

United States Loses First Global Space War to Russians

Based on mathematical/geometric analysis, it is now possible to verify United States attacks on 8 different Russian satellites. It appears that the United States and Russia have been at war in outer space for the last 4-5 months, due to the Ukrainian conflict. It is my current assessment that the United States has lost this first-ever space war between major countries, due to Russian asymmetrical economic attacks on the US banking system. To review this evidence, see the below analysis at the end of this posting.

Verified and possible space control (space warfare) actions that have taken place during the recent Ukrainian conflict are:

1. Western Ukrainians attacked (jammed) a Russian communications satellite around 15 March [Reference 1: <http://www.independent.mk/articles/2688/Western+Ukraine+Has+Attempted+to+Jam+Russian+Satellites>; also, <http://freebeacon.com/national-security/moscow-accuses-ukraine-of-electronic-attack-on-satellite/>] – Verified “Disruption” Satellite Attack;
2. Russian GLONASS (their GPS system) system-wide failure of all 24 satellites for 13 hours on 2 April [Reference 2: http://www.gpsdaily.com/reports/Satellite_Navigation_Failure_Confirms_Urgent_Need_for_Backup_999.html and Reference 3: <http://gpsworld.com/the-system-glonass-fumbles-forward/>; see also Figure 2 & 3] - **Verified** “Denial” Satellite Attack. See below discussion and attached figures for the mathematical verification of the source of this attack;
3. Russian GLONASS (their GPS system) 8 satellites failed on 14 April [Reference 4: <http://gpsworld.com/the-system-glonass-fumbles-forward/>] - **Verified** “Denial” Satellite Attack. (Thanks to LinkedIn member [Gabriel Elefteriu](#) for pointing this out and suggesting that an orbital analysis be accomplished);
4. The last satellite of the Russian Oko-1 ballistic missile attack early warning system was lost in April (Reference 5: <http://www.defencetalk.com/russia-loses-its-last-early-warning-satellite-59992/#ixzz3BnZMVvuP>) - Possible “Destruction” Satellite Attack;
5. Russia conducted a diplomatic/economic attack against Western interests in the International Space Station (ISS) on 30 April [Reference 6: <http://www.foxnews.com/science/2014/04/30/us-astronauts-should-use-trampolines-to-get-into-space-russian-official-says/?intcmp=latestnews>] - Verified “Diplomatic / Political” Space Attack;
6. Crash of Russian Proton-M launch vehicle carrying the Express-AM4R heavy telecom satellite on 16 May [Reference 7: http://www.space-travel.com/reports/Third_stage_engine_glitch_causes_Proton_M_accident_999.html] and [Reference 8: http://www.huffingtonpost.com/2014/05/19/ufos-crash-china-villages_n_5353750.html], plus [Reference 9: <http://www.breitbart.com/Big-Peace/2014/05/21/Russian-Rocket-Crash-Triggers-UFO-Panic-in-China> see also Figure 1] - Possible “Destruction” Satellite Attack. See attached graphic;
7. Failure in the Russian communications satellite Yamal-201 on 6 June (Reference 10: <https://translate.google.com/translate?sl=ru&tl=en&js=y&prev=t&hl=en&ie=UTF-8&u=http%3A%2F%2Fria.ru%2Fscience%2F20140606%2F1010895493.html>) -

Possible “Denial” Satellite Attack. (Thanks to LinkedIn member [Alexey Martyushenko](#) for pointing this out);

8. Russian loses contact with Foton-M4 research satellite around 19 July (Reference 11: <http://www.washingtonpost.com/blogs/worldviews/wp/2014/07/24/there-is-a-lizard-sex-satellite-floating-in-space-and-russia-no-longer-has-it-under-control/>)- Possible “Denial” Satellite Attack, though this does not on the surface sound like a satellite with military utility, it might still have hidden payloads of military value; or, if this was an attack, it was another warning message;
9. European Galileo satellite launch failure on 22 August (Reference 12: <http://www.spacenews.com/article/launch-report/41650galileo-launch-initially-hailed-as-success-is-a-failure>) - Possible “Destruction” Satellite Attack.

The temporary failure of the entire Russian GLONASS satellite system was a warning shot on 2 April, which would be the equivalent of space-related economic sanctions. The \$200M loss of the Russian Express-AM4R communication satellite on 16 May could have been a more serious expression of resolve by an adversary in this conflict. Of course, some of these satellite failures may be due to natural or unintentional human causes, but they sure do come at convenient times for Western powers during this Ukrainian crisis. In addition, 22 satellite failures over a six month period is hard to believe are purely “accidental” or environmental. The Russian Express-AM4R satellite would have provided communications coverage to the pro-Russian Eastern Ukraine (for beam coverage map, see: Reference 13: <http://www.satbeams.com/satellites?id=2502> and attached graphic). The GLONASS system would have provided support to any Russian forces invading the Ukraine. Also, the loss of this Russian Proton-M launch vehicle and satellite payload came at the exact time that Mr. Putin was in China to sign a multi-billion dollar deal to provide natural gas to China, which is also a key issue for Western Ukrainians. The Russians are also trying to sell to China their space technology. In addition, debris from this failed rocket booster and payload fell directly onto a village in China, which is an additional technical and political embarrassment for Russia during Putin’s trip.

