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Report Name: Grain and Feed Market Update

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Report Highlights:

FAS Sofia updates its forecasts for Bulgarian production of grain crops in marketing year (MY)2023/24 to 10.5 million metric tons (MMT), based on improving prospects for average yields for wheat, barley, and corn. Unusually rainy and cool spring led to favorable growing conditions although it hampered timely corn planting and caused higher pest and disease pressure. MY2022/23 export demand has been sluggish due to decreasing grain prices causing farmers to be reluctant sellers. A heavy Black Sea supply situation, along with volatile and unpredictable regional market, led to unusually low exports lagging behind by 36 percent for wheat, by 59 percent for barley, and by 34 percent for corn at the end of May compared to a year ago. As a result, the country will likely meet the new harvest with almost double higher wheat ending stocks and eight times more barley stocks, creating logistical and price challenges in the beginning of the new season.

Weather Overview

Bulgaria had unusually rainy and cool spring season. Cool and wet weather during the early grain filling of winter crops was adequate for yield formation but increased pest and disease pressure. In the northern part of the country, the crop status is weaker-than-usual, mainly due to late sowing and delayed development of spring crops (corn, spring barley, oats). Bulgaria experienced significantly below-average temperatures during the first 20 days of May, with negative thermal anomalies reaching values between -1°C and -3.5°C. Later, the temperatures increased and near-seasonal daily temperatures were recorded from May 1 to June 12 (MARS June 2023 Bulletin Vol.31 №6). The western regions enjoyed rainfall surpluses, while the eastern areas were drier and warmer than usual. In the first half of June, little or no precipitation was observed in the eastern half of Bulgaria, but soil water availability remained adequate. In the second half of June, eastern areas –especially along the Black Sea – remained drier while western areas continue to see regular rainfall.

The colder-than-usual conditions of early May slowed down spring crop development, however, significant May precipitation was beneficial, and aligned with the grain-filling phase of winter crops. Winter crops sustained high crop biomass accumulation, particularly in southern and eastern regions. Corn experienced serious delay in planting and growth by 1-3 weeks, due to cold and wet weather conditions during sowing and early development; however, current soil moisture conditions are highly beneficial. Subsurface moisture reserves have greatly improved and are significantly better than in the previous season, promising improved resilience of the spring crops in case of summer heat. Pest and disease pressure was high this spring which can negatively affect final yields. The forecasted yield for wheat, barley, and corn is increased but is not expected to be a record. (See maps 1-9 Crop Explorer and Bulgaria data).

MY2023/24 Forecast

Winter wheat and barley were planted in the optimal time window due to rains in September/October. There has been a small growth in fall plantings for winter grains, 2.7 percent for wheat, and 0.4 percent for barley (Table 2), mainly due to high farm prices. It was reported that due to elevated fertilizer costs, farmers made efforts to maximize the winter grains area. Winter crops benefited from warmer-than-usual temperatures in the November-January period, however, this fall dryness is reported to be negatively affecting the crop tillering. Mild winter and frequent rains in April-May, although beneficial for winter crops, have caused higher spreading of diseases and pests. Farmers reported viral diseases, yellow and brown rusts, and an especially high population of aphids and wheat bugs. Due to a cooler spring, the harvest is likely to start later than usual compared to the last season. Most barley is likely to be harvested in the first half of July and wheat by the middle of the month. First tentative harvest results as of June 22 show disappointing yields of 4.3 MT/HA for wheat and 5.07 MT/HA for barley (MinAg Bulletin #25). Many farmers opine that the regular rains lowered the hectoliter mass and thus the average yields.

Thanks to the good start of the season and favorable spring weather, the expectations for average wheat yields are increased above those in MY2022/23 (5.34 MT/HA). Independent crop observations (Agroportal.bg) show average yields of 5.41 MT/HA with wide variations in the country's regions from 4.3 MT to 6.0 MT/HA, and advanced farmers expecting 8.0 to 10.0 MT/HA. The most recent EU estimates (MARS June 2023 Bulletin Vol.31 №6) are for 5.4 MT/HA while the most optimistic private estimates reach as high as 5.9 MT/HA or a total production of 7.0+ MMT. The Bulgarian MinAg estimate is for wheat crop "to exceed 6.0 MMT." The current FAS Sofia yield projection is increased to

5.66 MT/HA compared to an earlier expectation of 5.45 MT/HA. This translates in total wheat production of 6.8 MMT (Table 3).

Estimates for barley average yields (winter and spring) are also above those in MY2022/23 (5.11 MT/HA). Private estimates vary from 5.1 MT/HA to 5.4 MT/HA, with EU estimate (MARS June 2023 Bulletin Vol.31 №6) for 5.26 MT/HA. The current FAS Sofia yield projection is increased slightly to 5.29 MT/HA leading to total barley production of 625,000 MT (Table 3).

Corn planting in the spring was challenged by cold and rainy weather. Due to almost daily rains, field work was prevented, and the planting was late and prolonged until the end of May. In addition, farmers –hit by consistently declining prices – have decided to reduce corn area as the crop is considered more costly to grow compared to sunflower. Finally, the ban on neonicotinoids was also discouraging for farmers. Current (tentative) data for area planted show a decline of 5 percent compared to MY2022/23.

Due to the optimistic start of the season to date, restored subsurface soil reserves, and provided the weather conditions cooperate, corn yields have the potential to recover from very low levels in MY2022/23 (4.9 MT/HA). Current private estimates are around 6.5 MT/HA – 6.6 MT/HA. FAS Sofia projection is slightly more cautious at 6.26 MT/HA due to unknowns related to growing conditions in the critical month of July. This translates into total forecast production of 3.1 MMT (Table 2).

MY2022/23 Production Estimates, Trade and Use
Final production data is shown in Table 1, based on Eurostat.

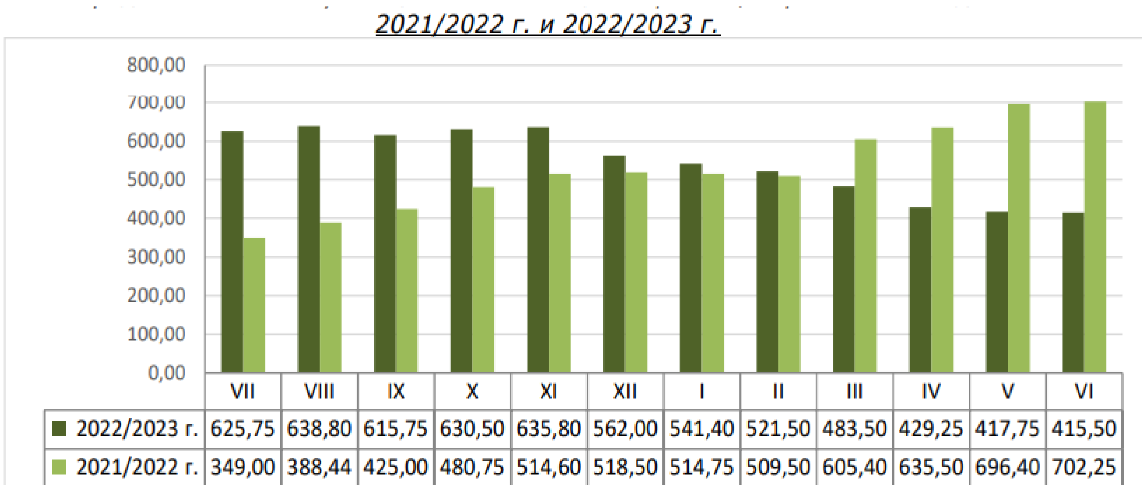
Wheat: Export demand for wheat has been depressed due to heavy and low-priced Black Sea supply (Russia). Farmers preferred to keep their stocks due to higher production costs, inflation, and expectations that prices would climb again to their last season level. With full warehouses, however, and favorable spring weather leading to higher yields, farmers became concerned about logistical issues related to the upcoming harvest and accelerated sales and exports. As of the end of May, wheat exports were reported to be 36 percent lower than a year ago at 3.0 MMT, compared to 4.8 MMT in the corresponding period in MY2021/22 (Table 5, Graph 3). At the end of June, exports were at almost 3.8 MMT but still behind that a year ago (Table 4).

