

CASE FILE 82 / 237UAP00485

237UAP00485

Multiple-witness public UAP report; score 46

HIGH-VALUE UNRESOLVED

REPORT NO.	UAP-OM-82-237UAP00485	DISPOSITION	HIGH-VALUE UNRESOLVED
PRIMARY CASE	237UAP00485	GENERATED	2026-05-20 18:32 UTC
REPORT TIME	2023-02-28T00:55:00+00:00	OBSERVER	26.85375, -82.45301
SOURCE CASE IDS	237UAP00485		

Abstract

This case file evaluates a reported UAP sighting against the available orbital-object layer. No compact same-launch group fully identifies the file by itself. The final disposition is assigned under a normal-object favored standard, where ordinary aerospace/orbital explanations are preferred when they reasonably fit the report.

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

237UAP00485 was screened against historical public LEO catalog objects orbital elements at the extracted time and observer coordinate. The screen did not produce enough mundane evidence to close the case under the normal-object favored standard. Hard features retained for follow-up: multiple witnesses/facilities.

1.1 Key Findings

- Source score 46 based on: multiple aircraft/facility witnesses, high-altitude report, UAP/UFO language.
- Report time used: 2023-02-28T00:55:00+00:00.
- External object layer used: public LEO catalog objects.
- Disposition standard: UNRESOLVED requires case-specific causal fit. Satellite density above the horizon is context only and cannot by itself resolve the report.
- Non-causal context / rejection screens: very dense orbital-object sky background; context only, not causation.
- Remaining hard features: multiple witnesses/facilities.
- Objects above horizon: 940; at/above 10 deg: 431.
- No compact same-launch/designator group survived the report threshold.
- No explicit Starlink/balloon wording was found in the source excerpt used for ranking.

1.2 Bottom Line

HIGH-VALUE UNRESOLVED: Hard report features remain after the normal-object screens, such as primary/radar evidence, multiple witnesses, footage references, or motion language that still conflicts with the available object layer.

2. Source Control

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
237UAP00485	2/27/2023 7:55:00 PM (-05 EST)	N4200K UFO-UAP ACTIVITY 02-27-2023	text extract present	237UAP00485.pdf

3. Original Report Evidence

PRIMARY EXCERPT USED FOR MATCHING	Washington Operations Center Date: 2/27/2023 7:55:00 PM (-05 EST) Title: N4200K UFO-UAP ACTIVITY 02-27-2023 Latitude: 26.85374964 Latitude: -82.453014379999999 DESCRIPTION PRELIM INFO FROM FAA OPS: LA BELLE, FL/UFO-UAP ACTIVITY/2017E/ MIAMI ARTCC ADVISED N4200K, CESSNA C560, OPF - HOU, REPORTED VERY BRIGHT LIGHT PASS OFF LEFT WING ESTIMATED 10,000 FEET ABOVE ACFT WHILE W BOUND AT FL400 63 W LA BELLE VORTAC. NO EVASIVE ACTION REPORTED. LEOS NOT NOTIFIED. MULTIPLE ACFT REPORTED SAME INCIDENT. WOC 7-3333 DJ/JG
REPORT TIME USED	2023-02-28T00:55:00+00:00
OBSERVER COORDINATE USED	26.85375, -82.45301
OBSERVER SOURCE BASIS	(public text extract 237UAP00485)

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 public LEO catalog objects element rows. The analytic mode for this case is historical public LEO catalog objects 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.

PUBLIC LEO CATALOG OBJECTS CATALOG IDS CONSIDERED	19344	HISTORICAL ELEMENT ROWS	19344
ABOVE HORIZON AT REPORT MINUTE	940	AT/ABOVE 10 DEG	431
LARGEST SAME-SKY CLUSTER	425		

No compact same-launch/designator group survived the report threshold. In this condition, satellite density remains context only and cannot by itself resolve a report with hard features.

