Supplement of:

The correlation between Arctic sea ice, cloud phase and radiation using A-train satellites

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Table S1. Mean ratio (%) of mixed-phase to liquid plus mixed-phase clouds for each dataset. Datasets are subset to 2007-2010.

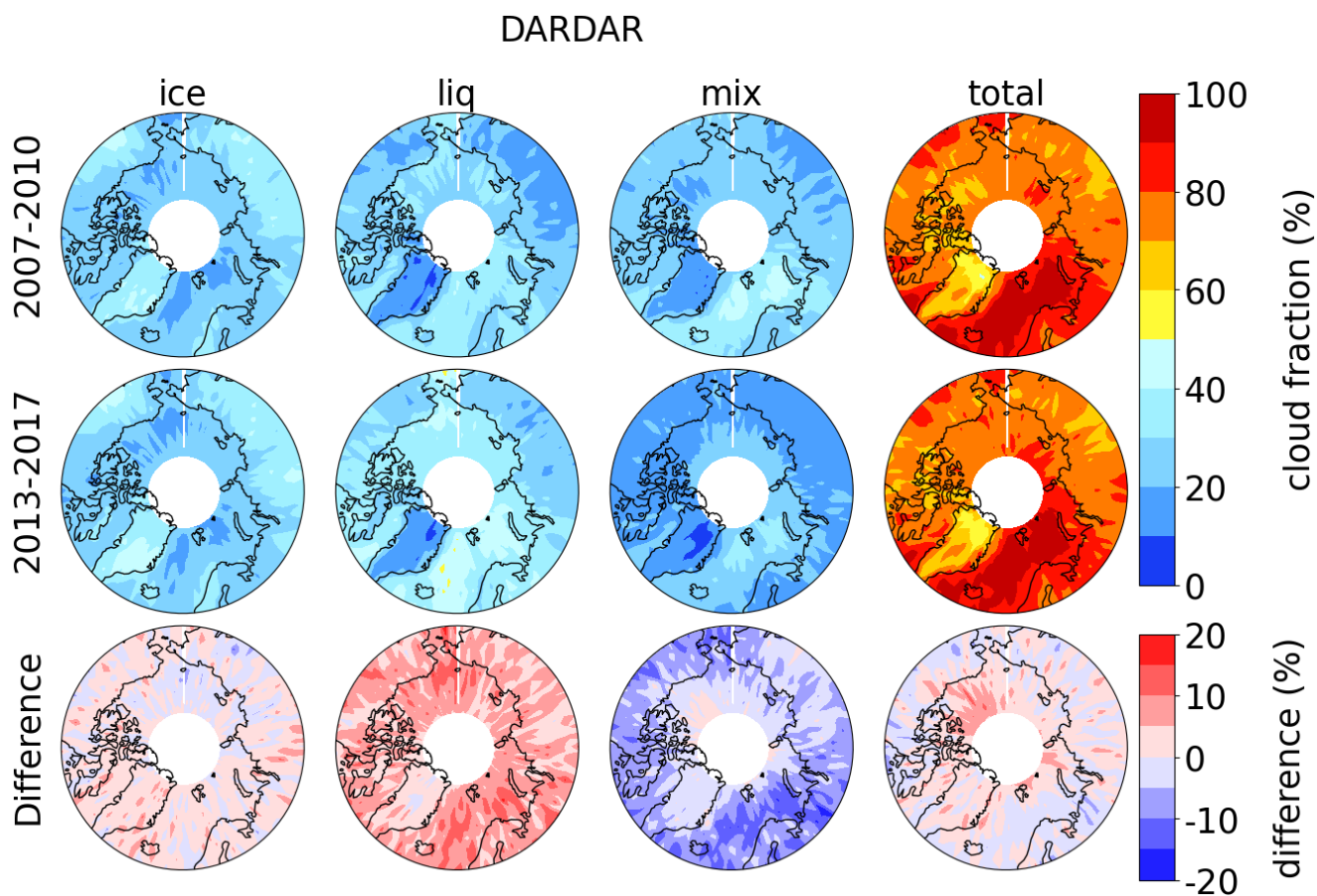| (%)	DARDAR	PHACT	CERES
mix/(liquid+mix)	49	26	N/A