According to Trade Data Monitor/TDM, total wheat exports (in WGE/wheat equivalent) in the three quarters of MY2022/23 (July-March) were at 2.7 MMT, to main destinations Algeria, Spain, Indonesia, Tunisia, and Greece. This is about 40 percent lower than exports in the corresponding period in MY2021/22 (4.43 MMT).

According to the EC Customs data, as of June 26, 2023, Bulgaria exported 2,859,868 MT of wheat to non-EU markets, or 9.3 percent of total EU exports, ranking as the fifth-largest EU wheat exporter after France, Romania, Poland, and Germany.

Following record high ex-farm prices in May-June 2022, prices began to decline since then. The gap between the local ex-farm prices and the EU prices has gradually widened, especially since March (Graphs 1 and 2). As of June, the ex-farm wheat prices were about 60 percent of the price level a year ago.

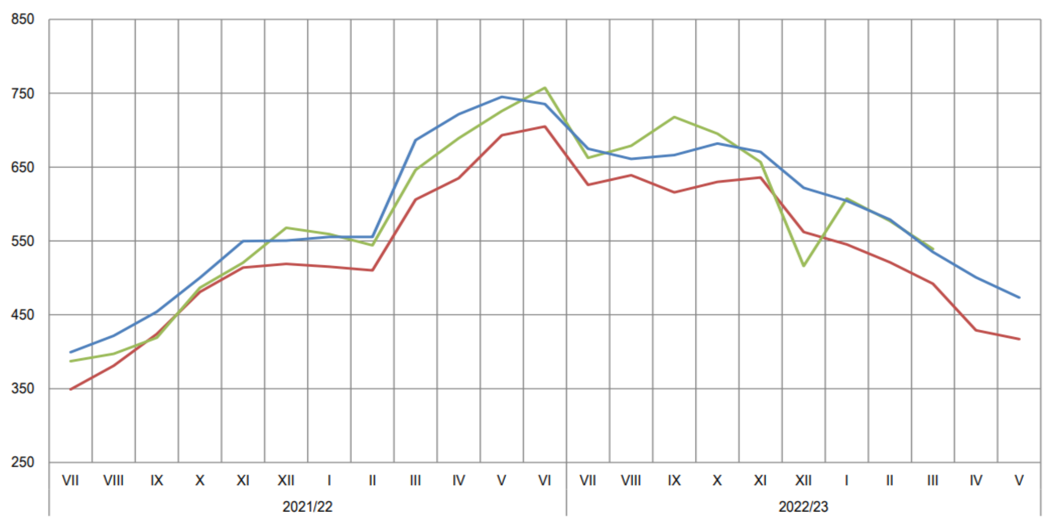
Graph 1. Wheat Monthly Market Prices, MY2022/23 vs MY2021/22 in Bulgarian Leva (BGN)/MT



	VII	VIII	IX	X	XI	XII	I	II	III	IV	V	VI
2022/2023 г.	625,75	638,80	615,75	630,50	635,80	562,00	541,40	521,50	483,50	429,25	417,75	415,50
2021/2022 г.	349,00	388,44	425,00	480,75	514,60	518,50	514,75	509,50	605,40	635,50	696,40	702,25

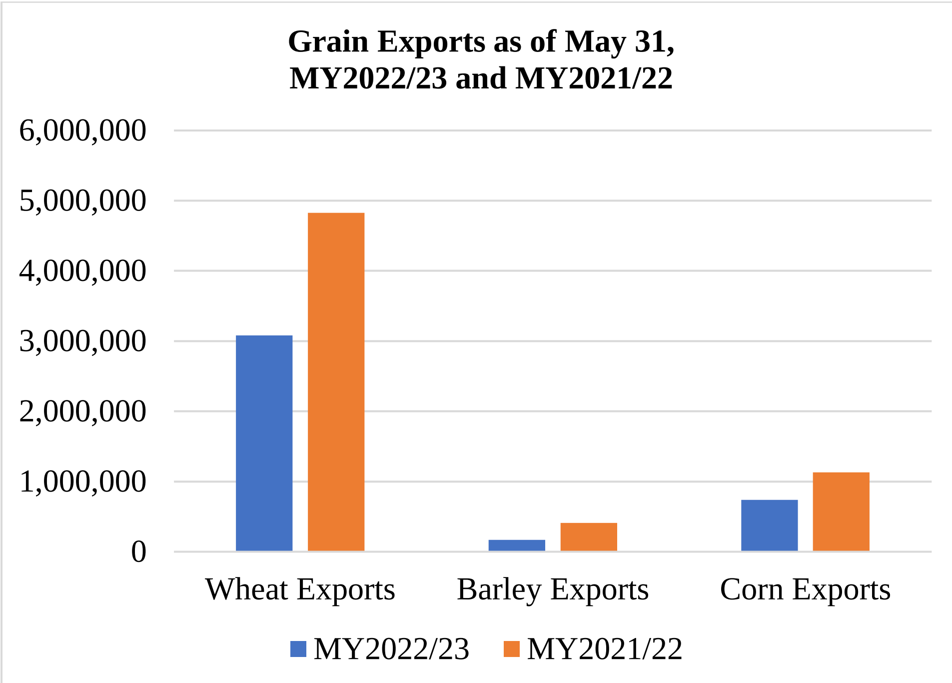
*The chart shows prices for the MY, which begins in July, with MY 2022/23 in dark green and MY 2021/22 in light green.
Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

Graph 2. Wheat Monthly Prices, MY2021/22 - MY2022/23 (May), BGN/MT



Red line- Bulgarian ex-farm prices, milling wheat, in Bulgarian leva (BGN) per MT
Blue line – EU market price, milling wheat, BGN/MT
Green line – Bulgarian FOB export price, milling and feed wheat, BGN/MT
Source: Bulgarian MinAg Dashboard Grains and Oilseeds, June, 2023

Graph 3. Grain Exports, MY2022/23 and MY2021/22



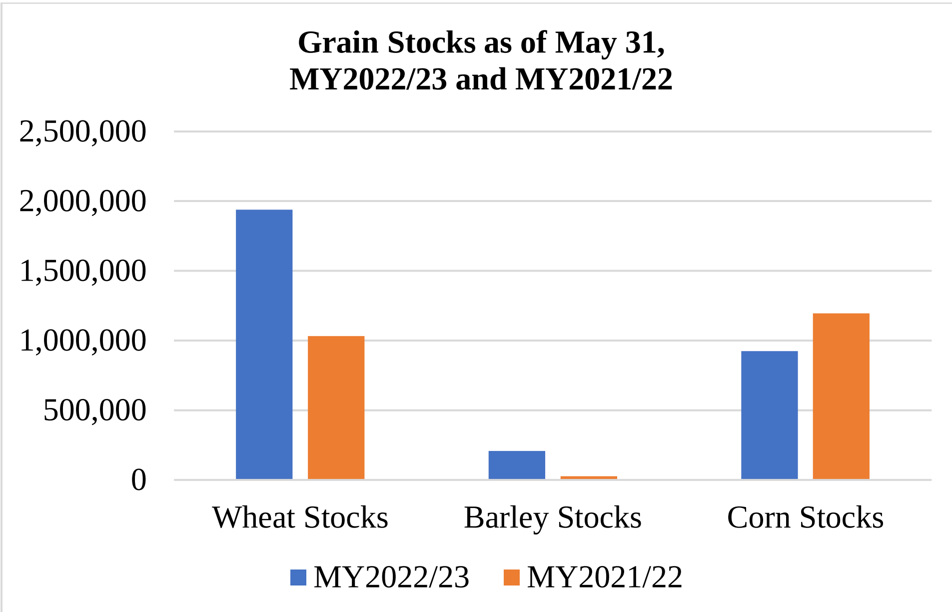
Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

Local food and feed consumption has been relatively stable, although feed use has slightly declined in MY2022/23 (Table 5). This was due to the challenging situation of the dairy, livestock, and poultry industries that have suffered from expensive feed and stagnant dairy/meat prices, resulting in negative margins in the first half of the MY. The situation has improved in the spring with lower feed wheat (grain) prices, softened food inflation and gradually growing dairy/meat prices.

