Satellite images shed light, or lack thereof, on the impact of the Syrian conflict

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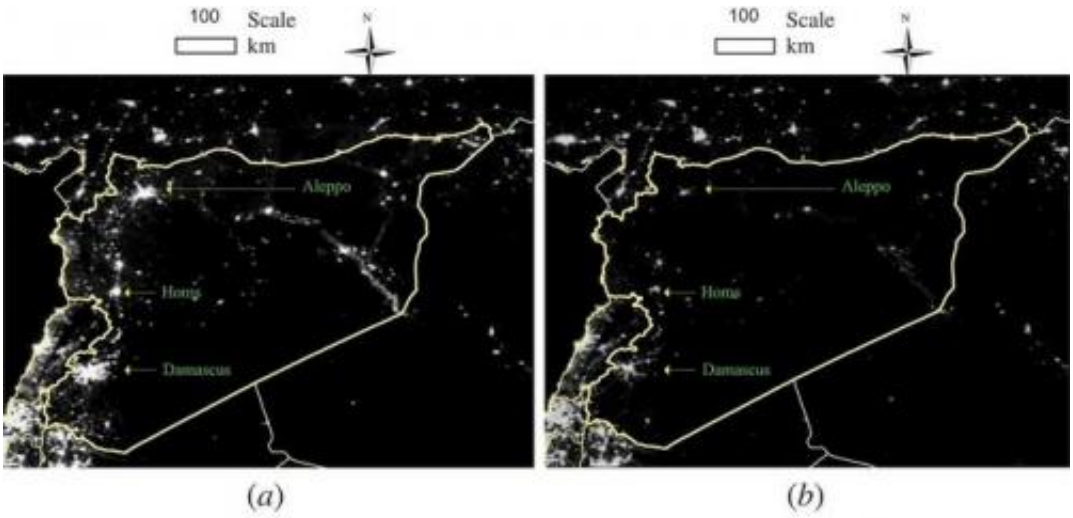

Fig.1 The night-time light monthly composites: (*a*) March 2011; and (*b*) February 2014.

TRES 35-18 Syrian night-light fig.1

An interesting new paper recently published in the *International Journal of Remote Sensing* which hypothesises that night-time light can be a useful source for monitoring humanitarian crises, such as that unfolding in Syria.

The ongoing Syrian Crisis, which broke out in April 2011, has been a severe humanitarian disaster, with more than 190,000 deaths since the start of the conflict. However, evaluating the ongoing crisis in Syria is challenging, because reliable and comprehensive witness reports are hard

to gather in a warzone. Therefore, satellite images, as one of the few sources of objective information, are potentially of great importance.

In their recent study published in International Journal of Remote Sensing, Xi Li and Deren Li analysed the effect of the Syrian Crisis on levels of night-time light as a means of evaluating and monitoring the conflict. By comparing the levels of light in March 2011 and February 2014, (see Fig 1. attached) they found that in all of the provinces, the levels of night-time light had declined sharply following the breakout of the conflict. Indeed, in most provinces, the level of night-time light decreased by more than 60%.

Notably, the authors also found that the number of internally displaced persons (IDPs) from each province showed a linear correlation with the level of night-light loss. This relationship between the number of displaced persons and the drop in night-time light levels may allow for the quantitative estimation of the number of IDPs from other areas of conflict, such as Iraq, where the activities of Islamic State are causing significant civil unrest.

More information: "Can night-time light images play a role in evaluating the Syrian Crisis?", by Xi Li and Deren Li, *International Journal of Remote Sensing*, Volume 35, Issue 18, pages 6648-6661, 2014, published by Taylor & Francis Group.
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