GC GLD Tonnes Flow Z

GLD is the largest gold ETF and its holdings reflect institutional demand net of redemptions. Unlike price ratios which encode expectations, physical tonnage is the flow itself.

David Stendahl · Market Lab Analytics · November 6, 2026

What this signal is

GLD is the largest gold ETF and its holdings reflect institutional demand net of redemptions. Unlike price ratios which encode expectations, physical tonnage is the flow itself. Rising tonnage means authorized participants are creating shares - real demand. Falling tonnage means redemptions. change captures medium-term flow momentum. Fires strongly in institutional-driven gold-bull windows (2019-2020 pandemic accumulation, 2024-2025 central-bank + ETF re-accumulation). Third orthogonal CHASE Z designed for GC v0.6.8 direction-conditional composite.

The composite is bounded between minus one and plus one through tanh. On 2016-03-08 it reached its series maximum plus 1.000 and on 2013-04-25 its series minimum minus 0.999.

Today the composite reads near −0.34. See live page for current state.

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How the inputs compose

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The engine also computes four confirming features: five-day velocity, 60-day volatility regime, 60-day correlation with gold returns, 63-day lag-1 autocorrelation.

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What the state-conditional returns have actually done

The gold forward-60-day return baseline (unconditional) is mean plus 1.39 percent, median plus 1.18 percent.

Reference baseline (5,381 gold-aligned forward-60-day windows over the live engine window)

Gold forward-60-day return baseline: mean plus 1.39 percent, median plus 1.18 percent. Phase 0 source: Z11111 engine parquet joined with COMEX gold back-adjusted continuous closes.

ETF physical accumulation (Phase +1), 1,416 trading days, returned on average plus 2.11 percent.

Normal (Phase +0), 5,166 trading days, returned on average plus 0.21 percent.

ETF physical redemption (Phase −1), 2,383 trading days, returned on average plus 1.23 percent.

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Three cases that frame how to read the signal

Case 1: 2016-03 composite series maximum

On 2016-03-08 the composite reached its series maximum plus 1.000. Gold subsequent 60-day behavior aligned with the etf physical accumulation regime pattern.

Case 2: 2013-04 composite series minimum

On 2013-04-25 the composite reached its series minimum minus 0.999. Gold subsequent 60-day behavior aligned with the etf physical redemption regime pattern.

Case 3: March 2020 COVID shock window

The March 2020 COVID liquidity shock drove violent regime shifts across gold drivers. The composite oscillated as the underlying mechanism repriced.

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How to use the signal today

This is a regime detector on a 60-day forward horizon.

Three best uses. First, as a regime filter for gold exposure (Phase +1 equals etf physical accumulation). Second, as a cross-check against positioning and price-momentum signals. Third, as a transition-window warning, pairing with price-based signals for conviction.

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Methodology notes

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The 1990 start reflects the earliest reliable source coverage.

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What this signal does not cover

Four caveats. The signal is a regime detector, not a timing signal. State-conditional means hold on average, not for every individual window. Regime persistence varies with macroeconomic backdrop. Individual windows can run much longer or shorter than mean sample. State-conditional edges are backward-looking empirical averages. Future regimes may differ. The baseline is COMEX gold back-adjusted continuous (GC_1240BD).

Not investment advice. Signal readings and empirical statistics are derived from publicly available data sources. (c) 2026 David Stendahl.