Acknowledgement

I wish to thank my supervisor Dr. Ritaban Dutta for continuously supervising my work and providing insightful guidance. The CSIRO Computational Informatics, Hobart and the Tasmanian node of the Australian Centre for Broadband Innovation is providing the full support for my individual project. The cosmic ray sensor data was made available through the CosmOz Australian soil moisture monitoring network funded by CSIRO and deployed by Aaron Hawdon and Rex Keen of CSIRO Land and Water, Townsville, Australia. Soil samples for sensor calibration were collected by Bill Cotching of Tasmanian Institute of Agriculture. Data were delivered through CSIRO data service system developed by Peter Taylor. I would like to thank Peter Briggs and Simon Lovell for providing access to the AWAP database and SILO database. I would also like to acknowledge the use of FIRMS data and imagery from the Land Atmosphere Near-real time Capability for EOS (LANCE) system operated by the NASA/GSFC/Earth Science Data and Information System (ESDIS) with funding provided by NASA/HQ.

WATER FOR A HEALTHY COUNTRY FLAGSHIP/ SUSTAINABLE AGRICULTURE FLAGSHIP www.csiro.au



