# Morning Agriculture Commentary

ADM Investor Services, Inc.

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Wheat prices overnight are up 7 1/4 in SRW, up 7 in HRW, up 7 1/4 in HRS; Corn is up 3; Soybeans up 7 1/2; Soymeal up $0.28; Soyoil up 0.22.

For the week so far wheat prices are down 9 3/4 in SRW, down 1/4 in HRW, up 5 1/4 in HRS; Corn is down 10; Soybeans down 30; Soymeal down $0.81; Soyoil down 0.92.

For the month to date wheat prices are up 44 1/4 in SRW, up 65 1/2 in HRW, up 48 in HRS; Corn is down 38 1/2; Soybeans down 92; Soymeal down $26.70; Soyoil down 4.22.

Year-To-Date nearby futures are up 41% in SRW, up 44% in HRW, up 22% in HRS; Corn is up 33%; Soybeans up 22%; Soymeal down -1%; Soyoil up 55%.

Chinese Ag futures (SEP 22) Soybeans down 9 yuan; Soymeal down 27; Soyoil down 136; Palm oil down 62; Corn down 19 Malaysian palm oil prices overnight were down 90 ringgit (-1.40%) at 6319.

There were changes in registrations (-147 SRW Wheat). Registration total: 1,166 SRW Wheat contracts; 25 Oats; 0 Corn; 0 Soybeans; 98 Soyoil; 50 Soymeal; 154 HRW Wheat.

Preliminary changes in futures Open Interest as of May 9 were: SRW Wheat down 1,939 contracts, HRW Wheat down 23, Corn down 5,186, Soybeans down 4,605, Soymeal up 6, Soyoil up 101.

*Northern Plains Forecast:* Isolated to scattered showers through Friday. Temperatures near to below normal west and above to near normal east through Friday. 6-to-10-day outlook: Isolated showers Saturday. Mostly dry Sunday-Tuesday. Isolated showers Wednesday. Temperatures near to below normal Saturday-Monday, near to above normal Tuesday-Wednesday.

*Central/Southern Plains Forecast:* Periods of isolated showers through Friday. Temperatures above to well above normal through Thursday, near to above normal Friday. 6-to-10-day outlook: Isolated showers Saturday-Wednesday. Temperatures near to above normal Saturday-Wednesday.

*Western Midwest Forecast:* Isolated to scattered showers through Friday, mostly north. Temperatures above to well above normal through Friday.

*Eastern Midwest Forecast:* Isolated showers northwest through Friday. Temperatures above to well above normal through Friday. 6-to-10-day outlook: Isolated to scattered showers Saturday-Wednesday. Temperatures above normal Saturday, near to above normal Sunday, near to below normal Monday-Wednesday.

*Canadian Prairies Forecast:* Isolated to scattered showers through Wednesday. Temperatures near to below normal through Wednesday. Isolated to scattered showers Thursday-Friday. Temperatures near to above normal Thursday, near to below normal Friday. Outlook: Isolated showers to scattered showers Saturday. Mostly dry Sunday-Tuesday. Isolated showers Wednesday. Temperatures near to below normal Saturday-Sunday, near to above normal Monday-Wednesday.

*Brazil Grains & Oilseeds Forecast:* Rio Grande do Sul and Parana: Isolated showers Tuesday-Wednesday. Mostly dry Thursday-Friday. Temperatures near to above normal Tuesday, near to below normal Wednesday-Thursday, near to above normal Friday. Mato Grosso, MGDS and southern Goias: Mostly dry through Wednesday. Isolated showers Thursday-Friday. Temperatures above normal through Friday.

*Argentina Grains & Oilseeds Forecast:* Cordoba, Santa Fe, Northern Buenos Aires: Mostly dry through Wednesday. Isolated showers Thursday-Friday. Temperatures near to above normal through Friday. La Pampa, Southern Buenos Aires: Mostly dry through Wednesday. Isolated showers Thursday-Friday. Temperatures near to above normal through Friday

The player sheet for 5/9 had funds: net sellers of 7,000 contracts of SRW wheat, sellers of 14,000 corn, sellers of 15,500 soybeans, sellers of 6,500 soymeal, and sellers of 3,500 soyoil.

| | Corn | Soybeans | Wheat | Soymeal | Soyoil |
|---|---|---|---|---|---|
| May 9 | -14,000 | -15,500 | -7,000 | -6,500 | -3,500 |
| May 6 | -12,500 | -12,000 | +1,000 | -2,000 | -3,500 |
| May 5 | +1,000 | +2,500 | +13,000 | +1,000 | -2,500 |
| May 4 | +500 | +6,500 | +13,500 | -2,500 | +5,500 |
| May 3 | -12,000 | -7,500 | -3,500 | -3,500 | +1,000 |

**TENDERS**

- CORN PURCHASE: The Korea Feed Association (KFA) Busan section purchased some 65,000 tonnes of animal feed corn expected to be sourced from South America in an international tender on Monday
- RICE TENDER: South Korea's Agro-Fisheries & Food Trade Corp has issued an international tender to purchase an estimated 136,000 tonnes of rice
- WHEAT TENDER: Algeria's state grains agency OAIC has issued an international tender to buy soft milling wheat to be sourced from optional origins
- WHEAT TENDER: Japan's Ministry of Agriculture, Forestry and Fisheries (MAFF) is seeking to buy a total of 196,560 tonnes of food-quality wheat from the United States, Canada and Australia in regular tenders that will close on Thursday.

**PENDING TENDERS**

- FEED BARLEY TENDER: Jordan's state grains buyer issued an international tender to purchase 120,000 tonnes of animal feed barley
- WHEAT TENDER: The Taiwan Flour Millers' Association issued an international tender to purchase 40,000 tonnes of grade 1 milling wheat to be sourced from the United States

**US BASIS/CASH**

- Basis bids for corn and soybeans shipped by barge to the U.S. Gulf Coast were mostly flat to lower on Monday, weighed down by light demand and weakening freight costs, traders said.
  - Spot barge offers on the Illinois River and the Mississippi River at St. Louis were flat on Monday on light demand, while offers for spot barges on the lower Ohio River fell 25 points.
  - CIF soybean barges loaded in May were bid nominally around 126 cents over July futures, down 2 cents from trades on Friday.
  - FOB basis offers for soybeans loaded at the Gulf in June held at around 140 cents July.
  - CIF corn basis bids for barges loaded in May were flat at about 96 cents over July futures.
  - FOB basis offers for June corn shipments were offered around 108 cents over July.
- Spot basis bids for soybeans were steady to firm at processors and river elevators around the U.S. Midwest on Monday, grain dealers said.
  - Soybean bids were flat at interior elevators.
  - Cash bids for corn held steady at processors, river terminals and interior elevators.
  - Farmer sales were slow on Monday, a dealer in Ohio said.
  - Most growers were focused on resuming long-delayed planting tasks as fields dried out across the region.
  - Weakness in the futures market also contributed to the light interest in booking new deals.
- Spot basis bids for hard red winter wheat were unchanged at rail and truck market elevators across the southern U.S. Plains on Monday, dealers said.
  - Country movement was light.
  - Most growers were unlikely to commit to new sales until harvest, an Oklahoma dealer said.
  - Severe drought across much of the region throughout the growing season has raised concerns about crop shortfalls this year.
  - Protein premiums for hard red winter wheat delivered by rail to or through Kansas City rose by 10 cents a bushel for wheat with protein content ranging from 11.6% through 12.2%, according to CME Group data.
  - Premiums were 3 cents higher for ordinary protein wheat and 11% protein wheat and 13 cents higher for 11.2% protein wheat. Premiums were 5 cents higher for wheat with 11.4% protein. Premiums were unchanged for all other grades of wheat
  - There were five new deliveries against the expiring K.C. hard red winter wheat May contract KWK2, bringing the total for the period to 211, CME Group said.
- Spot basis bids for soybeans were steady to stronger at U.S. Midwest river terminals and processors on Monday morning, grain dealers said.
  - The soy basis was flat at the region's interior elevators.
  - Cash bids for corn were flat at processors, river terminals and ethanol plants, and steady to firm at interior elevators, rising by 4 cents a bushel in Cincinnati, Ohio.

