

CMAQ Operational Guidance document

List of Figures

[Figure 4-1. CMAQ Modeling Framework](#)

[Figure 4-2. CMAQ Chemistry-Transport Model \(CCTM\) and input processors](#)

[Figure 4-3. Meteorology preprocessing for CMAQ with MCIP](#)

[Figure 4-4. Initial and boundary conditions preprocessing for CMAQ](#)

[Figure 4-5. Clear-sky photolysis rate preprocessing for CMAQ](#)

[Figure 4-6. Invoking new/modified gas-phase chemical mechanisms in CMAQ](#)

[Figure 4-7 Process analysis implementation in the CMAQ modeling system](#)

[Figure 4-8 Lightning data preprocessor for CCTM](#)

[Figure 4-9 Crop calendar data preprocessor for the CCTM](#)

[Figure 4-10. CMAQ chemistry-transport model and associated preprocessors](#)

Figure 7-1.CMAQ core programs

Figure 7-2. BCON input and output files

Figure 7-3. Calmap input and output files

Figure 7-4. CCTM input and output files

Figure 7-5. CHEMMECH and CSV2NML input and output files

Figure 7-6. ICON input and output files

Figure 7-7. JPROC input and output files

Figure 7-8. LTNG_2D_DATA input and output files

Figure 7-9. MCIP input and output files

Figure 7-10. PROCAN input and output files

Figure 9-1. CMAQ Horizontal grid Convention

Figure 9-2. CMAQ benchmark grid

Figure 10-1. 36-km four-day modeling period IC/BC schematic

Figure 10-2. 12-km nested two-day modeling period IC/BC schematic

List of Tables

Table 5-1. Software required for running CMAQ

Table 5-2. Optional support software for CMAQ

Table 5-3. NetCDF and I/O API compilation options for CMAQ

Table 5-4. Config.cmaq Configuration Variables

Table 6-1. Possible Time Step Structures in I/O API Files

Table 6-2. Possible Data Type Structures in I/O API Files

Table 6-3. Possible values for OPEN(3) FSTATUS

Table 6-4. IO API data retrieval routines

Table 6-5. I/O API data manipulation utilities

Table 7-1. BCON input files

Table 7-2. BCON output files

Table 7-3. Required Calmap input files

Table 7-4. Required Calmap input files

Table 7-5. Required CCTM input files

Table 7-6. Optional CCTM input files

Table 7-7. CCTM base output files

Table 7-8. CCTM optional output files

Table 7-9. CHEMMECH input files

Table 7-10. CHEMMECH output files

Table 7-11. CSV2NML input files

Table 7-12. CSV2NML output files

Table 7-13. ICON input files

Table 7-14. ICON output files

Table 7-15. JPROC input files

Table 7-16. JPROC output files

Table 7-17. LTNG_2D_DATA input files

Table 7-18. LTNG_2D_DATA output files

Table 7-19. MCIP input files

Table 7-20. MCIP output files

Table 7-21. PROCAN input files

Table 7-22. Process analysis global commands

Table 7-23. Integrated process rate output commands

Table 7-24. Integrated process rates process codes

Table 7-25. Integrated reaction rate output commands

Table 7-26. PROCAN output files

Table 8-1. CMAQ input files

Table 8-2. Coordinate system description segment of GRIDDESC

Table 8-3. Grid definition segment of GRIDDESC

Table 8-4. GC species namelist file format

Table 8-5. IC_PROFILE format description

Table 8-6. BC_PROFILE format description

Table 8-7. CSQY format description

[Table 8-8 ET file format description](#)

[Table 8-9. PROFILES file format description](#)

[Table 8-10 TOMS Data Profile](#)

[Table 8-11. JTABLE file format description](#)

[Table 8-12. OMI data format](#)

[Home](#)