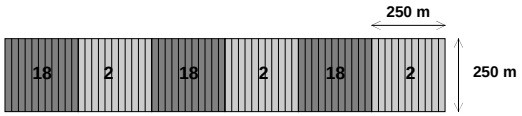
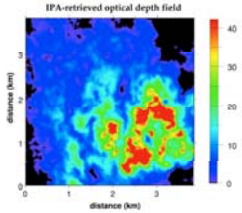
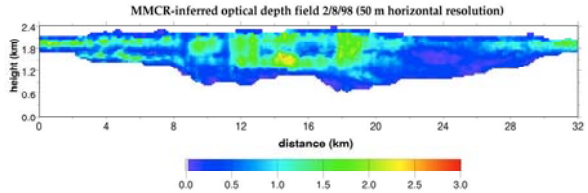
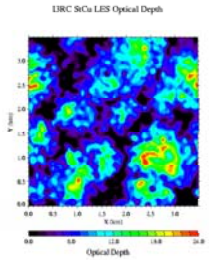
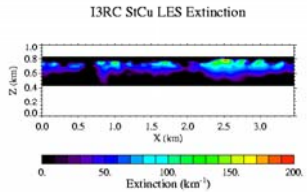
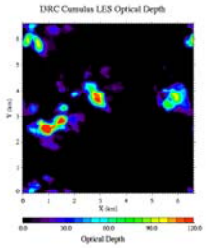
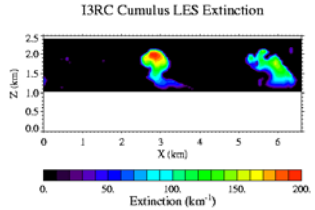
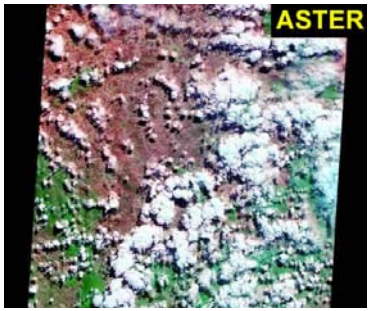
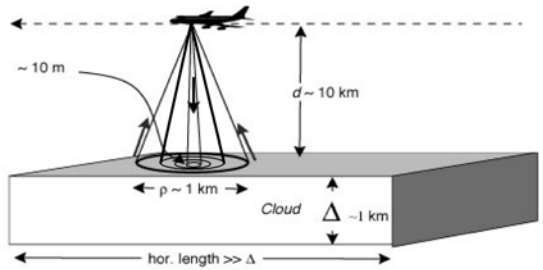
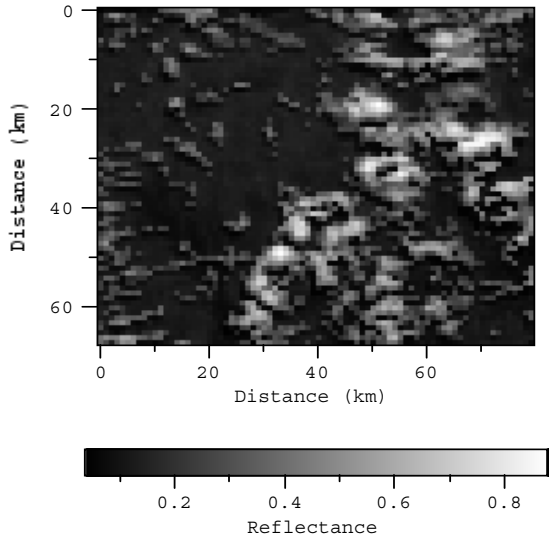
I3RC intercomparison cases

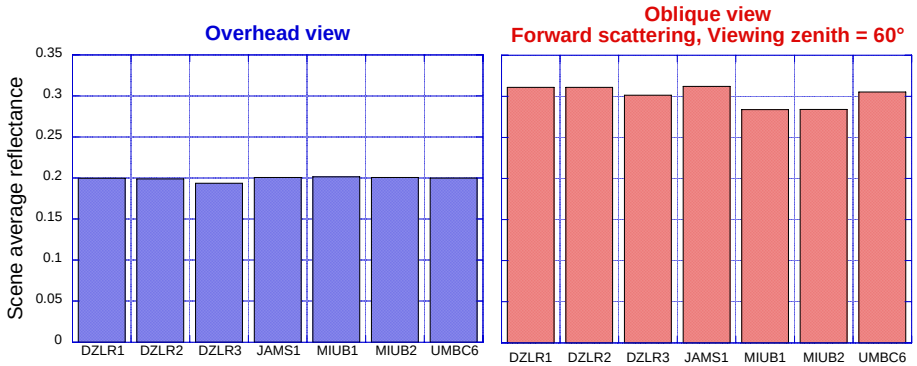
Phase 1			
Phase 2	 		 
Phase 3			

Phase 3 intercomparisons (12 models participated)

