ALUVIAL SIGNALS
Connected intelligence. Real-world decisions.

22 OCTOBER 2026

ISSUE 06

SOUTH AMERICA / PLANTING PACE + BIOFUEL VALUE

South America's soy gets moving. Who captures the biofuel value?

Brazil is planting ahead of its recent average, but the pace differs sharply by state. Field conditions shape supply timing; biofuel rules shape the outlets for soybean oil.

30.1%

BRAZIL PLANTED

26.4% five-year average

60.8%

MATO GROSSO

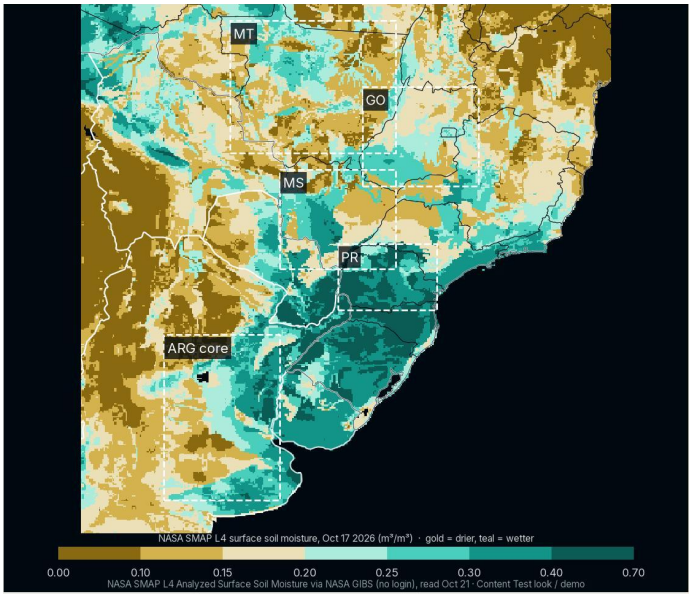
47.4% five-year average

28.0%

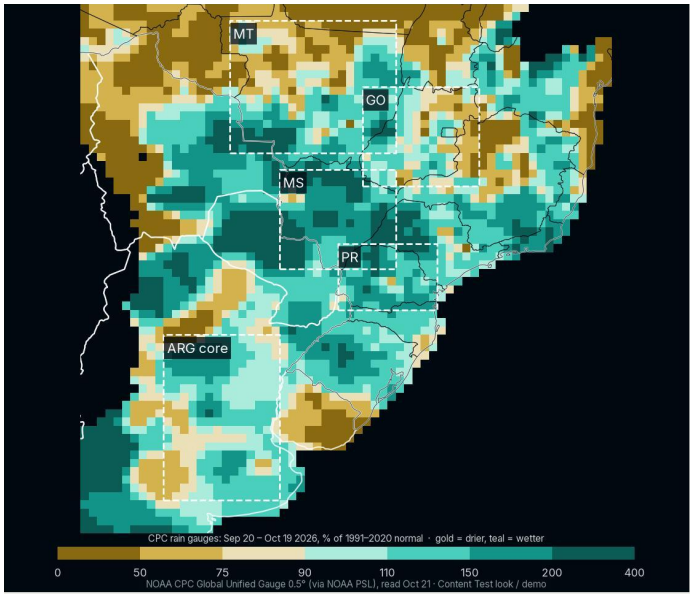
MATO GROSSO DO SUL

35.2% five-year average

SOIL MOISTURE / OCT 17



RAINFALL / SEP 20 - OCT 19



Gold = drier. Teal = wetter. Soil moisture is a modeled surface estimate; rainfall is relative to the 1991-2020 normal. Boxes approximate regions, not individual fields.

The commercial question: Who needs the oil, and when can the crop reach them?

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Mato Grosso leads while wetter Mato Grosso do Sul trails its average. Watch whether that gap narrows. Planting progress informs timing; it does not establish yield, export availability or a farmer premium.

Sources: CONAB Progresso de Safra, week to Oct 16; NASA SMAP L4, Oct 17; NOAA CPC rain gauges, Sep 20-Oct 19. Policy detail follows. Public-data analysis, not a deployed Aluvial model output.

