Mounting empirical evidence suggests that the observed extreme prices within a trading period can provide valuable information about the volatility of the process within that period. In this paper we define a class of stochastic volatility models that uses opening and closing prices along with the minimum and maximum prices within a trading period to infer the dynamics underlying the volatility process of asset prices and compares it with similar models that have been previously presented in the literature. The paper also discusses sequential Monte Carlo algorithms to fit this class of models and illustrates its features using both a simulation study and data from the S&P500 index.

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