RELAP/SCDAPSIM

RS3.x Versions

Advanced 2D/3D fuel & severe accident models for LWR/PHWR's (includes the influence of burn-up, air ingestion, advanced cladding/fuel materials)

Validated using an extensive database-TMI-2, LOFT-FP, PHEBUS-FPT, PBF-SFD, CORA, QUENCH, PARAMETER(VVER)

v3.4 Build 10/2018

"Frozen" Production version used for licensing & safety studies

v3.5 Build 10/2018

R&D version, used for ongoing JH/SA experiment design & analysis, for advanced cladding materials, spent fuel storage, Fukushima de-commissioning R&D

v3.6 Build 05/2018

R&D version with specialized models for CANDU's & other HPWR safety and R&D activities

RS4.x Versions

Advanced multi-D BFPU fuel models for advanced fluid systems (included Pb-based & Na, molten salts, He and other non-condensible gases)

Advanced numerics and programming for high performance, easy maintenance

Used to support advanced fluid systems including ITER, SCWRS, & SMR's

v4.0 Build 05/2018

"Frozen" Production version used for licensing & safety studies

v4.1 Build 05/2018

R&D version with advanced porous media for pebble beds, liquid-gas mixtures
Note increasing courant limit as flowrate drops.
CANDU

G.R.A.P.E.

2D RELAP/SCDAPSIM GUI Interface

VVER
ISS staff and direct consultants have more than 150 years of combined RELAP and SCDAP code development experience

- R. Wagner (retired) – RELAP5 programmer and chief architect
- L. Siefken (retired) – FRAP-T6 and SCDAP lead model developer
- G. Berna (retired) – FRAPCON lead and SCDAP model developer
- J. Hohorst – Lead SCDAP/RELAP5 code assessment
- M. Perez – Uncertainty analysis & RELAP development
- R. Pericas – SCDAP Development
- C. Allison – Technical project leader SCDAP/RELAP5
- B. Allison – IT

Faculty and staff at regional training centers are experts in thermal-hydraulics, numerical techniques, and plant applications

Code Versions

v3.4, v3.5(SCDAP), v3.6, v4.0, v4.1(experimental)

System Requirements

Windows 7-10, Linux, Mac OS X
1 GB SDRAM Free
200MB free disk space for install