



# Commodity Intelligence Report

February 28, 2018

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## **IRAQ: Dry Weather Threatens the Winter Grains Crop in Northern Iraq**

Northern Iraq is the main winter grain producing area for Iraq (Fig. 1). This region is heavily dependent on precipitation for its winter grains production. Planting begins in October and continues until late December for both wheat and barley. According to media reports dry conditions have raised concerns that the winter grains have experienced unfavorable conditions for establishment, and in some instances, dryness prevented planting.

The vegetation anomaly (Normalized Difference Vegetation Index – NDVI) map for northern Iraq provides supporting evidence for the media reports; vegetation conditions are below normal (Fig. 2). Percent normal precipitation from October until the end of December shows rainfall was well below average providing additional evidence that the concerns for the winter grains crop situation is valid (Fig. 3). Time series NDVI analysis for northern Iraq indicates an under-performing crop at this time (Fig. 4). A slight increase in the vegetation condition occurred recently because of rainfall that has brought some relief to the dry conditions since mid-January (Fig. 5). The actively growing winter grains crops responded to these January rains because temperatures have been mild and not cold enough to put these crops into dormancy (Fig. 6).

Satellite imagery has confirmed late planting field activities that may help boost the planted area (Fig. 7). The imagery from the WorldView-2 satellite, with a slightly earlier observation in the morning of Feb. 8, 2018 shows the overturned soil from plowing (dark on the image). The imagery from WorldView-3 satellite marks the progress of the fieldwork later that morning. Fields being worked and possibly planted in early February may provide some added production if



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precipitation proves favorable for the remainder of the season. Harvest begins in late May and there is still time for the crop situation to improve. USDA will release its first estimates of Iraq wheat and barley May 10, 2018.

Other related links at FAS for monitoring worldwide crop conditions and droughts are available at:

Crop Explorer (<https://ipad.fas.usda.gov/cropexplorer/Default.aspx>)

USDA and NASA's GLAM (Global Agriculture Monitoring) System for MODIS-NDVI Time Series Graphs

(<https://glam1.gsfc.nasa.gov/>)

FAS World Agricultural Production (WAP) circular (<https://www.fas.usda.gov/data/world-agricultural-production>)



