

## INVESTIGATION OF LANDSLIDES MOVEMENT PARAMETERS IN LOESS AND CLAY DEPOSITS OF UZBEKISTAN

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On the territory of Uzbekistan more than 12000 landslide areas have been registered. Every year 100-150 landslides are forming and in anomalous years its number reaches up to 1000 events with displacement capacity from 30-300m<sup>3</sup> up to 1-90mln m<sup>3</sup>. The main criteria of landslides activation are: 1) increased norm in 1.5-1.7 times of precipitation fall in autumn-winter period with sharp thaw in February-March that occurred in 6-8 days, 2) increasing of groundwater level to 4-10m and of springs discharge in 2 times in the period of 20-30 days in May-June. In the loess deposits 90% of landslides are developed and are characterized by simultaneous mass displacement. The mass movement is in form of flow, landslip - destruction- crawlover and drift. Displaced from slopes rock masses are propagating to distances 500-600m up to 2-3.5km, destroying everything by the way. Formation of landslides occurs as repeated displacement in short time interval. The movement occurs in the form of high-flood wave or few waves and properties of the rocks by the flow length are changed slightly. Increased moisture content of sediments brings to viscosity decrease and increased movement speed, but not affect flow length. The volume rise of displaced rock doesn't influencing displacement acceleration and increased its extent. Average movement velocity is 1.0-3.5m/s and maximal 8 m/s. In clay rocks landslides are formed with volume 40-800mln m<sup>3</sup> and depth 60-140 m. Development duration is 30-40 years. The movement character is not stationary with seasonal splash in the period of groundwater maximal level. Activity is timed to the water plentiful years, displacement is 7.5-11 m and in anomalous years 21-26 m. Maximal velocity is 650-800mm/day, critical velocity of transition to progressing creep – 22 m/day, transition to established creep – 2-4 mm/day for Jurassic clay and 8-10 mm/day for Paleogenic clay. Strength rehabilitation period of clays after catastrophic displacement up to state of progressing creep 65-70 day and established creep 115-120 days.