

## ALBERTA HAIL SUPPRESSION PROJECT RADAR WEBSITE

The project radar TITAN (Thunderstorm Identification Tracking Analysis and Nowcasting software) image is updated to the web throughout the duration of the project season, June 1 - Sept 15. Radar web images show composite reflectivity, and each volume scan takes approximately four minutes to complete. Data is transmitted to the web server within seconds following the completion of a scan. The project radar is located at the Olds-Didsbury Airport at the AHSP operations centre and has a range of 180km.



- The red circles are the forecast storm tracks. When the radar detects TITAN cells (storms having ≥45dBz with volume of 10km<sup>3</sup> above 4km MSL), the three red circles indicate where a cell is forecast to move in 10, 20, and 30 minutes (from the timestamp on the radar image). The circle sizes also estimate future growth or weakening of cells (growing or shrinking circles).
- The color scale shows the intensity of the precipitation. Higher values of reflectivity (dBz) indicate greater precipitation rates. Refer to the right side bar for color key. Radar echoes less than 45 dBz typically mean rain during summer. Values higher than 50 dBz often indicate hail.
- 3. The numerical labels on the storm cells are the cell top heights (in km) defined as the max height of the 45 dBz contour. Any TITAN cell that stays below 9km is typically tame producing only small hail or rain only. A significant storm with tops above 10km has potential for large, damaging hail.

4. The image also includes tracking for the project's cloud seeding aircraft. The color code for each aircraft tail number is located on the bottom right of the radar image; each plane has a different color for their track. Tracks show locations of the planes, but they do not indicate whether aircraft are seeding or not, just that they are airborne. Aircraft are frequently launched for "patrol" flights in anticipation of convective development, so the presence of an aircraft track over an area does not necessarily mean seeding is occurring. Pilots may be circling and only observing cloud development.

5. Time and date are in Coordinated Universal Time (UTC). Subtract 6 hours from the time you see on the radar image to convert to local time (Alberta). Always check the time stamp to make sure it is a recent image.

## Visit our webpage for the latest radar images and weather information at: http://www.wmiradar.com/ahsp View this tutorial online at: http://wmiradar.com/ahsp/titantutorial.pdf

Animated pages use JavaScript. Animation between frames can be achieved by using the step buttons, the left and right arrow keys, or with the horizontal scroll bar beneath the image. These pages are also compatible with most mobile devices. **TIP:** to continuously view the most current product, click the refresh button on your browser every four minutes.

- Have hail reports and/or storm pictures? Please email to: olds@weathermodification.com
- Cloud seeding questions? Visit www.weathermodification.com or e-mail info@weathermodification.com