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
4. Barry, P., Raytheon Electronic Systems, Mendenhall, J., MIT Lincoln Laboratory, Jarecke, P., Folkman, M., Northrup Grumman Space Technology, Pearlman, J., The Boeing Company and Markham, B., NASA Goddard Space Flight Center
   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
14. **Goodenough, David G.**, Hall, R., Iisaka, J., Leckie, D., Staenz, Karl, Dyk, A., Natural Resources Canada, Hollinger, A., Canadian Space Agency, Miller, J., York University, Niemann, Olaf, University of Victoria, Zwick, H., MacDonald Dettwiler and Pearlman, Jay, The Boeing Company
    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
26. Bryant, R., **Moran, M.S.**, McElroy, Holifield, C., U.S. Department of Agriculture, Agricultural Research Service, Thome, K., Miura, T., and Biggar, S.F., University of Arizona
    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
28. **Ramsey III, Elijah**, Nelson, Gene, Rangoonwala, Amina and Ehrlich, Robert, U.S. Geological Survey
    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
30. **Root, Ralph**, Zarco-Tejada, Pablo, Pinilla, Carlos, U.S. Geological Survey, Ustin, Susan, University of California, Davis, Kokaly, Raymond, Anderson, Gerry, Agricultural Research Service, and Hager, Steve, National Park Service
    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