PART 4. SCIENCE VALIDATION

3. VALIDATION SUMMARIES

The essence of the validation studies’ results is contained in the following collection of validation summaries. Of the original 30 Principle Investigators, 28 are represented in this collection. In addition, there is one summary submitted by non-PI’s that is deemed noteworthy enough to be included. For ready reference, the list of summaries is presented below in alphabetical order of PI authors or otherwise by first author if no PI is one of the authors (PI’s name is in bold print).

1. Abrams, Michael, NASA Jet Propulsion Laboratory
   Satellite and Airborne Remote Sensing Investigations
2. Asner, Gregory, University of Colorado
   Analysis of EO-1 Hyperion Imagery for Desertification Research Applications in Argentina
3. Lobell, David and Asner, Gregory, University of Colorado
   Comparison of EO-1 Advanced Land Imager and Landsat Enhanced Thematic Mapper for Crop Identification and Yield Prediction in Mexico
   EO-1 Hyperion Hyperspectral Aggregation and Comparison with EO-1 Advanced Land Imager and Landsat 7 ETM+
5. Schowengerdt, Robert and Biggar, Stuart, University of Arizona
   Radiometric Calibration, Spatial Characterization, and Spectral Evaluation of the Advanced Land Imager and Hyperion Sensors
6. Bindschadler, Robert, NASA Goddard Space Flight Center
   EO-1 Ice-Sheet Investigations
7. Boardman, Joseph, Analytical Imaging and Geophysics, LLC
   Hyperion Validation in Yellowstone National Park Using AVIRIS, HyMap, and Field Spectra
8. Carlson, Barbara E., NASA Goddard Institute of Space Studies
   Correlative Analysis of EO-1, Landsat 7, and Terra Data of the Department of Energy ARM CART Sites: An Investigation of Instrument Performance and Atmospheric Correction
9. Crawford, Melba, Neuenschwander, Amy and Ringrose, Susan, The University of Texas at Austin
   Investigations in the Okavango Delta Using EO-1 Data
10. Crowley, James, U.S. Geological Survey
    Comparison of Airborne and Spaceborne Sensors for Remote Sensing Analysis of Potential Debris Flow Source Areas on Mount Shasta, California
11. Flynn, Luke, University of Hawaii at Manoa
    Quantitative Analysis of Hot Spots Using EO-1 and Landsat 7
12. Goetz, Alexander F.H., University of Colorado
    Atmospheric Correction of Hyperion Data and Techniques for Dynamic Scene Correction
13. Gong, Peng, Biging, Greg and Pu, R., University of California, Berkeley
    Retrieval of Surface Reflectance and Estimation of Forest Leaf Area Index (LAI) Using Hyperion, ALI and AVIRIS
    Evaluation and Validation of EO-1 for Sustainable Development (EVEOSD) of Forests
15. **Huete, Alfredo**, University of Arizona  
   *Land Cover Conversion and Degradation Analysis Through Coupled Soil-Plant Biophysical Parameters Derived From Hyperspectral EO-1 Hyperion*

16. Miura, Tomoaki, **Huete, Alfredo** and Yoshioka, Hiroki, University of Arizona  
   *An Empirical Investigation of Reflectance and Vegetation Index Continuity/Compatibility Using EO-1 Hyperspectral Hyperion*

17. Graetz, Dean, Campbell, Susan, King, Edward, Lovell, Jenny and **Jupp, David**, Commonwealth Scientific and Industrial Research Organization (Australia)  
   *Evaluation of Hyperion Performance at Lake Frome, Australia*

18. McVicar, Tom, van Niel, Tom, Datt, Bisun, **Jupp, David**, Commonwealth Scientific and Industrial Research Organization (Australia) and Pearlman, Jay, The Boeing Company  
   *Assessing Hyperion Performance Using the Coleambally Irrigation Area Calibration and Validation Site*

19. **Kruse, Fred**, Analytical Imaging and Geophysics, LLC  
   *Evaluation and Geologic Validation of EO-1 Hyperion*

20. **Liang, Shunlin**, University of Maryland  
   *Using ALI Observations to Estimate Land Surface Biophysical Variables*

21. **Liew, Soo Chin**, National University of Singapore  
   *Retrieving Optical Parameters of Coastal Waters Using Hyperion Data*

22. Smith, M.L., U.S. Department of Agriculture Forest Service, **Martin, M.E.** and Aber, J.D., University of New Hampshire  
   *Evaluation of Hyperspectral Requirements for Remote Estimation of Forest Ecosystem Composition and Function*

23. **Matsunaga, Tsuneo**, National Institute for Environmental Studies, Iwasaki, Akira and Tsuchida, Satoshi, National Institute of Advanced Industrial Science and Technology  
   *Coastal and Inland Water Environmental Monitoring in Japan Using Hyperion Data*

24. **McGwire, K.** and Schultz, B., Desert Research Institute  
   *Hyperspectral Monitoring of Invasive, Non-Native Plant Species With EO-1 Hyperion Imagery*

25. **Meyer, David**, U.S. Geological Survey/EROS Data Center, Helder, Dennis, Mettler, Cory, and Ruggles, Tim, South Dakota State University  
   *ALI Radiometric Processing System*

   *Data Continuity of Earth Observation (EO-1) Advanced Land Imager (ALI) and Landsat TM and ETM +*

27. Elmore, Andrew and **Mustard, John**, Brown University  
   *Comparison of the Precision and Accuracy of ALI and ETM+ Data for Semiarid Vegetation Studies*

   *Mapping the Invasive Species Chinese Tallow*

29. **Roberts, D.A.**, University of California, Santa Barbara  
   *Hyperion Applications and Validation for Fire Hazard Assessment in Santa Barbara, California*

   *Identification, Classification, and Mapping of Invasive Leafy Spurge Using Hyperion, AVIRIS, and CASI*
31. **Smith, James**, NASA, Goddard Space Flight Center
   *Canopy Modeling and Satellite Comparison Studies Using EO-1*

32. **Townsend, Phil** and Foster, Jane, University of Maryland Center for Environmental Science
   Appalachian Laboratory
   *Mapping Forest Composition in the Appalachians Using Data From EO-1 Hyperion, Landsat, and AVIRIS*

33. **White, William A.**, Crawford, Melba, Erzurumlu, Sinan, Tremblay, Thomas and Raney, J.A.,
    The University of Texas at Austin
   *Evaluation of EO-1 ALI Data Through an Analysis of Land Cover and Land Use and Local Impacts of Hurricane Iris in Belize, Central America*