Welcome to the
24rd CATHARE Users Club meeting

October 12th – 14th, Grenoble, France

Introduction

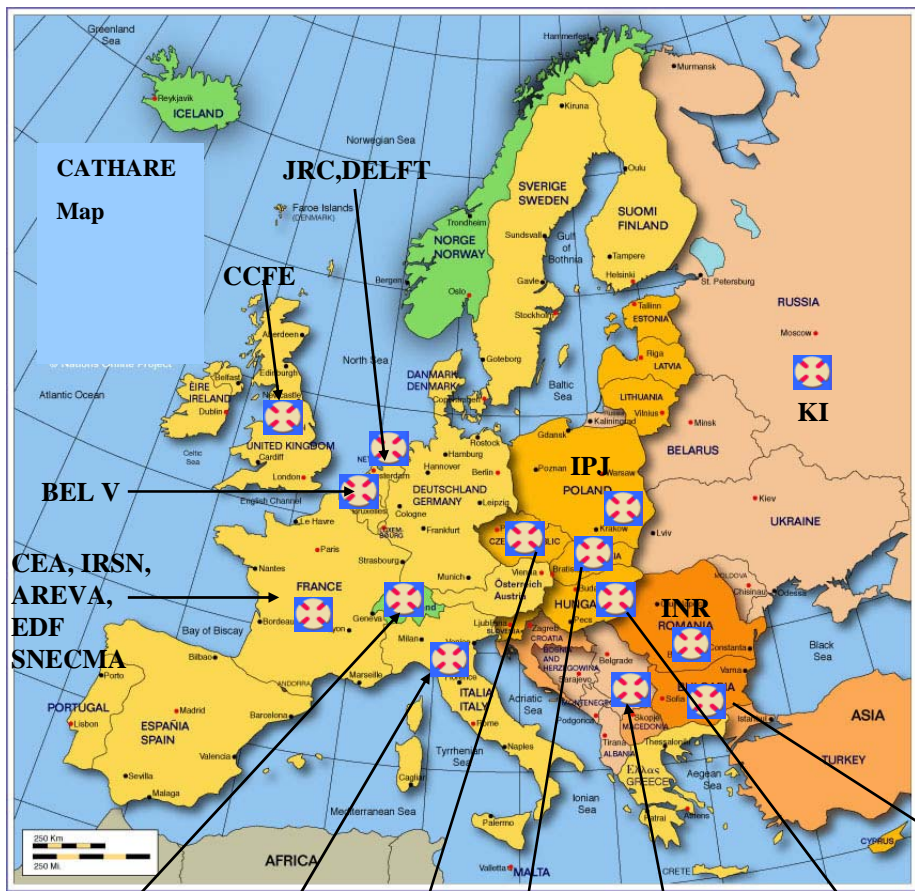Dominique BESTION - CEA

CATHARE 2 V2.5_2 distributions worldwide

18 countries and 31 organisations

CATHARE 2
V25 series

CATHARE Map

JRC,DELFT

CCFE

BEL V

CEA, IRSN, AREVA, EDF SNECMA

KI

IPJ

INR

INRNE

AEKI

ENSI, PSI

ENEA, PISA

NRI

IVS, VUJE

BELGRADE
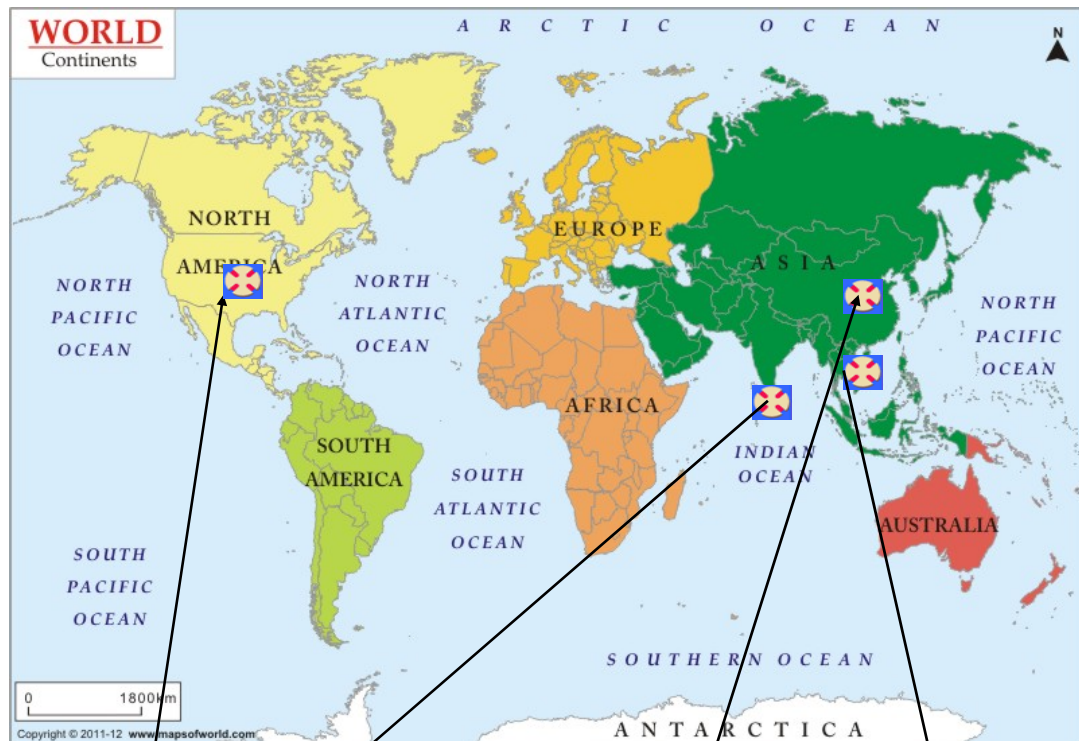
BARC

In progress
TEXAS, NRC

CGNPC, NPIC, CIAE, BINE

VARANS
VAEC

CATHARE User's Club-2011, Grenoble, France

AREVA   cea   edf   IRSN INSTITUT DE RADIOPROTECTION ET DE SÛRETÉ NUCLÉAIRE

CATHARE 2 users

❑ For the last 23rd CUC : 16 licensed CATHARE **V2.5_1** organizations

❑ Today : 35 organisms have requested for the CATHARE 2 **V2.5_2** versions

  ❖ 17 organizations have signed a V2.5_2 license

  ❖ Range of applications :

