

ISARS 2014 special issue

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Figure 1: Participants of ISARS 17 in front of Old Government House, Auckland, New Zealand.

The 17th International Symposium for the Advancement of Boundary Layer Remote Sensing (ISARS, 2014), was hosted at The University of Auckland, Auckland, New Zealand from 28–31 January 2014. ISARS is an informal association of scientists from all over the world which organizes a symposium every second year. The focus is the use of acoustical, optical and microwave techniques to probe the lower part of the atmosphere from the ground. The first ISARS symposium was in Calgary in 1981, and since then the symposium has been held in Rome (1983), Paris (1985) Canberra (1988), New Delhi (1990), Athens (1992), Boulder (1994), Moscow (1996), Vienna (1998), Auckland (2000), Rome (2002), Cambridge (2004), Garmisch-Partenkirchen (2006), Roskilde (2008), Paris (2010), Boulder (2012) and most recently in Auckland (2014).

The conference series provides an opportunity for researchers to present the latest research developments in remote sensing of the atmospheric boundary layer. At ISARS 2014 there were eight sessions covering turbulent processes, complex terrain, urban environments, modeling for remote sensing, boundary layer observations, instrumentation, wind energy applications, and new techniques. There were a total of 66 presentations.

The Auckland symposium also afforded an opportunity for the delegates to get together during breaks in the pleasant Neon Foyer outside the conference lecture theatre. The Icebreaker on the first afternoon included a traditional Maori welcome and performance of dances and songs. An afternoon social event in the grand Old Government House building was hosted by conference sponsors, and the Conference Dinner at the Fale Pasifica included entertainment from a Pacific island group. The smaller number of delegates, compared with the number attending the Boulder symposium, allowed for much more interaction and discussion. Many delegates also took advantage of the summer weather to make tours of parts of New Zealand following the conference.

Papers from the Garmisch-Partenkirchen ISARS were published in issues 4 and 5 of volume 16 (2007) of *Meteorologische Zeitschrift* and papers from the Roskilde ISARS were published in issues 2 and 3 of volume 18 (2009) of *Meteorologische Zeitschrift*. Following this tradition, a total of 7 papers from the Auckland ISARS 2014 have been extended and selected for the current Special Issue series in *Meteorologische Zeitschrift*. These include 4 papers on applications of lidars: wake dynamics (TRABUCCHI *et al.*, 2015), wind evolution (SCHLIPF *et al.*, 2015), marine boundary-layer winds (PEÑA *et al.*, 2015), and LiDAR-mast deviations in complex terrain (KLAAS *et al.*, 2015). Measurements in complex terrain by both lidars and sodars is the basis of a review article (BRADLEY

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et al., 2015a), and there are 2 further papers on sodars: wind drift corrections (BRADLEY and STREHZ, 2014) and urban environments (BRADLEY et al., 2015b). These papers represent a cross section of the much larger number of presentations at the conference, although cannot really encapsulate the full breadth and depth of the work presented in Auckland.

ISARS 2014 was also supported by an international committee comprising PHILIP ANDERSON (UK), STEFANIA ARGENTINI (Italy), FRANK BEYRICH (Germany), NICO CIMINI (Italy), STEVE COHN (USA), STEFAN EMEIS (Germany), MARTIAL HAEFFELIN (France), MARGARITA KALLISTRATOVA (Russia), ROSTISLAV KOUZNETSOV (Finland), JAKOB MANN (Denmark), WILLIAM NEFF (USA), DOMINIQUE RUFFIEUX (Switzerland), DAVID TURNER (USA), SABINE VON HÜNERBEIN (UK), ALAIN WEILL (France), and host STUART BRADLEY (New Zealand).

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The next ISARS symposium is scheduled to take place at Varna, Bulgaria from 6–9 June 2016.

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