

Satellite Navigation Unit, ARD-352A
NSTB/WAAS T&E Team

WIDE AREA AUGMENTATION SYSTEM PERFORMANCE ANALYSIS REPORT

October 2026

Report #98
Reporting Period: July 01 to September 30, 2026
http://www.nstb.tc.faa.gov

FAA William J. Hughes Technical Center for Advanced Aerospace
Atlantic City International Airport, NJ 08405

DOCUMENT VERSION CONTROL

VERSION	DESCRIPTION OF CHANGE	DATE
0.1	Initial Version of Document	10/14/2026
0.2	Technical Edit	10/22/2026
0.3	Peer Review	10/29/2026
1.0	Final Edit	10/30/2026

Executive Summary

Since 1999, the Wide Area Augmentation System (WAAS) Test Team at the FAA William J. Hughes Technical Center for Advanced Aerospace (WJHTC) has reported Global Positioning System (GPS) performance as measured against the GPS Standard Positioning Service (SPS) Signal Specification in quarterly GPS Performance Analysis Network (PAN) Reports. In addition to the GPS PAN reports, the WAAS Test Team has provided quarterly reports on WAAS performance. The current WAAS PAN Report #98 provides WAAS performance data from the July 01 through September 30, 2026 reporting period.

This report provides the following results: accuracy, availability, coverage, safety index, range accuracy, WAAS broadcast message rates, geostationary satellite ranging availability, WAAS airport availability, WAAS Code Noise and Multipath analysis, WAAS reference station survey validation, and WAAS Signal Quality Monitoring.

The following table shows observations for accuracy and availability made during the reporting period for Continental United States (CONUS) and Alaska sites (the international sites are presented in the body of this report). Localizer Performance (LP) service is available when the calculated horizontal protection level (HPL) is less than 40 meters. Localizer Performance with Vertical Guidance (LPV) service is available when the calculated HPL is less than 40 meters and the Vertical Protection Level (VPL) is less than 50 meters. Localizer Performance with Vertical Guidance to 200-foot decision height (LPV200) service is available when the calculated HPL is less than 40 meters and the VPL is less than 35 meters. The FAA's National Satellite Test Bed (NSTB) sites—Grand Forks, North Dakota, Atlantic City, New Jersey, and Arcata, California—are outliers due to receiver quality issues, and not because of the WAAS signal in space quality.

Parameter	CONUS Site/Maximum	CONUS Site/Minimum	Alaska Site/Maximum	Alaska Site/Minimum
95% Horizontal Accuracy (HPL <= 40 meters)	Atlantic City 1.536 meters	Salt Lake City 0.541 meters	Juneau 0.704 meters	Barrow 0.618 meters
95% Vertical Accuracy (VPL <= 50 meters)	Arcata 1.706 meters	Seattle 0.865 meters	Barrow 1.337 meters	Bethel 1.034 meters
LP Availability (HPL <= 40 meters)	Multiple Sites 100%	Multiple Sites 100%	All Sites 100%	All Sites 100%
LPV Availability (HPL <= 40 meters & VPL <= 50 meters)	Multiple Sites 100%	Multiple Sites 100%	Multiple Sites 100%	Kotzebue 99.99%
LPV200 Availability (HPL <= 40 meters & VPL <= 35 meters)	Multiple Sites 100%	Cleveland 99.99%	Anchorage 100%	Cold Bay 99.90%
99% HPL	Miami 19.085 meters	Salt Lake City 10.738 meters	Cold Bay 21.838 meters	Anchorage 15.623 meters
99% VPL	Los Angeles 31.108 meters	Kansas City 20.350 meters	Barrow 33.693 meters	Anchorage 24.077 meters

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Event Summary 4
1.2 Report Overview 13
2.0 WAAS POSITION ACCURACY 13
3.0 AVAILABILITY 29
4.0 COVERAGE 48
5.0 INTEGRITY 59
5.1 HMI Analysis 59
5.2 Broadcast Alerts 60
5.3 Availability of WAAS Messages (SM9, S15, and G30) 61
5.4 Satellite Glitches 72
6.0 SV RANGE ACCURACY 74
7.0 GEO RANGING PERFORMANCE 84
8.0 WAAS AIRPORT AVAILABILITY 86
9.0 WAAS CNMP BOUNDING ANALYSIS 93
10.0 WRS ANTENNA SURVEY VALIDATION 99
11.0 SQM 109
11.1 Alpha Metrics 109
11.2 Type Bias 109
11.3 PRN Bias 111
11.4 SQM Trips 121
APPENDIX A: GENERAL TERMS AND DEFINITIONS A-1
APPENDIX B: ADDITIONAL COVERAGE PLOTS B-1
APPENDIX C: RTCA TABLE DO-229F C-1
APPENDIX D: WAAS LP, LPV, AND LPV200 OUTAGES AND AVAILABILITY D-1

LIST OF FIGURES

Figure 2-1 LPV 95% Horizontal Accuracy 18
Figure 2-2 LPV 95% Horizontal Accuracy 19
Figure 2-3 LPV 95% Horizontal Accuracy 20
Figure 2-4 LPV 95% Vertical Accuracy....21
Figure 2-5 LPV 95% Vertical Accuracy....22
Figure 2-6 LPV 95% Vertical Accuracy....23
Figure 2-7 NPA 95% Horizontal Accuracy....24
Figure 2-8 NPA 95% Horizontal Accuracy....25
Figure 2-9 LPV 2-D Horizontal Error Distribution Histogram 26
Figure 2-10 LPV 2-D Vertical Error Distribution Histogram....27
Figure 2-11 LPV Horizontal Error Bounding Triangle Chart....28
Figure 2-12 LPV Vertical Error Bounding Triangle Chart....29
Figure 3-1 LPV Instantaneous Availability....34
Figure 3-2 LPV Instantaneous Availability....35
Figure 3-3 LPV Instantaneous Availability....36
Figure 3-4 LPV200 Instantaneous Availability....37
Figure 3-5 LPV200 Instantaneous Availability....38
Figure 3-6 LPV200 Instantaneous Availability....39
Figure 3-7 LPV Outages....40
Figure 3-8 LPV Outages....41
Figure 3-9 LPV Outages....42
Figure 3-10 LPV200 Outages....43
Figure 3-11 LPV200 Outages....44
Figure 3-12 LPV200 Outages....45
Figure 4-1 LP North America Coverage for the Quarter....49
Figure 4-2 LPV North America Coverage for the Quarter....50
Figure 4-3 LPV200 North America Coverage for the Quarter....51
Figure 4-4 Daily LPV and LPV200 CONUS Coverage....52
Figure 4-5 Daily LPV and LPV200 Alaska Coverage....53
Figure 4-6 Daily LPV and LPV200 Canada Coverage....54
Figure 4-7 RNP 0.1 Coverage for the Quarter....56
Figure 4-8 RNP 0.3 Coverage for the Quarter....57
Figure 4-9 Daily RNP Coverage....58
Figure 5-1 SV Daily Alert Trend....61
Figure 5-2 SV Glitch Trend....73
Figure 6-1 Range Error (PRN1 – PRN16) – Washington, DC....77
Figure 6-2 Range Error (PRN17 – PRN32) – Washington, DC....78
Figure 6-3 Range Error (PRN131, PRN133, and PRN135) – Washington, DC....79
Figure 6-4 Ionospheric Error (PRN1 – PRN16) – Washington, DC....82
Figure 6-5 Ionospheric Error (PRN-17 – PRN-32) – Washington, DC....83
Figure 7-1 Daily PA SM9 GEO Ranging Availability Trend....84
Figure 7-2 Daily PA S15 GEO Ranging Availability Trend....85
Figure 7-3 Daily PA G30 GEO Ranging Availability Trend....85
Figure 8-1 WAAS LP Availability at Airports in the U.S. and Canada with GPS RNAV IAPs....87
Figure 8-2 WAAS LP Outages at Airports in the U.S. and Canada with GPS RNAV IAPs....88
Figure 8-3 WAAS LPV Availability Airports in the U.S. and Canada with GPS RNAV IAPs....89
Figure 8-4 WAAS LPV Outages at Airports in the U.S. and Canada with GPS RNAV IAPs....90
Figure 8-5 WAAS LPV200 Availability at Airports in the U.S. and Canada with GPS RNAV IAPs....91
Figure 8-6 WAAS LPV200 Outages at Airports in the U.S. and Canada with GPS RNAV IAPs....92
Figure 10-1 WAAS C&V Calculated Antenna Positions Deltas OPUS Survey....103
Figure 10-2 WAAS C&V Calculated Antenna Positions Deltas OPUS Survey....103
Figure 10-3 WAAS C&V Calculated Antenna Positions Deltas OPUS Survey....104
Figure 10-4 OPUS Survey Overall RMS Qualities....104
Figure 10-5 OPUS Survey Overall RMS Qualities....105

Figure 10-6 OPUS Survey Overall RMS Qualities 105
Figure 10-7 OPUS vs. CSRS RSS ECEF Deltas 106
Figure 10-8 OPUS vs. CSRS RSS ECEF Deltas 106
Figure 10-9 OPUS vs. CSRS RSS ECEF Deltas 107
Figure 10-10 CSRS Survey Qualities 107
Figure 10-11 CSRS Survey Qualities 108
Figure 10-12 CSRS Survey Qualities 108
Figure 11-1 Type Bias Average Trend 111
Figure 11-2 PRN Bias Average for the Quarter 113
Figure 11-3 PRN Bias Average Trend (PRN1 – PRN4) 114
Figure 11-4 PRN Bias Average Trend (PRN5 – PRN8) 115
Figure 11-5 PRN Bias Average Trend (PRN9 – PRN12) 116
Figure 11-6 PRN Bias Average Trend (PRN13 – PRN16) 117
Figure 11-7 PRN Bias Average Trend (PRN17 – PRN20) 118
Figure 11-8 PRN Bias Average Trend (PRN21 – PRN24) 119
Figure 11-9 PRN Bias Average Trend (PRN25 – PRN28) 120
Figure 11-10 PRN Bias Average Trend (PRN29 – PRN32) 121
Figure B-1 98% CONUS LP Availability Contour B-2
Figure B-2 98% Alaska LP Availability Contour B-3
Figure B-3 98% CONUS LPV Availability Contour B-4
Figure B-4 98% Alaska LPV Availability Contour B-5
Figure B-5 99% CONUS LPV200 Availability Contour B-6
Figure B-6 99% Alaska LPV200 Availability Contour B-7

LIST OF TABLES

Table 1-1 WAAS Service Levels 1
Table 1-2 PA Evaluation Sites....2
Table 1-3 NPA Evaluation Site 3
Table 1-4 WAAS Performance Parameters 4
Table 1-5 Events....5
Table 1-6 WAAS Upgrades....10
Table 1-7 GUS Switchovers 12
Table 2-1 PA 95% Horizontal and Vertical Accuracy....14
Table 2-2 NPA 95% and 99.999% Horizontal Accuracy 15
Table 2-3 Maximum LPV Error Statistics 16
Table 3-1 99% Protection Level 30
Table 3-2 PA Availability (15-minute window)....31
Table 3-3 LPV and LPV200 Outage Rate (Per 150 sec approach)....32
Table 3-4 NPA Availability (15-minute window)....46
Table 3-5 NPA Outage Rates (Excluding FD/FDE)....47
Table 5-1 Minimum Safety Margin Index and HMI Statistics 59
Table 5-2 WAAS SV Alert....61
Table 5-3 Update Rates for WAAS Messages....62
Table 5-4 WAAS Fast Correction and Degradation Message Rates–SM9....62
Table 5-5 WAAS Long Correction Message Rates (Type 24 and 25)–SM9....63
Table 5-6 WAAS Ephemeris Covariance Message Rates (Type 28)–SM9....64
Table 5-7 WAAS Ionospheric Correction Message Rates (Type 26)–SM9 65
Table 5-8 WAAS Ionospheric Mask Message Rates (Type 18)–SM9 65
Table 5-9 WAAS Fast Correction and Degradation Message Rates–S15 65
Table 5-10 WAAS Long Correction Message Rates (Type 24 and 25)–S15 66
Table 5-11 WAAS Ephemeris Covariance Message Rates (Type 28)–S15 67
Table 5-12 WAAS Ionospheric Correction Message Rates (Type 26)–S15....68
Table 5-13 WAAS Ionospheric Mask Message Rates (Type 18)–S15....68
Table 5-14 WAAS Fast Correction and Degradation Message Rates–G30....69
Table 5-15 WAAS Long Correction Message Rates (Type 24 and 25)–G30....69
Table 5-16 WAAS Ephemeris Covariance Message Rates (Type 28)–G30....70
Table 5-17 WAAS Ionospheric Correction Message Rates (Type 26)–G30 71
Table 5-18 WAAS Ionospheric Mask Message Rates (Type 18)–G30 71
Table 6-1 Range Error 95% Index and 3.29 Sigma Bounding 75
Table 6-2 Range Error 95% Index and 99.9% Bounding 76
Table 6-3 Ionospheric Error 95% Index and 99.9% Sigma Bounding....80
Table 6-4 Ionospheric Error 95% Index and 99.9% Sigma Bounding....81
Table 7-1 GEO Ranging Availability 84
Table 9-1 CNMP Bounding Statistics 94
Table 10-1 WAAS Antenna Positions (OPUS IGS08) as of 04/02/2017 100
Table 11-1 Alpha Metrics....109
Table 11-2 Type Bias Average for the Quarter 110
Table 11-3 Type Bias Average since January 1, 2008....110
Table 11-4 PRN Bias Average for the Quarter....112
Table C-1 Fast Corrections Degradation Factor and User Time-Out Interval Evaluation....C-1
Table D-1 U.S. Airports—Outages and Availability……..……..….D-1
Table D-2 Canada Airports—Outages and Availability ……..……D-69

1.0 INTRODUCTION

The FAA monitors the Wide Area Augmentation System (WAAS) and GPS Standard Positioning Service (SPS) performance to ensure the safe and effective use of the satellite navigation system in the National Airspace System (NAS). The WAAS augments timely integrity monitoring and improves GPS position accuracy and availability within the WAAS coverage area.

The objectives of this report are:

1. To evaluate and monitor the WAAS ability to augment GPS by characterizing important performance parameters.
2. To analyze the effects of GPS satellite operation and maintenance as well as ionospheric activity on WAAS performance.
3. To investigate GPS and WAAS anomalies and determine potential user impact.
4. To archive GPS and WAAS performance for future evaluations.

The evaluation uses the WAAS data transmitted from geostationary satellites (GEOs) pseudo-random noise (PRN) 131 (SM9), 133 (S15), and 135 (G30). SM9, S15 and G30 GEOs provide a precision approach (PA) ranging capability that supports all levels of WAAS service.

In this report, the terms PA and NPA are used in reference of the two modes of user equipment operation. These terms were used in the original WAAS specification, FAA-E-2892. See Table 1-1 for a mapping of PA and NPA to the user service levels.

Table 1-1 WAAS Service Levels

User Service	NPA or PA	WAAS Protection Levels
RNP 0.3	NPA	HPL <= 556 m
RNP 0.1	NPA	HPL <= 185 m
LNAV	NPA	HPL <= 556 m
LNAV/VNAV	PA	HPL <= 556 m VPL <= 50 m
LP	PA	HPL <= 40 m
LPV	PA	HPL <= 40 m VPL <= 50 m
LPV200	PA	HPL <= 40 m VPL <= 35 m

The receivers in PA mode are required to: (1) use all WAAS corrections, (2) use only corrected satellites, (3) never mix corrections from multiple GEOs, (4) exclusively use the designated Space Based Augmentation System (SBAS) for the published approach procedure, and (5) never use ranging from a GPS or GEO satellite with a User Differential Range Error (UDRE) status of greater than 15 meters. The receivers in NPA mode are allowed to: (1) mix corrected and uncorrected satellites, (2) mix corrections from different GEOs or SBASs, (3) use either the WAAS ionosphere corrections or the GPS Klobuchar model for ionosphere corrections, and (4) use ranging from a GPS or GEO satellite with a UDRE status of greater than 15 meters. The receivers in NPA mode can also operate using Fault Detection/Fault Detection Exclusion (FD/FDE) in the absence of an SBAS. The data presented in this report does not take credit for the additional NPA mode availability and continuity through use of either full or partial FD/FDE, which allowed the mixing of corrected and uncorrected satellites. To remain conservative, the NPA accuracy data presented in this report uses Klobuchar ionosphere corrections.

The results in this report are based on the application of the WAAS corrections to receiver data from the WAAS network and the FAA's National Satellite Test Bed (NSTB) network, and from analyses based on the WAAS-broadcasted correction data. Table 1-2 lists the receivers used in the PA analyses, and Table 1-3 lists the receivers used in the NPA analyses.

Table 1-2 PA Evaluation Sites

Location	Number of Days Evaluated	Number of Samples
NSTB:		
Arcata	89	7665079
Atlantic City	88	7634399
Bangor	80	6925081
Elko	48	4108905
Grand Forks	82	7088990
Oklahoma City	91	7850066
WAAS:		
Albuquerque	92	7946930
Anchorage	92	7945839
Atlanta	92	7947816
Barrow	92	7946054
Bethel	92	7947766
Billings	92	7947246
Boston	92	7946916
Chicago	92	7946977
Cleveland	92	7929234
Cold Bay	92	7933567
Dallas	92	7947571
Denver	92	7946667
Fairbanks	92	7947172
Gander	92	7943789
Goose Bay	91	7876357
Houston	92	7947655
Iqaluit	92	7922140
Jacksonville	92	7947403
Juneau	92	7945817
Kansas City	92	7944585
Kotzebue	92	7947773
Los Angeles	92	7941141
Memphis	92	7948800
Merida	89	7692474
Mexico City	90	7818157
Miami	92	7943996
Minneapolis	92	7948551
New York	92	7945463
Oakland	92	7945505

Location	Number of Days Evaluated	Number of Samples
Puerto Vallarta	90	7792069
Salt Lake City	92	7945727
San Jose Del Cabo	90	7818448
Seattle	92	7943640
Washington, DC	92	7946954
Winnipeg	92	7948446

Table 1-3 NPA Evaluation Site

Location	Number of Days Evaluated	Number of Samples
Albuquerque	92	7948781
Anchorage	92	7948781
Atlanta	92	7932757
Barrow	92	7925548
Bethel	74	6356104
Billings	92	7918051
Boston	92	7948780
Cleveland	92	7948782
Cold Bay	92	7941018
Fairbanks	92	7921959
Gander	92	7933798
Honolulu	90	7785283
Houston	91	7892382
Iqaluit	92	7940595
Juneau	92	7948782
Kansas City	92	7948781
Kotzebue	90	7764605
Los Angeles	92	7948782
Merida	82	7089166
Miami	92	7948371
Minneapolis	92	7948779
Oakland	92	7948782
Salt Lake City	92	7948781
San Jose Del Cabo	81	6958342
San Juan	92	7948779
Seattle	80	6920916
Tapachula	6	544408
Washington, DC	92	7915489

Note: Locations with decreased number of days evaluated are due to selected WRE for that location being offline. This does not mean all WREs at the location were offline.

The report is divided by the performance category:

1. WAAS Position Accuracy
2. WAAS Operational Service Availability
3. WAAS Coverage
4. WAAS Integrity
5. WAAS Range Domain Accuracy
6. WAAS GEO Ranging Performance
7. WAAS Airport Availability
8. WAAS Code Noise and Multipath (CNMP) Analysis
9. WAAS Antenna Survey Validation
10. WAAS Signal Quality Monitor (SQM) Analysis

Table 1-4 lists the evaluated WAAS performance parameters for this report. Note that these are the performance parameters associated with the WAAS system, and that these requirements are extracted from FAA Specification FAA-E-2892.

Table 1-4 WAAS Performance Parameters

Performance Parameter	Expected WAAS Performance
LPV Accuracy Horizontal	≤1.5 m error 95% of the time
LPV Accuracy Vertical	≤2 m error 95% of the time
LNAV Accuracy Horizontal	≤36 m error 95% of the time
Availability LPV CONUS	99% availability of 100% of CONUS
Availability LPV Alaska	95% availability of 75% of Alaska
Availability LNAV CONUS	99.99% availability with HPL <556 m
Availability LNAV Alaska	99.9% availability with HPL <556 m
Availability En Route OCONUS	99.9% availability with HPL <2 nmi
Probability of Hazardous Misleading Information	<10e-7 per approach

1.1 Event Summary

Table 1-5 lists events that affected WAAS performance or the ability to determine the WAAS performance during the reporting period. The events include GPS or WAAS anomalies, relevant receiver malfunctions, receiver maintenance, and ionospheric activity. The reporting of ionospheric activity includes reference to the planetary index (Kp) for the event time period. The Kp index quantifies the disturbance in the earth's magnetic field and is an indicator of solar storms causing geomagnetic disturbances resulting in an unpredictable ionosphere. The detection of an ionospheric disturbance causes the WAAS to increase Grid Ionospheric Vertical Error (GIVE) values, making PA service unavailable.

Analyses of events that merit more detailed investigations are documented in the Discrepancy Reports (DRs). The DRs are available at http://www.nstb.tc.faa.gov under "WAAS Technical Reports," and they are also accessible via hyperlink in Table 1-5. Note that "TOW" is the time of GPS week, which is the cumulative number of seconds beginning 00:00:00 Sunday (GMT without leap seconds). Table 1-6 lists events related to WAAS upgrades during this reporting period, and Table 1-7 lists events related to ground uplink station (GUS) switchovers, which are transitions from one GEO uplink site to another GEO uplink site.

Table 1-5 Events

Start Date	End Date	Location	Service Affected	Description
07/01/2026	07/01/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 4.67) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 22:10 UTC to 23:50 UTC. Please see plot(s): Cov_vs_Time_Canada_7/1/26 LPV200_7/1/26
07/04/2026	07/04/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV_CONUS, LPV_Canada, LPV200_CONUS, LPV200_Alaska, LPV200_Canada	Geomagnetic activity (KP = 6) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of: (1) LPV service coverage in CONUS from 04:35 UTC to 04:45 UTC, and from 07:20 UTC to 09:10 UTC; (2) LPV service coverage in Canada from 03:20 UTC to 03:30 UTC, 04:45 UTC to 04:55 UTC, 09:15 UTC to 09:25 UTC, and from 11:30 UTC to 11:40 UTC; (3) LPV200 service coverage in CONUS from 04:30 UTC to 04:55 UTC, and from 07:20 UTC to 09:15 UTC; and (4) LPV200 service coverage in Canada from 04:10 UTC to 05:30 UTC, 07:00 UTC to 07:25 UTC, 11:05 UTC to 11:40 UTC, and from 15:25 UTC to 16:45 UTC. The elevated GIVE values also resulted in minor degradation of LPV200 service coverage in Alaska from 04:30 UTC to 06:30 UTC, 07:40 UTC to 08:05 UTC, and from 10:35 UTC to 11:25 UTC. Please see plot(s): Cov_vs_Time_Conus_7/4/26 LPV200_7/4/26 Cov_vs_Time_Canada_7/4/26 Cov_vs_Time_Alaska_7/4/26 LPV_7/4/26
07/09/2026	07/10/2026	PRN3	LPV200_Alaska	There was a GPS NANU on PRN 3 (see NANU 2026054) which was unusable from 23:37 UTC on 07/09 to 07:55 UTC on 07/10. This resulted in minor degradation of LPV200 service coverage in Alaska from 23:35 UTC to 23:55 UTC. Please see plot(s): Cov_vs_Time_Alaska_7/9/26 LPV200_7/9/26

Start Date	End Date	Location	Service Affected	Description
07/17/2026	07/17/2026	PRN26	LPV200_CONUS	There was a GPS NANU on PRN 26 (see NANU 2026056) which was unusable from 00:46 UTC to 06:05 UTC. The NANU resulted in minor degradation of LPV200 service coverage in CONUS from 03:30 UTC to 03:45 UTC. Please see plot(s): LPV200_7/17/26 Cov_vs_Time_Conus_7/17/26
07/21/2026	07/21/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Alaska, LPV200_Canada	Geomagnetic activity (KP = 3.67) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of: (1) LPV200 service coverage in Alaska from 09:15 UTC to 10:40 UTC and from 11:40 UTC to 12:45 UTC; and (2) LPV200 service coverage in Canada from 09:15 UTC to 09:30 UTC. Please see plot(s): Cov_vs_Time_Alaska_7/21/26 Cov_vs_Time_Canada_7/21/26 LPV200_7/21/26
07/23/2026	07/23/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 5.33) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 17:45 UTC to 17:50 UTC, and from 19:25 UTC to 22:30 UTC. Please see plot(s): LPV200_7/23/26 Cov_vs_Time_Canada_7/23/26
07/24/2026	07/24/2026	PRN7	LPV200_CONUS, LPV200_Canada	There was a GPS NANU on PRN 7 (see NANU 2026058) which was unusable from 01:16 UTC to 07:48 UTC. The NANU resulted in moderate degradation of: (1) LPV200 service coverage in southeast CONUS from 05:15 UTC to 06:00 UTC; and (2) LPV200 service coverage in Canada from 03:15 UTC to 04:00 UTC. Please see plot(s): Cov_vs_Time_Canada_7/24/26 LPV200_7/24/26 Cov_vs_Time_Conus_7/24/26

Start Date	End Date	Location	Service Affected	Description
08/02/2026	08/02/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 5.67) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 05:50 UTC to 06:00 UTC and from 08:45 UTC to 09:10 UTC. Please see plot(s): LPV200_8/2/26 Cov_vs_Time_Canada_8/2/26
08/04/2026	08/04/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 4) disturbed the ionosphere causing elevated GIVE values. This resulted in minor degradation of LPV200 service coverage in Canada from 08:45 UTC to 09:00 UTC. Please see plot(s): Cov_vs_Time_Canada_8/4/26 LPV200_8/4/26
08/04/2026	08/04/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 4) disturbed the ionosphere causing elevated GIVE values. This resulted in minor degradation of LPV200 service coverage in Canada from 08:45 UTC to 09:00 UTC. Please see plot(s): Cov_vs_Time_Canada_8/4/26 LPV200_8/4/26
08/08/2026	08/08/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 0.67) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 01:40 UTC to 02:45 UTC, 05:25 UTC to 05:30 UTC, 07:20 UTC to 07:25 UTC, 08:30 UTC to 08:40 UTC, 11:30 UTC to 15:10 UTC, 18:15 UTC to 18:30 UTC, and from 20:05 UTC to 23:55 UTC. Please see plot(s): Cov_vs_Time_Canada_8/8/26 LPV200_8/8/26

Start Date	End Date	Location	Service Affected	Description
08/09/2026	08/09/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 2.67) disturbed the ionosphere causing elevated GIVE values. This resulted in minor degradation of LPV200 service coverage in Canada from 00:20 UTC to 00:45 UTC, 01:45 UTC to 02:20 UTC, 05:25 UTC to 05:35 UTC, and from 08:15 UTC to 08:40 UTC. Please see plot(s): Cov_vs_Time_Canada_8/9/26 LPV200_8/9/26
08/18/2026	08/18/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 5.33) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 05:00 UTC to 05:30 UTC. Please see plot(s): Cov_vs_Time_Canada_8/18/26 LPV200_8/18/26
09/02/2026	09/02/2026	PRN13	None	A GPS NANU 2025067 announced SVN83 to begin broadcasting as PRN-13 starting September 2nd, 2026 at 20:35 UTC.
09/06/2026	09/06/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 1.67) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 16:30 UTC to 16:45 UTC. Please see plot(s): LPV200_9/6/26 Cov_vs_Time_Canada_9/6/26
09/07/2026	09/07/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV_Canada, LPV200_Canada	Geomagnetic activity (KP = 4.33) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 09:25 UTC to 11:05 UTC, 16:00 UTC to 16:25 UTC, 19:10 UTC to 20:15 UTC, and from 21:30 UTC to 23:45 UTC. The elevated GIVE values also resulted in minor degradation of LPV service coverage in Canada from 07:35 UTC to 08:25 UTC, 13:25 UTC to 14:10 UTC, and from 20:05 UTC to 20:20 UTC. Please see plot(s): LPV200_9/7/26 Cov_vs_Time_Canada_9/7/26 LPV_9/7/26

Start Date	End Date	Location	Service Affected	Description
09/15/2026	09/15/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 3.33) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 18:40 UTC to 19:00 UTC and from 22:25 UTC to 22:50 UTC. Please see plot(s): Cov_vs_Time_Canada_9/15/26 LPV200_9/15/26
09/19/2026	09/19/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV_Canada, LPV200_Canada	Geomagnetic activity (KP = 2.33) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 05:00 UTC to 05:45 UTC, 07:00 UTC to 08:10 UTC, 09:20 UTC to 11:15 UTC, 12:30 UTC to 13:15 UTC, 15:25 UTC to 16:35 UTC, 18:00 UTC to 18:40 UTC, 20:05 UTC to 20:15 UTC, and from 21:30 UTC to 22:55 UTC. The elevated GIVE values also resulted in minor degradation of LPV service coverage in Canada from 03:35 UTC to 04:20 UTC, 07:15 UTC to 08:10 UTC, and from 22:50 UTC to 22:55 UTC. Please see plot(s): LPV200_9/19/26 LPV_9/19/26 Cov_vs_Time_Canada_9/19/26
09/29/2026	09/29/2026	Washington, DC (C&V), Los Angeles (C&V), Atlanta (C&V)	LPV200_Canada	Geomagnetic activity (KP = 2) disturbed the ionosphere causing elevated GIVE values. This resulted in moderate degradation of LPV200 service coverage in Canada from 16:15 UTC to 17:00 UTC. Please see plot(s): LPV200_9/29/26 Cov_vs_Time_Canada_9/29/26

Table 1-6 WAAS Upgrades

Start Date	End Date	Location/Satellite	Event Description
07/07/2026	07/07/2026	Washington, DC (ZDC1) Washington, DC (ZDC2) Washington, DC (ZDC3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Washington, DC (ZDC) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 13:38 UTC to 19:06 UTC on 6/30/2026. The reference station experienced an outage during the upgrade.
07/14/2026	07/14/2026	Memphis (ZME1) Memphis (ZME2) Memphis (ZME3)	|SSM-WAAS-065: This system support modification (SSM) upgrades the Memphis (ZME) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 15:03 UTC to 20:51 UTC on 07/14/2026. The reference station experienced an outage during the upgrade.
07/17/2026	07/17/2026	Gander (YQX1) Gander (YQX2) Gander (YQX3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Gander (YQX) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 12:02 UTC to 16:22 UTC on 07/17/2026. The reference station experienced an outage during the upgrade.
07/21/2026	07/21/2026	Goose Bay (YYR1) Goose Bay (YYR2) Goose Bay (YYR3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Goose Bay (YYR) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 13:00 UTC to 16:17 UTC on 07/21/2026. The reference station experienced an outage during the upgrade.
08/05/2026	08/06/2026	Iqaluit (YFB1) Iqaluit (YFB2) Iqaluit (YFB3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Iqaluit (YFB) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 01:48 UTC on 08/05/2026 to 15:39 UTC on 08/06/2026 UTC. The reference station did not experience an outage during the upgrade.
08/10/2026	08/10/2026	Winnipeg (YWG1) Winnipeg (YWG2) Winnipeg (YWG3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Winnipeg (YWG) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 14:41 UTC to 21:20 UTC on 08/10/2026. The reference station experienced an outage during the upgrade.
08/11/2026	08/13/2026	Cold Bay (CDB1) Cold Bay (CDB2) Cold Bay (CDB3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Cold Bay (CDB) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 17:08 UTC on 08/11/2026 to 21:42 UTC on 08/13/2026. The reference station did not experience an outage during the upgrade.
08/13/2026	08/13/2026	Mexico City (MMX1) Mexico City (MMX2) Mexico City (MMX3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Mexico City (MMX) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 18:23 UTC to 22:29 UTC on 08/13/2026. The reference station experienced an outage during the upgrade.
08/18/2026	08/18/2026	Merida (MMD1) Merida (MMD2)	SSM-WAAS-065: This system support modification (SSM) upgrades the Merida (MMD) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site.

Start Date	End Date	Location/Satellite	Event Description
		Merida (MMD3)	The upgrade occurred from 16:08 UTC to 20:29 UTC on 08/18/2026. The reference station experienced an outage during the upgrade.
08/18/2026	08/19/2026	Bethel (BET1) Bethel (BET2) Bethel (BET3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Bethel (BET) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 17:47 UTC 08/18/2026 to 00:54 UTC on 08/19/2026. The reference station experienced an outage during the upgrade.
08/19/2026	08/19/2026	Atlanta (ZTL1) Atlanta (ZTL2) Atlanta (ZTL3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Atlanta (ZTL) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 15:47 UTC to 20:31 UTC on 08/19/2026. The reference station experienced an outage during the upgrade.
08/21/2026	08/21/2026	Fairbanks (FAI1) Fairbanks (FAI2) Fairbanks (FAI3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Fairbanks (FAI) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 17:18 UTC to 21:22 UTC on 08/21/2026. The reference station experienced an outage during the upgrade.
08/25/2026	08/25/2026	Billings (BIL1) Billings (BIL2) Billings (BIL3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Billings (BIL) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 15:02 UTC to 21:02 UTC on 08/21/2026. The reference station experienced an outage during the upgrade.
08/26/2026	08/26/2026	Denver (DEN1) Denver (DEN2) Denver (DEN3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Denver (ZDV) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 15:23 UTC to 20:43 UTC on 08/26/2026. The reference station experienced an outage during the upgrade.
09/01/2026	09/01/2026	Barrow (BRW1) Barrow (BRW2) Barrow (BRW3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Barrow (BRW) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 18:03 UTC to 21:36 UTC on 09/01/2026. The reference station experienced an outage during the upgrade.
09/16/2026	09/18/2026	Honolulu (HNL1) Honolulu (HNL2) Honolulu (HNL3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Honolulu (HNL) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 20:10 UTC on 09/16/2026 to 20:06 UTC on 09/18/2026. The reference station did not experience an outage during the upgrade.
09/29/2026	09/29/2026	Tapachula (MTP1) Tapachula (MTP2) Tapachula (MTP3)	SSM-WAAS-065: This system support modification (SSM) upgrades the Tapachula (MTP) WRS to software build 7.442L. This SSM also upgrades power supply and distribution hardware at the site. The upgrade occurred from 14:59 UTC to 19:51 UTC on 09/29/2026. The reference station experienced an outage during the upgrade.

Table 1-7 GUS Switchovers

Start Date	End Date	GUS Switch	Location/Satellite	Service Affected	Event Description
07/20/2026	07/20/2026	Manual	GEO135, Brewster (BR2)	None	The uplink for the G30 GEO, PRN135 switched from the Brewster uplink site to the Napa uplink site at 07:03:29 UTC. This caused a 3-second outage of the GEO 135 broadcast and also caused the WAAS carrier smoothing algorithm to reinitialize for PRN135. There was no impact on coverage. TOW 111826-111830
07/08/2026	07/08/2026	C&V Source Switch (Manual)	Brewster (BR1), Los Angeles (C&V), Atlanta (C&V)	None	Brewster (BR1) had C&V Source Select from Atlanta to Los Angeles. TOW 331705
07/06/2026	07/06/2026	Missed Navigation Message	GEO133, Brewster (BR1), Los Angeles (C&V)	None	Brewster had C&V Source Select from Los Angeles to Atlanta. TOW 93603-93605

1.2 Report Overview

Section 2.0 provides the observed Localizer Performance with Vertical Guidance (LPV) and NPA performance for the evaluated receiver locations (see PA Evaluation Sites and NPA Evaluation Site). This section also shows tabulated data for the 95% accuracy and the maximum inaccuracy. In addition, the daily 95% accuracy for each receiver and the histograms of vertical and horizontal error are shown.

Section 3.0 provides the summary of the WAAS instantaneous availability performance at each receiver for three operational service levels. In addition, the daily availability, number of outages, and outage rate for each evaluated receiver are also reported.

Section 4.0 provides geographic plots of the WAAS service availability. Also shown in this section are plots of the percentage of the Continental United States (CONUS) and Alaska service areas covered by various levels of service availability.

Section 5.0 provides the summary of the Hazardous Misleading Information (HMI) analysis as well as a safety margin index for each receiver. This section also shows update rates of WAAS messages transmitted from SM9, S15, and G30.

Section 6.0 provides the UDRE and GIVE bounding percentages and the 95% index of the range and ionospheric accuracy for each satellite tracked by the WAAS receiver at 12 locations.

Section 7.0 provides the GEO ranging performance for SM9, S15, and G30.

Section 8.0 provides the WAAS LPV availability and outages at selected airports.

Section 9.0 provides the assessment of WAAS CNMP bounding for 114 WAAS receivers.

Section 10.0 provides surveyed positions of all Wide-Area Reference Equipment (WRE) and the difference between the WRE survey positions and the survey positions using both the National Geodetic Survey (NGS) Online Positioning Use Server (OPUS) and the Canadian Spatial Reference System (CSRS) Precise Point Positioning (PPP) service.

Section 11.0 provides the daily and quarterly average of SQM PRN type biases and PRN biases.

2.0 WAAS POSITION ACCURACY

Navigation error data, collected from WAAS and NSTB reference stations, was processed to determine position accuracy at each location. This was accomplished by using the GPS/WAAS position solution tool to compute a RTCA DO-229F-weighted least squares user navigation solution and WAAS horizontal protection level (HPL) and vertical protection level (VPL) once every second. The user position calculated for each receiver was compared to the surveyed position of the antenna to assess position error associated with the WAAS signal in space (SIS) over time. The position errors were analyzed, and statistics were generated for the operational service levels shown in Table 1-1.

Table 2-1 shows PA horizontal and vertical position accuracy maintained for 95% of the time at LP, LPV and lateral navigation (LNAV)/vertical navigation (VNAV) operational service levels as well as 95% SPS accuracy for certain locations. Note that WAAS accuracy statistics presented are compiled only when all WAAS corrections (i.e., fast, long term, and ionospheric corrections) for at least four satellites are available; this is referred to as PA navigation mode. Asterisks denote that SPS accuracy is not computed for those receivers. Table 2-1 also shows the percentage of time PA navigation mode was supported by WAAS at each receiver. The maximum and minimum LPV errors for this reporting period are:

- The maximum 95% CONUS horizontal LPV error was 1.54 meters observed at Atlantic City.
- The maximum 95% CONUS vertical LPV error was 1.71 meters observed at Arcata.
- The minimum 95% CONUS horizontal LPV error was 0.54 meters observed at Salt Lake City.
- The minimum 95% CONUS vertical LPV error was 0.87 meters observed at Seattle.

Table 2-1 PA 95% Horizontal and Vertical Accuracy

Location	Horizontal (HAL=40m) (m)	Horizontal (HAL=556m) (m)	Vertical (VAL=50m) (m)	Percentage in PA Mode (%)	SPS Accuracy	
					95% Horizontal (m)	95% Vertical (m)
NSTB:						
Arcata	1.37	1.37	1.71	100	*	*
Atlantic City	1.54	1.54	1.67	100	*	*
Bangor	1.01	1.01	1.56	100	*	*
Elko	1.03	1.03	1.13	100	*	*
Grand Forks	1.44	1.44	1.60	100	*	*
Oklahoma City	0.87	0.87	1.36	100	*	*
WAAS:						
Albuquerque	0.67	0.67	0.87	100	2.19	2.72
Anchorage	0.67	0.67	1.14	100	2.18	2.8
Atlanta	0.82	0.82	1.07	100	2.23	2.92
Barrow	0.62	0.62	1.34	100	2.37	3.03
Bethel	0.62	0.62	1.03	100	2.12	3.18
Billings	0.57	0.57	0.99	100	1.37	2.7
Boston	0.72	0.72	1.05	100	1.73	2.94
Chicago	0.77	0.77	1.10	100	*	*
Cleveland	0.72	0.72	1.12	100	1.56	2.93
Cold Bay	0.62	0.62	1.05	100	1.6	3.07
Dallas	0.60	0.60	1.07	100	*	*
Denver	0.58	0.58	0.90	100	*	*
Fairbanks	0.63	0.63	1.19	100	2.46	2.8
Gander	0.90	0.90	1.24	99.999	2	2.53
Goose Bay	0.79	0.79	1.29	100	*	*
Houston	0.63	0.63	1.07	100	2.93	2.98
Iqaluit	0.84	0.84	1.51	100	1.89	2.58
Jacksonville	0.64	0.64	1.00	100	*	*
Juneau	0.70	0.70	1.07	100	2.02	2.58
Kansas City	0.63	0.63	1.07	100	1.65	2.79
Kotzebue	0.67	0.67	1.32	100	2.56	3.04
Los Angeles	0.81	0.81	1.43	100	2.84	3.44
Memphis	0.60	0.60	1.07	100	*	*
Merida	0.98	0.98	1.59	100	*	*
Mexico City	1.08	1.08	1.89	100	*	*
Miami	0.85	0.85	1.25	100	3.29	3.29
Minneapolis	0.72	0.72	1.01	100	1.45	2.67
New York	0.69	0.69	1.05	100	*	*

Location	Horizontal (HAL=40m) (m)	Horizontal (HAL=556m) (m)	Vertical (VAL=50m) (m)	Percentage in PA Mode (%)	SPS Accuracy	
					95% Horizontal (m)	95% Vertical (m)
Oakland	0.84	0.84	1.57	100	2.56	3.76
Puerto Vallarta	1.02	1.03	1.50	100	*	*
Salt Lake City	0.54	0.54	0.89	100	1.61	3.06
San Jose Del Cabo	0.94	0.944	1.55	100	*	*
Seattle	0.69	0.69	0.87	100	1.35	3.09
Washington, DC	0.72	0.72	1.05	100	1.76	3.01
Winnipeg	0.65	0.65	1.03	100	*	*

NPA navigation mode is when only WAAS fast and long-term corrections are available to a user (i.e., no ionospheric corrections). Table 2-2 shows the 95%, 99.999%, and maximum NPA horizontal position accuracy. The maximum and minimum NPA errors for this reporting period are as below:

- The maximum 95% horizontal error was 4.728 meters observed at Honolulu.
- The maximum 99.999% horizontal error was 10.934 meters observed at Honolulu.
- The minimum 95% horizontal error was 1.143 meters observed at Seattle.
- The minimum 99.999% horizontal error was 2.183 meters observed at Seattle.

Table 2-2 NPA 95% and 99.999% Horizontal Accuracy

Location	95% Horizontal (m)	99.999% Horizontal (m)	Percentage in NPA Mode (%)	Maximum Horizontal Error (m)
Albuquerque	1.546	3.140	100	3.267
Anchorage	2.223	4.408	100	4.547
Atlanta	1.775	3.338	100	3.490
Barrow	2.224	3.454	100	3.581
Bethel	1.962	4.084	100	4.242
Billings	1.204	5.794	100	8.195
Boston	1.597	5.684	100	6.275
Cleveland	1.441	3.613	100	3.878
Cold Bay	1.550	3.678	100	3.920
Fairbanks	2.387	3.700	100	3.848
Gander	1.832	6.566	100	7.066
Honolulu	4.728	10.934	100	11.681
Houston	2.106	4.247	100	4.429
Iqaluit	2.190	3.983	100	4.168
Juneau	1.862	3.518	100	3.636
Kansas City	1.303	2.208	100	2.363
Kotzebue	2.378	3.784	100	3.943
Los Angeles	1.934	3.462	100	4.033
Merida	3.029	6.341	100	6.860

Location	95% Horizontal (m)	99.999% Horizontal (m)	Percentage in NPA Mode (%)	Maximum Horizontal Error (m)
Miami	2.551	4.789	100	4.917
Minneapolis	1.409	3.211	100	3.409
Oakland	1.954	3.427	100	3.577
Salt Lake City	1.172	2.600	100	2.887
San Jose Del Cabo	3.230	5.921	100	6.038
San Juan	2.523	8.355	100	8.532
Seattle	1.143	2.183	100	2.537
Tapachula	3.598	5.834	100	5.875
Washington, DC	1.585	4.081	100	4.793

Table 2-3 shows the quarterly maximum LPV error statistics: (1) the Horizontal Error column shows the maximum position errors while the calculated HPL meets the LPV service level defined in Table 1-1, (2) the Vertical Error column shows the maximum position errors while the calculated VPL meets the LPV service level, (3) the Horizontal Error/HPL column and the Vertical Error/VPL column show the ratio of position error to protection level at the time the maximum error occurred, (4) the Horizontal Maximum Ratio column and the Vertical Maximum Ratio column show the maximum position error to protection level ratio for the quarter. During this reporting period, the maximum LPV horizontal error was 3.961 meters occurred at San Jose Del Cabo and maximum vertical LPV error was 6.810 meters occurred at Mexico City.

Table 2-3 Maximum LPV Error Statistics

Location	Horizontal Error (m)	Horizontal Error/ HPL	Horizontal Maximum Ratio	Vertical Error (m)	Vertical Error/ VPL	Vertical Maximum Ratio
NSTB:						
Arcata	2.295	0.208	0.222	3.406	0.143	0.194
Atlantic City	2.308	0.206	0.214	3.385	0.152	0.196
Bangor	2.187	0.132	0.158	3.381	0.167	0.175
Elko	2.272	0.206	0.206	2.965	0.102	0.158
Grand Forks	2.411	0.133	0.224	3.504	0.177	0.217
Oklahoma City	1.807	0.181	0.193	2.894	0.148	0.171
WAAS:						
Albuquerque	1.448	0.148	0.149	3.208	0.193	0.194
Anchorage	2.439	0.180	0.193	2.960	0.130	0.159
Atlanta	1.569	0.158	0.162	2.331	0.124	0.143
Barrow	2.026	0.068	0.135	4.803	0.154	0.165
Bethel	2.055	0.146	0.151	3.190	0.160	0.166
Billings	1.588	0.153	0.159	3.399	0.172	0.172
Boston	2.205	0.166	0.166	2.804	0.130	0.152
Chicago	1.624	0.160	0.160	3.820	0.136	0.192
Cleveland	1.599	0.148	0.153	2.958	0.119	0.183
Cold Bay	3.302	0.125	0.135	3.947	0.140	0.144

Location	Horizontal Error (m)	Horizontal Error/ HPL	Horizontal Maximum Ratio	Vertical Error (m)	Vertical Error/ VPL	Vertical Maximum Ratio
Dallas	1.476	0.149	0.149	2.471	0.162	0.162
Denver	1.378	0.152	0.152	2.137	0.143	0.150
Fairbanks	2.419	0.180	0.180	6.035	0.159	0.226
Gander	2.605	0.099	0.126	3.408	0.134	0.139
Goose Bay	2.859	0.170	0.170	4.972	0.162	0.175
Houston	1.510	0.125	0.136	2.398	0.144	0.149
Iqaluit	2.951	0.113	0.160	6.243	0.134	0.199
Jacksonville	1.490	0.121	0.130	2.648	0.131	0.164
Juneau	3.763	0.209	0.209	5.039	0.226	0.226
Kansas City	1.402	0.135	0.135	2.815	0.169	0.185
Kotzebue	2.322	0.154	0.201	4.531	0.178	0.178
Los Angeles	1.563	0.132	0.151	3.146	0.180	0.188
Memphis	1.277	0.107	0.133	3.422	0.165	0.175
Merida	2.789	0.175	0.175	4.992	0.157	0.163
Mexico City	3.898	0.102	0.198	6.810	0.136	0.184
Miami	2.199	0.176	0.176	3.809	0.151	0.151
Minneapolis	1.864	0.151	0.153	5.105	0.206	0.206
New York	1.861	0.145	0.150	2.555	0.099	0.164
Oakland	1.694	0.139	0.148	2.961	0.142	0.176
Puerto Vallarta	3.781	0.116	0.163	5.914	0.156	0.176
Salt Lake City	1.288	0.135	0.136	2.395	0.114	0.133
San Jose Del Cabo	3.961	0.175	0.182	5.765	0.127	0.211
Seattle	2.060	0.148	0.164	3.219	0.120	0.147
Washington, DC	1.771	0.159	0.163	2.612	0.112	0.143
Winnipeg	2.538	0.167	0.207	5.860	0.209	0.262

Figure 2-1 through Figure 2-3 show the daily LPV 95% horizontal accuracy at the PA evaluation sites, and Figure 2-4 through Figure 2-6 show the daily LPV 95% vertical accuracy. Noteworthy increases in the 95% PA position errors over multiple evaluation sites due to geomagnetic activity in Figure 2-1 through Figure 2-6 are listed below.

- July 7, 2026—Position errors in CONUS, Alaska, Canada, Mexico were elevated. The maximum 95% horizontal and vertical LPV errors were 1.659 meters and 3.845 meters at Grand Forks and San Jose Del Cabo, respectively. The Kp index was 7.0.
- August 8, 2026—Position errors in Canada were elevated. The maximum 95% horizontal and vertical LPV errors were 1.646 meters and 2.838 meters at Gander and Iqaluit, respectively. The Kp index was 5.3.

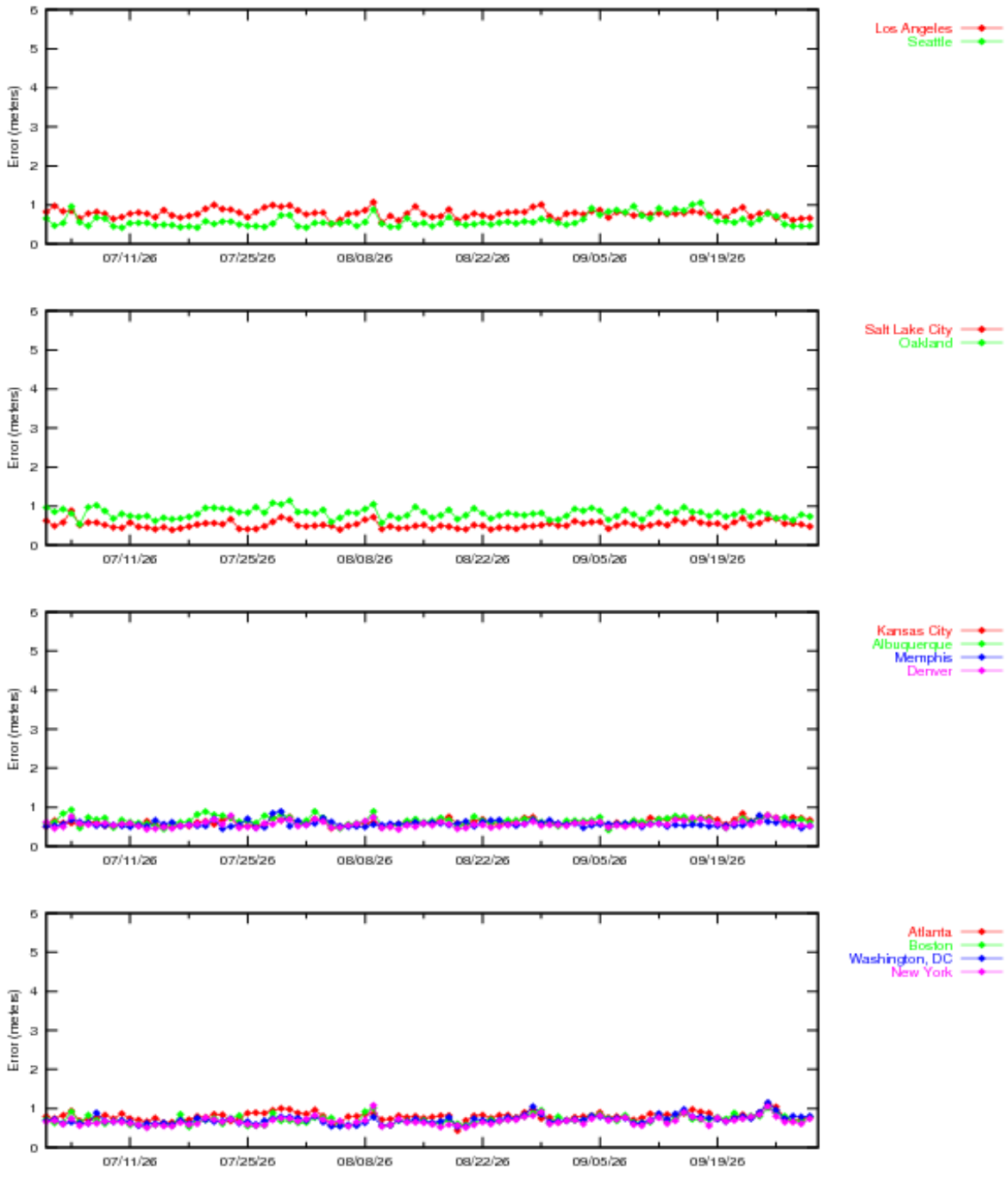


Figure 2-1 LPV 95% Horizontal Accuracy

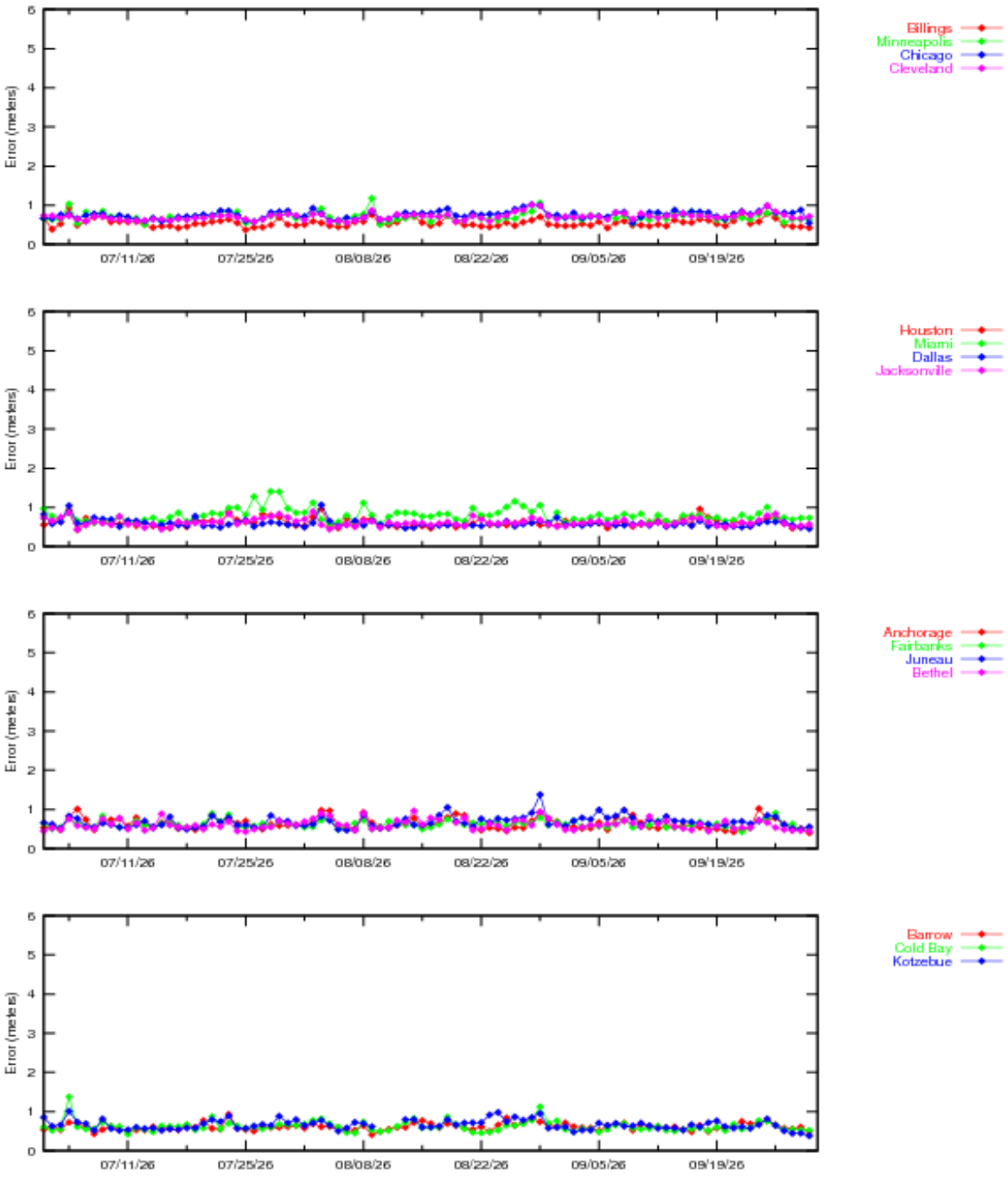


Figure 2-2 LPV 95% Horizontal Accuracy

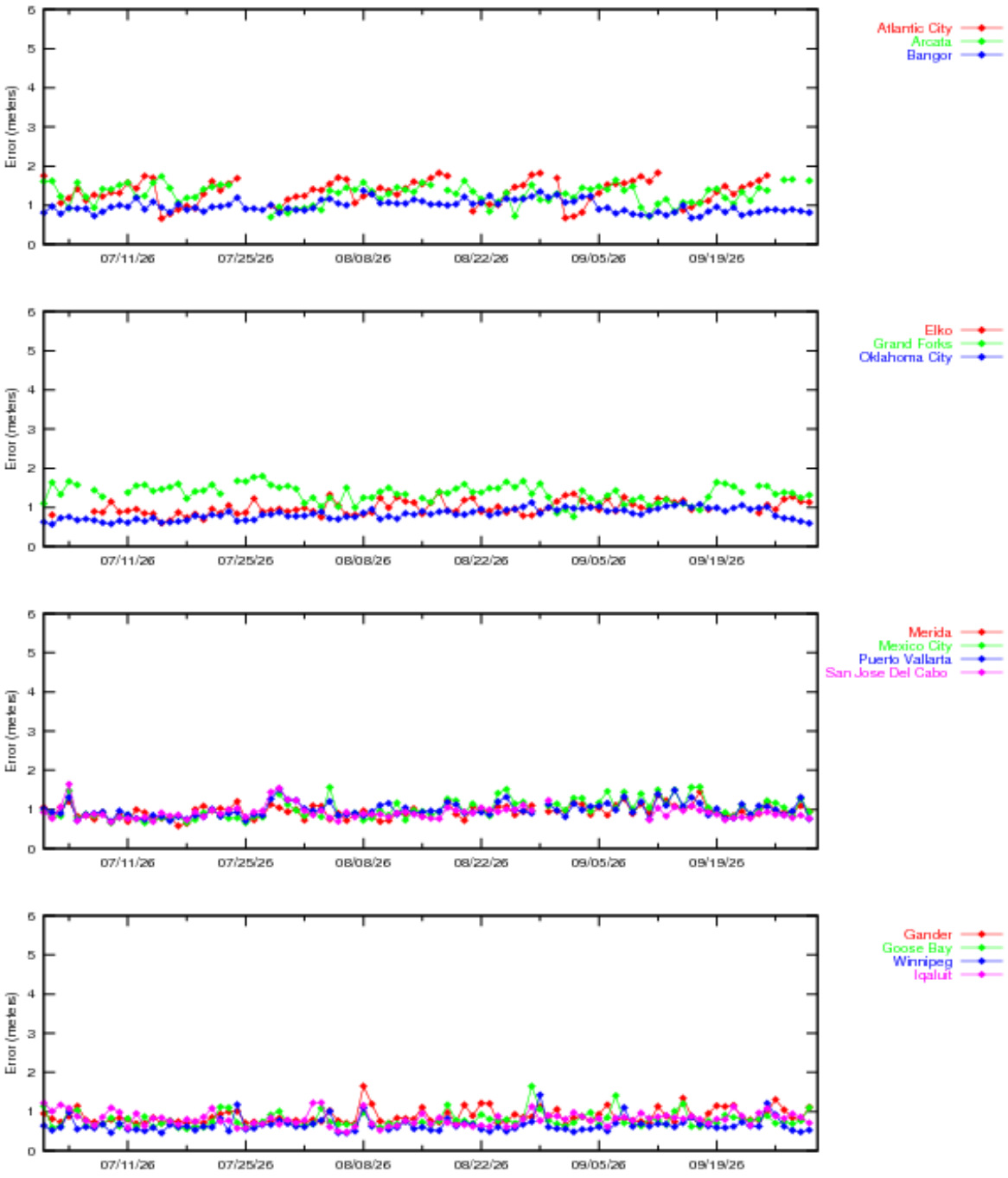


Figure 2-3 LPV 95% Horizontal Accuracy

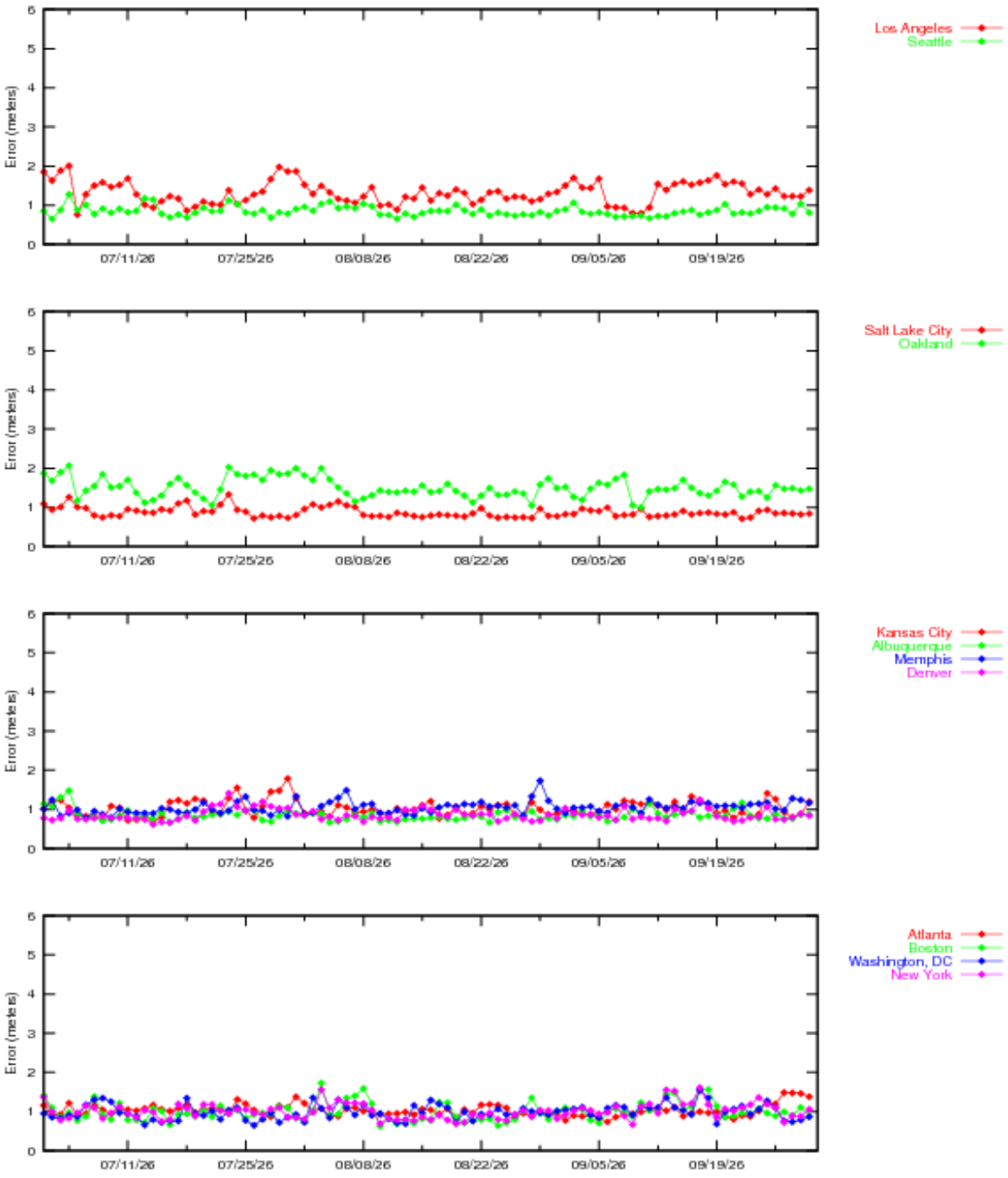


Figure 2-4 LPV 95% Vertical Accuracy

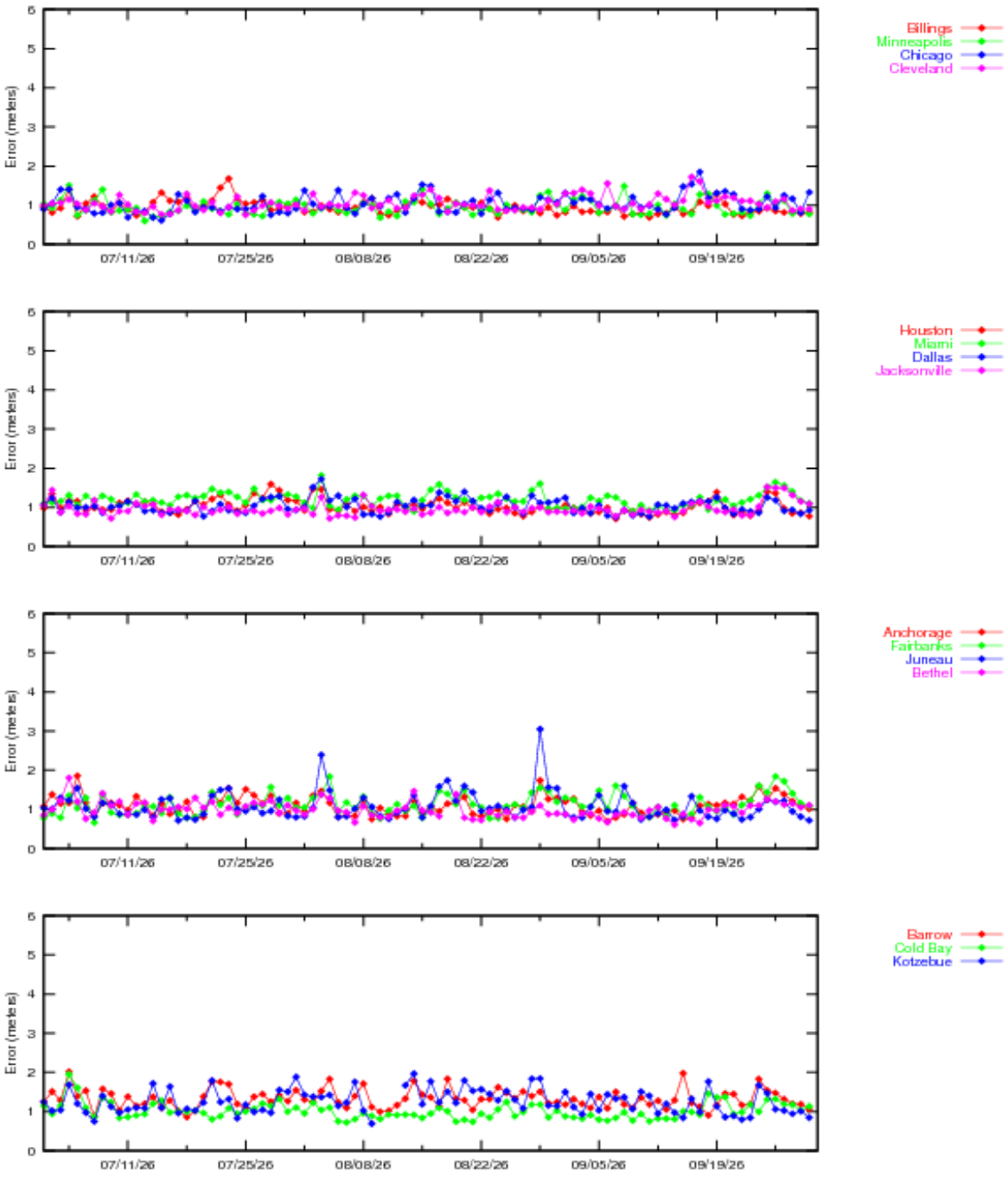


Figure 2-5 LPV 95% Vertical Accuracy

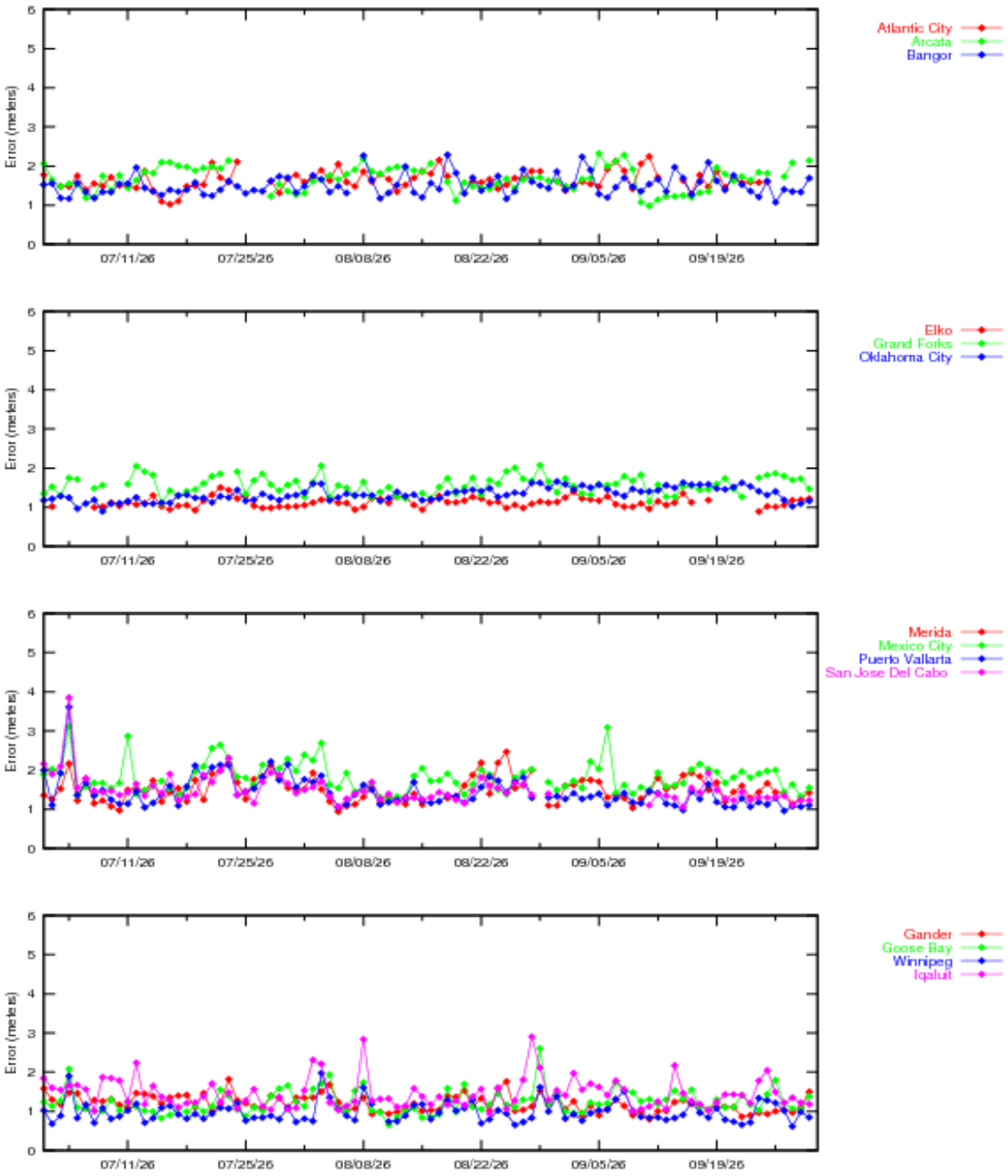


Figure 2-6 LPV 95% Vertical Accuracy

Figure 2-7 and Figure 2-8 show the daily NPA 95% horizontal accuracy at the NPA evaluation sites for the reporting period. No increases in 95% NPA position errors due to geomagnetic activity occurred this quarter.

