

## Annex A. Agroclimatic indicators

Tables in this Annex provide additional information about the agroclimatic indicators—RAIN, TEMP, and RADPAR—and BIOMASS for the Crop Production System Zones (table A.1), thirty-one main producing and exporting countries (A.2), regions or provinces within large countries—Argentina, Australia, Brazil, Canada, India, Kazakhstan, Russia, and the United States (tables A.3 through A.10), and China (table A.11).

**Table A.1. January to April 2014 agroclimatic indicators and biomass by Crop Production System Zones, current value and departure from the 5YA and 13YA**

|                                     | RAIN            |                  |      | TEMP            |                |      | RADPAR                          |               |      | BIOMASS                          |               |      |
|-------------------------------------|-----------------|------------------|------|-----------------|----------------|------|---------------------------------|---------------|------|----------------------------------|---------------|------|
|                                     | Current<br>(mm) | Departure<br>(%) |      | Current<br>(°C) | Departure (°C) |      | Current<br>(MJ/m <sup>2</sup> ) | Departure (%) |      | Current<br>(gDM/m <sup>2</sup> ) | Departure (%) |      |
|                                     |                 | 5YA              | 13YA |                 | 5YA            | 13YA |                                 | 5YA           | 13YA |                                  | 5YA           | 13YA |
| Equatorial_central_Africa           | 499             | -3               | -6   | 25.4            | 0.0            | 0.1  | 1119                            | 1             | 1    | 1501                             | -2            | -3   |
| East_African_Highlands              | 212             | -2               | -9   | 20.8            | -0.4           | 0.2  | 1261                            | 0.0           | -1   | 749                              | 2             | -5   |
| Gulf_of_Guinea                      | 220             | 12               | 17   | 28.4            | -0.2           | -0.1 | 977                             | 4             | 2    | 716                              | 9             | 14   |
| Horn_of_Africa                      | 297             | -16              | -21  | 24.3            | -0.3           | -0.3 | 1183                            | -3            | -2   | 926                              | -12           | -14  |
| Madagascar(main)                    | 885             | -9               | -13  | 24.3            | -0.3           | -0.4 | 1160                            | -1            | -0.4 | 1859                             | -5            | -5   |
| SW_Madagascar                       | 554             | 18               | 7    | 25.4            | -0.4           | -0.4 | 1204                            | -1            | -0.3 | 1297                             | -1            | -5   |
| North_Africa_Mediterranean          | 98              | -51              | -42  | 12.6            | 0.6            | 0.6  | 880                             | 1             | 0.2  | 404                              | -38           | -29  |
| Sahel                               | 42              | 102              | 81   | 29.6            | -0.2           | 0.1  | 1196                            | 1             | 0.0  | 140                              | 93            | 72   |
| Southern_Africa                     | 539             | 10               | 7    | 23.8            | -0.1           | -0.1 | 1184                            | -3            | -1   | 1348                             | 0             | 0    |
| S.Africa_Western_Cape               | 159             | 89               | 44   | 18.5            | 0.1            | 0.0  | 1291                            | -1            | -1   | 586                              | 57            | 33   |
| British_Columbia_To_Colorado        | 230             | 25               | 20   | -3.8            | -0.2           | -0.7 | 649                             | 0             | -0.3 | 469                              | 9             | 2    |
| America_northern_great_plains       | 154             | -2               | -6   | -2.4            | -2.1           | -2.2 | 694                             | -1            | -1   | 461                              | -11           | -15  |
| America_corn_belt                   | 328             | 3                | -2   | -1.9            | -3.1           | -2.9 | 675                             | 0.2           | 0.0  | 599                              | -18           | -18  |
| Am. cotton belt; Mex. coastal plain | 347             | -3               | -5   | 10.5            | -1.6           | -1.7 | 849                             | -2            | -2   | 907                              | -7            | -11  |
| Sub_boreal_north_America            | 124             | -3               | -1   | -10.9           | -3.1           | -2.8 | 487                             | -3            | -3   | 291                              | -20           | -19  |
| America_West_Coast                  | 246             | -5               | -13  | 7.9             | 1.4            | 1.2  | 720                             | 3             | 3    | 670                              | -2            | -8   |
| Sierra_Madre                        | 48              | -23              | -27  | 15.9            | 0.4            | 0.4  | 1194                            | -0.1          | 1    | 181                              | -23           | -32  |
| SW Mexico, N Mexico highlands       | 75              | 24               | 1    | 8.5             | 0.5            | -0.1 | 964                             | 0.3           | 1    | 317                              | 11            | -7   |
| N_South_and_Central_America         | 193             | -27              | -22  | 26.2            | 0.1            | 0.1  | 1172                            | 2             | 1    | 549                              | -24           | -19  |
| Caribbean                           | 210             | 15               | 5    | 24.5            | 0.7            | 0.4  | 1182                            | 0.3           | 0.3  | 728                              | 18            | 10   |
| Central_Northern_Andes              | 678             | 9                | 8    | 16.5            | 0.0            | -0.1 | 1115                            | 0.4           | -2   | 1348                             | -2            | -3   |
| Brazil_Nordeste                     | 337             | -15              | -29  | 27.0            | -0.1           | 0.8  | 1224                            | 2             | 0.3  | 1062                             | -9            | -16  |
| Central_Eastern_Brazil              | 702             | -7               | -9   | 25.7            | 0.1            | 0.2  | 1101                            | 1             | -4   | 1785                             | -3            | -3   |
| Amazon                              | 1152            | 6                | 6    | 26.8            | -0.2           | -0.2 | 988                             | 3             | -1   | 2262                             | 0             | 1    |
| Central_north_Argentina             | 527             | 34               | 19   | 24.0            | -0.9           | -0.6 | 1250                            | -0.2          | -1   | 1493                             | 20            | 13   |
| SE_Brazil_Concepcion_Bahia_Blanca   | 730             | 40               | 33   | 22.7            | -0.2           | -0.1 | 1196                            | -2            | -2   | 1780                             | 24            | 19   |
| SW_southern_cone                    | 82              | -35              | -46  | 13.5            | -1.1           | -0.8 | 1193                            | -0.5          | -0.1 | 332                              | -24           | -36  |
| Semi_arid_southern_cone             | 212             | 56               | 44   | 17.5            | -1.3           | -0.9 | 1279                            | 0.3           | 1    | 521                              | 18            | 5    |
| Caucasus                            | 271             | 2                | 1    | 4.1             | 0.8            | 1.0  | 745                             | 4             | 4    | 784                              | 4             | 4    |
| Central_Asia_Pamir_mountains        | 202             | -22              | -14  | 2.3             | -1.1           | -1.2 | 851                             | -1            | -1   | 568                              | -17           | -12  |
| Western_Asia                        | 160             | 3                | 1    | 6.5             | -0.5           | -0.5 | 825                             | 1             | 1    | 541                              | -5            | -4   |
| China_Gansu_Xinjiang                | 86              | 110              | 108  | -2.3            | 0.0            | -0.3 | 750                             | 1             | 2    | 279                              | 74            | 68   |
| China_Hainan                        | 130             | -26              | -4   | 20.4            | -0.2           | -0.5 | 1028                            | 3             | 2    | 398                              | -33           | -17  |
| China_Huang_Huaihai                 | 88              | 12               | 1    | 7.6             | 2.0            | 1.4  | 752                             | 1             | 2    | 368                              | 7             | 0    |
| China_Inner_Mongolia                | 42              | 4                | 7    | -2.4            | 2.9            | 1.9  | 732                             | -1            | -0.5 | 213                              | 7             | 7    |
| China_Loess_region                  | 102             | 117              | 97   | 3.6             | 1.0            | 0.7  | 797                             | 1             | 2    | 416                              | 81            | 63   |
| China_Lower_Yangtze                 | 391             | -10              | -11  | 11.3            | 0.7            | 0.4  | 769                             | 2             | 3    | 1075                             | -1            | -9   |
| North_East_China                    | 38              | -51              | -50  | -5.5            | 2.5            | 1.1  | 659                             | 1             | 1    | 185                              | -39           | -42  |
| China_Qinghai_Tibet                 | 177             | 12               | 10   | 2.0             | 0.3            | 0.3  | 1014                            | -0.4          | -0.2 | 444                              | 18            | 12   |
| Southern_China                      | 229             | -1               | 0    | 15.6            | -0.1           | -0.2 | 933                             | 0.0           | 1    | 513                              | -25           | -29  |
| South_West_China                    | 154             | 21               | 4    | 9.9             | 0.3            | 0.3  | 884                             | 0.4           | 2    | 528                              | 12            | -3   |
| Taiwan                              | 124             | -43              | -41  | 16.5            | -0.3           | -0.5 | 946                             | -4            | -3   | 503                              | -32           | -31  |
| East_Asia                           | 129             | -30              | -31  | -1.5            | 1.3            | 0.6  | 669                             | 1             | 0.2  | 366                              | -25           | -28  |
| Southern_Himalayas                  | 159             | 6                | -2   | 18.7            | -0.4           | -0.4 | 1050                            | -0.4          | -0.2 | 517                              | 16            | 5    |
| Southern_Asia                       | 96              | 8                | -5   | 25.3            | -0.4           | -0.3 | 1163                            | -1            | -0.3 | 336                              | 18            | 2    |
| Southern_Japan_and_Korea            | 334             | -20              | -16  | 6.9             | 0.2            | 0.0  | 750                             | 1             | 1    | 1027                             | -2            | -2   |
| Mongolia_region                     | 48              | 157              | 117  | -7.2            | 1.2            | 0.4  | 702                             | 1             | 1    | 214                              | 105           | 77   |
| S.Asia_Punjab_to_Gujarat            | 63              | 35               | 27   | 21.4            | -1.1           | -1.2 | 1083                            | -1            | -1   | 279                              | 42            | 40   |
| SE_Asia_islands                     | 931             | -18              | -15  | 25.4            | 0.0            | -0.1 | 1034                            | 4             | 3    | 1917                             | -13           | -12  |
| SE_Asia_mainland                    | 142             | -19              | -12  | 25.8            | -0.4           | -0.3 | 1142                            | 4             | 4    | 472                              | -20           | -16  |
| Eastern_Siberia                     | 87              | -32              | -32  | -9.7            | 2.0            | 1.1  | 465                             | -2            | -2   | 312                              | 7             | 3    |

