

AERMOD MPI™ Version 12060

AERMAP MPI™ Version 11103

Getting Started

1. About AERMOD MPI & AERMAP MPI (8-Core)

AERMOD MPI is Lakes Environmental parallel version of the AERMOD model. **AERMOD MPI Version 12060** is the parallel version for the US EPA AERMOD model dated 12060 released by the US EPA on March 2, 2012.

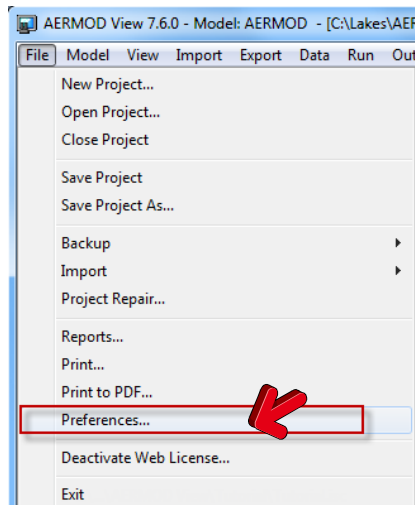
AERMAP MPI is Lakes Environmental parallel version of the AERMAP model. **AERMAP MPI Version 11103** is the parallel version for the US EPA AERMAP model dated 11103 released by the US EPA on April 13, 2011.

AERMOD MPI and **AERMAP MPI** are limited to a maximum of 8-cores.

2. Running AERMOD MPI in AERMOD View

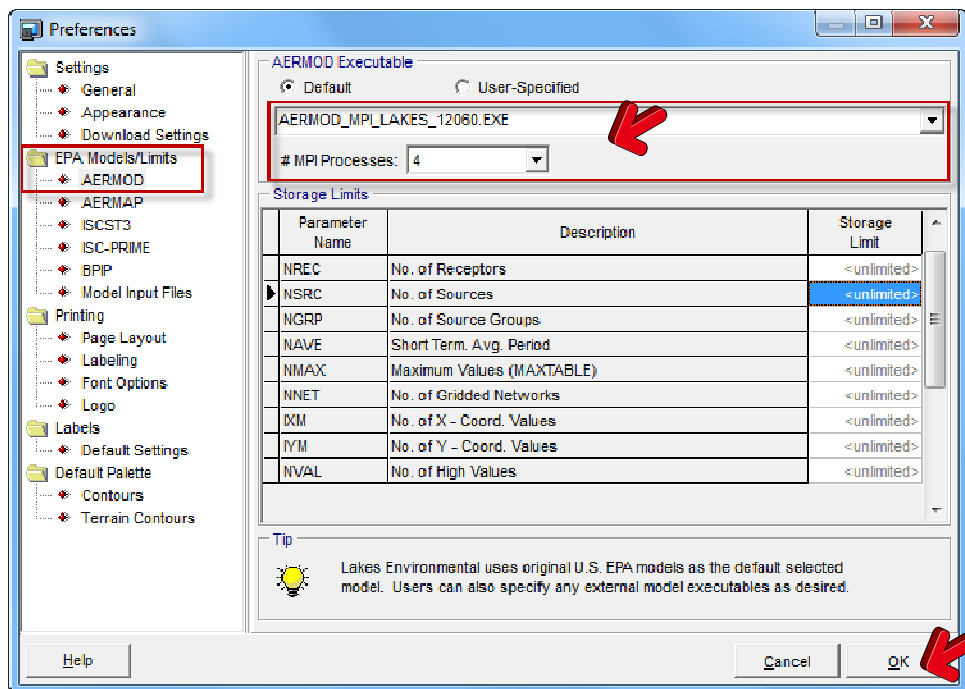
Once **AERMOD View** and **MPICH2** are installed in your computer, you will have access to the AERMOD MPI executable through the **Preferences** dialog in AERMOD View. The AERMOD MPI executable can be specified in the same way that you would specify any other AERMOD executable. See steps below:

Step 1: Open the **Preferences** dialog by clicking **File | Preferences** from the menu.



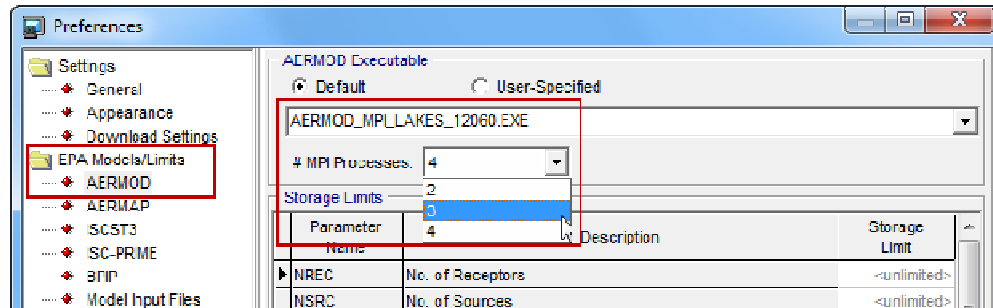
Step 2: In the **Preferences** dialog, select **EPA Models/Limits | AERMOD**.

