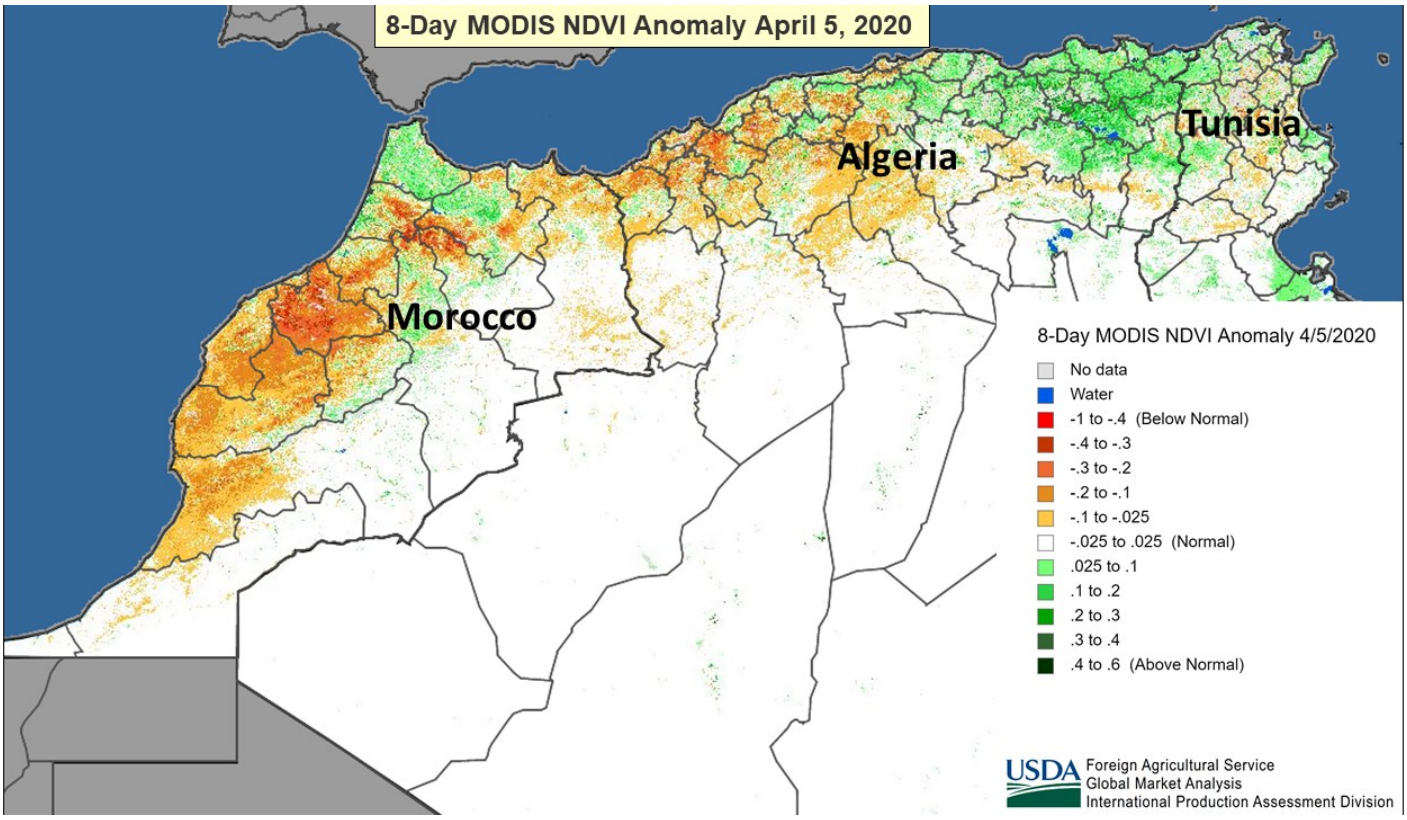
United States Department of Agriculture

Foreign Agricultural Service

April 22, 2020

Commodity Intelligence Report

Northwest Africa 2020/21 Crop Conditions are Mixed Due to Variable Rainfall



Crops throughout Northwest Africa, which includes Morocco, Algeria and Tunisia, have seen highly variable rainfall both geographically and temporally during the current growing season, resulting in considerable disparities in crop prospects. Cereal grains in Northwest Africa are typically planted starting in October and finished by January. The wide planting window is due to the variability of soil moisture from autumn rains. The crops usually flower in March and April and proceed to grain-fill in April and May. Harvest begins in May in southern Morocco and continues into June and early July in Algeria and Tunisia.

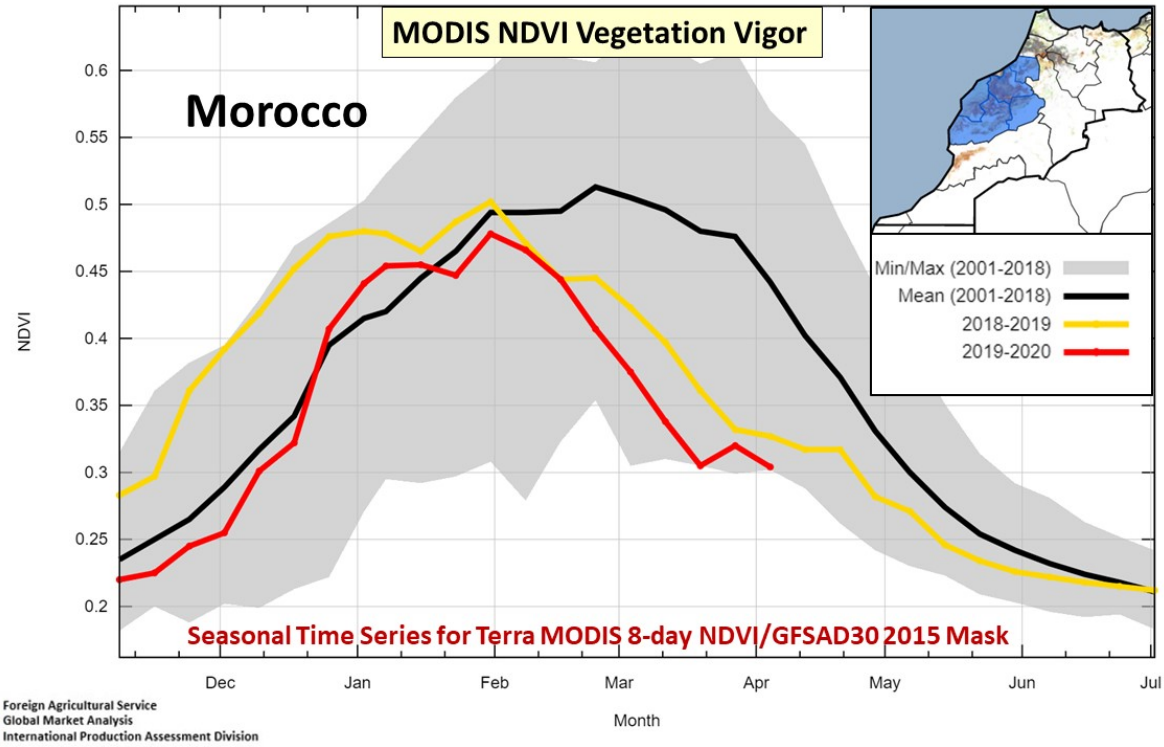
Wheat and barley are the two dominant cereals in Northwest Africa. The vast majority are rainfed; there is very little irrigation of grain. Wheat is planted on the best soils and in areas that climatically receive the highest rainfall. Barley is planted in more marginal areas, typically further inland and further south. A successful cereal crop must have frequent rainfall in both the autumn planting period (November through January) and during the spring growing period (February through April). During poor rainfall years when crops (particularly barley) are not well developed, they may be left unharvested and grazed by animals. Some farmers use their own seeds from previous years in order to save money, but this can lower yield potential. Nevertheless, even in bumper harvest years, all three countries are net wheat importers.