    - Farmers were focused on planting corn and soybeans after weeks of delays left most growers well behind they typical schedule for seeding.
- Spot cash millfeed values held mostly steady around the United States on Monday, underpinned by snug supplies in some markets and good demand from animal feed producers, brokers said.
    - Flour mill run times in the Midwest and Plains have lagged at times over recent weeks, keeping supplies of the byproduct millfeed tight, a broker said.
- Spot basis offers for U.S. soymeal held steady at rail and truck market processors on Monday, dealers said.
    - Demand was strong, a Minnesota dealer said, as the futures market fell to its lowest level since late January, pulling cash prices lower too.
    - A processing plant in Mankato, Minnesota, resumed operations after closing for scheduled maintenance. Plants were down for maintenance in Sioux City, Iowa, and Lafayette, Indiana.
    - There were 50 deliveries against the expiring Chicago Board of Trade May futures contract SK2, the first deliveries of the period, CME Group said.

**U.S. Crop Progress and Conditions for May 8: Summary**

| Crop Condition: | May 8 2022 | May 1 2022 | Year Ago | Weekly Change |
|---|---|---|---|---|
| Winter wheat | 29% | 27% | 49% | 2% |

| Crop Progress: | May 8 2022 | May 1 2022 | Year Ago | 5-Yr Avg | Yearly Change |
|---|---|---|---|---|---|
| Corn planted | 22% | 14% | 64% | 50% | -42% |
| Corn emerged | 5% | 3% | 18% | 15% | -13% |
| Soybeans planted | 12% | 8% | 39% | 24% | -27% |
| Soybeans emerged | 3% | n/a | 9% | 4% | -6% |
| Spring wheat planted | 27% | 19% | 67% | 47% | -40% |
| Spring wheat emerged | 9% | 5% | 27% | 15% | -18% |
| Winter wheat headed | 33% | 23% | 36% | 40% | -3% |
| Cotton planted | 24% | 16% | 24% | 24% | 0% |
| Sorghum planted | 22% | 20% | 22% | 26% | 0% |
| Barley planted | 48% | 36% | 68% | 55% | -20% |
| Barley emerge | 22% | 10% | 30% | 22% | -8% |
| Oats planted | 55% | 45% | 83% | 71% | -28% |
| Oats emerge | 36% | 31% | 58% | 50% | -22% |
| Rice planted | 66% | 45% | 73% | 67% | -7% |
| Rice emerge | 37% | 24% | 50% | 49% | -13% |
| Sugarbeets planted | 26% | 18% | 95% | 69% | -69% |
| Peanuts planted | 25% | 10% | 21% | 26% | 4% |

**U.S. Inspected 1.393m Tons of Corn for Export, 503k of Soybean**

| | | | | Weekly | Yearly |
|---|---|---|---|---|---|
| Weekly: | May 5 | Previous | Year Ago | % Chg | % Chg |
| Corn | 1,392.7 | 1,696.2 | 1,716.3 | -17.9% | -18.9% |
| Soybeans | 503.4 | 604.7 | 277.1 | -16.8% | 81.7% |
| Wheat | 236.8 | 392.4 | 563.6 | -39.6% | -58.0% |
| Sorghum | 270.5 | 217.9 | 125.1 | 24.1% | 116.2% |

| Market | | | YTD |
|---|---|---|---|
| Year-to-Date: | Current | Previous | % Chg |
| Corn | 37,981.9 | 45,336.5 | -16.2% |
| Soybeans | 47,713.3 | 55,930.1 | -14.7% |
| Wheat | 19,000.5 | 23,752.7 | -20.0% |
| Sorghum | 5,577.4 | 5,745.5 | -2.9% |
| Barley | 10.2 | 33.1 | -69.4% |

| Soybeans | | | Corn | | | Wheat | |
|---|---|---|---|---|---|---|---|
| Country | Tons | | Country | Tons | | Country | Tons |
| Grand Total | 503.4 | | Grand Total | 1,392.7 | | Grand Total | 236.8 |
| China | 210.6 | | Mexico | 329.2 | | Indonesia | 55.1 |
| Indonesia | 74.5 | | Japan | 320.6 | | Japan | 51.6 |
| Taiwan | 69.3 | | China | 264.1 | | Mexico | 46.7 |
| Japan | 61.8 | | Colombia | 133.6 | | Nigeria | 27.5 |
| Mexico | 56.9 | | Spain | 73.7 | | Dominicn Rep | 17.8 |

**Demand Rationing Is Needed for Edible Oils on Tight Supply: LMC**
Demand rationing is needed for edible oils as there is insufficient supply globally, Julian McGill, head of South East Asia at LMC International, said at a conference in Dubai.

- Demand for vegetable oils outstripped supply even before the war in Ukraine and Indonesia's palm oil export ban
- Global sunflower oil output may slump 30% this year and decline further next year
- Food demand will have to adapt in countries that can no longer afford cooking oil
- Some countries are moving to cut biodiesel demand; some others view biofuel as crucial to safeguarding energy security
- High palm oil prices are leading to lower Chinese imports; lockdowns are also cutting demand sharply

**Ukraine Exported 1.1m Tons of Grain in April: Minister Solskyi**

Ukraine’s grain exports were far below normal levels in April as the war affects operations of terminals and ports on the Black Sea, Agriculture Minister Mykola Solskyi said in Kyiv.

- Ukraine normally could ship 5m tons or more of grain monthly via its ports, Solskyi said
    - Grain exports in April increased m/m from 200,000 tons in March due to added shipping capacity of Danube ports
- Availability of grain shipping logistics in the Danube area and in Romanian ports may decline when Romania, Bulgaria, Serbia and Hungary start exporting grain for the new season from July: Solskyi
- A shortage of Ukrainian grain will become more noticeable for global markets in two to three months unless Black Sea ports can be unblocked
- The planting campaign is slower than last year as farmers have limited cash, fuel, inputs, machines and time
- NOTE: Much of Ukraine’s seaborne trade has been stalled since Russia invaded, limiting exports to rail and road

**Indonesia’s Bulog Awaits Rule to Distribute Bulk Cooking Oil**

Indonesia’s state-owned food logistic company Bulog is waiting for government regulation that authorizes the company to distribute bulk cooking oil, President Director Budi Waseso said in a briefing on Tuesday.

