

Children in cobalt mines, DRC

Sentinel-1 CSAR IW acquired on 16, 23 and 28 September 2019
Sentinel-1 CSAR IW acquired on 05, 10, 17, 22 and 29 October 2019
Sentinel-1 CSAR IW acquired on 10, 15, 22 and 27 November 2019
Sentinel-2 MSI acquired on 28 September 2019 at 08:17:21 UTC
Sentinel-2 MSI acquired on 05 October 2019 at 08:08:01 UTC

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Keyword(s): Cobalt, Mine, Children working, DRC

[2D Layerstack](#)

Fig. 1 - Location of the area of interest in the Democratic Republic of Congo.

[2D view](#)

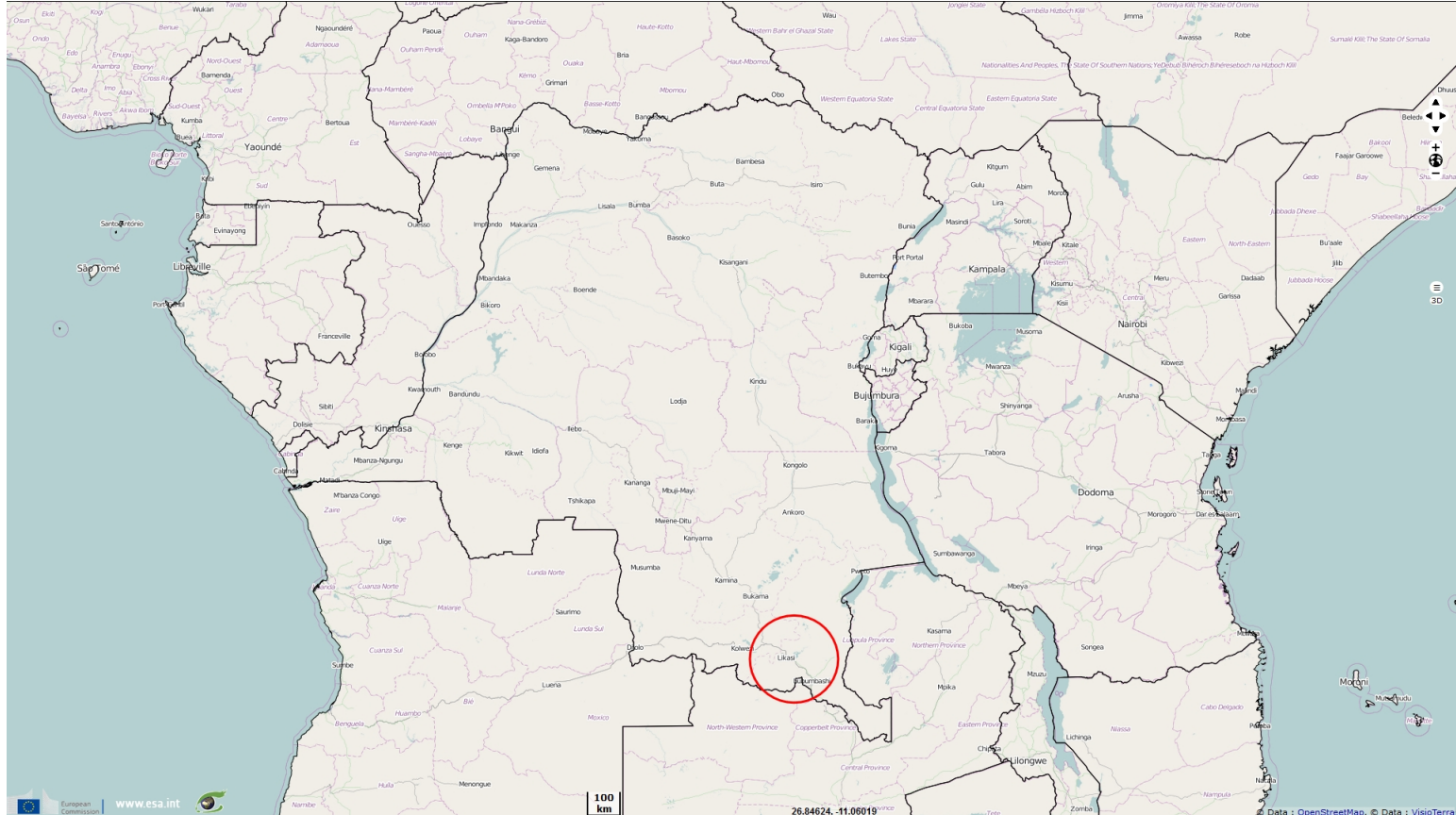


Fig. 2 - Sentinel-1 and Sentinel-2 acquired over Kambove and Lubumbashi towns.

[2D view](#)

