**Scenario: Present-day (2020)**

**CKD model: ecRad-RRTMG (fix SSI)**

- Bias TOA upwelling: $0.68 \text{ W m}^{-2}$
- Bias surface downwelling: $1.75 \text{ W m}^{-2}$
- RMSE TOA upwelling: $0.76 \text{ W m}^{-2}$
- RMSE surface downwelling: $1.96 \text{ W m}^{-2}$
- RMSE heating rate (0.02-4 hPa): $0.660 \text{ K d}^{-1}$
- RMSE heating rate (4-1100 hPa): $0.136 \text{ K d}^{-1}$