# 3D Convection through an Electronics Box - Numerical Solution

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Problem Specification

1. Pre-Analysis & Start-Up

2. Geometry

3. Mesh

4. Physics Setup

5. Numerical Solution

6. Numerical Results

7. Verification & Validation

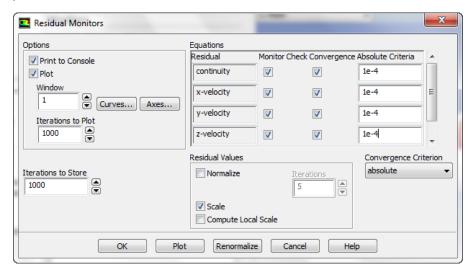
Exercises

Comments

## **Numerical Solution**

#### **Monitors**

Now, we need to set the parameters controlling the solver. In the *Outline*, select *Monitors*. In the *Monitors* window, select *Residuals - Plot,Print* and press *Edit...*. Set the *Absolute Criteria* for each variable to 1e-04.



### **Solution Initialization**

Next, we need to initialize the solution. In the *Outline*, select *Solution Initialization*. Under *Compute From*, select *Inlet*, and press *Initialize*. Press *OK* in the window that pops up. We are now ready to solve the simulation.

#### **Run Calculation**

In the Outline, select Run Calculation. Set the Number of Iterations to 5000 and press Calculate. The simulation will take a couple of hours to run. In addition, the solution may not converge.

Go to Step 6: Numerical Results

Go to all FLUENT Learning Modules