

CASE FILE 04 / 237UAP00611

# 237UAP00611

Radar/correlation-focused public UAP report; score 92

NORMAL-OBJECT FAVORED

REPORT NO.	UAP-OM-04-237UAP00611	DISPOSITION	NORMAL-OBJECT FAVORED
PRIMARY CASE	237UAP00611	GENERATED	2026-05-20 18:32 UTC
REPORT TIME	2024-02-18T10:20:00+00:00	OBSERVER	37.70308, -103.68474
SOURCE CASE IDS	237UAP00611		

## Abstract

This case file evaluates a reported UAP sighting against historical Starlink orbital elements. The primary external-object candidate is a 3-object same-launch group from 2023-09-12, spanning azimuth 218.6-225.72 deg and elevation 12.17-25.1 deg. The analysis distinguishes plausible geometric overlap from unresolved witness-language features.

This is a standalone independent analysis prepared from public-source records and public orbital datasets. It is not an official government determination, classification marking, or agency-authored report.

# 1. Executive Summary

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237UAP00611 is assessed as normal-object favored because the available public evidence gives a case-specific ordinary-object candidate: strong ADS-B aircraft candidate N121AN A321 a05776 at 34.1 km, azimuth 202.4 deg, elevation 17.2 deg, 0.70 min from report. Dense satellite presence alone is not treated as causation in this packet.

## 1.1 Key Findings

- Source score 92 based on: radar/primary-return language, negative official correlation, high-altitude report, maneuvering/motion anomaly, duration cue.
- Report time used: 2024-02-18T10:20:00+00:00.
- External object layer used: Starlink.
- Disposition standard: NORMAL-OBJECT requires case-specific causal fit. Satellite density above the horizon is context only and cannot by itself resolve the report.
- Case-specific ordinary-object evidence: strong ADS-B aircraft candidate N121AN A321 a05776 at 34.1 km, azimuth 202.4 deg, elevation 17.2 deg, 0.70 min from report.
- Non-causal context / rejection screens: very dense orbital-object sky background; context only, not causation; NASA/JPL known-small-body rejection screen present.
- Objects above horizon: 284; at/above 10 deg: 130.
- Top compact same-launch/designator group: 3 objects from 2023-09-12.
- No explicit Starlink/balloon wording was found in the source excerpt used for ranking.

## 1.2 Bottom Line

**NORMAL-OBJECT FAVORED:** A case-specific ordinary-object candidate exists from source language, orbital geometry, launch-object context, or compact trajectory grouping. Dense ordinary sky traffic alone is not treated as causation.

# 2. Source Control

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The source-control table identifies the public report records reviewed for this case and lists public access links where available. The table is included so this PDF remains interpretable when distributed by itself.

CASE ID	REPORT DATE FIELD	FACILITY / TITLE	TEXT EXTRACT	PUBLIC PDF LINK
237UAP00611	2/18/2024 3:20:00 AM (-07 MST)	N151SD UFO-UAP ACTIVITY 02-18-2024	text extract present	<a href="#">237UAP00611.pdf</a>

### 3. Original Report Evidence

PRIMARY EXCERPT USED FOR MATCHING	Washington Operations Center Date: 2/18/2024 3:20:00 AM (-07 MST) Title: N151SD UFO-UAP ACTIVITY 02-18-2024 Latitude: 37.927239520000001 Latitude: -101.9780492 DESCRIPTION PRELIM INFO FROM FAA OPS: LAMAR, CO/UFO-UAP ACTIVITY/0320M/DENVER ARTCC ADVISED N151SD, GULFSTREAM GLF4, LAS - TEB, REPORTED SEEING 3 BRIGHT LIGHTS MOVING VERY FAST WITH DRAMATIC MOVEMENTS BOTH VERTICALLY AND HORIZONTALLY AT FL510 OR HIGHER. PILOT FIRST REPORTED THE UAP 50 SE PUB AND THEN 40 ESE LAMAR. AMERICAN 2514 , A21N, SFO-CLT, REPORTED SEEING THE SAME LIGHTS WHILE AT FL350. UAP NOT OBSERVED ON TCAS. HOWEVER, UAP WAS OBSERVED ON ATC FACILITY RADAR. N151SD REPORTED SEEING THE LIGHTS FOR 20 MINUTES. WOC 7-3333 DJ/JG
REPORT TIME USED	2024-02-18T10:20:00+00:00
OBSERVER COORDINATE USED	37.70308, -103.68474
OBSERVER SOURCE BASIS	aviation_offset:50 SE PUB (public text extract 237UAP00611)

