A classical theme in harmonic analysis is embodied in the statement: behavior of the modulus of continuity of a function for small parameter reflects in the behavior of the Fourier transform for large parameter. In this talk we present weighted estimates of Fourier transforms in terms of an $L^p$-modulus of continuity defined using spherical means. The viewpoint will be carried out in Euclidean space and rank one symmetric spaces of non-compact type (joint work with M.A. Pinsky, to appear in the Jour. Func. Anal.). I will also present progress in this vein in the realm of general symmetric spaces of Euclidean type and non-compact type. (Received July 20, 2008)