

reliability:
confidence in
getting correct
data at
expected times

availability:
fixed
update
time

consistency/
same data
same value,
DST
alignments

9h00-9h30
Victor

Introduction

Wifi

Username: victor.lemaire@elia.be1

Password: ymp1UW6q

MIRO

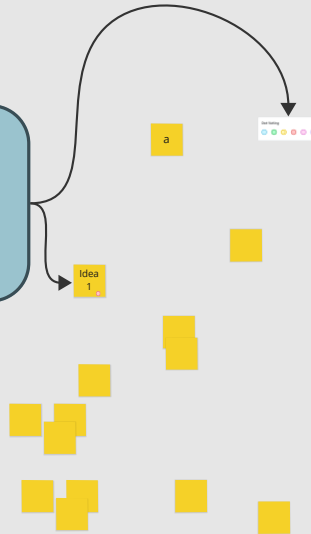
https://miro.com/app/board/uXjVLITu2bo=

Password: Elia2024

--> Signed in with your MIRO account is always a plus (we will see your real name)

Rules:

- One (1) idea per post-it
- Max 2 ideas per person
- Use dot-vote for ideas you like

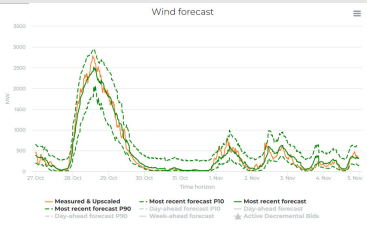


Today's meeting expectations



Elia provides three short-term forecasts

Week ahead
Day ahead (11 AM and 6 PM)
Most Recent ("Intraday")



Yes, continuously	10
Yes, daily	8
Yes, sometimes	6
No but I am considering it	7



- One (1) idea per post-it
- Max 2 ideas per person
- Use dot-vote for ideas you like



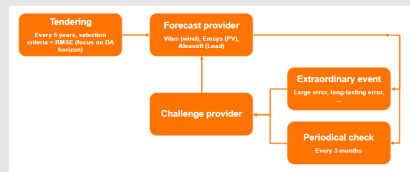
For which process? Tool ? Analysis? For which decision-taking?



Type of data, format, availability, granularity, quality, ..

[illegible]

Data quality



Tendering of forecasts

- All forecasts are created by external parties
- Tendering happens ~every 5 year
 - o 3-month live phase to determine best provider (main evaluation criteria: RMSE DA forecast)
 - o During these years continuous monitoring of performance forecasts
 - o Challenge specific events
- Competitive environment
 - o Confidence to have best-in-market forecast for current metrics
 - o Creation of forecasts black box due to IP
- Wind: Vitec
- Solar production: Emys
- Total load: Aleasoft

Monitoring forecasts

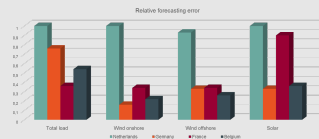
1. Wind

- No correlation between time of day and production
- All timestamps equally important
- Metrics to monitor
 1. Root Mean Square Error
 2. Bias
 3. Width of the confidence interval
 4. Accuracy of confidence interval
- For all time horizons

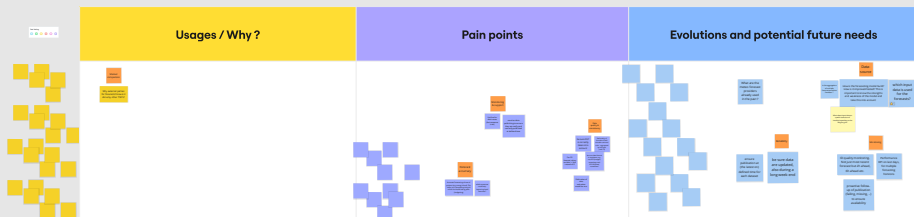
2. Same for total load

3. Solar

- Same metrics useful but...
- Production and time of day highly correlated
 - Same relative error at noon more important than in the morning
- Additional metrics quantifying the maximum error must be introduced
1. Max error per day
 2. Direction of max error per day (over/underestimation)
 3. Accuracy of confidence intervals at solar peak

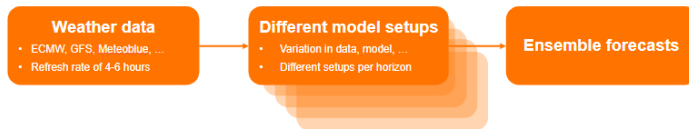


- Rules:
- One (1) idea per post-it
 - Max 2 ideas per person
 - Use dot-vote for ideas you like