- Bulog will seek help from storage tank owners to distribute cooking oil from producers to the market
- “We will make sure the same volume from producers will be distributed to the market, with no leaks and with prices set by the government”
- NOTE: Bulog’s distribution of cheaper bulk cooking oil is key to Indonesia reaching the 14,000 rupiah/liter price target set by the government

**Malaysia April Palm Oil Stocks 1.64m Tons: MPOB**

Malaysia's palm oil stocks was 1.64m tons in April, according to Malaysian Palm Oil Board.

- Palm oil production was 1.46m tons
- Palm oil exports were 1.05m tons

**U.S. Renewable Diesel Overtakes Biodiesel For First Time: BNEF**

- Renewable diesel production grew 48% since 1Q 2021
- Biodiesel credit generation fell to lowest level since 2017

The generation of U.S. biofuel credits, known as renewable identification numbers (RINs), from renewable diesel overtook that of biodiesel for the first time in the first quarter of 2022.
While biodiesel must be blended with diesel at low concentrations to prevent engine and performance issues, renewable diesel is a ‘drop-in’ fuel that can directly replace diesel, without blending limits.
Renewable diesel production shares many processes and attributes with oil refining. These similarities make it attractive to incumbent fuel suppliers, which can leverage their existing refineries and distribution networks.
Refiners such as Marathon, Phillips 66 and Valero have brought more than 730 million gallons of renewable diesel capacity online since 2020. If the full pipeline of U.S. renewable diesel projects were to come online by 2025, it would be equivalent to 12% of anticipated on-road diesel demand.

The rapid expansion puts pressure on the incumbent biodiesel market by raising competition for feedstock such as soybean oil.

**Brazil Fertilizer Deliveries Fall 17.5% in February, Group Says**

Fertilizer deliveries to Brazilian consumers fell about 18% in February from a year earlier, totaling 3.04m tons, industry group Anda says in a report on its website.

- Deliveries fell 11% to 5.7m tons in the first two months of 2022
- February fertilizer imports soared 26% to 2.98m tons
- Production in Brazil increased 22% to 563,684 tons in Feb.

**Brazil's Galvani to Expand Fertilizer Output as Shortage Endures**

Brazilian fertilizer company Galvani is ramping up production as the nation begins to grow desperate for hard-to-acquire crop nutrients.

The closely held company will double phosphate output at its plant in Luis Eduardo Magalhaes in Bahia state to 1.2 million tons in two years, Chief Executive Officer Marcos Stelzer said in an interview. While the expansion was planned before the latest fertilizer crisis began, the increased output will still be a welcome addition for local farmers struggling to afford the inputs they need in a runaway global marketplace.

Brazil, the top destination for Russian fertilizer shipments, currently imports around 85% of its fertilizer demand and 75% of its phosphate use. With Russia's invasion of Ukraine causing prices to skyrocket, the Brazilian government has been looking for alternative suppliers from Canada to Iran; otherwise, it risks lower fertilizer use curbing yields and contributing to soaring food prices around the world.

In addition to the Luis Eduardo Magalhaes plant, Galvani is also a partner in an early-stage fertilizer project in the nation's northeast, which is classified as strategic by the federal government. Known as Santa Quiteria, the phosphate-uranium project is waiting for environmental and operation licenses to proceed, the CEO said.

If brought online, the Santa Quiteria project will introduce an additional 1.05 million tons of phosphate production per year. Together, the projects will boost Galvani's fertilizer output to 2.2 million tons in 2026 from 600,000 tons in 2021. That would represent more than one-third of the nation's current phosphate output.

**Chinese lockdowns ease up the second-highest U.S. corn exports in record - Refinitiv Commodities Research**

China's corn demand has been the main driver of U.S. corn exports. This season, the country has accounted for a third of the U.S. corn exports. Thus, China's lockdown situation amid its zero-covid policy has significantly impacted the U.S. corn demand. In addition, low-income countries are more sensitive to the soaring corn prices leading to significant decreases in the corn demand.

In April, total U.S. corn exports were 5.9 MMT, 2% below the monthly 5-year average, and a pace decrease from the March exports, 8% above average. U.S. exports to China decreased by 329 thousand metric tons compared to the previous month and dropped 945 thousand metric tons from April 2021.

Even though factors are easing up the U.S. corn exports, this will be the second-largest U.S. export season in history if the pace is maintained. The U.S. just closed the second third of a solid export season. As of May 9, 2021/22 U.S. corn accumulated exports are at 37.9 MMT, 1.8 MMT above the 5-year average. As of April 28, outstanding U.S. corn sales are at 18.2 MMT, 1.5 MMT above the 5-year average. Given the current global demand and the export pace, we forecast the 2021/22 U.S. corn exports at 62.6 MMT, 2.9 MMT below April's estimate, and 0.8 below April's WASDE estimate.

According to Refinitiv flow data, Brazil 2021/22 accumulated corn exports closed April at 1 MMT, the highest start in the last five seasons. Brazil's corn export season did have the expected beginning. Given the increase in production compared to the 2020/21 season and the high global demand, Refinitiv increased Brazil's corn export forecast to 41.4 MMT, 3.5 MMT above April's estimate, and 3.1 MMT below April's WASDE.

Refinitiv increased 2021/22 Argentina corn production to 49.8 MMT, up <1% from the last update, based on a rapid and stable harvest. Favorable production outlook and high global demand increase the 2021/22 Argentina corn exports to 33.9 MMT, 4.9 MMT above April's forecast, and 5.1 below USDA's April update.

**France Sees Corn Area 5.9% Lower Y/y on High Fertilizer Costs**

Corn plantings in France in the 2022 season are seen at 1.46m hectares, down 5.9% y/y, France's agriculture ministry said Tuesday in a report.

- The decline reflects trade-offs farmers are making due to soaring fertilizer and gas prices
- Total grain acreage seen down 2.4% y/y to 9.09m hectares, while oilseeds increase 13% y/y to 2.12m hectares
- NOTE: U.S. farmers are also expected to curb corn plantings, in favor of soybeans, due to expensive fertilizer
- Planting estimates for soft-wheat, barley, rapeseed and durum-wheat left about steady from an April outlook
- Sunflower area seen at 758k hectares, up 8.5% y/y
    - Sowing will expand in the areas where corn acreage is shrinking
    - Crop requires less nitrogen fertilizer than corn and is more drought resistant
- Sugar-beet area seen at 399k hectares, slightly above April estimate

**Drought and Fertilizer Spike Pinches Critical U.S. Wheat Crop**

- Kansas will see some failed fields, industry group says
- Record fertilizer prices are adding to concern about shortfall

Little rain, high winds and soaring fertilizer costs mean some Kansas farmers will have "very little" wheat to harvest in a few weeks, according to a key industry group.

"Much of southwest Kansas has gone nearly 300 days without an inch of precipitation," Kansas Wheat, which represents growers in the state, said in a statement on Monday. "Farmers have already been in touch with their crop adjusters."

