CCSDS Multispectral & Hyperspectral Data Compression Working Group  
Spring 2017 Meeting Agenda – San Antonio, TX USA  
(Draft of April 14, 2017)

May 9 (TUES) – AM (8:45–12:30) & PM (13:30–17:30)
  • CCSDS-122.1-B, *Spectral Pre-processing Transform for Multispectral & Hyperspectral Image Compression*:
    o Status update of CCSDS-122.0-B Pink Sheets – UAB (MHDC-A-1610-1)
    o Review & resolve RIDs from Agency Review of Red Book CCSDS-122.1-R – ALL
    o Review Green Book CCSDS-120.3-G – UAB & ALL
    o Plans/timeline for Blue Book CCSDS-122.1-B
  • CCSDS-121.0-B-2, Lossless Data Compression
    o Due for reconfirmation review. Revisions warranted? – ALL
  • CCSDS-123.1-B: Extension of lossless CCSDS-123.0-B-1 to provide near-lossless compression of multispectral & hyperspectral imagery:
    o Fast prediction Mode (MHDC-A-1610-6) – ESA
    o Simplified Entropy Coder (MHDC-A-1610-5(a)3) and Entropy Coder specification (MHDC-A-1610-6) – JPL
    o Generalized Prediction Representatives (MHDC-A-1610-4) – JPL
    o Custom Weight Initialization (MHDC-A-1610-6) – JPL

May 10 (WED) – AM (8:45–12:30) & PM (13:30–17:30)
  • CCSDS-123.1-B: Extension of lossless CCSDS-123.0-B-1 to provide near-lossless compression of multispectral & hyperspectral imagery:
    o Relative Error (MHDC-A-1610-5(a)2) – ESA
    o HVS quantization (MHDC-A-1610-6) – CNES
    o Signaling quantization steplizes / rate control (MHDC-A-1610-6) – ESA
    o Header Structure (MHDC-A-1610-6) – ALL
    o Review White Book (MHDC-A-1610-6). Establish plans to resolve remaining elements of CCSDS-123.1-B and produce Red Book. – ALL
      ▪ General question: should near-lossless compression be a separate document (123.1-B, as currently planned), or incorporated in an Issue 2 revision of 123.0-B?

May 11 (THU) – AM (8:45–12:30)
  • Continue discussion of CCSDS-123.1-B, as needed
  • Review outstanding action items
  • Wrap up, assign new action items