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Radiative Losses of Solar Coronal Plasmas JAMES COLGAN, JOE ABDALLAH, MANOLO SHERRILL, MATT FOSTER, CHRISTOPHER FONTES, Los Alamos National Laboratory, URI FELDMAN, Naval Research Laboratory — A comprehensive set of calculations of the radiative losses of solar coronal plasmas is presented. The Los Alamos suite of atomic structure and collision codes is used to generate collisional data for fifteen coronal elements. These data are used in the Los Alamos plasma kinetics code ATOMIC to compute the radiative power loss as a function of electron temperature. We investigate the sensitivity of the loss curves to the quality of the atomic data, changes in the coronal elemental abundances, and compare our results with previous work.

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