Sentinel Vision SED-642 15 April 2020



Seasonal contrast in Chambeshi floodplains, Zambia

Sentinel-1 CSAR IW acquired on 08 September 2018 from 16:17:21 to 16:17:46 UTC Sentinel-1 CSAR IW acquired on 07 March 2019 from 16:17:19 to 16:17:44 UTC Sentinel-2 MSI acquired on 17 April 2019 at 07:46:19 UTC Sentinel-2 MSI acquired on 08 November 2019 at 07:51:31 UTC

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Keyword(s): Wetland, marshes, tropical climate, dry season, wet season, flooding, biodiversity, Congo river, Great Rift Valley.

2D view

2D view

Fig. 1 - S1 (07.03.2019) - vv,vh,ndi(vh,vv) - The Chambeshi River floodplains belong to the Zambezian flooded grasslands ecoregion.

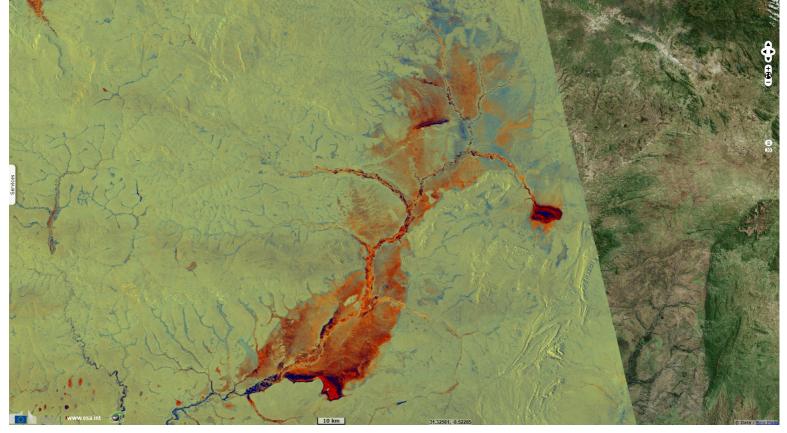


Fig. 2 - S2 (17.04.2019) - 4,3,2 natural colour - They are located in Zambia, located west of Lake Malawi, south-east of Lake Tanganyika.