Please see Figure 1 showing autumn 2019 precipitation, Figure 2 showing winter 2020 precipitation, and Figure 3 showing March 2020 precipitation in Northwest Africa.

Morocco

Much of Morocco's crops are in a dire situation. Areas in central and southern Morocco received minimal precipitation during planting last fall and little rainfall later in the season. A lack of autumn rains in central and southern areas discouraged plantings and lowered yield potential in a large swath of the country's grain belt. In some areas, the sowing that did occur was very late. It was also reported that some farmers lost hope in their crops and allowed livestock to graze in the cereal fields. South-central Morocco is critical for a large national harvest; however, rainfall in this region has been less than adequate.

Beneficial autumn rains did occur in the north and in the small eastern growing region, but overall precipitation throughout Morocco has been unfavorably low since early winter. Satellite derived vegetation (Normalized Difference Vegetation Index—NDVI) analysis for south-central Morocco (Figure 4) depicts a sudden drop in vegetation health at the beginning of February, similar to 2019/20, but with a lower start in autumn.



The warm and dry weather has pushed the current crop's development ahead of normal and with harvest on the horizon, there is little room for recovery. Many fields are assumed to have been left unsown. Established plants that did emerge likely would have struggled with low soil moisture and farmers would have hesitated to waste precious inputs on sparse plants and stunted tillers.

Morocco is expected to be facing a second consecutive year of disappointing harvests. Wheat and barley production were exceptionally low last year (2019/20). After a favorable start to planting, due to plentiful 2018 autumn rains, precipitation ended prematurely and abruptly in December 2018 and never fully returned the rest of the season. This season is proving to be similar to last year.

Morocco also produces small amounts of rice, oats, and sunflowerseed. Please see Figure 5 for Morocco's wheat production map and crop calendars.

Algeria

Some beneficial rains during planting in Algeria left wheat and barley farmers optimistic during late autumn 2019, enticing increased plantings for the 2020/2021 crop. Soil moisture levels were high in September with the first rainfall of the season, however precipitation later waned and nearly ended during the winter months. Winter precipitation was minimal, however critically needed rainfall arrived in March, reversing the downward trend in crop conditions, and providing timely moisture for flowering and further growth. While prospects for Algeria have improved, the cereals need additional moisture during the month of April and early May to finish grain-filling.

Crop conditions appear strongest in the eastern and central regions and weakest in the west and highlands. Flowering and reproduction typically occur in late March or early April for Algeria's cereals, followed immediately by grain-filling. Please see the satellite derived NDVI vegetation graphs for eastern Algeria (Figure 6), central Algeria (Figure 7), and western Algeria (Figure 8).

Wheat and barley are the main cereal crops in Algeria; they are concentrated along the northern coast and on higher elevations where rainfall probability increases. The largest production area is concentrated in the northeast near Tunisia, where rainfall has been the highest this season. Please see Figure 9 for Algeria's wheat production map and crop calendar.

Tunisia

Autumn rainfall in Tunisia created suitable planting conditions for the 2020/2021 crop. However, the initially favorable crop prospects deteriorated when above-average autumn rainfall degraded to below-average winter precipitation. During the winter, precipitation diminished to almost nothing. Nonetheless, much-needed rainfall did return during March, reviving crop conditions and improving yield prospects (Figure 10). More rain, however, is needed during April and early May for grain filling and yield improvement. Satellite-derived NDVI depicts above-average conditions dropping to average levels in March after a near-total lack of rainfall occurred in February, before improving again in April, after March rains (Figure 11).

Most of the wheat production in Tunisia is comprised of durum varieties used to produce couscous. Increasing, but remaining a small percentage of total area, irrigated wheat and barley account for 74,000 HA of the total combined crop. According to the Ministry of Agriculture, Tunisia's MY 2020/21 seeded area for wheat and barley decreased from 2019/20. Please see Figure 12 for Tunisia's wheat production map and crop calendar.

For more information please read the Foreign Agricultural Service (FAS) GAIN reports from US embassy staff in Northwest Africa (linked below). While estimates in the GAIN reports are not official USDA estimates, they represent the view and analysis of staff from the US embassy and provide a thorough and unique in-country perspective. USDA will release its official World Agricultural Supply and Demand Estimates (WASDE) on May 12, 2020, including official USDA 2020/21 outyear estimates.

Morocco GAIN Report
Algeria GAIN Report
Tunisia GAIN Report

For additional information please contact Bryan Purcell at bryan.purcell@usda.gov (202) 690-0138.

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/ or

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

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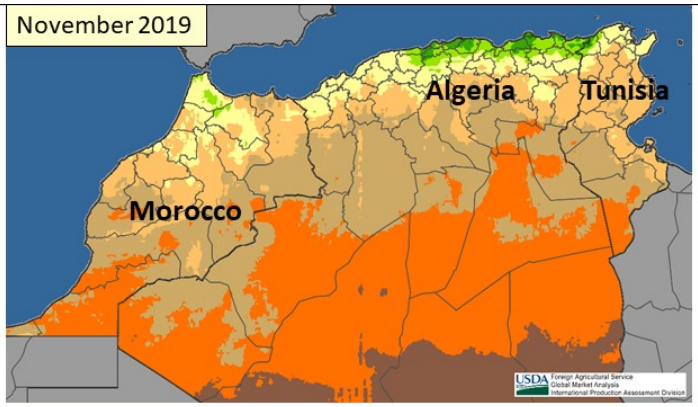
Figure 1: Northwest Africa Autumn 2019 Precipitation

Planting Rainfall: Autumn 2019

Autumn Planting rains were plentiful in eastern and central Algeria, but somewhat less in western Algeria.

