CURRENT FACILITIES (1)

› Absolute Radiometric Calibration Facility ARCF
  › Absolute BRDF measurements
  › Clean room facility (Class 100 / ISO 5)
  › Wavelength range from 210 nm to 2600 nm
  › Variable bandwidth monochromator or EKSPLA tuneable laser
  › Polarisation possible
  › Well-known uncertainty contributions
  › Accuracy as good as 0.5% (1σ)

CURRENT FACILITIES (2)

- Vacuum Calibration Facility VCF
  - Thermal Vacuum Chamber (1.5 m)
  - Cleanroom facility (Class 100 / ISO 5)
    - Radiometric calibration
    - Polarisation characterisation
    - Wavelength calibration
    - Slit-function characterisation
    - Stray light
    - Field of view
- https://www.tno.nl/en/focus-areas/industry/roadmaps/space-scientific-instrumentation/earth-observation/space-instrument-calibration/
FUTURE FACILITY (1)

- “Calibration Space Instruments” CSI
  - Thermal Vacuum Chamber (2.5 - 3 m?)
  - Cleanroom facility (Class 100 / ISO 5)
  - Tip-tilt of instrument
  - Optical Stimuli (partially) in vacuum
  - Goal: 1 solar constant irradiance, 1 earth radiance
  - Tuneable laser, (xenon?) White Light Source
  - Traceability to SI
EARLY SKETCH OF POSSIBLE CONFIGURATION
FUTURE FACILITY (2)

› Status:
  › Funding secured
  › Kick-off was January 2018
  › Currently in definition phase:

    Any features you’d like to have for your future calibration needs?
THANK YOU FOR YOUR ATTENTION

Take a look:
TIME.TNO.NL