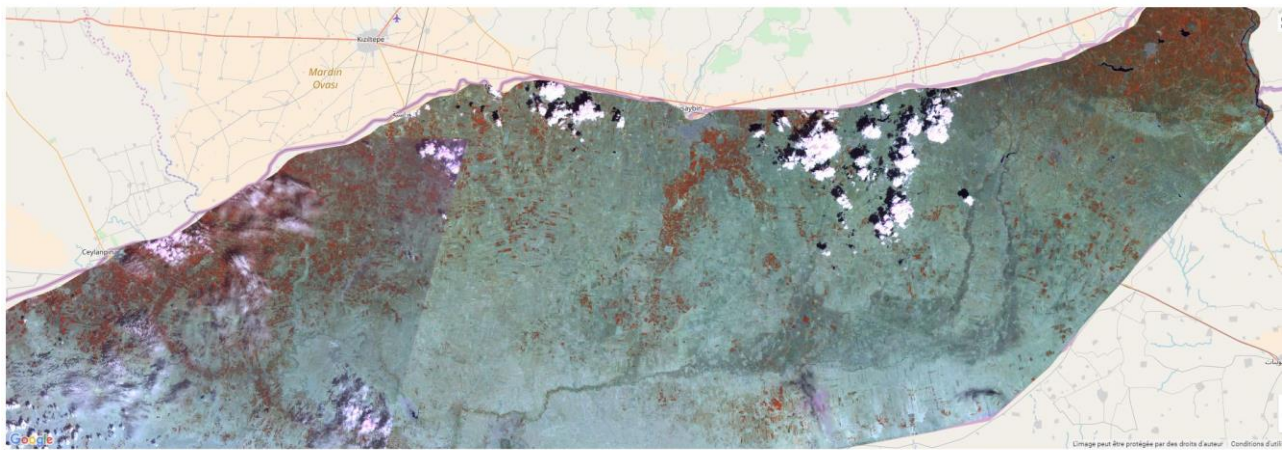


SPECIAL ALERT – June 2018

Failed sowings in Northern Syria

April is the month of maximum biomass (flowering) for wheat and barley fields in northern Syria. On satellite imagery of the SENTINEL2 sensor (Figures 1, 3 and 4) visualized in the ASAP High Resolution Viewer, most fields appear in red (light to dark) in April 2017 (bottom image) and cover the whole governorate, as cereals are the main rainfed crop of the region (there is no rainfall between May and September). In April 2018 (top image), most of the region appears as bare soil or dry vegetation (blue colour). This lack of green vegetation with respect to 2017 and to the long term average is also clear on the 2018 NDVI profile (Figure 2).

ASAP Experimental High Resolution View extension

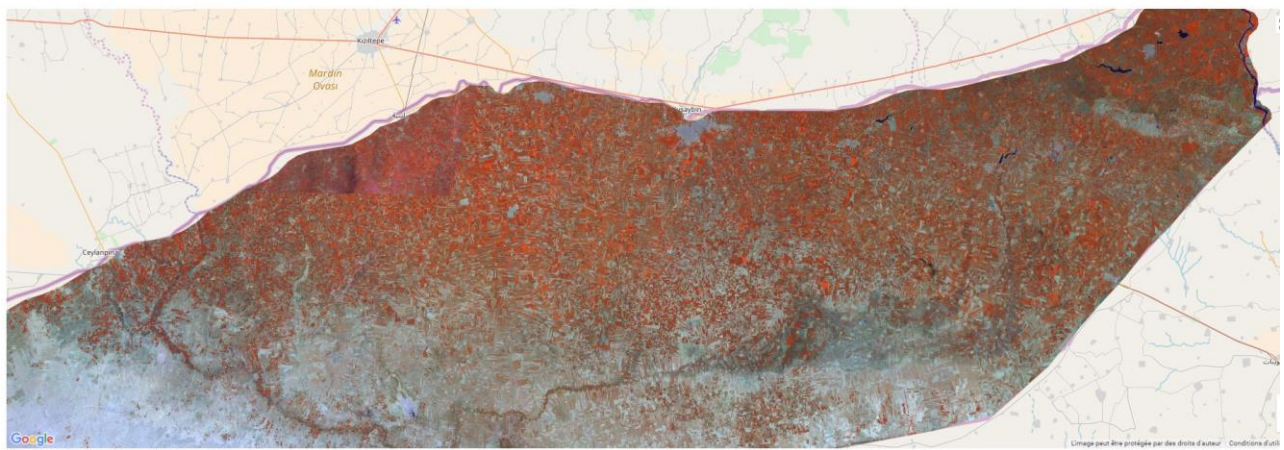


GAUL 1 district: Hassakeh (Syrian Arab Republic)

Analysis end: 30/04/2018 Period (days): 30 Max. cloud %age: 45

Retrieve imagery: Layers: Sentinel-2 (31 Mar 2018 to 30 Apr 2018)

ASAP Experimental High Resolution View extension



GAUL 1 district: Hassakeh (Syrian Arab Republic)

Analysis end: 30/04/2018 Period (days): 30 Max. cloud %age: 45

Retrieve imagery: Layers: Sentinel-2 (31 Mar 2017 to 30 Apr 2017)

Figure 1: Hassakeh governorate (Syria) in April 2018 (top) and April 2017 (bottom). The images are false color composites with red showing active vegetation. 2017 (bottom) shows the normal extent of planted fields in the area as compared to 2018 (top) where most of the area is bare.

