

Santiment Social Volume Intraday Seasonality

A Baseline for Crypto Attention

Metric: Santiment social volume

Sample: 2025-06-20 through 2026-05-19, complete UTC days

Assets: bitcoin, ethereum, solana, xrp, dogecoin, binance-coin, cardano, chainlink, avalanche, tron

Data source: Santiment

Author: Larry Cao, Santiment

Contact: larry.c@santiment.net

Executive Summary

The result is not subtle. Social volume in large-cap crypto assets has a pronounced intraday rhythm: the strongest UTC hour is 14:00, the weakest is 04:00, and the average peak-to-trough spread is 2.21x. A raw social-volume print is therefore not a clean abnormality signal unless the clock is part of the model.

The weekly effect is smaller but still operationally material. Weekend daily social volume is 25.3% lower than weekdays in this sample. This is large enough to distort alert thresholds, cross-asset dashboards, and manual anomaly review.

The practical rule is simple: treat hour-of-day and weekday seasonality as the first risk control in any short-horizon social-volume workflow. This is an attention-baseline study, not a claim about return predictability.

The Question

Crypto trades continuously. Human attention does not. The question is whether the timing of social attention is stable enough, and large enough, to deserve explicit treatment in monitoring infrastructure.

We test a narrow question: **how much of observed social-volume variation is explained by recurring UTC hour and weekday effects, before making any claim that activity is abnormal?**

Relation to Prior Evidence

This note sits at the intersection of two established research lines. The first is the investor-attention literature: Da, Engelberg, and Gao (2011) formalize internet search activity as a direct attention proxy and show that attention can be distinct from standard market observables. The implication for social volume is clear: attention measures can be economically meaningful precisely because they capture a different state variable, but that state variable still needs its own baseline.

The second line is high-frequency market seasonality. Andersen and Bollerslev (1997) show that intraday periodicity can dominate high-frequency dynamics unless explicitly modeled; ignoring the calendar can make ordinary periodic structure look like persistence or abnormality. Crypto evidence points in the same direction: Eross et al. (2019) document systematic intraday variation in Bitcoin volume, volatility, liquidity, and returns. Our contribution is to apply this baseline logic to crypto social attention rather than prices or trading volume.

Crypto-specific social-data studies provide the motivation, but also the guardrail. Garcia et al. (2014) link word-of-mouth communication, information search, and Bitcoin market dynamics in feedback cycles. Shen, Urquhart, and Wang (2019) find that Twitter activity is a significant driver of next-day trading volume and realized volatility. These papers justify taking social activity seriously, especially as an activity and risk-state variable. They do not remove the need to separate predictable calendar structure from genuine information shocks, and they do not turn raw social volume into a directional return signal.

Data and Estimation

We study hourly Santiment social volume for a liquid large-cap panel: bitcoin, ethereum, solana, xrp, dogecoin, binance-coin, cardano, chainlink, avalanche, and tron. The sample contains complete UTC days from 2025-06-20 through 2026-05-19.

For each asset-day, hourly social volume is converted into a daily-share index: