

## Assessing Precipitation, Evapotranspiration, and NDVI as Controls of U.S. Great Plains Plant Production

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### Appendix S2. Average 2004-2014 NRCS ANPP for the U.S. GP counties.

Table S1. Average 2004-2014 NRCS ANPP for the U.S. GP counties.

| unfips | County and State | Latitude<br>(°) | Longitude<br>(°) | avg_ANPP<br>(g biomass / m <sup>2</sup> ) |
|--------|------------------|-----------------|------------------|-------------------------------------------|
| 08001  | adams, CO        | 39.87           | -104.36          | 171.8576                                  |
| 08005  | arapahoe, CO     | 39.65           | -104.34          | 166.2536                                  |
| 08009  | baca, CO         | 37.32           | -102.56          | 163.3181                                  |
| 08011  | bent, CO         | 37.95           | -103.07          | 130.1741                                  |
| 08017  | cheyenne, CO     | 38.83           | -102.6           | 166.1041                                  |
| 08025  | crowley, CO      | 38.33           | -103.78          | 125.7798                                  |
| 08039  | elbert, CO       | 39.29           | -104.14          | 154.0431                                  |
| 08041  | elpaso, CO       | 38.83           | -104.53          | 153.223                                   |
| 08055  | huerfano, CO     | 37.68           | -104.96          | 112.8594                                  |
| 08061  | kiowa, CO        | 38.43           | -102.74          | 122.7797                                  |
| 08063  | kitcarson, CO    | 39.31           | -102.6           | 173.7301                                  |
| 08071  | lasanimas, CO    | 37.32           | -104.04          | 105.5854                                  |
| 08073  | lincoln, CO      | 38.99           | -103.51          | 137.0134                                  |
| 08075  | logan, CO        | 40.72           | -103.11          | 198.4877                                  |
| 08087  | morgan, CO       | 40.26           | -103.81          | 205.5178                                  |
| 08089  | otero, CO        | 37.9            | -103.72          | 114.6675                                  |
| 08095  | phillips, CO     | 40.59           | -102.36          | 235.3702                                  |
| 08099  | prowers, CO      | 37.95           | -102.39          | 160.3159                                  |
| 08101  | pueblo, CO       | 38.17           | -104.51          | 100.2081                                  |
| 08115  | sedgwick, CO     | 40.88           | -102.35          | 200.5661                                  |
| 08121  | washington, CO   | 39.97           | -103.2           | 165.104                                   |
| 08123  | weld, CO         | 40.55           | -104.39          | 176.4109                                  |
| 08125  | yuma, CO         | 40              | -102.42          | 212.1757                                  |
