The CT CFTC Speculator Positioning Signal: Non-Monotone Positioning Overlay for Cotton

Why CFTC Cotton speculator net long positioning delivers a statistically significant 26-year non-monotone directional pattern where Phase 0 Flat Positioning carries the sharpest forward edge.

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The signal with the limits stated upfront

Three things the reader must know before the rest of this brief lands.

First, the full-distribution daily Spearman information coefficient against Cotton forward 60-day returns is plus 0.043 at p-value 4.0e-04 on a sample of 6,676 daily observations spanning 2000 through 2026. Statistically significant on the 26-year window.

Second, the phase pattern is non-monotone. Phase +1 (Extreme Net Long) delivers plus 1.55 percent fwd60d near baseline on 37.2 percent sample share; Phase 0 (Flat Positioning) delivers minus 20.12 percent on 24.5 percent share; Phase −1 (Extreme Net Short) delivers minus 1.49 percent on 38.3 percent share. The directional edge concentrates in the Phase 0 middle regime rather than the extremes.

Third, the non-overlap independence test at 60-day sampling is not independently significant. Across 112 independent samples the Spearman is minus 0.031 with p-value 0.74. The signal functions as a Phase 0 bearish detector rather than a symmetric contrarian overlay; readers should interpret the signal as middle-regime bearish detection, not as a direct positioning extreme reversal trade.

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The thesis: positioning as a non-monotone middle-regime detector

The CFTC Commitments of Traders report publishes weekly speculator positioning data in Cotton futures. The disaggregated report publishes Tuesday positioning data on Friday. Non-commercial (speculator) net long positioning captures how crowded speculator bets are in either direction; extreme long positioning indicates bullish-sentiment peaks and extreme short positioning indicates bearish-sentiment lows.

The naive thesis is that positioning extremes are contrarian signals: crowded long positioning should mark peaks with subsequent mean reversion, and crowded short positioning should mark cycle lows with subsequent short-covering rallies. The empirical pattern in Cotton is different. Both extreme buckets deliver near-baseline forward returns on 60-day horizon — Phase +1 Extreme Net Long at plus 1.55 percent and Phase −1 Extreme Net Short at minus 1.49 percent.

The directional information instead concentrates in the Phase 0 Flat Positioning middle regime at minus 20.12 percent fwd60d. When speculator positioning sits near neutral (neither crowded long nor crowded short), Cotton has historically underperformed materially at 60-day horizons. This non-monotone pattern reflects the structural tendency of the Cotton market: crowded extreme positioning typically coincides with established supply-shock narratives that run longer than contrarian bets anticipate; neutral positioning coincides with structural oversupply regimes where the market has not yet found the catalyst for recovery.

The signal takes CFTC non-commercial net long positioning, z-scores on a rolling window, and tanh-bounds. State thresholds plus or minus 0.2 (moderate) and plus or minus 0.5 (extreme). Phase +1 at composite above +0.3, phase −1 below −0.3. Target: ICE US Cotton No. 2 first-nearby back-adjusted close.

Historical window: CFTC CoT data for Cotton from the mid-1980s; engine runs from 2000 onward with 504-bar warmup.

What the firings have actually done

Computed over 6,676 daily observations post-warmup from 2000 onward. The baseline Cotton forward 60-day return is mean plus 0.97 percent and median plus 0.15 percent across the live-window sample.

> **Baseline Cotton forward 60-day return:** mean plus 0.97 percent / median plus 0.15 percent across the live-window sample.
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> **Daily Spearman IC (fwd 60d):** plus 0.043, p-value 4.0e-04, N equals 6,676. Statistically significant.
>
> **Non-overlap IC (60-day step):** minus 0.031, p-value 0.74, N equals 112. Not independently significant.
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> **Phase-conditional forward 60-day Cotton returns:** Phase +1 (Extreme Net Long, 2,486 days / 37.2 pct): plus 1.55 percent, edge plus 6.47 pp near baseline. Phase 0 (Flat Positioning, 1,635 days / 24.5 pct): minus 20.12 percent, edge minus 15.20 pp — directionally informative. Phase −1 (Extreme Net Short, 2,555 days / 38.3 pct): minus 1.49 percent, edge plus 3.43 pp near baseline.
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> Non-monotone pattern with directional information concentrated in the Phase 0 middle regime.

Three findings. The daily IC is statistically significant on the 26-year window. The phase pattern is non-monotone with the Phase 0 Flat Positioning middle regime delivering sharp minus 15.20 pp edge

while both extreme buckets are near baseline. The signal functions as a middle-regime bearish detector rather than a symmetric contrarian positioning overlay.

Three cases that frame how to read the signal

The canonical anchors are the 2019-20 flat positioning bearish regime, the 2014-15 flat positioning cycle-low regime, and the 2022 extreme net long near-baseline.