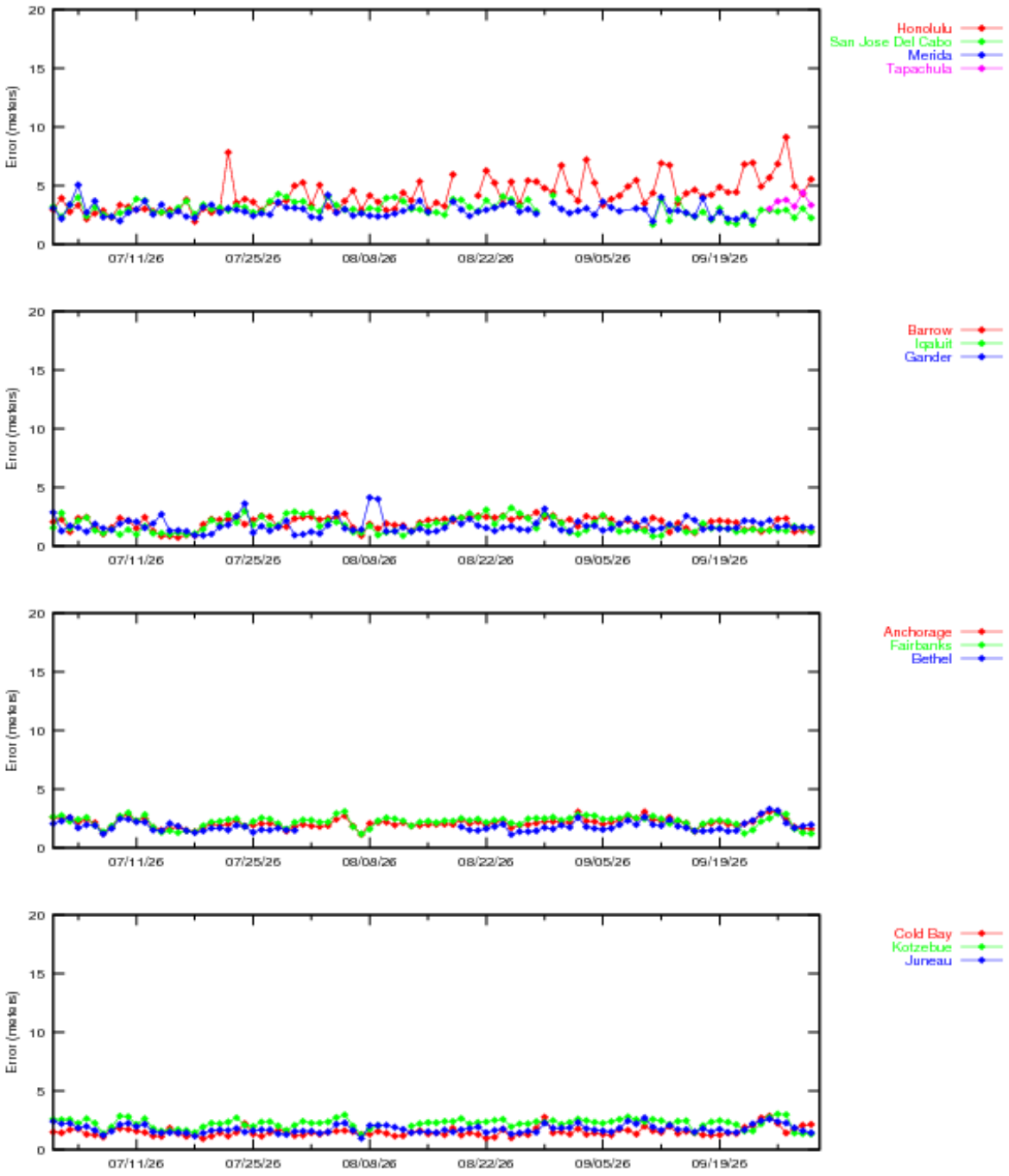


Figure 2-7 NPA 95% Horizontal Accuracy

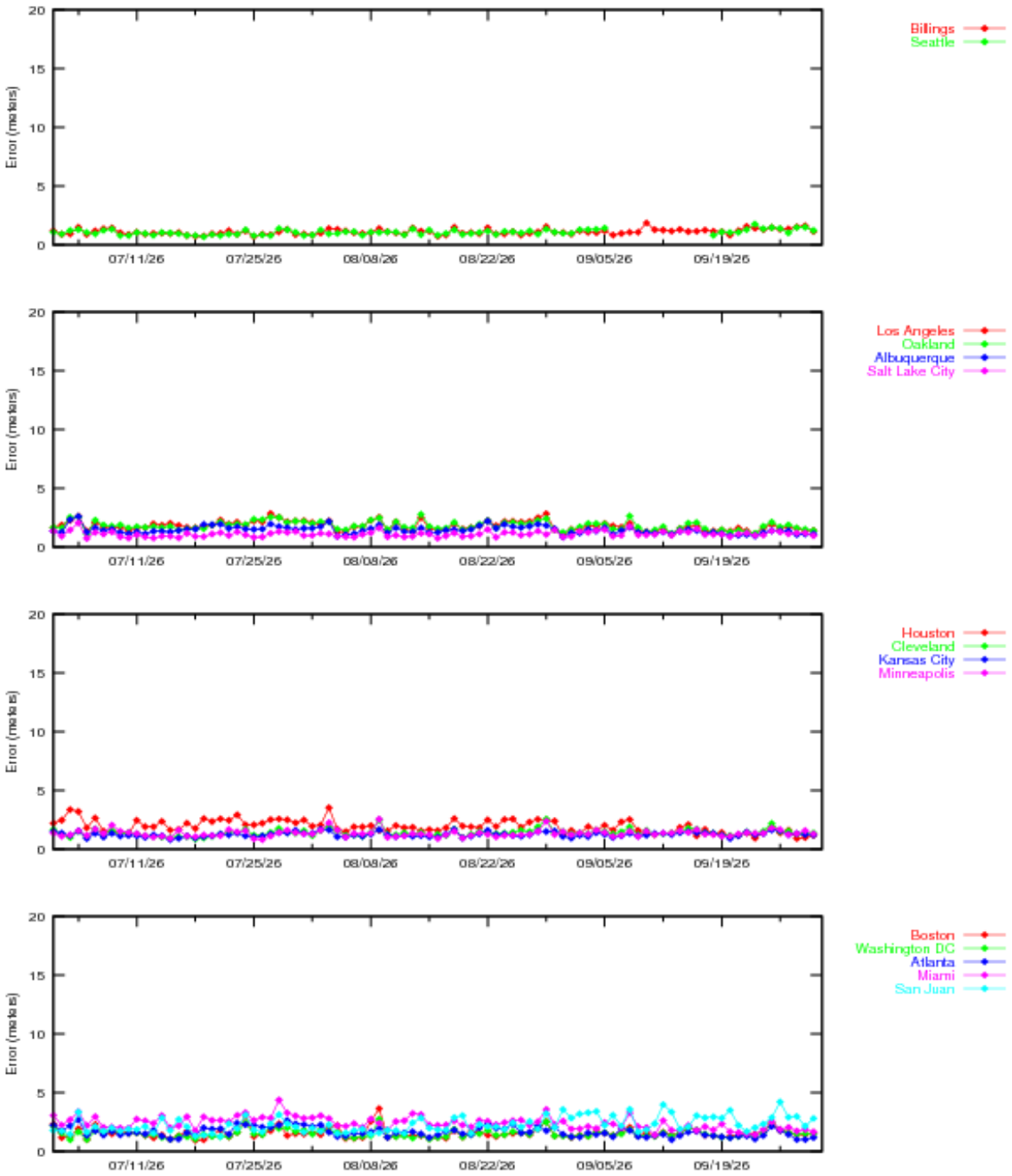


Figure 2-8 NPA 95% Horizontal Accuracy

Figure 2-9 through Figure 2-12 show the distributions of the vertical and horizontal errors at all 38 WAAS receiver for the quarter. Figure 2-9 and Figure 2-10 show the triangular distributions of vertical position error (VPE) versus VPL and horizontal position error (HPE) versus HPL: (1) the horizontal axis is the position error and has a bin resolution of 0.1 meters, (2) the vertical axis is the WAAS protection level where lower protection levels equate to better availability with a bin resolution of 1.0 meters, (3) the diagonal line shows the point where error equals protection level, (4) above and to the left of the diagonal line show where errors are bounded (WAAS is providing integrity in the position domain), and (5) below and to the right show where errors are not bounded (HMI could be present). Note that the color bars are locked to a maximum of 10E7 to make the colors comparable between the two plots. The color bar increments by 10E0.5. Figure 2-11 and Figure 2-12 show the 2-D histograms of HPE, VPE, and

normalized position errors: (1) the blue trace shows the distributions of the actual HPE and VPE; (2) the horizontal axis is the position errors and the vertical axis is the total count of data samples (log scale) in each 0.1-meter bin; (3) the magenta trace shows the distributions of the actual horizontal and vertical errors normalized by 1-sigma value of the protection level: horizontal protection level (HPL/6.0) and vertical protection level (VPL/5.33); (4) the horizontal axis is the standard units and vertical axis is the observed distribution of normalized errors data samples in each 0.1-sigma bin. The narrowness of the normalized error distributions indicates good safety performance.

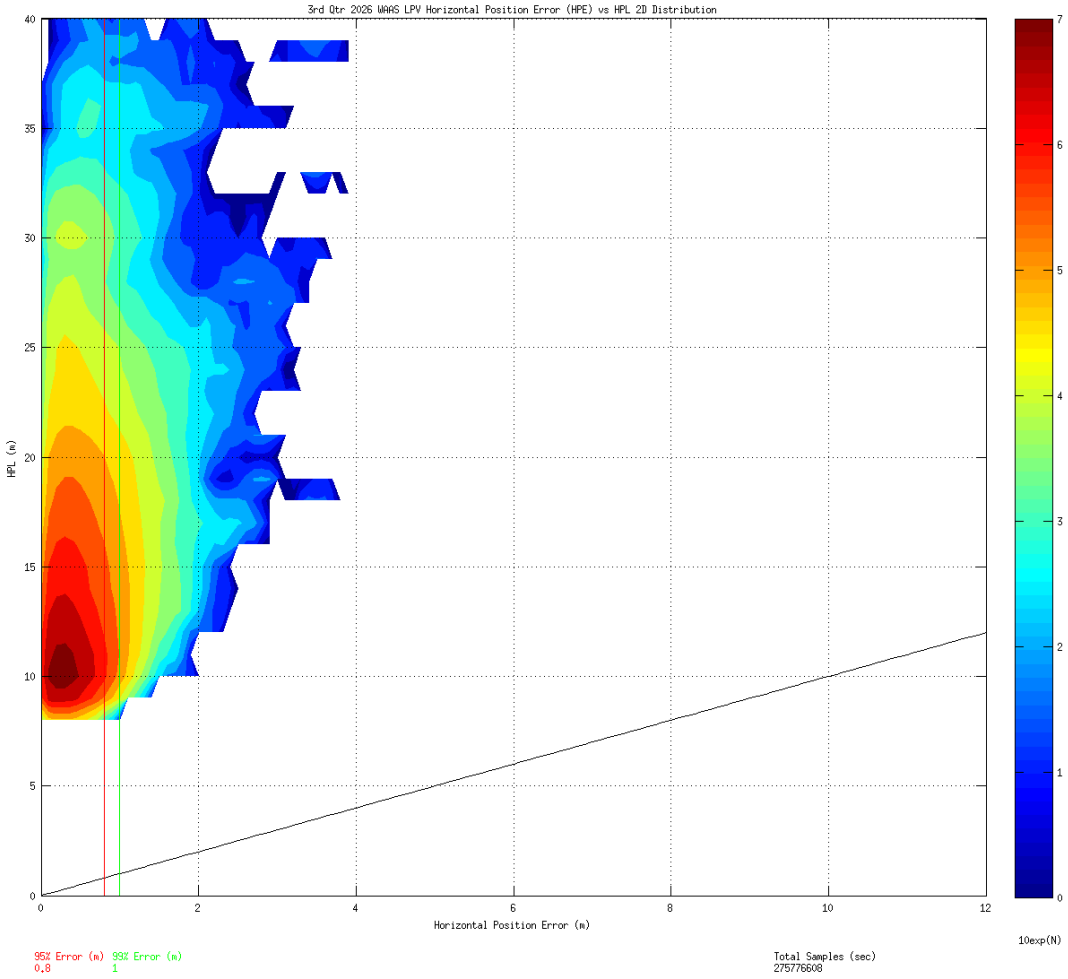


Figure 2-9 LPV 2-D Horizontal Error Distribution Histogram

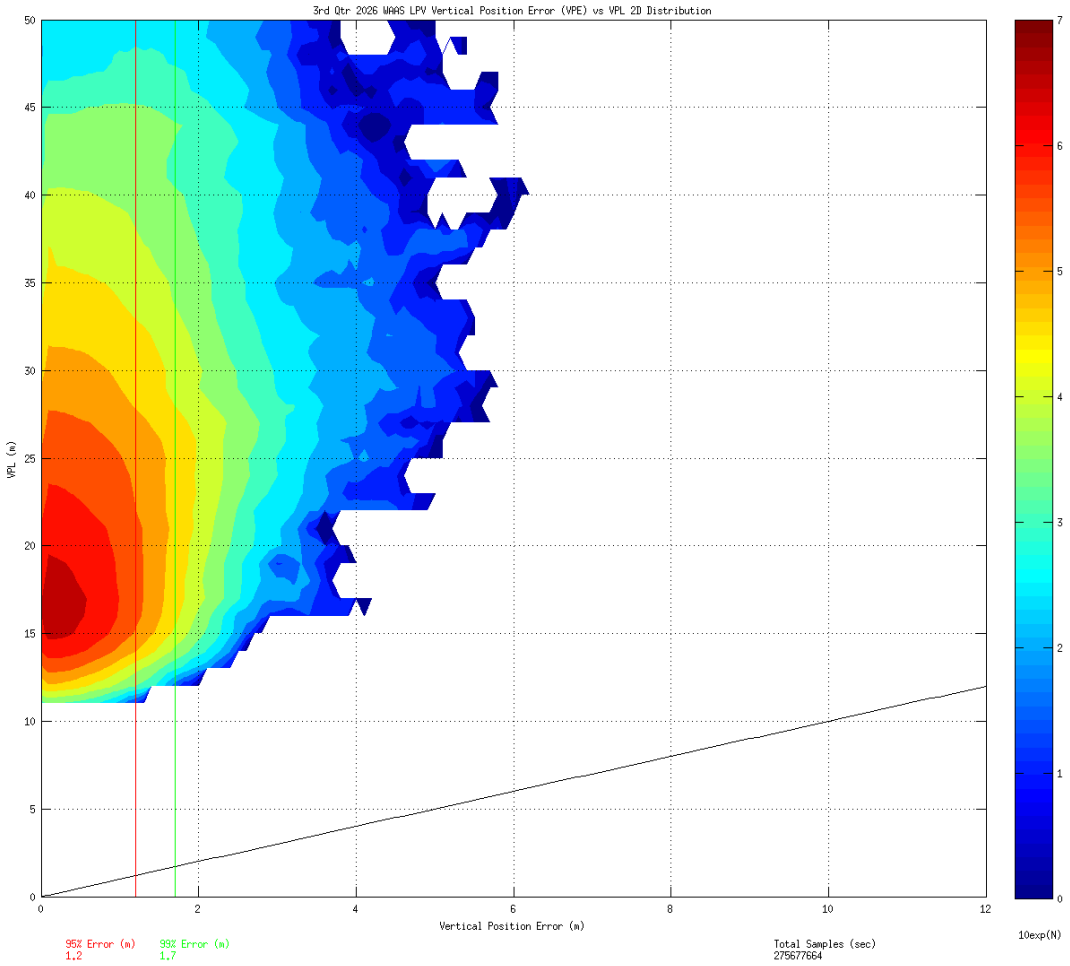


Figure 2-10 LPV 2-D Vertical Error Distribution Histogram

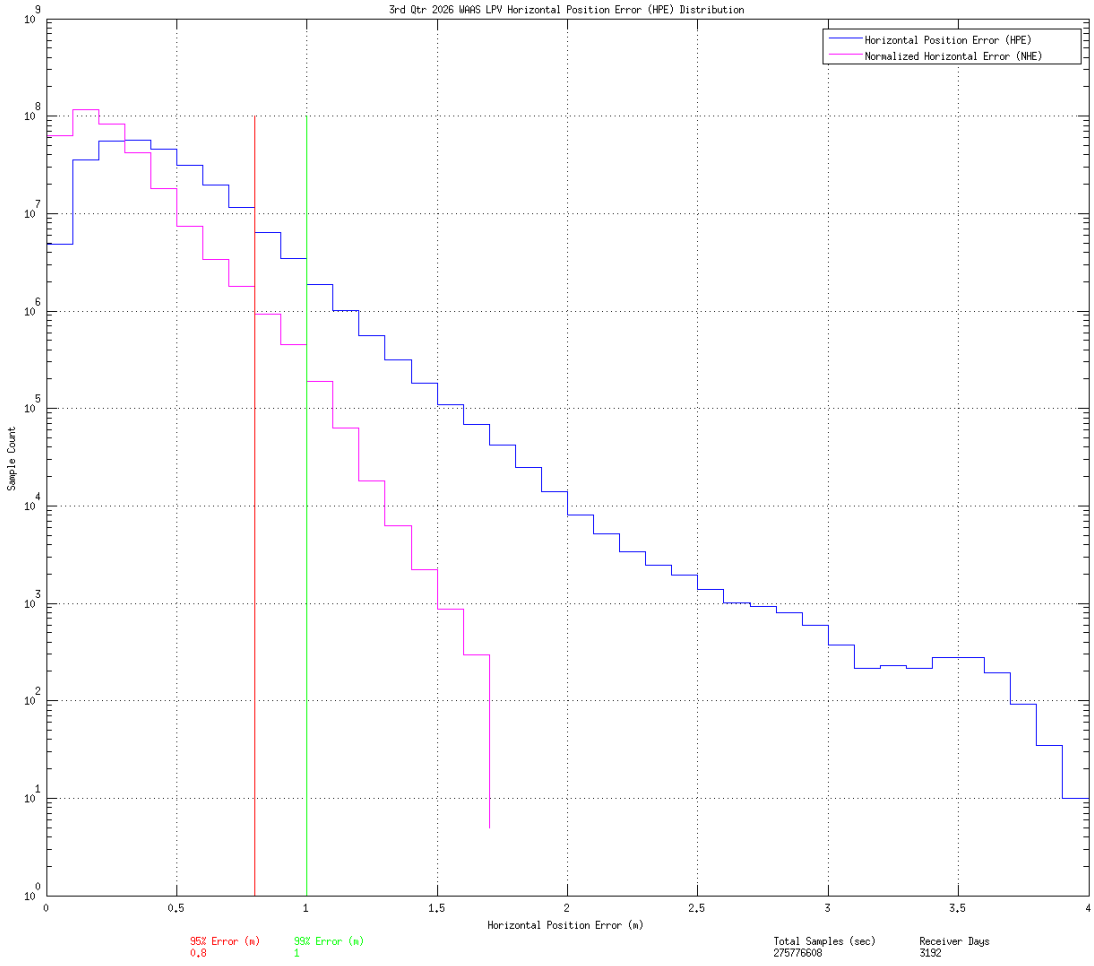


Figure 2-11 LPV Horizontal Error Bounding Triangle Chart

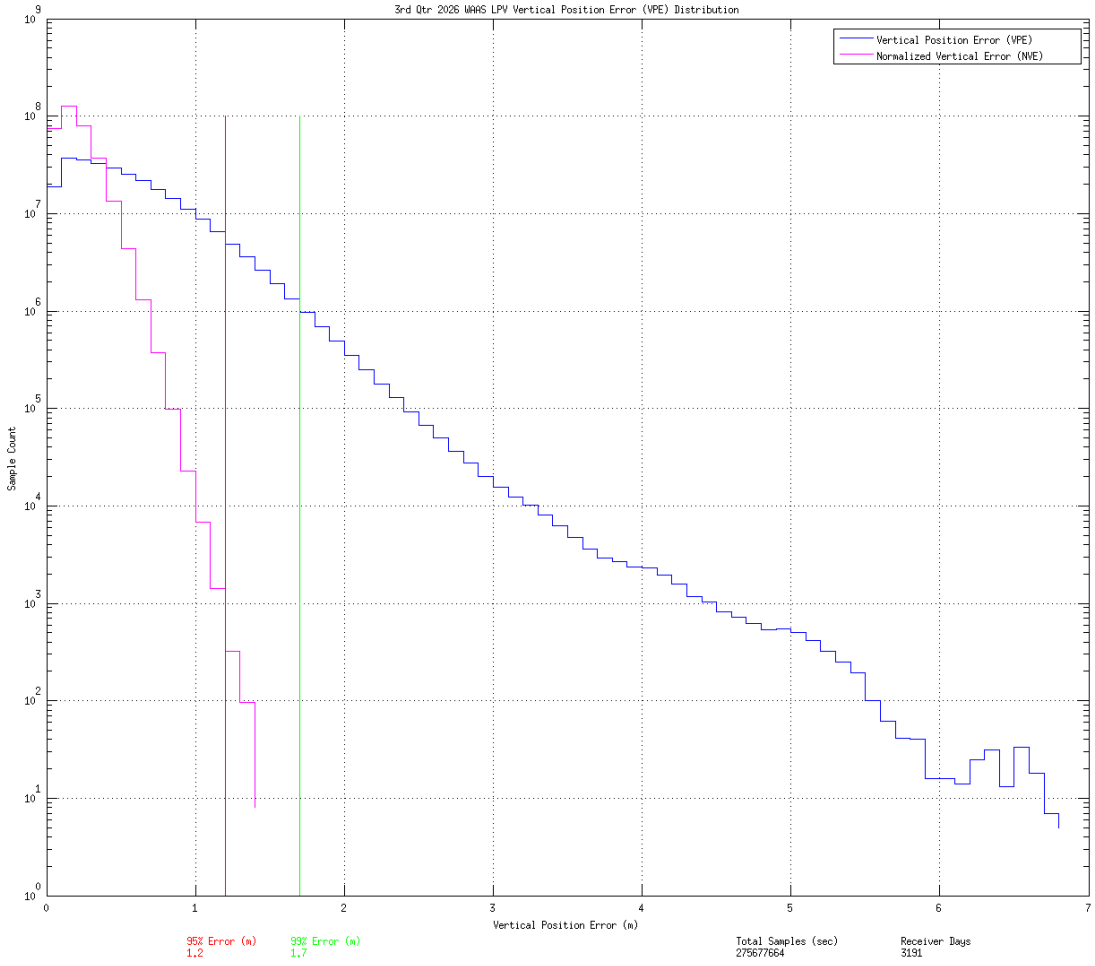


Figure 2-12 LPV Vertical Error Bounding Triangle Chart

3.0 AVAILABILITY

WAAS availability evaluation documents the percentage of time the WAAS provided service for the operational service levels defined in Table 1-1. The RTCA DO-229F VPL and HPL were computed for each evaluated receiver. Table 3-1 shows the evaluated receivers, the 99% maintained protection levels, and the percentage in PA mode (described in Section 2.0). The maximum and minimum VPL and HPL for this reporting period are listed as:

- The maximum 99% CONUS HPL was 19.085 meters observed at Miami
- The maximum 99% CONUS VPL was 31.108 meters observed at Los Angeles
- The minimum 99% CONUS HPL was 10.738 meters observed at Salt Lake City
- The minimum 99% CONUS VPL was 20.350 meters observed at Kansas City
- The maximum 99% Alaska HPL was 21.838 meters observed at Cold Bay
- The maximum 99% Alaska VPL was 33.693 meters observed at Barrow
- The minimum 99% Alaska HPL was 15.623 meters observed at Anchorage
- The minimum 99% Alaska VPL was 24.077 meters observed at Anchorage

Table 3-1 99% Protection Level

Location	99% HPL (m)	99% VPL (m)	PA Mode (%)
NSTB:			
Arcata	16.55	27.67	100
Atlantic City	14.65	23.61	100
Bangor	17.88	25.49	100
Elko	13.49	22.78	100
Grand Forks	15.94	23.36	100
Oklahoma City	12.66	21.27	100
WAAS:			
Albuquerque	12.10	27.88	100
Anchorage	15.62	24.08	100
Atlanta	12.28	22.36	100
Barrow	21.38	33.69	100
Bethel	16.54	26.75	100
Billings	11.91	20.48	100
Boston	15.59	22.46	100
Chicago	12.31	20.67	100
Cleveland	14.62	23.21	100
Cold Bay	21.84	31.27	100
Dallas	11.78	21.52	100
Denver	10.96	22.18	100
Fairbanks	17.02	25.95	100
Gander	36.06	46.10	99.999
Goose Bay	44.44	55.74	100
Houston	13.20	25.16	100
Iqaluit	68.84	98.97	100
Jacksonville	14.30	24.43	100
Juneau	16.55	25.01	100
Kansas City	11.65	20.35	100
Kotzebue	18.41	29.12	100
Los Angeles	12.90	31.11	100
Memphis	11.56	23.51	100
Merida	23.05	45.33	100
Mexico City	31.99	54.05	100
Miami	19.09	29.53	100
Minneapolis	13.00	20.42	100
New York	15.26	23.08	100
Oakland	12.98	28.12	100
Puerto Vallarta	33.76	58.26	100

Location	99% HPL (m)	99% VPL (m)	PA Mode (%)
Salt Lake City	10.74	21.39	100
San Jose Del Cabo	28.58	58.46	100
Seattle	13.88	23.62	100
Washington, DC	13.74	22.63	100
Winnipeg	17.31	24.57	100

Availability of LP, LPV, and LPV200 services are evaluated by monitoring the WAAS protection levels at receiver locations. Service is available when the VPL is less than the vertical alert limit (VAL) and the HPL is less than the horizontal alert limit (HAL). When the protection level exceeds the alert limit, the service is unavailable and an outage in service is recorded along with its duration. The operational service is not available again until both protection levels are within the alert limits for at least 15 minutes. Although this will cause minimal reduction in operational service availability, it will substantially reduce the number of service outages and prevent excessive switching in/out of service availability.

Table 3-2 shows the percentage of time LP, LPV, and LPV200 service is available using the 15-minute window criteria. Table 3-3 shows LP, LPV, and LPV200 service outages and associated outage rates. The outage rate is the percentage of theoretically interrupted approaches through a loss of operational service once the approach had started. Figure 3-1 through Figure 3-6 show the daily availability of LPV and LPV200 service levels. Figure 3-7 through Figure 3-12 show the daily interruptions of LPV and LPV200 service levels.

Table 3-2 PA Availability (15-minute window)

Location	LP WAAS With 15-Minute Window (%)	LPV WAAS With 15-Minute Window (%)	LPV200 WAAS With 15-Minute Window (%)
NSTB:			
Arcata	100	100	100
Atlantic City	100	100	100
Bangor	100	100	100
Elko	100	100	100
Grand Forks	100	100	100
Oklahoma City	100	100	100
WAAS:			
Albuquerque	100	100	100
Anchorage	100	100	100
Atlanta	100	100	100
Barrow	100	100	99.98
Bethel	100	100	100
Billings	100	100	100
Boston	100	100	100
Chicago	100	100	100
Cleveland	100	100	99.99
Cold Bay	100	100	99.9
Dallas	100	100	100

Location	LP WAAS With 15-Minute Window (%)	LPV WAAS With 15-Minute Window (%)	LPV200 WAAS With 15-Minute Window (%)
Denver	100	100	100
Fairbanks	100	100	99.99
Gander	100	100	99.9
Goose Bay	100	100	100
Houston	100	100	100
Iqaluit	99.98	99.96	99.55
Jacksonville	100	100	100
Juneau	100	100	99.99
Kansas City	100	100	100
Kotzebue	100	99.99	99.98
Los Angeles	100	100	100
Memphis	100	100	100
Merida	100	99.99	97.78
Mexico City	99.87	98.73	85.26
Miami	100	100	99.99
Minneapolis	100	100	100
New York	100	100	100
Oakland	100	100	100
Puerto Vallarta	99.92	99.67	87.59
Salt Lake City	100	100	100
San Jose Del Cabo	99.9	99.88	95.02
Seattle	100	100	100
Washington, DC	100	100	100
Winnipeg	100	100	100

Table 3-3 LPV and LPV200 Outage Rate (Per 150-sec approach)

Location	LP Outages (Number)	LP Outage Rates	LPV Outages (Number)	LPV Outage Rates	LPV200 Outages (Number)	LPV200 Outage Rates
NSTB:						
Arcata	0	0.000000	0	0.000000	0	0.000000
Atlantic City	0	0.000000	0	0.000000	0	0.000000
Bangor	0	0.000000	0	0.000000	0	0.000000
Elko	0	0.000000	0	0.000000	0	0.000000
Grand Forks	0	0.000000	0	0.000000	0	0.000000
Oklahoma City	0	0.000000	0	0.000000	0	0.000000
WAAS:						
Albuquerque	0	0.000000	0	0.000000	0	0.000000
Anchorage	0	0.000000	0	0.000000	0	0.000000

Location	LP Outages (Number)	LP Outage Rates	LPV Outages (Number)	LPV Outage Rates	LPV200 Outages (Number)	LPV200 Outage Rates
Atlanta	0	0.000000	0	0.000000	0	0.000000
Barrow	1	0.000019	4	0.000076	10	0.000189
Bethel	0	0.000000	0	0.000000	0	0.000000
Billings	0	0.000000	0	0.000000	0	0.000000
Boston	0	0.000000	0	0.000000	0	0.000000
Chicago	0	0.000000	0	0.000000	0	0.000000
Cleveland	0	0.000000	0	0.000000	2	0.000038
Cold Bay	0	0.000000	0	0.000000	17	0.000321
Dallas	0	0.000000	0	0.000000	0	0.000000
Denver	0	0.000000	0	0.000000	0	0.000000
Fairbanks	0	0.000000	1	0.000019	3	0.000057
Gander	1	0.000019	1	0.000019	5	0.000095
Goose Bay	0	0.000000	0	0.000000	1	0.000019
Houston	0	0.000000	0	0.000000	1	0.000019
Iqaluit	4	0.000076	5	0.000095	78	0.001482
Jacksonville	0	0.000000	0	0.000000	1	0.000019
Juneau	0	0.000000	0	0.000000	1	0.000019
Kansas City	0	0.000000	0	0.000000	0	0.000000
Kotzebue	0	0.000000	1	0.000020	6	0.000117
Los Angeles	0	0.000000	0	0.000000	0	0.000000
Memphis	0	0.000000	0	0.000000	1	0.000019
Merida	0	0.000000	1	0.000020	189	0.003786
Mexico City	4	0.000077	157	0.003051	718	0.016160
Miami	0	0.000000	0	0.000000	1	0.000019
Minneapolis	0	0.000000	0	0.000000	0	0.000000
New York	0	0.000000	0	0.000000	0	0.000000
Oakland	0	0.000000	0	0.000000	0	0.000000
Puerto Vallarta	1	0.000019	94	0.001806	691	0.015103
Salt Lake City	0	0.000000	0	0.000000	0	0.000000
San Jose Del Cabo	2	0.000044	12	0.000262	358	0.008225
Seattle	0	0.000000	0	0.000000	1	0.000019
Washington, DC	0	0.000000	0	0.000000	0	0.000000
Winnipeg	0	0.000000	0	0.000000	0	0.000000

