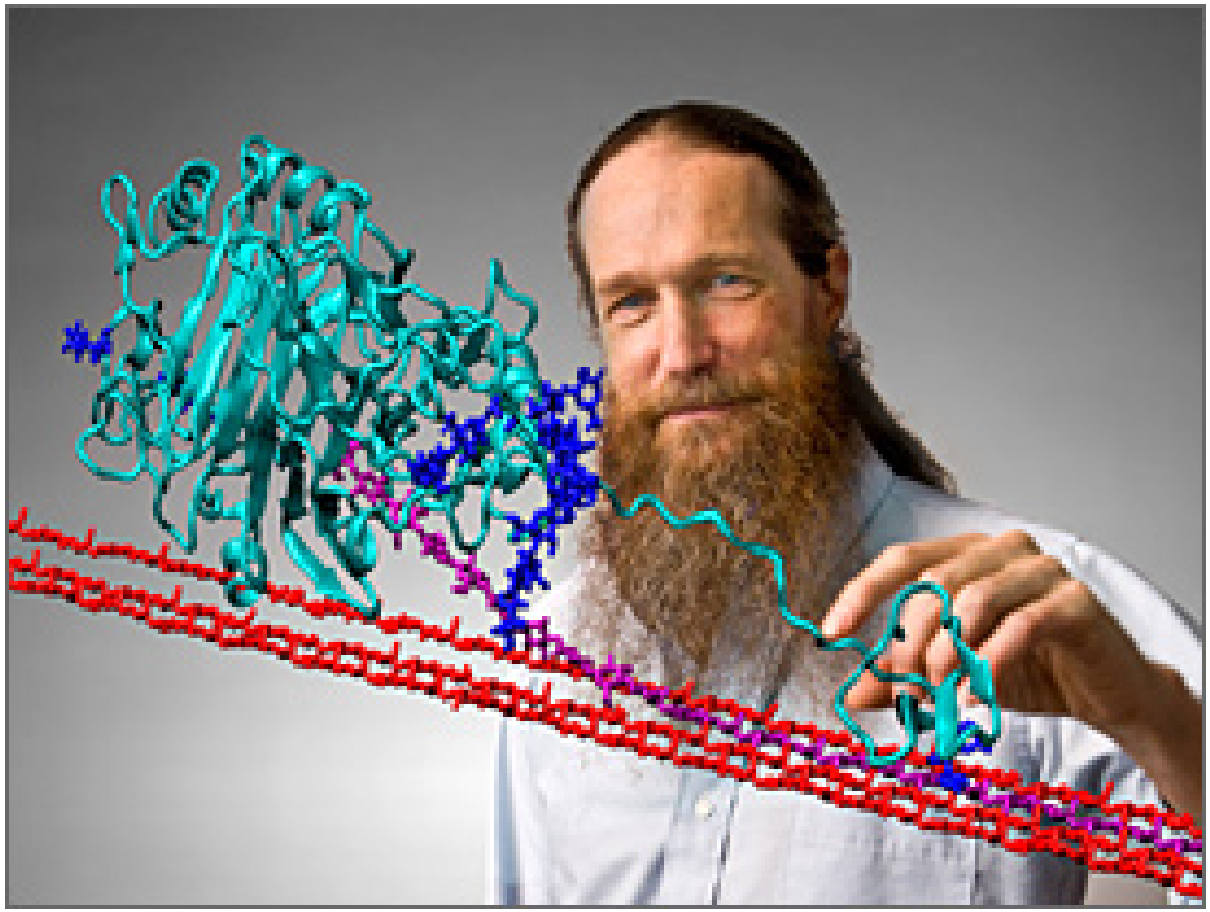
University of East Anglia

The Open University

Tim Lenton, Will Rawes
http://www.genie.ac.uk/

Walking with Dinosaurs?