Step 3: Make sure the **Default** radio button is selected, and select **AERMOD_MPI_LAKES_12060.EXE** from the drop-down list.

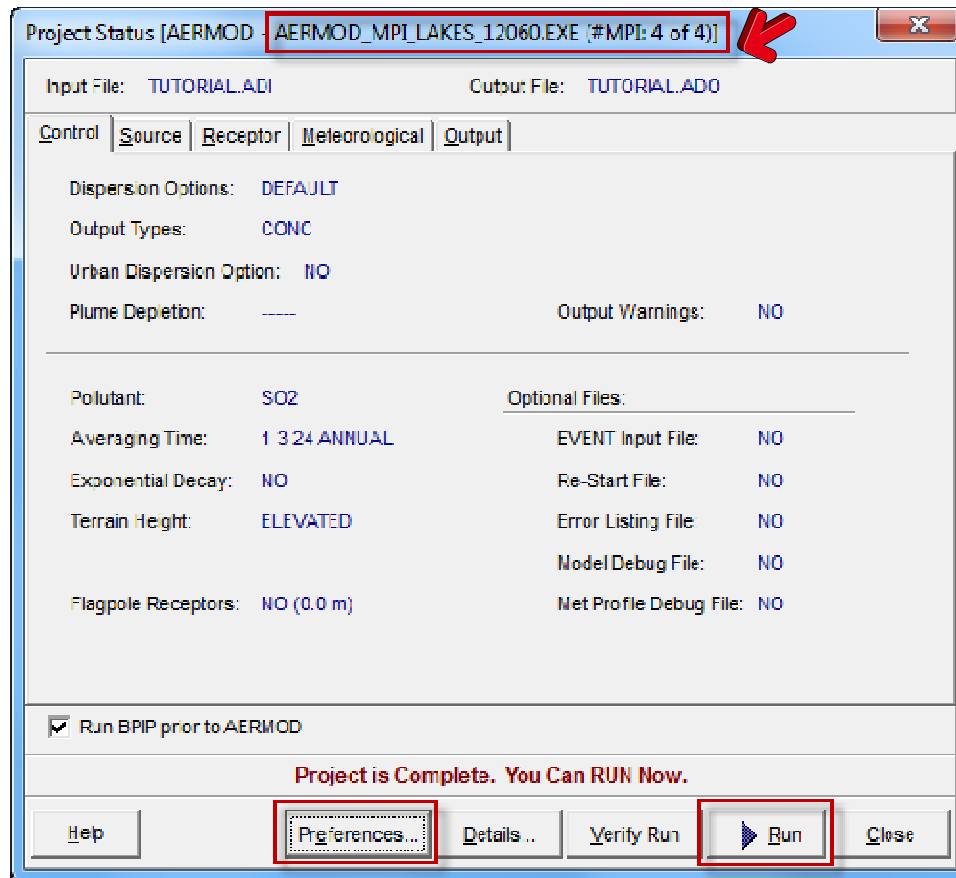


Note: The executable name, **AERMOD_MPI_LAKES.EXE**, will always correspond to the most recent version of the AERMOD MPI version, in this case, version 12060.

Step 4: You can select to run the AERMOD MPI with a reduced number of cores/processes. This option is available when you specify an AERMOD MPI Executable. The **# MPI Processes** list box will automatically detect how many processors you have in your computer and select this option as the default. Click the **OK** button to save the changes and close the **Preferences** dialog.



