TitleMulti-instrument approach for the correction of observedprecipitation in the Arctic

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Preferred session:

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Svalbard > 0°C
□ A bear ate my zodiac
□ Svalbard in the dark
⊠ Toolbox
⊠ Long term monitoring
□ An ocean of plastic

□Rocks, mud and ice

The Advisory Scientific Committee can move abstracts to other sessions if more appropriate.

Note: I selected several sessions into which the poster would fit!!!

Presentation preference: \Box oral or poster, \boxtimes poster. The Advisory Scientific Committee will select presentation format.

The abstract should be written in Calibri or Times New Roman 11pt. The abstract must not exceed 300 words and should be text only.

Word file only.

A book of abstracts will be published as a pdf in connection with the conference.

Submit no later than 15 June 2019 to abstract@rcn.no

Liquid and solid precipitation are important climatic variables in the Arctic that are expected to have undergone significant changes in the past and will undergo further changes due to the changing climate. However, it is well known that standard gauges to measure precipitation can strongly be biased especially in the case of solid precipitation. Here, we will present results of different gauges in different settings at Ny-Ålesund covering a full hydrological year from 2017 to 2018 with different temporal resolution ranging from minutes to days. Standard correction methods considering meteorological parameters like temperature and wind speed are applied to correct all observations. Based on the generated corrected time series, we will analyze the impact of the time resolution of the instruments on the calculated corrections. We will discuss the impact of the corrections and their uncertainties on the annual accumulation and the derived solid and liquid precipitation distribution.