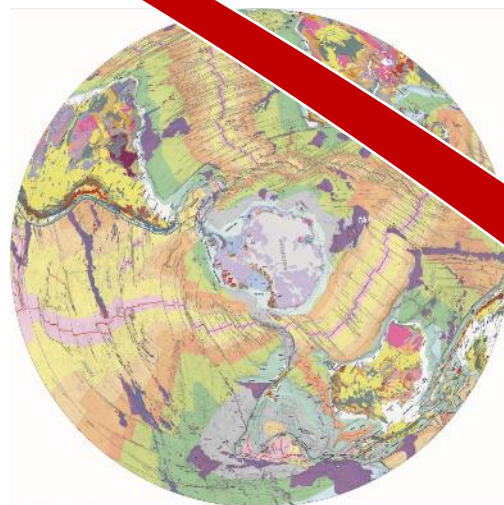
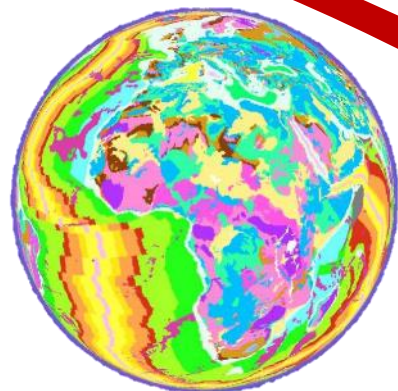
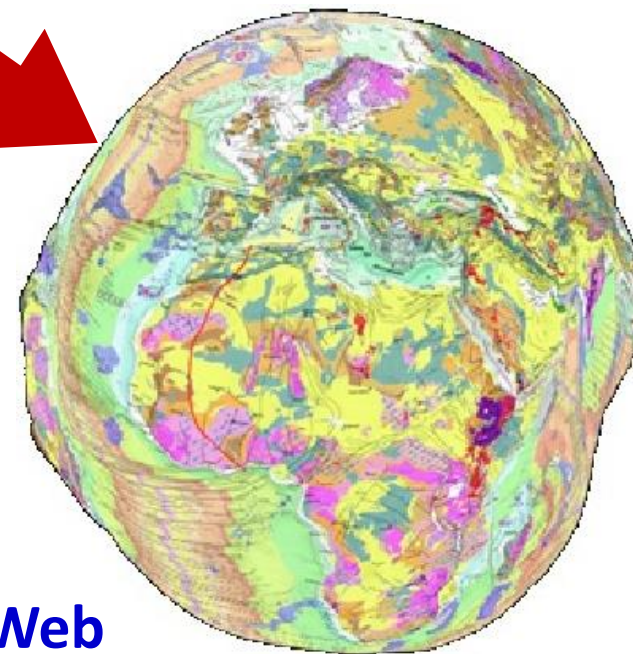


VtWeb from VisioTerra for CGMW



*At booth 29
Exhibition Hall*



United Nations
Educational, Scientific and
Cultural Organization



**THE COMMISSION FOR THE
GEOLOGICAL MAP OF THE
WORLD**

<http://visioterra.net/VtWeb>



The Commission for the Geological Map of the World (CGMW) is responsible for coordinating, designing and publishing solid Earth Sciences maps of continents, oceans, major regions of the Earth and for developing cartography in the solid Earth Sciences. Its aim is to facilitate the circulation of the scientific information in order to ensure the best quality information provided in the syntheses.

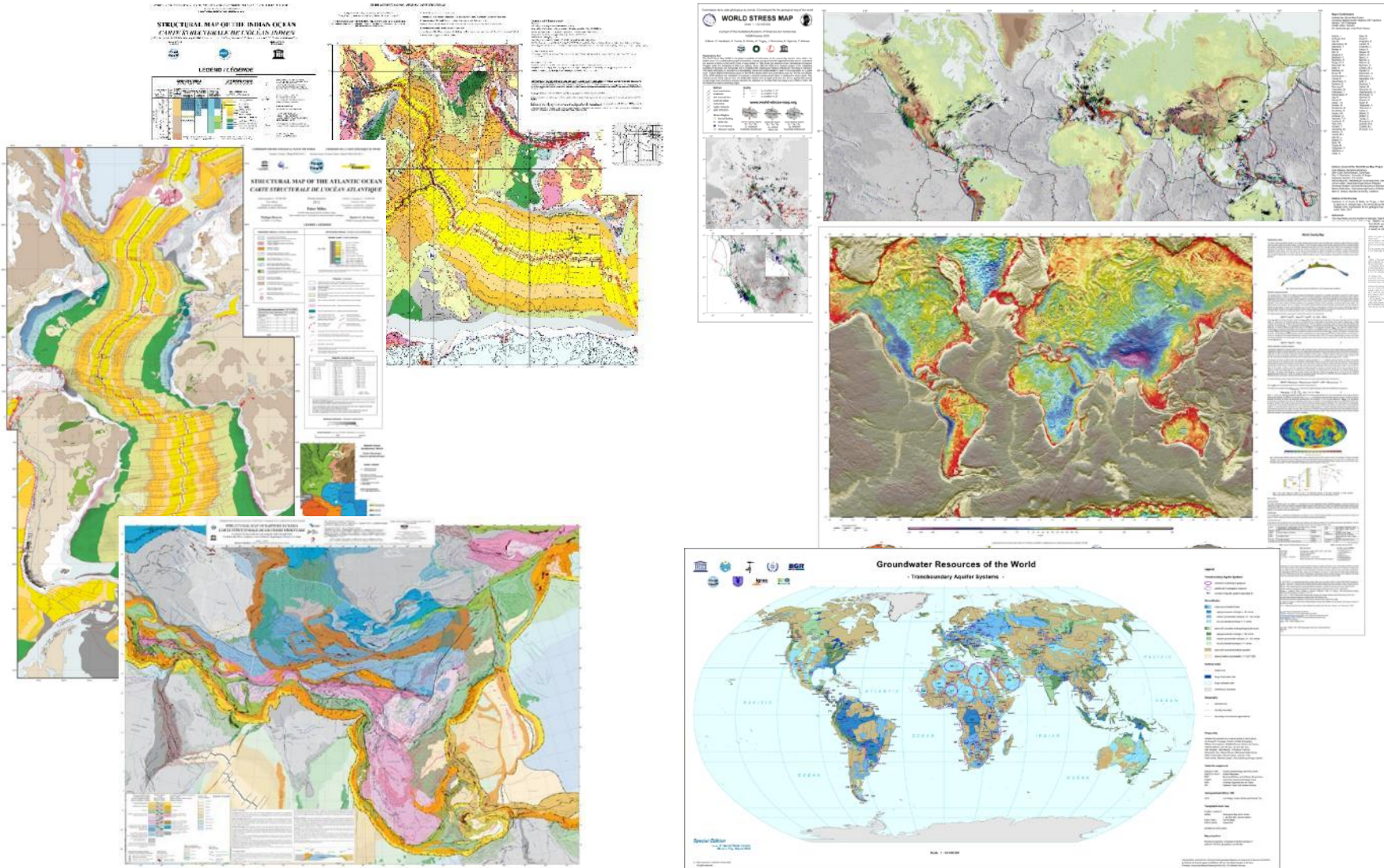
The primary data and workforce for CGMW mapping programs is provided by Geological Surveys and the Academia.

CGMW maps are carried out in partnership with:

- **CGMW Statutory members** that are national organizations responsible for solid earth and ocean science mapping of all the countries or territories (i.e. Geol. Surveys) of the World;
- **Associate members**, public or private organizations, interested in and supportive of the CGMW's work;
- in close coordination and with the **support** of **UNESCO, IUGS and sponsors**.

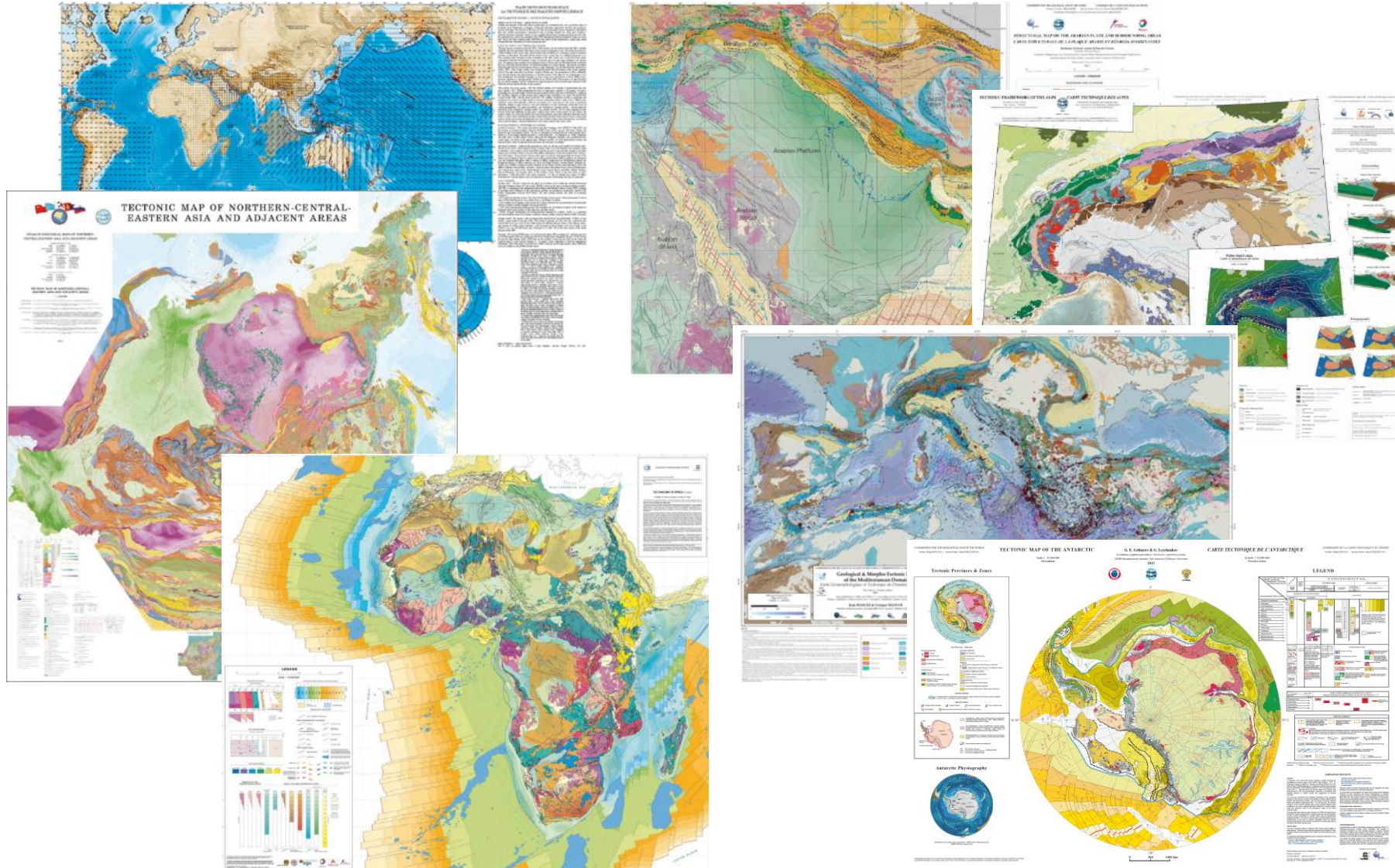


Global and regional mapping samples





Zooming in and out on structural and tectonic mapping





THE GONDWANA MAP PROJECT

IGCP 628. Prof. Renata Schmitt, Coordinator



Cape Town, South Africa.



GONDWANA GEOLOGICAL MAP - DRAFT - Version 2.0 - August, 2016.
(without northern terranes)

Reconstructed to 183 Ma

SCALE 1:5.000.000

Geographic Coordinate System - Datum: WGS 84



W. Schmitt et al. (2016) Gondwana Geological Map - Draft - Version 2.0 - August, 2016. (without northern terranes). Scale 1:5.000.000. Geographic Coordinate System - Datum: WGS 84. Reconstructed to 183 Ma. The map shows the geological reconstruction of the supercontinent Gondwana at approximately 183 million years ago. It includes a detailed legend, a list of main collaborators and reviewers, and a section on the reconstruction methodology. The map is color-coded to represent different geological units and tectonic features. A small inset map shows the location of the project area within the context of the world's continents.

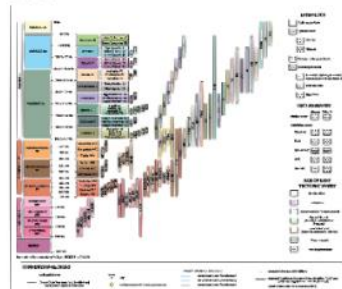
Main collaborators - Reviewers

Name	Institution
Renata Schmitt	UFRJ
...	...

