

Crowdsourcing Disaster Response

Pixels + Perception = Information



Recent FirstLook Activations



- Natural Disasters (Earthquakes, Fires)
- Manmade Crises (Large accidents, Terrorism)
- Human Interest (World Cup, Olympics)

- 2013: 170 events
- 2014: 250 events
- 2015 Year to Date: 38

FirstLook Case Studies



Mudslide in Oso, Washington March 2014



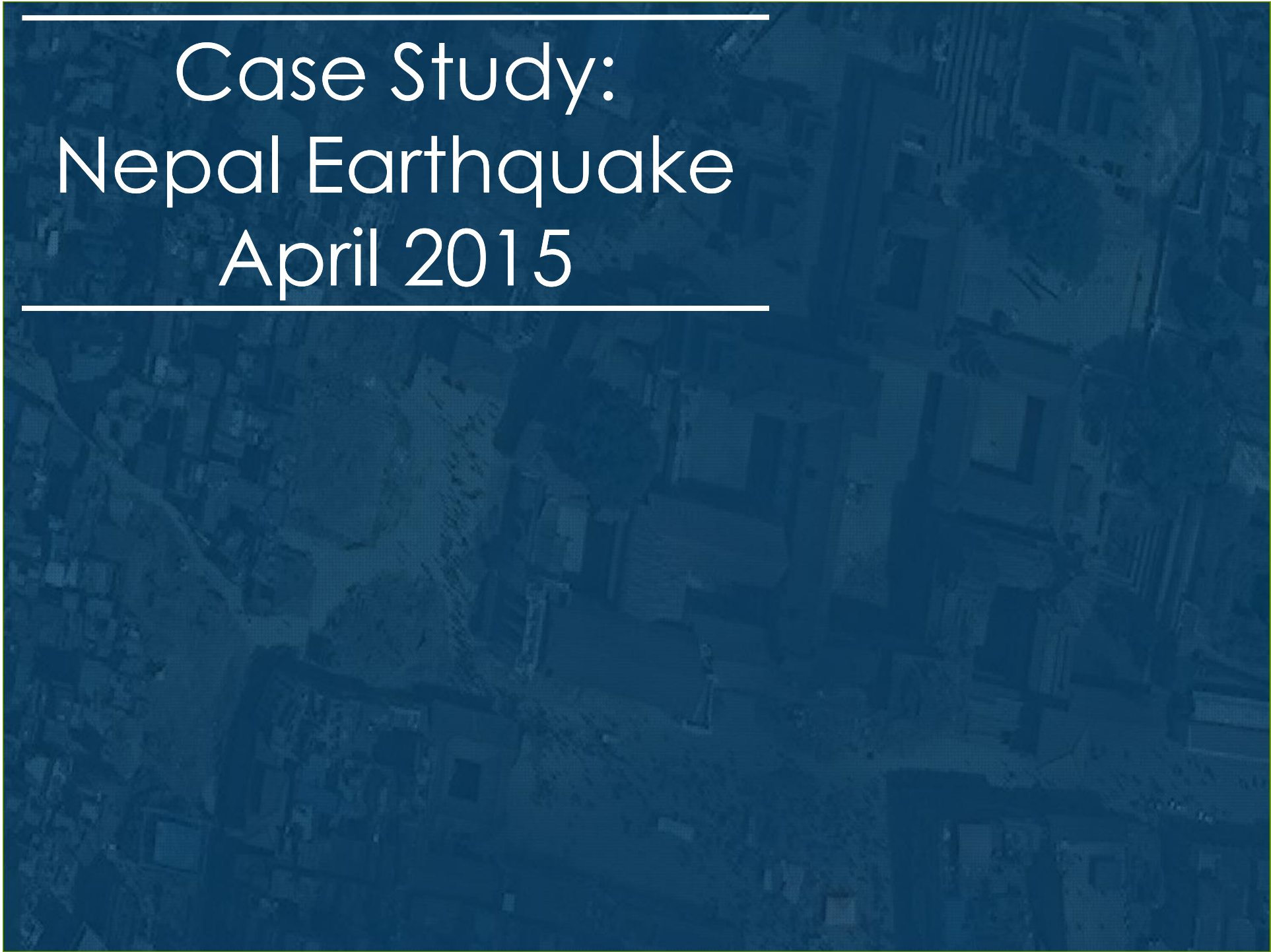
Wildfires in San Diego, California May 2014



Tornado in Pilger, Nebraska
June 2014



Case Study: Nepal Earthquake April 2015



WEATHER ALERT High Surf Advisory

NEWS

7.5-MAGNITUDE EARTHQUAKE ROCKS NEPAL; DAMAGE REPORTED



A 7.5-magnitude earthquake struck near Kathmandu, the capital of Nepal, on Friday, April 24, 2015.

Share +1 Tweet



Friday, April 24, 2015

NEWS



Garland Response to Attack: 'Our Community Is Not Scared'
Updated 1 min ago



Rescue helicopter interrupts Malibu beach wedding
Updated 15 mins ago



Killed on Vacation: Son Detained in Stabbing Death of Parents in Virgin Islands
Updated 16 mins ago



Family of Motorist in Deadly Metro-North Crash Plans to Sue
Updated 36 mins ago



Body found in North Hills apartment closet; roommate arrested
Updated 42 mins ago

MORE NEWS >

TOP STORIES



South El Monte man killed by deputies after stabbing his neighbors
Updated 1 hr 11 mins ago

