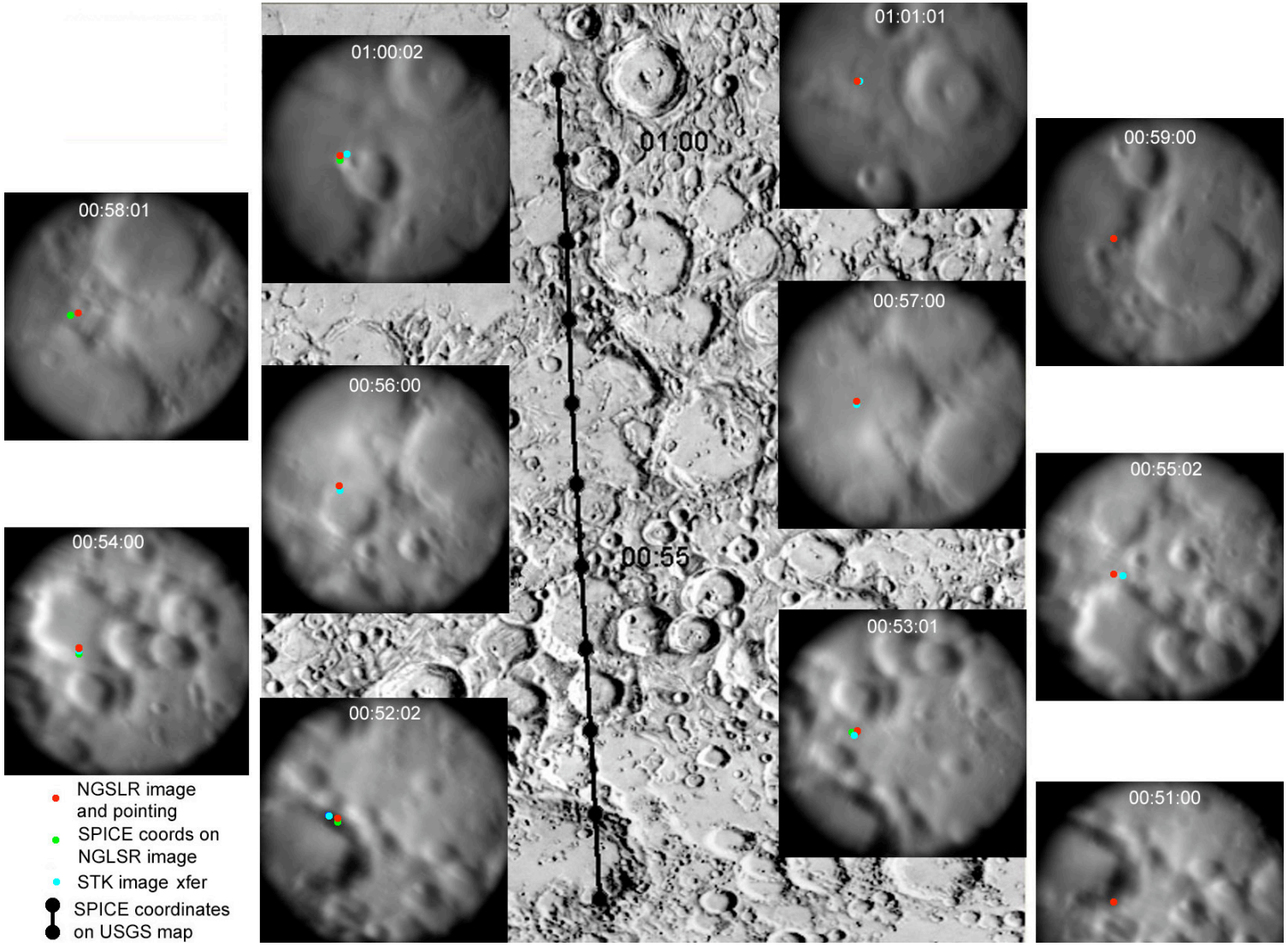
Laser Ranging Ground System

- **Progress**
  - **Data from 6/29 E2E has been analyzed to the extent possible, and it looks good. We were unable, however, to convert LOLA time to UTC (which is an important part of this test). Discovered that LOLA is the only instrument that gets MET from spacecraft, rest get s/c UT. The SCLK file converts UTC to s/c UT, not MET. Issue being worked by MOC.**
  - **Real-time website for display of HK telemetry has been tested using playback from LOLA SOC. Looked good, but a few updates will be made. Would like to test with playback from MOC in a few weeks.**
  - **Timing testing with Instrument Scientist will most likely occur in September because of vacation schedules in August.**
  - **One-way system delay analysis ongoing.**
  - **We continue to periodically range to earth orbiting satellites to keep system ready.**
  - **Selection of international stations to participate in LRO ranging should occur in early August. Discussions now ongoing with the stations interested in participating. These are: Zimmerwald (Switzerland), Herstmonceux (Gr.Britain), Matera (Italy), Mt Stromlo (Eastern Australia), Cerga (France). We are also working with MOBLAS-6 in South Africa and MOBLAS-5 in Western Australia) to upgrade to their system to possibly allow them to participate.**
  - **A more realistic LOLA-SOC CRD was given to FDF in late June. However, updates to this are still needed and will be supplied in next couple of weeks.**
- **Issues & Risks**
  - **None.**

Laser Ranging Ground System (cont)



The projected orbit track from 00:51 to 01:01. The large background image is the USGS product and the small insets are NGSLR images. Each NGSLR image can be matched with the USGS map by tracing horizontally from the red dot across to the black dot on the orbit track.