Figure 1. Iraq Wheat Production by Province

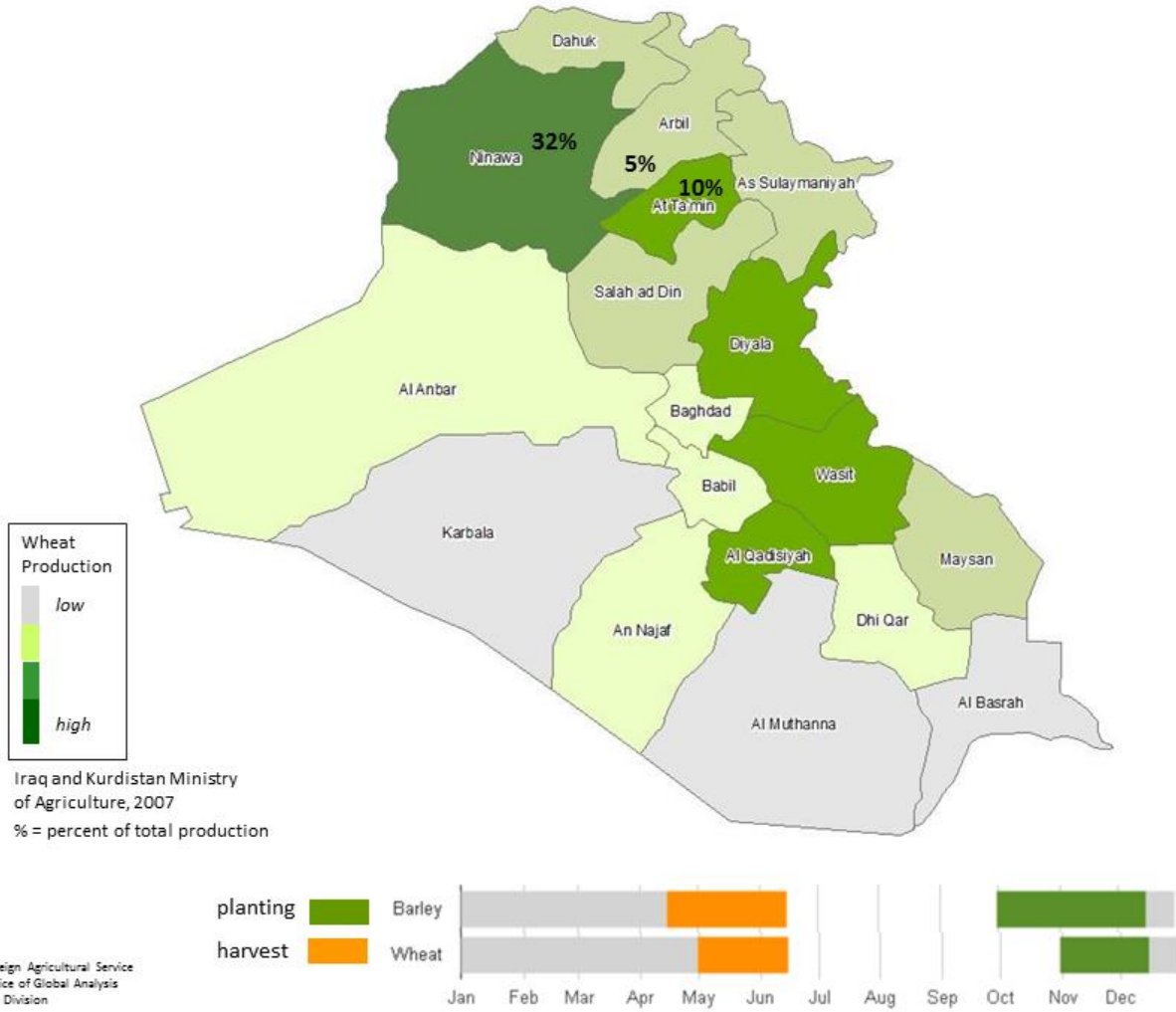
