List of Tables

Table 1. CERES launch dates and spacecraft information. 88

Table 2. Spectral bands of interest for the study of Earth/atmosphere energetics. 89

Table 3. Nominal component values for the CERES PFM total channel pre-amplifier circuit. 90

Table 4. Nominal component values for the CERES PFM total channel Bessel filter circuit. 91

Table 5. Nominal and modeled specifications for the detector module assembly. 92
Table 6. Predicted time constant and responsivity sensitivities, $\partial A/\partial B$, where $A$ equals either time constant, $\tau$, or Responsivity, $R$, and $B$ equals layer thickness, $\delta$, of the CERES detector module assembly.

Table 7. Narrow Field Black body (NFBB) temperatures, unfiltered and filtered radiances from the CERES ground calibration.

Table 8. Comparison of gains determined during the CERES ground calibration to the predicted values determined with the end-to-end model.

Table 9. Slow-mode numerical algorithm coefficient values in Eqs. 5.14 and 5.15 determined using the model.

Table 10. Results of a study where the thermal impedance between the compensating thermistor and aluminum substrate was varied.

Table 11. Overall number of footprints sorted by cloud categories for two weightings of the point spread function. Row and Column values correspond to the point spread function weightings displayed in Figures 5.33(a) and (b), respectively.

Table 12. Overall number of footprints sorted by surface type for two weightings of the point spread function. Row and Column values correspond to the point spread function weightings displayed in Figures 5.33(a) and (b), respectively.

Table 13. Comparison of the recovered shortwave TOA flux (Wm$^{-2}$) for the two point spread function weightings displayed in Figure 5.33.
The statistical mean difference in Wm$^{-2}$ (2-by-2 minus 16-by-16), standard deviation of the differences (std), and number of footprints (count) used in the comparison are presented.

Table 14: Comparison of the recovered longwave TOA flux (Wm$^{-2}$) for the two point spread function weightings displayed in Figure 5.33. The statistical mean difference in Wm$^{-2}$ (2-by-2 minus 16-by-16), standard deviation of the differences (std), and number of footprints (count) used in the comparison are presented.

Table 15: Autoregression coefficients determined for three combinations of $n$, $N$, and frequency content, $\omega$. All units are in Wm$^{-2}$sr$^{-1}$/count.