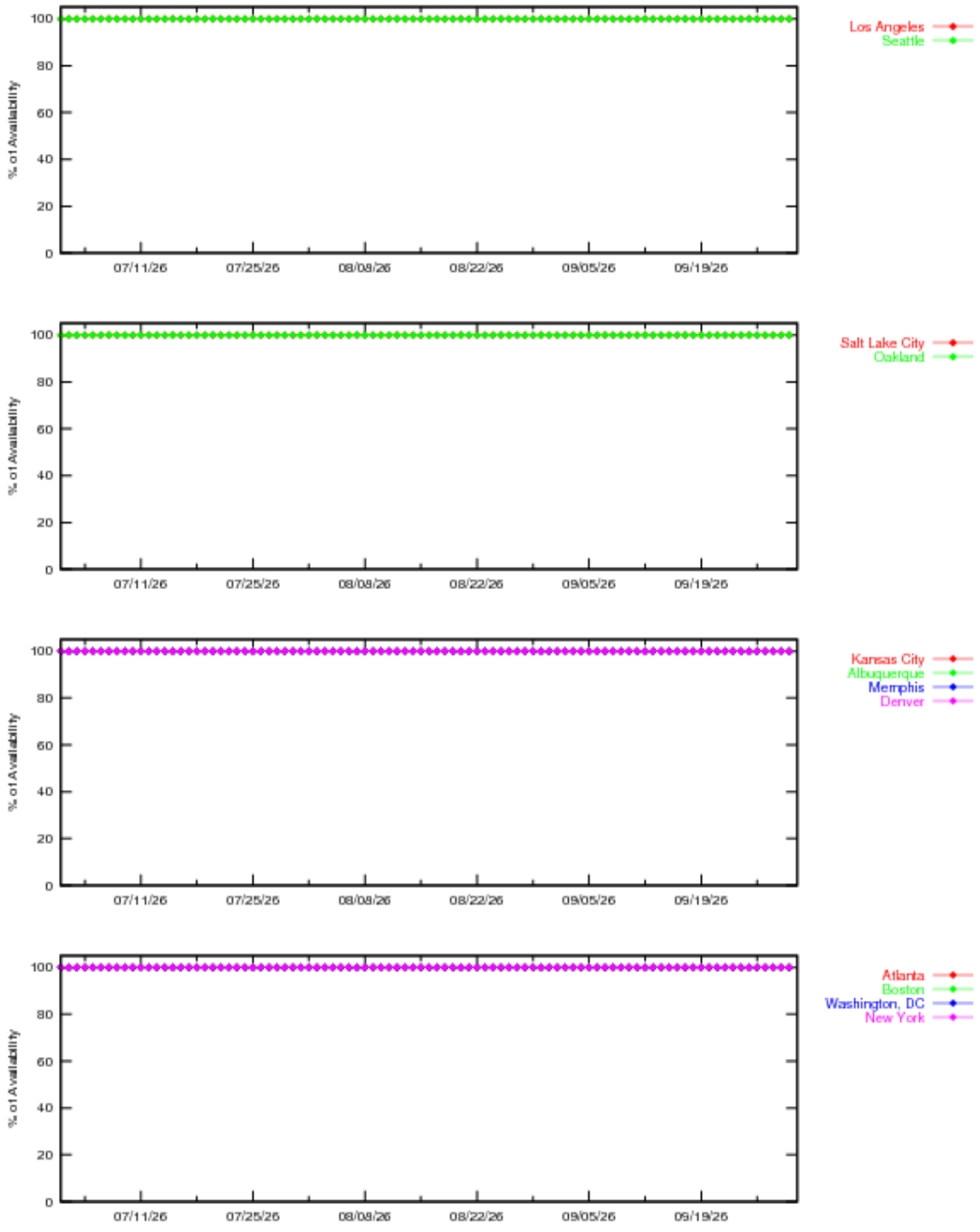


Figure 3-1 LPV Instantaneous Availability

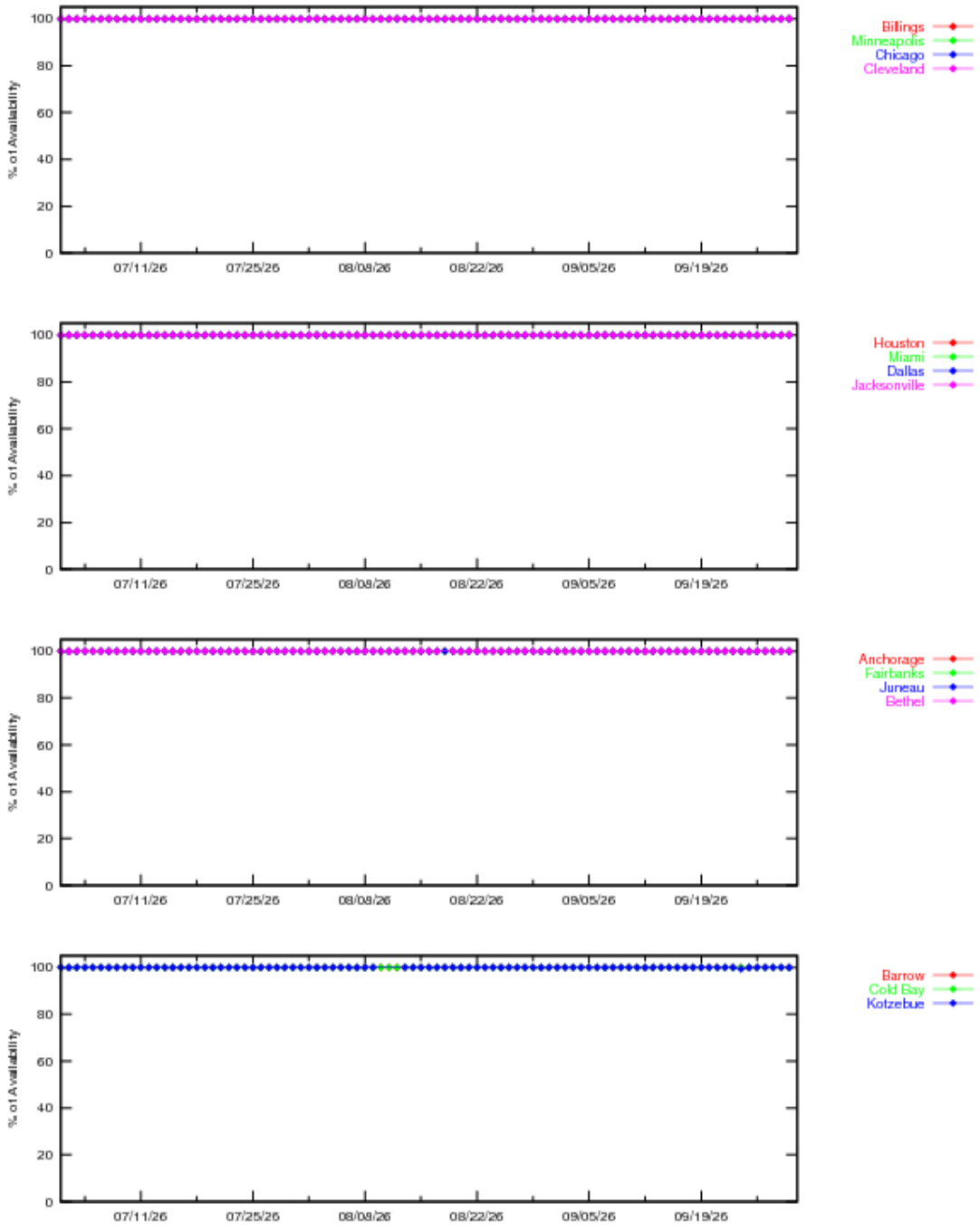


Figure 3-2 LPV Instantaneous Availability

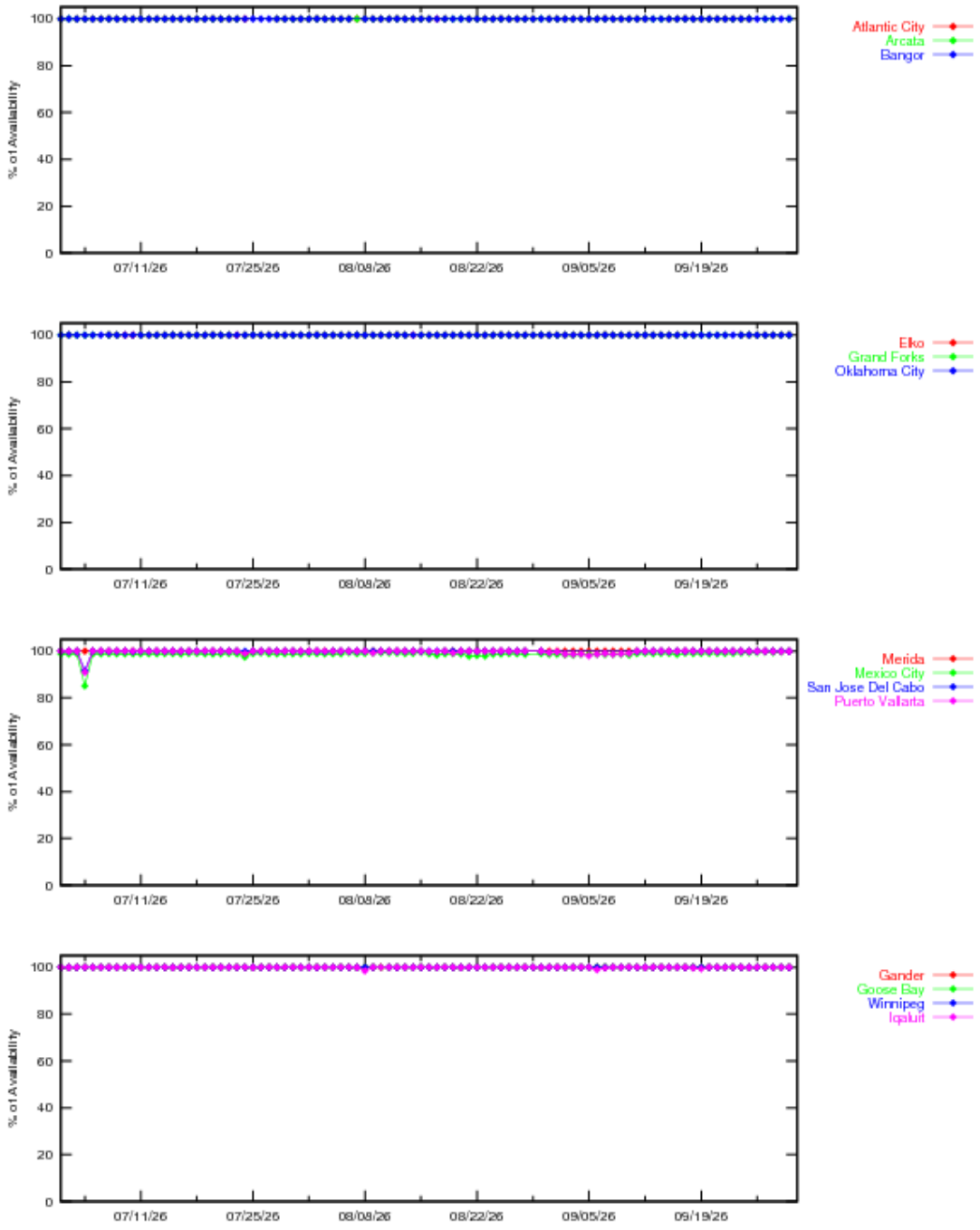


Figure 3-3 LPV Instantaneous Availability

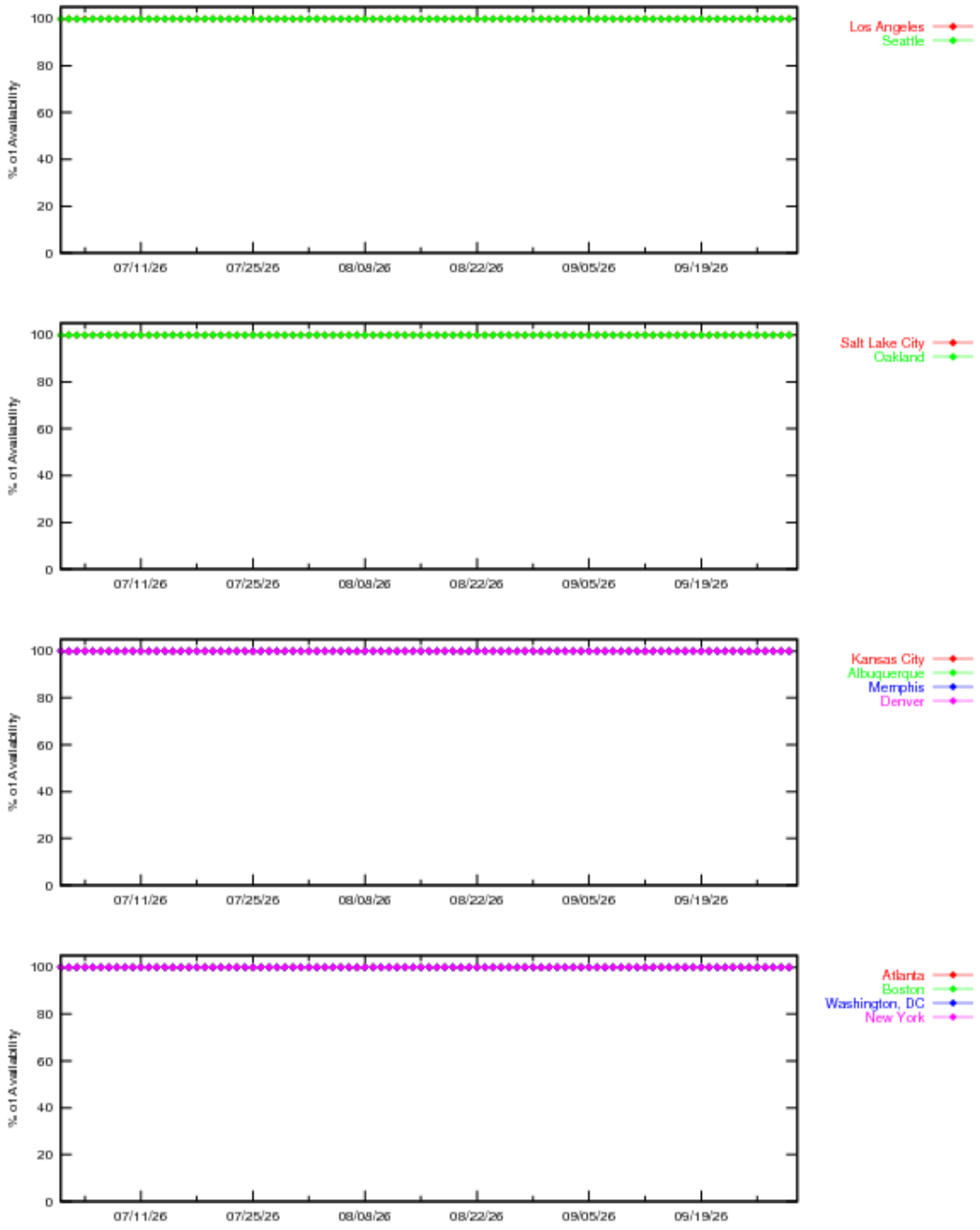


Figure 3-4 LPV200 Instantaneous Availability

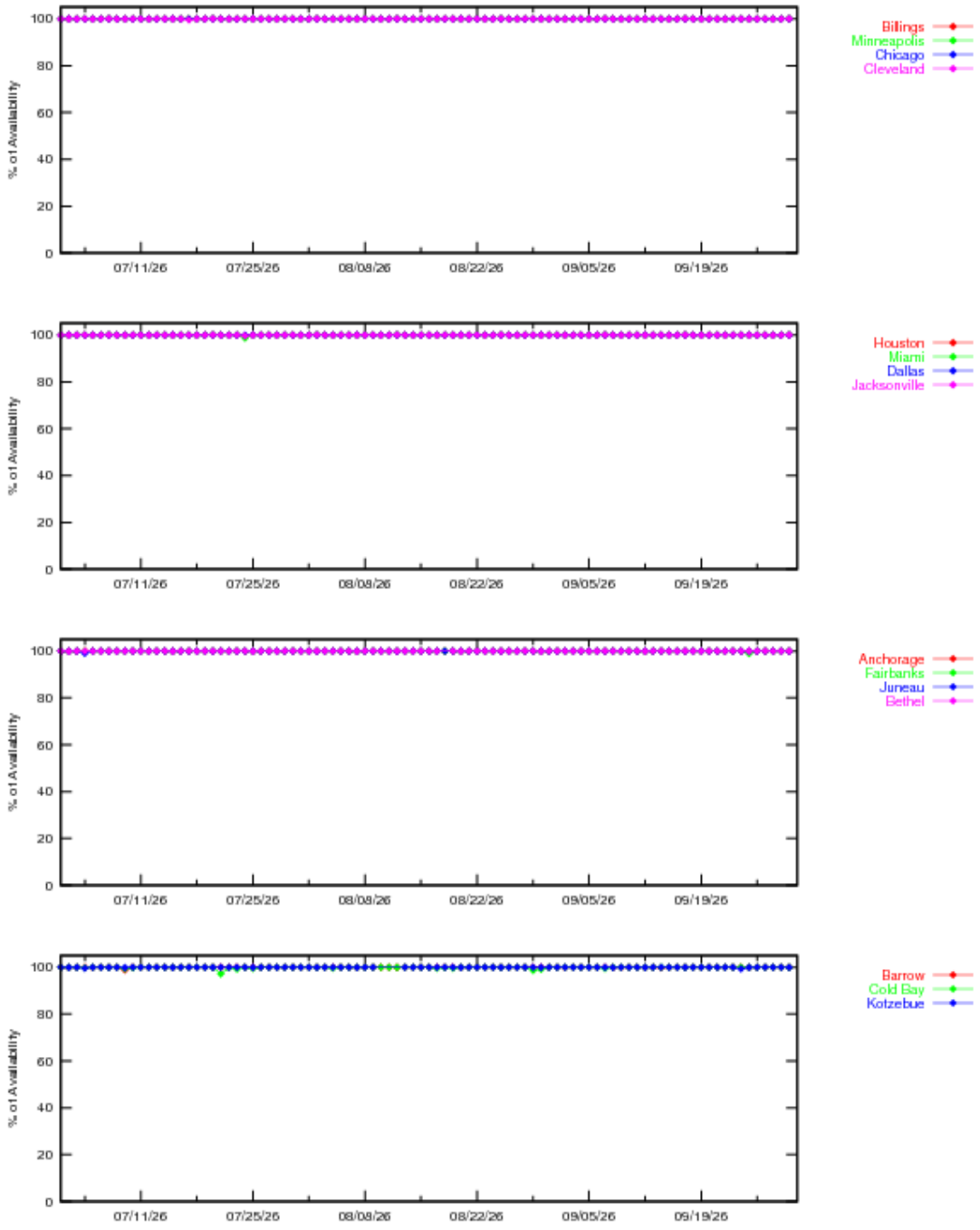


Figure 3-5 LPV200 Instantaneous Availability

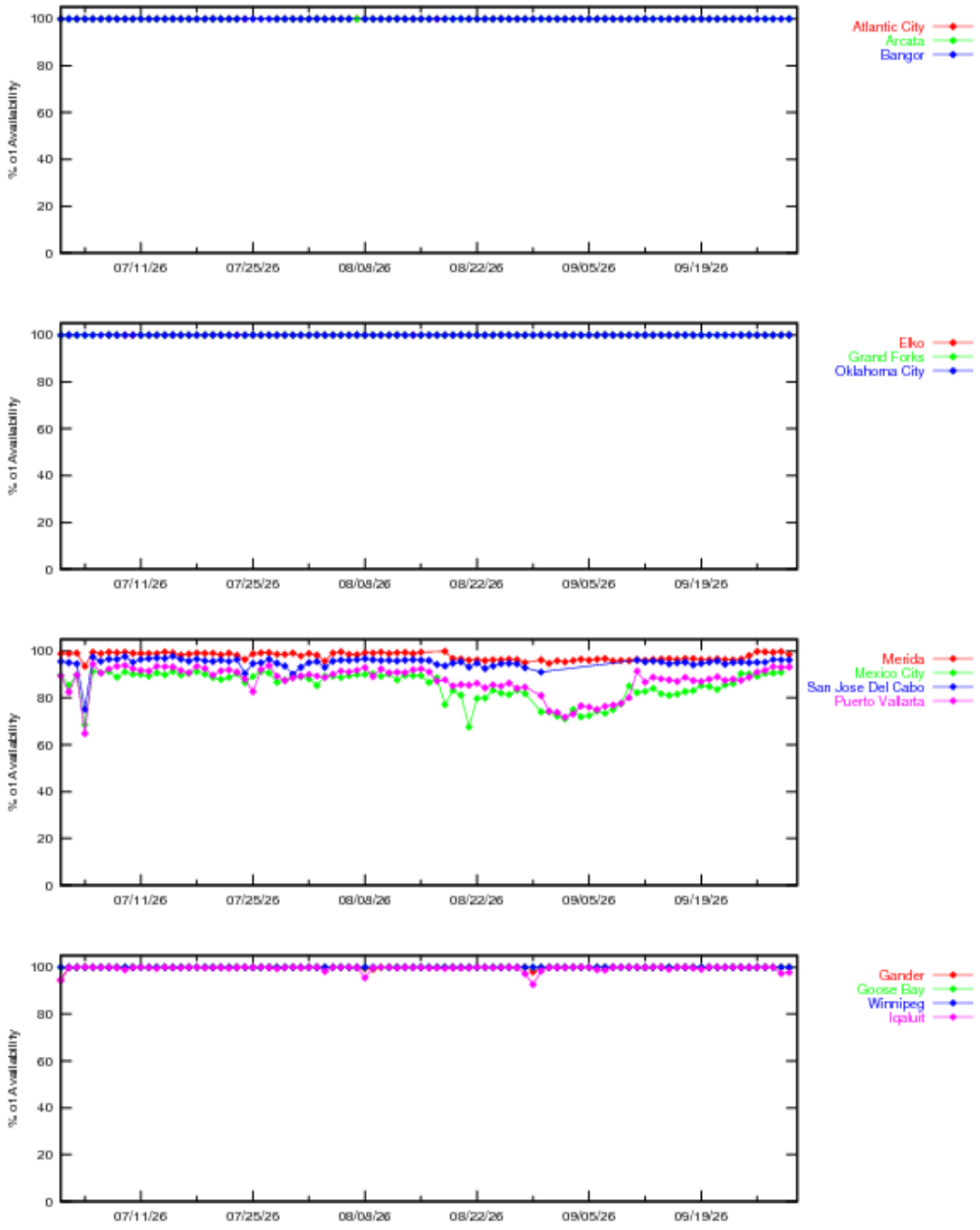


Figure 3-6 LPV200 Instantaneous Availability

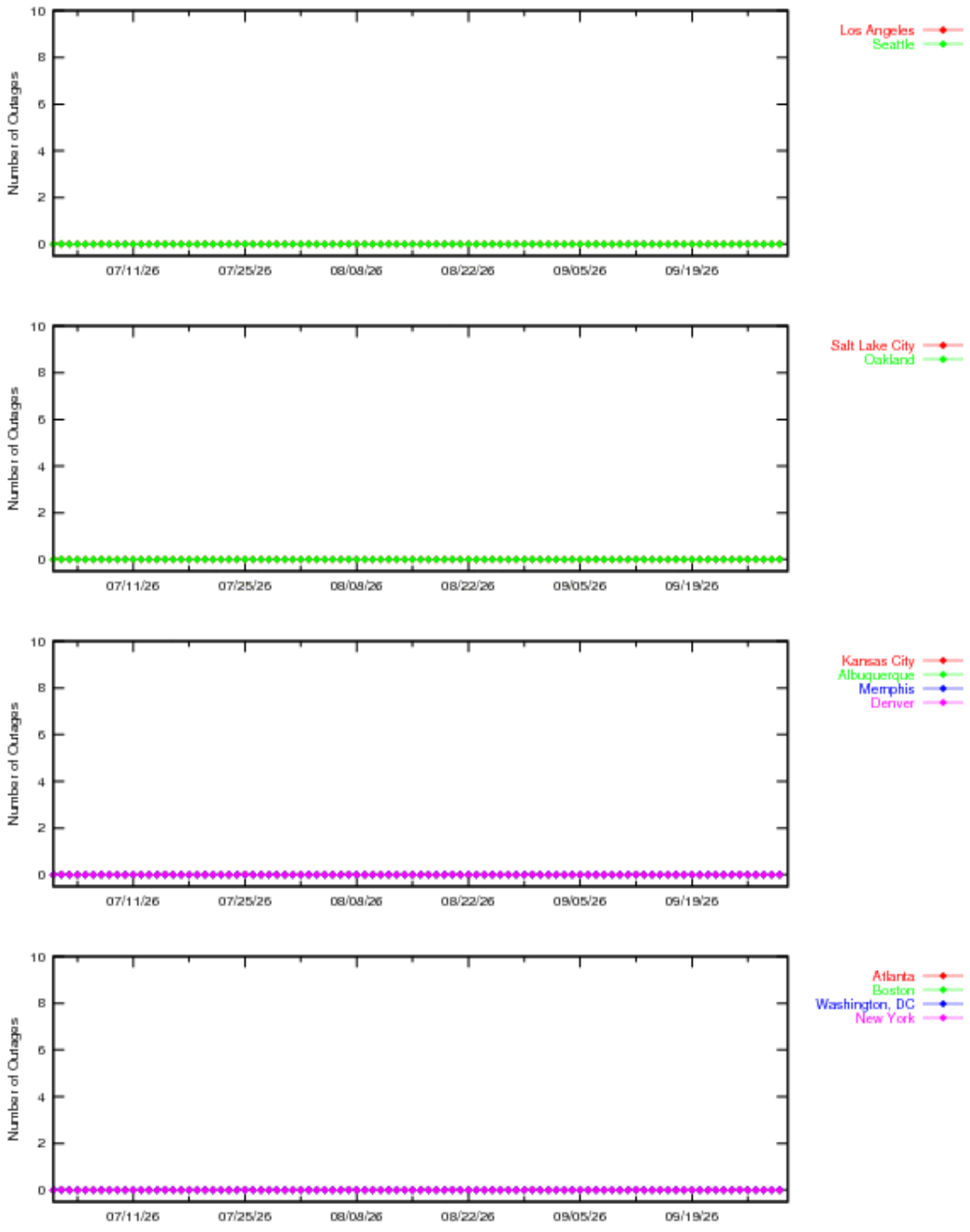


Figure 3-7 LPV Outages

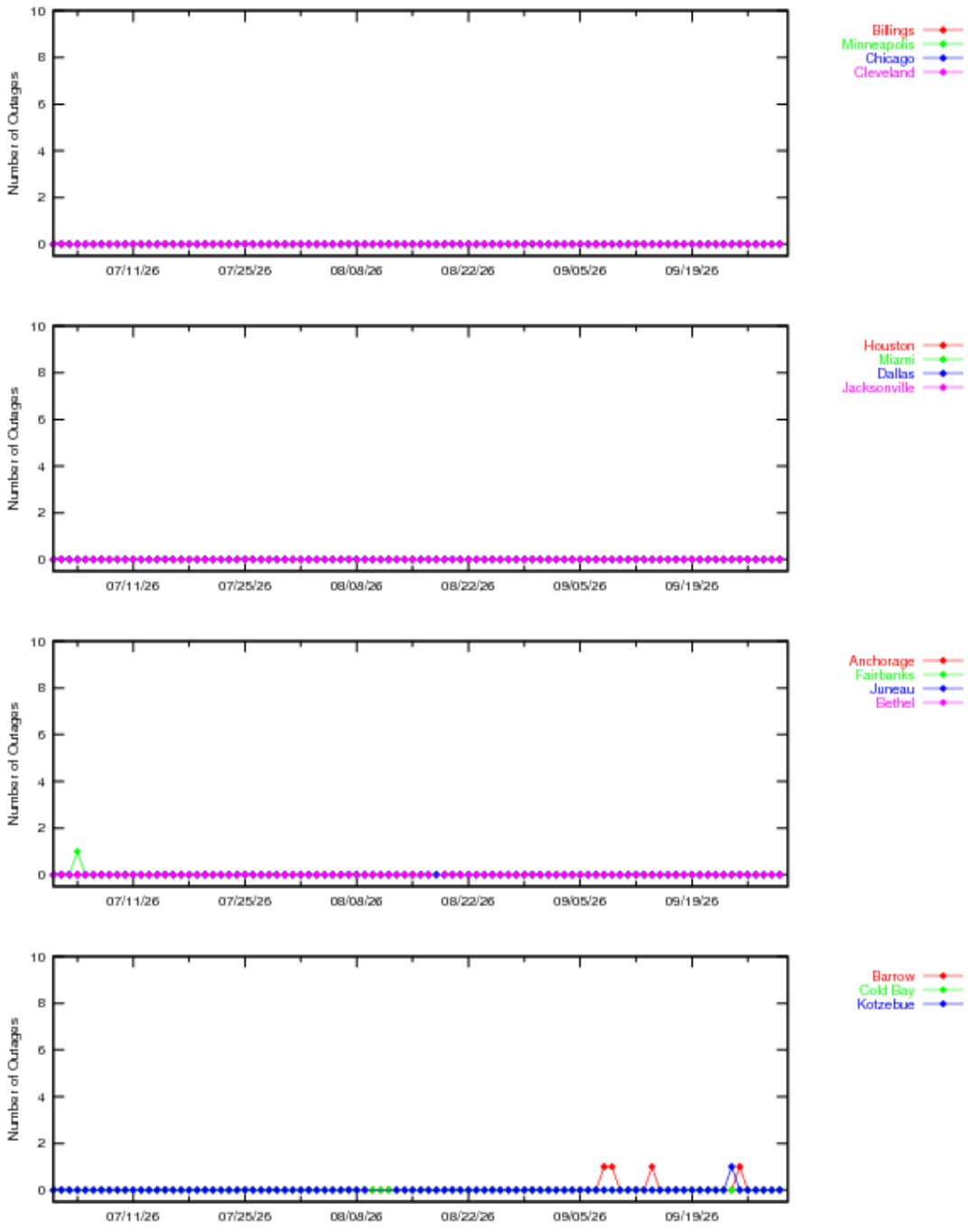


Figure 3-8 LPV Outages

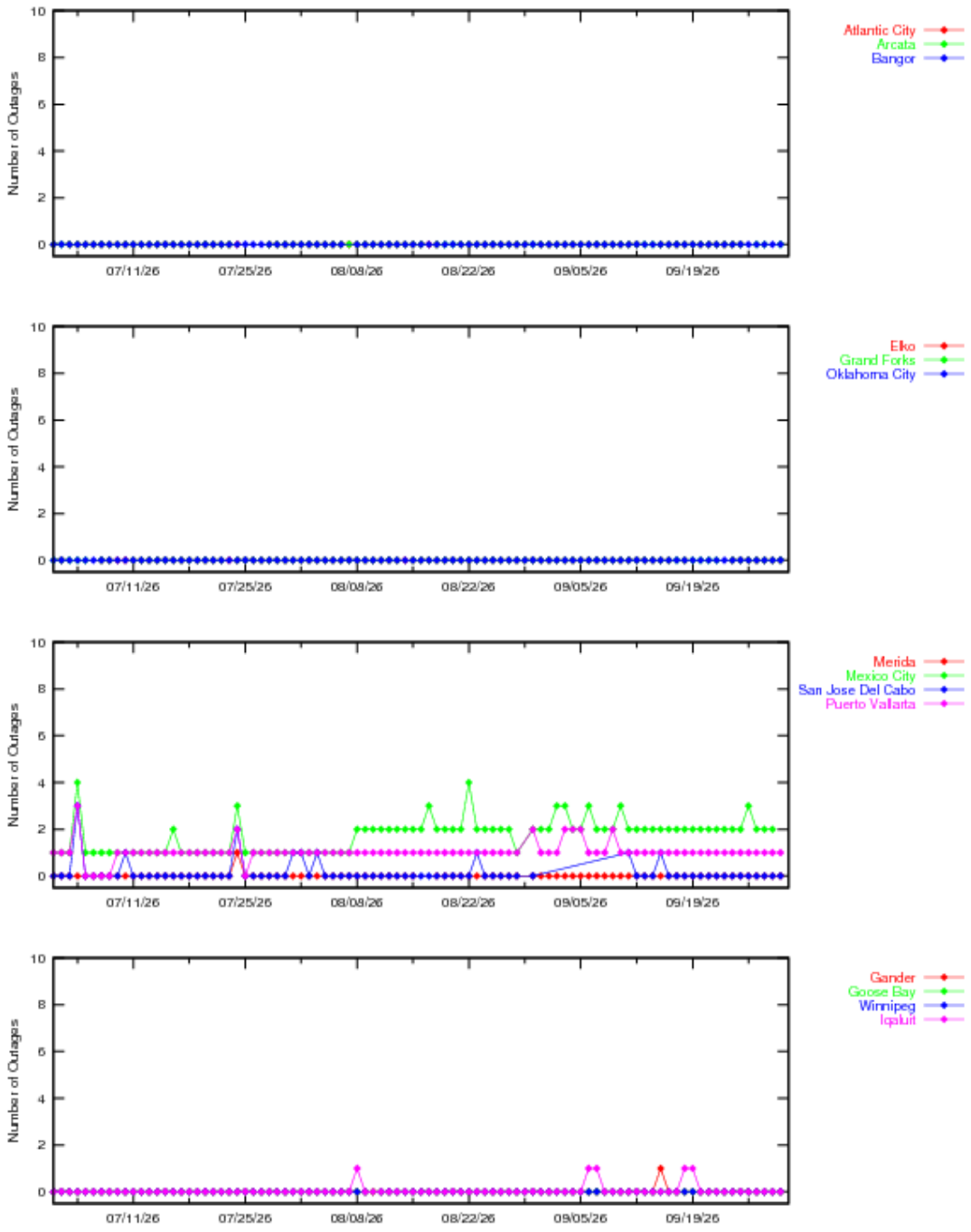


Figure 3-9 LPV Outages

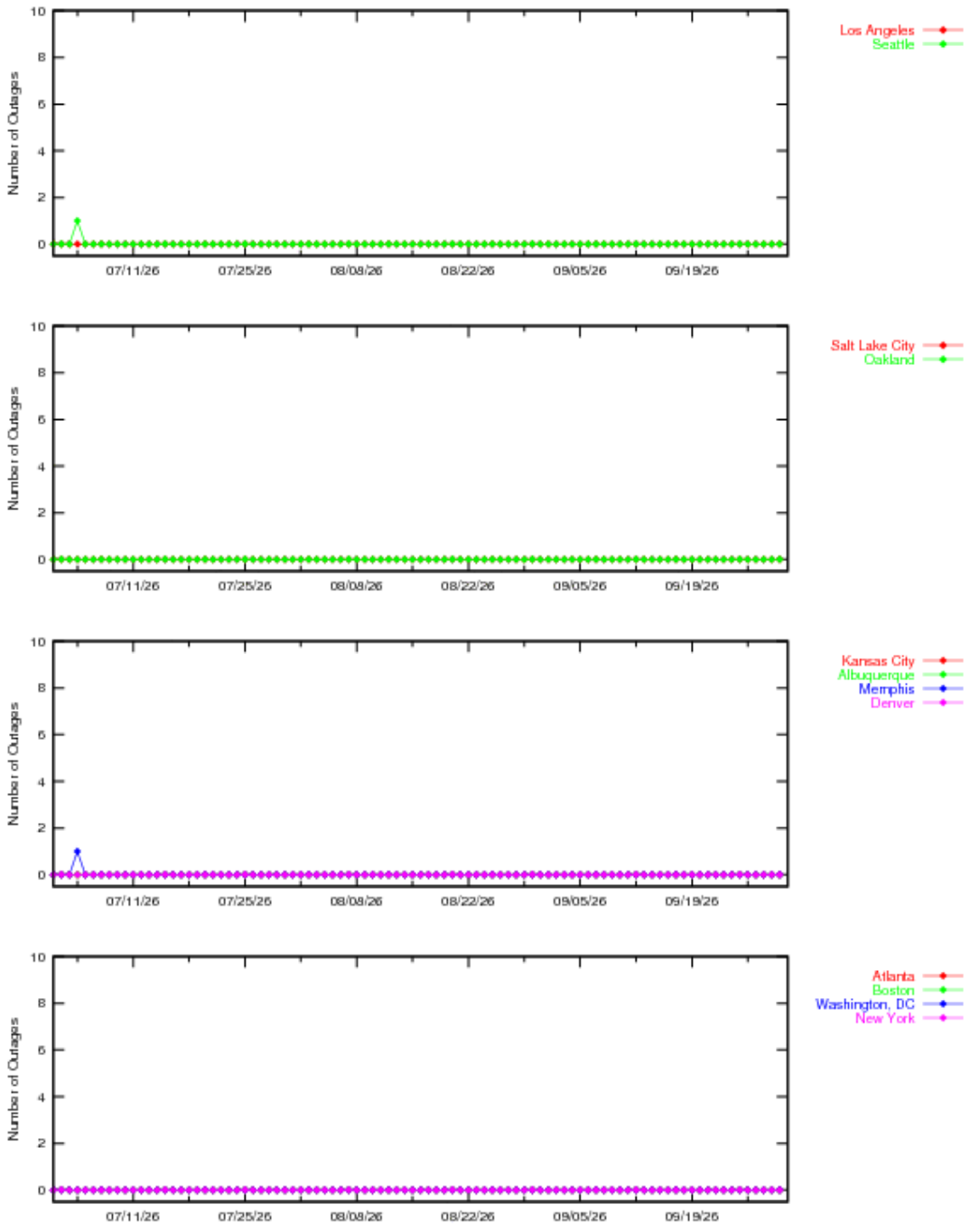


Figure 3-10 LPV200 Outages

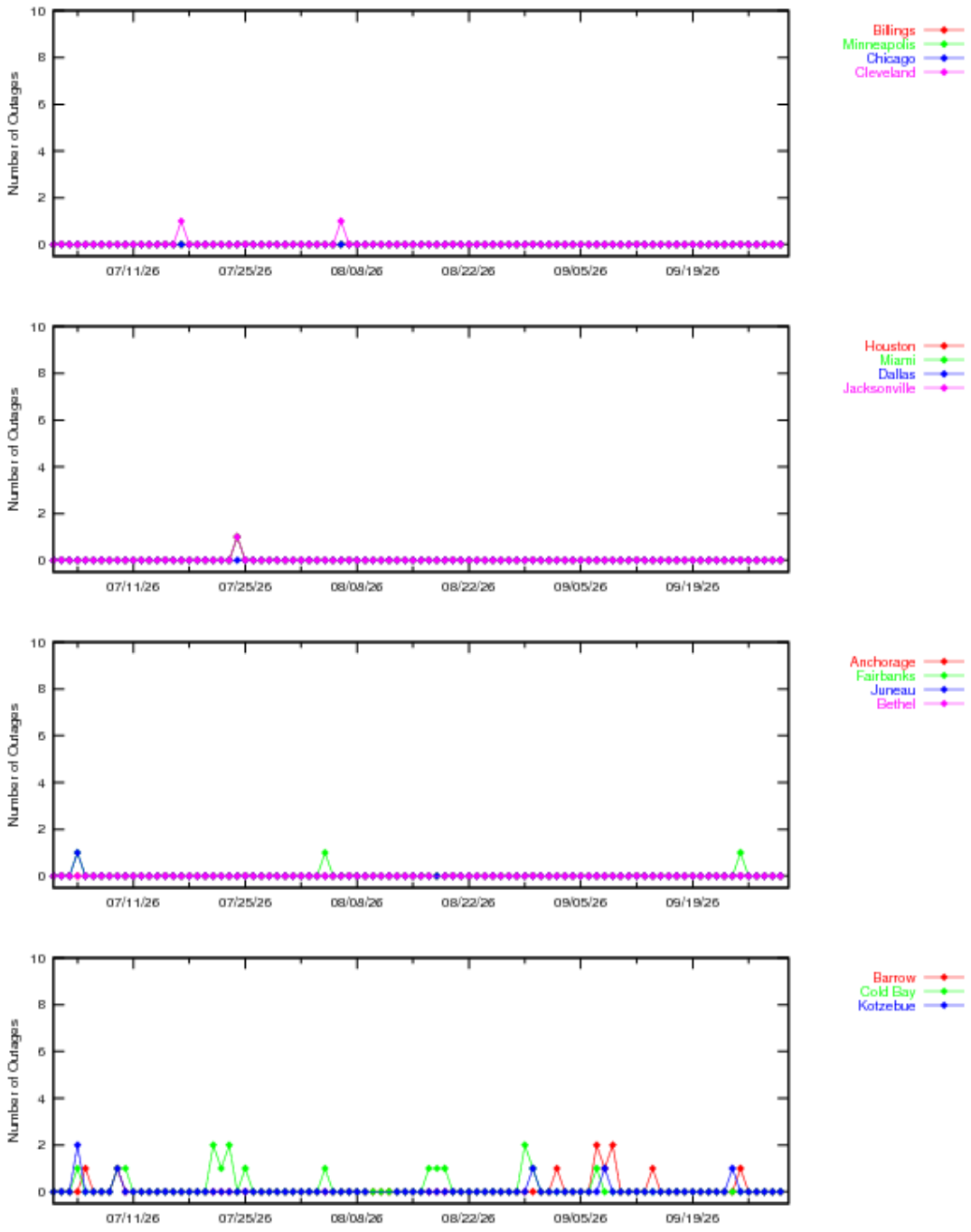


Figure 3-11 LPV200 Outages

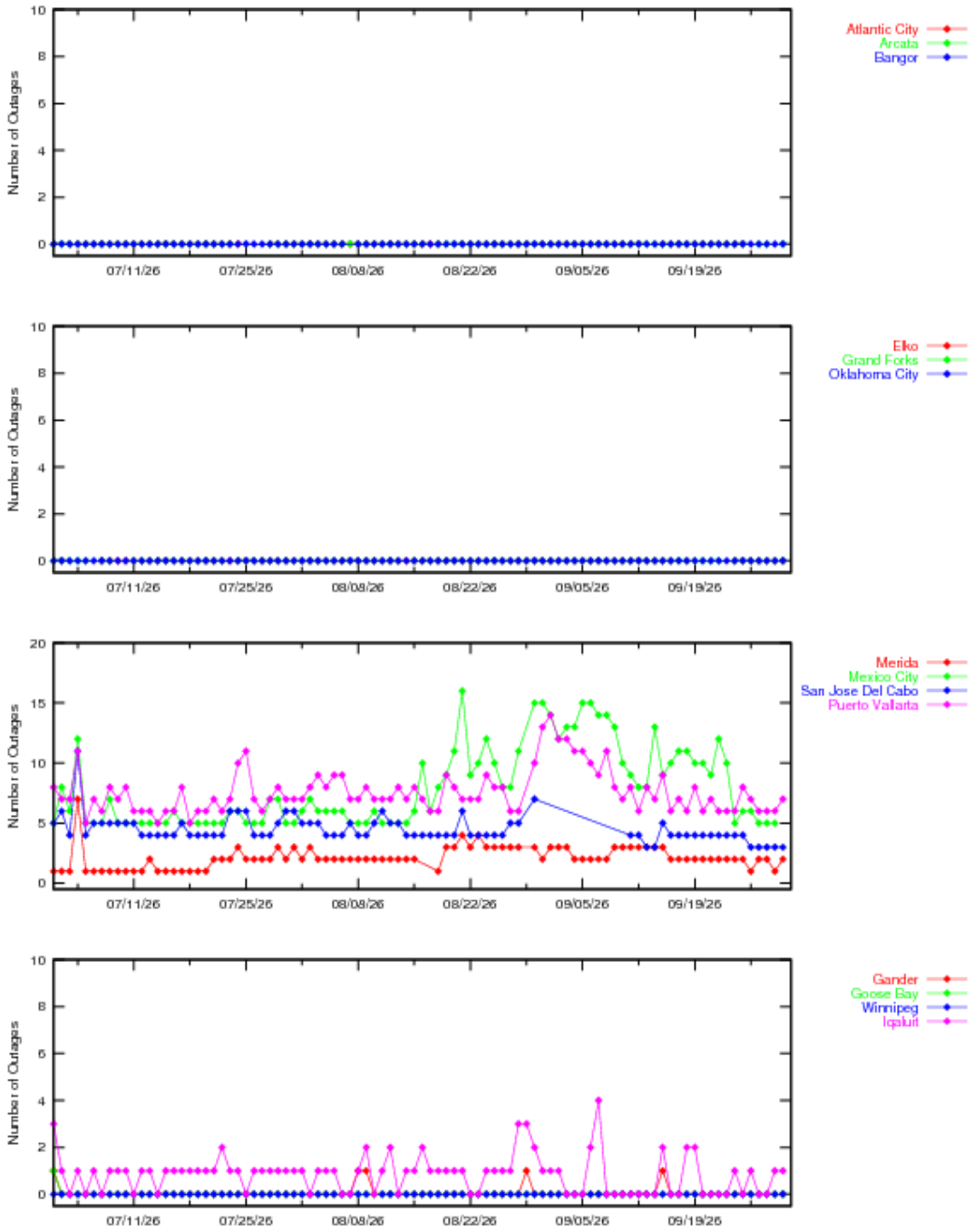


Figure 3-12 LPV200 Outages

Availability of NPA service is evaluated by monitoring the WAAS HPL at receiver locations. Service is available when the HPL is less than a HAL of 556 meters. The service is unavailable when HPL exceeds the HAL or when a WAAS navigation message is not received, and the service outage and its duration are recorded. NPA service is not available again until the HPL is within the HAL for at least 15 minutes. Table 3-4 shows the percentage of time that NPA service is available using the 15-minute window criteria. Table 3-5 shows the NPA service outages and associated outage rates. The outage rate is the percentage of theoretically interrupted NPA approaches through a loss of operational service once the approach had started.

Table 3-4 NPA Availability (15-minute window)

Location	NPA Availability (Excluding RAIM/FDE) (%)
NSTB:	
Arcata	100
Atlantic City	100
Bangor	100
Elko	100
Grand Forks	100
Oklahoma City	100
WAAS:	
Albuquerque	100
Anchorage	100
Atlanta	100
Barrow	100
Bethel	100
Billings	100
Boston	100
Cleveland	100
Cold Bay	100
Fairbanks	100
Gander	100
Honolulu	100
Houston	100
Iqaluit	100
Juneau	100
Kansas City	100
Kotzebue	100
Los Angeles	100
Merida	100
Miami	100
Minneapolis	100
Oakland	100
Salt Lake City	100
San Jose Del Cabo	100
San Juan	100
Seattle	100
Tapachula	100
Washington, DC	100

Table 3-5 NPA Outage Rates (Excluding FD/FDE)

Location	NPA Outages (Number)	NPA Outage Rates
Oklahoma City	0	0
Albuquerque	0	0
Anchorage	0	0
Atlanta	0	0
Barrow	0	0
Bethel	0	0
Billings	0	0
Boston	0	0
Cleveland	0	0
Cold Bay	0	0
Fairbanks	0	0
Gander	0	0
Honolulu	0	0
Houston	0	0
Iqaluit	0	0
Juneau	0	0
Kansas City	0	0
Kotzebue	0	0
Los Angeles	0	0
Merida	0	0
Miami	0	0
Minneapolis	0	0
Oakland	0	0
Salt Lake City	0	0
San Jose Del Cabo	0	0
San Juan	0	0
Seattle	0	0
Tapachula	0	0
Washington, DC	0	0

The availability decreases for this quarter were due to satellite outages, geomagnetic activity, communication outages, radio frequency interference (RFI), and elevated UDRE and GIVE values. Noteworthy events that affected availability are:

- Jul 01 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Jul 09–Jul 10 — Satellite maintenance elevated UDREs on PRN3 and reduced LPV200 availability in Alaska.
- Jul 17 — Satellite maintenance elevated UDREs on PRN26 and reduced LPV200 availability in CONUS.
- Jul 21 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Alaska and Canada.
- Jul 23 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.

- Jul 24 — Satellite maintenance elevated UDREs on PRN7 and reduced LPV200 availability in CONUS and Canada.
- Aug 02 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Aug 04 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Aug 07 — Satellite maintenance elevated UDREs on PRN5 and reduced LPV200 availability in Canada.
- Aug 08 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Aug 09 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Aug 11 — Satellite maintenance elevated UDREs on PRN29 and reduced LPV200 availability in Canada.
- Aug 18 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Sep 06 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Sep 07 — Geomagnetic activity increased GIVEs and reduced LPV and LPV200 availability in Canada.
- Sep 11 — Satellite maintenance elevated UDREs on PRN23 and reduced LPV200 availability in Canada.
- Sep 15 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Sep 15–Sep 16 — Satellite maintenance elevated UDREs on PRN13 and reduced LPV200 availability in Canada.
- Sep 18 — Satellite maintenance elevated UDREs on PRN1 and reduced LPV200 availability in Canada.
- Sep 19 — Geomagnetic activity increased GIVEs and reduced LPV and LPV200 availability in Canada.
- Sep 25 — Satellite maintenance elevated UDREs on PRN15 and reduced LPV200 availability in Canada.
- Sep 29 — Geomagnetic activity increased GIVEs and reduced LPV200 availability in Canada.
- Sep 29–Sep 30 — Satellite maintenance elevated UDREs on PRN25 and reduced LPV200 availability in Canada.

4.0 COVERAGE

The WAAS coverage area evaluation estimates the percentage of service volume where WAAS provided service for the operational service levels defined in Table 1-1. The WAAS message and GPS/GEO satellite status are used to determine WAAS availability across North America. For PA coverage, protection levels were calculated at 30-second intervals at 1-degree spacing over the PA service volume, whereas for NPA coverage, the protection levels were calculated at 30-second intervals at 5-degree spacing over the NPA service volume.

Daily PA analysis was conducted for LP, LPV, and LPV200 service levels. The PA coverage plots provide 100%, 99.9%, 99%, 98%, and 95% availability contours. Figure 4-1 shows the rollup LP North America coverage, Figure 4-2 shows the rollup LPV North America coverage, Figure 4-3 shows the rollup LPV200 North America coverage, Figure 4-4 shows the daily LPV and LPV200 CONUS coverage, Figure 4-5 shows the daily LPV Alaska coverage at 99% availability and ionosphere Kp index values, and Figure 4-6shows the daily LPV and LPV200 Canada coverage at 99% availability and ionosphere Kp index values. See APPENDIX B: ADDITIONAL COVERAGE PLOTS for coverage plots of 98% LP and LPV availability contour and 99% LPV200 availability contour. Kp quantifies the disturbance in the earth's magnetic field and is an indicator of solar storms causing geomagnetic disturbances, which can cause an unpredictable ionosphere. When the WAAS detects a disturbed ionosphere, it increases GIVE values that may result in unavailable PA service.

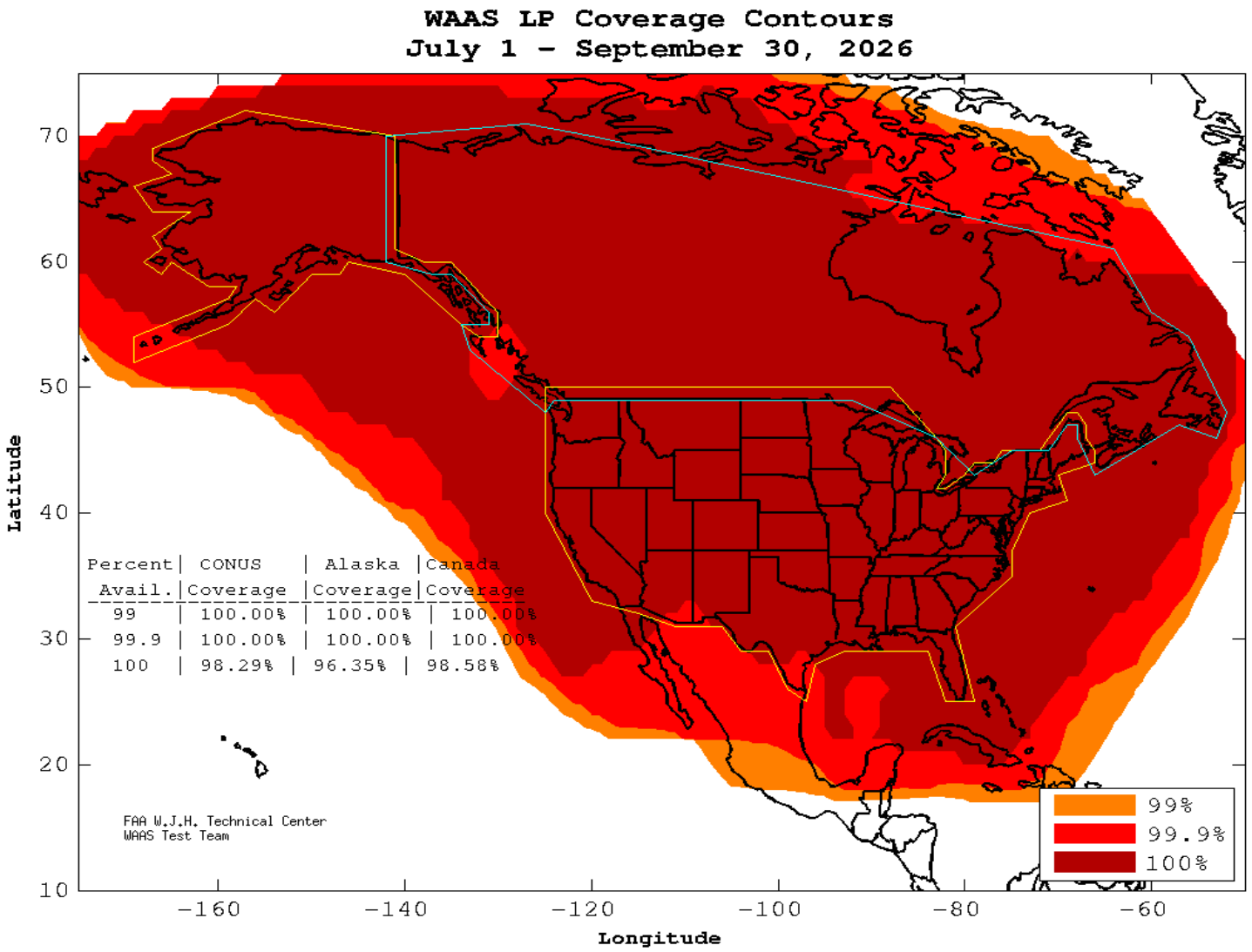


Figure 4-1 LP North America Coverage for the Quarter

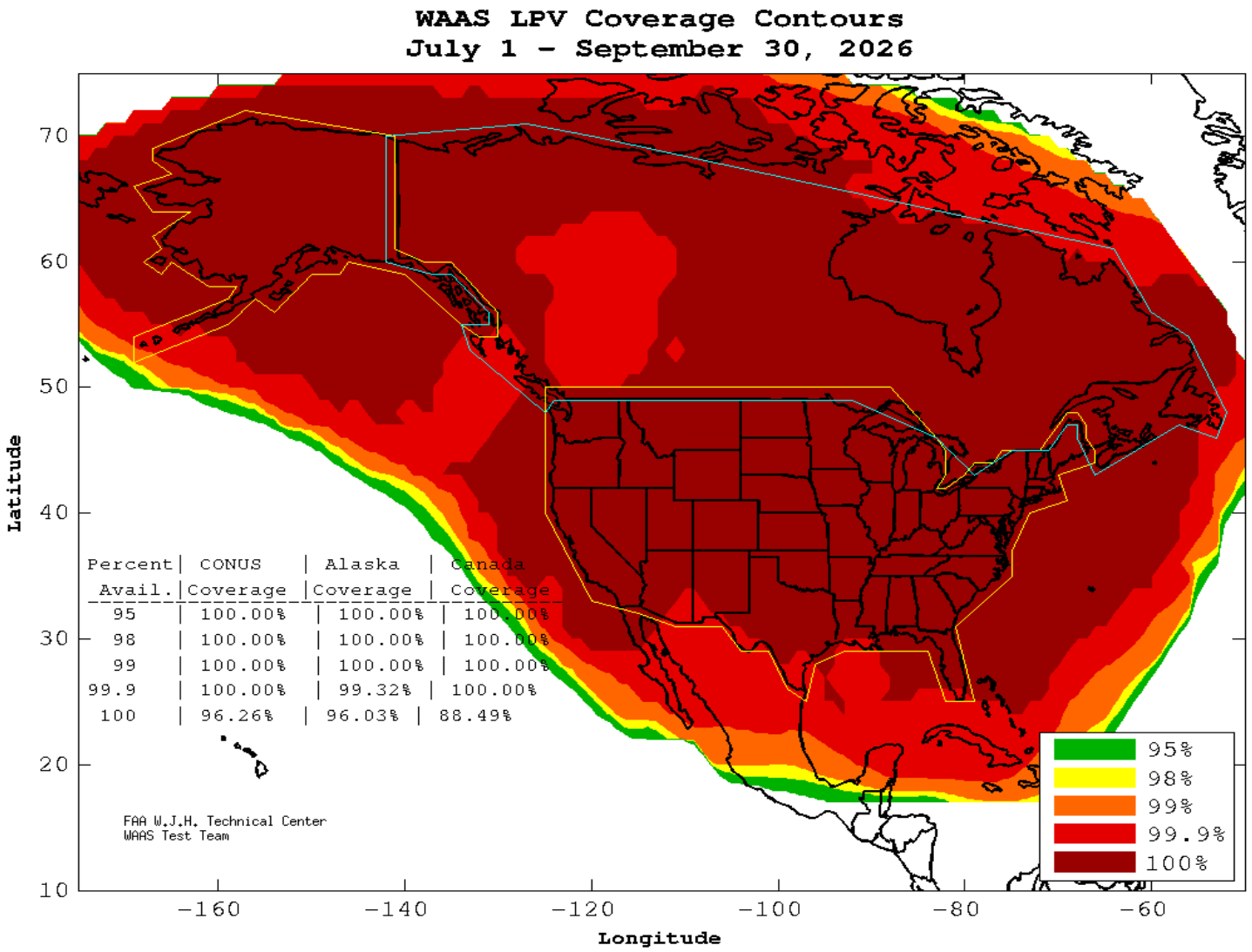


Figure 4-2 LPV North America Coverage for the Quarter

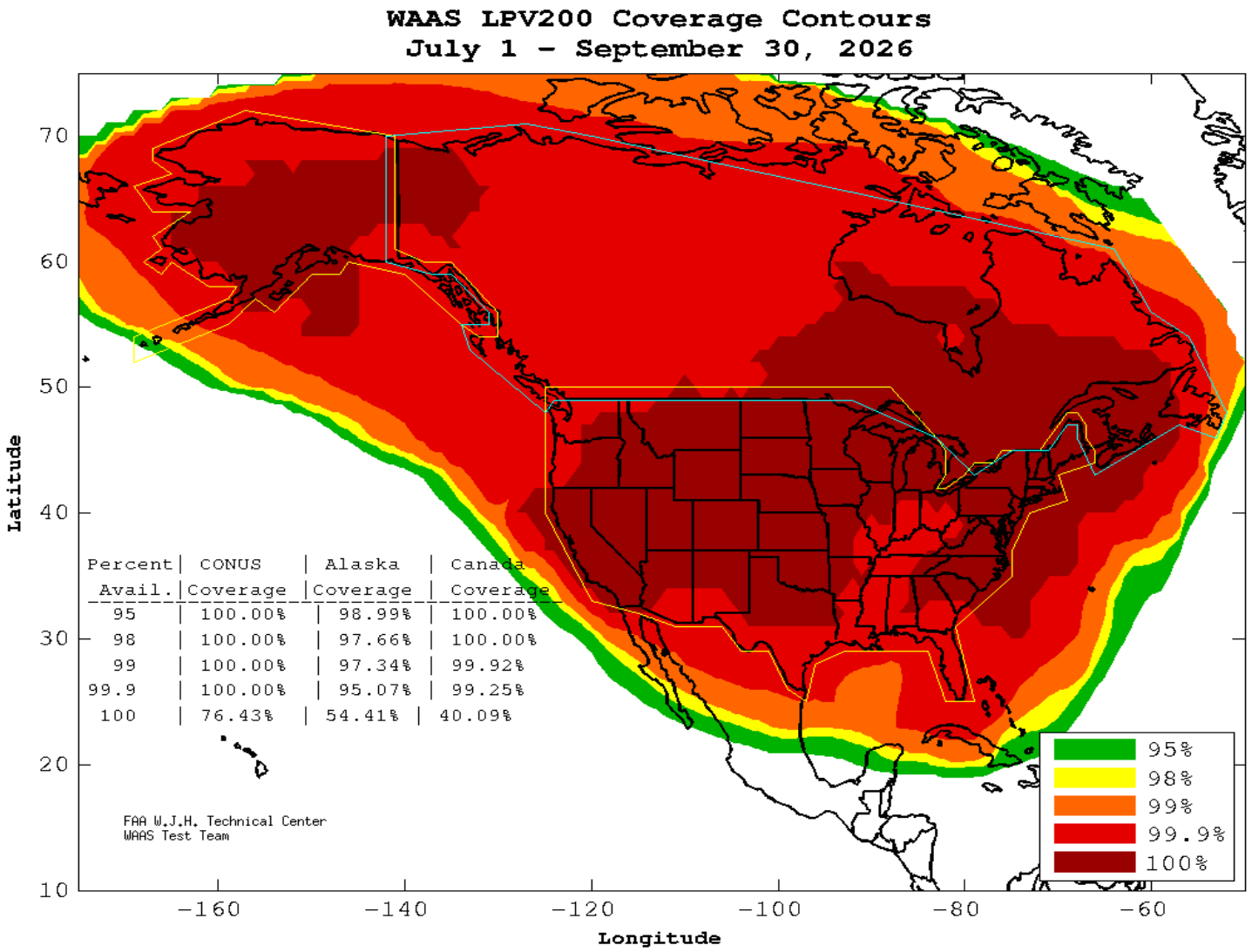


Figure 4-3 LPV200 North America Coverage for the Quarter

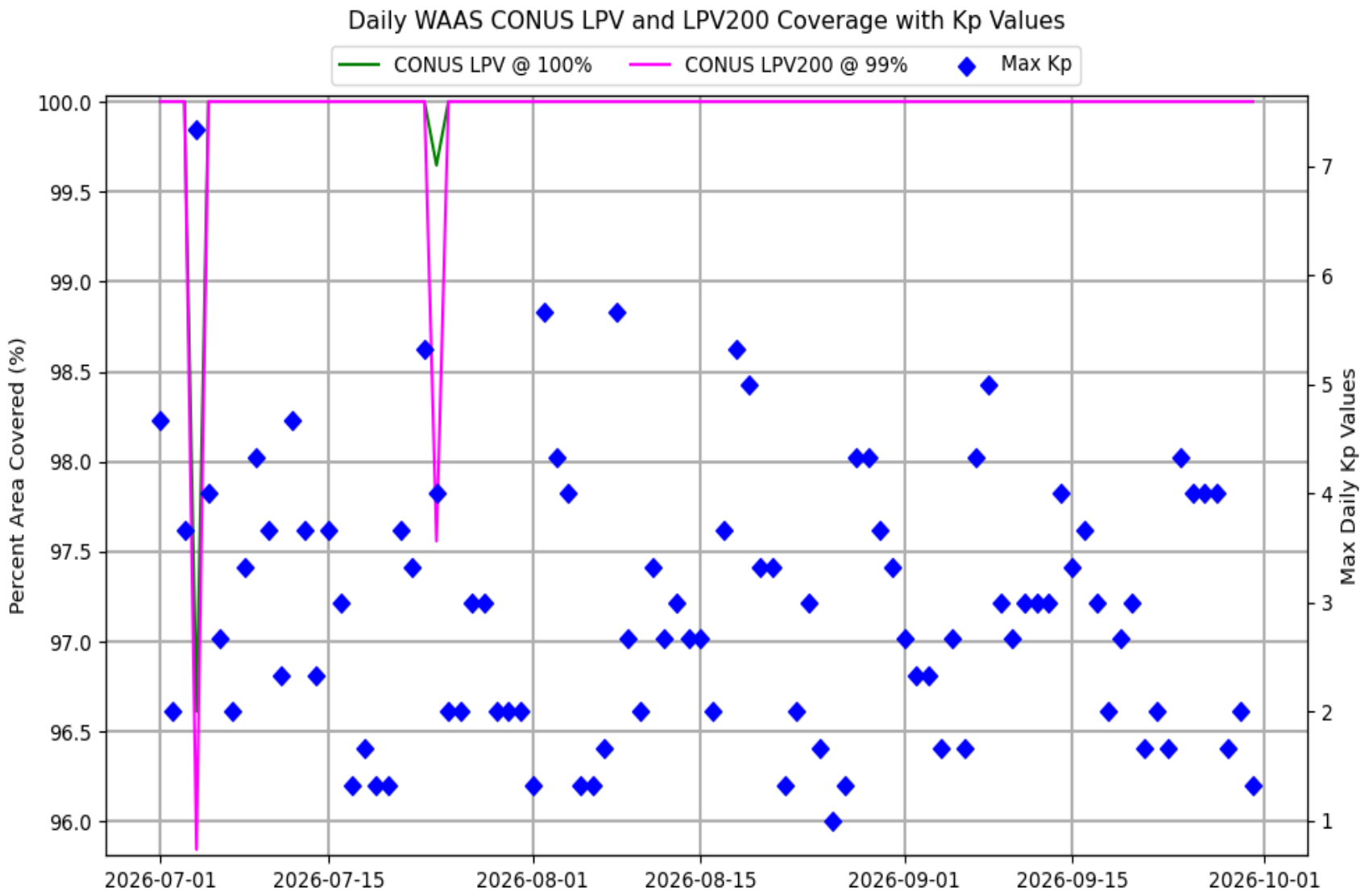


Figure 4-4 Daily LPV and LPV200 CONUS Coverage

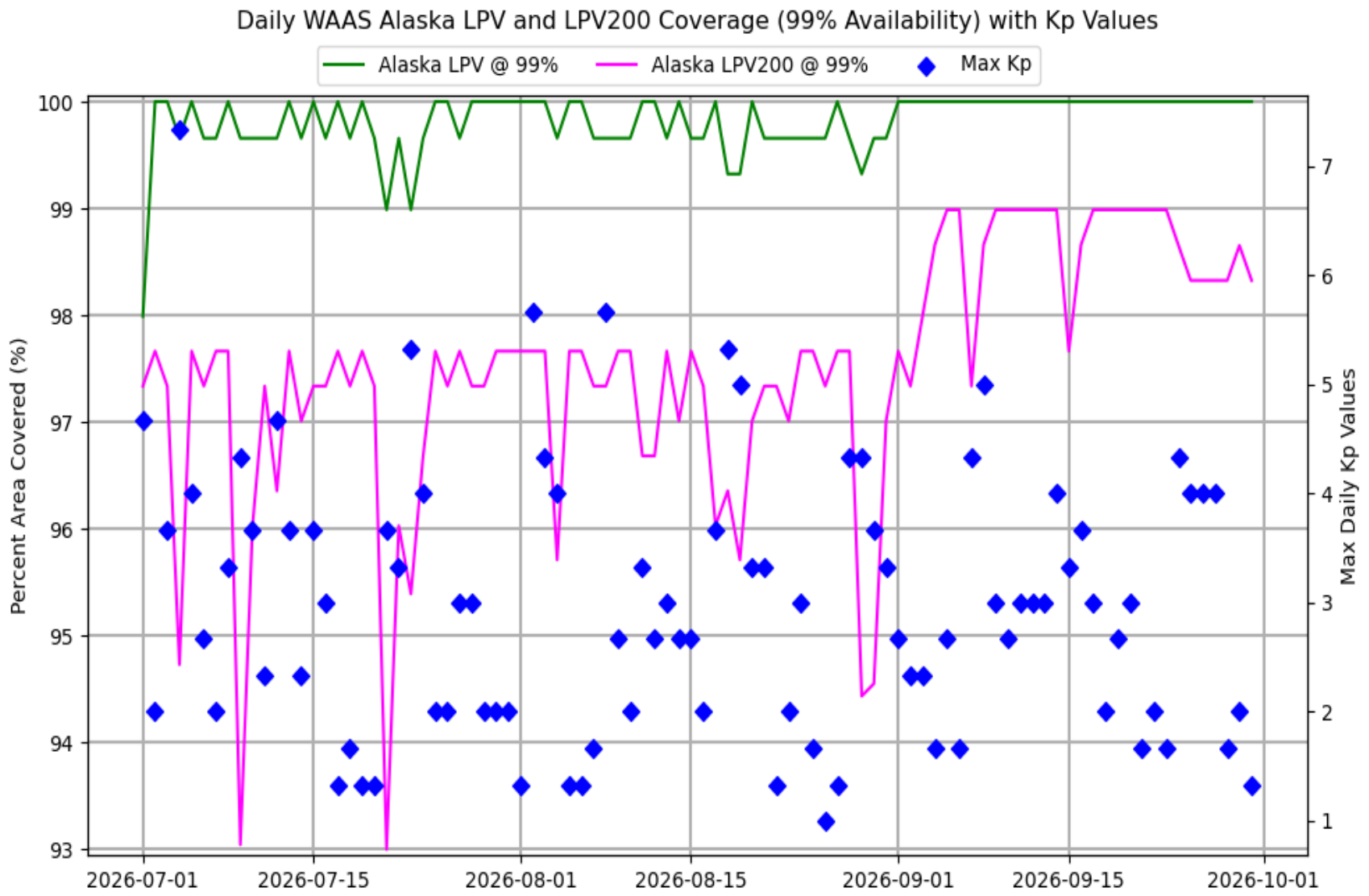


Figure 4-5 Daily LPV and LPV200 Alaska Coverage

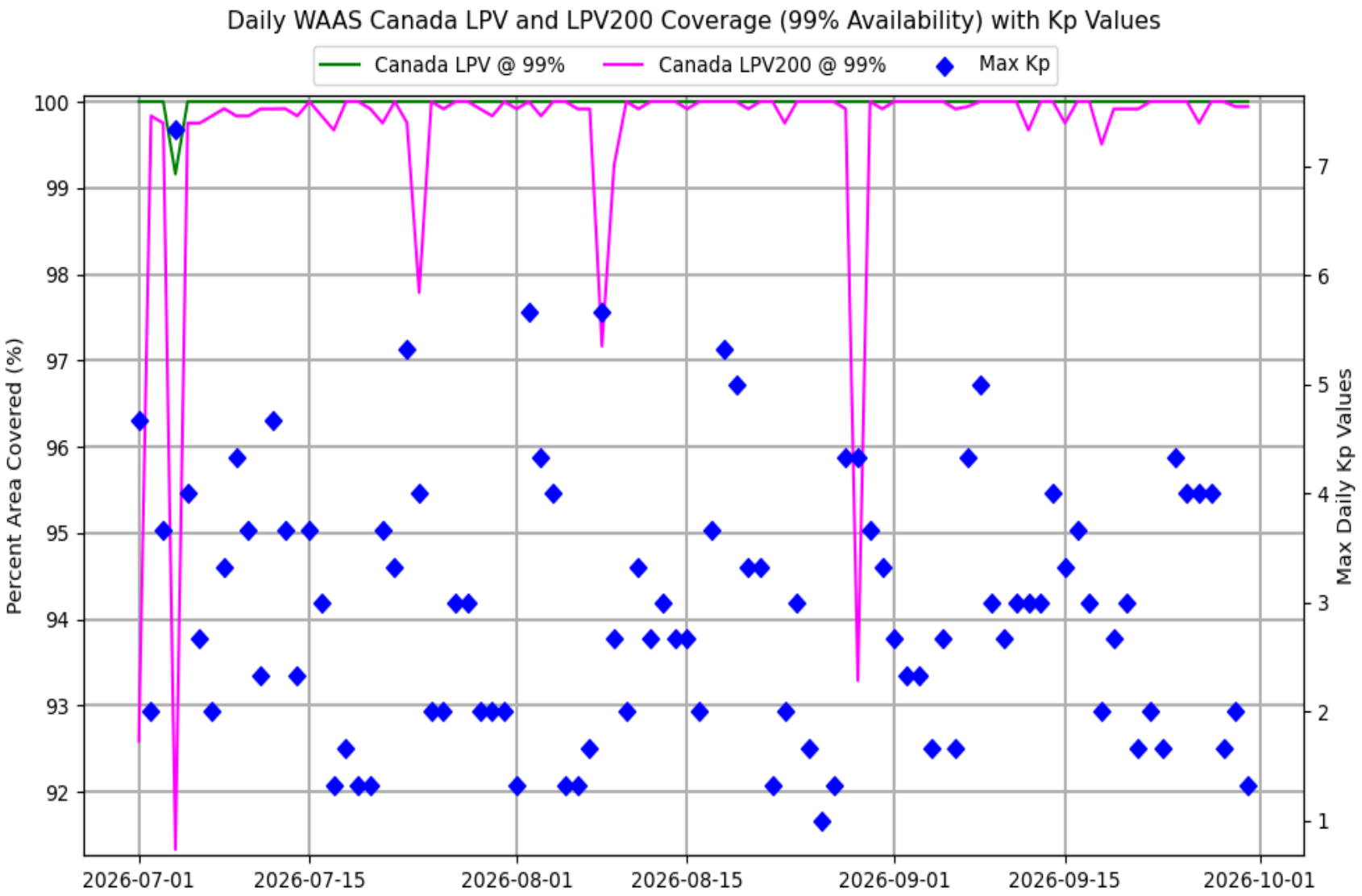


Figure 4-6 Daily LPV and LPV200 Canada Coverage

Daily analysis for NPA was conducted for the Required Navigation Performance (RNP) 0.1 and RNP 0.3 service levels based on a 100% availability requirement. The NPA coverage plots provide 100%, 99.9%, and 99% availability contours. Figure 4-7 shows the rollup RNP 0.1 coverage and Figure 4-8 shows the rollup RNP 0.3 coverage for the quarter. Figure 4-9 shows the daily RNP coverage at 100% availability and ionosphere Kp index values for this quarter.

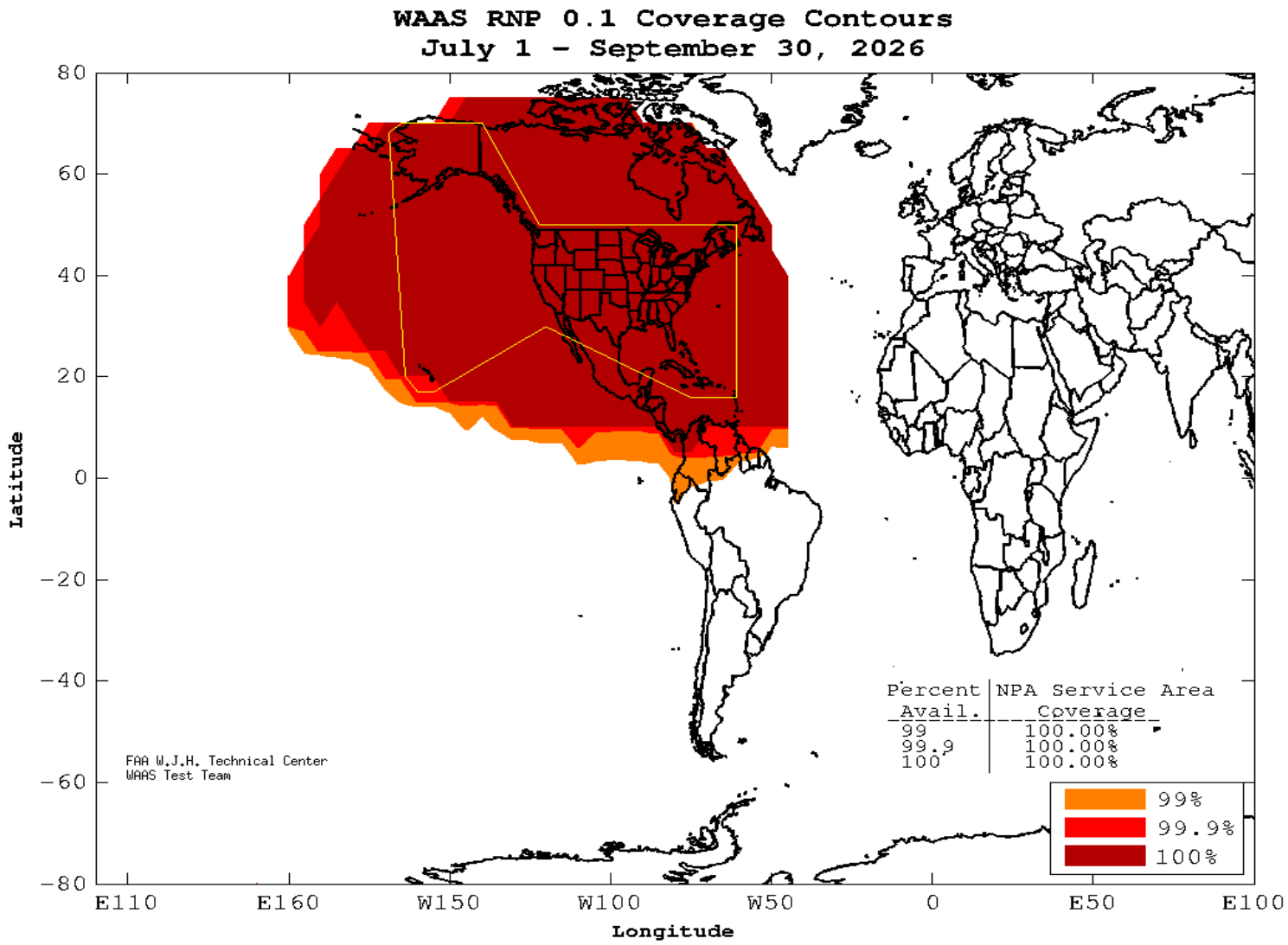


Figure 4-7 RNP 0.1 Coverage for the Quarter

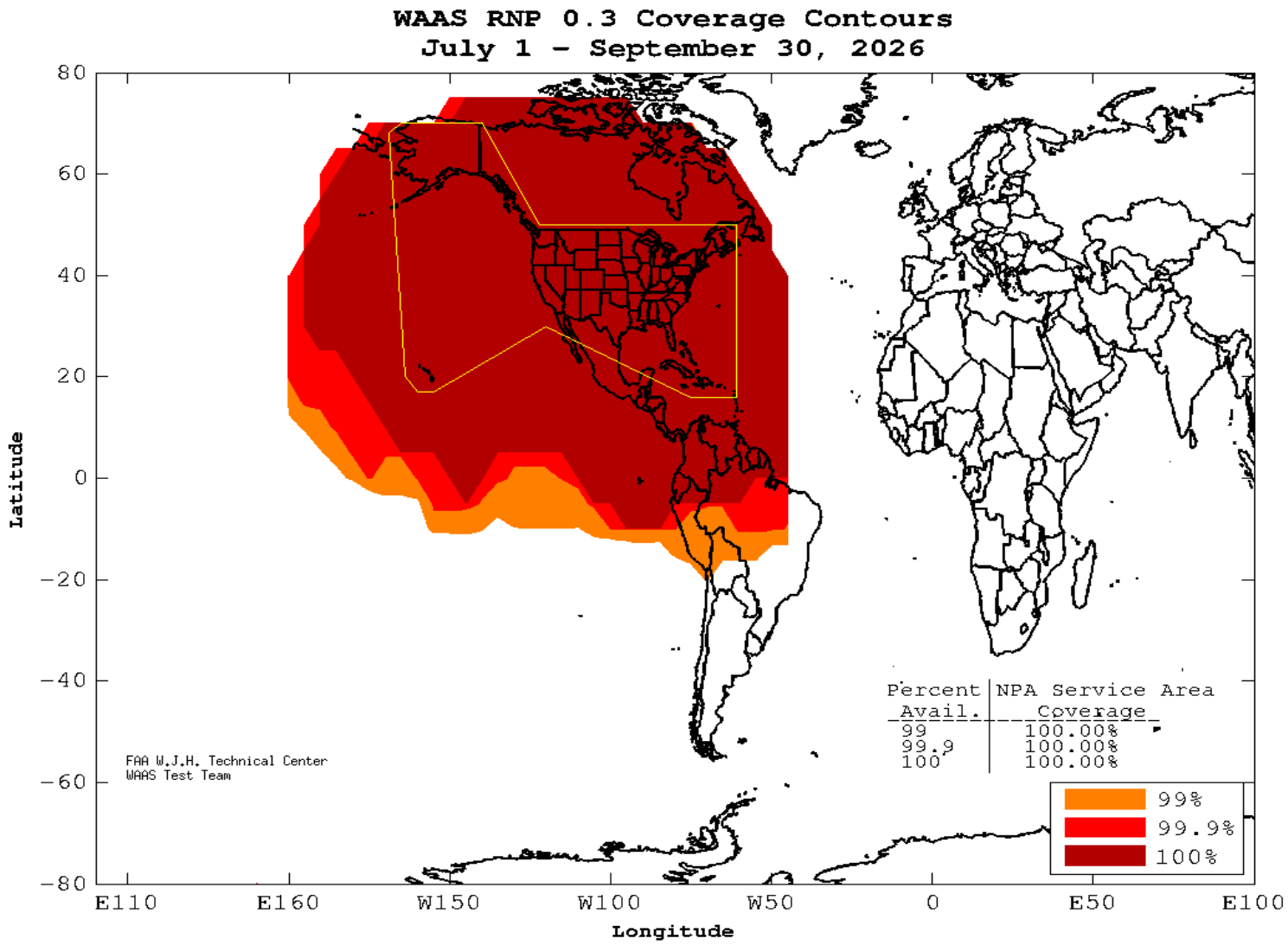


Figure 4-8 RNP 0.3 Coverage for the Quarter

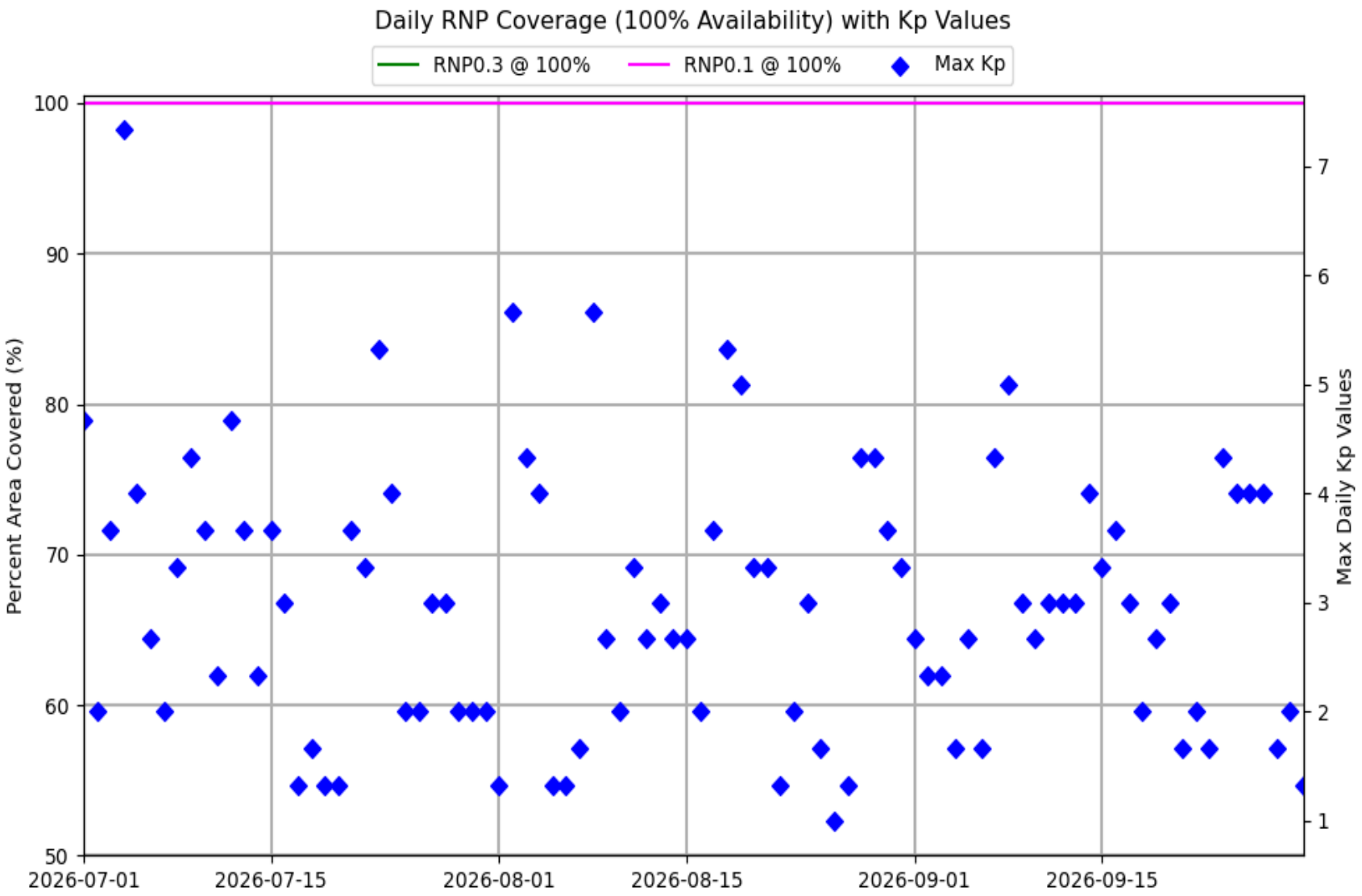


Figure 4-9 Daily RNP Coverage

5.0 INTEGRITY

5.1 HMI Analysis

Integrity analysis includes the identification and evaluation of HMI as well as the generation of the safety index to illustrate the safety margin provided by WAAS protection levels. The safety index is a metric that shows how well the protection levels are bounding the maximum observed error when LPV service is available. The horizontal and vertical safety margin index is the ratio of HPL/HPE and VPL/VPE, respectively, at the time the maximum position error occurred. Section 2.0 provides a detailed description of the methodology for computing HPL, VPL, and position errors.

A computed safety margin index of greater than one indicates safe bounding of the greatest observed error, less than one indicates that the maximum error was not bounded, and a result equal to one means that the maximum position error was equal to the protection level. An HMI event occurs if the position error exceeds the protection level in the vertical or horizontal dimensions at any time and coupled with the passage of 6.2 seconds before this event is corrected by WAAS.

Table 5-1 lists the safety margin index and the number of HMI events. For this reporting period, the lowest safety margin index is 2.968 at Puerto Vallarta and there were no HMI events. There has not been an HMI event since WAAS was made available to the public in August 2000. In July 2003, WAAS was commissioned by the FAA for safety of life services.

Table 5-1 Minimum Safety Margin Index and HMI Statistics

Location	Horizontal Safety Index (m)	Vertical Safety Index (m)	Number of HMIs
NSTB:			
Arcata	5.85	10.21	0
Atlantic City	5.91	5.10	0
Bangor	7.19	6.28	0
Elko	6.62	9.67	0
Grand Forks	5.66	6.80	0
Oklahoma City	7.49	5.99	0
WAAS:			
Albuquerque	7.13	7.69	0
Anchorage	3.30	5.00	0
Atlanta	6.62	4.52	0
Barrow	6.01	4.26	0
Bethel	4.66	9.10	0
Billings	8.04	4.65	0
Boston	9.23	8.72	0
Chicago	5.95	7.02	0
Cleveland	4.81	6.69	0
Cold Bay	7.94	7.51	0
Dallas	7.17	5.75	0
Denver	4.74	8.16	0
Fairbanks	5.68	5.52	0

Location	Horizontal Safety Index (m)	Vertical Safety Index (m)	Number of HMIs
Gander	10.67	10.02	0
Goose Bay	5.82	6.82	0
Houston	7.02	8.95	0
Iqaluit	5.90	4.04	0
Jacksonville	5.60	4.79	0
Juneau	4.37	6.53	0
Kansas City	4.52	9.50	0
Kotzebue	4.81	3.74	0
Los Angeles	5.65	7.44	0
Memphis	6.03	6.83	0
Merida	6.16	7.07	0
Mexico City	3.08	7.61	0
Miami	4.49	8.29	0
Minneapolis	8.82	7.02	0
New York	5.33	6.89	0
Oakland	5.19	10.73	0
Puerto Vallarta	2.97	4.38	0
Salt Lake City	9.41	13.10	0
San Jose Del Cabo	6.17	8.30	0
Seattle	10.41	5.40	0
Washington, DC	3.55	11.21	0
Winnipeg	9.40	8.06	0

5.2 Broadcast Alerts

The WAAS transmits alert messages for user protection when the active WAAS corrections are no longer bound by the UDREs. Alerts increase the UDRE for one or more PRNs, which can reduce the weighting of the satellite or exclude the satellite from the navigation solution. An increase in UDREs after an alert effectively increases the user protection levels (HPL and VPL), which affects the availability. Additionally, if an alert message sequence lasts for more than 12 seconds, the WAAS fast corrections can time out and cause a loss of continuity. Table 5-2 shows the total number of alerts and the average number of alerts per day.

