

OREGON FIREBALL SWARM

~9:00 PM PDT, 25 March 2021

(~04:00 UT on 26 March 2021)

SHOCKING
NEW FOOTAGE FROM SEATTLE SHOWS
LARGE METEOR OR UFO OVER
THE NIGHT SKY.
THIS THING SEEMS HUGE WHATEVER IT
IS.

**SKY ON FIRE OREGON METEOR
SHOWER – INCREDIBLE FOOTAGE**



1:35

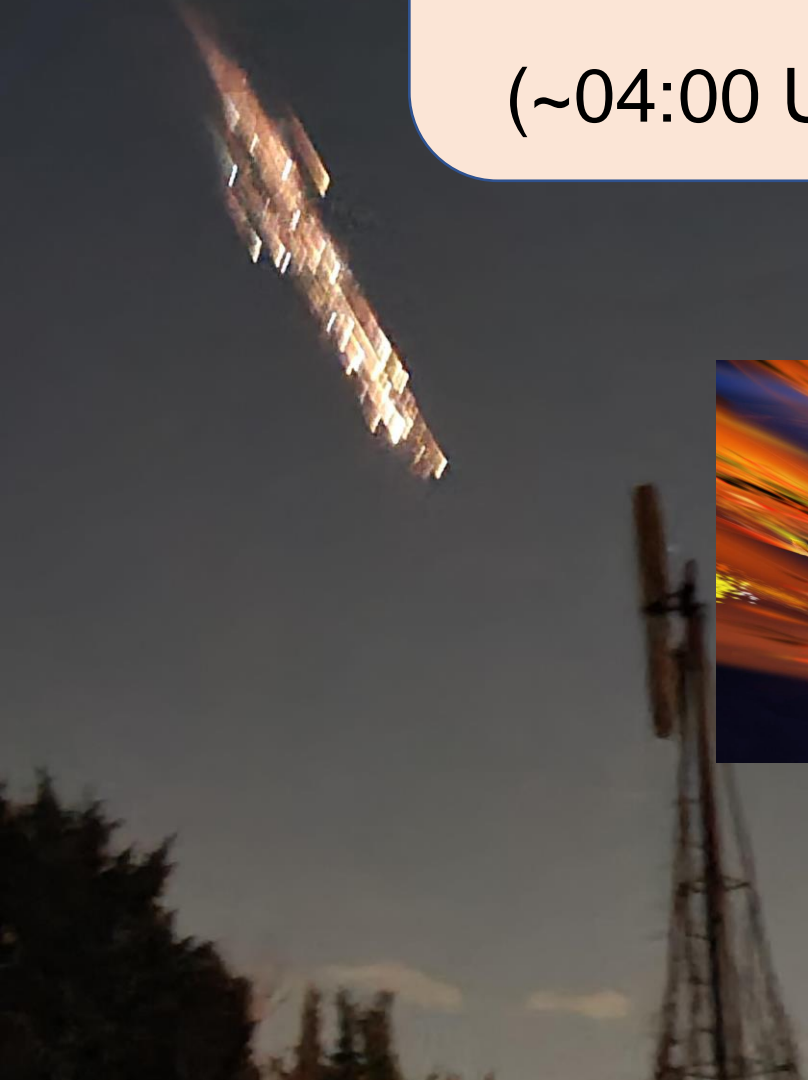
**Mystery Lights Above
Seattle and Portland?**



FINAL DRAFT
JAMES OBERG

jamesoberg@comcast.net

May 18, 2021



WHAT HAPPENED

Falcon 9 second stage from the 2021-017 Starlink launch [March 4] failed to safely de-orbit as planned, so it decayed naturally at approximately 04:00 UT on 26 March 2021

<https://www.zarya.info/2021#017>

NORAD #47782 (2021-017BN) listed it as "Falcon 9 RB" [SatTrackCam Leiden \(b\)log: Apparent failed deorbit of the Starlink-18 Falcon 9 upper stage \[UPDATED\]](#)

Around 9 PM local [PST] reentry was observed and recorded all across Oregon/Washington states and British Columbia.

Several pieces of the object were later recovered.

=====

Josie Conn == *Literally **flew over my house** outside Gaston Oregon. Got a picture at the very end once it started breaking up. Before it broke up it had a very long and bright tail behind it. Made me a nervous wreck.. all I could think was.. damn.. is this how it ends??.. **just like the damn dinosaurs.** my god.. I need a Xanax lol* <https://youtu.be/6pwogJ7TT-A>

The booster failure to deorbit safely was quickly noticed....




Jonathan McDowell 

@planet4589



It appears that the Falcon 9 second stage from the most recent Starlink launch (V1.0-L17) failed to deorbit itself, according to hobbyist observers:
satobs.org/seesat/Mar-2021

12:08 PM · Mar 9, 2021

... and responsible agencies  monitored the natural orbital decay and advised of imminent random reentry

<https://aerospace.org/reentries/falcon-9-rb-id-47782>

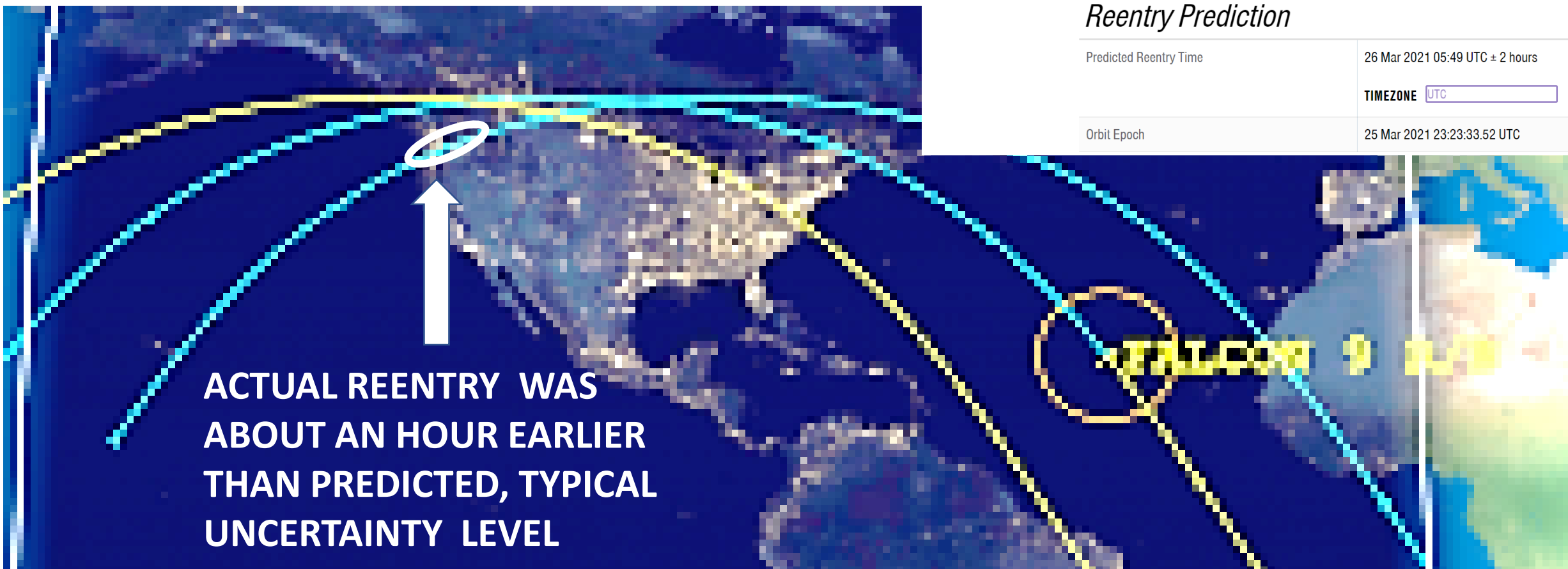
FALCON 9 R/B (ID 47782)

SHARING   

Reentry Prediction

Predicted Reentry Time	26 Mar 2021 05:49 UTC ± 2 hours
Orbit Epoch	25 Mar 2021 23:23:33.52 UTC

TIMEZONE





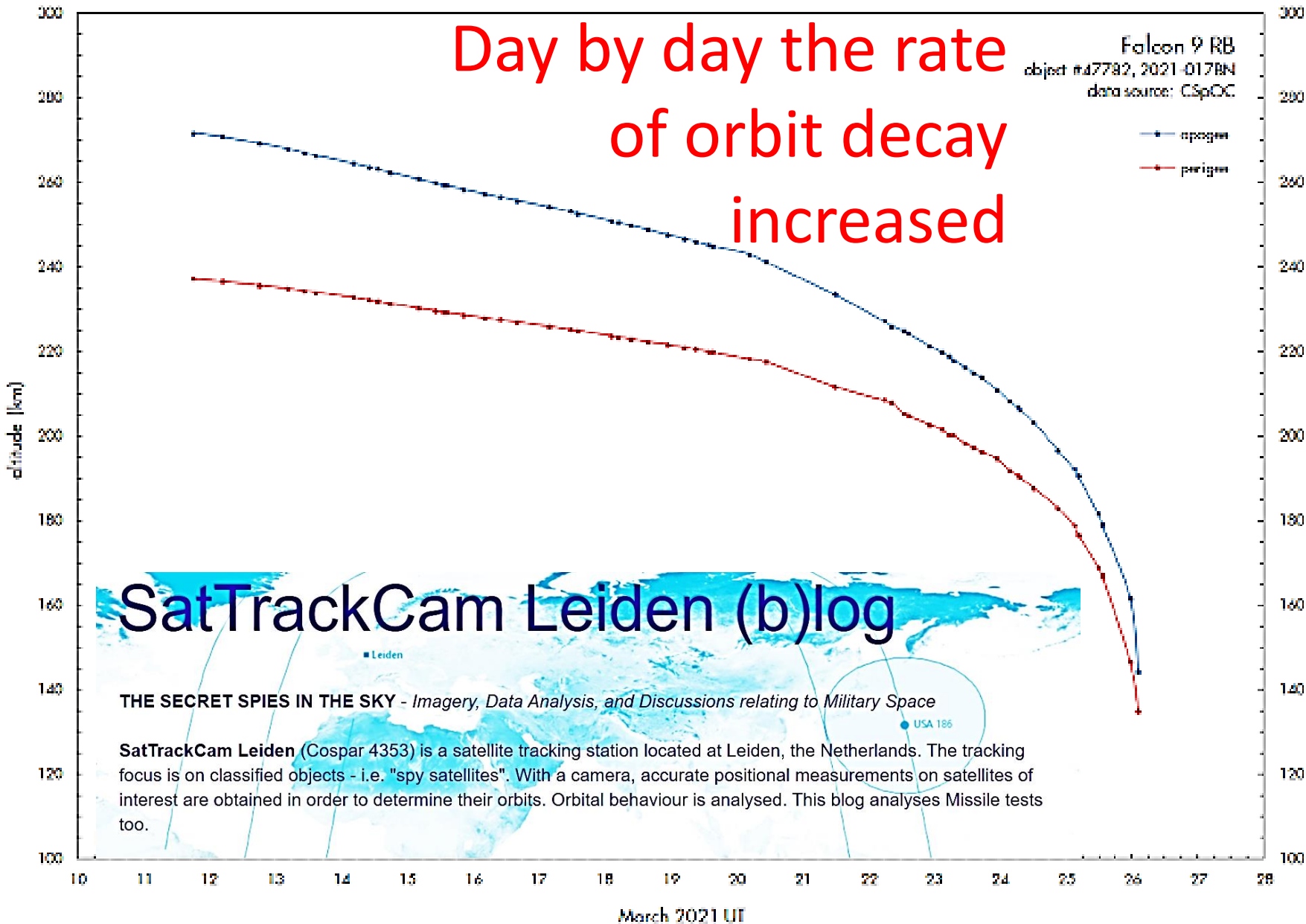
A FALCON-9 STAGE-2 IN-FLIGHT PHOTO [NOT THIS ACTUAL MISSION]



Thomas Pesquet managed to photograph the 2nd stage of Falcon 9 as it flew on a trajectory perfectly parallel to the Crew Dragon Endeavour. [April 24, 2021]

Development of reentry predictions

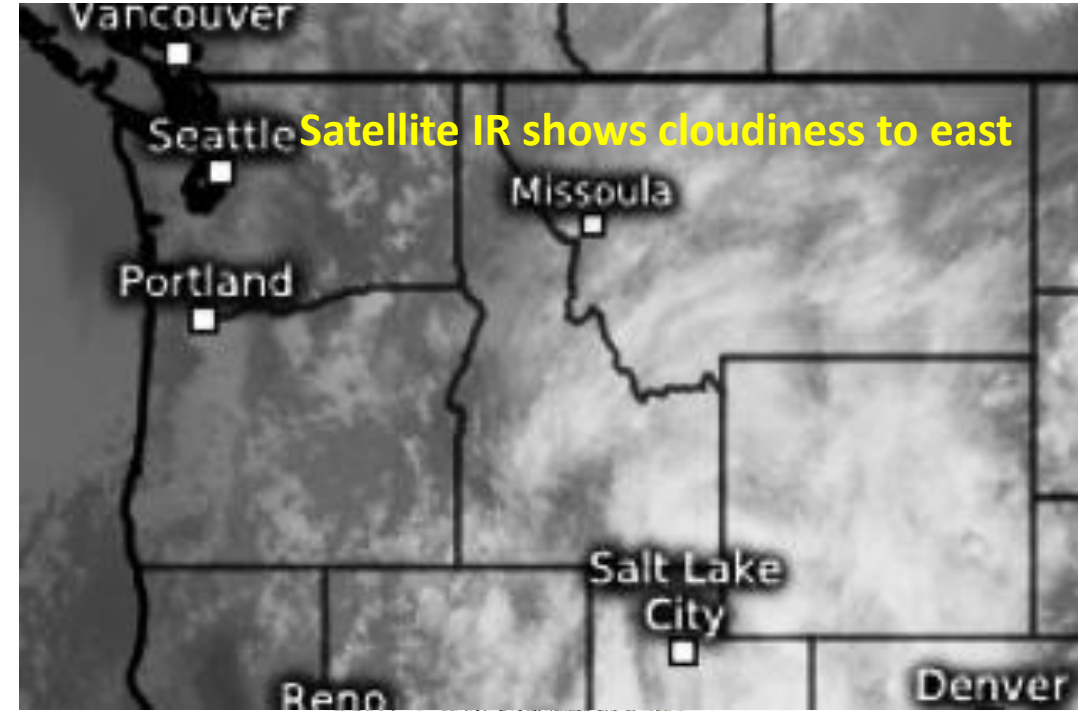
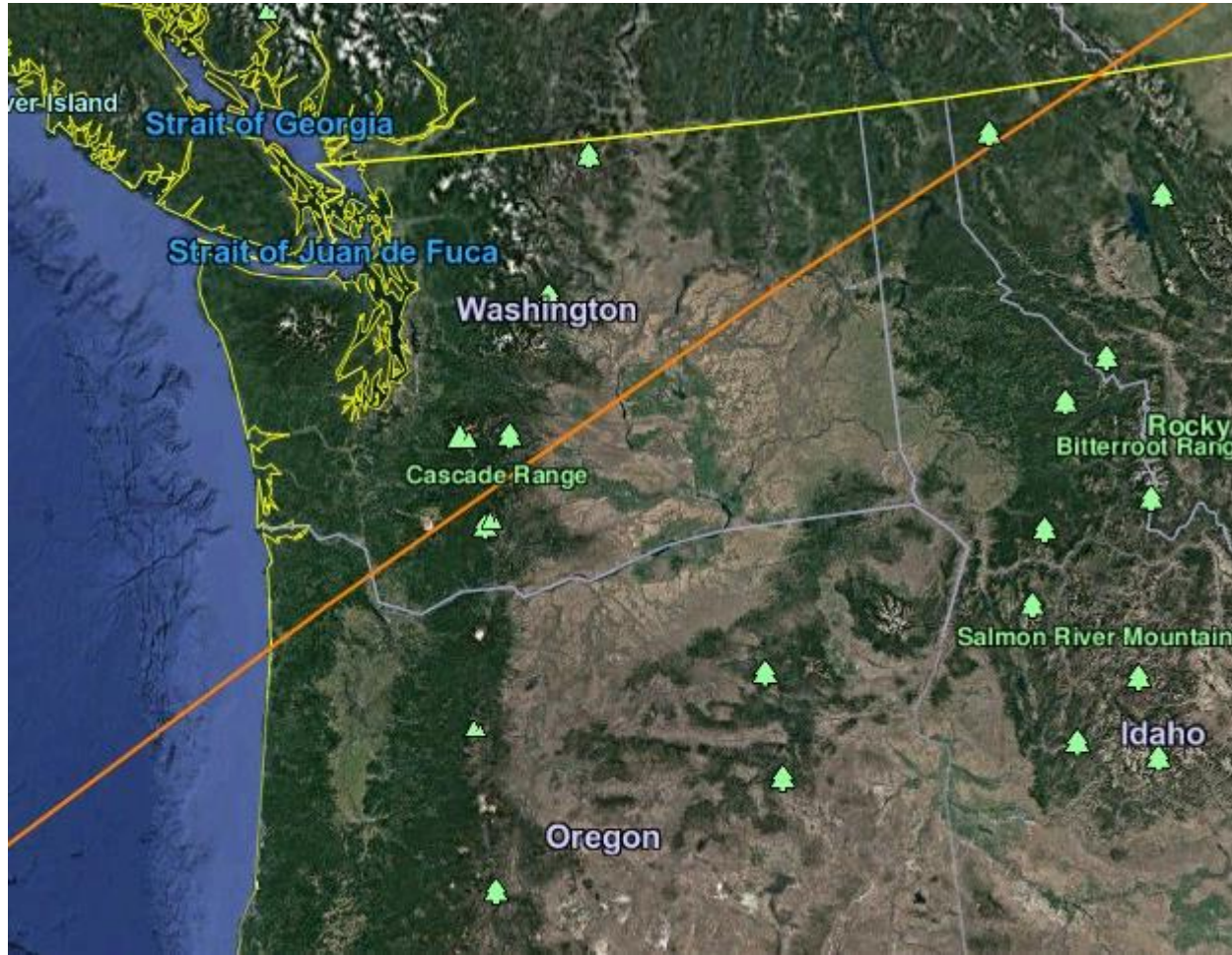
- WHY EXACT PREDICTIONS ARE PHYSICALLY IMPOSSIBLE:
[Why it's tough to predict reentries – Rocket Science \(esa.int\)](#)
- Why It's So Hard To Predict Where ...Space Junk Will Land
 - <https://youtu.be/afGFmAljL5E>
- [SatTrackCam Leiden \(b\)log: \[UPDATED\] Reentry predictions for the Falcon 9 RB 2021-017BN](#)
- <https://www.reddit.com/r/Portland/>
- Also the space track <https://www.heavens-above.com/orbit.aspx?satid=39271>
- I found a predicted reentry in the Falcon 9 R/B space track for 03/26/2021 which goes over the western US. Either a dead satellite or SpaceX debris
<http://www.zarya.info/Diaries/Launches/Decays.php>



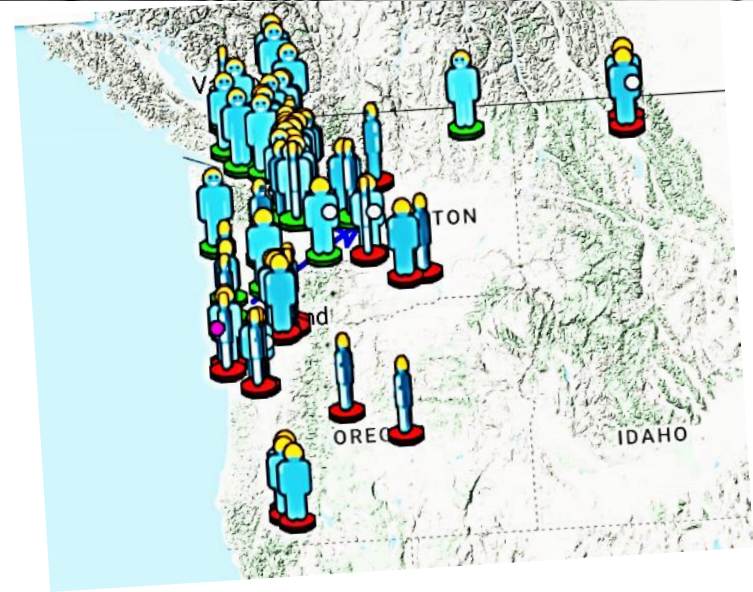
ONCE REENTRY WAS OBSERVED, IT THEN BECAME FEASIBLE TO ESTIMATE DEBRIS SCATTER AND BEST AREAS TO SEARCH. SEE APPENDIX 4 FOR RESULTS.

https://1.bp.blogspot.com/-95tgwE3bX2s/YF3Qzof4A3I/AAAAAAAGArk/vI_JnGd2AVIKrzN6BoM2x7Fa se5ScIleACNcBGAsYHQ/w640-h452/Falcon9_orbitevolution_diagram.png

Ground track, cloud cover, and ground reports



<https://twitter.com/planet4589/status/1375301028514500615/photo/1>



SPECIAL FEATURES OF THIS EVENT

- Closely followed major Hawaii reentry fireball swarm October 24
- For context see <http://jamesoberg.com/ufo/fireball.pdf>
- Dozens of videos and photos, and eyewitness reports
- Fireball tails were persistent so 'row of windows' effect was weaker
- Major witness misjudgments based on incorrect understanding of actual satellite reentry dynamics
- MANY reports of acoustic signatures, mostly [but not all] delayed several minutes after fireball passage
- Typical attraction of conspiratorial and superstitious interpretations

WHY IS THIS EVENT OF WIDER INTEREST?

- Magnitude of eyewitness misinterpretations continues to be amazing...
- ...Based on widespread fundamental misinformation of basic principles of physics in general, and spaceflight in particular, a challenge to educators and the mass media in general, and to NASA in particular.
- Documenting the scope of the fundamental challenge to assessing adequately the accuracy of any future witness descriptions of startling sky manifestations of any origin – natural events, human technology [missile/space activities, aircraft, weapons systems, etc], or potentially truly anomalous phenomena highly deserving of serious attention.
- Reaffirms the widespread and age-old human propensity to ‘rorshach’ pre-favored explanations onto once-in-a-lifetime ambiguous aerial apparitions, demonstrating creative “confirmation bias” in the sky.

ALTERNATE THEORIES FOR THE APPARITION ARE UNINTERESTING EXCEPT AS ODDITIES

- Many viewers and non-viewers attributed these kinds of apparition to extraordinary stimuli such as divine or demonic manifestations, top secret US or foreign weapons testing, secret human spacecraft, unknown life forms, and even non-human agencies.... to name a few.
- These suggestions don't even deserve the title of 'theories' because they provide no testable predictions that can be falsified to disprove them.
- The suggestions are culturally of interest because many were based on imagery from Hollywood film fantasies rather than actual reality
- **The suggestions also often relied on demonstrably inaccurate assumptions about fundamental features of modern human spaceflight..**

REPORT ORGANIZATION

- EVENT DESCRIPTION
- PRESS COVERAGE
- TYPICAL WITNESS COMMENTS
- BACKGROUND – SOURCES OF PUBLIC MISINFORMATION
- BACKGROUND – LINKS TO PREDECESSOR ANALOGS
-
- APPENDIXES

REGARDING THE COMMENTS

- THESE COMMENTS ARE SELECTED TO BE REPRESENTED OF THOSE PEOPLE EAGER TO COMMENT, THEY ARE NOT A RANDOM SAMPLE OF ALL PUBLIC OPINIONS [AND SOME MAY BE SATIRICAL]
- THERE ARE VERY MANY OF THEM [AND MORE IN THE APPENDIX] AND THEY CAN BE SKIMMED OR SKIPPED FORWARD AS DESIRED
- MOST INTERNET COMMENTS WERE FROM ARGUERS =FOR= THE CORRECT EXPLANATION, A SATELLITE REENTRY, AND MANY WERE SUPERNATURAL OR RELIGIOUS IN NATURE – USUALLY OMITTED
- AS WIDE A RANGE OF COMMENTS WAS SELECTED SO AS NOT TO INFLICT UNINTENTIONAL EDITORIAL BIAS ONTO THE SAMPLES

Random comments 1

- clarky_poo == It's what **the dinosaurs saw**.
- CherryBoo65 Boone == Interesting how they **all kept the same speed and distance**
- FinalMythology== could the whole have been **one big ufo and the lights have been the exterior?**
- Chris Mckenzie == debris **also doesn't fly with SPEED sideways**. it **falls** to the fuc4ing ground
- Ascension Vibrations == So, we all need to judge distance,,,**they seem close**, it's 22 miles until you breach the upper layer, so **these objects are miles wide**...yes MILES, and a Rocket doesn't compare to what we are seeing in size... They are not Meteors, or Rockets....it's something **greater than both**...
- Matt Emert == I watched it from the beginning. I am a truck driver and I watched as it hit the sky and then **shattered into a million pieces**. I literally thought it was a missile at first... I was at wallula junction in between Hermiston Oregon and Walla Walla Wa
- micah Castaneda == Saw this in Salem, thought it was an airplane, like **EXTREMELY close** then realized it was a shower. **Something huge** broke up in the atmosphere! So awesome!

Random comments 2

- Pinxity == **Something weird** happens in the sky, blame the Falcon 9. That Debris field is massive IMO and if the Falcon 9 broke up like that I doubt there would be **that many large scale pieces**.
- Acideyezz == I saw this in Tri-Cities, WA and **almost crashed my car!** You are beyond lucky for getting vid since it only lasted a few secs!
- Maria Garcia == My son and I saw it too last night March 25th at about 9:15PM in Hillsboro Or. it was the most amazing thing ever to be able to see. Out of this world ! Thanks for catching it on video. **We tried but were frozen by it, literal flew above our heads.** Amazing. [https://youtu.be/frUcP_JhXIY]
- BRANDI BIGFORD) == ...[W]hatever it was, was **able to hover..** it was going **very slow**. It was **flying very low** and headed from the west to the east. She thought it **wasn't going to clear the top of the buildings**.
- Kathy Bryla == Many of them been happening. **some look like they have blinking lights and look like ships of some sort** [<https://youtu.be/Ch8l3D1gWSc>]
- Kro0014 == From the videos on Youtube from vantage points in Vancouver and Seattle, **this was going north to south**. Almost **due south**. Never heard of that kind of orbit.

