

Zonal Trends in Flux Bias Error:

Theoretical Insight

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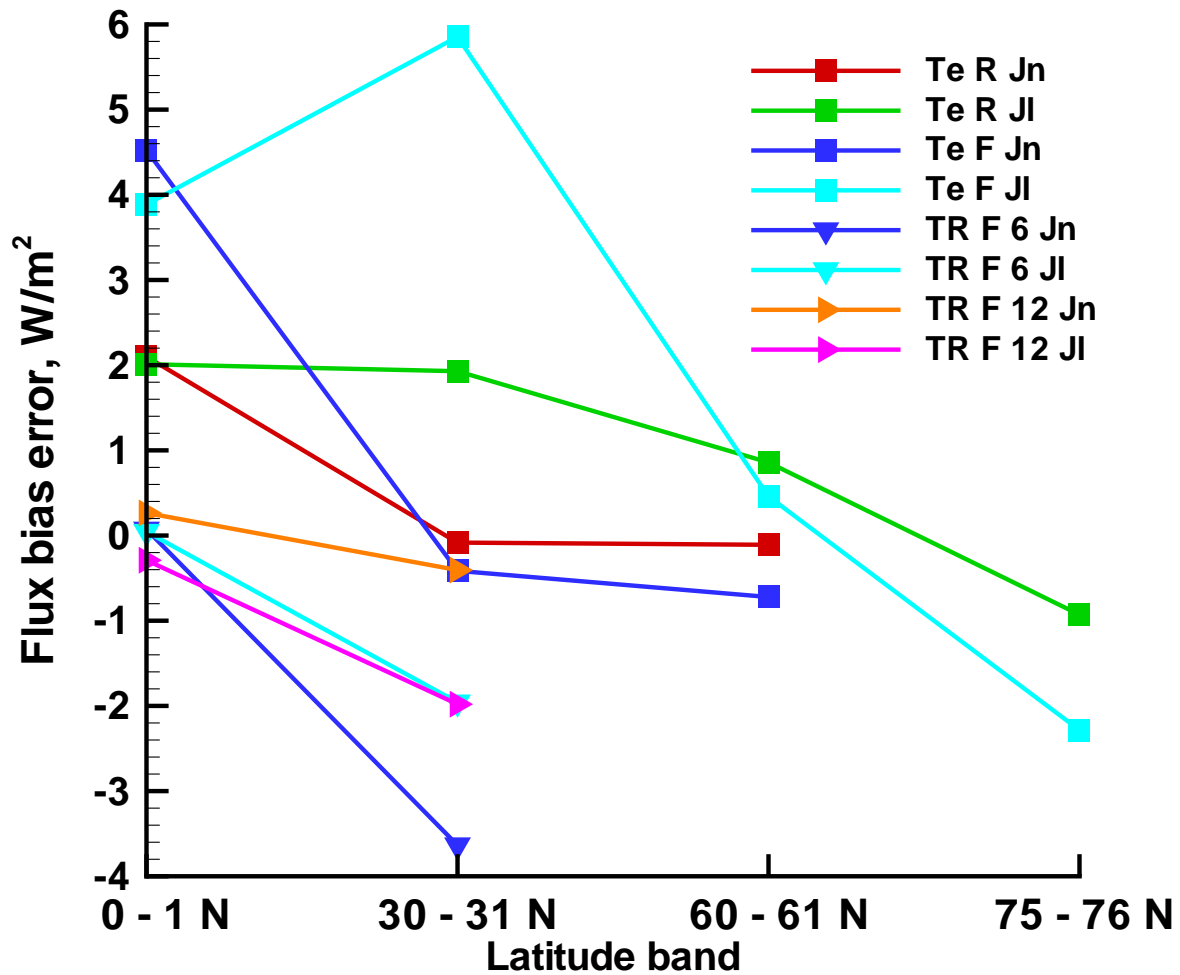
Objective

- **Use theoretical 2D analysis of Landsat-based “real” cloud scenes to examine errors in flux retrieval that may be incurred by CERES**