It seems too perfect to be just a random occurrence, and the timing of these events seems to correspond to significant military/political occurrences in the Ukraine, along with the recent launch of Western astronauts to the Space Station using Russian rockets. I also note that the press has not picked up on these possible space warfare actions, which fits perfectly into my notional subtle space attack escalation ladder I have been proposing for the last 20 years. Has space war already occurred right in front of us without the general populace realizing it, or at least, refusing to believe it due to the political correctness movement engulfing Western nations?

Verified United States Attacks Against 8 Russian Satellites

Figure 3 (Reference 4) gives exact times and sequences of the GLONASS (Globalnaya Navigatsionnaya Sputnikovaya Sistema) failures on 2 April, 2014. Employing orbital dynamics visualization software, I endeavored to determine where on Earth an Electronics Warfare (EW)

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site would exactly match up with these GLONASS failures. The only place on Earth that these GLONASS failures match up to a ground site with visibility to these satellites, at the exact times they failed, is Alice Springs, Australia. This location is exact because, if this EW site is moved just 2-3 degrees West or East from Alice Springs, then horizon constraints prevent access to the proper GLONASS satellite at the right time and sequence of failure. At any event, Alice Springs is in the center of the Australian sub-continent, and wide variations of Latitude or Longitude assumptions still leaves this threat EW site within Australia. Wikipedia describes an important satellite control, downlink and listening center near Alice Springs called Pine Gap (Reference 14: http://en.wikipedia.org/wiki/Pine_Gap) that is reportedly jointly controlled by CIA, NSA, NRO and Australia since 1970.

I believe the satellite experts at Pine Gap would be able to implement a cyber attack against a GLONASS satellite when these passed within view. However, my assessment is it probably was the 4th Space Control Squadron (Reference 15:

<http://www.peterson.af.mil/library/factsheets/factsheet.asp?id=4707>) using its publically acknowledged anti-satellite mobile Counter Communications System against GLONASS. It would be interesting to know if this Space Squadron was deployed in late March, and if any available commercial satellite imagery products would show mobile satellite antennas at Pine Gap similar to satellite images of Holloman Air Force Base, which is the 4th Space Control Squadron's home base.

For those who believe the attacks against GLONASS were random events, then carefully review Figure 3 (Reference 4). This shows the attacks commencing exactly at 6:30 AM Pine Gap time (UTC + 9.5; just after their first coffee in the morning), and the sequence of the attacks was in numerical order (GLONASS 9, 10, 11, 12, 13), like the operator was checking them off a neatly ordered list. These are too ordered, precise and specific to be random failure events.

It is my assessment that the failures of 7 Russian satellite systems over the last 4 months were mostly due to cyber attacks (some could be natural failure events) emanating from American anti-satellite cyber weapons. Even though I'm sure the United States has better and more numerous offensive military technologies than the Russians, I believe the Russians won this space war because they took the war back to Earth and attacked the American banking system the day before they invaded SE Ukraine in force (Reference 16:

<http://www.foxbusiness.com/technology/2014/08/28/sophisticated-bank-cyber-attack-said-to-target-core-infrastructure/> and Reference 17: http://finance.yahoo.com/news/banks-face-cyber-attack-russian-124506171.html;_ylt=A0SO8yGPyAdUC6sA0m5XNyoA;_ylu=X3oDMTBByNzhwY2hkBHNIYwNzcgRwb3MDMgRjb2xvA2dxMQR2dGlkAw--). It is instructive that after the Russians accomplished this new attack on Ukraine, President Obama and his State Department refused to characterize that as an invasion, making his response even wimpier than his normal. I believe that anyone else on Earth would call a cross-border attack by hundreds of tanks that are killing their military men an obvious "invasion". Obama is running scared that the Russians now have

