**AWImet**

**Additional Upper Air Soundings from Neumayer, RV Polarstern and AWIPEV**


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**Areas of contribution**

Observations

**Summary**

During the three "YOPP Special Observing Periods" we intend to launch extra radiosondes (envisaged are 4 per day) at the three AWI research platforms Neumayer (Antarctica), Polarstern (research vessel), and AWIPEV (Ny Alesund, Spitsbergen).

**Description**

To contribute to the special observing efforts of YOPP we plan to increase our radiosounding activity. The three AWI research platforms Neumayer (Antarctica), Polarstern (research vessel) and AWIPEV (Ny Alesund, Spitsbergen) routinely launch one sonde per day. During the "Special Observing Periods" SOP-NH1, SOP-NH2 and SOP-SH we plan to increase the soundings to 4 per day on the platforms in the respective hemisphere.

Additionally, we plan to maintain our two automatic weather stations (AWS) in Antarctica throughout SOP-SH.
One station is located on Sørøsen in the Dronning Maud Land, and one is located on the Filchner ice shelf. Both stations report hourly to the GTS.

**Timeline**

2018-02-01 - 2019-02-15

**Regional emphasis**

Northern hemisphere: Yes

Southern hemisphere: Yes

**Key project deliverables**

The upper air data will be available in near real time in the GTS as TEMP and BUFR messages. The full sounding profiles will be accessible from the scientific data archive PANGAEA (www.pangaea.de). The AWIPEV data will also be distributed via GRUAN (www.gruan.org).

Hourly AWS data will be available in near real time in the GTS as FM12 messages. Additionally, near real time minutely data will be transmitted via IRIDIUM to AWI and archived in PANGAEA.

**Data management**

AWI/PANGAEA

**Is data provided to WMO Global Telecommunication System**

Yes

**Real-time provision**

Sounding data will be distributed via the GTS in real time.

**Timelines**
<table>
<thead>
<tr>
<th>Location</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Start date</th>
<th>End date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neumayer Station</td>
<td>70.67°S</td>
<td>8.25°W</td>
<td>2018-11-16</td>
<td>2019-02-15</td>
<td>Increased radiosoundings (4 per day)</td>
</tr>
<tr>
<td>Location</td>
<td>Latitude</td>
<td>Longitude</td>
<td>Start date</td>
<td>End date</td>
<td>Activity</td>
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<tr>
<td>RV Polarstern (northern Hemisphere)</td>
<td>N</td>
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<td>2018-07-10</td>
<td>2018-09-30</td>
<td>Increased radiosoundings (4 per day)</td>
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<tr>
<td>RV Polarstern (southern Hemisphere)</td>
<td>S</td>
<td></td>
<td>2018-12-15</td>
<td>2019-02-15</td>
<td>Increased radiosoundings (4 per day)</td>
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<tr>
<td>AWIPEV Station Ny Alesund, Spitsbergen</td>
<td>78.92°N</td>
<td>11.92°E</td>
<td>2018-02-01</td>
<td>2018-03-31</td>
<td>Increased radiosoundings (4 per day)</td>
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<tr>
<td>AWIPEV Station Ny Alesund, Spitsbergen</td>
<td>78.92°N</td>
<td>11.92°E</td>
<td>2018-07-01</td>
<td>2018-09-30</td>
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<td>Søråsen, Dronning Maud Land, Antarctica</td>
<td>71.22°S</td>
<td>10.07°W</td>
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<td>2020-01-01</td>
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<td>Filchner ice shelf, Antarctica</td>
<td>80.44°S</td>
<td>44.43°W</td>
<td>2015-12-28</td>
<td>2022-01-01</td>
<td>Automatic Weather Station</td>
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