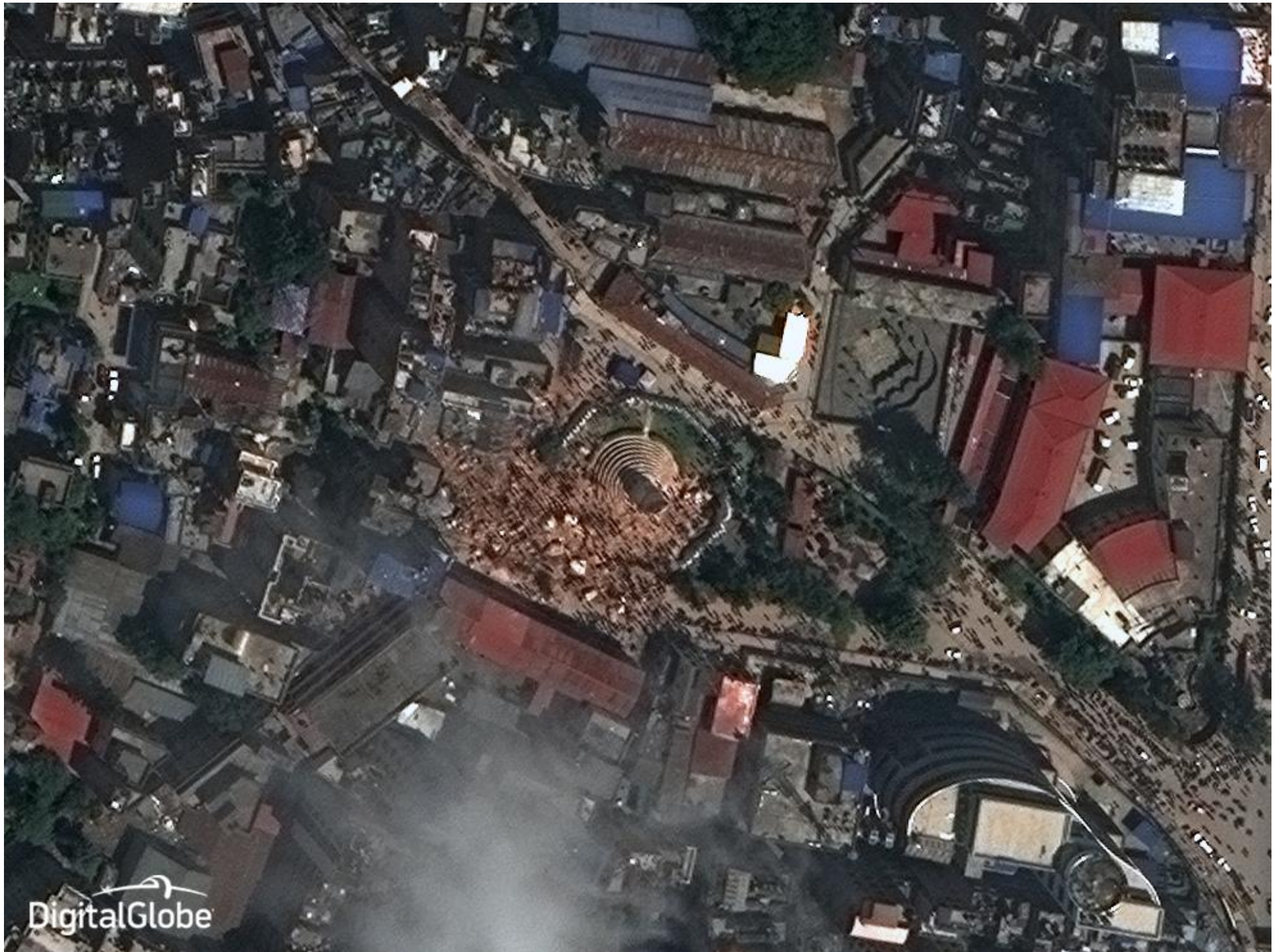
RECOMMENDED



Famed Dog Dies at 20 Vetstreet



DigitalGlobe







DigitalGlobe opens access to satellite data to support disaster response efforts in Nepal

