

Dr. Tom Rosmond

Tom Rosmond received B.S. and M.S. in Physical Oceanography from the University of Washington in 1966 and 1968, and a PhD in Atmospheric Sciences in 1972, also from Washington. His PhD thesis was a theoretical study of mesoscale cellular convection, with Professor James Holton as his advisor. His first job was at the California State University, Fresno, where he participated in a modeling and field study of the low-level jet in the San Joaquin Valley. In 1974 he joined the Navy Environmental Prediction Research Facility (NEPRF) in Monterey, California, and in 1976 became the head of a newly formed numerical modeling department. During the next several years he lead the development of the U.S. Navy's operational global atmospheric prediction system (NOGAPS), run operationally by the Fleet Numerical Meteorology and Oceanography Center (FNMOC). He was the primary architect of this system as it evolved over several generations of computer architectures, e.g. scalar, vector, parallel vector, and message passing.

In addition to forecast system development, Dr. Rosmond developed a tangent-linear and adjoint models for NOGAPS, which became the basis for a singular vector capability that made possible a highly successful predictability research program at the Naval Research Laboratory, Monterey (organizational name change). In 2001, in collaboration with the late Dr. Roger Daley, he began developing the Navy atmospheric variational data assimilation system - accelerated representer (NAVDAS-AR), an observation space based 4DVAR. This system is scheduled for operational implementation at FNMOC in mid-2009.

Dr. Rosmond retired from the U.S. Civil Service in 2004, and in 2005 joined Science Applications International Corporation (SAIC), as a contractor to NRL-Monterey to continue support of NAVDAS-AR development. Now working from a home office, he lives in Washington state on the west side of the Olympic Peninsula near the small town of Forks, where he grew up.