

Quant Atlas

VisionFX Use Cases

Institutional Workflows for Short-Term and Medium-Term FX Intelligence

Quant Atlas

July 10, 2026

Abstract

This paper presents concrete institutional workflows for VisionFX, the Quant Atlas directional FX signal package covering G10 majors. VisionFX now includes two operating variations within the same product: an hourly variation for short-term FX intelligence and a daily variation for medium-term FX intelligence. The hourly and daily streams are not separate products. They are cadence-specific versions of the same VisionFX offering, and clients may choose the variation that best matches their process, or subscribe to both when their workflow requires multiple horizons.

VisionFX is framed around target users, cadence selection, complete-package consumption rules, integration patterns, carry attribution, and operational outcomes. The objective is to show how the signal stream can be incorporated by systematic FX desks, quantitative macro teams, multi-strategy funds, discretionary traders, multi-asset allocators, wealth-management teams, family offices, research functions, and risk teams without forcing a change in their existing investment process.

1 Executive Overview

VisionFX provides point-in-time directional FX signals across G10 majors. It is available in two variations under the same product framework:

- **VisionFX Hourly:** a short-term variation designed for intraday, tactical, short-horizon swing, and faster risk-monitoring workflows.
- **VisionFX Daily:** a medium-term variation designed for macro positioning, allocator overlays, lower-turnover sleeves, factor research, and end-of-day risk workflows.

Both variations preserve the same institutional boundary: the signal stream is intended to be evaluated and consumed as a complete package. Every valid signal is retained under pre-committed package rules rather than selectively included or discarded according to conviction. Conviction remains available as risk metadata for exposure review, position limits, stop calibration, escalation, drawdown analysis, and monitoring.

The daily variation is calibrated for medium-horizon positioning, with an intended horizon of approximately 20 trading days in the stated research framework. The hourly variation is calibrated for short-term directional conditions and faster operating cycles. Clients decide which variation is more relevant to their investment horizon, infrastructure, portfolio turnover, and governance process. Some clients may only need the hourly stream. Others may only need the daily stream. Multi-horizon desks may use both.

Carry is treated as a separate attribution and risk dimension where applicable. The available carry variant allows clients to isolate the contribution of interest-rate differentials from the directional signal without using favorable or unfavorable carry as a signal eligibility filter.

VisionFX can be used as an alpha overlay, macro timing layer, independent directional reference, dedicated FX sleeve, cross-asset factor input, discretionary confirmation layer, research feature, model-comparison benchmark, or external risk signal. The default production delivery method is R2 object storage. S3, REST API, SFTP, and other agreed delivery methods remain available according to the client's infrastructure and workflow requirements.

2 Product Variations

	VisionFX Hourly	VisionFX Daily
Positioning	Short-term FX intelligence	Medium-term FX intelligence
Cadence	Hourly signal generation across the subscribed G10 major universe	One production delivery per day across the subscribed G10 major universe
Workflow fit	Intraday, tactical, short-horizon swing, systematic FX, discretionary timing, faster risk review	Macro positioning, multi-asset overlays, lower-turnover sleeves, wealth and family-office workflows, end-of-day risk reporting
Decision cycle	Faster review and implementation cycle	Slower decision cycle, typically aligned with end-of-day portfolio and committee processes
Research use	Short-horizon alpha overlay, overlap analysis, execution sensitivity, model comparison	Macro factor input, portfolio overlay research, carry attribution, holding-period and rate-regime analysis
Client choice	Suitable when the desk needs shorter-horizon timing or more frequent risk context	Suitable when the client wants medium-horizon directional FX context without a high-frequency ingestion stack
Combined use	Clients may use both variations when they need a multi-horizon view of the same directional FX product. The two cadences should be evaluated separately, then combined only under the client's own portfolio construction and governance rules.	

3 VisionFX Use Cases

3.1 Product Summary

VisionFX is a directional FX signal package covering G10 majors. It uses a composite, point-in-time architecture and is available in hourly and daily variations. The full signal stream for each chosen cadence is intended to be consumed as one package. Conviction labeling is retained as risk metadata and is not used to select only a subset of signals.

