

An application of ALOS-2 data for study of glacial region

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ALOS-2/ PALSAR-2 successfully launched on 24, May, 2014 and it has been collecting the data all over the world properly. The major difference between ALOS and ALOS-2 are improvement of spatial resolution, short revisit cycle, keeping short baseline and improvement of observation opportunity by left-right looking. Among them, the important improvement are short base line and short revisit cycle because it is expected to provide the high coherency between observations. It is able to observe in 14 days difference in the best case, it is almost 3 times shorter temporal difference than ALOS data.

Based on these difference, we choose two area for the comparison between ALOS-2 and ALOS data. One is Mt. El Salto, Andes region. This area has many rock glaciers and we successfully detected the movement of them. Here we would like to check whether ALOS-2 can detect these Phenomenon as ALOS data. The other target area is East Antarctic marginal zone between ice sheet and ice shelf. We already confirmed that the possibility of the extraction of grounding line by PALSAR data and how it improve using ALOS-2 data to take into the effect of short revisit cycle and short baseline. We plan to report how ALOS-2 data be useful for cryospheric study based on these two case studies.

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