engage
Engaging research with e-Infrastructure

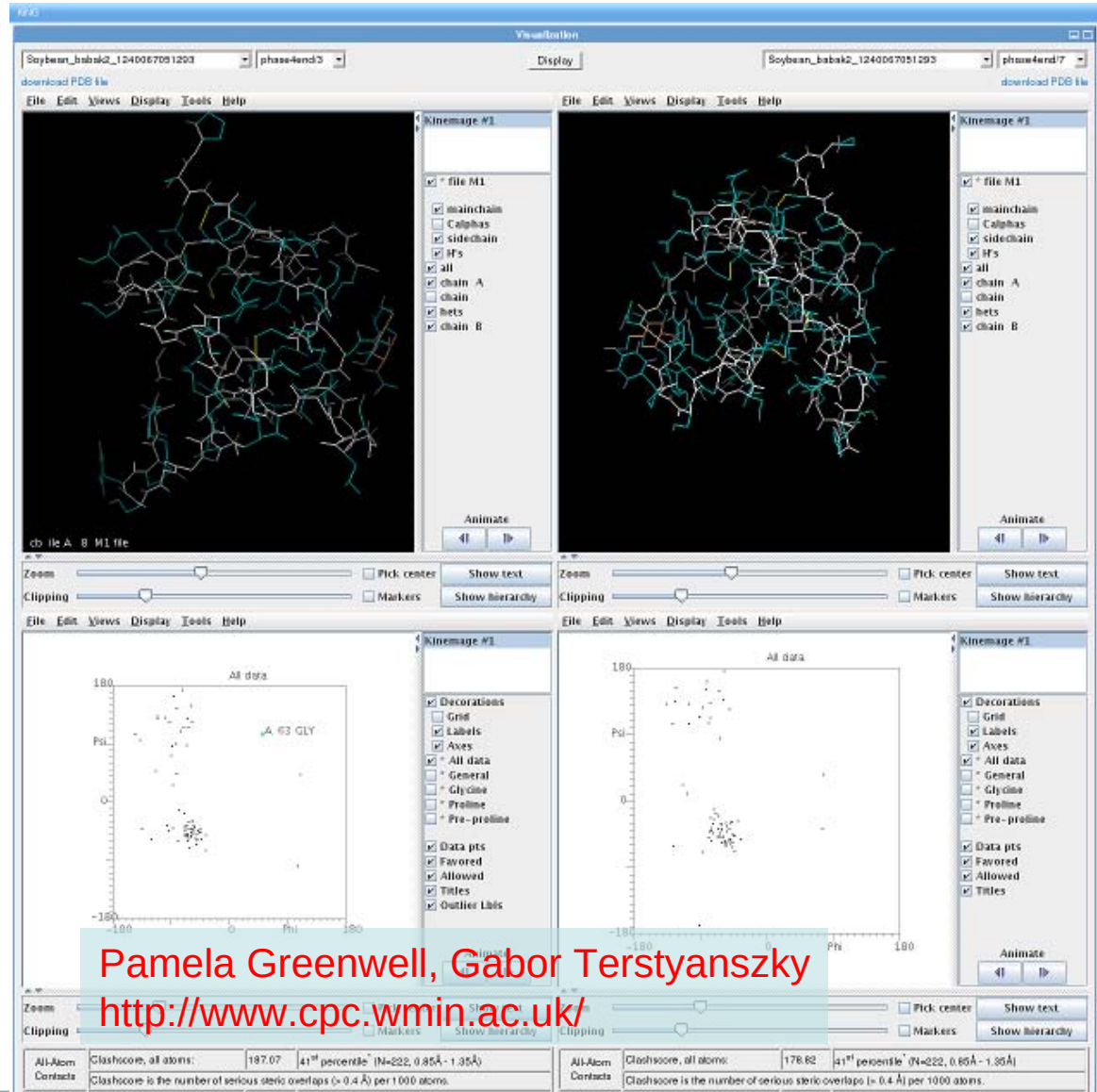


- Michael Crowley, NREL
- Simulation of Cel7A – plant decay
- Efficient biofuels