The hourly variation supports short-term systematic, discretionary, portfolio, research, and risk workflows. The daily variation supports medium-horizon macro, allocation, research, discretionary, wealth-management, family-office, and risk workflows. Both belong to the same VisionFX offering.

3.2 Target Users

- Systematic FX desks running intraday, short-horizon swing, or tactical directional strategies.
- Quantitative macro teams requiring an external timing overlay on existing directional views.
- Macro teams running medium-term directional FX positioning.
- Multi-strategy funds blending external signals into proprietary ensembles or dedicated sleeves.

- Multi-asset allocators sizing FX exposure within broader portfolios.
- Wealth-management quantitative teams building rules-based currency overlays.
- Family offices requiring a lower-turnover directional FX input.
- Discretionary FX and macro traders seeking systematic confirmation before sizing or execution.
- Research teams evaluating incremental signal content, overlap, residual alpha, or cross-asset factor behavior.
- Risk teams cross-referencing internal FX exposure against an independent directional source.

3.3 What VisionFX Measures

VisionFX measures directional conditions across G10 major currency pairs. Each valid observation is generated using only information available at its timestamp and reflects the output of a composite point-in-time methodology.

The hourly variation measures short-term directional conditions suitable for intraday and short-horizon workflows. The daily variation measures medium-horizon directional conditions suitable for slower decision cycles, macro positioning, allocator overlays, and end-of-day governance.

The delivered package can include:

- Timestamped signal direction for each covered currency pair.
- Supporting composite and component-level information for attribution, diagnostics, and research.
- Block-level component information where available for downstream attribution and model analysis.
- Conviction labeling retained as risk and monitoring metadata.
- Carry estimates by year and currency through a separately evaluable variant.
- Historical and live files constructed under consistent point-in-time rules.
- Fields supporting portfolio alignment, exposure review, and signal-level auditability.

3.4 Signal Interpretation and Package Boundaries

VisionFX is designed as a complete directional package. Institutional evaluation therefore concerns the behavior of the full valid signal population for the selected cadence rather than a retrospectively selected subset.

Every valid signal is retained under the package rules. Conviction does not determine whether a signal is accepted, rejected, or included in performance measurement. It can instead inform exposure limits, position review, stop calibration, drawdown analysis, monitoring, and escalation requirements.

Carry is also kept separate from signal selection where the carry variant is used. Signals are not removed because their direction has favorable or unfavorable carry. This boundary allows the consuming firm to distinguish directional contribution from carry contribution while preserving the integrity of the package methodology.

The signal stream can be consumed directly within a dedicated sleeve or indirectly as an overlay, feature, benchmark, confirmation layer, or external risk reference. In all cases, the consuming firm retains control over execution, sizing, liquidity constraints, hedging, portfolio construction, overrides, and governance.

3.5 Use Case 1: Alpha Overlay on an Existing Systematic FX Book

A systematic FX desk operates a proprietary trend, carry, relative-value, tactical, or short-horizon directional strategy. VisionFX is consumed as a complete external package alongside the desk's internal model.

Workflow.

1. The desk receives the complete VisionFX signal stream across the subscribed G10 major universe at the chosen cadence.
2. Every valid signal is retained under the package rules rather than filtered by conviction tier.
3. The desk compares VisionFX direction with its own house view for attribution, reconciliation, and portfolio context.
4. Agreement, disagreement, and neutrality are logged without removing observations from the delivered package.
5. Conviction is used only as risk metadata for exposure review, limits, stop calibration, and monitoring.
6. The desk measures the incremental contribution of the complete package relative to the house model over time.

Operational outcome. The workflow preserves the integrity of the complete VisionFX signal package while producing an explicit attribution and risk-review trail. The hourly variation is typically suited to faster systematic books, while the daily variation can support slower macro or tactical allocation processes.

3.6 Use Case 2: Macro Directional Sizing

A macro team has a thematic view on a G10 currency and uses VisionFX Daily as a complete medium-horizon directional package within that thematic window.

Workflow.