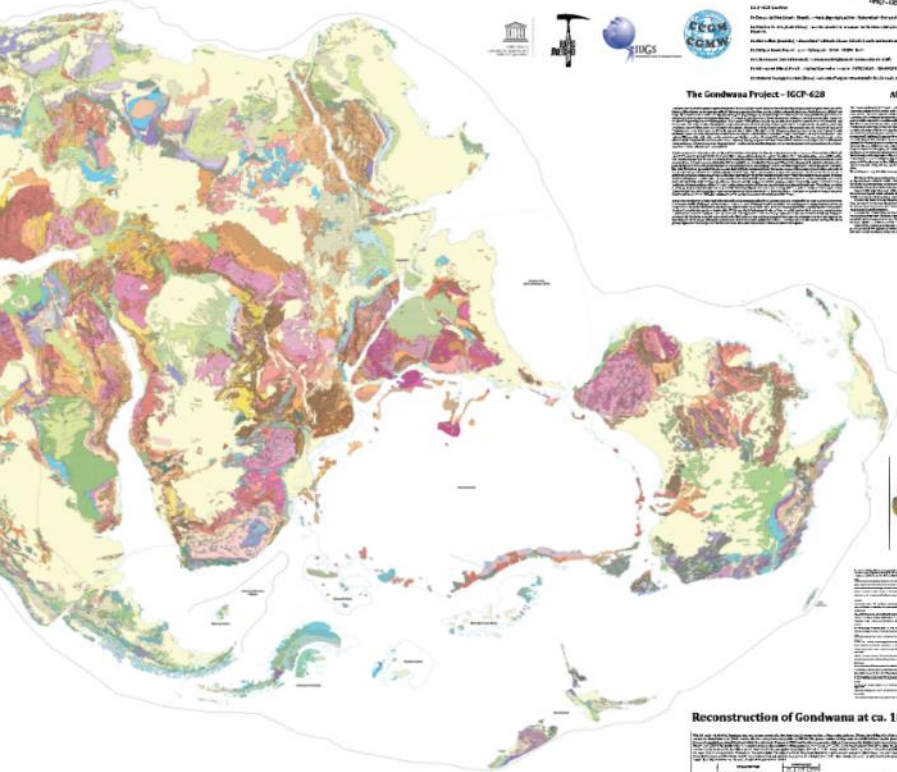
The Gondwana Digital Center of Geoprocessing (GDCC)

The Gondwana Digital Center of Geoprocessing (GDCC) is a multidisciplinary center dedicated to the development and application of geospatial technologies in the study of Gondwana. It provides a platform for data integration, analysis, and visualization, supporting the goals of the Gondwana Map Project. The center is led by Prof. Renata Schmitt and includes researchers from various institutions.

LEGEND



Project website: www.gondwana.geologia.ufrj.br



The Gondwana Project - IGCP 628

The Gondwana Project (IGCP 628) is a major international effort to create a comprehensive geological map of the supercontinent Gondwana. The project is coordinated by Prof. Renata Schmitt at UFRJ. It involves geologists from numerous countries and institutions, working together to integrate and synthesize geological data from across the continent. The project's goal is to provide a detailed geological framework for the study of Gondwana's evolution and the development of natural resources.

Aims and background

The primary aim of the Gondwana Project is to produce a geological map of the supercontinent Gondwana at approximately 183 million years ago. This map will serve as a fundamental tool for understanding the geological evolution of the continent and the processes that shaped it. The project also aims to identify and assess natural resources, including minerals, fossil fuels, and water resources, across the continent. The background of the project is rooted in the recognition of Gondwana as a major tectonic province and the need for a comprehensive geological synthesis of this region.

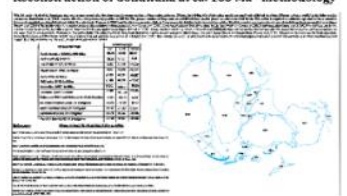
General Methodology

The methodology for the Gondwana Project involves a multi-step process. It begins with the collection and integration of geological data from various sources, including national geological maps, scientific publications, and field observations. This data is then processed and digitized to create a consistent dataset. The next step is the geological interpretation and mapping, where the data is analyzed to identify geological units and their relationships. Finally, the map is produced in a digital format, allowing for easy access and use by researchers and the public.

Sources

The geological data used in the Gondwana Project is derived from a wide range of sources. These include national geological maps, scientific publications, field observations, and data from international geological databases. The project has benefited from the expertise and data of geologists from many countries, particularly in South America, Africa, and Australia.

Reconstruction of Gondwana at ca. 183 Ma - methodology



Gondwana break up and dispersal



<http://www.reves.slgondwana>



INTERNATIONAL CHRONOSTRATIGRAPHIC CHART

www.stratigraphy.org International Commission on Stratigraphy v 2016/04



System	Series / Stage	Age (Ma)	Start (Ma)	End (Ma)	Start (Ma)	End (Ma)	Start (Ma)	End (Ma)	Start (Ma)	End (Ma)	Start (Ma)	End (Ma)	Start (Ma)	End (Ma)	Start (Ma)	End (Ma)	Start (Ma)	End (Ma)
Quaternary	Holocene	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Plataneocene	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Calabrian	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Termination 1	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Termination 2	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Termination 3	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Termination 4	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Termination 5	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Termination 6	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
	Termination 7	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117
Termination 8	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	0	0.0117	

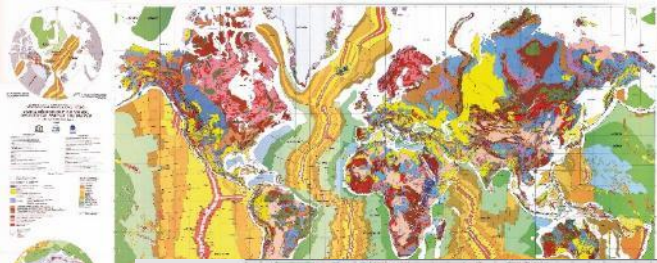
ICS Stratigraphic chart 2016/04




International Commission on Stratigraphy

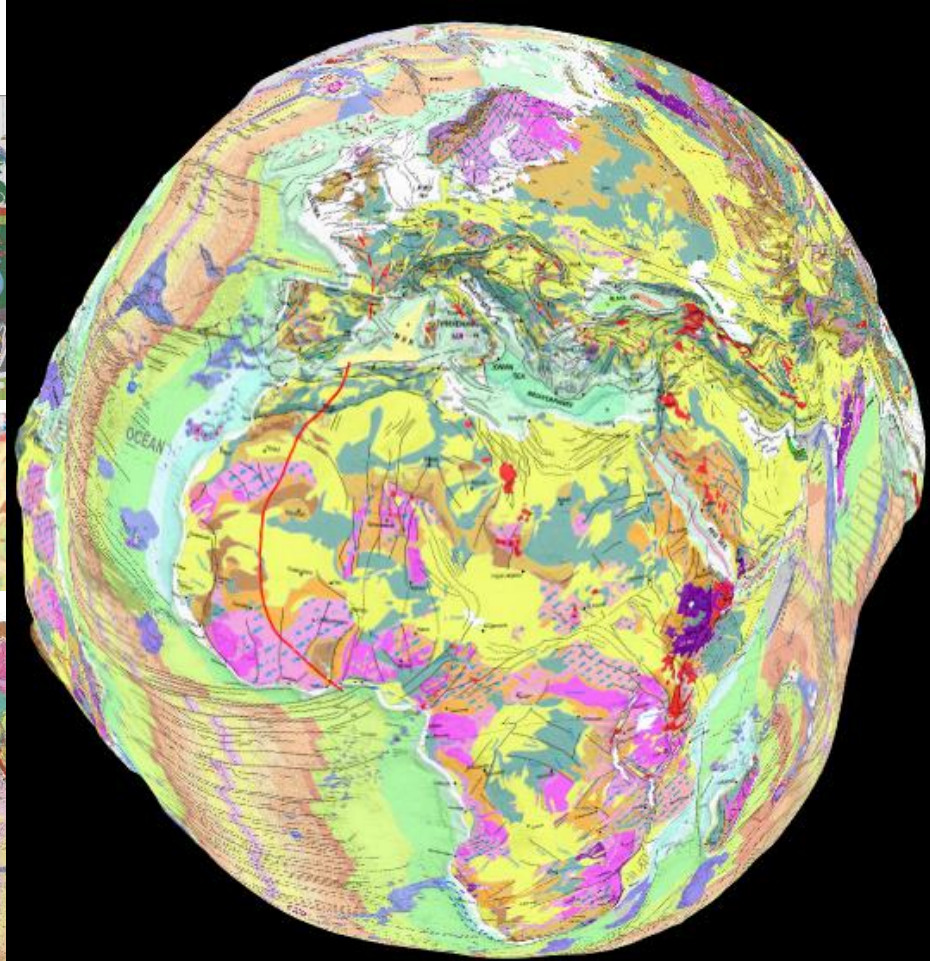
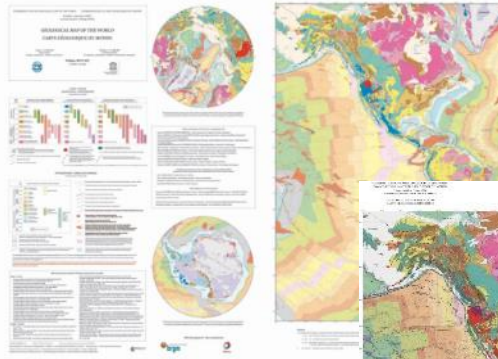
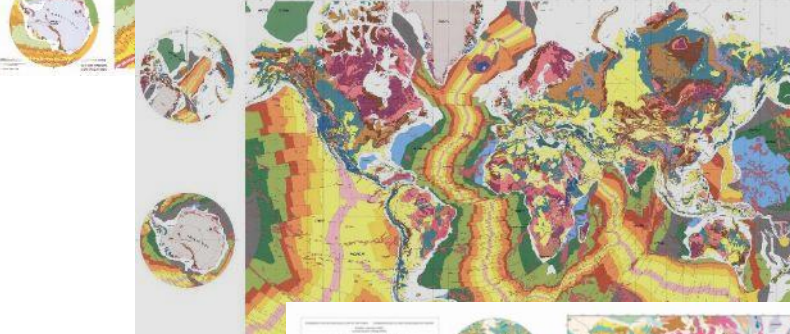
Scale: Colton, K.M., Farcy, B.C., Giblin, P.L., & Fain, L.J. (2016) United Nations. The ICS International Chronostratigraphic Chart, Episodes 38, 188-206. <http://www.stratigraphy.org>

Chart created by K.M. Colton, B. Fain, P.L. Giblin & L.J. Fain. Commission for the Geological Map of the World. Copyright © International Commission on Stratigraphy, April 2016



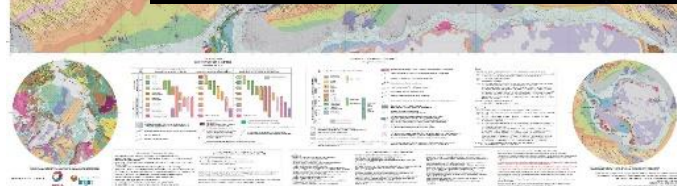
1990

The Geological Map of the World



2016

2016

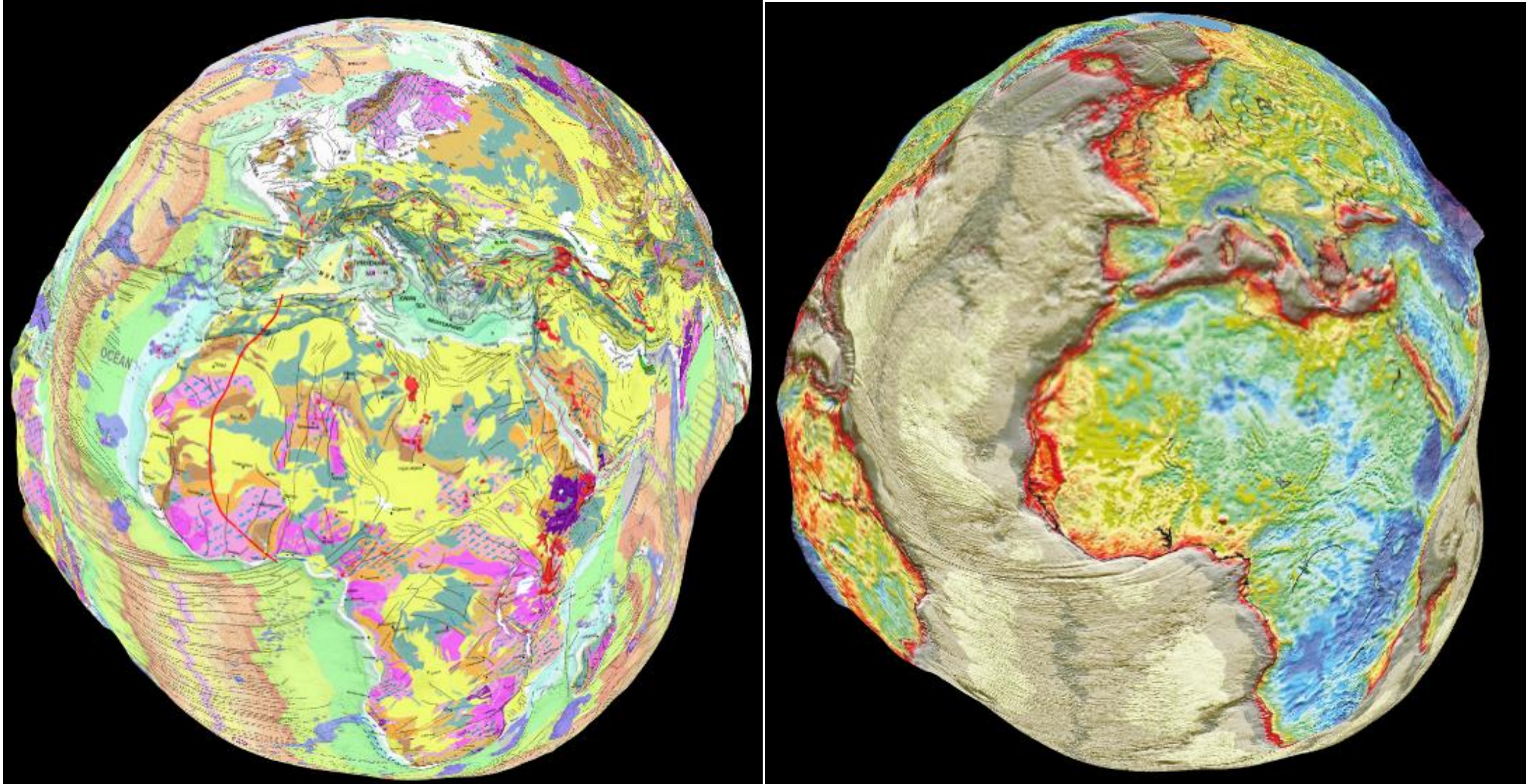


Geological Globe of the World

L: 76.2 cm - M: 45.7 cm - S: 25.4 cm.