5.2 Same-Launch / Same-Designator Candidate Groups

#	LAUNCH DATE	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS	MEMBERS
No same-launch group identified.						

5.3 Primary Group Members

OBJECT	NORAD	LAUNCH	AZ	EL	RANGE KM	APPARENT MOTION	ELEMENT AGE H
No members available.							

5.4 Bright-Sky Context: Top public LEO catalog objects Objects by Elevation

OBJECT	AZ	EL	RANGE KM	APPARENT MOTION	LAUNCH DATE
NORAD 9013	84.87	81.63	2108.0	eastward, setting	76067B
NORAD 41888	256.27	72.91	541.18	eastward, setting	16078E
NORAD 41148	32.57	72.69	683.42	eastward, setting	00055CF
NORAD 39254	124.72	72.35	1159.25	westward, setting	13049B
NORAD 22824	277.05	71.7	842.59	eastward, setting	93061B
NORAD 43102	240.5	69.75	541.73	eastward, setting	18002D
NORAD 29806	294.27	69.34	932.49	eastward, setting	99025CY
NORAD 42578	277.91	68.99	1679.9	westward, setting	73086HS
NORAD 42832	224.14	68.98	626.09	westward, setting	17042H
NORAD 41412	286.31	68.86	896.92	eastward, setting	00055KR
NORAD 23793	46.78	67.66	1554.6	westward, setting	96009G
NORAD 234	255.4	63.05	1021.8	westward, setting	61015BS

5.5 Largest Sky Clusters

#	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS
1	425	0.15-359.3 deg	10.0-72.91 deg	eastward, level, eastward, rising, eastward, setting, nearly fixed azimuth, rising, nearly fixed azimuth, setting, westward, rising, westward, setting
2	5	18.75-124.72 deg	62.26-81.63 deg	

#	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS
				eastward, setting, westward, setting
3	1	81.07-81.07 deg	56.98-56.98 deg	eastward, 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	30	SATCAT ROWS MATCHED	29
TOP OWNERS	US: 9, CIS: 8, PRC: 7, FR: 1, GLOB: 1, JPN: 1		
OBJECT TYPES	DEBRIS: 18, PAYLOAD: 8, ROCKET BODY: 2, UNKNOWN: 1		

5.7 Space-Track Metadata for Top Propagated Objects

NORAD	OBJECT NAME	TYPE	OWNER	LAUNCH DATE	DECAY DATE
9013	SL-8 R/B	ROCKET BODY	CIS	1976-07-08	n/a
41888	CYGF08	PAYLOAD	US	2016-12-15	n/a
41148	NOAA 16 DEB	DEBRIS	US	2000-09-21	2024-03-09
39254	EPSILON DEB	DEBRIS	JPN	2013-09-14	n/a
22824	STELLA	PAYLOAD	FR	1993-09-26	n/a
43102	CZ-2D DEB	DEBRIS	PRC	2018-01-09	2024-05-29
29806	FENGYUN 1C DEB	DEBRIS	PRC	1999-05-10	n/a
42578	DELTA 1 DEB	DEBRIS	US	1973-11-06	n/a
42832	OBJECT H	UNKNOWN	TBD	2017-07-14	n/a
41412	NOAA 16 DEB	DEBRIS	US	2000-09-21	n/a
23793	SL-14 R/B	ROCKET BODY	CIS	1996-02-19	n/a
234	THOR ABLESTAR DEB	DEBRIS	US	1961-06-29	n/a

5.9 NASA / NOAA / ADS-B Expansion Layer

NASA POWER/Horizons/DONKI batch context had not yet been written for this case at packet build time.

