



Supplement of

Developing spring wheat in the Noah-MP land surface model (v4.4) for growing season dynamics and responses to temperature stress

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Figure S1:

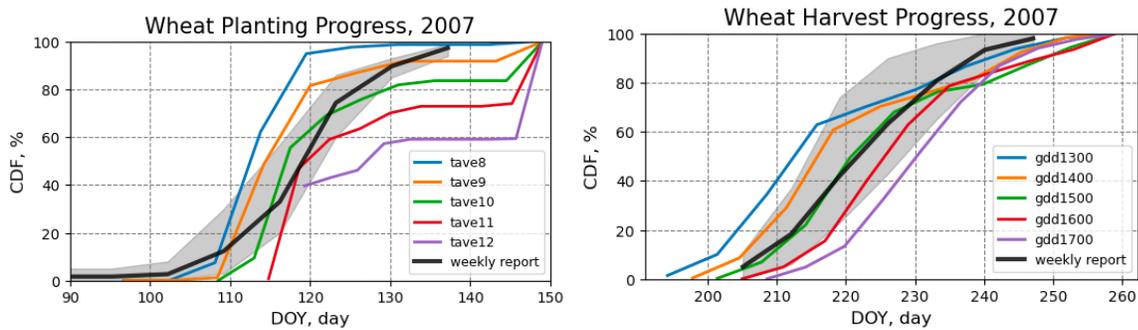


Figure S1. Cumulative distribution function (CDF) of the planting and harvest date from five parameter sensitivity analyses (TAVE=8, 9, 10, 11, 12 °C for planting and GDD=1300, 1400, 1500, 1600, 1700 for harvest), compared with the weekly progress report from USDA. The gray shaded areas indicating spatial variation for three states (North Dakota, South Dakota, and Minnesota).

Both parameters demonstrate strong influence on planting and harvest date in the North Great Plains region and indicate that average temperature and cumulative heat unit (e.g. GDD) have strong control of the management process on a large regional scale. These two figures show that the two parameters used in our study (TAVE=10 and GDD=1500), obtained from the global synthesis of Sacks (2010), are reasonable.