A partnership with Real World Globes (USA)

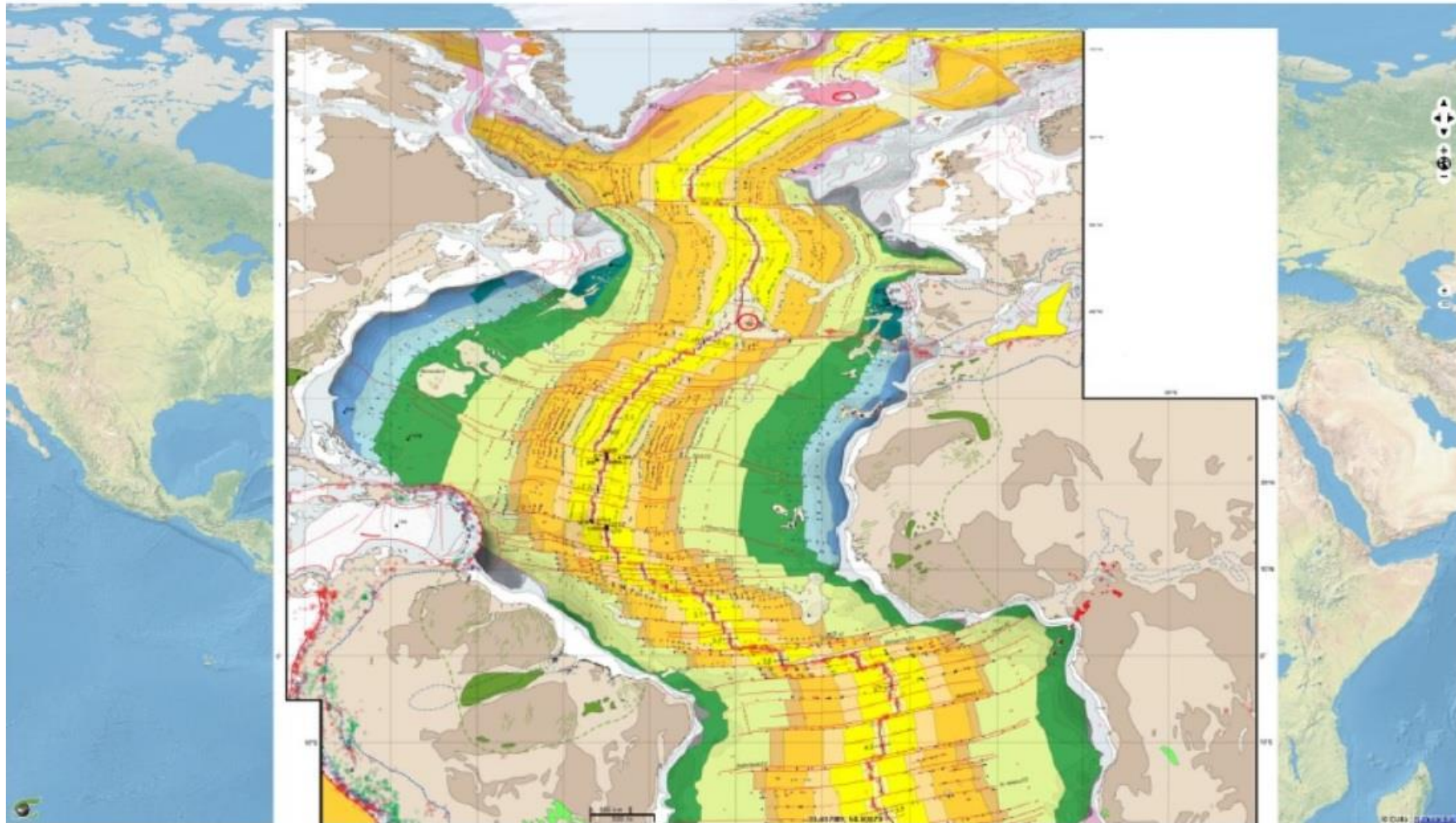
VtWeb from VisioTerra for CGMW



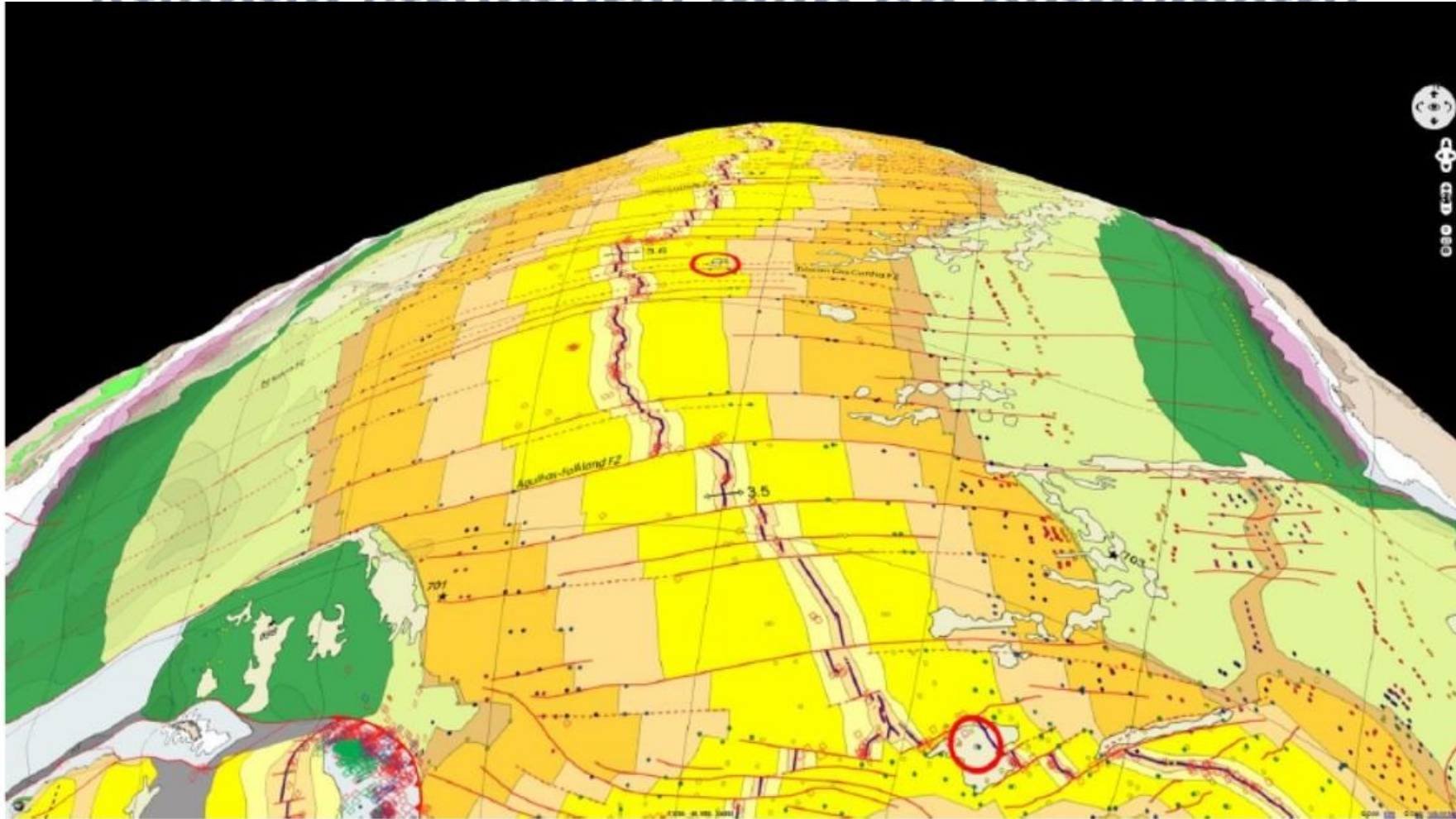
<http://visioterra.net/VtWeb>

Structural map of Atlantic Ocean

1:20 000 000 Atlantic structural map published by [CGMW](#) in 2012 and [GOCE](#) geoid



Atlantic structural map on bathymetry

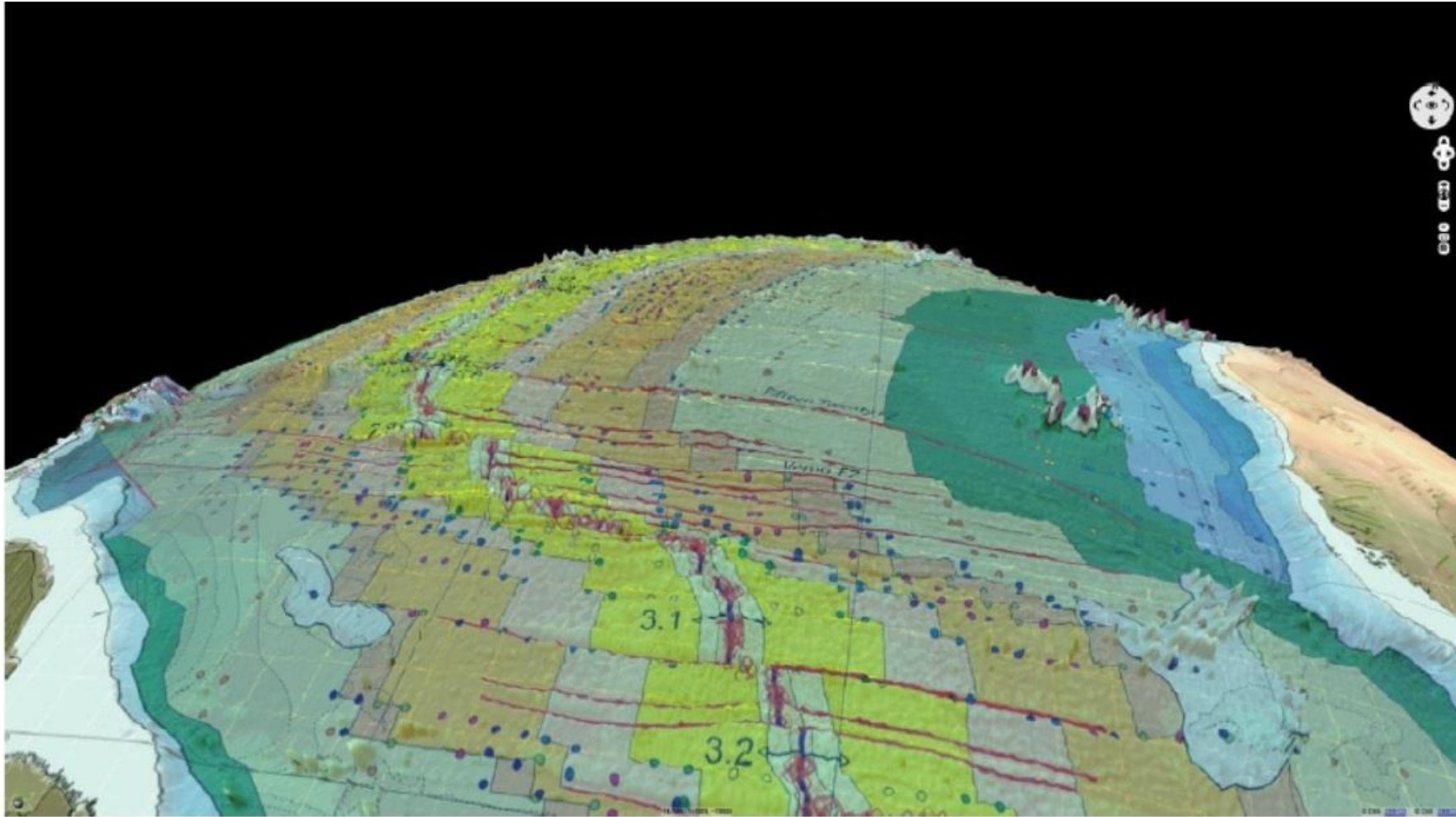


3D view of the south Atlantic ridge displaying seafloor transform faults

[3D view](#)

