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Flight Report

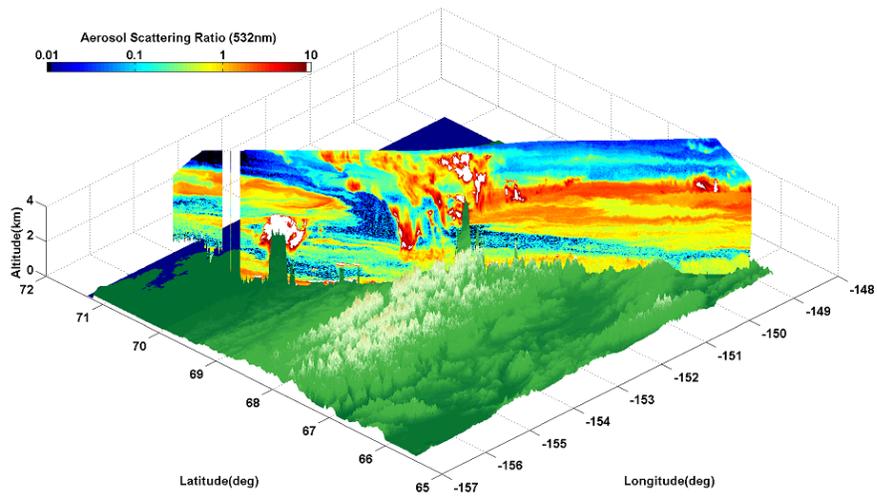
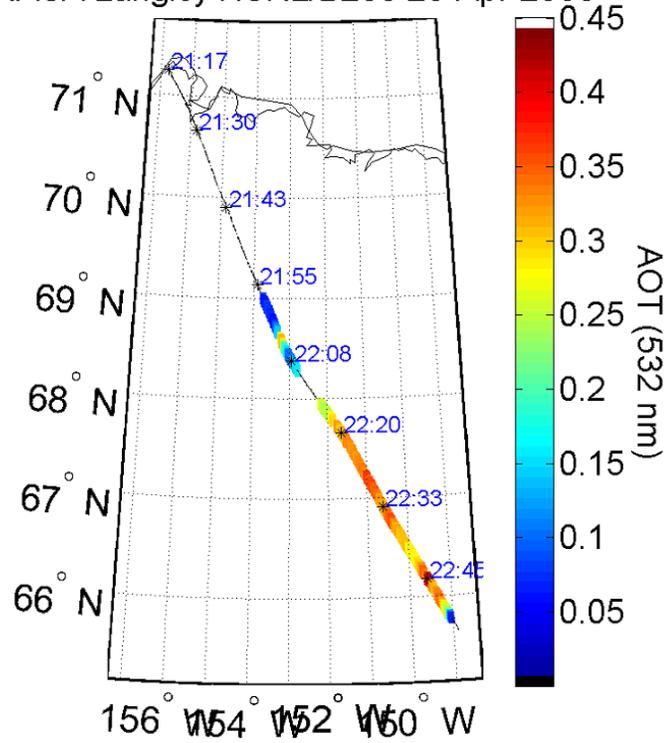
<b>Aircraft :</b>	LaRC B-200 King Air (N529NA) (Operating as NASA529)
<b>Operating Site(s) From / To :</b>	Pt. Barrow to Fairbanks to Juneau, AK
<b>Flight Date :</b>	4/20/2008
<b>Flight Number :</b>	R-142A and B
<b>Take Off Time :</b>	a) 1315 Local, 2115 UTC b) 1605 Local, 0005 UTC 4/21/2008
<b>Landing Time :</b>	a) 1508 Local, 2308 UTC b) 1833 Local, 0233 UTC 4/21/2008
<b>Flight Time :</b>	4.4 hours (total); 1.88 (a), 2.47 (b)
<b>Principal Investigator:</b>	Rich Ferrare
<b>Purpose of Flight :</b>	Data [X] Ferry [ ] Functional Check [ ] Other [ ]
<b>Sensor Payload :</b>	HSRL and Digital Camera
<b>Comments :</b>	<p>Launched from Pt Barrow through Fairbanks (refueling) to Juneau on the transit back to Langley Research Center. Haze diminished and in-flight visibility improved with decreasing latitudes. Some interesting cloud formations at the peaks of major mountains in southern Alaska. During flight HSRL measured elevated smoke layers throughout much of atmosphere. Over Barrow, smoke was concentrated in layer between 5-6.5 km; south of Barrow, and closer to Fairbanks, smoke was in several layers between 1.8 -5.5 km. Highest concentrations were in layers around 5 km. Smoke layers gradually dissipated south of about 63.5 deg S. Approaching Juneau, aerosol loading was lower, but saw some higher aerosol scattering and depolarization near the surface.</p>

