CSIRO EOC TRAVEL REPORT
[IGARSS EXTRACT FOR ASVT. Full Report on Web]

Name: Thomas Cudahy
CSIRO Exploration and Mining

Date of travel: June 17th to June 29th 2002

Locations: Tokyo, Japan
- Meetings with ERSDAC, MMAJ & Sumitomo
- ERSDAC Science Meeting

Toronto
- Industry TIR Workshop
- CEM Project workshop
- IGARSS02

Introduction

The main driver for this OS travel was, together with Nicholas Coops, to represent CSIROís Hyperion activities at the EO1 sessions at IGARSS02. Nicholas and I attended many of the same sessions and so I will not repeat here those issues covered by Nicholas in his OS trip report. To take advantage of this OS travel, I organised a series of meetings, workshops and presentations with industry and government bodies in both Japan and Canada.

IGARSS02

Unlike IGARSS01, there was a lack of ìgeologyî papers, which was a real disappointment for me and was further compounded by the fact that the minerals industry, even from Canada, stayed away. Not sure why though at my TIR workshop on the Monday of the IGARSS02 week, there were 12 attendees, of which all but one went directly home to all parts of Canada that evening. Nevertheless, there were many useful people to discuss different issues with in the corridors at IGARSS02.

I attended the IGARSS02 EO1, Hyperspectral Instrumentation and Hyperspectral Processing and Analysis sessions as well as selected papers from other sessions. I was surprised at the high priority given to the issue of Hyperion destreaking during the EO1 session and in the corridors after. Some Hyperion SVT team members even presented applications papers from ìhomogeneousî test areas without any attempt to destreak, and at the end implored the audience for a solution. Obviously, there is some communication problem as useful solutions for this simple case (homogeneous test areas) have been around for 12 months. The same with the spectral smile (frown) effect, where I was frustrated to see oral papers presented on correcting spectral smile using MNF. Most frustrating! Good papers from the EO1 session include those by Nicholas

Coops, and judging from the corridor chat after, Nicholas was one of the most impressive (and entertaining) speakers at the conference (Tumba-bloody-Rumba is now considered in a very different light).

The Hyperspectral Processing and Analysis session papers and panel discussion on atmospheric correction provided some useful information. When questioned about the next frontier for FLAASH, Tom Cooley from AFRL said that aerosol estimation and correction was the number one priority, a view of course shared by many of those in the EOC working on hyperspectral VNIR-SWIR data. As expected, the people at the University of Colorado are still looking for a commercial software partner to get HATCH finalised and out into the market.

At the Hyperspectral Remote Sensing Instrumentation session, there were papers on the European Hyperspectral Spectra mission and the Canadian Space Agencyís hyperspectral mission. Although Spectra will probably include comprehensive SWIR and TIR spectral coverage, the sales pitch at this presentation is very much on multiangle VNIR sensing for vegetation mapping. The CSA presentation described three options for a space-borne hyperspectral capability, one of which is base on the International Space Station, which may be the cheapest but least commercially attractive given its limited coverage (<30 degrees latitude) and other platform related issues. Anyway, sounds like a lot more will be discussed on this possibility.