



[P089] Development of EarthCARE JAXA Gridded Products for Evaluations of Weather/Climate models



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Motivation

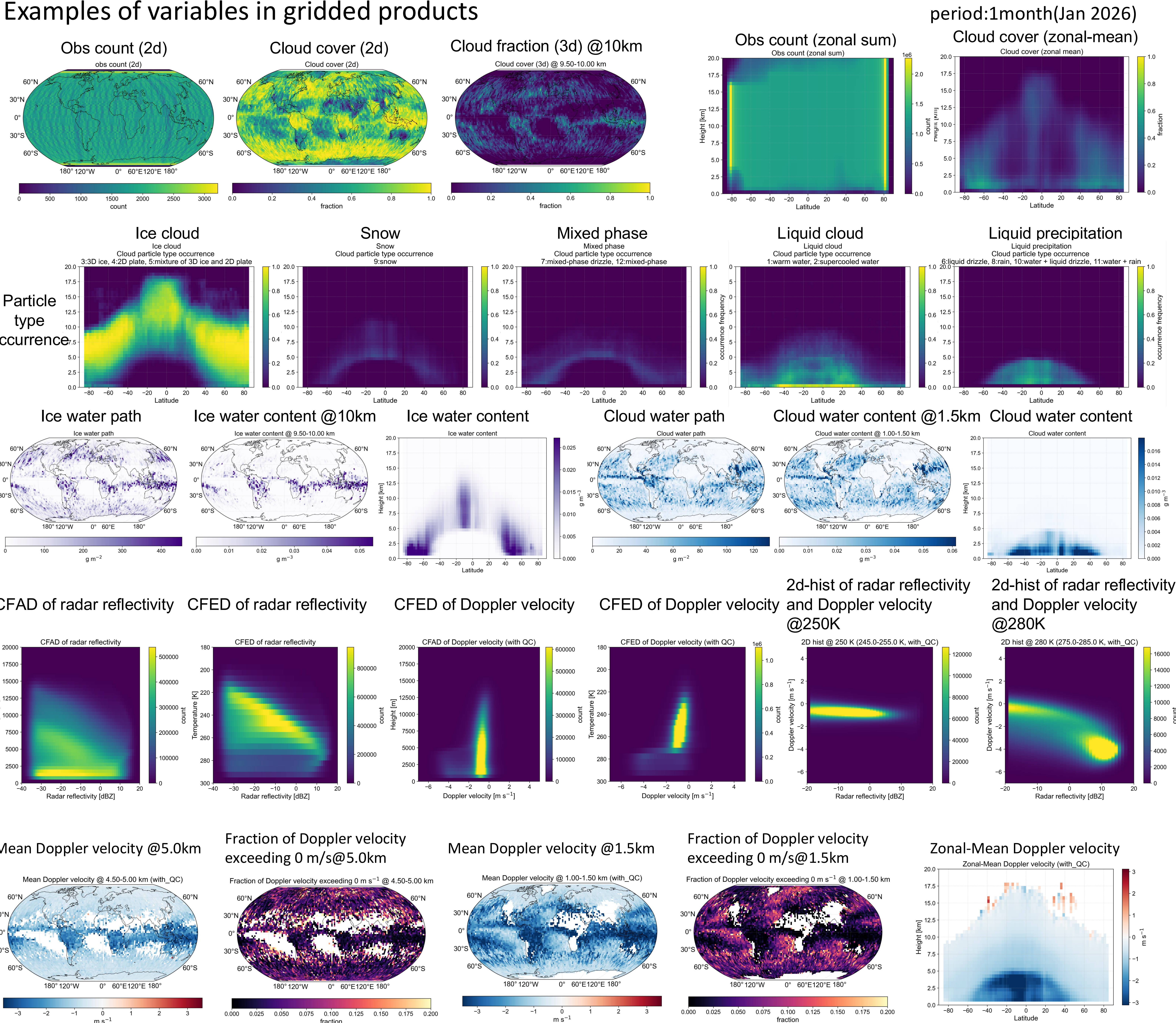
- High spatiotemporal resolution and large volume of EarthCARE Level-1 and Level-2 products present practical challenges, including storage limitations, data handling overhead, and the complexity of processing large numbers of files.
- To mitigate these barriers and foster broader utilization, developments of gridded data (Level-3 products) are desirable. The gridded products are helpful for evaluations of weather/climate models.
- Providing the gridded products was recommended for easier data use in the EarthCARE science and validation workshop 2025.
- Therefore, JAXA/EORC is developing EarthCARE JAXA gridded products. Public release of this is targeted for September 2026.

Data and Procedure

These products are generated by gridding JAXA 3-sensor synergy Level-2 data, ACM_CLP, based on CPR, ATLID, and MSI observations. The gridded products provide period-mean fields and statistics. The dataset includes basic statistics such as cloud fraction and radar reflectivity, as well as variables derived from CPR Doppler velocity.

Product	Horizontal grid size	Vertical grid size	Temporal resolution
L3 gridded product	2.5x2.5deg grid	500m	Monthly

Examples of variables in gridded products



Future plan

- The ACM_CLP gridded dataset introduced in this poster is planned to be released and made publicly available by September 2026.
- Feedback received on this poster highlighted several opportunities to further refine the ACM_CLP gridded dataset.
- In the future, we also plan to grid JAXA 1-sensor ATLID data, ATL_CLA, and 4-sensor synergy data, ALL_RAD.
- These development will support broader use of EarthCARE aerosol and radiation products.