Douglas C. Braun

NorthWest Research Associates 3380 Mitchell Lane Boulder, CO 80301

Professional Preparation:

University of Hawaii at Manoa, Ph.D., Astronomy, 1988 University of Hawaii at Manoa, M.S., Astronomy, 1985 Swarthmore College, B.A. with Distinction, Physics and Astronomy, 1983

Major Positions:

NWRA Vice President, 2010-present
NWRA Board of Directors, 2009-present
Senior Research Scientist, NWRA, 2004-present
Research Scientist, NorthWest Research Associates, 2000-2004
Long Term Visitor, High Altitude Observatory, 1996-1999
Visiting Astronomer, National Solar Observatory, 1993-1996
Astronomer, Solar Physics Research Corp, 1993-2000
Assistant Astronomer, Institute for Astronomy, University of Hawaii, 1990-1993

Science Interests:

Doug Braun is a solar physicist with a primary interest in helioseismology, the use of solar oscillations to probe the interior of the Sun. His PhD dissertation at the University of Hawaii in 1988 included the discovery of the acoustic absorption properties of sunspots, and the techniques Braun developed were used in the first application of what is now known as local helioseismology. In the 1990s, Braun discovered that sunspots scatter acoustic waves, and with Y. Fan, produced the first model of the wave speed structure beneath sunspots. He also worked with C. Lindsey to develop a general methodology, called helioseismic holography, and in 2000 applied this method to detect and predict active regions on the far surface of the Sun. Current areas of research funded by the NASA Heliophysics program include inferring and modeling solar subsurface flows below magnetic regions and inferring the subsurface supergranular flows.

Publications:

Braun is an author on 76 refereed publications and has an h-index of 34.

A reasonably complete list of Braun publications may be found on the ADS (Astrophysical Data System) by searching with ORCID number 0000-0001-6840-2717 (A direct link is available from the homepage).