MODIFYING ZENS

Getting more out of a problematic instrument.



National Geoelectromagnetic Facility





Driving Question

How can we simplify and modify an existing system to fit our needs and procedures?





What is the Zen

- Started out as a joint collaboration project
- 32 bit 5 channel system with modular design
- Power hungry 9 watts







Hardware Improvements

 Simplify problematic wiring harness







Hardware Improvements (cont.)

- Internal power configuration
- Low Voltage Protection







Hardware Improvements (cont.)

- Shielded signal wires
- Removed front end complexity
- Lightning Protection







Software Improvements

- Windows to OS X conversation
 - Fit the current NGF workflow
 - Processing Software
- Simplify and minimize chances for user errors







