Assessment of the PGLM Products at the Spring Program and Summer Experiment

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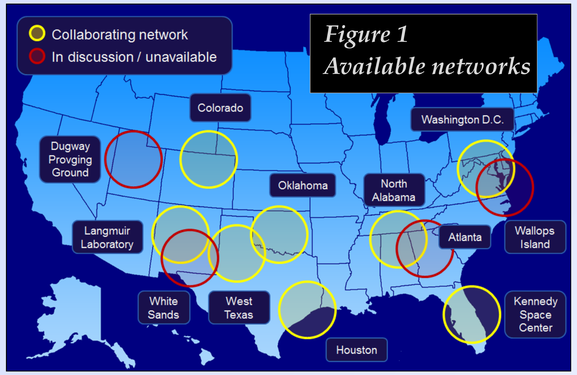
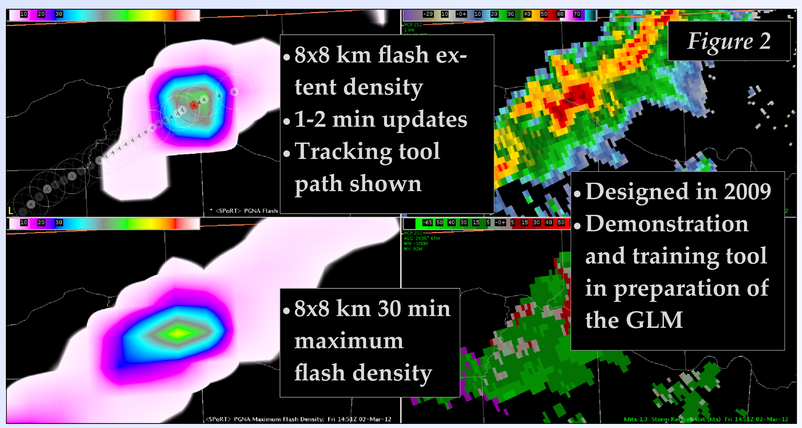


Figure 1 Available networks

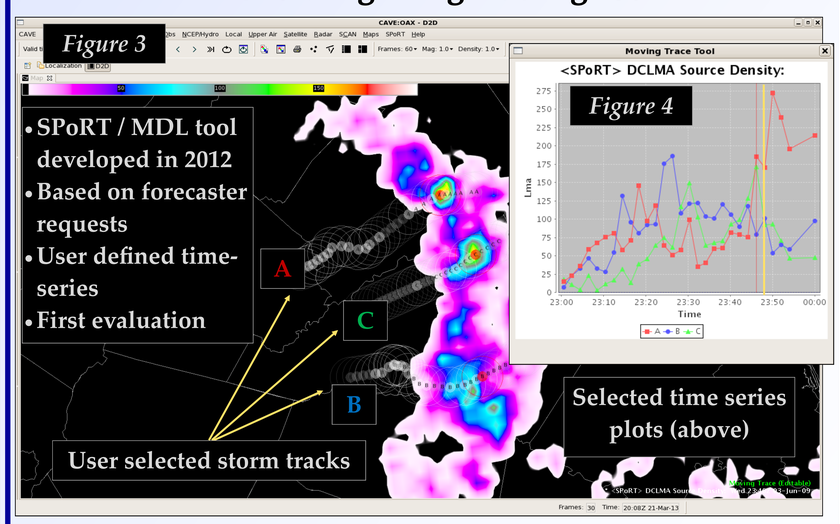
Introduction

- Review of assessments for demonstration products for the Geostationary Lightning Mapper
- Used for severe weather and aviation applications

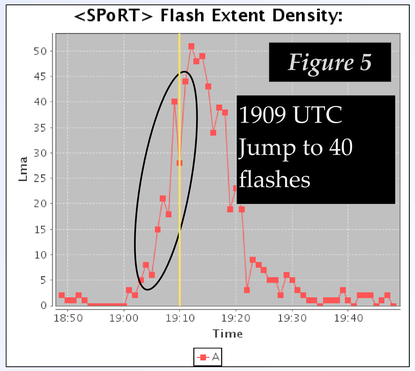
The Pseudo Geostationary Lightning Mapper (PGLM)