|                                  | RAIN            |                  |      | TEMP            |                |      | RADPAR                          |               |      | BIOMASS                          |               |      |
|----------------------------------|-----------------|------------------|------|-----------------|----------------|------|---------------------------------|---------------|------|----------------------------------|---------------|------|
|                                  | Current<br>(mm) | Departure<br>(%) |      | Current<br>(°C) | Departure (°C) |      | Current<br>(MJ/m <sup>2</sup> ) | Departure (%) |      | Current<br>(gDM/m <sup>2</sup> ) | Departure (%) |      |
|                                  |                 | 5YA              | 13YA |                 | 5YA            | 13YA |                                 | 5YA           | 13YA |                                  | 5YA           | 13YA |
| Eastern_Central_Asia             | 32              | -27              | -35  | -11.7           | 3.2            | 2.0  | 573                             | 0.0           | 1    | 163                              | -16           | -24  |
| North_Australia                  | 749             | -17              | -12  | 26.3            | 0.1            | 0.0  | 1164                            | 6             | 5    | 1614                             | -11           | -4   |
| Australia_Queensland_to_Victoria | 209             | -25              | -7   | 21.1            | 0.7            | 0.6  | 1271                            | 2             | 0.0  | 748                              | -12           | 3    |
| Australia_Nullarbor_Darling      | 58              | -24              | -35  | 20.9            | -0.2           | 0.3  | 1332                            | 0.1           | 0.0  | 298                              | -12           | -22  |
| New_Zealand                      | 151             | -48              | -47  | 14.2            | -0.2           | -0.1 | 1135                            | 2             | 3    | 651                              | -33           | -33  |
| Boreal_Eurasia                   | 184             | 10               | 2    | -3.3            | 3.1            | 2.2  | 346                             | -2            | -3   | 489                              | 20            | 13   |
| Ukraine_to_URAL_Mountains        | 138             | -12              | -16  | -0.9            | 2.0            | 1.1  | 462                             | 3             | 3    | 574                              | 1             | -5   |
| Mediterranean_Europe_and_Turkey  | 202             | -34              | -26  | 9.0             | 1.2            | 1.3  | 713                             | 0.4           | -0.4 | 701                              | -25           | -20  |
| W.Europe(non_Mediterranean)      | 212             | -6               | -10  | 6.4             | 2.4            | 2.0  | 522                             | -1            | -0.3 | 766                              | -4            | -7   |
| Boreal_north_America             | 260             | 28               | 24   | -6.6            | 3.1            | 2.3  | 414                             | 7             | 9    | 390                              | 37            | 26   |
| Ural_to_Altaï_Mountains          | 111             | 10               | 2    | -7.9            | 0.8            | -0.3 | 511                             | -1            | -0.2 | 408                              | 7             | 2    |

Note: Departures are expressed in relative terms (percentage) for all variables, except for temperature, for which absolute departure in degrees Celsius is given. Zero means no change from the average value; Relative departures are calculated as  $(C-R)/R \times 100$ , with C=current value and R=reference value, which is the five-year (5YA) or thirteen-year average (13YA) for the same period between January and April.