5.11 Free Source Availability and Remaining Work

LAYER	STATUS	CASE-SPECIFIC NOTE
ADSB.LOL HISTORICAL RELEASE LISTING	screened/present	planes-readsb-test-1 897.4 MiB; planes-readsb-test-0 895.5 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.
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_2023 for 2023-02-28, then filter +/-60 min and 250 nmi around 26.8537,-82.4530.
- NASA POWER/Horizons/DONKI: batch context for 237UAP00485 at 2023-02-28T00:55:00+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	https://noaa-goes16.s3.amazonaws.com/ABI-L2-CMIPF/2023/059/00/
GOES GLM LIGHTNING PREFIX	https://noaa-goes16.s3.amazonaws.com/GLM-L2-LCFA/2023/059/00/

5.13 Nearest Weather-Airport Candidates

STATION	NAME	DISTANCE KM	COORDINATE
KPGD	Punta Gorda Airport	46.50	26.92, -81.99
KSRQ	Sarasota Bradenton International Airport	61.00	27.39, -82.55
KFMY	Page Field	65.70	26.59, -81.86
KRSW	Southwest Florida International Airport	78.10	26.53, -81.75
KAPF	Naples Municipal Airport	103.10	26.15, -81.78

- KPGD: [IEM ASOS/METAR daily CSV query](#)
- KSRQ: [IEM ASOS/METAR daily CSV query](#)
- KFMY: [IEM ASOS/METAR daily CSV query](#)

5.14 Nearest Radiosonde Stations

STATION	NAME	DISTANCE KM	COORDINATE
USM00072210	TAMPA BAY AREA; FL.	94.80	27.71, -82.40
USM00072202	MIAMI; FL (72202-0)	240.10	25.75, -80.38
USM00074794	CAPE KENNEDY	259.40	28.47, -80.55
USM00072201	KEY WEST/INT.; FL	264.30	24.55, -81.79
USM00072206	JACKSONVILLE/INTNL.; FL.	410.30	30.48, -81.70

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
KPGD	46.50	2023-02-28T00:53:00 +00:00	10.00	CLR, M, M, M	230.00 / 6.00	KPGD 280053Z 23006KT 10SM CLR 23/16 A3004 RMK AO2 SLP171 T02280161
KSRQ	61.00	2023-02-28T00:53:00 +00:00	10.00	CLR, M, M, M	200.00 / 8.00	KSRQ 280053Z 20008KT 10SM CLR 23/19 A2999 RMK AO2 SLP153 T02280189
KFMY	65.70	2023-02-28T00:53:00 +00:00	10.00	CLR, M, M, M	220.00 / 3.00	KFMY 280053Z 22003KT 10SM CLR

STATION	DISTANCE KM	NEAREST OBS UTC	VIS SM	SKY	WIND DEG/KT	METAR
						24/18 A3003 RMK AO2 SLP170 T02390183

5.16 NOAA IGRA Radiosonde Wind Profile

Nearest sounding implies mean 0-12 km wind drift toward 90.1 deg at 16.56 m/s; a passive balloon could drift about 119.2 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
USM00072210	TAMPA BAY AREA; FL.	94.80	2023-02-28T00:00:00+00:00	90.10	16.56	119.20	30.40 at 12290.00 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/2023/059/00/OR_ABI-L2-CMIPF-M6C01_G16_s20230590000206_e20230590009514_c20230590010001.nc](#)
- [ABI-L2-CMIPF/2023/059/00/OR_ABI-L2-CMIPF-M6C01_G16_s20230590010206_e20230590019514_c20230590019597.nc](#)
- [ABI-L2-CMIPF/2023/059/00/OR_ABI-L2-CMIPF-M6C01_G16_s20230590020206_e20230590029514_c20230590029595.nc](#)
- [ABI-L2-CMIPF/2023/059/00/OR_ABI-L2-CMIPF-M6C01_G16_s20230590030206_e20230590039514_c20230590039589.nc](#)

GLM lightning sample objects:

- [GLM-L2-LCFA/2023/059/00/OR_GLM-L2-LCFA_G16_s20230590000000_e20230590000200_c20230590000223.nc](#)
- [GLM-L2-LCFA/2023/059/00/OR_GLM-L2-LCFA_G16_s20230590000200_e20230590000400_c20230590000425.nc](#)
- [GLM-L2-LCFA/2023/059/00/OR_GLM-L2-LCFA_G16_s20230590000400_e20230590001000_c20230590001026.nc](#)
- [GLM-L2-LCFA/2023/059/00/OR_GLM-L2-LCFA_G16_s20230590001000_e20230590001200_c20230590001224.nc](#)