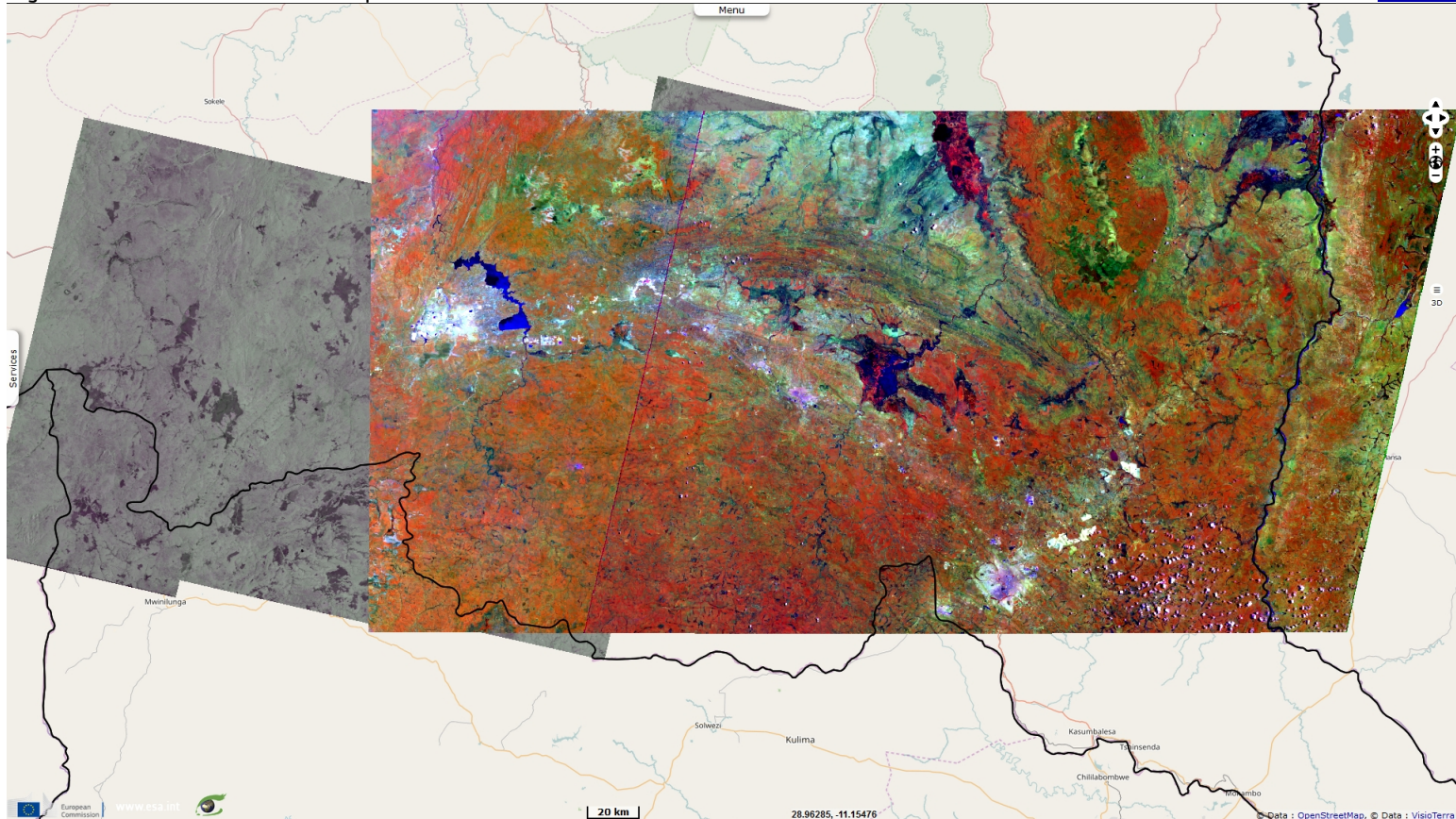


Fig. 3 - S2A- MSI (28.09.2019 and 05.10.2019) - 8,11,2 - Cobalt mines in the study area.

[2D view](#)