**Table A.2. January to April 2014 agroclimatic indicators and biomass by country; current value and departure from the 5YA and 13YA**

|                | RAIN            |               |      | TEMP            |                |      | RADPAR                          |               |      | BIOMASS                          |               |      |
|----------------|-----------------|---------------|------|-----------------|----------------|------|---------------------------------|---------------|------|----------------------------------|---------------|------|
|                | Current<br>(mm) | Departure (%) |      | Current<br>(°C) | Departure (°C) |      | Current<br>(MJ/m <sup>2</sup> ) | Departure (%) |      | Current<br>(gDM/m <sup>2</sup> ) | Departure (%) |      |
|                |                 | 5YA           | 13YA |                 | 5YA            | 13YA |                                 | 5YA           | 13YA |                                  | 5YA           | 13YA |
| Argentina      | 629             | 47            | 33   | 21.9            | -0.7           | -0.5 | 1219                            | -2            | -1   | 1511                             | 21            | 14   |
| Australia      | 236             | -24           | -10  | 21.6            | 0.5            | 0.5  | 1273                            | 2             | 0.3  | 707                              | -12           | 0    |
| Bangladesh     | 140             | -28           | -32  | 22.8            | -0.3           | -0.2 | 1049                            | 1             | 1    | 510                              | -1            | -14  |
| Brazil         | 824             | -1            | -3   | 25.7            | 0.0            | 0.2  | 1078                            | 1             | -2   | 1873                             | 0             | -1   |
| Cambodia       | 199             | 5             | 13   | 27.2            | -0.7           | -0.6 | 1089                            | 4             | 2    | 610                              | -10           | -4   |
| Canada         | 189             | 3             | 2    | -8.6            | -2.4           | -2.2 | 534                             | -1            | -2   | 332                              | -16           | -16  |
| China          | 196             | -3            | -6   | 7.6             | 0.9            | 0.5  | 814                             | 1             | 2    | 481                              | 1             | -7   |
| Egypt          | 58              | 6             | -2   | 17.0            | 0.6            | 0.8  | 961                             | -0.2          | 0.3  | 212                              | 26            | 26   |
| Ethiopia       | 214             | 24            | 16   | 21.8            | -0.3           | 0.3  | 1247                            | 1             | 0.0  | 739                              | 18            | 9    |
| France         | 207             | -11           | -20  | 7.8             | 2.1            | 1.7  | 552                             | -4            | -2   | 773                              | -3            | -11  |
| Germany        | 138             | -24           | -37  | 6.6             | 3.0            | 2.5  | 479                             | 1             | 2    | 659                              | -17           | -24  |
| India          | 111             | 27            | 11   | 22.8            | -0.6           | -0.6 | 1119                            | -1            | -1   | 369                              | 40            | 21   |
| Indonesia      | 993             | -18           | -17  | 25.6            | 0.0            | 0.0  | 1020                            | 5             | 5    | 2068                             | -12           | -11  |
| Iran           | 247             | 40            | 26   | 7.4             | -0.5           | -0.1 | 897                             | 1             | 0.5  | 721                              | 13            | 11   |
| Kazakhstan     | 112             | 7             | 2    | -7.0            | -0.2           | -1.2 | 577                             | 0.0           | 1    | 420                              | 3             | -3   |
| Mexico         | 63              | -21           | -23  | 19.6            | 0.1            | 0.2  | 1157                            | -1            | -0.3 | 228                              | -16           | -22  |
| Myanmar        | 57              | -40           | -40  | 23.7            | -0.2           | 0.1  | 1143                            | 3             | 3    | 224                              | -37           | -37  |
| Nigeria        | 209             | 39            | 55   | 29.1            | -0.3           | 0.3  | 952                             | 3             | -2   | 529                              | 30            | 40   |
| Pakistan       | 163             | -9            | 0.4  | 14.0            | -0.9           | -1.2 | 977                             | -0.5          | -1   | 475                              | 1             | 15   |
| Philippines    | 748             | 11            | 37   | 24.9            | -0.5           | -0.6 | 1137                            | 2             | -1   | 1193                             | -14           | -2   |
| Poland         | 148             | -8            | -14  | 4.6             | 2.7            | 2.3  | 461                             | 0.2           | 2    | 704                              | -2            | -8   |
| Romania        | 171             | -18           | -15  | 4.9             | 2.3            | 2.0  | 584                             | 1             | 0.5  | 668                              | -11           | -8   |
| Russia         | 123             | -7            | -13  | -4.9            | 1.8            | 0.7  | 483                             | 2             | 3    | 442                              | 2             | -3   |
| South Africa   | 308             | -5            | -5   | 19.9            | 0.0            | 0.0  | 1242                            | -1            | -1   | 1006                             | -8            | -7   |
| Thailand       | 152             | -30           | -23  | 26.0            | -0.5           | -0.4 | 1164                            | 6             | 6    | 528                              | -23           | -20  |
| Turkey         | 272             | -18           | -9   | 6.0             | 1.5            | 2.0  | 759                             | 4             | 3    | 814                              | -10           | -4   |
| United Kingdom | 388             | 59            | 47   | 6.5             | 1.5            | 1.1  | 401                             | -3            | -1   | 1044                             | 16            | 12   |
| Ukraine        | 123             | -28           | -31  | 3.0             | 2.1            | 1.7  | 531                             | 3             | 3    | 580                              | -16           | -18  |
| United States  | 280             | 1             | -3   | 3.6             | -1.6           | -1.8 | 762                             | -1            | -0.5 | 639                              | -6            | -11  |
| Uzbekistan     | 147             | -27           | -25  | 4.3             | -2.1           | -2.1 | 753                             | 2             | 1    | 531                              | -18           | -17  |
| Vietnam        | 168             | -6            | 0.3  | 21.9            | -0.1           | 0.0  | 1032                            | 3             | 1    | 520                              | -16           | -13  |

See note table A.1.

