Lamont Data System (LDS) 1987 - 2009

(aka: DAQCS & RVDAS among others)

UNOLS RVTEC November 18, 2009

Design Drivers

- As simple as possible
- ⁸ Up 24 x 7 x 365.....
- Reliably capture & log what comes out of the devices (no missing data)
- Accurate time stamping
- Standard protocols

Implementation

- Unix-based OS
- C & Perl
- Single process per "device"
- Real-time access to data w/o risk
- Distributed (network) logging devices
- Command-line interface

History

- 1987 (Conrad) Masscomp/RTU 4
- SGI/IRIX 1990 (Ewing)
- Sun/SunOS (4.1) (Ewing)
- Sun/Solaris (Ewing/Langseth)
- Linux (Palmer, Gould, Healy, SCICEX...)

New/recent

- Web cameras & SB2112 (real-time)
- (Relatively) elaborate data documentation (formats, cals. etc.)
- Refactor metadata unmanageable MS Word file(s) to DocBook xml source w/ version control and build
- Displays

(near) Future plans

- Integration of EM122
- Precision timed camera image capture
- GUI (control) wrapper (someday, maybe)
- Enhanced automatic event logging
- Consider"Formal" open source?

Contributors (an incomplete list)

William J. Robinson
Dale Chayes
Dave Caplan
Rob Blaes
Stephanus Budhypramono
Dave Brock
Jeff Turmelle
Greg Vseolozhsky

Steve Roberts
Anthony Johnson
Peter Lemmond
Val Schmidt
Ethan Gold
Bob Arko

Questions?

