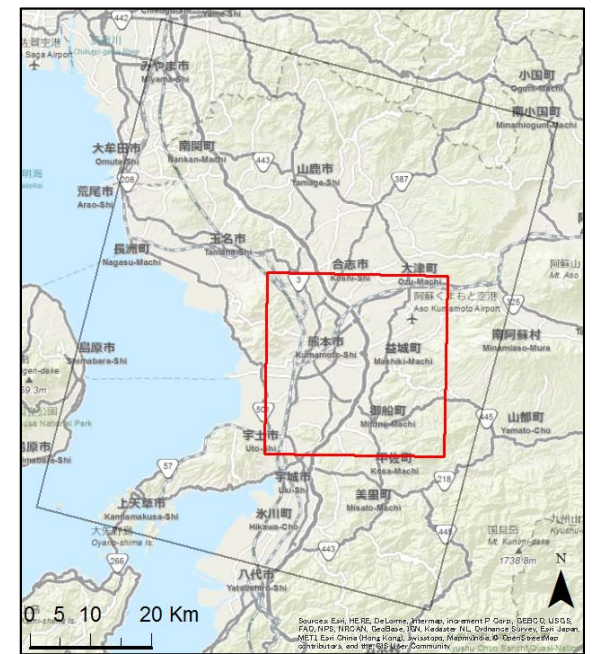
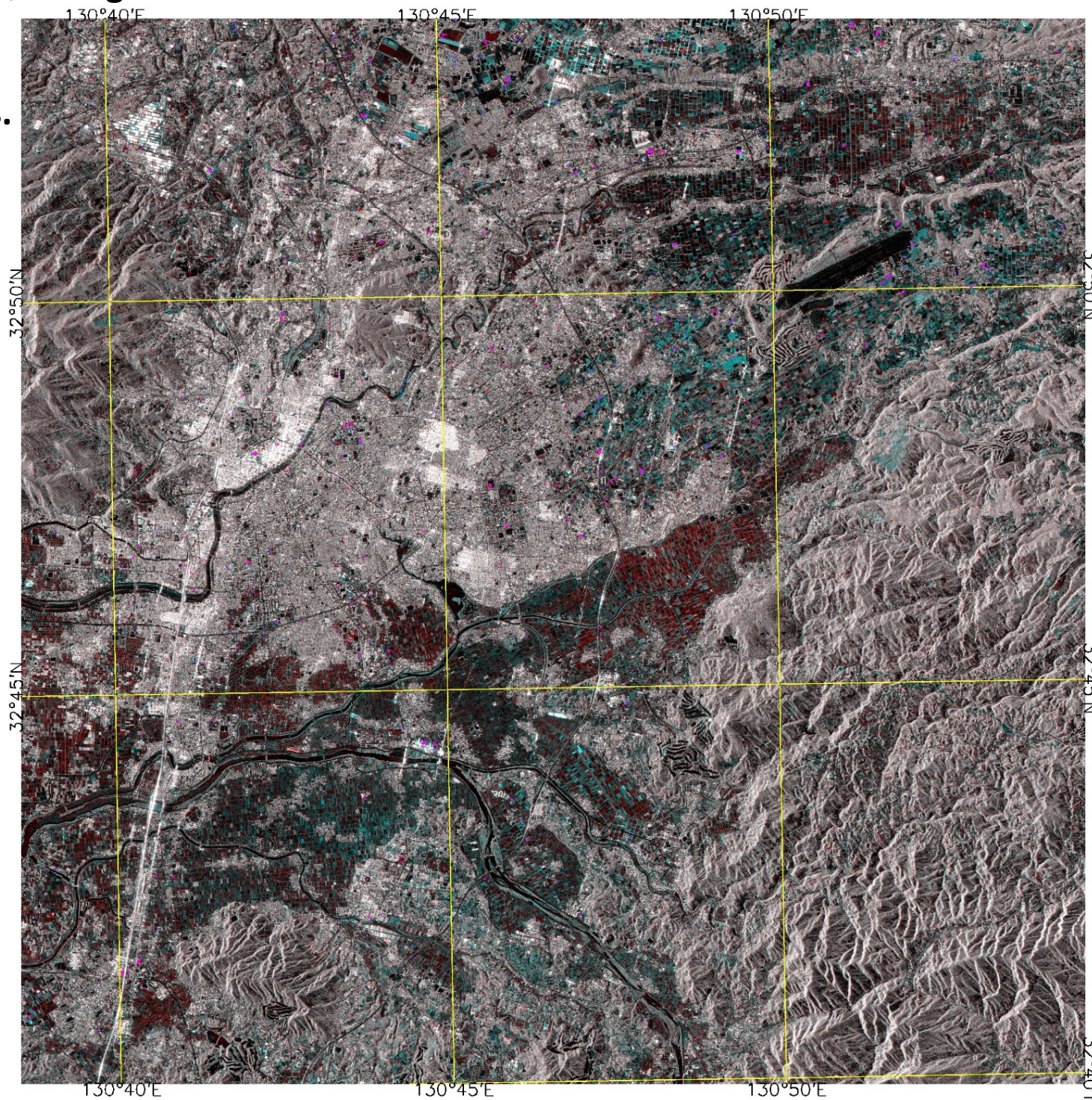