26
APR 2015

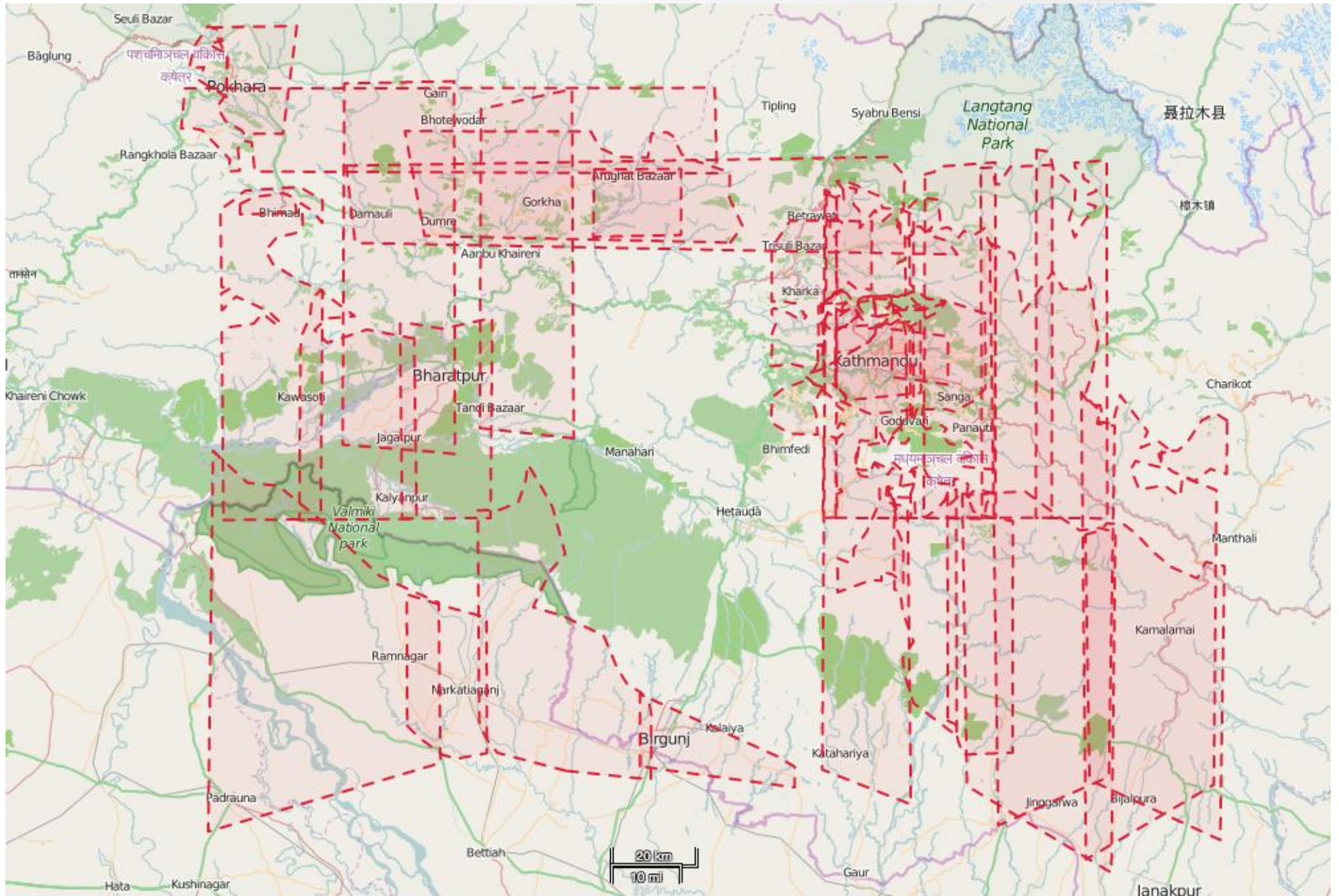
by DigitalGlobe

Crowdsourcing campaign underway to catalog earthquake's destruction

Share:  136



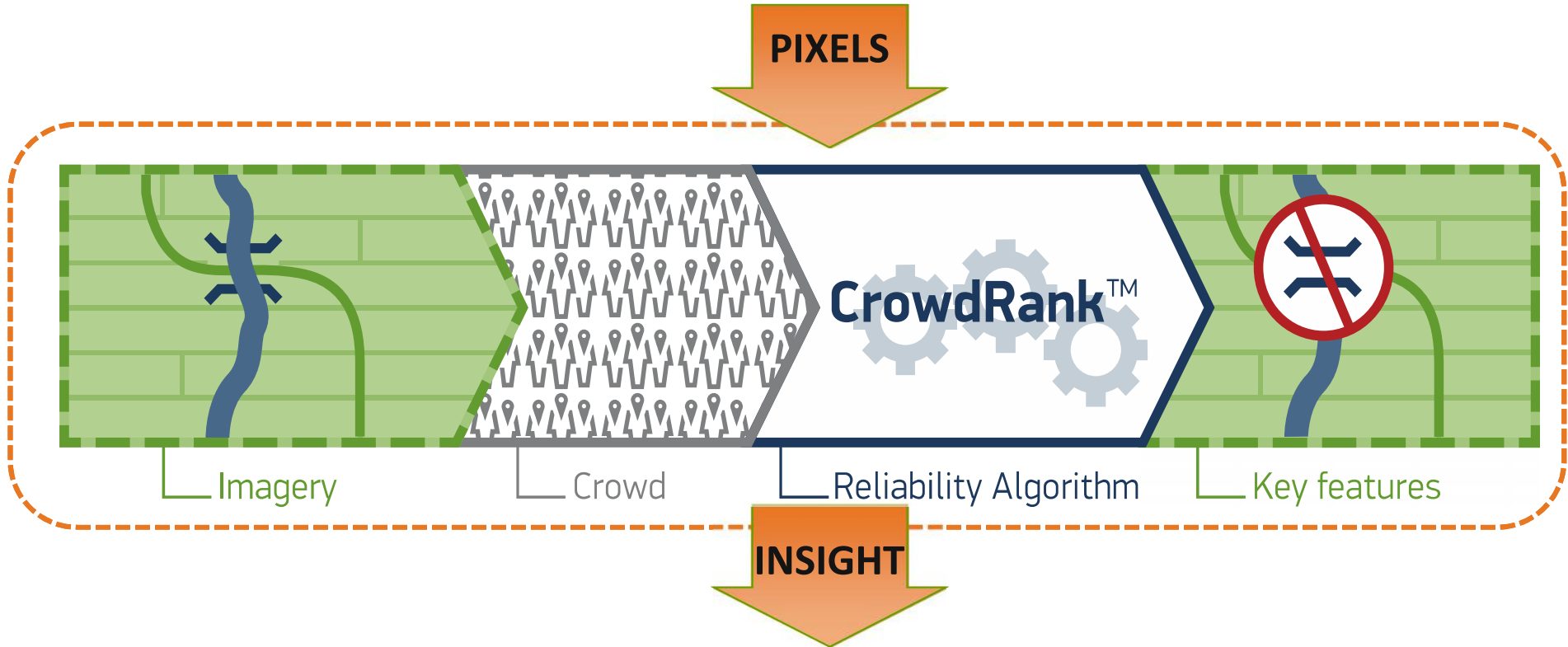
In response to the devastating 7.8-magnitude earthquake that struck central Nepal on April 25, DigitalGlobe has made high resolution satellite imagery of the affected areas freely available online to all groups involved in the response and recovery effort. This imagery can be accessed via <http://services.digitalglobe.com>



How do we quickly analyze all of these images?

3810	nepal_earthquake_2015_29	sip	jpg	04/26/2015	103001004155C100	85.685782603349	27.510905952865	WV02
3809	nepal_earthquake_2015_28	sip	jpg	04/26/2015	1030010041B35A00	85.884548534315	27.496920751819	WV02
3807	nepal_earthquake_2015_26	sip	jpg	04/26/2015	104001000B91B600	85.296047282195	27.47415822515	WV03_VNIR
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3779	nepal_earthquake_2015_16	sip	jpg	04/26/2015	104001000B91B600	85.294318399661	27.738479918758	WV03_VNIR
3778	nepal_earthquake_2015_15	sip	jpg	04/24/2015	1050410012953D00	85.059160015642	30.616847627877	GE01
3777	nepal_earthquake_2015_14	sip	jpg	04/24/2015	1050410012953E00	85.279981845526	27.689204150356	GE01
3776	nepal_earthquake_2015_13	sip	jpg	04/24/2015	1050410012953F00	81.082407131717	26.87683471368	GE01
3775	nepal_earthquake_2015_12	sip	jpg	04/25/2015	104001000A8B9E00	84.426145382897	27.500689972274	WV03_VNIR
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3773	nepal_earthquake_2015_10	sip	jpg	04/25/2015	104001000B553200	85.417716079665	27.495833874191	WV03_VNIR
3772	nepal_earthquake_2015_09	sip	jpg	04/25/2015	104001000A851A00	85.531567766989	27.495699728154	WV03_VNIR
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3768	nepal_earthquake_2015_05	sip	jpg	04/25/2015	102001003E8BBD00	84.671560315353	27.517678551348	WV01
3767	nepal_earthquake_2015_04	sip	jpg	04/25/2015	102001003CA96D00	84.9764476	27.5308412	WV01
3766	nepal_earthquake_2015_03	sip	jpg	04/25/2015	1020010039832F00	87.186100521818	26.647435194447	WV01
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3764	nepal_earthquake_2015_01	sip	jpg	04/25/2015	102001003D407500	85.648999035368	27.520039844738	WV01