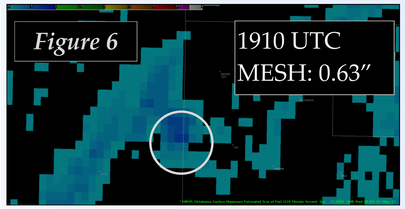


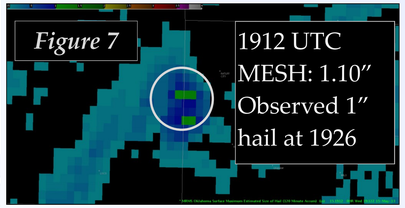
The Total Lightning Tracking Tool



Spring Program Example #1

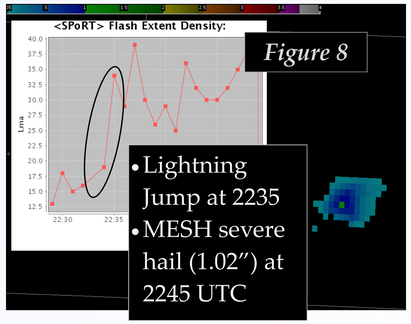


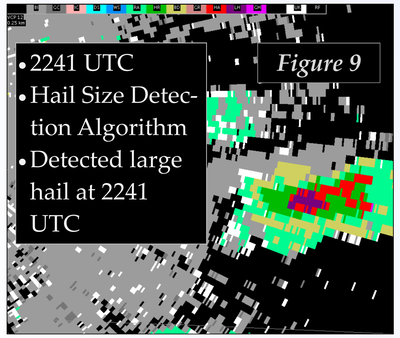




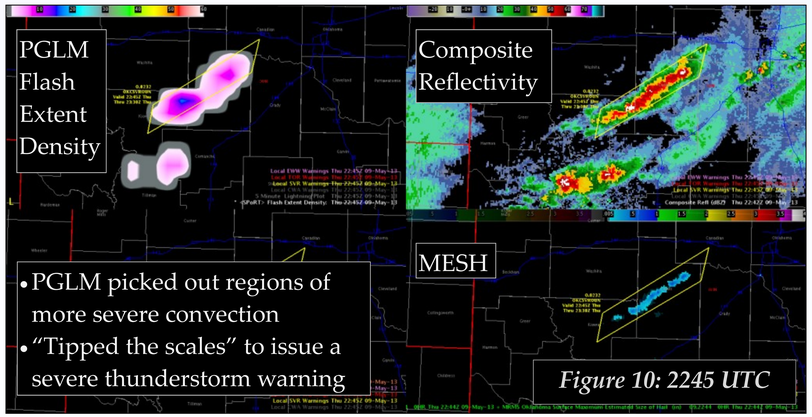
Figs. 5-7: PGLM time series (Fig. 5) compared to MESH at 1910 (Fig. 6) and 1912 (Fig. 7). The lightning jump preceded observed hail by 17 min.

Spring Program Example #2

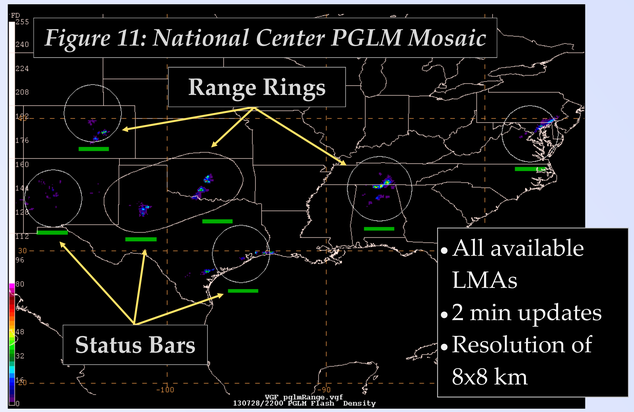




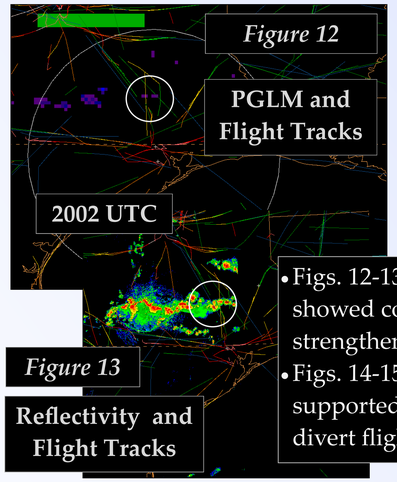
Spring Program Example #3

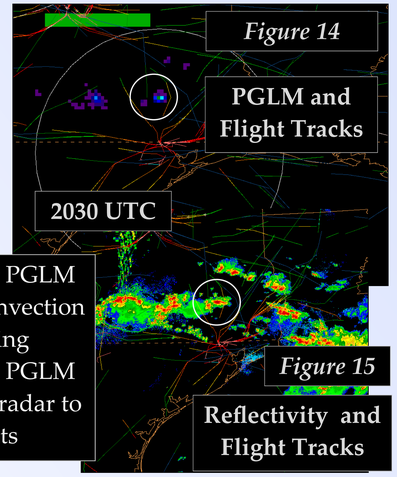


PGLM Mosaic During the AWC's Summer Experiment



Aviation Weather Center Example from Houston





- Figs. 12-13: PGLM showed convection strengthening
- Figs. 14-15: PGLM supported radar to divert flights

Conclusions and Future Work

- PGLM rated well (3.95 out of 5) with rapid updates a major advantage
- PGLM use to identify severe weather and storm development insight
- Tracking tool rated 3.24 out of 5 and visualization appreciated
- Tracking tool still needs work to improve real-time implementation
- New evaluations in 2014 with more networks and updated tracking tool expanded to visualize more observations (e.g., radar, satellite, grids)

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