American Meteor Society – Vincent Perlerin

Space Debris Reentry spotted over Oregon on Thursday, 25 March 2021 ~ 9pm PDT

<https://www.amsmeteors.org/2021/03/space-debris-reentry-spotted-over-oregon-on-thursday-25-march-2021-9pm-pdt/>

- The AMS received over [a lot of reports](#) of a bright fiery object traveling over Oregon on Thursday, 25 March 2021 around 9pm PDT. It was the remaining of a Falcon 9 second stage from the “Starlink Launch 4” mission launched in February 2020. Here are some videos and photos of the event:[see link].
- Rebecca: “I saw this tonight at 9:00 in Yakima- so amazing – didn’t know what it was but seemed **too big for meteor shower**. Several huge bright white fireball/shooting star-like lights with **trailing light** traveled across the **entire sky** then faded out.”
- Tracy Van Allen-Boodoo: “I was in olympia washington, in the meadows it seemed to be **right above my head** then went into the clouds and disappeared. Right after flying over **my cell phone would not call out or in.**”



BREAKING NEWS IMPRESSIVE LIGHT DISPLAY OVER METRO VANCOUVER

THU 7° 11:01 pm

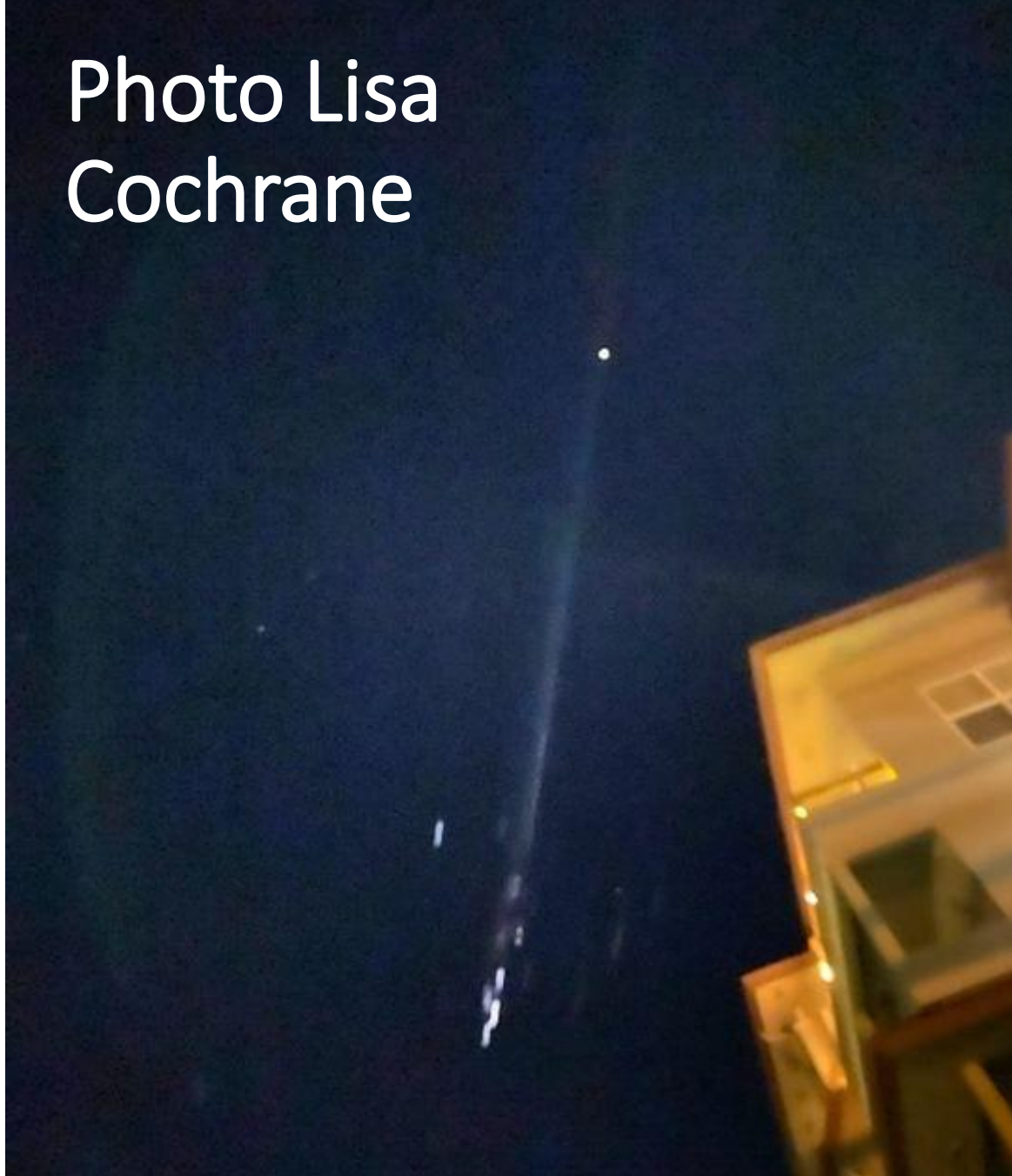
Raw: SpaceX Falcon 9 rocket debris seen from Bainbridge Island



COURTESY: STEPHEN VILKE

RIGHT TO LEFT ACROSS SOUTHERN HORIZON

Photo Lisa Cochrane



5/09/2021

OREGON FIREBALL SWARM DRAFT 3



<https://mauiNOW.com/2020/10/25/cluster-of-mysterious-lights-observed-across-maui/>

Courtesy AMOS Haleakaia

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Falcon 9 debris re-entry on 3-25-21

https://youtu.be/UuZ4TAi_KZg

Falcon 9 debris re-entry on 3-25-21

Eli Pratt == Newcastle,
Washington, looking south.



**VERY GOOD SEQUENCE
OF FLASHING LIGHTS IN
THE SWARM FORMATION**

March 25 2021 Comet Blows Up In Oregon Sky

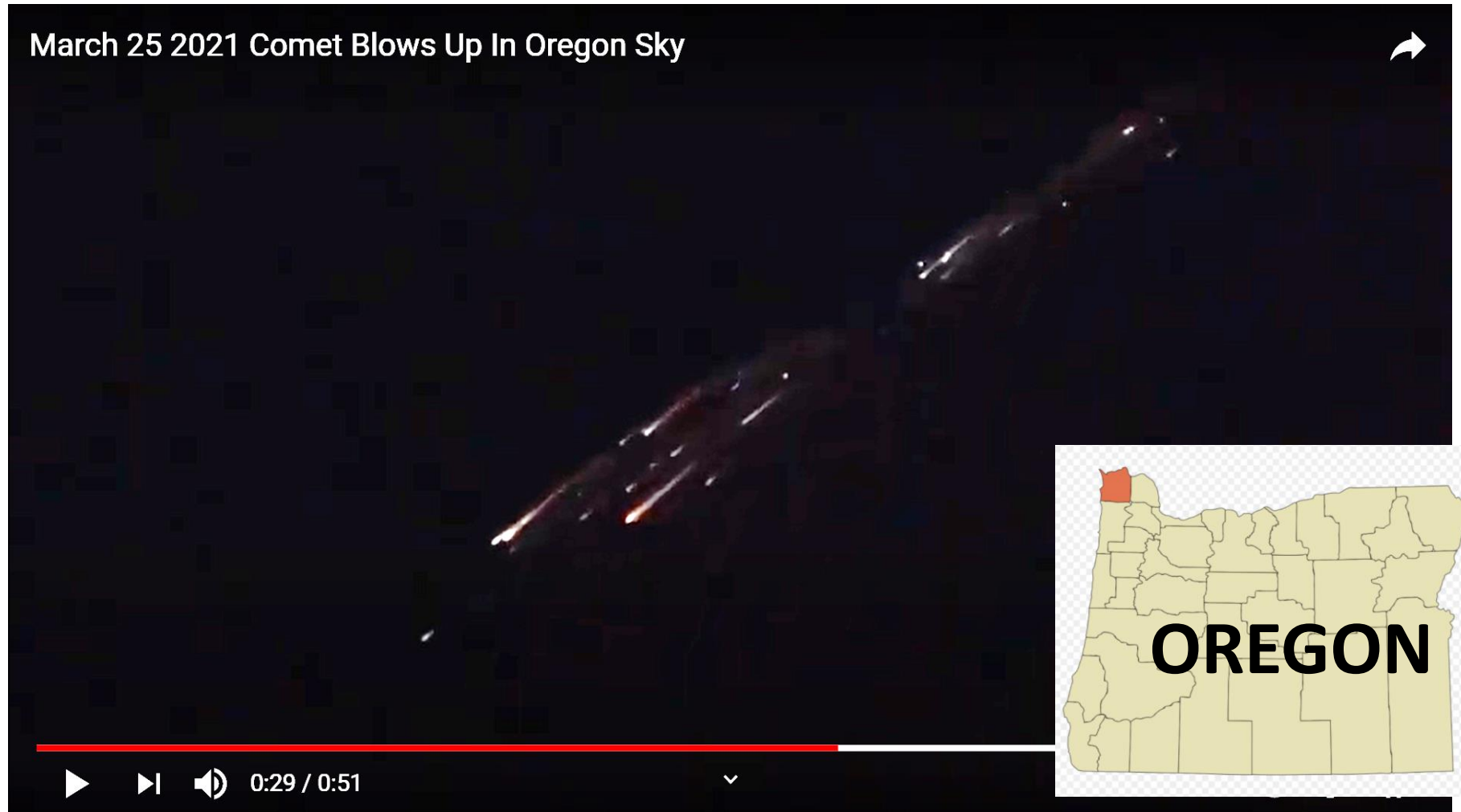
<https://youtu.be/s9a3ZkZ9jxl>

Giant meteor
caught over
Cannon Beach.

“Kat A”

Joined Mar 26,
2021

[earlier segment
of initial fireball
<https://youtu.be/xMSvl8omh7Q>



Rocket debris seen in sky just after high school soccer game -

“My Neighborhood News Network // <https://youtu.be/0czyl0gLL4E>

As the Edmonds-Woodway High School girls soccer game came to an end at Lynnwood (Wash.) High School Thursday night, Willa Jones shared this video via Twitter of the debris from a Falcon 9 rocket second stage that did not successfully have a deorbit burn.



5/09/2021



OREGON FIREBALL SWARM DRAFT 3

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LOCAL NEWS

'It's just so beautiful. It was so crazy': Light show in the sky amazes people in the Pacific Northwest

There's no official confirmation yet, but astronomers say the objects were pieces of SpaceX's Falcon 9 rocket.

Alex M == **I couldn't believe I saw this on my way home. Before it blew up, just a bright ball. I thought a asteroid was about to murder the entire west coast hahahaha** [https://youtu.be/p92_g7wTI6Q]

PORTLAND, Ore. — Did you see the amazing light show Thursday night? A lot of people in the Pacific Northwest saw **burning objects fly through the sky.**

West Seattle Blog... | UPDATE: Sky sight seen from West Seattle, explained – rocket re-entry

- SAMANTHA EARLL MARCH 26, 2021 (5:49 AM) == Spotted this while crossing Mercer floating bridge seriously looked as if it was like in a time warp or something crazy **definitely didnt look like some satellite coming back down to earth** that failed after 22 days looked way crazy I could hardly believe what I was watching and kept trying to get a good look while driving lol I was so upset I didnt get video glad some people did no one believed me when I told them what I had seen!
- LYLA & ARLIE MARCH 25, 2021 (9:27 PM) == We saw it too, so crazy!! **Looked way closer**, it was gold and orange.
- WEST SEATTLE UFO SPOTTER MARCH 25, 2021 (9:32 PM) == Yes!!! Weirdest freaking thing ever, like **a long long long spaceship with a million blinking lights** low in the southern sky headed north for nearly a minute right about 9pm. Satellite breaking up? Meteors? Waiting to hear what it was!

West Seattle blog p. 2

- BRANDI BIGFORD MARCH 25, 2021 (9:31 PM) == My mom went to drop a friend off in the West Seattle Junction at this time and she thought a plane was getting ready to crash. But whatever it was, was **able to hover**.. it was going **very slow**. She said whatever it was, she could see between 8 and 10 lights and they were white and bright. It was **flying very low** and headed from the west to the east. She honestly thought it **wasn't going to clear the top of the buildings**.
- ROBIN MARCH 25, 2021 (10:43 PM) == Before it spread out and **it was quite large in height and length**, I had a quick thought of UFO... it was so strange... then it started to gather and become **a brighter long ship**, so yeah meteor was definitely on the mind... like a HUGE one... someone posted about it not clearing buildings and it did seem like it could be possible.... felt better as it kept going in a **seemingly horizontal direction**... but man... thoughts.
- CAMEO MARCH 25, 2021 (11:46 PM) == Why does no one realize, they will always try to **hide the truth** from us. Never are they going to let us know what it really is. We can not handle the truth everyone's minds would be. Such fragile creatures we are and narrow minded at that.

weareborgunicons

I'm here in Albany, OR and I was the last customer of the night walking out of Grocery Outlet into a completely empty and silent parking lot and looked up to see it,...I had a lot of rapid thoughts. First thought was "plane" but **it was too low** and it dawned on me it was **orders of magnitudes too large for a plane**. I dropped my groceries. My glasses were a little fogged but I pulled out my phone and started a video (got a decent video!) but **because of my fogged glasses it looked like one solid object with multiple jets or burners**. I suddenly felt a primal fear like I never have before. I thought it was a bomb. It was whisper quiet and moving slowly, but **I thought it was solid**. I stopped recording and called my dad to tell him I loved him and braced myself for the impact. I feel silly now, but being all alone in a giant empty poorly lit parking lot at dark like that added to the terror factor significantly. I'm dead silent in the recording, which is a testament to my real fear. I'm glad I saw it because I would be SO jealous otherwise, ***but that terror took a couple years off my life.***



**AND THE
TINFOIL
HATTERS
SHOW UP ==**

**UFO Spotted
In Portland
Oregon Sky,
Is The US
Government
Hiding Alien
Invasions?
(Isiah Curry)**

<https://youtu.be/nx3tx961qCE>

WITNESS MISINTERPRETATIONS

- INTRO
- ROBERT LOVDAHL: **“A slow moving object with man-made lights, Cigar shaped, Rounded on each end. With what looked like windows on it.”**
“LOVE ELAINE”: “This ship went right over me. I had full vision of the **lights, beams, and metal like structure** that surrounded the lights.”

Was it one object vs formation flying

- Intro
- SEATAC skycam shows full sky flyover
<https://youtu.be/q4E-9K7OPfQ>

Flying in formation

- Aco Jankovic == No way it's a Meteor shower **it's flying in formation** . They're **meters apart** but going on same path
- sharon Padey == ...**if it was a rocket breaking up why was all the debris following the same direction in unison?**
- Mz = From my observation, nothing was breaking apart ... it was travelling **perfectly aligned, at the same speed**
- SS 1429 == But why are they moving **in the same direction and not scattered** as it happens after the explosion ?!
- Peaceloveforever88 == How can you justify all this LIGHTS are GROUPED together **PARRALLELY** ? and why all LIGHTS have the **same SPEED** ?

Formation 2

- Amauris Joaquin Linares == Why does it look like it's **on a formation?**
- CherryBoo65 Boone == Interesting how they all **kept the same speed and distance.**
- Langford, bc == There was approximately 6 white lights moving **at the same speed and same direction.**
- Greg's Mind == How did it stay in formation like that? **I choose to believe it was aliens.** <https://youtu.be/JqJOzw8PB1c>
- EASMR == the pieces could split in a minute, but **they was flying side by side** for many many miles in the sky....
- Chris Cyphaz TSL == They are traveling and they are grouped. If it was an explosion of debris, then it wouldn't travel in a group. It would expand outwards in all angles!

Weird Lights in Sky March 25th 2021 Maple Ridge BC



robert lovdahl == Lots of people saw something that wasn't what you described or was in this clip. A slow moving object with man-made lights, Cigar shaped, Rounded on each end. With what looked like windows on it. Not a burning light falling from the sky. Seen footage on a (normie) friend's phone, there was undoubtedly a UFO over BC last night.

**OR A
SINGLE
OBJECT
WITH
LIGHTS??**



TheAngryCanadianGuy
Weird lights in the sky
captured on my dash cam
at 8:23 PDT,

5/09/2021 0:09 / 0:27

<https://youtu.be/kbVq9AroM4E>

UFO ~ Small Fleet of Orb Ships Vancouver WA ~ Mufon Case 11403 [comments by "Love Elaine" [Apr 21]

<https://youtu.be/MY6fShgmjO4?list=TLPQMjgwNDIwMjFUEhPFH6NucQ>

home page motto: "Who are you to judge me? I let me be. Like a wave in the ocean I set me free."



This ship went right over me. I had full vision of the **lights, beams, and metal like structure** that surrounded the lights that was invisible to the regular naked eye that doesn't have multi dimensional sightseeing capability. It was breathtakingly beautiful. The prettiest UFO I have ever laid on eyes on and it ended about 20 feet after it directly crossed over me **not even 50 ft above me**..... There were **hundreds of a cluster of blinking white , golden , purple, blue, pink lights** in about a 50ft by 20 ft streak that ran from Canada to Washington . It started in Vancouver off of the coast and ended in Vancouver WA right about me.

- JO: This was at ~9:00 PM PDT, 25 March 2021 ?

VIDEO-TO-VIDEO COMPARISON SHOWS RANDOMNESS

“THE LIGHTS WERE HOLDING FORMATION”

**NO,
THEY
WEREN'T**

**JUST COMPARING DIFFERENT
VIDEOS SHOWS THE LIGHTS
ARE RANDOELY DISTRIBUTED
AND SHIFTTDD OVER TIME.**

SINGLE OBJECT WITH LIGHTS?

- Kyla Teljeur == My boyfriend ...called me thinking it was **a plane on fire**.
- tammy taylor == I live here in Brookings Oregon....**it looks like a Huge ship**.
- Kelsey Harte == It was like **a column of extended light with larger twinkling lights mixed in and different colors**.
- Mz Dawn == To me it looked like **a train in the sky ...** It was **absolutely massive**
- Bettina Johnson == **that object looks miles long**.
- tammy taylor == I live here in Brookings Oregon....**it looks like a Huge ship**.
- Sweet Orange == It looks so artificial... like some **iron rod with lights attached** to it ...
- ROBIN MARCH 25, 2021 (10:43 PM) == Before it spread out and **it was quite large in height and length**, I had a quick thought of UFO... it was so strange... then it started to gather and become **a brighter long ship**
- Robert lovdahl == Lots of people saw something that wasnt what you described or was in this clip. A slow moving **object with man-made lights, Cigar shaped**, Rounded on each end. **With what looked like windows on it**.

a single object with lights? 2

- FinalMythology== could the whole have been **one big ufo and the lights have been the exterior?**
- Port Ludlow, wa == . **We couldnt tell it was separate things following each other or one thing with white trails behind it.....**
- WEST SEATTLE UFO SPOTTER MARCH 25, 2021 (9:32 PM) == Yes!!! Weirdest freaking thing ever, like **a long long long spaceship with a million blinking lights** low in the southern sky
- Langford, bc == ..., **I could see a disc shape,**
- Oak harbor, wa --. It looked like a combination of a very slow moving comet and **a long freight train with dotted windows lit up.**
- Daniel Gordon == A wonder if all these are individual crafts or the **one big craft,** [<https://youtu.be/0DzRjvcGH98>]
- Unexplained Tragedies == In my personal opinion it's **one big craft,** but who knows.
- Mdgmm == At about 9:15 PM in Portland Oregon, **a strange mass with lights** soared over head. Very bright sources of light

ACTUAL TYPICAL BREAKUP PROCESS STAGES

- A typical large satellite reentry goes through several visual stages.
- First is the initial 'fireball' appearance, as the object encounters upper layers of the atmosphere while moving horizontally at orbital speed
- A glow appears in front of the object in the hypersonic shock zone, and soon many still-glowing molecules trail behind the object.
- The glow is not from 'flames' or combustion but from molecular disruption of atmospheric components [O₂, N₂] and recombination.
- The trail lengthens as the quantity of disrupted molecules increase.
- At some point the object fragments under enormous deceleration stress.
- Individual fragments continue by momentum along near-parallel paths each with own flame trail.
- Denser objects are slowed but often remain in relatively close proximity.
- As the speed lowers the amount of disrupted molecules decreases and the tails die out while glow from the leading shock wave continues.
- At this stage the fireball swarm looks like a pattern of simple lights
- As irregular fragments tumble the leading shock wave glow can flicker.
- Once sufficiently slowed, the fragments no longer have enough energy to induce airglow.

Reentry swarm fireballs dying out, trails fading

ROCKET REENTRY | Lights up night sky! (Chang Zheng 7 Rocket)

41,438 views • Jul 27, 2016

<https://youtu.be/XS0i3j8zkRM>

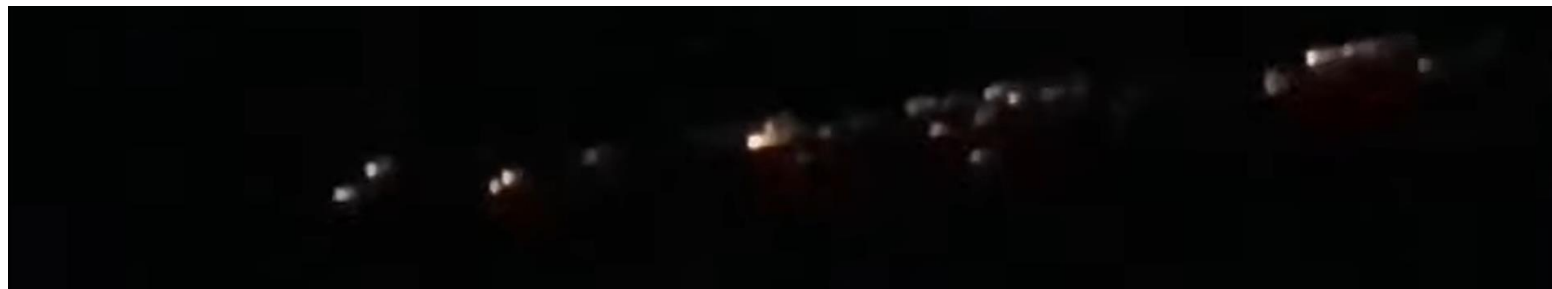
Dennis Jones == A friend of mine and I were in the hay fields above my land near Collbran, CO to photograph the Milky Way. He pointed it out in the west when it looked like a long, **extruded fireball of dozens of glowing pieces** of a meteor breaking up. We watched it process across the sky with most of the pieces disappearing until the final two pieces reached the elevation and direction of the lower two stars of the Big Dipper when **they too disappeared**. Very impressive! ... This has now been confirmed as the reentry of the Chang Zheng 7 rocket, launched Jun 25.



10 seconds later



10 seconds later

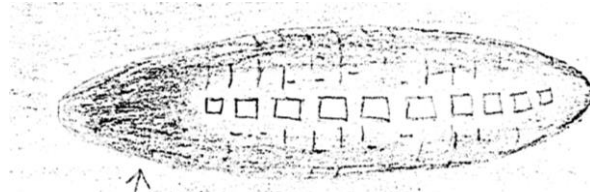


CRITICAL CULTURAL CONTEXT

EYEWITNESS DRAWINGS OF A FULLY DOCUMENTED SATELLITE REENTRY

In reading these witness comments it must first be recognized that similar descriptions have been coming in from **the identical visual stimulus** – a flaming swarm of fireballs from a disintegrating heavy satellite skimming earth's upper atmosphere – **since the earliest years of the Space Age**. All over the world, all cultures, all professions, all ages, **all awesomely similar**.

[more]



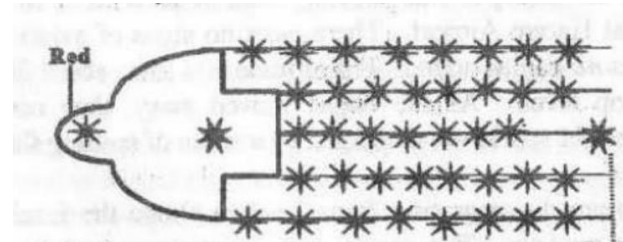
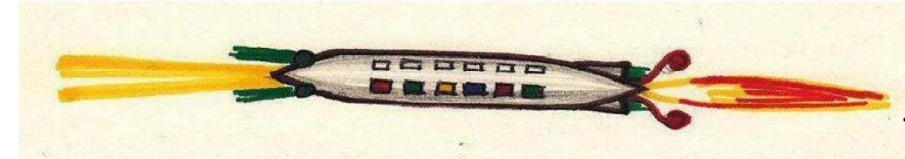
TENNESSEE



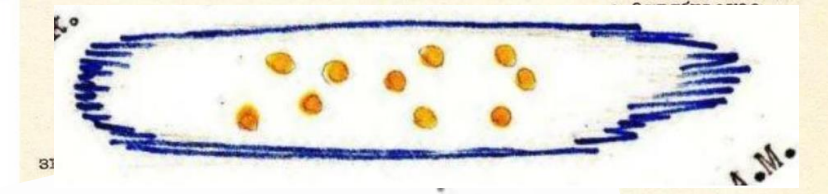
KIEV



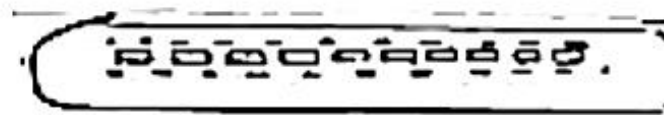
CALIFORNIA



ZIMBABWE



KIEV [GERSHTEYN]

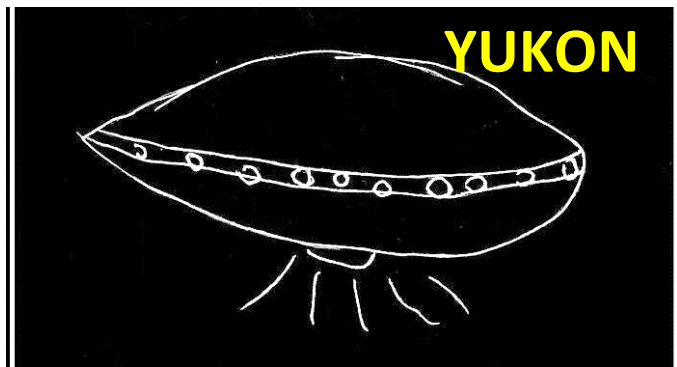


BAHAMAS

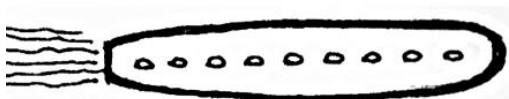
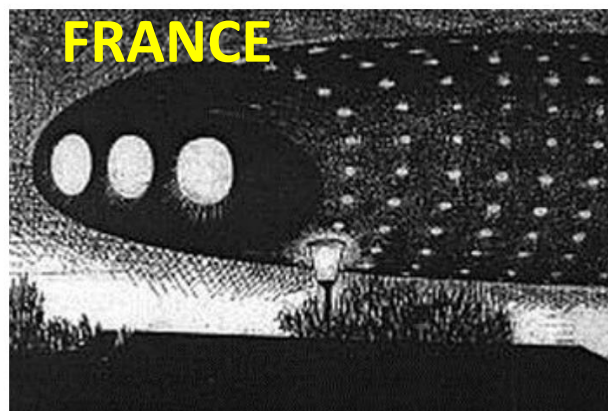
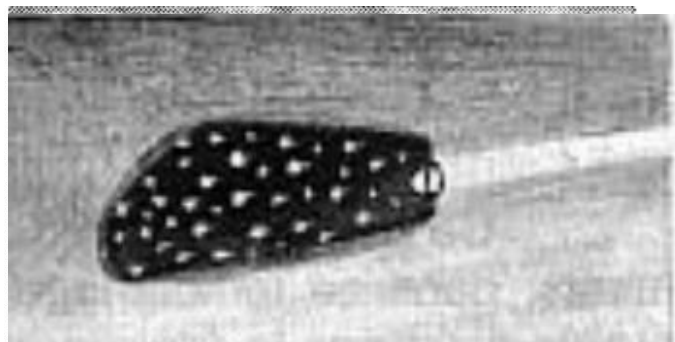


BALTIC

EYEWITNESS DRAWINGS OF A FULLY DOCUMENTED SATELLITE REENTRY



March 30-31, 1993 - UK - cosmos 2238 rocket



Fireman in Lancashire

ENGLAND

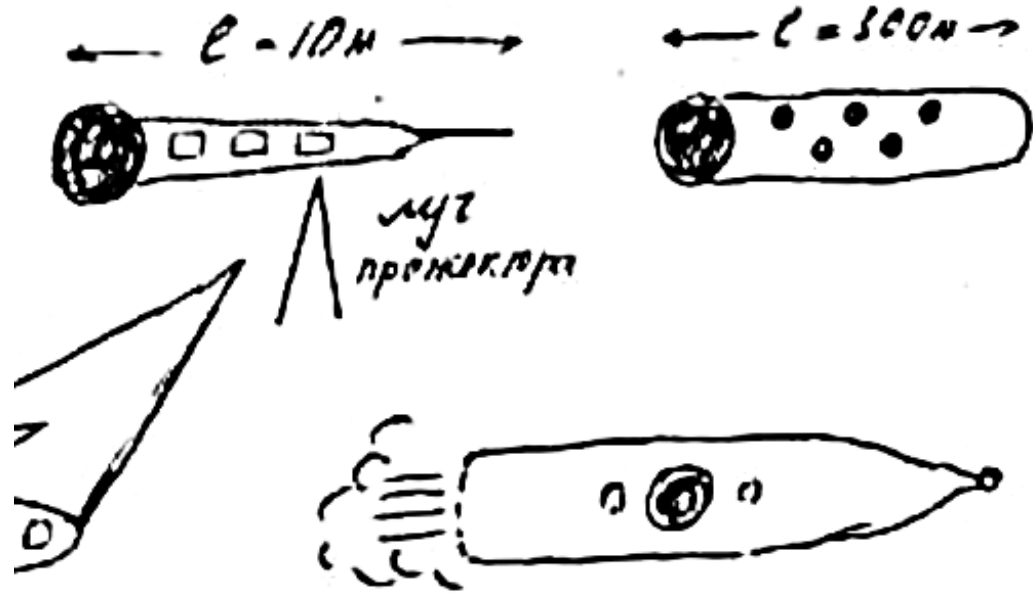


Police officer in Hertfordshire

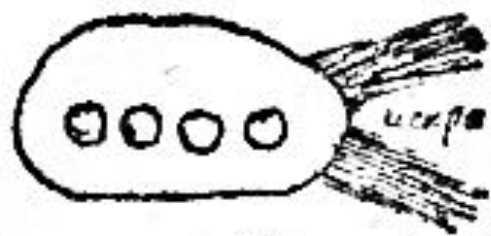
[continued]

The witness misperception is **NOT a failure** of eyesight or of brain or of rationality – it actually reflects a **survival-positive adaptation** to sudden surprising ambiguous visual perceptions in which the individual must amidst urgent uncertainty **quickly** pick out from existing memories what threat or opportunity the perceived object offers so that **fast response** can be useful, even life-critical. False-positives are usually low-cost so they are a preferred strategy – at least, the genetic predisposition to this trait seems to survive to reproduce more offspring much more often over generations.