Table 5-2 WAAS SV Alert

	Number of Alerts			Average Alerts Per Day		
Message Type	**SM9**	**S15**	**G30**	**SM9**	**S15**	**G30**
T2	12	12	12	0.1304	0.1304	0.1304
T3	25	25	25	0.2717	0.2717	0.2717
T4	11	11	11	0.1196	0.1196	0.1196
T5	0	0	0	0	0	0
T6	0	0	0	0	0	0
T24	0	0	0	0	0	0
T26	0	0	0	0	0	0
Total SV Alerts:	48	48	48	0.5217	0.5217	0.5217
Days in Service:	92	92	92			

Figure 5-1 provides the daily SV alerts. The number of alerts on one GEO is often the same as the number of alerts on the other GEO; therefore, lines tend to overlap in most points on this plot.

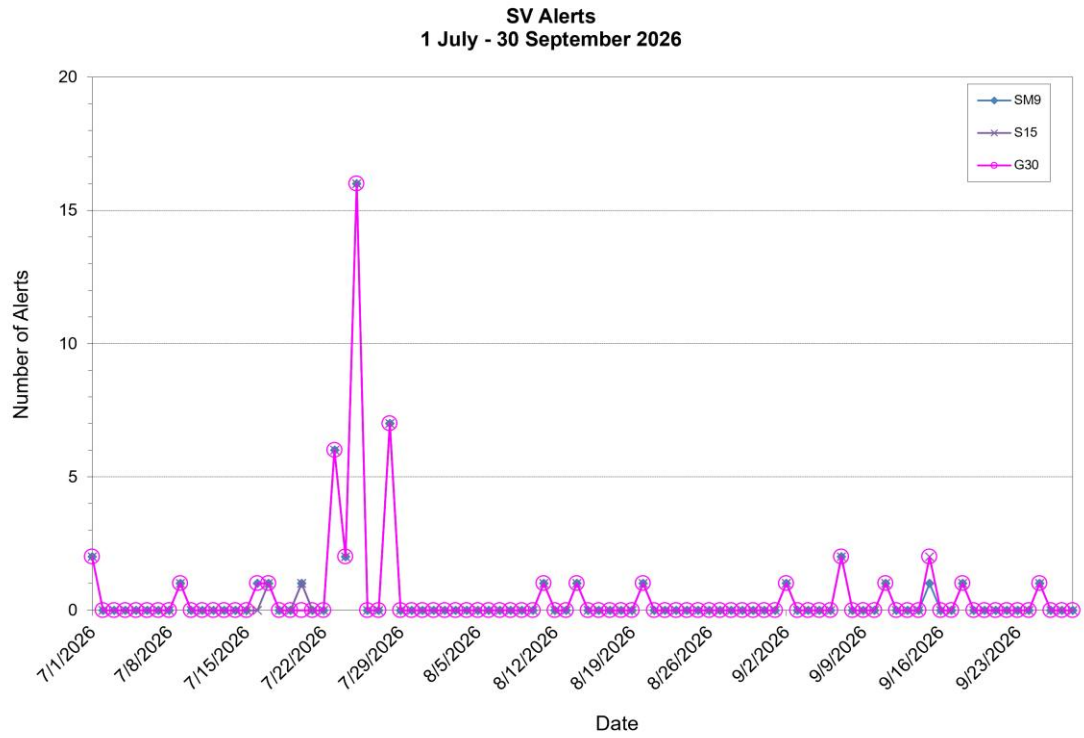


Figure 5-1 SV Daily Alert Trend

5.3 Availability of WAAS Messages (SM9, S15, and G30)

Accurate and current calculations of user position are dependent on the broadcast and receipt of the WAAS message within precise time specifications. This aspect of the WAAS is critical to maintaining continuity requirements. Each message type in the WAAS SIS has a specific timeout interval and expected worst-case broadcast interval. Table 5-3 lists the maximum intervals at which each message must broadcast to meet system requirements.

Table 5-3 Update Rates for WAAS Messages

Data	Associated Message Types	Maximum Update Interval (seconds)	En Route, Terminal, NPA Timeout (seconds)	Precision Approach Timeout (seconds)
WAAS in Test Mode	0	6	N/A	N/A
PRN Mask	1	60	None	None
UDREI	2-6, 24	6	18	12
Fast Corrections	2-5, 24	See Table C-1	See Table C-1	See Table C-1
Long Term Corrections	24, 25	120	360	240
GEO Nav. Data	9	120	360	240
Fast Correction Degradation	7	120	360	240
Weighting Factors	8	120	240	240
Degradation Parameters	10	120	360	240
Ionospheric Grid Mask	18	300	None	None
Ionospheric Corrections	26	300	600	600
UTC Timing Data	12	300	None	None
Almanac Data	17	300	None	None

GUS switchovers and broadcast WAAS alerts can interrupt the normal broadcast message stream. If these events occur when the maximum interval of a specific message is approaching, that message may be delayed, resulting in its late transmittal.

For this quarter, statistics reported for late messages were mainly caused by GEO SIS outages, GUS switchovers, and SV alerts, excluding message type 7 and 10. Furthermore, the delay of message types 7 and 10 had little or no impact on user performance and safety, and they were not caused by GEO SIS outages, GUS switchovers, or SV alerts. Table 5-4 through Table 5-8 show statistics for fast correction, long correction, ephemeris covariance, ionosphere correction, and ionospheric mask message rates broadcasted on SM9 GEO. Table 5-9 through Table 5-13 show statistics for message rates broadcasted on S15 GEO. Table 5-14 through Table 5-18 show statistics for message rates broadcasted on G30 GEO.

The high Max Late Length reported by S15 GEO for S15 GEO Type 28 messages occurred after PRN133 switched from Brewster (faulted) to South Mountain on July 16, 2026, causing an 18-second message outage. There was no high Max Late Length reported by SM9 and G30 GE for GEO Type 28 messages for the quarter.

Table 5-4 WAAS Fast Correction and Degradation Message Rates–SM9

Message Type	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	108760	2	126
2	1324874	36	22
3	1324918	29	18
4	1324873	34	20
7	100868	7	146
9	93299	2	178

Message Type	On Time (number received)	Late (number received)	Max Late Length (seconds)
10	100912	7	165
17	31929	1	322

Table 5-5 WAAS Long Correction Message Rates (Type 24 and 25)–SM9

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	49885	0	0
2	50244	0	0
3	47450	0	0
4	47688	0	0
5	47209	0	0
6	48075	0	0
7	47699	0	0
8	48372	0	0
9	47452	0	0
10	47592	0	0
11	47764	0	0
12	47215	0	0
13	14644	0	0
14	46660	0	0
15	46975	0	0
16	47483	0	0
17	47850	0	0
18	47113	0	0
19	46552	0	0
20	49116	0	0
21	47218	0	0
22	47416	0	0
23	46622	0	0
24	49001	0	0
25	49021	0	0
26	47985	0	0
27	49131	0	0
28	48010	0	0
29	47408	0	0
30	47402	0	0
31	47515	0	0
32	46659	0	0

Table 5-6 WAAS Ephemeris Covariance Message Rates (Type 28)–SM9

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	41035	0	0
2	41293	0	0
3	38899	1	169
4	39001	2	159
5	38734	0	0
6	39344	1	145
7	39043	1	157
8	39672	1	208
9	38799	1	169
10	39175	0	0
11	39106	0	0
12	38881	0	0
13	12077	0	0
14	38416	0	0
15	38707	0	0
16	38863	0	0
17	39316	0	0
18	38701	1	208
19	38266	1	177
20	40458	0	0
21	40053	0	0
22	39084	0	0
23	38419	0	0
24	40403	1	177
25	40302	0	0
26	39254	0	0
27	40321	1	208
28	39356	2	208
29	38846	1	145
30	38911	1	143
31	38868	0	0
32	38350	0	0
131	76231	0	0
133	76316	0	0
135	76335	1	157

Table 5-7 WAAS Ionospheric Correction Message Rates (Type 26)–SM9

Band	Block	On Time (number received)	Late (number received)	Max Late Length (seconds)
0	0	27672	9	410
0	1	27678	4	580
0	2	27678	4	404
1	0	27677	4	404
1	1	27675	6	399
1	2	27676	4	381
1	3	27679	7	381
1	4	27682	4	386
2	0	27680	5	382
2	1	27674	7	381
2	2	27670	9	368
2	3	27675	4	576
2	4	27680	3	352
3	0	27677	5	369
3	1	27677	4	328
3	2	27677	8	331
9	0	27675	9	320
9	1	27678	4	310
9	2	27679	5	325
9	3	27675	5	576
9	4	27677	5	315
9	5	27674	8	385
9	6	27672	9	369

Table 5-8 WAAS Ionospheric Mask Message Rates (Type 18)–SM9

Band	On Time (number received)	Late (number received)	Max Late Length (seconds)
0	36361	0	0
1	36353	1	479
2	36375	0	0
3	36386	1	308
9	36324	2	421

Table 5-9 WAAS Fast Correction and Degradation Message Rates–S15

Message Type	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	102410	4	180
2	1324879	34	25

Message Type	On Time (number received)	Late (number received)	Max Late Length (seconds)
3	1324925	24	22
4	1324876	32	22
7	95327	18	156
9	93302	2	178
10	95440	16	138
17	31367	1	431

Table 5-10 WAAS Long Correction Message Rates (Type 24 and 25)–S15

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	49892	0	0
2	50248	0	0
3	47451	0	0
4	47686	0	0
5	47211	0	0
6	48072	0	0
7	47691	0	0
8	48364	0	0
9	47445	0	0
10	47576	0	0
11	47760	0	0
12	47217	0	0
13	14645	0	0
14	46658	0	0
15	46970	0	0
16	47481	0	0
17	47855	0	0
18	47106	0	0
19	46548	0	0
20	49117	0	0
21	47223	0	0
22	47410	0	0
23	46633	0	0
24	49000	0	0
25	49021	0	0
26	47977	0	0
27	49123	0	0
28	48007	0	0
29	47404	0	0
30	47413	0	0

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
31	47523	0	0
32	46662	0	0

Table 5-11 WAAS Ephemeris Covariance Message Rates (Type 28)–S15

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	41018	7	197
2	41295	3	150
3	38898	0	0
4	38982	0	0
5	38738	0	0
6	39372	1	209
7	39054	2	209
8	39678	2	209
9	38819	0	0
10	39154	1	208
11	39113	0	0
12	38882	0	0
13	12074	0	0
14	38420	0	0
15	38702	0	0
16	38837	0	0
17	39314	0	0
18	38702	1	161
19	38249	0	0
20	40440	1	154
21	40061	0	0
22	39090	1	328
23	38423	0	0
24	40409	1	156
25	40305	0	0
26	39270	0	0
27	40330	0	0
28	39347	1	194
29	38839	0	0
30	38948	1	125
31	38852	1	174
32	38336	0	0
131	76172	0	0

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
133	76337	1	5464
135	76341	1	184

Table 5-12 WAAS Ionospheric Correction Message Rates (Type 26)–S15

Band	Block	On Time (number received)	Late (number received)	Max Late Length (seconds)
0	0	27685	3	305
0	1	27682	2	302
0	2	27682	2	302
1	0	27683	3	576
1	1	27682	5	388
1	2	27675	6	576
1	3	27678	4	405
1	4	27681	3	477
2	0	27681	5	478
2	1	27681	4	478
2	2	27678	5	483
2	3	27673	8	454
2	4	27680	4	471
3	0	27679	5	465
3	1	27683	3	466
3	2	27678	5	471
9	0	27678	4	478
9	1	27673	8	399
9	2	27680	5	388
9	3	27682	2	395
9	4	27679	3	370
9	5	27683	3	306
9	6	27683	2	301

Table 5-13 WAAS Ionospheric Mask Message Rates (Type 18)–S15

Band	On Time (number received)	Late (number received)	Max Late Length (seconds)
0	35509	1	438
1	35518	1	420
2	35518	1	334
3	35510	0	0
9	35534	0	0

Table 5-14 WAAS Fast Correction and Degradation Message Rates–G30

Message Type	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	101135	0	0
2	1324882	33	12
3	1324924	26	12
4	1324884	30	12
7	94401	12	137
9	93297	2	178
10	94475	11	132
17	31261	2	528

Table 5-15 WAAS Long Correction Message Rates (Type 24 and 25)–G30

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	49888	0	0
2	50251	0	0
3	47445	0	0
4	47685	0	0
5	47218	0	0
6	48079	0	0
7	47692	0	0
8	48369	0	0
9	47443	0	0
10	47584	0	0
11	47763	0	0
12	47216	0	0
13	14643	0	0
14	46657	0	0
15	46983	0	0
16	47477	0	0
17	47856	0	0
18	47114	0	0
19	46549	0	0
20	49121	0	0
21	47224	0	0
22	47423	0	0
23	46625	0	0
24	48999	0	0
25	49020	0	0
26	47980	0	0

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
27	49133	0	0
28	48004	0	0
29	47405	0	0
30	47405	0	0
31	47509	0	0
32	46652	0	0

Table 5-16 WAAS Ephemeris Covariance Message Rates (Type 28)–G30

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
1	41030	5	200
2	41301	1	145
3	38902	1	150
4	38989	3	209
5	38745	0	0
6	39371	1	133
7	39050	1	157
8	39675	0	0
9	38797	1	121
10	39163	0	0
11	39125	1	145
12	38885	0	0
13	12076	0	0
14	38418	2	208
15	38693	0	0
16	38845	0	0
17	39314	0	0
18	38688	0	0
19	38265	0	0
20	40426	1	160
21	40089	0	0
22	39083	0	0
23	38418	0	0
24	40402	3	245
25	40280	0	0
26	39249	0	0
27	40349	2	184
28	39351	1	150
29	38852	1	133
30	38923	1	208

PRN	On Time (number received)	Late (number received)	Max Late Length (seconds)
31	38859	0	0
32	38328	0	0
131	76277	3	209
133	76266	0	0
135	76308	0	0

Table 5-17 WAAS Ionospheric Correction Message Rates (Type 26)–G30

Band	Block	On Time (number received)	Late (number received)	Max Late Length (seconds)
0	0	27684	4	306
0	1	27681	5	304
0	2	27684	3	306
1	0	27684	1	302
1	1	27682	2	576
1	2	27682	2	301
1	3	27684	1	301
1	4	27686	1	306
2	0	27680	5	581
2	1	27682	2	576
2	2	27681	3	303
2	3	27681	7	306
2	4	27687	1	301
3	0	27677	7	304
3	1	27682	3	306
3	2	27679	5	305
9	0	27681	4	302
9	1	27689	2	305
9	2	27684	1	301
9	3	27685	2	301
9	4	27682	5	306
9	5	27686	1	307
9	6	27685	3	303

Table 5-18 WAAS Ionospheric Mask Message Rates (Type 18)–G30

Band	On Time (number received)	Late (number received)	Max Late Length (seconds)
0	35379	1	480
1	35365	0	0
2	35400	0	0
3	35367	1	480
9	35399	0	0

5.4 Satellite Glitches

The GPS satellites will occasionally experience periods of signal carrier stability glitches of varying magnitude. These glitches are short degradations in the signal, which in severe cases may cause WAAS to lose track or cycle slip for some or all the WAAS receivers. The more severe glitches will cause the WAAS-reported UDRE to increase to "Not Monitor" and result in an alert.

Figure 5-2 shows the SV glitch trend for this quarter. Severity 0, displayed by blue dots, indicates fewer than 10 receivers lost track of the satellite. Severity 1, displayed by green dots, indicates a significant number of receivers (but not all receivers) lost track of the satellite. Severity 2, displayed by yellow dots, indicates only Signal Quality Monitoring (SQM) was affected, and all receivers lost track. Severity 3, displayed by red dots, indicates more than just SQM was affected, and all receivers lost track.

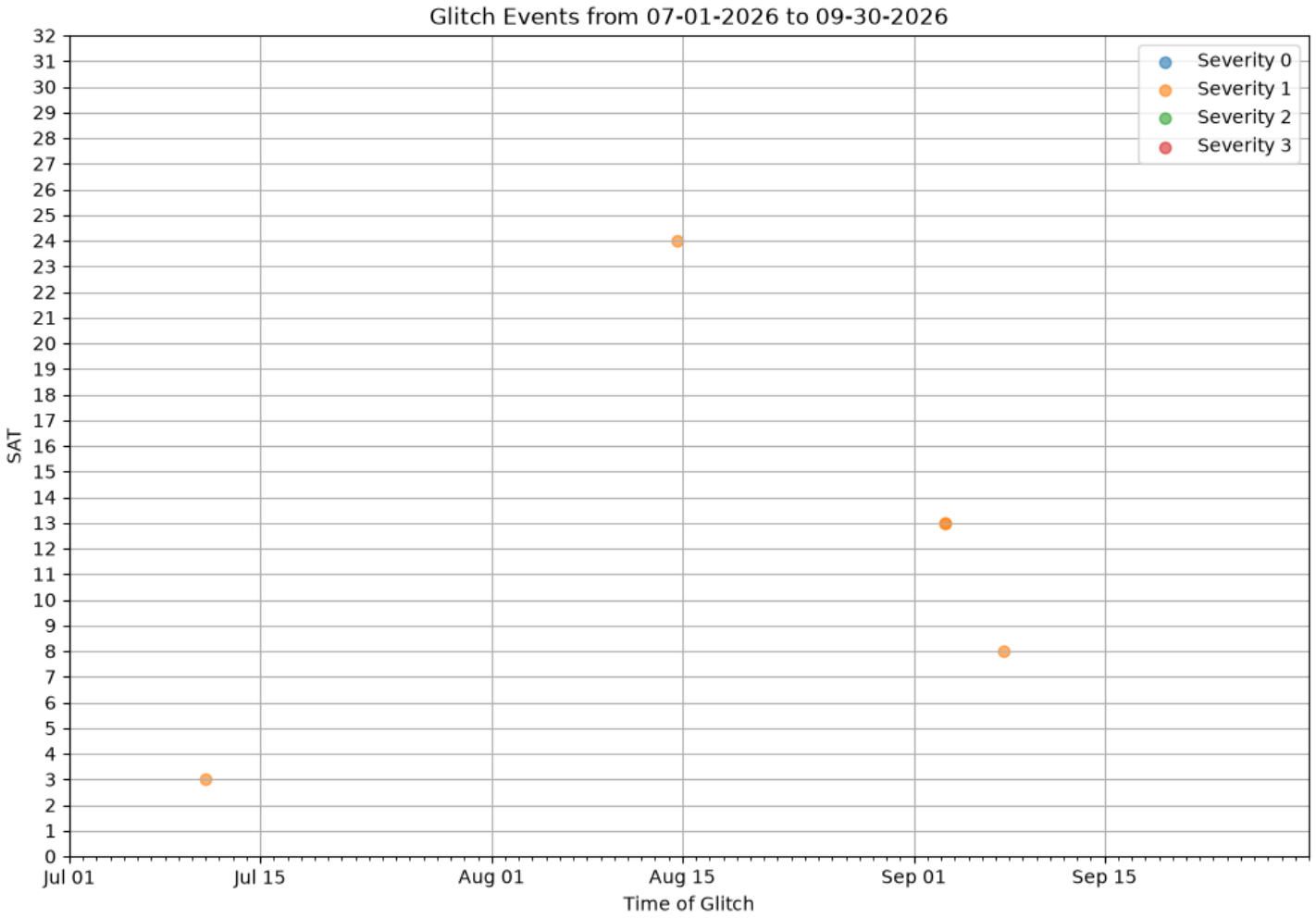


Figure 5-2 SV Glitch Trend

6.0 SV RANGE ACCURACY

WAAS transmits UDRE and GIVE values to support protection levels such that the position error is bounded 99.9999%. The position domain analysis in this report provides the information regarding how well the transmitted WAAS UDRE and GIVE values bound the position errors. A UDRE is broadcasted by the WAAS for each monitored satellite, and the 95% error bound and the maximum normalized value (divided by sigma_UDRE) of the pseudorange residual error after application of fast and long-term corrections is checked. The pseudorange residual error is determined by taking the difference between the raw pseudorange and a calculated reference range. The reference range is equal to the true range between the corrected satellite position and surveyed user antenna plus all corrections (i.e., WAAS fast clock, WAAS long-term clock, WAAS ionospheric delay, tropospheric delay, receiver clock bias, and multipath). Because the true ionospheric delay and multipath error are not precisely known, the estimated variance in these error sources are added to the UDRE before comparing it to the normalized residual error.

The GPS satellite range residual errors were calculated for 12 WAAS receivers during the quarter. Table 6-1 and Table 6-2 show the range error 95% index, maximum range error, and maximum normalized value (divided by sigma_UDRE) at the time of the maximum range error. Figure 6-1 through Figure 6-3 show the 95% range error for each SV measured by the WAAS receivers at the Washington, DC reference station.

Table 6-1 Range Error 95% Index and 3.29 Sigma Bounding

Site	Minneapolis			Chicago			Boston			Juneau			Honolulu			Salt Lake City		
PRN ↓	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma
1	1.120	4.092	1.180	1.038	2.411	0.712	1.126	4.320	1.224	1.168	2.898	1.226	1.197	4.006	1.413	1.307	4.217	1.085
2	1.336	4.622	1.388	0.956	3.055	0.907	1.282	2.746	0.749	1.065	3.283	1.016	1.305	3.657	1.499	1.031	3.404	0.849
3	1.131	3.158	0.968	1.409	6.618	1.688	1.905	4.455	1.157	1.141	2.588	0.798	1.310	3.619	0.955	1.529	3.753	1.230
4	1.023	3.529	2.402	1.130	3.594	1.186	1.292	3.490	1.121	1.115	2.638	0.806	1.180	2.309	1.345	1.305	3.427	0.994
5	1.295	2.273	1.293	1.342	3.187	1.070	1.468	3.325	0.917	1.837	4.072	2.374	1.952	4.258	1.451	1.241	2.694	0.803
6	1.254	2.427	0.962	1.003	3.135	0.999	1.331	2.392	1.567	1.405	2.846	0.990	1.080	2.559	0.458	1.087	2.430	0.806
7	1.227	3.467	1.116	1.067	2.516	1.491	1.222	2.713	1.306	1.380	3.421	1.398	0.914	3.463	1.274	0.984	2.615	0.832
8	1.345	3.566	2.180	1.207	2.819	0.729	1.049	2.967	0.847	1.226	2.901	0.999	1.069	2.720	0.895	1.020	2.760	0.792
9	1.148	4.098	1.312	0.999	3.533	0.926	1.033	3.056	0.575	1.374	2.805	1.360	1.524	3.112	1.019	1.063	2.168	0.684
10	0.985	2.640	0.870	0.990	2.711	0.735	1.015	2.289	1.732	1.400	3.276	1.032	0.999	2.066	0.717	1.490	3.105	0.836
11	1.277	2.176	0.713	1.048	2.246	1.047	1.176	4.037	1.102	1.438	3.493	0.889	3.083	6.722	2.354	0.980	2.105	1.360
12	1.106	2.832	1.042	1.290	4.730	1.201	1.158	2.529	0.645	1.573	3.138	1.580	1.372	5.693	1.483	1.323	2.990	0.937
13	2.385	3.319	1.833	3.642	7.689	2.477	2.668	5.313	1.752	2.960	4.046	1.369	1.784	3.982	1.254	2.413	4.099	1.274
14	1.705	3.494	1.109	1.369	2.746	1.297	1.430	2.927	1.681	1.771	3.635	1.392	1.178	2.615	0.823	1.510	2.878	1.296
15	2.321	4.197	1.694	1.223	3.016	0.922	1.698	3.417	1.089	1.731	4.145	2.595	1.107	2.404	1.233	1.136	3.480	1.028
16	1.883	4.270	1.237	0.942	2.078	0.780	1.102	2.914	0.896	1.378	2.878	1.208	1.220	2.772	1.447	1.104	2.625	0.784
17	1.038	2.253	1.185	1.048	2.844	0.789	1.137	2.424	0.777	1.245	4.657	1.384	2.217	6.310	1.924	1.043	2.374	0.769
18	1.412	2.289	1.100	1.095	2.207	0.864	1.455	2.868	0.921	1.371	3.269	0.922	1.207	2.836	1.104	1.106	2.240	0.684
19	1.144	2.950	0.808	1.393	2.861	1.086	1.384	3.358	1.058	1.885	3.546	1.753	1.057	3.819	1.011	1.588	3.346	0.934
20	1.646	3.845	1.414	1.207	3.180	0.806	1.263	2.625	1.256	1.483	3.588	2.754	1.175	2.657	0.674	1.215	2.727	0.737
21	1.780	3.928	1.217	1.277	3.512	1.090	1.507	3.763	1.125	1.663	3.036	1.742	2.311	3.684	2.232	1.209	2.473	1.499
22	0.997	2.551	0.818	1.119	2.579	0.838	1.094	2.301	1.223	1.522	3.861	2.438	1.092	3.828	0.909	1.109	2.711	1.020
23	1.772	2.980	0.972	1.017	2.309	0.761	1.293	2.690	1.107	1.307	4.227	1.683	1.073	3.144	0.964	1.916	4.855	2.088
24	1.531	3.000	0.979	1.125	3.260	0.832	1.373	3.138	0.978	1.617	4.043	1.390	1.272	3.694	1.635	1.287	2.688	0.732
25	1.424	3.135	1.089	1.880	4.170	1.314	2.018	3.578	1.678	1.778	3.790	1.316	1.474	4.347	1.338	1.196	4.440	1.193
26	1.496	3.203	1.024	1.025	2.437	1.100	1.016	2.657	0.737	1.267	2.338	0.963	1.037	2.746	0.914	1.151	2.756	0.738
27	1.394	3.532	2.593	1.078	2.951	0.994	1.090	2.987	0.874	1.046	2.494	0.674	1.196	2.953	0.766	1.103	4.715	1.326
28	0.960	2.257	0.738	0.961	2.473	0.671	1.032	2.496	0.802	1.577	3.181	1.135	1.179	2.927	1.356	1.239	3.144	0.947
29	1.410	2.463	0.982	1.280	3.756	1.196	1.238	2.375	1.650	1.474	2.585	1.481	1.191	3.006	0.922	1.970	4.066	1.173
30	1.293	3.628	1.719	1.091	3.993	1.060	1.346	3.071	0.941	1.425	3.134	1.749	1.299	2.696	1.198	1.007	2.061	0.576
31	0.944	2.022	1.777	0.965	2.328	0.785	0.895	2.157	0.942	1.831	3.608	1.140	1.052	3.881	0.637	1.116	2.381	1.056
32	1.406	2.888	1.404	0.919	1.939	1.016	1.058	2.088	1.395	1.454	2.710	1.187	2.039	4.948	1.449	1.331	3.421	1.515
131	1.629	3.645	0.821	1.253	3.242	0.532	1.811	3.434	0.648	1.675	4.197	0.923	1.389	3.127	0.966	1.281	3.002	0.957
133	2.254	4.309	0.883	1.666	3.823	0.655	1.832	3.763	0.738	1.546	4.084	0.873	1.196	2.923	0.768	1.186	2.911	0.690
135	2.325	4.890	1.108	1.408	3.056	0.567	1.651	3.309	0.688	1.610	4.039	0.889	1.491	3.233	0.841	1.114	2.687	0.745

Table 6-2 Range Error 95% Index and 99.9% Bounding

Site	Billings			Miami			Albuquerque			Kansas City			Los Angeles			Atlanta		
PRN ↓	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma	0.95 Range Error (m)	Max Range Error (m)	Max Range Error Sigma
1	0.872	3.270	1.191	1.258	2.615	0.944	0.839	3.749	1.101	1.314	4.735	1.500	1.181	2.150	0.727	1.076	2.563	0.742
2	0.961	2.732	0.935	1.057	2.644	0.778	1.750	6.348	1.967	1.253	4.849	1.401	1.524	2.927	1.050	0.995	2.114	0.907
3	1.060	2.884	1.097	1.212	4.008	1.104	1.010	2.500	0.705	1.171	4.177	1.320	1.166	2.573	0.802	1.171	3.059	1.049
4	1.540	2.802	1.457	1.082	2.405	1.297	0.888	2.891	0.777	1.245	2.299	1.189	1.011	3.072	0.797	1.002	2.138	1.523
5	1.237	3.082	0.959	2.004	7.584	1.356	1.053	2.127	0.585	2.309	6.184	1.099	1.475	6.341	1.922	1.408	2.630	0.898
6	1.190	2.625	0.823	1.597	4.723	0.884	0.896	2.407	0.859	1.329	6.256	1.475	1.469	4.080	1.354	1.400	2.927	0.895
7	1.228	2.463	2.085	2.255	4.639	2.209	0.775	1.804	0.494	0.981	2.507	0.823	0.846	2.003	1.211	1.002	2.196	1.253
8	0.861	2.423	1.275	1.230	2.753	1.165	0.957	2.658	0.809	1.292	4.545	1.354	1.412	3.242	0.994	1.016	2.000	1.525
9	1.003	3.217	0.998	1.173	2.443	0.447	1.136	2.905	0.783	1.069	4.703	1.569	1.211	3.157	0.878	1.139	3.085	0.867
10	1.255	3.536	1.048	0.995	2.907	0.753	0.763	1.983	0.353	1.158	3.286	0.999	0.991	2.062	0.401	0.897	1.797	0.791
11	1.324	4.393	1.515	1.332	5.077	1.257	0.951	1.733	1.272	1.189	6.184	1.941	1.012	1.988	0.366	1.349	2.184	1.661
12	1.204	2.223	1.740	1.192	2.766	1.123	0.933	3.256	0.829	1.696	4.640	1.429	1.054	2.290	0.690	1.240	2.174	0.617
13	2.680	4.752	1.264	2.497	6.147	1.676	2.246	3.667	1.383	2.178	4.711	1.641	1.902	3.624	0.874	2.309	3.648	1.312
14	0.859	3.301	0.758	1.796	3.384	1.288	0.828	1.947	0.643	1.218	3.081	0.909	1.065	3.977	1.145	1.081	2.242	1.374
15	1.220	3.444	1.291	1.172	2.911	1.812	0.968	2.821	0.900	2.966	6.300	2.321	0.985	3.703	0.939	1.671	3.020	1.648
16	0.930	3.084	1.161	0.991	2.259	0.755	1.160	2.821	0.774	1.553	5.302	1.300	1.109	3.263	1.088	0.968	2.323	0.415
17	1.190	2.592	1.346	1.068	3.311	0.845	0.857	1.850	0.322	1.288	4.768	1.264	1.239	2.775	1.228	0.995	2.470	0.828
18	0.985	1.884	0.520	1.836	5.554	1.829	0.759	2.395	0.559	1.329	2.615	1.907	1.143	2.821	0.559	1.363	2.404	1.925
19	2.323	4.001	1.735	1.105	2.990	1.308	1.398	3.456	0.856	1.089	2.984	0.903	1.228	3.424	0.948	1.218	2.338	0.913
20	1.174	3.177	0.888	1.147	5.006	3.064	0.880	3.299	0.948	1.007	3.959	1.382	1.547	5.605	1.774	1.072	2.095	1.036
21	1.693	3.592	1.009	1.303	2.530	1.261	1.186	2.509	0.778	2.357	7.473	2.113	1.536	3.941	1.193	1.744	2.960	1.221
22	1.643	3.971	1.164	1.184	3.477	1.275	0.799	1.768	0.844	1.075	2.770	0.835	1.020	2.704	0.881	1.083	2.028	1.213
23	1.343	3.028	1.231	1.576	4.828	1.793	1.091	2.289	0.708	1.816	3.154	2.139	1.195	2.109	0.728	1.080	2.197	1.348
24	1.275	2.667	0.634	1.321	3.069	1.537	0.901	2.201	0.668	0.931	3.460	0.895	1.275	2.598	0.925	1.375	2.858	1.175
25	1.416	2.723	0.995	1.215	2.588	0.845	1.142	3.124	0.752	1.344	4.776	1.520	1.269	3.177	0.842	1.306	3.081	1.030
26	1.292	3.125	1.107	0.978	2.273	0.731	1.021	3.211	1.008	1.284	4.581	1.433	1.823	3.372	1.015	1.012	2.029	0.550
27	0.865	2.296	0.665	1.009	2.451	1.021	1.518	4.135	1.232	2.106	4.531	1.418	1.339	5.322	1.437	0.955	2.265	0.702
28	1.107	3.207	1.171	2.319	7.848	1.437	0.832	2.272	0.841	1.415	5.177	1.343	1.326	3.943	1.820	0.990	3.115	0.876
29	1.096	2.180	0.686	1.928	2.941	1.487	1.014	2.884	0.849	1.985	4.085	1.130	1.177	3.029	0.846	1.205	2.380	0.739
30	0.977	3.283	1.041	1.219	3.407	1.159	0.757	2.184	0.677	1.116	2.240	1.250	1.079	1.983	0.292	1.009	1.932	1.098
31	1.300	2.680	1.052	1.005	2.648	0.850	0.700	1.754	0.630	1.911	5.164	1.936	1.016	3.624	1.064	1.000	1.878	1.304
32	1.263	2.617	1.266	1.239	5.433	1.344	1.086	2.427	0.729	1.438	3.812	0.997	1.045	2.674	1.106	1.196	2.426	1.498
131	1.746	4.276	1.172	1.264	3.494	0.747	1.807	3.207	1.046	1.212	2.930	0.432	2.072	3.854	1.166	1.323	2.723	0.653
133	1.275	3.148	0.714	1.180	2.984	0.682	1.878	3.177	0.761	2.166	3.584	0.848	1.982	3.549	0.737	1.174	3.253	0.792
135	1.301	3.042	0.790	1.334	3.375	0.706	1.361	2.877	0.797	1.700	3.546	0.934	1.218	2.861	0.675	1.294	2.717	0.671

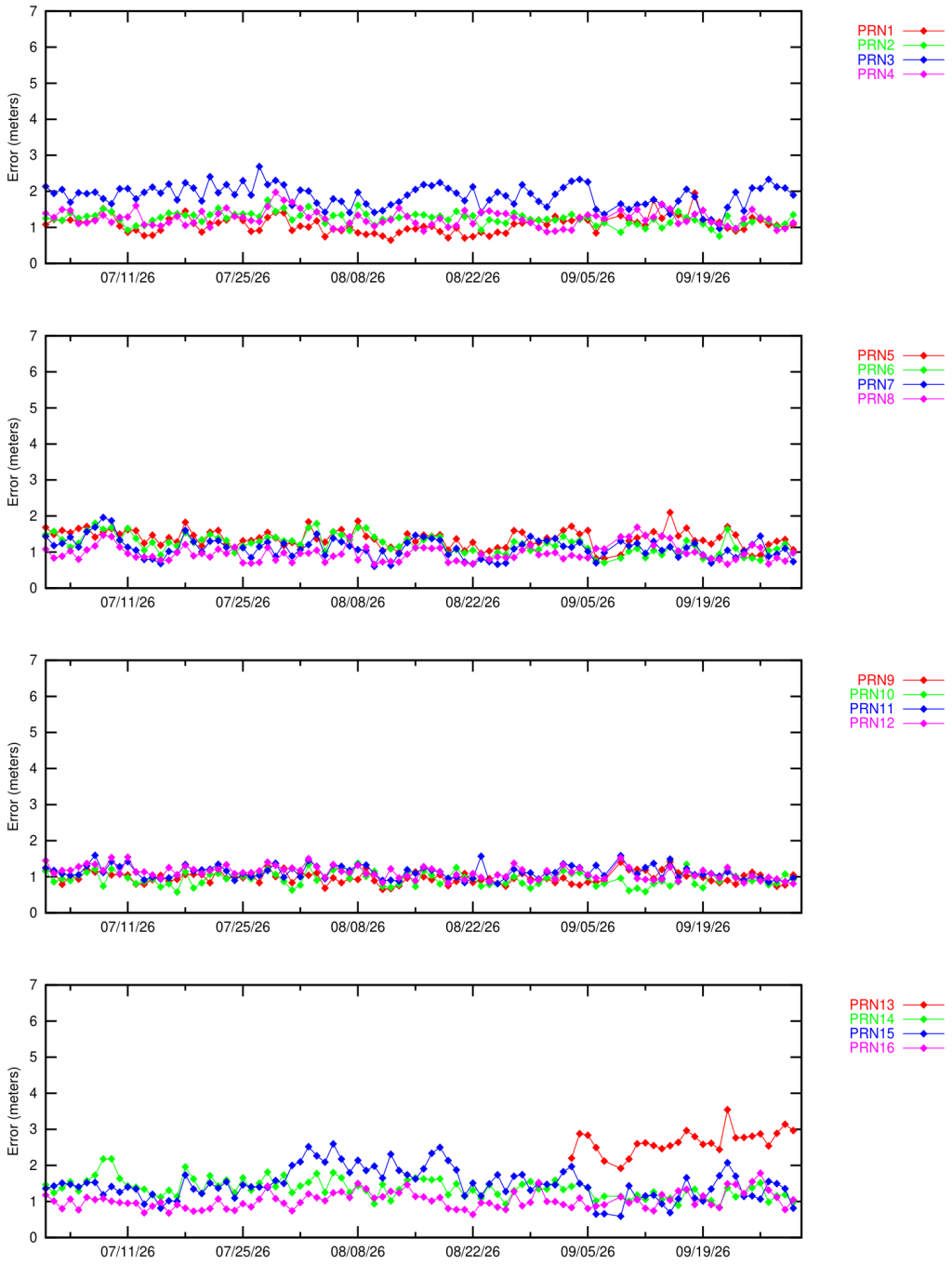


Figure 6-1 Range Error (PRN1 – PRN16) – Washington, DC

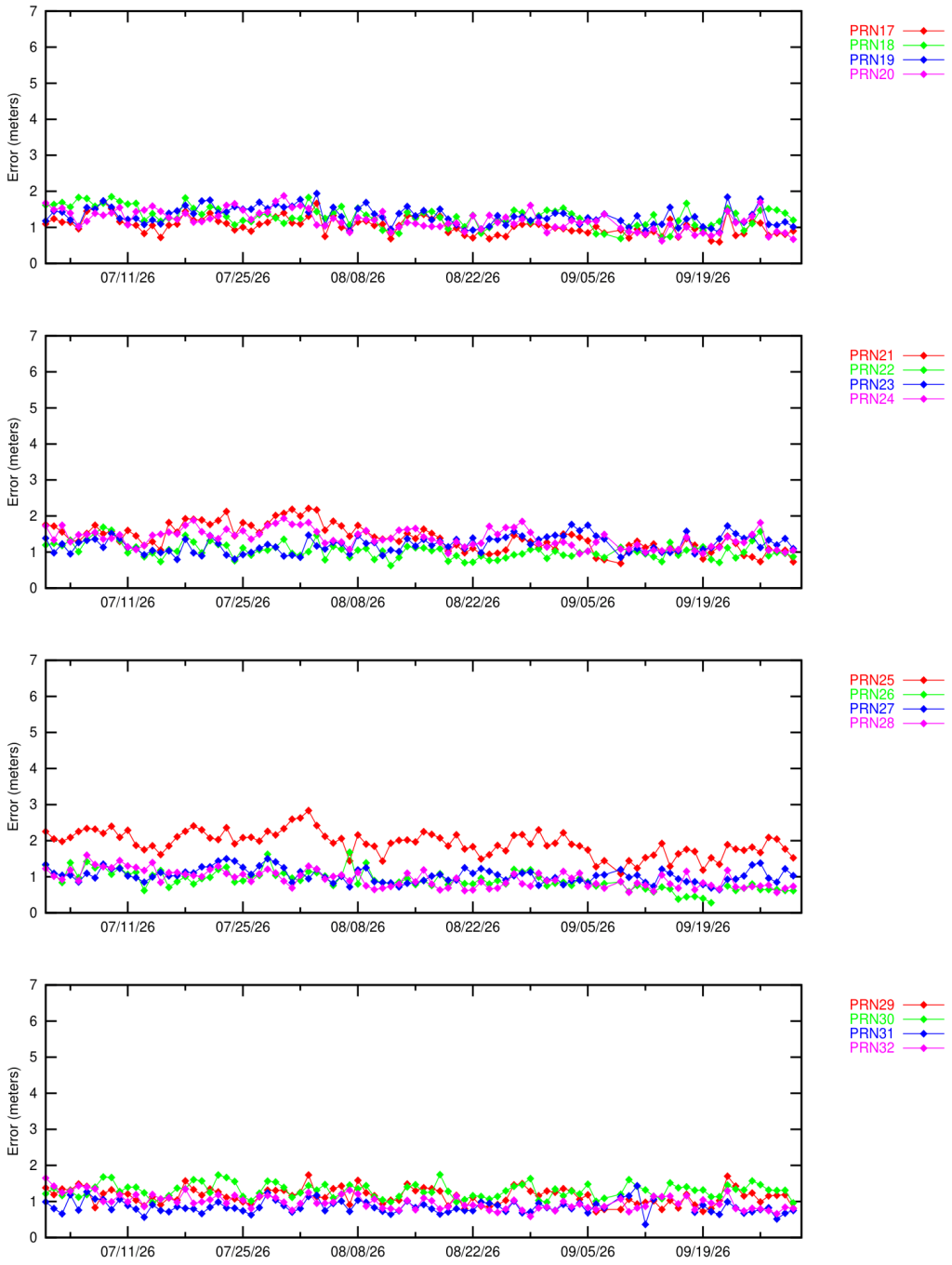


Figure 6-2 Range Error (PRN17 – PRN32) – Washington, DC

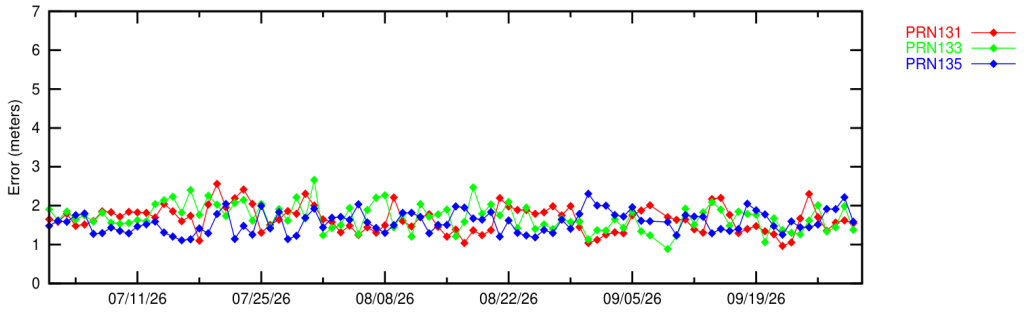


Figure 6-3 Range Error (PRN131, PRN133, and PRN135) – Washington, DC

A GIVE is broadcasted by the WAAS for each monitored IGP and the maximum normalized value (divided by sigma_UISE [User Ionospheric Slant Error]) of the ionospheric error after application of ionospheric corrections is checked. The WAAS broadcasts the ionospheric model using IGPs at predefined geographic locations. Each IGP contains the vertical ionospheric delay and the delay error in the form of the GIVE. The ionospheric error is determined by taking the difference between the WAAS vertical ionospheric delay interpolated from the IGP and GPS dual frequency measurement at that GPS satellite.

The GPS satellite ionospheric errors were calculated for 12 WAAS receivers during the quarter. Table 6-3 and Table 6-4 show the ionospheric error 95% index, maximum ionospheric error, and maximum normalized value (divided by sigma_UISE) for each SV at the selected locations. Figure 6-4 and Figure 6-5 show the 95% ionospheric error for each SV measured by the WAAS receiver at the Washington, DC reference station.

Table 6-3 Ionospheric Error 95% Index and 99.9% Sigma Bounding

Site	Minneapolis			Chicago			Boston			Juneau			Honolulu			Salt Lake City		
PRN ↓	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma
1	0.354	1.999	0.498	0.399	1.682	0.678	0.364	1.918	1.094	0.500	1.804	0.562	0.508	1.616	0.547	0.419	2.772	0.890
2	0.502	3.382	0.806	0.395	3.007	0.953	0.411	1.407	0.517	0.448	2.084	0.664	0.554	2.094	0.240	0.449	1.324	0.446
3	0.509	1.738	0.558	0.635	4.263	1.027	0.663	2.526	0.658	0.506	2.149	0.684	0.591	2.303	0.636	0.602	1.587	0.496
4	0.582	1.604	0.417	0.610	2.767	0.776	0.675	2.203	0.587	0.563	3.479	0.471	0.642	1.576	0.442	0.647	2.168	0.419
5	0.684	1.343	0.531	0.984	2.732	0.764	0.729	2.258	0.633	0.886	2.522	1.713	1.233	2.342	0.864	0.626	2.097	0.504
6	0.637	1.667	0.556	0.294	1.648	0.461	0.599	1.658	0.519	0.605	2.262	0.432	0.822	2.809	0.412	0.446	1.352	0.375
7	0.677	2.121	0.549	0.513	1.636	0.577	0.611	1.380	0.510	0.653	2.652	0.772	0.657	2.240	0.412	0.557	1.752	0.476
8	0.563	1.769	0.563	0.448	2.663	0.630	0.399	2.255	0.570	0.455	1.616	0.508	0.665	2.881	0.675	0.453	1.472	0.554
9	0.485	1.770	0.519	0.511	2.141	0.773	0.430	1.591	0.403	0.476	2.189	0.508	0.647	1.952	0.537	0.406	1.364	0.416
10	0.562	1.961	0.513	0.482	1.835	0.454	0.519	2.268	0.613	0.759	2.156	0.749	0.664	1.593	0.608	0.759	2.134	0.468
11	0.686	1.583	0.641	0.579	1.835	0.588	0.438	2.708	0.664	0.622	2.257	0.496	2.201	4.728	1.324	0.502	1.816	0.510
12	0.469	2.027	0.641	0.547	3.240	0.786	0.504	1.747	0.427	0.634	2.386	0.676	0.652	2.851	0.729	0.554	1.797	0.592
13	1.314	2.239	0.743	1.604	4.180	1.150	1.203	2.308	0.738	1.424	2.409	0.661	1.178	2.634	0.811	1.678	2.832	0.843
14	0.643	2.267	0.592	0.341	2.319	0.729	0.546	1.747	0.661	0.588	2.030	0.517	0.648	2.426	0.503	0.791	1.919	0.608
15	0.905	2.979	0.864	0.479	1.813	0.496	0.699	2.919	0.734	0.806	2.449	0.838	0.701	1.616	0.416	0.456	2.140	0.609
16	0.800	4.837	1.389	0.510	1.770	0.782	0.558	1.845	0.866	0.678	2.140	0.481	1.142	2.410	0.490	0.522	1.442	0.513
17	0.444	1.140	0.379	0.592	2.585	0.653	0.447	1.670	0.467	0.573	2.259	0.727	0.835	4.553	0.995	0.514	2.051	0.523
18	0.752	1.863	0.617	0.480	1.468	0.377	0.652	1.824	0.482	0.674	3.055	0.727	0.810	1.932	0.645	0.541	1.441	0.469
19	0.429	1.612	0.506	0.381	1.673	0.442	0.598	1.630	0.571	0.655	2.467	0.617	0.654	4.733	0.786	0.692	2.504	0.842
20	0.661	1.976	0.676	0.407	1.981	0.467	0.362	2.011	0.499	0.513	1.455	0.416	0.544	2.252	0.287	0.405	1.436	0.494
21	0.881	3.841	1.048	0.714	2.197	0.676	0.730	1.712	0.591	0.801	2.537	0.808	1.412	2.442	1.471	0.626	1.831	0.680
22	0.524	1.814	0.534	0.336	1.972	0.524	0.471	1.491	0.473	0.588	1.943	0.914	0.739	3.532	0.671	0.503	1.672	0.591
23	0.773	2.265	0.623	0.448	1.640	0.498	0.631	2.179	0.546	0.534	1.925	0.562	0.564	2.597	0.567	0.932	2.996	0.958
24	0.521	1.451	0.594	0.389	2.511	0.652	0.472	1.849	0.539	0.452	1.557	0.392	0.511	2.253	0.713	0.465	1.348	0.464
25	0.633	1.622	0.535	0.826	2.198	0.710	0.753	2.007	0.592	0.718	1.953	0.459	0.652	1.925	0.572	0.673	4.507	1.045
26	0.751	3.836	1.170	0.649	1.660	0.478	0.573	1.190	0.328	0.557	1.821	0.677	1.111	3.165	0.748	0.432	1.529	0.423
27	0.589	2.094	0.686	0.458	1.234	0.559	0.416	2.111	0.601	0.405	2.011	0.440	0.585	1.916	0.574	0.347	1.582	0.584
28	0.629	1.668	0.449	0.447	1.558	0.378	0.634	2.877	0.632	0.692	2.384	0.588	1.008	3.734	1.093	0.575	2.362	0.625
29	0.675	2.379	0.452	0.627	3.172	0.821	0.583	1.451	0.384	0.742	1.796	0.493	0.867	2.200	0.926	1.202	2.924	0.712
30	0.562	1.796	0.613	0.464	2.944	0.645	0.651	2.054	0.497	0.452	2.087	0.626	0.779	2.212	0.682	0.455	1.400	0.502
31	0.659	1.834	0.615	0.651	2.509	0.517	0.639	2.973	0.792	1.078	2.983	1.183	0.925	3.988	1.148	0.815	2.018	0.520
32	0.749	2.375	0.886	0.471	2.292	0.612	0.576	1.698	0.550	0.716	2.291	0.891	1.239	4.438	0.513	0.723	3.034	0.735

Table 6-4 Ionospheric Error 95% Index and 99.9% Sigma Bounding

Site	Billings			Miami			Albuquerque			Kansas City			Atlanta			Los Angeles		
PRN ↓	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma	0.95 Iono Error (m)	Max Iono Error (m)	Max Iono Error Sigma
1	0.406	1.337	0.509	0.605	1.993	0.233	0.397	2.601	0.876	0.557	2.132	0.777	0.472	1.593	0.414	0.465	1.625	0.497
2	0.329	1.326	0.422	0.417	2.213	0.703	0.570	3.405	1.114	0.387	2.770	0.897	0.396	1.529	0.366	0.497	1.249	0.493
3	0.441	1.493	0.465	0.570	2.645	0.676	0.530	4.913	1.100	0.442	2.189	0.662	0.541	1.825	0.571	0.406	1.667	0.218
4	0.542	1.929	0.584	0.649	1.328	0.800	0.679	1.861	0.405	0.582	1.455	0.671	0.649	1.751	0.632	0.443	2.393	0.511
5	0.710	2.242	0.839	0.995	4.362	1.051	0.740	2.482	0.568	1.301	3.741	1.128	0.712	1.733	0.569	0.737	3.585	0.826
6	0.461	3.756	0.866	0.775	3.450	0.680	0.428	1.898	0.429	0.923	4.442	0.939	0.630	1.999	0.503	0.716	2.863	0.680
7	0.765	2.373	0.721	1.160	2.808	0.850	0.444	1.837	0.092	0.518	1.089	0.298	0.577	1.267	0.368	0.570	2.701	0.232
8	0.366	1.280	0.425	0.492	3.535	0.812	0.403	1.340	0.433	0.525	3.503	1.020	0.504	1.927	0.386	0.466	1.675	0.487
9	0.487	2.030	0.428	0.565	1.920	0.479	0.490	4.995	1.754	0.403	3.140	0.855	0.539	2.131	0.513	0.393	2.874	0.111
10	0.744	3.106	0.815	0.533	1.828	0.537	0.381	1.657	0.510	0.492	2.465	0.646	0.555	1.893	0.524	0.572	1.166	0.393
11	0.706	2.712	0.720	0.655	2.783	0.564	0.515	1.993	0.474	0.595	3.639	0.984	0.734	1.632	0.392	0.596	1.627	0.329
12	0.480	1.164	0.333	0.633	2.289	0.558	0.492	1.513	0.356	0.653	2.412	0.779	0.524	2.443	0.584	0.385	2.055	0.407
13	1.602	2.254	0.775	1.496	3.085	0.903	1.449	1.894	1.049	1.252	2.335	0.747	1.446	3.058	0.942	1.249	1.994	1.381
14	0.544	1.717	0.509	0.964	2.682	0.784	0.410	2.279	0.324	0.531	1.773	0.751	0.535	1.491	0.427	0.477	2.918	0.826
15	0.512	2.169	0.709	0.567	1.374	0.554	0.417	1.912	0.452	1.328	3.245	0.992	0.711	1.729	0.489	0.542	2.625	0.744
16	0.404	1.573	0.574	0.568	2.715	0.253	0.459	1.669	0.706	0.697	3.061	0.728	0.573	1.578	0.292	0.537	2.324	0.568
17	0.627	1.845	0.725	0.783	3.007	0.547	0.460	1.238	0.322	0.856	2.588	0.620	0.488	2.422	0.675	0.507	1.922	0.409
18	0.563	1.302	0.391	0.977	2.993	0.958	0.460	1.950	0.387	0.607	1.734	0.417	0.784	2.032	0.551	0.559	1.899	0.507
19	1.167	2.770	1.078	0.652	2.191	0.406	0.730	2.098	0.929	0.473	1.555	0.402	0.549	1.492	0.591	0.643	2.596	0.493
20	0.390	1.437	0.533	0.541	2.466	0.737	0.389	1.290	0.359	0.408	1.778	0.433	0.383	1.439	0.310	0.630	3.197	0.869
21	0.740	2.066	0.601	0.728	1.507	0.449	0.577	1.623	0.599	1.146	3.231	0.801	0.818	1.880	0.988	0.773	2.014	0.216
22	0.798	1.983	0.531	0.600	2.830	0.805	0.434	1.755	0.214	0.492	1.835	0.513	0.494	1.477	0.401	0.639	1.653	0.672
23	0.464	1.913	0.672	0.834	3.044	0.965	0.406	1.320	0.300	0.782	1.875	0.646	0.484	1.903	0.414	0.673	1.791	0.552
24	0.499	1.609	0.562	0.611	1.386	0.509	0.421	1.212	0.541	0.397	1.668	0.557	0.549	2.023	0.670	0.558	1.488	0.553
25	0.561	1.538	0.440	0.742	2.014	0.606	0.579	1.432	0.436	0.559	2.312	0.842	0.626	2.799	0.664	0.611	2.084	0.442
26	0.561	2.664	0.788	0.831	3.624	0.896	0.411	1.900	0.591	0.737	3.054	0.899	0.653	1.836	0.596	0.795	2.364	0.812
27	0.430	1.561	1.152	0.716	2.338	0.593	0.472	1.685	0.646	0.735	2.995	0.826	0.425	1.589	0.493	0.537	3.967	1.007
28	0.487	2.287	0.623	0.769	4.930	0.490	0.441	1.866	0.425	0.615	3.192	0.922	0.661	2.048	0.485	0.631	4.728	1.487
29	0.550	1.420	0.511	1.047	2.194	0.772	0.605	1.390	0.364	0.910	2.870	0.688	0.649	1.547	0.407	0.641	2.330	0.197
30	0.454	1.876	0.437	0.652	2.404	0.661	0.648	1.876	0.468	0.519	1.261	0.361	0.497	1.624	0.618	0.366	2.486	0.587
31	0.865	1.963	0.823	0.921	2.431	0.531	0.425	1.992	0.465	1.059	4.013	0.916	0.736	2.218	0.677	0.840	1.995	0.581
32	0.695	1.965	0.859	0.737	3.381	0.690	0.566	2.360	0.416	0.686	1.973	0.625	0.613	2.566	0.610	0.666	1.830	0.199

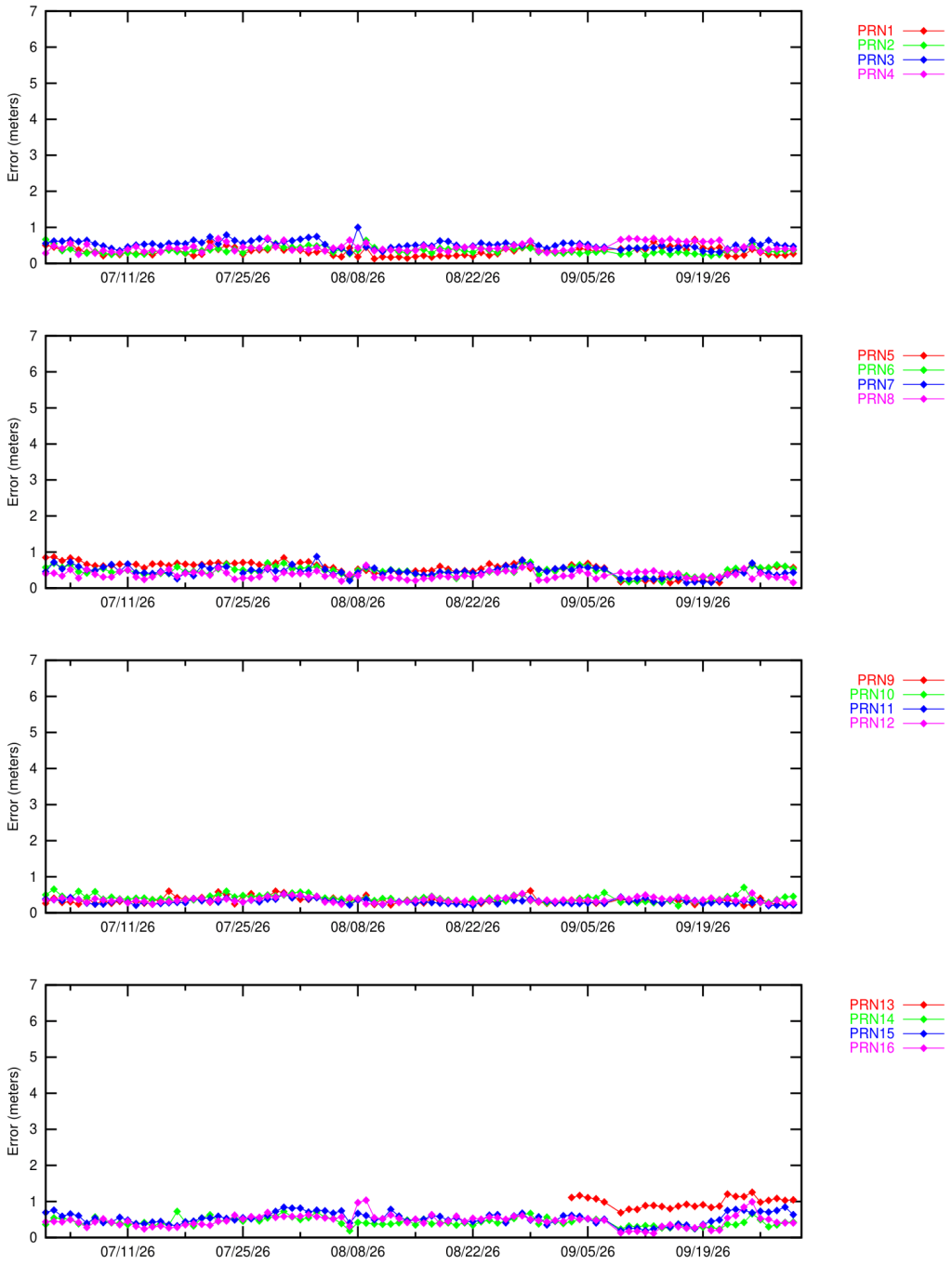


Figure 6-4 Ionospheric Error (PRN1 – PRN16) – Washington, DC

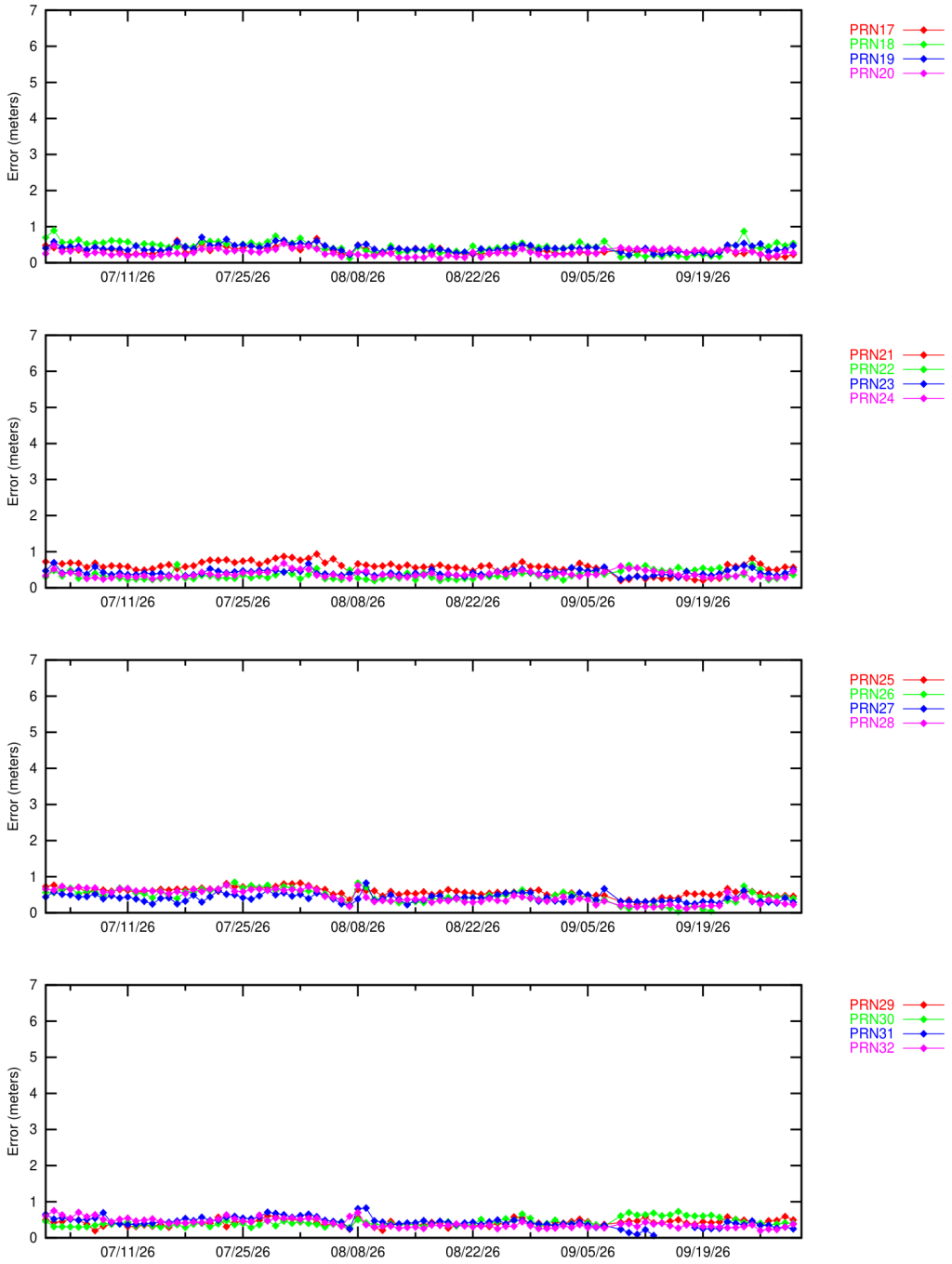


Figure 6-5 Ionospheric Error (PRN-17 – PRN-32) – Washington, DC

For this reporting period, most satellite range errors were bounded at least 99.9% of the time by UDRE. Other unbounded errors (i.e., errors bounded less than 100% of the time) were due to geomagnetic activity, noise, and/or multipath.

7.0 GEO RANGING PERFORMANCE

The WAAS GEO navigation messages provide corrections and UDRE values for each satellite. The GEO ranging availability from each GEO navigation message source was evaluated separately to determine the quality of service provided.

Table 7-1 shows the GEO PA and NPA ranging availability as well as the percentage of time the GEO UDRE was set to "Not Monitored" and "Do Not Use." Figure 7-1 to Figure 7-3 show the trend of SM9, S15, and G30 GEO PA ranging availability, respectively.

