

5 November 2018

# **Survey Report of the 2018 Sulawesi Tsunami**

27-31 October 2018

Research Institute of Sustainable Future Society

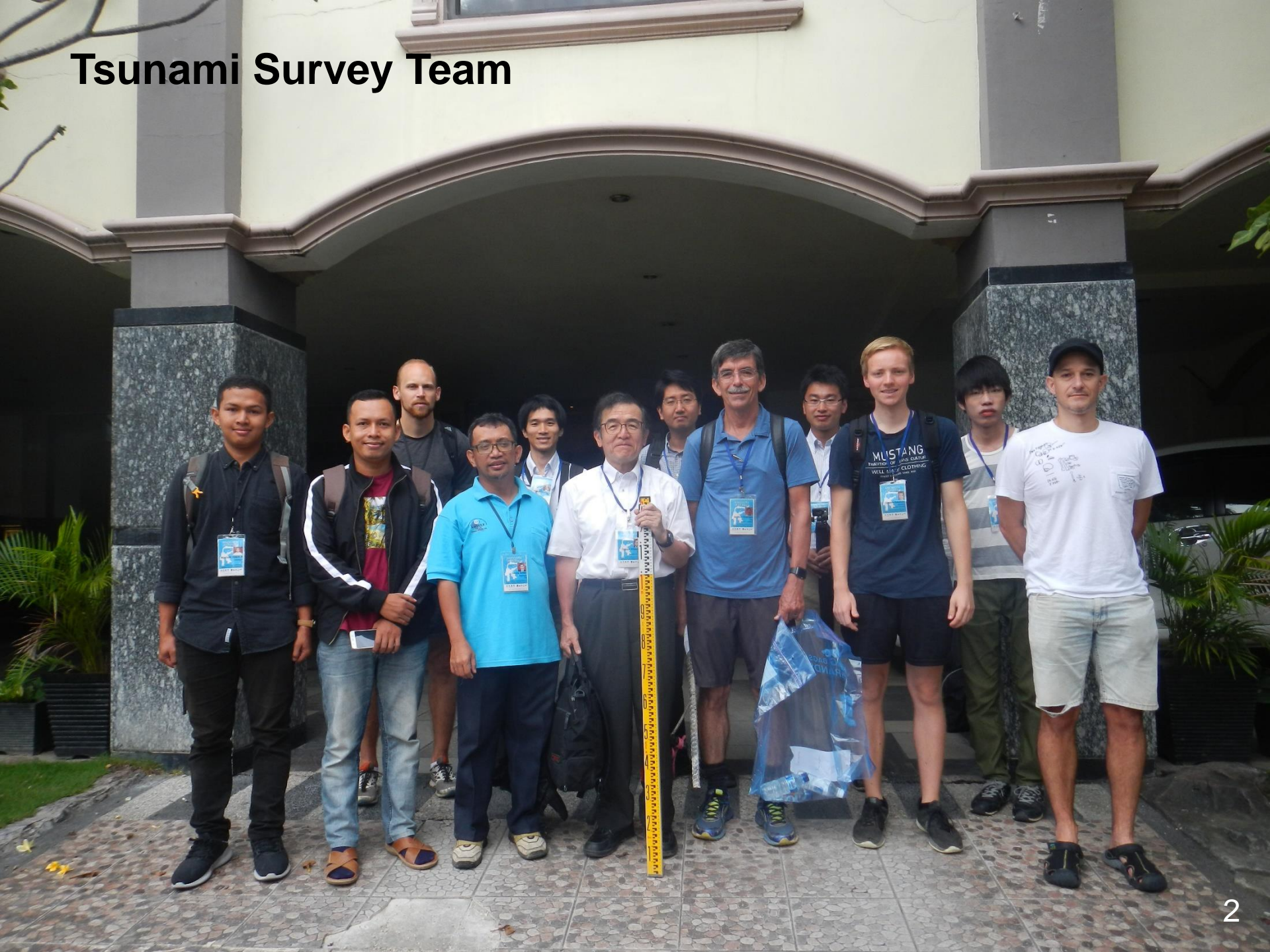
Waseda University

早稲田大学持続的未来社会研究所

Indonesia, Japan, USA, Canada, and Germany

Waseda Tsunami Survey Team

# Tsunami Survey Team



# Members of Tsunami Survey Team

- Prof. Tomoya Shibayama      Team Leader, Waseda University, Japan
- Prof. Miguel Esteban      Waseda University, Japan
- Dr. Tomoyuki Takabatake      Waseda University, Japan
- Mr. Yuta Nishida      Waseda University, Japan
- Dr. Takahito Mikami      Tokyo City University, Japan
- Dr. Ryota Nakamura      Toyohashi University of Technology, Japan
- Dr. Hendra Achiari      Bandung Institute of Technology, Indonesia
- Mr. Muhamad Fadel Hidayat Marzuki      Bandung Institute of Technology, Indonesia
- Prof. Rusli      State Institute for Islamic Studies Palu, Indonesia
- Dr. Abdul Gafur Marzuki      State Institute for Islamic Studies Palu, Indonesia
- Prof. Ian Nicol Robertson      University of Hawaii, USA
- Mr. Jacob Stolle      University of Ottawa, Canada
- Mr. Clemens Krautwald      Technical University of Braunschweig, Germany