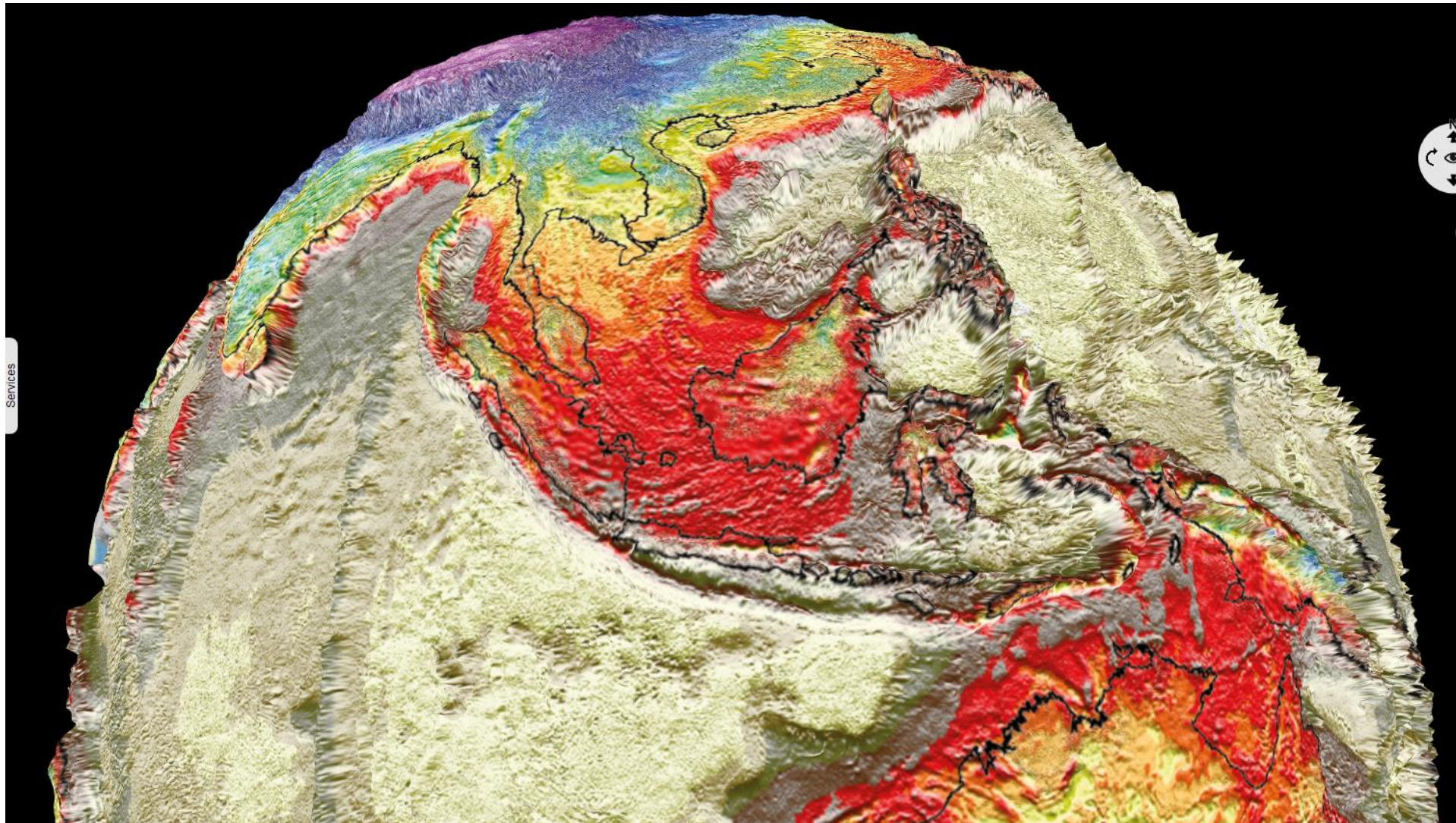


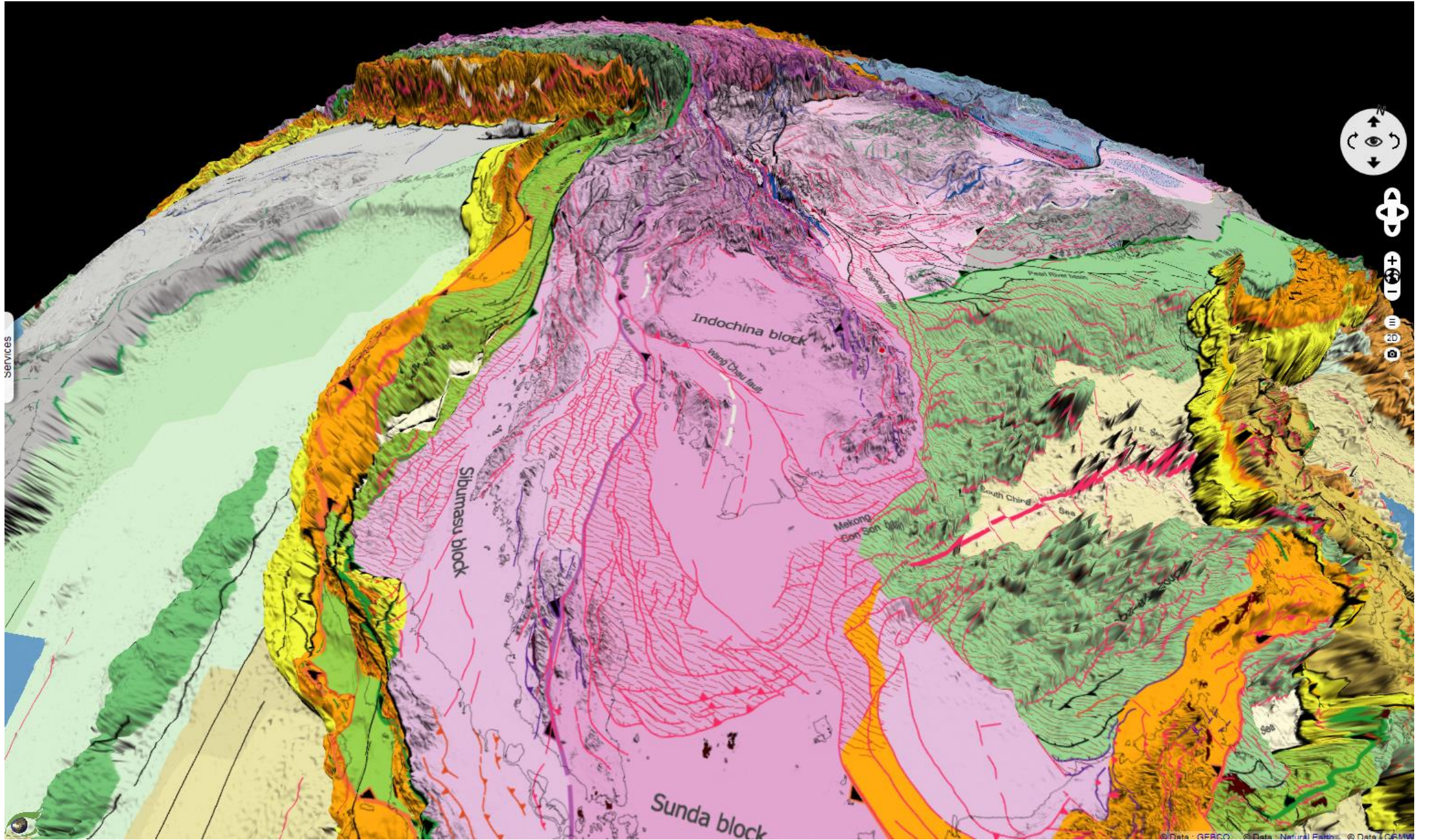
[2D view](#)

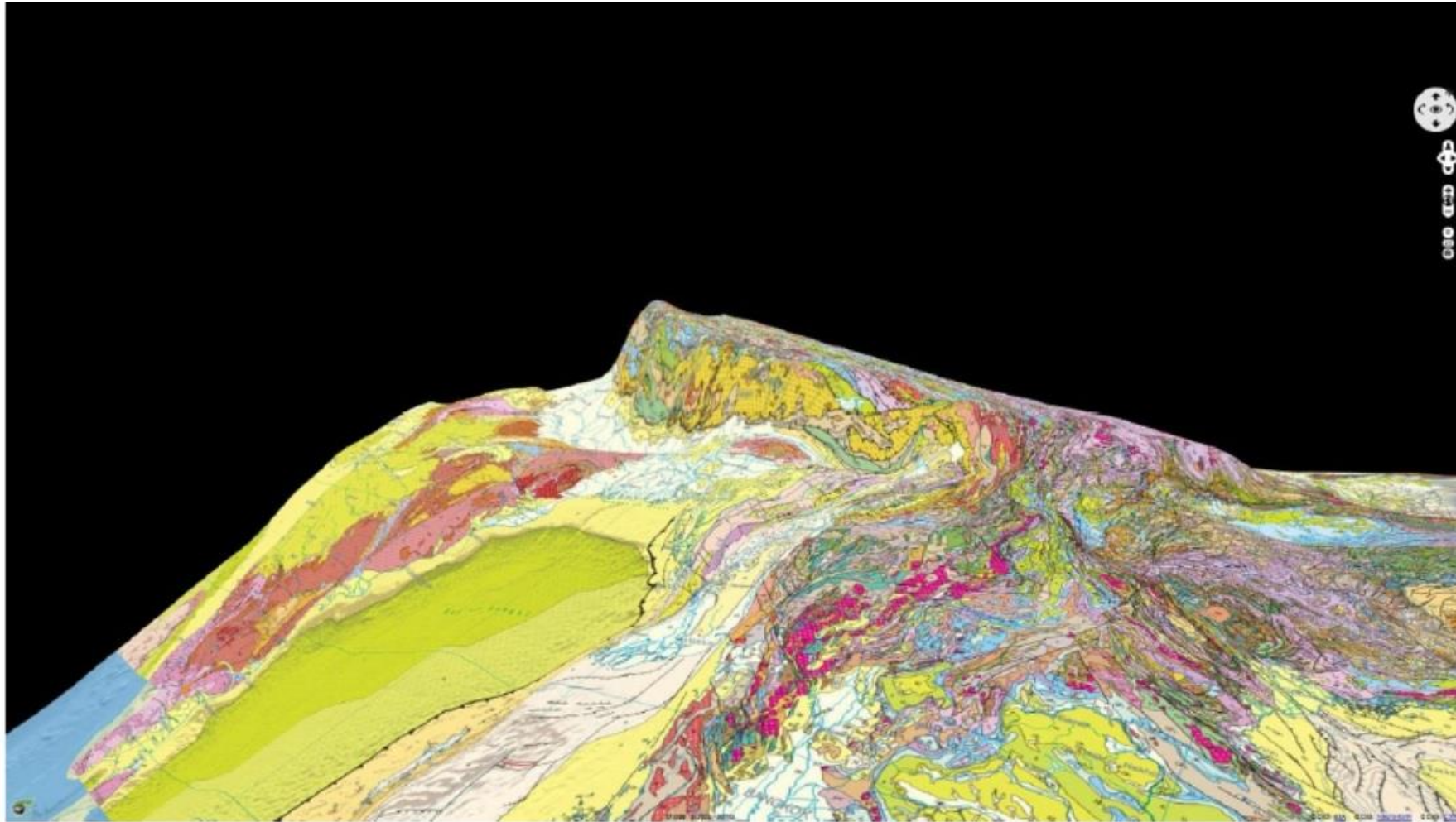


View of the mid Atlantic ridge with 3D seafloor [3D view](#)