Wheat production in the U.S. and from other big producing nations is under close scrutiny as Russia's invasion of Ukraine upends trade flows and threatens to trigger a full-scale global food crisis as grain prices soar and nations hoard supplies.

In Kansas, the biggest grower of U.S. hard red winter wheat, a combination of drought and "vicious" winds are hurting fields. Furthermore, high fertilizer prices have led some producers to skip full applications of nitrogen, hindering growth potential ahead of harvest that begins next month. Still, there's time for overall crop prospects to improve, with parts of Kansas seeing some much needed rainfall last week.

Representatives from the food and commodities industries will get a close-up look at Kansas wheat next week during crop tours across the state and parts of Nebraska and Oklahoma. Hard red winter wheat is the most widely grown class of the grain in the U.S. and is used to make bread flour.

**Vietnam Agriculture Min. Seeks Fertilizer Export Ban: Tuoi Tre**
Vietnam's agriculture ministry proposes a ban on fertilizer exports amid surges in domestic prices, newspaper reports, citing information from ministry.

- No other details given on proposed ban
- Increasing fertilizer prices and other costs are causing many farmers to reduce production, report cites ministry's department of plant protection
- NOTE: Vietnam's fertilizer exports climbed 33% y/y to 627,932 tons in Jan.-April, customs dept. said in a report on Monday

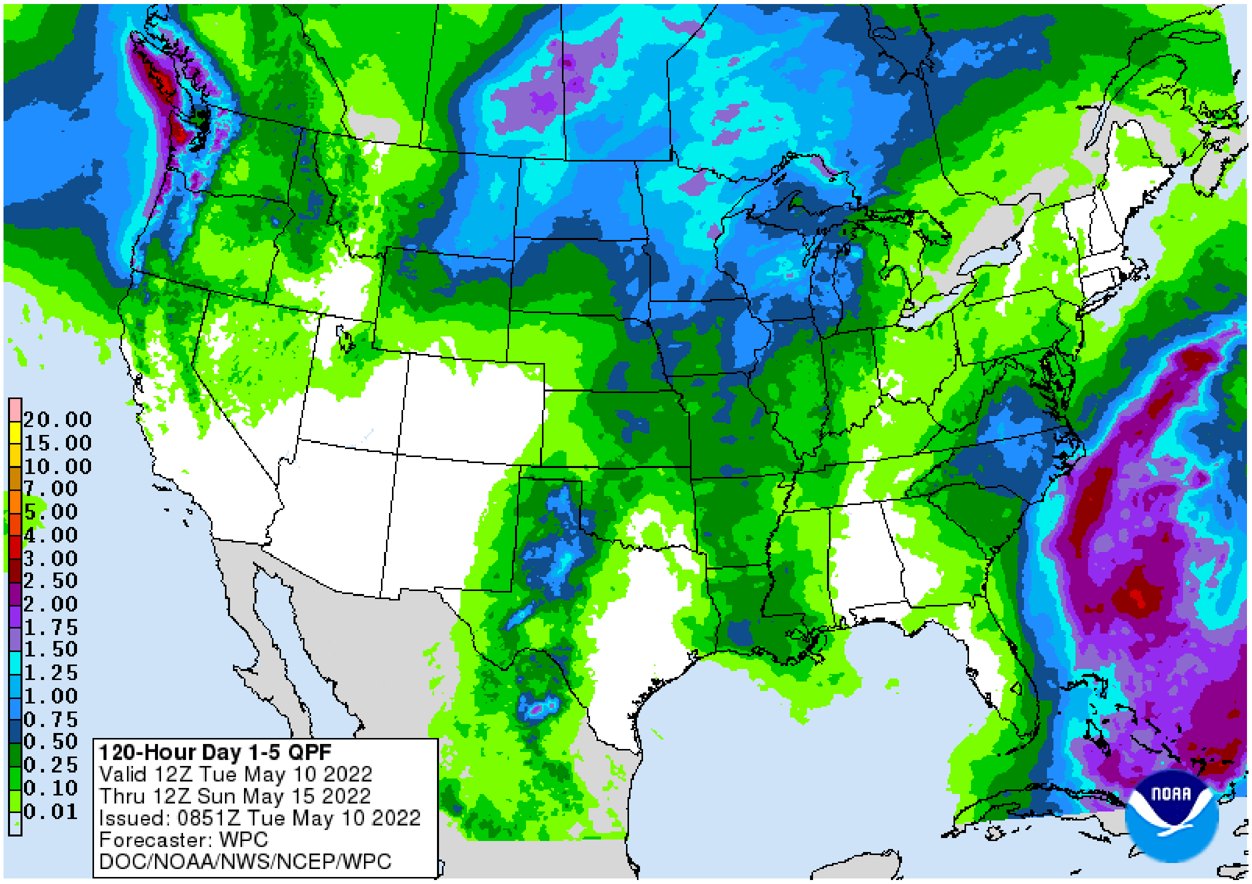
**Pakistan to Import 3m Tons of Wheat to Boost Strategic Reserves**
Pakistan Economic Coordination Committee approved the grain import on need basis after considering supply-demand situation in the country, finance ministry says in statement.
NOTE: Pakistan food ministry estimated 26.8m tons of wheat this season

**WEATHER SUMMARIES**
*WORLD SOYBEAN PROSPECTS*: Dryness in Argentina benefiting harvest. Wet fields limiting fieldwork for the western Corn Belt. Dryness in the east benefiting planting. Drier conditions favoring planting in the Delta.

*WORLD OILSEED PROSPECTS:* Scattered showers continue across Malaysia and Indonesia, favoring oil palm. Winter canola developing in favorable conditions in China. Mostly favorable conditions for harvesting winter canola in northwest India and Pakistan. Favorable conditions for planting winter canola in Australia.

*WORLD CORN PROSPECTS:* Periods of showers in southern Brazil benefiting pollinating to filling safrinha corn. Dryness in central Brazil unfavorable for pollinating to filling corn. Dryness in Argentina benefiting harvest. Dryness in South Africa favoring harvest. Above-normal soil moisture making it difficult for fieldwork in the much of the Corn Belt. Dryness in the east this week may bring some better windows. Northeast China could use more soil moisture as spring planting increases.
*WORLD WHEAT PROSPECTS*: Drought continues in the Pacific Northwest, though showers over the next week should increase soil moisture. Deep drought continues in the southwestern Plains. Small areas getting some showers this week, but not overly helpful with very high temperatures. Recent precipitation in the Northern Plains and eastern Canadian Prairies reducing drought. The region will see more showers this week. Favorable conditions for winter wheat development in most of Europe. Though more showers are needed across the north and in other spotty areas. Winter wheat in Ukraine and western Russia finding good soil moisture, but it will be fairly dry for the next week. Winter wheat developing in fair condition in China, but could use more showers. Favorable conditions for planting winter wheat in Australia.