[more]

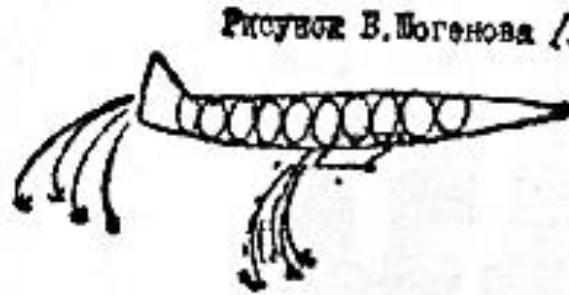


EYEWITNESS SKETCHES FROM SOME DOCUMENTED SATELLITE REENTRIES OVER THE USSR IN THE 1980S.... EYEWITNESS OVER-INTERPRETATION OF A MOVING STABLE SWARM OF BRIGHT LIGHTS IN THE NIGHT SKY HAS BEEN REPEATABLE AMONG ALL AGES, CULTURES, AND PROFESSIONS, OVER ALL CONTINENTS, FOR DECADES.

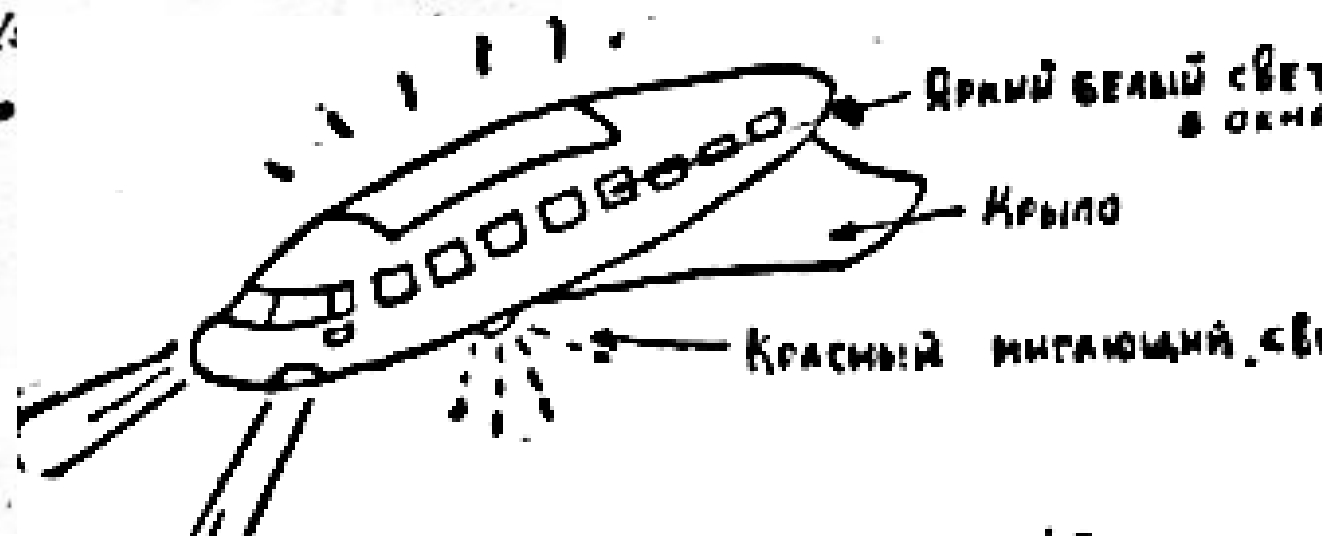


сферич. Чеснов
 Лучи из ступов.
 Сфера

гарднее
 тонко



Зона флюоресцентного
 освещения
 /похожа на салон
 летательного аппарата/



Яркий свет

Flying level.....

- Many witnesses were struck by the essentially horizontal flight path, which they saw as refuting the notion of a 'falling' satellite.

LEVEL FLIGHT PATH

- Mz Dawn == It was **absolutely massive, moved very slowly, and it was moving horizontal to the ground.**
- Peaceloveforever88 == ... and why all LIGHTS stay **HORIZONTALY** in the EARTH atmosphere ? it's not logic
- Sofia Bulg == **How the rocket goes falling horizontally??** . Lierssssss
- Ash New == **How does debris FALL Horizontally?**
- Robert Moskau == **Since when do space rockets re-enter Earth's atmosphere, over cities, at horizontal angles?**
- Seattle Peach == ... but this is traveling **completely horizontal!** Not even at a downward angle just horizontal!
- Kevin Walker == **Debris will Fall not Fly** says man with Common Sence!! Watch it.
- Navek Ydeer == You must have had a whole different view of this than I did cuz when I looked at it, **it was going uphill in the sky** it wasn't coming down hill in the sky. [<https://youtu.be/ekJanB4cjUk>]

LEVEL FLIGHT! 2

- Lance Kanewhart == The object is **flying not falling** throw a firework in the air and watch explode sparks fly all over and head downward from the sky so why is the so called explosion of a satellite **shooting across the sky instead of failing downward** angle that the video shows don't look like something falling straight down or descend quickly to much hang time for none jet powered metal and no debris either bs
- Atomic Bomb Heroes == Clear. **Something that falls to the earth flies horizontally to the earth.** For sure.
- Elena Caddell == Since when does anything **falling from the sky** travel horizontally?
- Hosanna 153 == That **does not look** like space debris" if so, why then **is it going up** on first of video, **then leveling out** etc???... Does not look like space debris - nor appear to be **falling downward, as "space debris " should...**
- Legion James2 == Falling debris tracks all the way **across the sky and keep ON going.** NOT falling debris in any way shape or form.
- David Quinones == Not a meteor, not rocket debris, moving slow it means that is flying. **Gravity works straight down, not horizontal.** .
<https://youtu.be/IFpPC5P9b0U>

Level 3

- Brian Barker == If you jump out of a plane **you fall straight to the ground** looks like it's flying **across the sky** not falling
- Chris Mckenzie == debris also doesn't **fly with SPEED sideways**. it falls to the [f-g] ground
- Hm == i am a total science nerd... **it's not falling down**, Like I said I've never seen debris look like this.
- Mr&Mrs Cannon == Did not realize debris fly
- Scott Kinter == It's amazing how this debris looks like **it's flying parallel to the surface** of the earth. Flying space debris and not falling space debris. The lie continues from nasa.
- Cyril sneer == Re-entering the atmosphere **yet still going straight**. people **believe anything** they are told these days!
- Science Revolution == If spacex rocket reentering **the path will be eastward. curved down not flat**. Stage 2 is one solid piece. no fuel left, **impossible to blow up** into many pieces? The path is **parallel** to earth surface. **Never seen a rocket launch path like this, always arch.**
- Manuel Betancourt == All that looks like **they are flying.....not falling down.....**

Witness expectations

- Commentators reflected the impressions

Public mental images of ‘falling satellites’ are widely shaped by false analogy with ‘falling aircraft’, exacerbated by the common media spurious analogy of anti-satellite weapons as ‘shooting down’ enemy satellites. But even when shattered, the fragments maintain their forward orbital motion by their own momentum.



MISLEADING ANALOGY



INACCURATE DEPICTION OF BURNING SATELLITE FALLING **DOWN** INTO ATMOSPHERE



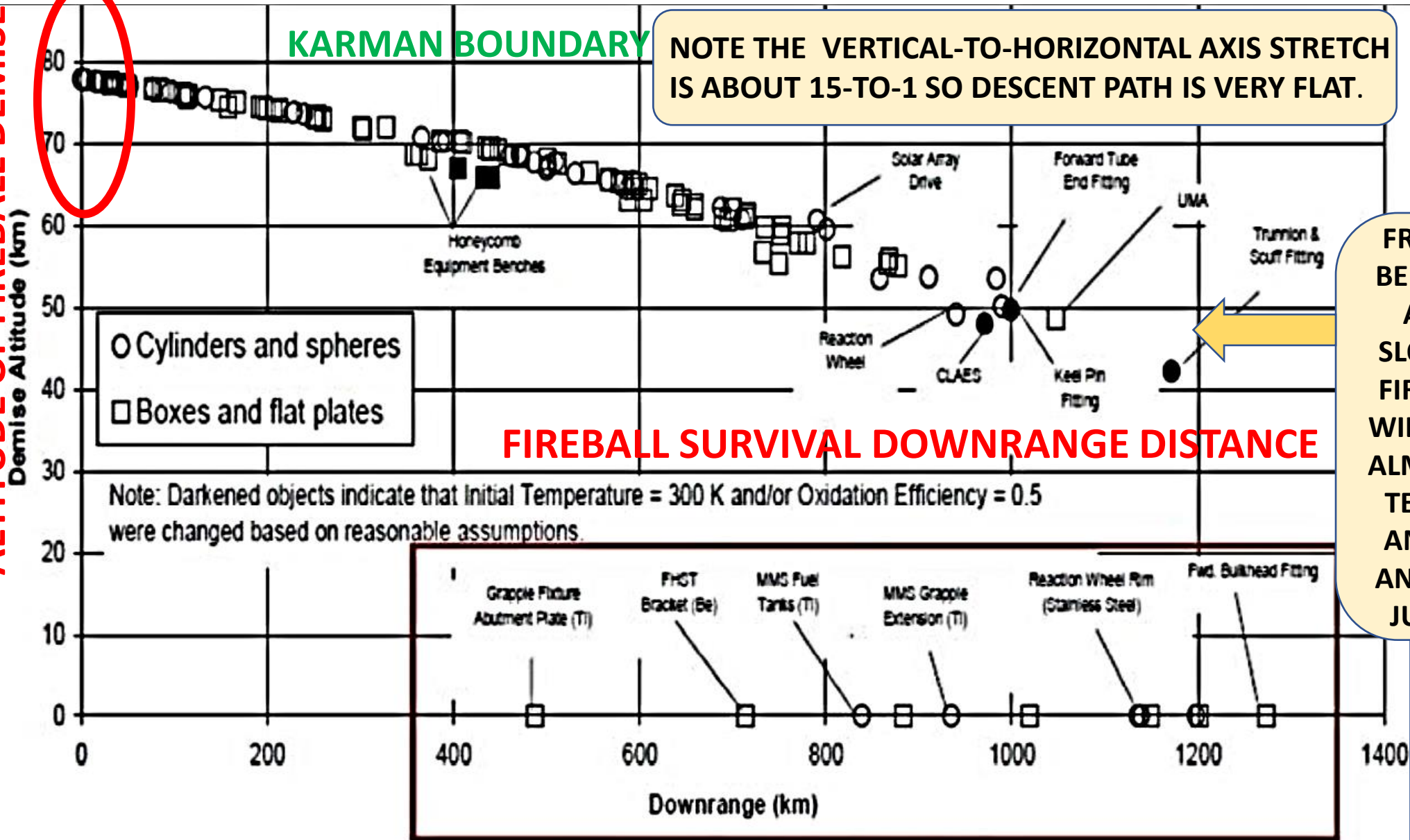
PUBLIC COMMENTS ON THE HAWAII REENTRY OFTEN SUGGEST THIS IS THE ARCHTYPICAL IMAGE OF A BURNING SATELLITE FALLING OUT OF THE SKY.

ARTISTIC LICENSE ALLOWED GLARING ILLUSTRATIVE INACCURACIES IN THE DURATION OF FIREBALL PHASE



CONTRARY TO THESE FANCIFUL ILLUSTRATIONS, ON REENTRY, FLAMING SATELLITE DEBRIS HAS NEVER BEEN OBSERVED FALLING AT SUCH STEEP ANGLES. BUT DUE TO PERSPECTIVE NEAR THE HORIZON IT CAN POSSIBLY GIVE THAT APPEARANCE.

ALTITUDE OF FIREBALL DEMISE

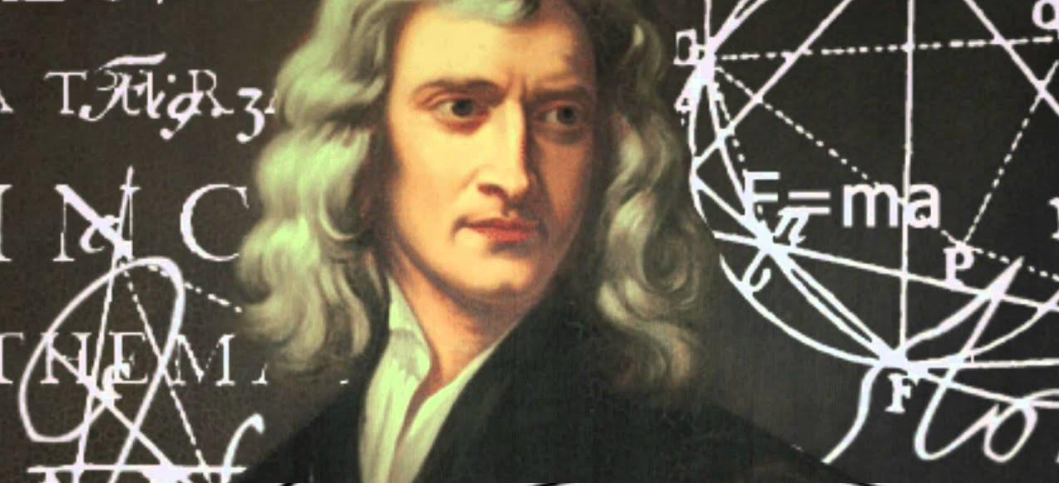


ACTUAL SHALLOW DESCENT

FRAGMENTS FALLING BELOW THIS ALTITUDE ARE USUALLY TOO SLOW TO CREATE ANY FIREBALL, AND MOST WILL WIND UP FALLING ALMOST VERTICALLY AT TERMINAL VELOCITY, AND DO NOT CREATE ANY IMPACT CRATERS, JUST DENTS IN DIRT.

FOR DEBRIS ON GROUND SEE <https://eclipsetur s.com/paul-maley/space-debris/space-debris-1981-2003/>

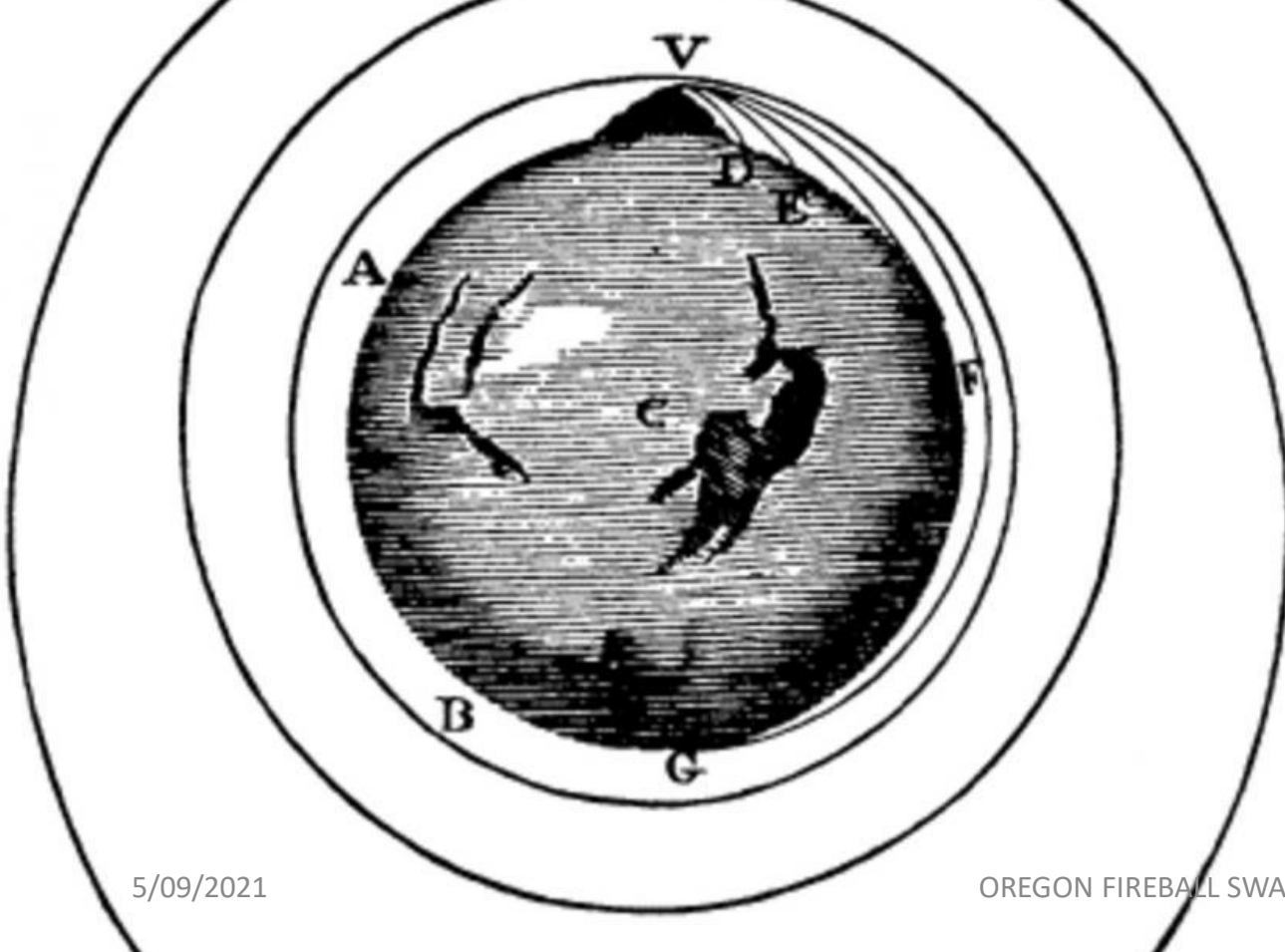
NASA UARS demise altitude/range schematic



THREE HUNDRED YEARS AGO, ISAAC NEWTON EXPLAINED WHY DECAYING SATELLITES WOULD ENTER EARTH'S ATMOSPHERE NEARLY HORIZONTALLY

Objects expelled horizontally fast enough are able to 'fall over the horizon' and not get any closer to the ground because the ground is 'falling away' beneath the object at the same rate it is falling.

Near-horizontal speed is the critical requirement to stay in orbit. If the speed drops, the object will get lower and enter the atmosphere shallowly.



Summary, transition tbs

- vv

COMMENTS ON SOUNDS

- Tania Verduzco == We live in Wapato, Wa and we saw it for like 20-30 seconds it looked like a meteoroid, but **then a few moments later I heard what sounded like thunder, rumbling sounds.** Not sure why there would be noises as well.
- C Mayo == Saw it in Peirce county..! **Didn't hear any sounds.**
- https://www.reddit.com/r/Portland/comments/mdgdxh/gif_of_the_lightsmeteor_satellite/
 - We heard a **pretty low rumble** unlike anything I've heard before while watching TV right around when this must've happened.
 - I heard this too! I was on the top floor of my house and it **rattled the windows** a bit. I had no idea what was going on.
 - Same here! **My doors started shaking** like crazy I thought we were having an earthquake
 - Chosenusername == Also same! thought someone was **jumping on the roof!**

Sound 2

- epic sword mewz == I just **felt and heard it**, I thought either someone dropped something or it was a preshock to an earthquake.
- marcanwest AG == Holy I'm in victoria and **i heard a bang** a minute ago to the south
- R Coto == Felt a **small tremor/shake** in S. Salem, Oregon
- PirateStyle2013 == I **heard multiple impacts**. I thought maybe out past Vancouver. I hope out of town and no one was hurt.
- Bloo == I didn't see it but **I heard the booms** last night too, in downtown PDX. Kind of booming/roaring, very loud. Made me wonder if it was an earthquake, woke me up.
- Wayne O'Neil == **I heard it too**.. Oregon City
- Maschelle Mashburn == Thank you for sharing this. It definitely grabbed people's attention when it entered the night sky **preceded by a loud boom** here in Southwest Washington. It was loud enough **to bring everybody outside**.

Sound 3

- Glenn Hunt == Now I know what the **series of explosions** were at about 9PM last Thursday night. Scared the crap out of me. All those pieces broke the sound barrier so it sounded like a series of explosions not just one. Wow!
- Inannawhimsey == SPECTACULAR did you hear **the explosions after**? ... I heard **multiple** explosions. They reminded me of fireworks. I remember when the debris disappeared on the horizon I thought of Chelyabinsk and hoped that wouldn't happen. Good thing **I was in a park**.
- Keyam Lafferry == I am in SE PDX and saw this too!! NEVER IN MY LIFE HAVE I SEEN SUCH A THING!! **We heard a series of booms soon after it passed** [<https://www.youtube.com/watch?v=6pwogJ7TT-AY>]
- May == I posted a video in wenatchee, wa. **I heard it land far away sounding like fireworks**. I'm glad to see it on your site.
- A plague doctor with internet access == I saw the same thing with my dog, **like 5-10 minutes later I heard a a number of large explosion like noises**. [https://youtu.be/K2AO_vGOj8Y]

Sound 4

- https://www.reddit.com/r/SALEM/comments/mdgdbe/meteor_shower/?sort=new
- Jlwark == We viewed it from West Salem, moving southwest to northeast. **No sound.**
- anonymous_being == Salem PD is reporting that they haven't personally confirmed what it was, but saw that many people on Twitter were saying that it was a rocket that exploded upon re-entry.. Apparently, the explosion **made a big boom sound** too.
- Crochetedclassroom == Did this make a loud noise? **We heard something** outside earlier but weren't sure what caused it, wondering if it was this.
- Mtheory11 == Just saw it and **then heard low rumbling booms** off in the distance
- Ryan O'Leary [to KGW8 TV] == "We then heard a couple **loud bangs**, and I don't know if that was **some sort of sonic boom.**"
- 2004 Ford Ranger XLT • 69 years ago == Was a cool sight to see, & **a crazy thunderous sound too that came a few minutes later!** [<https://youtu.be/5U3B-8EyzEk>]

Sounds 5

Watch weird lights in the sky tonight 2021 | meteor shower oregon tonight over Washington / <https://youtu.be/tBXmWeWutdk>

- The Coffee mug == We saw it fly over our house and other people in our city **heard a verry verry loud boom**
- Stephan J == I heard **3 or 4 booms near Portland.**
- KaileyMloucksentertainmentTV == I live in oregon and I saw and **heard it, it was loud**
- =====
- <https://www.youtube.com/watch?v=R8jAmTi5W5g>

Eric Steinbrenner == We saw it too! **About 2-3 minutes later we heard multiple sonic booms.** Very cool!

Angela R == I heard those too, they sounded like **booms far in the distance**

Sounds 6

- <https://youtu.be/4w1rILku7pk>
- Ryan Graven == Wife caught this on her drive home. Slow moving with crackling sound. Incredible and terrifying at the same time. This appears to be debris from a failed deorbit by Falcon 9 second stage from the March 4 Starlink exercise. or so they want us to think... no joke though - that was terrifying
- Inannawhimsey == spectacular did you hear the explosions afterwards?
- A plague doctor with internet access == Even though these two events happened at the same time, those loud noises were actually one of the many earthquakes located in the pacific coast region, I as well heard those noises
- Nannawhimsey == nifty :3. I heard the "explosions" roughly 1 minute after the spectacular light show disappeared from my view into the horizon. the sounds seemed to be coming from above me, where i first saw the light show. yes, they passed right overhead me :3
- jim oberg == I've collected two dozen reports of sonic booms.

SOUNDS 7 == Fire ball burning over Woodland WA- SpaceX second stage re-entry and burn up. //27,644 views // Mar 25, 2021 <https://youtu.be/UT-7zAPT5U>

- Blue Line Land Works == Fire ball burning in the sky. Woodland Wa UPDATE: This was part of a spaceX rocket reentering. **A few minutes after it burned up you could here a series of booms that sounded like thunder.**
- Itz_N0xX == That's brazy bro it **sounded like a helicopter flying low** over our house
- =====
- Stephan J == I heard the sonic booms **from the center of Hillsboro** next to the hospital. [https://youtu.be/eLZnYkhD_Hg]
- =====
- No Name Never a Name == Was there any sound you could actually hear from it?
- [Christian Merrikin](#) == I couldn't hear anything for sure. about 10 minutes later while I was still walking my dog I heard **some booms**, but they might have been unrelated. https://youtu.be/VF__EVufrdQ

Sonic booms during shuttle entries

- Some folks heard sonic booms a few minutes after the fireballs passed. When we used to watch shuttles fireballing over Houston on their way to Florida, we'd hear a single boom several minutes later.
- Traffic cam with exact time tags
- <https://youtu.be/CZWple0XrpM>

Electrophonic sounds

- Jo == Here's a story I did on that phenomenon during the much more powerful Chelyabinsk bolide:
<http://www.astronomy.com/magazine/2013/04/the-whispering-bolide>
- Jo = The sound is really interesting, because if it were acoustic transmission, from 40 miles up [where the fireball swarm was racing along] it would take 3 minutes to reach the ground even for directly overhead -- well past the time the fireballs would have vanished over the horizon. However, bright fireballs [and reentries] also cause 'electrophonic sound', radio noise generated in their plasma wake that sends out bursts at light speed that BECOME acoustic waves when they interact with material in the vicinity of witnesses. What impression did you get about the DIRECTION the sound was coming from -- this is a crucial datum, please recollect as well as you can and there is NO 'right answer'.

Satellite observation of entry heat trail

- To be delivered
- [Satellite signature of the Falcon 9 re-entry « CIMSS Satellite Blog \(wisc.edu\)](#)

SKEPTICISM OF ROCKET REENTRY EXPLANATION

Sharon Padey == OMG space junk! Your a professor maybe before you speak alot of junk you should maybe fact check before you speak on this subject.. so .. this so called rocket or space junk just happened to fall out of the sky **without anyone knowing where** it was going to re-enter the atmosphere... that's a little far fetched I think. And if you look into strange lights throughout 2020 and 2021 well apparently its all because of Elon Musk and spacex... just Google strange lights around the world.. news outlets everywhere say its SpaceX. Anyway just one more thing. Check out a little peice called "Fireball puts on show for a few in Oregon Washington.. This was published on 03/20/21 at 3.50 am By Andre' Hagedstedt.. So this doesn't happen often then what was it on the 20th march 2021.. not sure if there would be that much of a coincidence that this would happen twice within a week. Then again I'm not a professor.

ZOMBIEAPOCALYPSECHEROKEE 92 == I'm hearing the officials are claiming this is the Falcon rocket de-orbiting but that **does not make any sense** 1 because I can't find any launches today from Florida or Cali 2 the Falcon rocket doesn't go into orbit it only delivers the payload to orbit it then detaches and falls back to earth and usually lands on a [missing text].... Just seems a little wierd i didn't know that part of the rocket went into orbit. I actually caught the Falcon 9 rocket in night vision on accident on November 5th im on long Island 20 miles east of New York pretty wild to see I actually had to cut the audio because I was freaking out lol.

[https://youtu.be/NjgB_31mclA]

Streaks of light over the Pacific Northwest put on a show

<https://youtu.be/FHip0LUSK9c>

- ἰάσων == I saw this in person and **the front of it looked huge**. Not the same size as falcon 9. See the video on my page
- Sharon Padey [mar 27] == LOL a couple of hundred thousand feet in the sky.. then **why did you have witnesses saying it was so close. Not only that if it was a rocket breaking up why was all the debris following the same direction in unison?** Check out Stephen Vilke video [JO: Bainbridge view, <https://youtu.be/9rTzGXxEwa0>] .. it shows the **so called rocket** seemingly stop disappear then.. wait for it.. it appears again. How does that happen can you please explain that one? Then again I'm sure you have another so called bullsh*t answer for that as well. ... You became a reporter for a reason, to tell people the truth. So use your journalism degree for good instead of treating people like gullible idiots.. If you don't know what it is then say that .. don't repeat a narrative just because your told to. Allow people to have freewill.. misleading people and making them believe your bullsh*t is not freewill.

