R2R: Cruise Directory Structure

Robert Arko
Lamont-Doherty Earth Observatory



Goal

Develop a fleet-standard cruise directory structure to:

- Differentiate routine underway, national facility, and science party data sets
- Differentiate data files from documentation
- Identify the instrument system that produces each data set



Constraints

- Cruise ID is unique (within R2R system)
- Standard vocabulary of instrument type, make, and model
- Preserve "all" of the "original" data
- Preserve version of data that the science party took home
- Never break up or rename data files



1. Compression

Files or directories?

Algorithm? (gzip, ZIP, etc)

Is it even needed?



2. Checksums

MD5 most common but SHA1 is "better"

single top-level manifest?



3. Filesystem type

NTFS most flexible? (Windows, Linux, MacFUSE)



4. Filename/directory structure

spaces and/or non-ASCII characters

capitalization?

filename = {cruise_}device{_datatype}_time{.suffix}

data files hourly? daily?

raw vs. processed in different directories?

dedicated "docs" directory



6 of 7

5. "Public folder"

sensitive/non-science photos, emails, etc.





Thank you.