Product Specific QA Tools/Procedures

- LDOPE "common" batch tools, and HDFLook, ENVY used for first-look, coarse analysis
- SCF Product specific tools:
  - Delta analysis ("modeled" vs. "reference" image), visual difference images, statistical look; comparison with pre-establish model thresholds
  - Frequency analysis (histogram of modeled vs. reference population)
  - Summary statistics: min, max, median, std-dev

Priority of QA Tools, Procedures

- SCF analysis of ECS tile metadata, 10% of tiles (routine), via LDOPE tools, facilities
- SCF inspection of 4-category QA bands
- SCF runs of delta and frequency analysis
- Problem-triggered: visual and statistical analysis of a subset of product data itself (ENVY, HDFLook)

Science Quality Assignment Criteria

- Inspect Sci. Quality flag from upstream first...
- Set: {Pass,Fail,Investigating,No-Plan-Investigation} based on threshold % of correct pixels (e.g. 75% pixels at good or better quality)
- Setting based on QAPERCENTxxxx fields as well as visual analysis of a (systematic-subset) of a set of sampled tiles.

QA Scenarios

- Routine
  - LDOPE RDBMS, tile level metadata scans
  - Set subset (10% or more) of SCI flag at SCF
- Problem-Triggered
  - More intense statistical, visual analyses
  - Suggest: defect-history database to aid diagnosis
- Pre-launch QA fire-drills based on AVHRR 1KM and 8KM runs in progress.

Summary

- Coarse visual (.5 x .5 deg) diags useful
- Statistical approach is two-stage sample, stratified by biome
- Statistics targeted by visual first-looks
- URL for info:
  www.forestry.umt.edu/ntsg/projects/global/modis (see QA plan section)

Fixed, Sparse Global Tile Sample
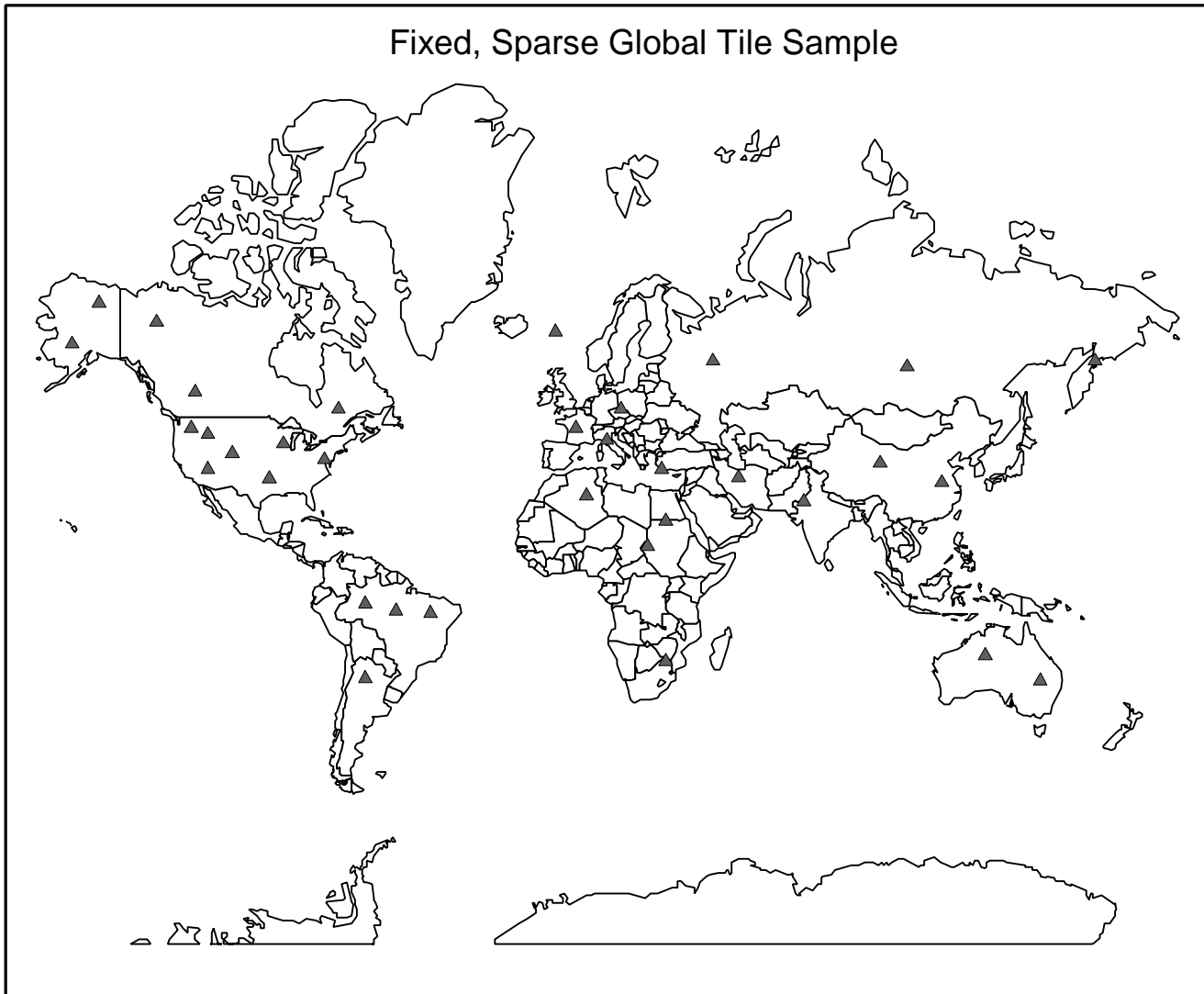
US Continent:
1KM Exhaustive Sample