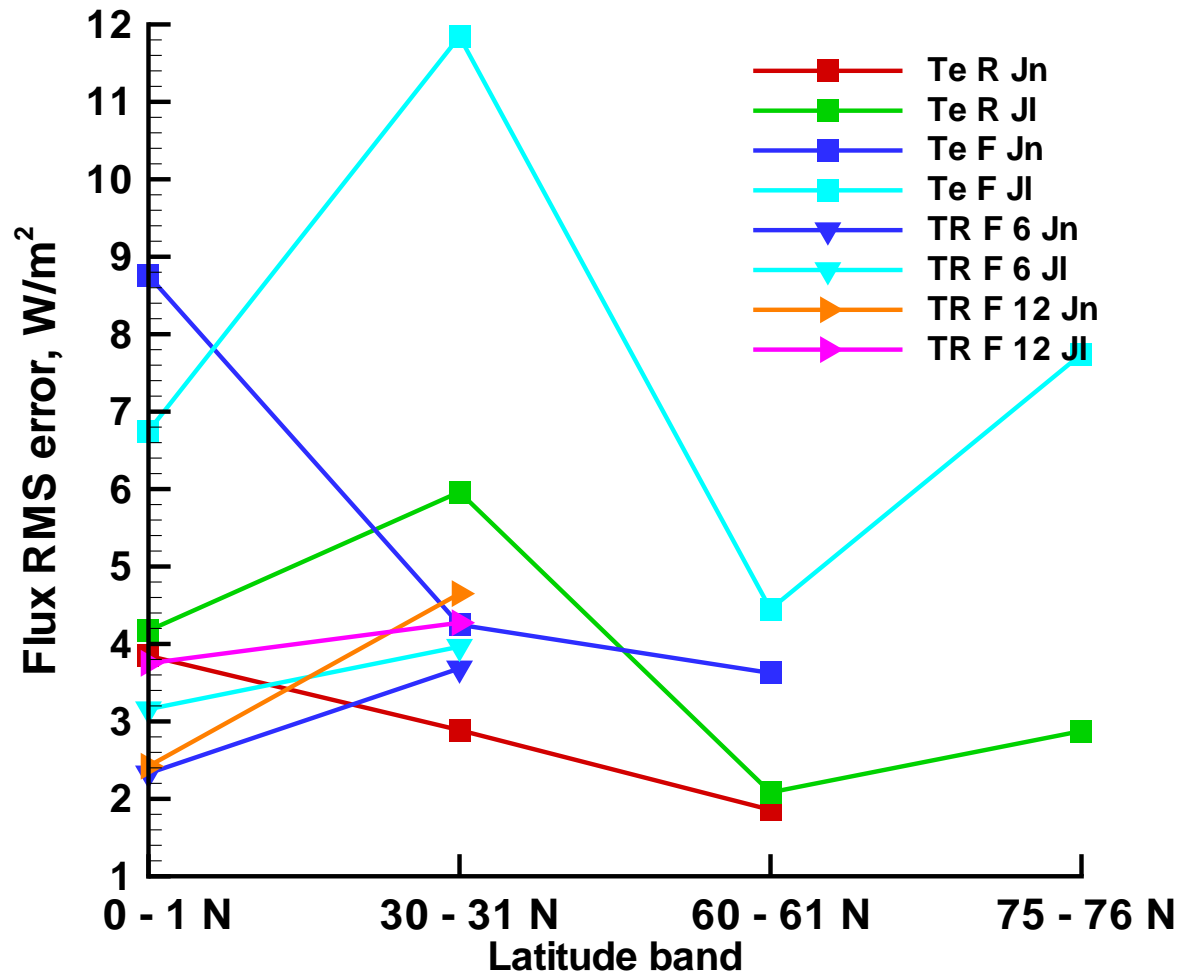
Approach

- **341 samples of marine boundary layer cloud used to successively cover planet**
- **Computed radiances -> Scene ID -> Flux inversion by ADM**
- **Error trends noted are due to angular sampling, not equator vs pole cloud types**

Flux Bias Error



Flux RMS Error



Conclusions

- **Consistent zonal trend in flux bias error noted**
- **Trend in RMS error is not terribly consistent**
- **Error trends shown are due to angular sampling differences, not cloud type changes**