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# **KNMI** Applications on Testbed 1

...and other activities

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#### Contents:

- Test & Validation Plans:
  - WP9: ESA, IPSL, KNMI
  - KNMI test plans in more detail
  - Goals for testbed 1
- Current status
- Questions



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#### WP9 tests



- All tests described in: DataGrid-09-TEN-0601-1\_2.doc
- Common time line defined at Frascati WS
- ESA, IPSL and KNMI have separate tests, which can be carried out independently:
- Test were presented at TWG meeting at CERN

Documents

### **Detailed** Plans

- Common WP9 template format for all partners & experiments
- A 'live', evolving reference document
- Designed to identify issues to be clarified
- Used for testbed reporting

### Spreadsheet

- Plans at a glance
- Timelines
- Overall plans and individual partner schemes



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### KNMI test plans

- 1. Basic authentication and authorization tests
- 2. Run 'hello world' script (csh-script)
- 3. FORTRAN job submission
- 4. Test job life cylce (from WP1 doc)
- 5. Replica Catalogue
- 6. Run header extractor
- 7. test WP4 tools ?
- 8. Run OPERA code

KNMI SGI farm is not part of Testbed 1 (only User Interface will run at KNMI)



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## ....KNMI plans in (much) more detail



KNMI-1 Basic authorization and authentication tests KNMI-2 Run 'hello world' script (csh-script) KNMI-3a Run Fortran program printing "hello from Fortran" KNMI-3b Run FORTRAN program, forcing the CE KNMI-4 Test job life cylce KNMI-5a Use GDMP to register a GOME level 1 file (LFN) KNMI-5b Test what happens if same file is registered twice KNMI-5c Retrieve file from ReplicaCatalogue to local disk KNMI-5d Remove a file from the ReplicaCataloge KNMI-5e Remove the master copy of a file KNMI-6a Run script to retrieve the header of a level 1 file, Retrieve directly KNMI-6b Run script to retrieve the header of a level 1 file. Use SE for storage & retrieval KNMI-7a Start job and monitor the CE its executing on KNMI-7b Monitor an SE, use 6b as basis KNMI-7c Configure a node using WP4 tools KNMI-7d Configure node to run OPERA S/W KNMI-8a Use OPERA code to process one level 1 file KNMI-8b Use OPERA code to process one level 1 file, store result on SE (result available for GRID) KNMI-8c Use OPERA code to process one day of data (14 files), store results on SE KNMI-8d Use OPERA code to process one week of data ((7\*14 files), store results on SE

# Goals for testbed 1

- Simple job submission & monitoring
- Use of i/o sandboxes
- Data replication and LFN to PFN translation
  - File open
- Application Environment
  - Prepare & install RPMs
  - Test case to select app environment
- Application deployment
  - IDL, FORTRAN, OPERA app



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### Goals for testbed 1 (II)



Running OPERA code to retrieve ozone profiles from GOME level 1 data

OPERA is a FORTRAN implementation of the DOAS ozone profile retrieval algorithm developed at KNMI.

- ESA will derive ozone profiles from the same data set. (with their own algorithm)
- IPSL will compare them (using ground based measurements)

### Current status:

K NMI

- Agreed on a common GOME dataset (November 28 to December 4, 1999)
- John is EO-VO admin
- Accounts on compact@sara and login@nikhef
- Data set copied to compact
- Working on OPERA code on compact (Get OPERA code running)
- Agreed on a 'workable situation' with our IT department. (DataGrid UI machine outside firewall in other domain than KNMI)
- Writing test scripts



## Questions

- Uncertainty about the attendance of the Testbed 1 tests at CERN.
- proxy's and services needed by the DataGrid S/W in the future for firewall configuration