As a result of stable domestic consumption and lower exports, the country accumulated record high ending stocks. As of the end of May, ending stocks were 88 percent higher than a year ago (Table 5, Graph 4) at 1.9 MMT. Post projection for MY2022/23 ending stocks is increased to about 1.0+ MMT or double the ending stocks of MY2021/22. This continues to raise concerns about logistical issues at harvest time as well as about additional pressure on farm prices.

Official data about grain storage in Bulgaria is at 14.5 MMT in 3,600 grain storages. Private estimates, however, are for higher storage capacity of 18.0+ MMT due to considerable investments in recent years.

Graph 4. Grain Stocks, MY2022/23 and MY2021/22



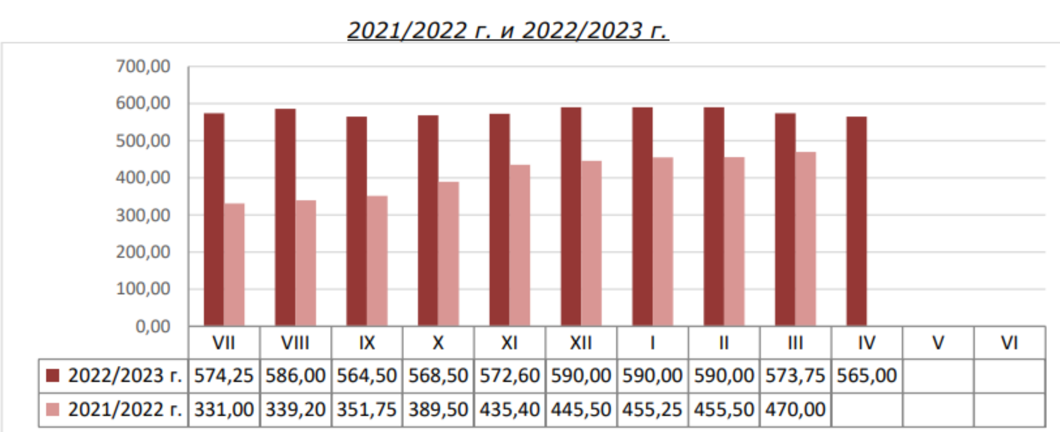
Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

Barley: Similar to wheat, export demand has been depressed (Table 5, Graph 3). The reduction in barley exports is bigger than that for wheat with 59 percent lower exports as of the end of May 2023 over 2022. At the end of June (Table 4), barley exports reached 218,000 MT or 47 percent lower than a year ago (414,000 MT).

According to TDM, barley exports in the first three quarters of MY2022/23 (July-March) were at 115,823 MT, to main destinations Spain, Israel, and Greece. According to the EC Customs data, as of June 26, 2023, Bulgaria exported 80,000 MT of barley to non-EU markets ranking the country as the fifth-largest EU exporter to non-EU markets after France, Romania, Germany, and Denmark.

Barley monthly prices have been more stable than wheat prices and are still maintaining higher levels in MY2022/23 compared to MY2021/22 (Graph 5).

Graph 5. Barley Monthly Market Prices, MY2022/23 vs MY2021/22 in BGN/MT



*The chart shows prices for the MY, which begins in July, with MY 2022/23 in dark red and MY 2021/22 in light red.
Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

Domestic demand for feed has been stable (Table 5) while that for food (brewing) declined by 15 percent due to lower beer manufacturing. As a result, barley's ending stocks are projected to be much higher compared to MY2021/22. As of the end of May 2023, barley stocks were at 208,000 MT or eight-fold higher than a year ago (Table 5, Graph 4). Post forecast for MY2022/23 ending stocks is increased to about 140,000 MT.

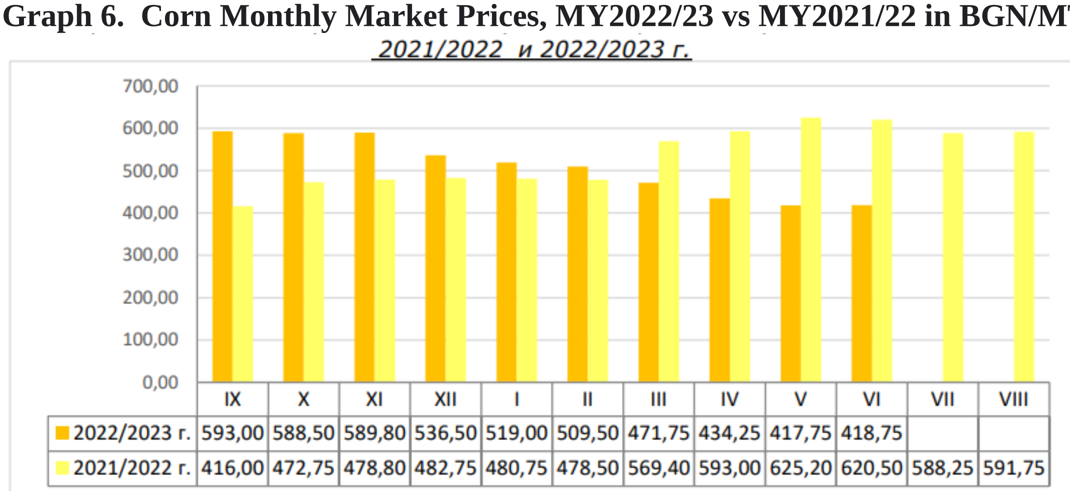
<u>Corn</u>: The country had lower exportable availabilities due to much shorter corn crop in MY2022/23. In addition, corn export demand has faced strong competition by Black Sea suppliers (Ukraine) (Table 5, Graph 3). The decline in corn exports was at 34 percent (Table 5, Graph 3) at the end of May 2023 over 2022.

According to TDM, corn exports in the first half of MY2022/23 (October-March) were at 541,861 MT, to main destinations China, Spain, and Greece. According to the EC Customs data, as of June 26, 2023, Bulgaria exported 644,756 MT of corn to non-EU markets with a share of 18 percent of EU total exports raking the country as the second largest EU exporter after Romania.

Corn imports declined and were reported by the MinAg at 26,000 MT at the end of May (Table 5) or a reduction of 58 percent compared to May 2022. EC Customs data shows imports at 22,655 MT. The TDM data for imports in the first half of the MY is for 31,997 MT, mainly from Romania, Greece, and Ukraine.

