Terrestrial Applications Breakout Session

1. What is the status and what is being done to ensure the application continuity between MODIS and VIIRS?
2. Can we operationalize the application of ground water, make products the applicant community can grasp and use
3. How can we tie in ground observation with satellite observations?
4. Review of lessons to learn from different user groups and communication on the application end, NASA and user community
5. How do we standardize the biodiversity scales for consistent conservation, spatial and consistency
6. **Changing range limits of species with changing snowline in mountain, latitudes, temps**
7. **How much biodiversity variation can humidity explain**
8. Real time satellite fire map, how global fire trends change over time, consistent forest maps, finer scale than MODIS (30m)
9. **How does rate of land use change affect adaptive capacity of species**
10. **How can we test viability of isolated/semi isolated species with limited field data**
11. **How can we improve biodiversity conservation by combing abundance distribution and connectivity and remote sensing, how can we improve population vulnerability assessments by combining genetics**
12. Improve ability to asses differences in types plantations and also be able to assess a difference between plantations and intact forests
13. High-resolution dynamic vegetation type, structure, big data question driven approach to distribute data. Global connectivity mapping. Can we build data exchange foundation between user and scientist, more searchable
14. **Characterize landscape stream hydrology and geomorphology to predict biology**
15. **Land cover, resolution from spatial/temporal and specificity as much as possible for global coverage, how does LCC affect biodiversity**
16. **Role of nutrients in biomass allocation and carbon sequestration, implication for blue carbon and other systems**
17. “Dark data,” items that fall in reports that aren’t readily available, digitize the information to help others validate remote sensing imagery
18. Water quality, spectrally high-resolution for fresh water bodies, how NASA can provide satellite remote sensing to improve water quality monitoring
19. **How does functional variation in ecosystems (measured using remote sensing) translate to other measures of function in the ecosystems that we can’t remotely sense**
20. Temporal asyncranicity on changes in landscape, short term, long term (immediate changes, climate) and how does fragmentation alter connectivity

* Repository for project results
* How to package metadata and archive for PIs who don’t have semantic experience- searchable database, exchangeable
* Create NASA standards to post products – big, one time investment with continued support, need to make the process easy and provide lasting framework
* Possibly separate ways to cater data openly to different communities (public vs scientists, eco forecasting vs health)
* Can we build data exchange foundation between user and scientist, more searchable