



Figure 4: The time series of clouds, smoke aerosols and radiation for Madison, WI (left panel) and St. Pierre and Miquelon (right panel) for the period of July 22-31. The top panel gives the 6-hourly cloud fraction as predicted by the ECMWF Re-analyses (ERA-15). The center panel gives the mean fraction of initial carbon burden of the smoke aerosols. The bottom panel of each figure gives the daily averaged solar insolation ($W m^{-2}$) from observations and the ERA-15 analysis.