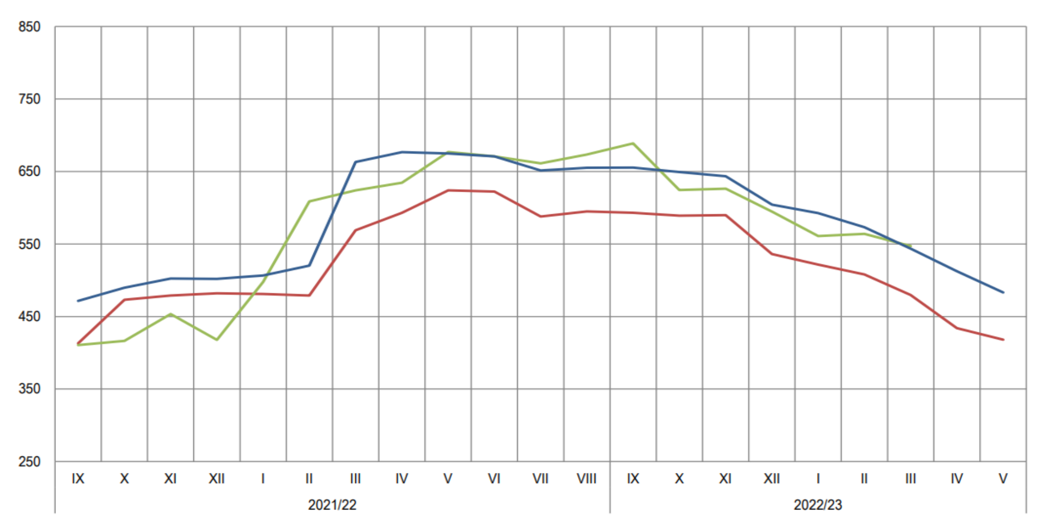
Corn prices have been declining since the beginning of the MY and since March they fell below the prices a year ago with a widening gap. As of June, the corn price was 33 percent lower than the price in June 2022. Ukraine is a significant corn producer and exporter and ample availabilities in the region had an impact on the local market.

Graph 6. Corn Monthly Market Prices, MY2022/23 vs MY2021/22 in BGN/MT



*The chart shows prices for the MY, which begins in July, with MY 2022/23 in dark yellow and MY 2021/22 in light yellow.
Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

Graph 7. Corn Monthly Prices, MY2021/22 - MY2022/23 (May), BGN/MT



Red line- Bulgarian ex-farm prices, in Bulgarian leva (BGN) per MT
Blue line – EU market price, BGN/MT
Green line – Bulgarian FOB export price, BGN/MT
Source: Bulgarian MinAg Dashboard Grains and Oilseeds, June, 2023

Domestic corn consumption has been more stable to slightly lower to date, both for food and feed (Table 5). Due to the lower crop in MY2022/23 and despite the decline in exports, ending stocks for the MY are not estimated to increase. Corn stocks as of the end of May are already 23 percent less than the level a year ago at below 1.0 MMT.

Appendix.

Table 1. Grain Crops Final Production Data MY2022/23 and MY2021/22, June 2023

Crops	Area Harvested (000 HA)		Production (000 MT)	
	MY2022/23	MY2021/22	MY2022/23	MY2021/22
Wheat	1,206	1,206	6,447	7,343
Barley	122	126	624	704
Corn	520	573	2,554	3,427
Rice	10	12	65	58
Oats	11	10	26	24
Triticale	14	16	43	54
Rye	8	8	17	17
Sorghum	2	2	6	5
Total	1,893	1,953	9,782	10,928
Source: Eurostat data based on EU standard moisture content - updated as of June 2023				

Table 2. Winter Grains Area to be Harvested MY2022/23, HA, June 2022

	June 1, 2023	June 2, 2022	Change,

			Percent
Wheat	1,191,556	1,159,795	+2.7%
Barley	117,510	117,012	+0.4%
Rye	7,966	8,507	-6.4%
Triticale	13,493	14,663	-8.0%
Corn (as of June 16)	492,581	518,888	-5.0%
Oats*	11,000	NA	-
Sorghum*	2,500	NA	-
Rice*	10,000	NA	-
Triticale*	13,000	NA	-
Source: Bulgarian MinAg Weekly Bulletin #22, June 7, 2022 Note: *Eurostat, June			

Table 3. FAS Sofia Grain Production Estimates MY2023/24, June 2023

Crops	Area Harvested, HA	Production, MT
Wheat	1.2 million	6.8 million
Barley (winter and spring)	118,000	625,000
Corn	495,000	3.1 million
Total	1,813,000	10,525,000
Source: FAS Sofia		

Table 4: MY2022/23 Trade in Major Grain Crops, as of June 23, 2023

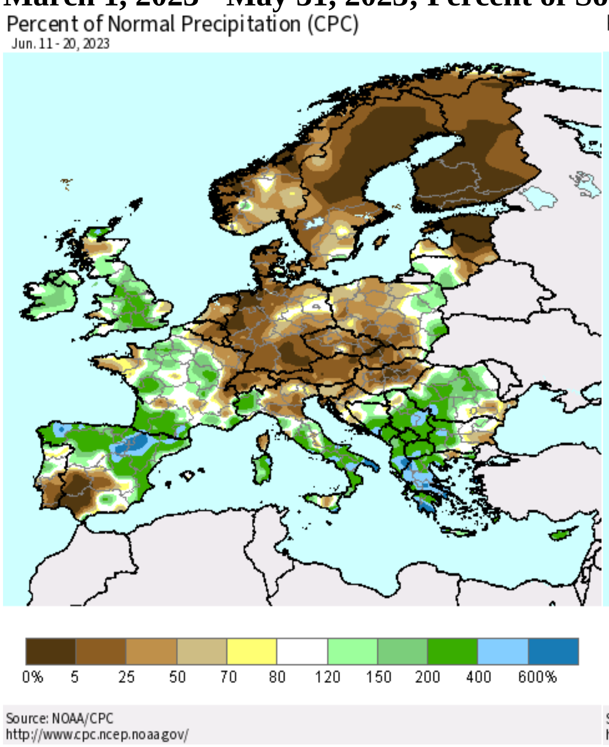
Types of Grains	Imports, MT	Exports, MT
Wheat	37,855 MT	3,761,182 MT (including 3,032,687 MT to non-EU markets);
Barley	6,250 MT	217,925 MT (including 111,500 MT to non-EU markets);
Corn*	36,737 MT	777,939 MT (including 536,842 MT to non-EU countries)
Source: MinAg Weekly Grain Market Bulletins 2022 and 2023. *****Note: The Bulgarian MinAg uses September 1-August 31 as a MY for corn. Trade data refers to 2022 corn crop traded since September 1, 2022		

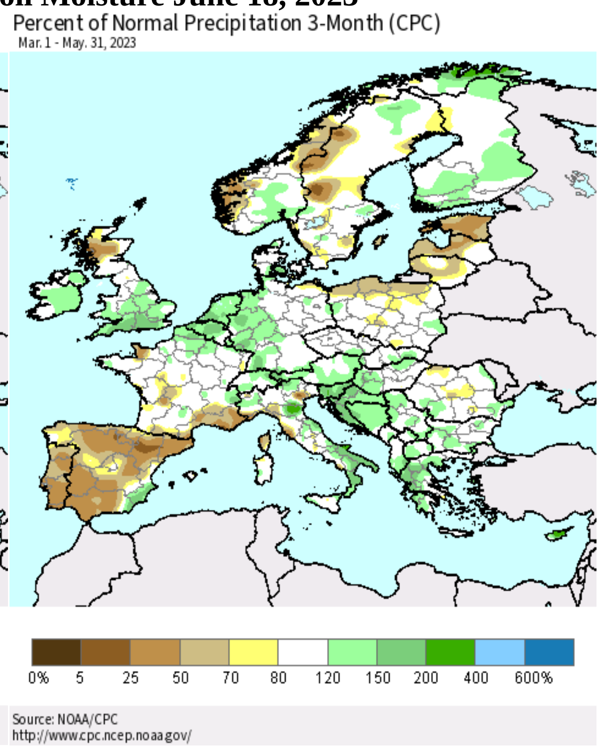
Table 5. Grain Exports, Imports, Stocks, and Use as of May 31 in MY2022/23 and MY2021/22, in MT

