HUMAN RIGHTS WATCH

Satellite-Based Damage Assessment of Affected Villages in Maungdaw District

(Assessment based on satellite imagery recorded on the morning of 22 October 2016)

Summary of main findings:

Human Rights Watch identified multiple areas of probable building destruction in the villages of Kyet Yoe Pyin, Pyaung Pyit (Ngar Sar Kyu) and Wa Peik (Kyee Kan Pyin), Maungdaw District from a review of high resolution satellite imagery recorded on the morning of 22 October 2016. Damage signatures visible in the satellite imagery were consistent with the presence of large fire burn scars in each of the assessed villages.

Human Rights Watch also reviewed thermal anomaly data collected by an environmental satellite sensor that detected the presence of multiple active fires burning in the village of Wa Peik (Kyee Kan Pyin) on 9 October and the village of Kyet Yoe Pyin on 14 October.

The discovery of both active fires and large burn scars in these villages is consistent with the reported arson attacks occurring in Maungdaw District on or after 9 October 2016.

This is a preliminary damage assessment with an associated degree of uncertainty regarding the exact number and extent of building destruction because of limits to the spatial resolution of available satellite imagery and dense tree cover. It is likely that the actual extent of building destruction in Maungdaw has been underestimated. A revised assessment will be conducted once more spatially detailed satellite imagery becomes available.

Satellite Sensors: 1) Spot 07; Date: 22 October 2016; © CNES 2016 - Airbus DS 2016; 2) SNPP/VIIRS 09 and 14 October 2016; source NASA 2016

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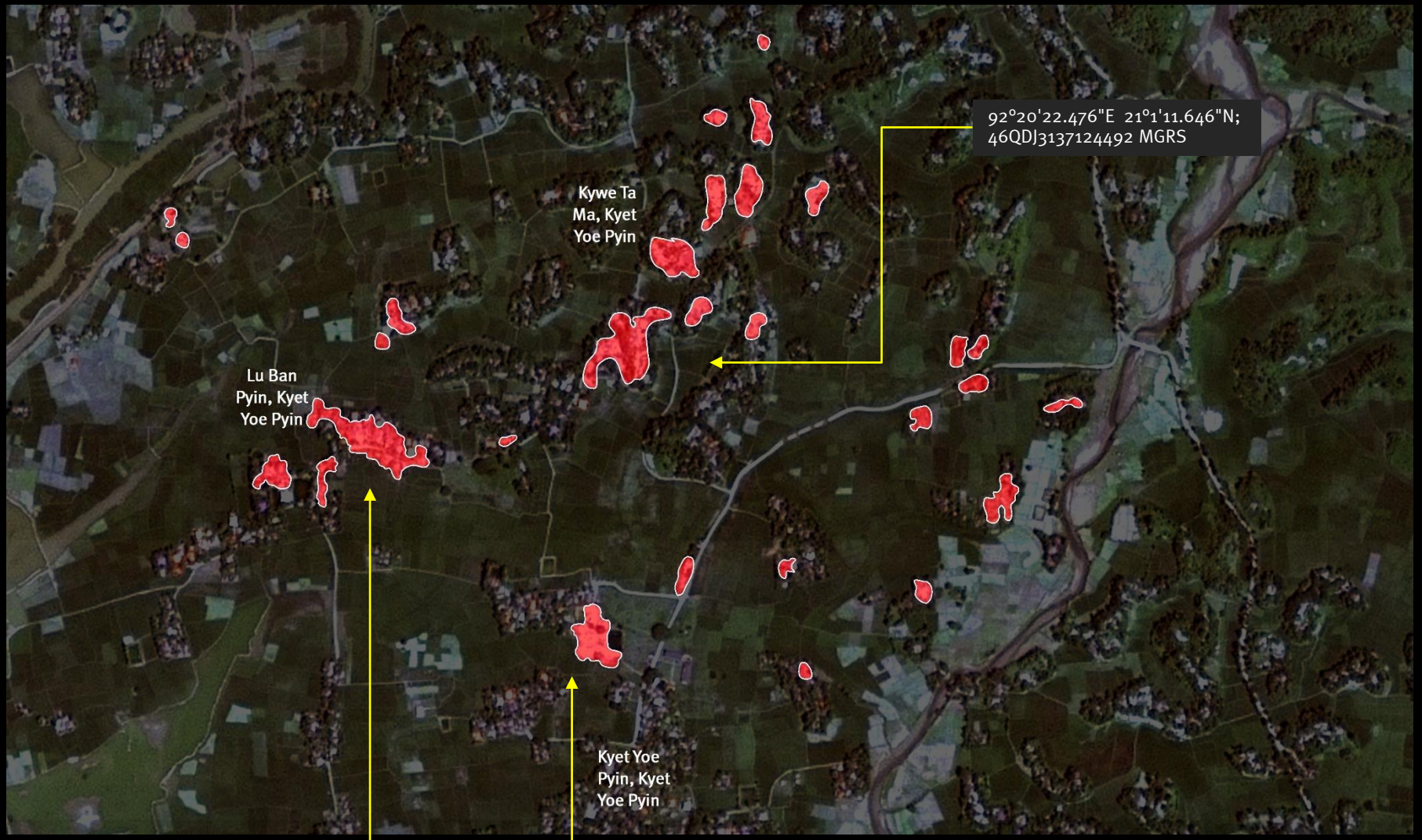
Probable areas of building destruction in the villages of Lu Ban Pyin, Kywe Ta Ma and Kyet Yoe Pyin, Maungdaw District.



