

Advisory Board Meeting #4 Summary of Results July 2025

Held online on 2nd

Present:

Board members: Amy McGovern, Saied Vaghefi, Andrea Manrique Sunen, Gabriela Aznar

ECWMF: Olga Loegel, Joshua Talib, Jörn Hoffmann

Apologies: Frederic Vitart (ECMWF)

Board Meeting #4 Agenda:

1. Registrants' overview
2. Testing Period progress
3. Reminder on results display
4. Competition outputs transparency
5. Updates on promotion & engagement

Discussion points

Board Members commented on different aspects of the proposed approach, and suggested amendments.

Item #1: Registrants overview

- A question was raised regarding whether current circumstances might explain lower Testing Period activity among US-based teams. Organisers clarified that 3 of the 10 teams currently active in the Testing Phase are based in the United States, and that the mix of actively engaged teams broadly reflects the diversity of the registrant base. The main concern lies in the limited proportion of registered teams that have engaged with the Testing Phase so far.

Item #2: Testing Period progress

- It was reiterated that training data is only provided up to four months before each submission deadline. As a result, each team is responsible for sourcing its own initial observations. The Board noted that accessing initial conditions may represent a barrier to

entry, particularly for less experienced teams. It was suggested that clearer guidance on where and how to obtain initial conditions could help reduce this friction.

Item #3: Reminder on Results Display

- Evaluation results, including the leaderboard and evolution graphs, will be made publicly available on the website in mid-September. Forecast visualisations will be accessible from the first week of the Competition Phase, starting mid-August.
- If a team discontinues submissions for a given model, its scores will remain visible for the weeks it did submit. However, from the point of interruption, the model will no longer appear in the period-aggregated leaderboards or graphs. Should the team resume submissions, the model may reappear in the weekly displays.
- To be eligible for a periodic award, teams must submit forecasts under the same model name for every week of that competition period. Regarding the annual award, the current expectation is that a model must be submitted continuously across all periods. However, this criterion may be revisited depending on how participation evolves over time.
- The Board raised the question of how the “same model” should be defined in practice, especially considering that continuous development and improvement should be encouraged throughout the Quest.

Item #4: Competition Outputs Transparency

- The Board enquired whether any concerns had been raised by industry participants regarding the public release of forecast data. Organisers confirmed that no objections have been received to date. It was also highlighted that the forecasts shared during the Quest are limited to specific variables and forecast windows, and therefore do not expose the full capabilities or outputs of participants’ models.
- Organisers confirmed that hardware details (e.g. CPUs and GPUs used) are collected at the model level through the registration form and can be updated anytime.
- It was clarified that all information submitted via the model summary, as well as models information provided during registration, will be publicly visible on team profile pages at the end of each competitive period.
- The Board suggested adding a new question to the Model Summary Questionnaire regarding the initialisation method used for each model.

Item #5: Updates on Promotion & Engagement

- No comments.

Next steps

- Highlight to participants how to access suitable initial conditions.
JT – *A short guidance text will be prepared and shared on the AI Weather Quest Forum.*
- Confirm that information provided in the Model Summary (including registration data) will be made publicly available after each period.
OL – *A clarifying sentence will be added to the participant dashboard.*
- Add two new questions to the Model Summary Questionnaire: “What techniques did you use to initialise your model (e.g. data sources and processing of initial conditions)?”

(question 3) and “If any, what data does your model rely on for real-time forecasting purposes?” (question 4)

OL – *The questionnaire template will be updated.*