***LINEAMENTARY PROCESSING IN THE WESTERN PART OF THE SENEGAL SEDIMENTARY BASIN FROM LANDSAT SATELLITE IMAGES 8.***

***Correspondent:*** *fayepapmalick @ gmail.com / malickfaye1990 @ yahoo.fr*

***Department of Geology, Faculty of Science and Technology, Cheikh Anta Diop university of Dakar, BP 5005, Dakar-FANN (Senegal)***

A new cartographic study based on the linear processing of the satellite images of Landsat 8 was carried out in the peninsula of Cape Verde and Thiès (western part of the Senegalese Sedimentary basin). Processing techniques such as RGB tri-color combinations (5-4-3), (7-4-2), (4-5-7), (7-5-3), band ratios or band ratios (1 / 2-1 / 3-1 / 6), (1 / 3-5 / 7-3 / 5), (¼-1 / 5-1 / 6), (1 / 3-1 / 4-1 / 5 ) and directional filtering using the Sobel filter were carried out in order to better discern the different geological structures, particularly the lineaments. This series of image processing which led to geological extraction by satellite tele-analysis combined with pre-existing structural data made it possible to update the map linearly, to highlight a large number of “offshore” faults and volcanic cones . Four families of lineaments corresponding to faults have been identified: NS, NNE-SSW, NW-SE, NE-SW. The lineaments NS and NNE-SSW correspond respectively to the direction of the meridian and sub meridian faults. The NW-SE, NE-SW Linearities are characterized by normal faults.

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