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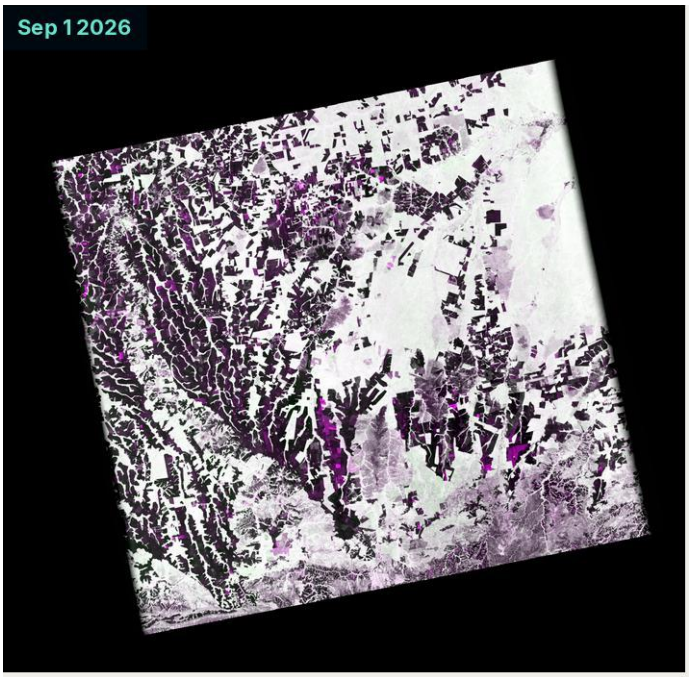
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NISAR / SEEING THROUGH CLOUD IS THE START

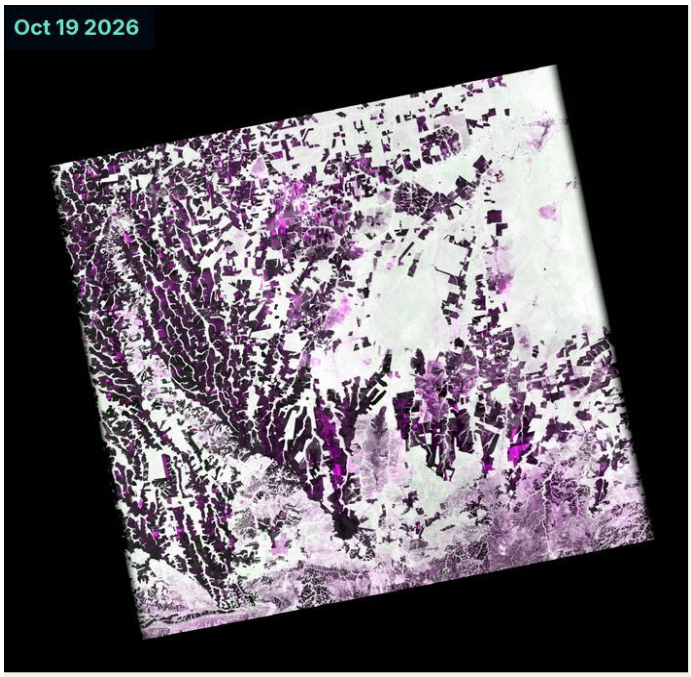
Radar sees through cloud. The crop story needs more evidence.

Two public NISAR radar views cover the same Sorriso / Lucas do Rio Verde frame in Mato Grosso. They add spatial context to the planting reports, rather than a direct measure of planted area.

SEPTEMBER 1, 2026



OCTOBER 19, 2026



Same orbit and frame. Public dual-polarization browse images, approximately 220 km across. The displayed colors are relative within each image; this is not calibrated change detection.

What radar adds

L-band observations through cloud and without sunlight, helping maintain a view of the landscape during wet planting periods.

What these images cannot prove

Planting date, crop identity, planted hectares or yield. Interpretation needs calibrated data, consistent processing and independent crop evidence.

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Use radar to ask where conditions may be changing. Test that read against planting reports and moisture evidence before making a crop or market claim. Seeing through cloud is useful; it is not a yield forecast.

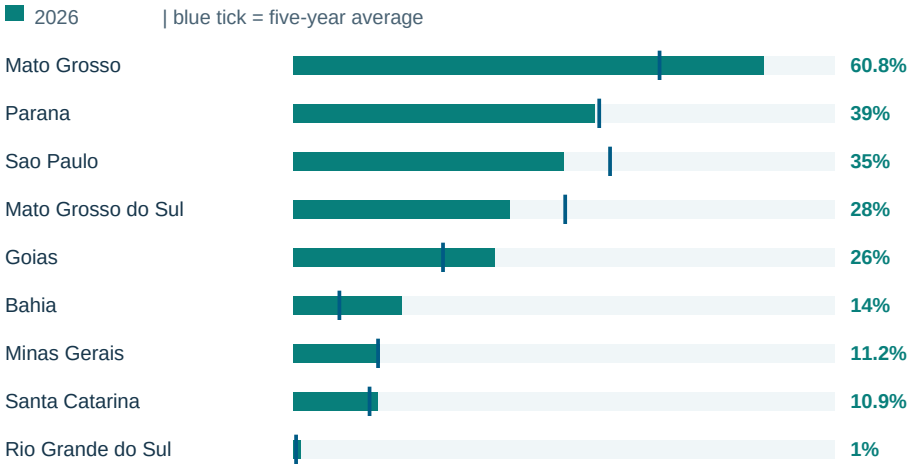
Source: NASA-ISRO NISAR L2 GCOV provisional public browse images via ASF DAAC, track 103 / frame 171, HH/HV. Neither image is an Aluvial crop classification or a measured change map.