Tunisia had adequate autumn planting rains that peaked in December.

In Morocco, rains were noticeably absent in southern and central areas, while northern Morocco received more moisture.



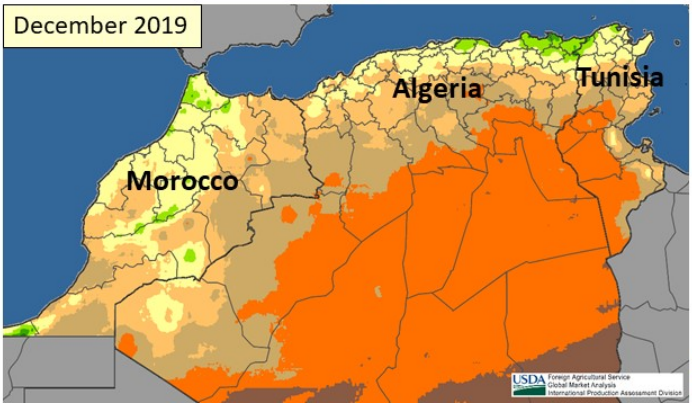


Figure 2: Northwest Africa Winter 2020 Precipitation

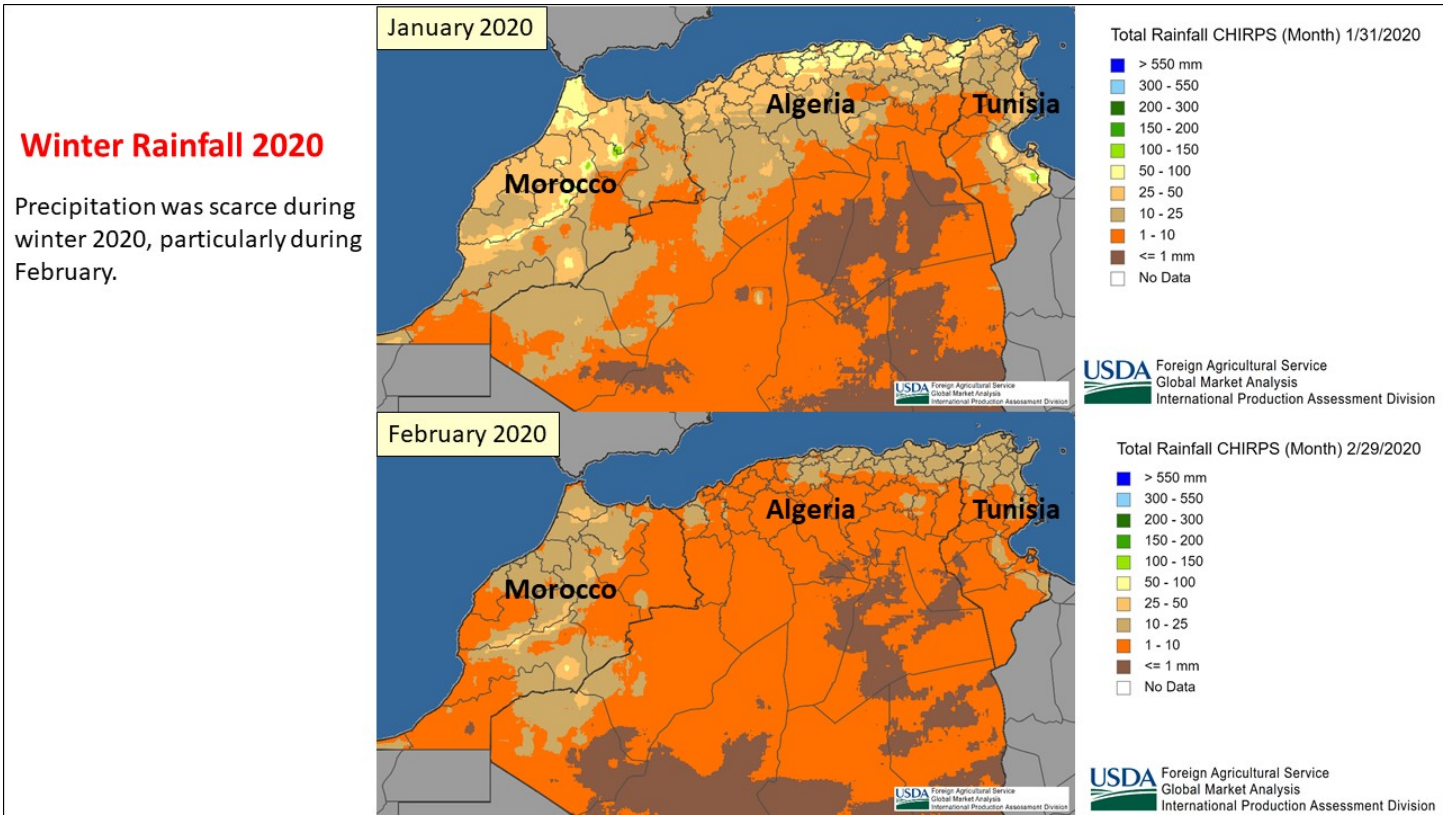


Figure 3: Northwest Africa March Precipitation

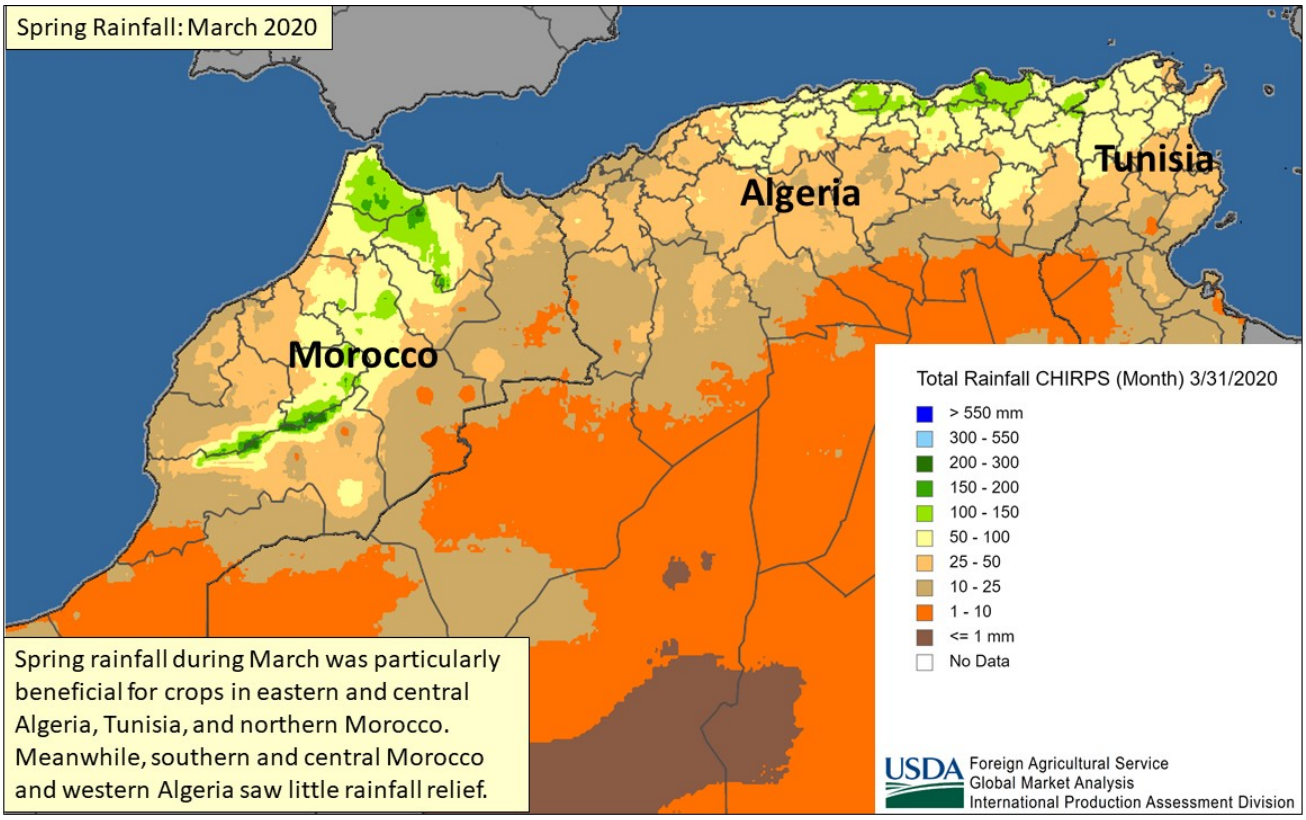
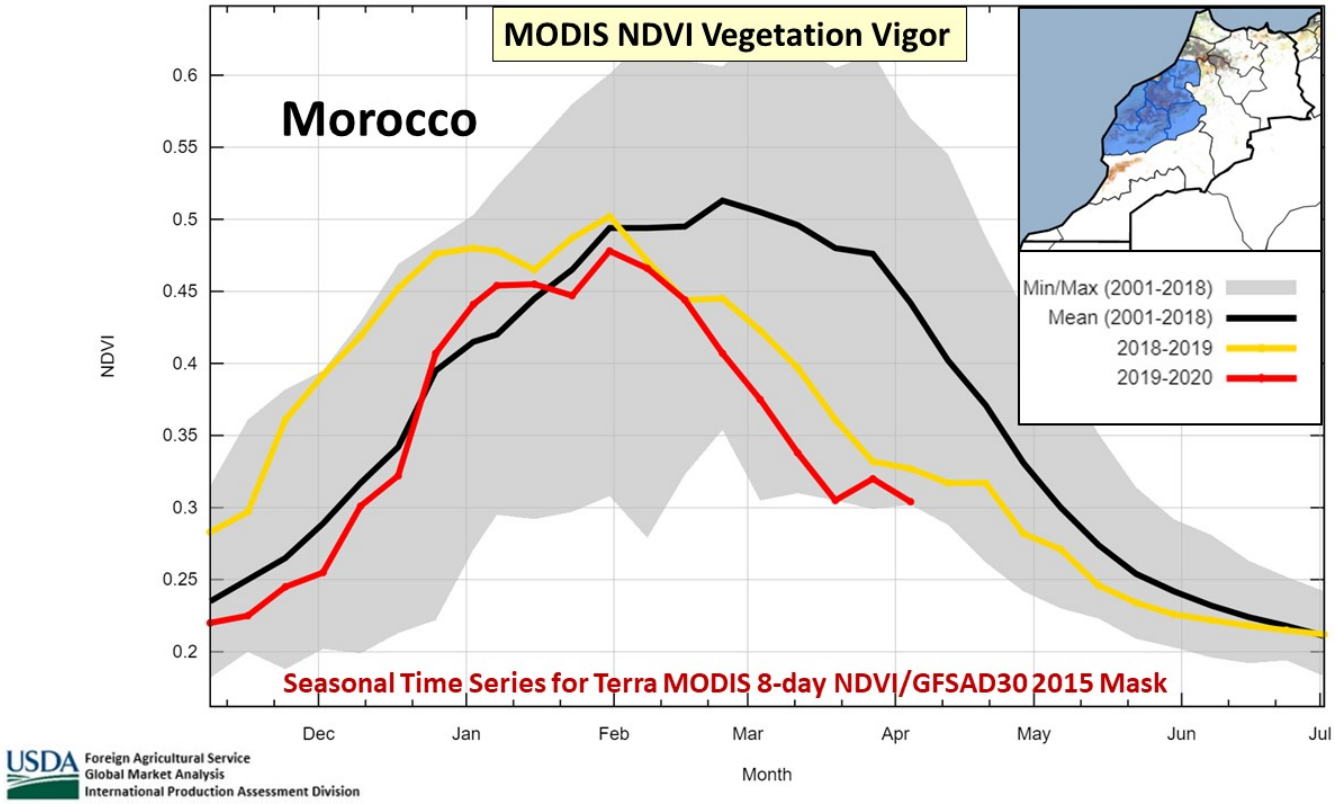


Figure 4: Morocco MODIS NDVI Vegetation Vigor



Source: USDA/NASA GLAM (Global Agricultural Monitoring) Project. https://glam1.gsfc.nasa.gov/