| 20007  | barber, KS       | 37.23           | -98.68           | 292.0624                                  |
| 20009  | barton, KS       | 38.48           | -98.76           | 560.4052                                  |
| 20023  | cheyenne, KS     | 39.79           | -101.73          | 189.0094                                  |
| 20025  | clark, KS        | 37.24           | -99.82           | 198.3212                                  |
| 20033  | comanche, KS     | 37.19           | -99.27           | 266.3199                                  |
| 20039  | decatur, KS      | 39.78           | -100.46          | 199.5155                                  |

|       |               |       |         |          |
|-------|---------------|-------|---------|----------|
| 20047 | edwards, KS   | 37.89 | -99.31  | 314.9477 |
| 20051 | ellis, KS     | 38.91 | -99.32  | 267.7492 |
| 20053 | ellsworth, KS | 38.7  | -98.2   | 391.7233 |
| 20055 | finney, KS    | 38.04 | -100.74 | 110.213  |
| 20057 | ford, KS      | 37.69 | -99.89  | 233.9762 |
| 20063 | gove, KS      | 38.92 | -100.48 | 223.7138 |
| 20065 | graham, KS    | 39.35 | -99.88  | 320.354  |
| 20067 | grant, KS     | 37.56 | -101.31 | 138.9805 |
| 20069 | gray, KS      | 37.74 | -100.44 | 179.3297 |
| 20071 | greeley, KS   | 38.48 | -101.81 | 67.24863 |
| 20075 | hamilton, KS  | 38    | -101.79 | 100.8729 |
| 20077 | harper, KS    | 37.19 | -98.08  | 391.1068 |
| 20083 | hodgeman, KS  | 38.09 | -99.9   | 330.6391 |
| 20089 | jewell, KS    | 39.78 | -98.22  | 381.0756 |
| 20093 | kearny, KS    | 38    | -101.32 | 128.5983 |
| 20095 | kingman, KS   | 37.56 | -98.14  | 353.5036 |
| 20097 | kiowa, KS     | 37.56 | -99.29  | 318.7049 |
| 20101 | lane, KS      | 38.48 | -100.47 | 250.0121 |
| 20105 | lincoln, KS   | 39.05 | -98.21  | 309.9674 |
| 20109 | logan, KS     | 38.92 | -101.15 | 220.5959 |
| 20119 | meade, KS     | 37.24 | -100.37 | 194.2738 |
| 20123 | mittchell, KS | 39.39 | -98.21  | 353.1113 |
| 20129 | morton, KS    | 37.19 | -101.8  | 172.6048 |
| 20135 | ness, KS      | 38.48 | -99.92  | 274.5986 |
| 20137 | norton, KS    | 39.78 | -99.9   | 310.6061 |
| 20141 | osborne, KS   | 39.35 | -98.77  | 331.8189 |
| 20145 | pawnee, KS    | 38.18 | -99.24  | 300.7508 |
| 20147 | phillips, KS  | 39.78 | -99.35  | 320.9877 |
| 20151 | pratt, KS     | 37.65 | -98.74  | 342.968  |
| 20153 | rawlins, KS   | 39.79 | -101.08 | 204.4145 |
| 20155 | reno, KS      | 37.95 | -98.09  | 311.185  |
| 20159 | rice, KS      | 38.35 | -98.2   | 483.5497 |
| 20163 | rooks, KS     | 39.35 | -99.33  | 299.1702 |
| 20165 | rush, KS      | 38.52 | -99.31  | 504.3647 |
| 20167 | russell, KS   | 38.91 | -98.76  | 323.167  |
| 20171 | scott, KS     | 38.48 | -100.91 | 207.3499 |
| 20175 | seward, KS    | 37.19 | -100.85 | 155.7927 |
| 20179 | sheridan, KS  | 39.35 | -100.44 | 229.1435 |
| 20181 | sherman, KS   | 39.35 | -101.72 | 208.1505 |
| 20183 | smith, KS     | 39.79 | -98.79  | 346.5172 |
| 20185 | stafford, KS  | 38.03 | -98.72  | 370.652  |
| 20187 | stanton, KS   | 37.56 | -101.78 | 149.4414 |
| 20189 | stevens, KS   | 37.19 | -101.31 | 148.5074 |