Range  
Des.



Color campsite of the pre- and post-event PALSAR-2 intensity images for Kumamoto City, Japan

R: 2016/4/15

G&B: 2014/11/14

Polarization: HH

Off-nadir angle: 28.8°

Pixel size: 2.5 m

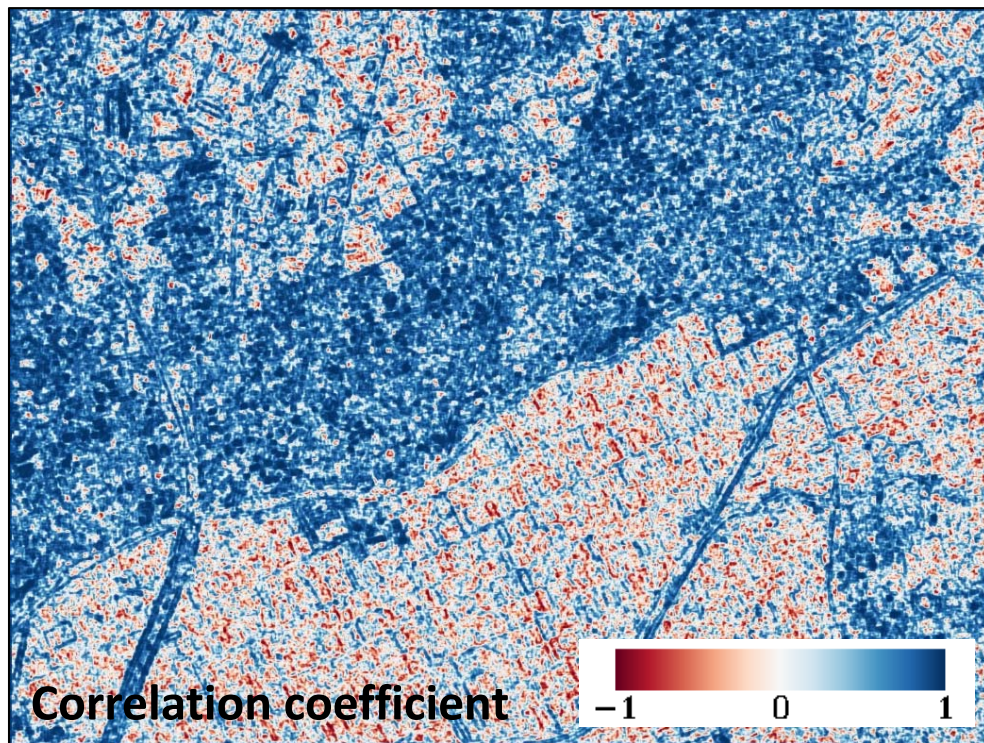
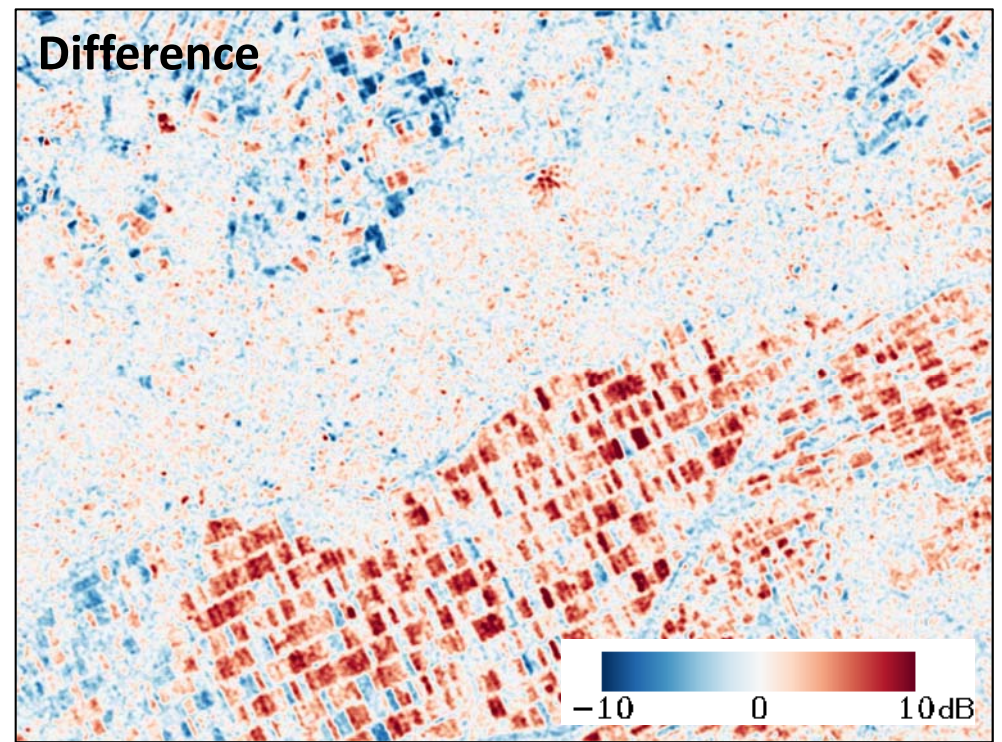
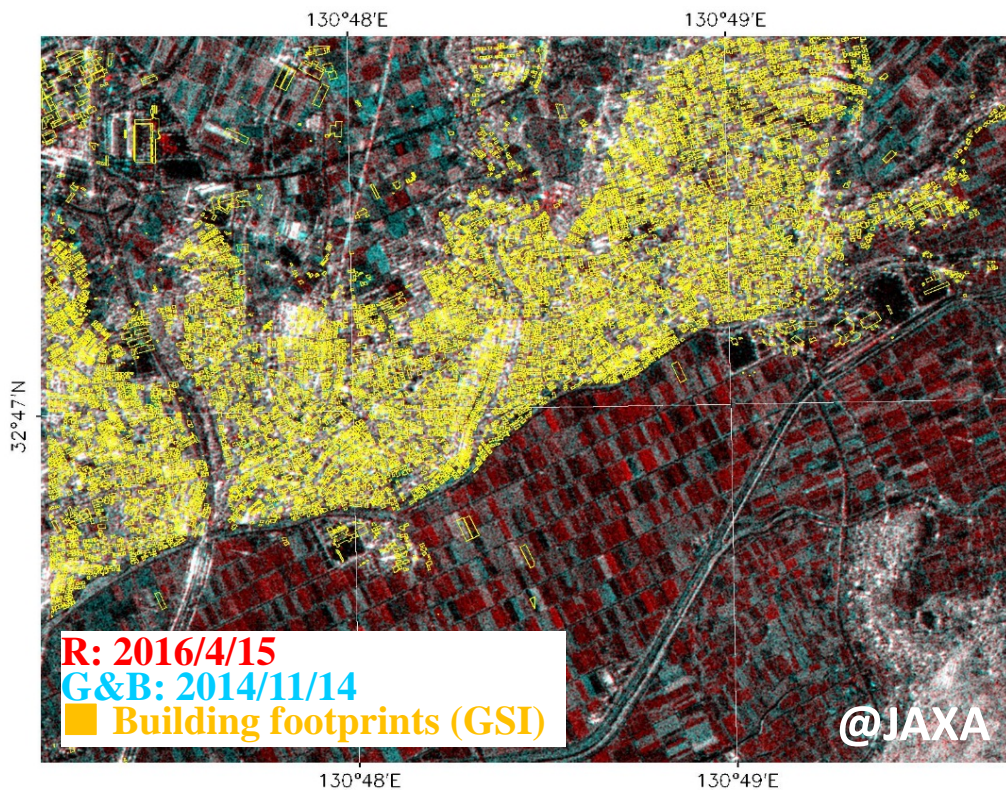
■ Changed urban area ( $z > 0.3$ )

