

# **Application of Satellite and Doppler Radar Image In the Typhoon**

## **Rainstorm of Bolaven**

XiangDong Yang

Meteorology Center of Northeast Air Traffic Management Bureau, CAAC.

ShenYang 110043 China, xdyang555@sina.com

**Abstract:** Remote sensing is widely used, such as in agriculture, forestry, land cover, hydrology, sea ice and so on, now it plays more and more important roles in aviation. This paper is the application of Satellite and Doppler Radar Image in Aeronautical Meteorology. Using the routine surface observations, FY-2C satellite infrared and vapor cloud image and Doppler Radar Image, the heavy rainstorm in Shenyang of Liaoning province on 28 August, 2012, which was influenced by outside circulation setting of the typhoon of Bolaven, were comprehensively analyzed. The results showed that the southwest jet stream was benefit to transport the moisture vapor to the rainstorm area, the cloud minimum temperature related to rainfall center , the Doppler radar velocity data revised NWP products timely. So the impact on aviation due to adverse weather such as unfavorable winds, heavy rain and low visibility decreases to the minimum.

Keywords: Satellite Image; Doppler Radar; Typhoon; Rainstorm; Aviation