# Survey Route - 27 October 2018

Palu

2018-10-27

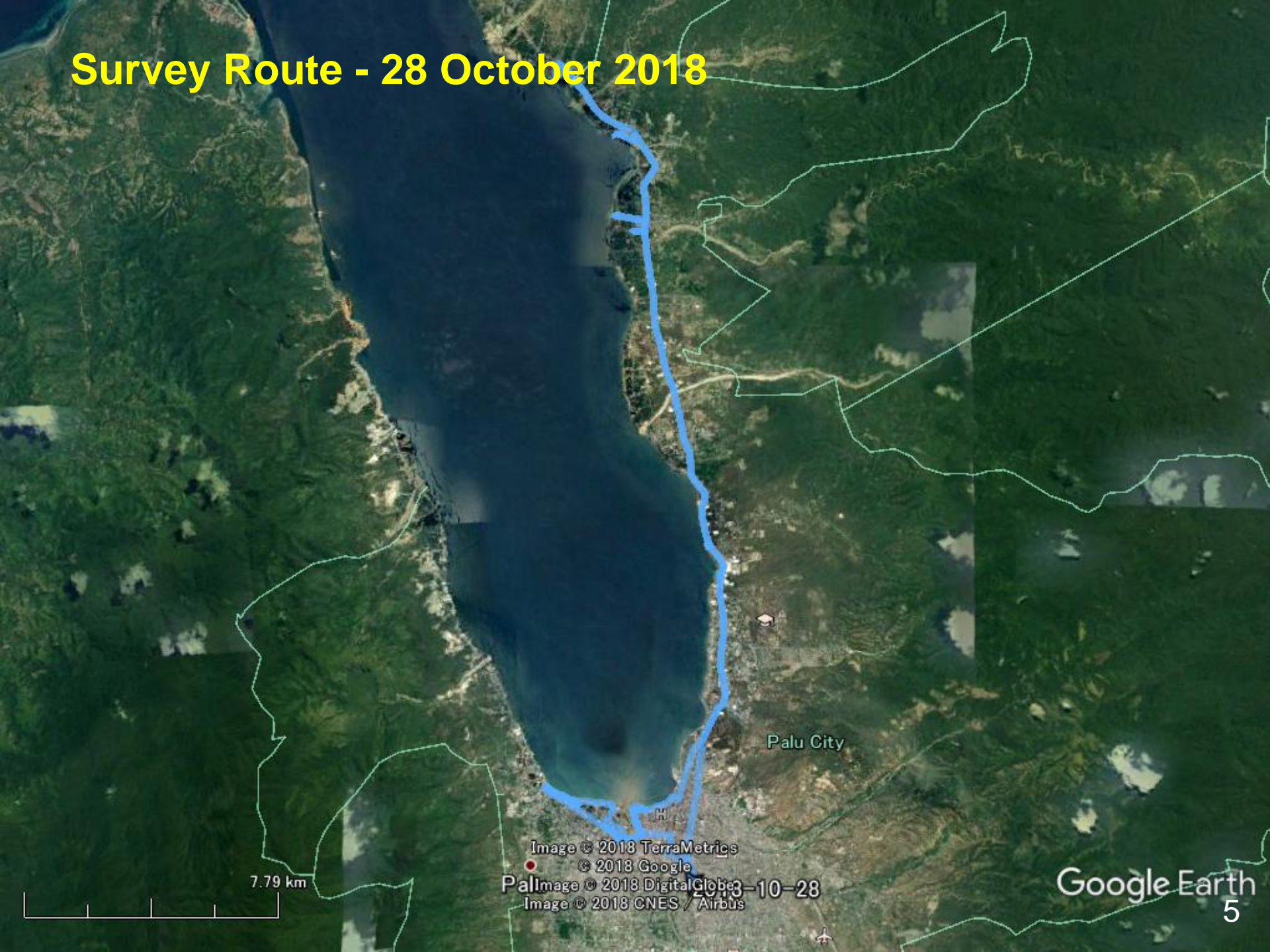
1516 m

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Image © 2018 TerraMetrics

Google Earth  
4



# Survey Route - 28 October 2018



7.79 km

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Image © 2018 Google  
Image © 2018 DigitalGlobe  
Image © 2018 CNES / Airbus  
2018-10-28

Palu City

Google Earth



