

Validations of a Principal Component-based Radiative Transfer Model Using AIRS and NAST-I Observed Radiances

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To effectively assimilating data observed from modern sensors with thousands of channels, rapid and accurate radiative transfer models are needed. Principal Component-based Radiative Transfer Model (PCRTM) is a rapid algorithm developed to meet this need. The PCRTM does its radiative transfer modeling in principal component domain instead of normal channel domain. The model has been successfully developed for various sensors. The current talk will present results of applying the PCRTM to AIRS and NAST-I radiance spectra.

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