**Table A.3. Argentina, January to April 2014 agroclimatic indicators and biomass (by province); current value and departure from the 5YA and 13YA**

|                     | RAIN            |                  |      | TEMP            |                   |      | RADPAR                          |                  |      | BIOMASS                          |                  |      |
|---------------------|-----------------|------------------|------|-----------------|-------------------|------|---------------------------------|------------------|------|----------------------------------|------------------|------|
|                     | Current<br>(mm) | Departure<br>(%) |      | Current<br>(°C) | Departure<br>(°C) |      | Current<br>(MJ/m <sup>2</sup> ) | Departure<br>(%) |      | Current<br>(gDM/m <sup>2</sup> ) | Departure<br>(%) |      |
|                     |                 | 5YA              | 13YA |                 | 5YA               | 13YA |                                 | 5YA              | 13YA |                                  | 5YA              | 13YA |
| Buenos_Aires        | 622             | 65               | 48   | 19.8            | -0.8              | -0.5 | 1180                            | -4               | -3   | 1434                             | 20               | 12   |
| Chaco               | 758             | 61               | 43   | 25.2            | -0.3              | -0.1 | 1251                            | 0.0              | -1   | 1846                             | 35               | 28   |
| Cordoba             | 608             | 61               | 41   | 20.9            | -1.1              | -0.8 | 1206                            | -3               | -2   | 1608                             | 28               | 18   |
| Corrientes          | 805             | 42               | 34   | 24.4            | -0.4              | -0.3 | 1234                            | -0.4             | -1   | 1905                             | 26               | 22   |
| Entre_Rios          | 805             | 51               | 41   | 22.1            | -1.0              | -0.8 | 1229                            | -2               | -2   | 1804                             | 25               | 20   |
| La_Pampa            | 450             | 40               | 23   | 20.3            | -0.8              | -0.4 | 1202                            | -3               | -1   | 1300                             | 23               | 12   |
| Misiones            | 893             | 37               | 33   | 24.3            | 0.5               | 0.2  | 1192                            | -0.3             | -0.1 | 2079                             | 22               | 22   |
| Santiago_Del_Estero | 559             | 41               | 27   | 24.0            | -0.9              | -0.5 | 1250                            | 0.2              | -0.1 | 1541                             | 21               | 16   |
| San_Luis            | 437             | 37               | 15   | 19.9            | -1.3              | -0.9 | 1221                            | -1               | 0.2  | 1312                             | 13               | 3    |
| Salta               | 475             | 9                | -6   | 23.3            | -0.5              | -0.3 | 1279                            | 1                | -1   | 1319                             | 2                | -6   |
| Santa_Fe            | 667             | 35               | 25   | 22.6            | -0.7              | -0.5 | 1232                            | -2               | -2   | 1754                             | 22               | 19   |
| Tucuman             | -1              | -1               | -1   | -1              | -1                | -1   | -1                              | -1               | -1   | -1                               | -1               | -1   |

See note table A.1.

**Table A.4. Australia, January to April 2014 agroclimatic indicators and biomass (by state); current value and departure from the 5YA and 13YA**

|                   | RAIN            |               |      | TEMP            |                |      | RADPAR                          |               |      | BIOMASS                          |               |      |
|-------------------|-----------------|---------------|------|-----------------|----------------|------|---------------------------------|---------------|------|----------------------------------|---------------|------|
|                   | Current<br>(mm) | Departure (%) |      | Current<br>(°C) | Departure (°C) |      | Current<br>(MJ/m <sup>2</sup> ) | Departure (%) |      | Current<br>(gDM/m <sup>2</sup> ) | Departure (%) |      |
|                   |                 | 5YA           | 13YA |                 | 5YA            | 13YA |                                 | 5YA           | 13YA |                                  | 5YA           | 13YA |
| New_South_Wales   | 216             | -24           | -6   | 21.5            | 0.8            | 0.6  | 1265                            | 2             | -1   | 798                              | -9            | 10   |
| South_Australia   | 174             | 64            | 93   | 19.6            | 0.2            | 0.4  | 1300                            | 1             | 0.3  | 693                              | 51            | 76   |
| Victoria          | 158             | -26           | -9   | 18.7            | 0.5            | 0.7  | 1242                            | 1             | 0.4  | 705                              | -4            | 11   |
| Western_Australia | 107             | -5            | -12  | 21.5            | -0.2           | 0.3  | 1319                            | 0.1           | 0.0  | 352                              | -8            | -17  |

See note table A.1.

**Table A.5. Brazil, January to April 2014 agroclimatic indicators and biomass (by state); current value and departure from the 5YA and 13YA**

|                    | RAIN            |               |      | TEMP            |                |      | RADPAR                          |               |      | BIOMASS                          |               |      |
|--------------------|-----------------|---------------|------|-----------------|----------------|------|---------------------------------|---------------|------|----------------------------------|---------------|------|
|                    | Current<br>(mm) | Departure (%) |      | Current<br>(°C) | Departure (°C) |      | Current<br>(MJ/m <sup>2</sup> ) | Departure (%) |      | Current<br>(gDM/m <sup>2</sup> ) | Departure (%) |      |
|                    |                 | 5YA           | 13YA |                 | 5YA            | 13YA |                                 | 5YA           | 13YA |                                  | 5YA           | 13YA |
| Ceara              | 523             | -12           | -24  | 27.6            | 0.1            | 0.7  | 1112                            | 1             | 0.3  | 1513                             | -1            | -10  |
| Goias              | 762             | -8            | -10  | 25.2            | 0.1            | 0.1  | 1077                            | 0.0           | -6   | 2019                             | 0             | 0    |
| Mato_Grosso_Do_Sul | 662             | -7            | -3   | 26.0            | 0.0            | -0.6 | 1118                            | 0.0           | -6   | 1896                             | 3             | 5    |
| Mato_Grosso        | 1117            | 9             | 10   | 26.2            | -0.2           | -0.4 | 1087                            | 5             | -3   | 2409                             | 6             | 7    |
| Minas_Gerais       | 376             | -41           | -43  | 24.8            | 0.8            | 1.1  | 1167                            | 3             | -1   | 1212                             | -24           | -27  |
| Parana             | 773             | 12            | 17   | 23.8            | 0.7            | 0.6  | 1162                            | 0.2           | -1   | 2083                             | 18            | 18   |
| Rio_Grande_Do_Sul  | 736             | 29            | 23   | 23.1            | 0.4            | 0.2  | 1182                            | -1            | -1   | 1989                             | 24            | 21   |
| Santa_Catarina     | 902             | 22            | 30   | 21.7            | 0.5            | 0.5  | 1141                            | 1             | 0.1  | 2118                             | 15            | 15   |
| Sao_Paulo          | 592             | -27           | -23  | 25.2            | 1.1            | 1.2  | 1116                            | 4             | -1   | 1785                             | -10           | -5   |

See note table A.1.