|       |                 |       |         |          |
|-------|-----------------|-------|---------|----------|
| 20193 | thomas, KS      | 39.35 | -101.06 | 162.5175 |
| 20195 | trego, KS       | 38.91 | -99.87  | 268.294  |
| 20199 | wallace, KS     | 38.92 | -101.76 | 225.5631 |
| 20203 | wichita, KS     | 38.48 | -101.35 | 181.1977 |
| 30003 | bighorn, MT     | 45.42 | -107.49 | 169.3805 |
| 30005 | blaine, MT      | 48.43 | -108.96 | 174.1179 |
| 30009 | carbon, MT      | 45.23 | -109.03 | 141.1521 |
| 30011 | carter, MT      | 45.52 | -104.54 | 155.6059 |
| 30015 | chouteau, MT    | 47.88 | -110.44 | 171.6878 |
| 30017 | custer, MT      | 46.25 | -105.57 | 149.2977 |
| 30019 | daniels, MT     | 48.78 | -105.55 | 157.5361 |
| 30021 | dawson, MT      | 47.27 | -104.9  | 186.0114 |
| 30025 | fallon, MT      | 46.33 | -104.42 | 171.1391 |
| 30027 | fergus, MT      | 47.26 | -109.22 | 186.9855 |
| 30033 | garfield, MT    | 47.28 | -106.99 | 149.3246 |
| 30037 | goldenvally, MT | 46.38 | -109.18 | 135.3594 |
| 30041 | hill, MT        | 48.63 | -110.11 | 163.2905 |
| 30051 | liberty, MT     | 48.56 | -111.02 | 159.8874 |
| 30055 | mccone, MT      | 47.64 | -105.8  | 170.55   |
| 30065 | musselshell, MT | 46.5  | -108.4  | 135.0723 |
| 30069 | petroleum, MT   | 47.12 | -108.25 | 143.5058 |
| 30071 | phillips, MT    | 48.26 | -107.92 | 150.6981 |
| 30075 | powderriver, MT | 45.39 | -105.63 | 148.2327 |
| 30079 | prairie, MT     | 46.86 | -105.38 | 153.8001 |
| 30083 | richland, MT    | 47.79 | -104.56 | 185.8677 |
| 30085 | roosevelt, MT   | 48.3  | -105.02 | 173.2945 |
| 30087 | rosebud, MT     | 46.23 | -106.73 | 146.8858 |
| 30091 | sheridan, MT    | 48.72 | -104.5  | 155.0454 |
| 30095 | stillwater, MT  | 45.67 | -109.4  | 156.8304 |
| 30097 | sweetgrass, MT  | 45.81 | -109.94 | 142.8865 |
| 30101 | toole, MT       | 48.65 | -111.7  | 183.0704 |
| 30103 | treasure, MT    | 46.21 | -107.27 | 140.6108 |
| 30105 | valley, MT      | 48.36 | -106.67 | 173.7972 |
| 30107 | wheatland, MT   | 46.47 | -109.84 | 160.4219 |
| 30109 | wibaux, MT      | 46.96 | -104.25 | 156.1493 |
| 30111 | yellowstone, MT | 45.94 | -108.28 | 145.9779 |
| 31003 | antelope, NE    | 42.18 | -98.07  | 339.8457 |
| 31005 | arthur, NE      | 41.57 | -101.7  | 226.14   |
| 31007 | banner, NE      | 41.55 | -103.71 | 127.7257 |
| 31009 | blaine, NE      | 41.91 | -99.98  | 279.1519 |
| 31011 | boone, NE       | 41.71 | -98.07  | 354.9233 |
| 31013 | boxbutte, NE    | 42.22 | -103.09 | 201.3456 |
| 31015 | boyd, NE        | 42.9  | -98.77  | 259.105  |

|       |               |       |         |          |
|-------|---------------|-------|---------|----------|
| 31017 | brown, NE     | 42.43 | -99.93  | 281.1092 |
| 31019 | buffalo, NE   | 40.86 | -99.07  | 372.5047 |
| 31027 | cedar, NE     | 42.6  | -97.25  | 280.2026 |
| 31029 | chase, NE     | 40.52 | -101.7  | 188.6698 |
| 31031 | cherry, NE    | 42.54 | -101.12 | 240.6331 |
| 31033 | cheyenne, NE  | 41.22 | -102.99 | 178.3957 |
| 31041 | custler, NE   | 41.39 | -99.73  | 341.4469 |
| 31045 | dawes, NE     | 42.72 | -103.14 | 190.8111 |