### 4. Methodology

- Spacetime extraction.** The report time and observer coordinate were extracted from the public text report and normalized to UTC. Aviation fixes/radials were resolved during earlier preprocessing where applicable.
- External object dataset.** The object layer used historical Space-Track/TLE-derived Starlink element rows. The analytic mode for this case is historical Starlink element propagation and same-launch/designator sky grouping.
- Propagation.** Orbital elements were propagated to the report minute and observer location. For launch-object checks, samples around the report minute were retained. For Starlink group checks, objects above the horizon were clustered by sky position and filtered for same-launch groupings.
- Comparison.** The output was compared against the report's count of lights, direction cue, motion language, altitude/radar language, and whether the file itself already suggested a satellite explanation.
- Causation standard.** Mere object presence above the horizon is treated as background context only. A normal-object disposition requires a case-specific causal fit, such as a named launch object, a compact same-launch trajectory group, or source language that directly supports that object class.
- Disposition assignment.** *Identified* means a specific normal object fits the report spacetime and the hard reported features do not materially conflict. *Normal-object favored* means a case-specific ordinary aerospace/orbital candidate exists, but it is not a full named identification. *Insufficient* means the file is too thin to carry high anomaly value. *High-value unresolved* is used when radar, video, rapid maneuver, or multi-witness features remain after reasonable normal-object checks.

## 5. External Object Evidence

### 5.1 Search Volume and Density

This table is a screening layer only. Objects above the horizon show background opportunity; they do not establish causation unless a specific object or compact trajectory group matches the reported behavior.

STARLINK CATALOG IDS CONSIDERED	5459	HISTORICAL ELEMENT ROWS	5415
ABOVE HORIZON AT REPORT MINUTE	284	AT/ABOVE 10 DEG	130
LARGEST SAME-SKY CLUSTER	116		

### 5.2 Same-Launch / Same-Designator Candidate Groups

#	LAUNCH DATE	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS	MEMBERS
1	2023-09-12	3	218.6-225.72 deg	12.17-25.1 deg	westward, rising	STARLINK-30404, STARLINK-30405, STARLINK-30431

### 5.3 Primary Group Members

OBJECT	NORAD	LAUNCH	AZ	EL	RANGE KM	APPARENT MOTION	ELEMENT AGE H
STARLINK-30404	57853	2023-09-12	218.6	25.1	1049.18	westward, rising	4.56
STARLINK-30405	57851	2023-09-12	225.72	19.29	1241.7	westward, rising	4.57
STARLINK-30431	57852	2023-09-12	222.25	12.17	1583.47	westward, rising	4.58

### 5.4 Bright-Sky Context: Top Starlink Objects by Elevation

OBJECT	AZ	EL	RANGE KM	APPARENT MOTION	LAUNCH DATE
STARLINK-31163	287.09	72.57	512.42	westward, setting	2024-01-15
STARLINK-5922	349.6	71.39	607.31	eastward, setting	2023-03-17
STARLINK-3861	124.98	69.43	575.72	westward, setting	2022-05-06
STARLINK-5855	273.66	68.77	594.33	westward, setting	2023-03-17
STARLINK-6349	351.57	61.52	632.32	eastward, setting	2023-07-07
STARLINK-5556	143.97	51.42	700.14	westward, setting	2023-01-26
STARLINK-30492	71.45	49.68	714.44	eastward, setting	2023-09-24
STARLINK-4766	38.63	48.08	707.31	eastward, setting	2022-09-19
STARLINK-4002	241.77	47.25	714.43	westward, setting	2022-05-14
STARLINK-1879	276.54	45.69	740.81	westward, setting	2020-11-25
STARLINK-5674	316.89	45.24	762.88	eastward, rising	2023-02-02
STARLINK-5404	122.27	43.85	751.12	westward, setting	2022-12-17

