

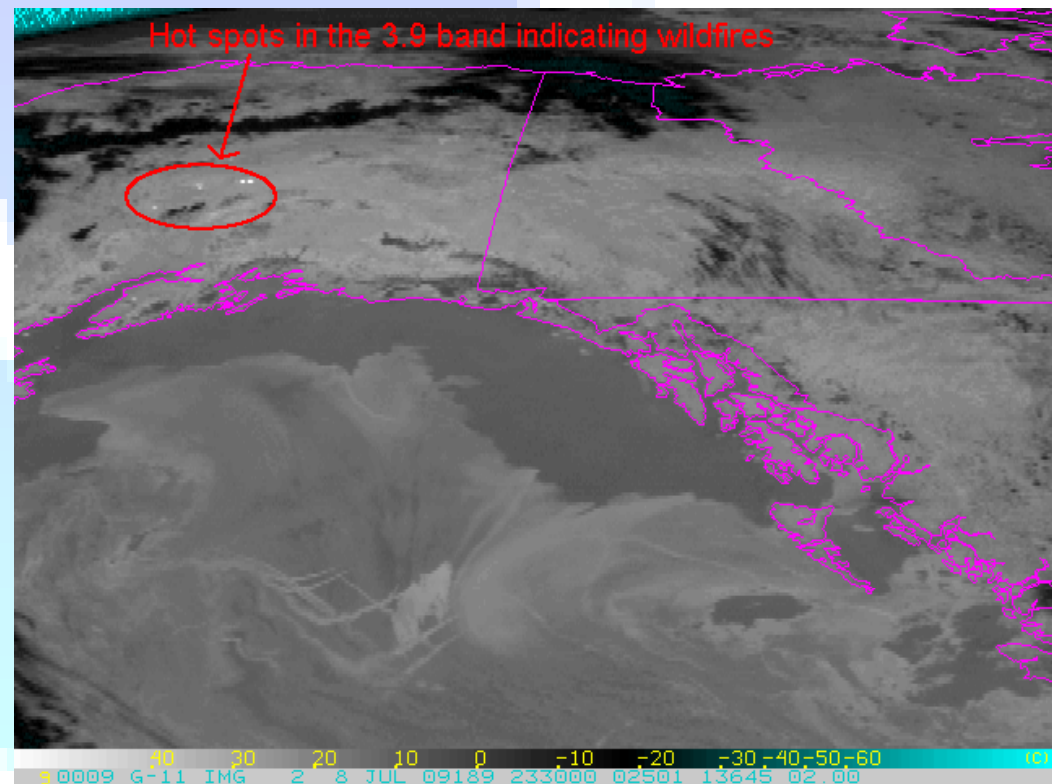


2nd Symposium on Aerosol-Cloud-Climate Interactions

The Effect of Smoke on Pyrocumulonimbus: A Satellite Perspective

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- A “PyroCb” is a thunderstorm which forms over a wildfire
- Aerosols from the fire can significantly alter the microphysical evolution of the storm, compared to nearby “clean” convection
- PyroCbs often have very small cloud-top ice crystals, and their anvils tend to have long residence times
- Aerosols from pyroCbs can be injected into the lower stratosphere, where they can exist for days



An example of a pyroCb and the resulting anvil/aerosol evolution in central Alaska on 9 June 2009. The loop above is a series of GOES-11 3.9 um images from 8 July to 11 July 2009.