| 31047 | dawson, NE    | 40.87 | -99.82  | 372.903  |
| 31049 | deuel, NE     | 41.11 | -102.33 | 213.6545 |
| 31057 | dundy, NE     | 40.18 | -101.69 | 157.0886 |
| 31061 | franklin, NE  | 40.18 | -98.95  | 273.5796 |
| 31063 | frontier, NE  | 40.53 | -100.39 | 209.7917 |
| 31065 | furnas, NE    | 40.18 | -99.91  | 241.4053 |
| 31069 | garden, NE    | 41.62 | -102.34 | 215.921  |
| 31071 | garfield, NE  | 41.91 | -98.99  | 302.9138 |
| 31073 | gospert, NE   | 40.51 | -99.83  | 405.3598 |
| 31075 | grant, NE     | 41.91 | -101.74 | 260.146  |
| 31077 | greeley, NE   | 41.57 | -98.52  | 319.6857 |
| 31079 | hall, NE      | 40.87 | -98.5   | 489.2338 |
| 31083 | harlan, NE    | 40.18 | -99.4   | 359.9172 |
| 31085 | hayes, NE     | 40.52 | -101.06 | 196.1418 |
| 31087 | hitchcock, NE | 40.18 | -101.04 | 144.6379 |
| 31089 | holt, NE      | 42.46 | -98.78  | 274.2076 |
| 31091 | hooker, NE    | 41.92 | -101.14 | 243.0758 |
| 31093 | howard, NE    | 41.22 | -98.52  | 384.8116 |
| 31101 | keith, NE     | 41.2  | -101.66 | 196.906  |
| 31103 | keyapaha, NE  | 42.88 | -99.71  | 244.1549 |
| 31105 | kimball, NE   | 41.2  | -103.71 | 126.4274 |
| 31107 | knox, NE      | 42.64 | -97.89  | 325.035  |
| 31111 | lincoln, NE   | 41.05 | -100.75 | 241.713  |
| 31113 | logan, NE     | 41.57 | -100.48 | 260.5884 |
| 31115 | loup, NE      | 41.91 | -99.45  | 309.4237 |
| 31117 | mcperson, NE  | 41.57 | -101.06 | 252.6918 |
| 31121 | merrick, NE   | 41.17 | -98.04  | 442.4088 |
| 31123 | morrill, NE   | 41.72 | -103.01 | 180.3874 |
| 31125 | nance, NE     | 41.4  | -97.99  | 321.9217 |
| 31129 | nuckolls, NE  | 40.18 | -98.05  | 367.7659 |
| 31135 | perkins, NE   | 40.85 | -101.65 | 246.5783 |
| 31137 | phelps, NE    | 40.51 | -99.41  | 349.3193 |
| 31139 | pierce, NE    | 42.26 | -97.6   | 257.7864 |
| 31145 | redwillow, NE | 40.18 | -100.48 | 292.2113 |
| 31149 | rock, NE      | 42.42 | -99.45  | 304.0198 |

|       |                 |       |         |          |
|-------|-----------------|-------|---------|----------|
| 31157 | scottsbluff, NE | 41.85 | -103.71 | 131.2528 |
| 31161 | sheridan, NE    | 42.5  | -102.41 | 234.1693 |
| 31163 | sherman, NE     | 41.22 | -98.98  | 364.9306 |
| 31165 | sioux, NE       | 42.49 | -103.76 | 162.393  |
| 31171 | thomas, NE      | 41.91 | -100.56 | 249.1648 |
| 31175 | valley, NE      | 41.57 | -98.98  | 326.4454 |
| 31181 | webster, NE     | 40.18 | -98.5   | 341.9873 |
| 31183 | wheeler, NE     | 41.91 | -98.53  | 310.3244 |
| 35005 | chaves, NM      | 33.36 | -104.47 | 106.7512 |
| 35007 | colfax, NM      | 36.61 | -104.65 | 108.345  |
| 35009 | curry, NM       | 34.57 | -103.35 | 166.1123 |
| 35011 | debaca, NM      | 34.34 | -104.41 | 167.0876 |
| 35015 | eddy, NM        | 32.47 | -104.3  | 101.0216 |
| 35019 | guadalupe, NM   | 34.86 | -104.79 | 118.6023 |
| 35021 | harding, NM     | 35.86 | -103.82 | 137.551  |
| 35025 | lea, NM         | 32.79 | -103.41 | 132.5206 |
| 35033 | mora, NM        | 36.01 | -104.94 | 109.0376 |
| 35037 | quay, NM        | 35.1  | -103.55 | 162.1991 |
| 35041 | roosevelt, NM   | 34.02 | -103.48 | 190.8535 |