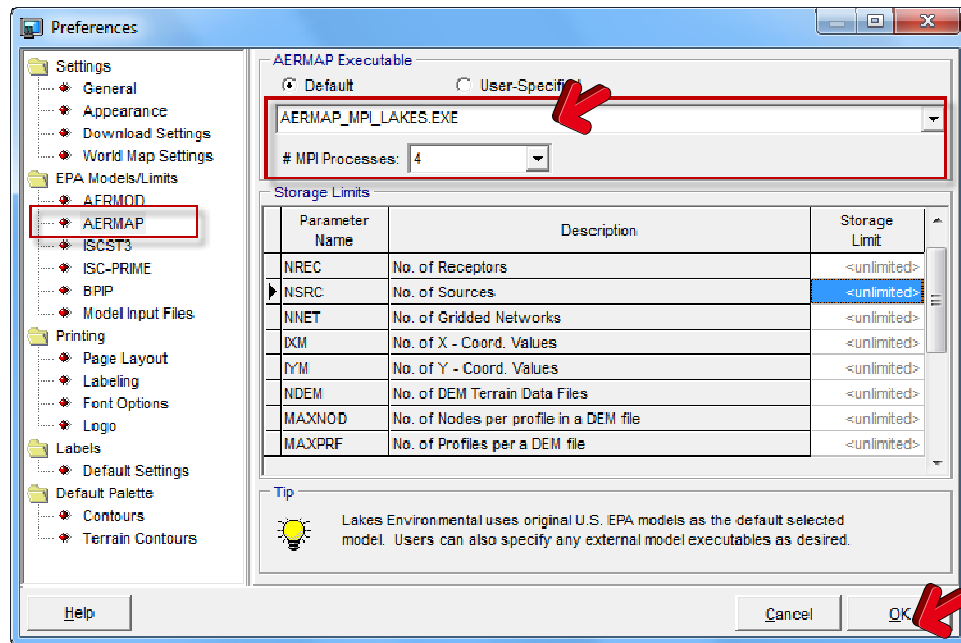
Step 5: AERMOD View will automatically recognize the selected AERMOD MPI executable and the selected number of processes next time you try to run the AERMOD model.



3. Running AERMAP MPI

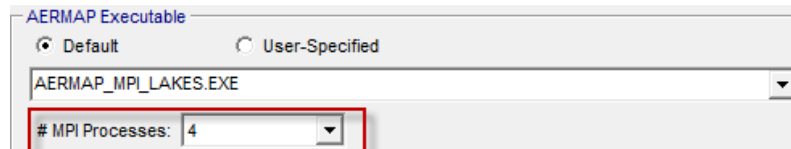
Once **AERMOD View** and **MPICH2** are installed in your computer, you will have access to the AERMAP MPI executable through the **Preferences** dialog in AERMOD View. The AERMAP MPI executable can be specified in the same way that you would specify any other AERMAP executable. See steps below:

- Step 1:** Open the **Preferences** dialog by clicking **File | Preferences** from the menu.
- Step 2:** In the **Preferences** dialog, select **EPA Models/Limits | AERMAP**.
- Step 3:** Make sure the **Default** radio button is selected, and select **AERMAP_MPI_LAKES.EXE** from the drop-down list.

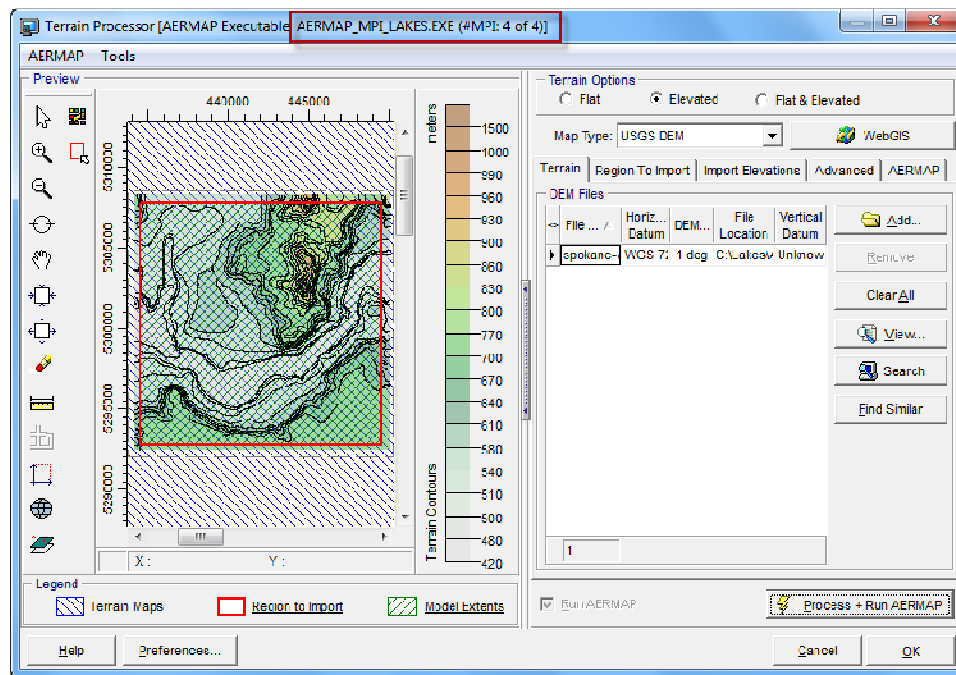


Note: The executable name, **AERMAP_MPI_LAKES.EXE**, will always correspond to the most recent version of the AERMAP MPI version, in this case, version 11103.