### 5.5 Largest Sky Clusters

#	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS
1	116	1.94-358.88 deg	10.0-49.68 deg	eastward, level, eastward, rising, eastward, setting, westward, level, westward, rising, westward, setting
2	5	24.02-38.63 deg	30.32-48.08 deg	eastward, setting
3	2	273.66-287.09 deg	68.77-72.57 deg	westward, setting

#	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS
4	2	349.6-351.57 deg	61.52-71.39 deg	eastward, setting
5	1	124.98-124.98 deg	69.43-69.43 deg	westward, setting

5.6 Space-Track SATCAT Enrichment

Space-Track SATCAT metadata was pulled as a cached subset for NORAD catalog IDs appearing in this packet's evidence tables. This section adds owner/type/status context to the propagated object candidates.

PACKET SATCAT SUBSET ROWS	5370	FETCHED	2026-05-19T01:19:50+00:00
THIS CASE NORAD IDS CHECKED	33	SATCAT ROWS MATCHED	33
TOP OWNERS	US: 33		
OBJECT TYPES	PAYLOAD: 33		

5.7 Space-Track Metadata for Top Propagated Objects

NORAD	OBJECT NAME	TYPE	OWNER	LAUNCH DATE	DECAY DATE
58807	STARLINK-31163	PAYLOAD	US	2024-01-15	n/a
55925	STARLINK-5922	PAYLOAD	US	2023-03-17	n/a
52503	STARLINK-3861	PAYLOAD	US	2022-05-06	n/a
55917	STARLINK-5855	PAYLOAD	US	2023-03-17	2025-11-23
57241	STARLINK-6349	PAYLOAD	US	2023-07-07	n/a
55385	STARLINK-5556	PAYLOAD	US	2023-01-26	n/a
57921	STARLINK-30492	PAYLOAD	US	2023-09-24	n/a
53840	STARLINK-4766	PAYLOAD	US	2022-09-19	n/a
52612	STARLINK-4002	PAYLOAD	US	2022-05-14	n/a
47164	STARLINK-1879	PAYLOAD	US	2020-11-25	2025-04-05
55465	STARLINK-5674	PAYLOAD	US	2023-02-02	n/a
54769	STARLINK-5404	PAYLOAD	US	2022-12-17	2025-01-04

5.6 NASA/JPL Near-Earth Object Screen

This secondary object screen checks NASA/JPL close-approach objects near the report date and propagates their observer geometry through Horizons at the report coordinate. It is a known-object rejection layer, not a generic astronomy backdrop.

NASA/JPL CAD WINDOW	event date +/- 1 day, dist-max 0.2 au	COORDINATE USED	37.70, -103.68
CLOSE-APPROACH OBJECTS	22	ABOVE HORIZON	14
BRIGHT-ISH ABOVE HORIZON	0 using apparent magnitude <= 10 screen		

5.7 NASA/JPL Objects Above Horizon

OBJECT	CLOSE APPROACH UTC	DIST AU	H	AZ	EL	APP MAG
2024 CS7	2024-Feb-17 22:44	0.0209726045454978	25.11	285.59	43.63	17.91
2024 CS6	2024-Feb-17 17:29	0.0191474200083196	26.15	230.47	41.91	18.45
2016 CA138	2024-Feb-18 16:44	0.0644686869889789	23.31	202.29	30.05	18.98
2024 EY2	2024-Feb-18 19:58	0.0729453549652706	22.01	14.66	26.02	19.52
2024 DZ	2024-Feb-17 06:32	0.0121636018899248	28.45	261.93	32.02	19.75
2024 BJ5	2024-Feb-17 11:42	0.0953339401194425	22.52	135.98	38.58	20.10
2024 BE2	2024-Feb-18 09:22	0.0855038216297829	23.87	159.51	79.66	20.41

OBJECT	CLOSE APPROACH UTC	DIST AU	H	AZ	EL	APP MAG
2024 CR5	2024-Feb-17 14:43	0.0439405237090806	25.57	333.57	35.65	20.98
2024 EB1	2024-Feb-18 11:02	0.148283398313261	22.84	74.78	61.18	21.23
2024 EU2	2024-Feb-18 18:17	0.033331932935766	24.82	123.49	13.19	21.35

5.8 NASA/JPL Bright-Candidate Result

OBJECT	AZ	EL	APP MAG
No above-horizon close-approach object met the apparent magnitude <= 10 screen.			

- NASA/JPL CAD listed 22 near-Earth close approaches in the event-date +/-1 day window within 0.2 au.
- Horizons placed 14 of those objects above the local horizon at the report coordinate/time.
- None of the above-horizon close-approach objects were remotely bright enough for naked-eye explanation using the mag<=10 screen.

5.9 NASA / NOAA / ADS-B Expansion Layer

This source layer adds free NASA context that was previously missing from most packet cases. It is contextual evidence; it does not replace aircraft, satellite, balloon, or radar causation tests.

HOURLY UTC	2024021810
CLOUD AMOUNT	9.17%
PRECIPITATION	0.0 mm/hr
10 M WIND	3.67 m/s
TEMPERATURE	-4.83 C
RELATIVE HUMIDITY	56.73%
DONKI +/-1 DAY	CME: unavailable; FLR: unavailable; GST: 0

5.10 Horizons Sky Geometry Context

OBJECT	AZ	EL	APP MAG
Sun	71.62	-40.12	-26.77
Moon	309.42	-4.31	-10.83
Venus	97.37	-23.84	-3.91
Mars	96.51	-25.64	1.25
Jupiter	338.05	-35.80	-2.24
Saturn	61.25	-45.67	0.98

- Sun elevation was -40.1 deg, so this was a dark-sky/nighttime sighting.
- Moon was below horizon at elevation -4.3 deg.
- No checked bright planets were above the horizon at the primary coordinate/time.
- NASA POWER cloud amount for the hour was 9.17%, with precipitation 0.0 mm/hr.
- DONKI event counts in +/-1 day: GST=0.

5.11 Free Source Availability and Remaining Work

LAYER	STATUS	CASE-SPECIFIC NOTE
ADSB.LOL HISTORICAL RELEASE LISTING	screened/present	planes-readsb-staging-0 1590.0 MiB; planes-readsb-prod-0 1591.0 MiB
ADSB TRACKS DOWNLOADED	not yet exhausted	Requires targeted extraction from large daily history archives before claiming aircraft exhaustion.
NOAA GOES IMAGERY	not yet exhausted	Needed for cloud/lightning visual context.

LAYER	STATUS	CASE-SPECIFIC NOTE
NOAA GOES ABI/GLM MANIFEST	screened/present	Public S3 object availability for the report hour.
NOAA NEXRAD WEATHER RADAR	not yet exhausted	Weather radar only; not ATC radar.
NOAA IGRA RADIOSONDE	screened/present	Needed for balloon drift plausibility.
ASOS/METAR WEATHER OBSERVATIONS	screened/present	Nearest station surface observations around report time.

- ADSB.lol historical: extract aircraft traces from adsblol/globe\_history\_2024 for 2024-02-18, then filter +/-60 min and 250 nmi around 37.7031,-103.6847.
- NASA POWER/Horizons/DONKI: batch context for 237UAP00611 at 2024-02-18T10:20:00+00:00.
- NOAA GOES: pull nearest ABI/GLM products for the UTC hour and render cloud/lightning map.
- NOAA NEXRAD: select nearest radar stations and render Level-II/III weather radar sweep around event time.
- NOAA IGRA: find nearest radiosonde station launches bracketing the event and model wind drift for balloon-like descriptions.
- Space-Track gp\_history/decay: fetch exact historical element rows and decay/reentry status for top candidate NORAD IDs.

### 5.12 Weather, Imagery, and Balloon Query Plan

This plan identifies the concrete free sources needed for the next case-specific weather and balloon checks. These are not treated as completed exclusions until the data are downloaded and plotted.