**UNITED STATES**



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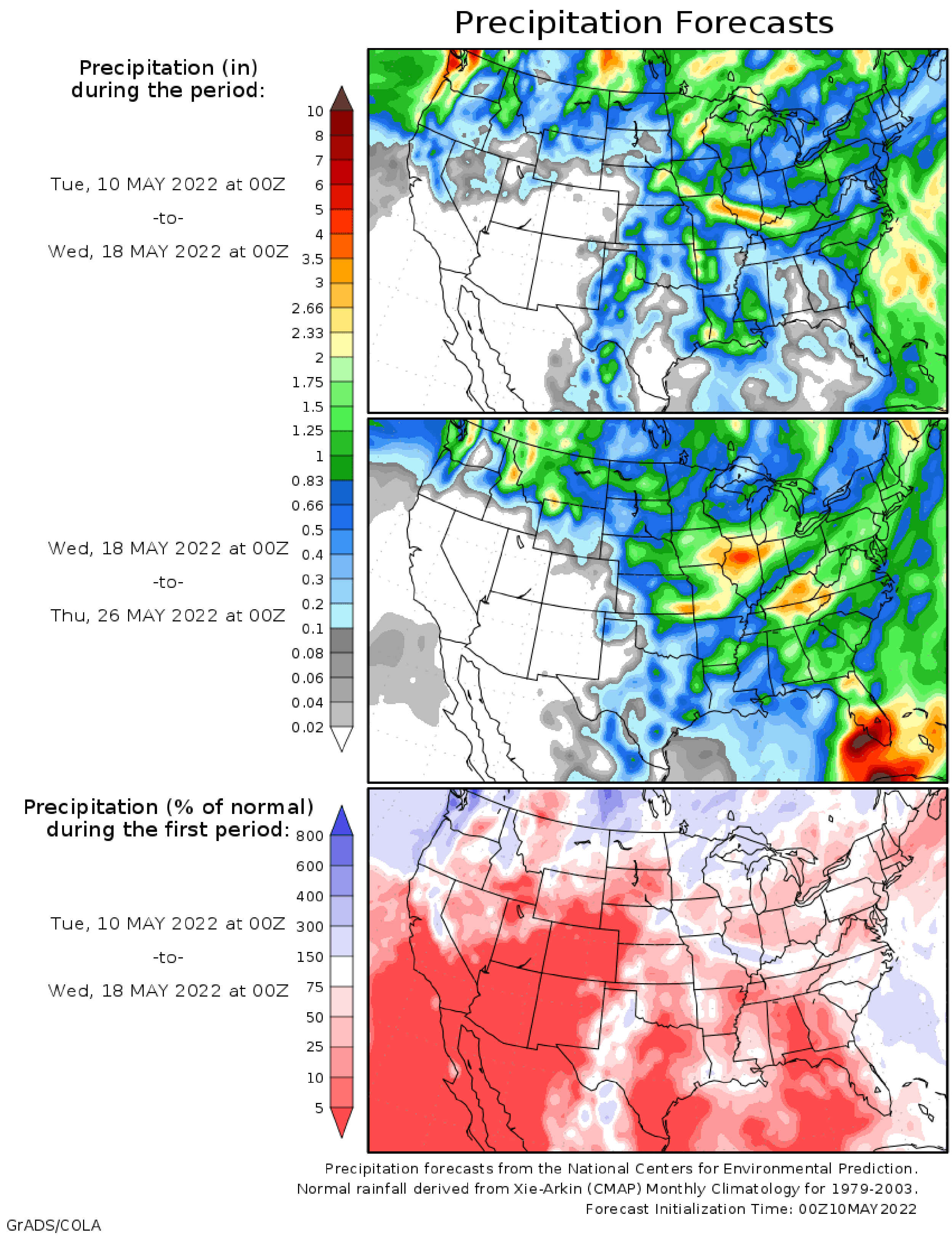
Thru 12Z Sun May 15 2022
Issued: 0851Z Tue May 10 2022
Forecaster: WPC
DOC/NOAA/NWS/NCEP/WPC


Precipitation Forecasts
Precipitation (in) during the period:
Tue, 10 MAY 2022 at 00Z
-to-
Wed, 18 MAY 2022 at 00Z
Wed, 18 MAY 2022 at 00Z
-to-
Thu, 26 MAY 2022 at 00Z
10 8 7 6 5 4 3.5 3 2.66 2.33 2 1.75 1.5 1.25 1 0.83 0.66 0.5 0.4 0.3 0.2 0.1 0.08 0.06 0.04 0.02
Precipitation (% of normal) during the first period:
Tue, 10 MAY 2022 at 00Z
-to-
Wed, 18 MAY 2022 at 00Z
800 600 400 300 150 75 50 25 10 5
Precipitation forecasts from the National Centers for Environmental Prediction.
Normal rainfall derived from Xie-Arkin (CMAP) Monthly Climatology for 1979-2003.
Forecast Initialization Time: 00Z10MAY2022
GrADS/COLA

