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**Appendix A**

**Table A1.** Goodness-of-fit measures.

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| Measure | Formula |
| Akaike information criterion (AIC) | Source: [Tanaka (1993)](#LinkManagerBM_REF_4Uocwfnf) |
| Robust root mean square error of approximation (RMSEA) | Source: [Brosseau-Liard et al. (](#LinkManagerBM_REF_EsYGeZf6)[2012)](#LinkManagerBM_REF_EsYGeZf6) |

**Table A2.** Region identification numbers (IDs) used in [Figures 2](#LinkManagerBM_FIG_RkACKWaC)–[5](#LinkManagerBM_FIG_ypPEbGUh).

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Region (NUTS-2)** | **ID** | **Region (NUTS-2)** | **ID** | **Region (NUTS-2)** | **ID** | **Region (NUTS-2)** |
| 1 | Adygea | 21 | Kaliningrad | 41 | Mari El | 61 | Samara |
| 2 | Altai (Republic) | 22 | Kalmykia | 42 | Mordovia | 62 | Saratov |
| 3 | Altai (Krai) | 23 | Kaluga | 43 | Moscow | 63 | Smolensk |
| 4 | Amur | 24 | Kamchatka | 44 | Murmansk | 64 | Stavropol |
| 5 | Arkhangelsk | 25 | Karachay-Cherkessia | 45 | Nenets AO | 65 | Sverdlovsk |
| 6 | Astrakhan | 26 | Karelia | 46 | Nizhny Novgorod | 66 | Tambovsk |
| 7 | Bashkortostan | 27 | Kemerovo | 47 | North Ossetia-Alania | 67 | Tatarstan |
| 8 | Belgorod | 28 | Khabarovsk | 48 | Novgorod | 68 | Tomsk |
| 9 | Bryansk | 29 | Khakassia | 49 | Novosibirsk | 69 | Tula |
| 10 | Buryatia | 30 | Khanty-Mansi AO | 50 | Omsk | 70 | Tuva |
| 11 | Chechnya | 31 | Kirov | 51 | Orenburg | 71 | Tver |
| 12 | Chelyabinsk | 32 | Komi | 52 | Oryol | 72 | Tyumen |
| 13 | Chukotka AO | 33 | Kostroma | 53 | Penza | 73 | Udmurtia |
| 14 | Chuvashia | 34 | Krasnodar | 54 | Perm | 74 | Ulyanovsk |
| 15 | Dagestan | 35 | Krasnoyarsk | 55 | Primorsky | 75 | Vladimir |
| 16 | Ingushetia | 36 | Kurgan | 56 | Pskov | 76 | Volgograd |
| 17 | Irkutsk | 37 | Kursk | 57 | Rostov | 77 | Vologda |
| 18 | Ivanovo | 38 | Leningrad/St. Petersburg | 58 | Ryazan | 78 | Voronezh |
| 19 | Jewish | 39 | Lipetsk | 59 | Sakha | 79 | Yamalo-Nenets AO |
| 20 | Kabardino-Balkaria | 40 | Magadan | 60 | Sakhalin | 80 | Yaroslavl |
|   |   |   |   |   |   | 81 | Zabaykalsky |

**Table A3.** Generated cluster solution by using a *k*-means algorithm on the estimated regional climate change (CC) awareness indices from January 2014 to April 2016.

|  |  |
| --- | --- |
| **Cluster (CC index)** | **Regions** |
| 1 | Chechnya, Dagestan, Ingushetia, Kabardino-Balkaria, Karachay-Cherkessia, North Ossetia-Alania |
| 2 | Adygea, Arkhangelsk, Bashkortostan, Belgorod, Bryansk, Chelyabinsk, Chuvashia, Ivanovo, Kaliningrad, Kaluga, Karelia, Kemerovo, Kirov, Kostroma, Kurgan, Kursk, Leningrad/St. Petersburg, Lipetsk, Mari El, Mordovia, Nizhny Novgorod, Novgorod, Oryol, Penza, Pskov, Rostov, Ryazan, Samara, Saratov, Smolensk, Stavropol, Sverdlovsk, Tambovsk, Tula, Tver, Ulyanovsk, Vladimir, Voronezh |
| 3 | Altai (Krai), Amur, Astrakhan, Buryatia, Irkutsk, Jewish, Kalmykia, Khakassia, Khanty-Mansi AO, Komi, Krasnodar, Krasnoyarsk, Moscow, Murmansk, Novosibirsk, Omsk, Orenburg, Perm, Primorsky, Tatarstan, Tomsk, Tyumen, Udmurtia, Vologda, Yamalo-Nenets AO, Yaroslavl, Zabaykalsky |
| 4 | Altai (Republic), Chukotka AO, Kamchatka, Khabarovsk, Magadan, Nenets AO, Sakha, Sakhalin, Tuva |

**Table A4.** Russian regions grouped geographically

|  |  |
| --- | --- |
| **Geocluster** | **Regions** |
| North-Eastern Europe | Arkhangelsk, Bryansk, Chuvashia, Ivanovo, Kaliningrad, Kaluga, Karelia, Kirov, Komi, Kostroma, Kursk, Leningrad/St. Petersburg, Lipetsk, Mari El, Mordovia, Moscow, Murmansk, Nizhny Novgorod, Novgorod, Oryol, Penza, Perm, Pskov, Ryazan, Smolensk, Tambovsk, Tatarstan, Tula, Tver, Udmurtia, Ulyanovsk, Vladimir, Vologda, Yaroslavl |
| South-Eastern Europe | Adygea, Astrakhan, Bashkortostan, Belgorod, Chechnya, Dagestan, Ingushetia, Kabardino-Balkaria, Kalmykia, Karachay-Cherkessia, Krasnodar, North Ossetia-Alania, Orenburg, Rostov, Samara, Saratov, Stavropol, Volgograd, Voronezh |
| Western and Central Siberia | Altai (Krai), Altai (Republic), Chelyabinsk, Irkutsk, Kemerovo, Khakassia, Khanty-Mansi AO, Krasnoyarsk, Kurgan, Nenets AO, Novosibirsk, Omsk, Sverdlovsk, Tomsk, Tuva, Tyumen, Yamalo-Nenets AO |
| Far-Eastern Siberia | Amur, Buryatia, Chukotka AO, Jewish, Kamchatka, Khabarovsk, Magadan, Primorsky, Sakha, Sakhalin, Zabaykalsky |

**References for Appendix A**