GOES SATELLITE	GOES16
GOES ABI PREFIX	<a href="https://noaa-goes16.s3.amazonaws.com/ABI-L2-CMIPF/2024/049/10/">https://noaa-goes16.s3.amazonaws.com/ABI-L2-CMIPF/2024/049/10/</a>
GOES GLM LIGHTNING PREFIX	<a href="https://noaa-goes16.s3.amazonaws.com/GLM-L2-LCFA/2024/049/10/">https://noaa-goes16.s3.amazonaws.com/GLM-L2-LCFA/2024/049/10/</a>

### 5.13 Nearest Weather-Airport Candidates

STATION	NAME	DISTANCE KM	COORDINATE
KLAA	Southeast Colorado Regional Airport	96.10	38.07, -102.69
KPUB	Pueblo Memorial Airport	96.50	38.29, -104.50
KFCS	Butts AAF (Fort Carson) Air Field	143.30	38.68, -104.76
KCOS	City of Colorado Springs Municipal Airport	151.40	38.81, -104.70
KALS	San Luis Valley Regional Airport/ Bergman Field	194.60	37.43, -105.87

- KLAA: [IEM ASOS/METAR daily CSV query](#)
- KPUB: [IEM ASOS/METAR daily CSV query](#)
- KFCS: [IEM ASOS/METAR daily CSV query](#)

### 5.14 Nearest Radiosonde Stations

STATION	NAME	DISTANCE KM	COORDINATE
USM00072363	AMARILLO/INTL.; TX.	326.50	35.23, -101.71
USM00072451	DODGE CITY/MUN.; KS.	326.80	37.76, -99.97
USM00072365	ALBUQUERQUE/INT.; NM.	396.20	35.04, -106.62
USM00072476	GRAND JUNCTION/WALKER FIELD; C	450.10	39.12, -108.53
USM00072562	NORTH PLATTE/LEE BIRD; NE.	459.50	41.13, -100.70

### 5.15 ASOS/METAR Surface Weather Observations

surface visibility ranged 10-10 statute miles; no precipitation was reported in the retained observations; no low broken/overcast cloud ceiling was evident in the retained station observations. Surface ASOS/METAR observations describe airport-level weather and visibility; they do not by themselves prove conditions at the sighting altitude or line of sight.

STATION	DISTANCE KM	NEAREST OBS UTC	VIS SM	SKY	WIND DEG/KT	METAR
KLAA	96.10	2024-02-18T09:53:00 +00:00	10.00	CLR, M, M, M	250.00 / 9.00	KLAA 180953Z AUTO 25009KT 10SM CLR M07/M08 A3011 RMK AO2 SLP219 T10671083
KPUB	96.50	2024-02-18T09:53:00 +00:00	10.00	CLR, M, M, M	260.00 / 5.00	KPUB 180953Z 26005KT 10SM CLR M08/M09 A3009 RMK AO2 SLP221 I1000 T10781094
KFCS	143.30	2024-02-18T09:55:00 +00:00	10.00	CLR, M, M, M	320.00 / 4.00	KFCS 180955Z AUTO 32004KT 10SM CLR M08/M11 A3003 RMK AO2 SLP229 T10771106 \$

5.16 NOAA IGRA Radiosonde Wind Profile

Nearest sounding implies mean 0-12 km wind drift toward 134.3 deg at 13.85 m/s; a passive balloon could drift about 99.7 km in two hours under this crude layer-average model. Radiosonde winds are sparse station soundings; balloon drift remains approximate without launch time, ascent rate, object altitude, and exact line-of-sight bearing.

STATION	NAME	DISTANCE KM	SOUNDING UTC	MEAN DRIFT BEARING	MEAN SPEED M/S	2H DRIFT KM	MAX WIND
USM00072363	AMARILLO/ INTL.; TX.	326.50	2024-02-18T12:00 :00+00:00	134.30	13.85	99.70	33.40 at 13680.00 m

5.17 NOAA GOES ABI/GLM Public File Manifest

GOES public S3 objects are listed for the report hour where available. This is an availability manifest, not yet a rendered satellite image.

