In this way the slope s was calculated at each point of hydrometrical measurement. Then the length of the river curve was measured on the charts between all those points, and the parts occupied by lakes or still water, i. e. the horizontal parts, where the slope was equal to zero, were measured separately.

Now, let A_1, A_2, A_3, . . . A_{n-1}, A_n be a series of consecutive points of measurement, let $a_{1,2}$, $a_{2,3}$, . . . $a_{n-1,n}$ be the distances between them, and let s_1, s_2, . . . s_{n-1}, s_n be the slopes at those points. Then I have supposed the difference of altitude between A_1 and A_2 to be $\frac{1}{2}(s_1+s_2)\,a_{1,2}$, that between A_2 and A_3 to be $\frac{1}{2}(s_2+s_3)\,a_{2,3}$, . . . , that between A_{n-1} and A_n to be $\frac{1}{2}(s_{n-1}+s_n)a_{n-1,n}$, and consequently the difference of altitude between A_1 and A_n will be the sum of all these expressions. In this calculation all the horizontal parts ought to be excluded and treated separately.

After the numerical calculation was performed, a vertical section of the river was constructed, with the river lengths as abscissæ and the altitudes of A_1, A_2 , . . . A_{n-1} above the lowest point, A_n say, as ordinates. The points A_1, A_2, . . . A_n were then joined by a curve, in which all horizontal parts were drawn as straight lines parallel to the axis of the abscissæ, and the altitudes of all intermediate points were taken from the figure.

The work was divided into two parts, the one from Lajlik to Jangi-köl, the other from Jangi-köl to Kara-koschun. The result is given in the following tables.

Table I.

The Tarim river from Lajlik to Jangi-köl.

Name of station.	Month and day 1899.	Lat. N.	Long. E. from Greenwich.	$s \cdot 10^3$.	Distance along the river from Jangi-köl in kilometers.	Altitude above Jangi-köl in meters.	Altitude above sea-level in meters.
Lajlik	Sept. 10—17	38° 59′	77° 34′	—	1394.4	292	1173
Ghasanglik.	» 17	39 3	77 35	—	1381.2	288	1169
Bisch-köl	» 18	39 8	77 43	0.267	1363.4	283	1164
Schäschkak	» 19	39 10	77 47	0.090	1350.4	281	1162
At-pangsa	» 21	39 13	77 51	0.110	1331.5	279	1160
Toghluk (Schakal-otak) .	» 22	39 18	77 54	0.059	1315.3	278	1159
Kötäklik-darja	» 23	39 19	77 59	0.380	1305.8	276	1157
Lepscheme (Töländä) . .	» 23	39 19	78 3	0.036	1300.8	275	1156
Karul-dung.	» 24	39 22	78 7	—	1291.1	274	1155
Kum-atschal	» 25	39 22	78 9	0.234	1286.7	273	1154
Läschlik	» 27	39 23	78 20	0.452	1266.8	267	1148
Jalghus-jigde	» 28	39 29	78 25	0.246	1245.9	259	1140
Kijik-tele-tschöl	» 29	39 31	78 31	0.181	1227.0	256	1137
Haradighan-kötek	» 30	39 36	78 36	0.617	1210.0	248	1129
Kuruk-asti	Oct. 1	39 38	78 43	0.154	1193.0	241	1122