

Landsat 10 Landsat Science Team 1-slide synthesis in ~decreasing order (charge to team in red, Tom will provide template and schedule)

- 1) Continuity / backward compatibility to previous Landsats (wulder, Belward, Loveland, Patrick H, Joe & Kennedy, Dennis)
 - Obviously but also Global climate monitoring principals rationale
 - Multiple satellites would provide continuity “safety” / redundancy and help obj. 1-3
- 2) ↑ Temporal – need to provide clear application/science rationale
 - 4 days (Martha A. study; A. Whitcraft MODIS cloud study, Ted S. cryospheric change)(Leo, Jim V., Ted, Cohen, Allen, Ayse, Feng, M. Anderson, Jim Hipple, Dave J.)
- 3) Coincident/near-coincident 2-band thermal observations (thermal pixels integer multiple of reflective pixel dimensions) (field level ET, hydrological studies, cloud screening) [This is part of the continuity objective] (Allen, Ayse, M. Anderson)
- 4) ↑ Spatial 10 m all VIS/NIR and perhaps also SWIR bands (anthropogenic monitoring), stackable (Randy W., Feng, Jim Hipple, Dave J.)
- 5) ↑ SNR, radiometric resolution ↑ 14 bits (improved retrievals) (Schott, Sheng, Ted)
- 6) New spectral bands
 - red edge bands (agricultural and vegetation applications, canopy chlorophyll content, nitrogen retrieval)
 - targeted narrow bands (ASTER heritage) / hyperspectral (HYSPIRI folk, Patrick H)
 - water vapor retrieval, deeper blue, polarization bands for improved atmospheric correction (Vermote, Roy, Joel M.)

Recognize need for trade studies: forward modelling, proxy data, case studies etc.