Tomnod Crowdsourcing



7.8 Earthquake hits Nepal

Help disaster response teams by mapping damage from the recent deadly 7.8 magnitude earthquake that hit near Kathmandu, Nepal. Start by comparing before and after imagery and placing a tag in the center of every damaged building, damaged road and area of major destruction you find. To compare before and after imagery, press the "Q" and "W" keys on your keyboard or click the "Newest" and "Oldest" buttons in the bottom right corner of the map.

Search satellite images for...



Damaged
Building



Major
Destruction



Damaged
Road

START SEARCHING

Tomnod calls 1M+ people to action via email...



A 7.8 magnitude earthquake struck near Kathmandu, Nepal at noon on Saturday, killing thousands. Aftershocks and avalanches have caused fatalities and damage as far away as the basecamp of Mount Everest.

Help map the destruction by tagging **damaged buildings, blocked roads** and **areas of major destruction!**

This campaign offers pre-event imagery for context. Toggle between pre-event and post-event imagery by clicking the buttons on the bottom right corner of the campaign page, or by pressing the "Q" and "W" keys on your keyboard.

[HELP MAP EARTHQUAKE DAMAGE IN NEPAL](#)

...and 75K+ people via social media (Facebook, Twitter, Youtube)

Tomnod
Posted by Cait E. Pop [?] · April 26 at 3:27pm · Edited ·

Help response teams by mapping blocked roads, damaged buildings and areas of major destruction after a deadly 7.8 earthquake hit near Kathmandu, Nepal! <http://bit.ly/1FovhCF>



7.8 Earthquake hits Nepal - Help disaster response teams by mapping damage from the recent 7.8...

Help disaster response teams by mapping damage from the recent deadly 7.8 magnitude earthquake that hit Kathmandu, Nepal. Start by comparing before and...

TOMNOD.COM

TWEETS	FOLLOWING	FOLLOWERS	FAVORITES
1,530	96	9,999	31

Tomnod @tomnod · Apr 29

New @DigitalGlobe images have been added to the #NepalEarthquake campaign! Together we can make a difference -JOIN: bit.ly/1FovhCF

← 9 2 ...

Tomnod retweeted

Shay Har-Noy @iheartcrowds · Apr 28

So far 16,685 people have helped identify damage in #NepalEarthquake on @tomnod. Amazing response. Join the effort! tomnod.com/campaign/nepal...

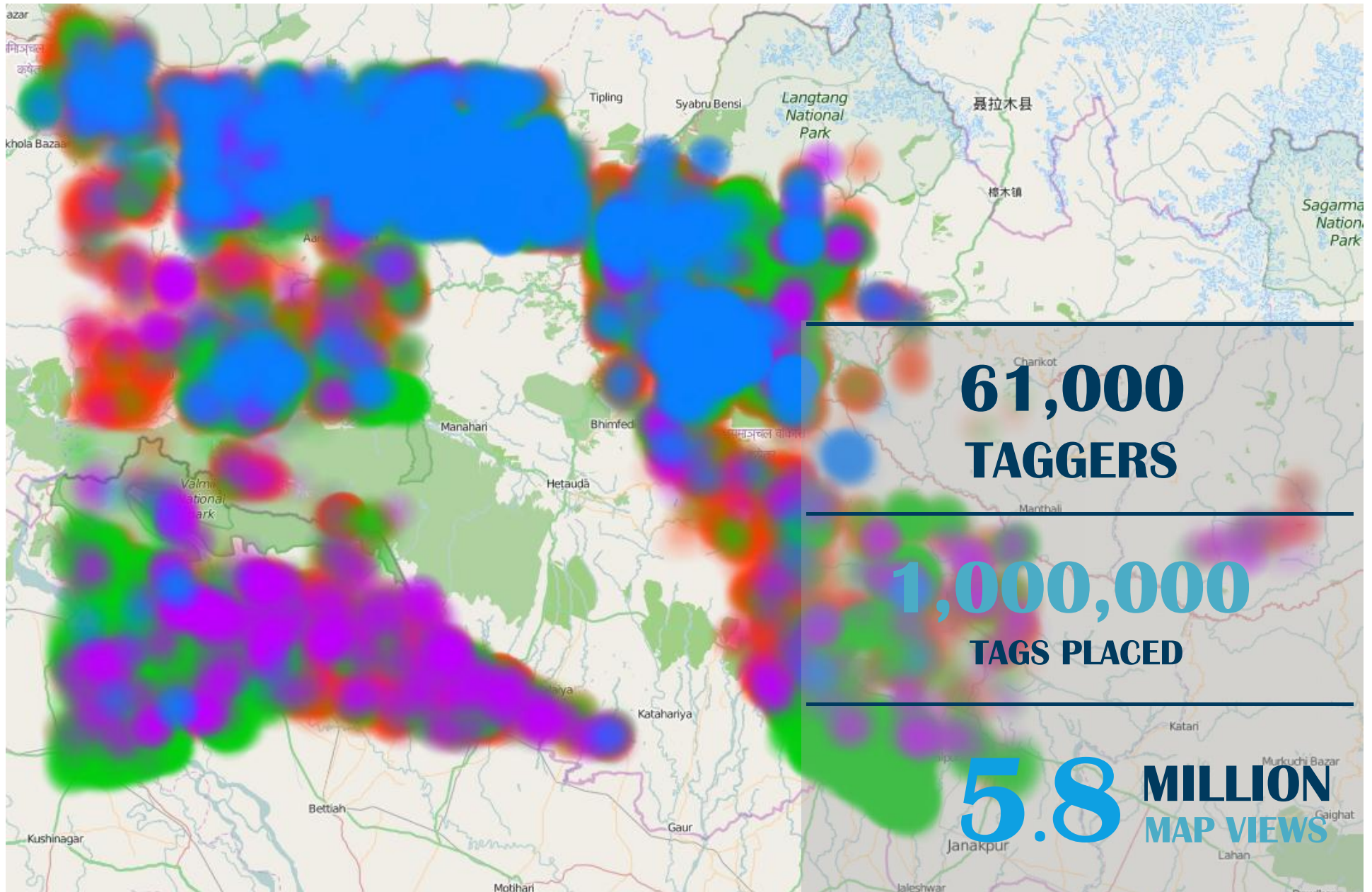
← 14 5 ...

