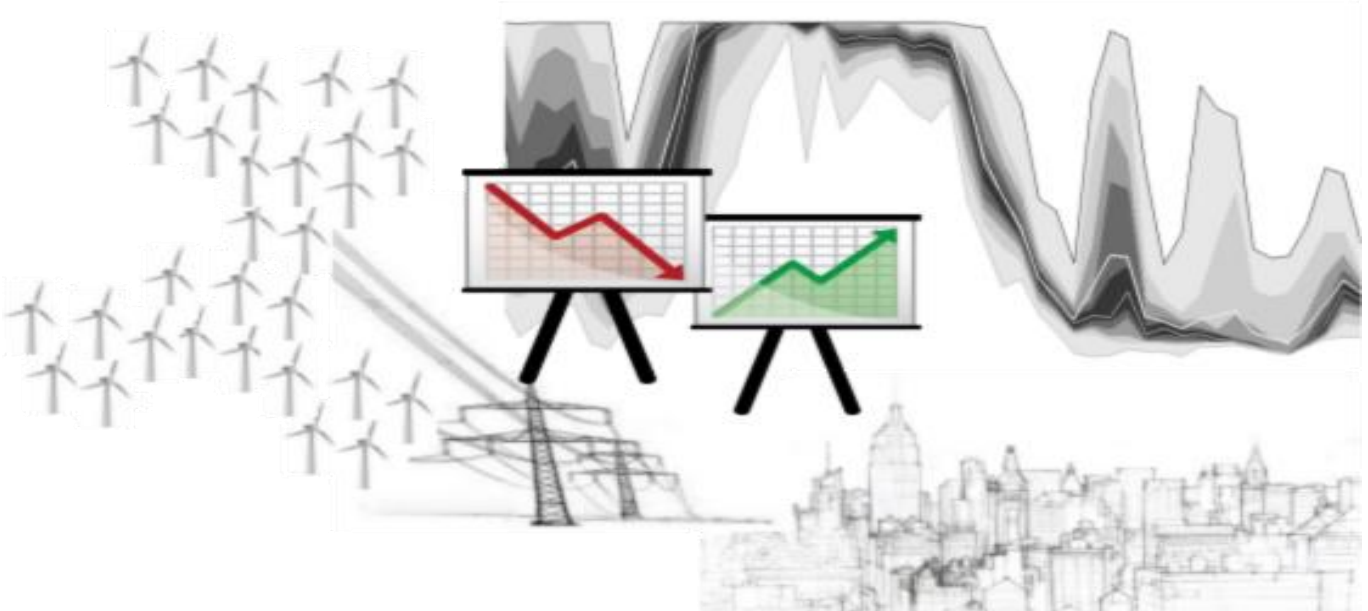
IEA Wind Task 51
"Forecasting for the Weather-driven Energy System" Workshop

Open Space Discussion

Rutgers University
New Brunswick, NJ
29th October 2024



IEA Task 51 Open Space Session

Time	Activity
3:30 - 3:40	Introduction to the OpenSpace Principle and Topics
3:40 – 4:30	OpenSpace discussions in **4 groups** - participants rotate free among the groups
4:30 – 4:50	Group leaders provide summary of each group to the full group; full group discussion

Open Space Workshop: How We Run It…

Principle	Meaning
Whoever comes is the right people	CHANGE group whenever you think you have said what you wanted or you are no longer interested in the discussion
Law of two feet	You can contribute on any discussion, use this opportunity!
When it's over, it's over	We stop after 50 minutes…use the time to tell about your ideas!
Whenever it starts it starts	Whenever you come to a discussion it is OK to engage and participate
Whatever happens is the only thing that could have happened	No matter who and what is discussed regarding the topic, it's good. Leave if you no longer like the discussion!

Today's Open Space Topics

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Topic #	Title	Facilitator
1	**Current and Future State of the Art**	**Justin Sharp**
2	**Matching Applications and Evaluation**	**Victoria Rojo**
3	**Standards for Energy Data Collection, Assessment and Access**	**Caroline Draxl**
4	**Topic Brainstorming for Extreme Power System Events Workshop to be held in Spring 2025**	**John Zack**

Starting Questions for Topic 1:
Current and Future State of the Art

What is considered as the current “gold standard”?

What are the gaps that are present? Which need to be most urgently fixed?

What is most important, an ongoing long time series with well understood accuracy characteristics, or a more accurate short dataset deploying the very latest research methods?

What are the current overarching science and logistic issues?

What approach to future dataset production might most effectively address these issues?

Prioritization: what are the most urgent issues to fix?

Starting Questions for Topic 2:
Matching Applications and Evaluation

- What applications of weather data are users currently using and why?
- How do users select datasets for their applications?
- How do they evaluate the quality of dataset for their applications
- Dataset Comparison/Evaluation:
- How is quality control performed for weather dataset inputs into their processes?
- How should the relative quality/suitability of different datasets be assessed?
- No doubt this should be use-case dependent - but how do we link the use cases with the key attributes and the metrics to assess their quality?
- How would we define validation metrics?

Starting Questions for Topic 3: Standards and Rules for Energy Data Collection, Assessment, Access:

- Should there be standards for some dataset attributes: data formats, period of record, scope of variables etc.?
- Should there be some kind of waiver before downloading data that says the user is responsible for making reasonable efforts to educate themselves on data accuracy and applicability before download?
- Should dataset use be “certified” as fit-for-purpose?

Starting Questions for Topic 4:
Topic Brainstorming for Extreme Power System Events Workshop to be held in Spring 2025

- What is the definition of “weather-driven extreme power system events”?
- How should the impact of these events be measured?
- How should forecasts of these events be evaluated?
- How is forecasting for extreme events different from routine forecasting? Are there different forecasting tools needed?