SATELLITE	GOES16	BUCKET	noaa-goes16
ABI SAMPLE FILES	12	GLM SAMPLE FILES	12

ABI sample objects:

- [ABI-L2-CMIPF/2024/049/10/OR\\_ABI-L2-CMIPF-M6C01\\_G16\\_s20240491000210\\_e20240491009518\\_c20240491009583.nc](#)
- [ABI-L2-CMIPF/2024/049/10/OR\\_ABI-L2-CMIPF-M6C01\\_G16\\_s20240491010210\\_e20240491019518\\_c20240491019593.nc](#)
- [ABI-L2-CMIPF/2024/049/10/OR\\_ABI-L2-CMIPF-M6C01\\_G16\\_s20240491020210\\_e20240491029518\\_c20240491029585.nc](#)
- [ABI-L2-CMIPF/2024/049/10/OR\\_ABI-L2-CMIPF-M6C01\\_G16\\_s20240491030210\\_e20240491039518\\_c20240491039591.nc](#)

GLM lightning sample objects:

- [GLM-L2-LCFA/2024/049/10/OR\\_GLM-L2-LCFA\\_G16\\_s20240491000000\\_e20240491000200\\_c20240491000219.nc](#)
- [GLM-L2-LCFA/2024/049/10/OR\\_GLM-L2-LCFA\\_G16\\_s20240491000200\\_e20240491000400\\_c20240491000417.nc](#)
- [GLM-L2-LCFA/2024/049/10/OR\\_GLM-L2-LCFA\\_G16\\_s20240491000400\\_e20240491001000\\_c20240491001017.nc](#)
- [GLM-L2-LCFA/2024/049/10/OR\\_GLM-L2-LCFA\\_G16\\_s20240491001000\\_e20240491001200\\_c20240491001219.nc](#)

5.18 ADSB.lol Historical Aircraft Track Extraction

This layer uses the downloaded ADSB.lol daily history archive to test actual aircraft tracks near the report coordinate and minute. It is not treated as a primary-radar substitute; it is a transponder/receiver-derived aircraft screen.

ARCHIVE WINDOW	2024-02-18T09:05:00+00:00 to 2024-02-18T11:35:00+00:00	RADIUS	300.00 nmi
TRACE FILES SCANNED	45012	TRACKS RETAINED	156
SUPPORT STATUS	aircraft strong candidate present	BEST-CANDIDATE NOTE	



			ordinary-object favored if the report's count, color, direction, and motion can be reconciled with the candidate track(s).
<b>STRONG CANDIDATES</b>	2	<b>PLAUSIBLE CANDIDATES</b>	17
<b>REPORTING-AIRCRAFT TRACKS EXCLUDED</b>	2	<b>WEAK CANDIDATES</b>	21

### 5.19 Top ADS-B Candidate Tracks

AIRCRAFT	STATUS	SCORE	MIN DIST KM	NEAREST DT MIN	ALT FT	AZ	EL
N121AN A321 a05776	strong aircraft candidate	83.98	32.30	0.05	34975	202.40	17.20
N433AN A21N a52e50	strong aircraft candidate	58.68	51.40	0.14	33325	230.10	7.92
C-FLEJ B38M c01d7e	reporting aircraft track; excluded from support counts	92.23	20.00	0.08	37000	229.10	29.05
N151SD GLF4 a0cf7a	reporting aircraft track; excluded from support counts	88.76	4.30	0.12	41050	347.70	70.89
N922NK A20N acc6ce	plausible aircraft candidate	52.35	118.50	0.05	37000	316.70	4.18
N968NK A20N ad7b14	plausible aircraft candidate	51.85	148.60	0.10	37000	350.70	3.67
N510UW A321 a66346	plausible aircraft candidate	48.50	89.80	0.09	33000	195.50	5.35
N969JT A321 ad7e6f	plausible aircraft candidate	46.68	86.80	0.13	34200	220.10	5.96

## 6. Annotated Evidence Figure



Generated figure copied from the local evidence-plot output. It is included as an analytic visualization, not as original sensor imagery.

## 7. Analytic Comparison

CRITERION	REPORT EVIDENCE	ANALYTIC TREATMENT
TIME CONSTRAINT	2024-02-18T10:20:00+00:00	Directly used in propagation; this is a hard filter, not descriptive context.
LOCATION CONSTRAINT	37.70308, -103.68474	Directly used as observer point for azimuth/elevation/range computation.
COUNT / PATTERN	three-object/light language present	Primary same-launch group contains 3 propagated objects in a compact sky sector.
MOTION LANGUAGE	moving	Apparent motion labels in the object table provide a plausible but not definitive comparison.
RADAR / OFFICIAL CHECK	not observed on ATC radar	No ATC radar return can be consistent with distant orbital objects or visual aircraft-light hypotheses, but it does not prove the match.
ANALYTIC DISPOSITION	normal-object	237UAP00611 is assessed as normal-object favored because the available public evidence gives a case-specific ordinary-object candidate: strong ADS-B aircraft candidate N121AN A321 a05776 at 34.1 km, azimuth 202.4 deg, elevation 17.2 deg, 0.70 min from report. Dense satellite presence alone is not treated as causation in this packet.