# Survey Route - 29 October 2018



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Image © 2018 DigitalGlobe  
Image © 2018 CNES / Airbus

2018-10-29

Google Earth  
6

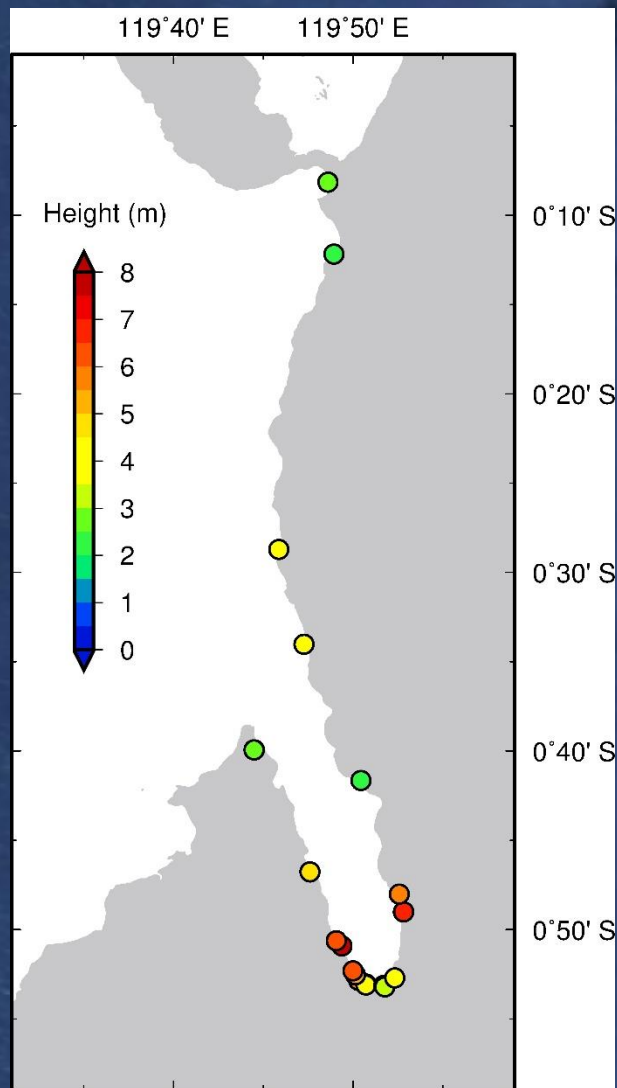


# Survey Route - 30 October 2018



# Measurement Survey Results

Note: The results are **not** yet corrected to the heights above the estimated tide level at the time of tsunami arrival.