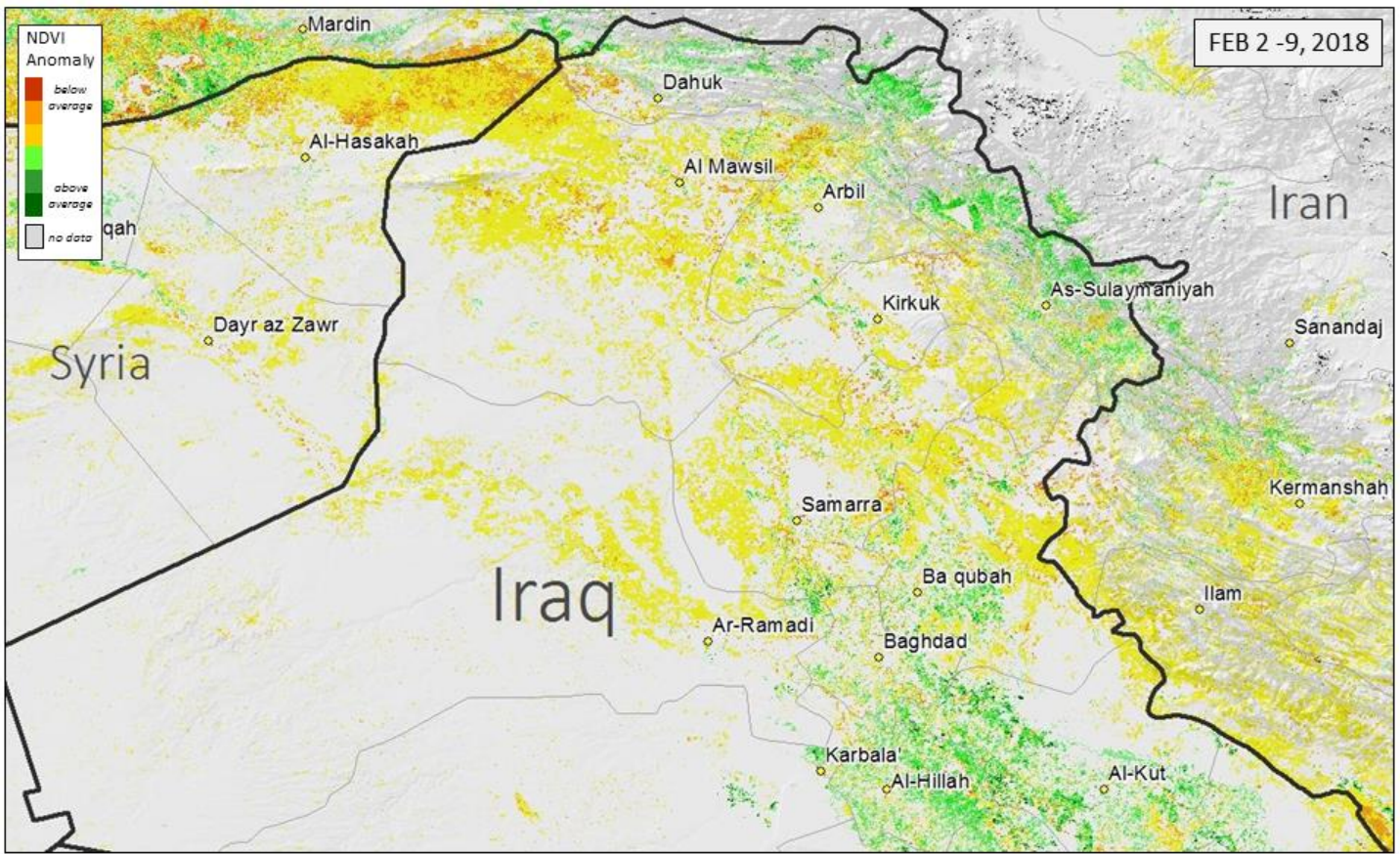
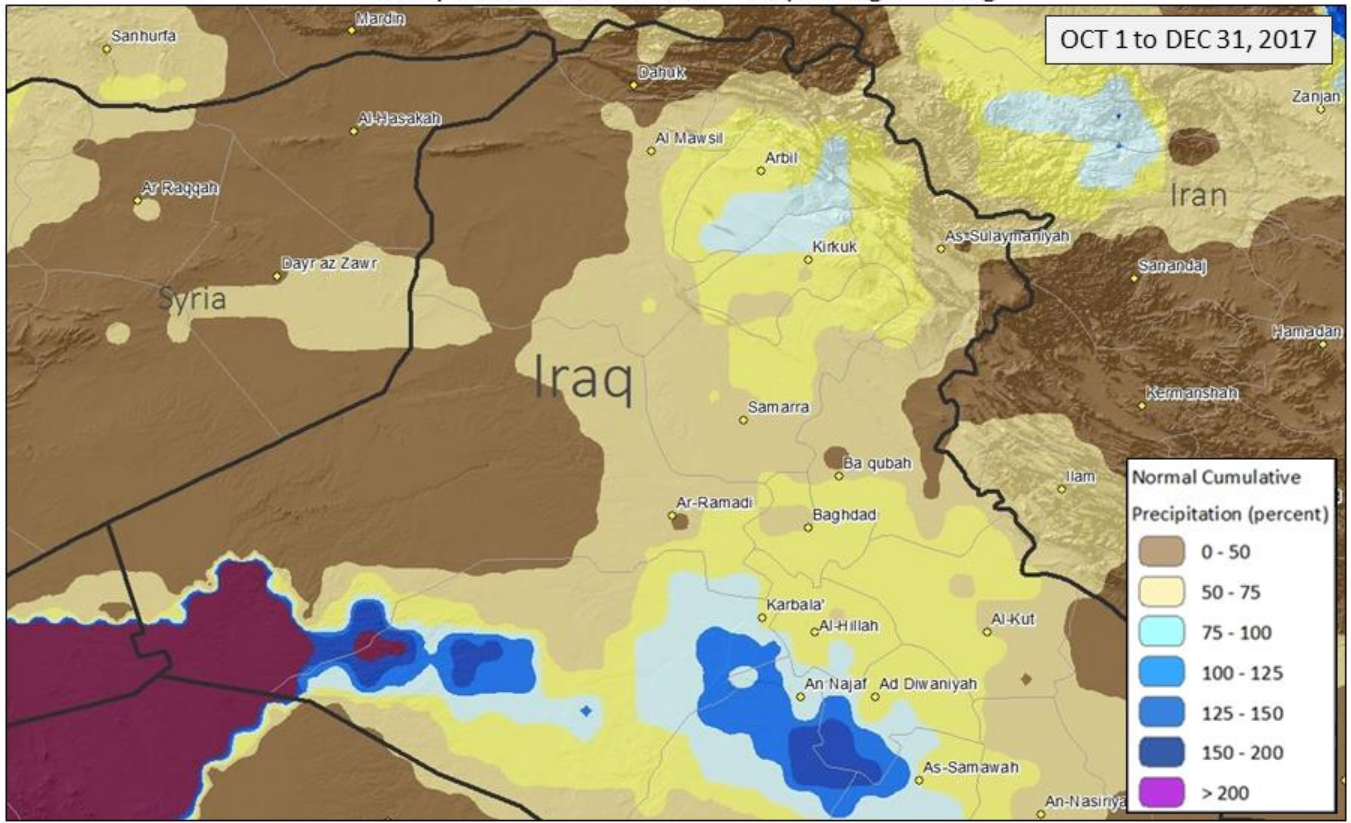