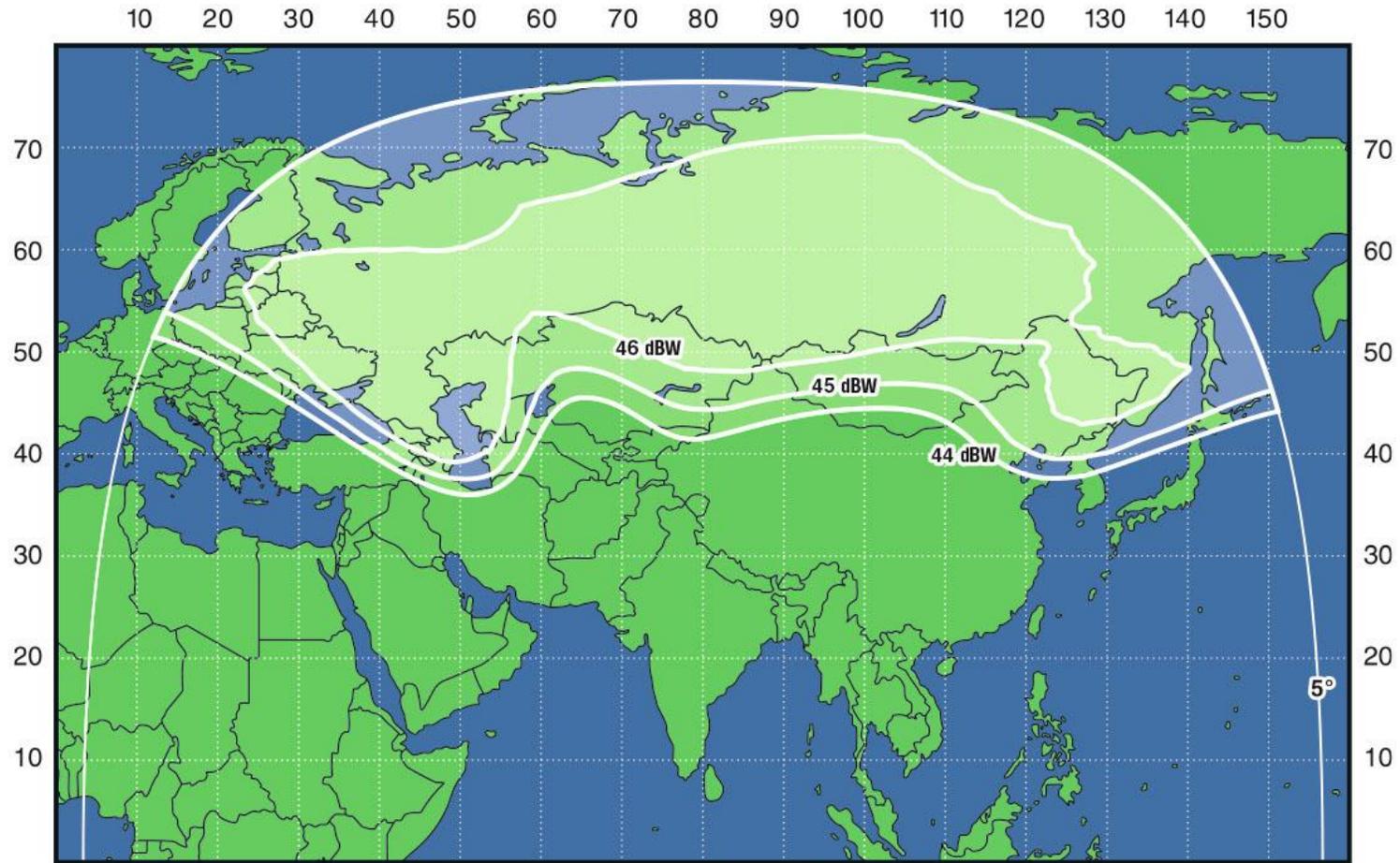
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millions of bank account and stock account numbers of American citizens, and they will drain those accounts or offer them to cyber thieves if the United States gives them any more hassle on the Ukraine. If this happens, Obama and the Democratic Party will lose the mid-term elections and the Republicans would control both houses of Congress for the remainder of his term. Also, such a severe financial event like this might cause a collapse of the Western banking system and send the United States back into recession under Obama's watch.

There is also some concern that the European Galileo satellite launch failure on 22 August may have been a Russian attack against this navigation system in revenge for the attacks on the GLONASS navigation satellites, the large financial loss associated with the failure of Express-AM4R, and as a warning to the EU to stop meddling in the Ukraine. The Galileo satellites were launched by a Russian Soyuz rocket a few days before the attack on the American banking system, and just before the major Russian armored invasion of SE Ukraine. It's interesting that one week after this attack on the American financial system, suddenly all parties to the Ukrainian Conflict wanted to negotiate a cease fire. Even a new Russian aid convoy of over 200 trucks was allowed to pass unhindered and without permission into Ukraine by Kiev, even though a month earlier the Ukrainians stridently protested a similar convoy.

It appears to me that the attacks on the Russian GLONASS satellites were poorly executed. In order for space attacks to achieve their objective of showing serious intent, and provide more subtle rungs on the conflict escalation ladder, these satellite attacks should not be as obvious to the general public. The attacks emanating from Australia should have occurred from multiple sites around the world (since satellites can be accessed globally), even possibly from a ship at sea or aboard an airplane flying over a remote ocean area. That way it would have been impossible to correlate them as intentional attacks. At least do not conduct these attacks in satellite designator numerical order, which certainly proves human adversarial intent and not some accident or some space environmental issue (the effects of Solar Flares as some have proposed). Of course these attacks were planned by an American Air Force that has not had an able air adversary since World War II (70 years ago), and made past tactical blunders such as during the Vietnam War of following the same ingress/egress flight paths when bombing Hanoi day after day. They need to study some of my teachings on space warfare doctrine, strategies and tactics to be able to achieve better results, at least politically and diplomatically.

