

FIG WORKING WEEK 2017

Shaping the world of tomorrow -

Helsinki Finland 29 May - 2 June 2017

From digitalisation to augmented reality

**Presented at the FIG Working Week 2017,
May 29 - June 2, 2017 in Helsinki, Finland**



BULA



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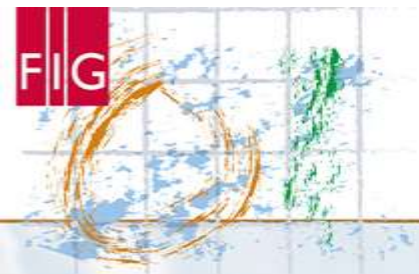


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WHERE IS FIJI



- Lat 17° 45' S, Long 175° 00' E
- Population – 858,038
- Land Area – 18,274 sq km (300+ islands)
 - iTaukei land – 16,081 sq km (88%)
 - Freehold – 1,462 sq km (8%)
 - State land – 731 sq km (4%)

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The FIG logo consists of the letters 'FIG' in white, set against a red rectangular background.

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Helsinki Finland

29 May - 2 June 2017

GGRF in the Pacific Island Countries

31 May 2017
Helsinki, Finland

Asakaia Tabua
Principal Surveyor
Ministry of Lands & Mineral Resources
Fiji

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WHERE IT STARTS

The UN-GGIM Roadmap...

In February 2015 the UN General Assembly adopted the resolution "A Global Geodetic Reference Frame for Sustainable Development" - the first resolution recognizing the importance of a globally-coordinated approach to geodesy.

As per UN Resolution A/69/L.53

In the Pacific...Australia, Fiji, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tuvalu, Vanuatu



UN-GGIM
UNITED NATIONS INITIATIVE ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT



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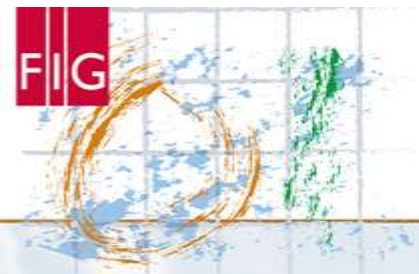


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Why is it Important?

- Surveying & Geospatial Data is underpinned by the Reference Frame
- Land Development
- Land Administration
- Natural Disaster
- Climate Change
- Sea Level Rise



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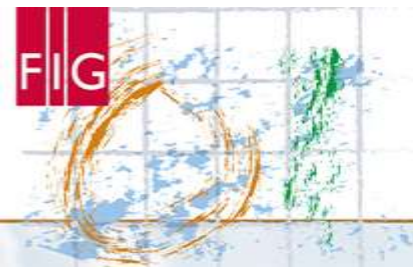