Figure 2. Winter Grains Vegetation Index Anomaly Map Over Northern Iraq



Aqua EOS PM MODIS NDVI 8-day composite  
NASA Goddard Space Flight Center / GIMMS and USDA Office of Global Analysis

Figure 3. Percent Normal Cumulative Precipitation Illustrating Below Normal Precipitation Over Northern Iraq during Planting



557<sup>th</sup> US Air Force Weather Wing – LIS grid cell

planting ■  
harvest ■



Figure 4. Vegetation Index for Winter Grains Over the Northern Iraq

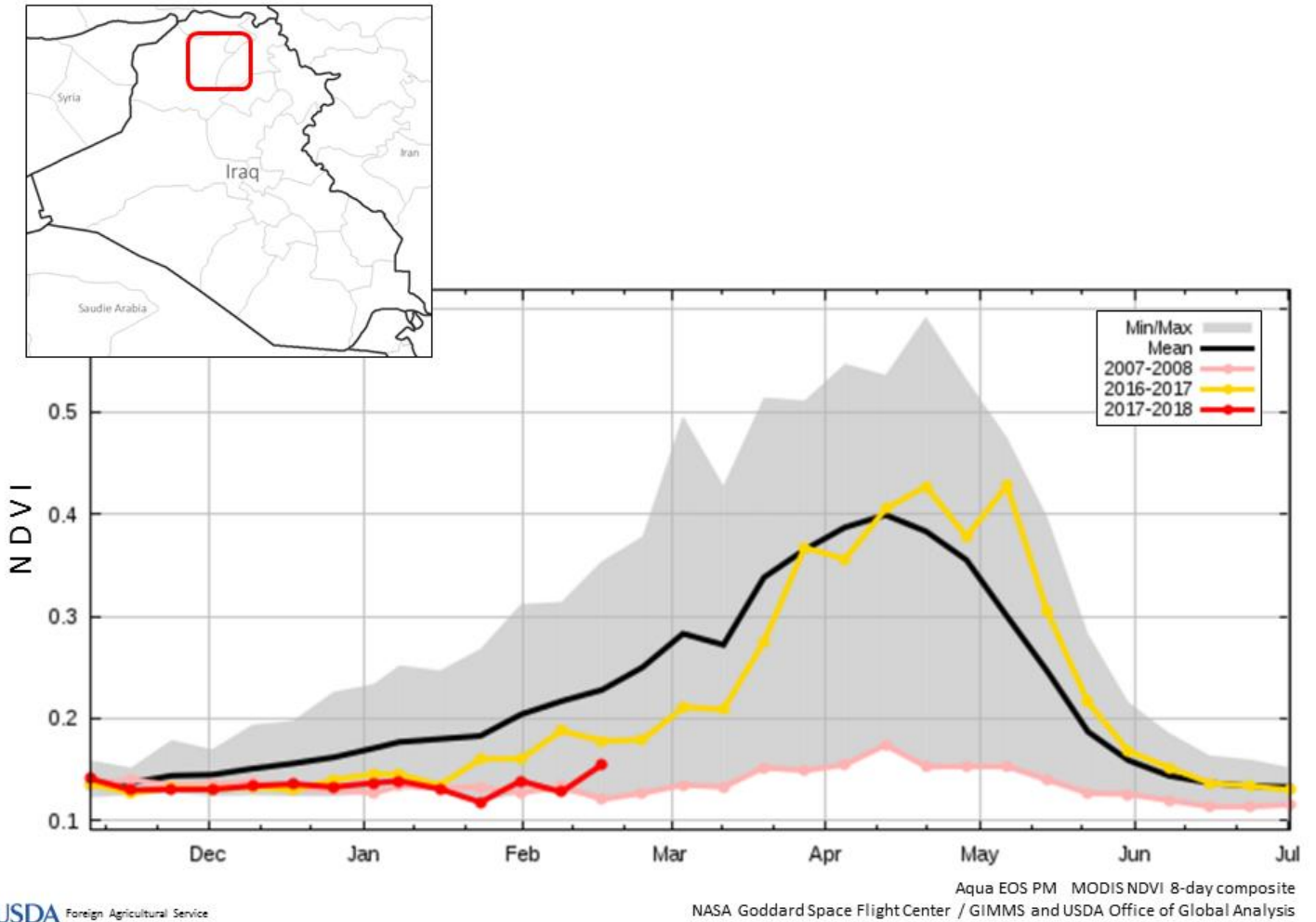


Figure 5. Cumulative Precipitation Over Northern Iraq

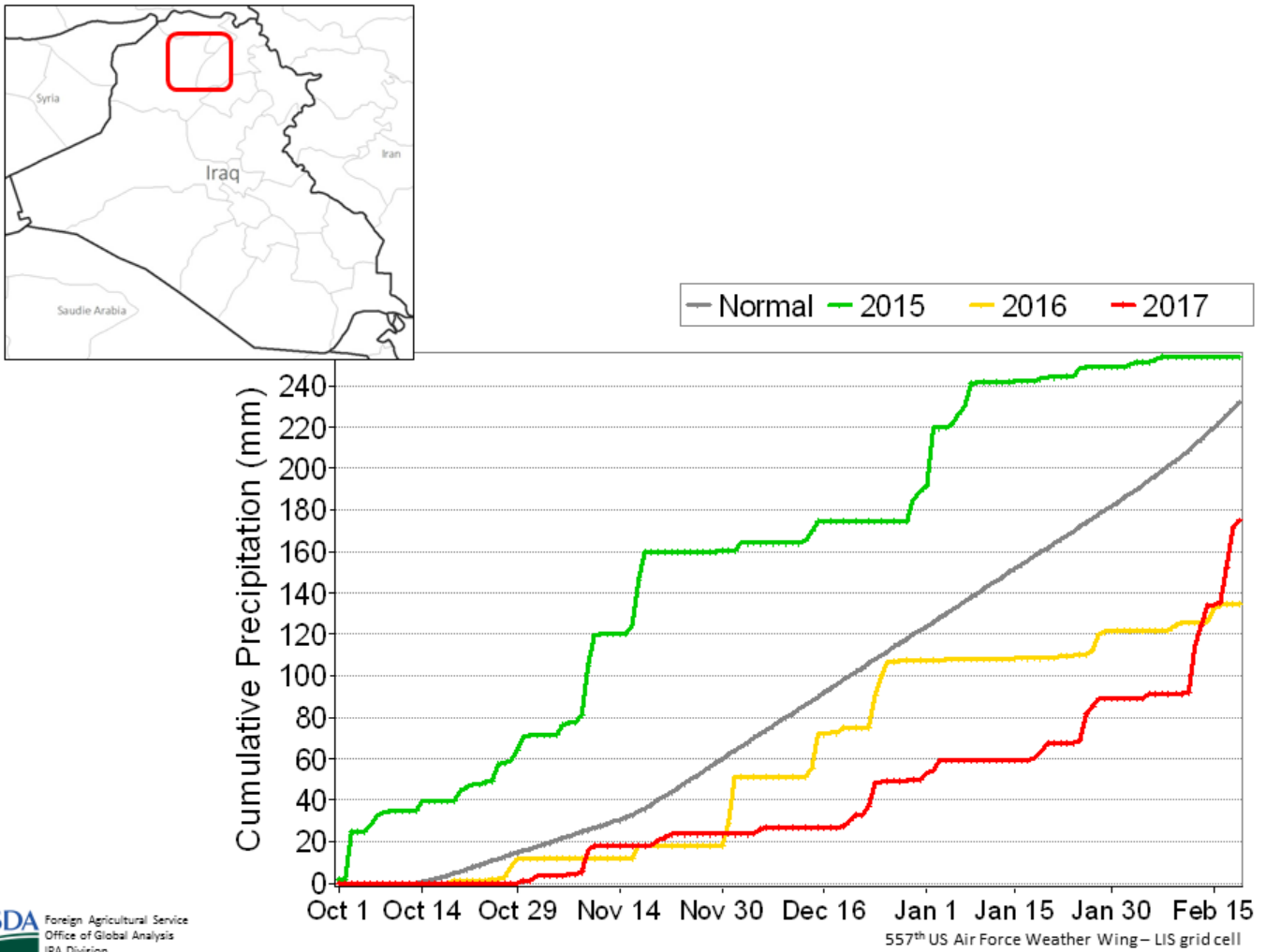
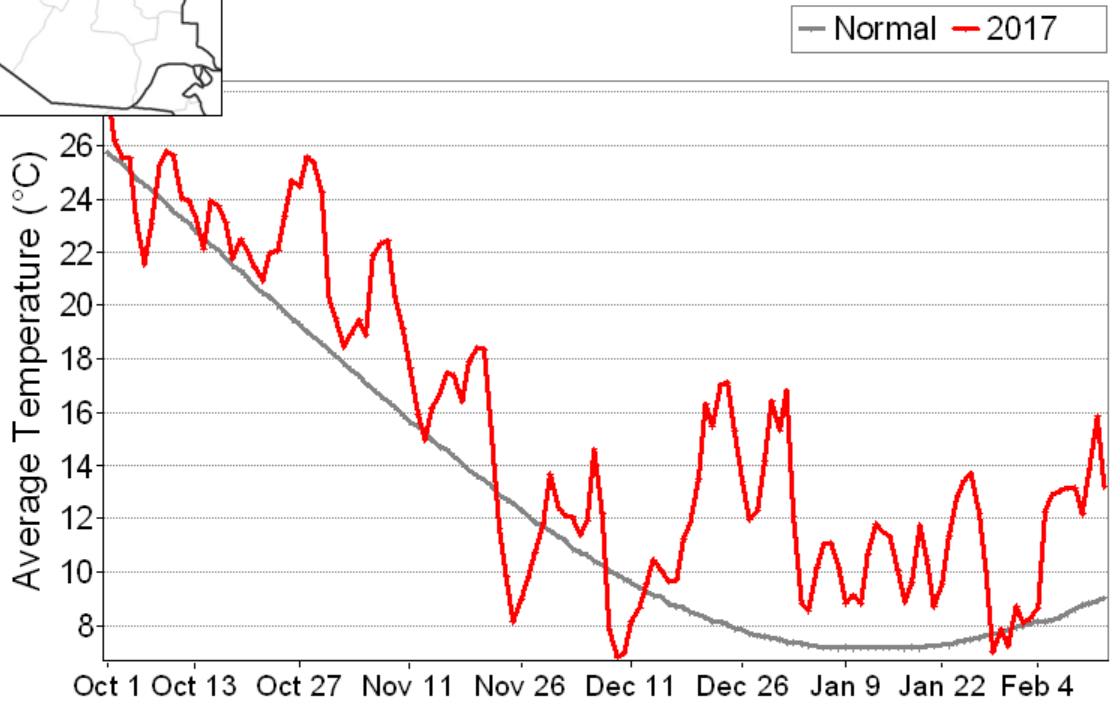


Figure 6. Average Temperature Over Northern Iraq



557<sup>th</sup> US Air Force Weather Wing – LIS grid cell



Figure 7. Observed Worked Fields Northeast of Mosul, Iraq



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Current area and production estimates for grains and other agricultural commodities are available on  
IPAD's Agricultural Production page:  
[Crop Explorer https://ipad.fas.usda.gov/cropexplorer/](https://ipad.fas.usda.gov/cropexplorer/)or

Production, Supply and Distribution Database (PSD Online):  
<http://apps.fas.usda.gov/psdonline/psdHome.aspx>

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