The reductions in SM9 GEO PA, S15 GEO PA, and G30 GEO PA ranging availability were due to GUS switchovers (see Figure 7-1 to Figure 7-3). Refer to Table 1-7 for detailed information on the GUS switchovers for this reporting period.

Table 7-1 GEO Ranging Availability

GEO Source	GEO	PA (%)	NPA (%)	Not Monitored (%)	Do Not Use (%)
SM9 131	SM9	99.74	0.02	0.24	0.00
SM9 131	S15	99.87	0.01	0.12	0.00
SM9 131	G30	99.86	0.01	0.13	0.00
S15 133	SM9	99.73	0.02	0.25	0.00
S15 133	S15	99.87	0.01	0.12	0.00
S15 133	G30	99.86	0.01	0.13	0.00
G30 135	SM9	99.73	0.02	0.24	0.00
G30 135	S15	99.87	0.01	0.12	0.00
G30 135	G30	99.86	0.01	0.13	0.00

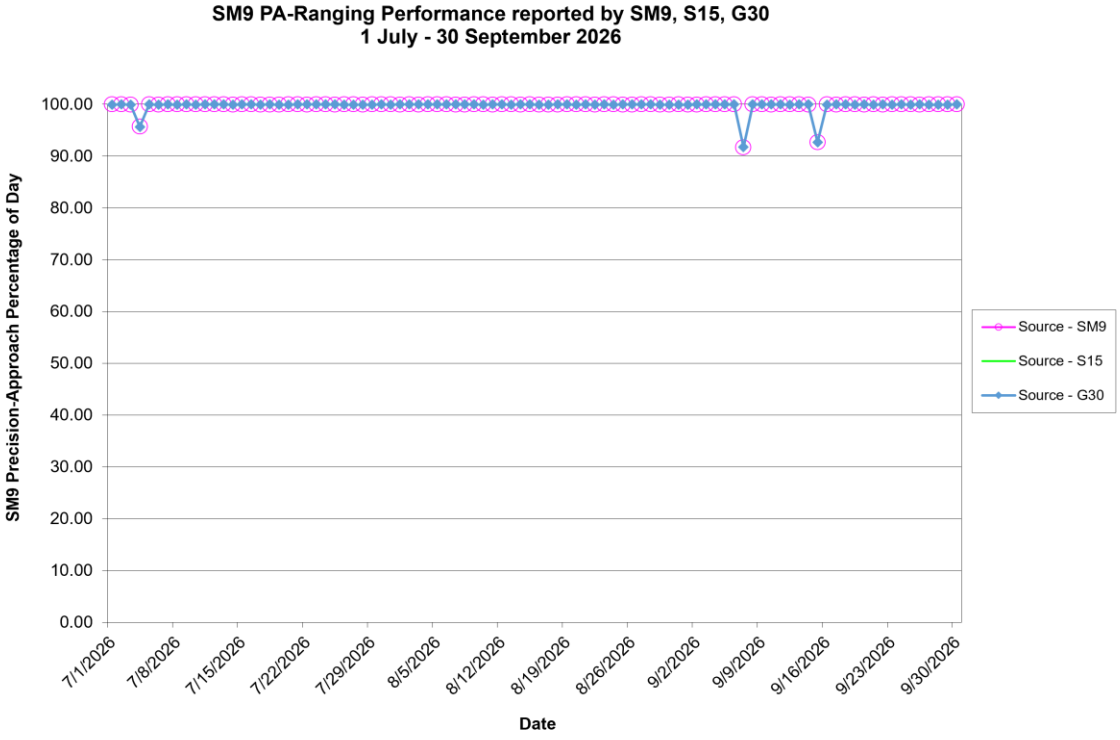


Figure 7-1 Daily PA SM9 GEO Ranging Availability Trend

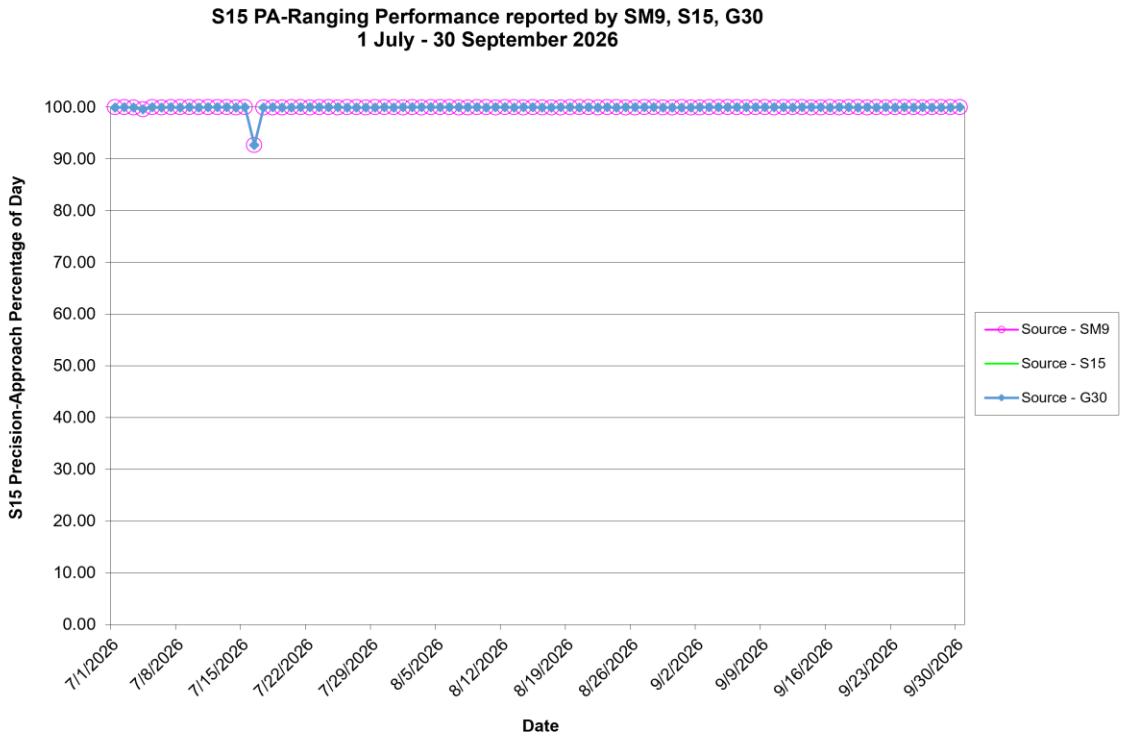


Figure 7-2 Daily PA S15 GEO Ranging Availability Trend

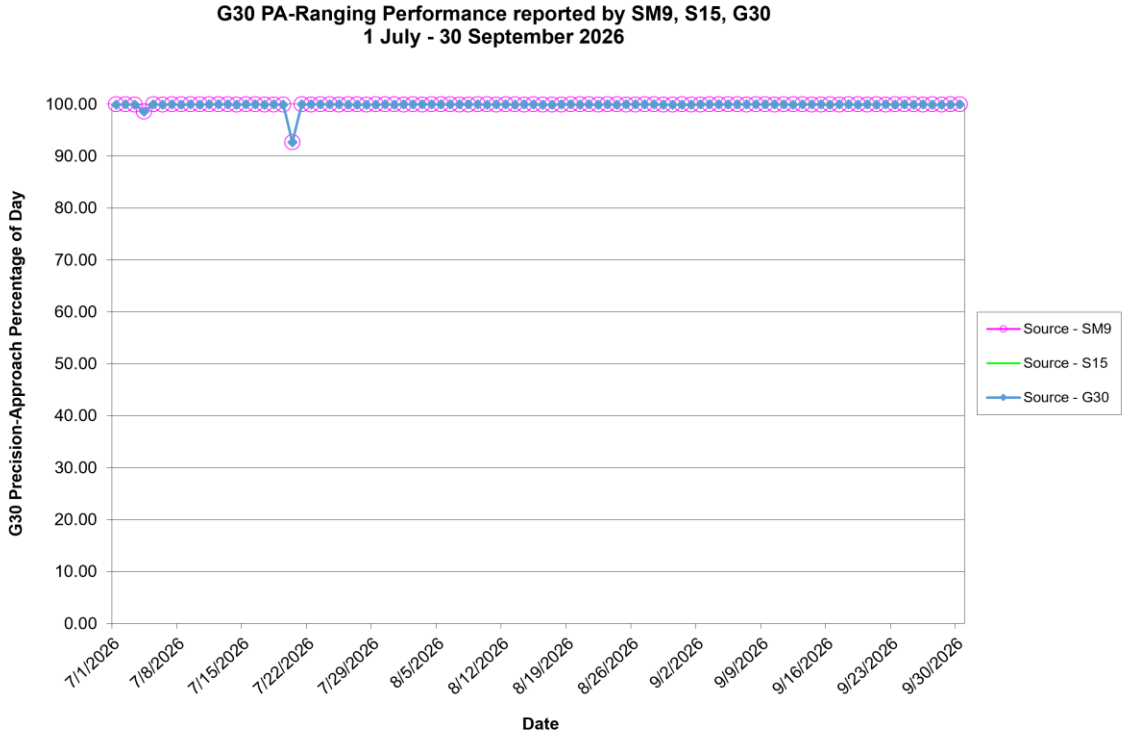


Figure 7-3 Daily PA G30 GEO Ranging Availability Trend

8.0 WAAS AIRPORT AVAILABILITY

The WAAS airport availability evaluation determines the number and length of LPV service outages at selected airports using the transmitted WAAS navigation message. The navigation messages transmitted from all GEO satellites are processed simultaneously, and WAAS protection levels (VPL and HPL) are computed at each airport once every 30 seconds in accordance with the RTCA DO-229F. The WAAS LPV service is available for a user when the VPL is less than or equal to the VAL of 50 meters and the HPL is less than or equal to the HAL of 40 meters. If both conditions are met, WAAS LPV service is available at that airport. Consequently, if either one of the conditions is not met, the WAAS LPV service outage and its duration is recorded.

LPV service outages within 15 minutes of each other are considered one continuous LPV service outage. Although this will minimally reduce LPV service availability, it substantially reduces the number of service outages and prevents excessive switching in and out of service availability. Similar service analyses are computed for the LP and LPV200 services in accordance with HAL and VAL shown in Table 1-1. APPENDIX D: WAAS LP, LPV, AND LPV200 OUTAGES AND AVAILABILITY shows the WAAS LPV service availability and outages at selected airports in the U.S. and Canada. Figure 8 1 through Figure 8 6 provide graphical representation of the LP, LPV, and LPV200 availability and outage counts at airports in the U.S. and Canada that have published GPS area navigation (RNAV) Instrument Approach Procedures (IAPs). These results are geographically depicted on an interactive web page and are accessible at http://www.nstb.tc.faa.gov/AirportOutages/.

To use the interactive web page, select the current quarter from the dropdown menu in the upper left corner, and click “Submit Request”. The WAAS LPV airport layer will appear providing color-coded availability results, as shown in Figure 8 1 and Figure 8 2. Rolling the cursor over any airport will display the LPV availability and outages for the reporting period. The “WAAS Layer” menu in the upper right of the display allows the user to select WAAS LP or LPV200 availability and outage results, as shown in Figure 8 3 through Figure 8 6. Selecting “Show All Airports” displays WAAS availability for U.S. airports with GPS RNAV IAPs; not selecting “Show All Airports” displays only airports with approved LPV approaches, as shown in APPENDIX D: WAAS LP, LPV, AND LPV200 OUTAGES AND AVAILABILITY.

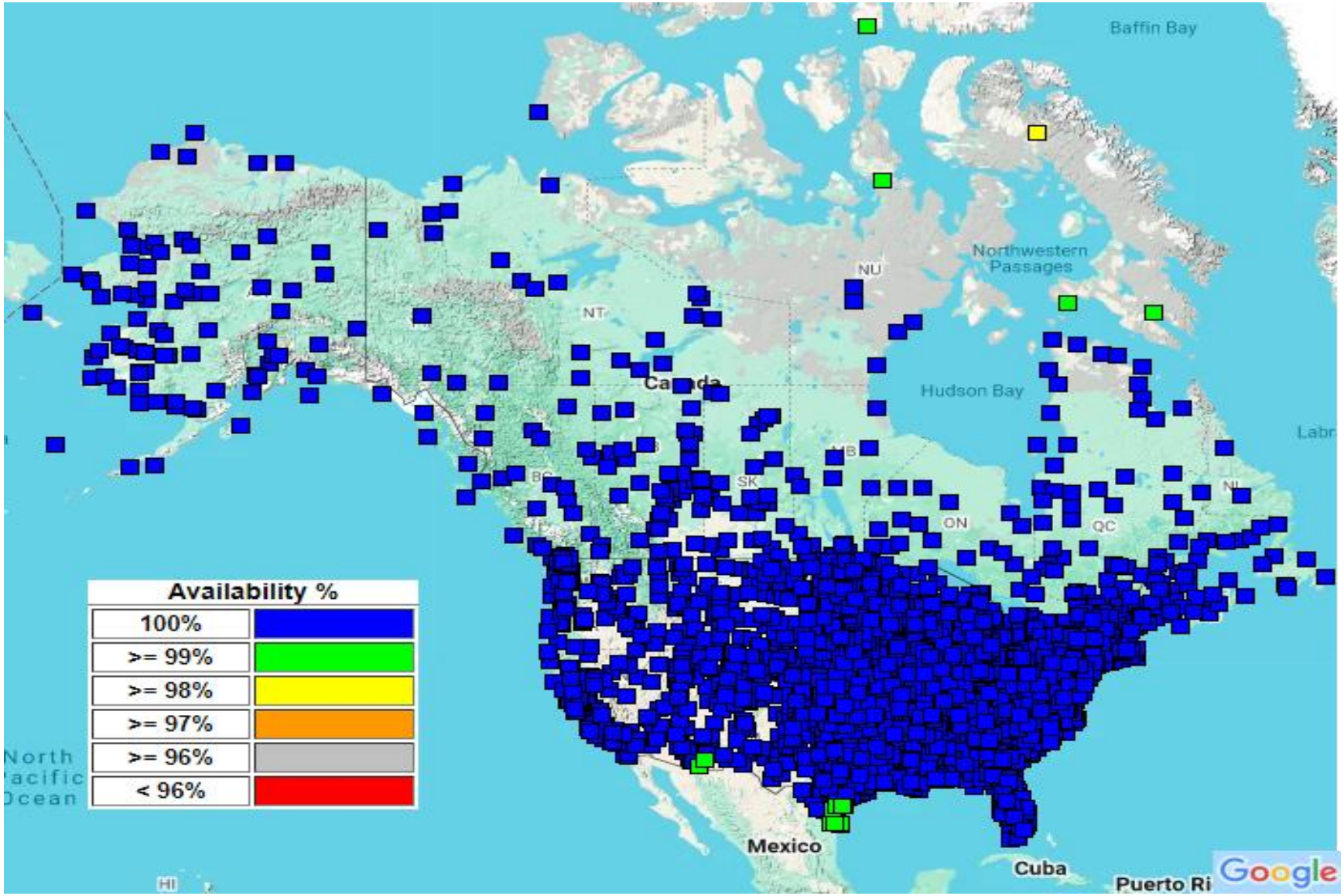


Figure 8-1 WAAS LP Availability at Airports in the U.S. and Canada with GPS RNAV IAPs

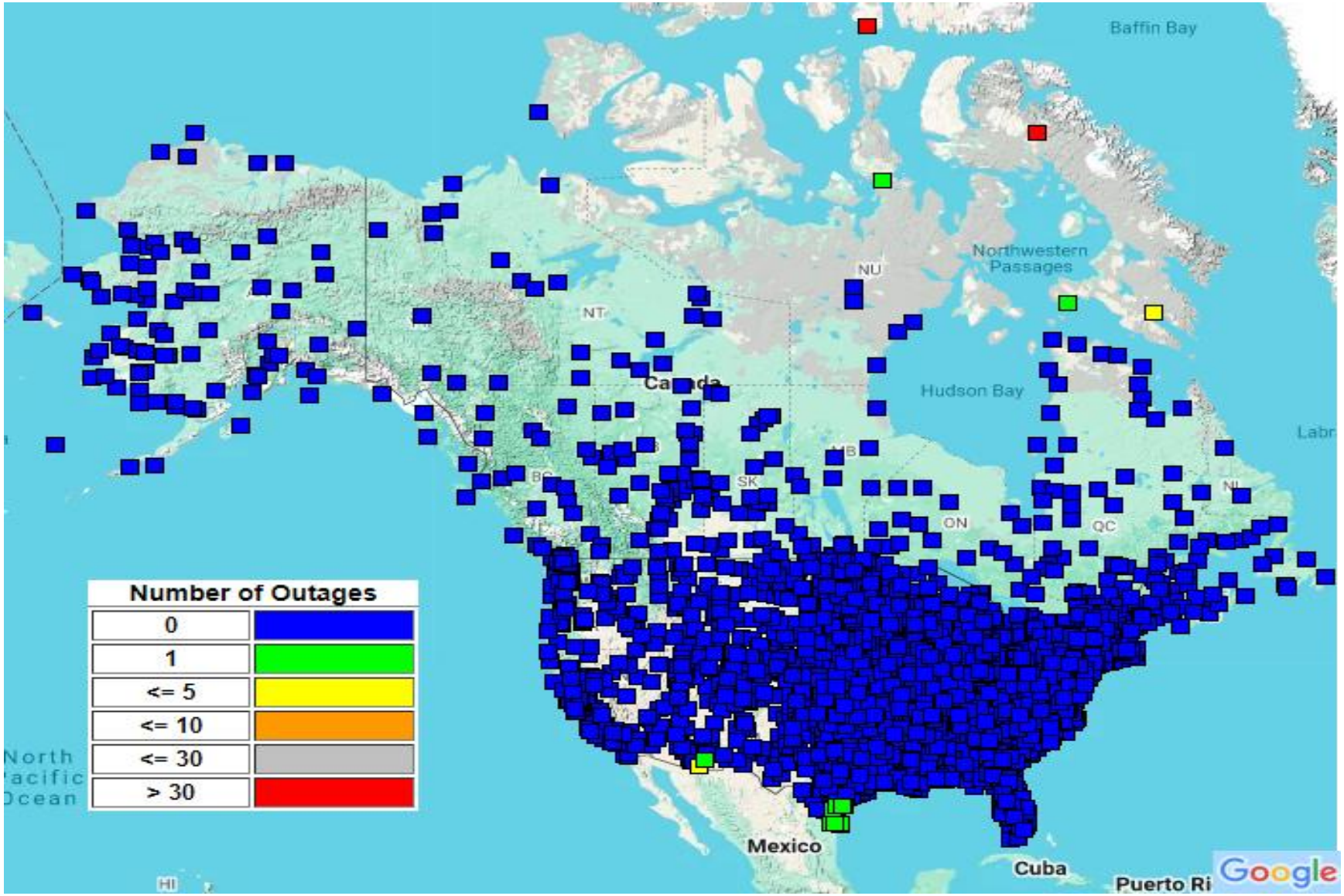


Figure 8-2 WAAS LP Outages at Airports in the U.S. and Canada with GPS RNAV IAPs

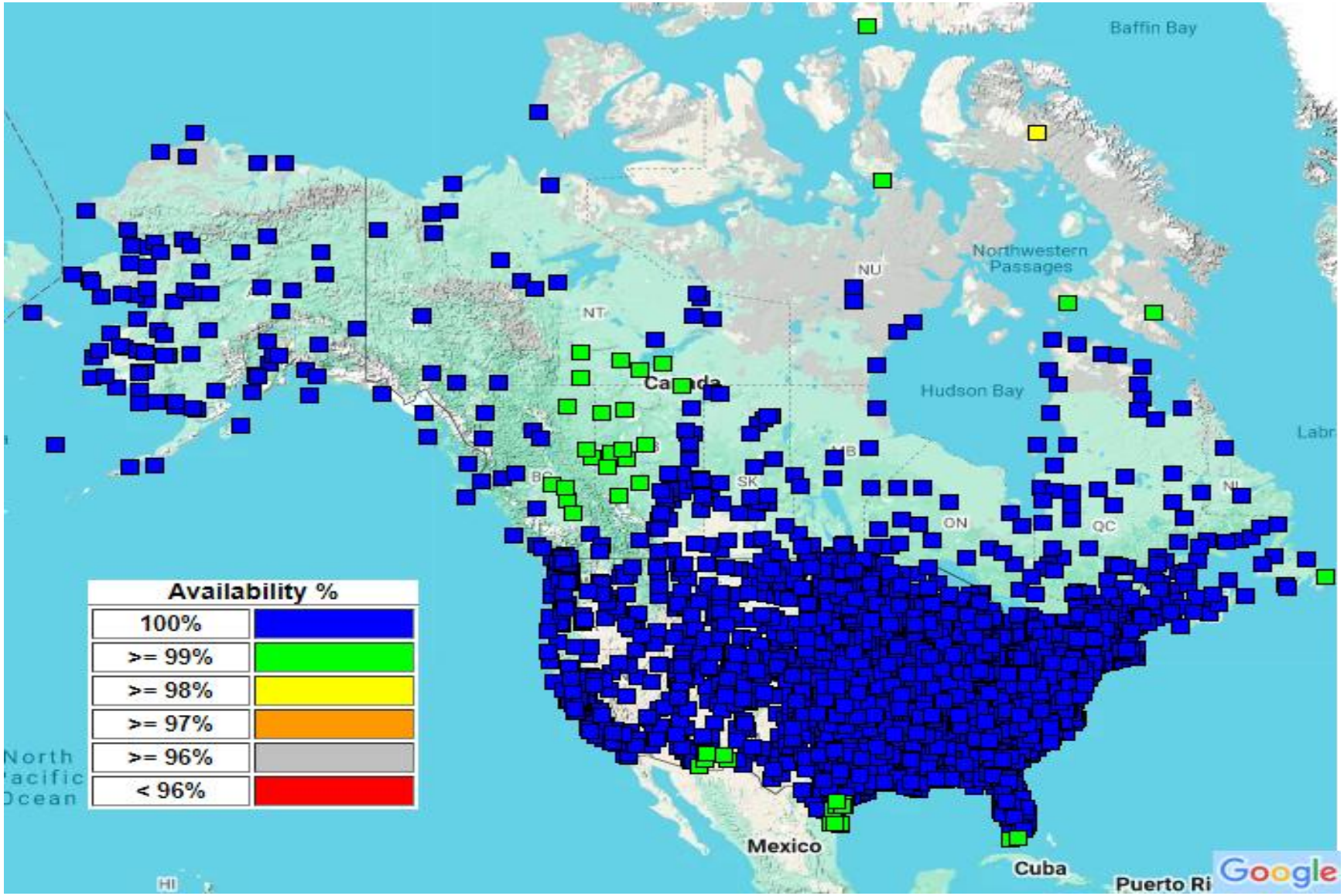


Figure 8-3 WAAS LPV Availability Airports in the U.S. and Canada with GPS RNAV IAPs

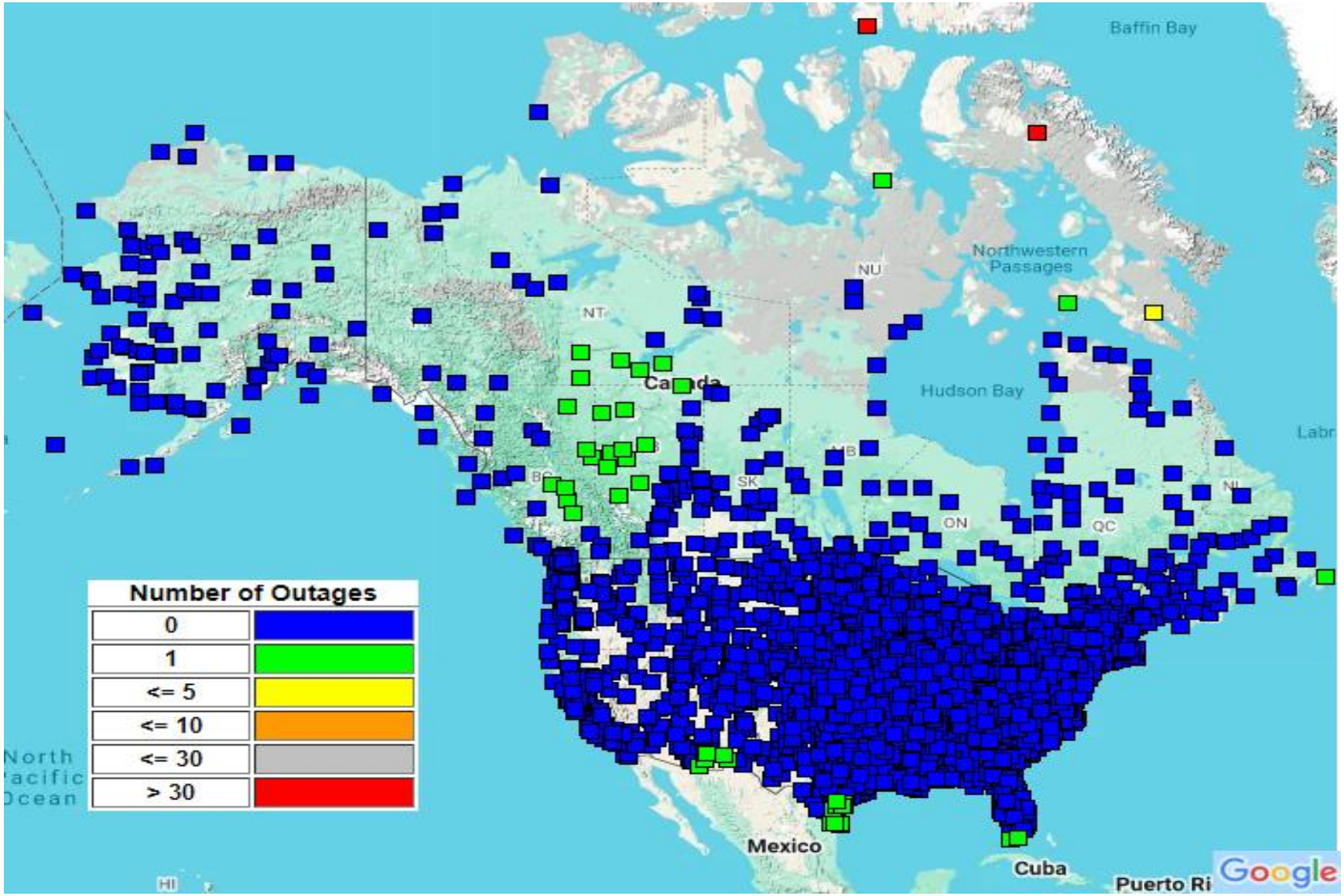


Figure 8-4 WAAS LPV Outages at Airports in the U.S. and Canada with GPS RNAV IAPs

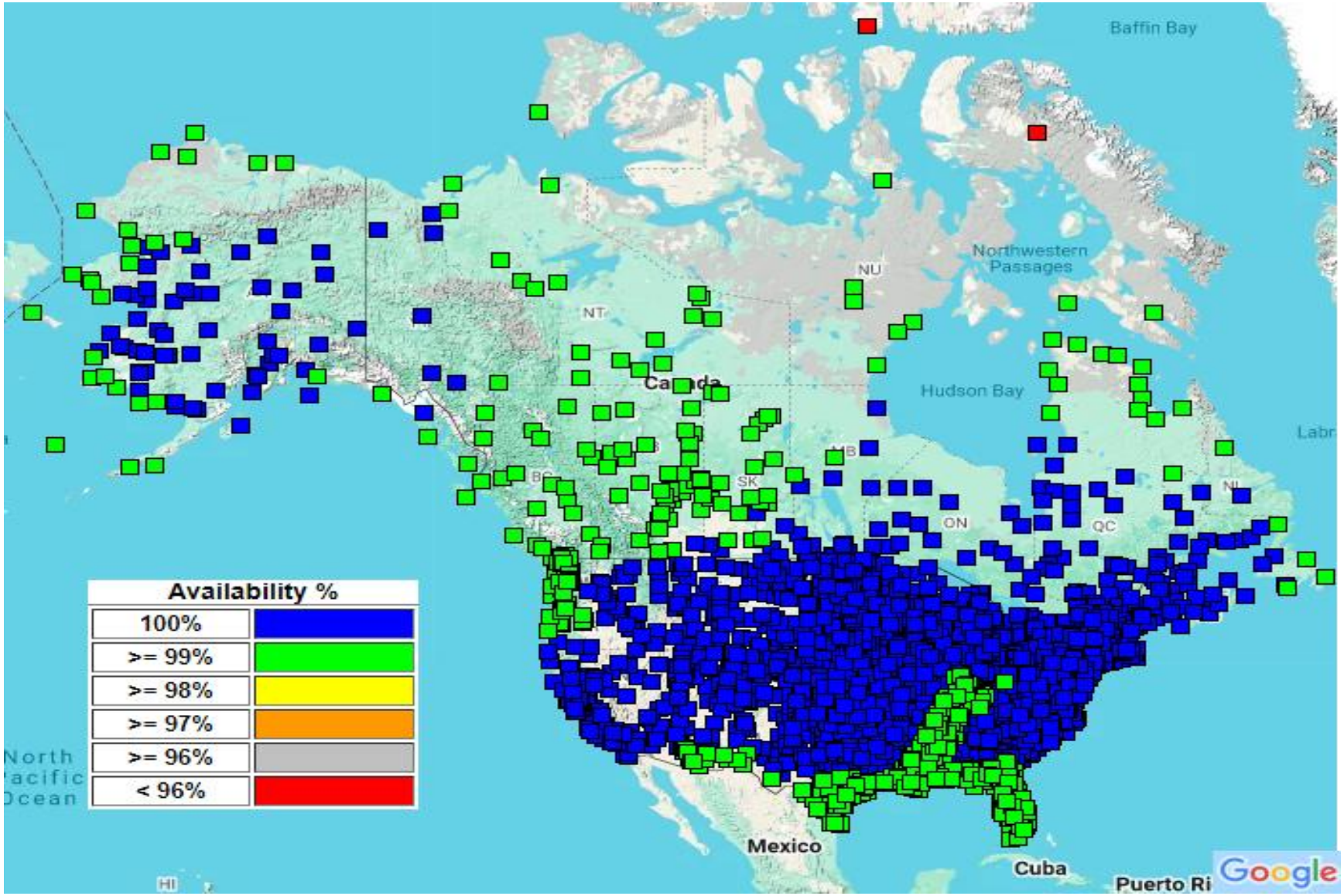


Figure 8-5 WAAS LPV200 Availability at Airports in the U.S. and Canada with GPS RNAV IAPs

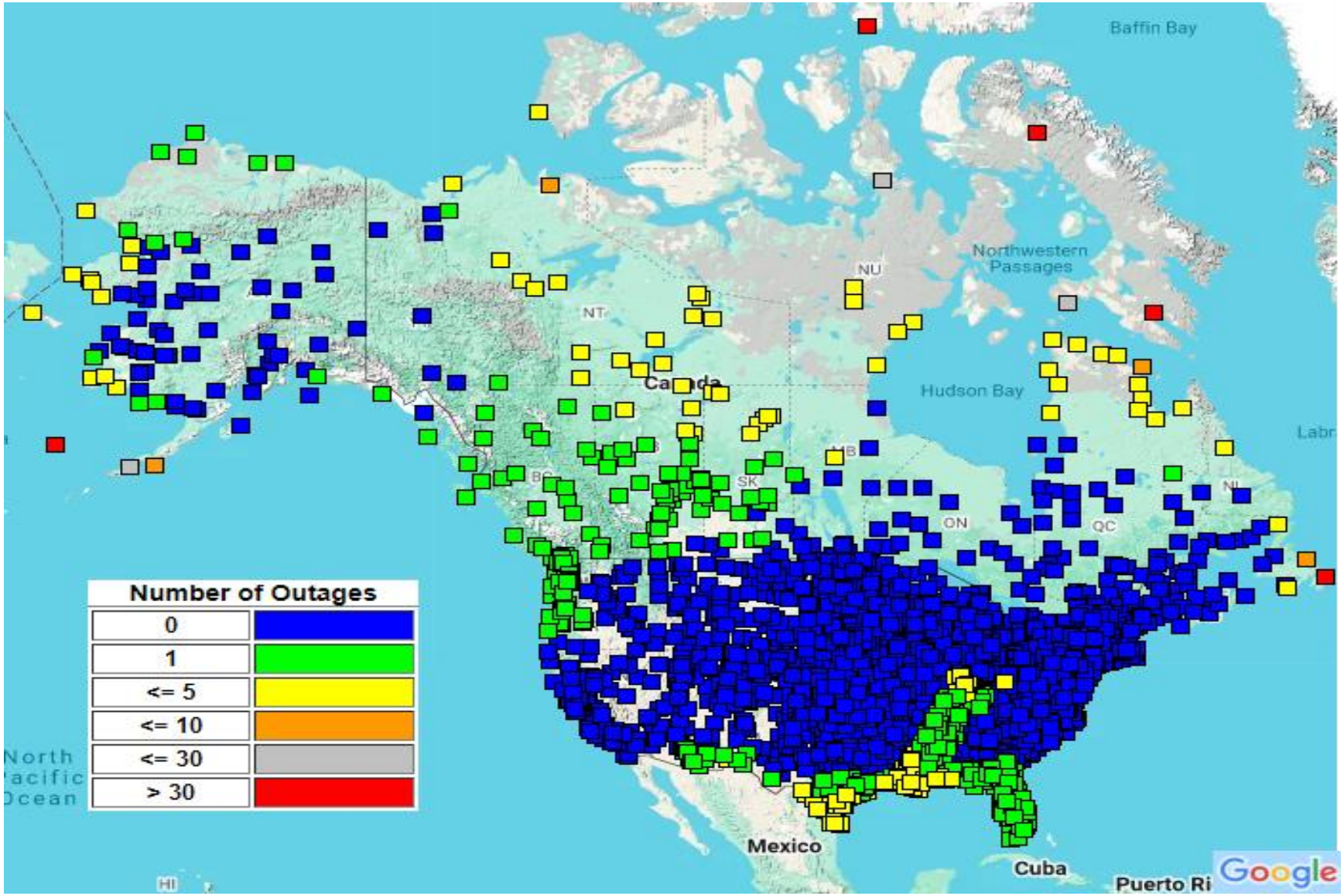


Figure 8-6 WAAS LPV200 Outages at Airports in the U.S. and Canada with GPS RNAV IAPs

9.0 WAAS CNMP BOUNDING ANALYSIS

The purpose of the WAAS CNMP Bounding Analysis is to evaluate the performance of the CNMP algorithm and identify any undetected anomalous events to limit exposure to faulted receivers and persistent large multipath errors. The identification of undetected anomalous events ensures that there is the probability of more than one WAAS reference station (WRS)-producing persistent unbounded measurement errors is negligible. This offline analysis is critical to ensure that CNMP bounding is not invalidated by changes in WRE environmental conditions.

The operational CNMP functionality resides in the WAAS safety processor. The CNMP algorithm estimates, and corrects for, observed code noise and multipath and provides confidence estimates for residual error in multipath-corrected pseudorange measurements. These confidence terms provide a conservative Gaussian overbound of the true error distribution, which integrity monitors use in the weighting of the measurements.

The measurement data from the offline analysis is post-processed to estimate the carrier phase ambiguity of each entire arc of measurements for each satellite pass. The ambiguity estimate is used to level the carrier measurement, which is then used as a multipath-free truth estimate. The WAAS real-time CNMP smoothing algorithm is then applied to the original measurements, and the difference between the smoothed measurements and the multipath-free truth estimates is the observed residual error. To minimize the impacts of non-zero mean multipath biasing the truth estimates, only arcs with a continuous carrier phase greater than 7200 seconds are used for this analysis. The WAAS dual frequency cycle slip detector algorithm is used to detect any discontinuities in the carrier phase.

Statistics are calculated based on how well Gaussian distributions with 0.1 multiples of the CNMP standard deviation bound the observed residual error. Subsequently, these statistics are compared to a theoretical Gaussian distribution, and an extensive set of plots are generated and manually reviewed. Table 9-1 shows the analysis results for the previous 12 months for all three threads of WRE at each WAAS reference station. The color coding represents four levels of performance based on the magnitude and probability distribution of the residual error and the bounding performance of the CNMP algorithm.

Table 9-1 CNMP Bounding Statistics

WAAS Site	WRE	Oct25	Nov25	Dec25	Jan26	Feb26	Mar26	Apr26	May26	Jun26	Jul26	Aug26	Sep26
Albuquerque	A												
	B												
	C												
Anchorage	A												
	B												
	C												
Atlanta	A												
	B												
	C												
Barrow	A												
	B												
	C												
Bethel	A												
	B												
	C												
Billings	A												
	B												
	C												
Boston	A												
	B												
	C												
Chicago	A												
	B												
	C												
Cleveland	A												
	B												
	C												

WAAS Site	WRE	Oct25	Nov25	Dec25	Jan26	Feb26	Mar26	Apr26	May26	Jun26	Jul26	Aug26	Sep26
Cold Bay	A												
	B												
	C												
Dallas	A												
	B												
	C												
Denver	A												
	B												
	C												
Fairbanks	A												
	B												
	C												
Gander	A												
	B												
	C												
Goose Bay	A												
	B												
	C												
Honolulu	A												
	B												
	C												
Houston	A												
	B												
	C												
Iqaluit	A												
	B												
	C												
Jacksonville	A												
	B												

WAAS Site	WRE	Oct25	Nov25	Dec25	Jan26	Feb26	Mar26	Apr26	May26	Jun26	Jul26	Aug26	Sep26
	C												
Juneau	A												
	B												
	C												
Kansas City	A												
	B												
	C												
Kotzebue	A												
	B												
	C												
Los Angeles	A												
	B												
	C												
Memphis	A												
	B												
	C												
Merida	A												
	B												
	C												
Mexico City	A												
	B												
	C												
Miami	A												
	B												
	C												
Minneapolis	A												
	B												
	C												
New York	A												

WAAS Site	WRE	Oct25	Nov25	Dec25	Jan26	Feb26	Mar26	Apr26	May26	Jun26	Jul26	Aug26	Sep26
	B												
	C												
Oakland	A												
	B												
	C												
Puerto Vallarta	A												
	B												
	C												
Salt Lake City	A												
	B												
	C												
San Jose Del Cabo	A												
	B												
	C												
San Juan	A												
	B												
	C												
Seattle	A												
	B												
	C												
Tapachula	A												
	B												
	C												
Washington, DC	A												
	B												
	C												
Winnipeg	A												
	B												
	C												

Legend

	Excellent	3.29σ bounded 100%
	Good	4σ bounded 100%
	Fair	4σ bounded 100% with one worst satellite excluded
	Poor	Requires manual review
	N/A	No data available

10.0 WRS ANTENNA SURVEY VALIDATION

Antenna L1 phase center position surveys were performed for all the WAAS Reference Station antennas using 24-hour sets on 10/02/2026. Merida Thread B (MMD2), Merida Thread C (MMD3), Mexico City Thread B (MMX2), Mexico City Thread C (MMX3), Puerto Vallarta Thread B (MPR2), and San Juan Thread B (ZSU2) are excluded from this since they were out of service. Each WAAS WRS has three independent threads of WRE: (1) Thread A is also referred to as Thread 1, (2) Thread B is also referred to as Thread 2, and (3) Thread C is referred to as Thread 3.Duplicate surveys were performed using both the NGS OPUS and the CSRS PPP services. The International GPS Service (IGS) 08 reference frame is used for the OPUS solutions. A value of -0.4445 meters was used for the antenna reference point (ARP) to antenna phase center (APC) offset for the MicroPulse MPL-WAAS-2225W WAAS antennas in the processing of the data.

The OPUS-reported RMS quality metrics were 2.80 cm or less. The CSRS surveys' RSSs of the reported ECEF sigmas were 11.46 mm or less. The OPUS and CSRS surveys agreed to an average of 1.15 cm with a standard deviation of 5.99 mm. The maximum difference was 4.63 cm at Houston Thread A (ZHU1).

The OPUS positions were compared to the positions computed by the WAAS C&Vs. The survey was completed on October 2, 2026. The OPUS surveys agree with the calculated positions to better or equal to 2.34 cm for most sites. The maximum difference was 16.08 cm at Mexico City Thread A (MMX1).

Table 10-1 lists the WAAS antenna L1 phase center positions using the OPUS data.

Table 10-1 WAAS Antenna Positions (OPUS IGS08) as of 04/02/2017

WRE	X (m)	Y (m)	Z (m)	LATITUDE	LONGITUDE	H (m)
BET1	-2965385.334	-972576.672	5543892.728	60.7879125	-161.8417257	52.176
BET2	-2965386.1	-972580.395	5543891.664	60.787893	-161.8416651	52.169
BET3	-2965388.673	-972577.524	5543890.808	60.7878771	-161.84173	52.178
BIL1	-1416446.075	-4223577.008	4550862.057	45.8037059	-108.5397254	1112.213
BIL2	-1416450.146	-4223574.863	4550862.781	45.8037152	-108.5397839	1112.216
BIL3	-1416441.776	-4223574.258	4550865.913	45.8037557	-108.5396843	1112.207
BRW1	-1886759.207	-809058.714	6018494.357	71.2827622	-156.7899266	15.549
BRW2	-1886756.624	-809055.963	6018495.536	71.2827949	-156.7899687	15.556
BRW3	-1886755.529	-809059.755	6018495.36	71.2827903	-156.7898594	15.546
CDB1	-3484099.351	-1084748.818	5213678.45	55.192371	-162.7064056	49.719
CDB2	-3484105.977	-1084741.637	5213675.499	55.192325	-162.7065441	49.688
CDB3	-3484112.275	-1084734.845	5213672.756	55.1922815	-162.7066754	49.716
FAI1	-2304742.107	-1448715.358	5748843.641	64.8096275	-147.8473427	150.02
FAI2	-2304741.646	-1448706.549	5748846.036	64.8096778	-147.8474946	150.026
FAI3	-2304733.122	-1448707.486	5748849.192	64.8097444	-147.8473824	150.022
JNU1	-2354255.251	-2388549.732	5407043.227	58.3625728	-134.5857104	16.359
JNU2	-2354253.161	-2388565.842	5407037.055	58.3624672	-134.5854917	16.353
JNU3	-2354239.946	-2388568.695	5407041.515	58.3625436	-134.5852967	16.35
MMD1	35070.287	-5959686.641	2264365.772	20.9319094	-89.662842	29.096
MMD2	-	-	-	-	-	-
MMD3	-	-	-	-	-	-
MMX1	-948700.588	-5943931.788	2109211.408	19.431654	-99.0683906	2231.532
MMX2	-	-	-	-	-	-
MMX3	-	-	-	-	-	-
MPR1	-1570142.315	-5759530.572	2238184.729	20.6790031	-105.2492041	10.963
MPR2	-	-	-	-	-	-
MPR3	-1570143.597	-5759527.967	2238190.542	20.6790592	-105.2492226	10.98
MSD1	-1979520.364	-5523222.689	2493107.071	23.1604497	-109.7176552	104.28
MSD2	-1979521.931	-5523225.009	2493100.669	23.1603869	-109.717662	104.256
MSD3	-1979526.379	-5523221.761	2493104.344	23.1604229	-109.7177136	104.27
MTP1	-254854.447	-6162909.136	1617805.072	14.7913661	-92.3680001	54.918
MTP2	-254850.839	-6162910.158	1617801.636	14.7913341	-92.3679662	54.884
MTP3	-254855.601	-6162910.266	1617800.114	14.7913201	-92.3680103	54.79
OTZ1	-2396056.298	-750356.225	5843502.363	66.8873293	-162.6113734	10.857
OTZ2	-2396053.126	-750354.395	5843503.885	66.8873641	-162.6113916	10.854
OTZ3	-2396053.107	-750358.335	5843503.397	66.8873528	-162.6113057	10.86
YFB1	1035381.186	-2634289.685	5696539.644	63.7314914	-68.5431887	10.096
YFB2	1035371.969	-2634296.104	5696538.263	63.731465	-68.5434098	10.01

WRE	X (m)	Y (m)	Z (m)	LATITUDE	LONGITUDE	H (m)
YFB3	1035365.894	-2634306.871	5696534.487	63.7313872	-68.543604	10.075
YQX1	2430424.412	-3419640.429	4788223.951	48.9664914	-54.5976349	146.903
YQX2	2430432.36	-3419639.085	4788220.9	48.9664496	-54.5975358	146.905
YQX3	2430440.271	-3419637.732	4788217.898	48.9664082	-54.597437	146.926
YWG1	-520164.655	-4083476.001	4855842.982	49.9005734	-97.2594014	222.118
YWG2	-520150.776	-4083468.931	4855850.371	49.9006764	-97.2592222	222.123
YWG3	-520152.653	-4083478.049	4855842.547	49.9005673	-97.259232	222.117
YYR1	1885341.198	-3321428.411	5091171.791	53.3086483	-60.4194716	37.915
YYR2	1885344.161	-3321419.927	5091176.206	53.3087146	-60.4193701	37.92
YYR3	1885339.884	-3321413.117	5091182.212	53.3088048	-60.4193755	37.936
ZAB1	-1488637.039	-5003946.528	3654557.64	35.1735747	-106.5673519	1620.123
ZAB2	-1488631.703	-5003948.214	3654557.618	35.173574	-106.5672905	1620.188
ZAB3	-1488632.48	-5003950.794	3654553.764	35.1735316	-106.5672906	1620.17
ZAN1	-2659536.861	-1549114.647	5567750.716	61.2292006	-149.7802549	80.718
ZAN2	-2659548.628	-1549110.697	5567746.232	61.2291169	-149.7804287	80.724
ZAN3	-2659541.576	-1549106.572	5567750.704	61.2292005	-149.780429	80.712
ZAU1	138703.902	-4761244.111	4227763.906	41.7826581	-88.3313392	195.844
ZAU2	138704.167	-4761248.739	4227758.75	41.7825957	-88.3313377	195.863
ZAU3	138710.871	-4761248.474	4227758.831	41.7825966	-88.331257	195.865
ZBW1	1490299.004	-4448983.185	4306010.544	42.7357212	-71.4804284	39.106
ZBW2	1490304.12	-4448981.176	4306010.889	42.7357252	-71.4803614	39.135
ZBW3	1490305.829	-4448984.805	4306006.58	42.7356723	-71.4803557	39.137
ZDC1	1069125.553	-4839598.986	4001126.523	39.1015963	-77.5427489	80.038
ZDC2	1069127.952	-4839603.617	4001120.325	39.1015243	-77.5427334	80.039
ZDC3	1069123.856	-4839602.708	4001122.529	39.1015498	-77.5427773	80.055
ZDV1	-1273628.82	-4711375.563	4094890.052	40.1873026	-105.1272268	1541.351
ZDV2	-1273623.116	-4711377.079	4094890.065	40.1873028	-105.1271575	1541.34
ZDV3	-1273625.128	-4711380.273	4094885.773	40.1872524	-105.1271705	1541.327
ZFW1	-659983.375	-5324060.777	3438276.435	32.8306493	-97.0664737	155.617
ZFW2	-659988.648	-5324063.317	3438271.434	32.830596	-97.0665262	155.569
ZFW3	-659983.671	-5324063.847	3438271.644	32.830598	-97.0664728	155.61
ZHN1	-5508637.253	-2234492.438	2303722.656	21.3129948	-157.9208359	24.664
ZHN2	-5508656.409	-2234482.75	2303687.405	21.3126519	-157.9209918	24.997
ZHN3	-5508647.832	-2234496.679	2303694.508	21.3127205	-157.9208363	25.052
ZHU1	-513864.631	-5506451.632	3166720.416	29.9618962	-95.331428	10.771
ZHU2	-513867.278	-5506455.004	3166714.237	29.9618316	-95.331452	10.806
ZHU3	-513873.557	-5506457.654	3166708.651	29.9617735	-95.3315143	10.808
ZJX1	772646.28	-5434462.203	3237231.776	30.69886	-81.9081868	2.145
ZJX2	772649.608	-5434463.753	3237228.381	30.6988244	-81.9081547	2.134
ZJX3	772645.542	-5434466.179	3237225.27	30.6987918	-81.9082003	2.119

WRE	X (m)	Y (m)	Z (m)	LATITUDE	LONGITUDE	H (m)
ZKC1	-415247.712	-4954556.381	3982161.092	38.8801592	-94.7908361	305.889
ZKC2	-415231.319	-4954557.699	3982161.145	38.8801599	-94.7906466	305.879
ZKC3	-415237.439	-4954561.056	3982155.956	38.8801017	-94.7907136	305.624
ZLA1	-2474410.238	-4637294.414	3602183.626	34.6035193	-118.0838995	763.51
ZLA2	-2474404.96	-4637297.211	3602183.628	34.6035194	-118.0838343	763.497
ZLA3	-2474411.565	-4637296.891	3602179.644	34.6034754	-118.0838995	763.562
ZLC1	-1808273.441	-4486410.789	4145302.929	40.7860424	-111.9521802	1287.414
ZLC2	-1808274.827	-4486414.417	4145298.434	40.7859889	-111.9521794	1287.418
ZLC3	-1808270.623	-4486416.119	4145298.436	40.7859889	-111.9521256	1287.424
ZMA1	966042.152	-5662999.817	2761581.538	25.8246126	-80.3191912	-7.598
ZMA2	966029.177	-5662999.118	2761586.026	25.8246604	-80.3193176	-8.228
ZMA3	966037.253	-5662997.945	2761586.371	25.8246624	-80.3192363	-7.896
ZME1	4070.7	-5226189.306	3644028.423	35.0673941	-89.9553721	68.61
ZME2	4070.734	-5226186.752	3644032.534	35.0674376	-89.9553717	68.882
ZME3	4064.538	-5226186.626	3644032.69	35.0674394	-89.9554396	68.864
ZMP1	-249978.595	-4539297.49	4458955.013	44.637463	-93.1520882	262.628
ZMP2	-249972.792	-4539297.824	4458955.009	44.6374629	-93.1520149	262.636
ZMP3	-249973.891	-4539302.102	4458950.531	44.6374068	-93.1520258	262.572
ZNY1	1406144.421	-4627343.97	4144322.123	40.7843295	-73.0971681	6.435
ZNY2	1406146.224	-4627347.021	4144317.322	40.7842765	-73.0971581	5.907
ZNY3	1406140.664	-4627348.68	4144317.36	40.7842769	-73.0972269	5.909
ZOA1	-2684437.169	-4293337.094	3865351.975	37.5430553	-122.0159525	-3.518
ZOA2	-2684434.166	-4293341.178	3865349.553	37.5430277	-122.0158992	-3.51
ZOA3	-2684438.539	-4293342.052	3865345.692	37.5429833	-122.0159359	-3.437
ZOB1	650769.972	-4754715.656	4187420.752	41.2971547	-82.2064472	223.649
ZOB2	650777.652	-4754714.83	4187422.773	41.2971671	-82.206355	225.15
ZOB3	650775.98	-4754719.655	4187414.981	41.2970873	-82.2063826	223.429
ZSE1	-2308930.415	-3668169.665	4663526.402	47.2869924	-122.1883745	82.09
ZSE2	-2308934.805	-3668175.208	4663519.992	47.2869068	-122.1883846	82.148
ZSE3	-2308935.866	-3668179.481	4663516.046	47.2868551	-122.1883663	82.085
ZSU1	2462589.499	-5529372.023	2003724.639	18.4313374	-65.9934759	-28.107
ZSU2	-	-	-	-	-	-
ZSU3	2462594.201	-5529375.144	2003710.273	18.4312006	-65.9934472	-28.13
ZTL1	529840.231	-5305248.806	3489342.86	33.3796888	-84.2967278	261.123
ZTL2	529846.606	-5305247.96	3489343.142	33.3796919	-84.2966588	261.104
ZTL3	529847.289	-5305251.399	3489337.907	33.3796352	-84.2966551	261.138

Figure 10-1 through Figure 10-3 show the RSS of the ECEF differences between the OPUS survey antenna phase center locations and the locations in the WAAS C&V calculated software. Figure 10-4 through Figure 10-6 shows the OPUS surveys' overall RMS quality indications.

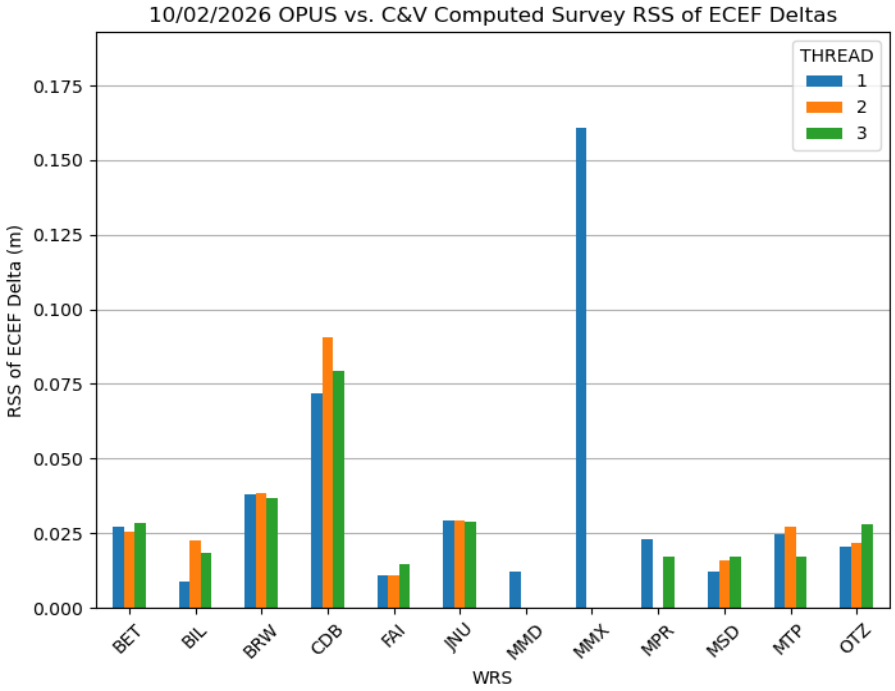


Figure 10-1 WAAS C&V Calculated Antenna Positions Deltas OPUS Survey

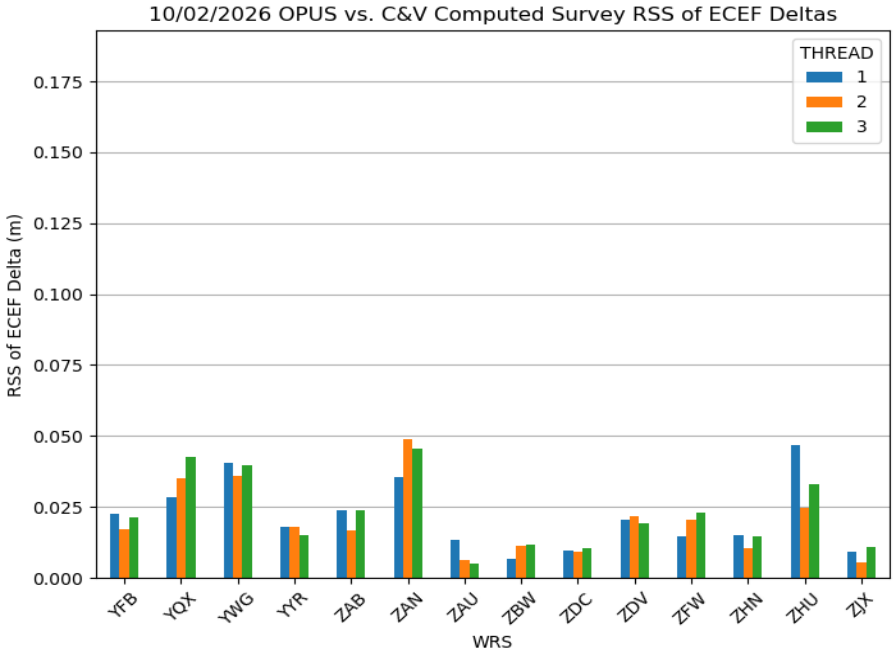


Figure 10-2 WAAS C&V Calculated Antenna Positions Deltas OPUS Survey

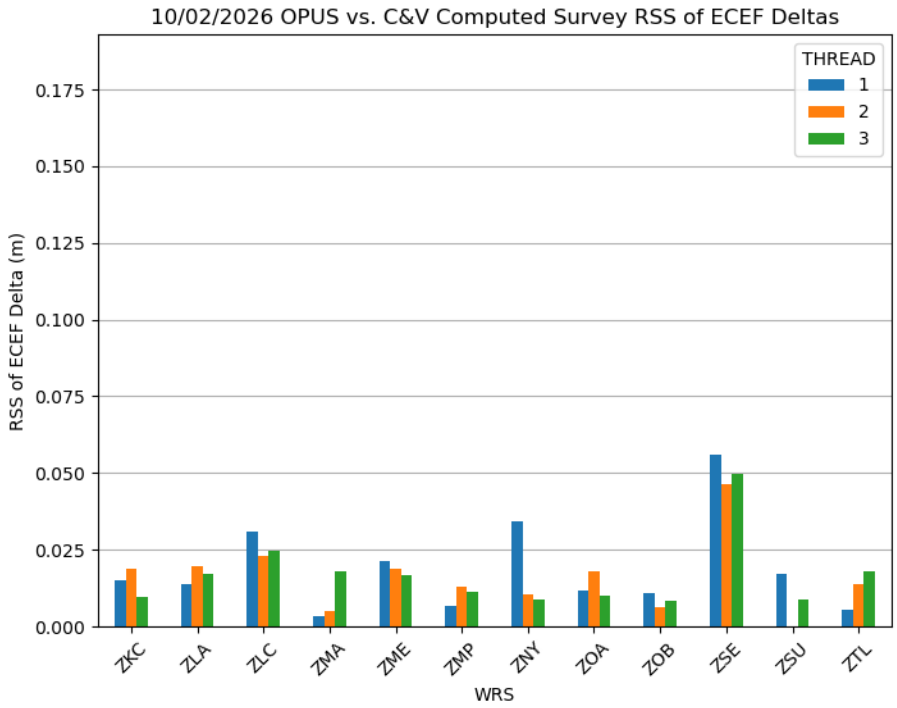


Figure 10-3 WAAS C&V Calculated Antenna Positions Deltas OPUS Survey

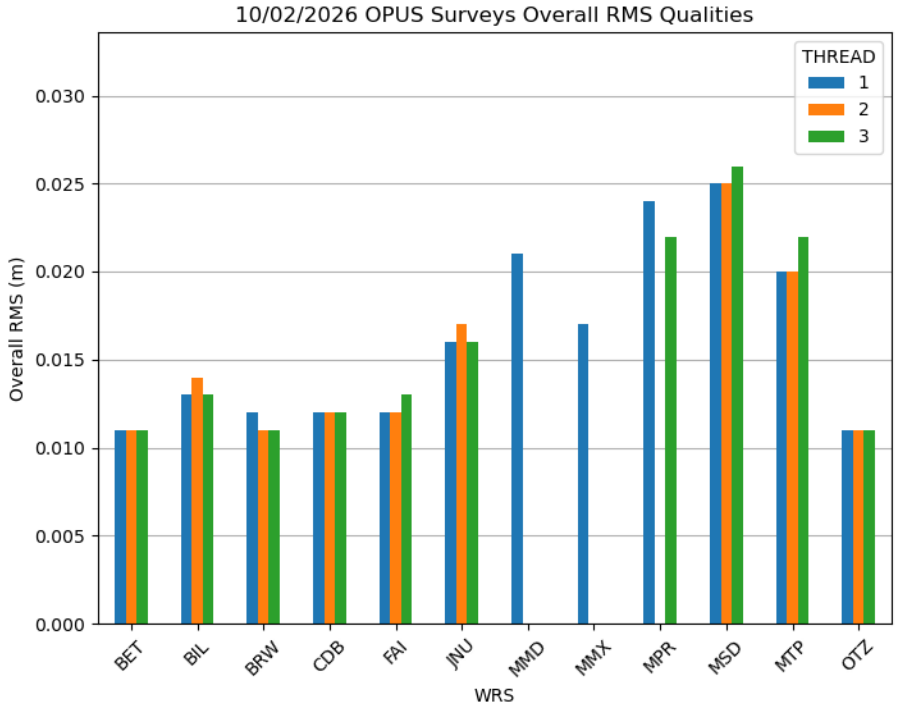


Figure 10-4 OPUS Survey Overall RMS Qualities

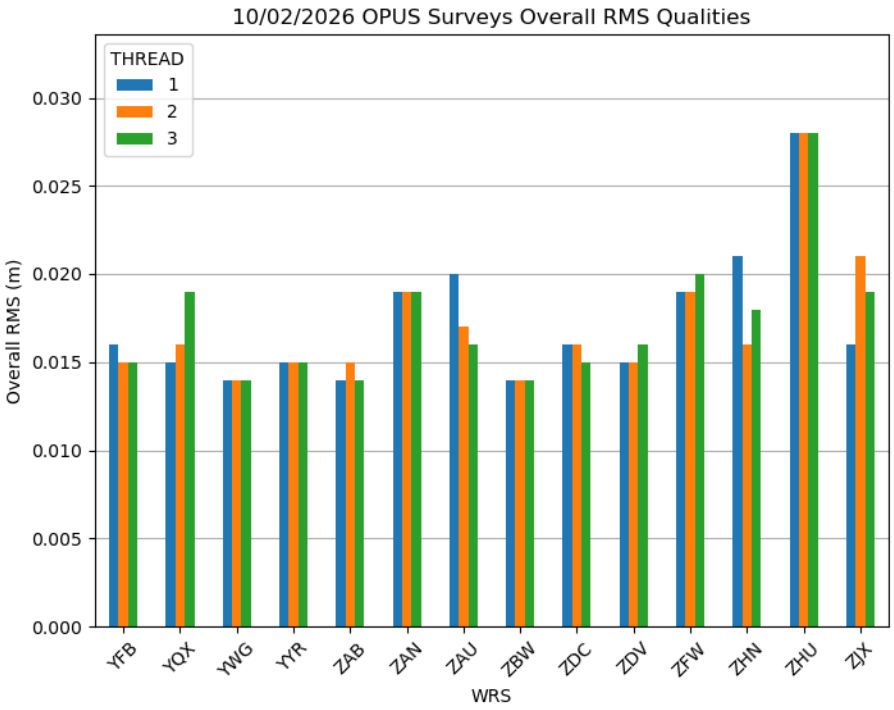


Figure 10-5 OPUS Survey Overall RMS Qualities

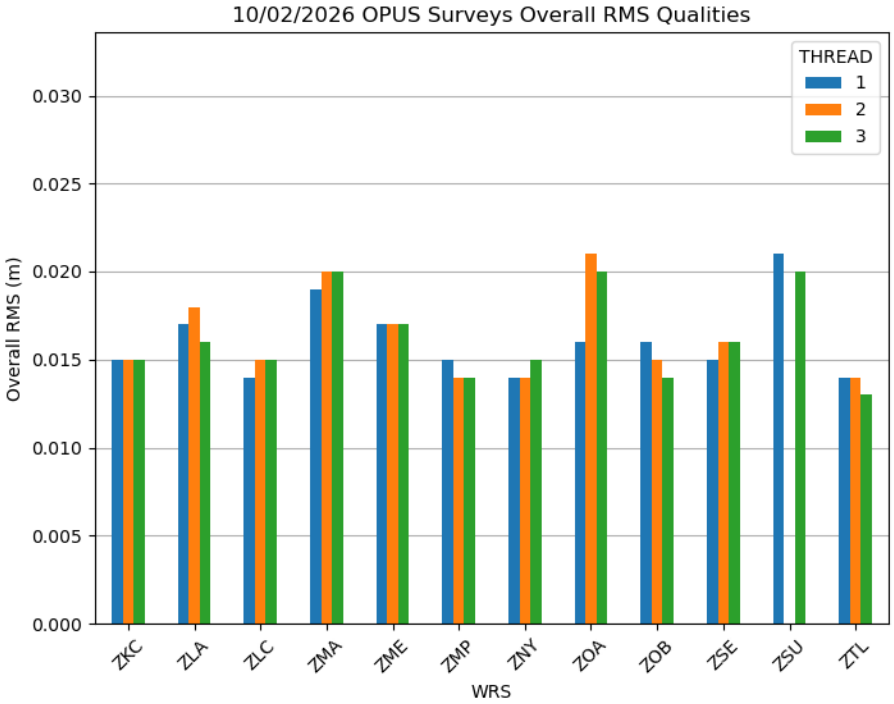


Figure 10-6 OPUS Survey Overall RMS Qualities

The “take action” threshold established by the WAAS Integrity Performance Panel (WIPP) is 25 cm for Mexico City and 10 cm for the remaining sites. The large MMX allowance is required because of the rapid subsidence in Mexico City (approximately 28 to 30 cm/year).

