Of meteorological variables of interest to a wide community, precipitation at the surface is a priority. This is true for snow and rain over a range of scales from historical to high resolution, as one minute. Such a measurement is obtained, for a given event, in terms of the fraction of precipitation at a given rate as characterizing a changing moisture climate. Application lies for specifying an avalanche or flood hazard. Challenge lies in interpreting the cloud microphysical processes and the dynamical (updraft) processes responsible for the observations. Insight lies in the cloud processes, requiring knowledge of properties as fall velocity and density. Measurement of such events (as a cylindrical rain gauge) may ONLY be undertaken along with collocated measurements of wind speed at the site since local perturbation of collected precipitation all too often results from air flow perturbations resulting in significant loss/enhancement of precipitation. Flow correction as alter shields and diff tend to be speed specific and lead to separate problems. A way around these difficulties is the principle of the hotplate precipitation gauge, hand size, 50 second response, maintaining its upper surface at a temperature near 100°C, evaporating precipitation on arrival and providing a rate measure through latent heat from electrical power. The gauge, as a sandwich, having the lower surface shielded from precipitation yet exposed to the airflow is similarly heated to provide a direct measurement of the wind speed. The system functions for any mix of rain and snow, discouraging bird and insect visitors.