1077-90-2182 Charles N Glover* (cnglover@umd.edu), 3117 A. V. Williams, University of Maryland, College Park, MD 20742, and Michael O Ball (mball@rhsmith.umd.edu), Robert H. Smith School of Business, 4471 Van Munching Hall, College Park, MD 20742. Computationally Tractable Stochastic Integer Programming Models for Air Traffic Flow Management.

Weather is a major contributor to air traffic delays. There is much uncertainty associated with weather predictions so stochastic models are necessary to effectively assign ground delay and route adjustments to flights. We describe a two-stage stochastic integer program for this problem and provide proof that the Linear Programming Relaxation of this model always yields integer results. (Received September 21, 2011)