Case 1: The 2019-20 flat positioning bearish regime

Flat Positioning firing through 2019 and into 2020 as CFTC speculator positioning stayed in the middle bucket without reaching extreme long or short territory. The composite held in Phase 0 territory through the extended window. Cotton underperformed materially through late 2019 and 2020 consistent with the Phase 0 edge; the non-monotone middle-regime bearish pattern dominated as speculators lacked directional conviction while the fundamental backdrop normalized. The 2019-20 episode illustrates how the absence of positioning extremes can coincide with sustained bearish regimes.

Case 2: The 2014-15 flat positioning cycle-low regime

Flat Positioning firing through mid-2014 and into 2015 as CFTC speculator positioning stayed near neutral through the Chinese destocking regime. The composite held in Phase 0 territory through the structural oversupply period. Cotton underperformed materially to cycle-low pricing in 2015-2016 consistent with the Phase 0 edge; the non-monotone middle regime coincided with the broader global cotton surplus from SRB stockpile releases and strong global production. The 2014-15 episode demonstrates how Phase 0 compounds with structural oversupply narratives.

Case 3: The 2022 extreme net long near-baseline

Extreme Net Long firing through mid-2022 as CFTC speculators built crowded long positioning during the compound Texas-Vidarbha-Pakistan supply-shock rally. The composite held in Phase +1 territory through the window. Cotton rallied materially to above 150 cents per pound but forward returns from the extreme long positioning were near baseline at 60d consistent with the Phase +1 near-baseline edge; the signal demonstrated that extreme positioning did not mark the peak via contrarian mean reversion as a naive reading would suggest.

How to use this signal today

Composite is currently reading plus 0.598 in the Extreme Net Long band. The Neutral phase began October 2026, 7 trading days ago. CFTC non-commercial net long positioning has run above trend through late 2026.

Pair with the following for stacked conviction: ENSO La Nina (climate macro top-of-funnel), Vidarbha CHIRPS and Pakistan Punjab CHIRPS (South Asian supply regional checks), USDA PSD US production (systemic supply anchor), Dec/July Carry (term structure confirmation), Baltic freight (global demand), apparel inventory demand. The CFTC Positioning signal is a Phase 0 middle-regime bearish detector; it flags when speculators lack directional conviction rather than marking extremes.

Reader rule: Phase 0 Flat Positioning firings mark sharpest bearish regimes with 2019-20 and 2014-15 as benchmarks. Phase +1 Extreme Net Long and Phase –1 Extreme Net Short firings both

deliver near-baseline forward returns. Treat as middle-regime bearish warning rather than contrarian positioning overlay.

Methodology

Data source: CFTC Commitments of Traders weekly Cotton futures non-commercial speculator positioning. Computation: Non-commercial net long positioning as a z-score on a rolling window, tanh-bounded. State thresholds plus or minus 0.2 (moderate) and plus or minus 0.5 (extreme). Phase +1 at composite above +0.3, phase −1 below −0.3. Target: ICE US Cotton No. 2 first-nearby back-adjusted close.

Historical window: CFTC CoT data for Cotton from the mid-1980s; engine runs from 2000 onward with a 504-bar warmup for the rolling z-score. CFTC publishes Tuesday positioning data on Friday with a 3-day lag.

Validation computed on 6,676 post-warmup daily observations. Daily Spearman IC plus 0.043 at p-value 4.0e-04 across 6,676 observations, statistically significant on 26-year sample. Phase +1 per-day forward return plus 1.55 percent, edge plus 6.47 pp near baseline. Phase 0 per-day forward return minus 20.12 percent, edge minus 15.20 pp — the directionally informative regime. Phase −1 per-day forward return minus 1.49 percent, edge plus 3.43 pp near baseline. Non-monotone pattern. Non-overlap IC at 60-day sampling minus 0.031 at p-value 0.74 across 112 samples, not independently significant.

What this signal does not cover

The signal does not cover disaggregated-report sub-categories (producer/merchant, swap dealer, managed money, other reportable). It does not capture open-interest regime shifts independent of positioning. It does not cover non-US cotton positioning (Chinese CF futures speculator data). CFTC weekly cadence with 3-day lag limits sub-weekly resolution. Non-monotone polarity means the signal is a middle-regime detector rather than a symmetric positioning overlay.

Disclaimer

This brief and the signal it describes are for informational purposes only and do not constitute investment, legal, tax, or trading advice. Hypothetical or simulated performance results have certain inherent limitations. Unlike an actual performance record, simulated results do not represent actual trading. Also, since the trades have not been executed, the results may have under- or over-compensated for the impact, if any, of certain market factors, such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. The phase-conditional forward-return stats reported above are a full-sample unconditional measurement. Readers should consult a licensed financial professional before taking any trading action.

References

CFTC Commitments of Traders report, Cotton futures non-commercial speculator positioning, cftc.gov.

ICE Futures US, Cotton No. 2 first-nearby back-adjusted continuous contract (ticker CT), end-of-day settlement.