COMMON 'CLASSIC' WITNESS OBJECTIONS TO REENTRY EXPLANATION

- No warning was issued
- It was flying level, not falling
- It moved too slowly
- Never happened before
- It was too low
- It changed direction
- Why wouldn't it happen EVERY time?
- It had a distinct shape [oval, boomerang, winged aircraft, etc]
- Lights didn't have flame trails
- Object didn't look like pictures of the rocket
- It was also seen over other countries
- It showed intentional, intelligent control
- It blocked the stars as it passed
- It had synchronized flashing lights
- No debris was found

Answers to rejection of the explanation

- Now, exactly why do your experts justify rejecting the satellite reentry explanation for this event?
- 1. Object in question was left in orbit due to malfunction
- 2. Tracked regularly as orbit decayed.
- 3. Reentry predicted for a particular time interval
- 4. Satellite passed over Oregon/Washington at the time of the sighting, in the same direction of motion.
- 5. Object motion was still largely horizontal as it skimmed upper atmosphere.
- 6. Fireball phase began about 55 mile up, lasted a minute or so as object descended to about 40 miles where it was slowed enough to extinguish incandescence.
- 7. Crossed entire sky of most observers, horizon to horizon -- normal for reentering space objects.
- 8. Some sonic booms heard a few minutes AFTER passage, confirming it was HIGH.

REFUTING ANTI-REENTRY ARGUMENTS

- This reentry was predicted and warnings were issued
- Object was tracked in orbit by civilian observers, orbital decay was monitored and the time interval of the entry predicted, the path of the object at the time of fireball observation was right over NW US exactly as observed from the ground. Pretty iron-clad case.
- Satellites don't suddenly drop out of orbit capriciously, but are tracked
- Re-entering satellites don't 'fall out of the sky' downwards, and on fire
- The 'fireball phase' occurs on a very shallow descent between 60 to 40 miles
- And usually ends well before getting much lower.
- Tumbling pieces often flicker and flash
- Stars could be seen behind the passing lights
- Determining "same object" from blurry videos from other events is dodgy'
- Estimating range to light in night sky – fundamentally impossible
- Observers of bright lights high in the sky often lose track of object direction and motion and imagine course/speed variation even from straight motion

SUMMARY & CONCLUSIONS

This is probably the last detailed reentry misperception report I'll be making, but I hope other skywatchers will document replays if they find the material of potential value to future researchers.

Addenda – and by the way.....

- Related events.....

Some other satellite reentry “mother ship” UFOs

- Bahamas, Jan 1985

http://satobs.org/seesat_ref/Oberg/850111-Bahamas_spaceship.pdf

- Eastern US, March 1968

http://satobs.org/seesat_ref/Oberg/680304-Eastern-US.pdf

- Baltic, Feb 1976

http://satobs.org/seesat_ref/Oberg/760211-baltic_bolide.pdf

- Zimbabwe, 1994

http://satobs.org/seesat_ref/Oberg/940914-africa-pdf1.pdf

- Chile-Argentina Apr 2013

http://www.slate.com/blogs/bad_astronomy/2013/05/11/video_satellite_re_entry_looks_like_ufos_over_south_america.html

- France, Nov 1990,

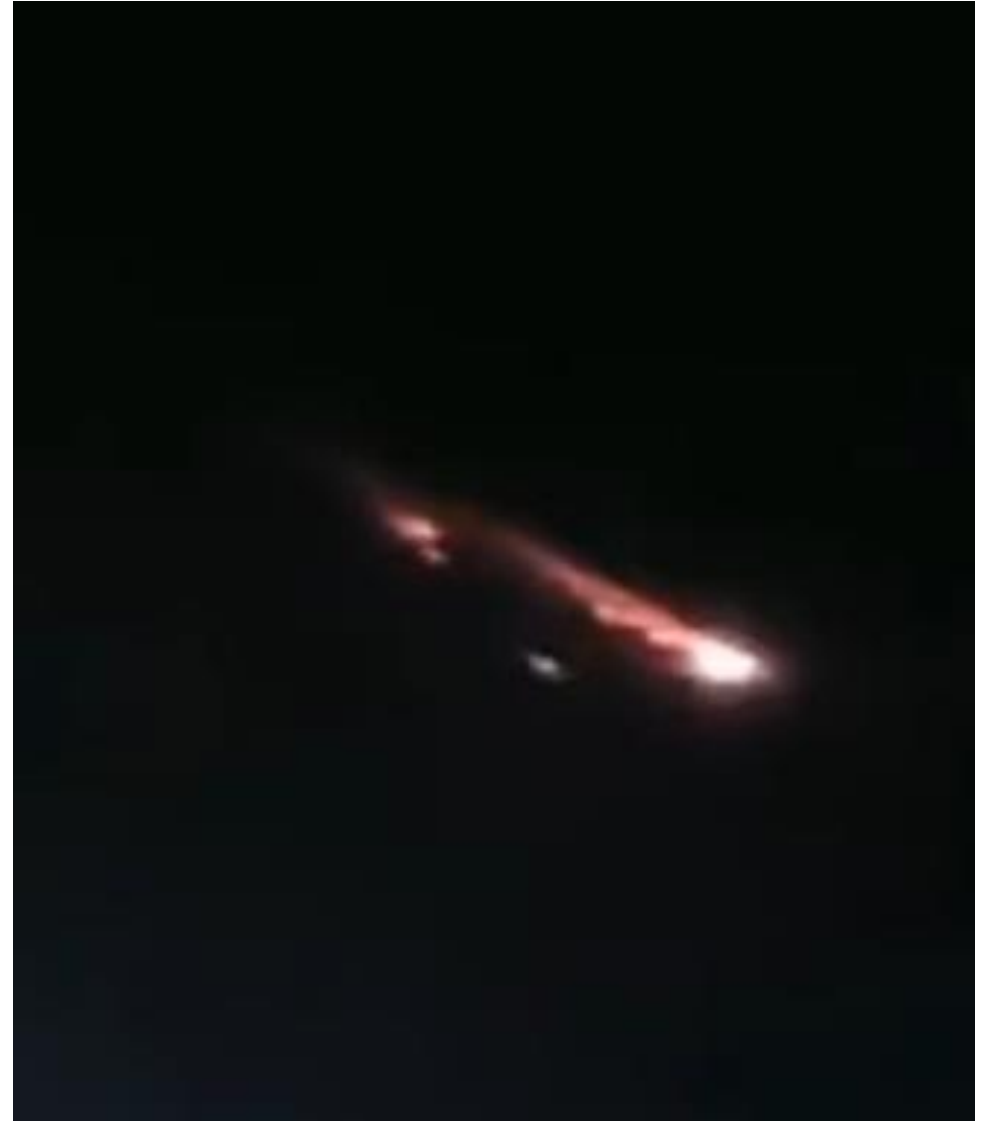
http://satobs.org/seesat_ref/Oberg/901105-French_wave.pdf

- Yukon, Dec 1996

<http://badufos.blogspot.com/2012/04/top-ten-ufo-case-yukon-canada-1996.html>

SpaceX Falcon 9 Second Stage Re-entered over China!!

- The Falcon 9 second stage (object 46669) that reentered over China at 1401 UTC Oct 30, 2020, was observed from Harbin. This second stage was one from starlink mission.
- https://youtu.be/fq_bLw9mf1c



Salyut-7 debris in Argentina, via Ruben Lianza

- <https://planet4589.org/space/debris/sal/index.html>
- **Salyut-7 debris in Argentina, via Ruben Lianza** == The DOS-6 (Salyut-7) space station reentered on 7 Feb 1991, with debris crashing in Argentina near the border with Uruguay.



July 17, 2020 Texas fireball swarm

- COMPARE AND CONTRAST
- IDENTICAL WITNESS DESCRIPTIONS AND MISPERCEPTIONS

TODAY 18-07-2020 TEXAS , HUGE MOTHERSHIP

Jul 18, 2020 <https://youtu.be/tGiVZCH0cD8>

- Atlantica Evolution [Justin fowler Callie Alexis fowler] == That damn sure ain't no comet LOL. I think **there's giant ships** millions all around us at all times.... They're just dematerialized
- N B == The best part is that people got used to watching them with no fear & taking their time to film them

=====

- Ravi Jagtiani // [July 17, 2020](#) . .
- **Spent Soviet SL-4 rocket stage 44799 making atmospheric reentry.**
- The rocket that launched COSMOS 2542 and COSMOS 2543 (sub satellite = "inspector") to Sun Synchronous orbit on 2019-11-25.
- 02:02 CDT = 07:02 UT

SL4 reentry Texas 2019

<https://www.youtube.com/watch?v=L8lr3T7vcXs>

- Realtime video of Russian rocket SL-4 burning up in atmosphere 2020/07/18 2:02am Abilene, Texas. // Jul 19, 2020



Something HUGE Happened Over Texas!

[Citizens Shaken] <https://youtu.be/vLnKiYgCzsA>

- 41,754 views / thirdphaseofmoon • Premiered Jul 19, 2020
- Trent Johnson == At [4:00](#) ish you can see, a quarter to a third of the way from the front of the debris, **a clear 3 light triangle craft spinning slowly**, you can see it if you watch closely, all 3 lights at the points of the craft move and spin **in unison**..... Can anyone confirm this for me? Just wanna make sure I'm not seeing things.....
- reginald sudberry == How can space junk **turn and fly off**, and why didn't anything **hit the ground** somewhere?, if space junk
- Frank Hall == Looks a **bit too big** to be space junk burning up .
- Butter == Space junk? Too slow to be a meteor.
- Scott Gibson == I agree, If they know something is coming down, and where, **people on the ground should be warned**
- Eric Saldivar == I'm in Dallas and we could see it ' whatever it was **it was big** everyone was outside and been talking about this still '... its was really big from where i live my little one was outside playing right as it came over are house '

Over Texas! 2

- NaDopros == Seriously, though, space junk re-entering the Earth's atmosphere **doesn't "float back towards Earth"**.
- Rebecca Lee == That Wasn't A Russian Rocket...**They Will Say Anything To Silence The Masses**. After All, That ALWAYS Works. Unfortunately, Many Are Not Ready To Admit The Truth.
- Tonya Whitten ==It looked like **it was moving upward at first**. How can space junk go up ?
- Jacqueline Freeman -- A UFO showing of in the sky from 12:00 midnight until 6:45 am. They are giving the citizens a show. Come on now. We know. **This is not junk floating in the air** in this atmosphere.where gravity exist.... I saw **a large long structure with lights on it they were the Windows.... Dark structure....** This is a UFO.. an extraterritorial ship. these ships are showing off and these extraterrestrials want the citizens of the world to see them. they are uncloaking themselves since the Governments are not telling the citizens of The United States. They will will do the honors of introducing them selves. This is not a meator or space junk. from Russia.This is true reality. That exist.
- Poppy333 == That was **NOT** space junk PERIOD

Over Texas! 3

- SILENCE IS NOT AN OPTION == **IT'S A SOLID OBJECT**..LIGHTS ARE **IN SYNC** ..IT'S ALSO CAMOUFLAGED BLENDING IN TO THE NIGHT SKY... NO WIND? NO WHERE? IF IT BROKE APART IT WOULD SPIN AND LOSE SPEED AND LIGHT WOULD BEGIN TO DIE OUT..THAT IS NOT WHAT I AM SEEING HERE
- Rick Vornbrock == Don't know why a ufo or starship is ruled out of the dialogue so quickly. In the film provided, it doesn't look like its splitting up into small burning pieces. Some starships are huge, long, even half the size of a planet. **This one could have been a mile long** or more. They are said to be in the thousands in orbit of the earth, Galactic Fed. They can "fly" in our atmosphere like your standard ufo saucer using gravity manipulation. No need for uplift with wings or rockets. Please google/youtube Gina Maria Colvin Hill's youtubes, she has a nack for photoing many of these starships. Yes, it could be space junk, but don't jump on the space junk bandwagon, that's what MSM does.
- Mr. Sarcastic == It's the same thing right here. Guam April <https://youtu.be/04Kvvl0Opyg> No meteorite to me. No sonic boom Space force ship imo. War
- Er4se1 == If that's space junk **its massive** looks too weird for that tho imo

Over Texas! 4

- ChuckandMax == That poor girl in the video is totally freaking out, she says my heart can't handle it. The fact that **this is causing people to panic** and can trigger serious health conditions is irresponsible to not be notifying us. It is the duty of our government **to inform us the facts**, and stop keeping us in the dark. I think they just don't think we can handle the truth because it's been hidden from us for so long and we've been lied to for so long the whole government would be taken down by angry rioters that make the BLM movement look like a Sunday in the park. Clearly we are not alone in this universe, they called them angels and demons when they appeared the first times and they still exist. I'm not going to believe that we have a whole continent that is completely covered by ice and snow, that's just one big lie the government has been keeping from us, and all the underground cities they have built, more lies. I don't think they want us to know because we are all just useless cattle in their eyes, the same way we think about ants on the ground, we don't warn the ants that we are going to be walking across the lawn, and these other worldly beings are not going to warn us when they have a huge battle in our skies.

Over Texas! 5

- Jaime R. Tosch == It looks like **it is one large long space craft** from our own U. S. Navy. There will be more .
- Michael Carr == Is that space junk **anti-gravity**? It just **seems to float around in the sky**...nobody mentioned how **it just seems to hang there**.
- James Mccall== Yeah but what is a Russian Rocket doing **flying over American airspace??**
- Kevin Coulthard == Maybe you guys don't realize the size of satellites but **they are not that big** and if they did come into the atmosphere it would not be such a drastic reaction. Sorry guys but it is something else.
- Heather Brant == **Space junk falls back to earth doesn't fly by earth** rofl
- Richard Jay == If that thing just flipped over as it looks like that is **a giant Mothership triangular looks like about 10 or 15 miles long...** The only thing wrong with your theories is it looks like it's rotating **space junk doesn't rotate**

Over Texas! 6

- Floupe1 == It looks like **it's going very slow** to me and if that really was the case **it should be falling to the ground** it might be the angle of the video that makes it look like it's slow play but I think imma video he mentions that it went for a few hours??
- Mark Seveland == Agree, **its larger in mass and complexity then the Shuttle**. A lot more material and parts then the shuttle.
- musicology 2020 == **Slowed down and made a turn**, Someone or something **is at its control**.
- Dan Rozelle = The question every one was asking it seems "why were we not warned" well the obvious answer that comes to my mind and I am sure others is that once again the people that like to believe they have control over our minds I am sure are thinking this is a good way to distract us and cause more mistrust and so forth ... they just like playing with our minds, we love the chaos... sure they knew this was going to happen unless there is a war going on up there and an alien space tank just shot another alien space weapon out of the sky, unexpectedly...who knows, right?
- **jim oberg** == Dan, the obvious answer is that normal reentry alerts were issued, but since the final predicted impact point is along a path 50,000 miles long, there's no value in calling everybody -- since nobody has ever been hurt by randomly falling satellite debris. The actual impact point depends on air drag which varies enormously as the object tumbles randomly. Does this explain it?

Over Texas! 7

- Tim Stingel == I have been saying it for a while now that **theres a war going on in space** iv see enough to suggest that its very true could it also be the real reason they want us staying home.
- Carmel Shephard == You can't trust the government to tell you anything let alone the truth
- Alan saund == We know what it was now a Russian anti satellite missile test.
- Dave Andrews == I think it was **a secret craft** breaking up, thats why there not saying anything. It looked like the shuttle when it broke up.
- Shnickers123 == That is debris from the Destroyer Coney that is headed to Earth, it is the size of a planet and it has a tail. Space Junk!!!! That is a flat out fkn lie and you know it...
- =====
Jul 18, 2020 // Appeared from a large area in the south of the U.States, Burning in the atmosphere, shattered meteor
space googlevesaire // https://youtu.be/4TAzj_0wpyM
This video has been uploaded on the American Meteor Society Website.
AMS Event: 3478-2020, Report 201019 (3478i-2020) - Sanderson US / Crane US
Credit : AMS/Zach L./Vanessa V. (www.amsmeteors.org)

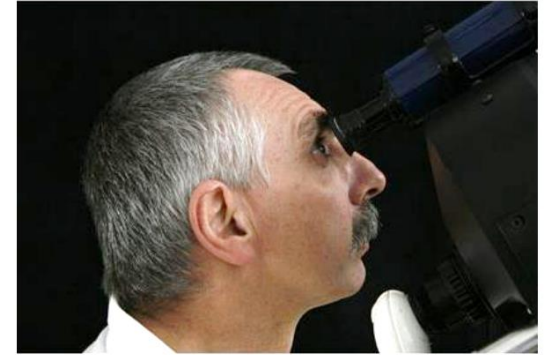
Jim o FAQ

- Thank you -- that is a VERY common eyewitness interpretation of the bizarre appearance of such nighttime fireball swarms caused by satellite reentries. Here are a dozen previous examples from all over the world. Human perceptual processes react to sudden unusual visual stimuli by pulling up past experiences and filling in the gaps -- it's a survival-positive trait that allows crucial fast-reaction in events of lethal hazard or food opportunities, over a million generations of our ancestors. The reality of this trait's importance to the UFO puzzle is persuasively demonstrated in opportunistic double-blind experiments when known stimuli [for example, a swarm of fireballs resulting from a satellite reentry] will often result in similar interpretations [a large structured object with lights mounted on it] in startled witnesses across the world, over the decades, with all ranges of cultures and professions and ages.
- See http://www.jamesoberg.com/1963_kiev-fireball-swarm-rev-B.pdf

APPENDIXES

Visually Observed Natural Re-entries of Earth Satellites

Compiled by Ted Molczan



http://www.satobs.org/reentry/Visually_Observed_Natural_Re-entries_latest_draft.pdf

It can also be accessed via the following web page, along with some individual case reports:

<http://www.satobs.org/decay.html#reentrysightings>

The comprehensive set of web pages that I intend to be the final product of this research will include general information on the science of re-entries and reports on selected individual sightings. A working prototype of the latter is the identification of David Biedny's childhood UFO sighting in Venezuela in 1974, which he and his brother disclosed on the Paracast in 2006: <http://satobs.org/reentry/1974-060B/1974-060B.html>

Decay Date UTC	Int'l Desig.	SSN	Origin	Name	Type	Model	Mass kg	Sighting Location	Sources
2018 Jan 27 23:32	2017-086D	43090	Russia	Angosat 1 r	R	Zenit-3SLBF	?	Brazil: Acre: Rio Branco, Tarauacá, Feijó, Cruzeiro do Sul, Porto Walter, Rodrigues Alves, Marechal Thaumaturgo; Peru: Huancané, San Antonio de Putina, Azángaro, Ucayali, San Martín. Debris: 5 pieces found in Puno; one or more near San José, Ninanuyo, Larancahuani and Catacora.	L. Cesar, "Clarão no céu assusta moradores do Acre," G1 AC, Rio Branco, Jan 28, 2018. (https://g1.globo.com/ac/acre/noticia/clarao-no-ceu-assusta-moradores-do-acre.ghtml); "PUNO: EXTRAÑO OBJETO SURCA LOS CIELOS Y ALARMA A LA POBLACIÓN," Panamericana Televisión S.A., Lima, Peru, Feb 4, 2017. (https://panamericana.pe/24horas/nacionales/239668-puno-extrano-objeto-surca-cielos-alarma-poblacion)
2018 Mar 10 05:30	2017-078B	43040	China	Alcomsat 1 r	R	CZ-3B Stage 3	4000	Chile, Argentina, Paraguay, Brazil	ABC Color, "Satélite chino causó revuelo," Mar 10, 2018. (http://www.abc.com.py/nacionales/satelite-chino-causo-revuelo-1682271.html); Télam, "Restos de un cohete chino cruzaron el cielo esta madrugada," Mar 10, 2018. (http://www.telam.com.ar/notas/201803/258321-cohete-chino-formosa-destellos-noche.html)

- Australia June 2010 'spiral UFO' was Falcon9 rocket
http://satobs.org/seesat_ref/misc/180314-falcon9s2-australia.pdf
- SpaceX Falcon9 upper stage plumes
http://satobs.org/seesat_ref/misc/zuma_vs_falcon9-stage2_clouds_plumes_overview.pdf
- FH [falcon heavy] escape burn to Mars Feb 06, 2018 observed from SW USA
http://satobs.org/seesat_ref/misc/180206_fh_s2_burn3_d2.pdf
- Observations of Falcon9 Deorbit Burn on Nov 11, 2019
http://satobs.org/seesat_ref/misc/191111-falcon_pdf1.pdf
- Falcon9 Stage-2 Parking Orbit Departure Burn over Australia on Dec 23, 2018:
http://satobs.org/seesat_ref/misc/181223-falcon9-australia4.pdf
- Observation of the SpaceX deorbit burn on October 7, 2018:
http://satobs.org/seesat_ref/misc/181007-stage2_deorbit.pdf
- A previous deorbit burn WAS observed in Norway, on Feb 19, 2018
http://satobs.org/seesat_ref/misc/180322-falcon9-deorbit-NORWAY.pdf
- Persian Gulf deorbit Feb 19, 2017
http://satobs.org/seesat_ref/misc/180314-falcon9s2-persian-gulf.pdf
- May 10, 2018 Falcon 9 stage 2 fuel dump observation from Australia
http://satobs.org/seesat_ref/misc/180510-falcon9s2-spiral-australia-ROUGH.pdf
- Indian Ocean fuel dump sphere Sep 29, 2013
http://satobs.org/seesat_ref/misc/180314-flcon9s2-indian-ocean.pdf

Other
Falcon9
stage-2
pluming
shenanigan
S

To: MUFON UFO Journal (Dennis Stacy)

August 17, 1992

The May 1992 UFO Journal carried a translation of Jean Sider's report on the November 5, 1990 UFO wave in France. Sider said the wave could be "the greatest UFO flap in France since the Autumn of 1954", as well as "one of the largest possible UFO flaps in French history."

The French space agency CNES, through its UFO study group SEPRA, explained the sightings as being caused by the atmospheric entry of a Soviet rocket (a Proton third stage). Despite Sider's argumentation against this solution, my own further research has confirmed it.

The Soviet satellite Gorizont-23 was launched by a Proton booster on November 3, 1990 (not as per Sider on October 21), into a temporary low parking orbit. The payload was injected toward geosynchronous orbit half an hour later, while the spent third stage fell from orbit within 48 hours (See for a comparable case the similar Proton [Zond] entry over Tennessee in 1968 described by Klass in UFOs-Explained).

Attached is a ground track map of the booster in the hour before it decayed and burned up. This is based on orbital elements released by the US Space Command. The trajectory took the rocket body right across the northern horizon of France. The exact point of entry could not be tracked by US Space Command sensors (outside of its radar coverage) and only an approximate point on the orbital path can be computed in advance. The west-to-east motion of the fireball in the northern skies of France is completely consistent with eyewitness accounts, connected with the predicted entry.

Sider's rebuttals to the Proton entry explanation are easily refuted:

1) An astrophysicist at the Lyons Observatory "ruled out" the entry hypothesis. Well, on what grounds, and what does this person know about entries? The citation is a French TV report, not a follow-up interview that a competent investigator should have done.

2) An astronomer near Grenoble was on duty at the time and should have seen an entry. Astronomers don't usually stand on platforms scanning the skies with their eyes, they operate complex equipment from control rooms. Besides, the scattered clouds could easily have blocked view of the fireball low on the northern horizon. The absence of the astronomer's report is no evidence for the absence of a bright entry fireball. The much later sighting appears to be independent.

3) US Space Command said the impact was expected over the North Atlantic at 2:35 PM. I have been unable to confirm this published report (new officials in the press office are uncooperative), but entries can occur within 1 or 2 orbits of the expected time, and the US Space Command times are usually given as Mountain Standard (GMT -7). The authenticity and relevance of this datum is obscure.

4) The object was seen below the clouds. If this means that the object passed along the northern horizon below higher clouds, above it in elevation angle from the ground, this is consistent with the entry. If it means that the sky was totally overcast and the object was seen with clouds as background, that's something else. The former interpretation is consistent with the Proton entry fireball.

5) A structured object was perceived by witnesses. This is a classic fireball phenomenon, where bright lights (individual fragments) are mentally integrated by witnesses into illuminated sections

of a single craft. The estimates of "enormous size" are worthless since only angular size is directly perceivable. This is basic eyewitness interview technique and standards.

6) The object's motion was irregular. Some witnesses did report "alternating slow and rapid speeds" or a "vertical ascent", but these perceptual errors are known to occur with undisputed fireballs and are a characteristic of sudden celestial perceptions.

7) Many witnesses were "qualified observers". This is a discredited argumentation gimmick which falsely implies that pilots or engineers or students are more likely to recognize natural celestial apparitions. Experience has shown the opposite: they are more easily cued into unconsciously adding in interpretations from their specialties.

8) Further investigation of this was done in the US. My notorious reputation as a "space/rocket UFO debunker" (and genuine expert) seems to have disqualified me from being approached, but other real experts would have told Sider the same thing: the evidence was overwhelming that the sightings were caused by a space entry.

It is distressing that by now, half a century into the "modern UFO phenomenon", leading UFO groups such as Sider's and MUFON cannot recognize such overt IFO's as rocket entries. This French case is one example. Another pitiful throwback was shown in a recent Gribble column on the 1967 "crescent UFO wave" over southern Russia, a wave which my research (published in the MUFON Journal in 1982!) showed conclusively to have been caused by Soviet orbital weapons entry tests. Nobody has argued with that solid conclusion: MUFON's editorial position appears instead to just pretend it was never published. This is not a responsible, scientific approach to the issue.

Eyewitness accounts

- Intro tbs

<https://youtu.be/gyoweVssAd0>

UFOs Over Oregon & Washington On 3-25-2021, UFO Sighting News

UFO Sightings Daily == Guys, now the us agencies are trying to **spread disinformation** by **falsely** telling the public that this is SpaceX debris falling. I **know for a fact** that Elon Musk would not allow such debris to fall over America. He instead would aim it at the ocean area where it can crash to earth safely. Elon thinks ahead, he plans ahead and would **never ever allow** SpaceX parts to crash over American soil, or any land for that matter. So, this is not SpaceX, what is it? Easy...**a fleet of UFOs trying to look like meteors**...but meteors fall, these are following each other and **not falling but moving in a straight line**. These are UFOs!

Seattle sky asteroid meteor comet shower plane crash shooting star aliens ufo // <https://youtu.be/DN0OBR313qE>

- Isaiah Baye = I just seen this when I was driving home! It looked like **one big one then it split** into a bunch of smaller ones
- Kyla Teljeur == My boyfriend saw this in Langley bc Canada!!!! He called me thinking it was **a plane on fire.**
- John geer == i was on the porch, thought it was **a burning plane** at first, just kept getting bigger from my point of view. Best one i even seen at least one breaking up like that

<https://youtu.be/0DzRjvcGH98>

- Daniel Gordon == A wonder if all these are individual crafts or the **one big craft,**
- Unexplained Tragedies == In my personal opinion it's **one big craft,** but who knows.

Something (presumably a satellite) breaking up while entering the atmosphere over Oregon

- Kjayd2205 -- I could see it **from Northern California clearly**, don't know what it is.
- Osiris32 == Saw it almost from start to finish in **Portland. Traveling SW-NE, and from about 45° declination to almost the horizon. Tons of little bits breaking up and scintillating, every color imaginable, with more debris suddenly appearing later.** It's filling the new cue on r/Portland right now. What a special thing to get to witness!
- MettaMorphosis == I was outside smoking like 35 minutes ago in Hoquiam, WA. I see this HUGE light in the sky, at first I thought it was some weird plane, but the light was much bigger than normal and it flashed rainbow colors. Then **it shattered and sparkled rainbow colors**, and the debris drifted slowly across the sky. Scared the \$hit out of me, because for a little bit I thought it was a plane, and the fact that the debris could have hit my house or something is a very scary thought.