Z-factor is calculated by the following equation, which is from -0.5 and 1.5. A high value shows high possibility for changes.

$$z = \frac{|d|}{\max(|d|)} - 0.5r$$





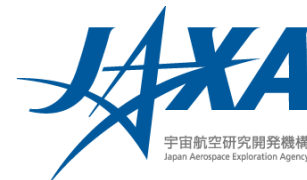


**Range**  
 Color campsite of the pre- and post-event PALSAR-2 intensity images in Mashiki-cho, Kumamoto City, Japan.

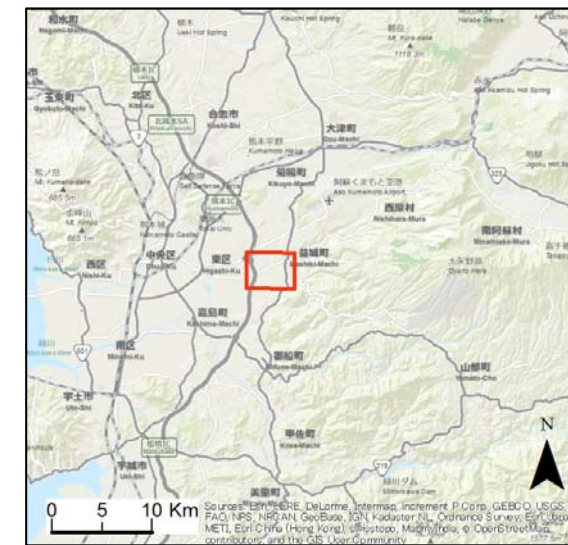
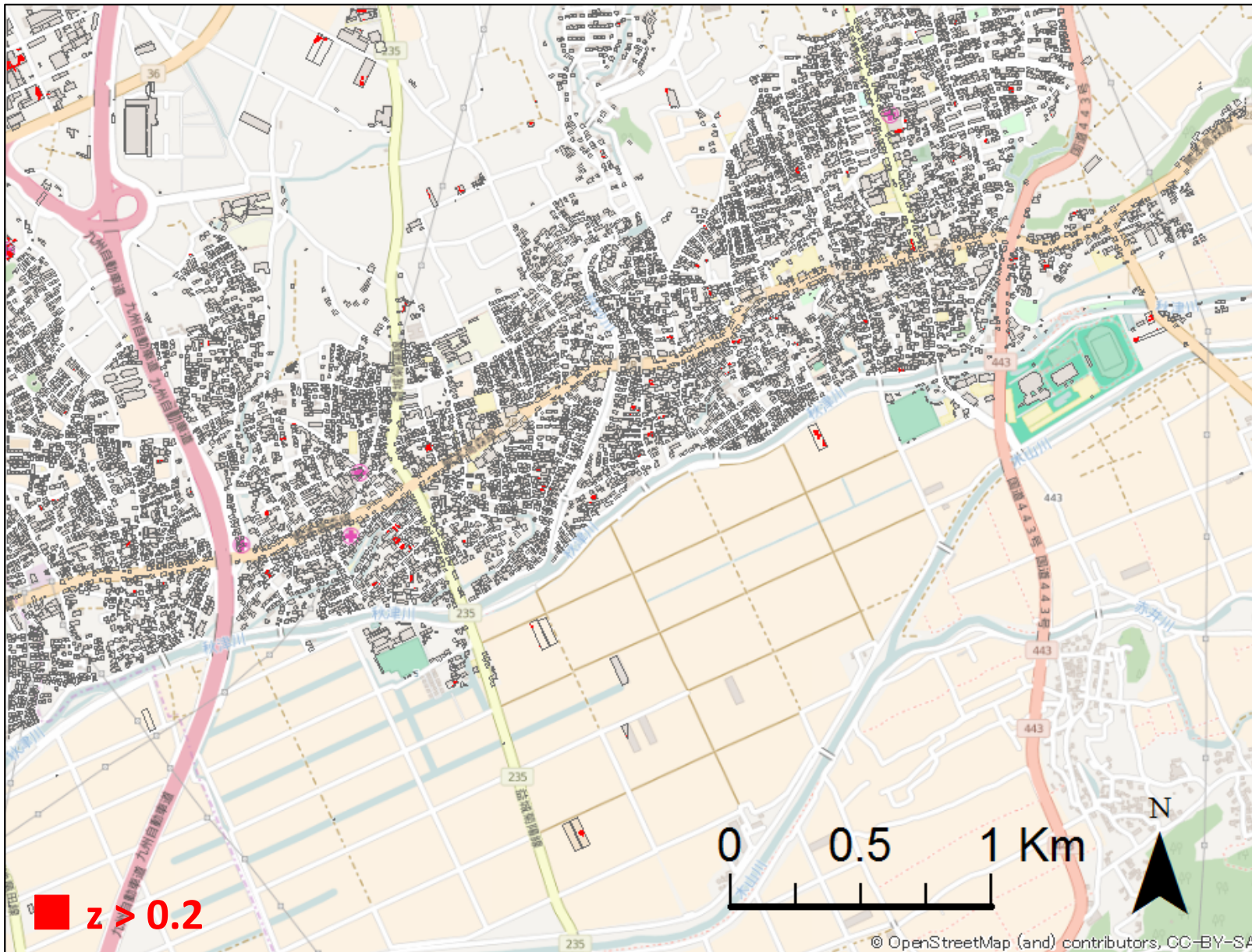
**Des.**  
 Polarization: HH  
 Off-nadir angle:  $28.8^\circ$   
 Pixel size: 2.5 m

Building footprints are downloaded from <http://fgd.gsi.go.jp/download/>, provided by GSI.

Difference and correlation coefficient are calculated in a  $7 \times 7$  pixels window.







The results were calculated from the pre- and post-event PALSAR-2 intensity images of Kumamoto City, Japan.  
 Pre-event: 2014/11/14  
 Post-event: 2016/04/15  
 Polarization: HH  
 Off-nadir angle: 28.8°  
 Pixel size: 2.5 m

Possible damaged buildings in Mashiki-cho, Kumamoto City, Japan, were extracted the z-factor. Z-factor is from -0.5 and 1.5. A high value shows high possibility for changes.

$$z = \frac{|d|}{\max(|d|)} - 0.5r$$