| 35047 | sanmiguel, NM   | 35.48 | -104.82 | 105.0712 |
| 35059 | union, NM       | 36.48 | -103.47 | 136.3714 |
| 38001 | adams, ND       | 46.1  | -102.53 | 244.0474 |
| 38005 | benson, ND      | 48.07 | -99.37  | 452.8074 |
| 38007 | billings, ND    | 47.02 | -103.38 | 220.0864 |
| 38009 | bottineau, ND   | 48.79 | -100.83 | 363.0181 |
| 38011 | bowman, ND      | 46.11 | -103.52 | 195.7916 |
| 38013 | burke, ND       | 48.79 | -102.52 | 234.2164 |
| 38015 | burleigh, ND    | 46.98 | -100.47 | 282.053  |
| 38021 | dickey, ND      | 46.11 | -98.5   | 357.4585 |
| 38023 | divide, ND      | 48.82 | -103.49 | 255.3346 |
| 38025 | dunn, ND        | 47.36 | -102.62 | 225.1854 |
| 38027 | eddy, ND        | 47.72 | -98.9   | 296.0808 |
| 38029 | emmons, ND      | 46.28 | -100.24 | 284.7559 |
| 38031 | foster, ND      | 47.46 | -98.88  | 252.1824 |
| 38033 | goldenvally, ND | 46.94 | -103.85 | 189.3119 |
| 38035 | grandforks, ND  | 47.92 | -97.46  | 300.7508 |
| 38037 | grant, ND       | 46.36 | -101.64 | 235.3702 |
| 38039 | griggs, ND      | 47.46 | -98.24  | 347.9607 |
| 38041 | hettinger, ND   | 46.43 | -102.46 | 320.365  |
| 38043 | kidder, ND      | 46.98 | -99.78  | 317.096  |
| 38045 | lamoure, ND     | 46.46 | -98.54  | 184.9337 |
| 38047 | logan, ND       | 46.46 | -99.48  | 290.2309 |
| 38049 | mchenry, ND     | 48.23 | -100.64 | 362.342  |

|       |               |       |         |          |
|-------|---------------|-------|---------|----------|
| 38051 | mcintosh, ND  | 46.11 | -99.44  | 234.1249 |
| 38053 | mckenzie, ND  | 47.74 | -103.4  | 212.7464 |
| 38055 | mclean, ND    | 47.61 | -101.32 | 255.8085 |
| 38057 | mercier, ND   | 47.31 | -101.83 | 244.409  |
| 38059 | morton, ND    | 46.72 | -101.28 | 235.7778 |
| 38061 | mountrail, ND | 48.2  | -102.36 | 236.954  |
| 38063 | nelson, ND    | 47.92 | -98.19  | 348.2518 |
| 38065 | oliver, ND    | 47.12 | -101.34 | 258.3201 |
| 38069 | pierce, ND    | 48.25 | -99.97  | 325.2685 |
| 38071 | ramsey, ND    | 48.27 | -98.72  | 459.5323 |
| 38073 | ransom, ND    | 46.46 | -97.66  | 305.4209 |
| 38075 | renville, ND  | 48.72 | -101.66 | 459.5323 |
| 38079 | rolette, ND   | 48.77 | -99.84  | 351.1873 |
| 38081 | sargent, ND   | 46.11 | -97.63  | 427.0288 |
| 38083 | sheridan, ND  | 47.58 | -100.35 | 252.8495 |
| 38085 | sioux, ND     | 46.11 | -101.04 | 249.1135 |
| 38087 | slope, ND     | 46.45 | -103.46 | 164.2418 |
| 38089 | stark, ND     | 46.81 | -102.66 | 239.326  |
| 38091 | steele, ND    | 47.46 | -97.72  | 425.908  |
| 38093 | stutsman, ND  | 46.98 | -98.96  | 300.3772 |
| 38095 | townler, ND   | 48.68 | -99.25  | 396.4867 |
| 38099 | walsh, ND     | 48.37 | -97.72  | 322.233  |
| 38101 | ward, ND      | 48.22 | -101.54 | 253.4277 |
| 38103 | wells, ND     | 47.59 | -99.66  | 321.0321 |
| 38105 | williams, ND  | 48.34 | -103.48 | 244.8727 |
| 40003 | alfalfa, OK   | 36.73 | -98.32  | 422.1719 |
| 40007 | beaver, OK    | 36.75 | -100.48 | 189.1246 |
| 40009 | beckham, OK   | 35.27 | -99.68  | 188.9686 |
| 40011 | blaine, OK    | 35.87 | -98.43  | 285.6233 |
