

Figure 2-68. Icing Flowchart.

obtain an accurate measurement of the height of the freezing level, choose RCS end points on different sides of the bright band on the Base Reflectivity product.

c. Bright Band Identification. The Base Reflectivity (R) product will display the freezing level as a ring of enhanced reflectivity (30 to 45 dBZ) around the Radar Data Acquisition Unit (RDA). This enhanced area is called the bright band, formed when frozen precipitation melts as it falls through the freezing level (Figure 2-70). The height of the outer edge of the bright band is the height of the freezing level (0°C). You can measure the height (MSL) by placing the cursor on the area of interest and reading the elevation to the right of the reflectivity panel.

Although there is currently no WSR-88D product that is specifically designed to help forecast icing, inferences still can be made from locating the bright band. After determining the height of the freezing level by using the PUP cursor, the next step is to determine the approximate height of the -22° C isotherm, which is generally accepted as the outer

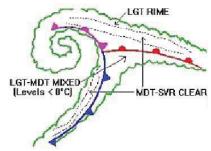


Figure 2-69. Typical Icing Areas in a Mature Cyclone.

The figure shows general locations for icing, in relation to the position of surface features.

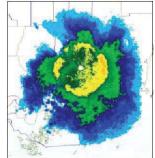


Figure 2-70. Bright Band Identification Using the WSR-88D.

The enhanced area is called the bright band, formed when frozen precipitation melts as it falls through the freezing level.