June Events

June 15: Fellows Association Happy Hour
Open to any postdocs and graduate students at NCAR….even visitors! More details will follow by email.

June 16: ASP Hike
Join other postdocs and graduate students in a hike from the Mesa Lab. Contact Paula Fisher for more details: paula@ucar.edu

Research has shown that girls benefit from:

• An informal, single-sex learning environment
• Role Models
• Hands-on inquiry based activities
• Non-competitive atmosphere

Girl Scout Troop leaders are often unable to lead science related activities with Girl Scouts, and hence was born an idea of bringing Girl Scouts to NCAR to spend a day in the company of female scientists, visiting exhibits, and participating in weather and climate related activities.

“Girl scouts @ NCAR”, also known as “Climate and Weather, the two go together” is an annual event that brings about 50 girl scouts between 8 and 15 years old to NCAR for one day to learn about weather and climate and to participate in hands-on activities, for which they earn a science badge. The goals of the program are:

a) to facilitate the Girl Scouts’ discoveries about atmospheric science,
b) to encourage the Girl Scouts to have a more positive view about science,
c) to show examples of scientific career paths (for both men and women).

The event is already in its 8th year, has been very successful so far, and is typically organized by female Postdocs and graduate students at NCAR, in close collaboration with the NCAR Education and Outreach staff, and with the help of about 10-12 volunteers. It is funded by ASP and was co-sponsored this year by five other NCAR divisions (ACD, CGD, EO, and HAO). ASP Postdocs initiated the event in 2004, and many ASP Postdocs have since organized or volunteered at it; we hope it will stay this way in the future.

This year’s event took place on April 27th. After being volunteers ourselves last year, we became the main organizers of the 2011 event. Because the event has been held many times and is well documented, we were able to build on the program and activities developed from previous years. We even had a checklist of what needed to be done and when, so that really helped. To further improve the event and to make sure we kept the things that worked well,
we used the participant evaluations from last year. As a result, we again had the live portrayal of Madame Curie, performed by Susan Marie Frontczak, as it has always been a favorite of the girls and the parents. We also planned to have a weather balloon launch like in previous years, but the weather didn’t cooperate (for the first time in the history of the Girl Scouts @ NCAR event), and we had to cancel it due to poor visibility and snowfall. Instead, Kate Young gave a presentation about weather balloons and dropsondes and showed a video of a balloon launch from a previous year, which was well received. But obviously no presentation could come close to the excitement of launching a balloon themselves and seeing the data from it coming in live, so hopefully the weather will cooperate again next year so that this popular event can be on the agenda again. Other activities in the morning included an introduction of all the volunteers, where we explained what we do and what a “Postdoc” is, followed by a tour of the super computer facilities, and a “Systems Game”, which was meant to show the girl scouts how scientists observe a system and come up with hypothesis about its behavior and how they test them.

After a brown-bag lunch in the cafeteria, the afternoon was dedicated to workshops, one on pressure and hurricanes and one on thunderstorms and lightening. In these workshops the girls participated in hands-on experiments to explore static electricity and air pressure, among other things, and to learn about the science behind these weather phenomena. As the evaluations from previous years indicated that the girls wanted to be outside more, we replaced a third workshop that was conducted in previous years with an outdoor scavenger hunt. That was almost canceled as well due to the weather, but fortunately the weather improved over the course of the day, so the girls could actually go outside in the afternoon for the scavenger hunt. They very much enjoyed this active outdoor part of the program, and it was mentioned frequently as one of the best aspects of the event in the evaluations, together with the Madame Curie portrayal.

Thanks to the many volunteers who dedicated their Saturday, the event went very smoothly, apart from the weather not cooperating early on. It was a pleasure to see how much fun the girls had learning about climate and weather and how curious they were about science and NCAR. The parents also really appreciated the event, especially that the event was run by female NCAR staff, which they saw as potential role models for their daughters. And last but not least, the event was fun for us as well, as it allowed us to take a step back from everyday work and to remember why we like science.

One suggestion we received was that the boy scouts would also like to come to NCAR for a day. We promised to pass this wish on to the male Postdoc and graduate student community at NCAR, so that maybe 2012 can be the year of the first Boy Scouts @ NCAR event. The Girl Scouts @ NCAR event is also looking for new organizers, so there are lots of opportunities for all of you to get involved, no matter which gender you are 😊! We can really only recommend organizing the event and/or volunteering at it, as it
Girl Scouts (continued)

is so rewarding to see the girls enjoy learning about weather and climate and to interact with them. And given the great documentation and the help from the Education and Outreach Staff, it really isn’t that much work! Let us know if you are interested in organizing next year’s event, or if you have any questions. And to volunteer, just keep an eye on the staff notes in January and February, as a call for volunteers is always posted there.

Girl Scouts at NCAR, 2011.

Feedback from Previous Events

When asked about their discoveries, the girls’ comments included:

- Hot air goes up
- Glaciers reflect more sunlight that they absorb
- The worst hurricane names get retired
- Air molecules go to places with less molecules
- Having fat or blubber is good when in the Arctic
- Hot water is less dense than cold water
- I discovered why they send up weather balloons
- Cold water is heavier than hot water
- Clouds are made by low pressure, smoke and water
- that it’s really fun
- that you have to have good grades
- The earth is tilted
- I learned how to make clouds
- Hurricanes are more powerful than I thought
- The ocean is blue because of the sky
- Salt can make ice melt
- It was so fantastic it cannot be described
- Glaciers have changed over time

Comments from Chaperones included:

- The activities held the girls’ interest, not once did any of our girls ask when this would end or complain about boredom
- Interaction with passionate career women all day!
- The girls actually got to do activities
- It’s fun because it’s the actual site where the research takes place
- I think it made career possibilities more real for the girls
- Great interaction and role models for the girls
- Thanks for showing the girls what real scientists do
- I liked seeing all the women in science
- The joy of the kids learning while having fun