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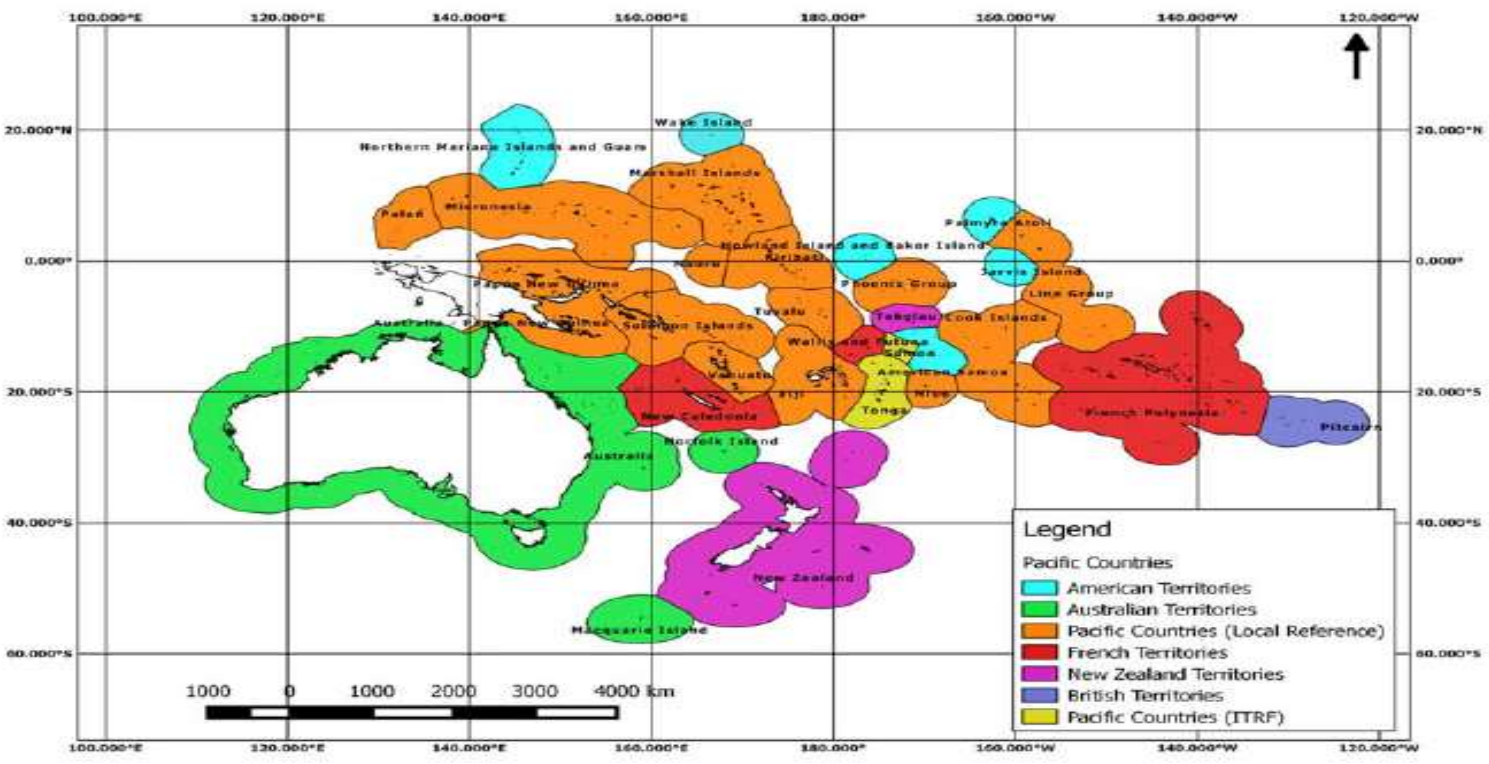
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Geodetic Reference Frame - Pacific



Most Pacific Islands countries's reference frame are base on local reference frame. Some are outdated.