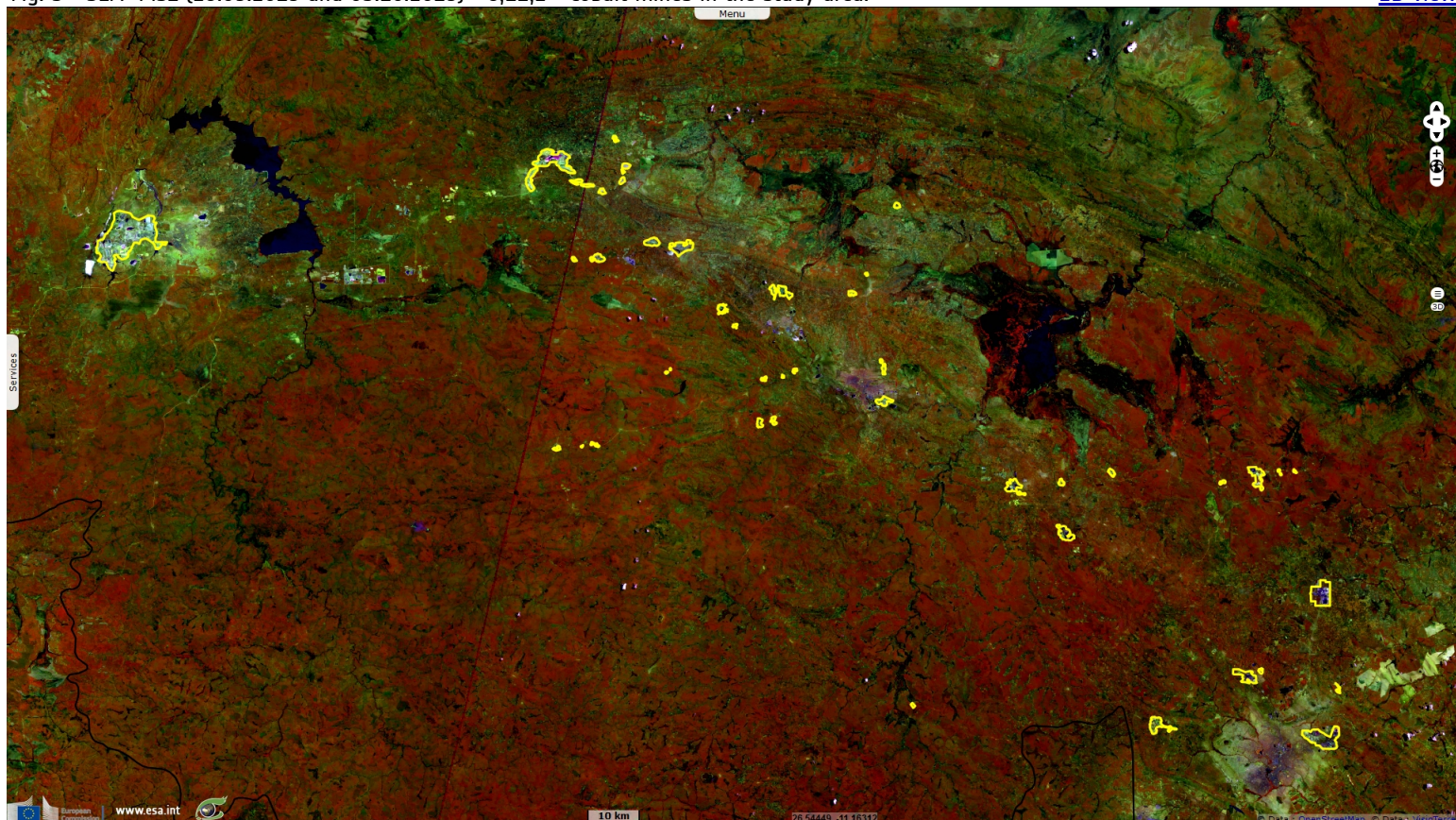
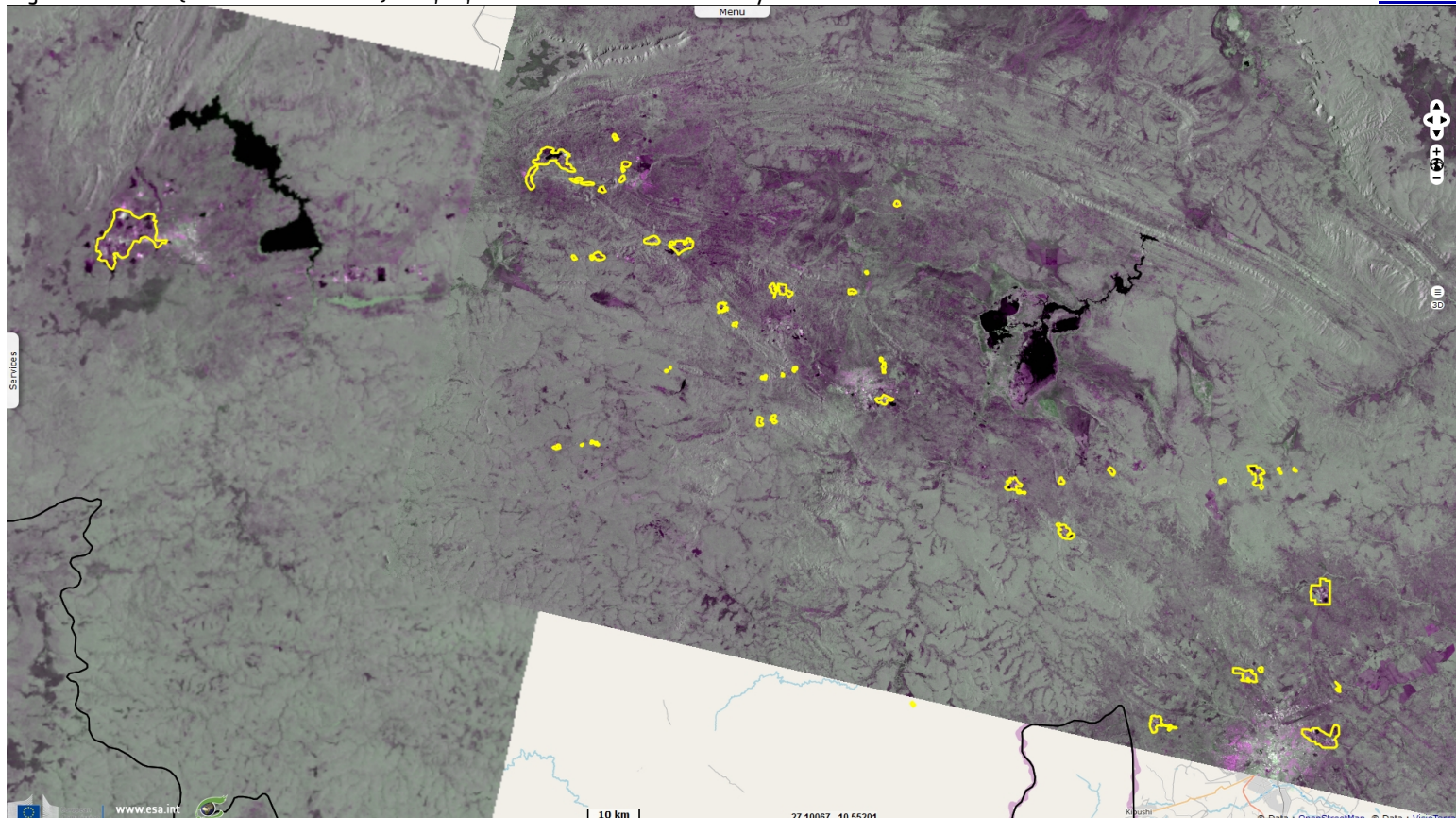