Note: If the reader wants to obtain additional detailed technical information on these GLONASS attacks, such as orbital elements files so you can verify my analyses, and pictures and animations visualizing the attack constraints, then download these files at my personal website: (Reference 18: http://spacecontrol.info/information_links/information_links.htm).



Russian Express AM4R Planned Coverage Map

Figure 1. Predicted Coverage Map of Failed Russian Communications Satellite

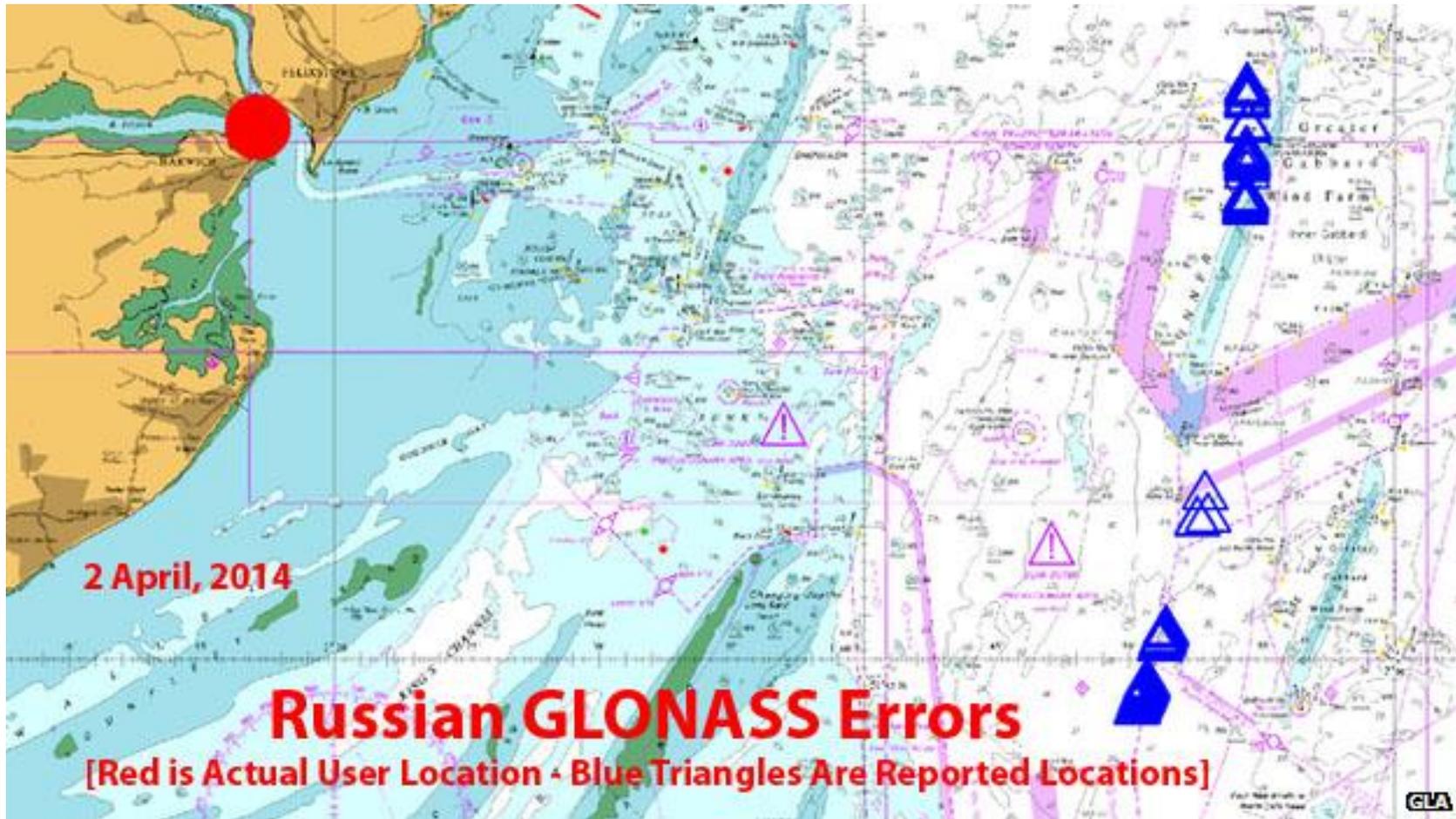


Figure 2. GLONASS Errors After Attack

Состояние КА ГЛОНАСС с 16:39:00 01.04.14 по 16:39:00 02.04.14 UTC+4

