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PEM025-P24

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## Ionospheric effects on land observation with ALOS

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ALOS (Advanced Land Observation Satellite) is equipped with L band Radar, and used for mapping and monitoring of land.

Offset mapping (offset method) and phase deviation mapping (interferogram SAR method, InSAR) are widely used to extract land deformation from a pair of observed data taken at the same scene on two different days.

In each method, extracted land deformation includes pseudo-deformation along with true land deformation. Possibilities are pointed out that the ionosphere along with atmospheric moisture plays a key role.

At present, these pseudo-deformations are removed by using numerical smoothing. In my study, ionospheric contributions to pseudo-deformation are estimated from the calculated figures of phase shift which rader experience while traveling through ionosphere.