**Table A.6. Canada, January to April 2014 agroclimatic indicators and biomass (by province); current value and departure from the 5YA and 13YA**

|              | RAIN            |                      |      | TEMP            |                       |      | RADPAR                          |                      |      | BIOMASS                          |                      |      |
|--------------|-----------------|----------------------|------|-----------------|-----------------------|------|---------------------------------|----------------------|------|----------------------------------|----------------------|------|
|              | Current<br>(mm) | Departure (%)<br>5YA | 13YA | Current<br>(°C) | Departure (°C)<br>5YA | 13YA | Current<br>(MJ/m <sup>2</sup> ) | Departure (%)<br>5YA | 13YA | Current<br>(gDM/m <sup>2</sup> ) | Departure (%)<br>5YA | 13YA |
| Alberta      | 89              | -23                  | -18  | -7.6            | -1.6                  | -1.6 | 494                             | -2                   | -2   | 365                              | -9                   | -10  |
| Manitoba     | 107             | -4                   | 6    | -12.2           | -4.3                  | -4.0 | 555                             | -1                   | -1   | 261                              | -30                  | -31  |
| Saskatchewan | 79              | -23                  | -18  | -10.5           | -2.5                  | -2.6 | 542                             | 0.0                  | -1   | 311                              | -15                  | -16  |

See note table A.1.

**Table A.7. India, January to April 2014 agroclimatic indicators and biomass (by state); current value and departure from the 5YA and 13YA**

|                        | RAIN            |               |      | TEMP            |                |      | PAR                             |               |      | BIOMASS                          |               |      |
|------------------------|-----------------|---------------|------|-----------------|----------------|------|---------------------------------|---------------|------|----------------------------------|---------------|------|
|                        | Current<br>(mm) | Departure (%) |      | Current<br>(°C) | Departure (°C) |      | Current<br>(MJ/m <sup>2</sup> ) | Departure (%) |      | Current<br>(gDM/m <sup>2</sup> ) | Departure (%) |      |
|                        |                 | 5YA           | 13YA |                 | 5YA            | 13YA |                                 | 5YA           | 13YA |                                  | 5YA           | 13YA |
| Arunachal_Pradesh      | 270             | -51           | -49  | 16.2            | 0.5            | 0.7  | 1032                            | 2             | 1    | 928                              | -17           | -24  |
| Andhra_Pradesh         | 40              | 0             | -34  | 27.0            | -0.3           | -0.4 | 1190                            | -2            | -0.2 | 173                              | -6            | -28  |
| Assam                  | 229             | -35           | -39  | 22.0            | 0.2            | 0.4  | 1031                            | 0.1           | -0.5 | 826                              | -4            | -17  |
| Bihar                  | 93              | 90            | 38   | 22.7            | -0.9           | -0.9 | 1062                            | -2            | -1   | 391                              | 74            | 30   |
| Chandigarh             | -1              | -1            | -1   | -1              | -1             | -1   | -1                              | -1            | -1   | -1                               | -1            | -1   |
| Chhattisgarh           | 104             | 68            | 39   | 24.0            | -0.7           | -0.6 | 1128                            | -3            | -2   | 404                              | 47            | 28   |
| Daman_and_Diu          | -1              | -1            | -1   | -1              | -1             | -1   | -1                              | -1            | -1   | -1                               | -1            | -1   |
| Delhi                  | 131             | 59            | 46   | 19.6            | -1.4           | -1.8 | 1027                            | -0.5          | 0.0  | 613                              | 71            | 64   |
| Dadra_and_Nagar_Haveli | 2               | -50           | -59  | 25.3            | -0.3           | 0.0  | 1203                            | -1            | -1   | 11                               | -49           | -58  |
| Gujarat                | 8               | 84            | 67   | 24.9            | -0.7           | -0.5 | 1165                            | -1            | -1   | 42                               | 65            | 58   |
| Goa                    | 6               | -26           | -68  | 27.2            | 0.0            | 0.1  | 1271                            | -0.3          | -0.3 | 38                               | -22           | -55  |
| Himachal_Pradesh       | 334             | 48            | 35   | 3.5             | -1.1           | -1.1 | 1006                            | -1            | -0.3 | 651                              | 4             | 1    |
| Haryana                | 165             | 75            | 60   | 18.7            | -1.3           | -1.6 | 1022                            | -0.1          | 1    | 667                              | 70            | 65   |
| Jharkhand              | 86              | 37            | 11   | 22.6            | -0.7           | -0.6 | 1100                            | -2            | -1   | 344                              | 22            | 0    |
| Kerala                 | 279             | 19            | 9    | 27.0            | 0.3            | 0.4  | 1236                            | 5             | 5    | 704                              | -6            | -9   |
| Karnataka              | 74              | 4             | -9   | 25.9            | 0.0            | 0.0  | 1220                            | -0.2          | 0.2  | 296                              | 11            | 1    |
| Meghalaya              | 278             | -40           | -40  | 18.7            | 0.0            | 0.2  | 1033                            | -0.1          | -1   | 902                              | 22            | 0    |
| Maharashtra            | 73              | 222           | 130  | 25.4            | -0.7           | -0.6 | 1175                            | -3            | -3   | 319                              | 174           | 121  |
| Manipur                | 151             | -53           | -54  | 17.6            | 0.3            | 0.3  | 1030                            | -0.4          | -2   | 607                              | -20           | -25  |
| Madhya_Pradesh         | 109             | 226           | 148  | 22.8            | -1.1           | -1.1 | 1105                            | -4            | -4   | 408                              | 168           | 119  |
| Mizoram                | 140             | -46           | -45  | 20.1            | -0.3           | -0.3 | 1040                            | 0.2           | -1   | 481                              | -25           | -29  |
| Nagaland               | 171             | -37           | -45  | 18.0            | 0.6            | 0.8  | 1037                            | -1            | -1   | 700                              | -9            | -26  |
| Orissa                 | 88              | 21            | 1    | 24.7            | -0.4           | -0.2 | 1144                            | -1            | 0.1  | 380                              | 23            | 3    |
| Puducherry             | 53              | -55           | -59  | 27.4            | 0.3            | 0.4  | 1221                            | 4             | 4    | 268                              | -41           | -39  |
| Punjab                 | 153             | 21            | 11   | 17.7            | -1.2           | -1.4 | 989                             | 0.2           | 1    | 634                              | 26            | 23   |
| Rajasthan              | 48              | 132           | 75   | 21.5            | -1.3           | -1.4 | 1089                            | -1            | -1   | 198                              | 84            | 52   |
| Sikkim                 | 269             | 55            | 43   | 6.5             | 0.2            | 0.1  | 1137                            | -1            | -0.1 | 662                              | 23            | 18   |
| Tamil_Nadu             | 43              | -57           | -65  | 27.4            | 0.2            | 0.2  | 1230                            | 2             | 3    | 164                              | -55           | -61  |
| Tripura                | 152             | -35           | -40  | 22.7            | 0.0            | 0.0  | 1010                            | 1             | -0.4 | 524                              | -16           | -25  |
| Uttarakhand            | 453             | 176           | 146  | 9.3             | -0.2           | -0.3 | 1044                            | -1            | -0.2 | 907                              | 73            | 60   |
| Uttar_Pradesh          | 155             | 109           | 104  | 21.3            | -1.1           | -1.2 | 1045                            | -2            | -2   | 592                              | 93            | 85   |
| West_Bengal            | 82              | -21           | -31  | 23.2            | -0.4           | -0.3 | 1084                            | -0.3          | 1    | 347                              | -13           | -26  |