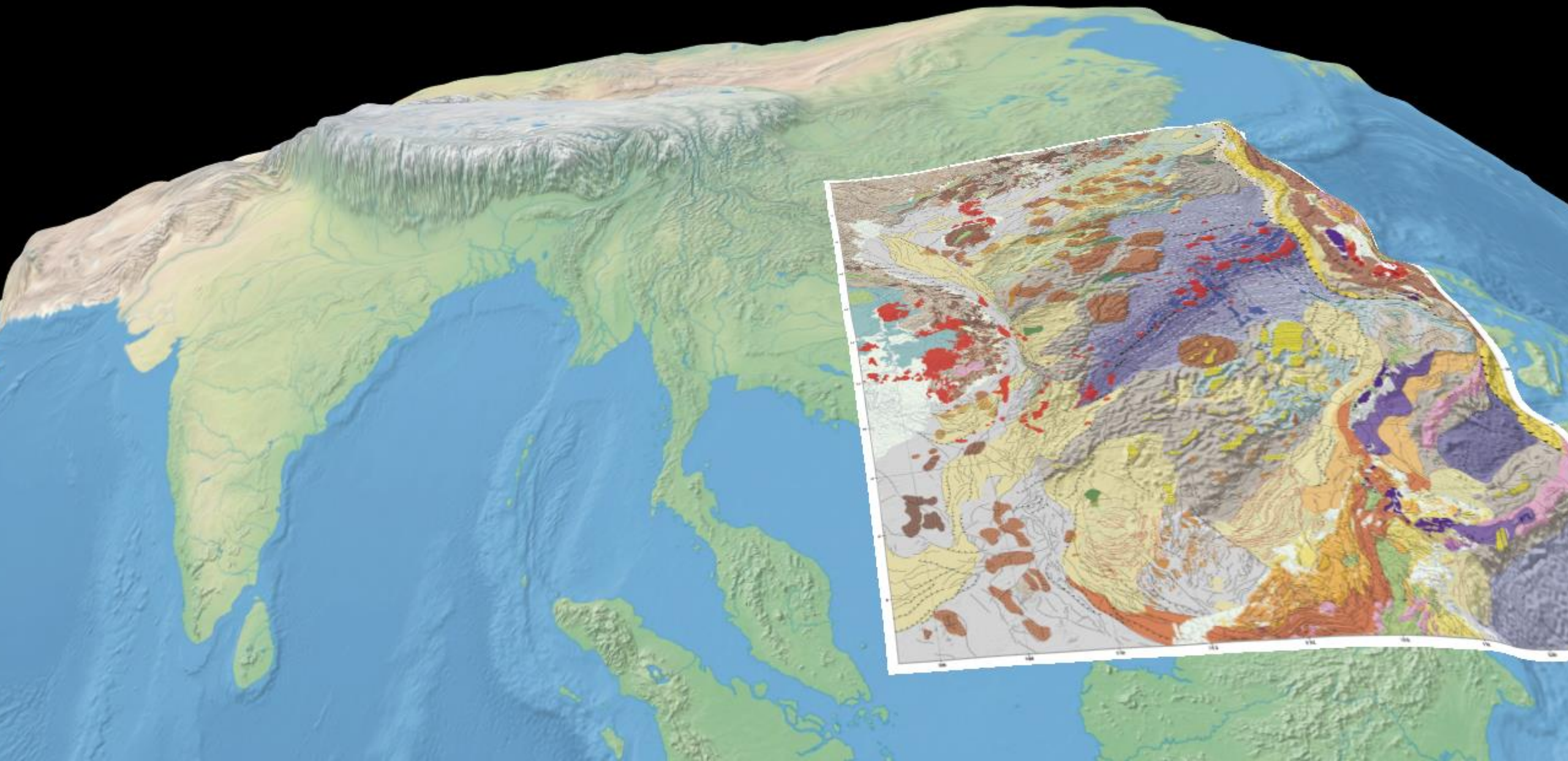


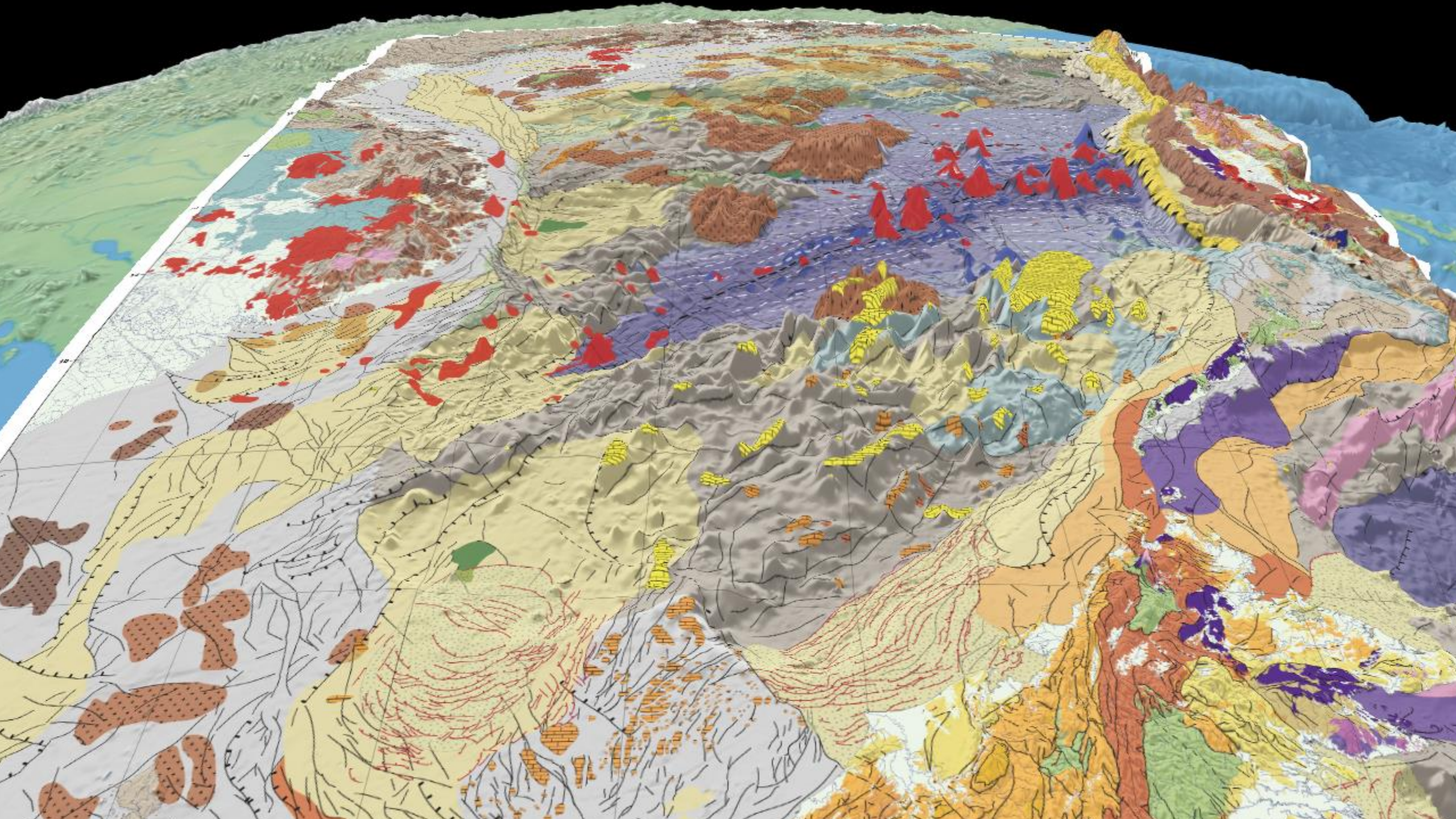




Focus on the Himalayas [3D view](#)



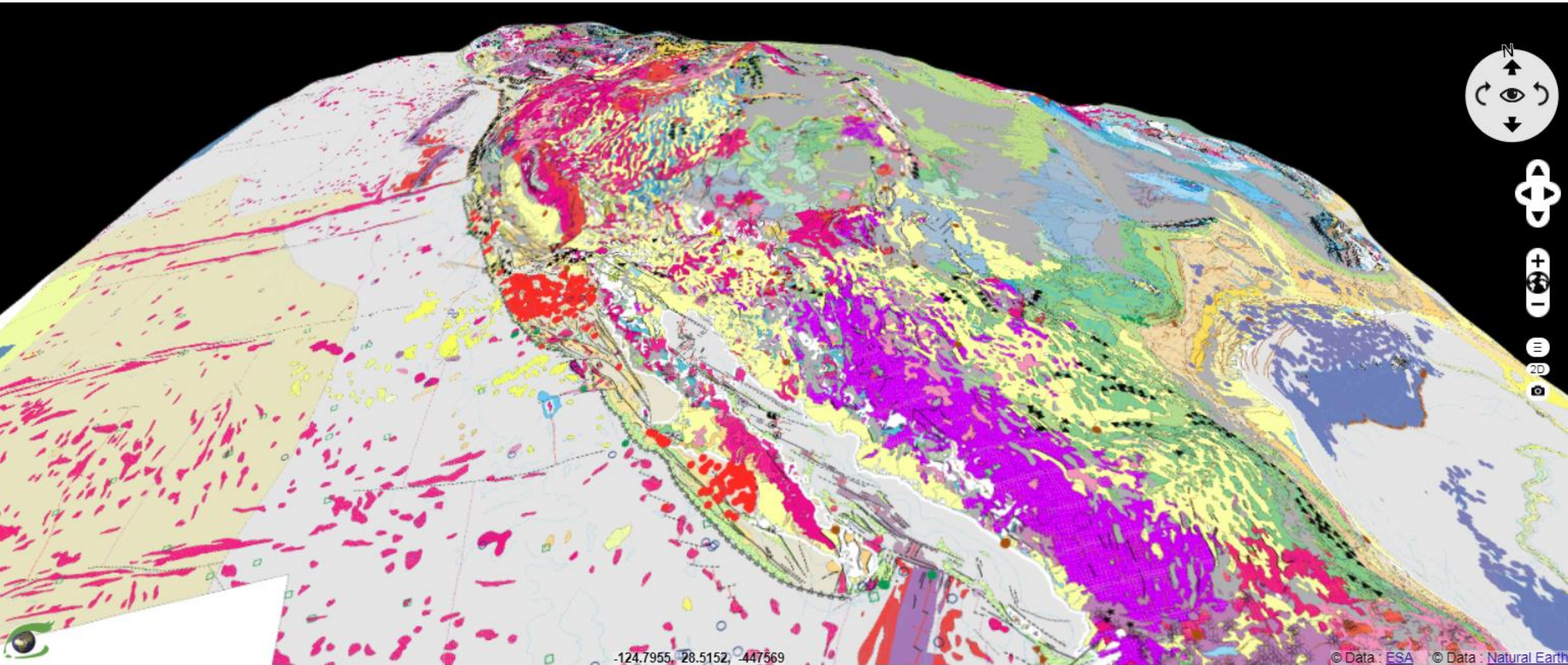




<http://visioterra.net/svp/gallery/thematic>

<http://visioterra.org/VtWeb/hyperlook/ce1e65be2b484c89a75502dfad23ad5e>

http://visioterra.fr/transfert/CLIENT_ESRIN/P268_ESRIN_SENTINEL_VISION/stories/



003

23 March 2017



2D

3D

Geology in Zagros as an open book

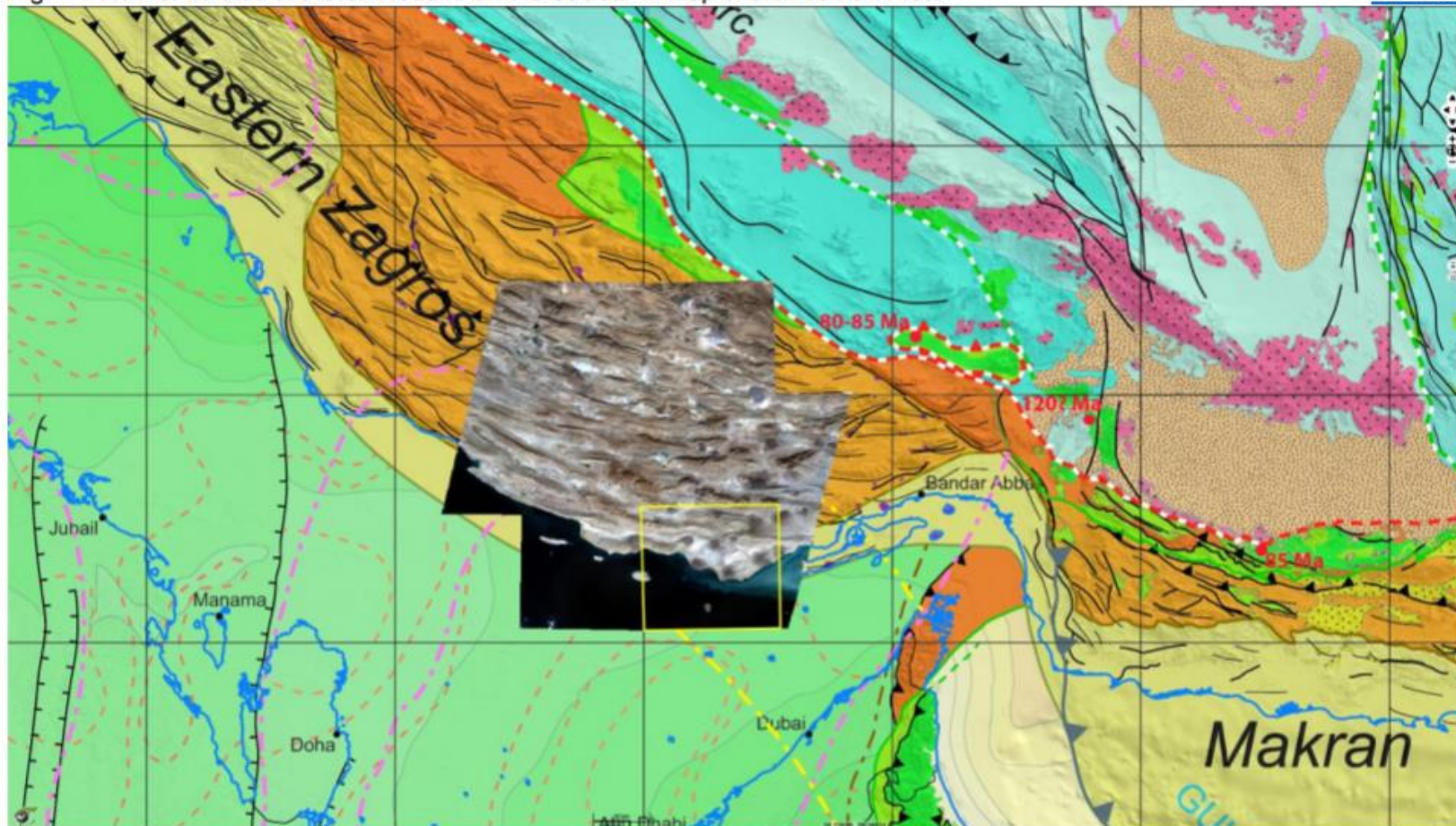
Sentinel-2 MSI acquired on 7 January 2017 at 07:03:01 GMT

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

Keywords: land, geology, structural geology, tectonics, sebkhra, diapir, Iran, Zagros

Fig. 1 - View of 10 tiles of the S2A scene on the Structural Map of the Arabian Plate.

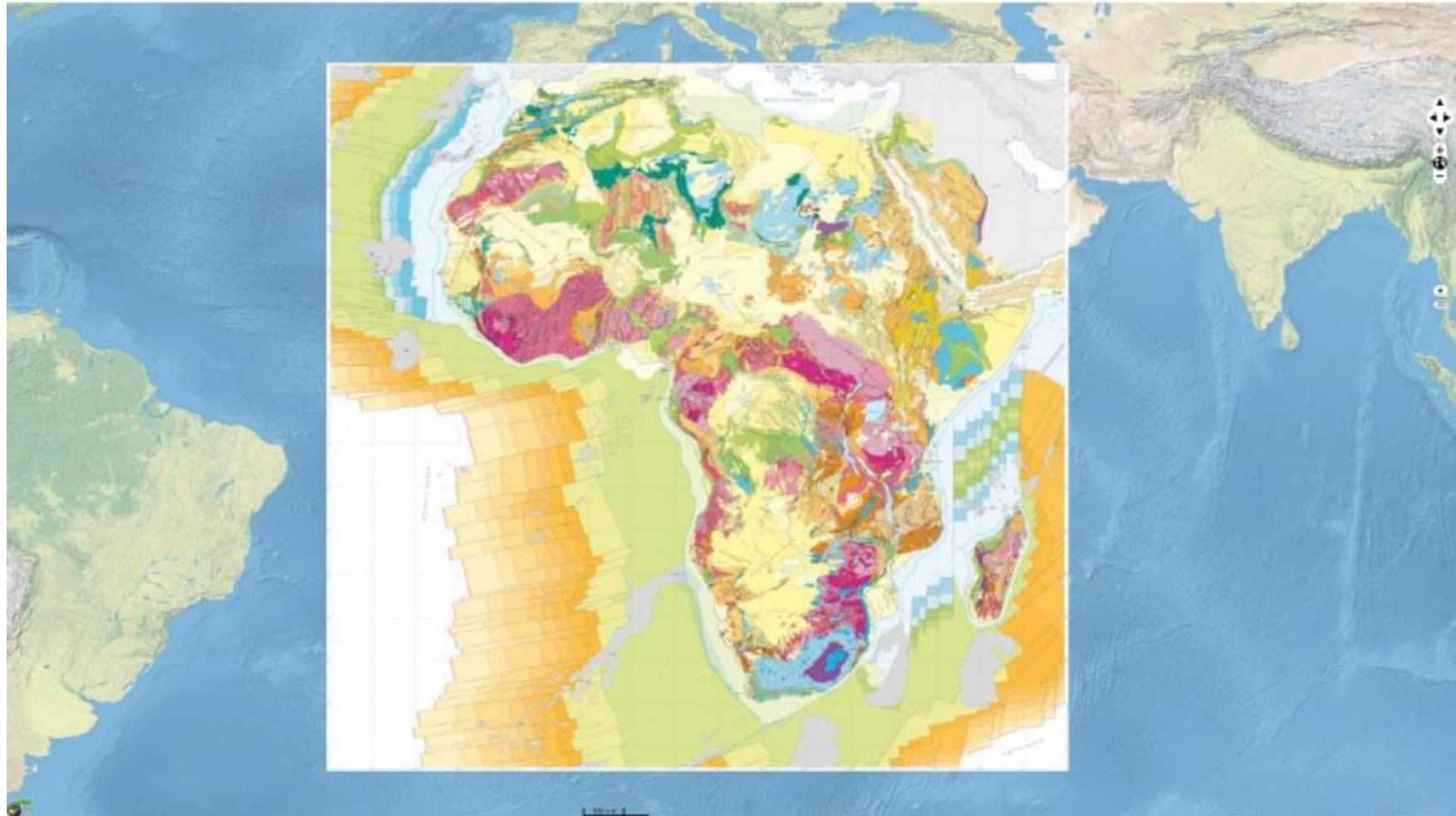
[2D view](#)

