PL South Africa Mining Stress Cluster

SA produces 75% of global platinum. SA stress = PGM supply fear = PL bid. Not captured by macro dollar or industrial signals.

David Stendahl · Market Lab Analytics · November 6, 2026

What this signal is

SA produces 75% of global platinum. SA stress = PGM supply fear = PL bid. Not captured by macro dollar or industrial signals.

The composite is bounded between minus one and plus one through tanh. On 1991-04-15 it reached its series maximum plus 1.000 and on 2004-04-27 its series minimum minus 0.388.

Today the composite reads near −0.33. 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 platinum returns, 63-day lag-1 autocorrelation.

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What the state-conditional returns have actually done

The platinum forward-60-day return baseline (unconditional) is mean plus 0.99 percent, median plus 0.80 percent.

> **Reference baseline (8,960 platinum-aligned forward-60-day windows over the live engine window)**
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> Platinum forward-60-day return baseline: mean plus 0.99 percent, median plus 0.80 percent. Phase 0 source: Z101179 engine parquet joined with NYMEX platinum back-adjusted continuous closes.

SA mining stress elevated (Phase +1), 1,774 trading days, returned on average plus 2.09 percent.

Normal (Phase +0), 3,140 trading days, returned on average plus 1.26 percent.

SA mining stress calm (Phase −1), 4,046 trading days, returned on average plus 0.29 percent.

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Three cases that frame how to read the signal

Case 1: 1991-04 composite series maximum

On 1991-04-15 the composite reached its series maximum plus 1.000. Platinum subsequent 60-day behavior aligned with the sa mining stress elevated regime pattern.

Case 2: 2004-04 composite series minimum

On 2004-04-27 the composite reached its series minimum minus 0.388. Platinum subsequent 60-day behavior aligned with the sa mining stress calm regime pattern.

Case 3: March 2020 COVID shock window

The March 2020 COVID liquidity shock drove violent regime shifts across platinum 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 platinum exposure (Phase +1 equals sa mining stress elevated). 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

SA produces 75% of global platinum. SA stress = PGM supply fear = PL bid. Not captured by macro dollar or industrial signals.

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 NYMEX platinum back-adjusted continuous (PL_1240BD).

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