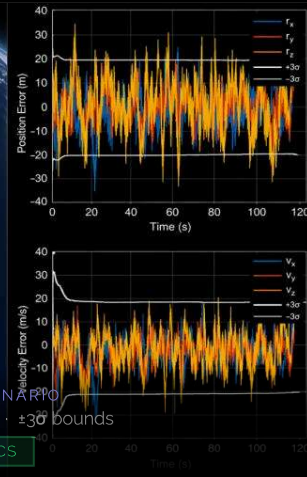
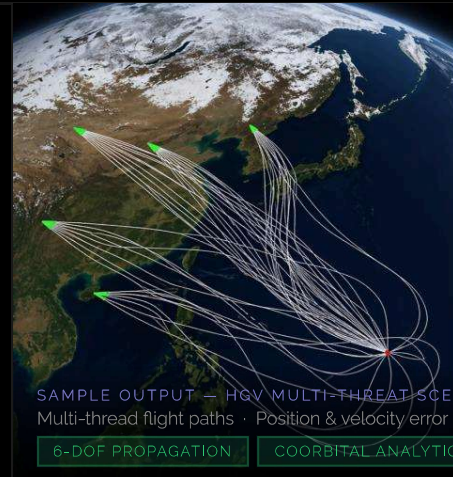


ANALYTIC SPRINT OFFERING · RAPID ENGAGEMENT

HGV TRAJECTORY GENERATION SPRINT

30 - 45 DAY STUDY · PHYSICS-BASED · DECISION-QUALITY ANALYSIS

Coorbital delivers **rapid, high-fidelity trajectory generation and scenario analysis** for Hypersonic Glide Vehicle threat characterization. Our physics-based backend provides full Boost → Glide → Dive flight profiles with engagement geometry, sensor visibility, and trade studies — **ready for prime integration or government program office use within 30–45 days.**



SAMPLE OUTPUT — HGV MULTI-THREAT SCENARIO
Multi-thread flight paths · Position & velocity error : ±30 bounds

6-DOF PROPAGATION COORBITAL ANALYTICS

HGV SPRINT PACKAGE

1 MISSION THREAD

30-45 DAY POP

TRADE STUDY

TECH MEMO

BRIEFING PACKAGE

VISUALIZATIONS

SCOPE OF WORK

- 01 **HGV trajectory generation** across candidate mission profiles with full 6-DOF fidelity
- 02 **Flight geometry, access, and observability** for sensor and interceptor trade studies
- 03 **Scenario trade studies** for threat-informed engagement planning and architecture evaluation
- 04 **Decision-quality technical deliverables** structured for prime or program office consumption

DELIVERABLES

- Technical Memorandum
- Trade Matrix w/ Criteria
- HGV Trajectory Analysis
- Briefing Package
- Flight Path Visualizations
- Sensitivity Study

FULL-SPECTRUM TRAJECTORY GENERATION CAPABILITIES

HYPERSONIC GLIDE (HGV)

BOOST - GLIDE - DIVE

BALLISTIC MISSILE (IRBM/ICBM)

FRACTIONAL ORBITAL BOMBARDMENT

MANEUVERING REENTRY (MARV)

HYPERSONIC CRUISE (HCM)

ASCENT PHASE INTERCEPT

ISR & SENSOR GEOMETRY

ORBITAL / CISLUNAR

BEST-FIT MISSION AREAS

THREAT CHARACTERIZATION	Representative profiles for adversary HGV and ballistic threats
SENSOR & TRACKING	Coverage, geometry, and tracking for kill-chain analysis
ENGAGEMENT PLANNING	Trajectory-informed interceptor and sensor network planning
ARCHITECTURE EVAL	Threat-representative scenarios for system assessment
KILL CHAIN ANALYSIS	End-to-end observability and engagement window modeling

WHY COORBITAL

PHYSICS-BASED

High-fidelity 6-DOF propagation with verified atmospheric and aero models. No shortcuts, no black-box approximations.

LOW INTEGRATION BURDEN

Delivered as structured packages ready for prime or government office consumption from day one.

SPECIALIZED DEPTH

World-class trajectory generation and mission analysis expertise across the full threat spectrum.



READY TO ENGAGE IN 30 DAYS

Full sprint packages available to primes, SIEs, and government program offices. Scalable scope on request.

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