| 40015 | caddo, OK     | 35.17 | -98.37  | 279.6422 |
| 40017 | canadian, OK  | 35.54 | -97.98  | 521.1096 |
| 40025 | cimarron, OK  | 36.75 | -102.52 | 167.1051 |
| 40031 | comanche, OK  | 34.66 | -98.47  | 243.2159 |
| 40033 | cotton, OK    | 34.29 | -98.37  | 315.0085 |
| 40039 | custer, OK    | 35.64 | -99     | 271.096  |
| 40043 | dewey, OK     | 35.99 | -99.01  | 280.7739 |
| 40045 | ellis, OK     | 36.22 | -99.75  | 291.3547 |
| 40047 | garfield, OK  | 36.38 | -97.78  | 252.1824 |
| 40051 | grady, OK     | 35.02 | -97.88  | 451.8332 |
| 40053 | grant, OK     | 36.8  | -97.79  | 367.9994 |
| 40055 | greer, OK     | 34.94 | -99.56  | 250.4339 |
| 40057 | harmon, OK    | 34.74 | -99.85  | 302.4252 |
| 40059 | harper, OK    | 36.79 | -99.67  | 238.6144 |

|       |                |       |         |          |
|-------|----------------|-------|---------|----------|
| 40065 | jackson, OK    | 34.59 | -99.41  | 292.1704 |
| 40067 | jefferson, OK  | 34.11 | -97.84  | 413.3011 |
| 40073 | kingfisher, OK | 35.95 | -97.94  | 319.431  |
| 40075 | kiowa, OK      | 34.92 | -98.98  | 282.4442 |
| 40093 | major, OK      | 36.31 | -98.54  | 242.9504 |
| 40129 | rogermills, OK | 35.69 | -99.7   | 285.8562 |
| 40137 | stephens, OK   | 34.49 | -97.85  | 450.0961 |
| 40139 | texas, OK      | 36.75 | -101.49 | 183.3005 |
| 40141 | tillman, OK    | 34.37 | -98.92  | 336.4673 |
| 40149 | washita, OK    | 35.29 | -98.99  | 271.4155 |
| 40151 | woods, OK      | 36.77 | -98.86  | 248.2025 |
| 40153 | woodward, OK   | 36.42 | -99.27  | 279.6471 |
| 46003 | aurora, SD     | 43.72 | -98.56  | 338.7338 |
| 46005 | beadle, SD     | 44.41 | -98.28  | 406.9404 |
| 46007 | bennett, SD    | 43.19 | -101.66 | 270.655  |
| 46009 | bonhomme, SD   | 42.99 | -97.88  | 313.8269 |
| 46013 | brown, SD      | 45.59 | -98.35  | 236.902  |
| 46015 | brule, SD      | 43.72 | -99.08  | 331.5731 |
| 46017 | buffalo, SD    | 44.08 | -99.2   | 293.4863 |
| 46019 | butte, SD      | 44.91 | -103.51 | 166.9621 |
| 46021 | campbell, SD   | 45.77 | -100.05 | 269.0407 |
| 46023 | charlesmix, SD | 43.21 | -98.59  | 383.3172 |
| 46025 | clark, SD      | 44.86 | -97.73  | 371.1128 |
| 46031 | corson, SD     | 45.71 | -101.2  | 214.0564 |
| 46035 | davison, SD    | 43.67 | -98.15  | 358.6594 |
| 46037 | day, SD        | 45.37 | -97.61  | 417.5019 |
| 46041 | dewey, SD      | 45.16 | -100.87 | 215.6439 |
| 46043 | douglas, SD    | 43.39 | -98.37  | 355.8573 |
| 46045 | edmunds, SD    | 45.42 | -99.22  | 330.3028 |
| 46047 | fallriver, SD  | 43.24 | -103.53 | 186.8017 |
| 46049 | faulk, SD      | 45.07 | -99.15  | 305.4927 |
| 46053 | gregory, SD    | 43.19 | -99.19  | 307.9057 |
| 46055 | haakon, SD     | 44.29 | -101.54 | 241.4053 |
| 46059 | hand, SD       | 44.55 | -99     | 314.4496 |
| 46061 | hanson, SD     | 43.67 | -97.79  | 339.0452 |
| 46063 | harding, SD    | 45.58 | -103.5  | 194.7611 |
| 46065 | hughes, SD     | 44.39 | -100    | 293.0712 |
| 46067 | hutchinson, SD | 43.33 | -97.75  | 465.1363 |
| 46069 | hyde, SD       | 44.55 | -99.49  | 304.3    |
| 46071 | jackson, SD    | 43.87 | -101.59 | 240.2971 |
