

## List of regions and subregions reference for PCA biplots

| Name                                 | National PCA | Regional PCA |
|--------------------------------------|--------------|--------------|
| <b>Central</b>                       |              | <b>A</b>     |
| Belgorod                             | 1            | A1           |
| Bryansk                              | 2            | A2           |
| Vladimir                             | 3            | A3           |
| Voronezh                             | 4            | A4           |
| Ivanovo                              | 5            | A5           |
| Kaluga                               | 6            | A6           |
| Kostroma                             | 7            | A7           |
| Kursk                                | 8            | A8           |
| Lipetsk                              | 9            | A9           |
| MoscowReg                            | 10           | A10          |
| Orel                                 | 11           | A11          |
| Ryazan                               | 12           | A12          |
| Smolensk                             | 13           | A13          |
| Tambov                               | 14           | A14          |
| Tver                                 | 15           | A15          |
| Tula                                 | 16           | A16          |
| Yaroslavl                            | 17           | A17          |
| MoscowCity                           | 18           | A18          |
| <b>North Western Federal Region</b>  |              | <b>B</b>     |
| Karelia                              | 19           | B1           |
| Komi                                 | 20           | B2           |
| Archangelsk                          | 21           | B3           |
| Nenets Autonomous Region             | 22           | B4           |
| Vologda                              | 23           | B5           |
| Kaliningrad                          | 24           | B6           |
| Leningrad                            | 25           | B7           |
| Murmansk                             | 26           | B8           |
| Novgorod                             | 27           | B9           |
| Pskov                                | 28           | B10          |
| St. Petersburg City                  | 29           | B11          |
| <b>Southern Federal Region</b>       |              | <b>C</b>     |
| Adygia                               | 30           | C1           |
| Kalmykia                             | 31           | C2           |
| Krasnodar                            | 32           | C3           |
| Astrakhan                            | 33           | C4           |
| Volgograd                            | 34           | C5           |
| Rostov                               | 35           | C6           |
| <b>North Caucasus Federal Region</b> |              | <b>D</b>     |
| Dagestan                             | 36           | D1           |
| Ingushetia                           | 37           | D2           |
| KabardinoBalkaria                    | 38           | D3           |
| KarachayevoCherkessiya               | 39           | D4           |
| NorthernOssetiya                     | 40           | D5           |
| Chechnya                             | 41           | D6           |
| Stavropol                            | 42           | D7           |

|                                |    |          |
|--------------------------------|----|----------|
| <b>Volga Federal Region</b>    |    | <b>E</b> |
| Bashkortostan                  | 43 | E1       |
| MariyEl                        | 44 | E2       |
| Mordovia                       | 45 | E3       |
| Tatarstan                      | 46 | E4       |
| Udmutriya                      | 47 | E5       |
| Chuvashiya                     | 48 | E6       |
| Perm                           | 49 | E7       |
| Kirov                          | 50 | E8       |
| Nizhegorod                     | 51 | E9       |
| Orenburg                       | 52 | E10      |
| Penza                          | 53 | E11      |
| Samara                         | 54 | E12      |
| Saratov                        | 55 | E13      |
| Ulyanovsk                      | 56 | E14      |
| <b>Urals Federal Region</b>    |    | <b>F</b> |
| Kurgan                         | 57 | F1       |
| Sverdlovsk                     | 58 | F2       |
| Tyumen                         | 59 | F3       |
| Khanty-Mansiysk                | 60 | F4       |
| Yamalo-Nenetsk                 | 61 | F5       |
| Chelyabinsk                    | 62 | F6       |
| <b>Siberian Federal Region</b> |    | <b>G</b> |
| Altay Republic                 | 63 | G1       |
| Buryatiya                      | 64 | G2       |
| Tyva                           | 65 | G3       |
| Khakasiya                      | 66 | G4       |
| Altay Region                   | 67 | G5       |
| Zabaykal                       | 68 | G6       |
| Krasnoyarsk                    | 69 | G7       |
| Irkutsk                        | 70 | G8       |
| Kemerovo                       | 71 | G9       |
| Novosibirsk                    | 72 | G10      |
| Omsk                           | 73 | G11      |
| Tomsk                          | 74 | G12      |
| <b>Far East Federal Region</b> |    | <b>H</b> |
| Sakha (Yakutiya)               | 75 | H1       |
| Kamchatka                      | 76 | H2       |
| Primorsk                       | 77 | H3       |
| Khabarovsk                     | 78 | H4       |
| Amursk                         | 79 | H5       |
| Magadan                        | 80 | H6       |
| Sakhalin                       | 81 | H7       |
| Jewish Autonomous Region       | 82 | H8       |
| Chukhotka                      | 83 | H9       |