



2D Laverstack

Exceptional monsoon flood kills over 1100 in Pakistan

Sentinel-1 CSAR IW acquired on 23 August 2021 from 01:25:19 to 01:26:09 UTC Sentinel-2 MSI acquired on 12 July 2022 at 05:56:51 UTC Sentinel-1 CSAR IW acquired on 25 August 2022 from 01:16:43 to 01:17:33 UTC Sentinel-1 CSAR IW acquired on 30 August 2022 from 01:25:26 to 01:26:16 UTC

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Fig. 1 - S1 (23 & 30.08.2021; 25 & 30.08.2022) - Pakistan received twice as much rainfall as usual, four times in southern provinces. 2D view 2D view



Fig. 2 - S1 (25 & 30.08.2022) - The ensuing flood hit 33 millions people, killing over 1100. Upstream water has yet to reach south Pakistan. 2D view



At least 1136 people have died since the monsoon began in June. More than 33 million people, or one in seven Pakistanis, have been affected by the floods, and nearly one million houses have been destroyed or severely damaged. More than 80 000 hectares of cultivable land have been destroyed and more than 3400 km of roads and 157 bridges washed away.

2D view

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Fig. 3 - S2 (12.07.2022) - Sukkur Barrage is vital to prevent the disaster from getting worse downstream.



Built during the British Raj from 1923 to 1932, the Sukkur Barrage is the largest single irrigation network of its kind in the world. Sindh is arid with rainfalls averaging 100-200 mm per year, while the evaporation rate is between 1000-2000 mm. The Indus irrigates otherwise barren lands of Sindh. Sukkur Barrage is used to for the purposes of irrigation and flood control. This barrage enables water to flow through a network of seven canals 9923 km long, allowing ~25% of total canal irrigated area of the country.

The bulk of the water flowing from the north of the country through the river is expected to reach the structure around 5 September.

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