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Satellite Sensor: Spot 07; Date: 22 October 2016; © CNES 2016 - Airbus DS 2016

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Probable areas of building destruction in the village of Pyaung Pyit, Ngar Sar Kyu, Maungdaw District.

92°20'26.272"E 21°2'47.675"N;
46QDJ3149327444 MGRS

92°20'39.961"E 21°2'47.366"N;
46QDJ3188827433 MGRS

This is a preliminary damage assessment with an associated degree of uncertainty regarding the exact number and extent of building destruction because of limits to the spatial resolution of available satellite imagery and dense tree cover. It is likely that the actual extent of building destruction in Maungdaw has been underestimated. A revised assessment will be conducted once more spatially detailed satellite imagery becomes available. Active fire (thermal anomaly) data collected by SNPP/VIIRS satellite sensor.

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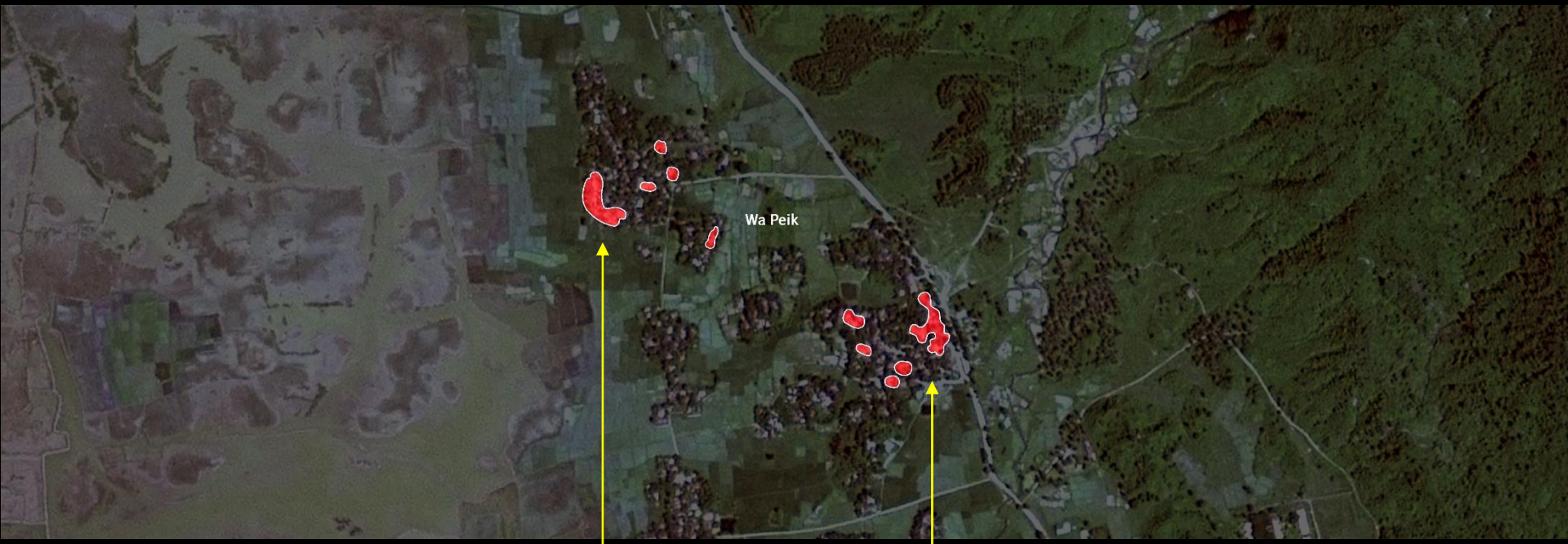
Probable areas of building destruction in the village of Wa Peik, Kyee Kan Pyin, Maungdaw District.



92°23'15.995"E 20°55'8.775"N;
46QDJ3633713316 MGRS

92°23'35.766"E 20°55'2.471"N ;
46QDJ3690813120 MGRS

This is a preliminary damage assessment with an associated degree of uncertainty regarding the exact number and extent of building destruction because of limits to the spatial resolution of available satellite imagery and dense tree cover. It is likely that the actual extent of building destruction in Maungdaw has been underestimated. A revised assessment will be conducted once more spatially detailed satellite imagery becomes available. Active fire (thermal anomaly) data collected by SNPP/VIIRS satellite sensor.