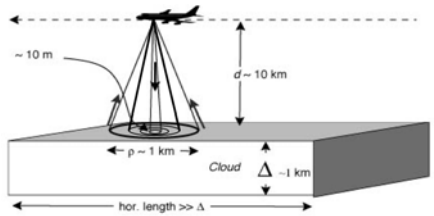
Solar reflectance

Overhead view
(simulated by JAMS model)



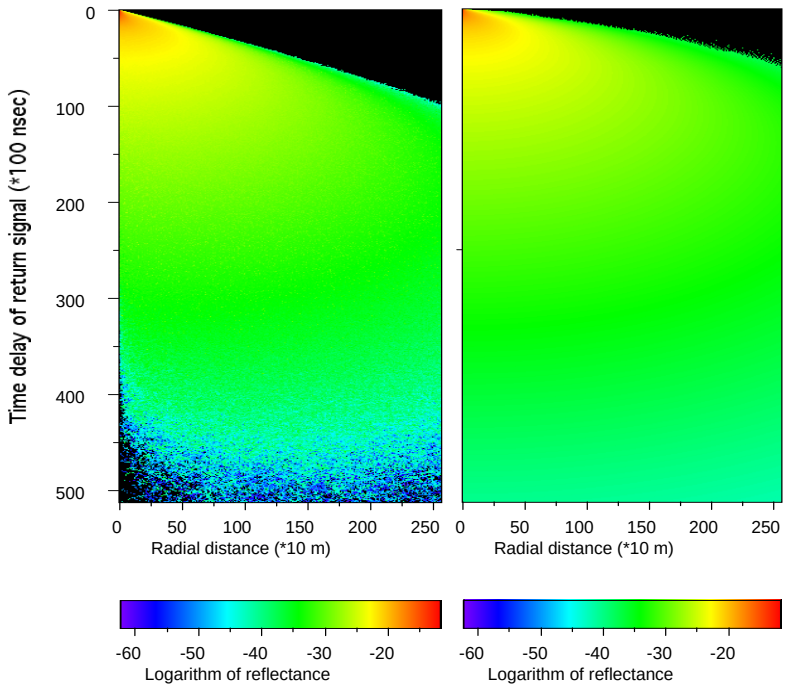


Lidar multiple scattering



DZLR
(Monte Carlo method)

URDG
(TDTS method)



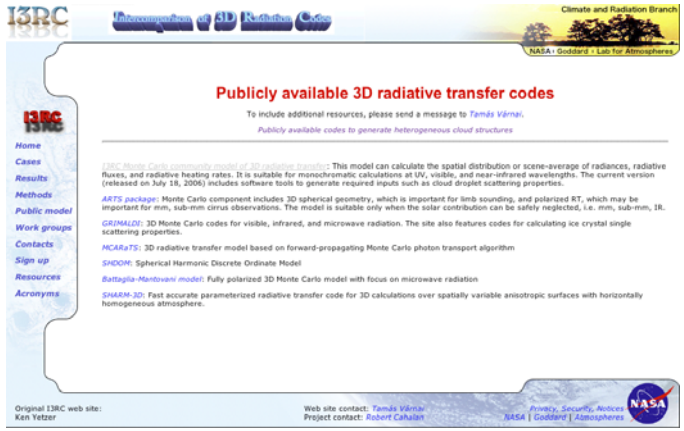
Other I3RC activities

I3RC community code of 3D radiative transfer

- Released in July 2006
- Over 40 downloads in 2007 (since we started keeping track)
- Can calculate radiative fluxes, heating rates, and radiances for any view direction
- Can provide both scene average values and complete fields
- Simulations for single wavelength

Information on 3D radiative transfer codes (including I3RC community code)

- Wikipedia: http://en.wikipedia.org/wiki/List_of_atmospheric_radiative_transfer_codes
- I3RC website: http://i3rc.gsfc.nasa.gov/ (also includes other resources such as 3D-related publications)



Plans

- Easy-to-use community model of 3D radiative transfer: online 3D simulator, executables
- Automated online system for future code verification
- Illustrative archive of 3D radiative effects