

Observation of tornado using a high dense ground observation network in Midori city, Gunma, Japan on 16 September 2013

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On the midnight of 16 September 2013, a severe thunderstorm passed over Midori and Kiryu City in Gunma Prefecture, causing a gust of wind damage. Japan Meteorological Agency (JMA) estimated that the wind damage was tornado at F1 intensity by damage survey teams. The change of surface pressure was observed by high dense ground observation network POTEKA. The tornado and misocyclone pressure fields are estimated by using the modified Rankine vortex. The result of this analysis shows that we need to discuss the upper air misocyclone and surface tornado.