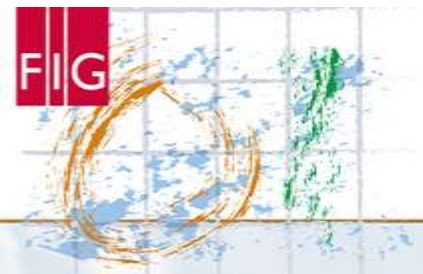


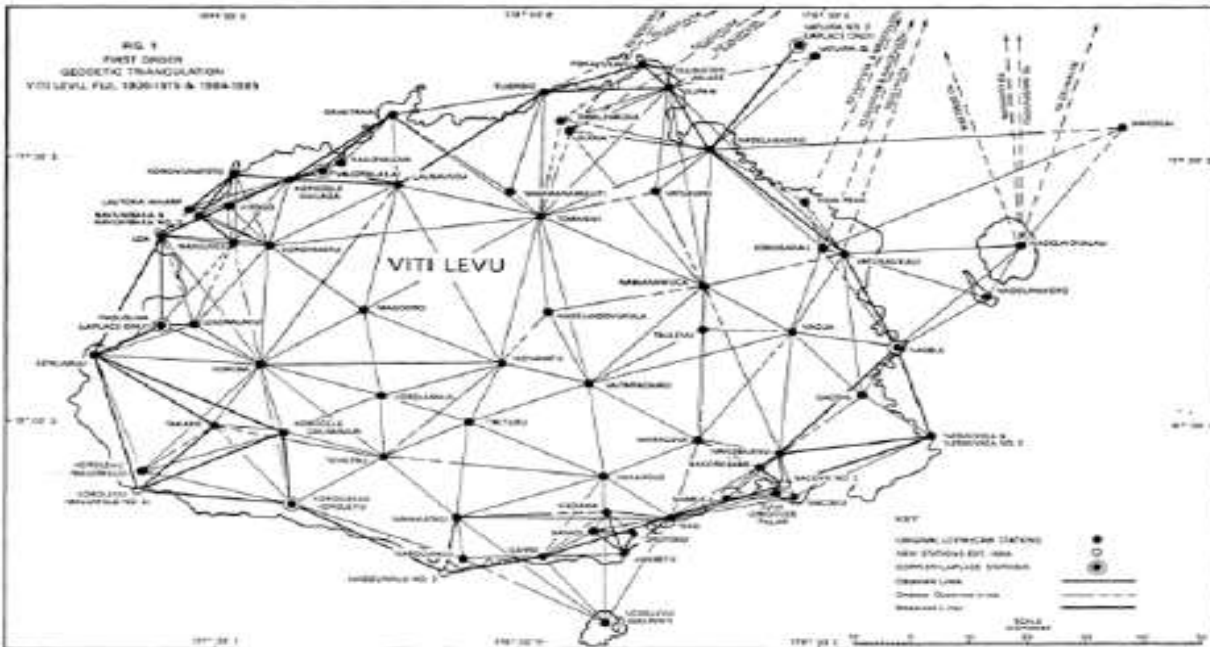
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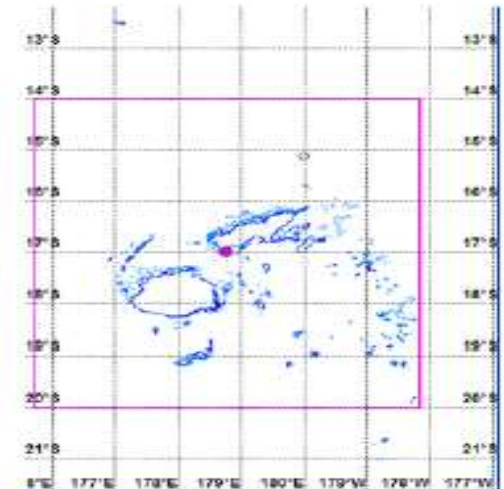
Fiji Island Geodetic Reference Frame



THE DEFINITION AND ADJUSTMENT OF THE FIJI
GEODETIC DATUM -1986

J. Hannah and J. Maseyk

Department of Survey and Land Information, Wellington, New Zealand



Fiji Map Grid (FMG1986 is based on the Gauss-Krüger Transverse Mercator projection where:

- Latitude of Origin = 17° 00' South
- Central Meridian = 178° 45' East
- Scale Factor at Origin = 0.999854
- False Northing = 4 000 000m
- False Easting = 2 000 000m
- Ellipsoid of reference = WGS 72
- where $a = 6378135m$
- $1/f = 298.26$



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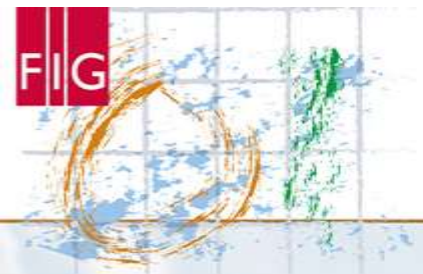


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Tonga Geodetic Reference TGD2005

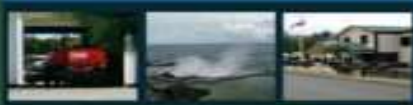


Pacific Community
Communauté du Pacifique

Report 6 : GeoSource Tonga Survey Transformations

Malcolm Archbold

Cyclone Emergency Recovery and
Management Project
Component B.2: Land Hazards and
Information Management



June 2006

Landcare Research New Zealand Ltd
in association with Beva International Consultants Ltd
and Geological and Nuclear Sciences NZ Ltd

Report 7 : GeoSource Tonga Survey Legislation

Malcolm Archbold, Graham Powell,
Alan Kirnear

Cyclone Emergency Recovery and
Management Project
Component B.2: Land Hazards and
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June 2006

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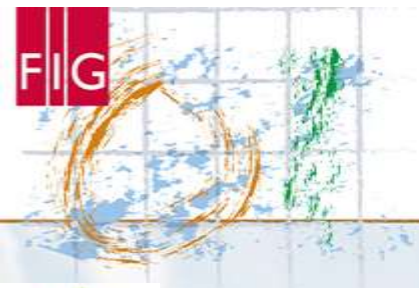


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NEW TECHNOLOGY



In order to fully utilize new survey technology, we need to have our base right first.