# Temperature Forecasts

Mean Surface Temperature (°F)
**during the period:**

Tue, 10 MAY 2022 at 00Z

-to-

Wed, 18 MAY 2022 at 00Z

Wed, 18 MAY 2022 at 00Z

-to-

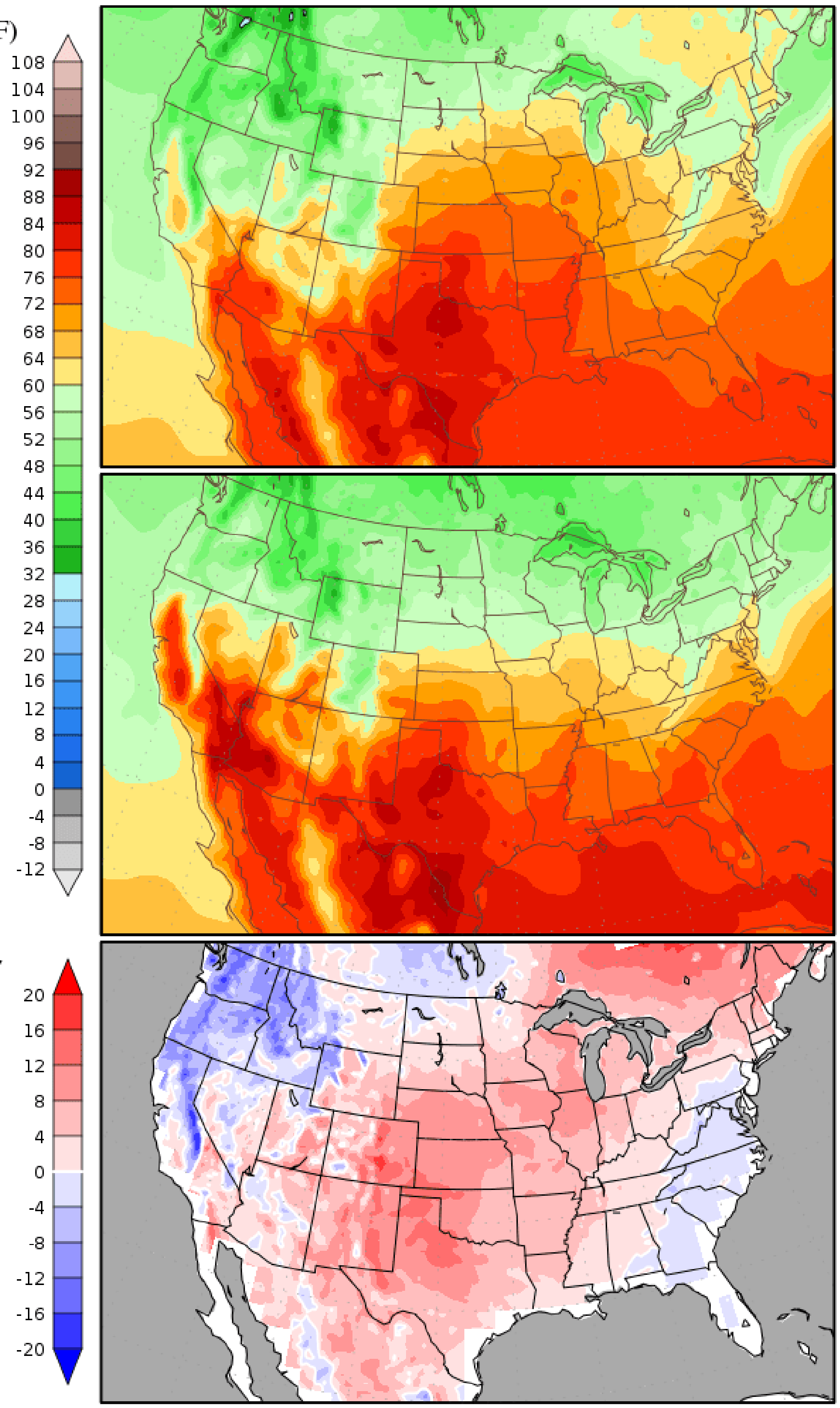
Thu, 26 MAY 2022 at 00Z

**Temperature Anomaly**
**during the first period:**

Tue, 10 MAY 2022 at 00Z

-to-

Wed, 18 MAY 2022 at 00Z

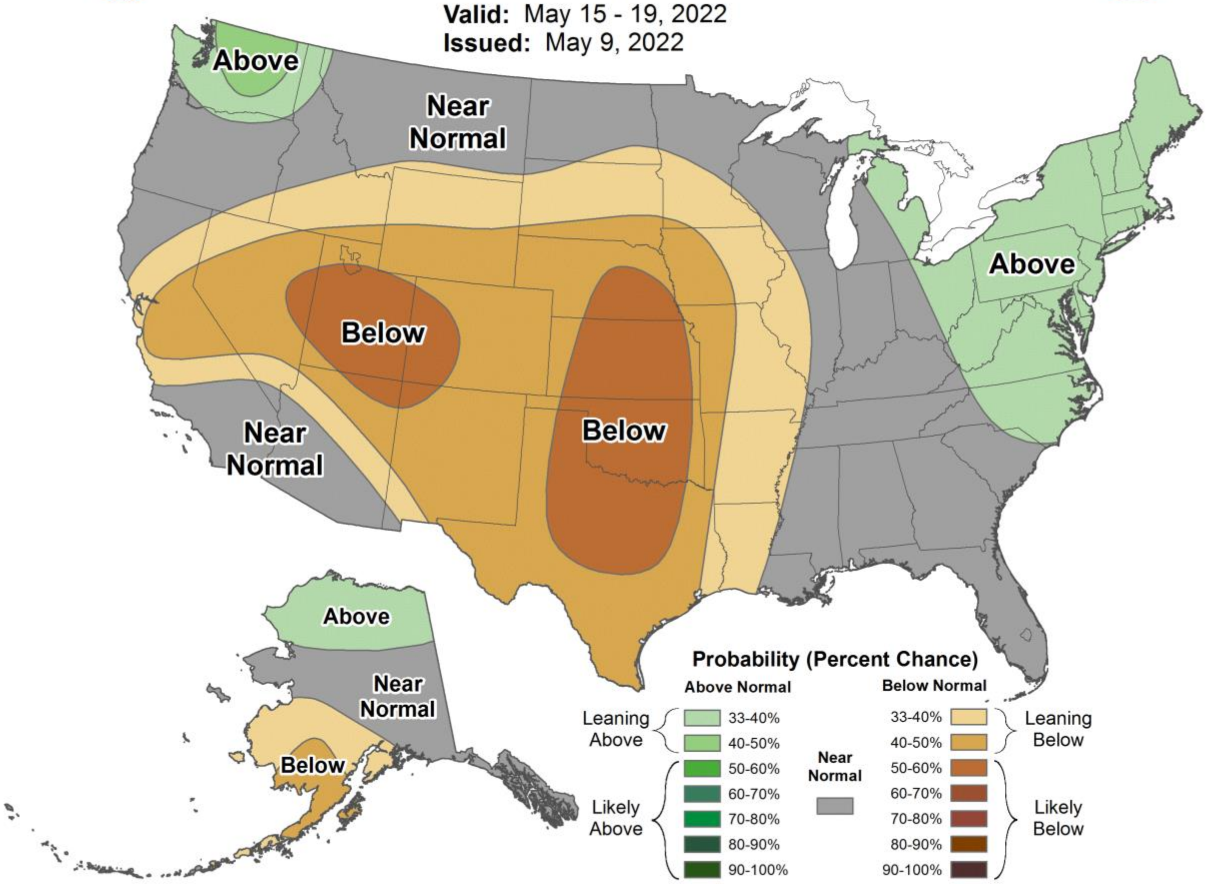