Other videos

-
- Single fireball Rising in sw, on all-sky cam
<https://youtu.be/InyQqwvoQno>
- Moment of breakup [https://youtu.be/yca- uC1ZS8](https://youtu.be/yca-uC1ZS8)

RAW COLLECTION OF WITNESS COMMENTS

- DISCUSSION
- Introduction and suggested utilization
- x

- I was heading northbound on White Trails rd between quincy wa and wenatchee wa on my way to wenatchee wa. I was a couple miles south of 28 w when up in the sky, above my truck, from east to west, **a red orb lower than a plane** ought to have been, between 500-1000 ft, went across the sky faster than any aircraft I have ever seen. **No sound**, exhaust or tail. It seemed like a shooting star but way slower and no tail. It was the weirdest aerial phenomenon I have ever seen. It crossed the entire sky in a matter of seconds.
- Langford, bc == 6 lights surrounding a disc shape and moving. There was approximately 6 white lights moving at the same speed and same direction. I first thought it was aircrafts but when I went to the balcony to look at it better, **I could see a disc shape**, grey color. It was huge and was moving up in the air so smoothly.

nuforc 2

- 19:30 Vancouver Bc (Canada), BC Disk. 20 seconds. It looked as if **a giant Disk shaped object** that was de-cloaking as was cruising across burning with fire around the front of the Rim, strange orange lights, like burning debris flicking yellow and fireball color with a dim yellow trail behind it, moving like a slow cruising plane going NE. in the Sky's over Stanley Park, Vancouver Bc. **Was flying low** when looking over horizon on Thursday evening in Vancouver bc from Lions heat bridge. At first it look like a giant plane was going down while burning slow, with trail of fire. But then **looked like a front of a giant Disk** shoe that you could see the front half, but the very front of it was light up like burning, Brighter. But as it moved across sky, it didn't go down it just disappeared, but slowly.so as the 🔥 fir gloominess. End
- 20:40 Everett WA, Light. On the freeway - driving - everyone slowed down - some were swerving- **So many lights**, big and small - some in a haze - it looked like a comet or as some have stated ribbons - there also looked like **the mass had an escort following - possible military.**
- Port Ludlow, wa == There are currently 6 drones above the Bay in Port Ludlow, we were outside looking at them when something moving horizontally flashed across the sky right in front of us. It was circular but had at least 6 other lights trailing right behind it. **We couldnt tell it was separate things following each other or one thing with white trails behind it.....**

nuforc 3

- chilliwack, bc Large bright white light in the night sky that suddenly **vanished** in an instant! I walked out onto the back deck of my apartment to have a smoke. I always gaze at the stars when I'm outside at night. I happened to look up and to the NNW and noticed a large bright white light up in the night sky, that resembled a very bright star. I stared toward the above mentioned direction for about 30-40 seconds. All of a sudden, as if someone flicked a light switch, the light vanished. In a millisecond it was gone. This light "anomaly" made no sound that I heard, and I couldn't make out how high in the sky it was. This was not a commercial airliner, as they have safety and flashing lights on during their flights. Not to mention, they are quite easy to hear flying overhead, especially at night. The light also didn't move in any noticeable direction. It just hovered in the same spot in the sky until it vanished. I waited and watched in the same spot to see if it returned to view, but sadly it did not. Not too sure what I saw. This wasn't a plane, helicopter, satellite, or star.
- JO = Location Is in far SW corner of mainland BC, well north of ground track.

nuforc 4

- Oak harbor, wa -- Slow moving **formation of lights**. Looked like a **combination between a massive freight train and a comet**. It looked like a combination of a very slow moving comet and **a long freight train with dotted windows lit up**. It moved through the sky from west to east and crossed over Heller Road around 9pm. The front was the brightest and had the most lit up objects but there were other bright lights scattered in the middle and towards the back. The light trailed off behind each bright light. My son thought it was a one of the big navy carrier planes, but it didn't make any sound and was a lot bigger/longer and looked way different to him when his eyes adjusted to the image. He saw it more as **a formation** of bright, round lights. I also thought it was a navy carrier plane since they fly overhead here all the time but when I lifted his window shades I could tell that it was something very different. It was **massive and slow moving**. I have never seen anything like that before. A truck driving down Heller Road slowed to a stop as it passed over head. We assume he or s! he saw it too.

Strange lights over head

[\(2\) Strange lights over head : oregon \(reddit.com\)](#)

- Mdgmvnm == At about 9:15 PM in Portland Oregon, **a strange mass with lights** soared over head. Very bright sources of light but did not illuminate any land. 4-6 streaks of light followed the source as it flew behind the clouds. Although no sound came from the ufo it had a flight pattern that seemed **to fly low then adjust upwards** before disappearing. I personally suspect it was some kind of test rocket or maybe even a really fancy drone. Either way it was definitely strange. Hope to find someone who saw the same event.
- Skykelp == Sighted all over, including Coos Bay. SOME are saying a plane went down.

<https://youtu.be/BX7GZenopm4>

SHOCKING



NEW FOOTAGE FROM SEATTLE SHOWS
LARGE METEOR OR UFO OVER
THE NIGHT SKY.
THIS THING SEEMS HUGE WHATEVER IT
IS.

News & Beats == CRAZY
UFO FOOTAGE AS SEEN
OVER SEATTLE
WASHINGTON AND
Volcanoes earthquakes
and other Strange
weather occurrences
have happened in 2021.
Videos captured are
showing how crazy 2021
has been so far with
large amount of activity
happening worldwide.
**Subscribe to keep up to
date with all the latest
videos**

SpaceX Falcon 9 Rocket Debris Lights Up The Sky Over Chilliwack BC [by Rob i]

<https://youtu.be/qBJhprHQxKw>

- Security camera footage
- Michael Suchocki == HOLLY \$hit thats a rare catch! wonder if theres pieces of that rocket in the Fraser wouldnt be surprised.
- Amped Up == Funny how things sent into space don't go straight up.
- Tim Adams == Or straight down.

Meteor Shower over Washington ???

<https://youtu.be/h2p4CcU60Sw>

- MARK MATAITUSI == I knew i saw something blue that fell when i was driving on freeway that night near everett
- Tlj4all == If "it slowly spiraled down from orbit over three weeks", was the fact that it would come down in a rain of fire published anywhere at that time? Why are such reports published (at least widely) only weeks later, as a "news curiosity"? Please, space-junk techies, let us know next time via your news contacts, a little sooner. And Mr. "not my prob, dude" Musk, who I'm sure is lawyered-up for any unfortunate events at the trash dump site (Earth), needs to be called onto the carpet by the media for this careless disregard of us uninformed bugs-to-be-squashed.

Holy Cow A Meteor Or Something Exploded Over My Head 3/25/2021, 9:00 PM (really bad video, but real)

<https://youtu.be/40fdtr54fks>

- Daniel Eriksson == Looks **way too big** for a Falcon 9 second stage?
- Allan Dulles == That makes more sense cuz I am pretty sure **meteors usually dont break up** like that?
- Mitchell Pearce == That's space junk (old satellites/rockets/etc.). I've only seen it once.... There is a lot of garbage out in space that falls back to Earth and burns up on re-entry.
- Bob == of course, but imo that's not what this is. the timing of this. lets agree to have our own belief on what this is, I believe **its more of a spiritual event**, not some **metal pieces so close to each other, of such size that can be viewed clearly from the ground.**
- Mitchell Pearce == I watched it again, and I think you're right. **Space junk moves slower and looks different.** I was 10 the last time I saw space junk. But sure, I can agree to that.
- marcanwest AG == Holy im in victoria and **i heard a bang** a minute ago to the south

Meteor Over Portland, Oregon? Falcon 9 Debris? Strange Lights in the Sky (March 25 2021) = <https://youtu.be/XjqBiA93DSI>

- Tetraskete == OR ... this is the wreckage of **the NASA satellite that mysteriously broke up** in space back on March 10th. They CLAIMED it was not due to some unknown impact ... but this is what one might expect NASA (never a straight answer) to say ... as **such a reality would be gleaned to be too 'scary' for the public**. An impact would have pushed it towards Earth, as well as breaking into so MANY pieces. I watched this 'cloud' and there were **more than 50, perhaps 100 pieces** in this debris cloud. **NOT** a 2nd stage of a rocket, I would not think, unless those were something like heat tiles? And bear in mind, this debris was coming out of the SSW, or so it appeared. **The NASA satellite was in a polar orbit!** All is sometimes NOT what it appears.
- epic sword mewz == I just **felt and heard it**, my dad just found out it was a meteor. I thought either someone dropped something or it was a preshock to an earthquake.
- A == Just saw this in Bend Oregon. It crossed the whole sky, starting as a bright point with a tail then **breaking up into the many sparkling pieces**. Seems like something large must have fallen out of orbit. It went way slower than most meteors entering the atmosphere usually do.

Seattle sky asteroid meteor comet aliens shooting star ufo // <https://youtu.be/DN0OBR313qE>

- Jo == Any chance you could make a sketch of what it looked like to you? The eye/brain sensory mechanism is far superior to automated instruments.
- Check Team Tony == it looked pretty much exact of what was on film just maybe closer to the ground.
- Kelsey Harte == I saw it **go RIGHT OVER ME!!!!** I was like wtf!!!![jo-shape?] It's so hard to explain. It was like **a column of extended light with larger twinkling lights mixed in and different colors.**
- =====
- Meteor Shower over Washington ???
[City skyline view] <https://youtu.be/h2p4CcU60Sw>
- May == I posted a video in wenatchee, wa. **I heard it land far away sounding like fireworks.** I'm glad to see it on your side.
T. B. == Whatever it was, it burned for a long time

Seattle sky asteroid meteor comet aliens shooting star ufo // <https://youtu.be/DN00BR313qE>

- Mz Dawn == I saw it as well amazing and **massive!**.... I was **very, very close** to it ... it was literally **flying over the tree tops**, close to the Canadian/US border in WA. To me it looked like **a train in the sky**, all lights travelling in sequence.
- JO: EXCELLENT analogy, but range estimate way off. It was forty miles up.....
- Mz = All of the videos I've seen show it way up, but it was not as high when it went past here. I watched it go by just off my deck, and **it wasn't nearly as high as the planes that go by**.... It was **very low to the ground**, here ... much lower than I would observe a plane going over. It was **absolutely massive, moved very slowly, and it was moving horizontal to the ground**. From my observation, nothing was breaking apart ... it was travelling perfectly aligned, at the same speed. If I had to try to describe what I saw, and I was very close to it,
- Mz Dawn == . I'm watching the video, and I agree with the others that said **it was an object, not just lights.**

Jo to Mz dawn [continued]

- Jo == I appreciate your helpful candor -- that is EXACTLY the impression many MANY people get when watching this kind of unearthly 'fireball swarm'. It forms the foundation of a number of famous and highly impressive 'UFO mothership' mass witness events.
- Jo - Want to see two drawings that witnesses to the Oct 24 Maui fireball swarm produced, after I pestered them [grin]? They actually contained critical information they themselves didn't realize they had noticed -- and correctly remembered!
- Jo: I've worked with federal air accident investigators, they have assured me that YOU fit the profile of the 'ideal witness' == you are not a professional pilot or aircraft specialist so you do not [like them] have the urgent instinct to find an explanation right away, in the most hazardous spin, in order to save their own butts from a potential lethal threat. .Pilots are NOT 'trained observers', they are 'trained survivors', worst-casing their way through puzzling ambiguities to quickly choose explanations and responses to save their lives if they guess right, but merely embarrass them if they guess wrong. These investigators tell me [and I've confirmed] that 'naive' witnesses see more clearly and report MORE completely all factors, that a pilot might unintentionally mentally edit to force-fit his/her observations to the instinctively preferred answer. May you live long and prosper!!

Weird lights in the sky tonight | meteor shower oregon or spacex debris

<https://youtu.be/WbJeTkQWgp0>

- SickSalvation84 == This was freaking nuts. Saw it last night outside the vape store in Bothell WA. literally insane.... it literally looked like the scene from transformers it was **soooooo slowwwwww** and incredibly bright. I guess it happened over south washington/Oregon area. I'm a good 300 miles north of oregon but it looked **SO CLOSE**. I'll post a great video of it in a sec. Not mine, just one I found that was identical to what I watched
- FinalMythology == could the whole have been **one big ufo** and **the lights have been the exterior?**
- corn bread == [@jim oberg](#) you're a weirdo get a life I keep seeing your same comment every where
- Jo == Hey, I'm a retired 'rocket scientist', it's my hobby. I'm studying why so many seemingly intelligent people just don't want to believe these are human spaceflight effects.

SpaceX rocket debris likely the reason for strange lights seen in skies over Pacific Northwest /

https://youtu.be/dcx52ZE_UaI?list=TLPQMzEwMzIwMjGYusB6NdiJow

- Global News = Bright lights seen in the skies over parts of British Columbia, Washington state and Oregon on Thursday night was likely space junk, according to the National Weather Service and other astronomy experts.
- Stjames273 == Those are lies.. those are **too big and uniform** .. And **follow a trajectory** . Don't believe the media lies.
- TheKnowledgeGuy == That **does look like space debris**. The green sparks are probably chemical reactions by ignition. Although that is just my speculation, i am not the right person to consult for chemistry, i am a complete noob in it lmao
- Jonathan Darnell == Usually when things break apart, they breaks apart. **This thing stayed together**. But I don't expect the truth out of known liars
- maria skalniak == They will lie!!! That **not looks like space racket**

Pac n/w

- Amauris Joaquin Linares == Why does it look like it's **on a formation**?
- Frank Cancelliere == It's just convenient for "experts" and the mainstream media to say this is "space junk" or meteorites. They don't want the public **to suspect anything.**
- Bagw3ll Beatz == **DEBRIS DOES NOT FALL IN SYNC WITH OTHER DEBRIS. READ IT AGAIN.... THE GOVERNMENT IS LYING TO US WE ARE CURRENTLY UNDRR ATTACK AND THEY ARE AFRAID TO NOTUFY THE PEOPLE DUE TO PANIC AND OUTRAGE... THIS IS A FACT....**
- Dean Snombers == That's **a large amount of debris for a rocket** but yet this is msm and deceiving the public is their game!
- Mr Nobody == the media is **covering this up**, keep sleeping to those who believe it falcon 9 debris
- Rob Rochon == Mainstream media all reporting it as SpaceX rocket debris. The problem with that narrative is that SpaceX has had a record number of successful launches and booster rocket recoveries in a row (its all public record) going back to February 16th. Hence why Elon Musk also hasn't tweeted about this. That's not SpaceX debris, the mainstream media is lying to you. **Satellite debris has been falling down on us for half a century and none of it has ever looked like that.**

Fire ball burning over Woodland WA- SpaceX second stage re-entry and burn up

<https://youtu.be/UT-7zAPT5U>

- Itz_N0xX == That's brazy bro **it sounded like a helicopter flying low** over our house
- Science Revolution == If spacex rocket reentering the path will be eastward. curved down not flat.
- Fighting Ducks == Kelso, 2 helicopters followed it south
- Jose Flores == i'm in ellensburg and i saw it **really close**
- Catherine Lord == **I heard it go by twice...** Unless it really was a very loud helicopter I heard.

Unseen Video Of Oregon Meteor Fireballs Light Streaking across Washington

- Aco Jankovic == No way it's a Meteor shower **it's flying in formation** . There **meters apart** but going on same path .
- Shane Rogers == Those are not asteroids folks. That's what it looks like when a missile has been shot before detonation.
- Truth Detective == **Same exact scene** happened over Russia last 03/17. Did they say it was from space x because it's the same sight. In America they want to claim it came from space x when supposedly there's numerous pieces of space debris in orbit.



<https://youtu.be/2dzRnRfqVgc>

Tony Smith [apr 15] == **That's a satellite being taken out!**

- sonja keesee == This one was crazy. I actually was a witness to this one. **it went right above my head** ! It seems some peoples videos/picture are from an angle or from where they recorded it at the right of the screen or left of the screen mine was directly above my head but **I couldn't get my camera to work** , but I'll tell you right now this one was amazing ! I've never seen anything like it, it literally made me **gasp in awe** ! Seeing it on a video is one thing but being right there and having it literally right above your head is something totally different. I can't even begin to describe how amazing this was.
- Jo = Any chance you could make a sketch of what it looked like to you? The eye/brain sensory mechanism is far superior to automated instruments.
- Nikky sugar == It's part of Elon's falcon 9 rocket- it basically **got lost** 22 days ago and **now it shows up**.

- MyEcoLife == If space is straight up then why do meteors always fly across the sky and **not fall straight down**? Because they can't come straight down cuz there is no space up there... That is a lie... There is a firmament up there so these things we are seeing come from under the firmament and may be part of an elaborate scheme to fool Humanity to continuously believe in outer space and aliens and not believe in God.
- Corteum9000 == Any other examples of rockets showing up like this before? **Not that im aware of**.... I dont think so. No other examples of a rocket test looking like that.
- Pierce's Trains == Well it is man made, weather its the falcon 9 or not. A rock of some sort would have gone way farther than a chunk of man made material. And thats why it fell apart over a large area and not just one streak.

Meteor Lights Up in Washington, USA

Fish News == <https://youtu.be/Y18XluzklOg>

- A long streak of lights slow-danced across the night sky over the Pacific Northwest Thursday night. The bright show dazzled onlookers from Canada to Oregon, leaving many to wonder what caused the spectacle.
- Rae Jackson == Planet X debris being shot down by UFO or military worldwide , **it's not space rockets as they want you to believe** because there is about 5 or 7 videos from different parts of the world, the media is bull\$hitting about these because they are controlled to say what they must say by the elite ... When you watch the news , block yours ears from the bull\$hit and look with your eyes only , you will most probably work it out....

The UFO is shredded!? Meteor or comet seen in the sky in Portland, Oregon – YouTube
<https://youtu.be/Zkq9rz5JYTE>

- David Spear == The "official" explanation is that it was part of a rocket re-entering the atmosphere. Ummm...that must have been **one big ass piece of rocket!!!**
- Byron Bonilla == I've seen one of elons rockets break apart a few years back outchea in cali **looked nothing like this one**... it had an orb around it n was pulsing... whatever this is looks cool and interesting.... great video
- Jesus Christopher == I HAVE'NT SEEING A " SHOWER " / " MISSILE DEBRIS " / " COMET DEBRIS " THIS BIG BEFORE- I'D BE QUITE FRIGHTENED WITNESSING THAT - FOR SURE I'D BE EXPECTING AN IMPACT. **SEEMS LIKE EVERYTHING IN THE MOVIES IS STARTING TO HAPPEN.**

UFO Spotted In Portland Oregon Sky, Is The US Government Hiding Alien Invasions? (Isiah Curry)

<https://youtu.be/nx3tx961qCE>

- Chase Bandxs -- My girlfriend and I were walking home the other night in hillsboro OR and we both saw this bright and clear it looked **like it was on fire.**
- Bettina Johnson == They look like they staying for a lonnng visit **that object looks miles long.**
- IAMWHOIAM777 == If it's not blown up on mainstream media then they are trying to hide it and **keep people misinformed.**
- D Lastname == i was seein this \$hit all the time in cali before covid happend i was tellin my people somethin was goin on

Isiah Curry 2

- Cinnamon Cinnabon == That isn't no damn UFO that's **project blue beam!** In a minute. the fake image of the anti christ is going to appear in the sky. Their is aliens though!
- Katarina Giselle == Project blue beam is real, no doubt, but aliens are as well. It's determining the difference that is important because there are very evil aliens along with aliens that care and want to help all the innocent humans on this planet that are basically slaves to the evil elites that have been getting worse and are trying to work out a huge agenda right now that has already been in the works for decades and is getting worse by the day and will continue to get worse before 2030. They reach out to those that are seeking ascension, those who are are awakening. I was reached by them several times in the last 6 years, mostly pre 2 years ago, and not just in the night, but once during the day, and I did have a telepathic communication. It was the most surreal thing I ever experienced and without a doubt the coolest thing I've ever witnessed as well. They are so far advanced, it gives you the indescribable feeling of being a small, trusting, innocent child again.

Other angles

- Religious spin
- <https://youtu.be/MzJRxpDLPmY>
- Drone captures reentry
- <https://youtu.be/qTDCIDID8qA>

- Objekt dringt über den USA in Atmosphäre ein - Es war kein Meteor
25,000 views <https://youtu.be/dwdbIPIFhz8>

Raw: SpaceX Falcon 9 rocket debris seen from Bainbridge Island // <https://youtu.be/9rTzGXxEwa0>

Raw: SpaceX Falcon 9 rocket debris seen from Bainbridge Island



COURTESY: STEPHEN VILKE



Raw: SpaceX Falcon 9 rocket debris seen from Bainbridge Island // <https://youtu.be/9rTzGXxEwa0>

#2

- Rae Jackson == Meteor or asteroid shot down or interception by UFO causing explosion , but **a little slow** in moving across the sky , hmmm.
- Science Revolution == If spacex rocket reentering **the path will be eastward. curved down not flat.** Stage 2 is one solid piece. no fuel left, **impossible to blow up** into many pieces? The path is **parallel** to earth surface. **Never seen a rocket launch path like this, always arch.**
- robert cowpewart == it has fuel for a de orbit burn.... it didnt go to plan and hit a rather flat trajectory and missed its normal re entry/burn up location
- Motokid600 == This was a polar launch so **the orbit is going roughly North-south** as opposed to west-east.
- SS 1429 == It is quite possible that these are the wreckage of a rocket. But why are they moving **in the same direction and not scattered** as it happens after the explosion ?!
- Brian Barker == If you jump out of a plane **you fall straight to the ground** looks like it's flying **across the sky** not falling stupid fallen devil's lol

- Tom Board == You need to stop. This wasn't the Falcon 9 2nd stage. **It doesn't have the mass** for this kind of display. There have been over 200 Falcon launches. How many **times have you seen this happen** from a 2nd stage re-entering the atmosphere? Also, neither SpaceX nor NASA has made any confirmation. The 2nd stage of the Falcon 9 is 30 feet long and weighs 3.1 tons empty. This looks like the Columbia breakup over Texas. It was 122 feet long and 82 tons. I have no idea what it was but that wasn't the equivalent of a Chevy Suburban burning up. It was big. You news people are so lazy. You won't even make an effort.
- Jo - Tom, thanks for the detailed response. Comparing mass of debris based on brightness of debris field is a reasonable suggestion but overlooks one fundamental difference, **Columbia was in a sunlit sky, and this one was in full night so camera sensitivity settings were obviously very different.** If you want accurate details on why I'm convinced this was a second stage reentry, email me jamesEoberg@comcast.net and I'll send you some reports I've done on very similar apparitions in the past. But thanks for the good attempt at serious technical analysis, keep at it.
- Scott Kinter == It's amazing how this debris looks like it's flying **parallel to the surface** of the earth. Flying space debris and not falling space debris. The lie continues from nasa.

Rocket debris lights up skies over the Pacific Northwest

<https://youtu.be/6x49lplwlu8>

- Oregonian/OregonLive reporter Joe Freeman captured this video of the large flash seen in the night sky on March 25, 2021, in the Pacific Northwest. Freeman shot the video in Cannon Beach. Read more about the large flash across the sky on OregonLive: <https://bit.ly/39hicQe>.
- Toilet Paper == 6 months ago debris started falling. **It's going to change us all.**
- Just a Sober Guy == If you think you know what's going on your wrong. The problem with everyone is everyone is looking for a quick answer to satisfy their cognitive dissonance. I hope you all feel satisfied with your quick answers. Now carry on and go shopping and keep your heads down glued at your phones.
- R Coto == Felt a **small tremor/shake** in S. Salem, Oregon to see this in the sky and neighbors wondering what in the world was going on! Amazing and scary at the same time.

#2 <https://youtu.be/6x49lplwlu8>

- Ryka jdoe == Y'all are way too damn naive **stop believing everything you hear** like a bunch of mindless sheep being led into a slaughter house unfortunately, all centralized news media is doing damage control trying to create a cover story of what all the citizens of Portland Oregon had witness. FYI you mindless sheep what you saw **was not a space x rocket** it is not consistent with a debri from a rocket it would burn up in the atmosphere it wouldn't be visible, what ppl saw was a trail of lights linked across the sky in different colours **evidently something interplanetary** the government deems threatening certainly **not debri** from a rocket entering our atmosphere.
- Sparkling Cyanide == More pieces of SpaceX breaking off and falling back to Earth Trump and Elon musk make the biggest pair of assholes I have ever seen. Dur dur.
- Mudkip909 == Aaaand do you have any sources to back your claim?

#3 <https://youtu.be/6x49lp1wlu8>


- Sherry Moore == I saw this from Red bluff Ca. I thought it was **an airplane at first on fire**. I was looking at the sky already when it first appeared and thought it was a meteor but when it started to come apart i was concerned it was an aircraft on fire going down. Whatever it was; the display of it was quite unique.
- Mysteries of the Realm == Not a phoney rocket story , for sure.
- Rosmery Lopez == Before it looked like meteriodes now looks **like a ship from star wars** or some
- GioXD Games == Rocket go boom boom in re-entry
- Sandra Gayle == Hay cool! I saw one of them before in Sacramento California ha i thought I was seeing things very cool guys. So I am not the only person who seen this although that was many moons ago but still. They disappear right before your eyes. You guys did take a picture of it? You only see it at night.

#4 <https://youtu.be/6x49lpwlu8>

- Blues Howler -- **I don't think for one minute this was SpaceX's junk.** There were after all three different sightings. One six hours before in Oregon make me believe "they're here" and maybe coming out soon. Considering the govt has acknowledging there are unknown aerial phenomenon. It's about time. I believe David Fravor and the Navy. I told a friend before this was posted on YouTube. Oddly enough they had a sighting of an enormous ufo in Arkansas that has him concerned. His sighting of a huge craft the same evening makes me believe it's not SpaceX junk. It can't all be theirs. Isn't space junk the modern day weather balloons of the 1940's?
- Peaceloveforever88 == How can you justify all this LIGHTS are GROUPED together PARRALLELY ? and why all LIGHTS have the **same SPEED** ? and why all LIGHTS stay **HORIZONTALY** in the EARTH atmosphère ? it's not logic
- Marke Bedwell == This was not a rocket it was a military transport look for the blinking lights in the center.
- tammy taylor == I live here in Brookings Oregon....**it looks like a Huge ship.**

Scientists and onlookers react to rocket debris streaking over PNW sky

“KING 5” <https://youtu.be/oCbQQ4HIKWg>

- A long streak of lights slow-danced over the Pacific Northwest around 9 p.m. Thursday. The bright show dazzled onlookers from Snohomish County to Salem, Oregon, leaving many to wonder what caused the spectacle. While viewers speculated it could be a meteor shower, fireworks or something extra-terrestrial, scientists report the sight was actually man-made.
<https://www.king5.com/article/news/lo...>
- Stan Pikaliri == **Debris flying horizontally** it means the earth is flat ;-;
- Cedrick Biernes == Wow they already put an excuse for that hahaha. As expected from government hiding all for what cause
- Truth Detective == This couldn't have been from a space x  . The same exact thing happened in Russia a week before that.
- Sofia Bulg == I wish i can believe u... **How the rocket goes falling horizontally**??????????????????. Lierssssss
- Christine youtube == That was **too much debris** to be a satellite rocket. Looked more like mother-ship.
- Juan Valadez == Rocket debris LOL. I wonder **if anyone actually believes** this..
- Hawks Fan == And you think it was what?
- Luisa Green == Typical lying ass media once again! This was a meteor, not space junk, tards!!!

oCbQQ 2

- Kevin Walker == **Debris will Fall not Fly** says man with Common Sence!! Watch it.
- JO == Not orbital debris, it comes in very shallow. And BTW you misspelled 'common sense'.
- KW == u should watch private videos of it all the way thru! Its **Clearly not a rocket** or debris! They fly **straight up back off to space at the end!** You need to investigate instead of Propagate!!:) was that spelled correctly sir? ... **Defy all laws of physics for a falling or floating** ir orbital thing! To fly straight up at end is to imply there is No Gravity!! Gravity a lie to u guess.
- JO == Clearly you are worse than clueless – you are delusional – about the motion of orbital objects and the illusions that parallax can create on cameras. There are plenty of websites with introductory-level explanations of this, would you like a few suggestions? All you're doing now is embarrassing yourself and attracting mockery toward theories of government secrets, many of which strike me as entirely reasonable. .
- Encik Hikram == stupid statment..the metal object will burn melt..that is big meteor
- I am Nomad == Anyone who does not believe in aliens **are small minded insects.**

oCBQQ 3

- KW == I also realize the Nikon p900 works amazingly well on sky! I have 1! If you watch a video shot of it with that! It totally 100% shows SEVERAL things split and fly off! **Rockets dont separate into several pieces then hit the turbo boost and zip off with that speed!!** Now either you are working for someone to help hide the hand of what it was or your 12 yrs old **with no grasp of the slightest physics!** Either way I dont think you have investigated enuff videos of it to qualify you to debate me on it! I been watching rockets take off and reenter since Challenger live explosion!! Truth stands for itself!! You want a demonstration pull up Night Sky shot with p900 an tell me if you dont believe it will show the Truth! Even on the surface of the moon.

SpaceX Falcon 9 rocket failure creates spectacular light show for Vancouver

<https://youtu.be/S66DZ7IzUHg>

- Bagw3ll Beatz == DEBRIS DOES NOT FALL IN SYNC WITH OTHER DEBRIS. BUT TERRESTRIAL MATTER DOES.
- Ash New == **How does debris FALL Horizontally?**
- Sebastian Bork == You are writing complete BS. That was a single piece of equipment falling, which only broke up into several pieces as it was already reaching the denser parts of the atmosphere, where it got slowed down rapidly and started to burn up. It's no wonder the parts would stay close together when they had broken up only seconds earlier.
- Tom Board == The 2nd stage of the Falcon 9 is about 30 feet long and empty weighs about the same as your car. That debris looks like whatever it was it was **much larger** than that.
- finlay Morrison == The stage will have broken up, the intense lights would have been because of the extremely large energy that these parts have, about 30 million joules per kilogram.