PLANTING PACE / BIOLOGY + FIELD CONDITIONS

Brazil is ahead. The state picture is uneven.

CONAB tracks 12 states representing 95% of Brazil's soybean area. Planting rose from 15.6% to 30.1% in a week; Mato Grosso leads while wetter southern regions trail.

PLANTED SHARE / OCT 16, 2026



EARLIER OBSERVATIONS

State order*	2025	Oct 9
1	39.8%	25.2%
2	39%	36%
3	20%	0%
4	34%	25%
5	5%	7%
6	6%	11%
7	6%	4.6%
8	7%	10%
9	0%	0%

*Same state order as chart. 2025 observations: Oct 17. Chart scale: 0-70%. National average: 26.4%; year ago: 21.4%.

WEATHER BEHIND THE PACE / REGIONAL BOX MEANS

Region	Rain / 30d (% normal)	SMAP soil (m³/m³)	Planting vs average
Mato Grosso	99% (99 mm)	0.17	60.8% / 47.4%
Goias	104% (79 mm)	0.20	26% / 19.4%
Mato Grosso do Sul	181% (194 mm)	0.23	28% / 35.2%
Parana	154% (259 mm)	0.38	39% / 39.6%
Argentina core	112% (86 mm)	0.22	Not meaningful yet

Next two weeks, GFS rainfall (mm): Sorriso 10 / 24; Rio Verde 42 / 61; Dourados 77 / 40; Cascavel 161 / 30; Rosario 20 / 11; Cordoba 12 / 9; Pergamino 12 / 5. Weeks Oct 21-27 / Oct 28-Nov 3. Model guidance, not an Aluvial forecast.

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Earlier planting can widen the second-crop corn window, but weather still decides the outcome. Argentina is only starting. Track field access and catch-up progress before treating planting pace as evidence of a larger crop.

Sources retained: CONAB week to Oct 16; NOAA CPC Sep 20-Oct 19; SMAP Oct 17; GFS via Open-Meteo Oct 21. Approximate boxes, unweighted public-data means. BCBA Oct 15: corn 34.8%, sunflower 41.9%; soy intention 17.0 M ha (+1.2%).

BIOFUEL RULES / POLICY + COMMERCIAL VALUE

Same bean.
Three policy systems.

B15 / B16: 15% / 16% biodiesel by volume in finished diesel. **Argentina blend floor:** minimum required biodiesel share. **RINs:** Renewable Identification Numbers - tradable U.S. fuel-compliance credits, not a pump blend percentage.

BRAZIL

Domestic blend and carbon credits

Reported in force: B15 since Aug 1, 2025. Fuel of the Future targets B16 from Mar 2026 and B20 by 2030; CNPE sets the actual rate (13-25%). Above 15% needs technical feasibility.
Status to watch: B16 target missed; secondary reporting says B16-B20 engine tests run through Feb 2027.
RenovaBio: 2026 target 48.09 M CBIOs; distributor target 49.01 M due Dec 31. Secondary reports: 28.38 M in circulation Sep 30. Soy oil was 73.5% of H1 2026 feedstock, versus 75.0% in H1 2025.

ARGENTINA

Blend floor and export-duty differential

Reported in force: 7.5% diesel blend restored Jan 2, 2026 after a temporary 7% cut; legal floor 5%. Export duties: beans 24%; meal and oil 22.5%. Scheduled cuts: 0.25 percentage point/month from Jan 2027, then 0.5 from Jan 2028.
Alternative oils: Canola, carinata, camelina or safflower oil biodiesel has a reported 0% export duty.
Pending: A 10% blend bill has passed the Senate only. It is not law.

UNITED STATES

RIN demand and feedstock eligibility

Proposed SRE reallocation: 100% of 770 M exempted 2025 RINs into 2026/27; hearing Nov 4, comments Dec 4.
45Z: Reported 2026 eligibility restricts feedstock origin to the U.S., Canada or Mexico. Eligibility and implementing rules govern access to the credit.
RINs: Reported treatment retains full RINs for eligible imported fuel/feedstock. Half-RIN treatment is not final; EPA intends it from 2028.
Demand benchmark: USDA projects 17.8 B lb soybean oil to biofuel in 2026/27.