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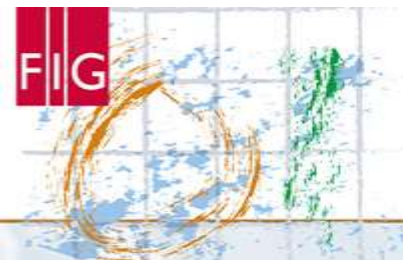


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Pacific Geospatial & Surveying Council (PGSC)



- Independent regional body advancing geospatial and surveying standards and capacity
- Established in the margins of the 2014 GIS/RS User Conference
- Governed by the PGSC Charter endorsed by 11 Pacific Island governments
- Supported by PGSC Partnership Desk (SPC)

For more info, visit: <http://gsd.spc.int/pgsc/>



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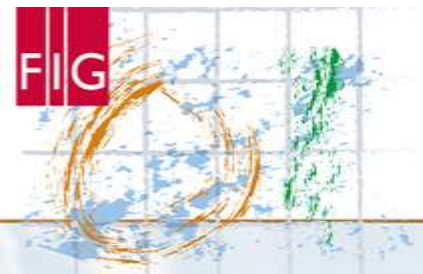


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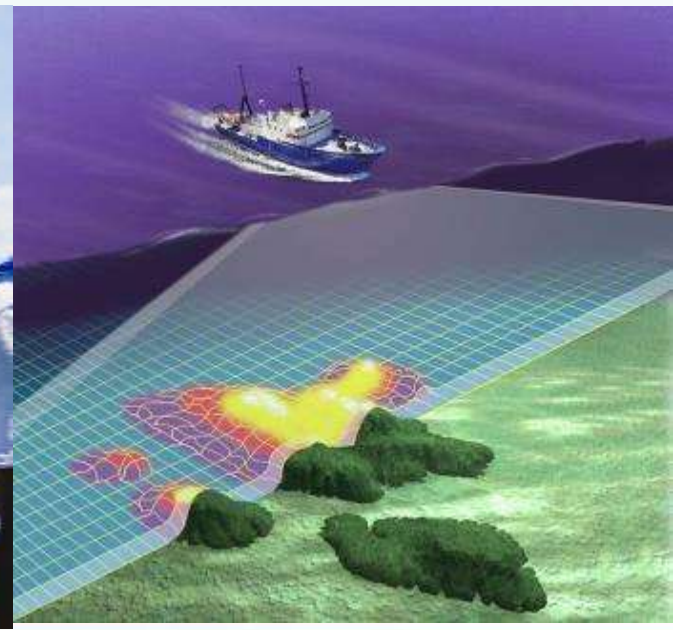
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PGSC VISION



Sustainable development in the Pacific enabled by world class geospatial information and surveying services.



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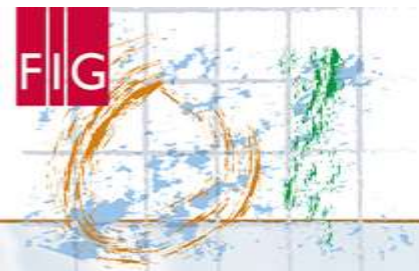


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WHY COLLABORATION IS IMPORTANT

- United Nations General Assembly: 11th March 2015
 - Resolution 69/266 – A global geodetic reference frame for sustainable development; in its 80th plenary meeting held 26th February 2015
- Cabinet Paper - CP(15) 169 29th August 2015
- Cabinet Decision 207 – Modernising Fiji's Geodetic Datum; 29th August 2015



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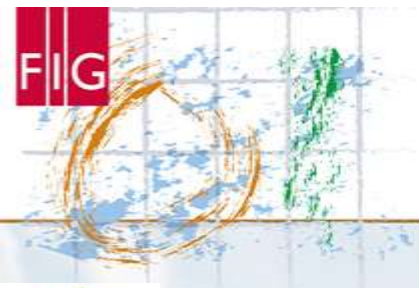


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THANK YOU



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