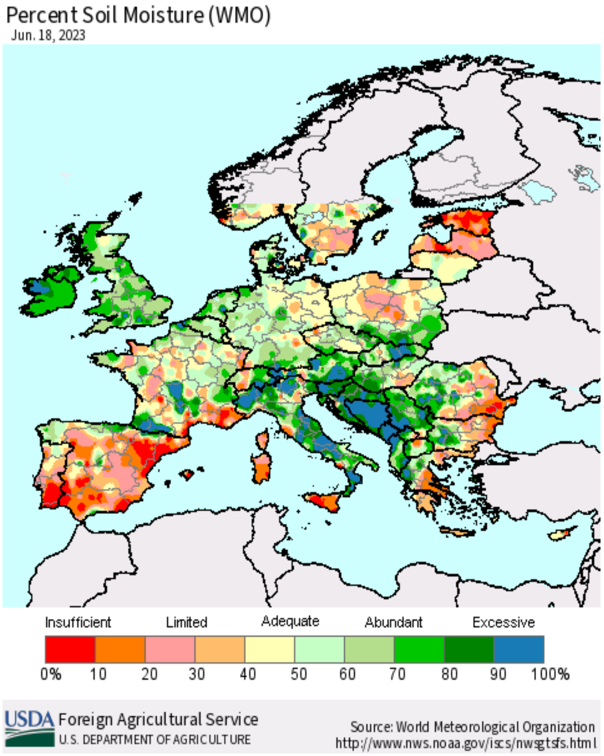
Types of Grains and Use	MY2022/23	MY2021/22	Change, MY 2022/23 to MY 2021/22 in Percent
Wheat Imports	33,955	49,279	-31%

Wheat Exports	3,080,204	4,825,477	-36%
Wheat Food Use	636,250	632,850	0.5%
Wheat Feed Use	406,050	416,250	-2.5%
Wheat Stocks	1,939,760	1,032,960	+88%
Barley Imports	6,190	1,465	+422%
Barley Exports	168,425	409,775	-59%
Barley Food Use	57,820	68,300	-15%
Barley Feed Use	152,150	158,000	-3.8%
Barley Stocks	208,332	25,796	+808%
Corn Imports	26,357	62,683	-58%
Corn Exports	740,631	1,128,585	-34%
Corn Food Use	785,800	821,150	-4%
Corn Feed Use	397,450	421,550	-6%
Corn Stocks	923,919	1,195,743	-23%
Source: MinAg Weekly Grain Market Bulletins 2022 and 2023, as of May 31.			

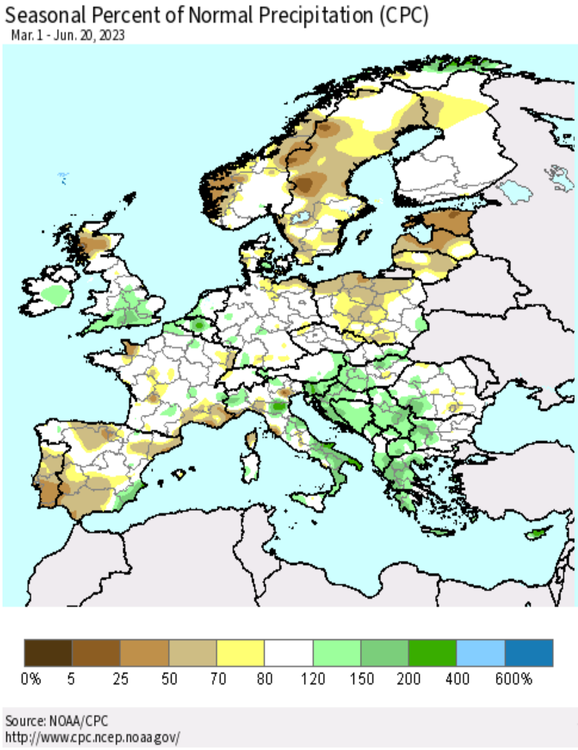
Map 1: USDA Crop Explorer, Europe, Percent Normal Precipitation, June 11-20, 2023 and for March 1, 2023 - May 31, 2023; Percent of Soil Moisture June 18, 2023

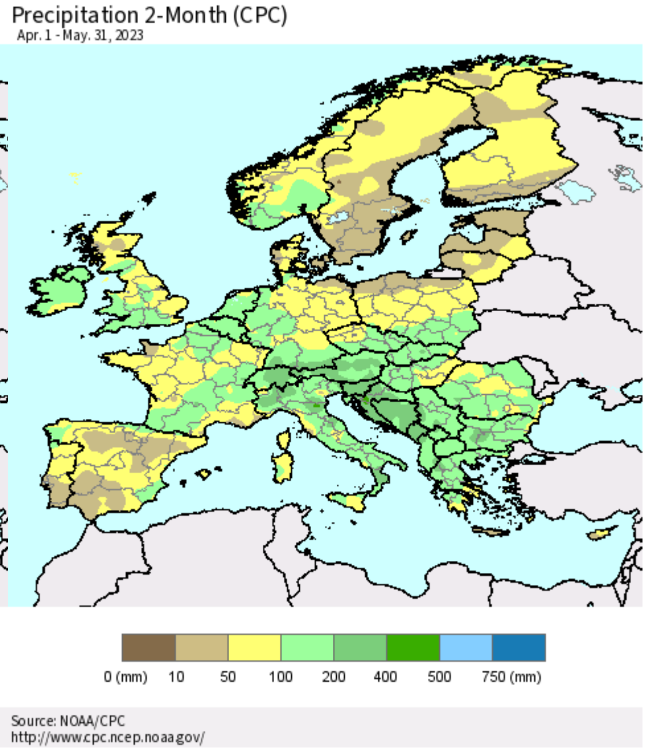




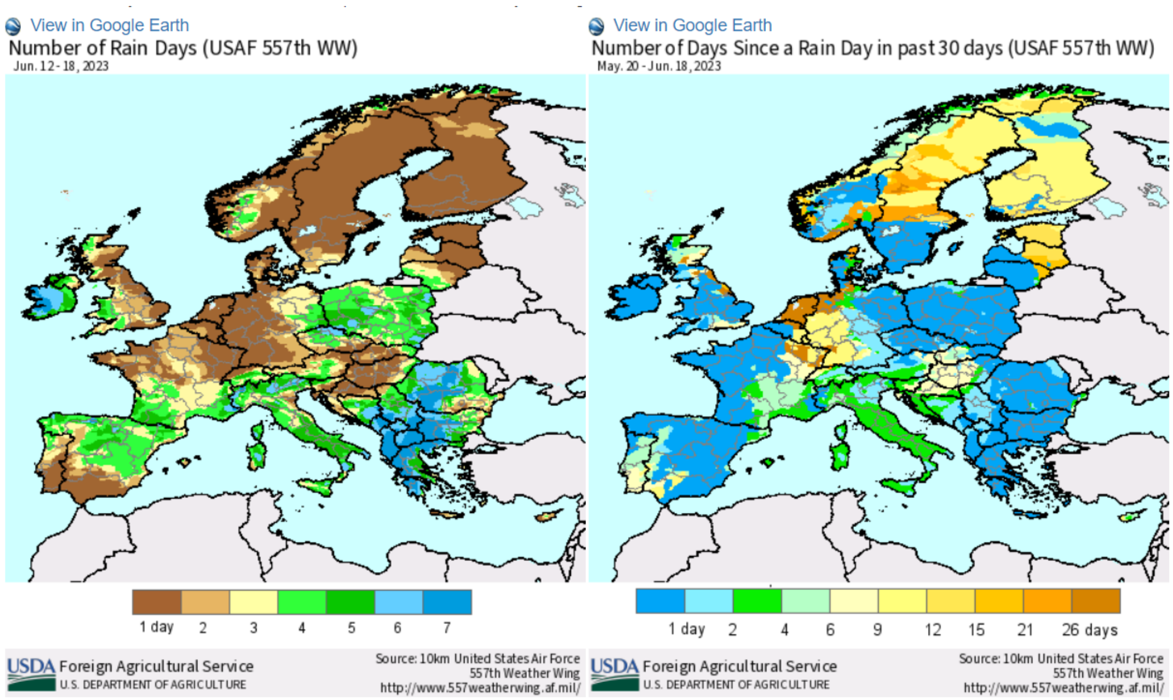


Map 2: USDA Crop Explorer, Europe (including Bulgaria), Seasonal Percent of Normal Precipitation March 1- June 20, 2023 and Precipitation April 1- May 31, 2023