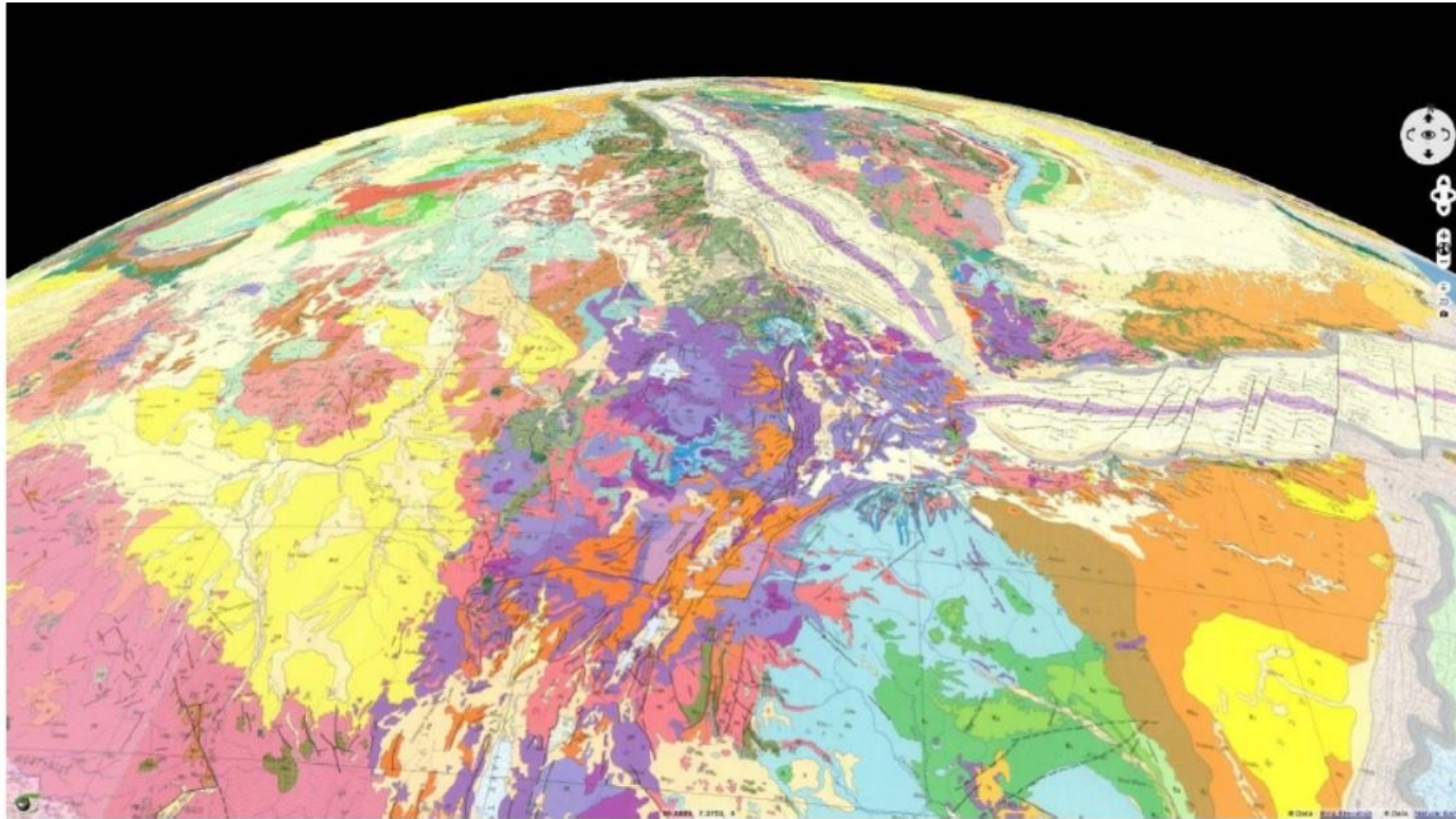


Pr. Jean Chorowicz, emeritus Professor of University Paris 6 said: "The Sentinel-2 scene acquired over Iran on 7 January 2017 is divided into 100x100 km tiles but some are not displayed. The colour composite image in 'true colours' - B4 in red, B3 in green, B2 in blue - shows here in the context of the "Structural Map of the Arabian Plate and Surrounding Areas" (distributed by the [Commission for the Geological Map of the World](#), CGMW, see [legend](#) and covers a part of the Fars area in the Zagros (Iran) along the northern shore of the Persian Gulf, one of the oldest studied and exploited petroleum provinces of the world.

New Geological map of Africa

1:5 000 000 Africa geological map published by [CGMW](#) in 2016



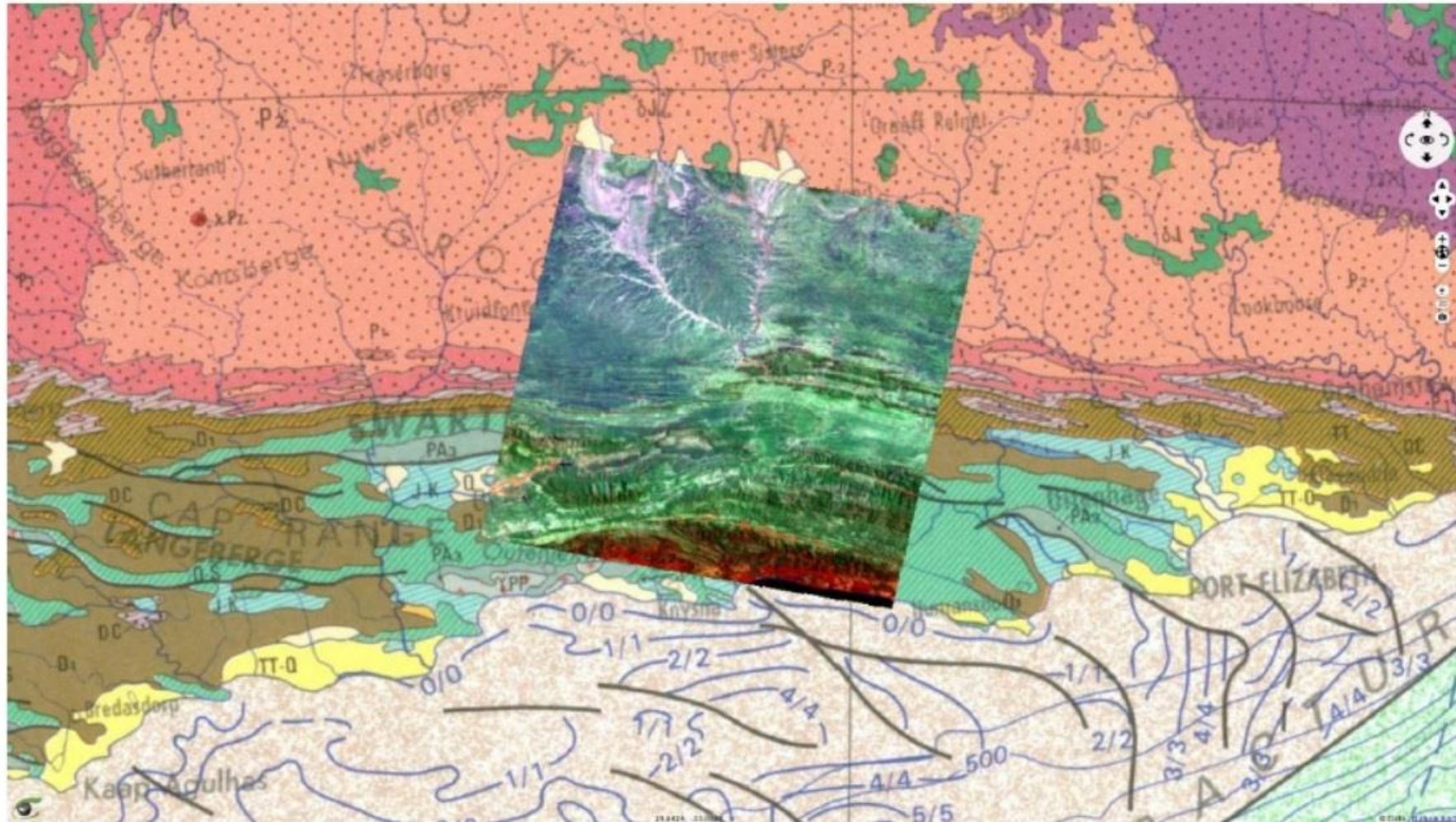


View of the East African rift: [3D view](#)

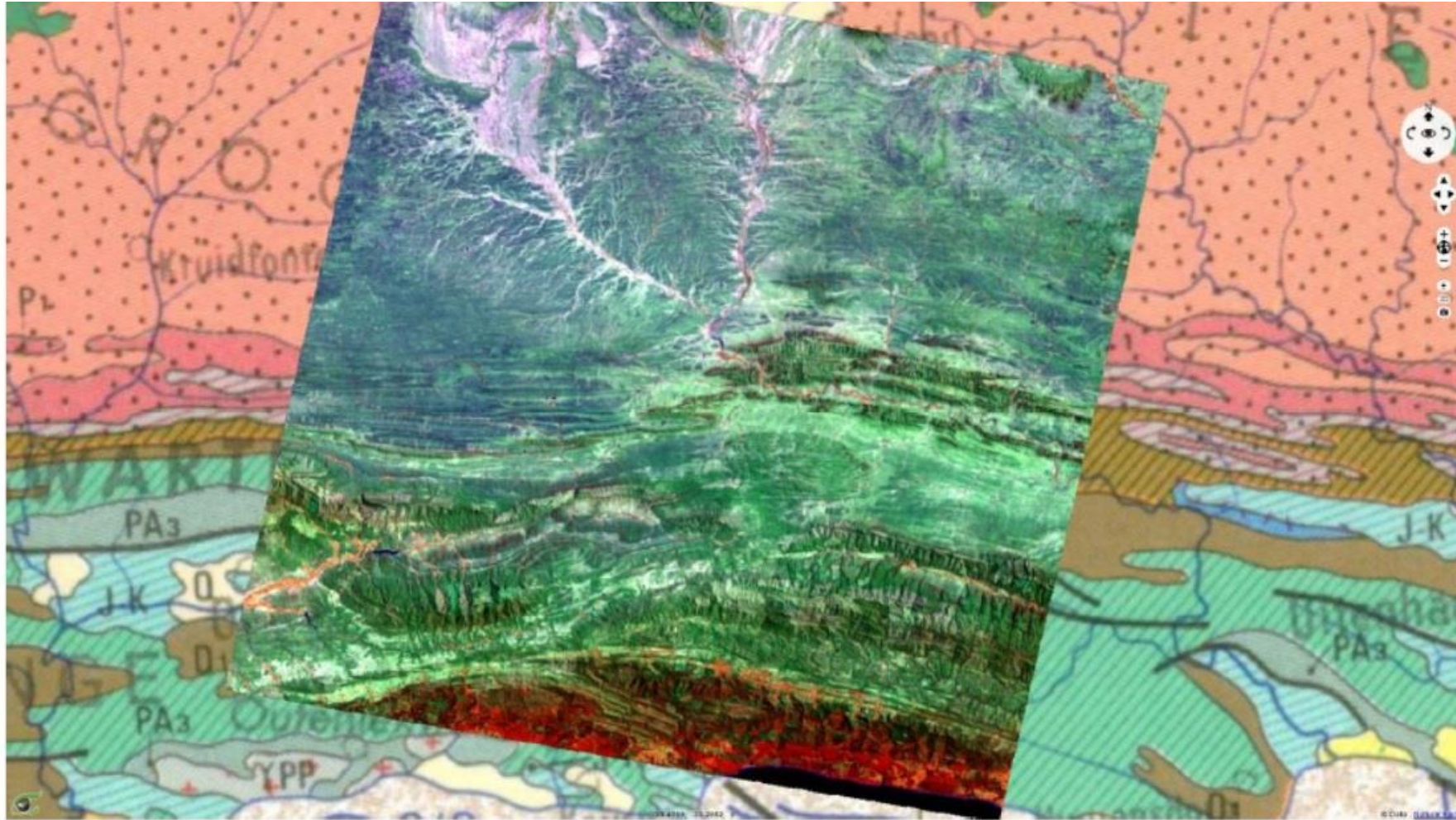


Geological map with Landsat data

1:5 000 000 Africa geological map published by [CGMW](#) in 1990
Landsat TM on 12.19.1986 over the Swartberge mountains (South Africa) [3D stack](#)



Bands 4-5-3: [2D view](#)