**SUBMITTED: Rich Ferrare**

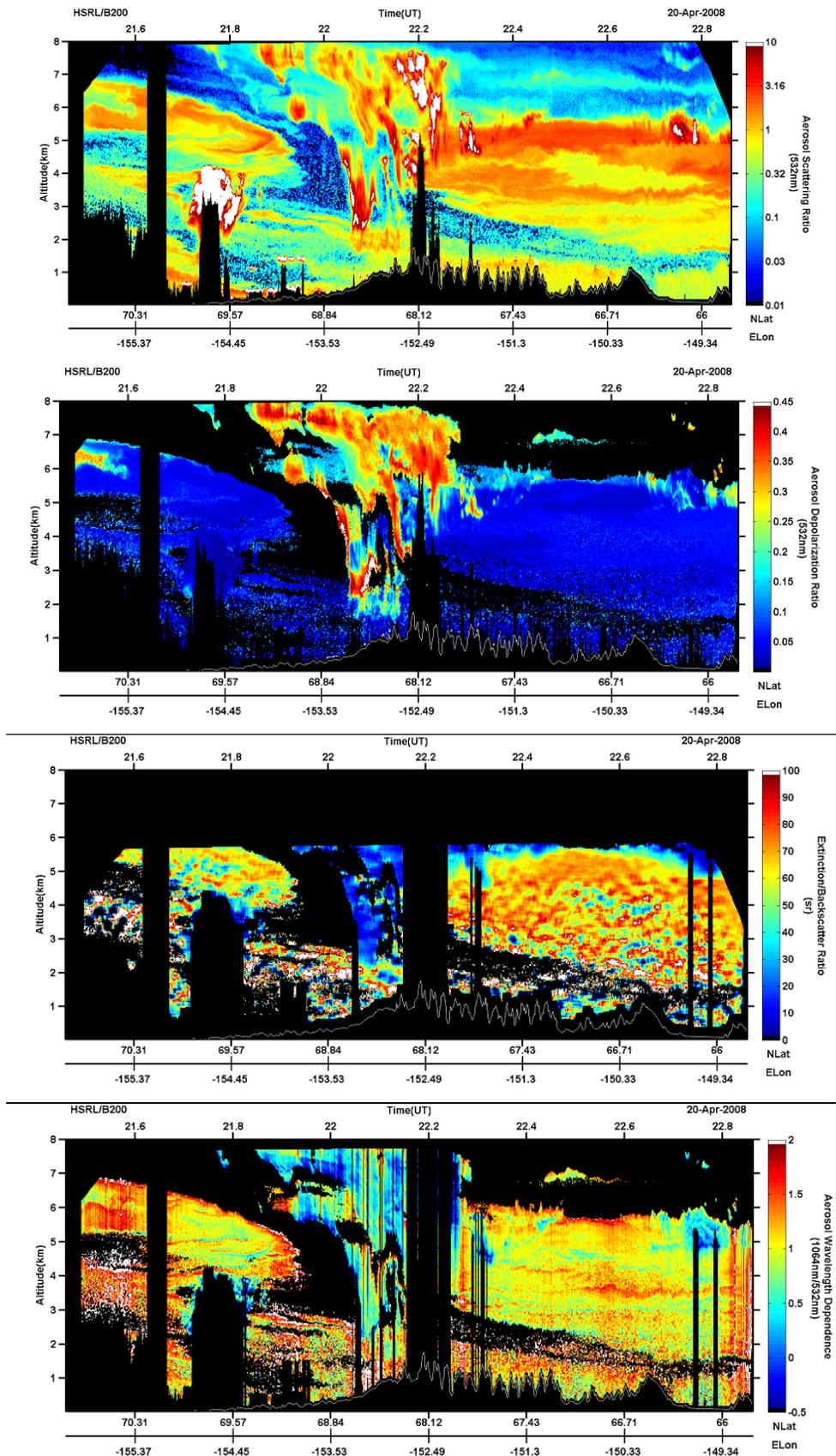
**DATE: 4/21/2008**

### First part (Barrow-Fairbanks) (a)

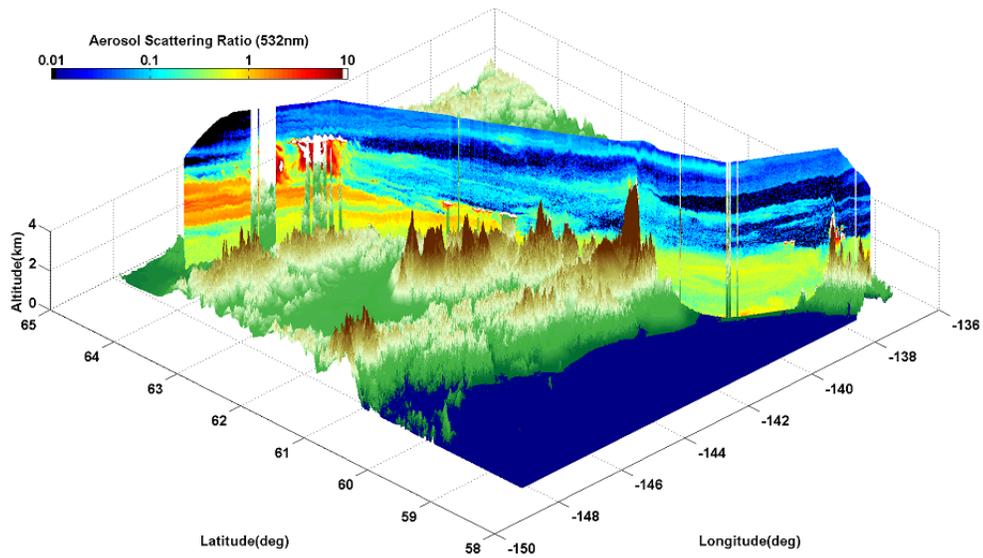