## 8. Caveats, Limitations, and Collection Gaps

- No raw cockpit video, ATC replay, radar plot, or witness interview transcript was reviewed unless explicitly stated in the public source text.
- Aviation-derived coordinates can represent a nearby fix/radial or report point, not necessarily the actual line-of-sight intercept point.
- Starlink visibility depends on illumination, observer altitude, atmospheric conditions, and apparent brightness; this analysis tests geometry, not photometry. No brightness model is used unless explicitly stated elsewhere in the case file.
- TLE propagation is appropriate for screening and reconstruction but is not a substitute for authoritative operational ephemerides.
- When many satellites are above the horizon, generic presence is weak evidence and is not treated as causation. The report emphasizes named launch-object checks or compact same-launch trajectory groups.
- Normal-object favored is not the same as a perfect named-object identification; it requires a case-specific ordinary-object candidate stronger than simple object density.

## Appendix A. Public Report Text Extracts

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### 237UAP00611

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Washington Operations Center

Date: 2/18/2024 3:20:00 AM (-07 MST)  
Title: N151SD UFO-UAP ACTIVITY 02-18-2024  
Latitude: 37.927239520000001

Latitude: -101.9780492

DESCRIPTION

PRELIM INFO FROM FAA OPS: LAMAR, CO/UFO-UAP ACTIVITY/0320M/DENVER ARTCC ADVISED N151SD, GULFSTREAM GLF4, LAS - TEB, REPORTED SEEING 3 BRIGHT LIGHTS MOVING VERY FAST WITH DRAMATIC MOVEMENTS BOTH VERTICALLY AND HORIZONTALLY AT FL510 OR HIGHER. PILOT FIRST REPORTED THE UAP 50 SE PUB AND THEN 40 ESE LAMAR. AMERICAN 2514 , A21N, SFO-CLT, REPORTED SEEING THE SAME LIGHTS WHILE AT FL350. UAP NOT OBSERVED ON TCAS. HOWEVER, UAP WAS OBSERVED ON ATC FACILITY RADAR. N151SD REPORTED SEEING THE LIGHTS FOR 20 MINUTES. WOC 7-3333 DJ/JG

