

# **In Situ Measurements of Dust Devil Dynamics**

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## **ABSTRACT**

An intensive three-day dust devil investigation was conducted near Eloy, Arizona during June of 2001, with the goal of evaluating comprehensive measurement strategies for the study of dust devils on Mars. As part of this campaign, an instrumented vehicle outfitted with wind, temperature, and pressure sensors was used to intercept and penetrate numerous dust devils. This contribution will describe the meteorological dynamics of several of these encounters. In at least one case, analysis of the resolved radial and tangential velocity components indicates systematic departure from the standard Rankine Combined Vortex Model in the peripheral region of the dust devil.