



## Heavy rainfall in Kochi accompanied by two typhoons

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Heavy rainfall in Kochi, Japan continued from 1 to 10 August 2014, due to the passage of two typhoons, ‘Nakri’ and ‘Halong’. Accumulated rainfall exceeded 2000 mm in 10 days. Fortunately there is no victims but flood and many land slides occurred. The present study aims to clarify the characteristics of precipitation system yielding such heavy rainfall. We analyzed the data obtained from the JMA Muroto Doppler radar, Asakura and Monobe Doppler radars in Kochi University.

When Typhoon ‘Nakri’ moved northward in the East China Sea, warm moist southerly wind continuously blew on Shikoku Island. Then streak on slope type convective system was kept for more than one day. This convective system is one of kind of orographic precipitation and some quasi-linear echoes arranged parallel to the slope of mountain. The daily precipitation in the middle portion of Kochi on 2 August was over 600 mm because such convective system maintained for long time. However, Typhoon ‘Nakri’ passed outside of the area that typhoons cause heavy rainfall in Kochi. In this case, warm moist air mass was apart from the typhoon and concentrated in the Pacific Ocean just south side of Shikoku Island.

Typhoon ‘Halong’ moved northward and landed on Aki City faced on Tosa Bay at about 0600 JST on 10 August. Before its landfall, another orographic precipitation called as fixed echo type was continued more than 12 hours. Such convective system stagnated on the east and west side of Shikoku mountains.

Conclusively, two typhoons caused different convective systems on Kochi then the areas that heavy rainfall continued were also different with each other.