The Use of Convective Parameters by the Australian Extreme Weather Desk in Forecasting the 16 December 2015 Tornado Supercell

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An ingredients-based forecast process is utilized within the EWD that promotes an efficient and thorough assessment of the convective environment. Stemming from the literature and best practices from the US National Weather Service Storm Prediction Centre, the EWD forecaster strategically combines atmospheric ingredients to diagnose areas of threat from significant convective phenomena. This is aided by the use of parameters that aim to highlight environments conducive to convective organisation and related phenomena.

Convective Parameters

- In hindsight, it could be argued that the EWD forecast process that included systematic verification as part of the rostered duties provided the catalyst to further investigate the marine boundary layer instability and convection which in turn has increased expertise within the EWD.

Daily Verification

- Daily forecast process that includes systematic verification as part of the rostered duties provided the catalyst to further investigate the marine boundary layer instability and convection which in turn has increased expertises within the EWD.

References