Protein Simulation

engage
Engaging research with e-Infrastructure

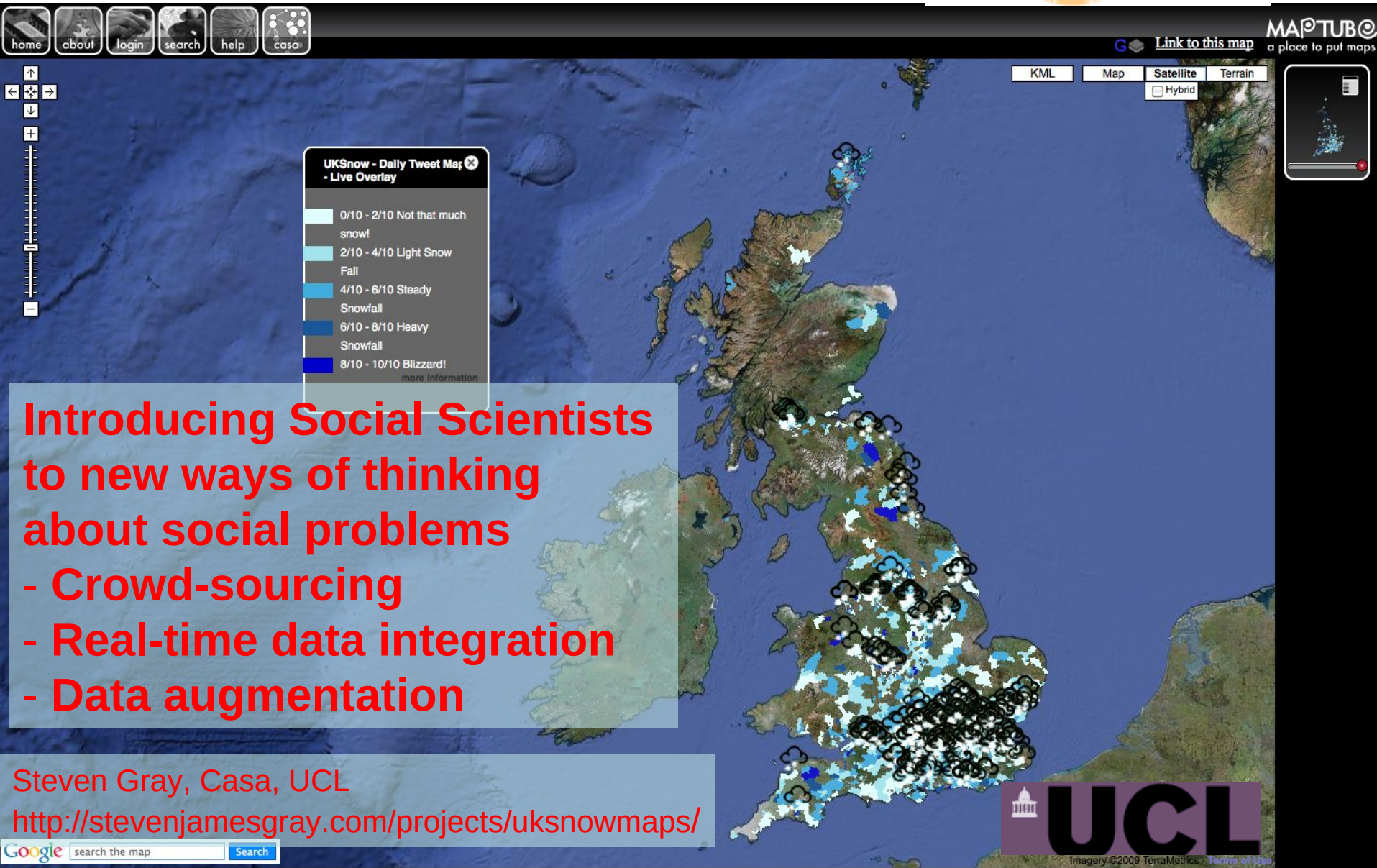
- Carbohydrate recognition
- Chaining several complex tools