See note table A.1.

**Table A.8. Kazakhstan, January to April 2014 agroclimatic indicators and biomass (by province); current value and departure from the 5YA and 13YA**

|                           | RAIN            |                      |      | TEMP            |                       |      | RADPAR                          |                      |      | BIOMASS                          |                      |      |
|---------------------------|-----------------|----------------------|------|-----------------|-----------------------|------|---------------------------------|----------------------|------|----------------------------------|----------------------|------|
|                           | Current<br>(mm) | Departure (%)<br>5YA | 13YA | Current<br>(°C) | Departure (°C)<br>5YA | 13YA | Current<br>(MJ/m <sup>2</sup> ) | Departure (%)<br>5YA | 13YA | Current<br>(gDM/m <sup>2</sup> ) | Departure (%)<br>5YA | 13YA |
| Akmolinskaya              | 106             | 27                   | 22   | -9.2            | -0.1                  | -1.2 | 541                             | -2                   | 0.1  | 401                              | 11                   | 1    |
| Karagandinskaya           | 97              | 10                   | 7    | -9.5            | -0.8                  | -1.9 | 602                             | -0.2                 | 2    | 362                              | -3                   | -10  |
| Kustanayskaya             | 102             | 10                   | 1    | -8.2            | 0.3                   | -0.9 | 507                             | -3                   | -2   | 406                              | 3                    | -6   |
| Pavlodarskaya             | 77              | 22                   | 8    | -8.6            | 1.1                   | -0.3 | 534                             | 1                    | 3    | 372                              | 16                   | 6    |
| Severo_kazachstanskaya    | 113             | 29                   | 21   | -8.7            | 0.6                   | -0.4 | 485                             | -2                   | -1   | 408                              | 10                   | 4    |
| Vostochno_kazachstanskaya | 113             | -4                   | -10  | -9.3            | 0.8                   | -0.5 | 618                             | -0.3                 | 1    | 367                              | 7                    | 0    |
| Zapadno_kazachstanskaya   | 114             | 0                    | -6   | -5.1            | -0.5                  | -1.8 | 552                             | 4                    | 5    | 518                              | 3                    | -5   |

See note table A.1.

**Table A.9. Russia, January to April 2014 agroclimatic indicators and biomass (by oblast); current value and departure from the 5YA and 13YA**