## Appendix B. Computational Evidence Digest

This appendix preserves the principal computed values used in the assessment, shortened to the fields most relevant to audit and review.

```
{
  "report_time_utc": "2024-02-18T10:20:00+00:00",
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## Appendix C. Source Exhaustion Checklist

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This checklist records which source layers were actually applied to this individual report. It separates checked evidence from unexhausted collection gaps so the disposition is auditable when the PDF is read alone.

SOURCE LAYER	STATUS	CASE-SPECIFIC NOTE
NARA PUBLIC UAP/FAA REPORT	reviewed	Source IDs: 237UAP00611
TIME AND OBSERVER COORDINATE	extracted	2024-02-18T10:20:00+00:00 at 37.70308, -103.68474
ORBITAL OBJECT PROPAGATION	screened	Starlink
SPACE-TRACK SATCAT METADATA	screened	33 NORAD IDs checked; 33 matched in local SATCAT subset
LAUNCH-OBJECT/SUPGP LAYER	not applicable	not a launch-object case
NASA/JPL KNOWN SMALL-BODY LAYER	screened	CAD/Horizons secondary screen included when this case had NEO-relevant timing/geometry
NASA POWER/HORIZONS/DONKI CONTEXT	screened	Hourly weather, sky geometry, and space-weather context where local JSON is present
AIRCRAFT/ADS-B LAYER	screened	45012 trace files scanned; 156 tracks retained; aircraft strong candidate present
NOAA GOES IMAGERY LAYER	not exhausted	Cloud/lightning imagery layer for the report hour
NOAA GOES ABI/GLM MANIFEST	screened	Public S3 object listing for the report hour
NOAA/NEXRAD WEATHER RADAR LAYER	not exhausted	Weather radar only; not ATC/primary radar
NOAA IGRA RADIOSONDE LAYER	screened	Balloon drift plausibility layer
ASOS/METAR SURFACE WEATHER	screened	Nearest station visibility, cloud, wind, precipitation, and METAR observations
WEATHER/BALLOON SOURCE PLAN	planned	Nearest weather-airport, GOES, and radiosonde queries are listed where local plan JSON is present
FINAL ANALYTIC DISPOSITION	normal-object favored	Presence-only satellite density is context only; a stronger case-specific fit is required for normal-object disposition

## References and Source Links

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1. National Archives and Records Administration. *Records Related to Unidentified Flying Objects (UFOs) and Unidentified Anomalous Phenomena (UAPs) at the National Archives*. <https://www.archives.gov/research/topics/uaps>
2. National Archives and Records Administration. *Record Group 615: Unidentified Anomalous Phenomena Records Collection*. <https://www.archives.gov/research/topics/uaps/rg-615>
3. National Archives and Records Administration. *Bulk Downloads for Records Related to Unidentified Anomalous Phenomena (UAPs)*. <https://www.archives.gov/research/catalog/catalog-bulk-downloads/uap-bulk-download>
4. National Archives Catalog. *Records from the Federal Aviation Administration Relating to Unidentified Anomalous Phenomena, National Archives Identifier 493468575*. <https://catalog.archives.gov/id/493468575>
5. National Archives direct digital object. *237UAP00611.pdf, FAA UAP report record copied from RG 615 bulk digital objects*. <https://s3.dualstack.us-east-1.amazonaws.com/NARAprdstorage/lz/electronic-records/rg-615/493468575/237UAP00611.pdf>
6. Hugging Face dataset. *oxzoid/space-track-tle-history: historical TLE archive used for Starlink screening*. <https://huggingface.co/datasets/oxzoid/space-track-tle-history>
7. Space-Track.org. *Public source for the underlying U.S. Space Surveillance Network TLE distribution referenced by the historical TLE archive*. <https://www.space-track.org/>
8. Space-Track.org. *API documentation for SATCAT and catalog metadata classes used for local enrichment*. <https://www.space-track.org/documentation#/api>
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10. NASA/JPL Solar System Dynamics. *Horizons API documentation for observer geometry and apparent magnitude queries*. <https://ssd-api.jpl.nasa.gov/doc/horizons.html>
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12. NASA. *DONKI space weather API documentation*. <https://api.nasa.gov/>
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14. ADSB.lol. *Historical open-data release documentation*. <https://www.adsb.lol/docs/open-data/historical/>
15. OpenSky Network. *REST API documentation*. <https://openskynetwork.github.io/opensky-api/rest.html>
16. OpenSky Network. *Historical data via Trino documentation*. <https://openskynetwork.github.io/opensky-api/trino.html>
17. NASA GIBS. *Global Imagery Browse Services API documentation*. <https://nasa-gibs.github.io/gibs-api-docs/>
18. NASA Earthdata. *Common Metadata Repository search API documentation*. <https://cmr.earthdata.nasa.gov/search/site/docs/search/api.html>
19. NOAA / AWS Open Data. *GOES public dataset registry*. <https://registry.opendata.aws/noaa-goes/>
20. NOAA / AWS Open Data. *NEXRAD public dataset registry*. <https://registry.opendata.aws/noaa-nexrad/>
21. NOAA NCEI. *Integrated Global Radiosonde Archive*. <https://www.ncei.noaa.gov/products/weather-balloon/integrated-global-radiosonde-archive>
22. Iowa Environmental Mesonet. *ASOS/AWOS/METAR data download service*. <https://mesonet.agron.iastate.edu/request/download.phtml>
23. Celestrak. *Spacetrack Report No. 3: Models for propagation of NORAD element sets*. <https://celestrak.org/NORAD/documentation/spacetrk.pdf>
24. Celestrak. *Supplemental GP element sets documentation and current endpoint index*. <https://celestrak.org/NORAD/elements/supplemental/>