

Communication Quality Analysis Report

LTE & Starlink Network Performance

Report Generated: 2026-01-29 14:02

Flight Summary

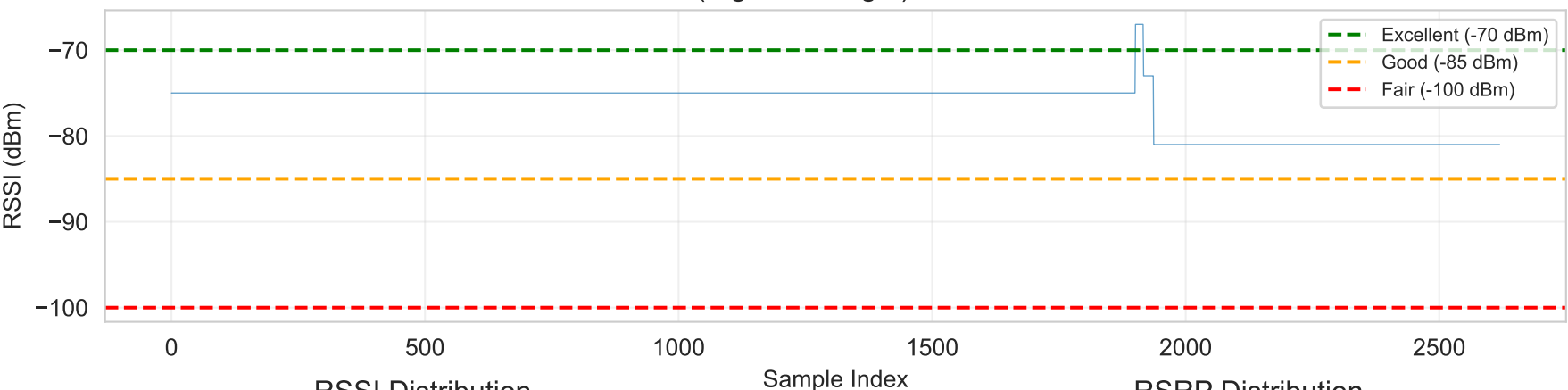
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Total Data Points: 2,620
Flight Duration: 399 seconds

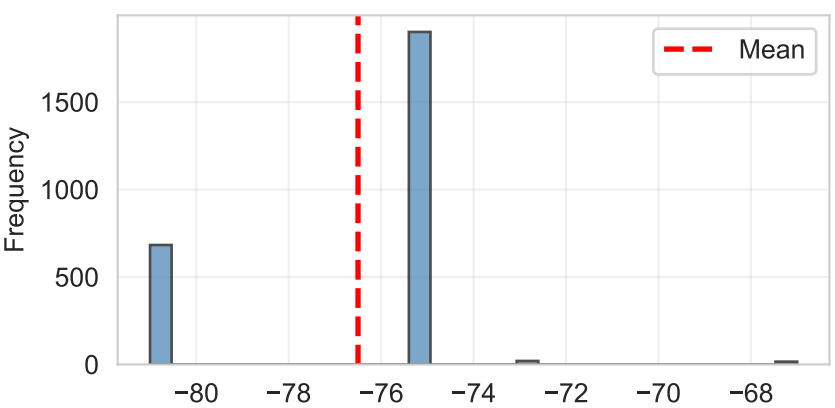
LTE Coverage: 100.0%
Starlink Coverage: 53.9%