Tomnod retweeted

CrisisMappers @CrisisMappers · Apr 27

Help tag imagery in #Nepal with our friends at @tomnod tomnod.com/campaign/nepal...

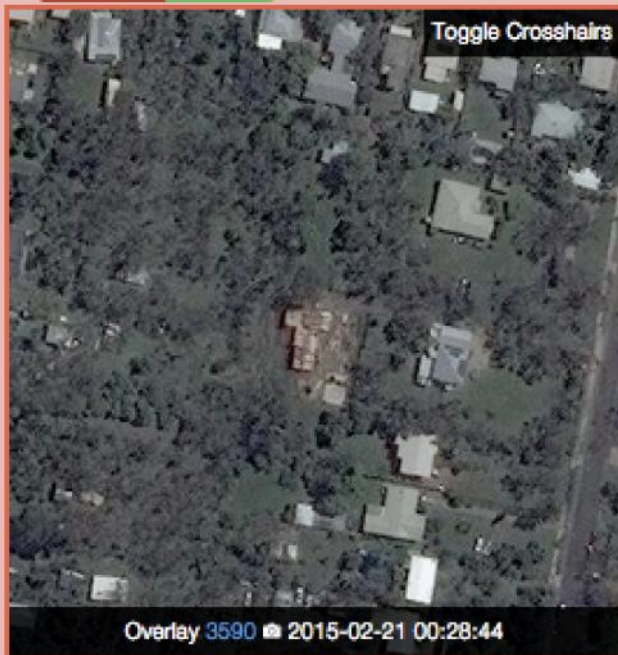
← 25 6 ...



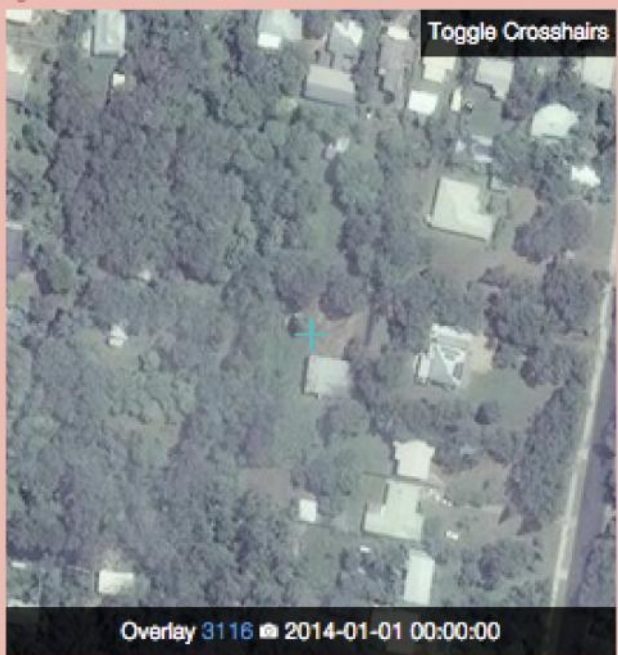
Tent / Shelter (1766) Major Destruction (4313) Damaged Building (4122) Damaged Road / Bridge (106)