Figure 5: Morocco Wheat Production Map and Crop Calendar

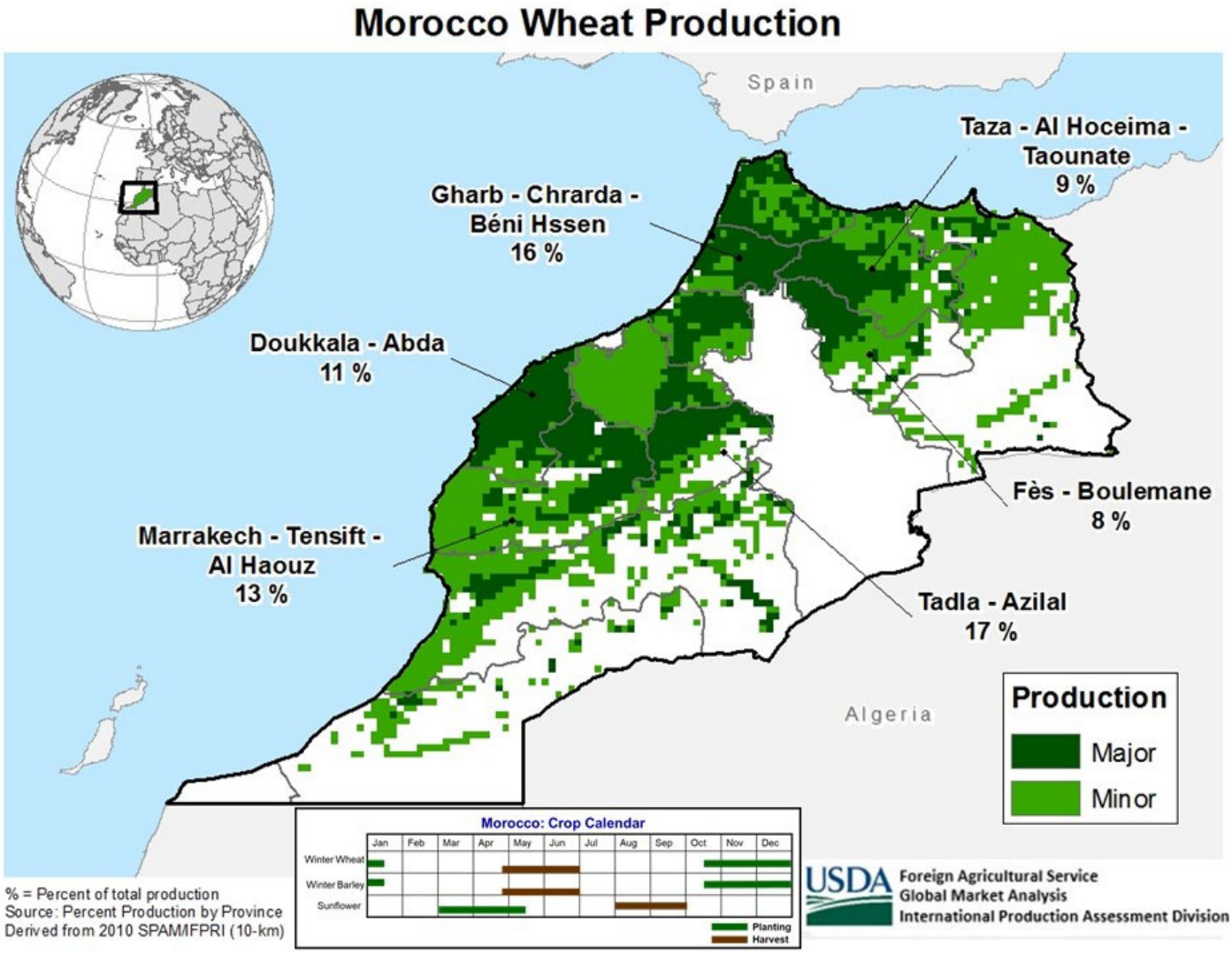
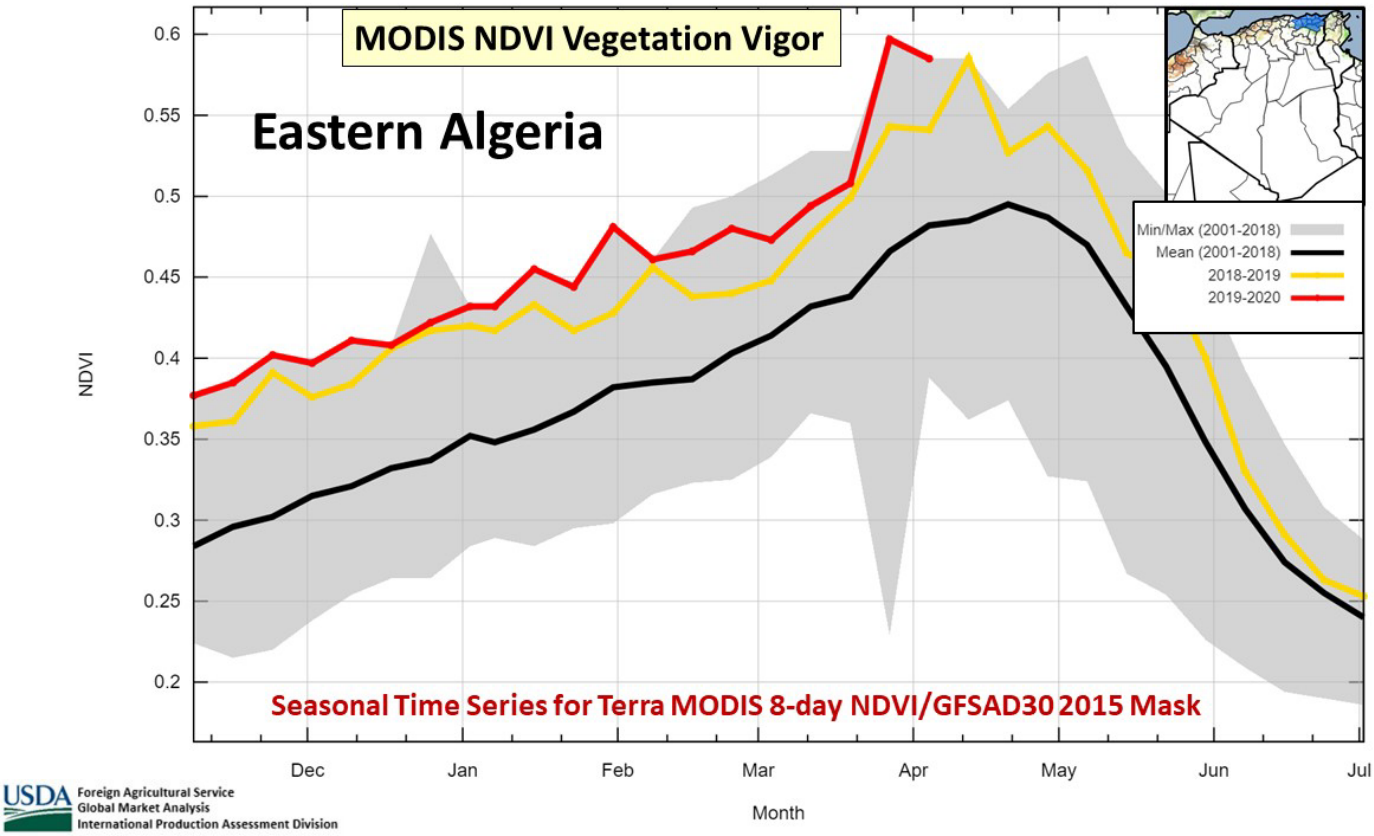
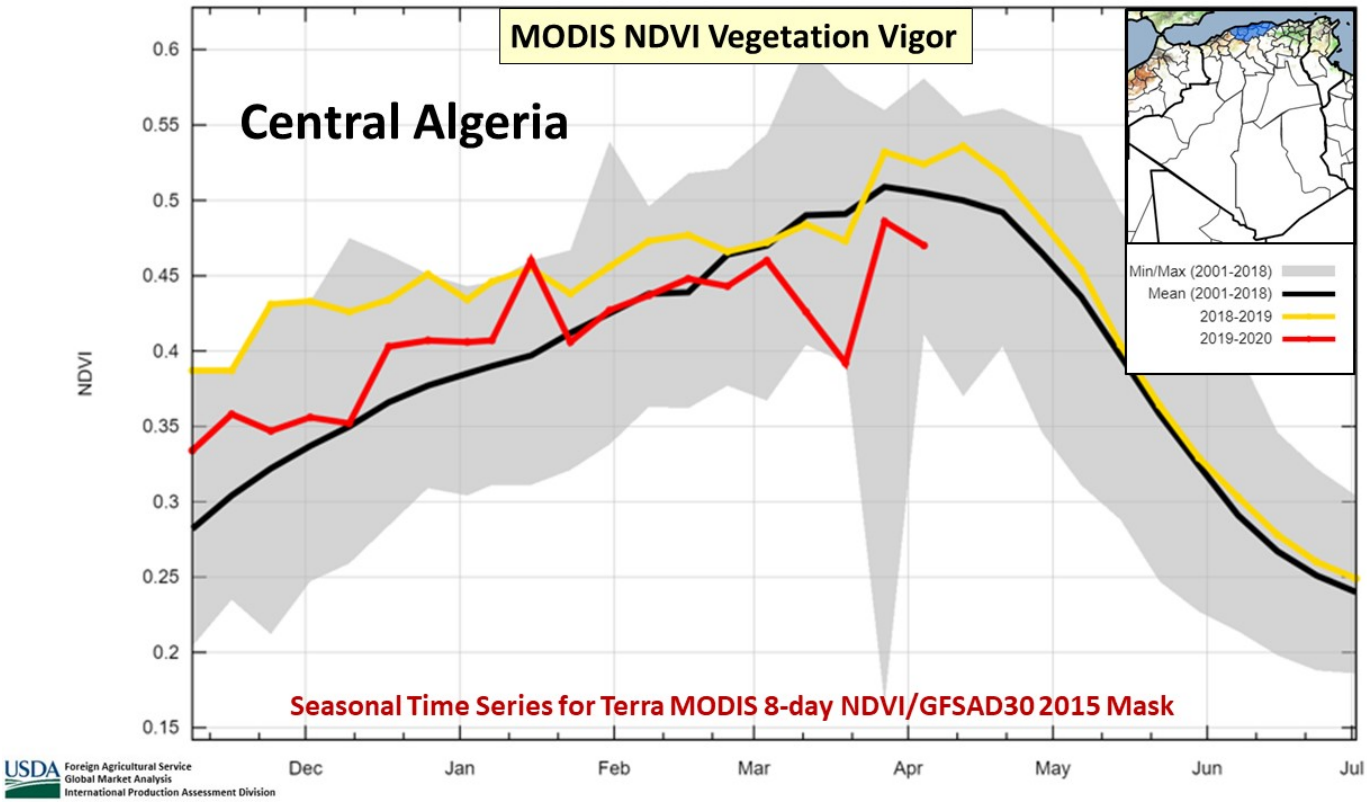


