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Poster

Aurora chasing is becoming more accessible through consumer cameras, smartphones, and online communities, creating new opportunities for public engagement and for scientifically useful observations. Aurora observers often operate outside the fields of view of fixed instruments, and their images and reports can complement traditional measurements by documenting visible aurora occurrence, morphology, and rare phenomena.

We present a proof-of-concept implementation of a HexaF-developed auroral forecast dashboard designed for the aurora-chasing community. Rather than replacing existing forecast products, this effort brings together the most useful auroral decision support tools within a unified, user-centered interface tailored to common questions such as “Should I go out tonight?” and “What is happening right now?” The platform is designed to incorporate physics-informed and data-driven approaches to improve short-term auroral prediction and interpretation of geospace conditions.

The proposed dashboard combines real-time and short-term auroral guidance, contextual solar wind and geomagnetic inputs, and magnetometer visualizations to support interpretation of substorm potential. A central concept is the incorporation of ground-truth observations through scientific all-sky imagers and, eventually, community reporting streams such as Aurorasaurus and social media, which can better constrain what is visible from the ground.

Beyond improving forecast usability for chasers, photographers, and tour operators, this framework supports auroral research and operational applications. The platform can help strengthen trust in science, support citizen-science participation, improve preparedness for documenting auroral activity, and contribute to richer ground-based datasets. At the same time, it offers potential value for commercial and operational users who benefit from more actionable auroral forecasts.

Poster session day

Thursday, April 30, 2026

Poster location

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Meeting homepage

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