NASA team lands in Yellowknife to study forest fire smoke

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NASA scientists are in Yellowknife with lasers, airplanes and giant balloons to collect data on wildfire smoke and other air pollutants.

About a dozen scientists from the National Aeronautics and Space Administration have been in Yellowknife for the past two weeks, with some working on the ground and others flying over northern forest fires to gather information about smoke particles.

"It's going to help predict where the smoke will go, how far it gets transported around the world, and the changes in chemistry caused by the smoke in the atmosphere," Chris Hostetler, the NASA research scientist in charge of the Yellowknife mission, told CBC News in an interview.

"It's going to be ultimately used to understand the global effect of large fires like [what] we experience up here in the boreal forests in Canada."

The scientists' work is part of International Polar Year, a two-year global effort to learn more about the Arctic environment.

Last week, university students were inflating large balloons and attaching small boxes containing sensors for measuring ozone levels.

NASA also has an airplane in Yellowknife that acts as a flying laboratory with a laser radar on the bottom. Two similar planes are stationed in Cold Lake, Alta., monitoring forest fires in northern Alberta.

Hostetler said the research will help improve climate models, so that scientists can be more precise in predicting the effects of climate change in the North. His team gathered similar data in Alaska in April.

NASA does currently get a picture of northern air pollution by satellite, but Hostetler said the current work will provide more precise information.

"In life, you never really get to measure what you want to measure. You measure some proxy for it and use complicated mathematical algorithms to turn it into the information that you want," he said.

"So with the aircraft, we can make the measurements that we're trying to retrieve from the satellite, and validate the satellite and improve the satellite."

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Milpool wrote:Posted 2008/07/08
at 12:17 AM ETPlenty of smoke outside the Gold Range every night.

Old_Dave wrote:Posted 2008/07/08
at 9:37 AM ETAppleton2007 wrote:
Posted 2008/07/08
at 9:26 AM

You do know Cali is not in the arctic, right?
"The scientists' work is part of International Polar Year, a two-year global effort to learn more about the Arctic environment."

Duhhhhhhh.

If I had to explain it to you...

appleton2007 wrote:Posted 2008/07/08
at 9:26 AM ET
"Geez!
They had to come all the way up here when California is so much closer?
I think so many scientific experiments are conducted by American scientists up here, simply because our beer is better.
Jam that in yer beaker!"

You do know Cali is not in the arctic, right?
"The scientists' work is part of International Polar Year, a two-year global effort to learn more about the Arctic environment."

Old_Dave wrote:Posted 2008/07/08
at 9:09 AM ET
"Geez!
They had to come all the way up here when California is so much closer?
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