

Changes in the cultivated area in the Neuquén and Limay rivers confluence between 2000 and 2021

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Summary

In recent years, the confluence of Limay and Neuquén rivers has experienced great urban growth, with the advance of cities and hydrocarbon exploitation over areas, former dedicated to agricultural production on the valley floor. The results also noted the conversion of crops and the expansion of the agricultural frontier, incorporating areas under irrigation in vulnerable areas on the plateau. This paper proposes the study of spatial and temporal variations in crops areas, using the NDVI from MODIS products (MYD13Q1) in the period 2002-2021. Land cover were identified and the temporal variability was studied obtaining seasonal trends in NDVI. The paper presents the seasonal monitoring of information every 16 days. The sectors with significant changes were zoomed using higher spatial resolution satellite images. The area presented significant negative trends in the NDVI, in much of the valley floor and some sectors bounded by positive significant trends on the plateau, associated with ventures under irrigation developed in recent years.

Key words: MODIS; NDVI; vegetation; seasonal trend