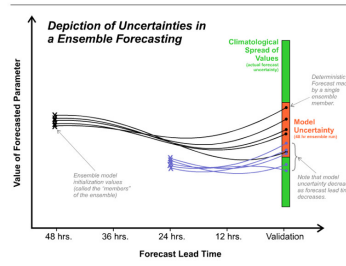
Uncertainty management

Setup forecasts



Ensemble forecasting

- Different models trained
 - Fed with different weather models
- Models yield forecasts for desired time window(s)
- P10 and P90 values are based on this ensemble of forecasts
 - If all align well, small confidence bands
 - If some react strongly on certain parameters, wide bands
 - Dynamical bands, reflecting uncertainty
- Point forecast = P50 or mean



Probabilistic approaches

- Trend towards more probabilistic approaches
 - Cost optimization
 - "Risk management"
 - Show uncertainty of forecasts

→ RES penetration makes that decisions cannot simply be done on the point forecast anymore

- Combine models to have more robust forecast

Rules:

- One (1) idea per post-it
- Max 2 ideas per person
- Use dot-vote for ideas you like



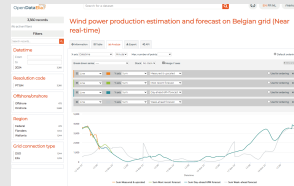
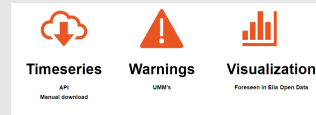
Usages / Why ?

- insight in renewable production in the surrounding countries
- What is the cause of errors in the forecasting model? Difference between weather forecast and actual weather? Other factors? Which factors have the biggest influence in the forecasting model? (dependent on parameter? Part of day? Humidity? etc.)
- Yes for ID risk management and optimization towards portfolio balancing
- Can you clarify again how the p10 and p90 is calculated? Is it using the 10th and 90th percentile from the ensemble for some other specific method?

Pain points

- when combining several data, you have to make an assumption on the distribution to be able to estimate the P10/P90 of the combined result.
- for more meaning of p10 and p90 calculations
- lack of applying

Data accessibility and visualization



New release version information

Operating System: **See the Java release on** 

Platform and architecture:  **Release version:**  **Java SE:** 

ADD NEW **DELETE** **CREATE FILTER** **SEARCH**

Platform and architecture 

Operating System	Architecture	Download Link	Download Size	Download Date	Download Status
Windows	x64	JRE-11.0.4.10-windows-x64.exe	100 MB	10/10/2018	  
Linux	x64	JRE-11.0.4.10-linux-x64.rpm	100 MB	10/10/2018	  
Linux	x64	JRE-11.0.4.10-linux-x64.tar.gz	100 MB	10/10/2018	  
Linux	x64	JRE-11.0.4.10-linux-x64.tar.gz	100 MB	10/10/2018	  

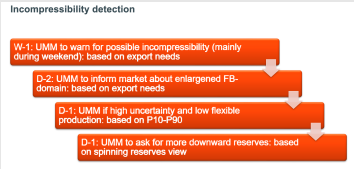
- One (1) idea per post-it
- Max 2 ideas per person
- Use dot-vote for ideas you like



Focus on incompressibility risk detection

- High risk of incompressibility detected throughout summer 2024
- After events begin April, new incompressibility system set up by Elia
- UMMs used to send out warnings to market parties

Rules:
- One (1) idea per post-it
- Max 2 ideas per person
- Use dot-vote for ideas you like



	Usages / Why ?	Pain points	Evolutions and potential future needs
	<div>Not yet used</div> <div>inform about specific market situations AND data provision problems</div> <div>UMM to warn about already happened redistribution or bids down or up</div> <div>UMMs used via RSS in Outlook</div>		

Conclusion - next steps - follow up

- Today was about need characterization, we will keep you informed on planned evolutions/solutions on our side in WG ES/Grid.
- For remaining open points, always possible to contact KAM and Victor le Maire.
- You can still place some post-it below if you still have topic you wish to address.

Open Meeting

about UMM/RSS:
sorry, onze leden
spreken
Nederlands, so
English is a bit
annoying

Nice that this
meeting has
been
organized

❤️ 2 🍌 1 🍌 2

Nice initiative
from Elia
side.

❤️ 1 🍌 1 🍌 2

I presume feed-
back/follow-up
on the
discussed points
will be provided

Just did a quick calculation, for the total
load past 10 years, the chance of
exceeding p10 and p90 is quite
inconsistent, and deviates from 10%.
Should probably look into it a bit more

🍌 2

Great initiative to
share insights with
market partners and
to get input to
improve future way
of working

❤️ 1 🍌 2