S66 p. 2

- The insane aerospace engineer == This was a rocket body burning up, it was disposed of like they usually do with them, no failure here.
- Robert Moskau == Oh, ok... so, some "expert" that no one knows told you this? Please prove us wrong. **Since when do space rockets re-enter Earth's atmosphere, over cities, at horizontal angles?** How many videos have we already witnessed from NASA's failed "Space X" launches? **Why would NASA authorize** a night time re-entry, over a city, knowing their multiple test flights have already proven to be unstable? You people have proven time and time again that you are incapable of being honest and trustworthy. You lie to the masses to cover up your own wretched miserable lies. There's a special place reserved for you, because you knew, and did nothing. That's exactly what meteors do when they explode from the Sonic booms. They fragment.
- Bagw3ll Beatz == you're delusional, not aware or working with the government to cover this up. fuc4 You either way...
- Peaceloveforever88 == **Why all LIGHTS have the same speed** in the atmosphere? Why all this LIGHTS are GROUPED PARALELLY together? because, this is ALIENS SPACE SHIPS.... it's impossible to make for comet or meteor or debris
- fritz eder == It makes me more and more confident **not to trust** any media. People there are simply **not qualified** to report.

SpaceX rocket debris lights up US sky - BBC News

<https://youtu.be/2LZSQ7wiB2o>

- Bbc news == Lights streaking across US skies on Thursday night stunned onlookers - but this wasn't a meteor shower, it was SpaceX rocket debris
- Juan Valadez == Are people really falling for this space x bull\$hit lie? The media does nothing but lie. The end is surely near. **And most everyone is blind as a bat.**
- Juan Cervantes == This \$hit **wasn't falling it was going somewhere**
- omni potent == Lie lies lies lies, it was a satellite **shot down** actually.
- Aj game changer == SpaceX is a failure just admit it, after many attempts many of their rocket burned down, are you saying people can travel in that, i don't think so
- Alex Keaton == So this debris falls on someone's home or worse yet hits and kills someone. Is Musk legally liable and responsible?

Bbc #2

- Heather Morgan == **I've never seen rocket debris look like this before**. This doesn't look right! The laws of gravity dictate falling objects, if u look closely u will notice pieces falling quicker than others and also slowing down. Everything falls at the same pace, no matter the weight difference.
- Sanctuary Life Systems == Atmosphere is the only reason they are glowing at all due to heat - meaning the larger pieces create more friction so their speed slows.
- Hm == I completely understand that, and i am a total science nerd 2 boot, but if u look at different videos & the angles of it **it's not falling down**, The degradation of altitude of these particles are acting weird. Like I said I've never seen debris look like this.
- Just Videos == Thats no rocket debris, **otherwise it would happen all of the time**
- Gwen == everything elon makes explodes, what a loser
- Mostcom == It's a Buick, no one can tell me any different.

Bbc #3

- Sparkling Cyanide == Lol trump's space garbage.... It ain't Skylab boys and girls
- [deleted poster] == This is not space x. There was **absolutely no mention**, zero, that this phenomenon might result from space x rocket debris **in the days before**. If it were space debris, **it would burn up in a couple of seconds** like the vast majority of meteorites. What is so special about this 'space debris' that it has an intense glow, and **travels so slowly**, why are all the supposed fragments **traveling together** and not randomly deteriorating? If the media was expecting a 're-entry' as they say, why was there zero mention of a possible spectacular light show? This came by complete surprise. And all the media has to say is 'space x' and the mindless masses eat it up. **still waiting for those links** to news stories where it was announced prior to March 25th

Bbc #4

- Neebel == [@jim oberg](#) Imao, you trust something somebody tells you on the internet **more than videos clearly showing** what happend?
- Jo = The subtle lighting in these fireball swarms is rarely captured by auto-iris pocketcams. I am also interested in documenting the details that witnesses often 'fill in' based on visual cues that call up memories of similar night-time scenes from the past. A string of lights becomes, through entirely normal mnemonic cuing, a string of lit windows on an imaginary fuselage. I'd be happy to send you links to some recent studies of exactly that perceptual enhancement effect during earlier reentry fireball swarm sightings.
- Glenn Hunt == Now I know what the **series of explosions** were at about 9PM last Thursday night. Scared the crap out of me. All those pieces broke the sound barrier so it sounded like a series of explosions not just one. Wow!

Kyle America

- Kyle America == They are lying. Not debris.
- Jo == Could be, but how about some checkable evidence? Amaze us.
- Ka == if looking at that slow moving straight looking objects and believing the Elon Rocket lie you're beyond help.
- Jo == Checkable evidence?
- Ka == my own eyes
- jo == Based on what experience, beyond playing Kerbal Space Program in your Mom's basement?
- Ka == be my guest. Continue to listen to lies while we're in the end times. Forgive them lord for they know not what they do
- Jo == A propellant tank from the rocket has just been recovered. Doesn't that settle it?
- Ka == says who? Bloom "berg"...who said a propellant rank was found
- [more]

Kyle America 2

- Jo == News services. Showed a photo of a standard COPV tank found on previous random reentries.
- Ka == i will never believe the lying medi
- Jo == You seem eager to believe the lying internet UFO hucksters.
- Ka == no. I saw the extremely slow moving lights. That ain't "space debris". I'm sure you're one of the ones who believes we put a golf cart with a camera on it 50 MILLION miles away
- Jo == "Slow moving"? How far away do you think they were, and how did you measure it?
- Ka == looks to be a few thousand feet possibly but not much more... living next to an airport and having friends that are pilots they agree.
- Jo == How have you actually validated the "looks-to-me" method of range determination?... That's just perfect. So everything artificial you've ever seen in the sky is at the range of airplanes? Pilot experience is to assess potential hazards from nearby objects, it's how they're trained -- and how they SHOULD interpret ambiguous objects. . Better safe than sorry.
- TO BE CONTINUED

PLANET X-WORMWOOD SYSTEM METEOR DEBRIS BREAK UP OVER OREGON-WASHINGTON+OVER L.A/MSM LIES/READ

https://youtu.be/JF_To-6M088



- BREAKING: PLANET X-WORMWOOD SYSTEM METEOR DEBRIS ARE COMING IN HEAVY-SLIPPING THROUGH EARTH'S ATMOSPHERE/DEBRIS BREAK UP OVER OREGON-WASHINGTON+OVER L.A/MSM LIES, CALLS IT "FALCON 9" ROCKET 🚀 /READ BELOW.
- Breaking news coming out of Washington state And west coast USA. Large meteor debris broke up coming in earth's atmosphere over Seattle Washington, also multiple surrounding areas including in the state of Oregon. Also large meteor debris came in over Los Angeles yesterday. Most people who caught the west coast footage tonight all said it's a meteor just as I'm sure it is. **As mainstream media came out as soon as possible stating it was a "Falcon 9" rocket that failed.** Complete LIE. They put out an article yesterday showing there was a rocket that put up "Starlink satellites". This isn't a Starlink satellite, and in the article it says the rocket landed in (the water yesterday). [more]

PLANET X-WORMWOOD 2

- [continued] That proof /<https://www.google.com/amp/s/www.spac...>. And they'll continue **trying to cover up** all this meteor debris inbound me and few others are warning of. It's obvious now. Earth's in deep dung. Earth's going through a massive asteroid debris field not even related to the planet x system. Though also planet x/biblical Wormwood system asteroid/meteor debris are headed earth's way. Insiders have spoken planet x system debris are being blocked right now by jupiter, as jupiter is sitting in front of the planet x system debris. Planet x's debris tail is longer than Jupiter itself, and when Jupiter moves out of the way then all that debris will come in hitting earth globally as I've seen in 7 fireball prophecy dreams from jesus(yeshua). Also a planet x system planet body showed itself near the sun again, plus more..The rapture/and 7 years of biblical judgement is imminent, is jesus christ (yeshua) your lord? Newcomers who don't know jesus christ as your personal lord I hope you'll read BELOW my video in my pinned comments section.

PLANET X-WORMWOOD 3

- 74 OM King Avalon 47 == We are most definitely heading right towards it as its size is now almost equal to the Sun.
- Louigi 1998 == I live in Portland oregon. MY 5YR old kept saying we need to go out tonight there will be fireworks. We told him sorry hun it's not 4th of July. So we missed it because we go to bed early. Wish we would have went out to see it. But I know there will be more. **I cant belive all the hype that it is some space launch.** So sad how many People are so blind.
- MyFaith MyWings == A guy caught a video of one that exploded above his head on the channel called, "Uneducated Economist"... it gives another view of it. Really beginning to come in faster now!!

Weird lights in the sky tonight | meteor shower oregon or spacex debris



<https://youtu.be/WbJeTkQWgp0>



5/09/2021

0:02 / 4:15

OREGON FIREBALL SWARM DRAFT 3



Weird lights in the sky tonight | meteor shower oregon or spacex debris

<https://youtu.be/WbJeTkQWgp0>

#2

- CherryBoo65 Boone == Interesting how **they all kept the same speed and distance.**
- Beretta == **This isn't a fuc4ing rocket** that's what the government says every time something extraterrestrial happens this happened like 3 years ago there were **the swirly things in the sky** and nasa said "iT wAs JUSt A RoCkET TesT" they are obviously hiding \$hit from us and 90% of people aren't aware of it
- SickSalvation84 == This was freaking nuts. SAw it last night outside the vape store in Bothell WA. literally insane. [see also [WbJeTkQWgp0](https://youtu.be/WbJeTkQWgp0)]
- FinalMythology == could the whole have been one big ufo and the lights have been the exterior?
- SickSalvation84 == dude I'm saying; it totally could've been a ufo. I instantly thought Roswell 2.0

Streak of lights over Pacific Northwest was Falcon 9 rocket debris

<https://youtu.be/ekJanB4cjUk>

- Hakeem Scott == It's always satellites and rockets falling right? **People really think all of us are stupid???** EVERYONE OF US???. First off there are extraterrestrials that have been confirmed to exist especially from the Russian government, secondly there are literally space wars going on right as I write this GTFHOH. STOP TRYING TO CONTINUE TO LIE TO US!!!
- Kristi Hansen == Yeah, that's **not falling!** It looks more like **it's being maneuvered.**
- Manuel Betancourt == All that looks like **they are flying.....not falling down.....**
- Tania Verduzco == We live in Wapato, Wa and we saw it for like 20-30 seconds it looked like a meteoroid, but **then a few moments later I heard what sounded like thunder, rumbling sounds.** Not sure why there would be noises as well.
- Seattle Peach == if this came from space and is falling debris then **WHY is it not traveling straight down or slanted down** (S or SW or SE) but is traveling completely W or E.....I think the reasoning or answer given is complete rubbish! Watch the YT channel Bruce Sees All to understand what I'm talking about! ... but this is traveling **completely horizontal!** Not even at a downward angle just horizontal!

2 <https://youtu.be/ekJanB4cjUk>

- You Gunnacry == That "debris" is doing **anything but falling down.**
- J r == I didnt know rockets entering the atmosphere **fly upwards** and **sideways.**
- Magus Hipolito == Laugh out loud always the News said debris but those debris **keeps going and why don't just falls ?**
- June Bug == was no Rocket lol.. u people.. I saw tho whole thing it appeared at 9 coming west . so **the helicopter and planes came after it** came across so they didn't know neither.. lol.. it was **different space crafts riding together.** lying ass Govt keep lying
- roy dunn == No mention on the major news channels of this, SpaceX has been working double time to hide their mistakes and put optimistic news in the media. **They could solve their problems with a parachute but seeing as the whole thing is a con they need that rocket thrust landing to fool the lemmings.**

3 <https://youtu.be/ekJanB4cjUk>

- D C == rocket haha yeah right. **way to many pieces**. I am to say this to all. That was **alien ship blown apart** from more advanced beings to warn other aliens they can not win against God. Most of the battle happened between dimensions so panic wouldn't inset. The beings that destroyed the space ship are with God. Evolution is here gates are open. I know this as end times are here. Human beings are eternal and we all continue on. We don't die just gonna be moved to other realms. God is here now. Angels are all over the place. So all know Jesus is God. God wants all to know the lies are over. Humanity survives this and evolves. Faith and love in God is all you need. when the tsunami hits west coast that proves it has begun. Do not fear what is coming as you are Gods children and your new lives will be truth for those who have chosen to believe in God. What everyone does for the next 7 years or so will decide what happens to your soul. God bless you all in the hard times ahead.

4 <https://youtu.be/ekJanB4cjUk>

- Metahelix == Looks like it's **gliding not falling**.
- Ben Lucas == Why is it in a **perfectly straight line**?
- Lee Lady == It's such bull if it was debris **it would be falling apart** in particles due to gravity and everything else. **It wouldn't be in a single straight line**. Completely **leveled** with nothing out of sequence. come on and they're all over the place **in different countries** and different states.
- Atomic Bomb Heroes == Clear. **Something that falls to the earth flies horizontally to the earth**. For sure.
- Tomas G == Waited to fall for three weeks and **no media outlets knew about it**, we didn't tell anyone just in case it fell near a city.
- Mr&Mrs Cannon == Did not realize **debris fly**
- Navek Ydeer == You must have had a whole different view of this than I did cuz when I looked at it, **it was going uphill in the sky** it wasn't coming down hill in the sky

5 <https://youtu.be/ekJanB4cjUk>

Miranda Turner [apr 9] == i saw it from Stanwood. it was crazy AF! it looked like **stars on fire** that just seemed to **disintegrate** all of a sudden i tried following it but it just was gone suddenly.... i honestly at first thought it was the power lines having a strong current running through that almost looked like fire but with little fire sparks following it and when i finally realized it was **in the sky** i was freaking out and my only mission became following what ever the hell it was but I'm not kidding it appeared to disintegrate and was no longer in the sky that i could see it was the most bizarre and unexplainable sight I've seen to date. i obviously know there's usually an explanation for thing and this has been identified as something but i struggle to end my curiosity there given just how different it was. it overall looked like **one bigger balls of fire sparks followed by like 50 smaller ones** . i personally believe no MSM narrative so my brain immediately thought aliens because the way it seemed like it was going through the power line and like jumped into the skycould have been my angle of site where i was parked but it lined up too perfectly.

Lj -- Seeking truth upside down and inside out. Youtube banned my Legion James #1 channel. This is 2.0

- Legion James2 == Falling debris tracks all the way across the sky and keep ON going. **NOT falling debris** in any way shape or form.
- Jo -- Yep, that's what reentering satellites =DO=, where did you get the idea they 'fall' straight down?
- Lj == Physics mostly but my ability to use logic and reason really factored in. **Dont worry you will probably never get it.** So as lightweight debris is hitting air resistance and burning up AND having gravity pull it just KEEPS ON GOING. Haha no way. **Its basic physics...** the "debris" was not trending downward at all. In any way. It was clearly going straight forward. No video out of 10 or so showed any downward trend. Your discernment is toast dude. Orbiting satellites have always been science fiction. All cell phone and radio communications are ground based. Ever see the cell phone towers littering the earth? Thats how radio frequencies spread. I dont expect you to understand. Chances are you will never question science because it is your religion, even though you cant see the dogma you thoughtlessly regurgitate.

2 li

- Jo == Out of curiosity, what school system did you graduate from?
- Lj == If you graduated from a system than you paid to be lied to and indoctrinated with pernicious false belief systems. And before you make another false assumption this time related to my intelligence or ability. Education is not the primary signification of success, lots of "educated" people are failures therefore money is our societies highest value. Also children, and in both i am very well blessed. Just out of curiosity how many children do you have?
- Jo == Reentering satellites still come in very shallow, skimming the thin upper atmosphere, and in the fireball phase [40 to 50 miles up] cross the sky from horizon to horizon. They've been observed doing that since the very beginning of the Space Age. They do not 'fall in flames' like a shot-down warplane.
- Lj == Drivel
- =====
- Video deleted, author's site is [Legion James2.0 - YouTube](#)

Seattle Asteroid? Plane?

https://youtu.be/IdJsK9_HZ2o



Seattle Asteroid? Plane?



What was that in the sky over Oregon? Meteor, Space X, Debris?

<https://youtu.be/k4MOdJyCBlo>

- Residents of several cities in the American states of Oregon and Washington on March 26 witnessed a mysterious "fireworks" show that illuminated the sky over a vast area of the Pacific Northwest. It is noted that a stream of light, similar to a meteor shower, hit areas of the two states around 9:00 p.m. PST, bewitching witnesses to the event and causing some confusion about its origin. "Shooting stars? Debris? Has anyone else seen this just now?", "Mmmm... just caught this flying over my house. Some guessed whether it was a meteor, a broken satellite, or maybe a UFO.
- Sweet Orange == It looks so artificial... like some **iron rod with lights attached** to it ... and making fun of people
- Masterofsparks Hwy6 == Wow,, it was **so low it was cutting thru the clouds** !
- K TRIBE JUDAH == It flew below the moon so how is it debris burning in the atmosphere? Plus what debris **travels horizontal** ?
- D C == before it really busts up you can see it is **saucer shaped**

- Staar Gaazing == **It's a craft.**
- MolliD == I live in Southwest Washington and I literally could hear this **loud rumbling** while it went by sitting in my home I thought it was some kind of fighter jet. I have a picture that a local young lady took that shows another object above the debris going in a different direction so I'm not too sure I buy the news narrative of SpaceX falcon 9 debris.
- Aissa Louali == NASA is hiding something .. they keep telling us to not worry but what if a comet hit the earth .. NASA cannot do nothing but we can run if we already know .. they know that we know that they won't us to know things they know.
- Cobra Naka == **Gravity pulls downward, not angularly**
- John Keith === One hit last year at the same time in Africa and now its back but it hasn't hit us yet and it brings dirty dust particles that can cause severe damage to the body just wait until the wind starts to blow people away forever its gonna be insanity for you if your hearts don't fail you.
- Donald Mach == To me, it looks like **something got shot down!**

K4mo

3

- Sweet Orange == It looks so artificial... **like some iron rod with lights attached to it ...** and making fun of people
- SP399 == Love watching videos like these because it gives me the "How humans would react if this was something else" vibe. If another spacex launch related thing occurs, do more of these little compilations. They are fun to watch.
- Pontus == I've no idea how NASA does that holy sh*t. Looks Unreal
- Weird Mik == There's absolutely nothing biblical about seeing something that is seen all over the world since we started going into space.
- Sleeping Lion == Group of angels? **That's my best guess.** Asteroids or any other rock or debris wouldn't be so organized
- gamer ven == I'm no astrologist but I'm pretty sure this is just a large comet instead of hitting the atmosphere it skimmed in to it much like a ship enters to bring in astronauts I watch a lot of science and space stuff that involves planets stars and asteroids so I'm pretty well educated on this I'm not gonna say that's what it is but I'm like 90% sure that's what it was

K4mo

4

- Environmental ASMR == Extraterrestrial, ufo.
- Jo == Why don't you think the Oregon fireball swarm was a reentering satellite burning up?
- EASMR == Have you been there? I would chase this until it fell down to the ground if I have a chance.
- Jo == A big piece was found on a farm in central Washington?
- EASMR == was found, **but not recorded when falls down**, but where are more pieces? There was an entire fleet that flew by. Washington is a Federal area where an agent could put this piece of garbage in the mass media..... the pieces could split in a minute, but they were flying side by side for many many miles in the sky.... are you NSA or FBI agent?

Large Meteor caught in Vancouver, Portland, DC, and more States March 25th

<https://youtu.be/U0EH4ZQfHSQ>

- Zena Gray == BBC news stating it's an Elon Musk satellite rocket launch. They always say that kind of thing **to cover the truths!!!**
- Rebel's Clips n Tricks == No sonic booms? This object **obviously was shot down from low orbit** or the materials would have been vaporized. This is Sus..
- Crazee Clayton == What were the odds of this happening just a day before Passover begins?? Hmmmm
- MALAIKA AL-AMIN == They all think it's a METEOR SHOWER...but it's NOT. That my dear people is **a bunch of ALIEN SHIPS in flight** to their landing destination.

- The Conscious Evolution == I thought it was a satellite breaking up but they say it was part of a rocket that for some mysterious reason didn't fall back the same day it was launched. they said **it was hanging out in space for two months then fell back yesterday**. All though I guess that could be possible I feel that explanation was covering something else but then again who knows in a world full of lies.
- Hgpnpeace == We are definitely in a world full of Lies! I was hoping it were **angels** coming to take us home :(I'm ready to leave this sick, sad world.
- traffic lights == Looks like a hologram test
- Romaca21 == Maybe its only one big asteroid that entered the earth due to the force of gravity it cracked. When it scattered it looks like a group rushing in one direction. That's only my opinion.

"What is that?": Debris from SpaceX rocket causes strange lights in the night sky – watch video

<https://youtu.be/Ot5DMOsp6Ss>

- Guardian News == Residents in the Portland area of Oregon report sightings of strange lights streaking across the sky, which turned out to be debris from a SpaceX rocket launched in Florida 22 days ago. The rocket re-entered the atmosphere at the wrong angle, causing it to burn up.
- w g == Weird that news networks all over the world **immediately pushed out** that this was the SpaceX rocket where in other UFO sightings barely any media coverage.
- DrDevilish1 == elon musk must making rockets **to open up a portal for demons**. nobody hears the explosion or sees if either which is suspicious

Ot5

2

- Maschelle Mashburn == Thank you for sharing this. It definitely grabbed people's attention when it entered the night sky **preceded by a loud boom** here in Southwest Washington. It was loud enough to bring everybody outside. I'm just glad it didn't land on any inhabited areas or start a forest fire. Thanks again!
- Hosanna 153 == **That does not look like "space debris"** if so, why then is it going up on first of video, then leveling out etc??? Does not look like space debris - nor appear to be falling downward, as "space debris " should... even levels out right before screen goes black n "it" enters into the clouds..
- Kevin Nguyen == 1. Its the angle of the camera that makes it look its going up. The camera was moving so it looked liked it leveled out. 2. Its falling downward but its going horizontally so fast that it does not look like its falling down. It eventually falls downward completely but there is little pieces and its not on fire so you can't see it.

Strange Lights West Coast Oregon, British Columbia / Confirmed SpaceX "Space Debris"

https://youtu.be/kg_maHqiLAc

- Elena Caddell == Since when does anything **falling from the sky travel horizontally????**
- Just a Sober Guy == If you think you know the answer you're wrong. Get out of you're cognitive dissonance. It has nothing to do with religion or what's in your head product of the propaganda you know. I have news for you all. We are ALL wrong. Whatever is happening and whatever this is leading to will be proof soon enough that ALL of us here on Earth are wrong.
- kindred spirit == The NWS didn't actually confirm anything. Nor did SpaceX, NORAD or any other official agency. **Just widespread speculation & conjecture.**
- SAAAR == Meant to **look like** space debris. **Too uniform**, space ship.

Kg 2

- Allen Myers == **Is not space debris because their slowing down.** Lol
- SAAAR == And **turning**
- Allen Myers == oh yes and it's quite disturbing.
- Angelica Woods == If it was real, why wouldnt it be on the news??
- Kathy DeAtley == The news has started keeping things from the public...lol
- Dream Visions == I stopped watching the news years ago. Brainwashing the whole country. I do my own research. They don't want people to use critical thinking skills. They don't want you to think for yourself. They want you to believe EVERYTHING they say is true. This world belongs to Satan and he is a LIAR.

big meteorite comet in the sky of oregon usa

<https://youtu.be/wO2RoqFO7w>

- Lori Taylor == It's just debris from falcon 9
- Lesa James == **Debris travel in sync and light up like that?**
- *Lori Taylor == it's burning up in the atmosphere as it comes down. It's all going to travel at the same speed considering it's all part of what was released. As it entered our atmosphere, it started breaking and burning up. I remember all these little facts from elementary school. Space has just always interested me and I paid extra attention when it was discussed. Also, I'm a little bit of a nerd.*
- Dutchies Hostel == Hi there fellow Nerd! Debris from falcon 9? That's a lot of DAMAGE and **a lot of bullcrab**. Not a real nerd, more like in a church of Science I think. ...
- Rachelle W === Amazing!!! An Angel!!! Don't let anyone try to make you think it was anything else! (PERIOD)
- Lesa James == According to the book of Enoch, you are right

What was that flash in the sky? OMSI's Jim Todd explains <https://youtu.be/Ch8l3D1gWSc>

- Mullcrum the Sage == Funny how it wasn't on mainstream media until way later.
- Feilyan == To me seems like something blow up in the sky and fell down on earth. I think **we have a sort of barrier** that can't let us see what's happening in the sky until it came down at certain heights
- Kro0014 == From the videos on Youtube from vantage points in Vancouver and Seattle, **this was going north to south**. Almost due south. Never heard of that kind of orbit. Maybe Elon can elaborate??
- Kathy Bryla == Many of them been happening some look like **they have blinking lights and look like ships of some sort**

Ch8

2

- Marcus Williams == It's funny how **every time a REAL ufo shows up** and we see it they always blame ELON MUSK.... BUT HE NEVER CONFIRMS THESE SO CALLED FAILED TEST AND LAUNCHES... THE REST OF WORLD HAS ALREADY TOLD THEIR CITIZENS THAT UFO'S ARE INDEED VISITING EARTH.... FACTS
- Craig O === SpaceX rockets don't even go up anymore. Now this is some rocket that was orbiting for a while, and while China comes back from a fake moon. Shove your theories far up yourself.
- Jimi Bmore == **Missiles designed to break up in earth's atmosphere to release a more viral virus.** Don't believe it? Watch the news as it spreads in the coming weeks. The earth's population is being attacked by the Deep State NWO. These are being tracked by radar systems and news outlets coast to coast. Remember to get your vaccines sheeple....
- Michael Thomas === NO NICE COVER STORY. Not Falcon 9. **TOOOOO BIG**

Ch8

3

- Frankw Enos == This is not man-made,if this is man-made, when the space shuttle exploded everyone would have seen it.
- Jeffrey Chan == That makes absolutely zero sense.
- Kendra Werner == This looks very similar to other items that had been out in space coming back into the atmosphere and burning up. It's not a big mystery. The news is just trying to make hype.
- Michael Thomas == FACT: Meteors are increasing hot and heavy. Some say this is the start of the approach of Plant X, the Destroyer. Watch Youtube video "the Koblin Bible, the Destroyer". The history of cycles of this planet passing wiping us clean. **Some say we are starting to pass through a massive part of space filled with meteors and Earth is going to be shot up like fish in a barrel.**

Ch8

4

- Basil Ahmed == No-one is mentioning **the dozen military helicopters** that showed up soon after.
- Anna Salvatore == There were **tons of planes** shortly after here in Salem, everytime something strange travels the sky there's always 4 to 5 planes out after.
- David Gord == they playing us **for fools**
- worst nightmare == Russian satellite we've been going back and forth they shot down US satellite the other day in Russia
- Cyril sneer == Re-entering the atmosphere yet **still going straight.** people believe anything they are told these days!
- All Esau Do is lie! == Exactly leave them alone

OMSI talks about streaking light from rocket debris seen across Pacific Northwest

<https://youtu.be/JqJOzw8PB1c>

- Lugia2Ho-oh == Their extraterrestrials. it's been happening, but they lie all the time.
- Stella Unger == **Not from dumb rocket**. That's clearly Gods doing.
- Rosa Maria Cooney == They haven't given us much info on it.
- Louie Niglio == **It's a conspiracy** it was not SpaceX it was North Korea they launched a missile the other day and lost contact with the missile it's easier to say SpaceX and not deal with political nightmare with North Korea.
- TTL America == ICBM was intercepted and destroyed
- Google User == UFO cover-up..

p. 2 JqJOzw8PB1c

- Truth Detective == **Same exact scene** happened over Russia 03/17. Did they say it was from space x because it's the same sight. In America they want to claim it came from space x when supposedly there's numerous pieces of space debris in orbit.
- AA == So it's okay that all these Millionaires are just launching rockets damn near daily and it just **rains down debris** onto the Humans down below?...
- Nikko == It's never going to cause an impact since it's just debris. So it's basically like a mini meteor shower.
- Willow Cat == And **causes cancer** and serious problems for pregnant women. This \$hit is radioactive.
- Russell zauner == Good to know Space Force is doing its job, protecting us from alien insurgents.

