

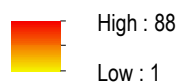


Fires at the Qayyarah oil field, Nineveh Governorate, between July 18 and October 24, 2016

This map illustrates satellite-detected fires and smoke plumes at oil wells south of Mosul, and also east of Baiji, Iraq. The Mosul fires began with an initial fire at one or two wells on 8 May 2016, lasting less than one day, and intermittently burned in June. The current fire complex began on 3 July with daily fire detections occurring until about 12 July, when the fires greatly increased in number and continued to burn to the present at that scale. The fires east of Baiji have been active since early January 2016. The frequency of smoke plumes (in days) is symbolized in shades of red and yellow, and was calculated using 99 MODIS satellite images collected between July 18 and October 24, 2016. Note that as the plume dissipates then areas of thinner smoke are not detected in this process. The inset on the top right corner shows the thermal data from a Landsat image collected on October 20, indicating the Mosul fires in white. The inset on the top left corner shows the same area in natural color. Additionally, precipitation data from NASA's IMERG algorithm was included to evaluate instances of rainfall intersecting the smoke plume on that particular day. This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR - UNOSAT.

Legend

Smoke plume frequency (days)



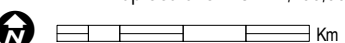
Rain intersecting smoke plumes (mm)



