Mizan Rahman* (mrahman@math.carleton.ca), School of Mathematics and Statistics, Carleton University, 1125 Colonel By Dr., Ottawa, Ontario K1S 5B6, Canada. *Green's function for the second order Askey-Wilson operator*. Preliminary report.

A Green's function for a hypergeometric difference equation on a q-quadratic lattice is obtained by using the method of variation of parameters, and Ismail and Rahman's (2002) formula for the inverse of an Askey-Wilson difference operator. Explicit formulas are given for the continuous q-ultraspherical case. (Preliminary Report) (Received September 11, 2006)