

Using the ZDR Column Product to Detect Convective Storm Development and Track Updraft Position

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Observational studies and recent numerical simulations have noted an association between the updrafts of mid-latitude convective storms and columns of high differential reflectivity (ZDR) that extend considerably above the environmental and updraft-perturbed freezing level. While the reflectivity factor may be relatively low within a nascent updraft, the ZDR column can be quite prominent within developing and mature updrafts, making it a useful signature for locating and tracking the updrafts of convective storms. The ZDR Column Product has been created to aid the detection of developing and evolving deep, moist convection. Examples of the utility of this product are provided.