Figure 6: Eastern Algeria MODIS NDVI Vegetation Vigor



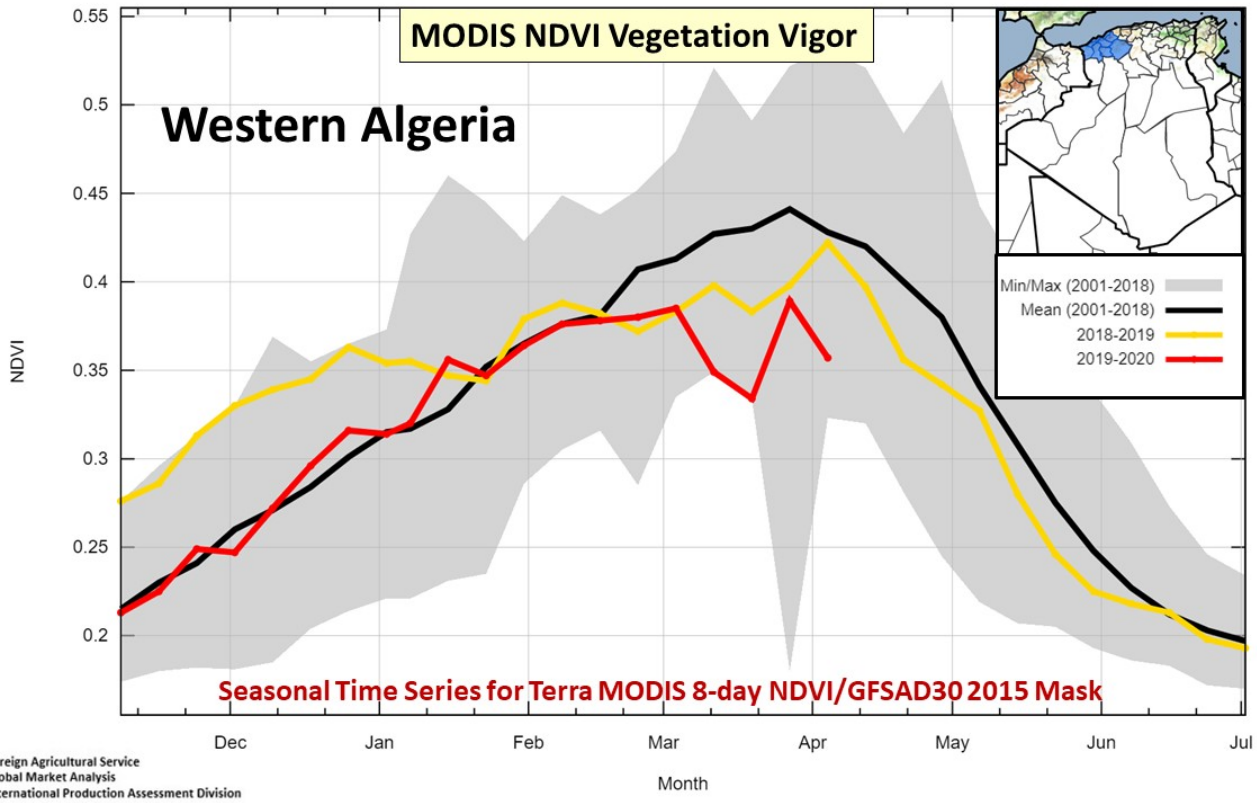
Source: USDA/NASA GLAM (Global Agricultural Monitoring) Project. https://glam1.gsfc.nasa.gov/