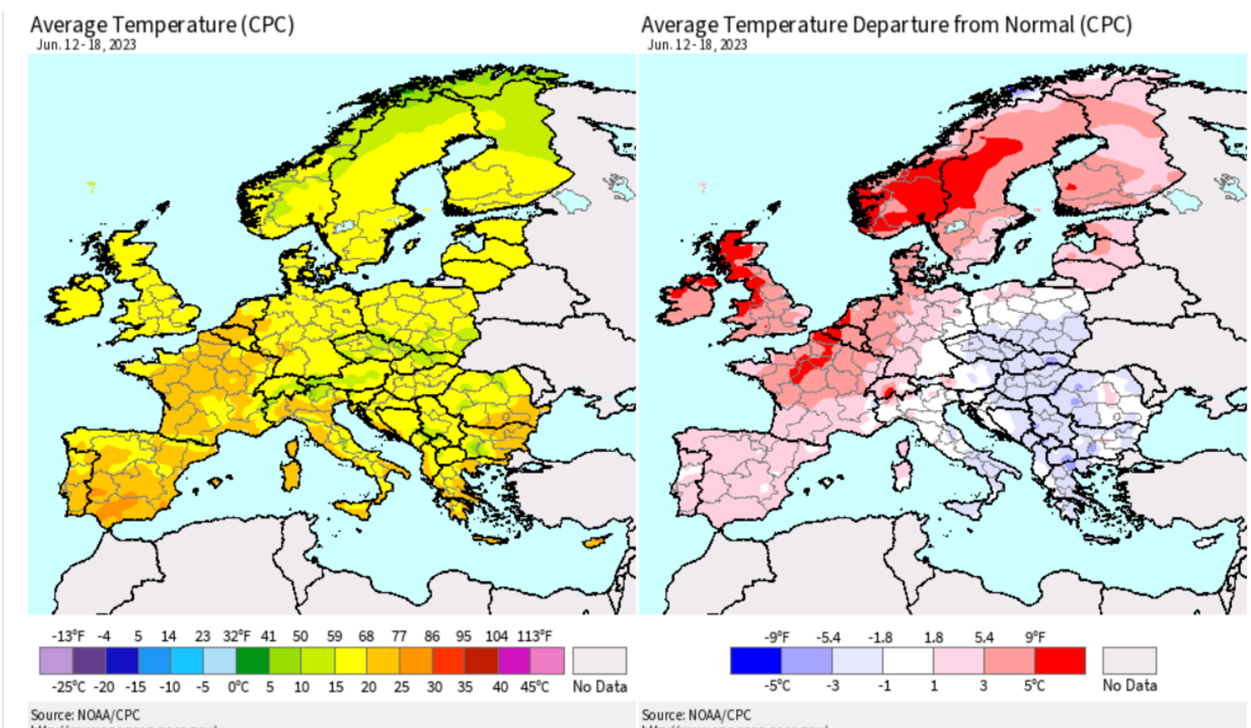




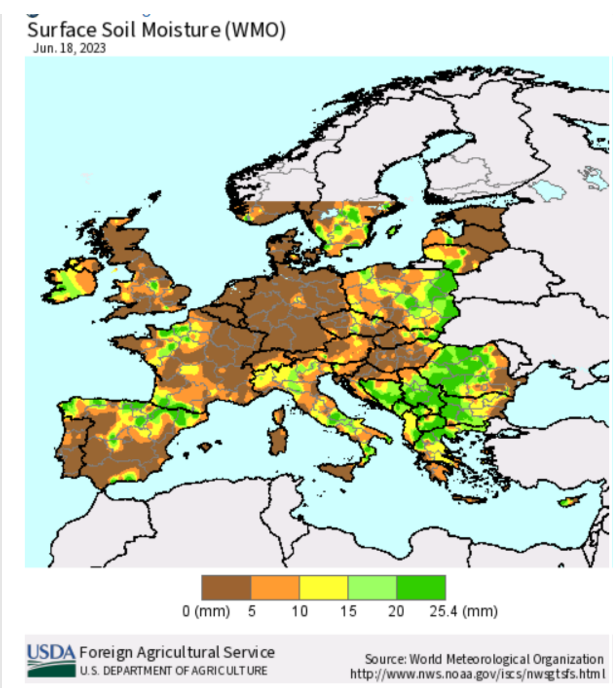
Map 3: USDA Crop Explorer, Europe (including Bulgaria), Number of Rain Days June 12-18, 2023 and in the Past 30 days May 20 -June 18, 2023

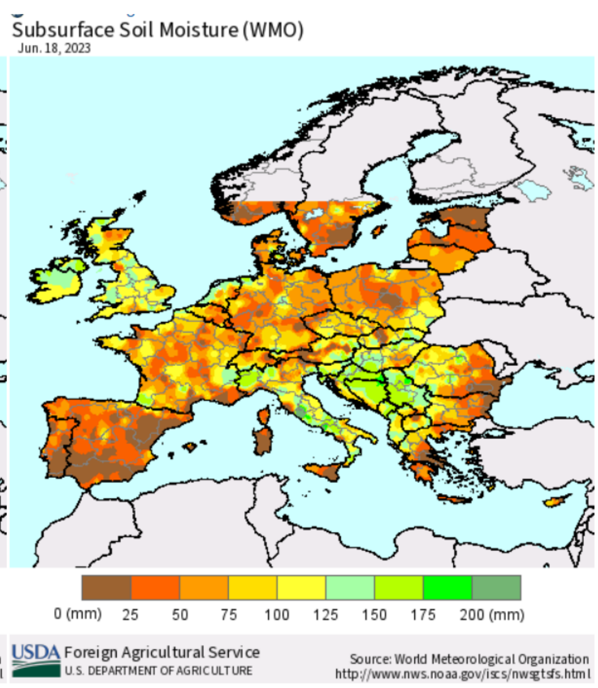


Map 4: USDA Crop Explorer, Europe (including Bulgaria), Average Temperature and Departure from Normal June 12-18, 2023

