DUGE BRIDGE

The Duge Bridge ([tú.kɤ̌]), also called the Beipanjiang Bridge, is a 4-lane cable-stayed bridge on the border between the provinces of Guizhou and Yunnan. As of 2021, the bridge is the highest in the world, with the road deck sitting over 565 metres (1,850 feet) above the Beipan River. The bridge is part of the G56 Hangzhou–Ruili Expressway between Qujing and Liupanshui. The eastern tower measures 269 m (883 ft) making it one of the tallest in the world. The bridge spans 1,340 m (4,400 ft) between Xuanwei city, Yunnan and Shuicheng County, Guizhou and shortens the journey between the two places from around five hours' drive to about an hour. Today, the structure is largely buried by river sediments and surrounded by greenhouses. Despite its unique features, the bridge remains relatively unknown, and only in the 1970s did researchers from the Istanbul branch of the German Archaeological Institute carry out field examinations on the site. No information on the bridge survives from ancient sources. The first descriptions appear in European travellers' accounts from the 19th century. The British archaeologist Charles Fellows was

the first to explore the region of Lycia, and visited the bridge in May 1840. Fellows, as well.

History

Construction of the bridge began in 2011. The bridge was completed on 10 September 2016, and was opened to the public on 29 December 2016. The bridge cost a total of ¥1.023 billion and took 3 years to build. It was recognized by the Guinness World Records as the World's highest bridge in 2018.

At the time of Wurster's and Ganzert's visit to the site, the entire bridge was buried by river sediments up to the springing line of the vaults. No efforts to dig them up were undertaken by Wurster and Ganzert. Only two of the 28 arches were exposed enough so that direct measurements of the clear span and the pier width could be undertaken. It was, however, possible to calculate the dimensions of the remaining bays from their exposed sections.

Only in a single case, between arches 26 and 27, were Wurster and Ganzert able to determine the breadth of a pier: 2.10 m (6.9 ft). Subtracting this value from the common arch span of 12.75 m (41.8 ft), a clear span of 10.65 m (34.9 ft) remains. Since all arches have a rise of ca. 2 m (6.6 ft), the has an unusually large span-to-rise ratio of 5.3 to 1. Such flattened arches were very rare at the time for stone bridges, and were not matched and surpassed