

## Availability of the ALOS data for glacier monitoring

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Recent years, the glacier retreating caused by global warming grows into a serious problem in the world. One of the most serious consequences on regional environment is the lack of water resources. The water from glaciers is used for daily life water such as drinking water, agricultural water, hydraulic power generation in this area. It is very important to estimate the volume of glaciers as water resources accurately. Usually, the remote sensing by earth observing satellites is good at monitoring the area of glaciers, but it is difficult to apply for detecting their volumes. ALOS has 3 sensors, PRISM, AVNIR-2, and PALSAR. The stereoscopic viewing by PRISM and the interferometry by PALSAR can detect the elevation, and these results of detection are expected to estimate the volume of glaciers.

The purpose of this study is to consider the availability of the ALOS data for glacier monitoring. As the test site of this study, the glacier regions in Bolivia, which are located in the near center of the Andes, are selected. In the consideration about the detection of the height of glacier region, the combination of results from the stereoscopic viewing by PRISM and the interferometry of PALSAR improved the range of detection and the accuracy.