Supplementary Materials: Variability in Dry Mixed-Grass Prairie Yield: A Comparison of MODIS, SPOT, and Field Measurements

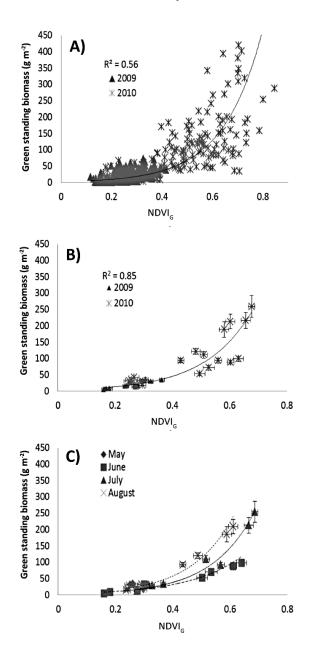**Donald C. Wehlage, John A. Gamon, Donnette Thayer and David Hildebrand**

Figure S1. Effect of spatial data aggregation and temporal filtering on the relationship between $NDVI_G$ and green standing biomass from the Pinhorn and Sounding Creek grazing reserves in 2009 and 2010. (**A**) Raw (unaggregated) data, where each data point represents a single ground sampling point ($N = 1$). (**B**) The same data aggregated (averaged) for all 10 sites within each grazing reserve by month, which better matched $NDVI_G$ to the scale of the satellite pixels (see Figures 1 and 2 for further details). (**C**) The same data as Panel B, with separate symbols and fits for individual months (May, June, July, and August). Aggregation and filtering allowed us to illustrate the NDVI–biomass relationships during the peak season (July; see Figure 7). All lines represent exponential fits.

Table S1. Mean site coordinates (degrees of latitude and longitude, measured in 2010) for Pinhorn (P) and Sounding Creek (S) grazing reserves. Measurements indicate repeated measures of the same sampling locations (see Figures 1 and 2), each with an error of approximately 10 m.

Site	May	June	July	August
P01	NAN, NAN	49.14366, –110.8124	49.14368, –110.81236	49.14365, –110.81244
P02	49.14934, –110.8202	49.14935, –110.82016	49.14938, –110.82018	49.14938, –110.82017
P03	49.13859, –110.8315	49.13855, –110.83147	49.13856, –110.83143	49.13855, –110.83149
P04	49.15069, –110.86387	49.15066, –110.86384	49.15063, –110.86379	49.15065, –110.86385
P05	49.1517, –110.88833	49.15167, –110.88831	49.15169, –110.88834	49.15167, –110.88835
P06	49.14124, –110.89009	49.14122, –110.89001	49.14124, –110.89001	49.14123, –110.89001
P07	49.1519, –110.90251	49.15184, –110.90248	49.15187, –110.90245	49.15187, –110.90247
P08	49.16117, –110.91185	49.16119, –110.91181	49.16118, –110.91179	49.16117, –110.91181
P09	49.15653, –110.92411	49.1565, –110.92406	49.15652, –110.92403	49.15652, –110.92402
P10	49.14196, –110.9209	49.14198, –110.92087	49.14196, –110.92088	49.14199, –110.92089
S01	51.53393, –110.59132	51.53389, –110.59129	51.53387, –110.59127	51.53392, –110.5913
S02	51.53445, –110.6079	51.53444, –110.60779	51.53445, –110.6078	51.53448, –110.60791
S03	51.53564, –110.62561	51.53563, –110.62556	51.53564, –110.62558	51.53566, –110.62554
S04	51.54657, –110.61903	51.54651, –110.619	NAN, NAN	51.54655, –110.61902
S05	51.53921, –110.65459	51.53922, –110.65454	51.53922, –110.65459	51.53922, –110.65457
S06	51.54559, –110.66618	51.54557, –110.66607	51.54557, –110.66602	51.54558, –110.66609
S07	51.55886, –110.66621	51.55884, –110.66614	51.5589, –110.66614	51.55885, –110.66615
S08	51.56189, –110.65523	51.56184, –110.6552	51.56188, –110.65518	51.56189, –110.65516
S09	51.56317, –110.66169	51.56315, –110.66164	51.56316, –110.66162	51.56318, –110.66169
S10	51.5727, –110.67628	51.57268, –110.67627	51.5727, –110.67619	51.57268, –110.67629