

SUpport to SAfety ANalysis of Hydrogen and Fuel Cell Technologies

Verification type	Methodology
Database reference	MET-13
Topic / Application	Methodology Analytical solution Manufactured Solution
Physics	Navier Stokes Turbulence Radiation Continuity
Summary	Comprehensive document on verification of a CFD code (FDS) with verification test cases.
Description	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.
Case Title	Fire Dynamics Simulator (Version 5) Technical Reference Guide Volume 2: Verification
Authors	Randall McDermott, Kevin McGrattan, Simo Hostikka, Jason Floyd
Year	2010
Online reference	NIST Special Publication 1018-5
Case image	
Governing equations	Refer to document.
Results	Refer to document