

Annareli Morales
ASP Graduate Visitor in MMM

Summer 2016



Image credit: Vanessa Vincente

WISE Goals

1. Advance diversity within atmospheric science and STEM fields
2. Mentor and be a role model to students
3. Increase my awareness of applied research within RAL and options available to me after graduation

Science Expo at Casa de la Esperanza

- Casa de la Esperanza learning center, a local community center dedicated to helping agricultural workers and their families
- 17 students (ages 5-12)
- Hands-on activities and take-home items
 - Eileen Carpenter at Center for Science Education
- Four stations
 - Light, Air, Water, Rotation

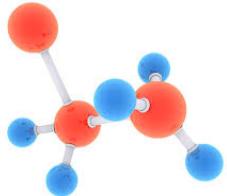




Light Station – Learning how light can be scattered or absorbed in our atmosphere



Marta Abalos - ASP Postdoc in ACOM



Air Station – Learning about molecules and how they are related to our sense of smell



Todd Rhodes – Graduate Visitor in CGD from Coastal Carolina Univ.



Water Station – Learning about the water cycle, cloud formation, and different cloud types



Farshid Nazari – ASP Postdoc in CISL/IMAGe



Rotation Station – Learning about vortices, tornadoes, and hurricanes



K. Ryder Fox – SOARS protégé, Undergrad at New Mexico Tech

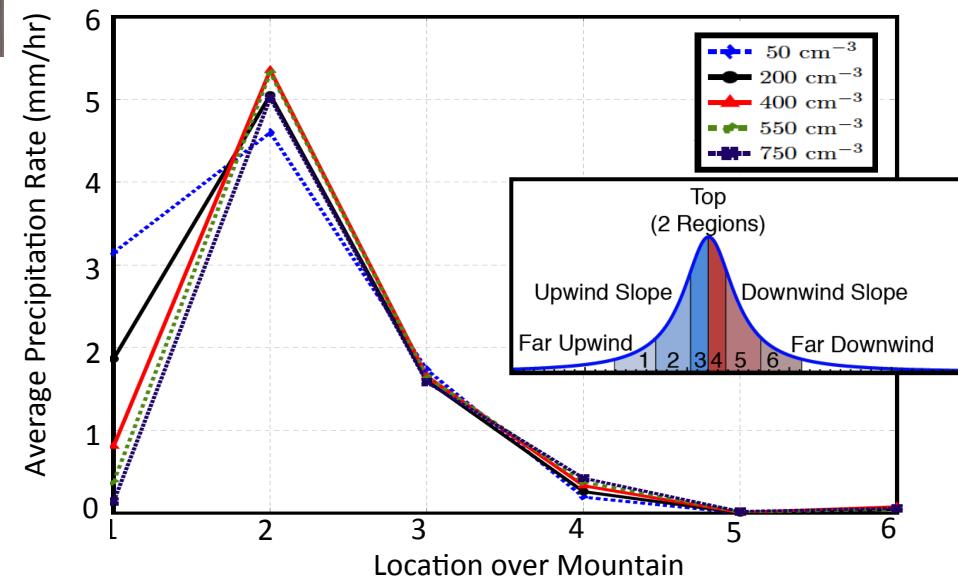
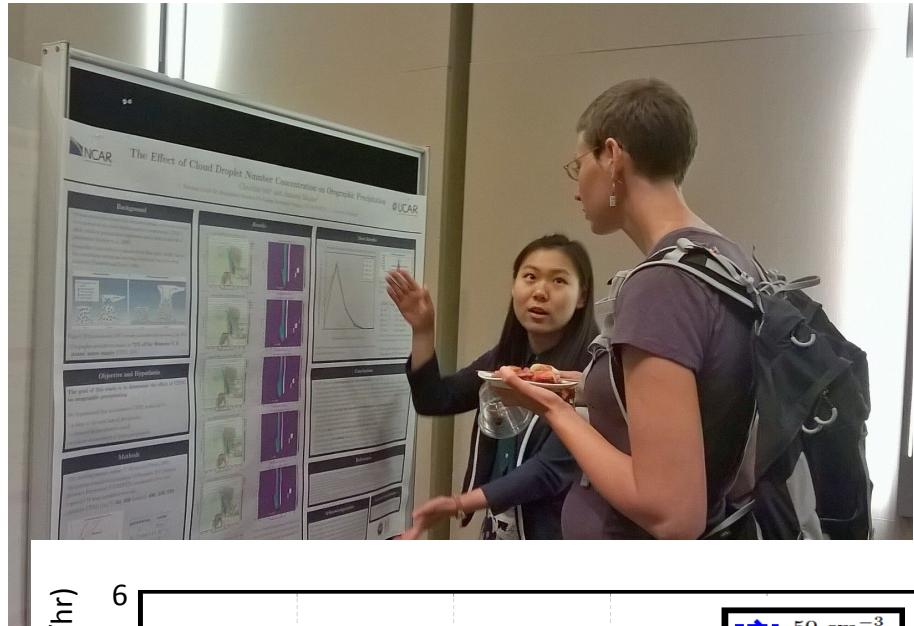
PRECIP Mentor

- Pre-College Intern Program (PRECIP) is a summer internship designed to provide research experience and engage high school students in STEM-related fields
 - Beneficial when making decisions for majors in college
 - Writing workshop provides professional development
- 6-weeks at NCAR participating in research project
 - Poster presentation
 - Abstract



“The Effect of Cloud Droplet Number Concentration on Orographic Precipitation” – Christine Soh

- Findings
 - Increasing CDNC results in precipitation suppression and delay
 - CDNC has weak affect on dynamics and cloud structure
 - Results suggest a threshold for CDNC impact; decreasing effect of increasing CDNC on precipitation



What's next?

- **Two years left of PhD**
 - Teaching experience: TA-ing course and working with professor to develop syllabus, exams, homework, etc.
 - Seek further outreach opportunities (or creating some of my own!)
 - No more courses – time to focus on research and writing!
- **After PhD...**
 - Postdoc
 - Professor? Research Scientist at National Lab? Private Sector?