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Jasson Vindas* (jvindas@math.lsu.edu), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803, and **Ricardo Estrada**, Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803. *On the jump behavior of distributions and logarithmic averages.*

The jump behavior and symmetric jump behavior of distributions are introduced and analyzed. We give several formulas for the jump of distributions in terms of logarithmic averages. This is done first in terms of Cesàro-logarithmic means of decompositions of the Fourier transform, and then by obtaining the logarithmic radial and angular behaviors of conjugate harmonic functions. Applications to Fourier series are presented, in particular, we give formulas for jumps of periodic distributions in terms of Cesàro-Riesz logarithmic means and Abel-Poisson logarithmic means of conjugate Fourier series. (Received February 04, 2008)