Figure S1. DARDAR cloud cover differences (bottom row) between daytime observing period (2013-2017; middle row) and daytime and nighttime observing period (2007-2010; top row).
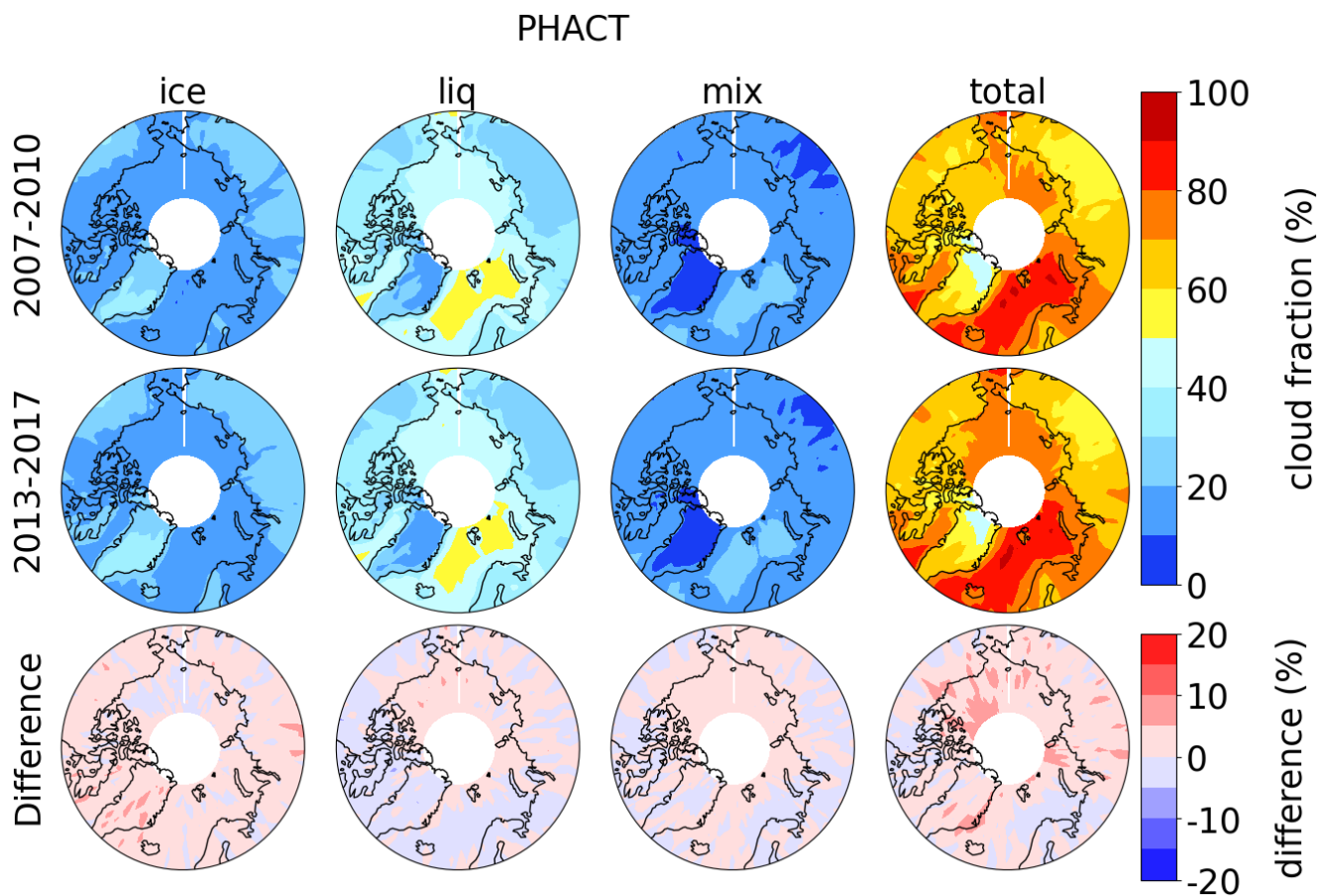
Figure S2. Same as Fig. S1 for PHACT, except that daytime and nighttime data are used in both time periods.