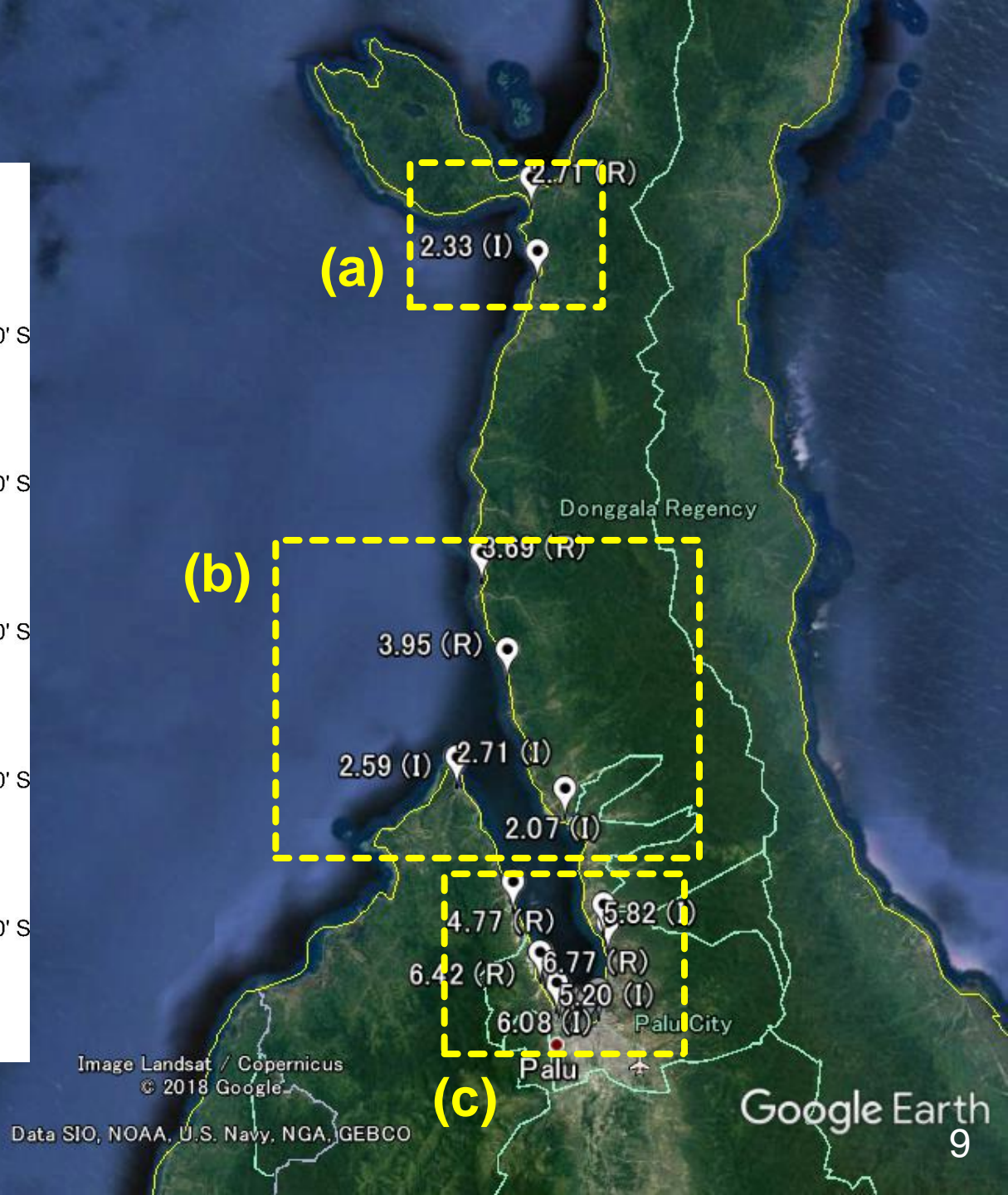