1. The portfolio manager forms the macro thesis independently of VisionFX.
2. The team ingests the complete daily VisionFX signal stream across the covered G10 majors.
3. Every valid signal is retained under the package rules rather than filtered by conviction tier.
4. VisionFX direction is used for implementation timing, attribution, and comparison with the house view.
5. Conviction is used only for risk limits, exposure review, stop calibration, and monitoring.
6. P&L decomposition separates the macro thesis from the contribution of the complete signal package.

Operational outcome. The workflow creates disciplined medium-horizon implementation while preserving the integrity of the complete VisionFX package.

3.7 Use Case 3: Independent Screening for Discretionary FX Trading

A discretionary FX or macro desk wants a systematic reference before sizing into a trade. VisionFX is reviewed as a complete stream rather than through selective use of preferred historical signal labels.

Workflow.

1. The trader develops an intraday, short-horizon, or medium-horizon thesis on a covered G10 major.
2. Before entering, the trader checks the latest VisionFX direction and supporting package fields at the relevant cadence.
3. The desk records whether the house thesis aligns with, opposes, or is neutral to the delivered signal.
4. The full signal stream remains part of the review process; signals are not discarded because of their conviction label.
5. Conviction is used only to frame risk, exposure, stop placement, and escalation requirements.
6. The desk reviews the complete alignment and override log against the systematic baseline on a pre-defined schedule.

Operational outcome. The workflow introduces a repeatable external reference while preventing selective use of only the most attractive historical observations. The hourly variation is suitable for shorter tactical decisions, while the daily variation supports slower discretionary macro confirmation.

3.8 Use Case 4: Multi-Asset Portfolio FX Overlay

A multi-asset allocator requires an FX overlay within a fixed risk budget. VisionFX Daily provides the directional input for the overlay while the allocator retains control of portfolio construction and exposure constraints.

Workflow.

1. The daily feed is ingested after the New York close.
2. The overlay sleeve rebalances according to the latest VisionFX signals across the covered G10 majors.
3. Total overlay notional is capped at a pre-defined percentage of fund net asset value.
4. Pair-level concentration limits prevent any single currency pair from dominating the sleeve.
5. Conviction is retained for risk reporting and exposure review rather than signal selection.
6. Performance is reported separately from the core portfolio, with directional and carry contributions attributed independently.

Operational outcome. The allocator obtains a diversified, lower-turnover FX overlay operated within a pre-committed risk budget and supported by transparent attribution.

3.9 Use Case 5: Complete Signal Package Portfolio Construction

A multi-strategy fund operates a dedicated VisionFX sleeve using the complete delivered signal package rather than a selected conviction subset.

Workflow.

1. The fund ingests the full VisionFX feed at the subscribed cadence.
2. Every valid signal is taken under the same pre-committed portfolio rules.
3. Conviction labels are not used as entry filters or as a basis for excluding signals.
4. Conviction is retained only for risk reporting, exposure limits, drawdown review, and portfolio monitoring.
5. Pair-level concentration, aggregate notional, liquidity, turnover, and execution constraints are defined by the fund.
6. The sub-portfolio runs alongside the fund's other strategies with separate P&L attribution and a dedicated risk budget.

Operational outcome. The result is an attributable FX sleeve that preserves the complete package methodology and maintains explicit portfolio-level controls. The hourly variation can support tactical sleeves; the daily variation can support lower-turnover allocation sleeves.

3.10 Use Case 6: Complete Signal Package with Carry Attribution

An allocator, macro desk, or research team consumes the complete VisionFX package while measuring carry as a separate attribution and risk component.

Workflow.

1. Every valid VisionFX signal is ingested across the covered G10 major universe.
2. No signal is removed because its direction has favorable or unfavorable carry.
3. The per-year, per-currency carry table is used to isolate carry contribution from directional signal contribution.
4. Conviction and carry fields are retained for risk measurement, exposure review, and reporting.
5. Results are segmented across changing rate regimes to determine how directional and carry effects evolved over time.
6. The complete package remains methodologically stable because attribution is performed after signal inclusion rather than through retrospective filtering.

Operational outcome. The client receives the complete directional package together with transparent carry attribution, avoiding selective filtering that could distort the intended methodology.