| 46073 | jerauld, SD    | 44.07 | -98.63  | 364.8861 |
| 46075 | jones, SD      | 43.96 | -100.69 | 262.0562 |
| 46077 | kingsbury, SD  | 44.37 | -97.49  | 417.5019 |

|       |                   |       |         |          |
|-------|-------------------|-------|---------|----------|
| 46085 | lyman, SD         | 43.9  | -99.85  | 267.7492 |
| 46087 | mccook, SD        | 43.67 | -97.37  | 302.6188 |
| 46089 | mcperson, SD      | 45.77 | -99.22  | 267.4254 |
| 46091 | marshall, SD      | 45.76 | -97.6   | 399.0085 |
| 46093 | meade, SD         | 44.57 | -102.72 | 213.4877 |
| 46097 | miner, SD         | 44.02 | -97.61  | 404.7371 |
| 46103 | pennington, SD    | 44    | -102.82 | 211.6731 |
| 46105 | perkins, SD       | 45.49 | -102.48 | 204.0534 |
| 46107 | potter, SD        | 45.06 | -99.96  | 290.6798 |
| 46111 | sanborn, SD       | 44.02 | -98.09  | 382.57   |
| 46113 | shannon, SD       | 43.34 | -102.55 | 223.6198 |
| 46115 | spink, SD         | 44.94 | -98.35  | 314.2659 |
| 46117 | stanley, SD       | 44.41 | -100.74 | 251.5597 |
| 46119 | sully, SD         | 44.72 | -100.13 | 310.4645 |
| 46121 | todd, SD          | 43.19 | -100.72 | 254.5841 |
| 46123 | tripp, SD         | 43.35 | -99.88  | 301.3277 |
| 46129 | walworth, SD      | 45.43 | -100.03 | 278.884  |
| 46135 | yankton, SD       | 43.01 | -97.39  | 396.4867 |
| 46137 | ziebach, SD       | 44.98 | -101.67 | 199.276  |
| 48003 | andrews, TX       | 32.31 | -102.64 | 175.0757 |
| 48009 | archer, TX        | 33.62 | -98.69  | 311.5853 |
| 48011 | armstrong, TX     | 34.96 | -101.36 | 174.0843 |
| 48017 | bailey, TX        | 34.07 | -102.83 | 164.9193 |
| 48023 | baylor, TX        | 33.62 | -99.21  | 223.4724 |
| 48033 | borden, TX        | 32.74 | -101.43 | 175.3295 |
| 48045 | briscoe, TX       | 34.53 | -101.21 | 206.5917 |
| 48059 | callahan, TX      | 32.3  | -99.37  | 299.7794 |
| 48065 | carson, TX        | 35.4  | -101.35 | 205.6687 |
| 48069 | castro, TX        | 34.53 | -102.26 | 184.9337 |
| 48075 | childress, TX     | 34.53 | -100.21 | 198.842  |
| 48077 | clay, TX          | 33.79 | -98.21  | 362.3275 |
| 48079 | cochran, TX       | 33.6  | -102.83 | 177.6485 |
| 48087 | collingsworth, TX | 34.96 | -100.27 | 246.0179 |
| 48101 | cottle, TX        | 34.08 | -100.28 | 262.718  |
| 48107 | crosby, TX        | 33.61 | -101.3  | 182.8959 |
| 48111 | dallam, TX        | 36.28 | -102.6  | 160.2759 |
| 48117 | deafsmith, TX     | 34.97 | -102.6  | 184.9337 |
| 48125 | dickens, TX       | 33.62 | -100.78 | 196.1418 |
| 48129 | donley, TX        | 34.97 | -100.81 | 235.557  |
| 48133 | eastland, TX      | 32.33 | -98.83  | 348.3853 |
| 48143 | erath, TX         | 32.24 | -98.22  | 269.8794 |
| 48151 | fisher, TX        | 32.74 | -100.4  | 211.4329 |
| 48153 | floyd, TX         | 34.07 | -101.3  | 156.9135 |

|       |                  |       |         |          |
|-------|------------------|-------|---------|----------|
| 48155 | foard, TX        | 33.97 | -99.78  | 221.3601 |
| 48165 | gaines, TX       | 32.74 | -102.64 | 191.6586 |
| 48169 | garza, TX        | 33.18 | -101.3  | 225.3429 |