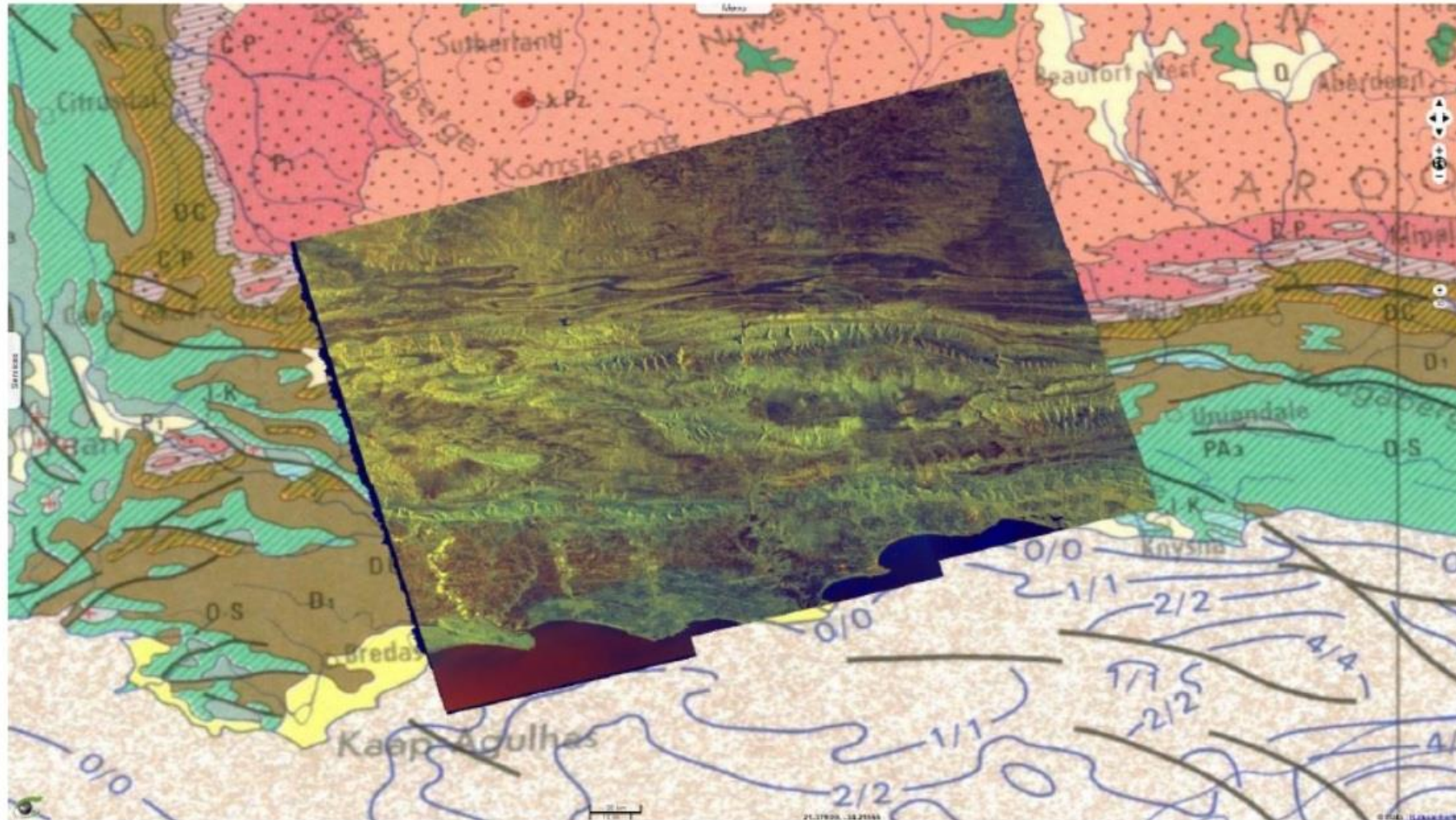


Focus on landsat picture showing different litology related to the geological map : [3D view](#)

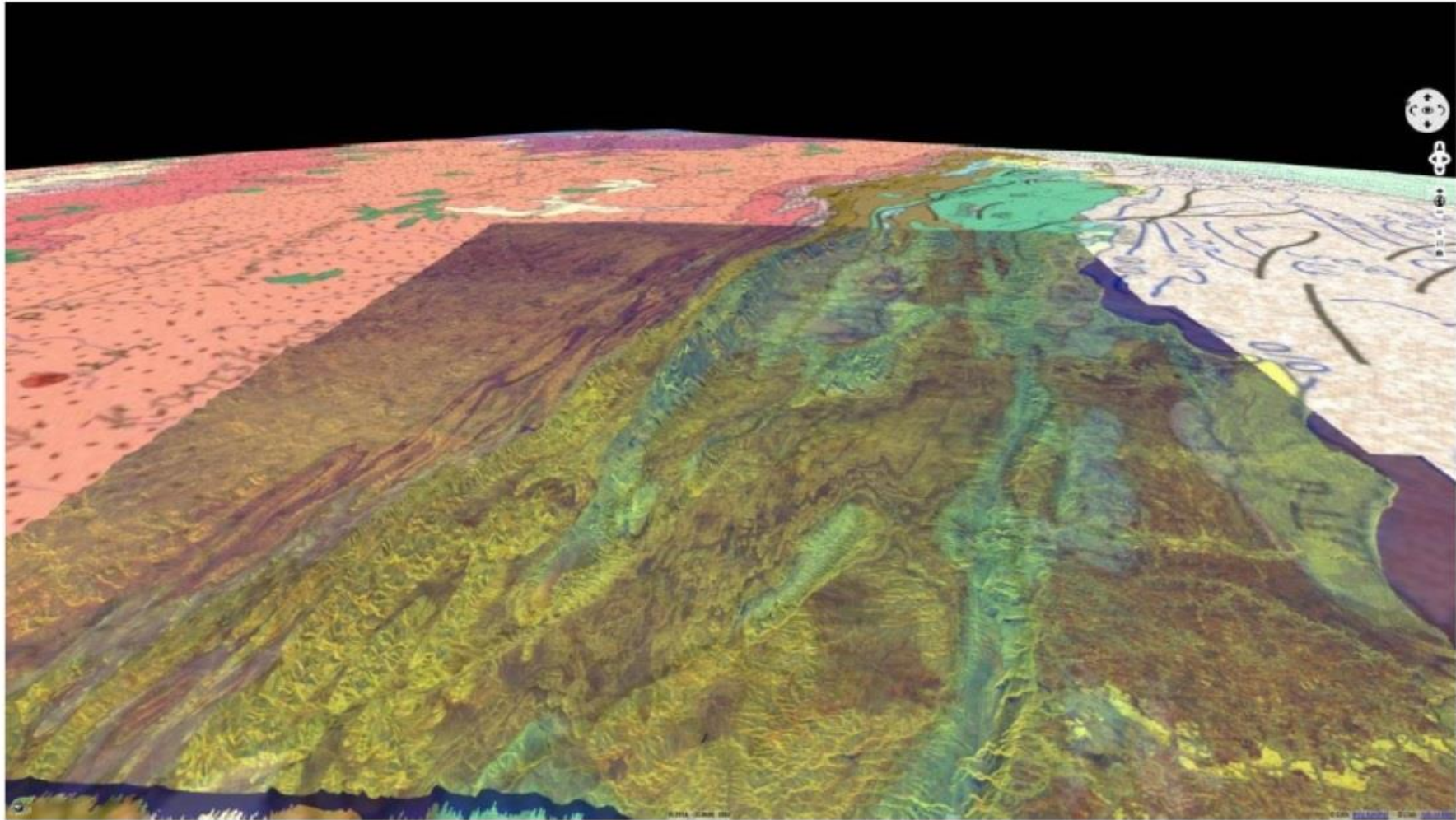


Geological map with Sentinel-1 data

1:5 000 000 Africa geological map published by [CGMW](#) in 1990
[ESA](#) Sentinel-1A CSAR IW on 14.03.2015 17:17:13 GMT



Geological map of South Africa with Sentinel-1A scene [2D stack](#)

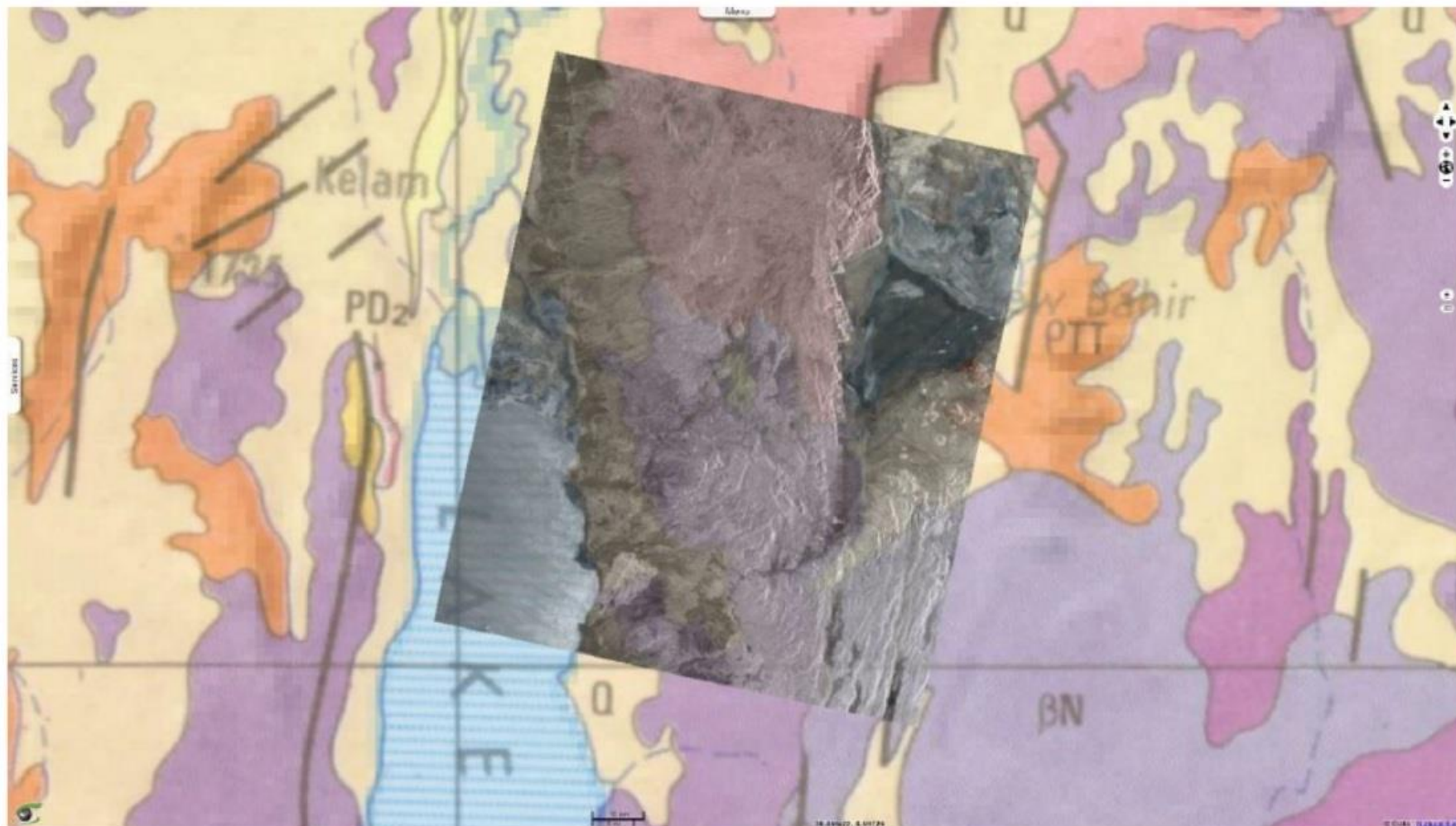


Sentinel-1 scene over geological data (vertical exaggeration: x4) [3D stack](#)

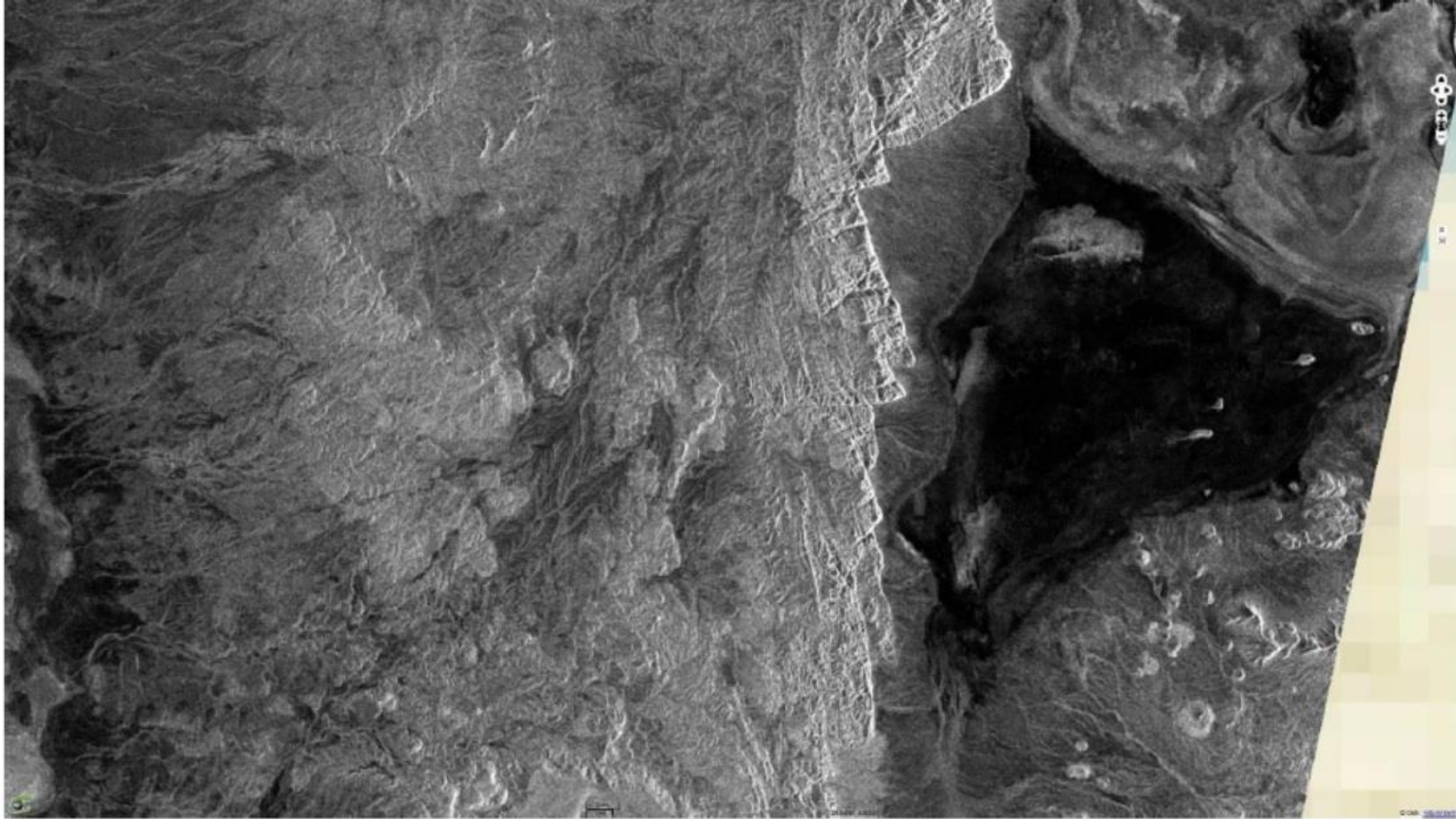


Geological map with ERS data

1:5 000 000 Africa geological map published by [CGMW](#) in 1990
[ESA](#) ERS SAR PRI on 27.09.1999 07:55:55 GMT



