Volcano Dance
A Creative Union of Science, Technology & Art

Tom Fryer (DANTE, UK)

Internet2 Fall Member Meeting, 2009

Collaboration Special Interest Group

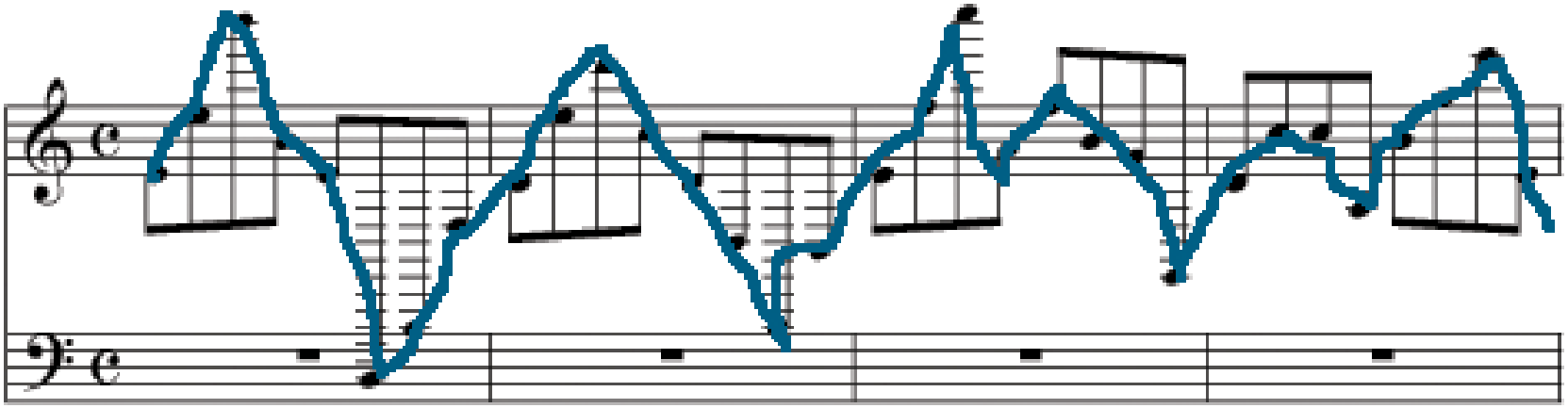
Wednesday, October 7, 2009

Converting Volcano Seismograms into Music - Why & Who?

- To make volcano seismograms audible
- To correlate seismic stages with melodies and/or sounds
- To discover the “signature tune” of an eruption
- To save human lives!

- Began in Italy (Mount Etna) in 2001
- Ecuador became involved (Mount Tungurahua) in 2006
- Philippines joined in (Mts. Mayon & Pinatubo) in 2008/9

Converting the Seismogram to Music



Sonification on Computing Grids

- Digital sound synthesis is computationally demanding
- Grids provide the necessary computing power and distributed data storage
- The **EGEE**, the **EELA** (and **EELA2**) and the **EUMEDGRID** grid infrastructures were used on **GEANT**, **EUMEDCONNECT** and **RedCLARA** backbones:
  - More than 30,000 computer processors across Europe, Latin America and lower Mediterranean involved.
- Researchers share information, data, experiences and knowledge.

The Mountain:
From Science to the Arts

- The Mountain by CityDance Ensemble: world premiere 10-11 Sept 2009, The Kennedy Center for Performing Arts, Washington DC, USA
- Music by Domenico Vicinanza (based on seismograms of 4 volcanoes: Etna, Tungurahua, Pinatubo, Mayon), Choreography by Jason Garcia Ignacio
- Info: **www.volcanodance.org**