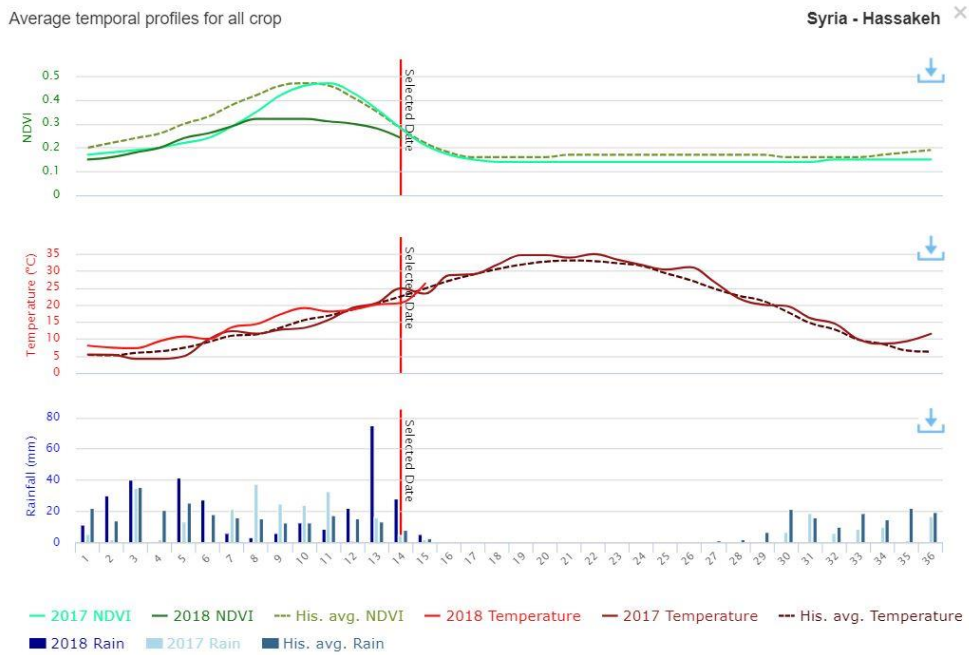
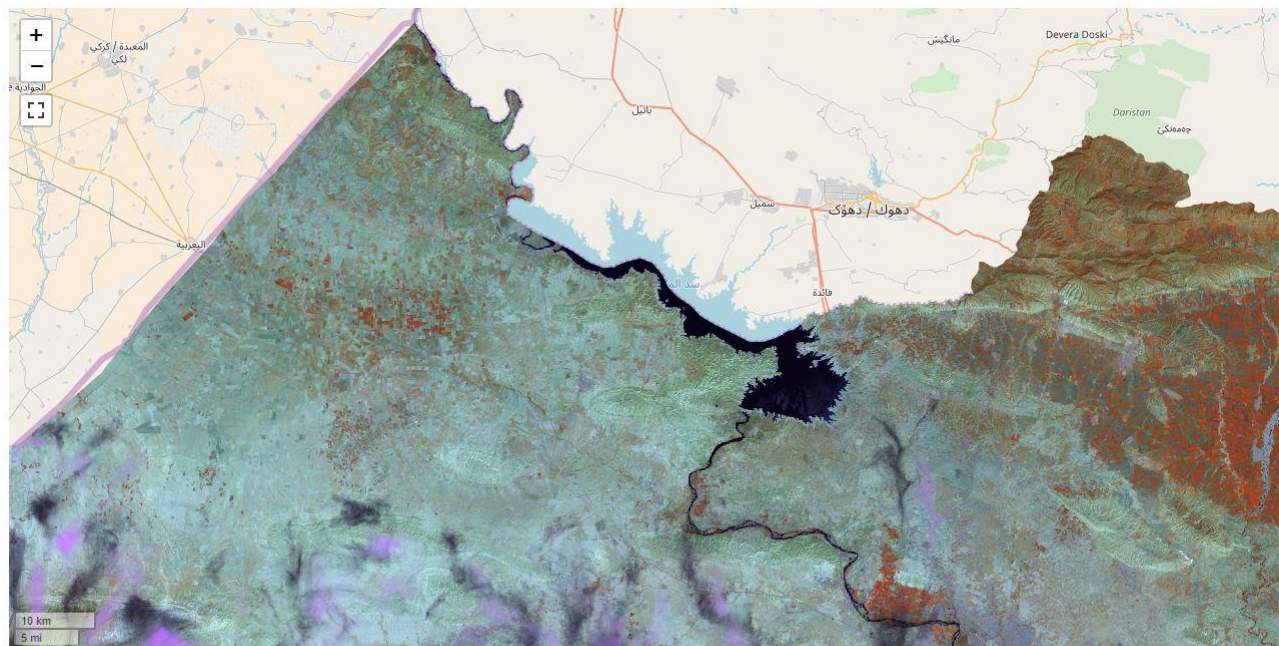