Figure 10-7 through Figure 10-9 show the RSS of the ECEF difference between the OPUS positions and the CSRS positions. Note that the OPUS positions are in IGS08 and the CSRS positions are in ITRF-2008. Figure 10-10 to Figure 10-12 show the RSS of the ECEF sigma’s survey qualities reported by CSRS.

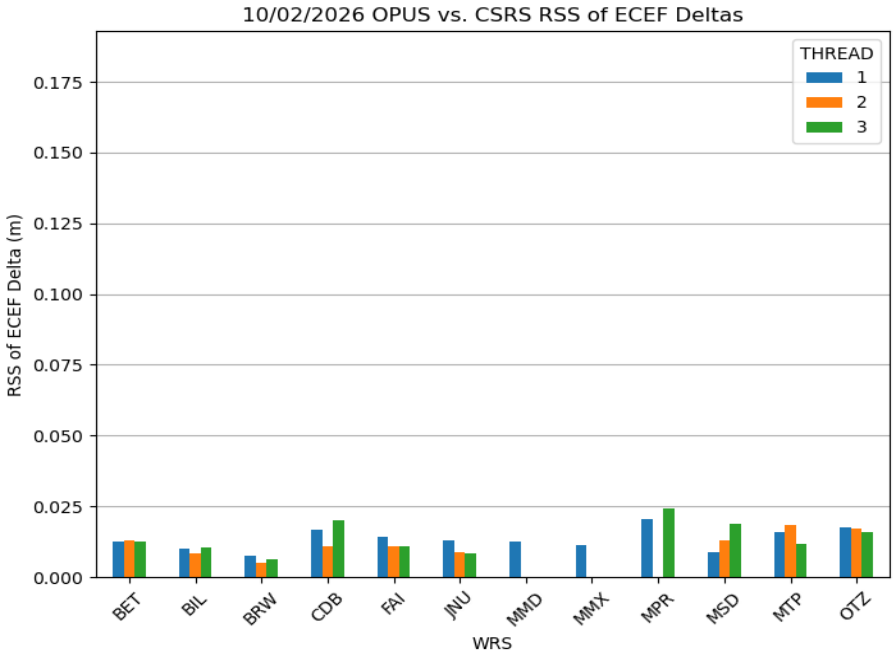


Figure 10-7 OPUS vs. CSRS RSS ECEF Deltas

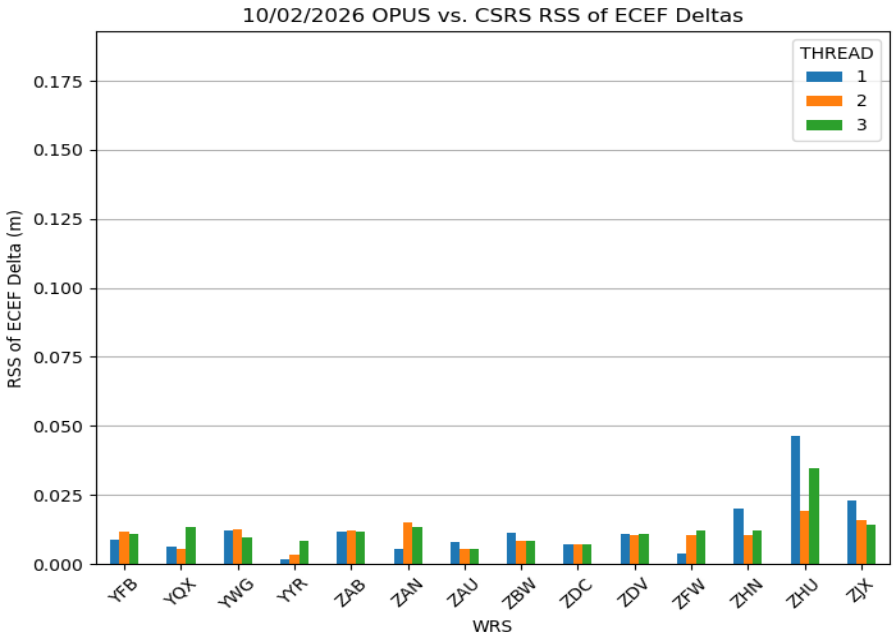


Figure 10-8 OPUS vs. CSRS RSS ECEF Deltas

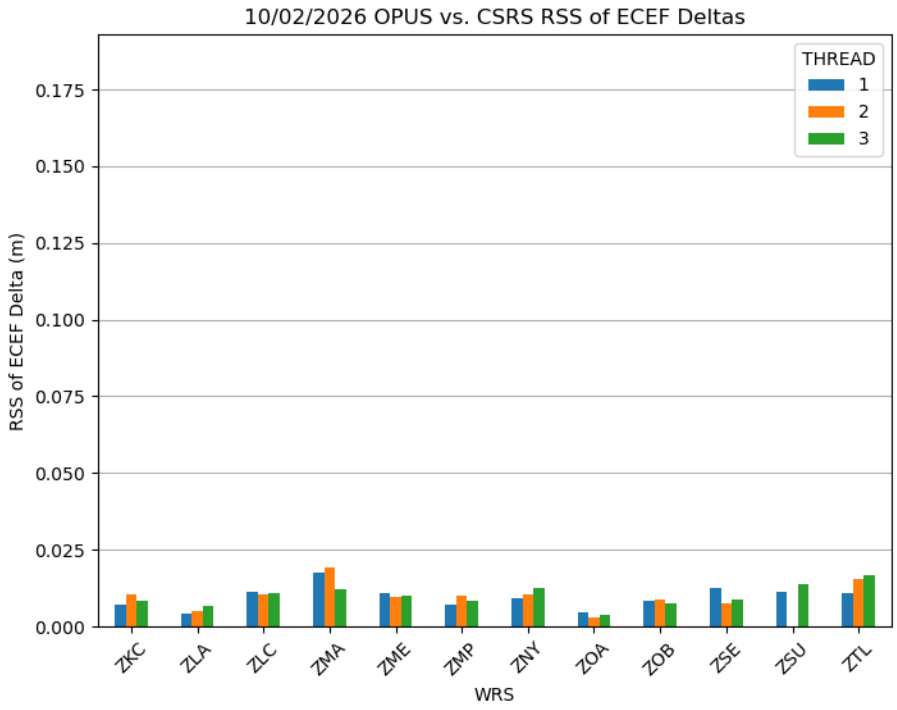


Figure 10-9 OPUS vs. CSRS RSS ECEF Deltas

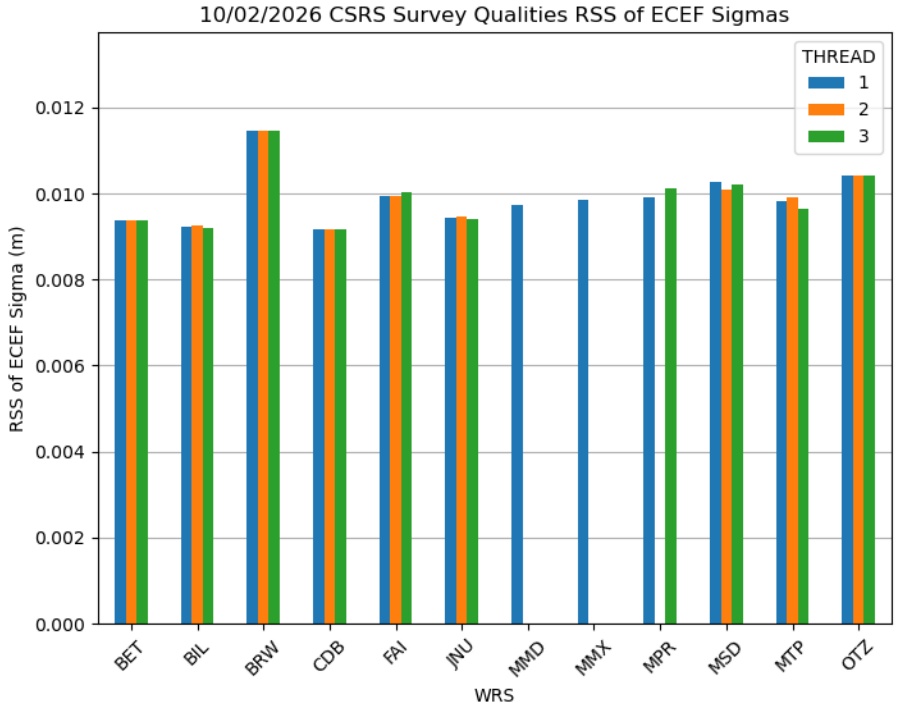


Figure 10-10 CSRS Survey Qualities

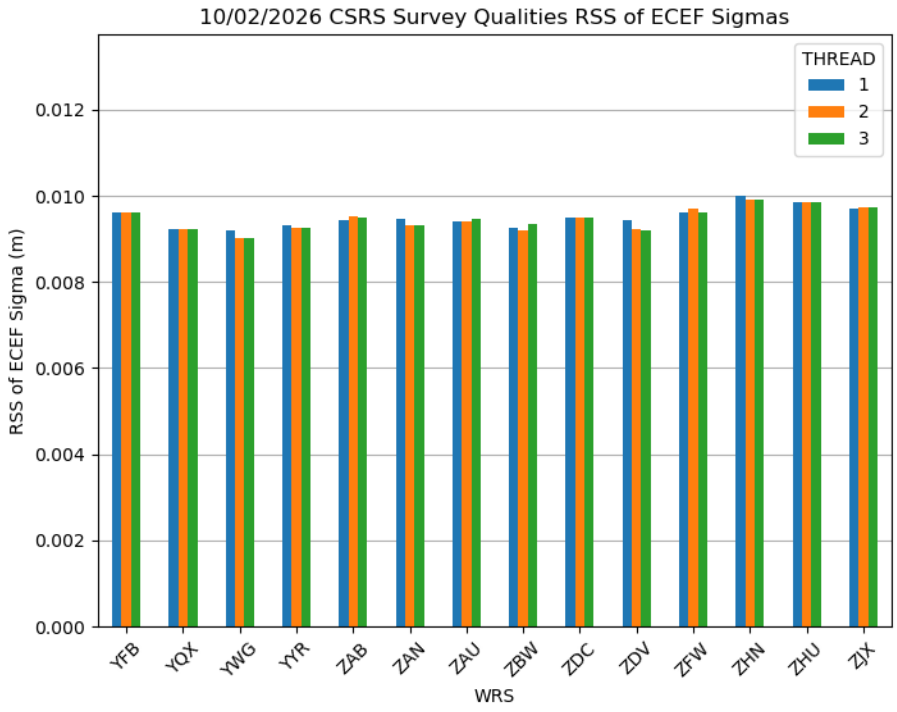


Figure 10-11 CSRS Survey Qualities

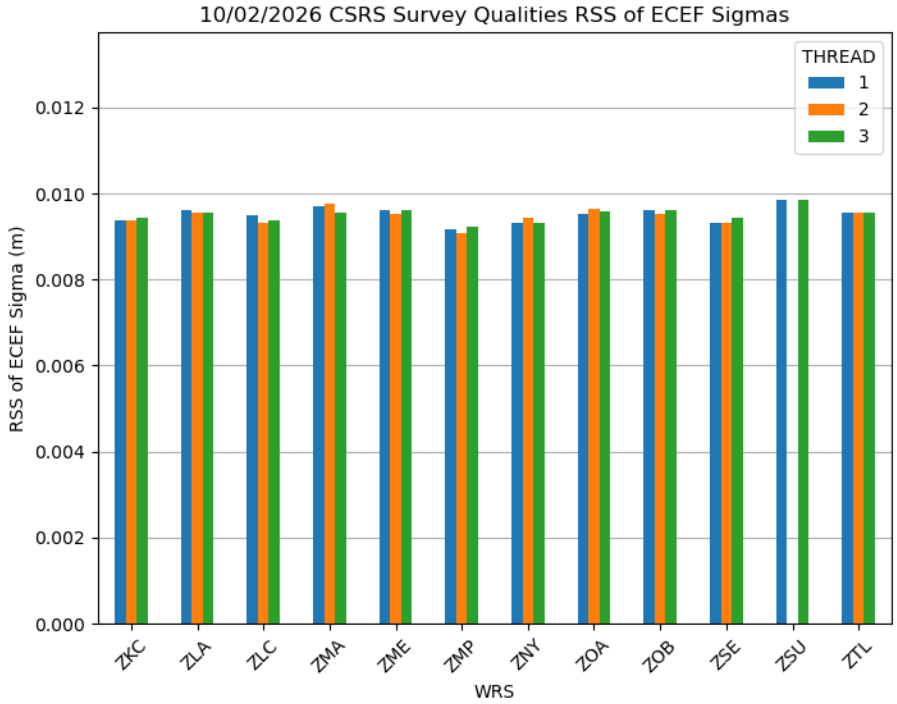


Figure 10-12 CSRS Survey Qualities

11.0 SQM

The SQM is designed to detect signal deformations originating from the GPS or GEO satellites and to ensure that the UDRE values are sufficiently inflated given the monitor's current observations. The SQM processes various correlator spacing measurements produced by the reference station receivers. These measurements are used to form four detection metrics for each receiver, and statistics are calculated based on the observed performance against "ideal" signal correlation peaks, resulting in an overall estimated deformation per satellite. The estimated deformation is compared against threshold values, which includes the acceptable error levels per UDRE value. If the estimated deformation exceeds threshold, the SQM trips for the given satellite and the UDRE value is set to "Don't Use." Currently, all 114 WAAS WREs are being used in the SQM computations because SQM depends on the entire ground network to ensure the satellite is the source of any detected problem rather than a localized effect.

The WAAS SQM offline monitoring effort includes the monitoring of the PRN type biases, trips, and the estimated deformation for each satellite (referred to as PRN bias in this report).

11.1 Alpha Metrics

The alpha metrics values are pre-determined by offline integrity analysis and are defined as constants in the SQM algorithm. These values remained unchanged for this reporting period and are listed in Table 11-1. Currently there are four sets of alpha metrics in the WAAS SQM algorithm that form four detection metrics for each receiver channel. For this report, the four detection metrics (DM) will be referred to as: DM1, DM2, DM3, and DM4.

Table 11-1 Alpha Metrics

Correlator Spacing	DM1	DM2	DM3	DM4
-0.1	0	0.43407318	0	-0.36110353
-0.075	0	0.48570652	-0.0058771682	-0.74860302
-0.05	-0.4071265	-0.69931105	-0.011382325	0.23726003
-0.025	1	-0.010099034	0.00037033029	-0.0076011735
0	0	0	0	0
0.025	-0.25	0.13317879	0.99991788	-0.062414070
0.05	1.008525	-0.22851782	0	0.25177272
0.075	0	0.10209042	0	0.42875623
0.1	0	0.078436452	0	0.41602138

11.2 Type Bias

The PRN type biases are evaluated as part of the WAAS SQM offline monitoring effort. Depending on the PRN number of any given GPS satellite, it can be classified into three categories of correlation function shapes: skinny (Type 0), nominal (Type 1), and broad (Type 2). Note that wideband GEOs are considered a different type (Type 3). The PRN type biases are estimates that are computed at each epoch, and daily averages are computed for each type, for four detection metrics.

For this reporting period, the GEO-type biases were not evaluated. Table 11-2 shows the rollup averages for the quarter. Table 11-3 shows the rollup averages since January 1, 2008. Figure 11-1 shows the daily averages of the four detection metrics for the quarter.

Table 11-2 Type Bias Average for the Quarter

Detection Metric	Type 0	Type 1	Type 2
DM 1	1.31771	1.31934	1.32139
DM 2	0.243312	0.246352	0.249489
DM 3	0.972656	0.973082	0.973732
DM 4	-0.188032	-0.189871	-0.191831

Table 11-3 Type Bias Average since January 1, 2008

Detection Metric	Type 0	Type 1	Type 2
DM 1	1.31611	1.31823	1.32002
DM 2	0.241743	0.244908	0.248037
DM 3	0.970915	0.9714	0.97199
DM 4	-0.187033	-0.188724	-0.190727

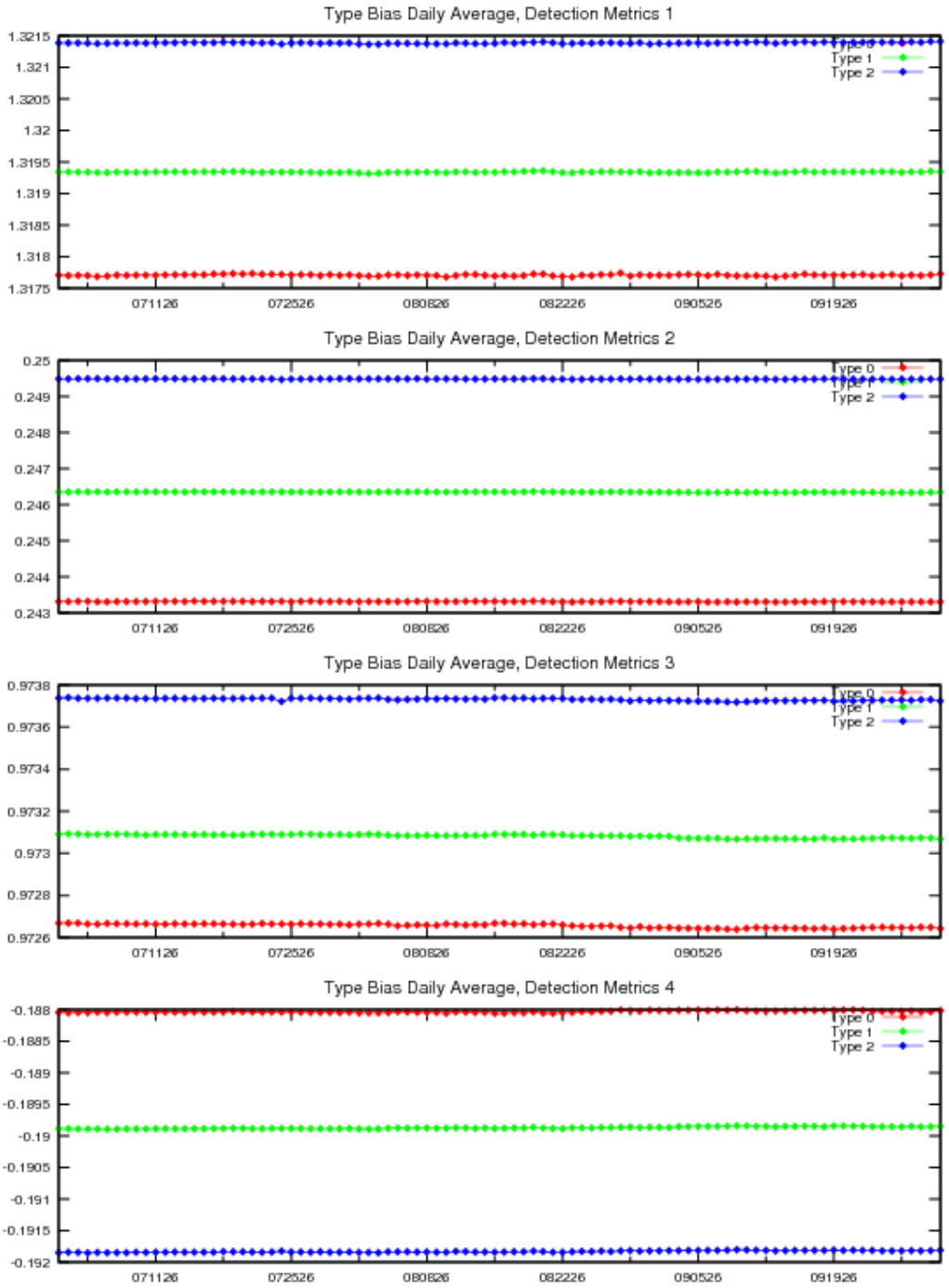


Figure 11-1 Type Bias Average Trend

11.3 PRN Bias

The PRN biases are evaluated as part of the WAAS SQM offline monitoring effort. A PRN bias is the overall estimated deformation per satellite across receivers. Detection metrics are adjusted for inter-receiver bias, corrected for PRN-type bias, and combined across receivers for each satellite. Relying on the assertion that the majority of the SV signals are healthy and normal, detection metrics are normalized over all the orbiting satellites, which results in an overall PRN bias for each satellite. PRN biases are collected at each epoch and daily averages are computed for each satellite for four detection metrics.

Table 11-4 and Figure 11-2 show the rollup PRN bias averages for the quarter with the maximum values for each detection metrics as follows: (1) the maximum average for DM1 is 0.0014893 observed on PRN22, (2) the maximum average for DM2 is 0.0002426 observed on PRN19, (3) the maximum average for DM3 is 0.0004002 observed on PRN18, (4) the maximum average for DM4 is 0.0005936 observed on PRN22.

Table 11-4 PRN Bias Average for the Quarter

PRN	DM 1	DM 2	DM 3	DM 4
1	2.11446000e-04	9.81076000e-05	2.98932000e-04	2.75322000e-04
2	2.39393000e-04	9.56207000e-05	6.66880000e-05	9.22902000e-05
3	1.89536000e-04	4.80652000e-05	1.14937000e-04	8.52543000e-05
4	6.95923000e-04	1.97537000e-04	3.71201000e-04	2.13971000e-04
5	1.50339000e-04	1.07708000e-04	7.09543000e-05	9.26728000e-05
6	7.57778000e-04	1.02011000e-04	7.22978000e-05	3.69255000e-04
7	1.76677000e-04	1.90473000e-04	5.52783000e-05	1.72053000e-04
8	3.38958000e-04	8.85261000e-05	1.19075000e-04	1.76850000e-04
9	2.95142000e-04	5.28739000e-05	1.70785000e-04	7.94000000e-05
10	1.62659000e-04	1.18025000e-04	5.58804000e-05	1.20913000e-04
11	2.95229000e-04	9.57935000e-05	3.63197000e-04	3.01902000e-04
12	4.21627000e-04	6.69533000e-05	7.14087000e-05	8.19359000e-05
13	2.47107000e-04	1.62990000e-04	2.87407000e-04	2.03921000e-04
14	4.87270000e-04	1.58512000e-04	3.47562000e-04	2.15375000e-04
15	4.19447000e-04	1.77490000e-04	9.04978000e-05	1.13040000e-04
16	2.01239000e-04	5.79543000e-05	1.47814000e-04	2.27988000e-04
17	3.96910000e-04	1.45527000e-04	7.71196000e-05	1.10995000e-04
18	6.12766000e-04	1.18383000e-04	4.00172000e-04	2.37060000e-04
19	7.52946000e-04	2.42623000e-04	6.07620000e-05	1.03641000e-04
20	1.68036000e-04	7.99087000e-05	3.75725000e-04	4.50453000e-04
21	2.21987000e-04	4.66630000e-05	1.63026000e-04	8.38826000e-05
22	1.48929000e-03	1.88364000e-04	5.28978000e-05	5.93555000e-04
23	3.59632000e-04	1.26196000e-04	3.28465000e-04	2.55740000e-04
24	2.07828000e-04	1.06895000e-04	2.52600000e-04	3.16455000e-04
25	4.43205000e-04	8.64413000e-05	4.02837000e-05	1.86445000e-04
26	1.56407000e-04	4.32141000e-05	1.46921000e-04	1.77428000e-04
27	2.34783000e-04	1.08258000e-04	2.58525000e-04	3.57168000e-04
28	2.71574000e-04	7.98359000e-05	3.53752000e-04	3.17799000e-04
29	3.67588000e-04	1.79743000e-04	1.30791000e-04	2.38995000e-04
30	3.29500000e-04	8.20848000e-05	1.57267000e-04	9.43815000e-05
31	1.43208000e-04	8.78054000e-05	8.25783000e-05	1.26005000e-04
32	2.78525000e-04	1.83186000e-04	7.10065000e-05	3.40210000e-04

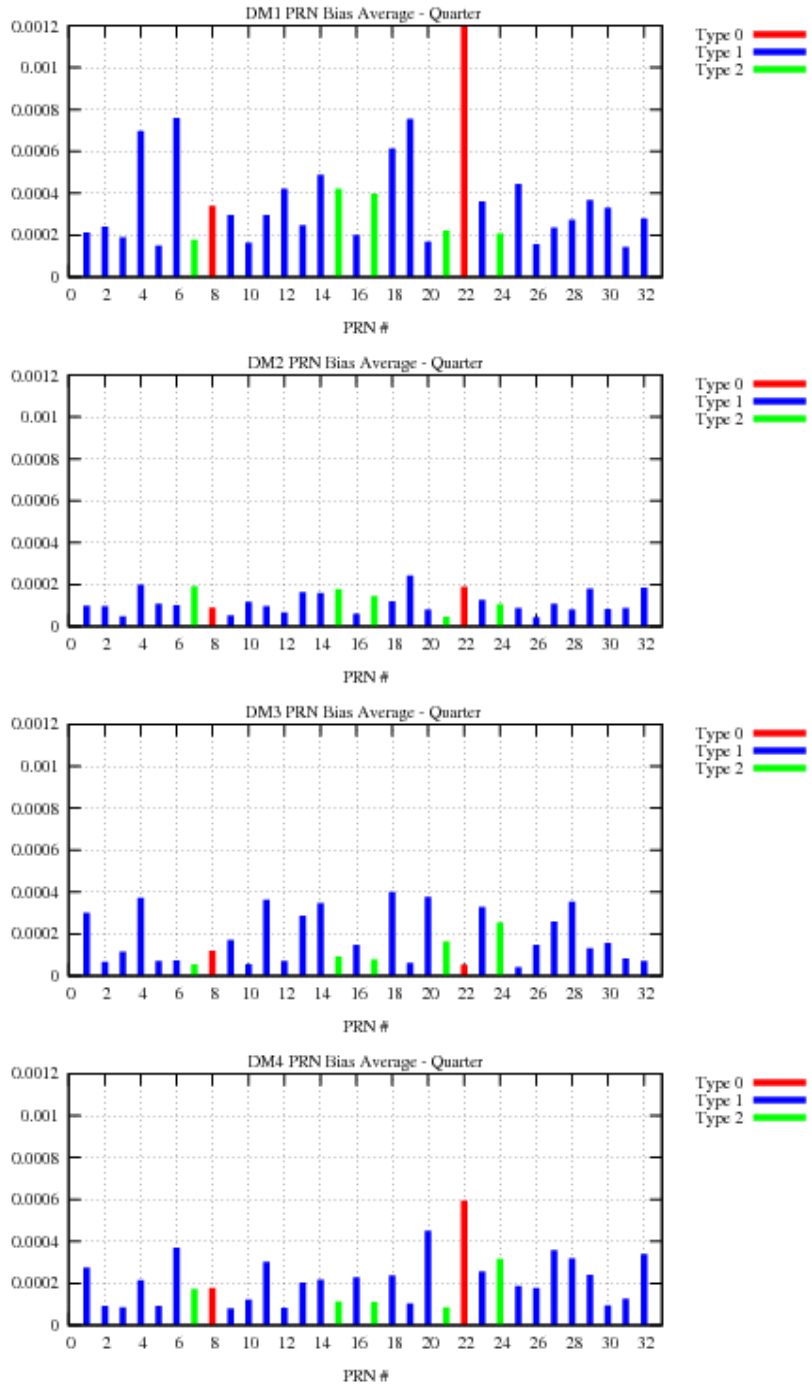


Figure 11-2 PRN Bias Average for the Quarter

Figure 11-3 to Figure 11-10 show the daily PRN bias for each PRN for four detection metrics. Figure 11-4 shows a shift in PRN bias for PRN7 on July 24, 2025 due to a FCSTDV NANU on PRN7. Figure 11-6 starts showing SQM data for PRN13 from September 02, 2025 as a result of its initialization. Figure 11-6 shows a shift in PRN bias for PRN15 on September 25, 2025 due to a FCSTDV NANU on PRN15.

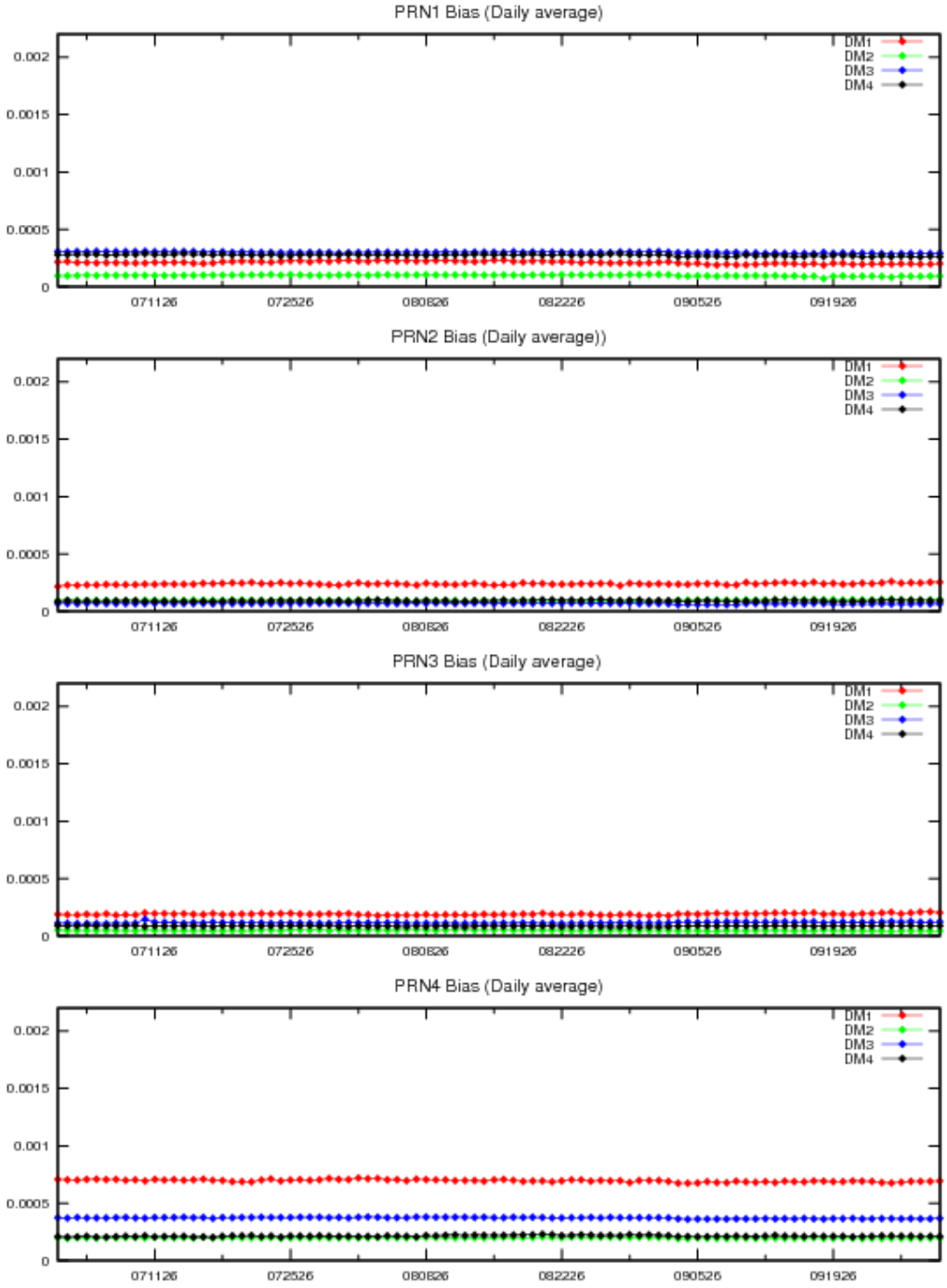


Figure 11-3 PRN Bias Average Trend (PRN1 – PRN4)

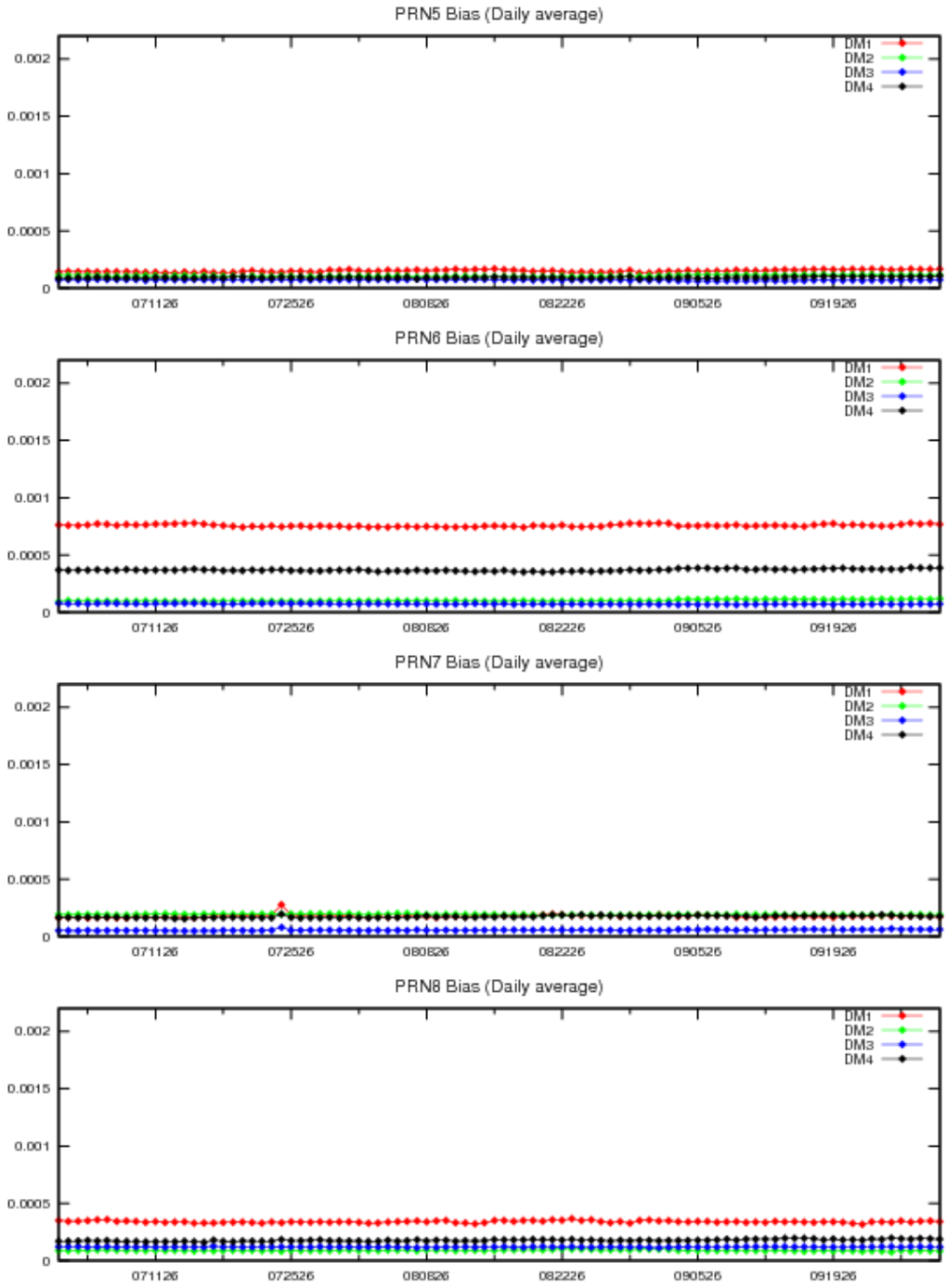


Figure 11-4 PRN Bias Average Trend (PRN5 – PRN8)

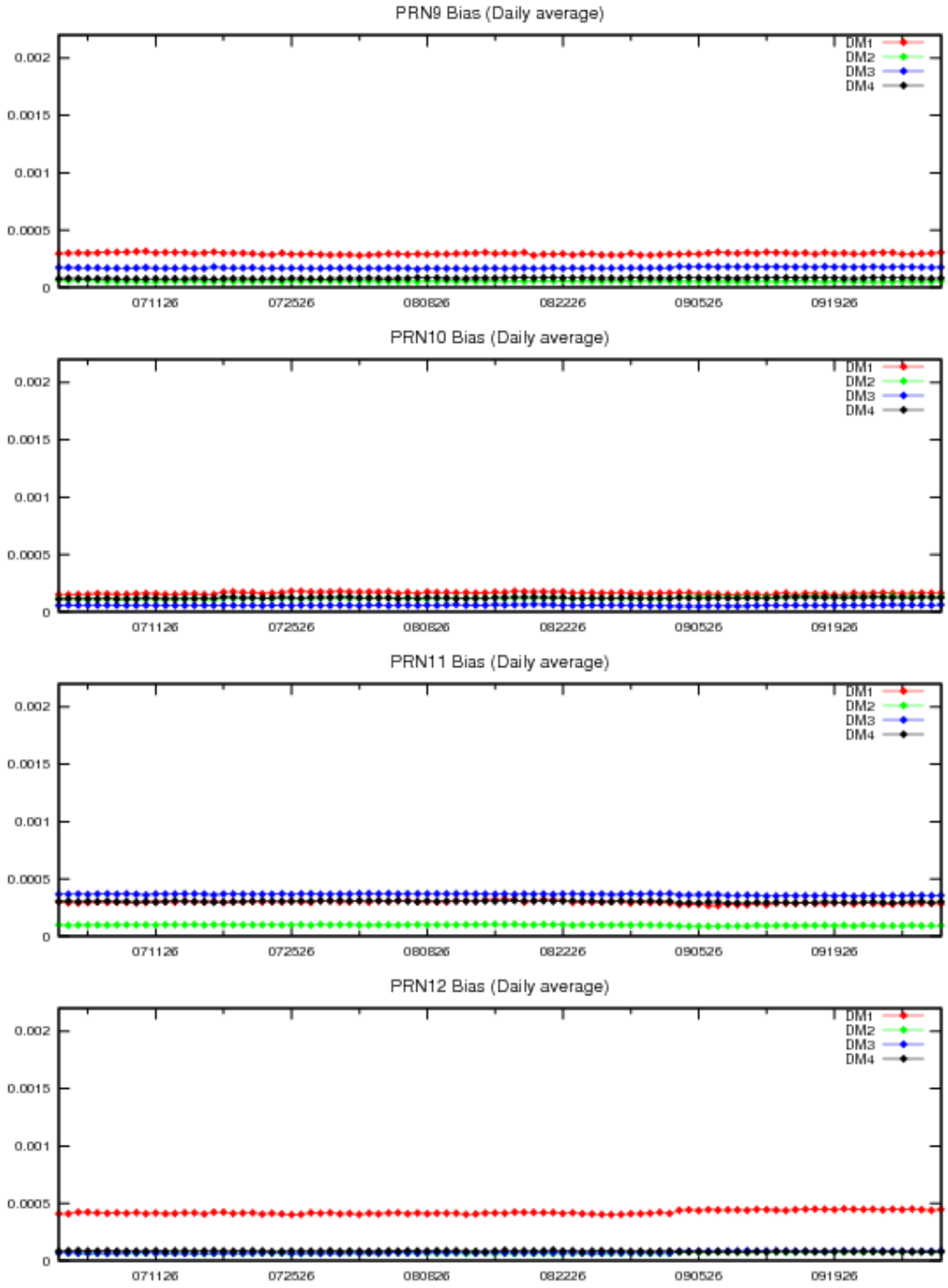


Figure 11-5 PRN Bias Average Trend (PRN9 – PRN12)

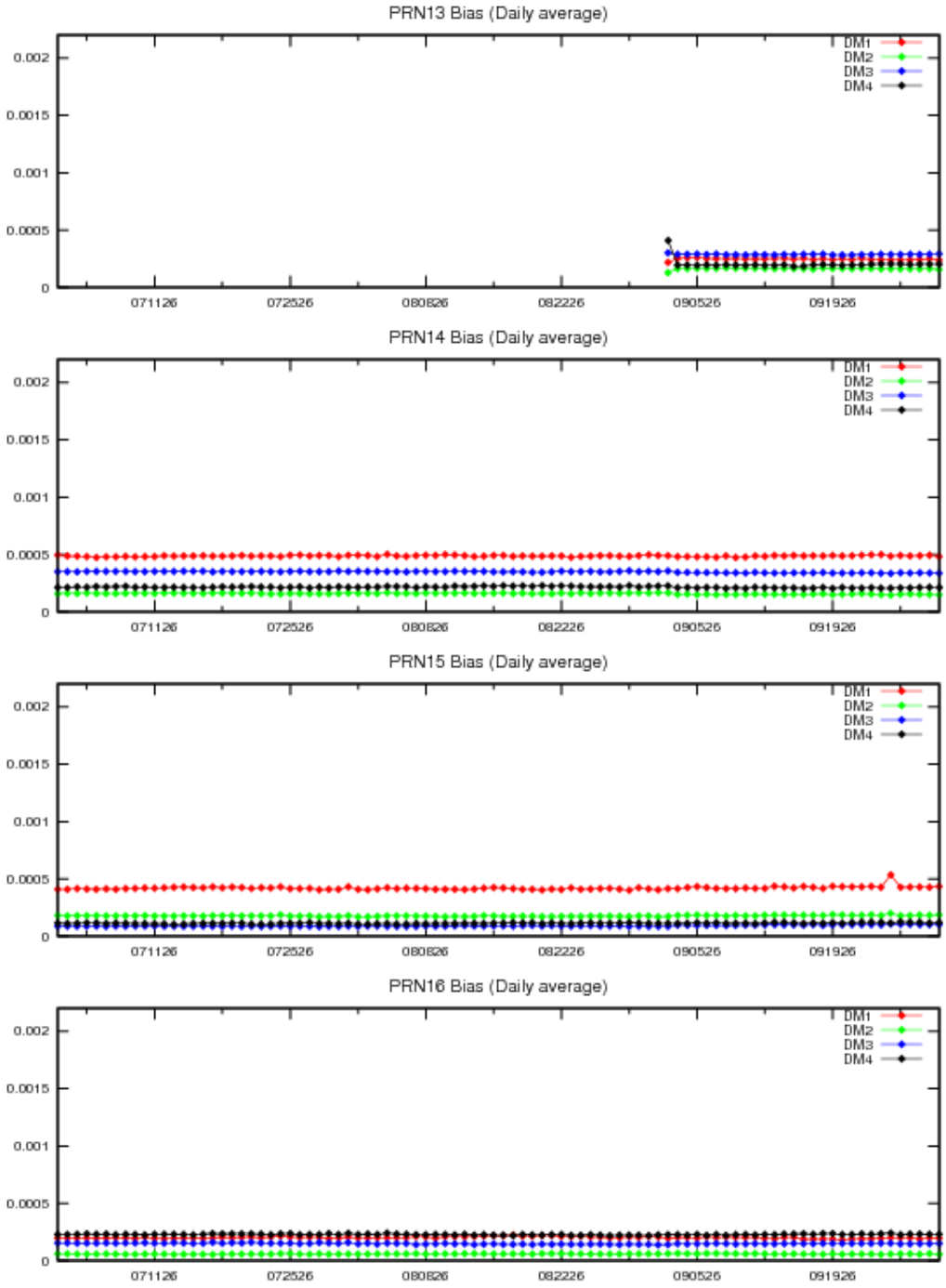


Figure 11-6 PRN Bias Average Trend (PRN13 – PRN16)

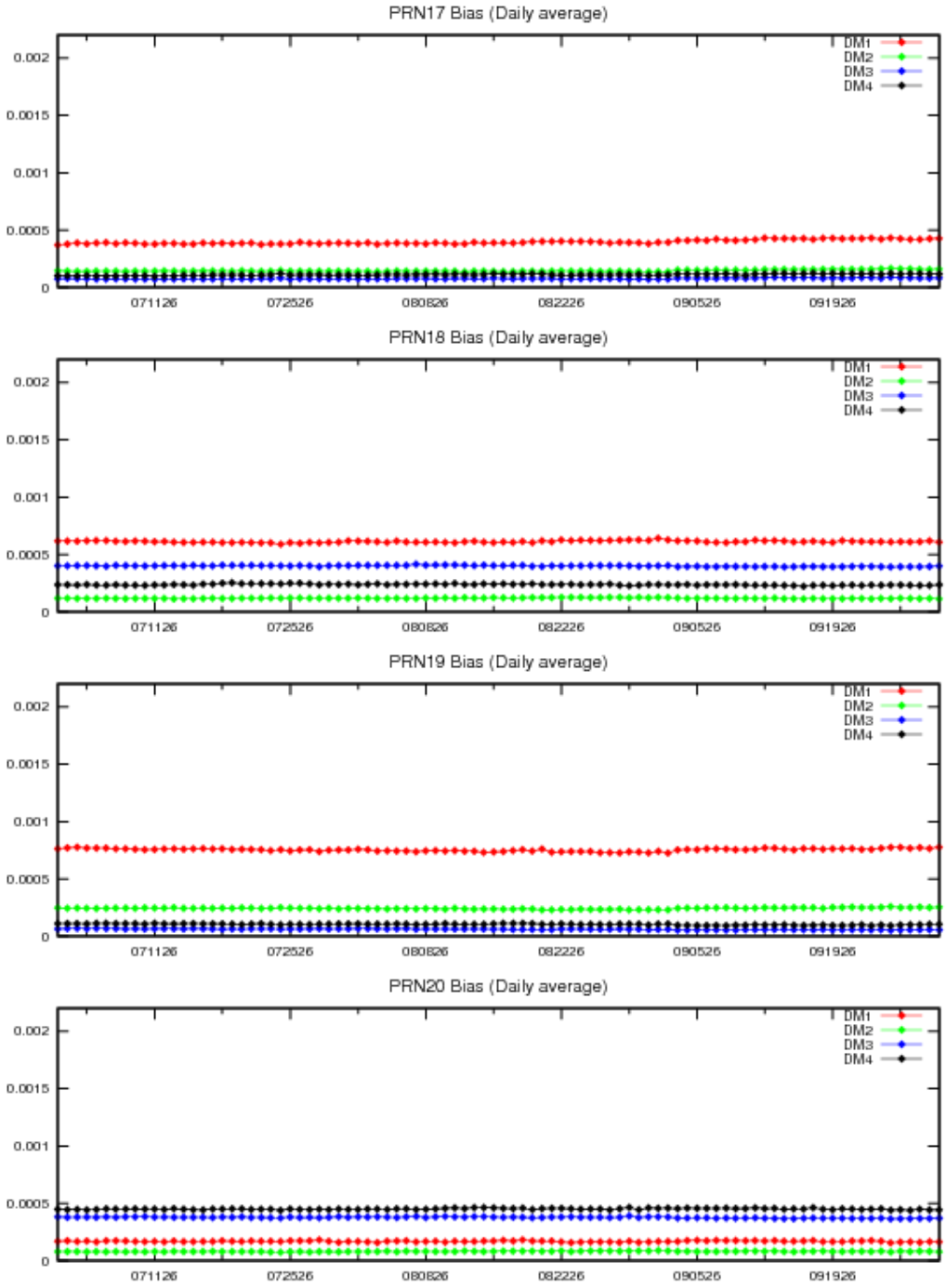


Figure 11-7 PRN Bias Average Trend (PRN17 – PRN20)

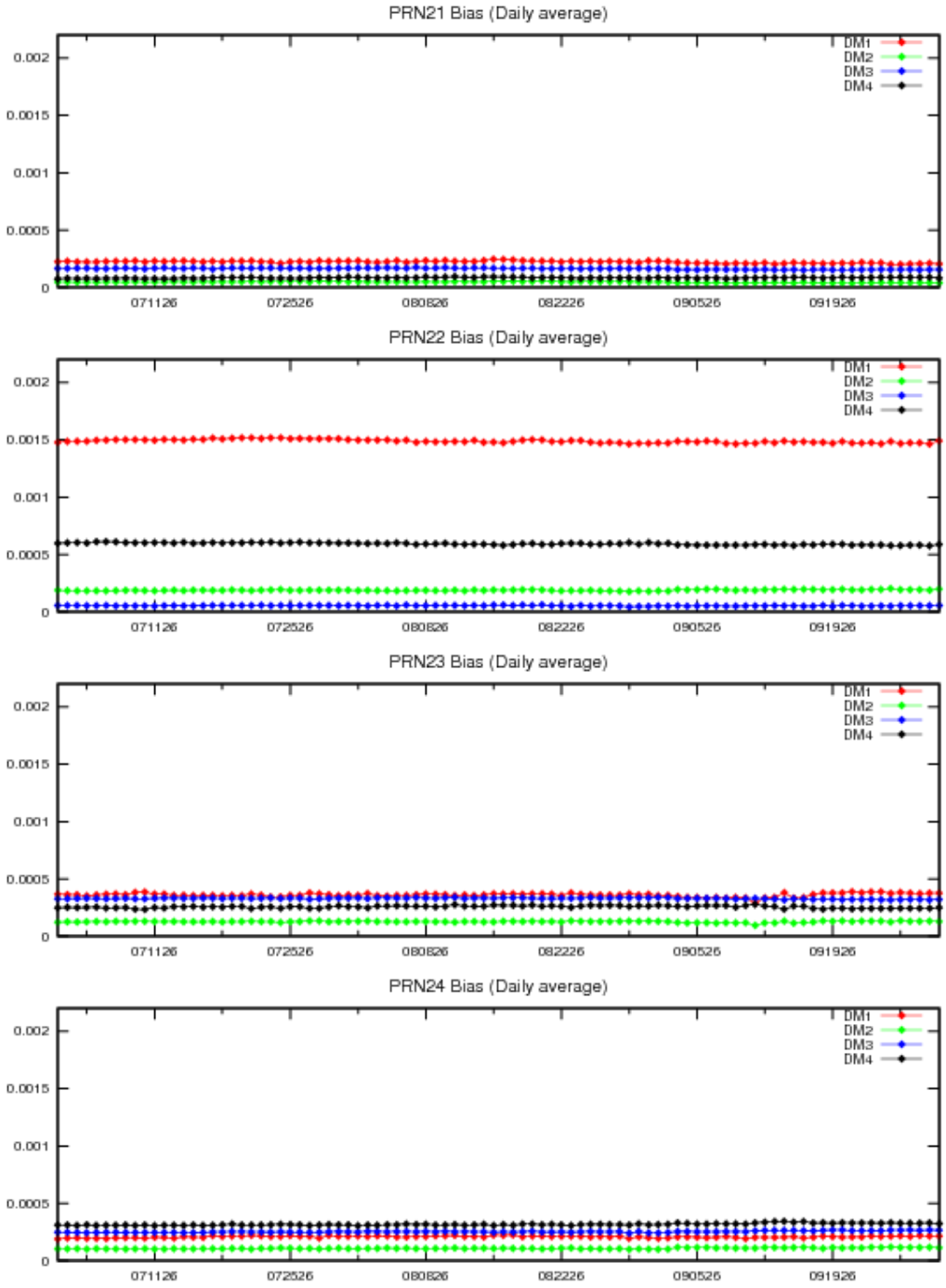


Figure 11-8 PRN Bias Average Trend (PRN21 – PRN24)

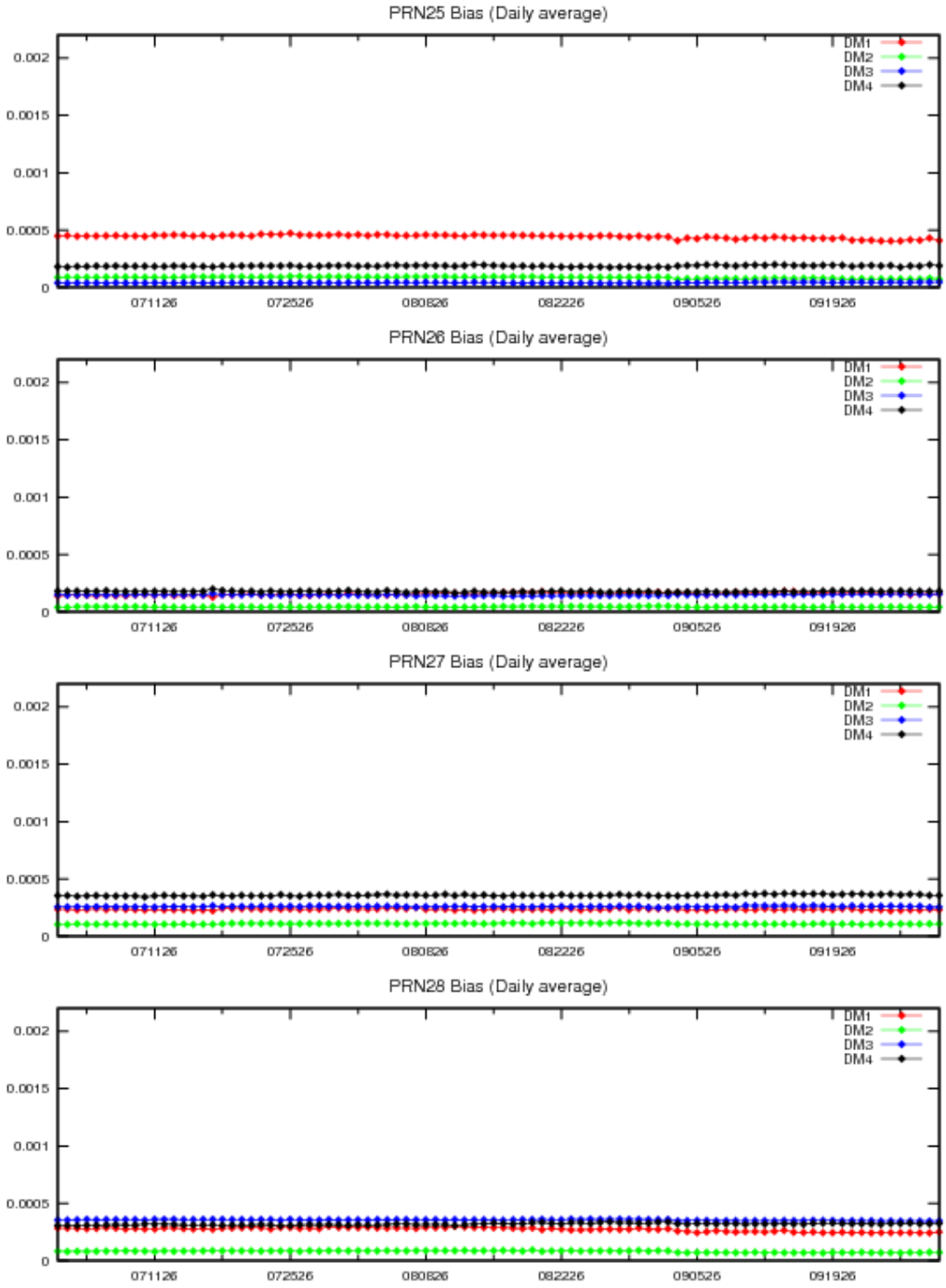


Figure 11-9 PRN Bias Average Trend (PRN25 – PRN28)

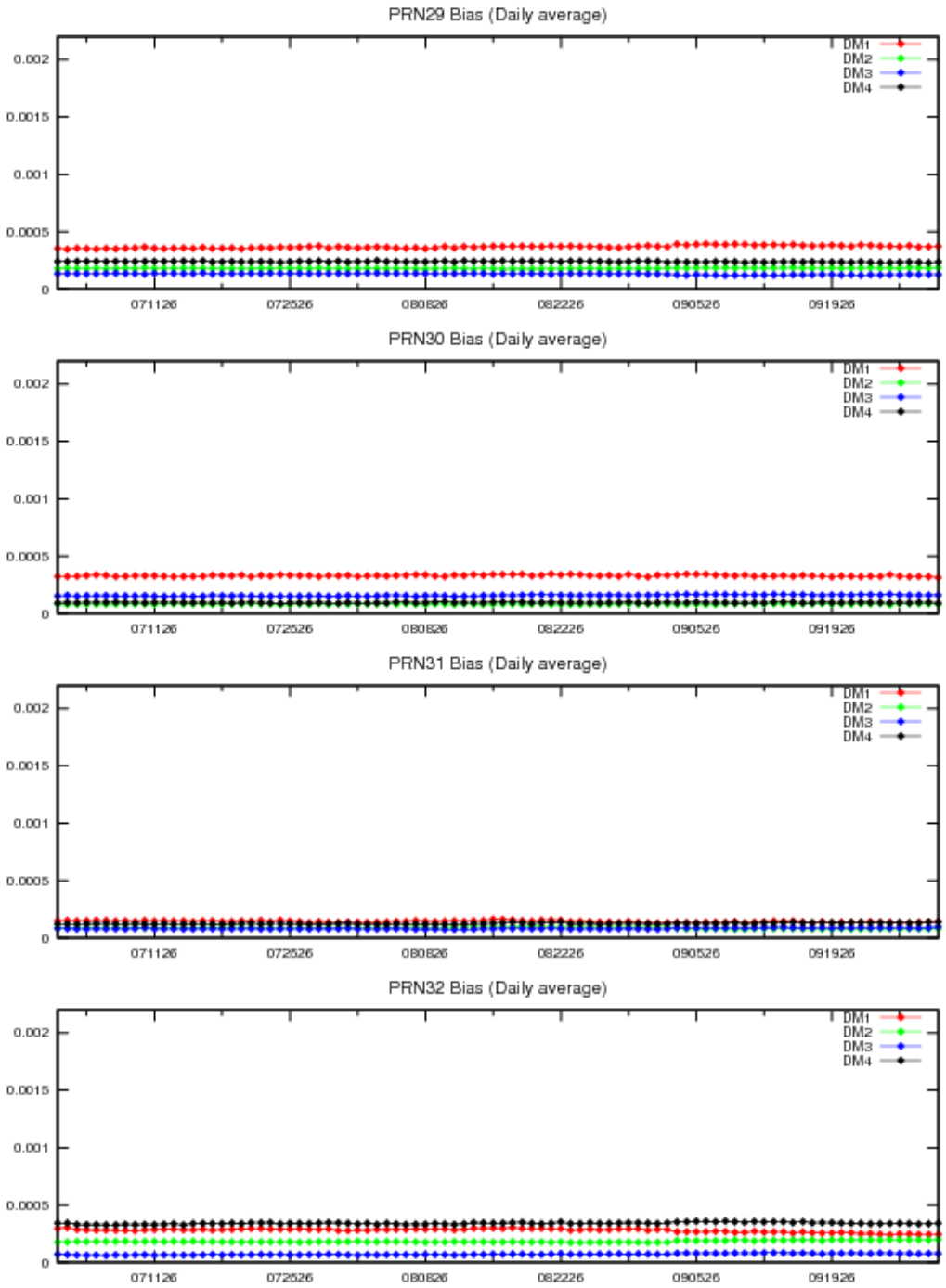


Figure 11-10 PRN Bias Average Trend (PRN29 – PRN32)

11.4 SQM Trips

An SQM trip occurs when the estimated deformation exceeds threshold. There were no SQM trips observed in this quarter.

APPENDIX A: GENERAL TERMS AND DEFINITIONS

Alert. An alert is an indication provided by the GPS/WAAS equipment to inform the user when the positioning performance achieved by the equipment does not meet the integrity requirements.

APC. Antenna phase center

ARP. Antenna reference point

Availability. The availability of a navigation system is the ability of the system to provide the required function and performance at the initiation of the intended operation. Availability is an indication of the ability of the system to provide usable service within the specified coverage area.

C&V. The Correction and Verification Subsystem

CNMP. Code noise and multipath

CONUS. Continental United States

Continuity. The continuity of a system is the ability of the total system (comprising all elements necessary to maintain aircraft position within the defined airspace) to perform its function without interruption during the intended operation. More specifically, continuity is the probability that the specified system performance will be maintained for the duration of a phase of operation, presuming that the system was available at the beginning of that phase of operation.

Coverage. The coverage provided by a radio navigation system is the surface area or space volume in which the signals are adequate to permit the user to determine position to a specified level of accuracy. Coverage is influenced by system geometry, signal power levels, receiver sensitivity, atmospheric noise conditions, and other factors that affect signal availability.

CSRS. Canadian Spatial Reference System

DM. Detection metrics

DR. Discrepancy Report

ECEF. Earth-centered, Earth-fixed

ESD. Extreme Storm Detector

FAA. Federal Aviation Administration

FD. Fault Detection

FDE. Fault Detection and Exclusion. A receiver processing scheme that autonomously provides integrity monitoring for the position solution using redundant range measurements. The FDE consists of two distinct parts: fault detection and fault exclusion. The fault detection part detects the presence of an unacceptably large position error for a given mode of flight. Upon the detection, fault exclusion follows and excludes the source of the unacceptably large position error, thereby allowing navigation to return to normal performance without an interruption in service.

G30. GEO PRN-135

GEO. Geostationary satellite

GIVE. Grid Ionospheric Vertical Error. Indicate the accuracy of ionospheric vertical delay correction at a geographically defined IGP. WAAS transmits one GIVE for each IGP in the mask.

GMT. Greenwich Mean Time

GPS. Global Positioning System. A space-based positioning, velocity, and time system composed of space, control, and user segments. The space segment, when fully operational, will be composed of 24 satellites in six orbital planes. The control segment consists of five monitor stations, three ground antennas, and a master control station. The user segment consists of antennas and receiver-processors that provide positioning, velocity, and precise timing to the user.

GUS. Ground uplink station

HAL. Horizontal alert limit. The radius of a circle in the horizontal plane (the local plane tangent to the WGS-84 ellipsoid), with its center being at the true position, which describes the region that is required to contain the indicated horizontal position with a probability of $1\text{-}10^{-7}$ per flight hour, for a particular navigation mode, assuming the probability of a GPS satellite integrity failure being included in the position solution is less than or equal to 10^{-4} per hour.

HMI. Hazardous Misleading Information. Any position data that has an error larger than the current protection level (HPL/VPL), without any indication of the error (e.g., alert message sequence).

HPE. Horizontal position error

HPL. Horizontal protection level. The radius of a circle in the horizontal plane (the plane tangent to the WGS-84 ellipsoid), with its center being at the true position, which describes the region that is assured to contain the indicated horizontal position. It is based on the error estimates provided by WAAS.

IAP. Instrument Approach Procedures

IGP. Ionospheric grid point. A geographically defined point for which the WAAS provides the vertical ionospheric delay.

IGS. International GPS Service

Kp. Planetary index

LNAV. Lateral navigation

LP. Localizer Performance. A WAAS operational service level with a HAL equal to 40 meters.

LPV. Localizer Performance with Vertical Guidance. A WAAS operational service level with a HAL equal to 40 meters and a VAL equal to 50 meters.

LPV200. Localizer Performance with Vertical Guidance to 200 ft decision height. A WAAS operational service level with a HAL equal to 40 meters and a VAL equal to 35 meters.

NANU. Notice Advisory to Navstar Users. NANU is an advisory message to inform users of a change in the GPS constellation. These messages inform users in advance of planned maintenance and also notify users of unscheduled outages.

NAS. National Airspace System

Navigation Message. Message structure designed to carry navigation data

NGS. National Geodetic Survey

NPA Navigation Mode. Non-precision approach navigation mode. Refers to the navigation solution operating with a minimum of four satellites with fast and long term WAAS corrections (no WAAS ionospheric corrections) available.

NSTB. National Satellite Test Bed

OCONUS. Outside Contiguous United States

OPUS. Online Positioning Use Server

PA Navigation Mode. Precision approach navigation mode. Refers to the navigation solution operating with a minimum of four satellites with all WAAS corrections (fast, long term, and ionospheric) available.

PAN. Performance Analysis Network

Position Solution. The use of ranging signal measurements and navigation data from at least four satellites to solve for three position coordinates and a time offset.