Streaks of light travel across the sky on Thursday night across the Pacific Northwest

KPTV FOX 12 Oregon <https://youtu.be/Lp1n70A80QY>

- Chris Cyphaz TSL == **Nobody know what this is** because its still under investigation according to the news that captured it...smh Yall fall for anything and if it was an explosion, the debris would explode in every angle, not travel together in a group! Yall don't know how a bomb, grenade, tnt, stick of dynamite explode? Imao yall celebrate 4th of july and still clueless on how this world works....Imfao a bunch of sheep. .. They are traveling and they are grouped. If it was an explosion of debris, then it wouldn't travel in a group. It would expand outwards in all angles!
- Ryka jdoe == Y'all are way too damn naive **stop believing everything you hear** like a bunch of mindless sheep being led into a slaughter house unfortunately, all centralized news media is doing damage control trying to create a cover story of what all the citizens of Portland Oregon had witness. FYI you mindless sheep what you saw was not a space x rocket it is not consistent with a debris from a rocket it would burn up in the atmosphere it wouldn't be visible, what ppl saw was **a trail of lights linked across the sky in different colours evidently something interplanetary** the government deems threatening certainly not debris from a rocket entering our atmosphere.

p. 2 KPTV FOX 12

- Lance Kanewhart == The object is **flying not falling** throw a firework in the air and watch explode sparks fly all over and head downward from the sky so why is the so called explosion of a satellite shooting across the sky instead of falling downward angle that the video shows don't look like something falling straight down or descend quickly to much hang time for none jet powered metal and no debris either bs
- Sonya Hawthorne == THANK YOU!!-@LEAST THERE ARE A FEW LEFT THAT ARE STILL "THINKING"!!
- Razor1rot == you do realize that objects in orbit travel at 17000 mph. On reentry they **have significant lateral movement**. Take a look at the meteor that exploded over Russia, had it continued to travel instead of exploding it would have continued to look much the same as it did on entry.
- Courtney Twait == Saw this \$hit, my boyfriend screamed like a girl for me to come outside because he thought it was an asteroid about to end the world.
- Hailey Pearson == My husband said the same thing when I yelled for him to come outside.
- Willow Cat == It will happen again probably. Luckily it is the USA who have these idiots **dropping radioactive \$hit**. They cause cancer.
- Jesus Mart == I'm pretty sure it was an asteroid but **it was destroyed in space** by the government but they won't say it. but it still managed to enter earth.

Seattle meteor 3/25/2021

<https://youtu.be/nTeqSEpn3CE>

- DrDevilish1 == last week in Brazil same thing happened and **five months ago in Maui too the same flaming sky chariots were seen.**
- Utubecustomer0099805 == OOOHHH...AAHHH...that's how it always starts. But then later, there's running and screaming.
- ProjectfullCurcit == Yes! It **was right above me!** I couldn't record i didn't want to look away!
- Jo = The eye/brain system is much more sensitive to subtle and small-scale visual details. You might print a screen-grab from youtube and trace over it the features the camera missed. There is no WRONG answer, the image forms both in front of your eyes, and behind them [visual cortex].

Holy Cow A Meteor Or Something Exploded Over My Head 3/25/2021, 9:00 PM

<https://youtu.be/40fdtr54fks>

- master ninja == Just saw this from Chemult, Oregon!! Incredibly lucky I just happened to be outside and to have noticed this!! **Probably won't see something this amazing again in my lifetime**
- Florentina Guggenheimer == Where are you? I'm in Battleground, WA and it was **so low** I didn't know what to make of it at first. I could see hundreds of lights and dust and trails, **it was so detailed and SO CLOSE!!!** People are saying meteor shower but that was unlike any "meteor shower" I've ever seen. I've seen some stuff and this was definitely some STUFF. Unreal is what it was. I was outside locking my chickens up and watched it for 20 seconds, just \$hitting myself.
- MeowMeowKittyPoop -== **I don't care what they say.** NASA, SpaceX and Blue Origin lie.
- marcanwest AG == Holy im in victoria and i heard a bang a minute ago to the south

<https://youtu.be/40fdtr54fks>

#2

- Christian Stanley == Was there a sound or explosion?
- Orcoastgreenman == He replied “**My wife heard a loud thud before we saw it...**” on another comment
- No Name == saw it too. I think it is starlink.. it was the most crazy thing ive ever seen. Saw it from white rock British Columbia. Thought I was seeing things cause I just smoked a cone.
- Joseph Riehl == Dude it was insane over Oregon city. **I was in shock** and therefore didn't whip out my phone unfortunately.
- Ron Miller == It was amazing in Lebanon. 3-4 minutes after it passed **we heard multiple sonic booms**
- PirateStyle2013 == I heard multiple impacts. I thought maybe out past Vancouver. I hope out of town and no one was hurt.
- Jo == Could you work up a sketch of what it looked like, to the naked-eye? So much better fine detail then overbright videocams at night.
jamesEoberg@[comcast.net](mailto:jamesEoberg@comcast.net)

#meteor falling caught on video at #oregon

<https://youtu.be/IFpPC5P9b0U>


- David Quinones == Not a meteor, not rocket debris, moving slow it means that is flying. **Gravity works straight down, not horizontal**. It was never a rocket re-entry. It was an unusual UFO flying by. They are here and we are going to see more of them, real UFOs and retro-engineered UFOs. .
- Jo == Thanks for the response. Lots of people agree with you. I'm curious to learn what features of the event show it could not have been a satellite reentry. It sort of =DOES= meet the standard pattern seen since the dawn of the Space Age.
- Dq == when satellites from low earth orbit (LEO) enter the atmosphere **it has to be coordinated** with remote operation to prevent landing in urban areas or even to prevent collision with ships in the ocean. Meteors are different because there is no way to control them unless there is UFO intervention, but meteors start burning from high-up in the atmosphere coming down as fast and aggressive balls of fire, but normally land on oceans. If you remember, when the Russian decommissioned the MIR space station they coordinated the re-entry with specific coordinates to prevent collision with ships on the ocean and prevent from landing in soil.

Cont'd

JO == You're very well informed. So why didn't you know that THIS object had been planned for exactly that disposal but the steering engine burn failed and it was doomed to a random reentry -- and was expected, predicted, and monitored all the way down. But specifying the exact point along its final orbital path is mathematically impossible because of unknown short-term variations in air density and especially due to unknown vehicle orientation that modifies its air drag. The entry occurred precisely along the predicted path at precisely the time the object was known to be traversing that segment. The same thing happened over Maui last October 24, with a Japanese rocket stage.

David Quinones == There was no debris reported landing anywhere, typically the MSM would know this type of event info in advanced. It kept flying non-stop and disappeared over urban area, and yet no crash nearby, no noise, no explosion.

JO == And it =WAS= known and anticipated, sorry you didn't get your personal notification. "no crash nearby, no noise, no explosion." ?? You need to find better news/information sources. Want help?

DQ == I'm not sure, but if you have information that I'm not aware share it. BTW when I mentioned that normally the MSM would know about these types of event, I was referring to satellites  decommission and burn out. The MSM is 85% fake news anyway..

Meteor (?) meteorite shower over Oregon and Washington states. Possibly SpaceX Falcon 9 on 3-25-2021

https://youtu.be/CT_VJ5jR14

- Inannawhimsey == SPECTACULAR did you hear **the explosions after?**
I'm glad our Chelyabinsk didn't happen
- May == I posted a video of that in wenatchee wa. **I heard it land** and that had to be in a different area. Sounded like fireworks.
- C Mayo == How far south was this visible? Saw it in Peirce county, very well! Didn't hear any sounds.
- Toiana Taylor == This was beautiful saw it in king county Washington. It was **sparkling like diamonds!**
- Birch the Fox I held my phone upright with my screen locked and it looked like **a tower of diamonds**

- Kstsn == Not sure exactly what this was. Did anyone hear a bang? Don't meteors usually blow up with lots of noise and create a shockwave? Where did you see it from? Share your location. Upd. Apparently this was some unburned debris from the recent SpaceX's Falcon 9 rocket launch. **This explains why there was no sonic boom.**
- PirateStyle2013 == That makes sense because they were flying with no sound and fast. **It had to be way higher** then it looked too because of the wide range of viewers. I am in Forest Grove and **it looked like it was right overhead.** Wild.
- https://youtu.be/dcx52ZE_UaI
- Pamela Pugh [apr 15] == Too bad it was not a ufo. I was the only one in my apartments out there that saw it. Nice night it was to see this shiny .gorgeous object that was space junk. Glad a lot of people knew what it was.
- MR.randomstuffguy !!! == Bru this happened right over my house! **I thought we were getting nuked** when I saw it appear!

Check this out | Mystery lights spotted in Seattle and Oregon

WKYC Channel 3 <https://youtu.be/vcFUc4j1oUY>

- Navek Ydeer == I seen it live... Was pretty spectacular actually... Question people... They say that **they knew that this was up there and it was going to come down...** Correct? So why didn't NASA or the government or anybody,,, **have film** of this happening???
- Zu == Ever wonder why **they always have an explanation** on deck? If a UFO landed and an alien got out, they would have a scientific reason Ready..
- Jin Kazama == Media bs tries **to make you believe** what they want you to believe. It is most often far from the truth.
- CONSPIRACY DADDY == That a bunch of \$hit. Was no space debris.

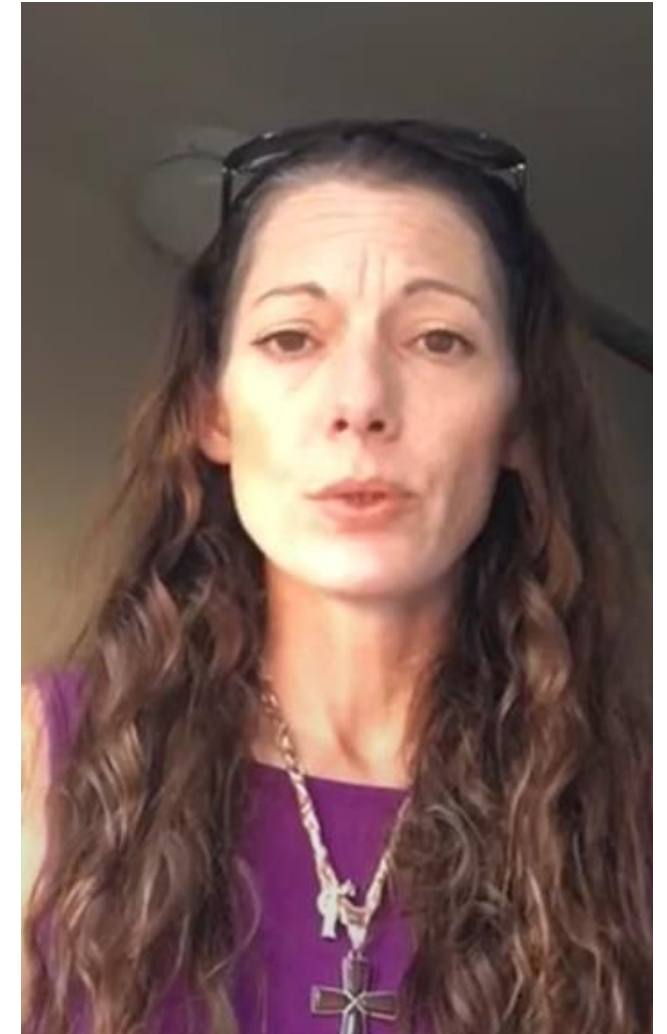
KGW8 TV

- Ryan O’Leary was left speechless as he watched the light show above his home in the Cedar Mill area around 9:30 p.m. “All of a sudden we look up because we saw a bright light catch our eyes and we see this surreal event just **streaming across the sky**,” said O’Leary.
- He said at first, he didn’t know what he was looking at and thought it was maybe a meteor shower. He was somewhat worried, but that quickly turned to awe. “It definitely passed over and cleared us, so we felt pretty safe,” O’Leary said.
- He said the lights traveled across the sky in the timespan of about 30 seconds before **he lost sight** of it. “We **then** heard a couple loud bangs, and I don’t know if that was some sort of sonic boom,” he said.

Meteor Show March 25, 2021 over Albany Oregon

<https://youtu.be/yBkVHxu1OVw>

- Paul C == Did it change its flight direction as in dip down or was it constant in one direction? Looks amazing. Great capture.
- Eve Droppings62 == Direction was North to Northeast towards Portland Oregon. Straight across the sky one big glowing ball then broke up to **about 50 pieces** fading right after video ended. My Facebook has it and I added an end video on that media site it's only about nine seconds but was not mine to place on here with this beautiful site

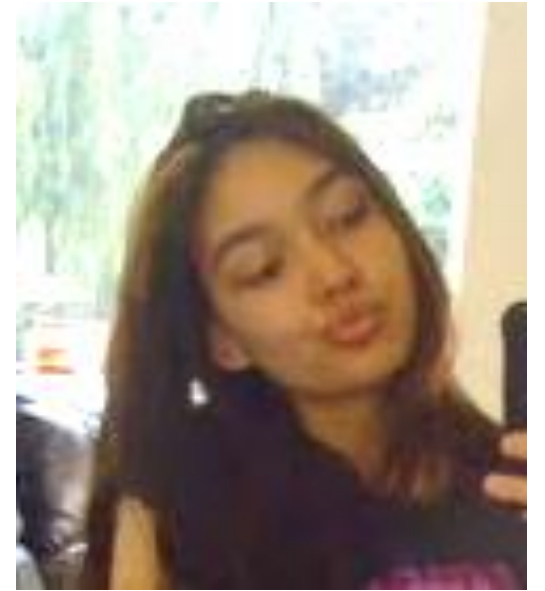


Craziest claim

- Jeff Rubble [<https://www.youtube.com/watch?v=VmyTbEkxXO0>]
- Media was told to say spacex rocket, but what , wait, they retrieve that 1,000 miles away from there in the ocean and reuse it! So its no rocket in a screwed up, over 1,100 miles off course re entry oopsie ! Its a N. Korean missile test that reached the pacific northwest ! Their nuclear program is up and firing on all cilynders right now , and they've been testing missile ignition systems and launches daily . China I hear, is helping them develop an I.C.B.M. that will detonate over , or reach the u.s. border now. KEEP A "GO BAG" PACKED PEOPLE!! We're going to need them sooner than later!

Asteroid? passing Wenatchee, Washington 3/25/21
'May' == <https://youtu.be/ZzI7dxbEaEk>

- "May" -- This happened at 9pm and a few minutes later **it sounded like fireworks really far away.**
Where did it hit?



SpaceX Falcon 9 Rocket Debris Lights Up The Pacific Northwestern Skies | Mistaken For Meteors/Comets

<https://youtu.be/6liRkOc1g4I>

- Get image of swarm



Falcon 9 rocket stage breakup on re-entry tonight

[https://www.facebook.com/stephen.vilke/posts/1920903518057531?__cft__\[0\]=AZXs0xDAmoQ0jcG20Xlr7vjd4QuKPFpBPjao0eYzz1fSePa1gCpOBaGW2ToetZBwDYLEDMfloB3_eFb2kB3MROw3la5ka7B1Hh1TupyNOVO53IJUktOrKXZ80dSUV6cdXIJJeMjbcQuBDcKyp5zydZS2C&__tn__=%2CO%2CP-R](https://www.facebook.com/stephen.vilke/posts/1920903518057531?__cft__[0]=AZXs0xDAmoQ0jcG20Xlr7vjd4QuKPFpBPjao0eYzz1fSePa1gCpOBaGW2ToetZBwDYLEDMfloB3_eFb2kB3MROw3la5ka7B1Hh1TupyNOVO53IJUktOrKXZ80dSUV6cdXIJJeMjbcQuBDcKyp5zydZS2C&__tn__=%2CO%2CP-R)

- From South end of Bainbridge Island, facing South...

INSANE light show from space debris

<https://youtu.be/Ex2sauIW8M8>

- McDowell says so far in 2021, there have been 14 reentries of 1-ton or bigger space junk. That's about one a week, but they mostly happen in the day time or over an ocean, so for those who caught the rare sight last night, consider yourselves lucky.

RoxyTower1 3-25-2021, 8:57:30pm

https://youtu.be/J12lav6gU_4

- Towercam of horizontal passage

RECOVERED COMPONENTS

- Needs organizing
- Although the central theme of this report is eyewitness interpretation of the visual effects of the reentry, this add-on section can help demonstrate for doubters the authenticity of the reentry explanation for the fireball swarm apparition.

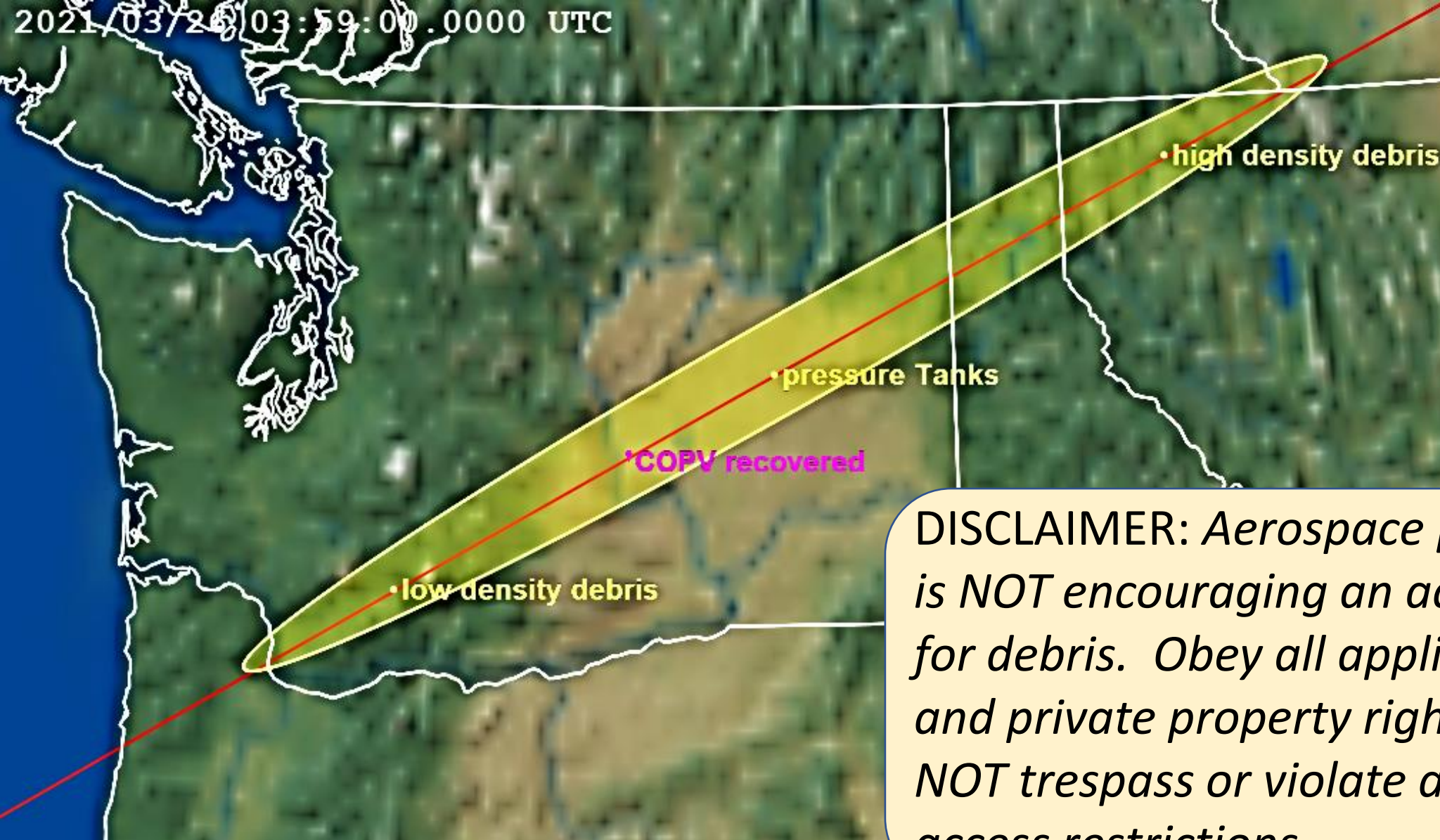
https://en.wikipedia.org/wiki/Atmospheric_entry

- **Uncontrolled and unprotected reentries**

- Of satellites that reenter, approximately 10–40% of the mass of the object is likely to reach the surface of the Earth. On average, about one catalogued object reenters per day. Due to the Earth's surface being primarily water, most objects that survive reentry land in one of the world's oceans.

https://en.wikipedia.org/wiki/List_of_reentering_space_debris





DISCLAIMER: Aerospace [Corporation] is NOT encouraging an active search for debris. Obey all applicable laws and private property rights, and do NOT trespass or violate any property access restrictions

<https://aerospace.org/reentries/falcon-9-rb-id-47782>

REPORT SUMMARY [1 of 2]

<https://aerospace.org/reentries/falcon-9-rb-id-47782>

The footprint graphic depicts the general area where surviving debris from the reentry is most likely to have landed. The individual objects shown are approximations showing how different objects may spread throughout the footprint; they are not to be taken as precise locations or as a prediction of specific surviving debris. While some debris from this type of reentry is likely to have survived, it is not a given that any debris landed near the locations that are shown. Debris from a reentry can land between 200 and 1000 km downrange from the breakup (the fireball witnessed by many observers).

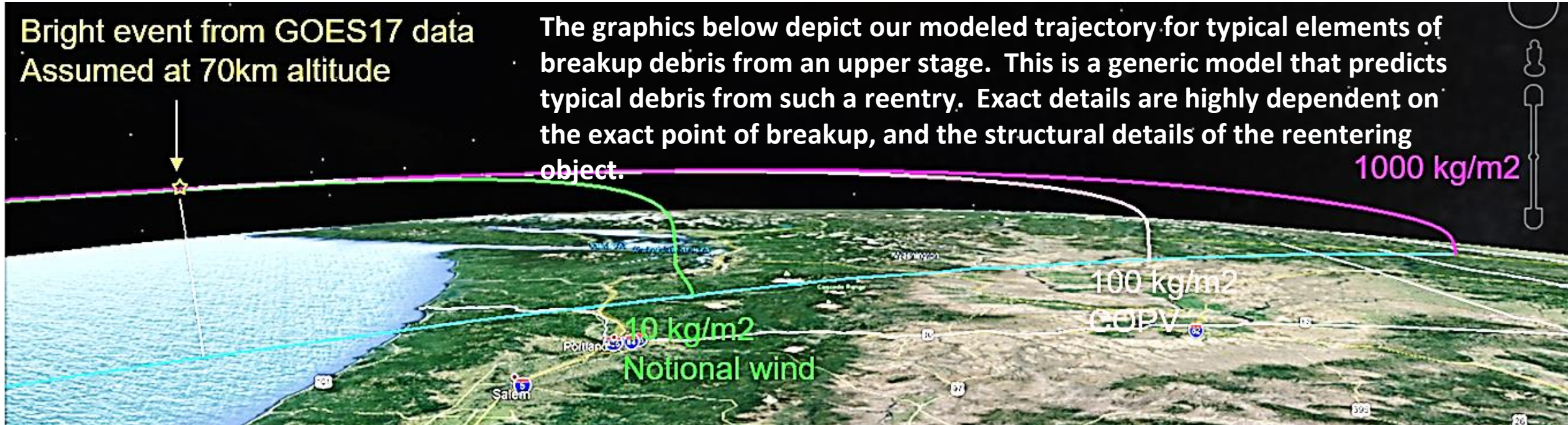
REPORT SUMMARY [2 of 2]

- Low density objects, those with larger areas but less mass will decelerate faster and land at the beginning or “heel” of the footprint. High density objects (higher mass to area ratios) will maintain their velocity longer and therefore land farther downrange toward the “toe” of the footprint. Only a few objects typically survive a reentry and the area where they could land is very large – thousands of square miles. While the chances of finding debris from this reentry are small, if unusual metal objects or spherical objects are observed in open areas, it is possibly debris.

DEBRIS SCATTER [POST-ENTRY RECONSTRUCTION]

Bright event from GOES17 data
Assumed at 70km altitude

The graphics below depict our modeled trajectory for typical elements of breakup debris from an upper stage. This is a generic model that predicts typical debris from such a reentry. Exact details are highly dependent on the exact point of breakup, and the structural details of the reentering object.



Source -- tbs

<https://aerospace.org/reentries/falcon-9-rb-id-47782>

FALCON 9 R/B (ID 47782)

SHARING   

Reentry Prediction

Predicted Reentry Time	26 Mar 2021 05:49 UTC ± 2 hours
	TIMEZONE <input type="text" value="UTC"/>
Orbit Epoch	25 Mar 2021 23:23:33.52 UTC

PRE-ENTRY
PREDICTION

Falcon-9 second stage disposal practices

Falcon-9 second stage disposal practices

- Deorbit delta-V highly dependent on parking orbit altitude
- Falcon-9 design involves unusually high-acceleration engine
- Remaining propellant load highly variable [payload dependent]
- SpaceX not obligated to disclose or explain procedures

FALCON-9 SECOND STAGE



<http://digitalvideo.8m.net/SpaceX/AIAA/2ndstage-dragon640.jpg>

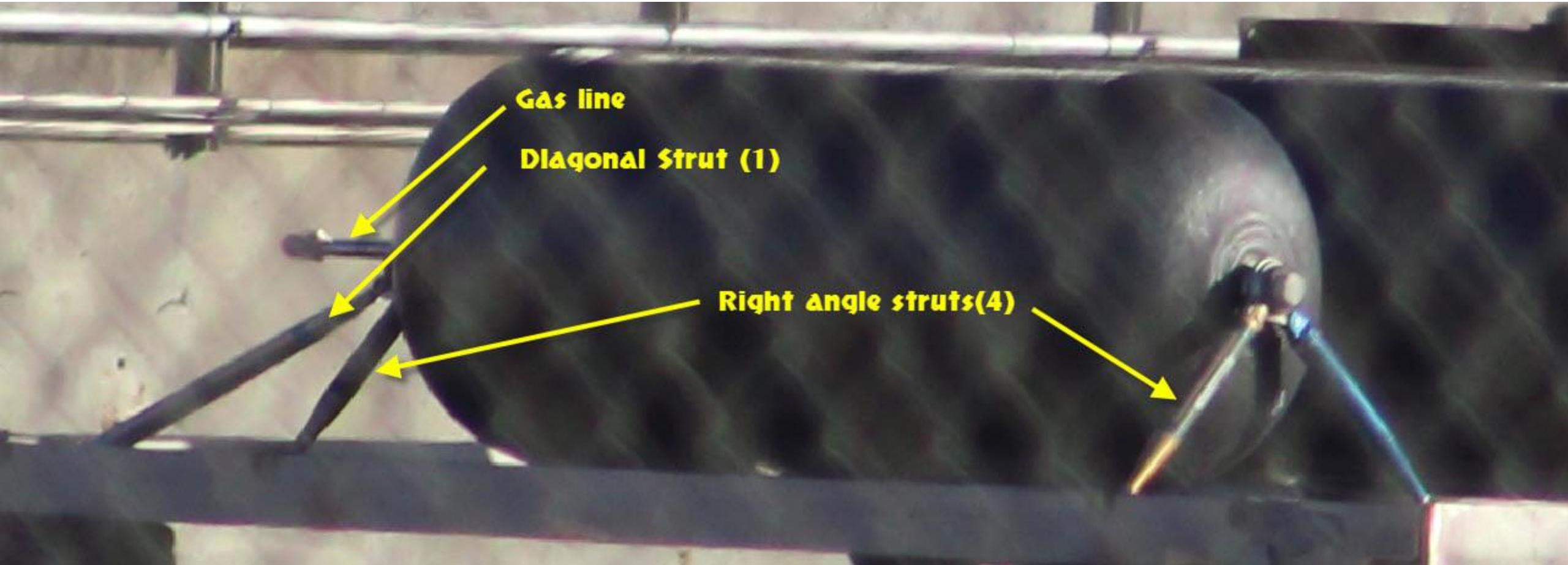
Falcon-9 second stage disposal practices

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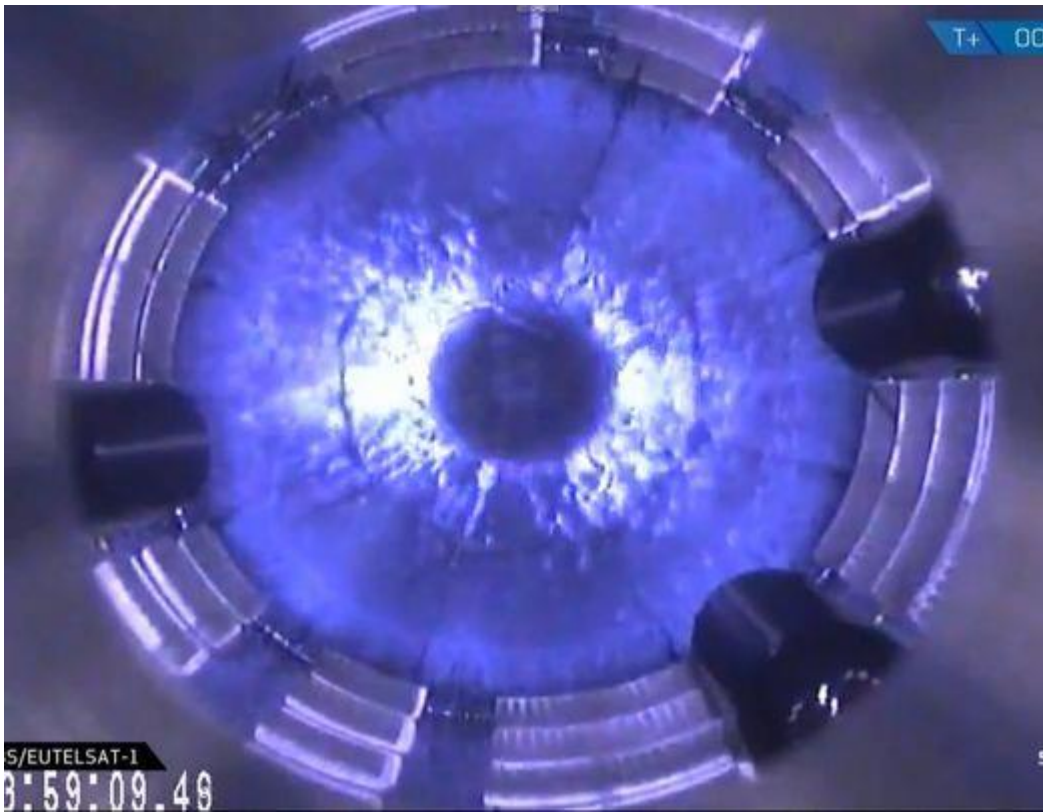


	Second stage
Engines	FT: 1 Merlin 1D Vacuum+ v1.1: 1 Merlin 1D Vacuum v1.0: 1 Merlin 1C Vacuum
Thrust	FT: 934 kN (210,000 lb _f) ^[2] v1.1: 801 kN (180,000 lb _f) ^[3] v1.0: 617 kN (139,000 lb _f) ^[4]
Specific impulse	FT: 348 seconds ^[2] v1.1: 340 seconds ^[3] v1.0: 342 seconds ^[12]
Burn time	FT: 397 seconds ^[2] v1.1: 375 seconds ^[3] v1.0: 345 seconds ^[4]
Fuel	LOX / RP-1

COPV == Composite Overwrap Pressure Vessel



- Credit tbd



VIEW OF COPV TANKS INSIDE MAIN STAGE-2 FUEL TANK

- **Douglas E De Vries** == There are at least three, as seen in the occasional shots of the 2nd stage LOX tank seen in webcasts

COMMENT ON FUEL TANK SURVIVAL/RECOVERY

- Here's a primer on recovered space debris. Tanks are the most common item because of very high drag-to-mass ratios, that slows them down really fast. Also, they catch the eyes of passersby in the woods. And even better, they FLOAT. <https://eclipsetours.com/paul-maley/space-debris/>
- Tanks ALSO just might create a V-E-R-Y interesting but rare phenomenon for SOME reentries: observer report of SEARCHLIGHTS. Sometimes with booster stage reentry after only a few days in space, it seems that leftover propellant can flash-evaporate in the tank as it heats and cracks, and spews forth during the fireball phase 40-50 miles up. The material impacts the thin air and induces thermoluminescence in the shape of the expelled fan. This is still a baffling and unverified process.

