

IceCube drillers train for final Antarctic season

July 30 2010

(PhysOrg.com) -- The sweltering Wisconsin summer is a far cry from conditions at the South Pole, but ice drillers from around the United States will gather next week in Stoughton to prepare for the upcoming Antarctic work season.

The [IceCube](#) neutrino detector, under construction at the [South Pole](#) since 2004, is on track to be completed this winter. In anticipation of the final work season, drillers and installers will review plans and practice safety procedures at the University of Wisconsin-Madison Physical Sciences Laboratory (PSL), which features a [test bed](#) with components of the South Pole [drilling](#) site. IceCube staff use the test bed to run new equipment and train drillers and installers.

From 3-4:30 p.m. on Monday, Aug. 2, the test bed will be open to media as drill team members work through routine drilling activities and simulated emergency situations involving hot-water drilling technology, designed at PSL and used to bore holes more than a mile deep into the ice.

Training activities include working with ruptured high-pressure hoses, troubleshooting heaters and boilers, and lowering strings of digital optical modules into a 100-meter deep hole. Drilling staff will be available to explain the activities and answer questions.

Deployment for the 2010-11 season will begin in November as drillers, equipment testers and computing specialists head to the Amundsen-Scott

South Pole Station. Only seven strings of optical sensors remain to be installed in the 86-string array, and IceCube is expected to be complete in January.

IceCube is primarily funded by the National Science Foundation and managed by UW-Madison. IceCube is the world's largest neutrino detector and, once completed, will span a cubic kilometer of ice at the South Pole. At present, the IceCube collaboration includes researchers from around the world, including Belgium, Germany, the Netherlands, Switzerland, Japan, United Kingdom, New Zealand and Sweden.

More information: icecube.wisc.edu/

Provided by University of Wisconsin-Madison

Citation: IceCube drillers train for final Antarctic season (2010, July 30) retrieved 26 April 2024 from <https://phys.org/news/2010-07-icecube-drillers-antarctic-season.html>

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