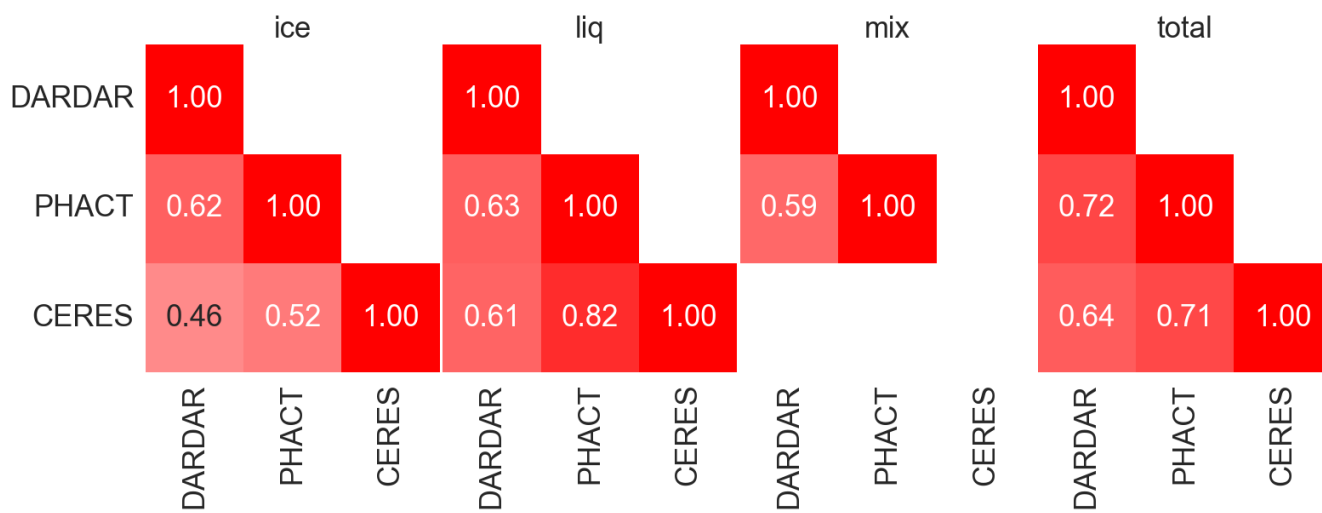
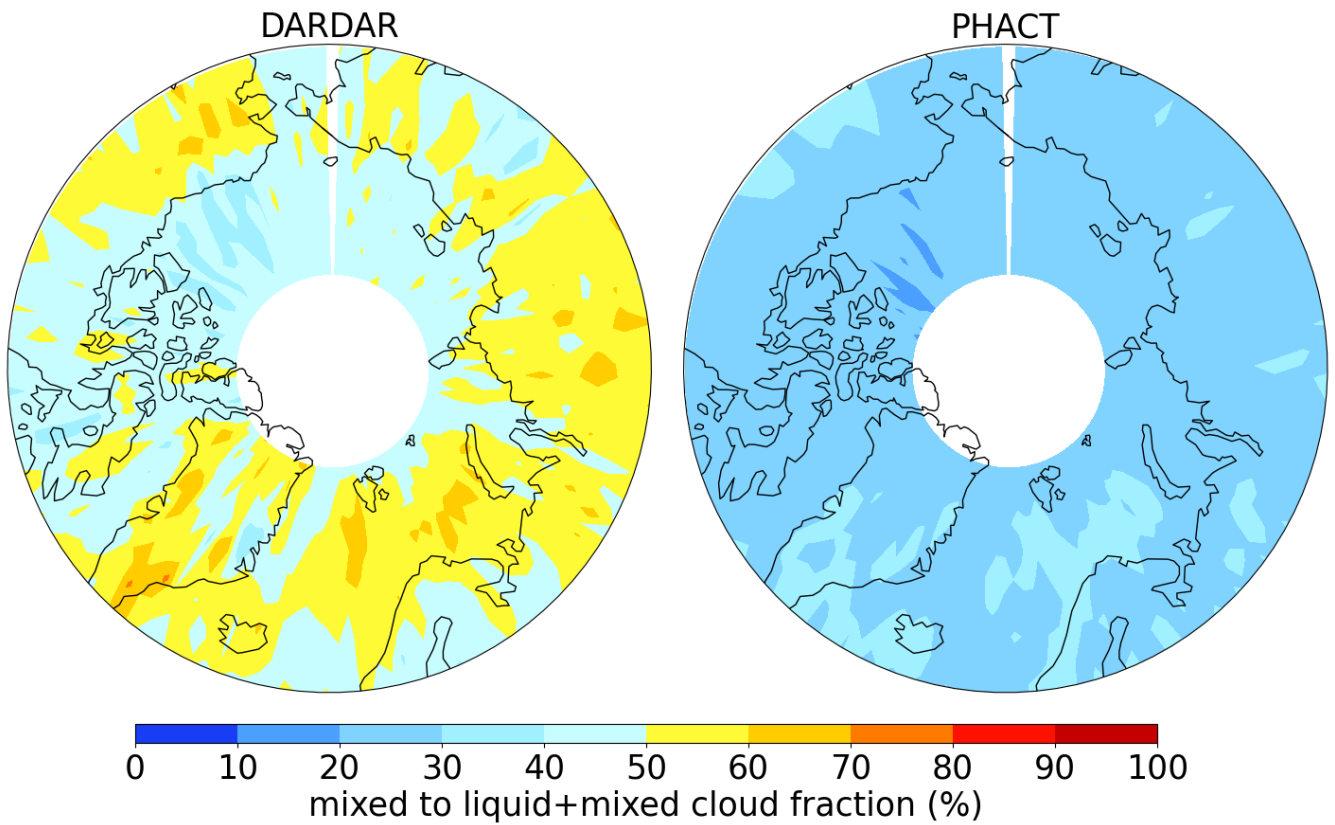**Figure S3.** Pattern correlation between datasets for the different cloud covers (subset to 2007-2010).

Figure S4. Ratio (%) of mixed-phase to liquid plus mixed-phase clouds for DARDAR (left) and PHACT (right). Datasets are subset to 2007-2010.