



2D Layerstack

## Colour mixing as Jhelum river meets Chenab river

Sentinel-2 MSI acquired on 29 August 2016 at 05:46:42 UTC Sentinel-2 MSI acquired on 05 February 2017 at 05:50:21 UTC Sentinel-2 MSI acquired on 08 October 2017 at 05:47:09 UTC Sentinel-2 MSI acquired on 06 January 2018 at 05:52:19 UTC Sentinel-2 MSI acquired on 05 February 2019 at 05:50:31 UTC

<u>Author(s)</u>: Sentinel Vision team, VisioTerra, France - svp@visioterra.fr

Keyword(s): Hydrology, river, water colour, seasons, monsoon, precipitations, erosion, sediments, alluvium, Pakistan

2D view

Fig. 1 - S2 (08.10.2017) - 4,3,2 natural colour - Brown-coloured Jhelum river (west) meets in black-coloured Chenab river.



Fig. 2 - 29.08.2016 - Chenab river here shows in dark brown. The sediment load carried by these rivers depends on precipitations.



Fig. 3 - 06.01.2018 - Jhelum here shows in green, no river dominates the other.



Fig. 4 - 05.02.2017 - Jhelum affluent in dark green while Chenab river, here in brown, now shows as the major constituent.

<u>2D view</u>



According to their profile they flow more or less rapidly. Faster rivers erode more while slower rivers flowing through ground rich in organic matter (such as forest or marshy areas) have more time to accumulate dark tanins.

<u>2D view</u>

Fig. 5 - 05.02.2019 - The dark green Jhelum river merges into the brown Chenab without altering much its colour.



The views expressed herein can in no way be taken to reflect the official opinion of the European Space Agency or the European Union. Contains modified Copernicus Sentinel data 2019, processed by VisioTerra.

More on European Commission space:		y	You Tube				
More on ESA:	₿	7	You Tube	<u>S-1 website</u>	<u>S-2 website</u>	<u>S-3 website</u>	
More on Copernicus program:	₿	7	You Tube	<u>Scihub portal</u>	<u>Cophub portal</u>	<u>Inthub portal</u>	<u>Colhub portal</u>
More on VisioTerra:	€€	<b>y</b>	You Tube	Sentinel Vision Portal	Envisat+ERS portal	<u>Swarm+GOCE portal</u>	<u>CryoSat portal</u>
			Fun	Funded by the EU and ESA		SED-406-SentinelVision	