

*SUpport to SAfety ANalysis of Hydrogen and Fuel Cell Technologies*

<b>Verification type</b>	Methodology
<b>Database reference</b>	MET-13
<b>Topic / Application</b>	Methodology Analytical solution Manufactured Solution
<b>Physics</b>	Navier Stokes  Turbulence  Radiation  Continuity
<b>Summary</b>	Comprehensive document on verification of a CFD code (FDS) with verification test cases.
<b>Description</b>	This document is focussed on the procedures and the test cases for verification of the CFD code FDS. The document provides a well structured set of verification test cases focussing on the Navier-Stokes Equations, continuity/conservation tests, and radiation tests.  The references include previous analytical tests, numerical tests (2.2), and grid sensitivity tests (section 2.3.1) as well as new tests presented in the text.
<b>Case Title</b>	Fire Dynamics Simulator (Version 5) Technical Reference Guide Volume 2: Verification
<b>Authors</b>	Randall McDermott, Kevin McGrattan, Simo Hostikka, Jason Floyd
<b>Year</b>	2010
<b>Online reference</b>	NIST Special Publication 1018-5
<b>Case image</b>	
<b>Governing equations</b>	Refer to document.
<b>Results</b>	Refer to document