|                        | RAIN            |               |      | TEMP            |                |      | RADPAR                          |               |      | BIOMASS                          |               |      |
|------------------------|-----------------|---------------|------|-----------------|----------------|------|---------------------------------|---------------|------|----------------------------------|---------------|------|
|                        | Current<br>(mm) | Departure (%) |      | Current<br>(°C) | Departure (°C) |      | Current<br>(MJ/m <sup>2</sup> ) | Departure (%) |      | Current<br>(gDM/m <sup>2</sup> ) | Departure (%) |      |
|                        |                 | 5YA           | 13YA |                 | 5YA            | 13YA |                                 | 5YA           | 13YA |                                  | 5YA           | 13YA |
| Bashkortostan_Rep.     | 141             | 2             | -8   | -7.7            | 0.0            | -1.1 | 455                             | -1            | -2   | 402                              | -3            | -8   |
| Chelyabinskaya_Oblast  | 106             | 10            | -3   | -7.7            | 0.7            | -0.5 | 464                             | -2            | -2   | 402                              | 5             | -3   |
| Gorodovikovsk          | -1              | -1            | -1   | -1              | -1             | -1   | -1                              | -1            | -1   | -1                               | -1            | -1   |
| Krasnodarskiy_Kray     | 140             | -29           | -32  | -1.4            | 2.4            | 1.6  | 518                             | 4             | 4    | 521                              | -2            | -4   |
| Kurganskaya_Oblast     | 110             | 20            | 15   | -8.0            | 0.9            | -0.3 | 440                             | -3            | -3   | 410                              | 5             | 0    |
| Kirovskaya_Oblast      | 144             | 1             | -10  | -5.3            | 1.8            | 0.6  | 394                             | 6             | 6    | 473                              | 12            | 3    |
| Kurskaya_Oblast        | 127             | -16           | -23  | 0.3             | 2.1            | 1.3  | 518                             | 6             | 7    | 625                              | -3            | -6   |
| Lipetskaya_Oblast      | 113             | -28           | -32  | -0.9            | 2.3            | 1.3  | 508                             | 6             | 8    | 566                              | -3            | -8   |
| Mordoviya_Rep.         | 140             | -5            | -8   | -3.1            | 2.2            | 0.9  | 470                             | 5             | 6    | 565                              | 15            | 4    |
| Novosibirskaya_Oblast  | 96              | 6             | -3   | -9.1            | 1.6            | 0.5  | 448                             | 0.0           | -0.4 | 411                              | 21            | 15   |
| Nizhegorodskaya_Oblast | 125             | -13           | -19  | -2.7            | 2.6            | 1.4  | 442                             | 6             | 8    | 519                              | 7             | -2   |
| Orenburgskaya_Oblast   | 129             | 0             | -9   | -7.1            | -0.3           | -1.5 | 504                             | 1             | 1    | 439                              | -3            | -10  |
| Omskaya_Oblast         | 128             | 41            | 31   | -9.1            | 1.1            | 0.4  | 437                             | -2            | -2   | 403                              | 12            | 10   |
| Permskaya_Oblast       | 163             | 12            | 6    | -7.6            | 0.6            | -0.4 | 389                             | 2             | 0.0  | 398                              | 0             | -4   |
| Penzaenskaya_Oblast    | 140             | -5            | -11  | -3.4            | 1.8            | 0.4  | 493                             | 4             | 6    | 568                              | 14            | 3    |
| Rostovskaya_Oblast     | 151             | -30           | -30  | 1.8             | 0.8            | 0.1  | 570                             | 6             | 6    | 668                              | -10           | -11  |
| Ryazanskaya_Oblast     | 117             | -25           | -29  | -1.5            | 2.6            | 1.5  | 473                             | 6             | 7    | 577                              | 8             | -1   |
| Stavropol'skiy_Kray    | 243             | 34            | 26   | 4.3             | 0.5            | 0.5  | 619                             | 5             | 6    | 853                              | 18            | 11   |
| Sverdlovskaya_Oblast   | 126             | 17            | 13   | -7.8            | 0.6            | -0.4 | 397                             | -2            | -3   | 400                              | 0             | -3   |
| Samarskaya_Oblast      | 171             | 31            | 21   | -5.5            | 0.6            | -0.8 | 483                             | 2             | 2    | 492                              | 3             | -6   |
| Saratovskaya_Oblast    | 150             | 9             | 4    | -3.8            | 0.8            | -0.7 | 527                             | 4             | 5    | 570                              | 6             | -2   |
| Tambovskaya_Oblast     | 126             | -15           | -22  | -1.8            | 2.0            | 0.8  | 506                             | 6             | 8    | 613                              | 10            | 2    |
| Tyumen'skiy_Kray       | 121             | 27            | 23   | -8.6            | 1.1            | 0.1  | 414                             | -2            | -3   | 399                              | 5             | 3    |
| Tatarstan_Rep.         | 141             | 6             | -1   | -5.5            | 1.1            | -0.2 | 448                             | 4             | 4    | 480                              | 6             | -2   |
| Ulyanovskaya_Oblast    | 196             | 49            | 40   | -4.5            | 1.6            | 0.1  | 477                             | 3             | 5    | 523                              | 11            | 1    |
| Udmurtiya_Rep.         | 150             | 6             | -1   | -6.5            | 0.8            | -0.3 | 401                             | 4             | 3    | 431                              | 3             | -3   |
| Volgogradskaya_Oblast  | 155             | 4             | 0    | -1.0            | 1.0            | -0.3 | 549                             | 4             | 5    | 657                              | 5             | 0    |
| Voronezhskaya_Oblast   | 126             | -14           | -22  | -0.7            | 1.4            | 0.5  | 528                             | 4             | 6    | 620                              | -1            | -5   |

See note table A.1.

**Table A.10. United States, January to April 2014 agroclimatic indicators and biomass (by state); current value and departure from the 5YA and 13YA**

|              | RAIN            |                      |      | TEMP            |                       |      | RADPAR                          |                      |      | BIOMASS                          |                      |      |
|--------------|-----------------|----------------------|------|-----------------|-----------------------|------|---------------------------------|----------------------|------|----------------------------------|----------------------|------|
|              | Current<br>(mm) | Departure (%)<br>5YA | 13YA | Current<br>(°C) | Departure (°C)<br>5YA | 13YA | Current<br>(MJ/m <sup>2</sup> ) | Departure (%)<br>5YA | 13YA | Current<br>(gDM/m <sup>2</sup> ) | Departure (%)<br>5YA | 13YA |
| Arkansas     | 427             | 1                    | -8   | 7.8             | -2.3                  | -2.4 | 815                             | 0.3                  | 0.2  | 1208                             | -6                   | -9   |
| California   | 206             | 0                    | -11  | 9.3             | 1.9                   | 1.7  | 828                             | 3                    | 3    | 587                              | -2                   | -9   |
| Idaho        | 237             | 63                   | 50   | -0.6            | 0.9                   | 0.9  | 667                             | 0.0                  | -1   | 648                              | 31                   | 24   |
| Indiana      | 326             | -12                  | -13  | 0.8             | -3.5                  | -3.4 | 723                             | 2                    | 1    | 783                              | -18                  | -18  |
| Illinois     | 333             | -1                   | -3   | 0.5             | -3.7                  | -3.6 | 732                             | 2                    | 1    | 773                              | -17                  | -18  |
| Iowa         | 284             | 22                   | 16   | -2.3            | -3.3                  | -3.4 | 721                             | 1                    | 1    | 632                              | -14                  | -17  |
| Kansas       | 113             | -37                  | -44  | 3.6             | -1.7                  | -1.8 | 825                             | 1                    | 0.4  | 437                              | -33                  | -39  |
| Michigan     | 290             | 6                    | 2    | -4.7            | -4.4                  | -4.2 | 622                             | -4                   | -3   | 479                              | -24                  | -26  |
| Minnesota    | 247             | 64                   | 53   | -7.8            | -4.1                  | -4.2 | 640                             | -1                   | -1   | 402                              | -20                  | -24  |
| Missouri     | 334             | -6                   | -8   | 3.5             | -2.5                  | -2.6 | 768                             | 2                    | 1    | 905                              | -15                  | -15  |
| Montana      | 136             | 44                   | 36   | -2.9            | -0.9                  | -1.0 | 608                             | -4                   | -4   | 492                              | 20                   | 14   |
| Nebraska     | 121             | -13                  | -23  | 0.9             | -1.1                  | -1.0 | 761                             | -1                   | -1   | 528                              | -9                   | -15  |
| North Dakota | 155             | 52                   | 64   | -7.2            | -2.2                  | -2.7 | 623                             | -2                   | -2   | 413                              | 4                    | 1    |
| Ohio         | 293             | -11                  | -13  | 0.6             | -3.0                  | -2.9 | 708                             | 3                    | 3    | 763                              | -17                  | -17  |
| Oklahoma     | 150             | -43                  | -47  | 7.4             | -1.7                  | -1.8 | 860                             | 1                    | 1    | 555                              | -34                  | -38  |
| Oregon       | 283             | 20                   | 10   | 4.3             | 0.9                   | 0.8  | 609                             | 3                    | 2    | 801                              | 22                   | 15   |
| South Dakota | 143             | 18                   | 10   | -2.1            | -1.3                  | -1.5 | 687                             | -2                   | -2   | 531                              | 2                    | -1   |
| Texas        | 107             | -47                  | -53  | 12.2            | -1.4                  | -1.3 | 916                             | -1                   | 0.4  | 374                              | -39                  | -47  |
| Washington   | 226             | -7                   | -9   | 2.9             | 0.1                   | -0.1 | 541                             | 2                    | 0.5  | 676                              | 6                    | 6    |
| Wisconsin    | 313             | 35                   | 26   | -6.3            | -4.8                  | -4.8 | 657                             | -1                   | -0.3 | 446                              | -28                  | -29  |