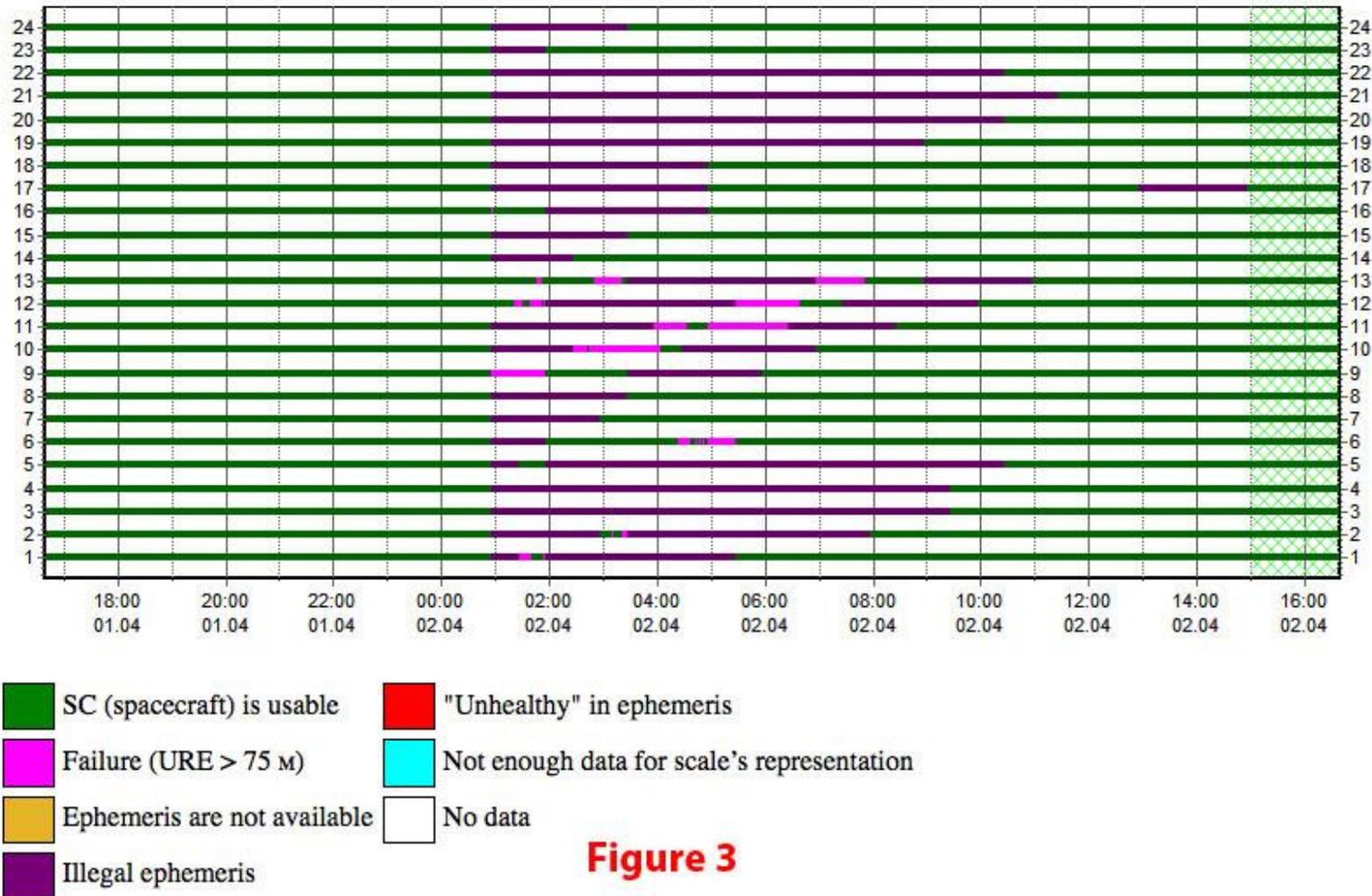


Figure 3

Figure 3. GLONASS Attack Timing & Sequences

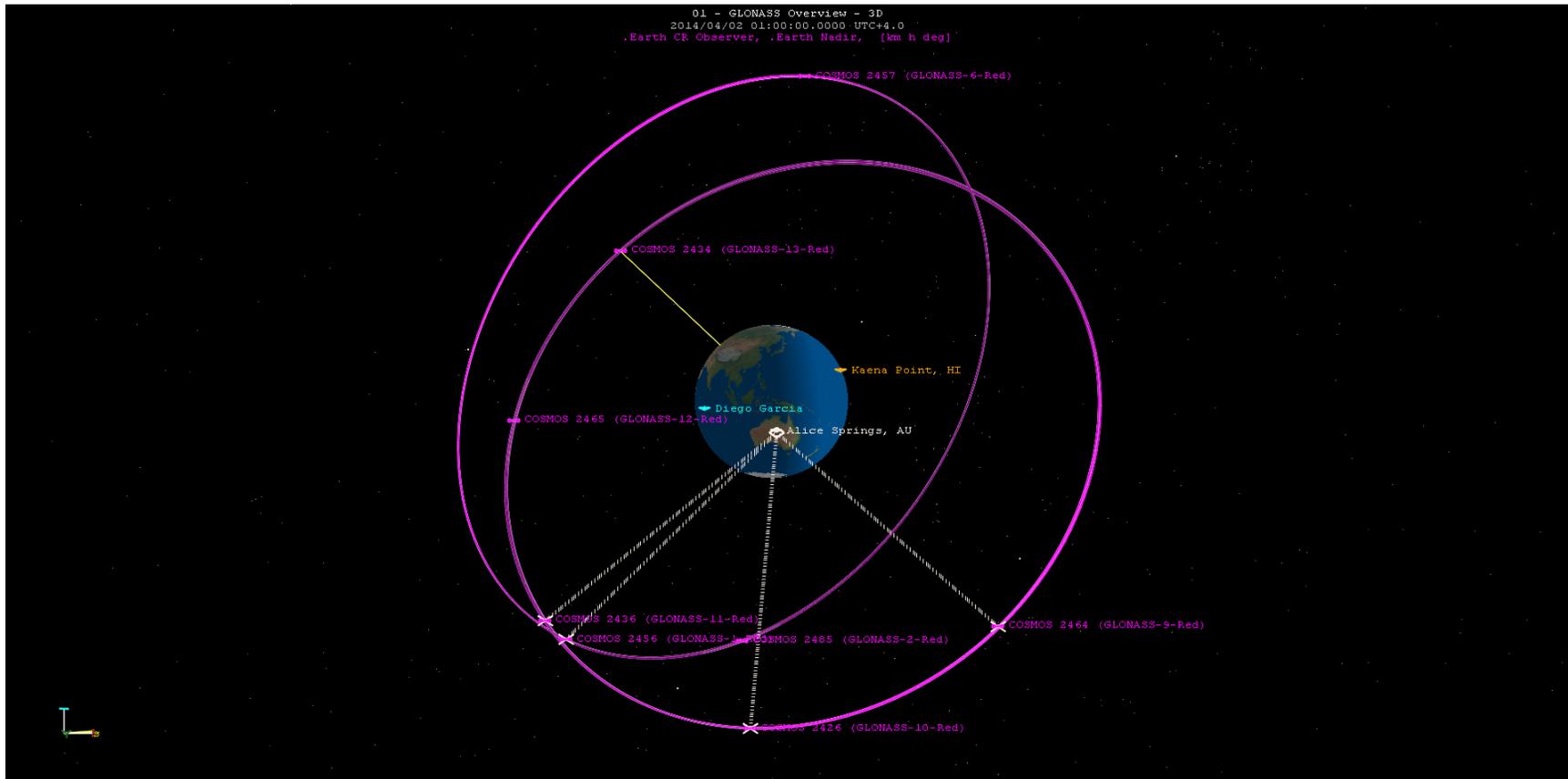


Figure 5. Failed GLONASS Satellites with Terrestrial Access Patterns – 3D

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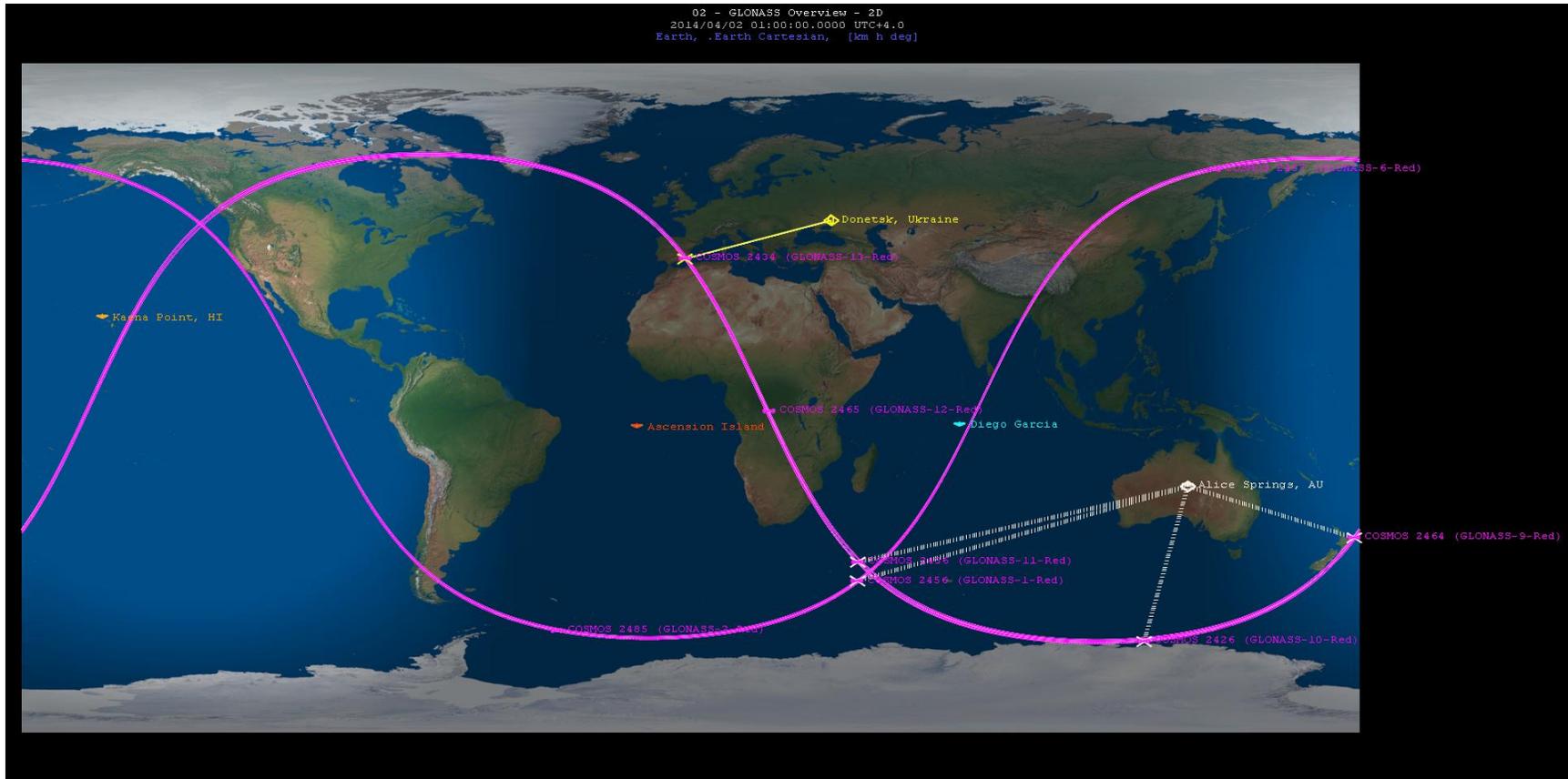