3.11 Use Case 7: Research Input for Internal Models and Factor Pipelines

A research team developing FX strategies, macro factor models, or cross-asset return models uses VisionFX within the internal feature library. The team does not need to trade VisionFX directly. It can instead test what dimensions of FX behavior the signal captures and whether candidate models add incremental information.

Workflow.

1. The research environment ingests the full historical VisionFX archive using point-in-time signal timestamps.
2. The complete directional package is added as a candidate factor, overlay, benchmark, or explanatory variable.
3. Candidate strategy P&L or forecasts are decomposed into a component associated with VisionFX and a residual component.
4. Conviction is retained separately as risk metadata rather than used to select or weight only preferred observations.
5. Factor loadings, overlap with internal factors, conditional behavior, carry contribution, and residual information content are documented.
6. Strategies whose contribution remains in the residual are promoted for further validation, paper trading, or portfolio testing.

Operational outcome. VisionFX becomes an explicit research benchmark for detecting overlap, assessing residual contribution, and reducing the promotion of redundant strategies. The hourly variation is suited to short-horizon research and execution sensitivity; the daily variation is suited to macro factor research, allocation studies, and rate-regime analysis.

3.12 Use Case 8: Risk Monitoring and End-of-Day Risk Reporting

A risk team oversees aggregate FX exposure across several desks. VisionFX serves as an independent reference for identifying positions that run materially against the external systematic direction.

Workflow.

1. The risk dashboard or risk pack ingests the latest VisionFX feed and the firm's aggregate FX exposure for each covered pair.
2. The report displays, by pair, firm direction, firm notional, VisionFX direction, VisionFX conviction, and alignment status.
3. When VisionFX direction conflicts with material firm exposure, the dashboard generates a review flag.
4. The flag prompts the risk team to confirm that the contrary exposure is intentional, understood, hedged, temporary, or consistent with approved limits.
5. Conviction can prioritize the sequence or depth of review but does not determine whether the signal is included.
6. Subsequent outcomes are logged to assess how alignments and misalignments behaved relative to the external systematic reference.

Operational outcome. VisionFX provides a structured input for risk-versus-desk dialogue, anchored to a consistent external reference rather than narrative interpretation alone. The hourly variation supports faster monitoring; the daily variation supports committee packs and end-of-day governance.

4 Validation and Research Framework

VisionFX is evaluated as a complete directional signal package under a pre-committed validation framework. The relevant question is whether the full valid signal population demonstrates repeatable directional value after accounting for realistic construction, timing, robustness, implementation, and risk requirements.

The framework can include:

- **Complete-package performance:** evaluation using every valid signal under consistent rules rather than a selected conviction subset.
- **Point-in-time integrity:** confirmation that each signal uses only information available at its timestamp.
- **Directional hit behavior:** analysis of signal alignment with subsequent price movement across the defined horizon.
- **Return and risk metrics:** assessment of return distribution, drawdown, Sharpe ratio, Sortino ratio, Calmar ratio, and related portfolio statistics where applicable.
- **Holding-period analysis:** evaluation of the daily variation around the approximately 20-day calibration horizon, and evaluation of the hourly variation around its shorter tactical horizon.
- **Asset-level stability:** review of whether results are distributed across the covered G10 majors rather than concentrated in one instrument.
- **Chronological stability:** testing across market periods, changing volatility environments, and materially different interest-rate regimes.
- **Execution sensitivity:** evaluation of latency, delayed entry, spread, transaction-cost, slippage, and rebalance assumptions.
- **Component attribution:** analysis of composite and component-level fields and their contribution to the directional signal.
- **Carry attribution:** independent measurement of directional and carry contributions using the dedicated carry variant.
- **Conviction analysis:** assessment of conviction as risk metadata without converting it into a retrospective signal-selection rule.
- **Falsification-grade stress testing:** pre-committed robustness checks with an objective edge verdict.

Hourly and daily variations should be evaluated separately because they answer different horizon questions. A client may later combine them into a broader multi-horizon process, but that combination belongs to the client's portfolio construction framework rather than to a retrospective selection of whichever cadence looked best.

5 Universe and Coverage

VisionFX covers G10 major currency pairs. The package is intended for short-term and medium-term systematic, quantitative macro, discretionary, allocation, portfolio, research, wealth-management, family-office, and risk workflows.

