

The source-receptor relationshipsa) United States Models

The results of running the three U.S. models are contained in separate computer print-out files on a 60 by 60 matrix. The matrices are to be consolidated into the eleven source areas used for the Canadian models. These matrices also can be reduced in size by selecting out the columns representing the sensitive receptor areas from the set of all 60 areas. The values are to be presented in the same three ways discussed below for the Canadian models.

For the purpose of illustrating their use, a selected portion of one of the U.S. 60 x 60 matrices is shown in Table 5.1. The three largest U.S. emission source regions (Southern Ohio, Southern Michigan and Southern Indiana) and the largest Canadian emission source region (Sudbury) were chosen, and 10 of the 60 regions were selected as receptors because of their known sensitivity to acid deposition.

This resulted in the 4x10 matrix shown in Table 5.1, and its use can be illustrated as follows. If one is interested in the impact of a given source, for example S Ohio, one reads down the column headed "46 S. Ohio" and the annual deposition of sulfur at each receptor is given. Conversely, if one is interested in the contribution to a given receptor area, for example Adirondack, one reads across the row headed "8 Adirondack".