LTE Communication Quality Analysis

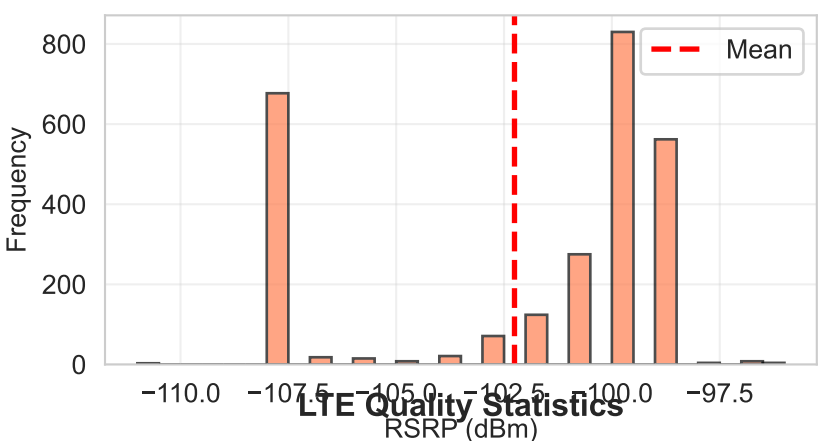
RSSI (Signal Strength) Over Time



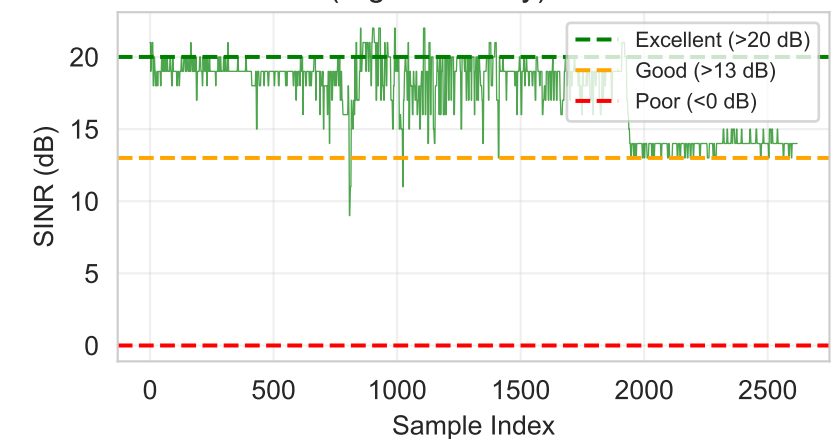
RSSI Distribution



RSRP Distribution



SINR (Signal Quality) Over Time

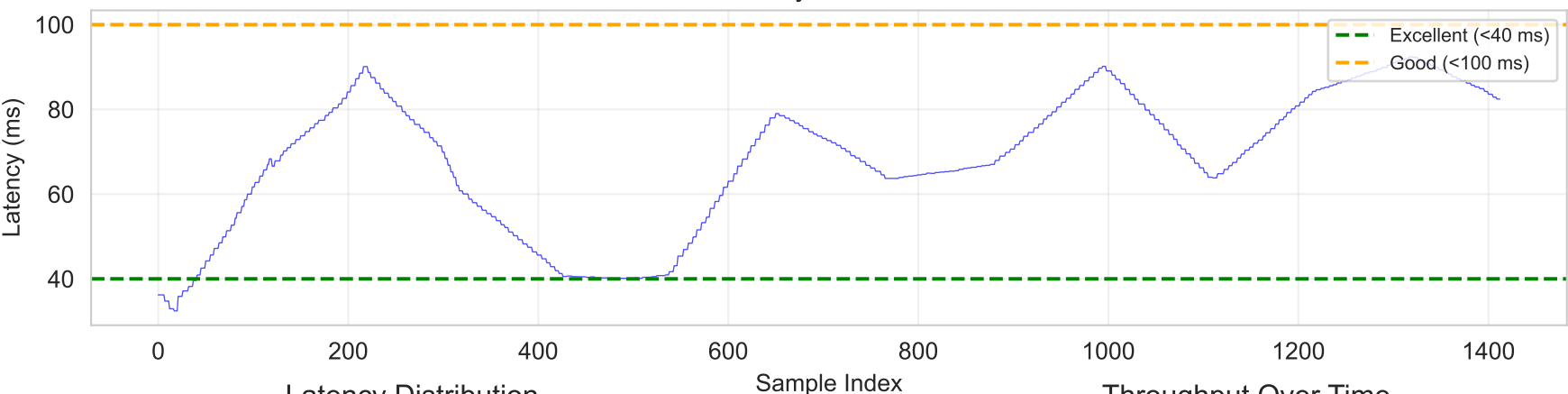


LTE Quality Statistics

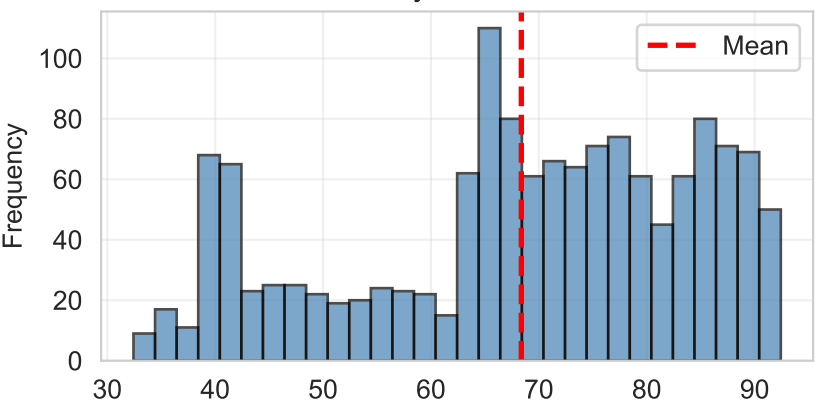
Metric	Mean	Min	Max	Std
RSSI (dBm)	-76.5	-81	-67	2.7
RSRP (dBm)	-102.3	-111	-96	3.6
SINR (dB)	17.4	9	22	2.5