- Settlements
- Most affected settlements

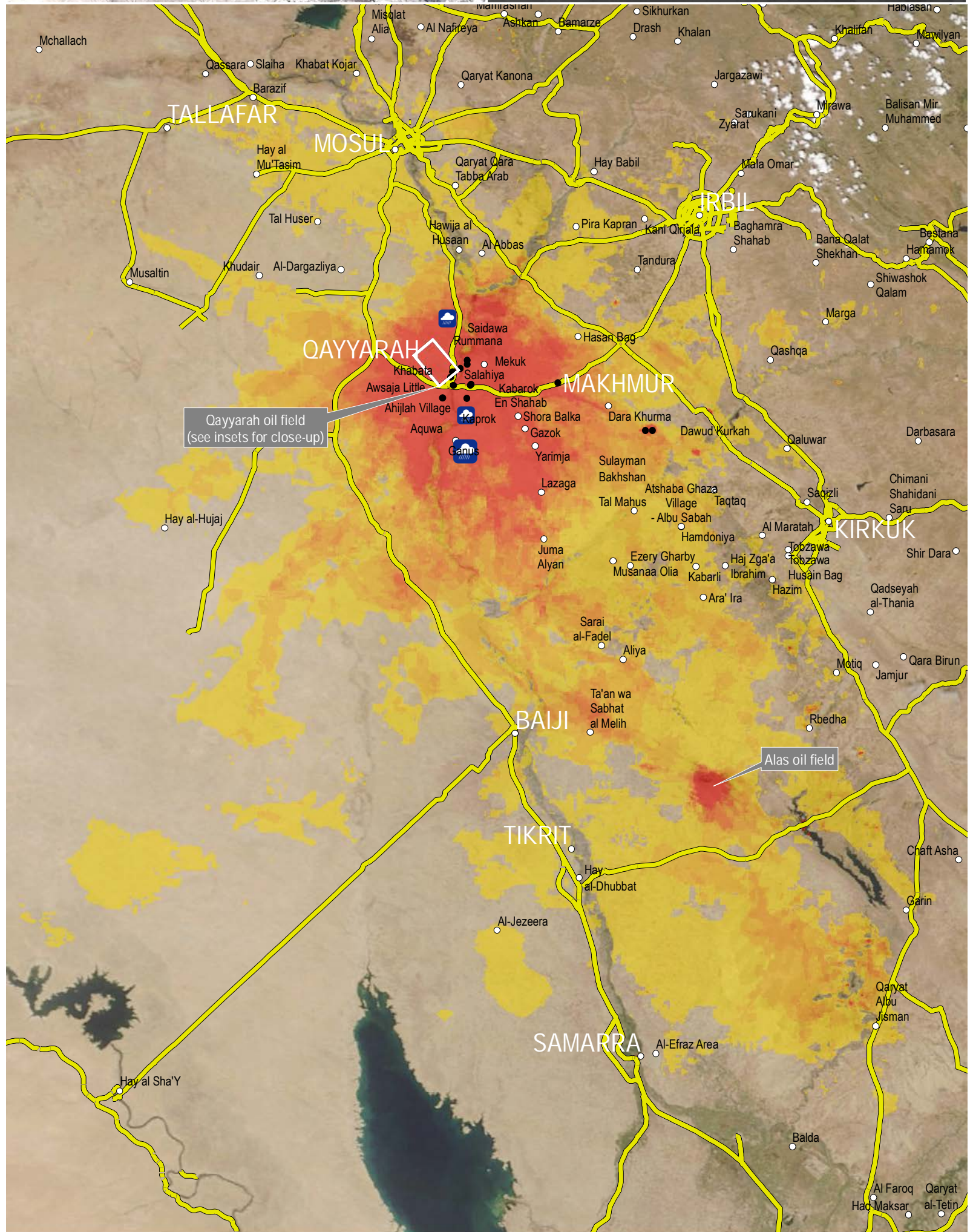
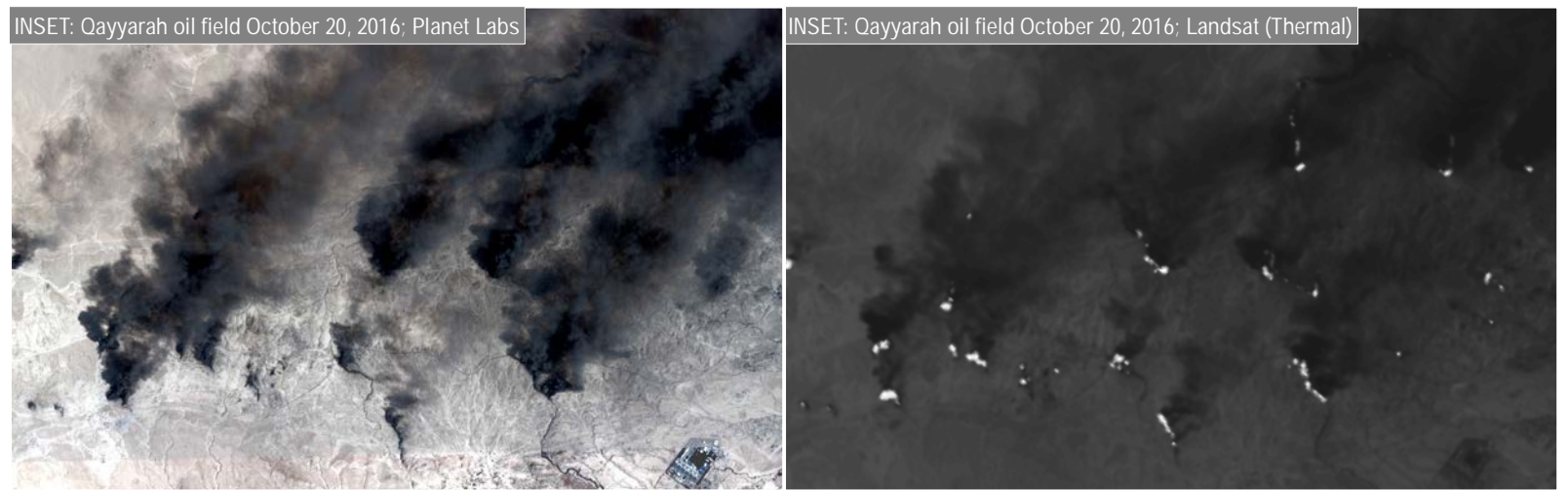
Highway/Primary road

Map Scale for A3: 1:1,200,000



Analysis conducted with ArcGIS v10.3

Coordinate System: WGS 1984 UTM Zone 38N
Projection: Transverse Mercator
Datum: WGS 1984
Units: Meter



Satellite Data: MODIS
Imagery Dates: July 18 to October 24, 2016
Resolution: 250 m
Copyright: NASA
Source: NASA

Precipitation Data: IMERG
Imagery Dates: July 18 to October 24, 2016
Resolution: 0.1°
Copyright: NASA
Source: NASA

Road Data: OpenStreetMap
Other Data: USGS, UNCS, NASA, NGA
Analysis: UNITAR - UNOSAT
Production: UNITAR - UNOSAT

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