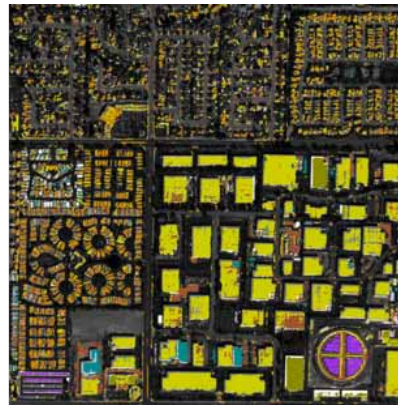


# PACIFIC ISLANDS GIS/RS USER CONFERENCE 2016

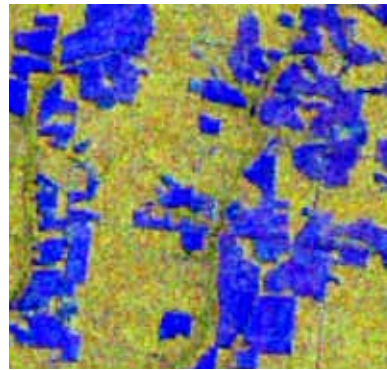


- Solar Panel
- Steel
- Rubber + Fiberglass, White
- EPDM, White
- Ceramic, Red
- Tile, Red
- Paint on Metal
- Concrete



WorldView-3 is a commercial Earth observation satellite owned by DigitalGlobe. It was launched on August 13, 2014. It provides commercially available panchromatic imagery of 0.31 m (12 in) resolution, eight-band multispectral imagery with 1.24 m (4 ft 1 in) resolution, shortwave infrared imagery at 3.7 m (12 ft 2 in) resolution, and CAVIS (Clouds, Aerosols, Vapors, Ice, and Snow) data at 30 m (98 ft) resolution. These enables the delivery of clearer, richer images that empower better decision making through improved situational awareness and advanced accuracy technology

Combined, their six satellite constellation satellites have a daily image capacity of over three million square kilometers, providing access to all parts of the globe and feeding into the industry's largest imagery archive and with high revisit rate, you can detect changes on the ground over short periods of time.



L-Band of ALOS-1 Radar Data is able to see deforestation under the clouds.

## Social Events

The GIS&RS Conference is not only about maps and technology. Evening social events and networking opportunities for participants are organised throughout the week, ending with a BBQ picnic on Suva sand bank. We hope you will enjoy your week with us in Suva!



For more information and registration contact:  
Conference committee via  
email: [gisconf@spc.int](mailto:gisconf@spc.int) ph: +679-3249 237  
website: <http://picgisrs.appspot.com/>



## Improved Image Data Improved Maps

28<sup>th</sup> November - 1<sup>st</sup> December 2016  
USP Japan ICT Auditorium  
Suva, Fiji Islands

GIS/RS Related Workshops 2<sup>nd</sup> December 2016  
Sand bank Picnic 3<sup>rd</sup> December 2016

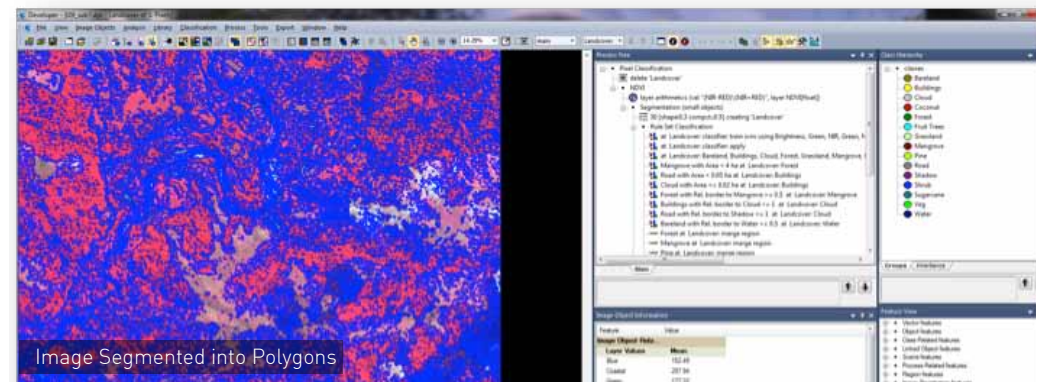


## What are GIS and RS?

Geographic Information Systems (GIS) is a computer-based tool used to collect, combine and overlay information from up-to-date satellite images and data for the construction of easily understood maps, whereas Remote Sensing (RS) is the collection of information from sensors on aircraft, satellites, ships and other vessels.

