

To: tzimmerl@pop100.gsfc.nasa.gov  
Subject: Australian trip  
Cc: jon@taiga.gsfc.nasa.gov

Terri I include a title for the Australian paper below.

Jon

Combining Radar and Optical data for Forest Disturbance Studies

#### Abstract

Disturbance is an important factor in determining the carbon balance and succession of forests. Until the early 1990's researchers have focused on using optical or thermal sensors to detect and map forest disturbances from wild fires, logging or insect outbreaks. As part of a NASA Siberian mapping project, a study evaluated the capability of three different radar sensors (ERS, JERS and Radarsat) and an optical sensor (Landsat 7) to detect fire scars, logging and insect damage in the boreal forest. This paper describes the data sets and techniques used to evaluate the use of remote sensing to detect disturbance in central Siberian forests. Using images from each sensor individually and combined an assessment of the utility of using these sensors was developed. Transformed Divergence analysis and maximum likelihood classification revealed that Landsat data was the single best data type for this purpose. However, the combined use of the three radar and optical sensors did improve the results of discriminating these disturbances.



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### Australian Canopy Crane Research Facility

The Australian Canopy Crane spans over one hectare of lowland tropical rainforest in one of the most ecologically diverse areas of the Wet Tropics. This unique research facility, the first of its kind in the southern hemisphere, includes comfortable on-site accommodation and a laboratory located only two hundred metres from the crane.

**This fifty metre tower crane is now available for use as a research facility.**

Research opportunities and potential student projects include:

- Ecology of arboreal frogs
- Vertical stratification of fauna
- Pollination and frugivory
- Plant - animal interactions
- Rainforest climatology
- Herbivory in the canopy
- Canopy plant physiology

**Would you like to sponsor student research or educational projects?**

Funding is being sought to establish the canopy crane as an innovative educational tool for future generations. Donations can be made to Australian Canopy Crane Pty Ltd.

**For more information about the canopy crane contact:**

Michael Cermak, Australian Canopy Crane Pty Ltd  
 PO Box 6811, Cairns, Qld 4870 AUSTRALIA  
 michael.cermak@jcu.edu.au  
 Tel. (07) 4042 1246 Intl. +61 7 4042 1246  
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The Cooperative Research Centre for Tropical Rainforest Ecology and Management (Rainforest CRC) is a research partnership involving:

- The Commonwealth and Queensland State Governments
- The Wet Tropics Management Authority
- The Tourism industry
- Aboriginal groups
- The CSIRO
- James Cook University
- Griffith University
- The University of Queensland

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The Australian Canopy Crane is a joint venture between James Cook University,  
Griffith University and the University of Queensland.



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**Events convened or hosted by the Rainforest CRC**

In this section of the site you will find information about events we are currently planning, and some information about events in the recent past. These events include anything from small 'invitation only' workshops, to fee-based short courses, or larger conferences and public forums.

To register for many of the larger events you have the choice of downloading a brochure and registration form, or contacting the conference secretariat for a brochure to be sent by email ..... or in the mail the old-fashioned way!

First you find the particular event you are interested in and then you're on your way!

If you would like to contact us directly about any of these events, use the following contact details:  
EMAIL: [Rainforest-crc@jcu.edu.au](mailto:Rainforest-crc@jcu.edu.au)

PHONE (within Australia): (07) 4042 1246  
(from outside Australia): + 61 07 4042 1246

FAX: (within Australia): (07) 4042 1247  
(from outside Australia): +61 7 4042 1247

Rainforest CRC, PO Box 6811, CAIRNS, QLD, 4870, AUSTRALIA

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### Exploring issues of relevance to the Rainforest CRC

Workshops, either by themselves, or in conjunction with a conference have been used in a variety of ways:

- as a means of exploring new issues,
- improving interaction with members and other key stakeholders,
- reviewing current knowledge and identifying knowledge gaps to strategically plan future research, and
- reviewing or developing new processes, protocols, techniques, or information products.

WORKSHOPS



NOTE: a distinction is made here between workshops and short courses—the latter will have specific learning objectives, a structured curriculum and possibly some form of assessment. The type of workshop developed, and the invitation list (open or closed), depends on what the workshop convenors want to achieve—what outcomes are proposed? The scope and size will also be determined by the resources available to convene the workshop.

#### Upcoming workshops

Click on the name of the workshop at right to see more information about any specific workshop.

#### Planning for Workshops convened by the Rainforest CRC

Some workshops have been convened by members on behalf of the Rainforest CRC, with very little input from Centre management. From 2001, a new process will be established for considering and selecting workshops (and other events) which are to be developed, supported and/or organised by the Rainforest CRC.

Workshop topics will be developed by Program Support Groups, and a key proposer will supply more details using a proforma. These more detailed proposals will then be considered by Program 9 staff and the Executive Committee. Where suggestions and/or opportunities have arisen outside PSG proposals, the Executive Committee may seek the advice of others in determining whether to include the workshop in the upcoming program.

#### Past Workshops

Information about some past workshops may be found under *Past Events*. In some cases, documents or proceedings are available. Summaries of some workshops convened since 1997 can be found by clicking on *Read the Full Story*(below).

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**WELCOME TO THE NEW RAINFOREST CRC WEBSITE**



**THE RAINFOREST CRC IS A PARTNERSHIP IN RESEARCH AND EDUCATION**

Our vision is to see the rainforests of Australia managed and utilised in a scientifically sound and sustainable manner to yield economic and social benefits to the community while ensuring conservation of the unique cultural and natural features of the rainforest

Following a successful bid for further refunding, the Rainforest CRC is now working towards the following outcomes:

- Improved and ecologically sustainable regional management of rainforest regions
- Ecologically sustainable development of the rainforest tourism industry
- Involvement of the aboriginal community to develop land management processes that enhance biodiversity, regional employment opportunities and aid in the reconciliation process
- To become a major national and international force well into the 21st Century

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Monday 8<sup>th</sup> April  
Tuesday 9<sup>th</sup> April  
Wednesday 10<sup>th</sup> April

Formal Workshop Sessions and Presentations

**COSTS**

There are no registration costs associated the meeting. Participants are responsible however to meet their own accommodation and all meal expenses.

**ACCOMMODATION** Reservations have to be made with the Oasis Resort direct. You must mention the GRFM Block Booking in your enquiry to receive the quoted room rate.

This can be done by accessing their website <http://www.oasis-cairns.com.au> ,making an email booking [res@oasis-cairns.com.au](mailto:res@oasis-cairns.com.au) , or by Phone 61 (0) 7 4080 1841 or by Fax 61 (0) 7 4080 1843.

Room rates are ;  
\$AUST 150.00 per night for single/double or twin in a resort standard room.  
Breakfast extra.

**BACKGROUND INFORMATION**

Check out the following websites to get information on  
Cairns and Region, <http://www.tnq.org.au> ,  
The Oasis Resort, <http://www.oasis-cairns.com.au> ,  
Australian Canopy Crane Research Facility, [http:// www.rainforest-crc.jcu.edu.au](http://www.rainforest-crc.jcu.edu.au)  
Skyway Rainforest Cableway, <http://www.skyrail.com>  
Quicksilver Connections Reef Cruises, <http://www.quicksilver-cruises.com>

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**REGISTRATION FORM**

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Please complete and return to Professor Tony Milne, [T.Milne@unsw.edu.au](mailto:T.Milne@unsw.edu.au) by the 1<sup>st</sup> March,2001.

1. Name:
2. Institution :
3. Address :
4. Tel/Fax :
5. E-Mail :