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.

<table>
<thead>
<tr>
<th>(%)</th>
<th>DARDAR</th>
<th>PHACT</th>
<th>CERES</th>
</tr>
</thead>
<tbody>
<tr>
<td>mix/(liquid+mix)</td>
<td>49</td>
<td>26</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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.