

## Estimation of Ground and Building Damage Areas -The 2024 Hualien Earthquake, Taiwan -

The change area (damage area) due to the earthquake on April 3, 2024, was estimated from the coherence difference value of the HH polarization image among the FBD data of ALOS-2 satellite. The data were obtained after the earthquake on April 4, 2024 and before the earthquake on October 19, 2023 and November 17, 2022. The coherence values of the pre-and post-earthquake pairs were subtracted from the coherence values of the pre-earthquake pairs, and the extent of the change area was expressed in multilevel slices. The data for non-urban areas are masked by the DLR Urban Footprint data.

