Desert landscapes in the Nile Valley

This true-colour satellite image of the Nile Valley in northern Sudan covers an area of about 40 × 30 km. It highlights striking contrasts between the desert landscapes on opposite sides of the river. The landscape to the north and west is dominated by yellow windblown sand from the north. Linear features are well developed and there is a long belt of barchan dunes in the far west of the image. The river provides an effective barrier to the movement of windblown sand so that prominent sand dunes have built up along the left bank.

The landscapes to the east of the river are very different. Here the land surface is dominated by bedrock and by ephemeral river networks. These dryland channels or wadis only flow with water during rare extreme rainfall events.

Stream networks are present on both sides of the Nile but they are blanketed by sand in the north because of the abundant supply of sand which is transported by aeolian processes. All the modern settlements and most of the agricultural activities in this part of the Nile Valley are located on the two largest islands (Sai and Ernetta) and on the right bank where they are protected from the damaging effects of windblown sand.

Locate this area using Google Earth (it includes the modern town of Abri) and explore the nature of the wider desert and Nile Valley landscapes.

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