

August 1, 2013

20 High School Students plus seven teachers, from China, England, and the US

Gathered at CalStateLA for conference on satellites and climate

Annie Richardson - JPL contact

Jacob Hedelius: Remote sensing of aerosol and gases in LA. (25 minute talk and 25 minute tour to ~30 high school students and chaperones)

The students were with Multinational Youth Studying Practical Applications of Climate Events (MY SPACE). Students had in-depth understanding of several points about aerosol but didn't seem to have a broad understanding. I started out with my story, why Caltech is a unique place to study the atmosphere, and general properties about aerosol. I briefly explained Aeronet, aerosol optical thickness (AOT), and how AOT remote sensing instruments work. I showed AOT data and asked them to point out unique features. I showed a clip of global AOT from satellite data. I then explained TCCON measurements by relating it to AOT measurements. The chaperones asked some great questions, but the students didn't ask any questions. I gave a brief intro on what to expect on the Linde+Robinson tour. Coleen Roehl took the group on the quick tour.

Things that went well:

- They seemed to like the presentation, and asked for a copy of the PowerPoint at the end (available upon request). I used mainly graphics and less text to try and keep their attention.
- The suggestion by Siebach (talk on June 5, 2012) to convert to amounts they would understand was helpful. For example, I related aerosol particle size to paper width, rather than just micrometers.
- Touring Linde+Robinson seemed to be a highlight. Too bad the sun wasn't out.

Things that could have gone better:

- I talked for too long and the tour had to be abbreviated. I also didn't allow enough time to move. Discussing general aerosol properties may have been useful, but less interesting. I would omit it if I were to repeat the presentation.
- The group included students from different countries and translation was necessary. Afterwards I realized that I spoke too fast. If I were to present over again, I would include more pauses so the translator could catch up and others could digest the information.
- More questions and repetition would have been better. This was a bright group of students and with more questions and more thinking/discovering on their own they would have retained more knowledge.
- Narrower focus along with a take home message would probably have increased the amount of information they actually remembered.