Fig. 4 - S1A- IW (11.09 to 27.11.2019) - VV,VH,VV - Cobalt mines in the study area.

[2D view](#)



"Cobalt: the dark side of a clean future"

"An estimated 35,000 children work in perilous conditions to extract cobalt from the ground in the Democratic Republic of Congo.

Yanick Kalumbu Tshiwengu, a former child miner from the Democratic Republic of Congo (DRC), is lucky to be alive. When he was just 11 years old, Every day he descended several metres underground into makeshift tunnels and perilous shafts dug out by the miners, never knowing if he would see daylight and his family again. With no protective clothing, accidents were common. Several of his friends died underground. Yanick narrowly escaped with his life on two occasions, once when an excavator began closing the entrances to the pit shaft, blocking his escape route, Like many of his friends, he began sniffing glue and gasoline to banish his fears, but this could not block out the painful memories that continue to haunt him."

Yanick [says](#) *"It was a living hell. As children we were exploited and worked in very dangerous situations. We saw things that no child should see. There was a culture of rape and violence. Girls often fell victim to rape, which as children we were powerless to prevent. Sometimes lives were lost for a few francs. No good can ever come from the mines and I'd like to see them all closed so no child has the same experience as me"* (source: [Raconteur](#)).

Fig. 5 - S2A- MSI (28.09.2019 and 05.10.2019) - 8,11,2 - Mashamba West cobalt mine, Kolwezi, DRC.

[2D view](#)

