

Clifford F Mass
Short Narrative Biography

Cliff Mass is a professor of atmospheric sciences at the University of Washington. His specialty is numerical weather and climate prediction and the meteorology of the western U.S.

Cliff Mass majored in physics at Cornell University, where he worked with Astronomer Carl Sagan on a model of the Martian atmosphere and with Stephen Schneider of NCAR on climate modeling.

After Cornell he entered the Ph.D. program at the University of Washington, with his doctoral work on African wave disturbances, the forerunners of tropical storms and hurricanes in the Atlantic.

Leaving the UW, Cliff joined the faculty of the Meteorology Department at the University of Maryland, where he taught synoptic meteorology and weather prediction, and worked on a variety of research topics, from Northwest weather circulations and high-resolution modeling, to the climatic implications of the Mount St. Helens eruption.

After three years at Maryland, Cliff moved to the University of Washington as an assistant professor in the Department of Atmospheric Sciences. During the next few decades, Cliff and his students have systematically studied the weather and climate of the western U.S., completing over seventy papers on West Coast phenomena as varied as orographic precipitation, coastal surges, the Catalina Eddy, and the Puget Sound convergence zone, to onshore pushes, downslope windstorms, and various local gap winds. Numerical simulation has been a key tool for his group, which now runs the most extensive local high-resolution prediction system in the United States. He is also heavily involved in regional climate modeling for the western U.S.

Cliff has been involved in a number of other initiatives, including the acquisition of coastal radar on the Washington coast, improving the infrastructure of the National Weather Service, the use of smartphone pressure observations for weather prediction, and the improvement of K-12 math education. He is the author of the 2008 book "The Weather of the Pacific Northwest" and broadcasts a weekly weather information segment on KNKX, a local public radio station. Cliff also writes a weather blog (cliffmass.blogspot.com)

Cliff Mass, a full professor at the UW, is a fellow of the American Meteorological Society, has been an editor of a number of meteorological journals, is a member of the Washington State Academy of Sciences, has published over 120 papers, and has served as a member of a number of National Academy committees. He is currently a member of the WRF Research Applications Board, a member of the NOAA/UCAR UMAC committee, and a member of several American Meteorological Society committees. He is now working on a new book "The Secrets of Weather Prediction."