Bill carton

- I've done some math (the crowd groans....so what else is new...). There are at least 3, sometimes 4, COPV needed in the LOX tank for ullage helium - the cryo helium that is warmed by the Merlin gas generator exhaust to repressurize the propellant tanks as propellants are depleted.
- As in the first stage, there are ALSO COPVs in the RP1 tank that are not at cryo temps, where the gasses need to be used right away, as is, without heating. The second stage has no leg struts that need extension, so those first stage COPVs are missing. But there MUST be at least one COPV for the gaseous ACS system, and one for turbopump turbine spin-up.
- So minimum 5 and possibly one or two more depending on the mission, attitude control needed during a long coast in a GTO mission, and number of relights needed.
- The RP1 COPVs have never been seen on public camera, and were only detected in the first stage by an image analysis I did of mounting strut bracket counts and a factory photo that may have been inadvertent.

What does the Internet tell us?

- **Intentional Deorbit ==** This is done for missions where the upper stage has enough remaining fuel reserves to ensure an intentional decay can occur safely. This has been done on every [LEO](#) mission since CRS-3 (including Orbcomm OG2), and usually results in the stage being deorbited Southsouthwest of Australia in the Indian Ocean. We know this because occasionally SpaceX will post a NOTAM declaring the zone unsafe for a certain time.
- **Left in GTO to decay ==** So far, this has been standard operating procedure for all 4 Falcon 9 upper stages that have delivered communications satellites to [GTO](#). At this time, none remain in orbit, as the periapsis of each is so low (~200-300km) that they decay within 2-6 months. No deorbit profile has been attempted as it presents SpaceX with a liability if the stage decides to explode, scattering debris in GTO (additionally, if not enough fuel remains, they cannot safely deorbit either).
- The standard apoapsis for GTO is about 35,000km, but for the first two GTO missions (SES-8 & Thaicom 6), they were injected into what is known as a "Supersynchronous Orbit" with an apoapsis beyond 35,000km. In the latter, it was in excess of 90,000km. It was launched on January 6 and decayed May 28, 2014.
- **Left in LEO to decay ==** This has been the case for Falcon 1 Flights 4 & 5 which remain in a nearly equatorial LEO to this day, as well as the first 5 Falcon 9 flights - of which COTS1 performed an unannounced upper stage restart boosting it into a 290x10,700km orbit & CASSIOPE, which attempted a "sideways" upperstage restart which failed, stranding it in a 900km polar orbit.
- <https://space.stackexchange.com/questions/7814/what-happens-to-the-falcon-9-second-stage-after-payload-separation> [Feb 20, 2017 note]

What happens with random reentries?

You'd also expect the stage to disintegrate upon reentry, wouldn't you. Not always! The upper stage of [AsiaSat 6 reentered over Brazil and parts of it were found scattered in an open field](#). It made quite the fireworks on reentry though [Some of the largest items found intact were the Composite Overwrapped Pressure Vessels (COPV's), which stored helium]:



DISCUSSION OF PRESSUR TNKS INIDE
FALCPN9 SECOND STAGE

[Falcon 9 second stage found in Brazil?
\(nasaspaceflight.com\)](#)



PREVIOUS SURVIVING STAGE-2 DEBRIS

- <http://forum.nasaspaceflight.com/index.php?topic=36440.0>
- https://www.reddit.com/r/spacex/comments/2qwrnq/from_nsf_possible_falcon_9_second_stage_founded_in/?st=jcwwvhw3&sh=d3ebb3ad3

Hello, I have the news that a second debris was found in Brazil, possibly an Annulus.

The piece fell on the roof of a country club, which luckily was empty at the time, in the city of Andradina, around 166km from the city where the tank fell.

A friend, Robson Hahn, aerospace engineer of the Department of Aerospace Science and Technology of Aeronautics

Robson is Investigating the area of possible falls using the coordinates that Ted Molczan suggested for possible point of falls, today he visited the site of the COPV fall (Which is isolated by the local police), and he is Maintaining contact with SpaceX.

About the COPV the tank fell only fifteen meters of a house and the heat melted and sealed it. Seems there is still que pressure inside it.

I believe que more debris will be found, all towns of the region are very small and the news sometimes linger to get out of the place.

5/09/2021

OREGON FIREBALL SWARM DRAFT 3

SURVIVING STAGE-2 DEBRIS



<http://forum.nasaspaceflight.com/index.php?topic=36440.msg1308656#msg1308656>

201

Spaceflight101.com [end]

Falcon 9's second stage is quite a sizeable object with a separated length of 12.6 meters, a diameter of 3.66 meters and an inert mass on the order of four metric tons. Some of its components are known to survive re-entry including the now infamous Composite Overwrapped Pressure Vessels that have been identified as the cause of the Sep 1, 201x, explosion of SpaceX's workhorse rocket. In 2016, debris from a second stage that had been left in orbit after a GTO launch rained down over Indonesia [http://spaceflight101.com/falcon-9-jcsat-16/spacex-rocket-parts-rain-down-over-indonesia/], causing damage to property on two small islands, illustrating the importance of safely removing rocket stages from orbit whenever possible.



<https://ekliptika.wordpress.com/2016/09/26/roket-falcon-9-full-thrust-penerbangan-28-jatuh-di-pulau-madura/>

December 28, 2014 FALCON 9 ROCKET BODY 2014-52B



- <https://eclipssetours.com/paul-maley/space-debris/>

THIS 2021 EVENT --

- [Possible SpaceX debris washes ashore in Oregon \(nypost.com\)](#)



- Grant county, wa



- Alsea bay, or



<https://nypost.com/wp-content/uploads/sites/2/2021/04/spacex-debris-003.jpg?quality=90&strip=all&w=1024>

Debris from SpaceX rocket that lit up night sky found on private property in Washington

https://www.q13fox.com/news/spacex-debris-found-on-private-property-in-central-washington?fbclid=IwAR2DIdk6UVBenk0pf2CXhse2_wUfQygFoRGsn0pleCMzJUFxSnxMKXoM7IE



Some debris from a SpaceX rocket that lit up the Pacific Northwest sky last week has been recovered from private property in central Washington state.

According to the Grant County Sheriff's Office, a composite-overwrapped pressure vessel was found in southwest Grant County.

SPACEX ISN'T SURE IF THIS OBJECT CAME FROM ONE OF ITS ROCKETS IT MIGHT HAVE COME FROM A ROCKET BURN-UP IN MARCH.

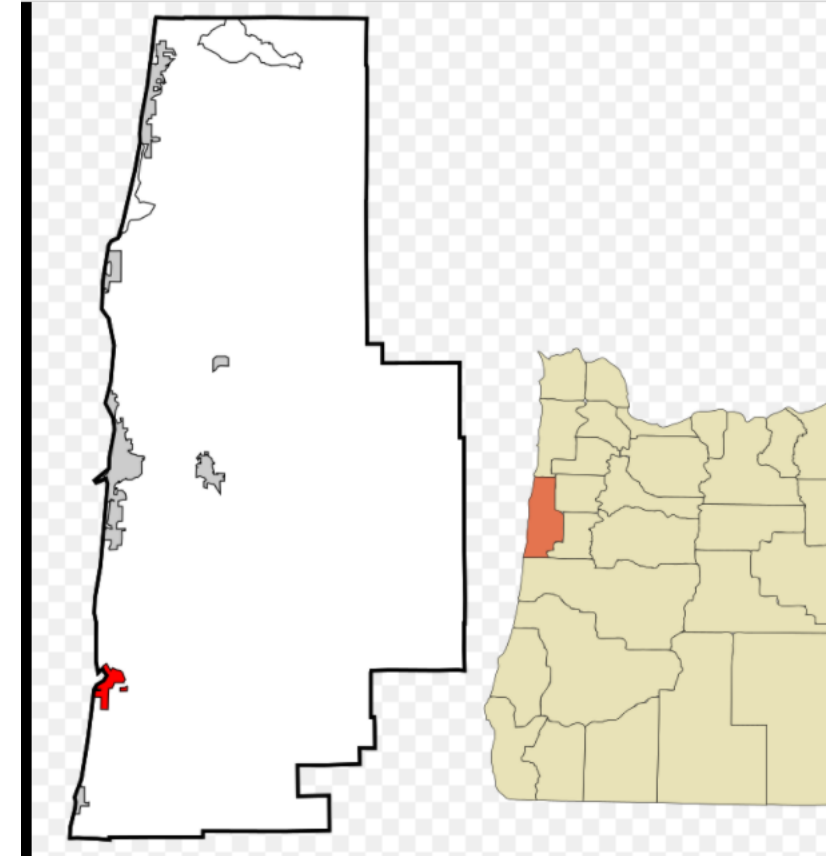
- [SpaceX Isn't Sure If This Object Came From One of Its Rockets \(futurism.com\)](https://futurism.com/object-came-from-one-of-its-rockets)
- Authorities in Oregon have discovered an object that they believe might be debris from a SpaceX rocket — but the aeronautics company isn't too sure. When contacted about the object, SpaceX said they weren't able to verify that it was a part of the rocket by looking at the photos.

https://futurism.com/_next/image?url=https%3A%2F%2Fwordpress.futurism.com%2Fwp-content%2Fuploads%2F2021%2F04%2Fspacex-debris.png&w=1920&q=75



MORE....

- Engineers are examining an object that washed ashore in Lincoln County to see if it could be debris from a SpaceX rocket. On Friday afternoon, the Lincoln County Sheriff's Office responded to Alsea Bay near Waldport after reports that someone had found charred debris they thought could be from a spacecraft.
- A fisherman removed the debris and stored it inside a local business, and the sheriff's office contacted several other authorities, including the Oregon Department of Environmental Quality and the Central Oregon Coast Fire & Rescue department, who determined that the object did not contain any hazardous materials.
- —Jayati Ramakrishnan; 503-221-4320; jramakrishnan@oregonian.com; @JRamakrishnanOR



In September 1975, [Marshall Applewhite](#) gave a lecture in Waldport on [UFOs](#) which was attended by roughly 150 people. In the following days, an estimated 20 residents, nearly one out of 30 people who lived in the town, abandoned their homes and possessions and joined Applewhite's cult, [Heaven's Gate](#). An [Oregon State Police](#) investigation concluded that no laws had been broken.

Not one, but two COPV tanks discovered

Eliana Sheriff <https://youtu.be/tU9yfvwZ5ew>

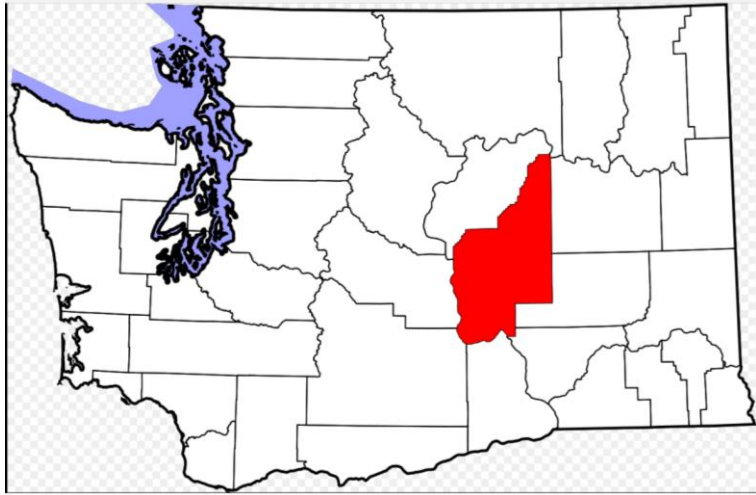
- So, to follow up on my original video about the Falcon 9 second stage reentry producing an awesome light show, a second COPV tank was recently discovered. The first Composite Overwrapped Pressure Vessel was found in Grant County in a private backyard. SpaceX did confirm it was from the failed deorbit burn. This second COPV washed up along the Oregon Coast. SpaceX hasn't confirmed if it belongs to them,

Grant County Sheriff Apr 2

<https://twitter.com/GrantCoSheriff/status/1378031863785263106>

- SpaceX recovered a Composite-Overwrapped Pressure Vessel from last week's Falcon 9 re-entry. It was found on private property in southwest Grant County this week. Media and treasure hunters: we are not disclosing specifics. The property owner simply wants to be left alone.
- Raconteur-guide == AFAIK this is the first time a SpaceX 2nd stage has re-entered in an uncontrolled way.
- Alessandro lovesio == All the Falcon 9 second stages that fly GTO missions (Also every other rocket stage that goes there, tbh) re-enter in an uncontrolled way after at least a few months or a few years at most. There are quite a few in orbit..... Once they get to a GTO orbit they usually don't have enough propellant left to deorbit or to get into a graveyard orbit either. Direct to GEO missions however retain prop margins to get into a graveyard orbit as otherwise they would stay in GEO forever (moon effects aside).

Grant County, Washington



- hh

Debris from SpaceX rocket launch falls on farm in central Washington

- [Debris from SpaceX rocket launch falls on farm in central Washington | Live Science](#)
- By [Hanneke Weitering - Associate Editor, Space.com](#)
- A pressure vessel from a SpaceX Falcon 9 rocket stage fell on a man's farm in Washington State last week, leaving a "4-inch dent in the soil," the local sheriff's office said Friday./// sitting on his farm one morning last weekend. He reported it to the Grant County Sheriff's Office, GCSO spokesman Kyle Foreman said in a phone call. A sergeant was dispatched on Monday to check it out.





- *c The COPV left a neat, COPV-shaped dent in the man's farm. Photo: Grant County Sheriff's Office c*

SpaceX confirmed

- [Piece of SpaceX rocket debris lands at Washington state farm \(phys.org\)](#)

After fireballs streaked across sky, space-junk sleuths got busy — and hit the jackpot in Washington /// Seattle Times // April 22, 2021 at 6:01 am

- **Dominic Gates:** 206-464-2963 or dgates@seattletimes.com;

- https://www.seattletimes.com/business/boeing-aerospace/space-junk-sleuths-track-down-the-rocket-chunks-that-lit-up-the-northwests-skies-last-month/?fbclid=IwAR2rWl-JbTHCQm2G--elaj86U5bHrKT2nJvmBVfbe6HVd8fdm3_JMVq4Epk



MORE

- <https://aerospace.org/reentries/>
- [Falcon 9 R/B \(ID 47782\) | The Aerospace Corporation](#)

THREE HUNTERS

- *Meteorite hunter Robert Ward*
- American Meteor Society operations manager Mike Hankey
- National Oceanic and Atmospheric Administration meteorologist Ken Howard

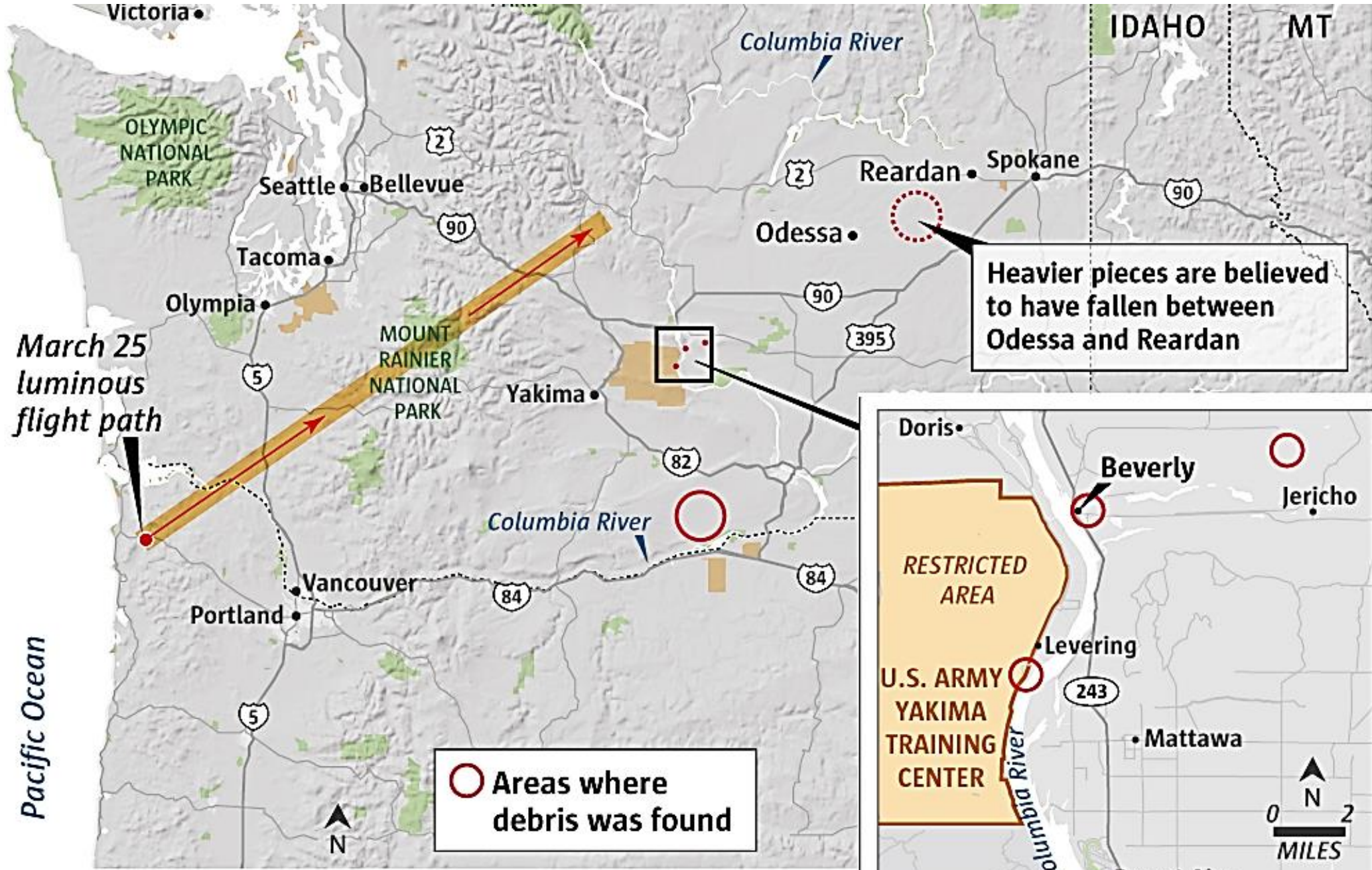
- Howard, Hankey and Ward sprang into action.
- Mike Hankey, American Meteor Society operations manager
- SpaceX debris tracked across Oregon and Washington == On the evening of March 25, a wayward upper stage of a SpaceX rocket reentered the atmosphere and streaked across the skies between Portland and Seattle. Three space-junk sleuths tracked its disintegrating pieces across eastern Washington and found some of the debris on the ground.

SpaceX debris tracked across Oregon and Washington

On the evening of March 25, a wayward upper stage of a SpaceX rocket reentered the atmosphere and streaked across the skies between Portland and Seattle. Three space-junk sleuths tracked its disintegrating pieces across eastern Washington and found some of the debris on the ground.

more

- Yet neither SpaceX nor the various federal agencies with some role in tracking space junk — the Federal Aviation Administration, NASA, and the U.S. Space Force — investigated what happened on the ground.
- That was left to a self-motivated trio of sleuths who brought to the task a combination of sophisticated scientific ingenuity, a passion for space and an Indiana Jones-style appetite for adventure.
- Software coder and American Meteor Society operations manager Mike Hankey used an app he developed to collect eyewitness reports and triangulate their location data. National Oceanic and Atmospheric Administration meteorologist Ken Howard analyzed data from weather radars.
- Together they pinned down the flight path of the fiery space junk and the expected location of some fallen pieces. Then meteorite hunter Robert Ward provided the boots on the ground to go find them.
- He tracked down where three 200-pound cylindrical tanks fell to Earth near a bend in the Columbia River east of Yakima. One landed 50 feet from a trailer home, where the owner pulled a shotgun on the stranger searching for space junk.
- Heavier rocket pieces, traveling with more momentum, likely hit the ground much farther east in the state, the trio believes.



Source: Mike Hankey & Ken Howard

MARK NOWLIN / THE SEATTLE TIMES

OREGON FIREBALL SWARM DRAFT 3

5/09/2021

XX

more

- As the debris traveled eastward over the state, eventually the fiery glow went out, ending what scientists who study meteors call the “luminous flight path” as remaining chunks traveled on in a “dark flight” phase.
- ...Then Howard used that trajectory to look at the weather radar data on that precise path at that precise time.
- Sure enough, blips on the radar tracks indicated pieces of the space debris falling away from the rocket as it disintegrated, and arcing southward due to the wind. Those included what looked like four pieces with similar radar signatures falling near the Columbia River.

tbs

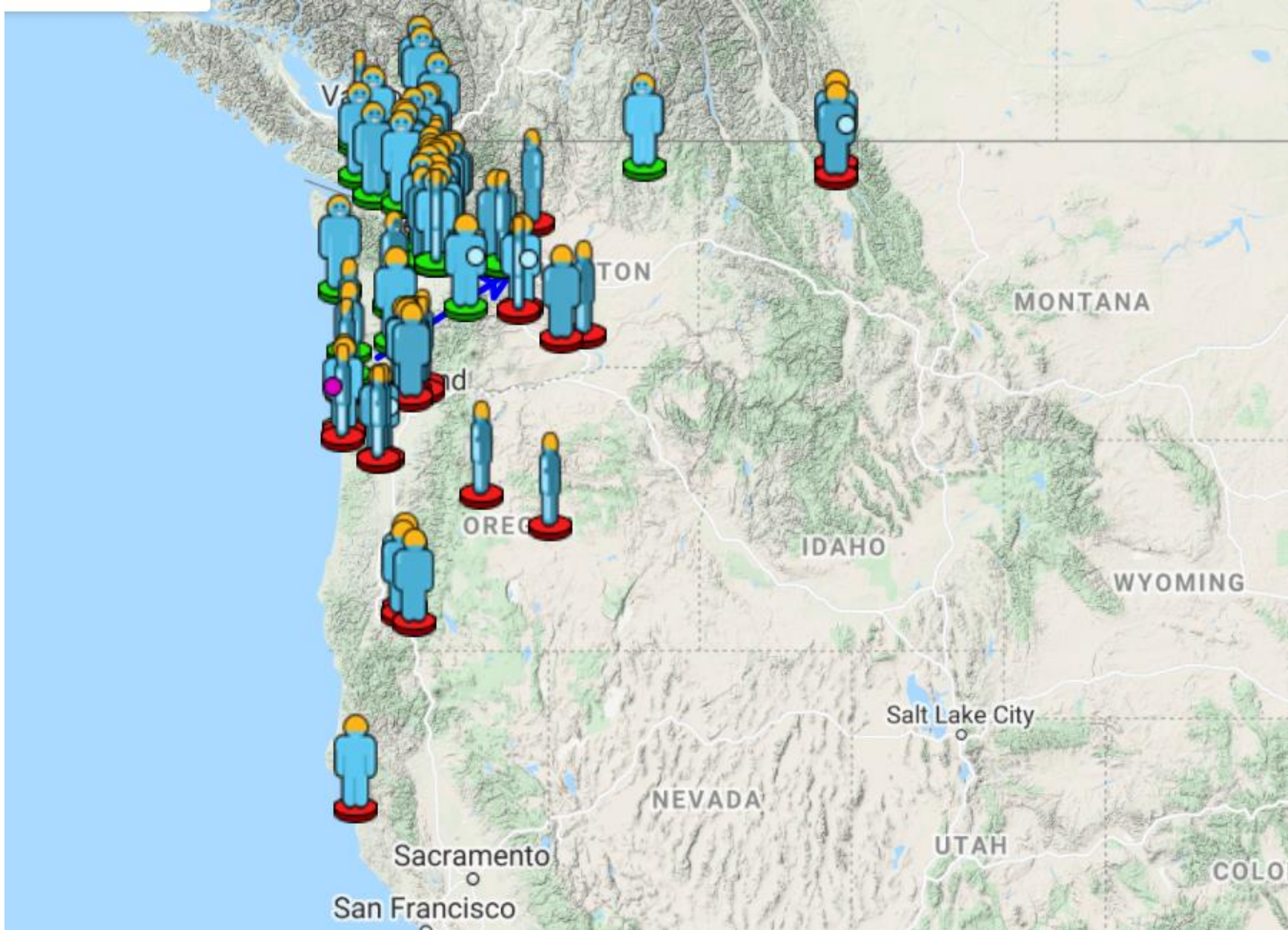


- tbs

Satellite infrared super HD



<https://weather.us/satellite/usa/satellite-infrared-superhd-5min/20210326-0300z.html>



https://fireball.amsmeteors.org/members/imo_view/event/2021/1916

We received 68 reports about a fireball seen over British Columbia, CA, MT, OR and WA on Friday, March 26th 2021 around 04:02 UT.

For this event, we received 6 videos and 10 photos