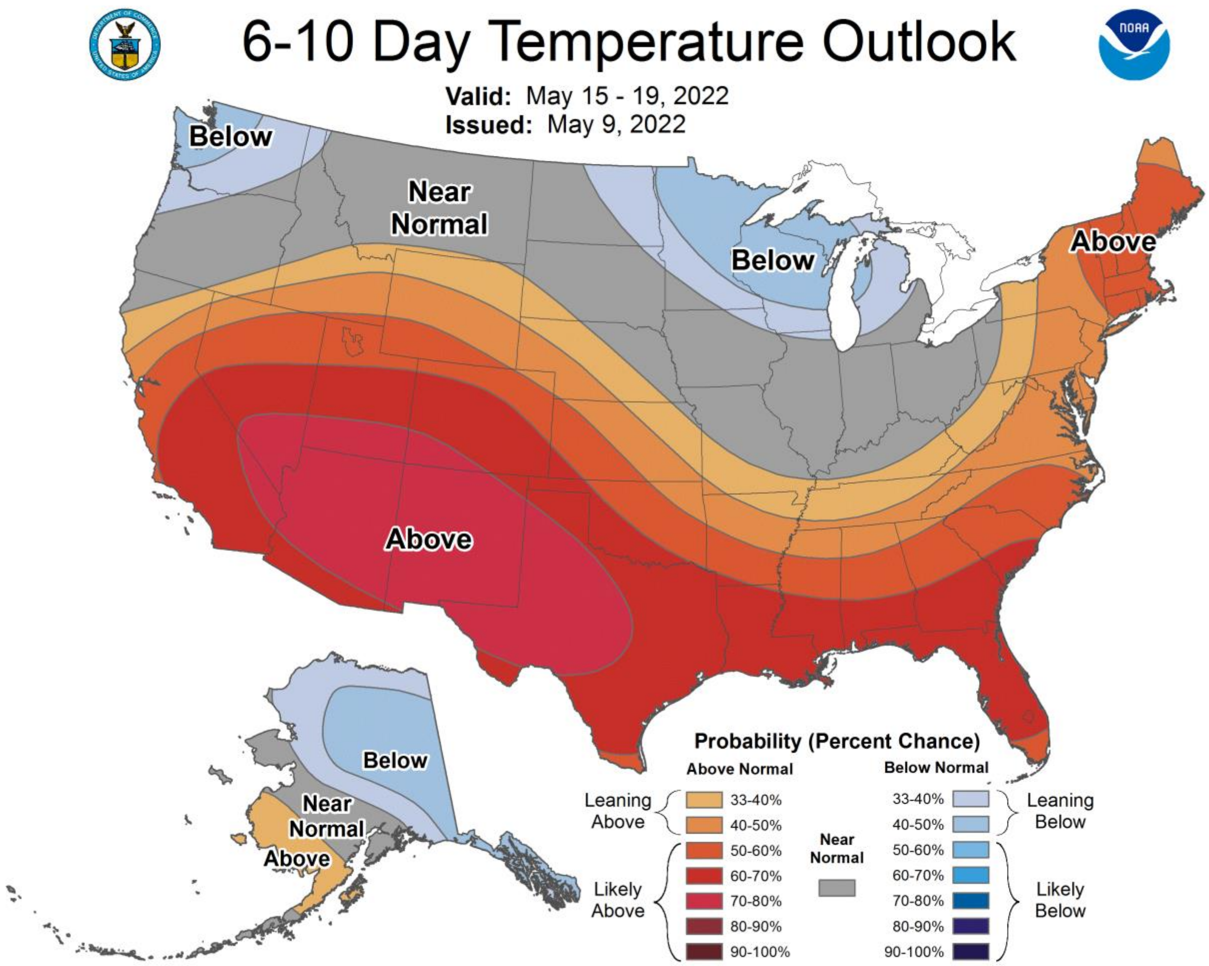

Temperature forecasts from the National Centers for Environmental Prediction.
Normal Temperature derived from CRU monthly climatology for 1901-2000
Forecast Initialization Time: 00Z10MAY2022

GrADS/COLA

# 6-10 Day Precipitation Outlook

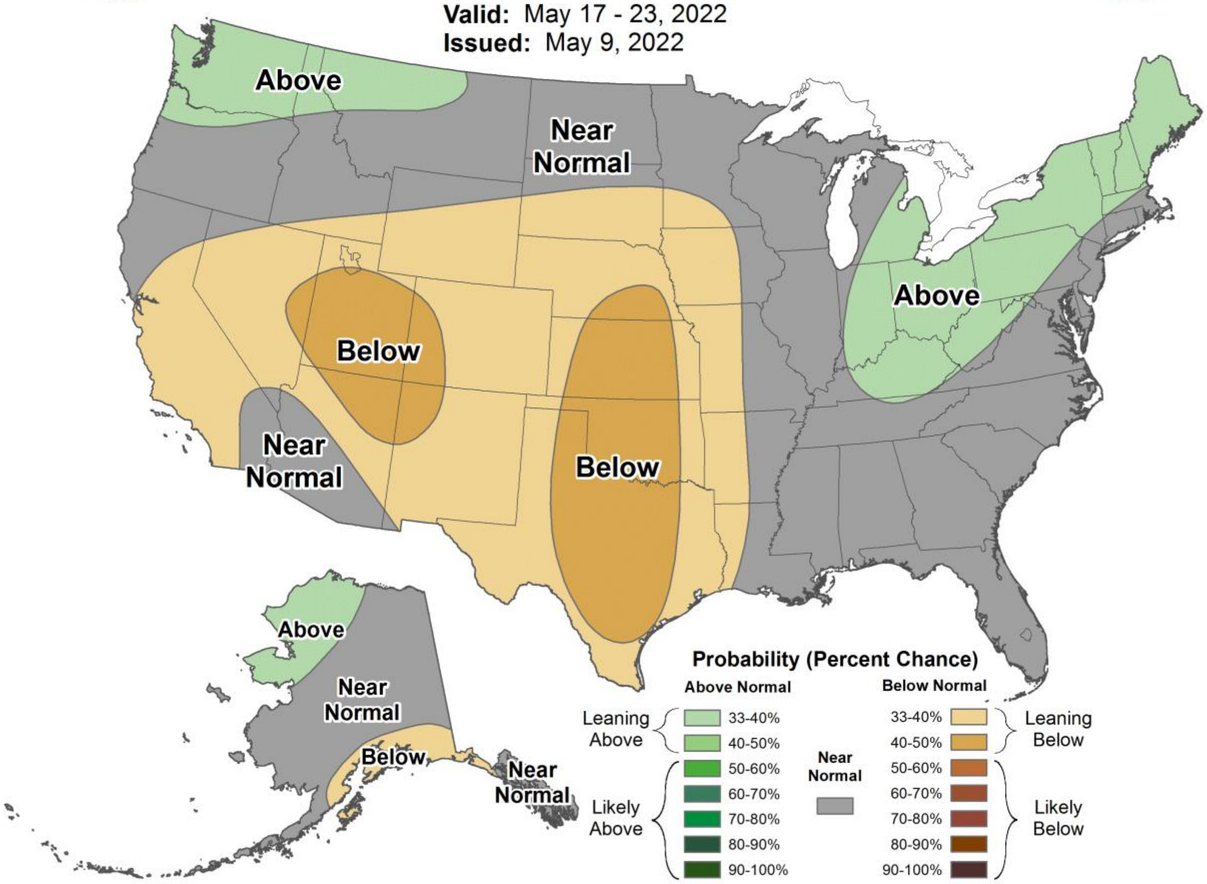
**Valid:** May 15 - 19, 2022
**Issued:** May 9, 2022