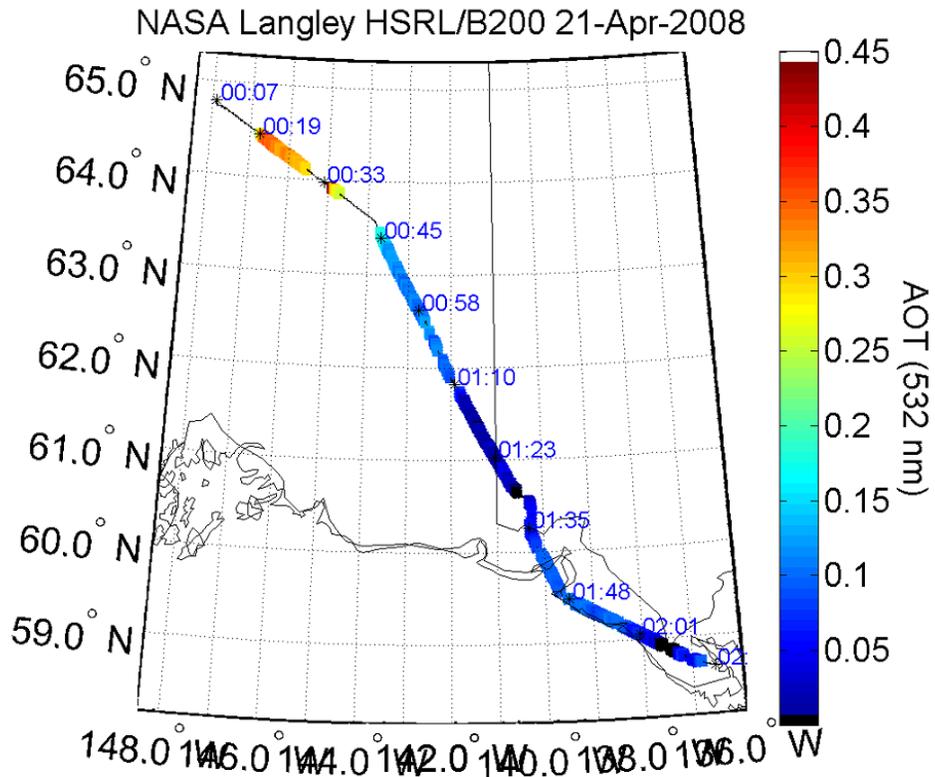
NASA Langley HSRL/B200 20-Apr-2008



# First part (Barrow-Fairbanks) (a)



## Second part (Fairbanks-Juneau) (b)



## Second part (Fairbanks-Juneau) (b)

