

of R. B. Lāl Singh's route in the southwestern corner of the sheet is adjusted on the positions of Āltmish-bulak, its starting point, and of Turfān.

This route at Donglik, near its northern end (A. 4), struck an old desert track from the terminal basin of the Hāmi river, once used by hunters of wild camels before certain salt springs along it had completely dried up. A more northerly route which M. Muhammad Yakūb surveyed from the same basin to Chik-tam (B-D. 3) has also become impracticable to traffic for the same reason.

Apart from these desert plateaus in the south, which in their utter barrenness fully share the character of the eastern Kuruk-tāgh, there falls within this sheet the small portion of the Turfān basin around Pichan and Chik-tam. Like the rest of the cultivated area of the basin these oases owe their irrigation almost exclusively to Kārēzes

*Astronomically observed latitudes.*

1906-08. Tung-yen-tzu, Camp 262 (close to Chinese station; C. 2)	...	43° 29' 10"
Pichan, Camp 265 (Bēg's house above W. bank of river bed, circ. 1 mile from town; A. 3)	... ..	42° 51' 56"
1913-15. Jam-bulak, Camp 236 (B. 1)	... ..	43° 39' 16"
Jōjan-kārēz, Camp 239 (village inn, 2 miles N.W. of Chik-tam post; B. 2)	... ..	43° 1' 13"
Tügemen-tāsh, Camp 271 (in patch of scrub; A. 4)	... ..	42° 6' 13"

NOTES ON SHEET No. 32 (ANCIENT LOP LAKE BED)

With the exception of the caravan track leading along the southern shore of the ancient salt-encrusted Lop sea bed which had been followed before in 1907, all the surveys shown in this sheet date from my third expedition. Those in the northern half of the sheet belong exclusively to R. B. Lāl Singh's work of the winter of 1915, while most of those further south were carried out by Miān Afrāz-gul and myself.

In the S.E. corner the position of Kum-kuduk (D.4), on the caravan track from Charkhlik to Tun-huang, was fixed by adjusting the traverses on the positions adopted for An-hsi (see Sheet No. 38) and Mīrān (No. 30. B.2). The longitude thus derived, 91° 55' 30", was found to agree very closely with the one shown in Sheet No. 67 of the 1906-08 Map. For the correction of its latitude the observations taken in 1914 on

<sup>18</sup> It deserves to be noted that the two traverses carried across exceptionally trying ground by R. B. Lāl Singh and myself, respectively, differed at their

which catch the subsoil drainage from the elevated portion of the eastern T'ien-shan. To the east of the meridian of Chik-tam the crest-line of the range falls considerably, and the moisture it receives is even on the northern slope too scanty to permit of cultivation in more than a few small patches (see B-D. 1). It is only to the west of that meridian that conifer forest is found on the northern face of the range, and a small village tract (Mu-li-ho, A. 1) with some grazing.

The southern slope of the range is far more barren still, and the passage of the Chinese highroad along its foot is made possible only by rare springs and wells and some scanty vegetation found in small basins (B-D. 2). The pass by which it crosses from Ch'i-ku-ching to the north of the range is low enough to be practicable for carts.

the route both west and east of Camp 95 could be utilized.

The traverses of the routes followed to Kum-kuduk from Āltmish-bulak and the ruins north-east of the Lou-lan Site (A.3), were adjusted on the positions adopted for the latter two points as well as on Kum-kuduk.<sup>18</sup> The correction in longitude which the revised computation of R. B. Lāl Singh's triangulation indicates for Āltmish-bulak and the Lou-lan Site, has been referred to in the Notes on Sheet No. 29. The traverse carried by R. B. Lāl Singh from Yetim-bulak (A.3) northward through wholly unexplored parts of the Kuruk-tāgh was adjusted on the adopted positions of Āltmish-bulak and Deghar (in the Turfān depression; No. 28. D.4). A useful check was afforded by the series of latitude observations taken along this route (see below).

junction at Kum-kuduk, Camp 95, cviii, only by about 2 miles in longitude and 3 miles in latitude.