

## **An update on techniques using the deviation angle variance (DAV) for tropical cyclone intensity, genesis, and surface wind field estimation**

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The Deviation Angle Variance (DAV) technique has been developed as an automatic and objective system that provides information about the intensity of tropical cyclones (TCs) throughout their life cycle. The DAV signal is computed from geostationary brightness temperature data, and provides a single score at each pixel in an image that is related to the axisymmetry of cloud patterns centered on that pixel. Coupled with knowledge of storm track, the DAV signal has been demonstrated to be a robust estimator of TC intensity. Furthermore, at early times, the DAV signal can be used to help identify TC genesis and track interesting cloud clusters automatically.

In this poster presentation, we will present updates on current efforts surrounding the DAV system including; updated training for intensity estimation; estimation of the radii of 34-, 50-, and 64-kt winds in four quadrants; cloud-cluster tracking; and early efforts to develop a probabilistic genesis prediction tool. Plans for possible implementation into operational centres will also be discussed.