Sort by: CrowdRank Agreement Map ID Overlay ID

Invalid Valid



CrowdRank 97.6% Agreement 7 within 1.13768m



Map ID 46832 Lat/Lon -23.121913°, 150.733555°

DAMAGED ROADS



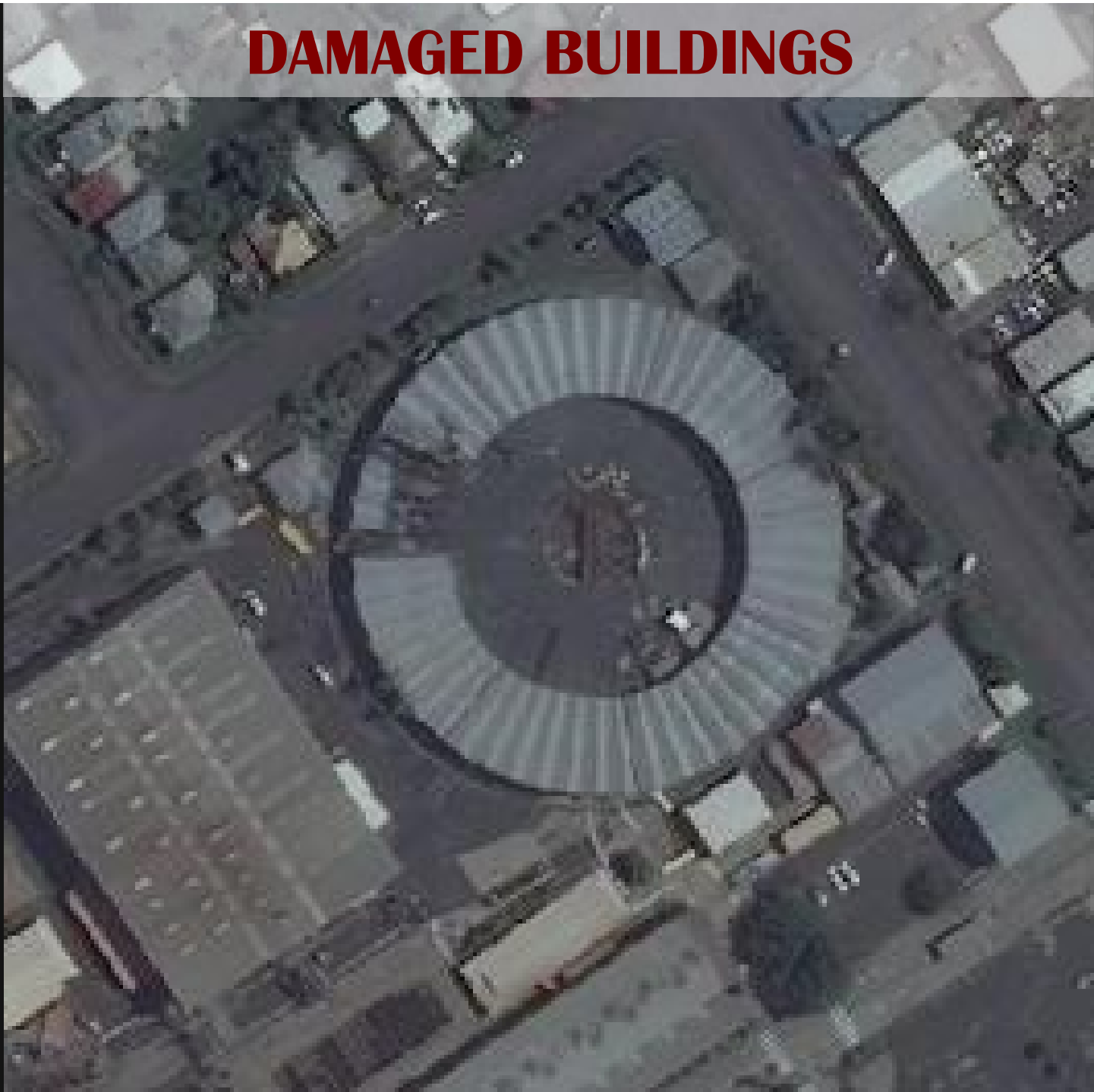
DAMAGED ROADS



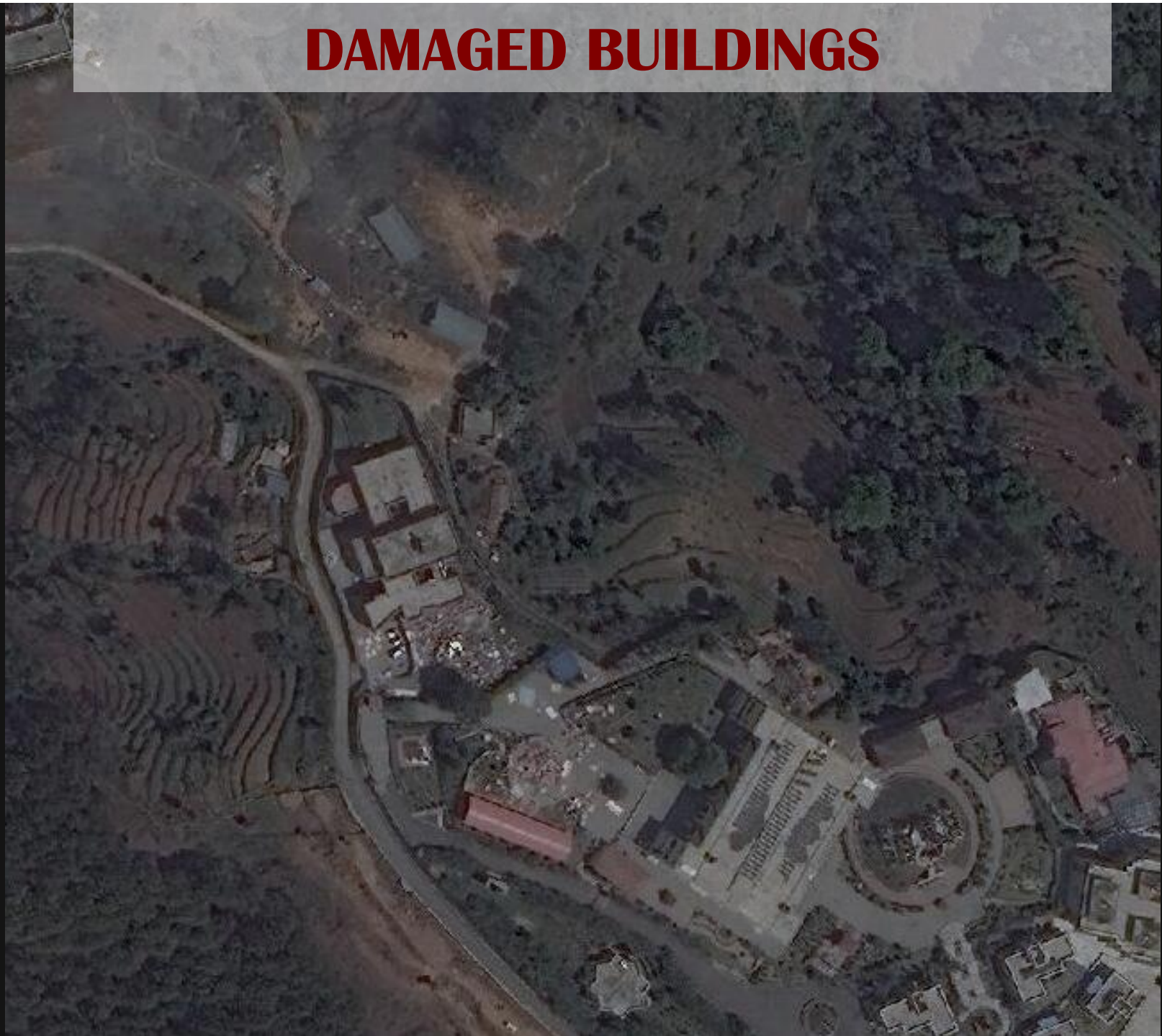