Step 4: You can select to run the AERMAP MPI with a reduced number of cores/processes. This option is available when you specify an AERMAP MPI Executable. The **# MPI Processes** list box will automatically detect how many processors you have in your computer and select this option as the default. Click the **OK** button to save the changes and close the **Preferences** dialog.

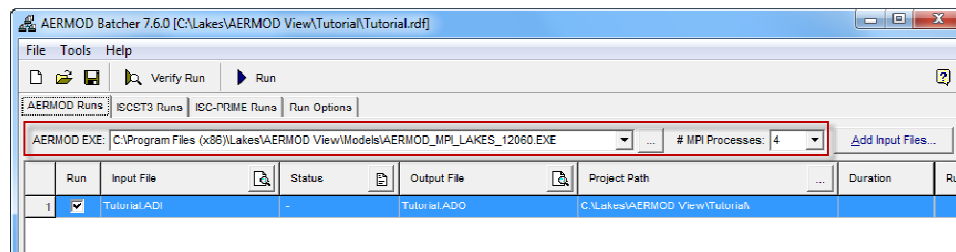


- Step 5:** AERMOD View will automatically recognize the selected AERMAP MPI executable and the selected number of processes next time you try to run the AERMAP model within the **Terrain Processor** window.



4. Running AERMOD MPI in Batcher

- Step 1:** Start **Batcher** either from within AERMOD View (**Run | Batcher** menu option) or from the Windows Start menu.
- Step 2:** The AERMOD Batcher is displayed. You can select the AERMOD MPI Executable (e.g., AERMOD_MPI_Lakes_12060.exe) from the drop-down list box or by pressing the  button.
- Step 3:** Specify the number of **MPI Processes** to be used and then you are ready to specify your **AERMOD input files** and press the **Run** button to start processing.



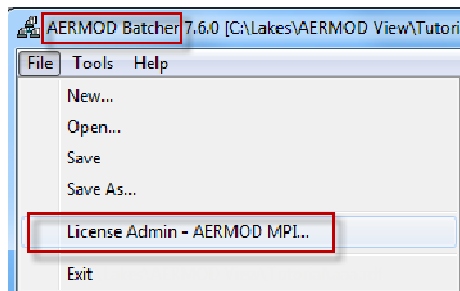
5. Activating AERMOD MPI License in a 2nd Computer

With each AERMOD View single seat license, **you receive an additional Web License activation for the AERMOD MPI Executable** only. This way, you can install AERMOD View in your computer and in a separate computer; **activate the AERMOD MPI Web License**, and run AERMOD MPI executable using the **Batcher** program in the second computer.

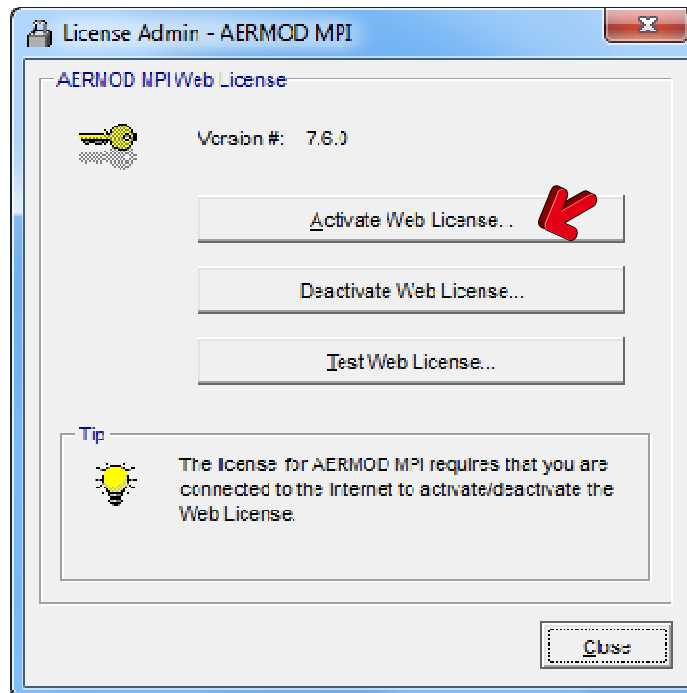
Note: Please note that the **AERMOD View license can only be activated in one computer**. The second activation for the **AERMOD MPI** is to allow you to run projects that will take many hours/days to run using **Batcher** and the **AERMOD MPI** executable. This will allow you to work with the AERMOD View interface for your other smaller projects.

