Information on the FTP site

The information on the FTP site was originally developed for a teaching workshop on Hyperion data. It is now freely available.

The FTP Site under "Hyperion" has the following directory structure:

Hyperion	Minimal_Set	Ancillary_Data	Binning_Weight_Matrices
			Calibration files
			Gain-offset files
			Hyperion_Smile
			User Defined Filter
			Functions
		Documents	
		Install	Labeller
			Save Add
			Test_Spl

In the folder "Hyperion" there is an 18 MB file called: EOC_EO1_report_Final.pdf

This contains reports on the Australian work for the NASA Science Validation Team. There are many useful accounts of experience here.

The folder "Minimal_Set" has three sub-folders called "Ancillary_Data", "Documents" and "Install"

Ancillary_Data are used in the processing as described in the processing notes. It is best to refer to these for the information in this area.

"Documents" contains the following documents:

Document Name	Description	
CHW_Introduction_to_	TRW Powerpoint presentation on	
Hyperion.pdf	Hyperion.	
EO1HyperionScienceDataUsersGuide_	Official Science Data Users Guide from	
public_L1_B1.pdf	TRW delivered to NASA.	
Datt_etal_2003.pdf	PDF of paper in IEEE by Bisun Datt and	
	others on pre-processing methods	
Col_SPIE_Hangzhou_4898-18_Final.pdf	Discussion of spectral smile from	
	Hanzhou Conference	
Hyp_Wsn.pdf	Workshop Notes (detailed outline of	
	Hyperion data)	
Heading.xls	Spreadsheet to calculate Hyperion	
	heading.	
Smile_Interpolation_notes.pdf	Added notes about smile correction by	
	interpolation	

Hyperion Data Processing	Workshop notes about pre-processing	
Instructions.pdf	Hyperion data	
proc_doc.pdf	Brief outline of the software used in the	
	Workshop.	
Notes on the use of Splib.pdf	Discussion of a new program to cluster	
	spectra.	

The yellow highlighted documents contain the most general information about Hyperion data and are recommended to be read.

The sub-folder "Install" has four sub-folders:

"Labeller" contains some software that is freeware and allows Excel to label data in a plot. It is useful to compare and cross-plot data as described in the notes about Splib.

"Save_Add" contains a SAV file and an EXE file. If you put both of these in the ENVI Save_add folder the software becomes available in the main ENVI menu. The use of the software is described in the Hyperion Data Processing Instructions.pdf file.

"Test_spl" contains some files to test the Splib software as described in the Notes on the use of Splib.pdf file.

"Source" has the IDL source code for the software and also Fortran for Cluster.

Suggested Path

- 1. Download and read Hyp_Wsn.pdf, Datt_etal_2003.pdf, and Col_SPIE_Hangzhou_4898-18_Final.pdf
- 2. Look at CHW_Introduction_to_Hyperion.pdf
- 3. Look at EO1HyperionScienceDataUsersGuide_public_L1_B1.pdf
- 4. Install the software by adding the SAV file to the ENVI Save_Add folder and make change to ENVI settings as described below
- 5. Go through Hyperion Data Processing Instructions.pdf to see how the preprocessing is done.

If there are questions do not hesitate to email me at:

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[NOTE: Change to ENVI settings. It is best to change File/Preferences/Miscellaneous settings for Cache Size and Image Tile Size to at least 50 mb each and (better) 100 mb each. If you have questions contact David Jupp]