See note table A.1.

**Table A.11. China, January to April 2014 agroclimatic indicators and biomass (by province); current value and departure from the 5YA and 13YA**

|                | RAIN            |                      |      | TEMP            |                       |      | RADPAR                          |                      |      | BIOMASS                          |                      |      |
|----------------|-----------------|----------------------|------|-----------------|-----------------------|------|---------------------------------|----------------------|------|----------------------------------|----------------------|------|
|                | Current<br>(mm) | Departure (%)<br>5YA | 13YA | Current<br>(°C) | Departure (°C)<br>5YA | 13YA | Current<br>(MJ/m <sup>2</sup> ) | Departure (%)<br>5YA | 13YA | Current<br>(gDM/m <sup>2</sup> ) | Departure (%)<br>5YA | 13YA |
| Anhui          | 335             | 14                   | 6    | 9.9             | 1.0                   | 0.6  | 752                             | 2                    | 3    | 1034                             | 17                   | 7    |
| Chongqing      | 219             | 38                   | 17   | 9.1             | 0.2                   | 0.1  | 781                             | 1                    | 4    | 730                              | 22                   | 6    |
| Fujian         | 403             | -19                  | -18  | 12.1            | 0.1                   | -0.1 | 809                             | 3                    | 3    | 1063                             | -9                   | -15  |
| Gansu          | 423             | 19                   | 25   | 15.7            | -0.1                  | -0.4 | 849                             | -1                   | 0.0  | 868                              | -9                   | -11  |
| Guangdong      | 108             | 155                  | 139  | 2.2             | 0.5                   | 0.4  | 833                             | 0.3                  | 1    | 384                              | 110                  | 91   |
| Guangxi        | 274             | -3                   | -3   | 14.7            | 0.1                   | -0.2 | 825                             | -1                   | 0.2  | 615                              | -23                  | -30  |
| Guizhou        | 212             | 29                   | 15   | 10.4            | 0.4                   | 0.2  | 872                             | 0.1                  | 2    | 642                              | 11                   | -5   |
| Hebei          | 41              | -8                   | -10  | 3.7             | 2.7                   | 1.7  | 759                             | 0.4                  | 1    | 214                              | -5                   | -6   |
| Heilongjiang   | 143             | 49                   | 26   | 8.4             | 1.2                   | 0.8  | 755                             | 1                    | 3    | 583                              | 43                   | 25   |
| Henan          | 33              | -52                  | -54  | -7.8            | 2.0                   | 0.6  | 634                             | 1                    | 2    | 167                              | -41                  | -46  |
| Hubei          | 268             | 10                   | -4   | 9.3             | 0.8                   | 0.5  | 770                             | 2                    | 4    | 890                              | 15                   | 0    |
| Hunan          | 340             | -13                  | -19  | 11.0            | 0.7                   | 0.4  | 761                             | 2                    | 3    | 996                              | -10                  | -19  |
| Jiangsu        | 45              | -49                  | -44  | -3.7            | 2.8                   | 1.5  | 681                             | 1                    | 1    | 215                              | -35                  | -34  |
| Jiangxi        | 213             | 11                   | 1    | 9.2             | 1.3                   | 0.8  | 763                             | 2                    | 3    | 769                              | 7                    | -2   |
| Jilin          | 464             | -19                  | -19  | 12.3            | 0.7                   | 0.5  | 761                             | 2                    | 2    | 1254                             | -3                   | -10  |
| Liaoning       | 49              | -48                  | -42  | 0.6             | 3.1                   | 2.0  | 716                             | 1                    | 1    | 246                              | -36                  | -31  |
| Inner Mongolia | 37              | -6                   | -6   | -4.8            | 3.0                   | 1.8  | 697                             | -1                   | -1   | 188                              | 1                    | -2   |
| Ningxia        | 55              | 98                   | 88   | 2.1             | 0.8                   | 0.7  | 809                             | 1                    | 2    | 265                              | 86                   | 78   |
| Shaanxi        | 130             | 49                   | 28   | 9.1             | 0.2                   | 0.3  | 899                             | -1                   | 1    | 468                              | 24                   | 10   |
| Shandong       | 77              | 8                    | 3    | 7.4             | 2.3                   | 1.6  | 751                             | 1                    | 2    | 337                              | 0                    | -2   |
| Shanxi         | 108             | 62                   | 52   | 5.2             | 0.6                   | 0.4  | 776                             | 0.2                  | 2    | 434                              | 48                   | 38   |
| Sichuan        | 75              | 74                   | 50   | 2.2             | 1.6                   | 1.1  | 787                             | 1                    | 2    | 340                              | 52                   | 32   |
| Yunnan         | 64              | -34                  | -40  | 13.3            | 0.1                   | 0.3  | 1089                            | 1                    | 2    | 265                              | -30                  | -37  |
| Zhejiang       | 400             | -22                  | -14  | 10.0            | 0.8                   | 0.3  | 782                             | 3                    | 4    | 1193                             | 0                    | -2   |

See note table A.1.