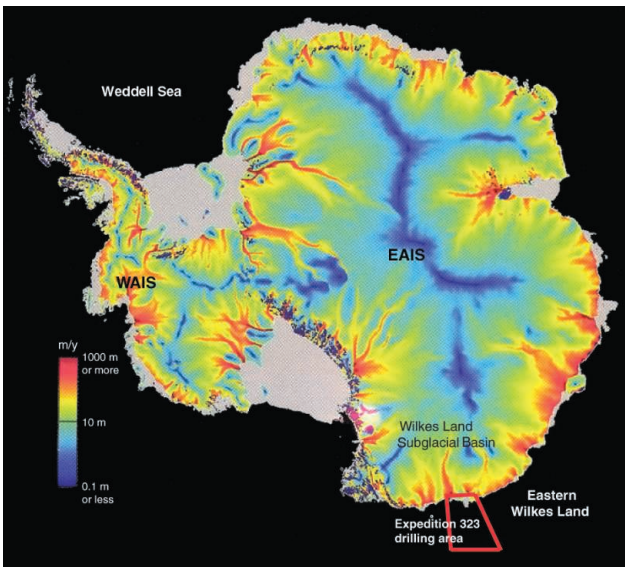
>>FINDINGS

doing so (or "deferred imitation," considered a sophisticated cognitive skill).

Each dog underwent 10 tests—and all the dogs, they found, were capable of deferred imitation. That, Fugazza says, suggests that dogs have declarative memory—long-term memory about facts and events that can be consciously recalled. Fugazza and Miklósi say they hope that trainers take advantage of dogs' willingness to learn by watching our actions. "They do it so naturally, because dogs are predisposed to learn socially from us," Miklósi says. **http://scim.ag/copydogs**

East Antarctic Ice Sheet Not So Stable?

To study future melting of the Greenland and Antarctica ice sheets—and resulting rising sea levels—many scientists look to the past. Current warm temperatures and greenhouse gas levels are reminiscent of the warm Pliocene Epoch that lasted from 5.3 million to 2.6 million years ago. Some data suggest that Pliocene sea levels peaked at perhaps 22 meters higher than today.



Exposed. Antarctica's Wilkes Land Subglacial Basin was ice-free during parts of the Pliocene.

While satellite observations suggest that the West Antarctic Ice Sheet (WAIS) is now losing mass, the far larger East Antarctic Ice Sheet (EAIS) seems more stable. But data from the Pliocene suggest that the "stable" ice sheet may be more vulnerable to warming than thought, says Carys Cook, a doctoral student at Imperial College London.

Cook and her colleagues studied Pliocene sediments in a core off the coast of East Antarctica that reflect continental erosion patterns as the climate warmed and cooled. They found a unique geochemical "fingerprint"—a telltale ratio of neodymium to strontium isotopes—from the now ice-covered Wilkes Subglacial Basin in East Antarctica. For those sediments to have eroded and ended up offshore during the Pliocene, the basin would have had to be exposed by ice retreat, the team reported online on 21 July in *Nature Geoscience*. **http://scim.ag/EAISmelt**

Random Sample

Modern Trackers Decipher Ancient Footsteps

The Namibian San people are renowned trackers, deciphering footprints as a way of life. And these traditional skills can be a boon to archaeologists seeking expert opinions on cave footprints.

Conventional footprint analysis focuses on individual prints but leaves the context to the imagination of archeologists, says Andreas Pastoors, a prehistorian at the Neanderthal Museum in Mettmann, Germany. Pastoors, who has studied cave art in the French Pyrenees since 1988, turned his gaze to the ground this month, hoping to give life to 17,000-year-old footprints left on the floor of the caves.

In a pilot test this month, Pastoors and colleagues brought a trio of footprint-trackers of the Namibian San tribe to four caves nestled in the mountains. After just a few hours in each cave, the team challenged conventional wisdom about some of the footprints.

One print, long regarded as the only ice age shoeprint, was instead the product of a bare foot, the trackers declared. They demystified another track, traditionally interpreted as a ritual dance, as belonging to a child and an adult fetching clay; the footprints in one direction were deeper, hinting that the two were carrying a heavy load in that direction. Pastoors recorded the trackers' conversations to study how they arrive at their conclusions. He plans to take the San back to the caves to do more thorough analyses.

This approach is a "great idea," says Michael Hofreiter, an evolutionary biologist at the University of York in the United Kingdom. The San's interpretations, he adds, are more believable than the "fantasies" of archeologists.

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