

The following Appendixes ([Appendix 1](#)) are the Electronic Supplementary Material of the article entitled “Improving remote sensing-based net primary production estimation in the grazed land with defoliation formulation model” at <https://doi.org/10.1007/s11629-018-5200-2>.

Appendix 1 Validation points across Xinjiang’s grassland biomes. NPP: Net primary Productivity outside enclosure ($\text{gC}\cdot\text{m}^{-2}\cdot\text{yr}^{-1}$); NPP_Nongra: Net primary Productivity inside enclosure ($\text{gC}\cdot\text{m}^{-2}\cdot\text{yr}^{-1}$)

No.	Site description	Lat.(°)	Lon.(°)	NPP value ($\text{gC}\cdot\text{m}^{-2}$)	Reference
1	NPP_Nongra	81.28	43.257	354	(Zhang et al. 2008)
2	NPP_Nongra	87.358	43.628	382	(Fan et al. 2009)
3	NPP_Nongra	81.238	42.641	429.92	(Yan 2009)
4	NPP_Nongra	80.75	41.772	315	(Zhang et al. 2012)
5	NPP_Nongra	89.52	44.15	305.61	This study
6	NPP_Nongra	89.53	43.69	294.97	This study
7	NPP_Nongra	89.53	43.63	600.75	This study
8	NPP_Nongra	83.72	42.9	344.03	This study
9	NPP_Nongra	87.19	43.55	306.89	This study
10	NPP	93.87	35.51	73.55	(Yang et al. 2010)
11	NPP	90.18	46.11	79.585	(Yang et al. 2010)
12	NPP	86.82	47.53	124.0335	(Yang et al. 2010)
13	NPP	86.18	47.28	168.85	(Yang et al. 2010)
14	NPP	86.02	46.6	182.6993	(Yang et al. 2010)
15	NPP	89.49	47.06	195.2027	(Yang et al. 2010)
16	NPP	81.15	45.02	198.0535	(Yang et al. 2010)
17	NPP	86.1	46.69	211.4071	(Yang et al. 2010)
18	NPP	87.75	47.73	224.2106	(Yang et al. 2010)
19	NPP	87.75	47.73	224.9107	(Yang et al. 2010)
20	NPP	92.3	43.69	228.5618	(Yang et al. 2010)
21	NPP	90.05	46.44	232.0127	(Yang et al. 2010)
22	NPP	84.03	43.3	271.1232	(Yang et al. 2010)
23	NPP	87.01	48.07	281.7261	(Yang et al. 2010)
24	NPP	94.01	43.42	297.0302	(Yang et al. 2010)
25	NPP	84.22	45.58	300.5312	(Yang et al. 2010)
26	NPP	84.42	43.45	302.4317	(Yang et al. 2010)
27	NPP	84.83	44.14	315.2851	(Yang et al. 2010)
28	NPP	90.3	43.76	323.1373	(Yang et al. 2010)
29	NPP	90.01	46.54	337.5411	(Yang et al. 2010)
30	NPP	81.61	44.6	347.1938	(Yang et al. 2010)
31	NPP	86.65	47.13	358.3468	(Yang et al. 2010)
32	NPP	84.37	43.15	384.5038	(Yang et al. 2010)
33	NPP	83.56	45.79	390.1553	(Yang et al. 2010)
34	NPP	83.65	45.59	400.9083	(Yang et al. 2010)
35	NPP	86.52	46.97	408.2103	(Yang et al. 2010)
36	NPP	85.77	43.96	408.2103	(Yang et al. 2010)
37	NPP	83.5	43.41	425.715	(Yang et al. 2010)
38	NPP	82.24	43.39	426.9153	(Yang et al. 2010)
39	NPP	84.4	43.66	428.3157	(Yang et al. 2010)
40	NPP	81.46	44.61	436.7679	(Yang et al. 2010)
41	NPP	90.61	43.65	461.8247	(Yang et al. 2010)
42	NPP	83.72	42.9	464.8255	(Anwar et al. 2006)
43	NPP	87.17	43.47	467.9764	(Yang et al. 2010)
44	NPP	81.15	44.49	469.3267	(Yang et al., 2010)
45	NPP	81.38	44.62	482.7304	(Yang et al. 2010)

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