



A study on Impact Forecasts in case of heavy snowfall on Jeju island

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This study suggests thresholds of the social impact by heavy-snow by analysing altitudinal snowfall distribution on Jeju island; most snowfall on Jeju island are caused by convective cloud formed by atmospheric-ocean interaction in West Sea. The statistical analysis are conducted in order to clarify the reason of heavy-snow on Jeju island; the distribution of the low level wind direction, the height of the cloud top, freezing level, and the temperature difference between sea surface and atmosphere(925~850hpa). A heavy snowfall case is selected and analysed to verify these statistical values. On the basis of these results, Risk Matrix considering social impact by heavy snow is developed. The range of road control is divided to low-middle-high for the snow depth 2cm, 5cm, 10cm respectively. Similarly, the facility damage is classified for three steps(5cm, 15cm, 40cm).