

## Project Atmosphere – July 2015

Report by the Canadian Representative

Olivier Laforest

High School Science and Technology teacher  
Montréal, Québec

This is it, 2 full weeks dedicated to atmospheric science, an opportunity to become a master of the topic and becoming a better teacher of it! This may seem intimidating but one needs to remember this program caters to a very wide demographic (more on that below) and the focus is on awareness and knowing who's who so that we can get help later-on.

### Accommodation

Before meeting the trainers and colleagues, we are first greeted by the hotel staff and assigned a room. At first, I thought there was a mistake, this was not just a room but a miniature apartment (stove, dishwasher, etc.)! No mistake, this is just one of many examples of how they care for us to be comfortable during our stay. There's also a small swimming pool, a hoop for basketball and a BBQ in the courtyard. Yes, we are a bit far from the nearest shopping centers, but when hotel transportation is not available, it's a decent 30-min walk on a nice (nothing but grass and trees around), long, calm boulevard to get there. The need for groceries is greatly offset by the morning breakfasts and networking events happening almost every evening in the lobby which easily double as diner!



### Demographics



### Abstract:

*Project Atmosphere aims at better equipping teachers of all levels (grade school and high school) to teaching weather related topics. The emphasis is put on awareness, making the seminar accessible to teachers who are not necessarily science savvy.*

*This is both a great social experience and an opportunity to get better acquainted with the reality of the atmospheric sciences. Teachers coming out this seminar will be equipped to share what they learned and efficiently access resources previously unavailable to them.*

The first official gathering (good luck figuring out who are your colleagues before that!) happens at dinner on the day of arrival. All key trainers/support staff are casually introduced and we are also invited to introduce ourselves in turn. Of the 20 participants this year, the bulk are in the mid to late forties, youngest is about 30 years old. In the U.S., these seminars are highly sought after. We've got grade schoolers to pre-college teachers.

No matter the age, origin, school or speciality, we all have in common our joy to be there, our curiosity and our care for students.

## Curriculum

Advanced science background participants shouldn't get too ambitious about the curriculum because the main objective is awareness and building the confidence of teachers about the will of the National Weather Service (NWS), the National Oceanic and Atmospheric Administration (NOAA) and all the agencies that support them.

About 50% of the time of the seminars is dedicated to meeting high-ranking officials (really important and incredibly smart people) of the weather services in the U.S. We get a detailed account of their past experiences and current mandates. These range from local weather sampling to space weather forecast, to improved warning and safety for the population.



In the second half, we delved a bit more in the applied sciences. This is mostly done through modules that could be taught in our home school classes or to other colleagues back home. The goal is not to acquire deep earth science knowledge but to visually and manually be able to accurately, by simple means, communicate simple basic concepts that stem from complex science. Still, there were a few topics aimed at pleasing the more science savvy (like me) participants too. Being proactive with questions about technical content also helps the speakers to re-orient their presentations toward hard science.

## Outings

To make sure our experience also involves some tangible content, we are taken on a trip to visit a weather station about 1 hour away and a weather aviation center right in the training center. These visits allow us to better visualise the reality of the field, the automated process and the complexity of the intricacies behind what appears to be easy to get weather forecast data on a website!



## Conclusion



The experience of this workshop goes far beyond acquiring technical knowledge. It provides an opportunity to connect with other colleagues sharing the same passion; it allows us to connect our teaching to the reality of life in the field; and, most importantly, it puts us in touch with several heavy lifters of the weather sciences who are all willing to help us teach our students better.

The main take-away concept is the emphasis about the importance of quality science teaching as well as the will of all partners wishing to help us achieve this goal.