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NCEO – Innovation In Earth Observation Services

"Zest for Enlightenment"

View From The City

Professor Michael Mainelli

michael_mainelli@zyen.com

Z/Yen Group Limited
Risk/Reward Managers
5-7 St Helen's Place
London EC3A 6AU
United Kingdom
tel: +44 (20) 7562-9562





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Geodat&MundoCart 1979-1984





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Research

- ◆ [Finance, Biodiversity and Managed Ecosystems: Where's the Data?](#), Chiara von Gunten and Dr Malcolm Cooper, 2011
- ◆ [Finance And Water: Where's The Data?](#), Leonor Fishman and Dr Malcom Cooper, 2010
- ◆ [Finance and Forestry: Where's the Data?](#), Stephanie Rochford and Dr Malcolm Cooper, 2010

Natural Environment Research Council, Financial Services Knowledge Transfer Network and Z/Yen Group



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Forests

Carbon balance accounting, carbon tracking and quantification of carbon sources, including that within:

- ◆ above and below ground biomass
- ◆ litter
- ◆ dead wood
- ◆ soil organic matter

Robust, regular, standardised measurements to develop:

- ◆ forest bonds
- ◆ expansion of the carbon market
- ◆ forest indices
- ◆ support for sustainable forestry



Image courtesy of IFAW/van Dorp



Water

WATER DATA	Agriculture and Fishery Use	Hydropower	Industrial Use	Water Industry, i.e. supply and sewerage
Precipitation	✓	✓		✓
Water Rights	✓	✓	✓	✓
Flow rates	✓	✓	✓	✓
Flooding	✓	✓	✓	✓
Groundwater abstraction	✓		✓	✓
Upstream abstraction	✓	✓	✓	✓
Desalination volumes	✓		✓	✓
Quality	✓		✓	✓
Evapo-transpiration rates	✓	✓		✓
Effluent discharge	✓		✓	✓





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Biodiversity & Ecosystem Services

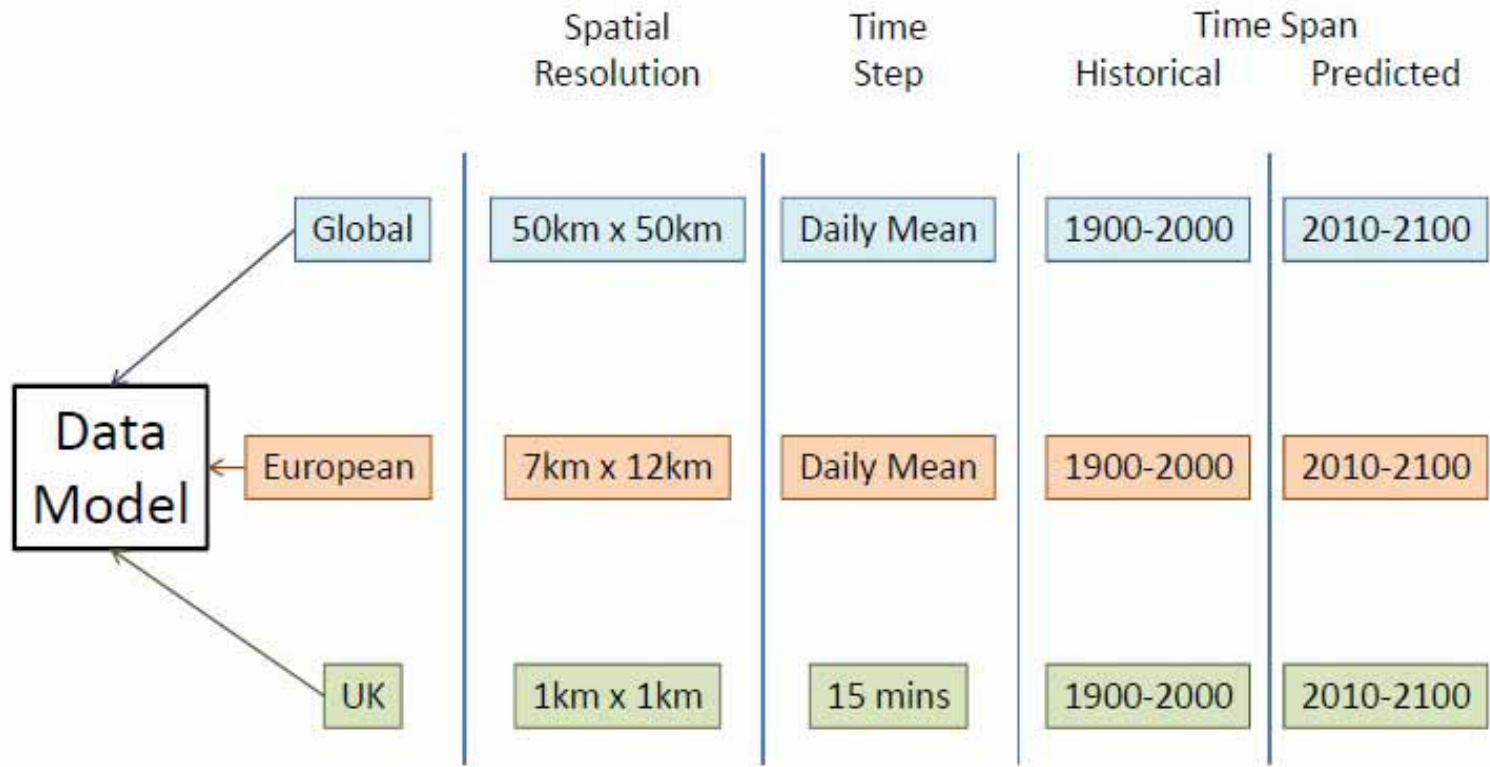
- ◆ Markets for BES – currently small in size and high degree of uncertainty
- ◆ Confusion between “managed” (transformed by human activity) and “unmanaged” (pristine)
- ◆ Tied to land
- ◆ Need for regulatory frameworks
- ◆ Need for metrics and valuation methods
- ◆ Speculation – habitat/biodiversity offsets may be an initial big market





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Global Snapshot



Source: Neil Runnalls, CEH



Opinion

- ◆ Financial services traders and guarantors need:
 - global, implying broad but shallow
 - regular, implying service
 - reliable, implying comparability over accuracy

- ◆ Financial services investors and corporations need:
 - local, project periodic and accurate



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Active Discussion

«Il y a des fleurs partout pour qui veut bien les voir.»

Henri Matisse (1869-1954)



www.longfinance.net



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Thank you...



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