Sentinel Vision SED-1029 21 February 2022

2D Layerstack

Torrential rainfall cause deadly landslides near Rio, Brazil



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

Keyword(s): Geohazard, natural disaster, landslide, urban planning, precipitation, climate change, Brazil

Fig. 1 - COP-DEM - Lying 68 km north of Rio de Janeiro, Petropolis is a city with over 1500m height difference from top to bottom.



Fig. 2 - S1 (26.11.2021-20.12.2021) - It is a inhabited by 300 000 people, many live on very strong slopes, up to 55°.

<u>3D view</u>

2D view



Large swathes of the city are classified as high risk areas. Yet, less than half of the subsidies dedicated to adaptation to climate change have been used.

Fig. 3 - S2 (18.01.2022) - In 1988, 134 people died of landslides. 72 more died in 2011 for the same reason.



2D view

Fig. 4 - S2 (17.02.2022) - On 15.02.2022, 260mm rain fell within 3 hours. The 26 resulting landslides killed at least 165 people.



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 2022, processed by VisioTerra.

More on European Commission space:		y	You Tube				
More on ESA:	€	y	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:	€€	Y	You Tube	Sentinel Vision Portal	Envisat+ERS portal	<u>Swarm+GOCE portal</u>	<u>CryoSat portal</u>



SED-1029-SentinelVision

