NASTER Trade Studies

July 11, 2003 NASTER-I Workshop LaRC Reid Conference Center

NASA Langley Research Center

NASTER-I Trade Studies

1. Pointing

- 1. Control (real-time)
- 2. Knowledge (post processing)
- 3. Inertial Reference Unit (IRU)
- **2.** Mirror design: Corner cube vs. flat
- **3.** Detector form and type
 - 1. 2-D array vs. linear array
 - 2. PC vs. PV (including array availability)
- 4. Number of spectral bands
- 5. Spatial sampling and resolution
- 6. Road Map
 - 1. Use of COTS
 - 2. Spare strategy
 - 3. Evolution and obsolescence
- 7. Retrofit vs. New Hardware
 - 1. Plan
 - 2. Costs

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8. Mission Plan

- 1. Operation including staff or sub-contract
- 2. Maintenance
- 3. Spares
- 9. NAST-I Upgrade Plan
 - 1. 2004-2007
 - 2. Mission Plans for NAST-I
- **10.** Zenith View and 3rd Blackbody
- **11.** Spectral resolution and coverage
- **12.** Communication options and cost
- **13.** Boresighting plan with other instruments
 - 1. Fabry-Perot interferometer
- 14. Platform Definition Study
 - 1. Weight, power, volume, communication, environment
- **15.** Data storage and archive system