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	2023-02-28T00:55:00+00:00	Directly used in propagation; this is a hard filter, not descriptive context.
LOCATION CONSTRAINT	26.85375, -82.45301	Directly used as observer point for azimuth/elevation/range computation.
COUNT / PATTERN	three-object/light language present	No compact same-launch count match; retained for unresolved report features.
MOTION LANGUAGE	not explicit	Reported motion remains only partly explained; this is a principal reason for high-value unresolved status.
RADAR / OFFICIAL CHECK	not specified	Radar or hard maneuvering language is treated as a conflict/collection gap, not hand-waved away.
ANALYTIC DISPOSITION	unresolved	237UAP00485 was screened against historical public LEO catalog objects orbital elements at the extracted time and observer coordinate. The screen did not produce enough mundane evidence to close the case under the normal-object favored standard. Hard features retained for follow-up: multiple witnesses/facilities.

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.
- This case is retained as high-value unresolved because the hardest reported behavior is not resolved by the current normal-object layers.

Appendix A. Public Report Text Extracts

237UAP00485

Washington Operations Center

Date: 2/27/2023 7:55:00 PM (-05 EST)

Title: N4200K UFO-UAP ACTIVITY 02-27-2023

Latitude: 26.85374964

Latitude: -82.45301437999999

DESCRIPTION

PRELIM INFO FROM FAA OPS: LA BELLE, FL/UFO-UAP ACTIVITY/2017E/MIAMI ARTCC ADVISED N4200K, CESSNA C560, OFF - HOU, REPORTED VERY BRIGHT LIGHT PASS OFF LEFT WING ESTIMATED 10,000 FEET ABOVE ACFT WHILE W BOUND AT FL400 63 W LA BELLE VORTAC. NO EVASIVE ACTION REPORTED. LEOS NOT NOTIFIED. MULTIPLE ACFT REPORTED SAME INCIDENT. 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.

```

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02-27-2023\\nLatitude: 26.85374964 Latitude:  
-82.453014379999999\\n\\n\\n\\nDESCRIPTION\\n\\nPRELIM INFO FROM FAA OPS: LA BELLE, FL/UFO-UAP ACTIVITY/2017E/MIAMI ARTCC ADVISED  
N4200K, CESSNA\\nC560, OPF - HOU, REPORTED VERY BRIGHT LIGHT PASS OFF LEFT WING ESTIMATED 10,000 FEET ABOVE ACFT\\nWHILE W BOUND  
AT FL400 63 W LA BELLE VORTAC. NO EVASIVE ACTION REPORTED. LEOS NOT NOTIFIED.\\nMULTIPLE ACFT REPORTED SAME INCIDENT. WOC 7-3333  
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    "ground_track_label": "NNW",
    "launch_date": "99025CY",
    "launch_designator": "99025CY",
    "name": "NORAD 29806",
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    "range_km": 932.49,
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    "subpoint_lat": 27.9005,
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"azimuth_deg": 277.91,
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"elevation_deg": 68.99,
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"azimuth_plus_5m_deg": 195.24,
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"elevation_plus_5m_deg": 3.35,
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"launch_date": "17042H",
"launch_designator": "17042H",
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"range_km": 626.09,
"sky_motion_label": "westward, setting",
"subpoint_lat": 25.5149,
"subpoint_lon": -83.878
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"azimuth_plus_5m_deg": 342.08,
"element_age_hours": 5.23,
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"elevation_plus_5m_deg": 10.65,
"epoch_altitude_km": 840.23,
"ground_track_bearing_deg": 346.99,
"ground_track_label": "NNW",
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"launch_designator": "00055KR",
"name": "NORAD 41412",
"norad_id": "41412",
"range_km": 896.92,
"sky_motion_label": "eastward, setting",
"subpoint_lat": 27.5502,
"subpoint_lon": -85.2302
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"azimuth_plus_2m_deg": 20.77,
