



[2D Layerstack](#)

The level rise of Lake Rose (Retba) endangers local economy, Senegal

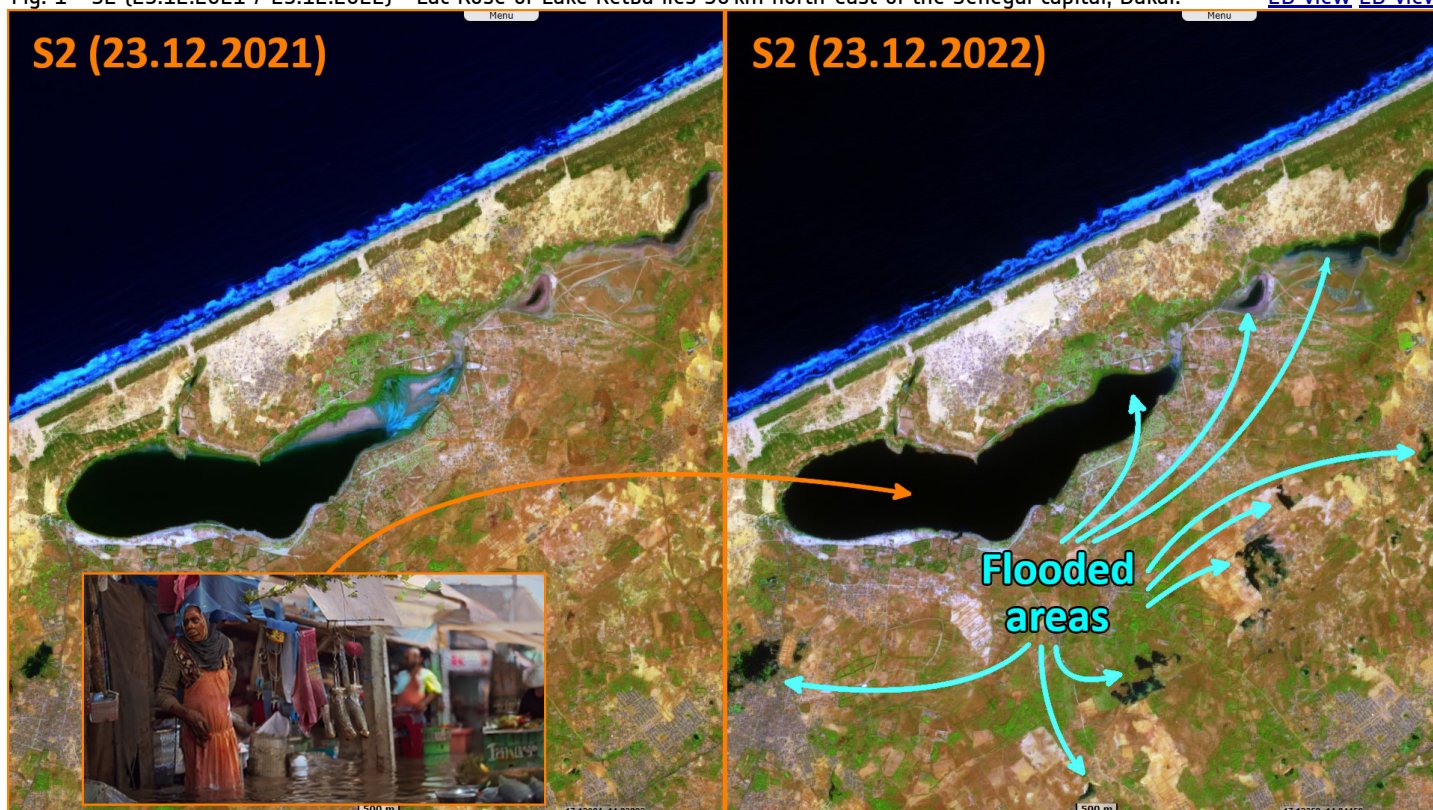
Sentinel-2 MSI acquired on 18 January 2018 at 11:34:09 UTC
Sentinel-2 MSI acquired on 23 December 2021 at 11:35:11 UTC
Sentinel-2 MSI acquired on 23 December 2022 at 11:34:09 UTC

