Mt. Aconcagua – A challenge for Remote Sensing mapping activities in the Andes

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Abstract:

This paper discusses the integration of various remote sensing based data (SRTM, LANDSAT and ASTER) for generating various thematic maps and a topographic map (contour lines) of Mt. Aconcagua (Argentina). Due to the lack of appropriate official topographic maps (1:50.000) Remote Sensing data are the only source which can provide adequate topographic and thematic information. The investigation area is located in the midst of the Central Andes in the Aconcagua Provincial Park (Argentina) with Mt. (Cerro) Aconcagua (6962m) is the highest mountain in South America and reaching out up to Argentinean-Chilean-Bolivian Border.

Results from digital and analogue classification (topography, glacier, vegetation, infrastructure, etc.), the methodology, advantages and disadvantages of High Mountain Environment Remote Sensing applications will be discussed and presented.