

Development of the C-band radar system with the good temporal and spatial resolutions

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The C-band weather radar has an advantage in detecting the precipitation echo without the attenuation effects by precipitation particle in the long distance. Recently, the active phased array system is implemented to the X-band weather radar, which enables all-sky scan within a minutes. However, it is difficult to develop the phased array system for C-band weather radar, because of the large antenna size. This paper introduce our project to develop the new C-band radar system with the good temporal and spatial resolutions. The super-resolution technique such as the radar imaging is also discussed in this paper.

Keywords: C-band weather radar, radar imaging, high temporal and spatial resolutions