

XIII.B. USE OF TEMPORARY DATA FILES TO STORE INTERMEDIATE RESULTS

Output to and input from temporary files is a time-honored method of saving memory at the expense of run time. In versions of SAMMY prior to M5, the use of temporary files also provided the necessary linkage from one module to another; I/O for this purpose has now been eliminated, since the segments of the code are now united into one large code. Nevertheless there are still many temporary files created by a SAMMY run; these are being phased out as modernization of the code proceeds. For now, upon successful completion of a SAMMY run, the temporary files may be deleted.

It is still occasionally possible for the author to debug the code in a piece-wise fashion, one segment at a time. However, it now requires a bit more planning. First, a SAMMY run is made that includes the alphanumeric line

STOP *xyz* *n*

in the INPut file, where *n* is a one-digit integer preceded by two spaces, and *xyz* is the name of the segment for which debugging is needed. This line is a command to SAMMY to cease execution just prior to the beginning of the *n*th pass through segment *xyz* and generate the temporary files that permit restart of that segment alone. After this run finishes, those temporary files can, in principle, be used as input for debugging on segment *samxyz*. However, with modern high-speed computers, it is now generally more trouble to ensure that the one segment runs properly than to run the entire program. This capability is gradually being eliminated, and the additional routines necessary for reading the temporary files and starting a run in the middle are no longer distributed with the code.

The temporary files generated by SAMMY are listed in Table XIII B.1. “Standard” names referenced in the third column of the table are “SAMxx.DAT,” where “xx” is replaced by the unit number. Caution: The list in Table XIII B.1 may not be completely accurate.

Input and output files are also included in Table XIII B.1, without detailed explanation. For a more comprehensive list of input files, see Table VI.1. For a list of output files, see Table VII.1.