| 48179 | gray, TX         | 35.4  | -100.81 | 207.0137 |
| 48191 | hall, TX         | 34.53 | -100.68 | 236.491  |
| 48195 | hansford, TX     | 36.28 | -101.35 | 188.6698 |
| 48197 | hardeman, TX     | 34.29 | -99.75  | 186.8017 |
| 48205 | hartley, TX      | 35.84 | -102.6  | 191.9388 |
| 48207 | haskell, TX      | 33.18 | -99.73  | 273.0294 |
| 48211 | hemphill, TX     | 35.84 | -100.27 | 263.1749 |
| 48221 | hood, TX         | 32.43 | -97.83  | 362.2459 |
| 48227 | howard, TX       | 32.31 | -101.44 | 119.2729 |
| 48233 | hutchinson, TX   | 35.84 | -101.35 | 229.2567 |
| 48237 | jack, TX         | 33.23 | -98.17  | 282.4442 |
| 48253 | jones, TX        | 32.74 | -99.88  | 250.3143 |
| 48263 | kent, TX         | 33.18 | -100.78 | 242.3753 |
| 48275 | knox, TX         | 33.61 | -99.74  | 175.1266 |
| 48279 | lamb, TX         | 34.07 | -102.35 | 176.976  |
| 48295 | lipscomb, TX     | 36.28 | -100.27 | 206.7295 |
| 48317 | martin, TX       | 32.31 | -101.95 | 169.8537 |
| 48335 | mittchell, TX    | 32.31 | -100.92 | 196.0895 |
| 48337 | montague, TX     | 33.68 | -97.72  | 321.8594 |
| 48341 | moore, TX        | 35.84 | -101.89 | 182.532  |
| 48345 | motley, TX       | 34.07 | -100.78 | 293.6523 |
| 48353 | nolan, TX        | 32.3  | -100.41 | 262.0393 |
| 48357 | ochiltree, TX    | 36.28 | -100.82 | 142.2807 |
| 48359 | oldham, TX       | 35.41 | -102.6  | 182.1826 |
| 48363 | palopinto, TX    | 32.75 | -98.31  | 360.5953 |
| 48367 | parker, TX       | 32.78 | -97.81  | 317.7124 |
| 48369 | parmer, TX       | 34.53 | -102.78 | 179.3297 |
| 48375 | potter, TX       | 35.4  | -101.89 | 184.3733 |
| 48381 | randall, TX      | 34.97 | -101.9  | 180.1703 |
| 48393 | roberts, TX      | 35.84 | -100.81 | 239.8885 |
| 48415 | scurry, TX       | 32.75 | -100.92 | 237.5528 |
| 48417 | shackelford, TX  | 32.74 | -99.35  | 292.6643 |
| 48421 | sherman, TX      | 36.28 | -101.89 | 175.5936 |
| 48429 | stephens, TX     | 32.74 | -98.84  | 374.261  |
| 48433 | stonewall, TX    | 33.18 | -100.25 | 204.1743 |
| 48437 | swisher, TX      | 34.53 | -101.74 | 184.9337 |
| 48441 | taylor, TX       | 32.3  | -99.89  | 321.6602 |
| 48445 | terry, TX        | 33.17 | -102.34 | 286.4231 |
| 48447 | throckmorton, TX | 33.18 | -99.21  | 320.7653 |
| 48483 | wheeler, TX      | 35.4  | -100.27 | 216.7167 |

|       |                |       |         |          |
|-------|----------------|-------|---------|----------|
| 48485 | wichita, TX    | 33.99 | -98.7   | 330.0787 |
| 48487 | wilbarger, TX  | 34.08 | -99.24  | 252.6627 |
| 48497 | wise, TX       | 33.22 | -97.65  | 386.3347 |
| 48501 | yoakum, TX     | 33.17 | -102.83 | 199.1594 |
| 48503 | young, TX      | 33.18 | -98.69  | 403.772  |
| 56003 | bighorn, WY    | 44.53 | -107.99 | 78.45673 |
| 56009 | converse, WY   | 42.97 | -105.51 | 135.2331 |
| 56017 | hotsprings, WY | 43.72 | -108.44 | 77.40597 |
| 56019 | johnson, WY    | 44.04 | -106.58 | 149.9693 |
| 56021 | laramie, WY    | 41.31 | -104.69 | 158.548  |
| 56027 | niobrara, WY   | 43.06 | -104.48 | 161.2041 |
| 56031 | platte, WY     | 42.13 | -104.97 | 140.1013 |