

Generation of Vulnerability Assessment data about Water-related Disaster using ALOS/AVNIR-2 and PRISM

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According to the Fourth Assessment Report of the IPCC, due to the climate change, it is assumed that the flood damages such as typhoon will be increased at lowland area. In order to decrease storm and flood damages, it is important to unify the measures over land use, environmental plan, and traffic environment. In this research, we focused on the Hai Hau coast that is a downstream of Red-River, Vietnam. Around the Hai Hau coast, vast lowland areas are distributed. Therefore, in this research, we mapped the vulnerability assessment to the river flood for Hai Hau coast and its vicinity. Then, we mapped a salt farm, a shrimp farm and cultivated land using ALOS/AVNIR-2 and ALOS/PRISM in order to grasp the vulnerability assessment of the cultivated land received from overtopping waves of the coast. The result of this study, we generated the geographic information for water-related disaster, and considered the relation with present condition of land-use.

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