DAMAGED ROADS



DAMAGED BUILDINGS



DAMAGED BUILDINGS



DAMAGED BUILDINGS



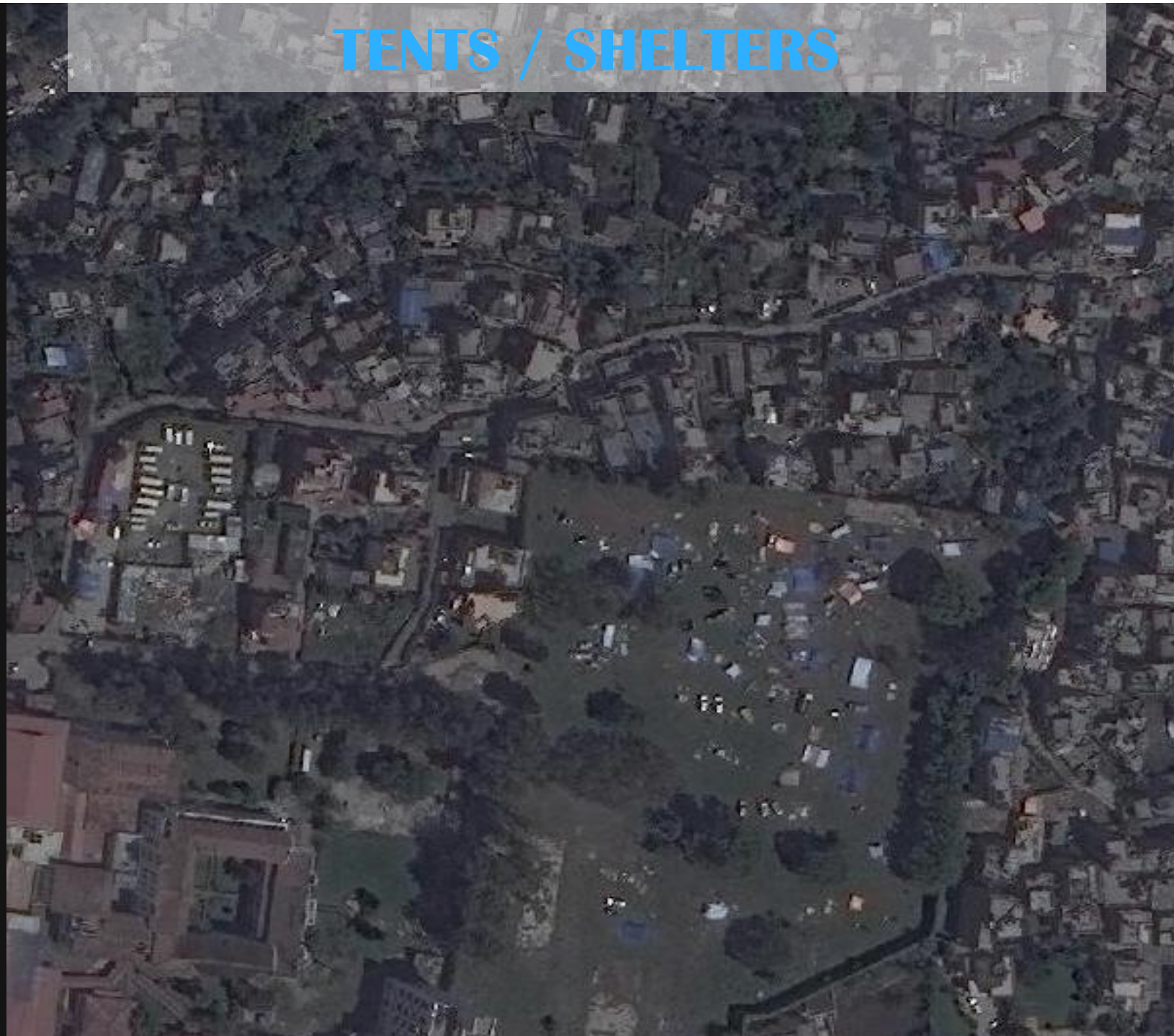
TENTS / SHELTERS



TENTS / SHELTERS



TENTS / SHELTERS

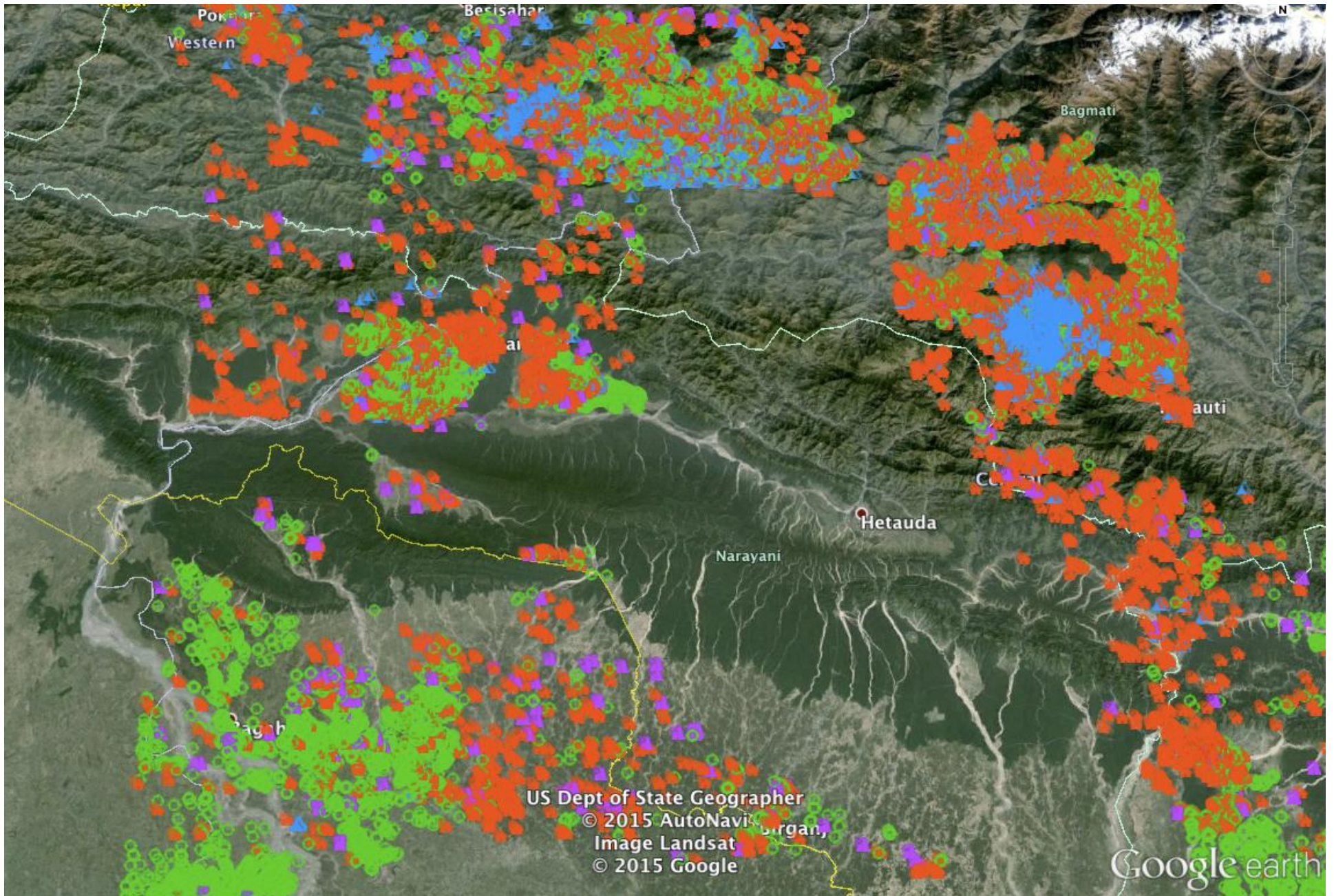


MAJOR DESTRUCTION

