

Tsajdam, in order to realise to the full its importance as an orographical boundary. And when we remember, further, that in the east the Tschimen-tagh is the first mountain-range which lies immediately south of this great depression, and that in the west the Tokus-davan and Musluk-tagh are also the first mountain-range which lies immediately south of the same depression, we have every reason to conclude that the Tokus-davan + Musluk-tagh and Tschimen-tagh form orographically one and the same continuous mountain-range, a range pierced in the west by the Tschertschen-darja and its tributaries, in the middle by the Toghri-saj, and in the east by the stream that enters the Tschimen valley over against Kara-tschoka. Under these circumstances the great branching range which borders the basin of the Atschik-köl on the north must be regarded either as a ramification of that system or — and this is perhaps more probable — as an independent parallel range, though it soon terminates indeed towards the east, unless we are prepared to recognise it again in one of the ranges through which the Pitelik-darja forces its way.

Let us now consider the Kalta-alaghan. Of this range I obtained five pass-altitudes — 4326, 4348, 4438, 4412, and 4786 m., going from west to east and proving that this range, contrary to the Astin-tagh, grows increasingly higher towards the east, where it gradually merges, as the Tschimen-tagh does, into the ranges that border the Tsajdam basin on the south. According to these five data, the mean pass-altitude of the Kalta-alaghan amounts to 4462 m. I have deliberately left out of account Prschevskij's pass of Amban-aschkan, which is situated in this range, and which he puts at an altitude of 4268 m. This figure is consequently lower than any that I obtained, though not for that reason improbable. Bonvalot also crossed over by the same pass, though on his map he gives no altitude; but as he considers that the Kum-köl-darja lies at an elevation of 5550 m., and as according to Prschevskij the pass lies 200 m. higher than the surface of the Lower Kum-köl, the Amban-aschkan would consequently in that case, accepting Bonvalot's computation, come to lie at about 5750 m., or exactly 1500 m. higher than it in reality does lie. In the light of these circumstances I am unable to place confidence in any other data than my own, namely the altitudes which have been calculated and corrected by Dr. Ekholm.

In the extreme east we discovered a quite short range thrust in between the Tschimen-tagh and the Kalta-alaghan, namely the Ara-tagh or the Middle Range, which we crossed over by a pass at 4373 m., and which soon tapers away and disappears in the west. On both sides of it are latitudinal valleys, which unite to form *one* valley at its western extremity. Of this main latitudinal valley, the extreme eastern part of which runs along the northern foot of the Ara-tagh, I took the following five observations of altitude. The first four succeed one another from east to west as far as the point below Möle-kojghan where the breach is made to Kara-tschoka, while the fifth was taken immediately above Kum-bulak, from which point the valley slopes down eastwards to the same breach. The first four altitudes are 4185, 3888, 3726, and 3594 respectively, and the fifth 4197 m. Taking the entire latitudinal valley, its mean altitude is consequently 3918 m. Of the latitudinal valley that lies south of the Ara-tagh I have only one measurement, namely 4301 m., and in order to get a mean value we must take the first measurement made after the