PPP. Precise Point Positioning

PRN. Pseudo-random noise

RAIM. Receiver autonomous integrity monitoring

RFI. Radio frequency interference

RNAV. Area navigation

RNP. Required Navigation Performance

RSS. Residual sum of squares

S15. GEO PRN-133

SBAS. Space Based Augmentation System

SIS. Signal in space

SM9. GEO PRN131

SPS. Standard positioning service. Three-dimensional position and time determination capability provided to a user equipped with a minimum capability GPS SPS receiver in accordance with GPS national policy and the performance specifications.

SQM. Signal quality monitor. Monitors correlator measurements to detect signal deformations that originate in the GPS or GEO satellites and ensure that the UDREs are sufficiently inflated to protect given the monitor's current observations.

SSM. System support modification

SV. Space vehicle

SVN. Space Vehicle Number

TOW. Time of GPS week

UDRE. User differential range error. Indicates the accuracy of combined fast and slow error corrections. WAAS transmits one UDRE for each satellite in the mask.

UTC. Coordinated Universal Time

VAL. Vertical alert limit. Half the length of a segment on the vertical axis (perpendicular to the horizontal plane of WGS-84 ellipsoid), with its center being at the true position, which describes the region that is required to contain the indicated vertical position with a probability of $1\text{-}10^{-7}$ per flight hour, for a particular navigation mode, assuming the probability of a GPS satellite integrity failure being included in the position solution is less than or equal to 10^{-4} per hour.

VNAV. Vertical navigation

VPE. Vertical position error

VPL. Vertical protection level. Half the length of a segment on the vertical axis (perpendicular to the horizontal plane of WGS-84 ellipsoid), with its center being at the true position, which describes the region that is assured to contain the indicated vertical position. It is based upon the error estimates provided by WAAS.

WAAS. Wide Area Augmentation System. Made up of an integrity reference monitoring network, processing facilities, geostationary satellites, and control facilities. Wide-area reference stations and integrity monitors are widely dispersed data collection sites that contain GPS/WAAS ranging receivers that monitor all signals from the GPS and the WAAS geostationary satellites. The reference stations collect measurements from the GPS and WAAS satellites so that differential corrections, ionospheric delay information, GPS/WAAS accuracy, WAAS network time, GPS time, and UTC can be determined. The wide-area reference station and integrity monitor data are forwarded to the central data processing sites. These sites process the data to determine differential corrections, ionospheric delay information, and GPS/WAAS accuracy, as well as verify residual error bounds for each monitored satellite. The central data processing sites also generate navigation messages for the geostationary satellites and WAAS messages. This information is modulated on the GPS-like signal and broadcast to the users from geostationary satellites.

WIPP. WAAS Integrity Performance Panel

WJHTC. William J. Hughes Technical Center for Advanced Aerospace

WRE. Wide-Area Reference Equipment

WRS. WAAS reference station

APPENDIX B: ADDITIONAL COVERAGE PLOTS

Appendix B includes the coverage plots with 99% LPV200 availability contour, 98% LPV availability contours, and 98% LP availability contours for the quarter. Figure B-1 shows CONUS coverage with 98% LP availability contour. Figure B-2 shows Alaska coverage with 98% LP availability contour. Figure B-3 shows CONUS coverage with 98% LPV availability contour. Figure B-4 shows Alaska coverage with 98% LPV availability contour. Figure B-5 shows CONUS coverage with 99% LPV200 availability contour. Figure B-6 shows Alaska coverage with 99% LPV200 availability contour.

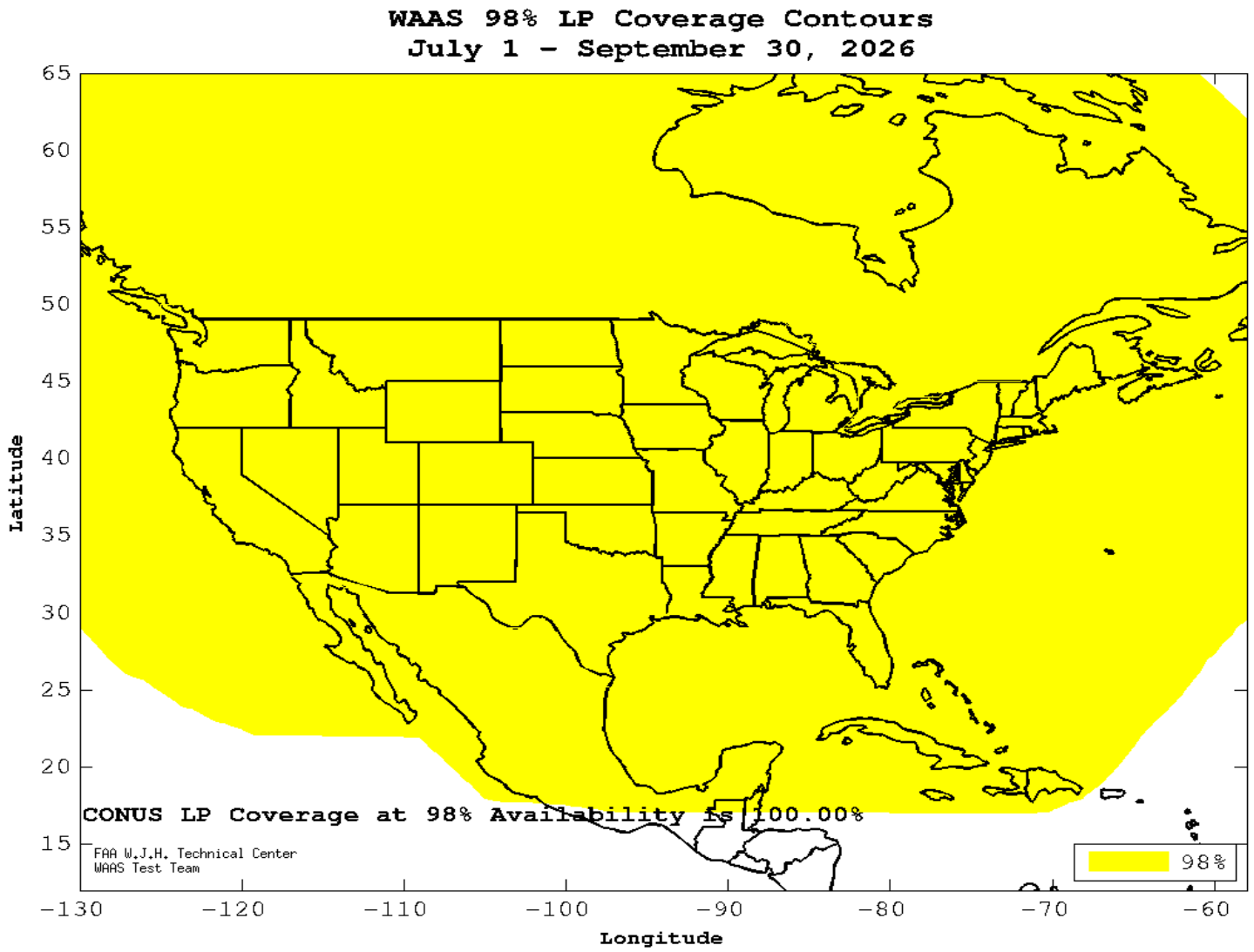


Figure B-1 98% CONUS LP Availability Contour

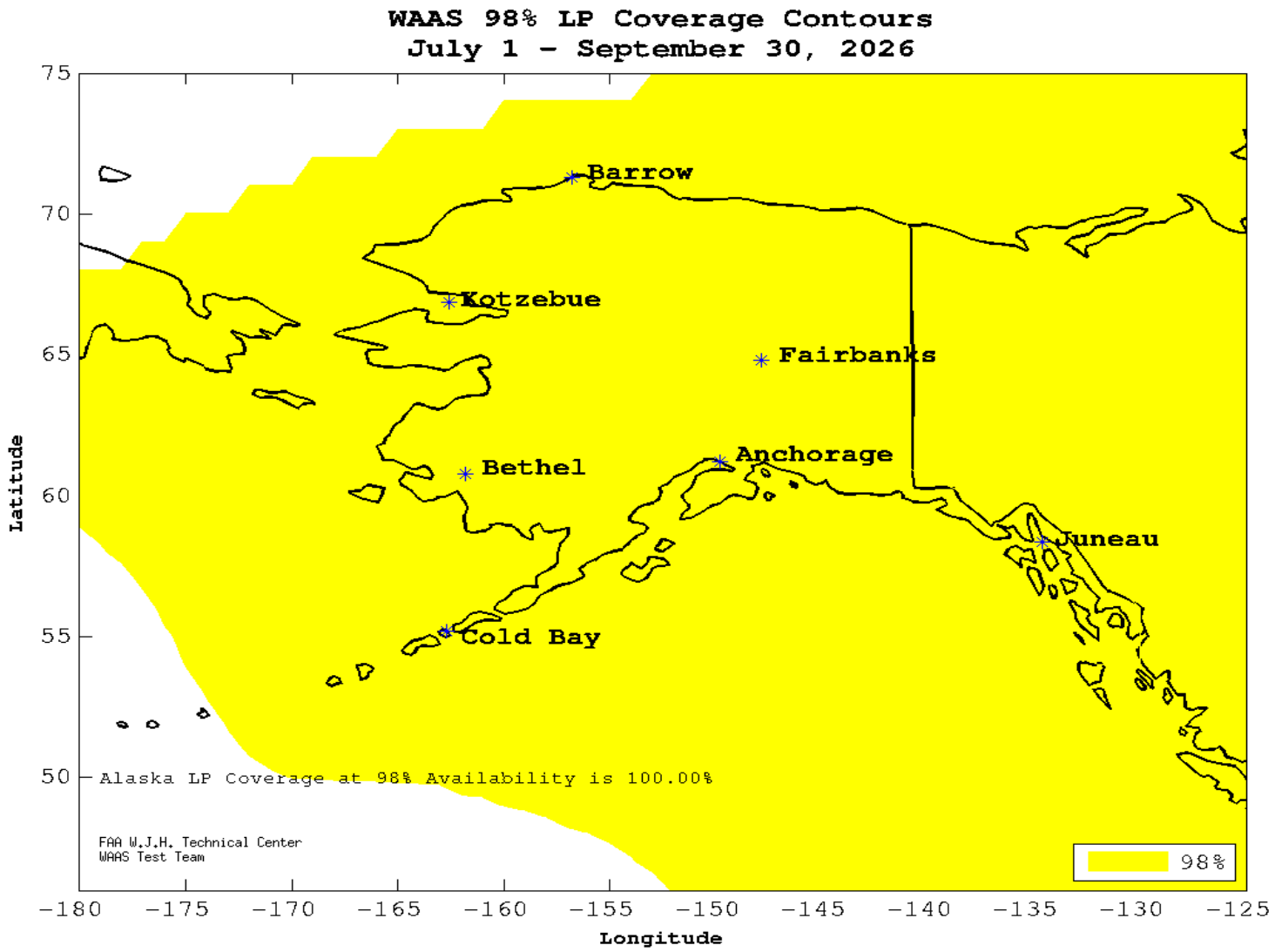


Figure B-2 98% Alaska LP Availability Contour

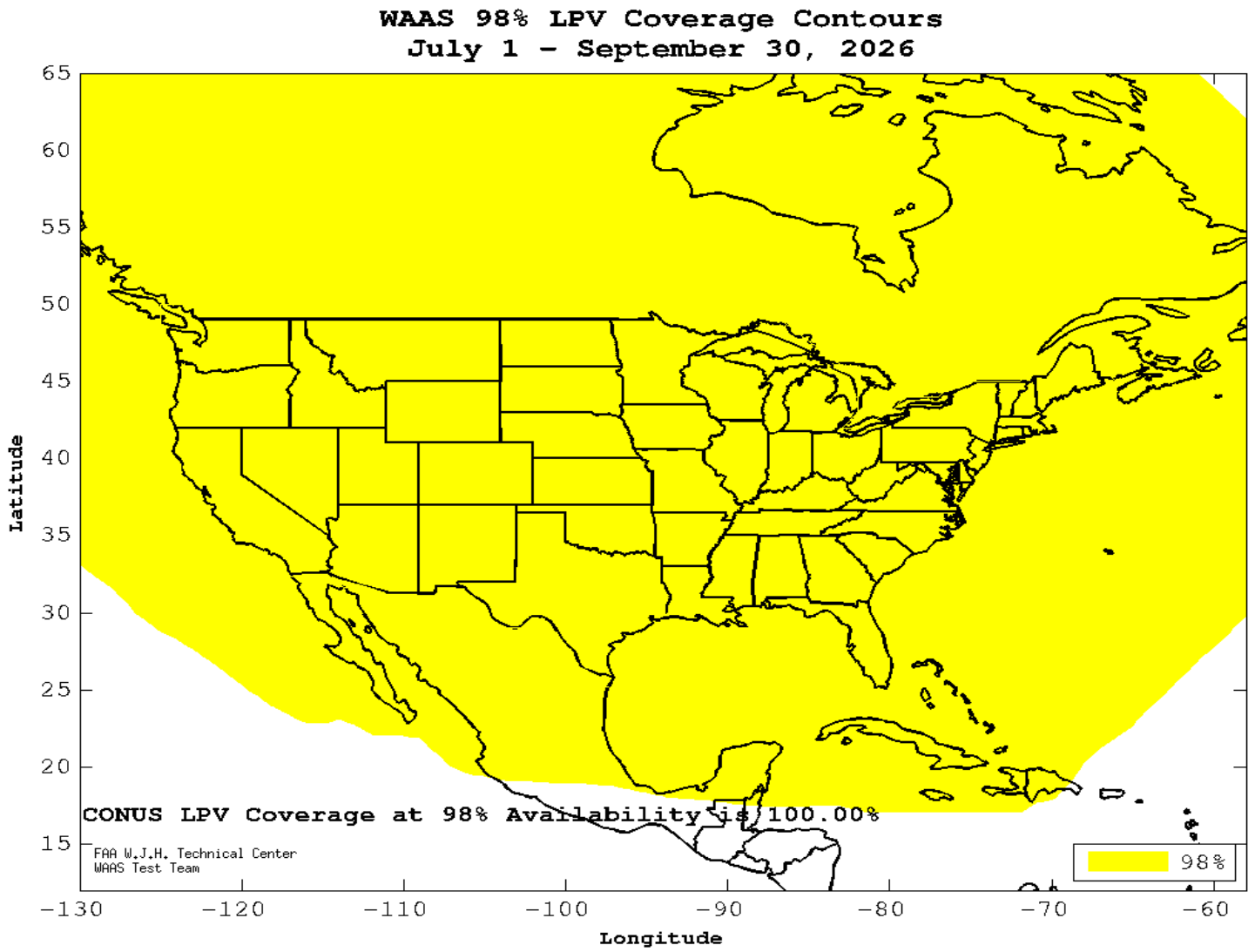


Figure B-3 98% CONUS LPV Availability Contour

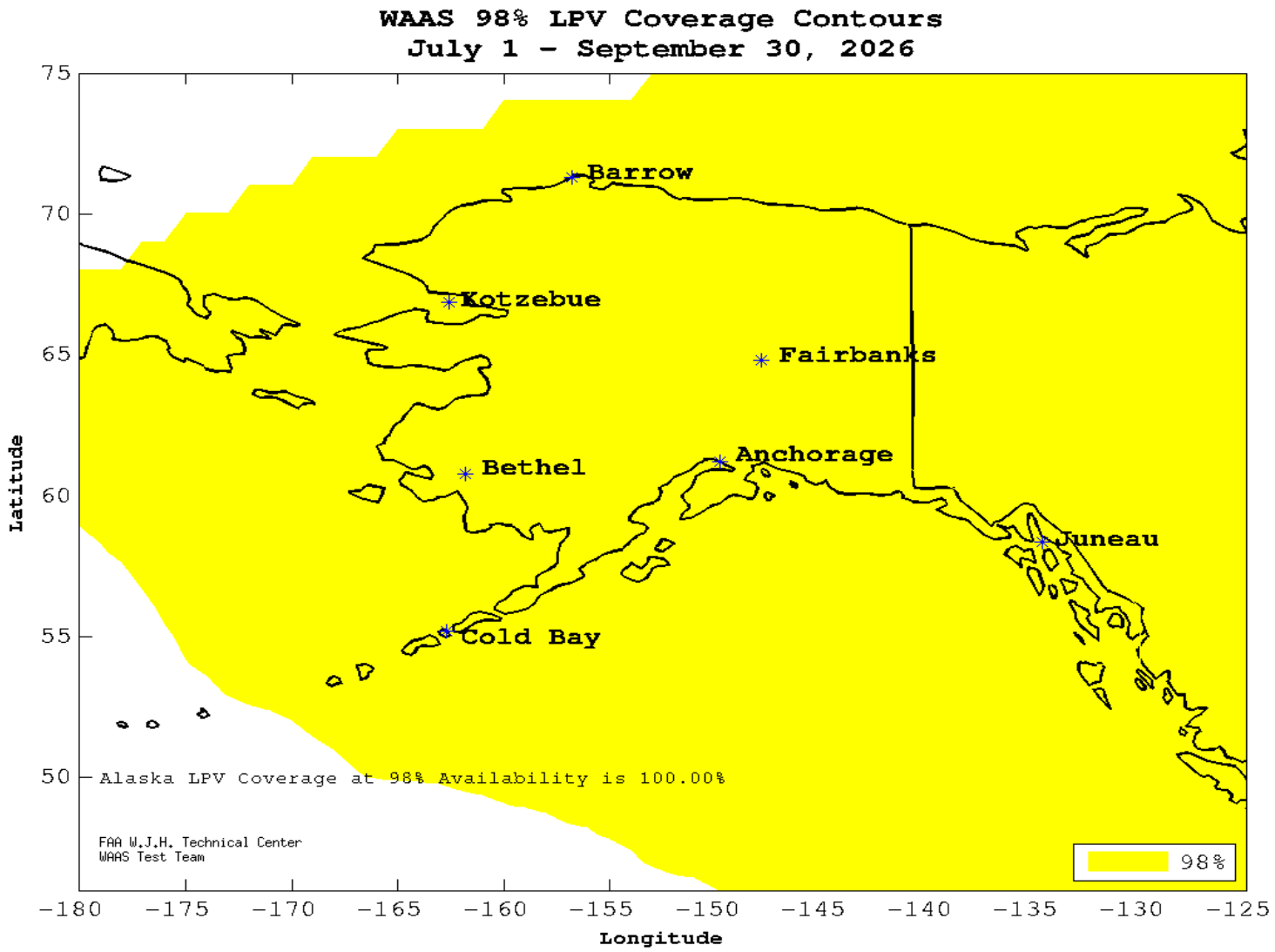


Figure B-4 98% Alaska LPV Availability Contour

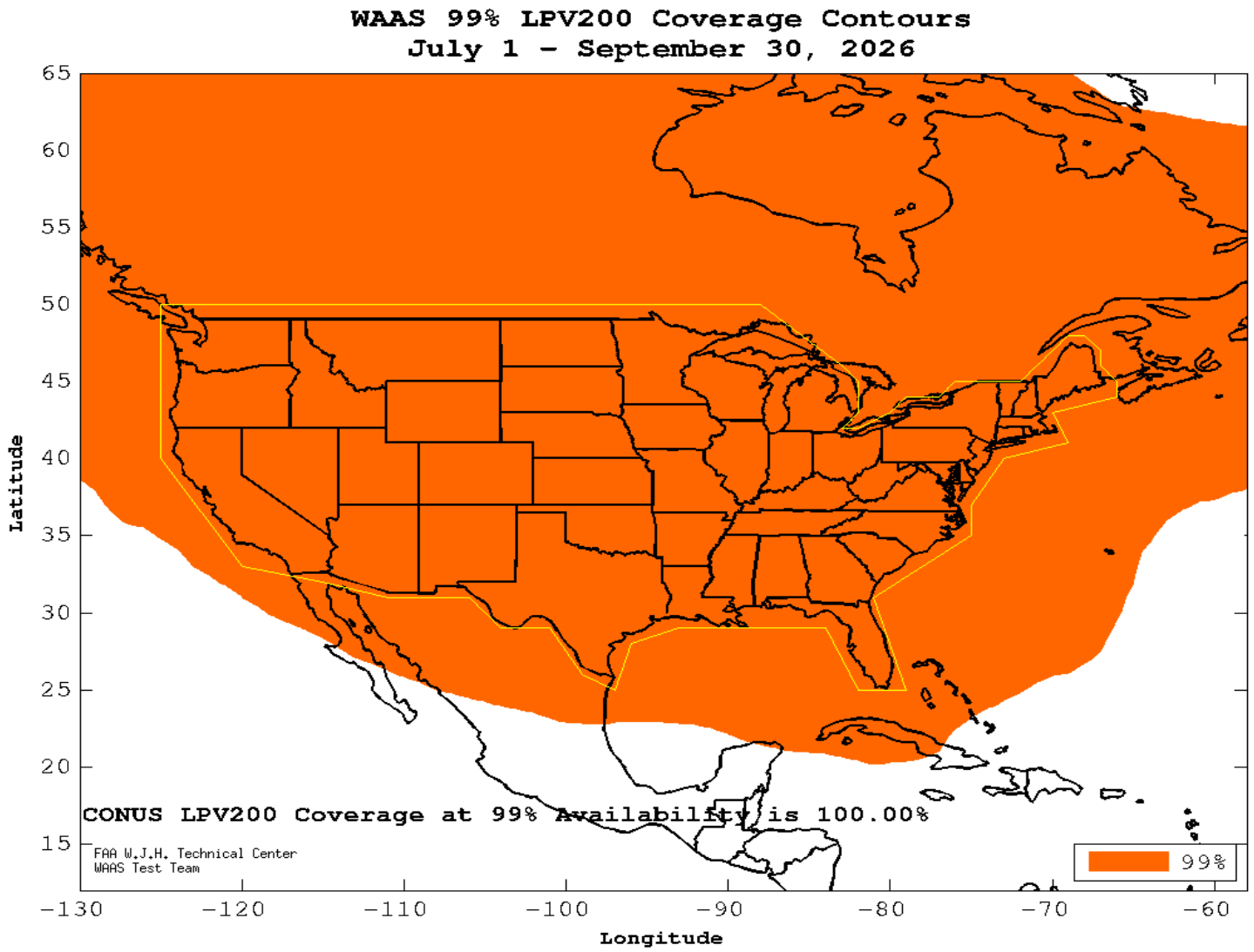


Figure B-5 99% CONUS LPV200 Availability Contour

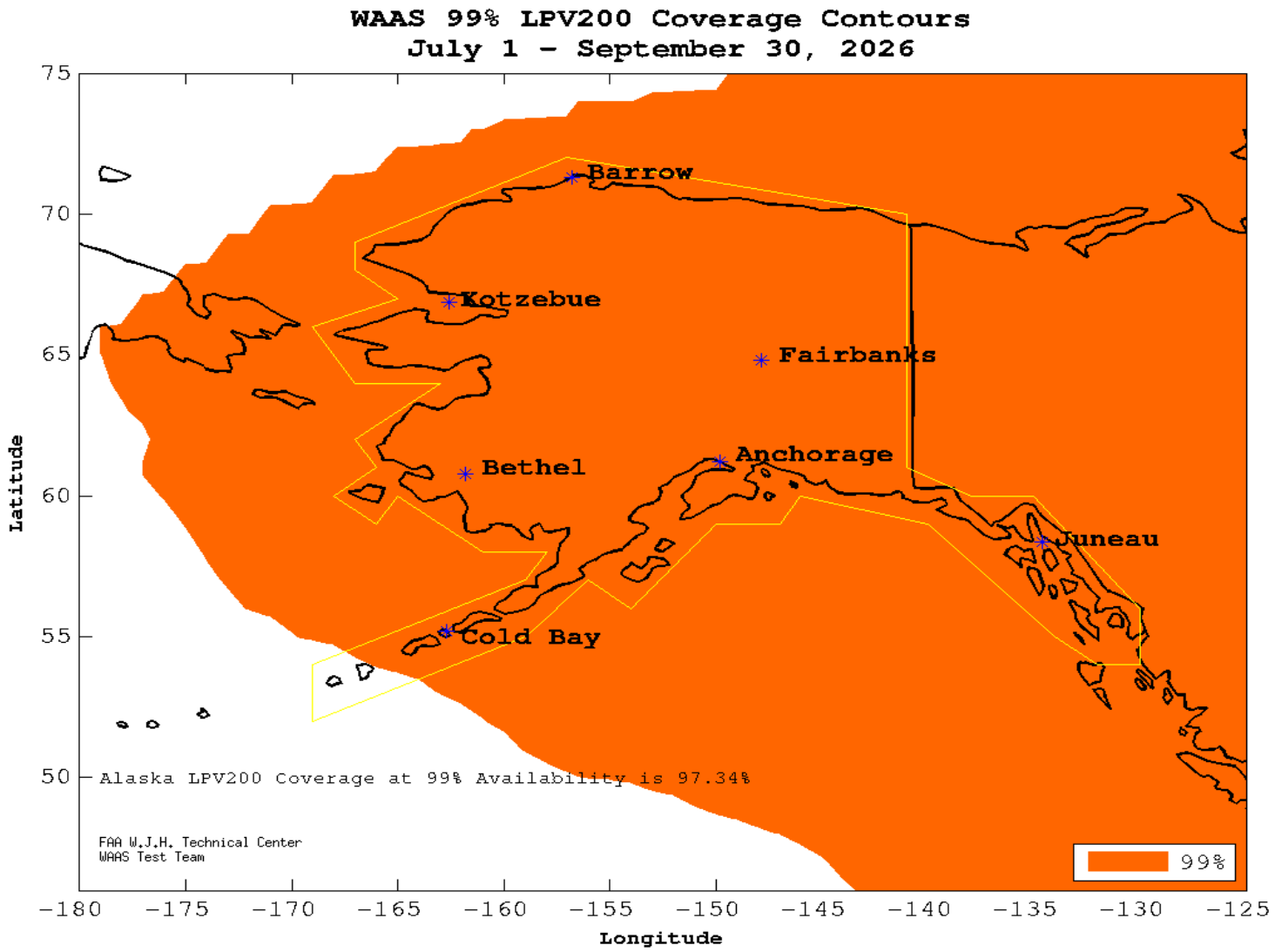


Figure B-6 99% Alaska LPV200 Availability Contour

APPENDIX C: RTCA TABLE DO-229F

Table C-1 is derived from the RTCA DO-229F Table A-8.

Table C-1 Fast Corrections Degradation Factor and User Time-Out Interval Evaluation

Fast Corrections Degradation Factor Indicator (ai_i)	Fast Corrections Degradation Factor (a_i) – (m/s^2)	User Time-Out Interval for fast corrections – seconds En Route through LNAV Approach (I_{fc})	User Time-Out Interval for fast corrections – seconds LNAV/VNAV, LPV, LP Approach (I_{fc})	Maximum Fast Correction Update Interval (seconds)
0	0.00000	180	120	60
1	0.00005	180	120	60
2	0.00009	153	102	51
3	0.00012	135	90	45
4	0.00015	135	90	45
5	0.00020	117	78	39
6	0.00030	99	66	33
7	0.00045	81	54	27
8	0.00060	63	42	21
9	0.00090	45	30	15
10	0.00150	45	30	15
11	0.00210	27	18	9
12	0.00270	27	18	9
13	0.00330	27	18	9
14	0.00460	18	12	6
15	0.00580	18	12	6

APPENDIX D: WAAS LP, LPV, AND LPV200 OUTAGES AND AVAILABILITY

Table D-1 U.S. Airports—Outages and Availability

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
2C7	SHAKTOOLIK	AK	LPV	0	100	0	100	0	100
6A8	ALLAKAKET	AK	LP	0	100	0	100	0	100
7KA	TATITLEK	AK	LP	0	100	0	100	0	100
9A3	CHUATHBALUK	AK	LPV	0	100	0	100	0	100
ADQ	KODIAK	AK	LPV	0	100	0	100	0	100
AFM	AMBLER	AK	LPV	0	100	0	100	1	99.999
AKN	KING SALMON	AK	LPV	0	100	0	100	0	100
ANC	TED STEVENS ANCHORAGE INTL	AK	LPV200	0	100	0	100	0	100
ANI	ANIAK	AK	LPV	0	100	0	100	0	100
AQH	QUINHAGAK	AK	LPV	0	100	0	100	1	99.999
AQT	NUIQSUT	AK	LPV	0	100	0	100	1	99.987
ATK	ATQASUK EDWARD BURNELL SR MEML	AK	LPV	0	100	0	100	1	99.989
AWI	WAINWRIGHT	AK	LPV	0	100	0	100	1	99.990
BET	BETHEL	AK	LPV200	0	100	0	100	0	100
BRW	WILEY POST-WILL ROGERS MEML	AK	LPV	0	100	0	100	1	99.988
BVK	BUCKLAND	AK	LPV	0	100	0	100	0	100
CDB	COLD BAY	AK	LPV200	0	100	0	100	17	99.912
CDV	MERLE K (MUDHOLE) SMITH	AK	LPV	0	100	0	100	1	99.996
CEM	CENTRAL	AK	LP	0	100	0	100	0	100
CLP	CLARKS POINT	AK	LPV	0	100	0	100	0	100
CXF	COLDFOOT	AK	LP	0	100	0	100	0	100
D76	ROBERT/BOB/CURTIS MEML	AK	LPV	0	100	0	100	1	99.999
DEE	DEERING	AK	LPV	0	100	0	100	2	99.997
DLG	DILLINGHAM	AK	LPV	0	100	0	100	0	100
ELI	ELIM	AK	LPV	0	100	0	100	0	100
ENA	KENAI MUNICIPAL	AK	LPV200	0	100	0	100	0	100
ENM	EMMONAK	AK	LPV	0	100	0	100	0	100
FAI	FAIRBANKS INTL	AK	LPV200	0	100	0	100	0	100
FYU	FORT YUKON	AK	LPV	0	100	0	100	0	100
GAL	EDWARD G PITKA SR	AK	LPV	0	100	0	100	0	100
GAM	GAMBELL	AK	LPV	0	100	0	100	5	99.976
GKN	GULKANA	AK	LPV	0	100	0	100	0	100
GST	GUSTAVUS	AK	LP	0	100	0	100	1	99.999

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
HLA	HUSLIA	AK	LPV	0	100	0	100	0	100
HOM	HOMER	AK	LPV	0	100	0	100	0	100
HPB	HOOPER BAY	AK	LP	0	100	0	100	1	99.998
HRR	HEALY RIVER	AK	LP	0	100	0	100	0	100
IAN	BOB BAKER MEML	AK	LPV	0	100	0	100	1	99.999
IIK	KIPNUK	AK	LPV	0	100	0	100	2	99.989
ILI	ILIAMNA	AK	LPV	0	100	0	100	0	100
IWK	WALES	AK	LP	0	100	0	100	4	99.990
IYS	WASILLA	AK	LPV	0	100	0	100	0	100
KAL	KALTAG	AK	LPV	0	100	0	100	0	100
KGX	GRAYLING	AK	LP	0	100	0	100	0	100
KKA	KOYUK ALFRED ADAMS	AK	LP	0	100	0	100	0	100
KSM	ST MARY'S	AK	LPV200	0	100	0	100	0	100
KTN	KETCHIKAN INTL	AK	LPV	0	100	0	100	1	99.989
KTS	BREVIG MISSION	AK	LPV	0	100	0	100	3	99.990
KWT	KWETHLUK	AK	LPV	0	100	0	100	0	100
KYU	KOYUKUK	AK	LPV	0	100	0	100	0	100
MCG	MC GRATH	AK	LP	0	100	0	100	0	100
MDM	MARSHALL DON HUNTER SR	AK	LP	0	100	0	100	0	100
MDO	MIDDLETON ISLAND	AK	LP	0	100	0	100	0	100
MLY	MANLEY HOT SPRINGS	AK	LP	0	100	0	100	0	100
MOU	MOUNTAIN VILLAGE	AK	LPV200	0	100	0	100	0	100
MYU	MEKORYUK	AK	LPV	0	100	0	100	4	99.974
OME	NOME	AK	LPV	0	100	0	100	2	99.996
OOK	TOKSOOK BAY	AK	LP	0	100	0	100	2	99.997
ORT	NORTHWAY	AK	LP	0	100	0	100	0	100
OTZ	RALPH WIEN MEML	AK	LPV	0	100	0	100	2	99.997
PAQ	WARREN 'BUD' WOODS PALMER MUNICIPAL	AK	LP	0	100	0	100	0	100
PBV	ST GEORGE	AK	LPV	0	100	0	100	33	99.687
PHO	POINT HOPE	AK	LPV	0	100	0	100	4	99.983
PTU	PLATINUM	AK	LPV	0	100	0	100	1	99.995
RBY	RUBY	AK	LPV	0	100	0	100	0	100
RSH	RUSSIAN MISSION	AK	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
SCC	DEADHORSE	AK	LPV200	0	100	0	100	1	99.988
SCM	SCAMMON BAY	AK	LP	0	100	0	100	0	100
SDP	SAND POINT	AK	LPV	0	100	0	100	6	99.971
SHG	SHUNGNAK	AK	LP	0	100	0	100	1	99.999
SHX	SHAGELUK	AK	LPV	0	100	0	100	0	100
SIT	SITKA ROCKY GUTIERREZ	AK	LP	0	100	0	100	1	99.990
SLQ	SLEETMUTE	AK	LP	0	100	0	100	0	100
SMK	ST MICHAEL	AK	LPV	0	100	0	100	0	100
SXQ	SOLDOTNA	AK	LP	0	100	0	100	0	100
TER	TELLER	AK	LPV200	0	100	0	100	3	99.991
TKA	TALKEETNA	AK	LPV	0	100	0	100	0	100
TOG	TOGIAK	AK	LP	0	100	0	100	1	99.997
WLK	SELAWIK	AK	LPV	0	100	0	100	1	99.999
WMO	WHITE MOUNTAIN	AK	LPV	0	100	0	100	1	99.999
WNA	NAPAKIAK	AK	LPV	0	100	0	100	0	100
WSN	SOUTH NAKNEK NR 2	AK	LPV	0	100	0	100	0	100
WTK	NOATAK	AK	LPV	0	100	0	100	1	99.997
YAK	YAKUTAT	AK	LPV200	0	100	0	100	1	99.994
02A	CHILTON COUNTY	AL	LP	0	100	0	100	0	100
06A	MOTON FLD MUNICIPAL	AL	LPV	0	100	0	100	0	100
09A	BUTLER/CHOCTAW COUNTY	AL	LPV	0	100	0	100	1	99.997
0J6	HEADLAND MUNICIPAL	AL	LPV	0	100	0	100	1	99.998
0R1	ATMORE MUNICIPAL	AL	LPV	0	100	0	100	2	99.997
11A	CLAYTON MUNICIPAL	AL	LPV	0	100	0	100	0	100
12J	BREWTON MUNICIPAL	AL	LPV	0	100	0	100	1	99.998
1A9	PRATTVILLE - GROUBY FLD	AL	LPV	0	100	0	100	0	100
1M4	POSEY FLD	AL	LPV	0	100	0	100	1	99.997
1R8	BAY MINETTE MUNICIPAL	AL	LPV	0	100	0	100	3	99.997
2R5	ST ELMO	AL	LPV	0	100	0	100	4	99.994
33J	GENEVA MUNICIPAL	AL	LP	0	100	0	100	1	99.997
3M8	NORTH PICKENS	AL	LP	0	100	0	100	1	99.997
4A9	ISBELL FLD	AL	LPV	0	100	0	100	0	100
5R1	ROY WILCOX	AL	LP	0	100	0	100	1	99.998

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
5R4	FOLEY MUNICIPAL	AL	LPV	0	100	0	100	4	99.994
71J	OZARK/BLACKWELL FLD	AL	LPV	0	100	0	100	1	99.998
79J	SOUTH ALABAMA RGNL AT BILL BEN	AL	LPV	0	100	0	100	1	99.998
8A0	ALBERTVILLE RGNL/THOMAS J BRUM	AL	LPV	0	100	0	100	0	100
8A1	GUNTERSVILLE MUNICIPAL/JOE STARNES	AL	LPV	0	100	0	100	0	100
9A4	COURTLAND	AL	LPV200	0	100	0	100	1	99.998
A08	VAIDEN FLD	AL	LPV	0	100	0	100	1	99.999
ALX	THOMAS C RUSSELL FLD	AL	LPV	0	100	0	100	0	100
ANB	ANNISTON RGNL	AL	LPV	0	100	0	100	0	100
ASN	TALLADEGA MUNICIPAL	AL	LPV200	0	100	0	100	0	100
AUO	AUBURN UNIVERSITY RGNL	AL	LPV200	0	100	0	100	0	100
BFM	MOBILE DOWNTOWN	AL	LPV200	0	100	0	100	4	99.994
BHM	BIRMINGHAM-SHUTTLESWORTH INTL	AL	LPV200	0	100	0	100	1	99.999
CMD	CULLMAN RGNL-FOLSOM FLD	AL	LPV	0	100	0	100	1	99.999
CQF	H L SONNY CALLAHAN	AL	LPV200	0	100	0	100	4	99.994
DCU	PRYOR FLD RGNL	AL	LPV200	0	100	0	100	1	99.998
DHN	DOTHAN RGNL	AL	LPV200	0	100	0	100	1	99.998
DYA	DEMOPOLIS RGNL	AL	LPV	0	100	0	100	1	99.998
EDN	ENTERPRISE MUNICIPAL	AL	LPV	0	100	0	100	1	99.998
EET	SHELBY COUNTY	AL	LPV	0	100	0	100	0	100
EKY	BESSEMER	AL	LPV200	0	100	0	100	1	99.999
EUF	WEEDON FLD	AL	LPV	0	100	0	100	0	100
GAD	NORTHEAST ALABAMA RGNL	AL	LPV200	0	100	0	100	0	100
GZH	EVERGREEN RGNL/MIDDLETON FLD	AL	LP	0	100	0	100	1	99.999
HAB	MARION COUNTY-RANKIN FITE	AL	LPV	0	100	0	100	1	99.997
HSV	HUNTSVILLE INTL-CARL T JONES F	AL	LPV200	0	100	0	100	1	99.999
JFX	WALKER COUNTY-BEVILL FLD	AL	LPV	0	100	0	100	1	99.998
JKA	GULF SHORES INTL/JACK EDWARDS	AL	LPV200	0	100	0	100	4	99.993
M95	RICHARD ARTHUR FLD	AL	LPV	0	100	0	100	1	99.997
MDQ	HUNTSVILLE EXEC TOM SHARP JR F	AL	LPV200	0	100	0	100	1	99.999
MGM	MONTGOMERY RGNL (DANNELLY FLD)	AL	LPV200	0	100	0	100	0	100
MOB	MOBILE RGNL	AL	LPV200	0	100	0	100	4	99.994
MSL	NORTHWEST ALABAMA RGNL	AL	LPV200	0	100	0	100	1	99.998

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
PLR	ST CLAIR COUNTY	AL	LPV	0	100	0	100	0	100
PYP	CENTRE-PIEDMONT-CHEROKEE COUNT	AL	LPV	0	100	0	100	0	100
SCD	MERKEL FLD SYLACAUGA MUNICIPAL	AL	LPV	0	100	0	100	0	100
SEM	CRAIG FLD	AL	LPV200	0	100	0	100	0	100
TCL	TUSCALOOSA NTL	AL	LPV	0	100	0	100	1	99.998
TOI	TROY MUNICIPAL AT N KENNETH CAMPBEL	AL	LPV	0	100	0	100	0	100
0M0	BILLY FREE MUNICIPAL	AR	LPV	0	100	0	100	1	99.999
42A	MELBOURNE MUNICIPAL - JOHN E MILLER	AR	LP	0	100	0	100	0	100
4A5	SEARCY COUNTY	AR	LPV	0	100	0	100	0	100
4M1	CARROLL COUNTY	AR	LP	0	100	0	100	0	100
4M3	CARLISLE MUNICIPAL	AR	LPV	0	100	0	100	0	100
6M7	MARIANNA/LEE COUNTY-STEVE EDWA	AR	LPV	0	100	0	100	0	100
7M1	MC GEHEE MUNICIPAL	AR	LP	0	100	0	100	1	99.999
9M8	SHERIDAN-GRANT COUNTY RGNL	AR	LPV	0	100	0	100	1	99.999
ADF	DEXTER B FLORENCE MEML FLD	AR	LPV	0	100	0	100	0	100
ARG	WALNUT RIDGE RGNL	AR	LPV200	0	100	0	100	0	100
ASG	SPRINGDALE MUNICIPAL	AR	LPV	0	100	0	100	0	100
AWM	WEST MEMPHIS MUNICIPAL	AR	LPV	0	100	0	100	0	100
BPK	BAXTER COUNTY	AR	LPV	0	100	0	100	0	100
BVX	BATESVILLE RGNL	AR	LPV	0	100	0	100	0	100
BYH	ARKANSAS INTL	AR	LPV200	0	100	0	100	0	100
CDH	HARRELL FLD	AR	LPV	0	100	0	100	1	99.999
CXW	CONWAY RGNL	AR	LPV	0	100	0	100	0	100
DRP	DELTA RGNL	AR	LPV	0	100	0	100	0	100
ELD	SOUTH ARKANSAS RGNL AT GOODWIN	AR	LPV	0	100	0	100	1	99.999
FLP	MARION COUNTY RGNL	AR	LPV	0	100	0	100	0	100
FSM	FORT SMITH RGNL	AR	LPV200	0	100	0	100	0	100
FYV	DRAKE FLD	AR	LPV	0	100	0	100	0	100
H34	HUNTSVILLE MUNICIPAL	AR	LPV	0	100	0	100	0	100
HEE	THOMPSON-ROBBINS	AR	LPV	0	100	0	100	0	100
HRO	BOONE COUNTY	AR	LPV	0	100	0	100	0	100
JBR	JONESBORO MUNICIPAL	AR	LPV200	0	100	0	100	0	100
LIT	BILL AND HILLARY CLINTON NTL/A	AR	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
LLQ	MONTICELLO MUNICIPAL/ELLIS FLD	AR	LPV	0	100	0	100	1	99.999
M18	HOPE MUNICIPAL	AR	LP	0	100	0	100	0	100
M19	NEWPORT RGNL	AR	LPV	0	100	0	100	0	100
M32	LAKE VILLAGE MUNICIPAL	AR	LP	0	100	0	100	1	99.999
M70	POCAHONTAS MUNICIPAL	AR	LPV	0	100	0	100	0	100
M77	HOWARD COUNTY	AR	LP	0	100	0	100	0	100
MXA	MANILA MUNICIPAL	AR	LPV	0	100	0	100	0	100
ORK	NORTH LITTLE ROCK MUNICIPAL	AR	LPV	0	100	0	100	0	100
PBF	PINEBLUFF RGNL/GRIDER FLD	AR	LPV	0	100	0	100	1	99.999
ROG	ROGERS EXEC - CARTER FLD	AR	LPV	0	100	0	100	0	100
RUE	RUSSELLVILLE RGNL	AR	LPV	0	100	0	100	0	100
SGT	STUTTGART MUNICIPAL CARL HUMPHREY F	AR	LPV	0	100	0	100	0	100
SLG	SMITH FLD	AR	LPV	0	100	0	100	0	100
SRC	SEARCY MUNICIPAL	AR	LPV	0	100	0	100	0	100
SUZ	SALINE COUNTY RGNL	AR	LPV	0	100	0	100	0	100
TXK	TEXARKANA RGNL-WEBB FLD	AR	LPV	0	100	0	100	0	100
VBT	BENTONVILLE MUNICIPAL/LOUISE M THAD	AR	LPV	0	100	0	100	0	100
XNA	NORTHWEST ARKANSAS NTL	AR	LPV200	0	100	0	100	0	100
AVQ	MARANA RGNL	AZ	LP	0	100	0	100	1	99.975
AZC	COLORADO CITY MUNICIPAL	AZ	LPV	0	100	0	100	0	100
CGZ	CASA GRANDE MUNICIPAL	AZ	LPV	0	100	0	100	1	99.982
CHD	CHANDLER MUNICIPAL	AZ	LPV	0	100	0	100	1	99.996
DVT	PHOENIX DEER VALLEY	AZ	LPV	0	100	0	100	0	100
FFZ	FALCON FLD	AZ	LP	0	100	0	100	0	100
FHU	SIERRA VISTA MUNICIPAL-LIBBY AAF	AZ	LPV200	2	99.987	1	99.975	1	99.975
FLG	FLAGSTAFF PULLIAM	AZ	LPV	0	100	0	100	0	100
GCN	GRAND CANYON NTL PARK	AZ	LPV	0	100	0	100	0	100
GEU	GLENDALE MUNICIPAL	AZ	LPV	0	100	0	100	0	100
GYR	PHOENIX GOODYEAR	AZ	LP	0	100	0	100	0	100
HII	LAKE HAVASU CITY	AZ	LPV	0	100	0	100	0	100
IFP	LAUGHLIN/BULLHEAD INTL	AZ	LPV	0	100	0	100	0	100
IGM	KINGMAN	AZ	LPV	0	100	0	100	0	100
IWA	PHOENIX-MESA GATEWAY	AZ	LPV200	0	100	0	100	1	99.996

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
JTC	SPRINGERVILLE MUNICIPAL	AZ	LP	0	100	0	100	0	100
P08	COOLIDGE MUNICIPAL	AZ	LPV	0	100	0	100	1	99.975
P20	AVI SUQUILLA	AZ	LPV	0	100	0	100	0	100
P33	COCHISE COUNTY	AZ	LPV	1	99.998	1	99.996	1	99.975
PGA	PAGE MUNICIPAL	AZ	LPV	0	100	0	100	0	100
PHX	PHOENIX SKY HARBOR INTL	AZ	LPV	0	100	0	100	0	100
PRC	PRESCOTT RGNL - ERNEST A LOVE	AZ	LPV200	0	100	0	100	0	100
RQE	WINDOW ROCK	AZ	LP	0	100	0	100	0	100
RYN	RYAN FLD	AZ	LPV	0	100	1	99.999	1	99.975
SAD	SAFFORD RGNL	AZ	LPV	0	100	1	99.999	1	99.975
SJN	ST JOHNS INDUSTRIAL AIR PARK	AZ	LPV	0	100	0	100	0	100
SOW	SHOW LOW RGNL	AZ	LPV200	0	100	0	100	0	100
TUS	TUCSON INTL	AZ	LPV	0	100	1	99.999	1	99.975
TYL	TAYLOR	AZ	LPV	0	100	0	100	0	100
AAT	ALTURAS MUNICIPAL	CA	LPV	0	100	0	100	0	100
ACV	CALIFORNIA REDWOOD COAST-HUMBO	CA	LPV	0	100	0	100	0	100
APC	NAPA COUNTY	CA	LPV200	0	100	0	100	0	100
APV	APPLE VALLEY	CA	LPV	0	100	0	100	0	100
AUN	AUBURN MUNICIPAL	CA	LPV	0	100	0	100	0	100
BFL	MEADOWS FLD	CA	LPV	0	100	0	100	0	100
BLH	BLYTHE	CA	LP	0	100	0	100	0	100
BUR	BOB HOPE	CA	LP	0	100	0	100	0	100
C83	BYRON	CA	LPV	0	100	0	100	0	100
CCB	CABLE	CA	LP	0	100	0	100	0	100
CCR	BUCHANAN FLD	CA	LPV	0	100	0	100	0	100
CEC	JACK MC NAMARA FLD	CA	LPV	0	100	0	100	0	100
CIC	CHICO MUNICIPAL	CA	LPV	0	100	0	100	0	100
CMA	CAMARILLO	CA	LPV	0	100	0	100	0	100
CNO	CHINO	CA	LPV	0	100	0	100	0	100
CPU	CALAVERAS COUNTY-MAURY RASMUSS	CA	LP	0	100	0	100	0	100
CRQ	MC CLELLAN-PALOMAR	CA	LPV	0	100	0	100	0	100
CVH	HOLLISTER MUNICIPAL	CA	LPV	0	100	0	100	0	100
DAG	BARSTOW-DAGGETT	CA	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
DWA	YOLO COUNTY	CA	LPV	0	100	0	100	0	100
F70	FRENCH VALLEY	CA	LPV	0	100	0	100	0	100
FAT	FRESNO YOSEMITE INTL	CA	LPV200	0	100	0	100	0	100
FCH	FRESNO CHANDLER EXEC	CA	LPV	0	100	0	100	0	100
GOO	NEVADA COUNTY	CA	LPV	0	100	0	100	0	100
HAF	HALF MOON BAY	CA	LPV	0	100	0	100	0	100
HHR	JACK NORTHROP FLD/HAWTHORNE MU	CA	LPV	0	100	0	100	0	100
HJO	HANFORD MUNICIPAL	CA	LPV	0	100	0	100	0	100
HWD	HAYWARD EXEC	CA	LPV	0	100	0	100	0	100
L35	BIG BEAR CITY	CA	LP	0	100	0	100	0	100
LAX	LOS ANGELES INTL	CA	LPV200	0	100	0	100	0	100
LGB	LONG BEACH (DAUGHERTY FLD)	CA	LPV	0	100	0	100	0	100
LHM	LINCOLN RGNL/KARL HARDER FLD	CA	LPV200	0	100	0	100	0	100
LLR	LITTLE RIVER	CA	LP	0	100	0	100	0	100
LSN	LOS BANOS MUNICIPAL	CA	LPV	0	100	0	100	0	100
LVK	LIVERMORE MUNICIPAL	CA	LPV200	0	100	0	100	0	100
MAE	MADERA MUNICIPAL	CA	LPV	0	100	0	100	0	100
MCE	MERCED RGNL/MACREADY FLD	CA	LPV200	0	100	0	100	0	100
MER	CASTLE	CA	LPV200	0	100	0	100	0	100
MHR	SACRAMENTO MATHER	CA	LPV200	0	100	0	100	0	100
MHV	MOJAVE AIR AND SPACE PORT	CA	LP	0	100	0	100	0	100
MIT	SHAFTER-MINTER FLD	CA	LPV	0	100	0	100	0	100
MOD	MODESTO CITY-COUNTY-HARRY SHAM	CA	LPV200	0	100	0	100	0	100
MRY	MONTEREY RGNL	CA	LPV	0	100	0	100	0	100
MYF	MONTGOMERY-GIBBS EXEC	CA	LPV200	0	100	0	100	0	100
MYV	YUBA COUNTY	CA	LPV200	0	100	0	100	0	100
NUQ	MOFFETT FEDERAL AIRFIELD	CA	LPV200	0	100	0	100	0	100
O02	NERVINO	CA	LPV	0	100	0	100	0	100
O08	COLUSA COUNTY	CA	LPV	0	100	0	100	0	100
O27	OAKDALE	CA	LPV	0	100	0	100	0	100
O32	REEDLEY MUNICIPAL	CA	LPV	0	100	0	100	0	100
O69	PETALUMA MUNICIPAL	CA	LPV	0	100	0	100	0	100
O88	RIO VISTA MUNICIPAL	CA	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
OAK	METRO OAKLAND INTL	CA	LPV200	0	100	0	100	0	100
ONT	ONTARIO INTL	CA	LPV200	0	100	0	100	0	100
OVE	OROVILLE MUNICIPAL	CA	LPV	0	100	0	100	0	100
OXR	OXNARD	CA	LPV	0	100	0	100	0	100
PMD	PALMDALE USAF PLANT 42	CA	LPV200	0	100	0	100	0	100
POC	BRACKETT FLD	CA	LPV	0	100	0	100	0	100
PRB	PASO ROBLES MUNICIPAL	CA	LPV	0	100	0	100	0	100
PVF	PLACERVILLE	CA	LPV	0	100	0	100	0	100
RAL	RIVERSIDE MUNICIPAL	CA	LPV	0	100	0	100	0	100
RBL	RED BLUFF MUNICIPAL	CA	LPV	0	100	0	100	0	100
RDD	REDDING MUNICIPAL	CA	LPV	0	100	0	100	0	100
RHV	REID-HILLVIEW OF SANTA CLARA C	CA	LPV	0	100	0	100	0	100
RIV	MARCH ARB	CA	LPV200	0	100	0	100	0	100
SAC	SACRAMENTO EXEC	CA	LPV	0	100	0	100	0	100
SAN	SAN DIEGO INTL	CA	LPV	0	100	0	100	0	100
SBA	SANTA BARBARA MUNICIPAL	CA	LPV	0	100	0	100	0	100
SBD	SAN BERNARDINO INTL	CA	LPV	0	100	0	100	0	100
SBP	SAN LUIS COUNTY RGNL	CA	LPV200	0	100	0	100	0	100
SCK	STOCKTON METRO	CA	LPV200	0	100	0	100	0	100
SDM	BROWN FLD MUNICIPAL	CA	LPV200	0	100	0	100	0	100
SEE	GILLESPIE FLD	CA	LP	0	100	0	100	0	100
SFO	SAN FRANCISCO INTL	CA	LPV200	0	100	0	100	0	100
SJC	NORMAN Y MINETA SAN JOSE INTL	CA	LPV200	0	100	0	100	0	100
SMF	SACRAMENTO INTL	CA	LPV200	0	100	0	100	0	100
SMO	SANTA MONICA MUNICIPAL	CA	LPV	0	100	0	100	0	100
SMX	SANTA MARIA PUB/CAPT G ALLAN H	CA	LPV200	0	100	0	100	0	100
SNA	JOHN WAYNE/ORANGE COUNTY	CA	LPV200	0	100	0	100	0	100
SNS	SALINAS MUNICIPAL	CA	LPV200	0	100	0	100	0	100
STS	CHARLES M SCHULZ - SONOMA COUN	CA	LPV200	0	100	0	100	0	100
TCY	TRACY MUNICIPAL	CA	LPV	0	100	0	100	0	100
TNP	TWENTYNINE PALMS	CA	LP	0	100	0	100	0	100
TOA	ZAMPERINI FLD	CA	LPV	0	100	0	100	0	100
TRK	TRUCKEE-TAHOE	CA	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
TRM	JACQUELINE COCHRAN RGNL	CA	LPV	0	100	0	100	0	100
TVL	LAKE TAHOE	CA	LP	0	100	0	100	0	100
VCB	NUT TREE	CA	LPV	0	100	0	100	0	100
VCV	SOUTHERN CALIFORNIA LOGISTICS	CA	LPV	0	100	0	100	0	100
VIS	VISALIA MUNICIPAL	CA	LPV	0	100	0	100	0	100
WJF	GENERAL WM J FOX AIRFIELD	CA	LPV	0	100	0	100	0	100
WLW	WILLOWS/GLENN COUNTY	CA	LPV	0	100	0	100	0	100
WVI	WATSONVILLE MUNICIPAL	CA	LPV	0	100	0	100	0	100
1V6	FREMONT COUNTY	CO	LPV	0	100	0	100	0	100
20V	MC ELROY AIRFIELD	CO	LPV	0	100	0	100	0	100
2V5	WRAY MUNICIPAL	CO	LPV200	0	100	0	100	0	100
2V6	YUMA MUNICIPAL	CO	LPV200	0	100	0	100	0	100
33V	WALDEN-JACKSON COUNTY	CO	LPV	0	100	0	100	0	100
4V0	RANGELY	CO	LPV	0	100	0	100	0	100
4V1	SPANISH PEAKS AIRFIELD	CO	LPV	0	100	0	100	0	100
AEJ	CENTRAL COLORADO RGNL	CO	LP	0	100	0	100	0	100
AJZ	BLAKE FLD	CO	LPV	0	100	0	100	0	100
AKO	COLORADO PLAINS RGNL	CO	LPV	0	100	0	100	0	100
ALS	SAN LUIS VALLEY RGNL/BERGMAN F	CO	LPV200	0	100	0	100	0	100
APA	CENTENNIAL	CO	LPV200	0	100	0	100	0	100
BJC	ROCKY MOUNTAIN METRO	CO	LPV200	0	100	0	100	0	100
CAG	CRAIG-MOFFAT	CO	LP	0	100	0	100	0	100
CEZ	CORTEZ MUNICIPAL	CO	LPV	0	100	0	100	0	100
CFO	COLORADO AIR AND SPACE PORT	CO	LPV200	0	100	0	100	0	100
COS	CITY OF COLORADO SPRINGS MUNICIPAL	CO	LPV200	0	100	0	100	0	100
DEN	DENVER INTL	CO	LPV200	0	100	0	100	0	100
DRO	DURANGO-LA PLATA COUNTY	CO	LPV200	0	100	0	100	0	100
FMM	FORT MORGAN MUNICIPAL	CO	LPV	0	100	0	100	0	100
FNL	NORTHERN COLORADO RGNL	CO	LPV200	0	100	0	100	0	100
FTG	FRONT RANGE	CO	LPV200	0	100	0	100	0	100
GJT	GRAND JUNCTION RGNL	CO	LPV200	0	100	0	100	0	100
GXY	GREELEY-WELD COUNTY	CO	LPV200	0	100	0	100	0	100
HDN	YAMPA VALLEY	CO	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
ITR	KIT CARSON COUNTY	CO	LPV	0	100	0	100	0	100
LAA	SOUTHEAST COLORADO RGNL	CO	LPV	0	100	0	100	0	100
LHX	LA JUNTA MUNICIPAL	CO	LPV	0	100	0	100	0	100
LMO	VANCE BRAND	CO	LPV	0	100	0	100	0	100
MTJ	MONTROSE RGNL	CO	LPV200	0	100	0	100	0	100
MVI	MONTE VISTA MUNICIPAL	CO	LPV	0	100	0	100	0	100
PSO	STEVENS FLD	CO	LP	0	100	0	100	0	100
PUB	PUEBLO MEML	CO	LPV200	0	100	0	100	0	100
RCV	ASTRONAUT KENT ROMINGER	CO	LPV	0	100	0	100	0	100
RIL	RIFLE GARFIELD COUNTY	CO	LPV	0	100	0	100	0	100
STK	STERLING MUNICIPAL	CO	LPV	0	100	0	100	0	100
TEX	TELLURIDE RGNL	CO	LP	0	100	0	100	0	100
4B8	ROBERTSON FLD	CT	LP	0	100	0	100	0	100
BDL	BRADLEY INTL	CT	LPV200	0	100	0	100	0	100
BDR	IGOR I SIKORSKY MEML	CT	LPV	0	100	0	100	0	100
DXR	DANBURY MUNICIPAL	CT	LP	0	100	0	100	0	100
GON	GROTON-NEW LONDON	CT	LPV	0	100	0	100	0	100
HVN	TWEED/NEW HAVEN	CT	LPV	0	100	0	100	0	100
IJD	WINDHAM	CT	LP	0	100	0	100	0	100
MMK	MERIDEN MARKHAM MUNICIPAL	CT	LP	0	100	0	100	0	100
OXC	WATERBURY-OXFORD	CT	LPV	0	100	0	100	0	100
DCA	RONALD REAGAN WASHINGTON NTL	DC	LPV	0	100	0	100	0	100
HEF	MANASSAS RGNL/HARRY P DAVIS FL	DC	LPV	0	100	0	100	0	100
IAD	WASHINGTON DULLES INTL	DC	LPV200	0	100	0	100	0	100
33N	DELAWARE AIRPARK	DE	LP	0	100	0	100	0	100
DOV	DOVER AFB	DE	LPV200	0	100	0	100	0	100
EVY	SUMMIT	DE	LPV	0	100	0	100	0	100
GED	DELAWARE COASTAL	DE	LPV	0	100	0	100	0	100
ILG	NEW CASTLE	DE	LPV	0	100	0	100	0	100
1J0	TRI-COUNTY	FL	LP	0	100	0	100	1	99.996
24J	SUWANNEE COUNTY	FL	LPV	0	100	0	100	1	99.994
28J	PALATKA MUNICIPAL - LT KAY LARKIN F	FL	LPV	0	100	0	100	1	99.993
40J	PERRY-FOLEY	FL	LPV	0	100	0	100	1	99.994

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
54J	DEFUNIAK SPRINGS	FL	LP	0	100	0	100	1	99.996
AAF	APALACHICOLA RGNL-CLEVE RANDOL	FL	LPV	0	100	0	100	1	99.991
APF	NAPLES MUNICIPAL	FL	LPV	0	100	0	100	1	99.985
AVO	AVON PARK EXEC	FL	LPV	0	100	0	100	1	99.989
BCR	TRI-COUNTY	FL	LPV	0	100	0	100	1	99.996
BCT	BOCA RATON	FL	LPV	0	100	0	100	1	99.987
BKV	BROOKSVILLE-TAMPA BAY RGNL	FL	LPV	0	100	0	100	1	99.990
BOW	BARTOW EXEC	FL	LPV	0	100	0	100	1	99.990
CEW	BOB SIKES	FL	LPV	0	100	0	100	1	99.996
CGC	CRYSTAL RIVER-CAPT TOM DAVIS F	FL	LP	0	100	0	100	1	99.991
CHN	WAUCHULA MUNICIPAL	FL	LP	0	100	0	100	1	99.989
COI	MERRITT ISLAND	FL	LPV	0	100	0	100	1	99.992
CRG	JACKSONVILLE EXEC AT CRAIG	FL	LPV200	0	100	0	100	1	99.995
CTY	CROSS CITY	FL	LPV	0	100	0	100	1	99.993
DAB	DAYTONA BEACH INTL	FL	LPV200	0	100	0	100	1	99.993
DED	DELAND MUNICIPAL-SIDNEY H TAYLOR FL	FL	LPV	0	100	0	100	1	99.992
DTS	DESTIN EXEC	FL	LPV	0	100	0	100	2	99.994
ECP	NORTHWEST FLORIDA BEACHES INTL	FL	LPV200	0	100	0	100	1	99.994
EVB	NEW SMYRNA BEACH MUNICIPAL	FL	LPV	0	100	0	100	1	99.992
EYW	KEY WEST INTL	FL	LPV	0	100	1	99.997	1	99.984
F45	NORTH PALM BEACH COUNTY GENERA	FL	LPV	0	100	0	100	1	99.988
FHB	FERNANDINA BEACH MUNICIPAL	FL	LPV	0	100	0	100	1	99.995
FIN	FLAGLER EXEC	FL	LPV	0	100	0	100	1	99.993
FLL	FORT LAUDERDALE/HOLLYWOOD INTL	FL	LPV200	0	100	0	100	1	99.987
FMY	PAGE FLD	FL	LPV	0	100	0	100	1	99.986
FPR	TREASURE COAST INTL	FL	LPV	0	100	0	100	1	99.989
FPY	PERRY-FOLEY	FL	LPV	0	100	0	100	1	99.994
FXE	FORT LAUDERDALE EXEC	FL	LPV200	0	100	0	100	1	99.987
GIF	WINTER HAVEN RGNL	FL	LPV	0	100	0	100	1	99.990
GNV	GAINESVILLE RGNL	FL	LPV	0	100	0	100	1	99.992
HEG	HERLONG RECREATIONAL	FL	LPV	0	100	0	100	1	99.994
IMM	IMMOKALEE RGNL	FL	LPV	0	100	0	100	1	99.986
ISM	KISSIMMEE GATEWAY	FL	LPV200	0	100	0	100	1	99.991