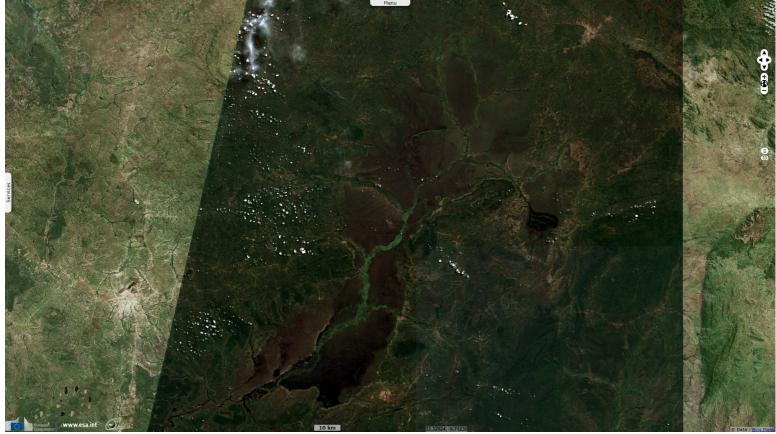
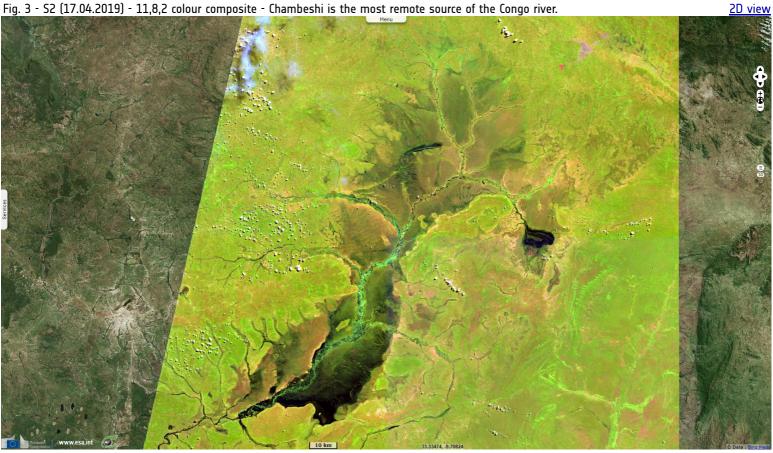
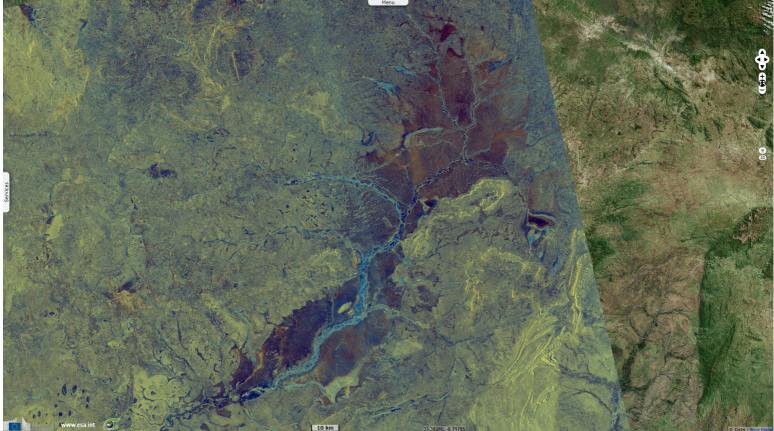


Fig. 3 - S2 (17.04.2019) - 11,8,2 colour composite - Chambeshi is the most remote source of the Congo river.



By the end of the rainy season in May, it delivers a flood which recharges the swamps and inundates a vast floodplain to the southeast 2D animation 2D view Fig. 4 - S1 (08.09.2018) - vv,vh,ndi(vh,vv) colour composite - During the dry season, most of the marsh vegetation regresses.



Even during the dry season the floodplains sustain a great deal of wildlife including buffalos, antelopes, elephants, zebras, giraffes, a large numbers of birds with hippopotamus and crocodiles in the waters.

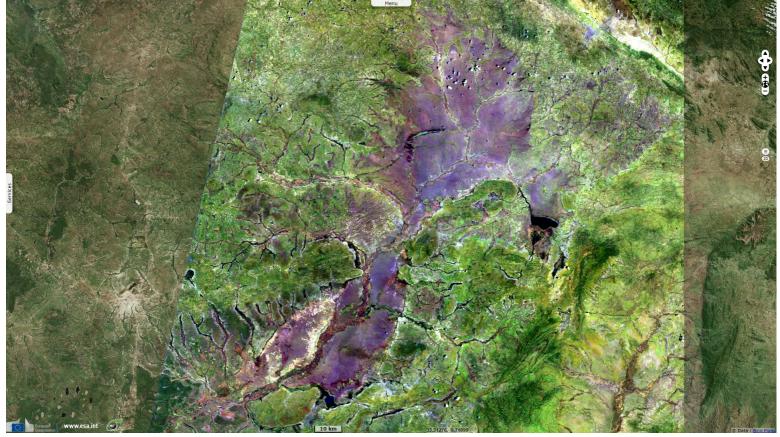
Fig. 5 - S2 (08.11.2019) - 4,3,2 natural colour - The red soil of the plateau shows as the grassland vegetation has shrunk.

2D animation 2D view

2D view



Fig. 6 - 08.11.2019 - 12,11,2 colour composite - The floodplain extent shows in purple, vastly beyond the river banks at its narrowest.



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