National Centre for Atmospheric Science
NATURAL ENVIRONMENT RESEARCH COUNCIL

Meteorology for Energy – Part 3

ICEM, June 2015

Lecturers:

Sue-Ellen Haupt (NCAR),

David Richardson (ECMWF),

Carlo Buonotempo (Met Office)

Emma Suckling (University of Reading/NCAS)

Chair: David Brayshaw (University of Reading/NCAS)

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Discussion

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Time horizon

Hours	1 day	1 week	1 month	1 year	1 decade
Nowcasting or statistical methods (e.g., ANN, AR^N)	Classic NWP	Medium range and subseasonal NWP (ensembles essential)	Seasonal forecasting (some slower components, initialisation)	Decadal forecasts (initialisation of slower components crucial)	Climate change (scenario dependence)

Morning: "Weather – hours to months"

- **Short range weather forecasting (hours to days)** *Sue-Ellen Haupt*
- **Longer range weather forecasting (several days to months)** *David Richardson*

Afternoon: "Climate – months to decades"

- **Understanding seasonal-to-decadal climate predictability** *Emma Suckling*
- **Global Climate Services** *Carlo Buonotempo*

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Discussion (groups)

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- ~4 groups, ~5-10 people
- Chairs: Sue, David, Emma and Carlo
- **Theme:** Towards better use of meteorological tools/information in the energy sector
- Questions:
  1. What aspects of weather/climate concern you most in your work?
  2. Which aspects of the talks surprised you most today?
  3. Based on what you've heard today, do you think there are any areas of meteorological tools/knowledge/data that might be put to better use in your sector? What are they and why?
  4. What do you think are the main barriers to greater uptake of meteorological forecasts and information - especially the longer range climate forecasts - in the energy sector? How do you think those barriers might be overcome?
- **30-40 mins discussion, reconvene here at 1645.**
- Appoint rapporteur: reconvene and give 2-3 min summary at end of session
- Collecting copies of rapporteur's notes: based on results may seek to compile thoughts in the ICEM special issue

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Discussion (panel)

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- Panel: Sue, David, Emma and Carlo
- **Theme:** Towards better use of meteorological tools/information in the energy sector
- 5 min thoughts from each panelist
- Questions to consider (audience):
  1. What aspects of weather/climate concern you most in your work?
  2. Which aspects of the talks surprised you most today?
  3. Based on what you've heard today, do you think there are any areas of meteorological tools/knowledge/data that might be put to better use in your sector? What are they and why?
  4. What do you think are the main barriers to greater uptake of meteorological forecasts and information - especially the longer range climate forecasts - in the energy sector? How do you think those barriers might be overcome?
- **40 mins discussion**
- Rapporteur's notes: based on results may seek to compile thoughts in the ICEM special issue

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