



# Super Typhoon PAKA (PR,TMI)



TRMM Earth View

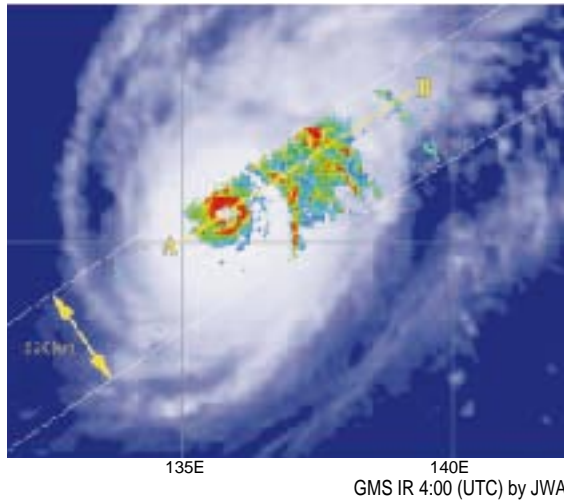


Fig.1 PR: Horizontal Cross Section of Rain at 2.0km Height

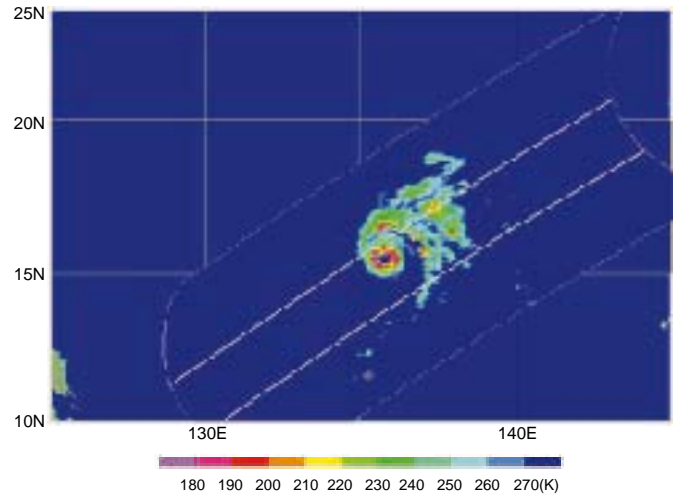


Fig.2 TMI: 85GHz V-POL. Brightness Temperature

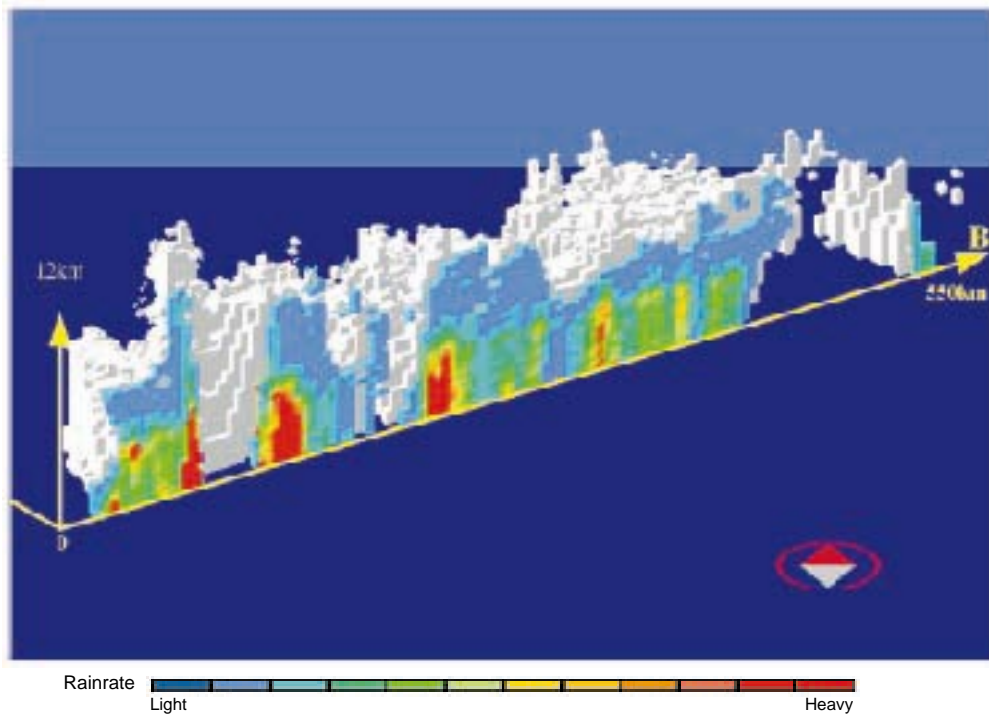


Fig.3 PR: 3D Rain Structure

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These are the rain images of the Super Typhoon PAKA from Precipitation Radar (PR) and TRMM Microwave Imager (TMI) on Dec. 19. This typhoon did great damage to the Guam islands in December 1997.

Figure 1 shows a horizontal cross section of the rain at an altitude of 2.0km together with a vortex image (cloud distribution) taken from the GMS. There is no rain in the eye and heavy rain indicated in red around that.

Figure 2 shows the image of the Super Typhoon PAKA observed by TMI. This image shows the 85GHz, vertically polarized brightness temperature. The temperature is lower in the rain regions because of microwave scattering by ice crystals and rain drops. The rain area from PR corresponded with that from TMI.

Figure 3 shows a three-dimensional image of rainfall. The cross section shows the vertical distribution of rain intensity along the line AB which crossed the eye of the typhoon in the Fig. 1. The white and gray cubic structure behind the cross section shows the rain echo height measured by the PR. Surrounding the eye is an elevated rain region up to about 12km, and there is heavy rain in the lower layer of this region.