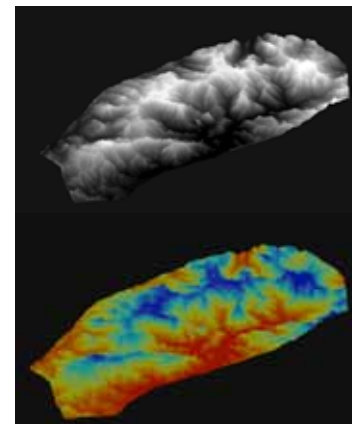
Both GIS/RS are increasingly being recognized as powerful tools to inform decision making. Timely imagery and data allows for rapid and accurate assessments of resources, land use, and environmental issues such as applications in disaster reduction and climate change adaptation.

## Landuse Classification using Trimble Ecognition



Ecognition is probably the most well-known software package for GEOBIA (Trimble 2014b). It has been around since 1995 and is accessible to new users with a simple interface, an extensive reference book for its functions and an upcoming active user community. The most important aspect of this object based image classification software is probably its segmentation algorithm.

## Digital Elevation Model Extracted from World View 1 Stereo pair Imagery



Digital Elevation Model for Delaikoro – Vanualevu (Fiji)

Digital Elevation Model is the continuous representation of elevation values over a topographic surface by a regular array of z-values, referenced to a common datum. Digital Elevation models (DEM) are useful for many geo-science applications such as topographic mapping, generation of orthoimages, generation of contours, 3D viewing, forest monitoring, flood planning, erosion control, agriculture planning and others. It is significant to distinguish between a DEM and other terrain representation; the two most closely used and confused with DEMs are Digital Terrain model (DTM) and Digital Surface Model (DSM).

A DTM is continuous smooth surface with elevation values whereas a DSM contains spatial data of the terrain with natural and artificial features such as vegetation, buildings etc.

The 17<sup>th</sup> annual Pacific Geographic Information Systems and Remote Sensing (GIS/RS) Conference will take place at the University of the South Pacific (USP) in Suva, Fiji from 21-24 November, 2016.

This weeklong conference brings together users of GIS and RS from Pacific Island governments, research institutes, consulting companies, and the private sector to discuss the latest software, hardware, data and methods available.

Jointly organised by the Pacific Community (SPC), Fiji Department of Lands, and the University of the South Pacific (USP), it is the largest of its kind in the Pacific.

Last year's conference with the theme Bridging Information Gaps by Creating Smarter Maps, drew more than 300 participants from more than 30 countries. Presentations were given on a variety of topics, including: marine applications, land use planning, geodetics, participatory mapping, disaster assessment and many others.

This year's theme- Improved Image Data- Improved Maps- will also provide participants and presenters the opportunity to engage across many sectors.

A call for abstracts will be sent out soon. For more information, please visit the conference website <http://picgirs.appspot.com/>

## Comments from the 2015 Conference

"The conference was a useful knowledge update on new geospatial technologies, techniques and applications." –Lt. Cmdr Gerard Rokoua, Chief Hydrographer, Fiji Navy

"The GIS & RS Conference provides the opportunity for regional surveyors to present and raise the profile their work." –Dr. John Dawson, Section Leader, Geodesy, Geoscience Australia

"I learned a lot from the presentations and what we share in common with other countries." –Darlyne Takawo, Assistant GIS Analyst, Palau

"The topics presented at the conference span many different sectors and levels of GIS experience, making it very useful for students, the private sector, professionals and participants from any background." –Vaipo Mataora, Manager Geospatial, Cook Islands