Figure 2: time profiles for the Normalized Difference Vegetation Index (NDVI) (top), temperature (centre) and rainfall (bottom) for Hassakeh province in Syria showing the extremely low vegetation index curve (dark green) as compared to last year (bright green) and average (dotted). Temperatures and rainfall have been close to normal, with slightly above normal temperatures from January to May and strong rainfall in early May.

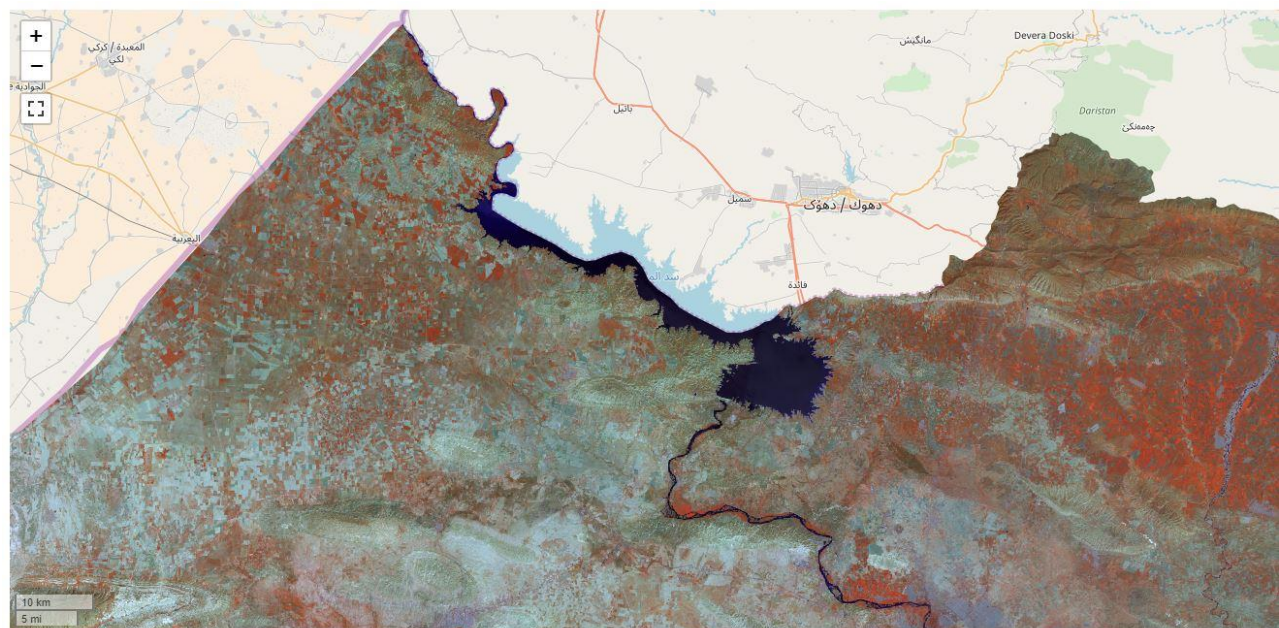


Figure 3. Zoom on the region south to the city of Kameshli at the border with Nusaybin in Turkey showing the contrast between 2018 (top) and 2017 (bottom).

A similar pattern occurred Iraq, in the north west of Mossoul, Ninewa region, which is neighbour to Hassakeh (figure 4).



GAUL 1 district: Ninewa (Iraq)
Analysis end: 30/04/2018 Period (days): 29 Max. cloud %age: 40 Retrieve imagery



GAUL 1 district: Ninewa (Iraq)
Analysis end: 30/04/2018 Period (days): 29 Max. cloud %age: 40 Retrieve imagery

Figure 4. Zoom on the region north west of Mossoul, Ninewa region, showing the contrast between 2018 (top) and 2017 (bottom).

More information on the 2018 agricultural campaign in Syria can be found in the FAO GIEWS country brief on Syria:

<http://www.fao.org/giews/country-analysis/country-briefs/country.jsp?code=SY>

For any feedback and questions please write to the address below.

Feedback can also be posted on Twitter by including the hashtag: #asapEU

JRC ASAP team

Jrc-asap@ec.europa.eu