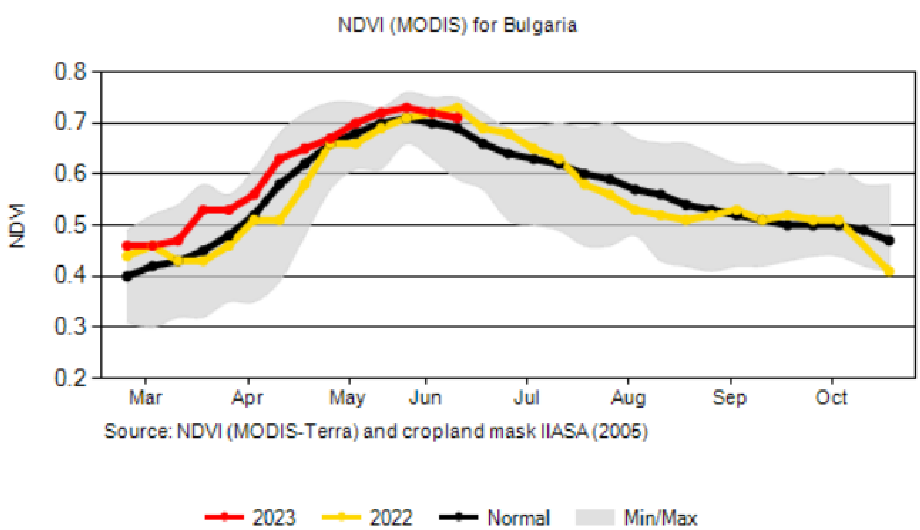


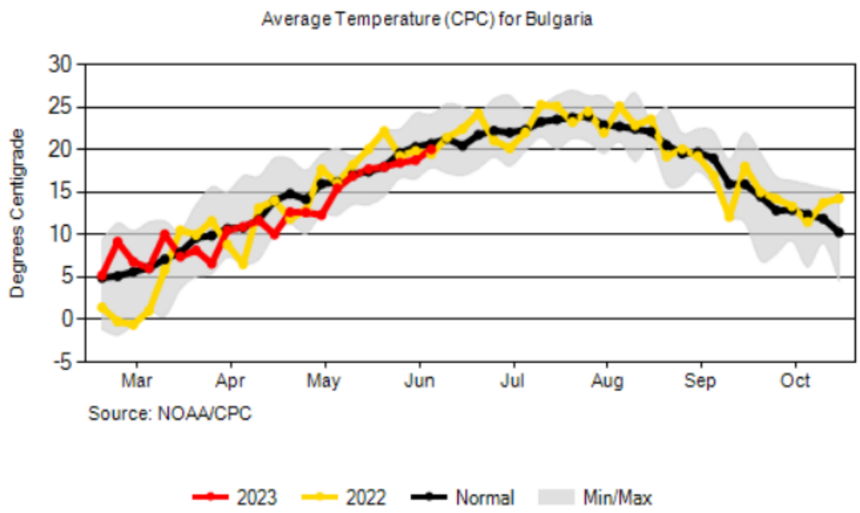
Map 5: USDA Crop Explorer, Europe (including Bulgaria), Surface and Subsurface Soil Moisture June 18, 2023



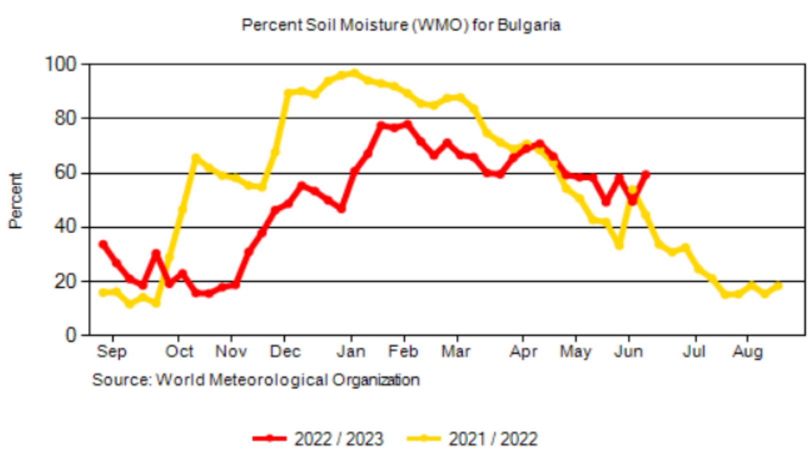


Map 6. **USDA [Crop Explorer](), Bulgaria, Vegetation Index (NDVI), Average Temperature, Percent of Soil Moisture, Surface and Subsurface Soil Moisture, as of June 2023**

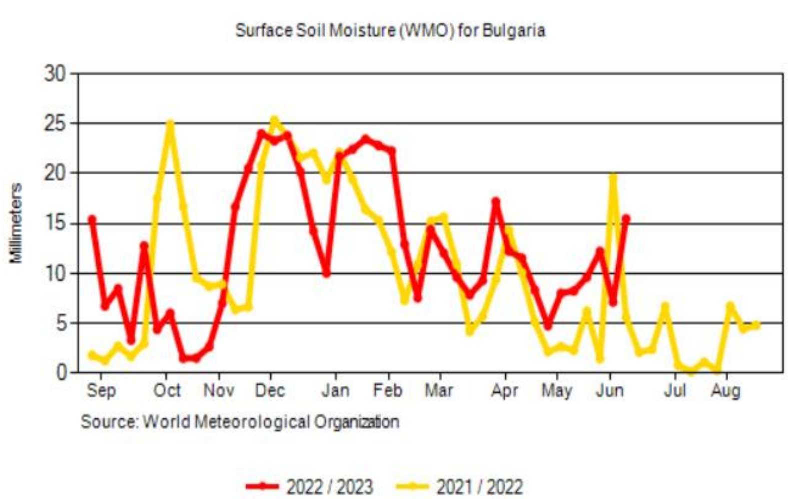




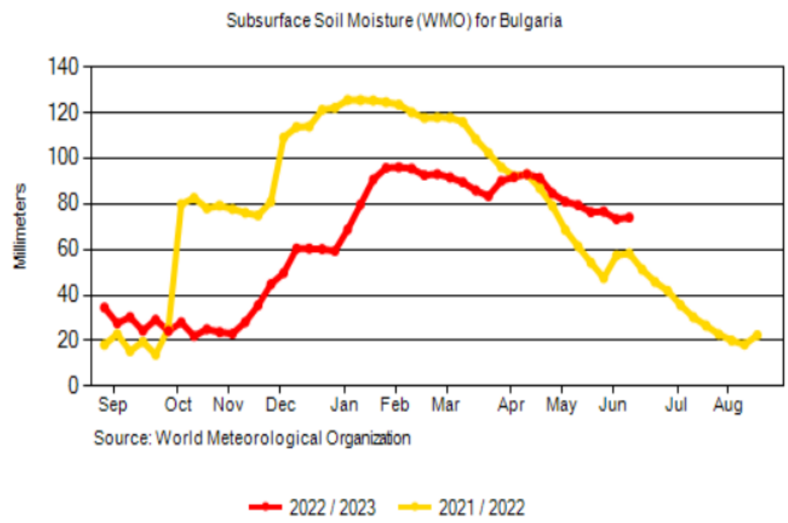
Average Temperature (CPC) for Bulgaria
Degrees Centigrade
30
25
20
15
10
5
0
-5
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Source: NOAA/CPC
2023
2022
Normal
Min/Max