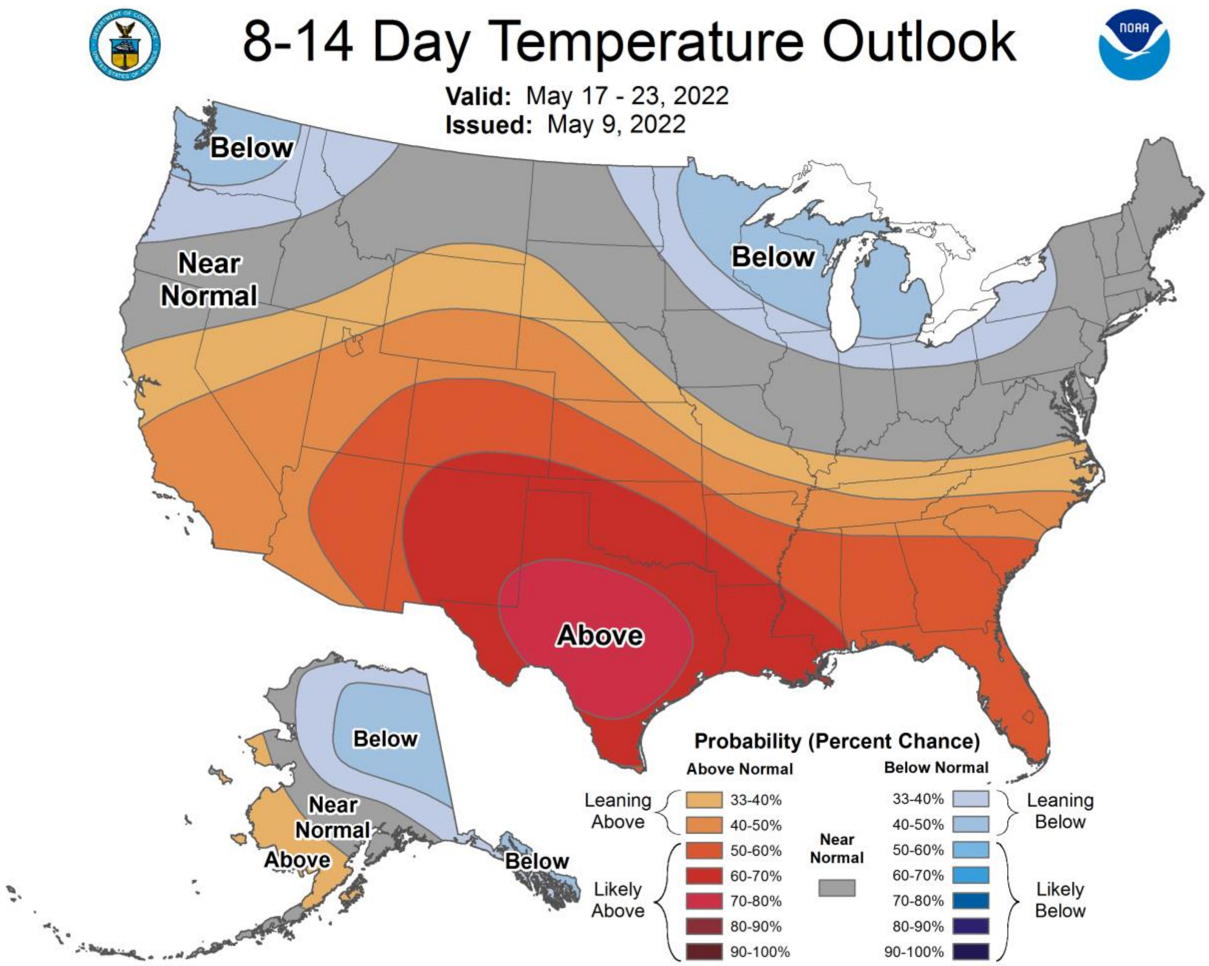



6-10 Day Temperature Outlook
Valid: May 15 - 19, 2022
Issued: May 9, 2022
Below
Near Normal
Below
Above
Above
Below
Near Normal
Above
Probability (Percent Chance)
Above Normal
Below Normal
Leaning Above
33-40%
40-50%
Likely Above
50-60%
60-70%
70-80%
80-90%
90-100%
Near Normal
Leaning Below
33-40%
40-50%
Likely Below
50-60%
60-70%
70-80%
80-90%
90-100%

# 8-14 Day Precipitation Outlook

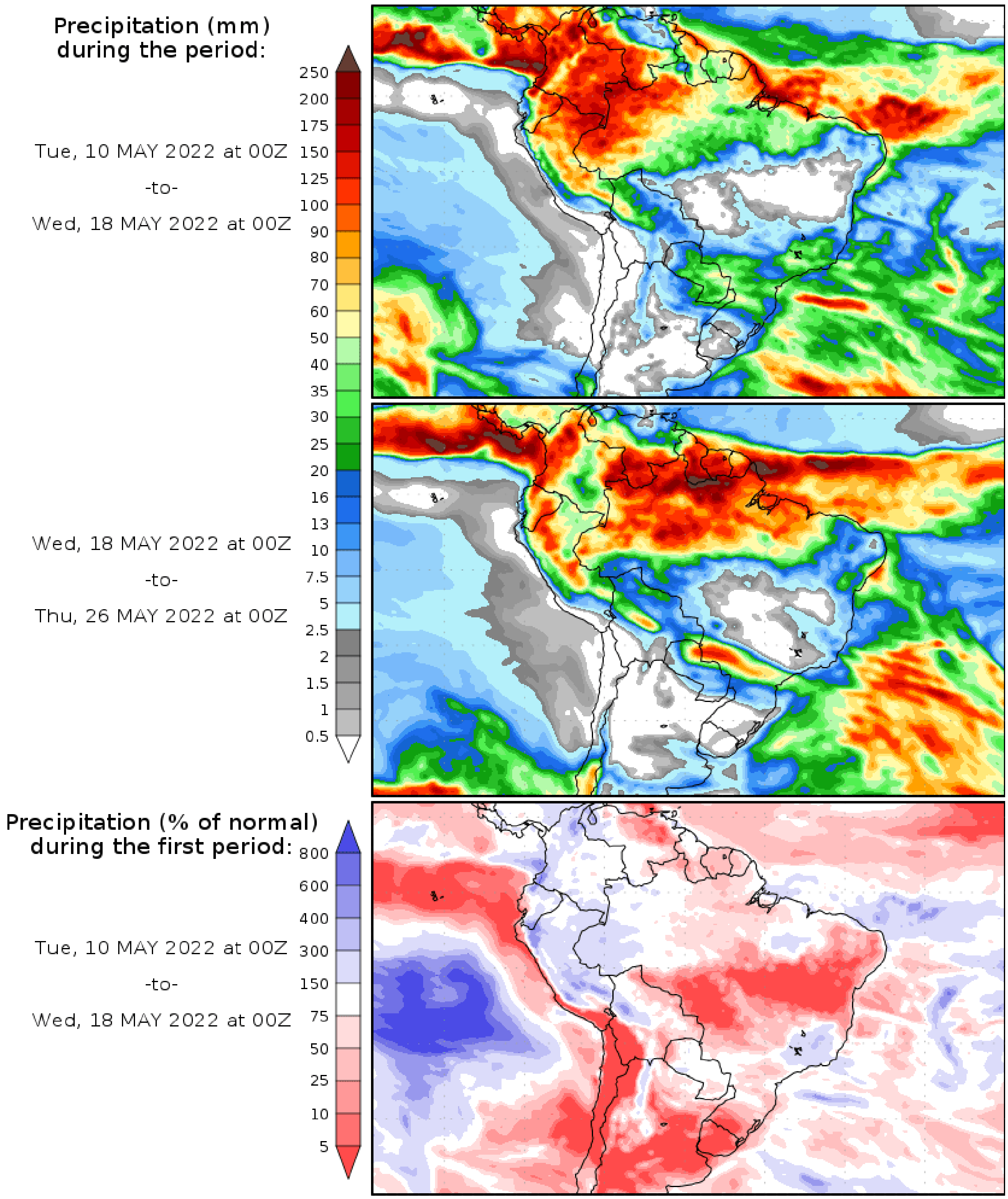
**Valid:** May 17 - 23, 2022
**Issued:** May 9, 2022






**SOUTH AMERICA**

# Precipitation Forecasts




Precipitation forecasts from the National Centers for Environmental Prediction.
Normal rainfall derived from Xie-Arkin (CMAP) Monthly Climatology for 1979-2003.
Forecast Initialization Time: 00Z10MAY2022

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