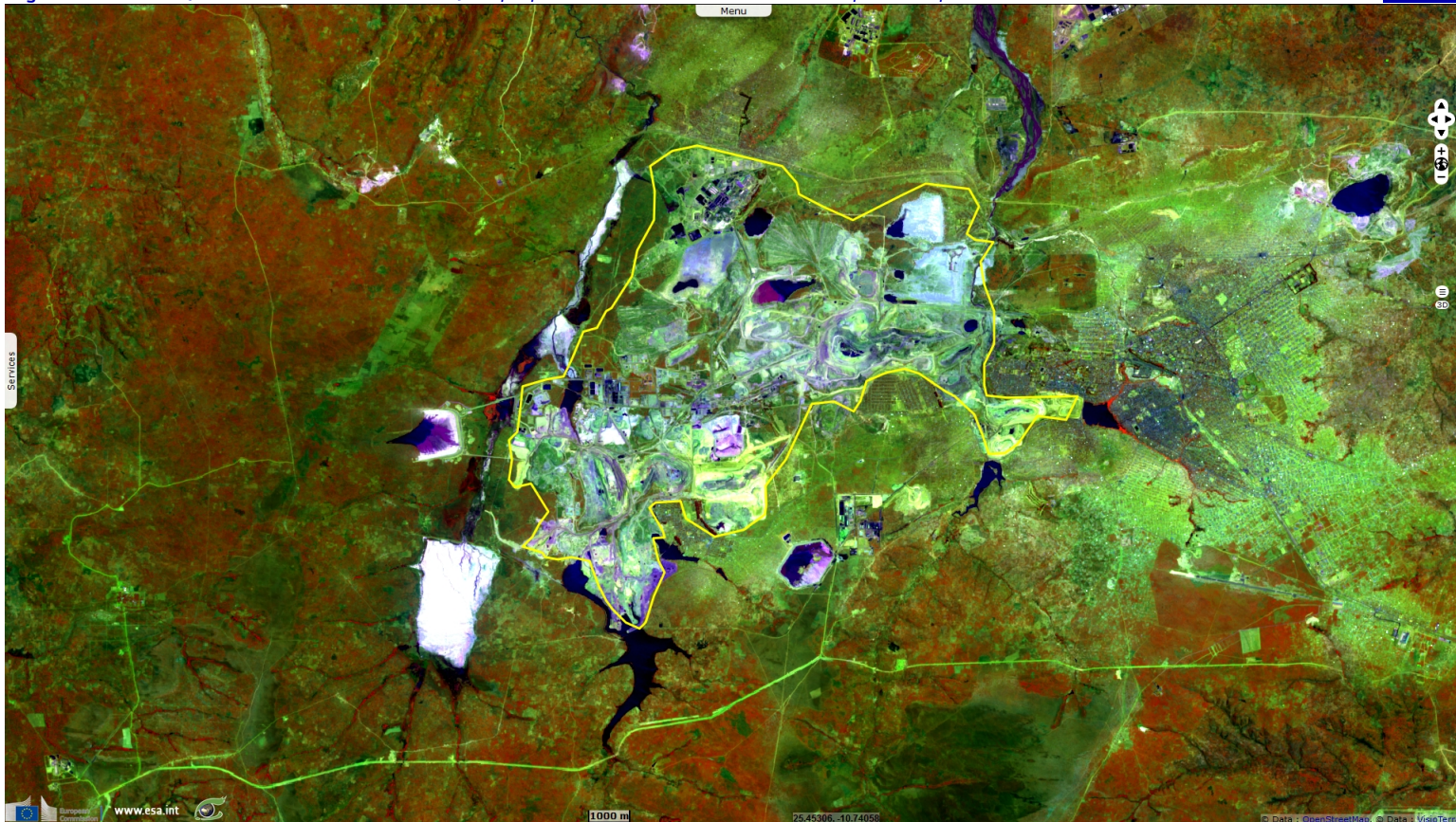