"azimuth_plus_5m_deg": 12.35,
"element_age_hours": 4.98,
"element_epoch": "2023-02-27T19:56:06.139968+00:00",
"elevation_deg": 67.66,
"elevation_plus_2m_deg": 45.21,
"elevation_plus_5m_deg": 22.12,
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"launch_designator": "96009G",
"name": "NORAD 23793",
"norad_id": "23793",
"range_km": 1554.6,
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"subpoint_lat": 29.7783,
"subpoint_lon": -78.8274
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"element_epoch": "2023-02-28T00:11:19.639680+00:00",  
"elevation_deg": 63.05,  
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"elevation_plus_5m_deg": 15.58,  
"epoch_altitude_km": 835.42,  
"ground_track_bearing_deg": 157.9,  
"ground_track_label": "SSE",  
"launch_date": "61015BS",
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Appendix C. Source Exhaustion Checklist

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: 237UAP00485
TIME AND OBSERVER COORDINATE	extracted	2023-02-28T00:55:00+00:00 at 26.85375, -82.45301
ORBITAL OBJECT PROPAGATION	screened	public LEO catalog objects
SPACE-TRACK SATCAT METADATA	screened	30 NORAD IDs checked; 29 matched in local SATCAT subset
LAUNCH-OBJECT/SUPGP LAYER	not applicable	not a launch-object case
NASA/JPL KNOWN SMALL-BODY LAYER	not selected	CAD/Horizons secondary screen included when this case had NEO-relevant timing/geometry
NASA POWER/HORIZONS/DONKI CONTEXT	not exhausted	Hourly weather, sky geometry, and space-weather context where local JSON is present
AIRCRAFT/ADS-B LAYER	not exhausted	ADSB.lol historical release pattern is recorded separately; actual aircraft exhaustion requires targeted trace extraction
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	high-value unresolved	Presence-only satellite density is context only; a stronger case-specific fit is required for normal-object disposition

References and Source Links

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. *237UAP00485.pdf, FAA UAP report record copied from RG 615 bulk digital objects*. <https://s3.dualstack.us-east-1.amazonaws.com/NARAprodstorage/lz/electronic-records/rg-615/493468575/237UAP00485.pdf>
6. Hugging Face dataset. *oxzoid/space-track-tle-history: historical TLE archive used for public LEO catalog objects 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>
9. ADSB.lol. *Interactive API documentation and OpenAPI definition*. <https://api.adsb.lol/docs>
10. ADSB.lol. *Historical open-data release documentation*. <https://www.adsb.lol/docs/open-data/historical/>
11. OpenSky Network. *REST API documentation*. <https://openskynetwork.github.io/opensky-api/rest.html>
12. OpenSky Network. *Historical data via Trino documentation*. <https://openskynetwork.github.io/opensky-api/trino.html>
13. NASA GIBS. *Global Imagery Browse Services API documentation*. <https://nasa-gibs.github.io/gibs-api-docs/>
14. NASA Earthdata. *Common Metadata Repository search API documentation*. <https://cmr.earthdata.nasa.gov/search/site/docs/search/api.html>
15. NOAA / AWS Open Data. *GOES public dataset registry*. <https://registry.opendata.aws/noaa-goes/>
16. NOAA / AWS Open Data. *NEXRAD public dataset registry*. <https://registry.opendata.aws/noaa-nexrad/>
17. NOAA NCEI. *Integrated Global Radiosonde Archive*. <https://www.ncei.noaa.gov/products/weather-balloon/integrated-global-radiosonde-archive>
18. Iowa Environmental Mesonet. *ASOS/AWOS/METAR data download service*. <https://mesonet.agron.iastate.edu/request/download.phtml>
19. CelesTrak. *Spacetrack Report No. 3: Models for propagation of NORAD element sets*. <https://celestrak.org/NORAD/documentation/spacetrk.pdf>
20. CelesTrak. *Supplemental GP element sets documentation and current endpoint index*. <https://celestrak.org/NORAD/elements/supplemental/>