Figure 7: Central Algeria MODIS NDVI Vegetation Vigor



Source: USDA/NASA GLAM (Global Agricultural Monitoring) Project. https://glam1.gsfc.nasa.gov/

Figure 8: Western Algeria MODIS NDVI Vegetation Vigor



Source: USDA/NASA GLAM (Global Agricultural Monitoring) Project. https://glam1.gsfc.nasa.gov/

Figure 9: Algeria Wheat Production Map and Crop Calendar

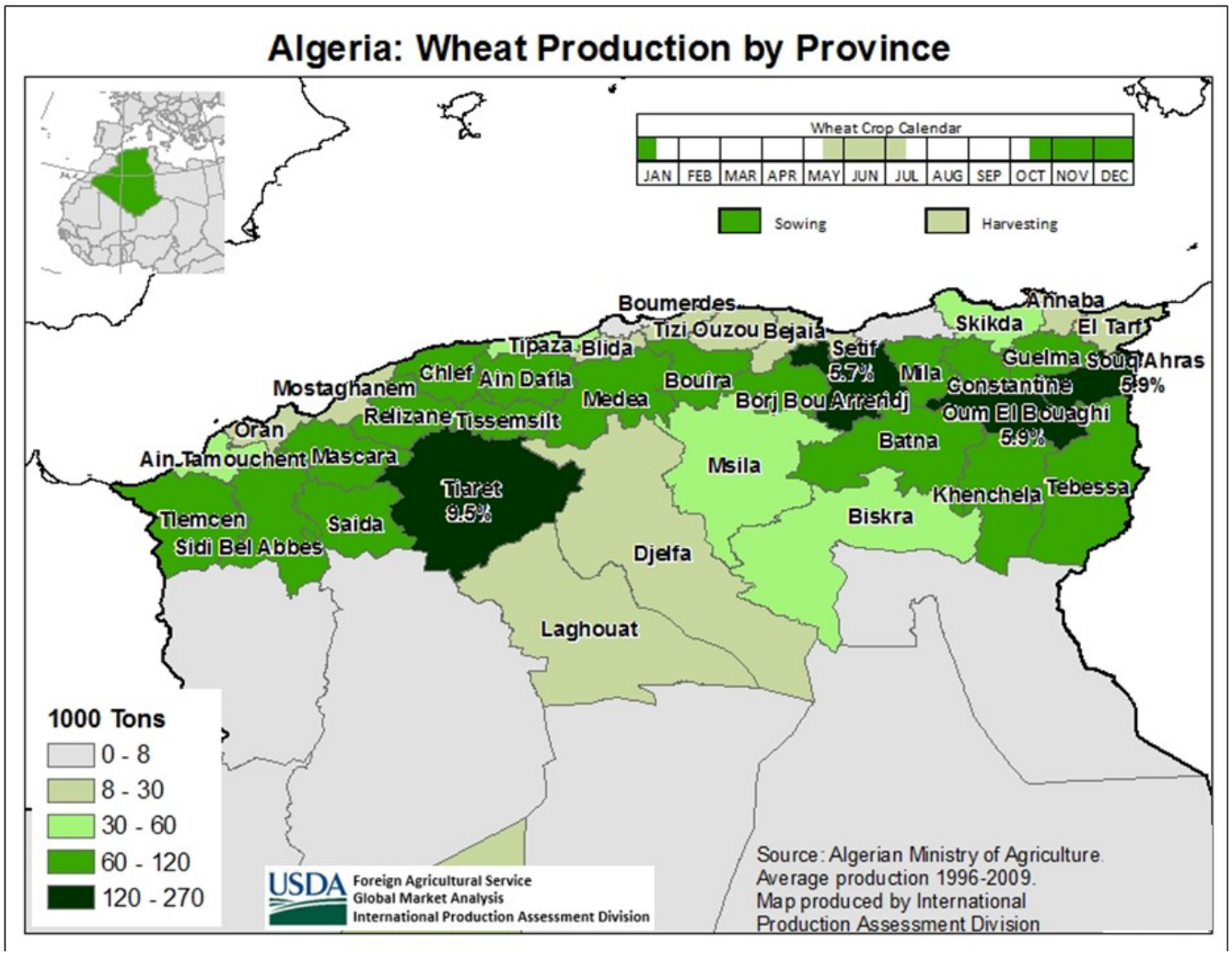


Figure 10: Tunisia Cumulative Precipitation

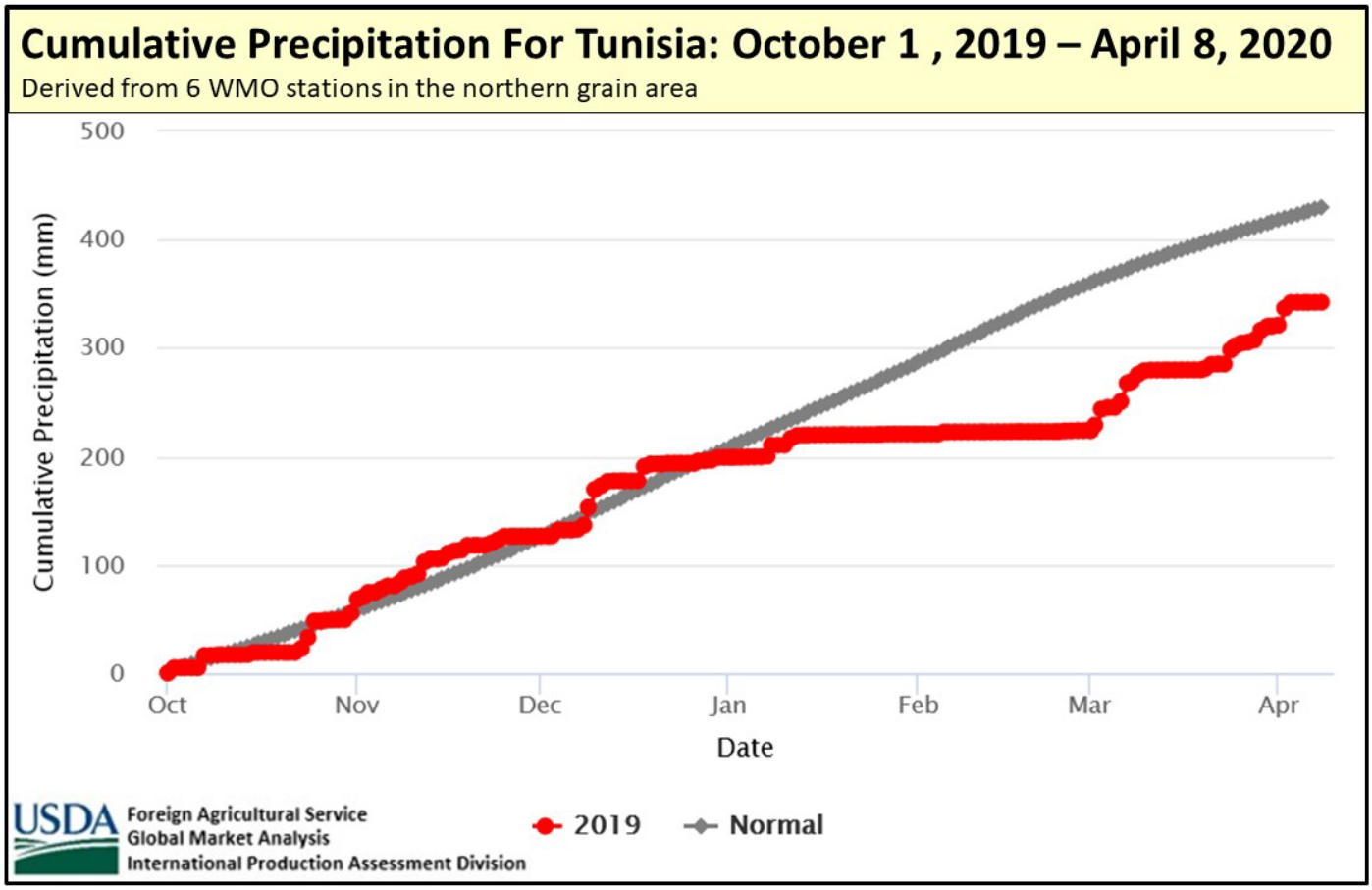
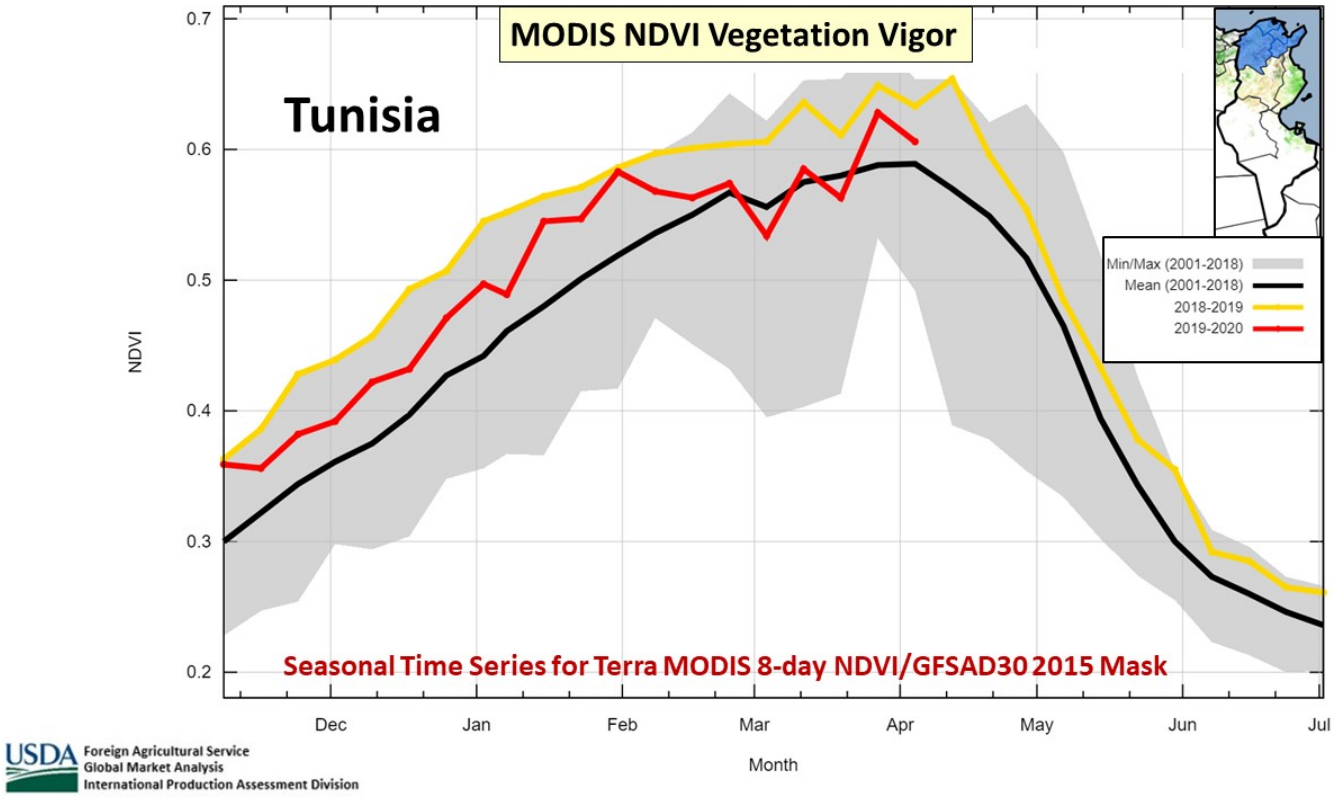


Figure 11: Tunisia MODIS NDVI Vegetation Vigor



Source: USDA/NASA GLAM (Global Agricultural Monitoring) Project. https://glam1.gsfc.nasa.gov/

Figure 12: Tunisia Wheat Production Map and Crop Calendar