Geological map of Africa with ERS scene [2D_stack](#)

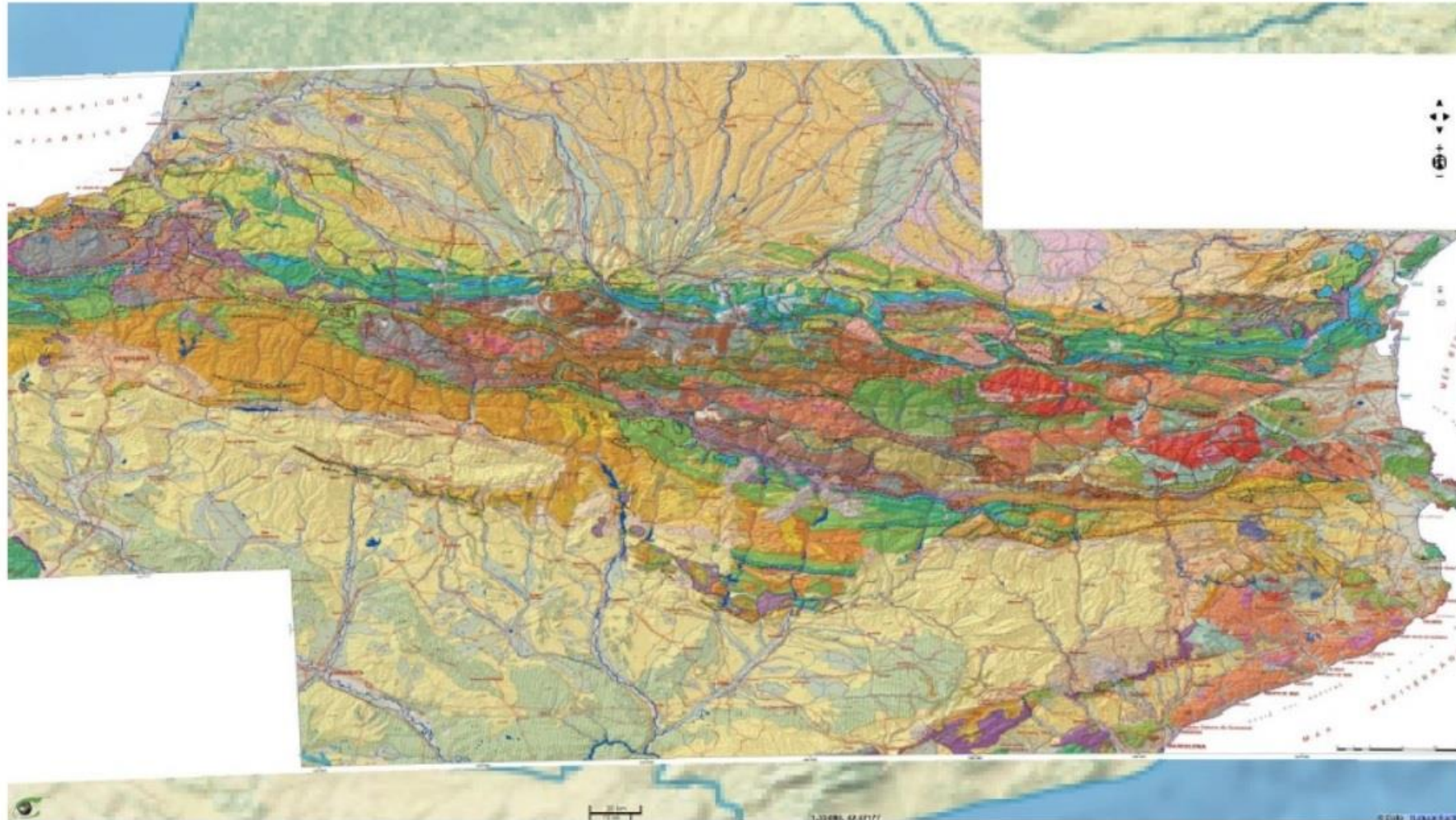


ERS scene showing fault trends, hydrographic network and alluvial fans [2D view](#)

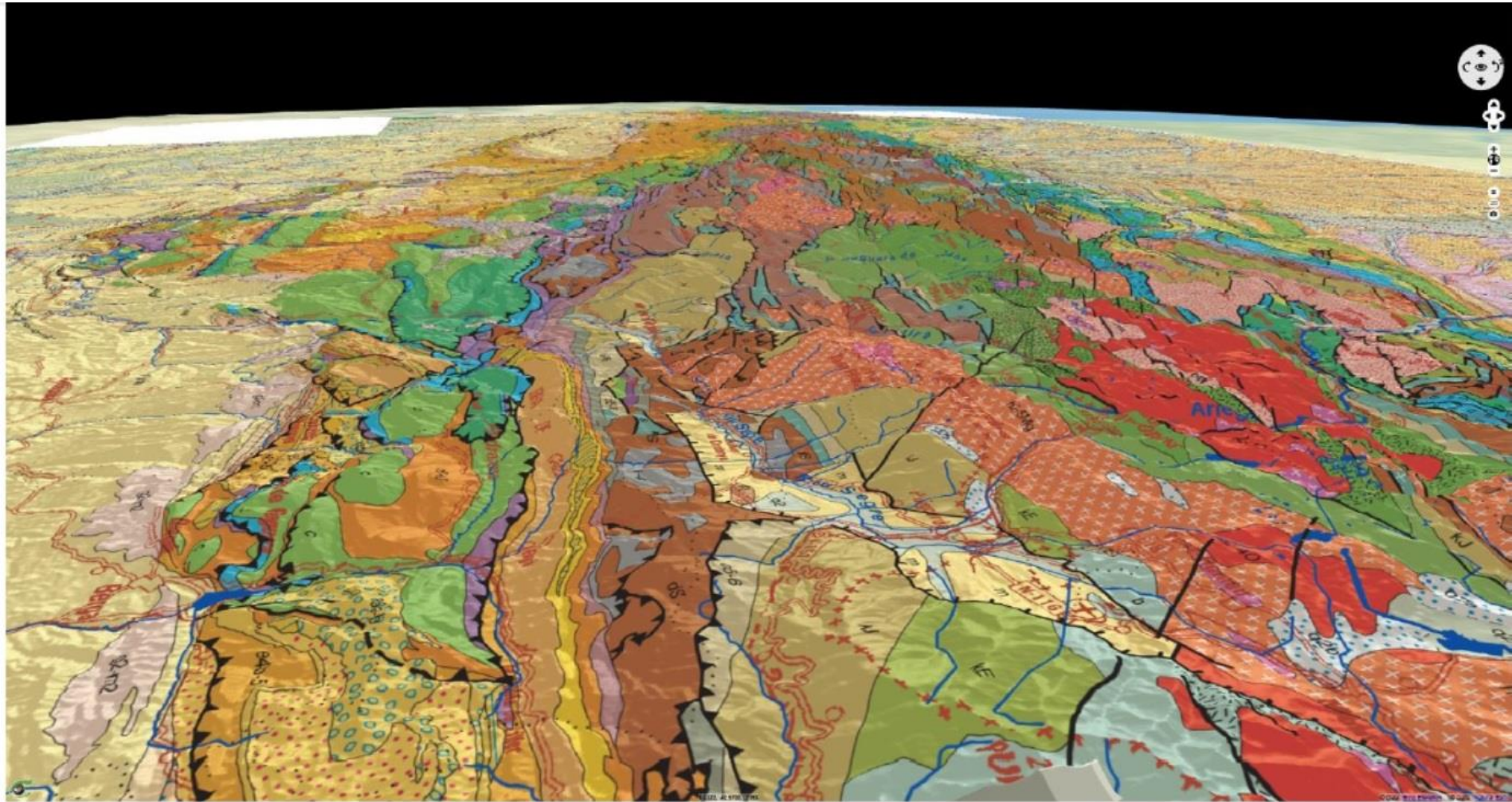


Pyénées Geological map

1: 400 000 [CGMW](#) Pyénées geological map (France - Spain)



Geological map of the Pyrenees mountains [2D view](#)

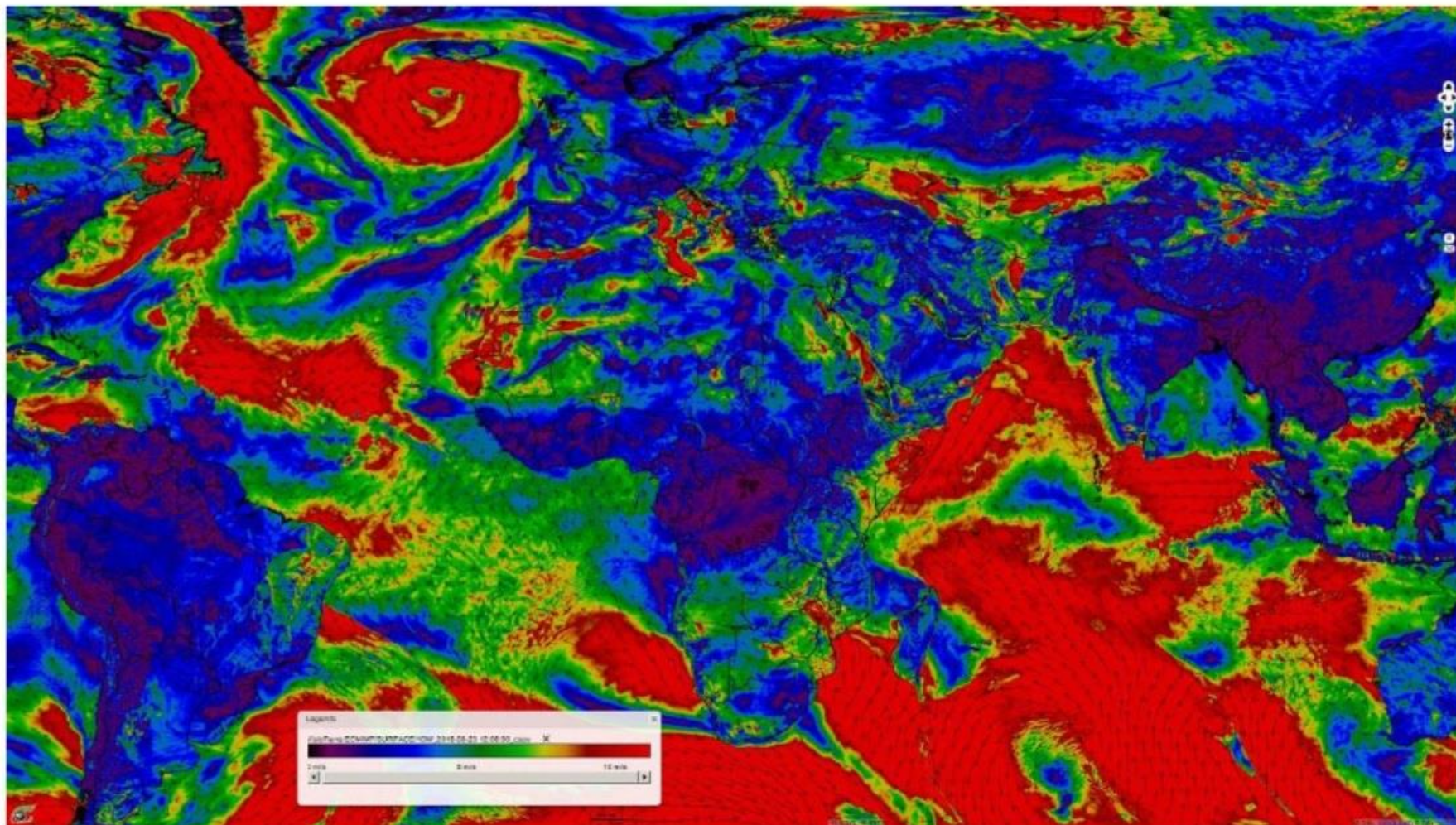


Geological map and topography showing major Pyrenean thrust [3D view](#)



Wind direction and intensity

[ECMWF](#) surface winds on 23.08.2016 12:00 GMT



Africa surface wind: [2D stack](#)