  o International programs (PKL, ROSA, ISP-ATLAS, PSB, PMK, THINS, NURISP, RAPHAEL, ESFR)

  o Coupling with ICARE

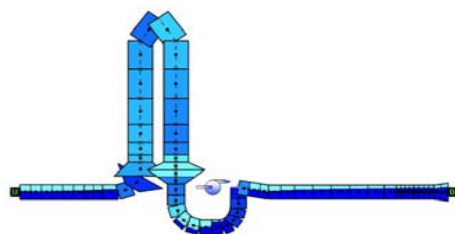 o VVER, Lead and sodium fast reactor, Gas cooled reactor
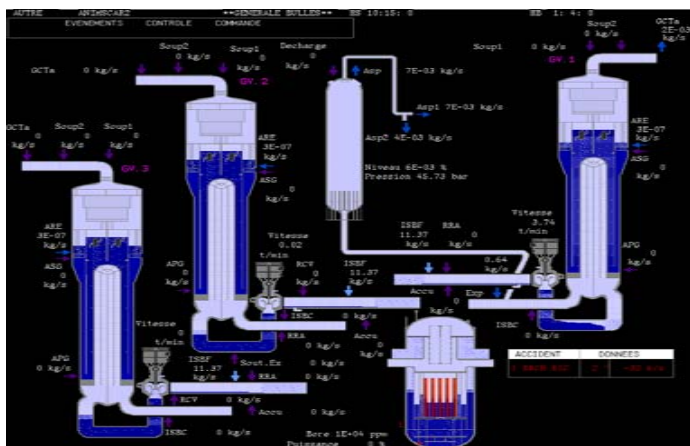
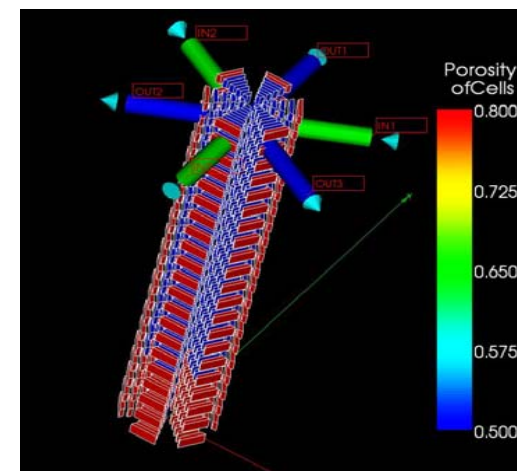 o ITER

24th CUC : October 12-14, 2011 in Grenoble

The CUC is the opportunity :

- For all the users : to show their works on various applications and to share experience on the CATHARE nuclear reactor safety code

- For the CATHARE team : to present features and functionalities of the new version of the CATHARE code

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FONESYS: FORUM & NETWORK OF SYS-TH CODES IN NUCLEAR REACTOR THERMAL-HYDRAULICS

The targets for FONESYS are:

- To promote the use of SYS-TH Codes and the application of the BEPU approaches.
- To establish acceptable and recognized procedures and thresholds for V&V.
- To create a common ground for discussing:
  - envisaged improvements in various areas, including user-interface,
  - the connection with other numerical tools, including CFD Codes.

Members:

- GRNSPG-UNIPI: initiator and organizer
- VTT (Finland) for APROS
- GRS (Germany) for ATHLET
- CEA –EDF-AREVA-IRSN (France) for CATHARE2 and CATHARE3
- AECL (Canada) for CATHENA
- Gidropress (Russia) for KORSAR and TECH-M
- KINS (Korea) for MARS
- KAERI (Korea) for SPACE
- INL (US) for RELAP5-©

FONESYS: FORUM & NETWORK OF SYS-TH CODES IN NUCLEAR REACTOR THERMAL-HYDRAULICS

Example of topics treated at previous meeting:

➢ "The way to make hyperbolic the system of equations and the virtual mass" by D. Bestion (CEA)

➢ "Statements about mesh convergence" by D. Bestion (CEA)

➢ "Comparison between 6 equation and drift flux" by D. Bestion (CEA)

➢ "Sample code-to-code benchmark on void fraction distribution and CHF" by A. Kovtonyuk (GRNSPG)

➢ "Proposals of code- to-code benchmark steady state and transient: CHF, Reflood and PRZ" by A. Kovtonyuk (GRNSPG)

➢ "Notes about TH-SYS Codes in available Publications" by F. D'Auria (GRNSPG)

   o Prof. D'AURIA has presented three papers by Zuber, Hewitt and Wulff with aggressive criticism on SYS T-H codes (both development and use of them). Prof. D'AURIA underlined that one of the goals of FONESYS is to address these type of critics and ensure the trust of users and regulatory bodies in the validity and the applicability of SYS T-H codes.

➢ "Transport of interfacial area in system codes" by D. Bestion (CEA)

We may present some status of FONESYS activities at the CUC meetings

3rd FONESYS WORKSHOP will be held 12-14 December 2011 in PISA

You may suggest new items

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