

XII.C. MONTE CARLO SIMULATIONS OF MULTIPLE-SCATTERING CORRECTIONS

One aspect of the SAMMY quality assurance program is the use of any and all available methods for double-checking the implementation of the various features in the code. For the multiple-scattering corrections for capture or fission data described in Section III.D, the most reliable checking method is Monte Carlo simulation of those corrections. The code SAMSMC (Section X.M) is used for these simulations. Sample simulations are stored in subdirectories samsim/sim001 through samsim/sim008; details are shown in Table XII C.1. The command file in each subdirectory is called simxyz, where xyz is the three-digit simulation number.

Table XII C.1. Sample Monte Carlo simulations

Simulation Number	Sample composition	Related test case number
sim001	^{58}Ni	tr039
sim002	natural Sm plus heavy water	
sim003	^{137}Ba	tr060
sim004	natural Si	
sim005	^{28}Si ; artificial data	
sim006	Natural Li Cl	
sim007	^{35}Cl with proton channel	
sim008	W	
sim009	^{55}Mn	