Starlink Communication Quality Analysis

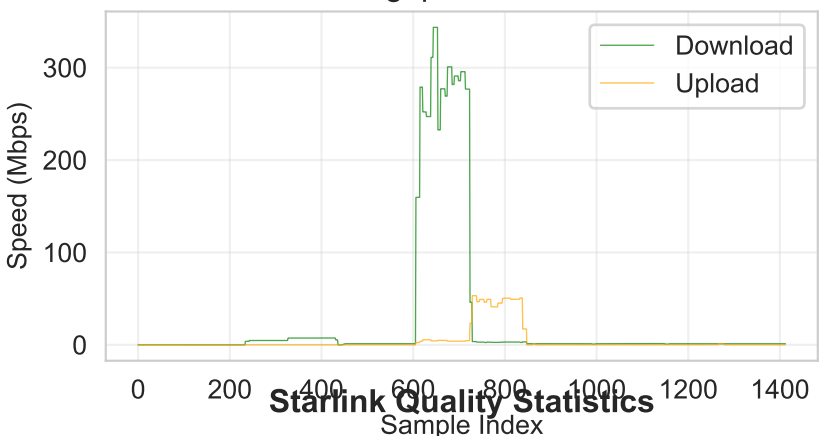
Latency Over Time



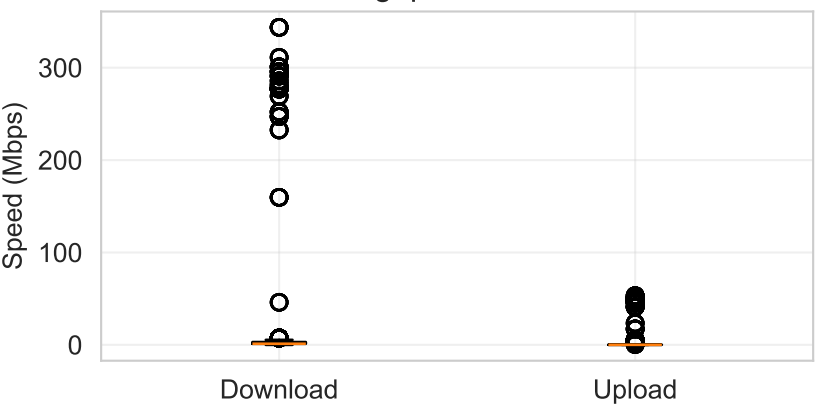
Latency Distribution



Throughput Over Time



Throughput Distribution

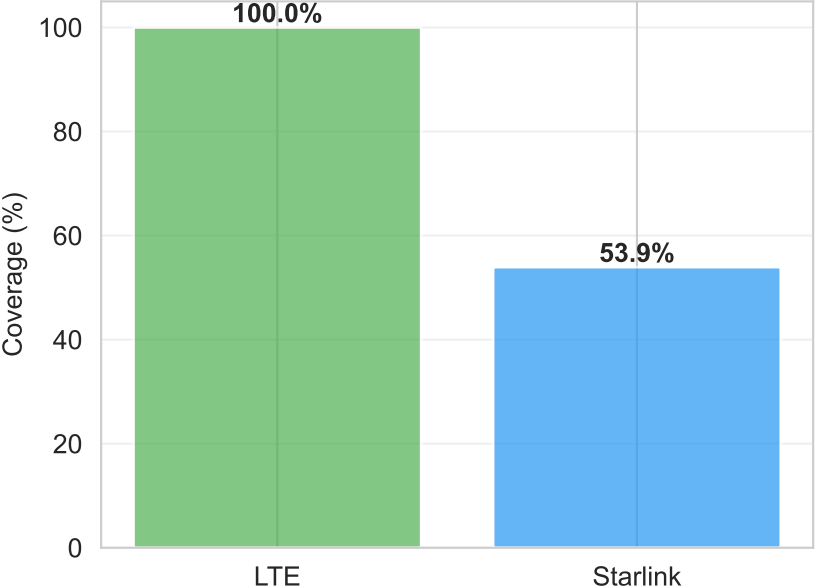


Starlink Quality Statistics

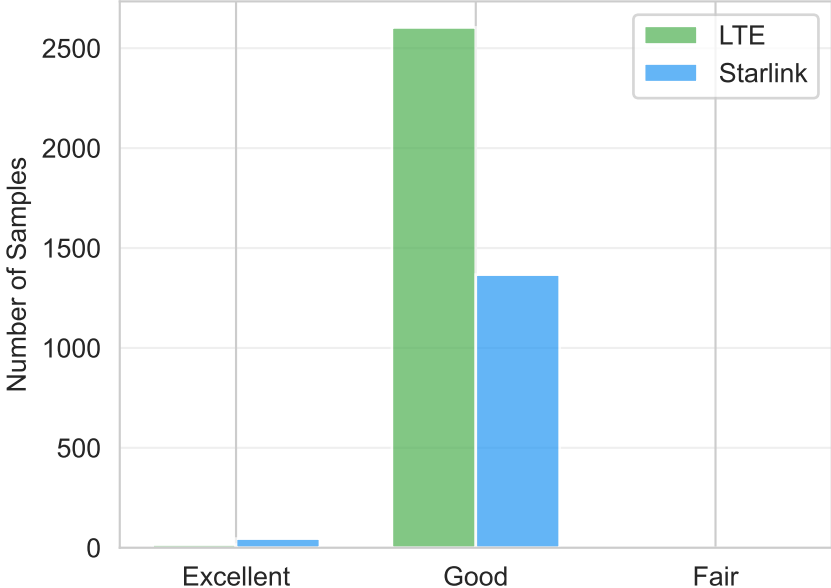
Metric	Mean	Min	Max	Std
Latency (ms)	68.4	32.4	92.4	15.9
Download (Mbps)	24.7	0.0	343.7	76.2
Upload (Mbps)	4.4	0.0	53.2	12.9

LTE vs Starlink Comparison

Network Coverage



Quality Grade Distribution



ANALYSIS SUMMARY & RECOMMENDATIONS

Network Performance:

- LTE Coverage: 100.0% | Overall Quality: Good
- Starlink Coverage: 53.9% | Overall Quality: Good

Key Findings:

- LTE Average RSSI: -76.5 dBm
- LTE Average SINR: 17.4 dB
- Starlink Average Latency: 68.4 ms
- Starlink Average Download: 24.7 Mbps

Recommendations:

1. LTE provides excellent coverage throughout the flight
2. Starlink shows reliable performance in this flight area
3. For mission-critical applications, dual network redundancy is available

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