PACIFIC ISLAND COUNTRIES

IS/RS

USER CONFERENCE

PACIFIC ISLANDS

GIS/RS USER CONFERENCE 2015

Bridging Information Gaps
by Creating
Smarter Maps

16th - 19th November 2015

USP Japan ICT Auditorium

Suva, Fiji Islands

GIS/RS related Workshops 20th November 2015

Sand bank Picnic 21st November 2015

SPC Highlights Technology and the Positive Advances Facing Pacific Regional Development at the 2014 GIS and Remote Sensing Conference

The Pacific region continues to face development issues and technology of all kinds is assisting many areas of decision making, wealth generation and job creation. This was the focus of opening remarks delivered by Professor Michael Petterson, Director of the Secretariat of the Pacific Community's (SPC) Geoscience Division (GSD) at the Geographic Information System and Remote Sensing (GIS & RS) conference.

The GIS & RS conference opened on Tuesday, 25th November 2014 at the University of the South Pacific, Suva, Fiji with the theme "Empowering Pacific Communities through Improved Geospatial Data", and where approximately 280 participants were in attendance with representatives from countries and agencies from the Pacific and beyond.

'Although we have some way to go because of limited capacity and resources, organisations like SPC have made a solid start in developing modern databases,

applying new technologies, including Unmanned Aerial Vehicles, multivariate satellite spectra and bathymetric instruments.

These technologies allow for rapid coverage of land and lagoon, enabling experts to determine land use, forestry cover, areas of mineralisation, sites for geothermal energy and to assist with planning decisions,' Professor Michael Petterson described.

Professor Petterson pointed out that there is also the significant task of turning legacy paper-based data, such as maps, reports and measurements into modern electronic databases to be intelligently interrogated and used as modern GIS and e-mapping systems.

'Decades of data need to be moved into a digital framework and this will take time, but we have made a solid beginning,' Professor Michael Petterson said. 'One day, we will be able to rapidly plot maps, showing where, for example, all public infrastructure worth over $US 0.5 million are located within zones of high risk from disasters. These decision-support tools facilitate intelligent planning and allow decisions to be made on retrofitting important buildings and infra-structure to make them more disaster and climate change resilient or to assist with issues, such as the value of forests, the location of channels for cruise ships and container vessels, and the locations of mines and mineral deposits.'

Finally, the Director encouraged all who attended to get involved with Pacific development initiatives and assist the region. 'Developing networks of profes-sional excellence in GIS, remote sensing and other modern technologies is the essential backbone of Pacific capacity building and can provide stimulating ideas for intelligence exchange for decades to come.'
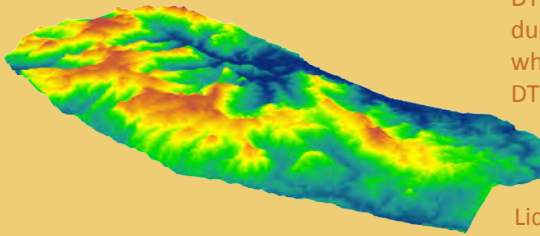
DTM – Digital terrain model can be pro-duced from stereo satellite image data which enables 3D data at 1: 10,000 scale. DTM for delaikoro, Central Vanualevu, FIJI

Lidar can be mounted on UAV, This opens new applications for Pacific Island Coun-tries
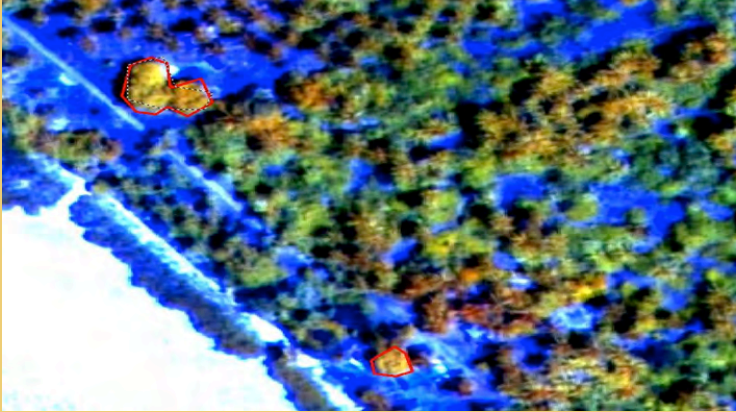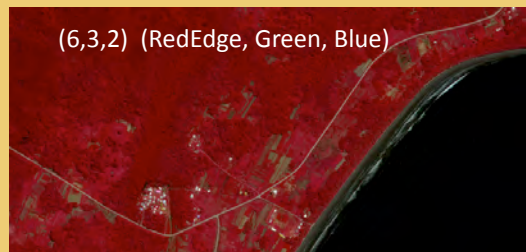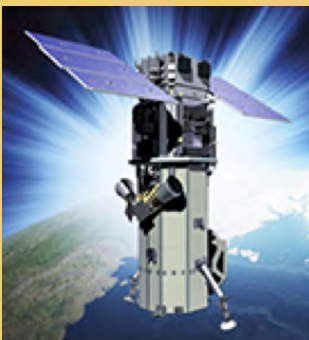
The spectral information of World-view2 satellite data allows delineating breadfruit in atoll islands, which is important for food security.

(6,3,2) (RedEdge, Green, Blue)

WorldView-3 provides 31cm panchromatic resolution, 1.24m multispectral resolution, 3.7m short wave infrared resolution and 30m CAVIS resolution.

WorldView-3 is the first multi-payload, super-spectral, high-resolution commercial satellite

It has an additional constellation capacity and a more frequent revisit, an average revisit time of <1 day. The coincident collection available —all instruments is capable of collecting up to 680,000km^2 per day with addition of 8 SWIR bands

WV3 has enhanced spatial resolution (0.31m pan, 1.24m multispectral and 3.7m short-wave infrared), addition of CAVIS Sensor and VNIR continuity with WV-2 (8-Band Multispectral)