Figure 6. Failed GLONASS Satellites with Terrestrial Access Patterns – 2D

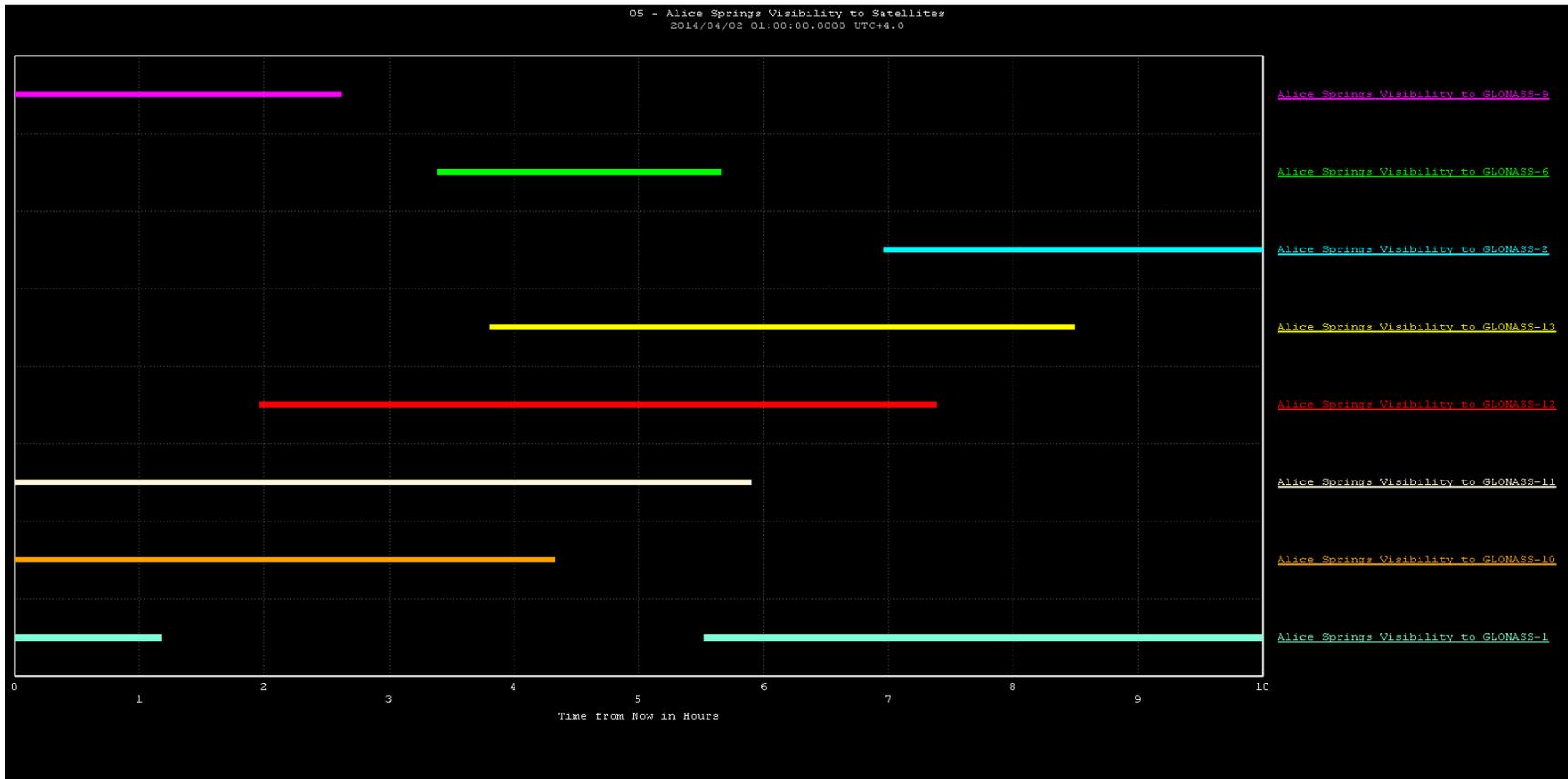


Figure 7. Failed GLONASS Satellites with Terrestrial Access Patterns – Time Coverage Map