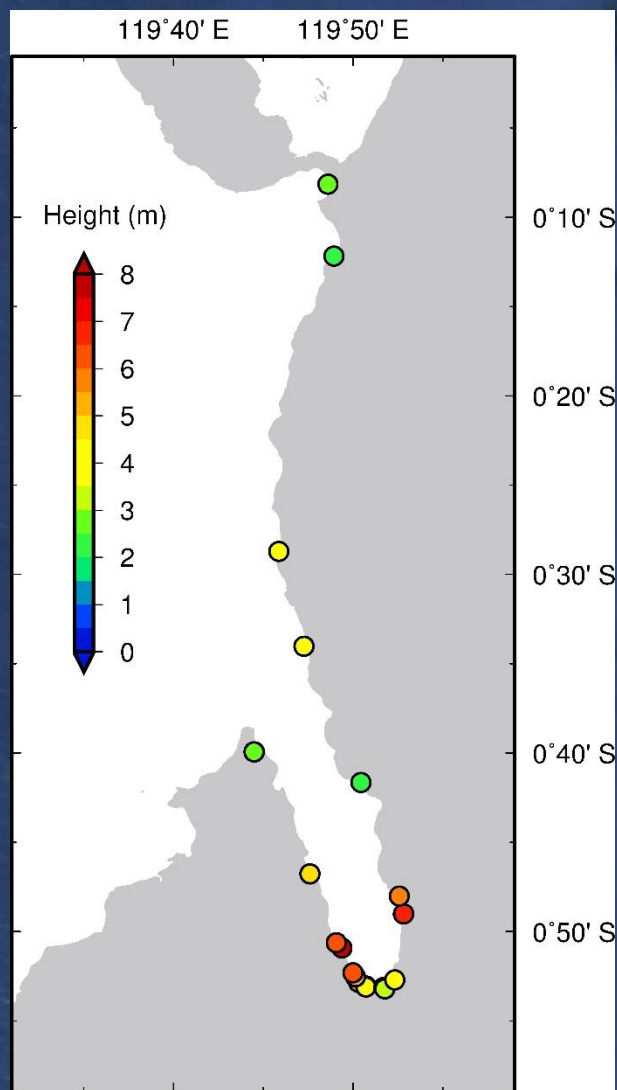
33 km

