

Multispectral & Hyperspectral Data Compression Working Group
Spring 2015 Meeting Agenda – Pasadena, USA
(Draft of March 5, 2015)

Mar 24 (TUE) – PM (13:30–17:30)

- CCSDS-120.2-G, *Lossless Multispectral & Hyperspectral Image Compression* (Green Book for CCSDS-123.0-B-1) – JPL, ALL
 - Review revised draft Green Book (MHDC-A-1411-1)
 - Plans & timeline for final editing of Green Book

Mar 25 (WED) – AM (8:45–12:30) & PM (13:30–17:30)

- Continue review of CCSDS-120.2-G, *Lossless Multispectral & Hyperspectral Image Compression* (Green Book for CCSDS-123.0-B-1)
- CCSDS-122.1-B, *Spectral Pre-processing Transform for Multispectral & Hyperspectral Image Compression*:
 - Results of search for additional images that are relatively free of streaking artifacts (MHDC-A-1411-2) – UAB, JPL, CNES
 - Alternative bit-accurate methods to calculate mean and variance, and hardware implementation complexity of such methods (MHDC-A-1411-3) – UAB, GSFC, ESA, ADS
 - Compression impact of varying the number of IWT levels at 1 and 3 bits/sample to confirm whether the number of levels should be fixed at 5 (MHDC-A-1411-4) – UAB
 - Status of IWT & IPOT cross-verification efforts (MHDC-A-1411-5) – UAB, GSFC
 - Review of Chapter 6 of White Book (MHDC-A-1411-6) – GSFC
 - Review plans and timeline for completion of CCSDS-122.1-B

Mar 26 (WED) – AM (8:45–12:30) & PM (13:30–17:30)

- Continue discussion of CCSDS-122.1-B, *Spectral Pre-processing Transform for Multispectral & Hyperspectral Image Compression* (see subtopics enumerated above)
- Lucana Santos, “CCSDS Lossless Compression IP-Core for Space Applications: overview of the activity and discussion.”
- Enrico Magli, “Variable-quality lossy compression of METIS solar corona images based on CCSDS-123.”
- Enrico Magli, “Update on hardware implementation of CCSDS-123 extension.”
- Discuss possible new work item to develop a lossy extension of CCSDS-123.0-B:
 - Discuss approach (develop new Blue Book or revise existing one)
 - Discuss tentative timeline, selection criteria
 - Determine whether WG consensus is to request management approval of this new project
- Review outstanding action items
- Wrap up, assign new action items