Implementation makes the difference. Brazil sets the effective blend through CNPE decisions and technical review. Argentina sets a required blend through law and implementing rules. U.S. refiners and importers retire eligible RINs against annual obligations; each diesel gallon need not carry the same blend.

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Policy creates potential demand. Implementation turns it into purchases. Diesel consumption provides the underlying market, but effective blend rates, start dates and exemptions determine the additional biofuel volume. Soybeans benefit only to the extent that soybean oil captures that demand - and the accompanying meal finds a market.

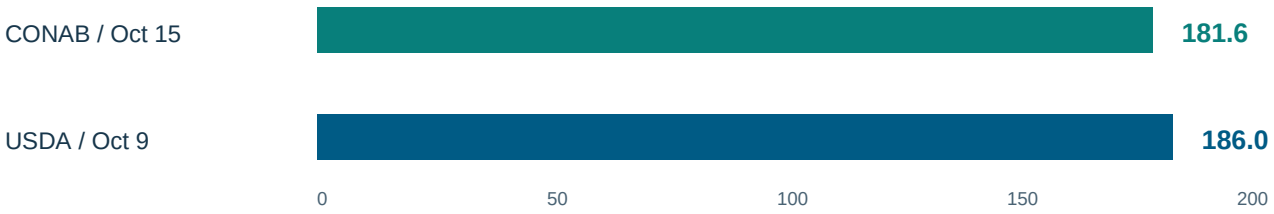
Policy snapshot as of Oct 21. Sources: CNPE / ANP; Argentina Decree 423/2026 and SE Res. 612/2025; EPA 91 FR 65699; 45Z 91 FR 5160; RFS 91 FR 16388. Proposals and effective rules are distinguished above; policy can change.

CROP SIZE + TRADE / COMPETING OFFICIAL ESTIMATES

Two crop estimates. Nearly the same export outlook.

CONAB and USDA differ by 4.4 million tonnes on Brazil's production outlook. Their soybean export estimates are almost identical. Keep each agency's balance sheet together.

BRAZIL 2026/27 PRODUCTION / MILLION TONNES



2026/27 measure	CONAB	USDA
Brazil planted area	49.3 M ha (+1.4%)	-
Brazil yield	3,683 kg/ha (-0.8%)	-
Brazil soybean exports	117.97 M tonnes	118.0 M tonnes
Brazil meal exports	27.1 M tonnes	-
Brazil crush	-	65.0 M tonnes
Argentina production	-	50.0 M tonnes
Argentina crush	-	43.5 M tonnes (+0.5 m/m)

China remains central: About 70% of Brazil's Jan-Sep soybean exports went to China in the cited secondary reporting. October daily exports averaged 345.2 kt through Oct 16 (+12.9% y/y), at US$488.60/t. ANEC projects 6.40 M tonnes for October, flat y/y.

Argentina: The lower duty on meal and oil than whole beans may favor domestic processing. **U.S. history:** East Gulf inspections were 3.45 M tonnes in four weeks to Oct 1 (+246% vs prior four weeks), from the Oct 13 staging pull.

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The production gap is uncertainty, not extra export demand. China, domestic crush and the outlets for oil and meal still determine where the crop clears. Faster planting alone does not establish an earlier export surge.

Sources retained: CONAB first survey, Oct 15; USDA WASDE-676, Oct 9 (Brazil/Argentina Oct-Sep year). ANEC / Secex via cited secondary outlets. U.S. FGIS comparison is historical. Production bars now start at zero; no forecast was added.

EVIDENCE REGISTER / SOURCES + STATUS

What supports the story.

H = primary-source attribution. M = secondary reporting or derived data. Read figures alongside their source dates, geography and policy status. Forecasts and proposals are not realized outcomes.

