1046-60-1475 **Libor Pospisil** (lp2185@columbia.edu), Department of Statistics, 1255 Amsterdam Ave, New York, NY 10027, **Jan Vecer** (vecer@stat.columbia.edu), Department of Statistics, 1255 Amsterdam Ave, New York, NY 10027, and **Olympia Hadjiliadis*** (ohadjiliadis@brooklyn.cuny.edu), Department of Mathematics, 1314N Ingersoll Hall, Brooklyn College, C.U.N.Y., New York, NY 11209. *Formulas for Stopped Diffusion Processes with Stopping Times based on Drawdowns and Drawups.*

This paper studies drawdown and drawup processes in a general diffusion model. The main result is a formula for the joint distribution of the running minimum and the running maximum of the process stopped at the time of the first drop of size a. As a consequence, we obtain the probabilities that a drawdown of size a precedes a drawup of size b and vice versa. The results are applied to several examples of diffusion processes, such as drifted Brownian motion, Ornstein-Uhlenbeck process, and Cox-Ingersoll-Ross process. (Received September 15, 2008)