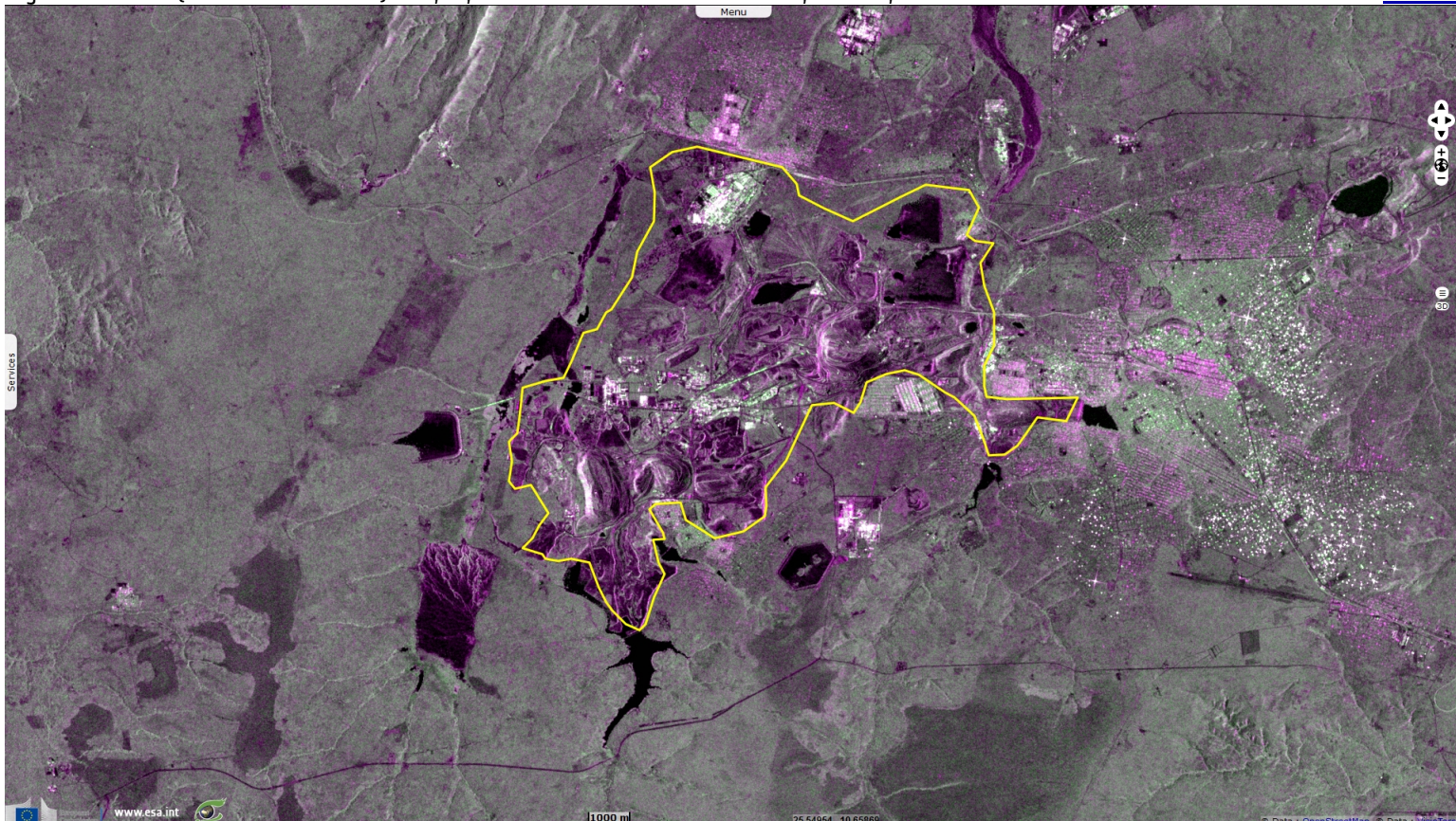


