Radiocarbon dating results for samples of different origin collected in the upper part of the Akkol valley, South Chuya range.

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| **N** | **Lab code** | **Section** | **N° E°** | **Altitude m a.s.l.** | **Depth of sampling,****сm** | **Sample type** | **Dating material** | **14C Age** | **Calibrated age (2σ)** |
| 1 | SOAN-9902 | 1 | N49º48´54'' E87º50´32'' | 2438 | 5-15 | Surface soil in the frontal part of the Historical moraine | soil (ha) | Modern |
| 2 | SOAN-9909 | 3 | N49º49´02'' E87º50´37'' | 2406 | 5-11 | Surface soil in the frontal part of the Historical moraine | soil (ha) | Modern |
| 3 | SOAN-9901 | 14-19 | Surface soil in the frontal part of the Historical moraine | soil (ha) | Modern |
| 4 | IGANAMS 8772 | 27-34 | Low-humus sandy lens (fossil soil?) in soil profile in the frontal part of the Historical moraine | soil (ha) | Modern |
| 5 | SOAN-9683 | 4 | N49º49´05'' E87º50´26'' | 2421 | 12-18 | Gray-humus horizon of polygenetic surface soil on landslide deposits | soil (ha) | 340±35 | 395±85 |
| 6 | SOAN-9682 | 21-28 | Dark-humus horizon of polygenetic surface soil on landslide deposits | soil (ha) | 1645±95 | 1535±190 |
| 7 | IGAN 6246 | 28-33 | Cryo-humus horizon of polygenetic surface soil on landslide deposits | soil (ha) | 1220±70 | 1130±155 |
| 8 | SOAN-9910 | 5 | N49º49´03'' E87º50´38'' | 2396 | 13-21 | Surface soil on aeolian sands above landslide deposits | soil (ha) | 930±80 | 820±135 |
| 9 | SOAN-9903 | 36-43 | Fossil soil in aeolian sands above landslide deposits | soil (ha) | 1570±80 | 1495±190 |
| 10 | SOAN-9908 | 6 | N49º49'06'' E87º50'45'' | 2390 | 90 | Fragment of *Larix sibirica* at the top of fossil soil above landslide deposits. 1 cm thick layer with wood fragments is covered by glaciofluvial (aeolian at the top of profile) sands, which fill the channel between two landslides bodies. | wood | 2865±110 | 3045±280 |
| 11 | SOAN-9894 | 90-105 | Fossil soil under the layer with wood fragments  | soil (ha) | 4420±105 | 5130±305 |
| 12 | SOAN-9893 | 7 | N49º49´07'' E87º50´45'' | 2391 | 23-28 | Fossil soil in aeolian sands underlain by laminar glaciofluvial sands, which fill the channel between two landslides bodies | soil (ha) | 1695±80 | 1570±175 |
| 13 | SOAN-9897 | 8 | N49º49´06'' E87º50´46'' | 2391 | 19-24 | Upper fossil soil in aeolian sands above glaciofluvial deposits on the landslide body | soil (ha) | 615±50 | 605±65 |
| 14 | SOAN-9896 | 38-42 | Middle fossil soil in aeolian sands above glaciofluvial deposits on the landslide body | soil (ha) | 1145±65 | 1085±160 |
| 15 | SOAN-9895 | 65-70 | Lower fossil soil on landslide deposits under glaciofluvial sands and loess-soil sequence at the top | soil (ha) | 2980±120 | 3150±295 |
| 16 | IGAN 6247 | 9 | N49º49´12''E87º50´51'' | 2381 | 10-15 | Surface soil in loess-soil sequence at the top of glaciofluvial sands above landslide deposits | soil (ha) | 140±50 | 225±55 |
| 17 | IGAN 6248 | 22-32 | Fossil soil in loess-soil sequence at the top of glaciofluvial sands above landslide deposits | soil (ha) | 1110±70 | 1040±205 |
| 18 | IGAN 6009 | 53-70 | Bark of *Larix sibirica.* Wood fragments underlay glaciofluvial sands, and cover landslide deposits filling the space between debris | wood | 3320±80 | 3600±220 |
| 19 | SOAN-9898 | 10\* | N49º49´10'' E87º50´55'' | 2373 | 23-30 | Fossil soil in loess-soil sequence at the top of glaciofluvial sands above landslide deposits  | soil (ha) | 2225±95 | 2215±270 |
| 20 | IGANAMS 8771 | soil (TOC) | 330 ± 20 | 385 ± 75 |
| 21 | SOAN-9684 | 11 | N49º49´24''E87º51´28'' | 2354 | 35-40 | Fossil soil in subaeral sediments above alluvium in the lower river terrace | soil (ha) | 1490±90 | 1375±195 |
| 22 | SOAN-9686 | 63-78 | Lens of dark brown loams with charcoals in subaeral sediments above alluvium in the lower river terrace | soil (ha) | 4470±105 | 5145±300 |
| 23 | SOAN-9685 | 98-102 | Lens of humus material with a large amount of root detritus at the top of alluvial boulders in the lower river terrace | soil (ha) | 5090±95 | 5880±280 |
| 24 | SOAN-9687 | 12 | N49º49´40'' E87º52´08'' | 2348 | 40-50 | Loams with detritus covered by peat in the lower river terrace | loams (ha) | 1730±60 | 1580±160 |
| 25 | IGAN 6100 | 13 | N49º49´12''E87º50´51'' | 2339 | 4-7 | Peat in a peat bog at the lower river terrace | peat | Modern |
| 26 | IGAN 6099 | 40-44 | Peat in a peat bog at the lower river terrace | peat | 200±50 | 330±90 |
| 27 | IGAN 6098 | 70-75 | Peat in a peat bog at the lower river terrace | peat | 1160±60 | 1095±165 |
| 28 | IGAN 6097 | 127-130 | Peat in a peat bog at the lower river terrace | peat | 1760±60 | 1675±145 |
| 29 | SOAN-9904 | 14 | N49º49´41'' E87º52´16'' | 2347 | 10-15 | Peat horizon between alluvial layers in deposits of high floodplain | peat | Modern |
| 30 | SOAN-9907 | 15 | N49º50´09'' E87º52´28'' | 2334 | 120-125 | Peat with sandy layers overlain by sandy lenticular-wavy-layered alluvium in deposits of the first river terrace | peat | 320±40 | 390±90 |
| 31 | SOAN-9906 | 144-150 | Peat with sandy layers overlain by sandy lenticular-wavy-layered alluvium in deposits of the first river terrace | peat | 1350±85 | 1230±165 |
| 32 | SOAN-9905 | 187-191 | Peat with sandy layers overlain by sandy lenticular-wavy-layered alluvium in deposits of the first river terrace | peat | 1440±80 | 1350±170 |
| 33 | IGAN 5966 | 16 | N49º50´19'' E87º52´40'' | 2334 | 125 | Fragments of burnt larch trunk on the ancient day surface, which separate fluvio-lacustrine and aeolian deposits | charcoal | 3630±70 | 3935±215 |
| 34 | SOAN-9899 | 17 | N49º51´01'' E87º53´20'' | 2311 | 103-113 | Peat horizon in fluvio-lacustrine deposits of the river terrace | peat | 805±55 | 775±125 |

**\*** Section 10 is an extension of the section with surface soil earlier studied by Egli et al. (2015), who reported 14С AMS dates of stable OM for this surface soil: 3510±55 cal BP (UZN 6103) for 0-15 cm and 5390±75 cal BP (UZN 6104) for 15-30 cm. Later, in section 10, we have reported a thin sandy layer which separates the humus horizon at a depth of 20-23 cm.