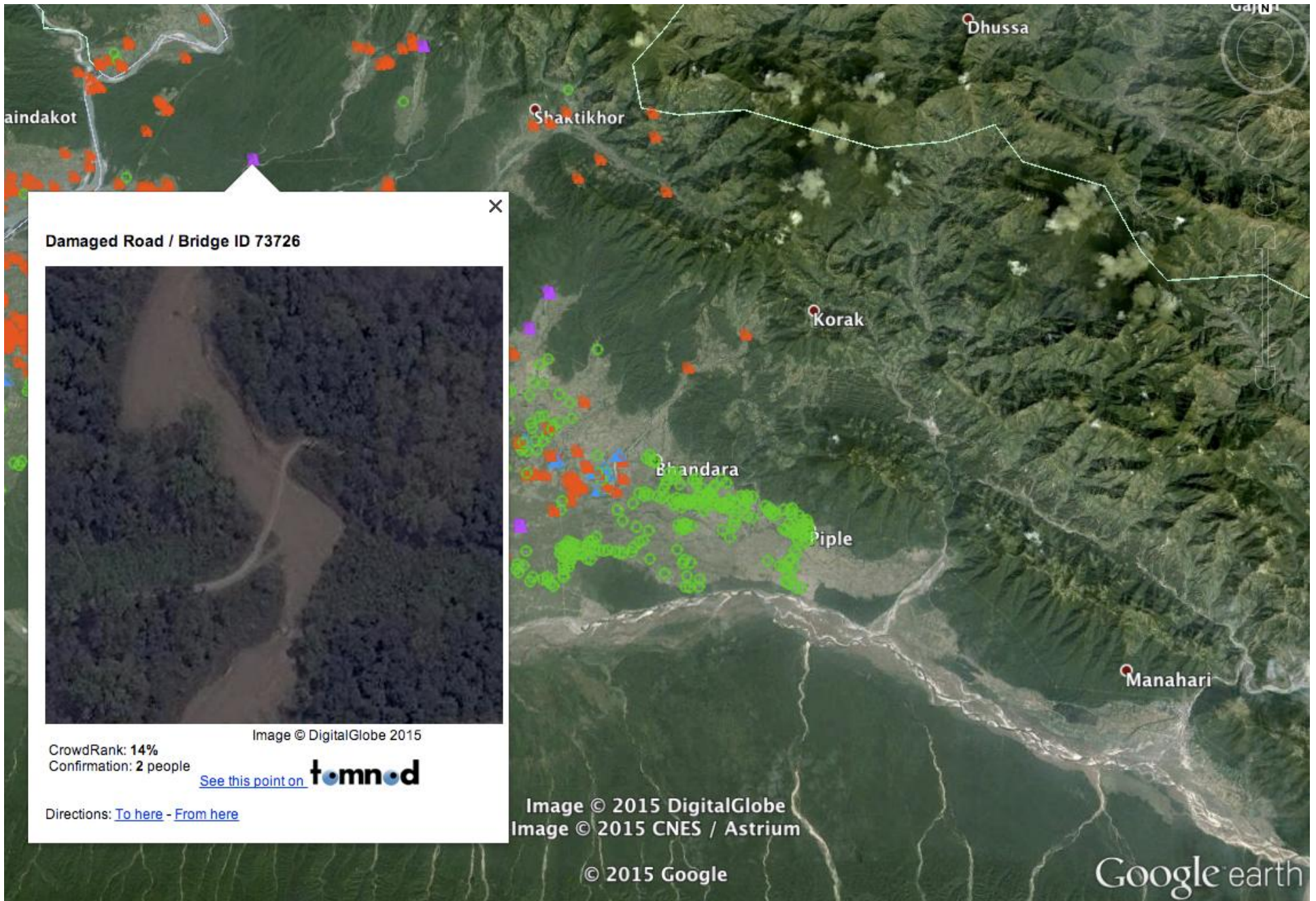


MAJOR DESTRUCTION





Easy dataset distribution via KMZ, SHP, WFS, GeoJSON, API, ...



Rapid, light-weight delivery to the field

Learn More about **tomnod**

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