Antarctic Journal: Back home — but not for long

The ROSETTA-Ice team wraps up its field season, and our blogger heads to UN climate talks in Paris.

Matt Siegfried

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LA JOLLA, CALIFORNIA

Goodbye, midnight Sun!

Matt Siegfried is a glaciologist on the ROSETTA-ICE field project in Antarctica. This research season, he's writing a blog for Nature about life in the field.

"The numerous people who imagine that a long stay in the Polar regions makes a man less susceptible of cold than other mortals are completely mistaken. The direct opposite is more likely to be the case."

- Roald Amundsen, The South Pole

As if to prove Amundsen's point, I was colder on my first few nights back in San Diego than I have ever been in Antarctica. Though I've assimilated back into North American society after a stay in Antarctica four times now, it doesn't seem to be easier.

Issues surrounding the physical change from Antarctica to Southern California — including traveling nearly 22,000 kilometres (13,500 miles) in an airplane and moving from a town with a population less than 900 to a city with more than a million — can typically be solved with a sweatshirt and a weekend of hibernation. But the mental shift is deceptively difficult to manage. Field work in Antarctica requires me to use a different part of my brain than my day-to-day life as a scientist. Instead of analyzing data and drawing conclusions in my office, Antarctic work is a constant stream of logistics, quality control, troubleshooting, and more logistics.



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Read more of Matt's Ice Diary

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The mark of a nightshifter. Possibly the reason for my weekend hibernation upon return to San Diego.

And all field work, but especially Antarctic work, leaves a hefty stamp on your emotions when it's over. After months of planning and weeks to months of execution, it's all over and you're left with a hard drive filled with data. Work in Antarctica never goes exactly as planned, and the contents of that hard drive can be disappointing (or unexpectedly exciting). In either case, I need to mellow those emotions to regain the objectivity needed to evaluate and learn from the field experience as well as to dive back into scientific research.

I'm still digesting this year's ROSETTA-Ice field programme, especially since the rest of the team is still in Antarctica collecting mountains of data. There were some logistical hiccups that put us behind schedule (broken windows on our plane; crew illness; crew availability), but our office's data-wall — where we posted only the coolest tidbits we found while archiving and verifying the data — was impressive even before I left. Since then, the team has been flying two eight-hour missions per day the past few days, blanketing the Ross Ice Shelf with survey lines.

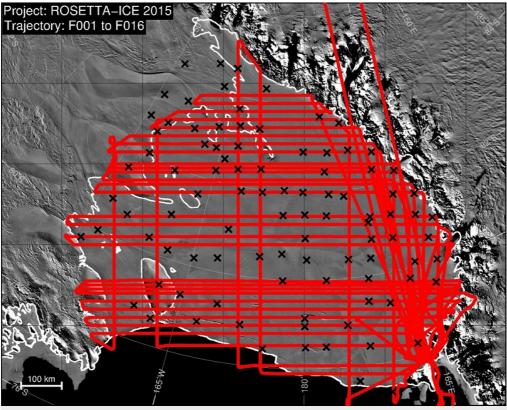
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The ROSETTA-Ice "data-wall" in our office.

While exciting updates keep streaming into my inbox, I've had to abruptly shift gears to prepare for two week-long conferences in the next two weeks. On Saturday, I hop on yet another airplane to cross an ocean (for those counting, I will have crossed three of the world's five oceans in fewer than ten days), this time to attend the UN climate negotiations in Paris (follow the Scripps Institution of

Oceanography delegation here). From there, I head back to California for the annual Fall Meeting of the American Geophysical Union, where I will present some of my dissertation research and co-chair a session of talks and posters on physical processes at the bed of ice sheets and glaciers.

Amidst all this madness, I've got many job applications that are due in the next month — a set that is especially important after that I let some application deadlines pass while I was busy in Antarctica. I also have a few scientific manuscripts I'd like to write and/or edit by the end of the year. Oh, and I have a month's worth of emails to respond to. While I'd get (much) more down time for both personal and scientific endeavours if I didn't participate in Antarctic field work, I hope I've made it clear over the past five weeks why I'm willing make such sacrifices.



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ROSETTA-Ice survey tracks to date. Black x's mark locations of data collection during the only previous Ross Ice Shelf survey — in the 1970s.

Though this concludes my field diary, the ROSETTA-Ice project is just getting started. Data collection is the first step of the process to making new scientific discoveries. If you are interested in following our progress over the coming years, like us on Facebook and/or follow us on Twitter.

Thanks to the US National Science Foundation for funding, the New York Air National Guard for strapping a pod of instruments to the side of their plane in the name of science, Antarctic Support Contract for logistical support, and everyone at *Nature* for making lemonade out of the lemons I send them every week. I've posted all my pictures from the field season on the Scripps Glaciology Group website; check them out here (or pictures from all my field seasons here). Thank you for following along!

Finally: A very wise man once told me that if you are into the history of Antarctica and Antarctic exploration, Amundsen's book *The South Pole* is fascinating; he was very right and I'm happily passing that tip forward.

-Matt

Previous entry: A special edition of "Ask the Glaciologist"

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