How to Activate your Second AERMOD MPI License:

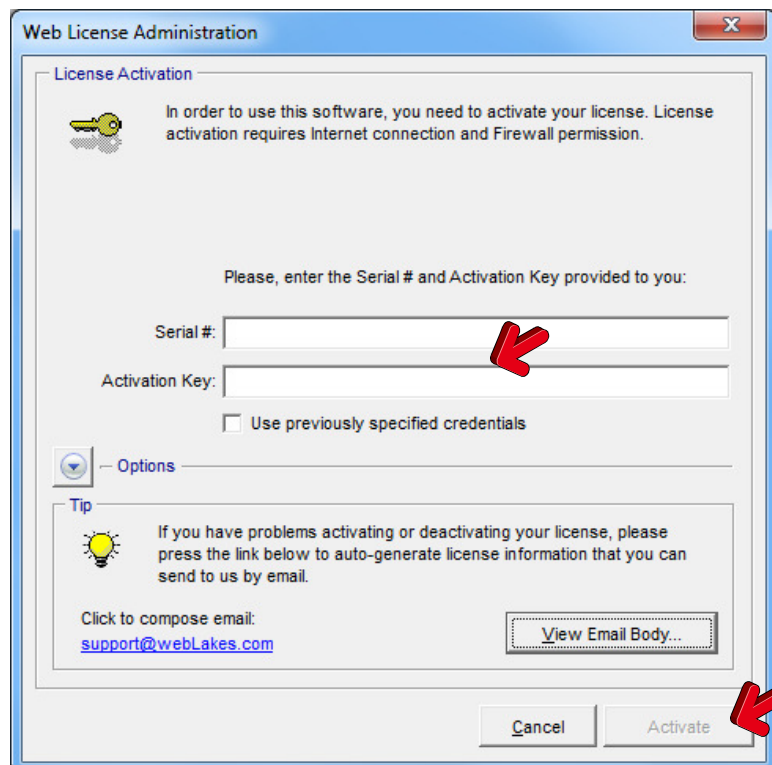
Step 1: From Batcher, select the menu option **File | License Admin – AERMOD MPI**.



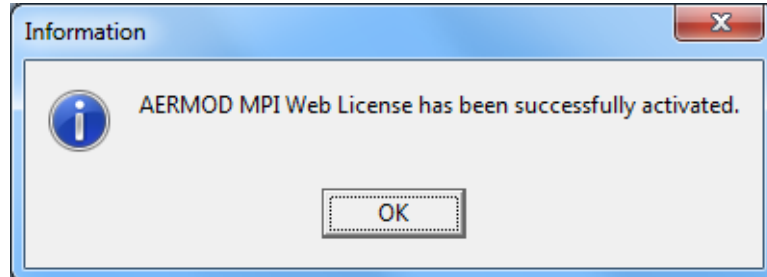
Step 2: The **License Admin** dialog is displayed. Press the **Activate Web License** button.



Step 3: The **Web License Administration** dialog is displayed. Specify the **Serial #** and **Activation Key** for **AERMOD MPI** you received by email and press the **Activate** button.



Step 4: A message is displayed stating that the license was successfully activated. Press **OK** and then close the **License Admin** dialog.



Note: You do not have to activate the AERMOD MPI license in the computer that you already have AERMOD View License activated (HASP Key or Web License). The **AERMOD MPI License** is a second activation for another server/computer to run the **AERMOD MPI** executable using **Batcher**.

6. Important Notes

1. The AERMOD MPI is a multi-core capable model that is built to utilize the complete set of computing resources to gain maximum performance. Such resource utilization is very rigorous on the system components because it uses the electronic components to the fullest. It is always advisable, when running Lakes Environmental AERMOD MPI, **to have proper cooling system for your computer**. You can also choose to run AERMOD MPI using a smaller number of cores **to prevent over-heating**.
2. Please note that the **AERMOD View license can only be activated in one computer**. The second activation for the **AERMOD MPI** is to allow you to run projects that will take many hours/days to run using **Batcher** and the **AERMOD MPI** executable. This will allow you to work with the AERMOD View interface for your other smaller projects.
3. Depending on your operating system and security settings, when running AERMOD MPI within AERMOD View you may be prompted to unblock **MPICH2**, please select **Unblock**.