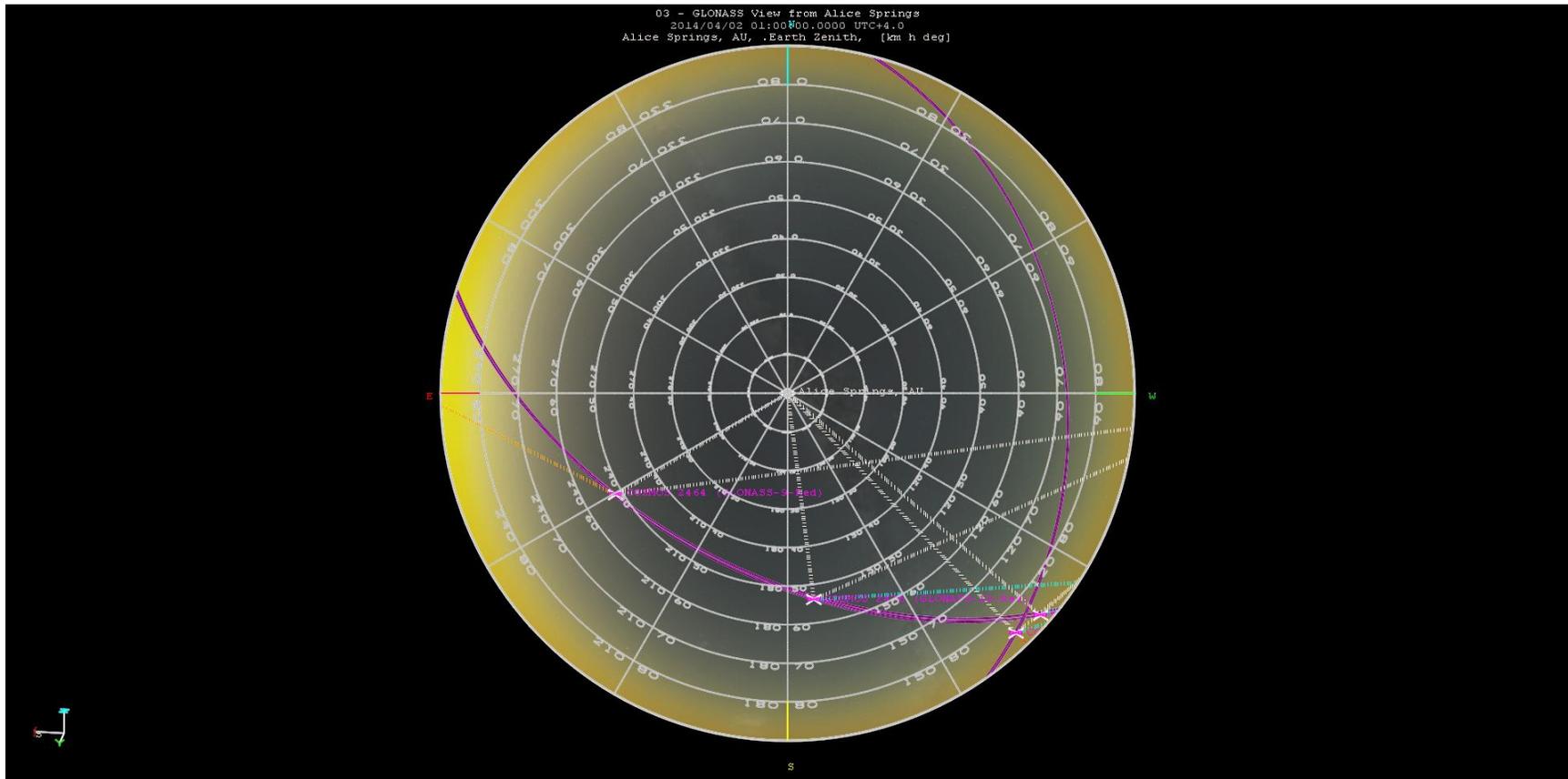


Figure 8. Failed GLONASS Satellites with Terrestrial Access Patterns – View from Alice Springs



Figure 9. Pine Gap Facility – Google View 1



Figure 10. Pine Gap Facility – Google View 2