

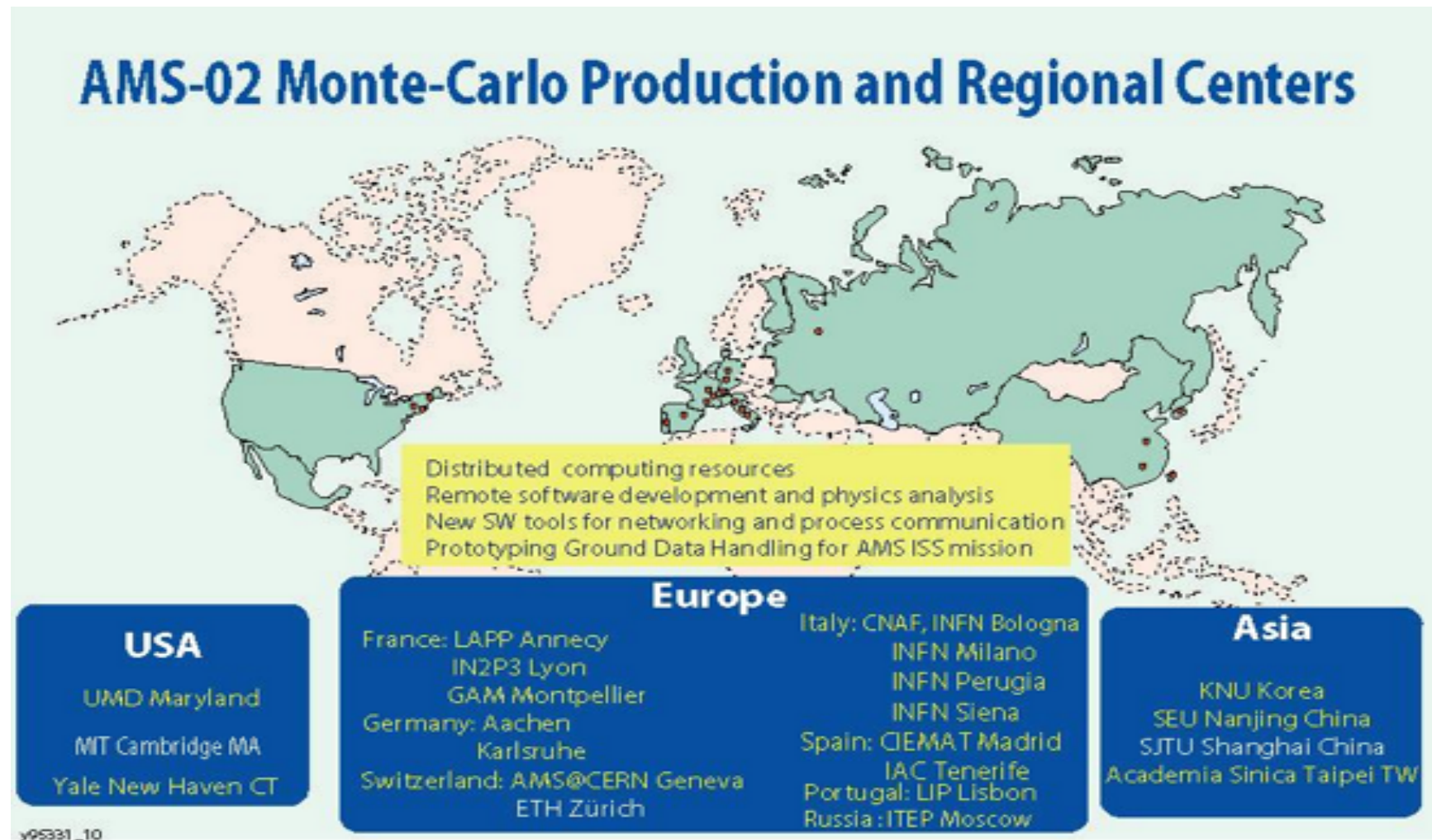
AMS-02 Computing & Software News

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Started Feb 2005; Finished Feb 2006.

Includes both AMS01 & AMS02 Simulation



- AMS-Wide Effort;
- Over 8 TB of Root Files Produced;
- Over 13,000 CPU Days Spent;
- About 500,000,000 LVL1-triggered Events Fully Simulated and Reconstructed.

- Oracle Database was moved from alpha servers to linux platform;
- Oracle 10g is currently used;
- Some DB related software have been rewritten;
- Queing requests response is greatly improved.

- Minor Updates in RICH & Root Sections;
- Major Update in TOF Section.

The new design of TOF/ANTI front-end electronics(SFET and SFEA cards) require the existing TOF/ANTI software to be significantly changed,namely:

- Modification of TOF/ANTI simulation software to implement new TDC-chip logic and new format of SFET(A)-card output (new FastTrigger and "half-plane summed" Time-History channels).

Status: preliminary version ready but wait for algorithm/parameters tuning based on real SFET(A) prototype tests.

- Modification of TOF/ANTI reconstruction software to implement new SFET(A) output format, new features of combined TimeHistory channel and new crate/slot/readout_channels assignment to physical counters/ PMTs.

Status: job in progress and also need cards prototype test results for completion.

- Modification of TOF/ANTI offline calibration software to accomodate new cards output formats.

Status: have to be done.

- Develop (with TOF group participation) algorithm and calibration/ reconstruction software for TDC-chip differential nonlinearity corrections.

Software Updates

Status: have to be done.

- Modification of trigger level1/3 simulation software.

Status: done.

- Recreate the complete set of TOF/ANTI calibration parameters using MC simulation data created after the completion of all above and some other less important steps.

Status: in preparation.

- Preliminary MC mass production is foreseen NET Aug 2006 (also depends on TOF/ANTI final hardware specifications readiness).

SOC: Funding Request

Item	Cost (kCHF)
MainFrame (4-Way Xeon)	37
Afs Server (2-Way Xeon)	17
Backup System (FireWire IDE Disks)	10
Storage System (Apple X serve)	23
AMS Production Node Final Prototype	5
Control & Network Equipment	6
1/2 ManYear System Administrator	25
Maintenance of existing equipments	27
Total Of	150