Fig. 6 - S1A- IW (11.09 to 27.11.2019) - VV,VH,VV - Mashamba West cobalt mine, Kolwezi, DRC.

[2D view](#)



US tech giants sued over DRC cobalt mine child labour deaths

[CBS News \(December 17, 2019\)](#) details "Some of the biggest technology firms in the United States have been accused in a lawsuit of complicity in the death and maiming of hundreds, if not thousands of African children who mine cobalt, a mineral vital to the production of the lithium-ion batteries in everything from smartphones to electric cars. The defendants named in the suit are Apple, Google parent company Alphabet, Microsoft, Dell and Tesla.

The lawsuit was filed on December 15, 2019 in the U.S. District Court in Washington D.C. by the non-profit organization [International Rights Advocates](#), on behalf of 13 anonymous plaintiffs from the Democratic Republic of Congo. The complaint accuses the tech giants of knowingly benefiting from and aiding and abetting the cruel and brutal use of young children in Democratic Republic of Congo ('DRC') to mine cobalt" (source: [CBS News](#)).

Images in the court documents, showed children with disfigured or missing limbs. Some of the plaintiffs children were killed in tunnel collapses, and the others suffered severe injuries. One of them ([James Doe 1](#)) was killed while working in Mashamba East mine on April 16, 2018 at the age of 17 (source : [International Rights Advocates](#)).

Fig. 7 - Very High Resolution image of Mashamba West cobalt mine, Kolwezi, DRC.

[2D view](#)



Fig. 8 - A child breaks rocks at a cobalt pit in the DRC. Photograph: Junior Kannah/Getty - Source: [The Guardian](#).



*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.*

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