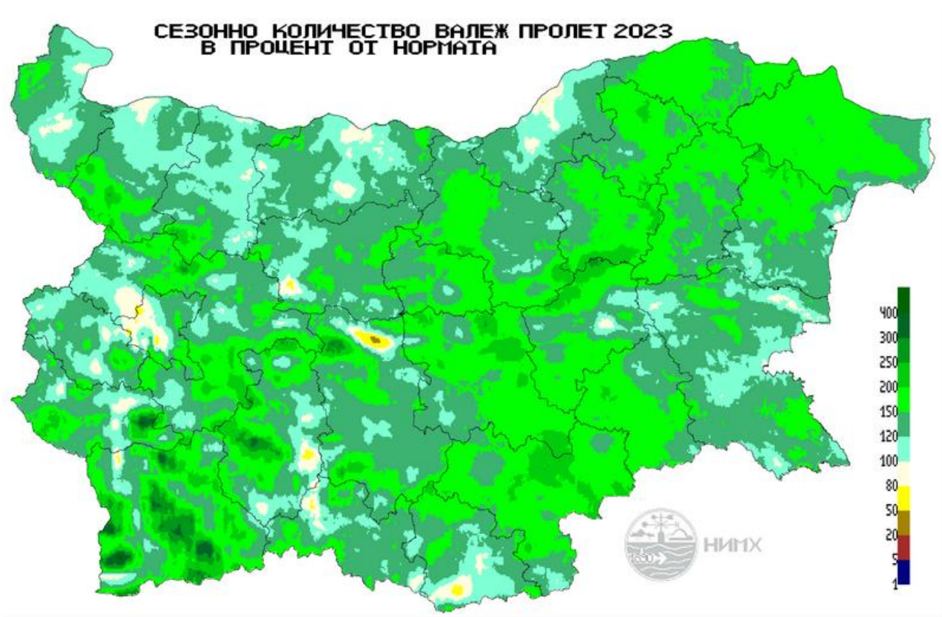
Percent Soil Moisture (WMO) for Bulgaria
Percent
100
80
60
40
20
0
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Source: World Meteorological Organization
2022 / 2023
2021 / 2022



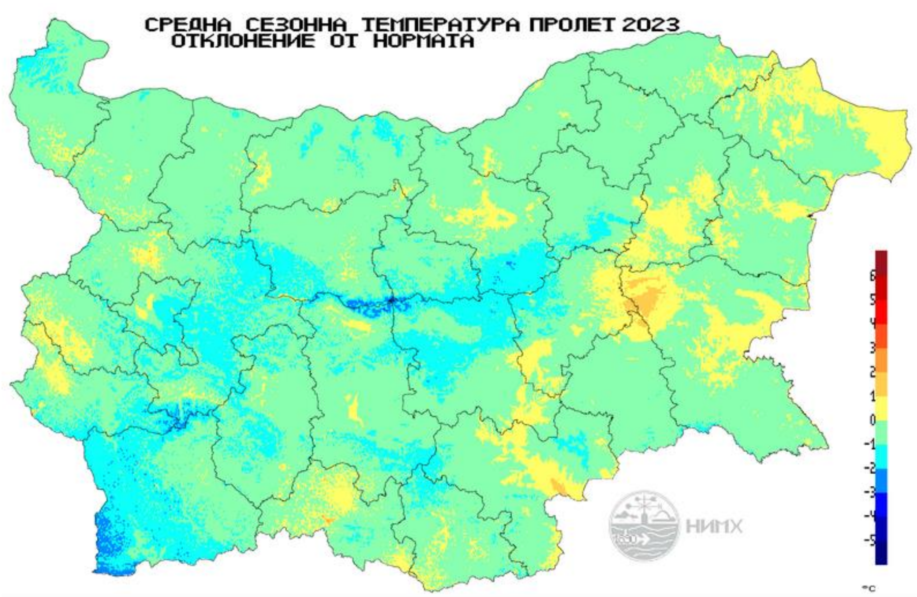
Surface Soil Moisture (WMO) for Bulgaria
Millimeters
30
25
20
15
10
5
0
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Source: World Meteorological Organization
2022 / 2023
2021 / 2022



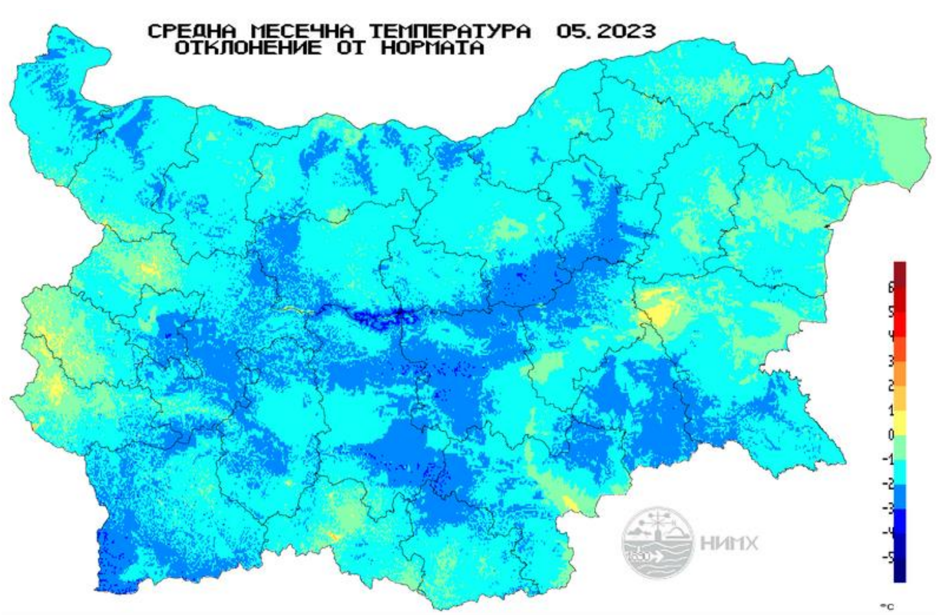
Map 7. Seasonal Rainfall Spring 2023 as a Percent of the Norm, Source: [Bulgarian National Institute of Meteorology and Hydrology]()

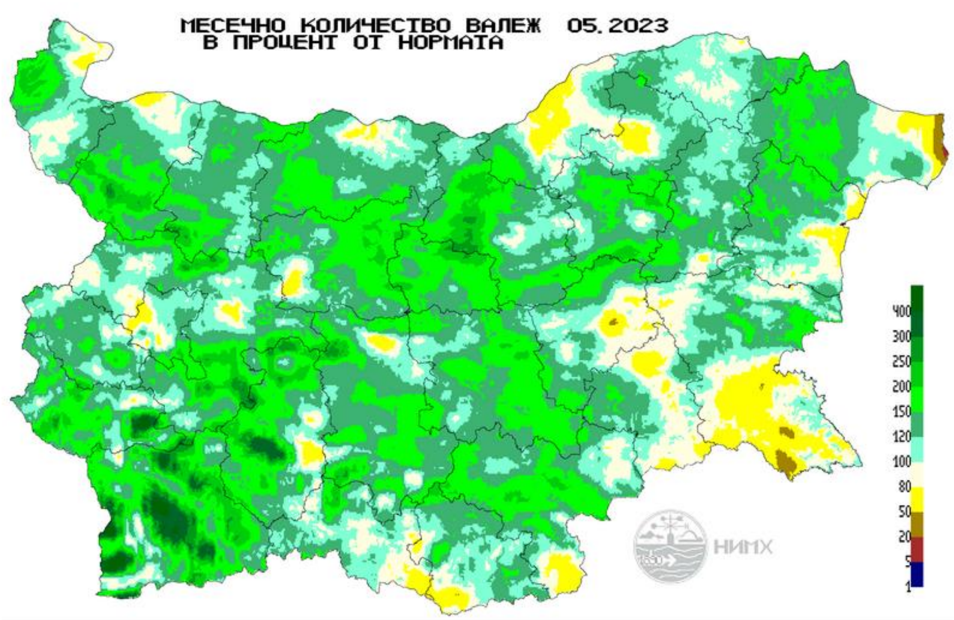


Map 8: Spring Season 2023: Deviation from the Average Seasonal Temperature Norm, Source: [Bulgarian National Institute of Meteorology and Hydrology]()



Map 9. May 2023, Deviation from the Average Monthly Temperature and Rainfall as Percent of the Norm, Source: [Bulgarian National Institute of Meteorology and Hydrology]()





Attachments:

No Attachments.