

The Installation of Antarctic Precipitation Systems During the 2017-18 Field Season and the Early Results

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Four Antarctic Precipitation Systems (APSs) were installed on the Ross Ice Shelf, Antarctica during the United States Antarctic Program 2017-18 field season. The low-power, autonomous APSs include a precipitation gauge with a double-alter wind shield, particle counter, disdrometer, snow height sensor, anemometer at gauge height, and a webcam. All four sites were able to be fully installed during the field season with ongoing retrieval of the observations. The goals of the project are to develop the ability to measure precipitation in Antarctica and further evaluate the surface mass balance as well as to assess numerical weather prediction and climate model precipitation estimates. This presentation will provide a review of the 2017-18 field season and a discussion of the results from the first six months of observations.