Coverage can be configured according to the agreed instrument set, identifier mapping, file schema, delivery requirements, and subscribed cadence. Historical archives and live updates are constructed under the same point-in-time methodology to support consistent research and production use.

The daily variation includes a historical research archive suited to medium-horizon evaluation across materially different rate environments, including low-rate periods and subsequent normalization cycles. The hourly variation supports short-horizon evaluation and production monitoring under more frequent operating cycles.

6 Integration Patterns

- **Cadence options:** hourly production files for VisionFX Hourly; daily production files for VisionFX Daily. Clients may subscribe to either cadence or both.
- **Default delivery:** R2 object storage with cadence-specific CSV payloads.
- **Alternative delivery:** S3 with notification, REST API, SFTP, and other agreed methods are available according to the client workflow.
- **Hourly latency profile:** typical end-to-end delivery within approximately seven seconds of bar close, subject to final infrastructure agreement.
- **Daily latency profile:** sub-one-minute typical delivery, with a five-minute service-level objective after the 17:00 New York close, subject to final infrastructure agreement.
- **Cadence fit:** hourly delivery supports short-term trading and faster monitoring; daily delivery supports macro, allocator, committee, and end-of-day reporting workflows without requiring a high-frequency ingestion stack.
- **Package consumption:** the full valid signal stream is retained under consistent rules for the selected cadence.
- **Risk metadata:** conviction is supplied for exposure review, limits, stop calibration, draw-down analysis, and monitoring rather than signal selection.
- **Carry analysis:** carry modeling by year and currency is available as a separately evaluable attribution variant where applicable.
- **Research transparency:** historical data and supporting fields are available for attribution, overlap analysis, residual analysis, and model comparison.

7 Why VisionFX

- Provides directional FX signal intelligence across G10 majors under one product name.
- Offers two variations of the same product: hourly for short-term workflows and daily for medium-term workflows.
- Allows clients to choose the horizon that matches their process, or use both under a multi-horizon research and portfolio framework.
- Uses composite, point-in-time construction rather than a single-indicator output.
- Is designed to be consumed as a complete signal package, with every valid signal retained under the package rules.

- Uses conviction labeling for risk measurement and monitoring rather than selecting only a subset of signals.
- Supports alpha overlays, macro positioning, multi-asset overlays, dedicated FX sleeves, factor research, discretionary confirmation, and risk reporting.
- Provides carry modeling by year and currency as a separate attribution and risk view where applicable.
- Preserves directional package integrity by evaluating carry after signal inclusion rather than using it as an eligibility filter.
- Applies point-in-time construction, execution-sensitivity analysis, component attribution, and pre-committed stress testing.
- Fits directly into institutional object-storage, API, SFTP, portfolio, research, and reporting workflows.

8 Conclusion

VisionFX is designed to fit into institutional FX workflows without requiring systematic desks, macro teams, allocators, discretionary traders, wealth managers, family offices, research teams, portfolio managers, or risk functions to abandon their existing processes. The signal stream can be consumed as a complete directional package, external overlay, dedicated portfolio sleeve, allocation sleeve, factor input, confirmation layer, research benchmark, attribution input, or independent risk reference.

Its operating boundary is explicit: every valid signal belongs to the package, while conviction is retained as risk metadata rather than used for selective signal inclusion. Carry is evaluated independently as an attribution and risk component rather than used to remove observations. These rules preserve methodological consistency and allow the consuming firm to distinguish signal behavior from its own decisions concerning execution, sizing, portfolio construction, hedging, overrides, and governance.

The key product decision for the client is cadence. VisionFX Hourly is the short-term variation. VisionFX Daily is the medium-term variation. Both are part of the same VisionFX offering. The client may choose whichever horizon is more relevant, or use both where a multi-horizon FX workflow is required.

The timestamped stream, component-level transparency, point-in-time construction, carry attribution variant, and documented delivery process support an auditable workflow from historical evaluation through production monitoring and risk reporting.

This document is intended for institutional product evaluation and research workflow discussion. It does not constitute investment advice or a recommendation to trade any financial instrument.