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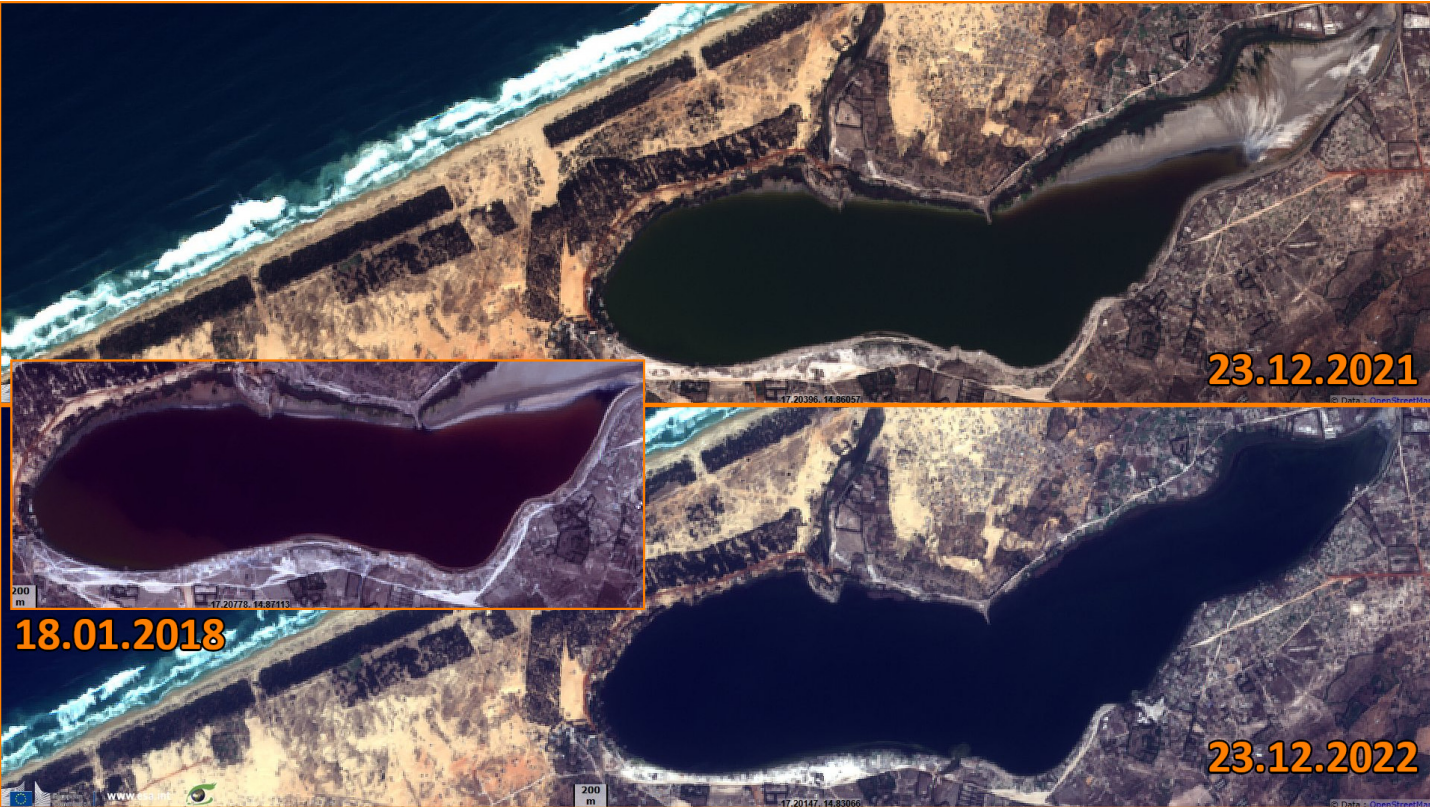
Fig. 1 - S2 (23.12.2021 / 23.12.2022) - Lac Rose or Lake Retba lies 30 km north-east of the Senegal capital, Dakar.

[2D view](#) [2D view](#)



This saline lake is known for its pink colour on clear windy days, caused by *Dunaliella salina* algae, and its high salt content, up to 40% in some areas.

Fig. 2 - S2 (23.12.2021 / 18.01.2018 / 23.12.2022) - Usual greenish colour / occasional reddish colour / new blueish colour of Lake Rose. [2D view](#) [2D view](#) [2D view](#)



Due to high precipitations in 2022 and increasing urbanisation, the lake and multiple areas around it have been flooded for months, endangering local economy.

- Its depth rose from 2-3 m to 6 m, decreasing its salt content. It caused a colour change troublesome for the touristic industry. Furthermore, most coastal infrastructures that have been affected were dedicated to tourism.
- 7000 T of already mined salt worth \$235 000 has been lost. 3000 workers will lose their job if the salt remains inaccessible with the traditional technique.

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