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## Davis-Ward: The Ice That Keeps on Giving Meteorites



## 2018-2019 ANSMET Team Members

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Veterans of previous seasons are marked with an asterisk (\*).

With 865 meteorites cached in the shipping crate, the 2018-2019 Antarctic Search for Meteorites (ANSMET) field team has wrapped up a successful season on the ice. ANSMET returned to icefields surrounding the Davis Nunataks and Mt. Ward, known as Davis-Ward, where previous teams had collected meteorites. This season's team expected to search systematically by snowmobile-transects over the estimated 20% of bare ice that had not yet been searched and by foot in the unsearched moraines surrounding the icefields.

Luck was with them! In addition to finding meteorites in newly-searched areas, a strong, Antarctic wind storm\*\* early in the season, December 20-21, scoured the snowy surface, exposing more meteorites (yes, the people weathered the storm safely). According to ANSMET's Principal Investigator Ralph Harvey (Case Western Reserve University), in a January 10 *blogpost*, "The big windstorm they had early in the season has played a role in all of this [successful meteorite collecting]; areas of blue ice and downwind firn edges that were ~50% covered with snow in previous seasons are nearly completely exposed this season and so the searches are going very very well." On New Year's Day, for example, the team collected 92 meteorites and located another 15 to 20 to bag the next day...all in an area where meteorites were hidden from view the last time ANSMET explorers were there, four years ago. The 2018-2019 ANSMET team was at the right place at the right time. As Paul Scholar noted in a January 23 *blogpost*, "Strong aeolian events, along with other slower localized icefield processes, seem to keep a large population of meteorites and terrestrial rocks in a periodic state of redistribution." The Davis-Ward area seems to be the ice that keeps on giving meteorites.

So, welcome home ANSMET team! We are thrilled with your achievements and we look forward to the new discoveries to come from these amazing pieces of Solar System building blocks.

ANSMET is run as a cooperative effort by NASA, the U.S. National Science Foundation (NSF-Office of Polar Programs), and the Smithsonian Institution to meet the strong scientific demand for new extraterrestrial specimens. As described at the *ANSMET website* by Principal Investigator Ralph Harvey, "These specimens are a reliable, continuous source of new, non-microscopic extraterrestrial material and support thousands of scientists from around the globe as they seek essential 'ground-truth' concerning the materials that make up the asteroids, planets and other bodies of our solar system." Details of curation, characterization, and allocation of the ANSMET meteorites are available from the NASA Johnson Space Center at *curator.jsc.nasa.gov/antmet/index.cfm*. Qualified scientists are directed to that site for more information about procedures and deadlines for requesting meteorite samples for study.

\*\* A shout out to my 2001-2002 ANSMET team mates – remember our wind storms? According to this season's Dec. 21 blogpost, John Schutt said the last time he experienced such a wind storm was in Meteorite Hills in 2001!

For more information see: the ANSMET website and from PSRD: Meteorites on Ice, and Searching Antarctic Ice for Meteorites.

See also:

35 Seasons of U.S. Antarctic Meteorites (1976-2010): A Pictorial Guide to the Collection, edited by K. Righter, C. Corrigan, T. McCoy, and R. Harvey, American Geophysical Union and John Wiley & Sons, Inc., December 2014, 320 pages.

Antarctic Meteorite Classification Database, by curator.jsc.nasa.gov.

**Antarctic Meteorite Sample References**, searchable bibliography with over 1600 peer-reviewed publications through 2017, by curator.jsc.nasa.gov.

PSRD General Resources, for meteorite and planetary science.

Written by Linda Martel, Hawai'i Institute of Geophysics and Planetology, for PSRD.



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February 2019

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