Pamela Greenwell, Gábor Terstyanszky
http://www.cpc.wmin.ac.uk/

University of Westminster

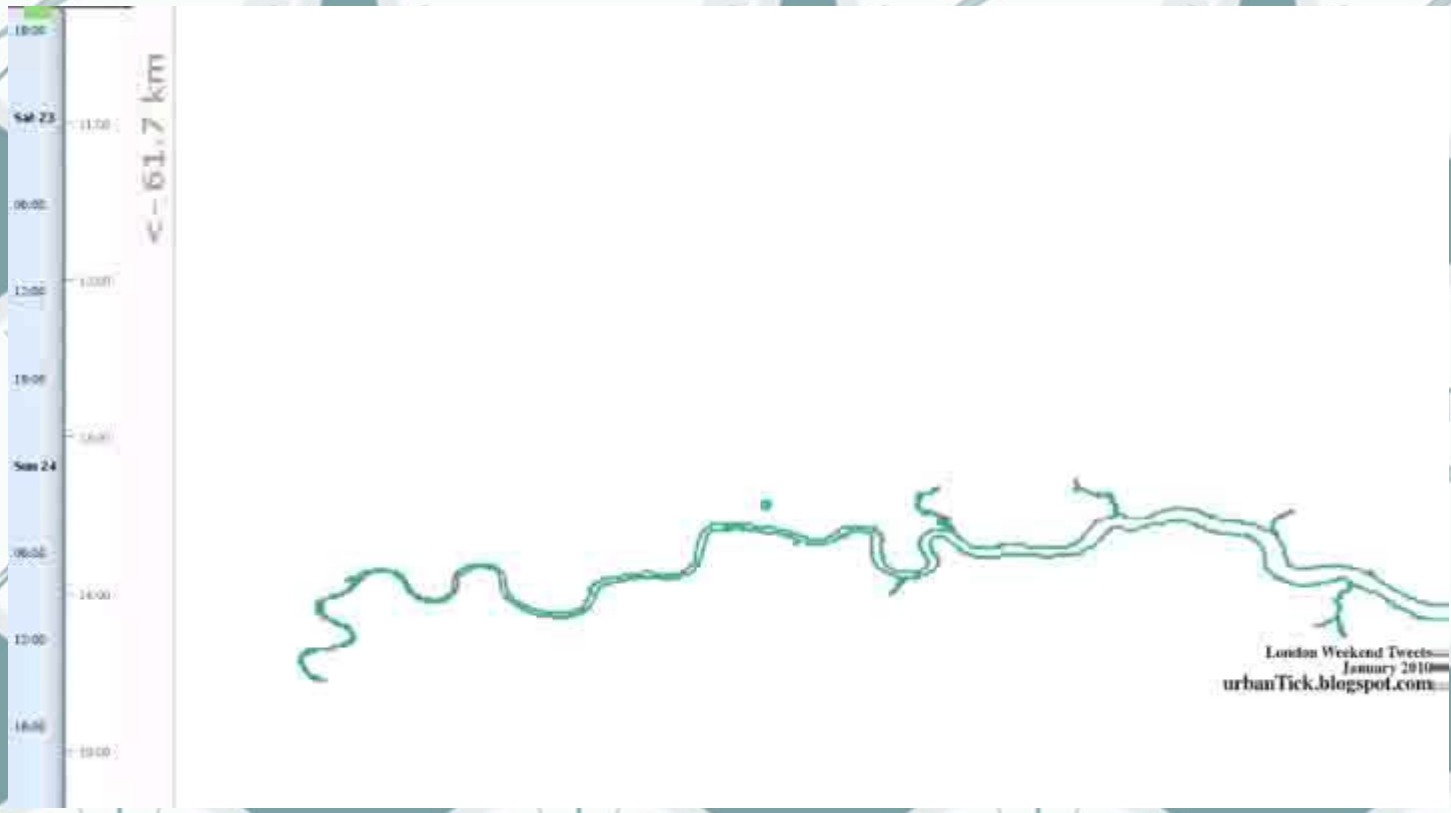
NeISS: UKSnow-MapTube



Tweet-o-Meter

NeISS: Tweet-o-Meter

The power of data is what you can do with it



Steven Gray, Casa, UCL
http://www.casa.ucl.ac.uk/tom/

Research Computing in the future

engage
Engaging research with e-Infrastructure

- Researcher-led, student-driven simulation

- Make leading research available through the right technology
  - Accurate
  - Appealing
  - Appropriate
  - Accessible

omii-uk
www.omii.ac.uk