

# **CLOUD MOTION VECTORS FROM MISR: UPDATE AND COMPARISON WITH QUICKSCAT**

Roger Davies

Department of Physics, University of Auckland, New Zealand

and

Michael Garay

Intelligence and Information Systems, Raytheon Corp, Pasadena, USA

The MISR instrument on the Terra satellite uses a stereo-based technique to obtain height-resolved cloud motion vectors on a global basis from pole to pole. Since this is a research instrument with relatively narrow swath-width ( $\approx 350$  km) and no real-time down-link, the impact of such a measurement technique on NWP improvement is hard to assess but is of significant interest for future instrument development. By requiring consistent retrievals between fore and aft looks of the same scene, the retrieval accuracy has an rms consistency in retrieved wind speed of 2.4 m/s, in wind direction of  $17^\circ$ , and in height assignment of 290 m. Here we explore the information obtained by comparing low altitude CMVs from MISR with surface winds over the ocean from QuickSCAT for June, July and August 2007. These measurements are highly consistent, and show systematic differences with height that provide information about the marine boundary layer. While direct comparisons with observational data provide the best tests of MISR accuracy, we are also comparing the MISR CMVs with NCEP reanalysis data and should have preliminary findings from this comparison to report.