R: Run-up height (m)  
I: Inundation height (m)

Image Landsat / Copernicus  
© 2018 Google  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google Earth





(a)

Magapa

2.71 (R)

Lombonga

2.33 (I)

Lende

Tompe

3.95 km

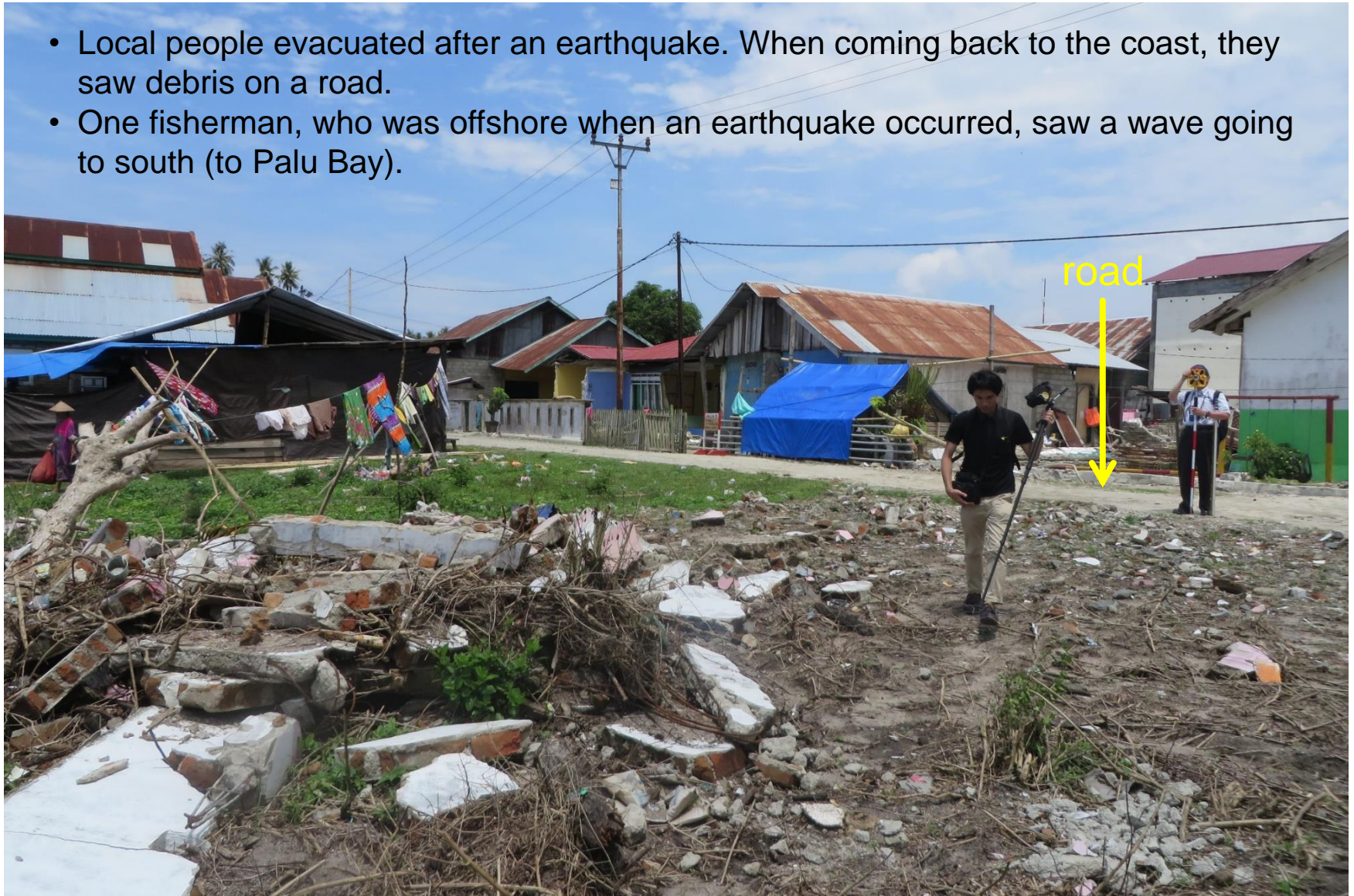
Image © 2018 TerraMetrics  
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Image © 2018 DigitalGlobe  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google Earth  
10



# Lombonga, Donggala

- Local people evacuated after an earthquake. When coming back to the coast, they saw debris on a road.
- One fisherman, who was offshore when an earthquake occurred, saw a wave going to south (to Palu Bay).





(b)

3.69 (R)

Kaliburu

3.95 (R)

Kavaya

Labuan Bajo

2.59 (I) 2.71 (I)

Wani2

2.07 (I)

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8.90 km

Google Earth  
12



# Wani2, Donggala





## Wani2, Donggala



- Water was accumulated inside a room on the first floor. The maximum water level observed was higher than this, but didn't reach the second floor.



(c)

Loli

4.77 (R)

5.82 (I)

Mamboro

6.58 (I)

6.77 (R)

Palu Bay

Buluri

8.43 (I)

6.42 (R)

(d)

5.20 (I)  
6.08 (I)  
2.61 (I)  
3.85 (I)  
5.65 (I)  
4.26 (I)  
5.60 (I)  
3.32 (I)  
4.07 (I)

Palu City

(e)

4.76 km

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Image © 2018 DigitalGlobe

Google Earth



# Mamboro, Palu





# Mamboro, Palu





# Buluri, Palu





# Loli, Donggala





(d)

6.08 (I)

5.20 (I)

5.65 (I)

*Palu Bay*

2.61 (I)

3.85 (I)

**IAIN Palu**

564 m

Image © 2018 TerraMetrics  
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Google Earth  
20



# IAIN Palu campus





(e)

*Palu Bay*

4.26 (I)

3.32 (I) 5.60 (I)

TV office

4.07 (I)

398 m

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Google Earth  
22



# TV office, Palu