Figure	Value / source date	Status
Brazil planting	30.1%; prior 15.6%; year ago 21.4%; average 26.4%. CONAB week to Oct 16.	H
State planting	MT 60.8; PR 39; SP 35; MS 28; GO 26; BA 14; MG 11.2; SC 10.9; RS 1 (%).	H
Field conditions	Rain helped MT; wet halted MS/SP; dry delayed PA/TO/south MA. CONAB via Mais Soja.	M
CONAB first survey	181.6 Mt; 49.3 M ha; 3,683 kg/ha; exports 117.97 Mt; meal exports 27.1 Mt. Oct 15.	H
USDA crop / crush	Brazil/Argentina production 186/50 Mt; exports Brazil 118 Mt; crush 65/43.5 Mt. Oct 9.	H
U.S. oil to biofuel	17.8 B lb, 2026/27. USDA WASDE Oct 9.	H
Brazil blend	B15 since Aug 1, 2025; B16 target missed. CNPE Res. 9/2025.	H / M
Engine tests	B16-B20 tests through Feb 2027. MME via eixos.	M
RenovaBio targets	48.09 M CBIOs; distributors 49.01 M. CNPE 21/2025 / ANP.	H
CBIO circulation	28.38 M, Sep 30. B3 via BiodieselBR.	M
Soy oil feedstock share	73.5% H1 2026 vs 75.0% H1 2025. ANP via BiodieselBR.	M
Argentina blend	7.5% since Jan 2, 2026. SE Res. 612/2025.	H
Argentina duties	Beans 24%; meal/oil 22.5%; alternative-oil biodiesel 0%. Decree 423/2026.	H
Argentina area intention	17.0 M ha (+1.2%). BCBA pre-campaign report, September.	H
Argentina progress	Soy not yet meaningful; corn 34.8%, sunflower 41.9%. BCBA / MAGyP Oct 15.	H
Brazil exports	345.2 kt/day through Oct 16; +12.9% y/y; US$488.60/t. Secex via aggregators.	M
ANEC October outlook	6.40 Mt, flat y/y. ANEC via CNN Brasil.	M
China share	About 70% of Brazil soybean exports Jan-Sep. ANEC via Canal Rural.	M
EPA reallocation proposal	770 M RINs into 2026/27; comments Dec 4. 91 FR 65699, Oct 16.	H
U.S. inspection history	3,446,666 MT; 4 weeks to Oct 1; +246% prior / +69% y/y. FGIS via K2, Oct 13.	H / history

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Public data can connect the physical crop story to market and policy questions. Keep source dates, geography and rule status attached to each claim. The local economics still need delivered prices, crop evidence and buyer terms.

Public-data analysis; no Aluvial yield, price, basis or crush-margin forecast is presented. The Argentina 10% blend bill and the U.S. proposals discussed here are not final rules.

WATCH LIST / NEXT EVIDENCE + SOURCE TRAIL

What would change the read?

Watch field access, planting catch-up and final policy decisions. Each answers a different part of the supply-timing and biofuel-value question.

When	Watch	Why it matters
Weekly / Monday	CONAB planting progress	State catch-up and field conditions
Weekly	BCBA Panorama Agricola Semanal	Argentina planting pace
Nov 4	EPA public hearing	SRE reallocation proposal
November	WASDE + CONAB second survey	Next official crop estimates
Dec 4	EPA comments due	Reallocation rulemaking
Dec 31	RenovaBio compliance	Distributor CBIO targets
Jan 2027	Argentina duty cuts begin	Scheduled product-duty changes

Field watch: Do Mato Grosso do Sul and Sao Paulo catch up after heavy rain? Does Argentina resume fieldwork? Use reports and moisture evidence alongside subsequent radar observations.
Policy watch: A CNPE decision above B15 would change the blend outlook. U.S. final rules will determine the timing and scope of additional obligations.

SOURCE TRAIL

1. CONAB Progresso de Safra, week to Oct 16 (posted Oct 19); first survey 2026/27, Oct 15. gov.br/conab. Field commentary via Mais Soja.
2. USDA WASDE-676, Oct 9: Brazil / Argentina supply-use and U.S. soybean oil. esmis.nal.usda.gov.
3. Brazil: Laws 13.033/2014 and 14.993/2024; CNPE 9/2025 and 21/2025; ANP. Secondary: eixos, BiodieselBR.
4. Argentina: Decree 423/2026; SE Res. 612/2025; BCBA / MAGyP. Secondary checks: Infobae, datopuro.
5. Trade: Secex via aggregators; ANEC via CNN Brasil / Canal Rural. EPA: 91 FR 65699; 45Z 91 FR 5160; RFS 91 FR 16388.
6. Weather: NOAA CPC 0.5-degree gauges, Sep 20-Oct 19; GFS via Open-Meteo, Oct 21. SMAP L4 via NASA GIBS, Oct 17. Radar: NISAR GCOV browse / ASF DAAC, Sep 1 and Oct 19.

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Brazil is ahead, Argentina is starting, and policy directs value through different channels. Connect the next field update to the buyer decision. Bring one Decision: region + crop timing + oil outlet. aluvial.ai/goal-session

Public-data analysis / Evidence cutoff Oct 21, 2026. Policy proposals remain subject to change. No proprietary South America layer, field-level classification or Aluvial production forecast is implied.