

# MAGIC

2013-05-17

A newsletter for non-scientists (and scientists) interested in MAGIC

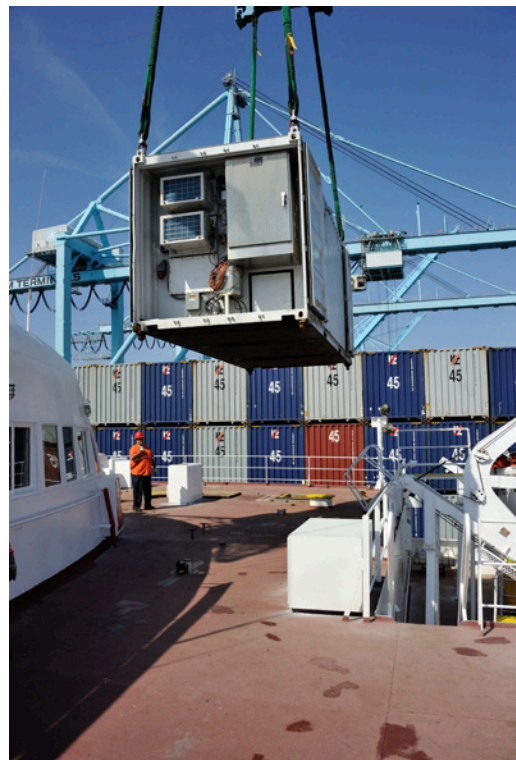
I was in Long Beach last week for preparation and re-installation of the AMF2 (our suite of instruments) on the *Horizon Spirit* for the second phase of MAGIC, which should last through the end of September. Once again we were blessed with beautiful sunny Southern California weather, as we have been each time we've had to work on the ship. Reinstallation went like clockwork, as the team is now well practiced with taking down and putting up all the instruments. It was great to see everyone again, including the Captain and some of the crew, and to meet and welcome Matt, our new tech. He previously worked on wind turbines in Colorado, and he'll make a great addition to the team.



L to R: Matt Gibson, Mark Smith, Nicki Hickmon, Brett Bersche, Pat Dowell

The *Spirit* left Honolulu about an hour ago to begin Leg10B. Three of the techs, Pat, Brett, and Mark, rode the ship over, along with Tim, from Argonne National Laboratory, and Gunner, from Brookhaven National Laboratory (he has the office next to me). Brett and Gunnar will get off in Hawaii,

and Rich (from Argonne) and Kevin (from Pacific Northwest National Laboratory) will get on and ride the ship back. The various locations illustrate what a large project this is! Tim is getting the navigation system set up. This is the brains of the operation and records time, location, and ship orientation and motion, which is necessary for not only knowing when and where data were measured, but for correcting radars and other instruments for ship roll and pitch. Rich will assist him in this and will also get other instruments up and going. Gunnar worked on the aerosol instruments, and Kevin will get the radars set up. Already many of the instruments are up and going and the techs have started weather balloon launches. As the go-live date is June 8 (this is when everything is scheduled to be up and collecting data), we are well ahead of the game.



Our 20-foot operations van being loaded. Notice how it is dwarfed by the cranes used at the Port of Los Angeles (L).

While I was in California I visited the Jet Propulsion Laboratory (JPL) in Pasadena and gave a talk on MAGIC. Two of the co-investigators on the project, Joao, and Matt, work there, and it was great to see them and to discuss current and future MAGIC plans. They also visited the ship on Friday. As MAGIC was originally Joao's idea, he enjoyed seeing how it has come to be a reality. Two other scientists in their group, Peter and Michio, are planning to ride the ship later this summer, so we're working on getting that set up.



L: Welding our vans down to the deck. R: Loading the radar wind profiler on the roof of the radar van.

Things will start picking up again (as if they ever slowed down) on MAGIC. Several scientists have been contacting me about the data that we have taken and what we plan to take, as they plan on writing proposals to use these data. We will have several additional instruments, including two different systems to collect aerosol samples. Yuan, from Rutgers in New Jersey, will go out to LA next time to help install her system, and Paul, from Colorado, is working on getting everything for his. Two college interns, Michelle and Danielle, will be starting here in just over two weeks, and Sarah, a local high school student, will also be with us this summer. We're looking forward to meeting them and working with them for the summer, and I'm sure you'll hear more about them in future updates.

Ernie Lewis  
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Please address any questions or comments to [elewis@bnl.gov](mailto:elewis@bnl.gov).

All updates and other MAGIC information can be found at <http://www.bnl.gov/envsci/ARM/MAGIC/>.