

UNOSAT

FIJI – Tropical Cyclone Winston

08 March 2016

Analysis of population exposure based on wind speed zones

08 March 2016

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Overview



The Tropical Cyclone Winston, the worst to affect Fiji in decades made landfall at 06:30 UTC (18:30 local time) on the north of Viti Levu, the main island in Fiji archipelago.

Population exposure estimates are based on observed cyclone track and sustained wind speeds of 90 - 120 Km/h and more than 120 Km/h (22 February 2016, Joint Typhoon Warning Center)



895,975

Total population of Fiji



694,732

Total population living in
>120 km/h wind speed zones



122,275

Total population living in
90 - 120 km/h wind speed zones

Division / Province	Total Population (WorldPop)	Population Exposure >120 Km/h	Population Exposure 90 - 120 Km/h
Central	366,402	325,062	13,575
Naitasiri	172,036	186,370	0
Namosi	7,382	6,080	1,306
Rewa	107,857	53,857	829
Serua	19,529	6,426	11,439
Tailevu	59,598	72,328	0
Eastern	39,928	15,740	6,550
Kadavu	10,880	0	0
Lau	11,432	3,854	2,292
Lomaiviti	17,616	11,886	4,258
Northern	145,473	37,729	98,110
Bua	15,170	13,284	1,155
Cakaudrove	52,966	21,958	31,617
Macuata	77,337	2,487	65,338
Western	342,030	316,201	4,041
Ba	248,017	229,204	0
Nadroga	62,482	56,409	4,041
Ra	31,531	30,587	0
Total	893,833	694,732	122,275

Population exposure, summarized at Division and Province level, has been calculated using 100 m resolution WorldPop dataset. This is a preliminary analysis & has not yet been validated in the field

FIJI: TROPICAL CYCLONE WINSTON. OBSERVED TRACK AS OF 22 FEBRUARY 2016

This map illustrates Observed Track for Tropical Cyclone 11P (Winston) as of 22 February 2016 and the zones of windspeed >120 km/h and 90 - 120 km/h. This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR - UNOSAT.

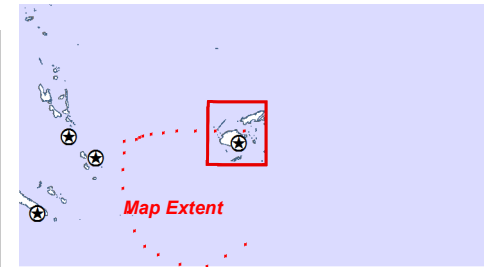
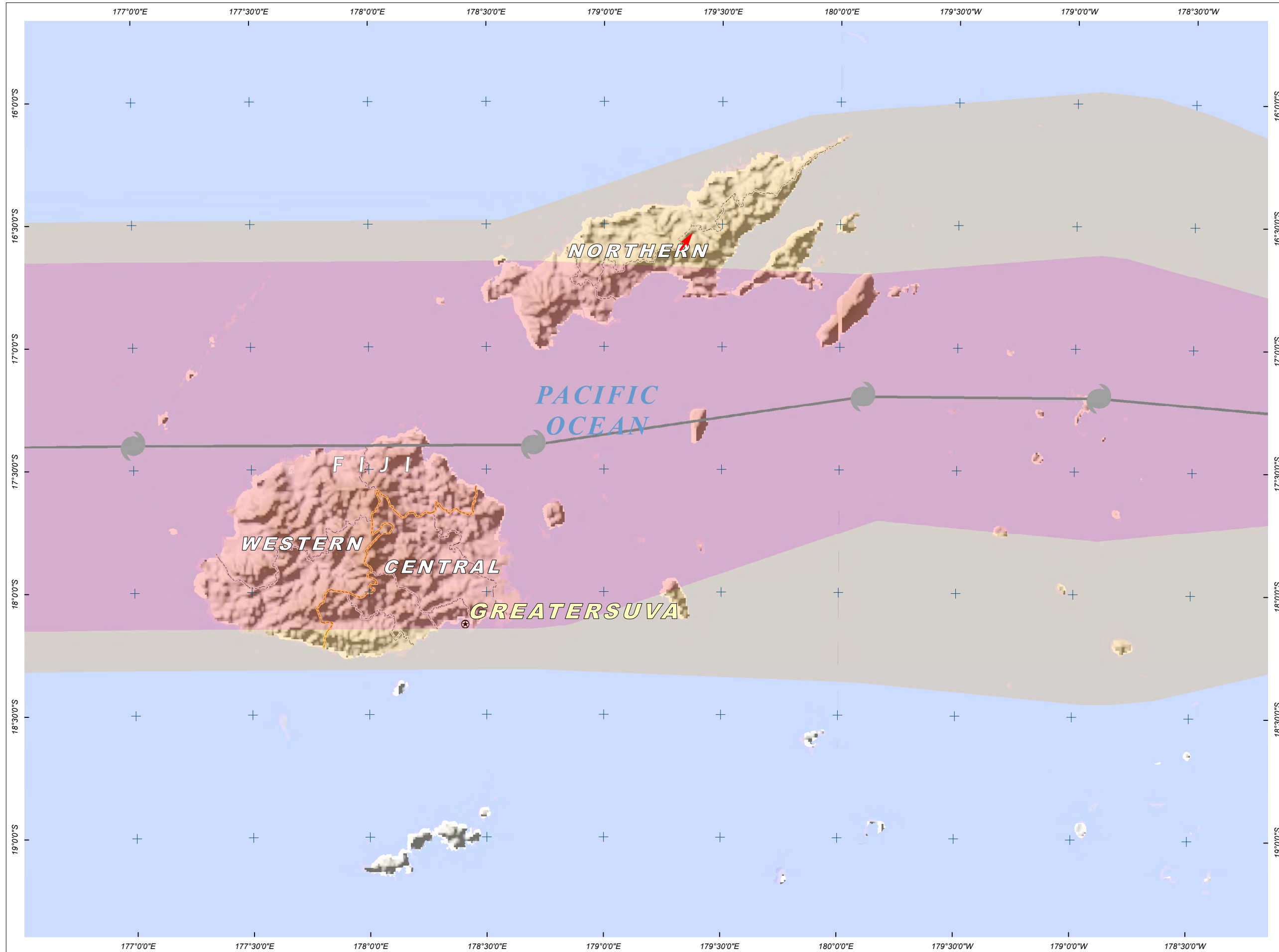
Tropical Cyclone

Production Date:
08/03/2016



Version 1.0

Glide: TC-2016-000014-FJI



LEGEND

- Storm Track
- Division Boundary
- Province Boundary
- Wind Speed >120 Km/h
- Wind Speed 90 - 120 Km/h

Map Scale for A3: 1:1,700,000
0 5 10 20 30 40 50 Km

Storm track: US Navy Joint Typhoon Warning Center
Population Data: WorldPop
Other Data: USGS, UNCS, NASA, NGA,
Analysis: UNITAR - UNOSAT
Production: UNITAR - UNOSAT
Analysis conducted with ArcGIS v10.3

Coordinate System: Fiji 1986 Fiji Map Grid
Projection: Transverse Mercator
Datum: Fiji 1986
Units: Meter

The depiction and use of boundaries, geographic names and related data shown here are not warranted to be error-free nor do they imply official endorsement or acceptance by the United Nations. UNOSAT is a program of the United Nations Institute for Training and Research (UNITAR), providing satellite imagery and related geographic information, research and analysis to UN humanitarian and development agencies and their implementing partners.

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