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
JAX	JACKSONVILLE INTL	FL	LPV200	0	100	0	100	1	99.995
LAL	LAKELAND LINDER INTL	FL	LPV200	0	100	0	100	1	99.989
LCQ	LAKE CITY GATEWAY	FL	LPV	0	100	0	100	1	99.994
LEE	LEESBURG INTL	FL	LPV	0	100	0	100	1	99.991
LNA	PALM BEACH COUNTY PARK	FL	LP	0	100	0	100	1	99.988
MAI	MARIANNA MUNICIPAL	FL	LPV	0	100	0	100	1	99.995
MCO	ORLANDO INTL	FL	LPV200	0	100	0	100	1	99.991
MIA	MIAMI INTL	FL	LPV200	0	100	0	100	1	99.986
MKY	MARCO ISLAND EXEC	FL	LPV	0	100	0	100	1	99.985
MLB	MELBOURNE ORLANDO INTL	FL	LPV200	0	100	0	100	1	99.991
MTH	THE FLORIDA KEYS MARATHON INTL	FL	LPV	0	100	1	99.998	1	99.984
OBE	OKEECHOBEE COUNTY	FL	LPV	0	100	0	100	1	99.989
OCF	OCALA INTL-JIM TAYLOR FLD	FL	LPV200	0	100	0	100	1	99.992
OMN	ORMOND BEACH MUNICIPAL	FL	LPV	0	100	0	100	1	99.993
OPF	MIAMI-OPA LOCKA EXEC	FL	LPV200	0	100	0	100	1	99.986
ORL	EXEC	FL	LPV200	0	100	0	100	1	99.991
PBI	PALM BEACH INTL	FL	LPV200	0	100	0	100	1	99.988
PCM	PLANT CITY	FL	LPV	0	100	0	100	1	99.989
PGD	PUNTA GORDA	FL	LPV200	0	100	0	100	1	99.987
PHK	PALM BEACH COUNTY GLADES	FL	LPV	0	100	0	100	1	99.987
PIE	ST PETE-CLEARWATER INTL	FL	LPV200	0	100	0	100	1	99.989
PMP	POMPANO BEACH AIRPARK	FL	LPV	0	100	0	100	1	99.987
PNS	PENSACOLA INTL	FL	LPV200	0	100	0	100	3	99.995
RSW	SOUTHWEST FLORIDA INTL	FL	LPV	0	100	0	100	1	99.986
SEF	SEBRING RGNL	FL	LPV	0	100	0	100	1	99.989
SFB	ORLANDO SANFORD INTL	FL	LPV200	0	100	0	100	1	99.992
SGJ	NORTHEAST FLORIDA RGNL	FL	LPV	0	100	0	100	1	99.994
SRQ	SARASOTA/BRADENTON INTL	FL	LPV200	0	100	0	100	1	99.988
SUA	WITHAM FLD	FL	LPV	0	100	0	100	1	99.989
TIX	SPACE COAST RGNL	FL	LPV200	0	100	0	100	1	99.992
TLH	TALLAHASSEE INTL	FL	LPV200	0	100	0	100	1	99.994
TMB	MIAMI EXEC	FL	LPV200	0	100	0	100	1	99.986
TNT	DADE-COLLIER TRAINING AND TRAN	FL	LPV200	0	100	0	100	1	99.986

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
TPA	TAMPA INTL	FL	LPV200	0	100	0	100	1	99.989
TPF	PETER O KNIGHT	FL	LP	0	100	0	100	1	99.989
TTS	NASA SHUTTLE LANDING FACILITY	FL	LPV200	0	100	0	100	1	99.992
VDF	TAMPA EXEC	FL	LPV	0	100	0	100	1	99.989
VNC	VENICE MUNICIPAL	FL	LP	0	100	0	100	1	99.987
VQQ	CECIL	FL	LPV200	0	100	0	100	1	99.994
VRB	VERO BEACH RGNL	FL	LPV200	0	100	0	100	1	99.990
X07	LAKE WALES MUNICIPAL	FL	LP	0	100	0	100	1	99.990
X14	LA BELLE MUNICIPAL	FL	LPV	0	100	0	100	1	99.987
X35	MARION COUNTY	FL	LP	0	100	0	100	1	99.991
X51	MIAMI HOMESTEAD GENERAL AVIATI	FL	LPV	0	100	0	100	1	99.985
ZPH	ZEPHYRHILLS MUNICIPAL	FL	LPV	0	100	0	100	1	99.990
09J	JEKYLL ISLAND	GA	LPV200	0	100	0	100	1	99.996
15J	COOK COUNTY	GA	LPV	0	100	0	100	1	99.996
17J	DONALSONVILLE MUNICIPAL	GA	LPV	0	100	0	100	1	99.996
18A	FRANKLIN-HART	GA	LPV	0	100	0	100	0	100
19A	JACKSON COUNTY	GA	LPV	0	100	0	100	0	100
2J3	LOUISVILLE MUNICIPAL	GA	LPV	0	100	0	100	0	100
2J5	MILLEN	GA	LPV	0	100	0	100	0	100
3J7	GREENE COUNTY RGNL	GA	LPV	0	100	0	100	0	100
48A	COCHRAN	GA	LPV	0	100	0	100	0	100
49A	GILMER COUNTY	GA	LPV	0	100	0	100	0	100
4A4	POLK COUNTY/CORNELIUS MOORE FL	GA	LPV	0	100	0	100	0	100
4J1	BRANTLEY COUNTY	GA	LPV	0	100	0	100	1	99.997
4J2	BERRIEN COUNTY	GA	LPV	0	100	0	100	1	99.996
4J5	QUITMAN BROOKS COUNTY	GA	LP	0	100	0	100	1	99.995
52A	MADISON MUNICIPAL	GA	LP	0	100	0	100	0	100
6A1	BUTLER MUNICIPAL	GA	LPV	0	100	0	100	0	100
6A2	GRIFFIN-SPALDING COUNTY	GA	LPV	0	100	0	100	0	100
70J	CAIRO-GRADY COUNTY	GA	LPV	0	100	0	100	1	99.995
75J	TURNER COUNTY	GA	LP	0	100	0	100	1	99.998
9A5	BARWICK LAFAYETTE	GA	LP	0	100	0	100	0	100
ABY	SOUTHWEST GEORGIA RGNL	GA	LPV200	0	100	0	100	1	99.998

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
ACJ	JIMMY CARTER RGNL	GA	LPV	0	100	0	100	0	100
AGS	AUGUSTA RGNL AT BUSH FLD	GA	LPV200	0	100	0	100	0	100
AHN	ATHENS/BEN EPPS	GA	LPV200	0	100	0	100	0	100
AJR	HABERSHAM COUNTY	GA	LPV	0	100	0	100	0	100
AMG	BACON COUNTY	GA	LPV	0	100	0	100	1	99.997
ATL	HARTSFIELD - JACKSON ATLANTA I	GA	LPV200	0	100	0	100	0	100
AYS	WAYCROSS-WARE COUNTY	GA	LPV200	0	100	0	100	1	99.997
BGE	DECATUR COUNTY INDUSTRIAL AIR	GA	LPV200	0	100	0	100	1	99.996
BHC	BAXLEY MUNICIPAL	GA	LPV	0	100	0	100	1	99.998
BIJ	EARLY COUNTY	GA	LPV	0	100	0	100	1	99.998
BQK	BRUNSWICK GOLDEN ISLES	GA	LPV200	0	100	0	100	1	99.997
CCO	NEWNAN COWETA COUNTY	GA	LPV	0	100	0	100	0	100
CKF	CRISP COUNTY-CORDELE	GA	LPV	0	100	0	100	1	99.999
CNI	CHEROKEE COUNTY RGNL	GA	LPV	0	100	0	100	0	100
CSG	COLUMBUS	GA	LPV	0	100	0	100	0	100
CTJ	WEST GEORGIA RGNL - O V GRAY F	GA	LPV	0	100	0	100	0	100
CVC	COVINGTON MUNICIPAL	GA	LPV	0	100	0	100	0	100
CWV	CLAXTON-EVANS COUNTY	GA	LPV	0	100	0	100	1	99.999
CXU	CAMILLA-MITCHELL COUNTY	GA	LPV	0	100	0	100	1	99.996
CZL	TOM B DAVID FLD	GA	LPV	0	100	0	100	0	100
D73	CY NUNNALLY MEML	GA	LP	0	100	0	100	0	100
DBN	W H 'BUD' BARRON	GA	LPV200	0	100	0	100	0	100
DNL	DANIEL FLD	GA	LPV	0	100	0	100	0	100
DNN	DALTON MUNICIPAL	GA	LPV	0	100	0	100	0	100
DQH	DOUGLAS MUNICIPAL	GA	LPV200	0	100	0	100	1	99.997
EBA	ELBERT COUNTY-PATZ FLD	GA	LP	0	100	0	100	0	100
EZM	HEART OF GEORGIA RGNL	GA	LPV200	0	100	0	100	0	100
FFC	ATLANTA RGNL FALCON FLD	GA	LPV	0	100	0	100	0	100
FTY	FULTON COUNTY EXEC/CHARLIE BRO	GA	LPV	0	100	0	100	0	100
FZG	FITZGERALD MUNICIPAL	GA	LPV	0	100	0	100	1	99.998
GVL	LEE GILMER MEML	GA	LPV	0	100	0	100	0	100
HMP	ATLANTA SPEEDWAY	GA	LPV200	0	100	0	100	0	100
HOE	HOMERVILLE	GA	LPV	0	100	0	100	1	99.996

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
HQU	THOMSON-MCDUFFIE COUNTY	GA	LPV	0	100	0	100	0	100
IIY	WASHINGTON/WILKES COUNTY	GA	LPV	0	100	0	100	0	100
JCA	JACKSON COUNTY	GA	LPV	0	100	0	100	0	100
JES	JESUP-WAYNE COUNTY	GA	LPV	0	100	0	100	1	99.998
JYL	PLANTATION AIRPARK	GA	LPV	0	100	0	100	0	100
JZP	PICKENS COUNTY	GA	LPV	0	100	0	100	0	100
LGC	LAGRANGE/CALLAWAY	GA	LPV200	0	100	0	100	0	100
LHW	WRIGHT AAF (FORT STEWART)/MIDC	GA	LPV	0	100	0	100	1	99.999
LZU	GWINNETT COUNTY/BRISCOE FLD	GA	LPV200	0	100	0	100	0	100
MAC	MACON DOWNTOWN	GA	LPV	0	100	0	100	0	100
MCN	MIDDLE GEORGIA RGNL	GA	LPV200	0	100	0	100	0	100
MGR	MOULTRIE MUNICIPAL	GA	LPV200	0	100	0	100	1	99.995
MHP	JOHN EDWIN JONES SR FLD/METTER	GA	LPV	0	100	0	100	0	100
MLJ	BALDWIN COUNTY RGNL	GA	LPV	0	100	0	100	0	100
MQW	TELFAIR-WHEELER	GA	LPV	0	100	0	100	1	99.999
OKZ	KAOLIN FLD	GA	LPV	0	100	0	100	0	100
OPN	THOMASTON-UPSON COUNTY	GA	LPV200	0	100	0	100	0	100
PIM	HARRIS COUNTY	GA	LPV	0	100	0	100	0	100
PUJ	PAULDING NORTHWEST ATLANTA	GA	LPV200	0	100	0	100	0	100
PXE	PERRY-HOUSTON COUNTY	GA	LPV	0	100	0	100	0	100
RMG	RICHARD B RUSSELL RGNL - J H T	GA	LPV	0	100	0	100	0	100
RVJ	SWINTON SMITH FLD AT REIDSVILL	GA	LP	0	100	0	100	1	99.999
RYY	COBB COUNTY INTL/MCCOLLUM FLD	GA	LPV200	0	100	0	100	0	100
SAV	SAVANNAH/HILTON HEAD INTL	GA	LPV200	0	100	0	100	0	100
SBO	EAST GEORGIA RGNL	GA	LPV	0	100	0	100	0	100
TBR	STATESBORO-BULLOCH COUNTY	GA	LPV	0	100	0	100	0	100
TMA	HENRY TIFT MYERS	GA	LPV	0	100	0	100	1	99.997
TOC	TOCCOA RG LETOURNEAU FLD	GA	LPV	0	100	0	100	0	100
TVI	THOMASVILLE RGNL	GA	LPV	0	100	0	100	1	99.995
VDI	VIDALIA RGNL	GA	LPV200	0	100	0	100	1	99.999
VLD	VALDOSTA RGNL	GA	LPV	0	100	0	100	1	99.995
VPC	CARTERSVILLE	GA	LPV	0	100	0	100	0	100
WDR	BARROW COUNTY	GA	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
3Y2	GEORGE L SCOTT MUNICIPAL	IA	LPV	0	100	0	100	0	100
4C8	ALBIA MUNICIPAL	IA	LPV	0	100	0	100	0	100
AIO	ATLANTIC MUNICIPAL	IA	LPV	0	100	0	100	0	100
ALO	WATERLOO RGNL	IA	LPV200	0	100	0	100	0	100
AMW	AMES MUNICIPAL	IA	LPV	0	100	0	100	0	100
AWG	WASHINGTON MUNICIPAL	IA	LPV200	0	100	0	100	0	100
BNW	BOONE MUNICIPAL	IA	LPV	0	100	0	100	0	100
BRL	SOUTHEAST IOWA RGNL	IA	LPV200	0	100	0	100	0	100
C25	WAVERLY MUNICIPAL	IA	LPV	0	100	0	100	0	100
CAV	CLARION MUNICIPAL	IA	LPV	0	100	0	100	0	100
CBF	COUNCIL BLUFFS MUNICIPAL	IA	LPV200	0	100	0	100	0	100
CCY	NORTHEAST IOWA RGNL	IA	LPV	0	100	0	100	0	100
CID	THE EASTERN IOWA	IA	LPV200	0	100	0	100	0	100
CIN	ARTHUR N NEU	IA	LPV	0	100	0	100	0	100
CKP	CHEROKEE COUNTY RGNL	IA	LPV	0	100	0	100	0	100
CSQ	CRESTON MUNICIPAL	IA	LPV	0	100	0	100	0	100
CWI	CLINTON MUNICIPAL	IA	LPV200	0	100	0	100	0	100
DBQ	DUBUQUE RGNL	IA	LPV200	0	100	0	100	0	100
DEH	DECORAH MUNICIPAL	IA	LPV	0	100	0	100	0	100
DNS	DENISON MUNICIPAL	IA	LPV	0	100	0	100	0	100
DSM	DES MOINES INTL	IA	LPV200	0	100	0	100	0	100
DVN	DAVENPORT MUNICIPAL	IA	LPV200	0	100	0	100	0	100
EAG	EAGLE GROVE MUNICIPAL	IA	LPV	0	100	0	100	0	100
EBS	WEBSTER CITY MUNICIPAL	IA	LPV	0	100	0	100	0	100
EFW	JEFFERSON MUNICIPAL	IA	LPV	0	100	0	100	0	100
EOK	KEOKUK MUNICIPAL	IA	LPV	0	100	0	100	0	100
EST	ESTHERVILLE MUNICIPAL	IA	LPV	0	100	0	100	0	100
FFL	FAIRFIELD MUNICIPAL	IA	LPV	0	100	0	100	0	100
FOD	FORT DODGE RGNL	IA	LPV200	0	100	0	100	0	100
FSW	FORT MADISON MUNICIPAL	IA	LPV	0	100	0	100	0	100
FXY	FOREST CITY MUNICIPAL	IA	LPV	0	100	0	100	0	100
GCT	GUTHRIE COUNTY RGNL	IA	LPV	0	100	0	100	0	100
GFZ	GREENFIELD MUNICIPAL	IA	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
GGI	GRINNELL RGNL	IA	LPV	0	100	0	100	0	100
HPT	HAMPTON MUNICIPAL	IA	LPV	0	100	0	100	0	100
I75	OSCEOLA MUNICIPAL	IA	LPV	0	100	0	100	0	100
ICL	SCHENCK FLD	IA	LPV	0	100	0	100	0	100
IFA	IOWA FALLS MUNICIPAL	IA	LPV	0	100	0	100	0	100
IIB	JAMES H CONNELL FLD AT INDEPEN	IA	LPV	0	100	0	100	0	100
IKV	ANKENY RGNL	IA	LPV200	0	100	0	100	0	100
IOW	IOWA CITY MUNICIPAL	IA	LPV	0	100	0	100	0	100
LRJ	LE MARS MUNICIPAL	IA	LPV	0	100	0	100	0	100
LWD	LAMONI MUNICIPAL	IA	LPV	0	100	0	100	0	100
MCW	MASON CITY MUNICIPAL	IA	LPV200	0	100	0	100	0	100
MIW	MARSHALLTOWN MUNICIPAL	IA	LPV	0	100	0	100	0	100
MPZ	MOUNT PLEASANT MUNICIPAL	IA	LPV	0	100	0	100	0	100
MUT	MUSCATINE MUNICIPAL	IA	LPV200	0	100	0	100	0	100
MXO	MONTICELLO RGNL	IA	LP	0	100	0	100	0	100
OOA	OSKALOOSA MUNICIPAL	IA	LPV	0	100	0	100	0	100
OQW	MAQUOKETA MUNICIPAL	IA	LPV	0	100	0	100	0	100
ORC	ORANGE CITY MUNICIPAL	IA	LPV	0	100	0	100	0	100
OTM	OTTUMWA RGNL	IA	LPV	0	100	0	100	0	100
OXV	KNOXVILLE MUNICIPAL	IA	LPV	0	100	0	100	0	100
PEA	PELLA MUNICIPAL	IA	LPV	0	100	0	100	0	100
POH	POCAHONTAS MUNICIPAL	IA	LPV	0	100	0	100	0	100
PRO	PERRY MUNICIPAL	IA	LPV200	0	100	0	100	0	100
RDK	RED OAK MUNICIPAL	IA	LPV	0	100	0	100	0	100
RRQ	ROCK RAPIDS MUNICIPAL	IA	LP	0	100	0	100	0	100
SDA	SHENANDOAH MUNICIPAL	IA	LPV	0	100	0	100	0	100
SHL	SHELDON RGNL	IA	LPV	0	100	0	100	0	100
SKI	SAC CITY MUNICIPAL	IA	LPV	0	100	0	100	0	100
SLB	STORM LAKE MUNICIPAL	IA	LPV	0	100	0	100	0	100
SPW	SPENCER MUNICIPAL	IA	LPV200	0	100	0	100	0	100
SUX	SIOUX GATEWAY/BRIG GENERAL BUD	IA	LPV200	0	100	0	100	0	100
SXK	SIOUX COUNTY RGNL	IA	LPV200	0	100	0	100	0	100
TNU	NEWTON MUNICIPAL-EARL JOHNSON FLD	IA	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
TVK	CENTERVILLE MUNICIPAL	IA	LPV	0	100	0	100	0	100
TZT	BELLE PLAINE MUNICIPAL	IA	LPV	0	100	0	100	0	100
VTI	VINTON VETERANS MEML AIRPARK	IA	LPV	0	100	0	100	0	100
1U7	BEAR LAKE COUNTY	ID	LPV	0	100	0	100	0	100
BOI	BOISE AIR TRML/GOWEN FLD	ID	LPV200	0	100	0	100	0	100
COE	COEUR D'ALENE/PAPPY BOYINGTON	ID	LPV200	0	100	0	100	0	100
DIJ	DRIGGS-REED MEML	ID	LP	0	100	0	100	0	100
EUL	TREASURE VALLEY EXEC AT CALDWE	ID	LPV	0	100	0	100	0	100
GNG	GOODING MUNICIPAL	ID	LPV	0	100	0	100	0	100
IDA	IDAHO FALLS RGNL	ID	LPV200	0	100	0	100	0	100
JER	JEROME COUNTY	ID	LPV	0	100	0	100	0	100
LWS	LEWISTON/NEZ PERCE COUNTY	ID	LPV200	0	100	0	100	0	100
MAN	NAMPA MUNICIPAL	ID	LPV	0	100	0	100	0	100
MYL	MC CALL MUNICIPAL	ID	LPV	0	100	0	100	0	100
PIH	POCATELLO RGNL	ID	LPV200	0	100	0	100	0	100
SUN	FRIEDMAN MEML	ID	LP	0	100	0	100	0	100
SZT	SANDPOINT	ID	LP	0	100	0	100	0	100
TWF	JOSLIN FLD/MAGIC VALLEY RGNL	ID	LPV200	0	100	0	100	0	100
U76	MOUNTAIN HOME MUNICIPAL	ID	LPV	0	100	0	100	0	100
1H2	EFFINGHAM COUNTY MEML	IL	LPV	0	100	0	100	0	100
3LF	LITCHFIELD MUNICIPAL	IL	LPV	0	100	0	100	0	100
3MY	MOUNT HAWLEY AUXILIARY	IL	LPV	0	100	0	100	0	100
AJG	MOUNT CARMEL MUNICIPAL	IL	LPV	0	100	0	100	1	99.999
ALN	ST LOUIS RGNL	IL	LPV200	0	100	0	100	0	100
ARR	AURORA MUNICIPAL	IL	LPV200	0	100	0	100	0	100
BLV	SCOTT AFB/MIDAMERICA ST LOUIS	IL	LPV200	0	100	0	100	0	100
BMI	CENTRAL IL RGNL/BLOOMINGTON-NO	IL	LPV	0	100	0	100	0	100
C15	PEKIN MUNICIPAL	IL	LPV	0	100	0	100	0	100
C73	DIXON MUNICIPAL-CHARLES R WALGREEN	IL	LPV	0	100	0	100	0	100
C75	MARSHALL COUNTY	IL	LP	0	100	0	100	0	100
CIR	CAIRO RGNL	IL	LP	0	100	0	100	0	100
CMI	UNIVERSITY OF ILLINOIS/WILLARD	IL	LPV200	0	100	0	100	0	100
CPS	ST LOUIS DOWNTOWN	IL	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CTK	INGERSOLL	IL	LPV	0	100	0	100	0	100
CUL	CARMI MUNICIPAL	IL	LPV	0	100	0	100	1	99.999
DEC	DECATUR	IL	LPV200	0	100	0	100	0	100
DKB	DE KALB TAYLOR MUNICIPAL	IL	LPV	0	100	0	100	0	100
DNV	VERMILION RGNL	IL	LPV	0	100	0	100	0	100
DPA	DUPAGE	IL	LPV200	0	100	0	100	0	100
ENL	CENTRALIA MUNICIPAL	IL	LPV	0	100	0	100	0	100
EZI	KEWANEE MUNICIPAL	IL	LPV	0	100	0	100	0	100
FEP	ALBERTUS	IL	LPV	0	100	0	100	0	100
FOA	FLORA MUNICIPAL	IL	LPV	0	100	0	100	0	100
GBG	GALESBURG MUNICIPAL	IL	LPV200	0	100	0	100	0	100
GRE	GREENVILLE	IL	LPV	0	100	0	100	0	100
HSB	HARRISBURG-RALEIGH	IL	LPV	0	100	0	100	0	100
I63	MOUNT STERLING MUNICIPAL	IL	LPV	0	100	0	100	0	100
IGQ	LANSING MUNICIPAL	IL	LPV	0	100	0	100	0	100
IKK	GREATER KANKAKEE	IL	LPV200	0	100	0	100	0	100
LOT	LEWIS UNIVERSITY	IL	LPV200	0	100	0	100	0	100
LWV	LAWRENCEVILLE-VINCENNES INTL	IL	LPV200	0	100	0	100	1	99.999
MDW	CHICAGO MIDWAY INTL	IL	LPV	0	100	0	100	0	100
MLI	QUAD CITIES INTL	IL	LPV200	0	100	0	100	0	100
MQB	MACOMB MUNICIPAL	IL	LPV200	0	100	0	100	0	100
MTO	COLES COUNTY MEML	IL	LPV200	0	100	0	100	0	100
MVN	MOUNT VERNON	IL	LPV	0	100	0	100	0	100
MWA	VETERANS AIRPORT OF SOUTHERN I	IL	LPV200	0	100	0	100	0	100
OLY	OLNEY-NOBLE	IL	LPV	0	100	0	100	0	100
ORD	CHICAGO O'HARE INTL	IL	LPV200	0	100	0	100	0	100
PIA	GENERAL DOWNING - PEORIA INTL	IL	LPV	0	100	0	100	0	100
PJY	PINCKNEYVILLE/DU QUOIN	IL	LPV	0	100	0	100	0	100
PNT	PONTIAC MUNICIPAL	IL	LPV	0	100	0	100	0	100
PPQ	PITTSFIELD PENSTONE MUNICIPAL	IL	LPV	0	100	0	100	0	100
PRG	EDGAR COUNTY	IL	LPV	0	100	0	100	0	100
PWK	CHICAGO EXEC	IL	LPV	0	100	0	100	0	100
RFD	CHICAGO/ROCKFORD INTL	IL	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
RPJ	ROCHELLE MUNICIPAL/KORITZ FLD	IL	LPV	0	100	0	100	0	100
RSV	CRAWFORD COUNTY	IL	LPV	0	100	0	100	0	100
SAR	SPARTA COMMUNICIPALTY-HUNTER FLD	IL	LPV	0	100	0	100	0	100
SFY	TRI-TOWNSHIP	IL	LP	0	100	0	100	0	100
SLO	SALEM-LECKRONE	IL	LPV200	0	100	0	100	0	100
SPI	ABRAHAM LINCOLN CAPITAL	IL	LPV	0	100	0	100	0	100
SQI	WHITESIDE COUNTY/JOS H BITTORF	IL	LPV200	0	100	0	100	0	100
TIP	RANTOUL NTL AVN CNTR-FRANK ELL	IL	LPV	0	100	0	100	0	100
UGN	WAUKEGAN NTL	IL	LPV	0	100	0	100	0	100
UIN	QUINCY RGNL-BALDWIN FLD	IL	LPV200	0	100	0	100	0	100
VYS	ILLINOIS VALLEY RGNL-WALTER A	IL	LPV	0	100	0	100	0	100
2R2	HENDRICKS COUNTY-GORDON GRAHAM	IN	LPV	0	100	0	100	2	99.998
50I	KENTLAND MUNICIPAL	IN	LPV	0	100	0	100	0	100
AID	ANDERSON MUNICIPAL-DARLINGTON FLD	IN	LPV	0	100	0	100	1	99.999
ASW	WARSAW MUNICIPAL	IN	LPV200	0	100	0	100	0	100
BAK	COLUMBUS MUNICIPAL	IN	LPV	0	100	0	100	2	99.998
BFR	VIRGIL I GRISSOM MUNICIPAL	IN	LP	0	100	0	100	2	99.999
BMG	MONROE COUNTY	IN	LPV200	0	100	0	100	2	99.999
C62	KENDALLVILLE MUNICIPAL	IN	LPV	0	100	0	100	0	100
C65	PLYMOUTH MUNICIPAL	IN	LPV	0	100	0	100	0	100
CEV	METTEL FLD	IN	LPV	0	100	0	100	1	99.999
CFJ	CRAWFORDSVILLE RGNL	IN	LPV	0	100	0	100	0	100
DCY	DAVIESS COUNTY	IN	LPV	0	100	0	100	1	99.999
EKM	ELKHART MUNICIPAL	IN	LPV	0	100	0	100	0	100
EVV	EVANSVILLE RGNL	IN	LPV200	0	100	0	100	1	99.999
EYE	EAGLE CREEK AIRPARK	IN	LPV	0	100	0	100	1	99.999
FKR	FRANKFORT CLINTON COUNTY RGNL	IN	LPV	0	100	0	100	0	100
FRH	FRENCH LICK MUNICIPAL	IN	LPV	0	100	0	100	2	99.999
FWA	FORT WAYNE INTL	IN	LPV200	0	100	0	100	0	100
GEZ	SHELBYVILLE MUNICIPAL	IN	LPV	0	100	0	100	1	99.999
GGP	LOGANSPORT/CASS COUNTY	IN	LPV200	0	100	0	100	0	100
GPC	PUTNAM COUNTY RGNL	IN	LPV	0	100	0	100	2	99.998
GSH	GOSHEN MUNICIPAL	IN	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
GWB	DE KALB COUNTY	IN	LPV	0	100	0	100	0	100
GYY	GARY/CHICAGO INTL	IN	LPV200	0	100	0	100	0	100
HFY	INDY SOUTH GREENWOOD	IN	LPV	0	100	0	100	2	99.998
HNB	HUNTINGBURG	IN	LPV	0	100	0	100	1	99.999
HUF	TERRE HAUTE RGNL	IN	LPV200	0	100	0	100	1	99.999
I22	RANDOLPH COUNTY	IN	LPV	0	100	0	100	1	99.999
I76	PERU MUNICIPAL	IN	LPV	0	100	0	100	0	100
IMS	MADISON MUNICIPAL	IN	LPV	0	100	0	100	2	99.998
IND	INDIANAPOLIS INTL	IN	LPV200	0	100	0	100	2	99.998
JVY	CLARK RGNL	IN	LPV200	0	100	0	100	2	99.998
LAF	PURDUE UNIVERSITY	IN	LPV	0	100	0	100	0	100
MCX	WHITE COUNTY	IN	LP	0	100	0	100	0	100
MIE	DELAWARE COUNTY RGNL	IN	LPV	0	100	0	100	1	99.999
MQJ	INDIANAPOLIS RGNL	IN	LPV200	0	100	0	100	1	99.999
MZZ	MARION MUNICIPAL - MCKINNEY FLD	IN	LPV200	0	100	0	100	0	100
OKK	KOKOMO MUNICIPAL	IN	LPV200	0	100	0	100	0	100
OVO	NORTH VERNON	IN	LPV	0	100	0	100	2	99.998
OXI	STARKE COUNTY	IN	LPV	0	100	0	100	0	100
PLD	PORTLAND MUNICIPAL	IN	LPV	0	100	0	100	1	99.999
PPO	LA PORTE MUNICIPAL	IN	LPV	0	100	0	100	0	100
RCR	FULTON COUNTY	IN	LPV	0	100	0	100	0	100
RID	RICHMOND MUNICIPAL	IN	LPV200	0	100	0	100	1	99.999
RWN	ARENS FLD	IN	LPV	0	100	0	100	0	100
RZL	JASPER COUNTY	IN	LPV	0	100	0	100	0	100
SBN	SOUTH BEND INTL	IN	LPV200	0	100	0	100	0	100
SER	FREEMAN MUNICIPAL	IN	LPV	0	100	0	100	2	99.998
SIV	SULLIVAN COUNTY	IN	LPV	0	100	0	100	1	99.999
SMD	SMITH FLD	IN	LPV	0	100	0	100	0	100
TEL	PERRY COUNTY MUNICIPAL	IN	LP	0	100	0	100	1	99.999
TYQ	INDIANAPOLIS EXEC	IN	LPV	0	100	0	100	1	99.999
UWL	NEW CASTLE HENRY COUNTY MARLAT	IN	LPV	0	100	0	100	1	99.999
VPZ	PORTER COUNTY RGNL	IN	LPV	0	100	0	100	0	100
1QK	GOVE COUNTY	KS	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
3AU	AUGUSTA MUNICIPAL	KS	LP	0	100	0	100	0	100
3K3	SYRACUSE-HAMILTON COUNTY MUNICIPAL	KS	LPV	0	100	0	100	0	100
3K7	MARK HOARD MEML	KS	LPV	0	100	0	100	0	100
3K8	COMANCHE COUNTY	KS	LPV	0	100	0	100	0	100
5K2	TRIBUNE MUNICIPAL	KS	LPV	0	100	0	100	0	100
9K8	KINGMAN/CLYDE CESSNA FLD	KS	LP	0	100	0	100	0	100
AAO	COLONEL JAMES JABARA	KS	LPV	0	100	0	100	0	100
ADT	ATWOOD-RAWLINS COUNTY CITY-COU	KS	LPV	0	100	0	100	0	100
ANY	ANTHONY MUNICIPAL	KS	LPV	0	100	0	100	0	100
BEC	BEECH FACTORY	KS	LPV	0	100	0	100	0	100
CBK	SHALZ FLD	KS	LPV	0	100	0	100	0	100
CFV	COFFEYVILLE MUNICIPAL	KS	LPV	0	100	0	100	0	100
CNK	BLOSSER MUNICIPAL	KS	LP	0	100	0	100	0	100
DDC	DODGE CITY RGNL	KS	LPV200	0	100	0	100	0	100
EGT	WELLINGTON MUNICIPAL	KS	LPV200	0	100	0	100	0	100
EHA	ELKHART-MORTON COUNTY	KS	LPV	0	100	0	100	0	100
EMP	EMPORIA MUNICIPAL	KS	LPV	0	100	0	100	0	100
EQA	EL DORADO/CAPT JACK THOMAS MEM	KS	LPV200	0	100	0	100	0	100
EWK	NEWTON-CITY-COUNTY	KS	LPV	0	100	0	100	0	100
FOE	TOPEKA RGNL	KS	LPV	0	100	0	100	0	100
FSK	FORT SCOTT MUNICIPAL	KS	LPV	0	100	0	100	0	100
GBD	GREAT BEND MUNICIPAL	KS	LPV200	0	100	0	100	0	100
GCK	GARDEN CITY RGNL	KS	LPV	0	100	0	100	0	100
GLD	RENNER FLD /GOODLAND MUNICIPAL/	KS	LPV200	0	100	0	100	0	100
HLC	HILL CITY MUNICIPAL	KS	LPV	0	100	0	100	0	100
HQG	HUGOTON MUNICIPAL	KS	LPV	0	100	0	100	0	100
HRU	HERINGTON RGNL	KS	LPV	0	100	0	100	0	100
HUT	HUTCHINSON RGNL	KS	LPV200	0	100	0	100	0	100
HYS	HAYS RGNL	KS	LPV200	0	100	0	100	0	100
ICT	WICHITA DWIGHT D EISENHOWER NT	KS	LPV200	0	100	0	100	0	100
IDP	INDEPENDENCE MUNICIPAL	KS	LPV200	0	100	0	100	0	100
IXD	NEW CENTURY AIRCENTER	KS	LPV	0	100	0	100	0	100
K38	WASHINGTON COUNTY VETERAN'S ME	KS	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
K78	ABILENE MUNICIPAL	KS	LPV	0	100	0	100	0	100
K79	JETMORE MUNICIPAL	KS	LPV	0	100	0	100	0	100
K81	MIAMI COUNTY	KS	LPV	0	100	0	100	0	100
K82	SMITH CENTER MUNICIPAL	KS	LPV200	0	100	0	100	0	100
K88	ALLEN COUNTY	KS	LPV	0	100	0	100	0	100
LBL	LIBERAL MID-AMERICA RGNL	KS	LPV200	0	100	0	100	0	100
LQR	LARNED-PAWNEE COUNTY	KS	LPV	0	100	0	100	0	100
LWC	LAWRENCE RGNL	KS	LPV200	0	100	0	100	0	100
LYO	LYONS-RICE COUNTY MUNICIPAL	KS	LPV	0	100	0	100	0	100
MHK	MANHATTAN RGNL	KS	LPV200	0	100	0	100	0	100
MPR	MC PHERSON	KS	LPV	0	100	0	100	0	100
MYZ	MARYSVILLE MUNICIPAL	KS	LPV	0	100	0	100	0	100
NRN	NORTON MUNICIPAL	KS	LPV	0	100	0	100	0	100
OEL	OAKLEY MUNICIPAL	KS	LPV	0	100	0	100	0	100
OIN	OBERLIN MUNICIPAL	KS	LPV	0	100	0	100	0	100
OJC	JOHNSON COUNTY EXEC	KS	LPV	0	100	0	100	0	100
OWI	OTTAWA MUNICIPAL	KS	LPV	0	100	0	100	0	100
PHG	PHILLIPSBURG MUNICIPAL	KS	LPV	0	100	0	100	0	100
PPF	TRI-CITY	KS	LPV	0	100	0	100	0	100
PTS	ATKINSON MUNICIPAL	KS	LPV	0	100	0	100	0	100
PTT	PRATT RGNL	KS	LPV	0	100	0	100	0	100
RCP	ROOKS COUNTY RGNL	KS	LPV	0	100	0	100	0	100
RPB	BELLEVILLE MUNICIPAL	KS	LPV	0	100	0	100	0	100
RSL	RUSSELL MUNICIPAL	KS	LPV	0	100	0	100	0	100
SLN	SALINA RGNL	KS	LPV	0	100	0	100	0	100
SYF	CHEYENNE COUNTY MUNICIPAL	KS	LPV	0	100	0	100	0	100
TOP	PHILIP BILLARD MUNICIPAL	KS	LPV	0	100	0	100	0	100
TQK	SCOTT CITY MUNICIPAL	KS	LPV	0	100	0	100	0	100
UKL	COFFEY COUNTY	KS	LPV	0	100	0	100	0	100
ULS	ULYSSES	KS	LPV	0	100	0	100	0	100
WLD	STROTHER FLD	KS	LPV	0	100	0	100	0	100
0I8	CYNTHIANA-HARRISON COUNTY	KY	LP	0	100	0	100	1	99.999
18I	MC CREARY COUNTY	KY	LP	0	100	0	100	1	99.999

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
1M7	FULTON	KY	LPV	0	100	0	100	1	99.999
27K	GEORGETOWN-SCOTT COUNTY RGNL	KY	LPV200	0	100	0	100	1	99.999
2I0	MADISONVILLE RGNL	KY	LPV	0	100	0	100	1	99.999
2M0	PRINCETON-CALDWELL COUNTY	KY	LPV	0	100	0	100	1	99.998
4M7	RUSSELLVILLE-LOGAN COUNTY	KY	LPV	0	100	0	100	1	99.998
5M9	MARION-CRITTENDEN COUNTY JAMES	KY	LPV	0	100	0	100	1	99.999
6I2	LEBANON SPRINGFIELD-GEORGE HOE	KY	LPV	0	100	0	100	1	99.999
AAS	TAYLOR COUNTY	KY	LPV	0	100	0	100	1	99.999
BRY	SAMUELS FLD	KY	LPV	0	100	0	100	2	99.999
BWG	BOWLING GREEN-WARREN COUNTY RG	KY	LPV200	0	100	0	100	1	99.999
BYL	WILLIAMSBURG-WHITLEY COUNTY	KY	LPV	0	100	0	100	0	100
CEY	KYLE-OAKLEY FLD	KY	LPV	0	100	0	100	1	99.999
CPF	WENDELL H FORD	KY	LPV200	0	100	0	100	0	100
CVG	CINCINNATI/NORTHERN KENTUCKY I	KY	LPV200	0	100	0	100	1	99.999
DVK	STUART POWELL FLD	KY	LPV	0	100	0	100	1	99.998
DWU	ASHLAND RGNL	KY	LP	0	100	0	100	1	99.999
EHR	HENDERSON CITY-COUNTY	KY	LPV	0	100	0	100	1	99.998
EKQ	WAYNE COUNTY	KY	LPV	0	100	0	100	1	99.999
EKX	ADDINGTON FLD	KY	LPV	0	100	0	100	1	99.999
FFT	CAPITAL CITY	KY	LPV	0	100	0	100	1	99.999
FGX	FLEMING-MASON	KY	LPV	0	100	0	100	1	99.999
GLW	GLASGOW MUNICIPAL	KY	LPV	0	100	0	100	1	99.999
HVC	HOPKINSVILLE-CHRISTIAN COUNTY	KY	LPV	0	100	0	100	1	99.998
I93	BRECKINRIDGE COUNTY	KY	LPV	0	100	0	100	1	99.999
IOB	MOUNT STERLING/MONTGOMERY COUN	KY	LPV	0	100	0	100	1	99.999
JQD	OHIO COUNTY	KY	LPV	0	100	0	100	1	99.999
K24	RUSSELL COUNTY	KY	LPV	0	100	0	100	1	99.999
K62	GENE SNYDER	KY	LP	0	100	0	100	1	99.999
KY8	HANCOCK COUNTY/RON LEWIS FLD	KY	LPV	0	100	0	100	1	99.999
LEX	BLUE GRASS	KY	LPV	0	100	0	100	1	99.999
LOU	BOWMAN FLD	KY	LPV	0	100	0	100	2	99.998
LOZ	LONDON/CORBIN/MAGEE	KY	LPV	0	100	0	100	0	100
M20	LEITCHFIELD-GRAYSON COUNTY	KY	LPV	0	100	0	100	1	99.999

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
M21	MUHLENBERG COUNTY	KY	LP	0	100	0	100	1	99.998
M25	MAYFIELD GRAVES COUNTY	KY	LPV	0	100	0	100	1	99.999
OWB	OWENSBORO/DAVIESS COUNTY RGNL	KY	LPV200	0	100	0	100	1	99.999
PAH	BARKLEY RGNL	KY	LPV200	0	100	0	100	0	100
PBX	PIKE COUNTY/HATCHER FLD	KY	LPV200	0	100	0	100	0	100
RGA	CENTRAL KENTUCKY RGNL	KY	LPV	0	100	0	100	1	99.998
SDF	LOUISVILLE MUHAMMAD ALI INTL	KY	LPV200	0	100	0	100	2	99.998
SJS	BIG SANDY RGNL	KY	LPV	0	100	0	100	0	100
SME	LAKE CUMBERLAND RGNL	KY	LPV	0	100	0	100	1	99.999
SYM	MOREHEAD-ROWAN COUNTY CLYDE A	KY	LPV200	0	100	0	100	1	99.999
TWT	STURGIS MUNICIPAL	KY	LPV	0	100	0	100	1	99.999
TZV	TOMPKINSVILLE/MONROE COUNTY	KY	LPV	0	100	0	100	1	99.999
0R4	CONCORDIA PARISH	LA	LPV	0	100	0	100	2	99.999
0R7	THE RED RIVER	LA	LPV	0	100	0	100	0	100
3R4	HART	LA	LPV	0	100	0	100	0	100
3R7	JENNINGS	LA	LPV	0	100	0	100	2	99.996
5R8	DE QUINCY INDUSTRIAL AIRPARK	LA	LPV	0	100	0	100	1	99.998
ACP	ALLEN PARISH	LA	LPV	0	100	0	100	1	99.998
AEX	ALEXANDRIA INTL	LA	LPV200	0	100	0	100	1	99.999
APS	PORT OF SOUTH LOUISIANA EXEC R	LA	LPV	0	100	0	100	4	99.989
ARA	ACADIANA RGNL	LA	LPV200	0	100	0	100	3	99.993
BQP	MOREHOUSE MEML	LA	LPV	0	100	0	100	1	99.999
BTR	BATON ROUGE METRO` RYAN FLD	LA	LPV200	0	100	0	100	4	99.994
BXA	GEORGE R CARR MEML AIR FLD	LA	LPV	0	100	0	100	4	99.993
CWF	CHENNAULT INTL	LA	LPV200	0	100	0	100	2	99.996
DTN	SHREVEPORT DOWNTOWN	LA	LPV	0	100	0	100	0	100
ESF	ESLER RGNL	LA	LPV200	0	100	0	100	1	99.999
F88	JONESBORO	LA	LP	0	100	0	100	1	99.999
GAO	SOUTH LAFOURCHE LEONARD MILLER	LA	LPV200	0	100	1	99.999	4	99.983
HDC	HAMMOND NORTHSHORE RGNL	LA	LPV200	0	100	0	100	4	99.992
HUM	HOUMA-TERREBONNE	LA	LPV200	0	100	1	99.999	4	99.985
HZR	FALSE RIVER RGNL	LA	LPV	0	100	0	100	4	99.996
IER	NATCHITOCHES RGNL	LA	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
IYA	ABBEVILLE CHRIS CRUSTA MEML	LA	LPV	0	100	0	100	3	99.993
L39	LEESVILLE	LA	LPV	0	100	0	100	0	100
LCH	LAKE CHARLES RGNL	LA	LPV200	0	100	0	100	2	99.996
LFT	LAFAYETTE RGNL/PAUL FOURNET FL	LA	LPV200	0	100	0	100	3	99.994
M79	JOHN H HOOKS JR MEML	LA	LPV	0	100	0	100	1	99.999
MLU	MONROE RGNL	LA	LPV200	0	100	0	100	1	99.999
MSY	LOUIS ARMSTRONG NEW ORLEANS IN	LA	LPV200	0	100	0	100	4	99.987
NEW	LAKEFRONT	LA	LPV	0	100	0	100	4	99.987
OPL	ST LANDRY PARISH-AHART FLD	LA	LPV	0	100	0	100	4	99.997
PTN	HARRY P WILLIAMS MEML	LA	LPV200	0	100	1	99.999	4	99.988
REG	LOUISIANA RGNL	LA	LPV	0	100	0	100	4	99.991
RSN	RUSTON RGNL	LA	LPV	0	100	0	100	1	99.999
SHV	SHREVEPORT RGNL	LA	LPV200	0	100	0	100	0	100
SPH	SPRINGHILL	LA	LPV	0	100	0	100	0	100
TVR	VICKSBURG TALLULAH RGNL	LA	LPV200	0	100	0	100	2	99.999
UXL	SOUTHLAND FLD	LA	LPV	0	100	0	100	2	99.996
3B0	SOUTHBRIDGE MUNICIPAL	MA	LPV	0	100	0	100	0	100
ACK	NANTUCKET MEML	MA	LPV200	0	100	0	100	0	100
BAF	WESTFIELD-BARNES RGNL	MA	LPV	0	100	0	100	0	100
BED	LAURENCE G HANSCOM FLD	MA	LPV200	0	100	0	100	0	100
BOS	GENERAL EDWARD LAWRENCE LOGAN	MA	LPV200	0	100	0	100	0	100
BVY	BEVERLY RGNL	MA	LPV	0	100	0	100	0	100
EWB	NEW BEDFORD RGNL	MA	LPV200	0	100	0	100	0	100
GBR	WALTER J KOLADZA	MA	LP	0	100	0	100	0	100
GHG	MARSHFIELD MUNICIPAL - GEORGE HARLO	MA	LPV	0	100	0	100	0	100
HYA	CAPE COD GATEWAY	MA	LPV200	0	100	0	100	0	100
LWM	LAWRENCE MUNICIPAL	MA	LPV200	0	100	0	100	0	100
MVY	MARTHA'S VINEYARD	MA	LPV200	0	100	0	100	0	100
ORE	ORANGE MUNICIPAL	MA	LPV	0	100	0	100	0	100
ORH	WORCESTER RGNL	MA	LPV200	0	100	0	100	0	100
OWD	NORWOOD MEML	MA	LPV	0	100	0	100	0	100
PSF	PITTSFIELD MUNICIPAL	MA	LPV	0	100	0	100	0	100
PVC	PROVINCETOWN MUNICIPAL	MA	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
PYM	PLYMOUTH MUNICIPAL	MA	LPV200	0	100	0	100	0	100
TAN	TAUNTON MUNICIPAL - KING FLD	MA	LPV	0	100	0	100	0	100
2G4	GARRETT COUNTY	MD	LPV	0	100	0	100	0	100
2W5	MARYLAND	MD	LP	0	100	0	100	0	100
2W6	ST MARY'S COUNTY RGNL	MD	LPV	0	100	0	100	0	100
BWI	BALTIMORE/WASHINGTON INTL THUR	MD	LPV200	0	100	0	100	0	100
CBE	GREATER CUMBERLAND RGNL	MD	LPV	0	100	0	100	0	100
CGE	CAMBRIDGE-DORCHESTER RGNL	MD	LPV	0	100	0	100	0	100
DMW	CARROLL COUNTY RGNL/JACK B POA	MD	LPV200	0	100	0	100	0	100
ESN	EASTON/NEWNAM FLD	MD	LPV200	0	100	0	100	0	100
FDK	FREDERICK MUNICIPAL	MD	LPV	0	100	0	100	0	100
GAI	MONTGOMERY COUNTY AIRPARK	MD	LPV	0	100	0	100	0	100
HGR	HAGERSTOWN RGNL/RICHARD A HENS	MD	LPV200	0	100	0	100	0	100
MTN	MARTIN STATE	MD	LPV	0	100	0	100	0	100
OXB	OCEAN CITY MUNICIPAL	MD	LPV	0	100	0	100	0	100
SBY	SALISBURY-OCEAN CITY WICOMICO	MD	LPV200	0	100	0	100	0	100
W29	BAY BRIDGE	MD	LPV	0	100	0	100	0	100
1B0	DEXTER RGNL	ME	LP	0	100	0	100	0	100
2B7	PITTSFIELD MUNICIPAL	ME	LPV	0	100	0	100	0	100
3B1	GREENVILLE MUNICIPAL	ME	LPV	0	100	0	100	0	100
59B	NEWTON FLD	ME	LP	0	100	0	100	0	100
81B	OXFORD COUNTY RGNL	ME	LP	0	100	0	100	0	100
AUG	AUGUSTA STATE	ME	LPV200	0	100	0	100	0	100
BGR	BANGOR INTL	ME	LPV200	0	100	0	100	0	100
BHB	HANCOCK COUNTY/BAR HARBOR	ME	LPV200	0	100	0	100	0	100
BST	BELFAST MUNICIPAL	ME	LPV	0	100	0	100	0	100
BXM	BRUNSWICK EXEC	ME	LPV200	0	100	0	100	0	100
CAR	CARIBOU MUNICIPAL	ME	LPV	0	100	0	100	0	100
EPM	EASTPORT MUNICIPAL	ME	LPV	0	100	0	100	0	100
FVE	NORTHERN AROOSTOOK RGNL	ME	LPV200	0	100	0	100	0	100
HUL	HOULTON INTL	ME	LP	0	100	0	100	0	100
IZG	EASTERN SLOPES RGNL	ME	LPV	0	100	0	100	0	100
LEW	AUBURN/LEWISTON MUNICIPAL	ME	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
LRG	LINCOLN RGNL	ME	LP	0	100	0	100	0	100
MLT	MILLINOCKET MUNICIPAL	ME	LPV	0	100	0	100	0	100
OWK	CENTRAL MAINE /NORRIDGEWOCK	ME	LPV	0	100	0	100	0	100
PQI	PRESQUE ISLE INTL	ME	LPV200	0	100	0	100	0	100
PWM	PORTLAND INTL JETPORT	ME	LPV200	0	100	0	100	0	100
RKD	KNOX COUNTY RGNL	ME	LPV200	0	100	0	100	0	100
SFM	SANFORD SEACOAST RGNL	ME	LPV200	0	100	0	100	0	100
WVL	WATERVILLE ROBERT LAFLEUR	ME	LPV200	0	100	0	100	0	100
48D	CLARE MUNICIPAL	MI	LP	0	100	0	100	0	100
4D0	ABRAMS MUNICIPAL	MI	LP	0	100	0	100	0	100
6Y1	BOIS BLANC ISLAND	MI	LP	0	100	0	100	0	100
77G	MARLETTE TOWNSHIP	MI	LPV	0	100	0	100	0	100
9D9	HASTINGS	MI	LPV	0	100	0	100	0	100
ACB	ANTRIM COUNTY	MI	LPV	0	100	0	100	0	100
ADG	LENAWEE COUNTY	MI	LPV	0	100	0	100	0	100
AMN	GRATIOT COMMUNICIPALTY	MI	LPV	0	100	0	100	0	100
ANJ	SAULT STE MARIE MUNICIPAL/SANDERSON	MI	LPV	0	100	0	100	0	100
APN	ALPENA COUNTY RGNL	MI	LPV	0	100	0	100	0	100
ARB	ANN ARBOR MUNICIPAL	MI	LPV	0	100	0	100	0	100
AZO	KALAMAZOO/BATTLE CREEK INTL	MI	LPV200	0	100	0	100	0	100
BAX	HURON COUNTY MEML	MI	LPV	0	100	0	100	0	100
BEH	SOUTHWEST MICHIGAN RGNL	MI	LPV200	0	100	0	100	0	100
BIV	WEST MICHIGAN RGNL	MI	LPV200	0	100	0	100	0	100
BTL	BATTLE CREEK EXEC AT KELLOGG F	MI	LPV200	0	100	0	100	0	100
C04	OCEANA COUNTY	MI	LPV	0	100	0	100	0	100
C20	ANDREWS UNIVERSITY AIRPARK	MI	LP	0	100	0	100	0	100
CAD	WEXFORD COUNTY	MI	LPV200	0	100	0	100	0	100
CFS	TUSCOLA AREA	MI	LP	0	100	0	100	0	100
CIU	CHIPPEWA COUNTY INTL	MI	LPV	0	100	0	100	0	100
CMX	HOUGHTON COUNTY MEML	MI	LPV	0	100	0	100	0	100
CVX	CHARLEVOIX MUNICIPAL	MI	LPV	0	100	0	100	0	100
D95	DUPONT-LAPEER	MI	LP	0	100	0	100	0	100
DET	COLEMAN A YOUNG MUNICIPAL	MI	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
DTW	DETROIT METRO WAYNE COUNTY	MI	LPV200	0	100	0	100	0	100
ERY	LUCE COUNTY	MI	LPV	0	100	0	100	0	100
ESC	DELTA COUNTY	MI	LPV200	0	100	0	100	0	100
FFX	FREMONT MUNICIPAL	MI	LPV	0	100	0	100	0	100
FNT	BISHOP INTL	MI	LPV200	0	100	0	100	0	100
GDW	GLADWIN ZETTEL MEML	MI	LP	0	100	0	100	0	100
GLR	GAYLORD RGNL	MI	LPV	0	100	0	100	0	100
GRR	GERALD R FORD INTL	MI	LPV200	0	100	0	100	0	100
HTL	ROSCOMMON COUNTY - BLODGETT ME	MI	LP	0	100	0	100	0	100
HYX	SAGINAW COUNTY H W BROWNE	MI	LPV200	0	100	0	100	0	100
IKW	JACK BARSTOW	MI	LPV	0	100	0	100	0	100
IMT	FORD	MI	LPV	0	100	0	100	0	100
IRS	KIRSCH MUNICIPAL	MI	LPV	0	100	0	100	0	100
ISQ	SCHOOLCRAFT COUNTY	MI	LP	0	100	0	100	0	100
IWD	GOGEBIC/IRON COUNTY	MI	LPV200	0	100	0	100	0	100
JXN	JACKSON COUNTY-REYNOLDS FLD	MI	LPV200	0	100	0	100	0	100
JYM	HILLSDALE MUNICIPAL	MI	LPV	0	100	0	100	0	100
LAN	CAPITAL REGION INTL	MI	LPV200	0	100	0	100	0	100
LDM	MASON COUNTY	MI	LPV	0	100	0	100	0	100
MBL	MANISTEE COUNTY/BLACKER	MI	LPV200	0	100	0	100	0	100
MBS	MBS INTL	MI	LPV200	0	100	0	100	0	100
MCD	MACKINAC ISLAND	MI	LPV	0	100	0	100	0	100
MKG	MUSKEGON COUNTY	MI	LPV200	0	100	0	100	0	100
MNM	MENOMINEE RGNL	MI	LPV200	0	100	0	100	0	100
MOP	MOUNT PLEASANT MUNICIPAL	MI	LPV	0	100	0	100	0	100
N98	BOYNE CITY MUNICIPAL	MI	LP	0	100	0	100	0	100
OEB	BRANCH COUNTY MEML	MI	LPV	0	100	0	100	0	100
OGM	ONTONAGON COUNTY - SCHUSTER FL	MI	LPV	0	100	0	100	0	100
OSC	OSCODA-WURTSMITH	MI	LPV200	0	100	0	100	0	100
OZW	LIVINGSTON COUNTY SPENCER J HA	MI	LPV200	0	100	0	100	0	100
PHN	ST CLAIR COUNTY INTL	MI	LPV200	0	100	0	100	0	100
PLN	PELLSTON RGNL/EMMET COUNTY	MI	LPV200	0	100	0	100	0	100
PTK	OAKLAND COUNTY INTL	MI	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
RMY	BROOKS FLD	MI	LP	0	100	0	100	0	100
RNP	OWOSSO COMMUNICIPALTY	MI	LPV	0	100	0	100	0	100
RQB	ROBEN-HOOD	MI	LPV200	0	100	0	100	0	100
SAW	SAWYER INTL	MI	LPV200	0	100	0	100	0	100
SLH	CHEBOYGAN COUNTY	MI	LPV	0	100	0	100	0	100
TEW	MASON JEWETT FLD	MI	LP	0	100	0	100	0	100
TTF	CUSTER	MI	LPV	0	100	0	100	0	100
TVC	CHERRY CAPITAL	MI	LPV200	0	100	0	100	0	100
Y31	WEST BRANCH COMMUNICIPALTY	MI	LP	0	100	0	100	0	100
Y70	IONIA COUNTY	MI	LPV	0	100	0	100	0	100
YIP	WILLOW RUN	MI	LPV200	0	100	0	100	0	100
16D	PERHAM MUNICIPAL	MN	LPV	0	100	0	100	0	100
3N8	MAHNOMEN COUNTY	MN	LPV	0	100	0	100	0	100
ACQ	WASECA MUNICIPAL	MN	LPV	0	100	0	100	0	100
ADC	WADENA MUNICIPAL	MN	LPV	0	100	0	100	0	100
AEL	ALBERT LEA MUNICIPAL	MN	LPV	0	100	0	100	0	100
AIT	AITKIN MUNICIPAL/STEVE KURTZ FLD	MN	LPV	0	100	0	100	0	100
ANE	ANOKA COUNTY-BLAINE (JANES FLD	MN	LPV	0	100	0	100	0	100
AUM	AUSTIN MUNICIPAL	MN	LPV200	0	100	0	100	0	100
AXN	CHANDLER FLD	MN	LPV	0	100	0	100	0	100
BBB	BENSON MUNICIPAL	MN	LPV	0	100	0	100	0	100
BDE	BAUDETTE INTL	MN	LPV	0	100	0	100	0	100
BDH	WILLMAR MUNICIPAL/JOHN L RICE FLD	MN	LPV200	0	100	0	100	0	100
BJI	BEMIDJI RGNL	MN	LPV200	0	100	0	100	0	100
BRD	BRAINERD LAKES RGNL	MN	LPV200	0	100	0	100	0	100
CBG	CAMBRIDGE MUNICIPAL	MN	LPV	0	100	0	100	0	100
CFE	BUFFALO MUNICIPAL	MN	LPV	0	100	0	100	0	100
CKC	GRAND MARAIS/COOK COUNTY	MN	LPV	0	100	0	100	0	100
CKN	CROOKSTON MUNICIPAL/KIRKWOOD FLD	MN	LPV	0	100	0	100	0	100
CNB	MYERS FLD	MN	LPV	0	100	0	100	0	100
COQ	CLOQUET/CARLTON COUNTY	MN	LPV	0	100	0	100	0	100
CQM	COOK MUNICIPAL	MN	LP	0	100	0	100	0	100
D39	SAUK CENTRE MUNICIPAL	MN	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
D42	SPRINGFIELD MUNICIPAL	MN	LP	0	100	0	100	0	100
DLH	DULUTH INTL	MN	LPV200	0	100	0	100	0	100
DTL	DETROIT LAKES/WETHING FLD	MN	LPV	0	100	0	100	0	100
DVP	SLAYTON MUNICIPAL	MN	LP	0	100	0	100	0	100
DXX	LAC QUI PARLE COUNTY	MN	LPV200	0	100	0	100	0	100
ELO	ELY MUNICIPAL	MN	LPV200	0	100	0	100	0	100
ETH	WHEATON MUNICIPAL	MN	LP	0	100	0	100	0	100
EVM	EVELETH-VIRGINIA MUNICIPAL	MN	LPV	0	100	0	100	0	100
FBL	FARIBAULT MUNICIPAL-LIZ WALL STROHF	MN	LPV	0	100	0	100	0	100
FCM	FLYING CLOUD	MN	LPV200	0	100	0	100	0	100
FFM	FERGUS FALLS MUNICIPAL/EINAR MICKEL	MN	LPV200	0	100	0	100	0	100
FKA	FILLMORE COUNTY	MN	LPV	0	100	0	100	0	100
FOZ	BIGFORK MUNICIPAL	MN	LP	0	100	0	100	0	100
FRM	FAIRMONT MUNICIPAL	MN	LPV	0	100	0	100	0	100
FSE	FOSSTON MUNICIPAL-ANDERSON FLD	MN	LP	0	100	0	100	0	100
GHW	GLENWOOD MUNICIPAL	MN	LPV	0	100	0	100	0	100
GPZ	GRAND RAPIDS/ITASCA COUNTY-GOR	MN	LPV200	0	100	0	100	0	100
GYL	GLENCOE MUNICIPAL	MN	LPV	0	100	0	100	0	100
HCD	HUTCHINSON MUNICIPAL/BUTLER FLD	MN	LPV	0	100	0	100	0	100
HCO	HALLOCK MUNICIPAL	MN	LPV	0	100	0	100	0	100
HIB	RANGE RGNL	MN	LPV200	0	100	0	100	0	100
INL	FALLS INTL/EINARSON FLD	MN	LPV	0	100	0	100	0	100
JKJ	MOORHEAD MUNICIPAL	MN	LPV	0	100	0	100	0	100
JMR	MORA MUNICIPAL	MN	LPV	0	100	0	100	0	100
JYG	ST JAMES MUNICIPAL	MN	LPV	0	100	0	100	0	100
LJF	LITCHFIELD MUNICIPAL	MN	LPV	0	100	0	100	0	100
LVN	AIRLAKE	MN	LPV200	0	100	0	100	0	100
LXL	LITTLE FALLS/MORRISON COUNTY-L	MN	LPV	0	100	0	100	0	100
LYV	QUENTIN AANENSON FLD	MN	LPV200	0	100	0	100	0	100
MJQ	JACKSON MUNICIPAL	MN	LPV	0	100	0	100	0	100
MKT	MANKATO RGNL	MN	LPV200	0	100	0	100	0	100
MML	SOUTHWEST MINNESOTA RGNL MARSH	MN	LPV200	0	100	0	100	0	100
MOX	MORRIS MUNICIPAL/CHARLIE SCHMIDT FL	MN	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
MSP	MINNEAPOLIS-ST PAUL INTL/WOLD-	MN	LPV200	0	100	0	100	0	100
MVE	MONTEVIDEO-CHIPPEWA COUNTY	MN	LPV	0	100	0	100	0	100
MWM	WINDOM MUNICIPAL	MN	LPV	0	100	0	100	0	100
MZH	MOOSE LAKE CARLTON COUNTY	MN	LPV	0	100	0	100	0	100
ONA	WINONA MUNICIPAL-MAX CONRAD FLD	MN	LPV	0	100	0	100	0	100
ORB	ORR RGNL	MN	LP	0	100	0	100	0	100
OTG	WORTHINGTON MUNICIPAL	MN	LPV200	0	100	0	100	0	100
OWA	OWATONNA DEGNER RGNL	MN	LPV200	0	100	0	100	0	100
PEX	PAYNESVILLE MUNICIPAL	MN	LPV200	0	100	0	100	0	100
PKD	PARK RAPIDS MUNICIPAL/KONSHOK FLD	MN	LPV200	0	100	0	100	0	100
PQN	PIPESTONE MUNICIPAL	MN	LPV200	0	100	0	100	0	100
RGK	RED WING RGNL	MN	LPV200	0	100	0	100	0	100
ROS	RUSH CITY RGNL	MN	LPV	0	100	0	100	0	100
ROX	ROSEAU MUNICIPAL/RUDY BILLBERG FLD	MN	LPV	0	100	0	100	0	100
RRT	WARROAD INTL MEML	MN	LPV200	0	100	0	100	0	100
RST	ROCHESTER INTL	MN	LPV200	0	100	0	100	0	100
RWF	REDWOOD FALLS MUNICIPAL	MN	LPV	0	100	0	100	0	100
SAZ	STAPLES MUNICIPAL	MN	LPV	0	100	0	100	0	100
SBU	BLUE EARTH MUNICIPAL	MN	LPV	0	100	0	100	0	100
SGS	SOUTH ST PAUL MUNICIPAL-RICHARD E F	MN	LPV	0	100	0	100	0	100
STC	ST CLOUD RGNL	MN	LPV200	0	100	0	100	0	100
STP	ST PAUL DOWNTOWN HOLMAN FLD	MN	LPV	0	100	0	100	0	100
TOB	DODGE CENTER	MN	LPV	0	100	0	100	0	100
TVF	THIEF RIVER FALLS RGNL	MN	LPV	0	100	0	100	0	100
TWM	RICHARD B HELGESON	MN	LPV	0	100	0	100	0	100
ULM	NEW ULM MUNICIPAL	MN	LPV200	0	100	0	100	0	100
VVV	ORTONVILLE MUNICIPAL-MARTINSON FLD	MN	LP	0	100	0	100	0	100
Y49	WALKER MUNICIPAL	MN	LP	0	100	0	100	0	100
Y63	ELBOW LAKE MUNICIPAL - PRIDE OF THE	MN	LPV	0	100	0	100	0	100
03D	MEMPHIS MEML	MO	LPV	0	100	0	100	0	100
1H0	CREVE COEUR	MO	LPV	0	100	0	100	0	100
1MO	MOUNTAIN GROVE MEML	MO	LP	0	100	0	100	0	100
2H2	JERRY SUMNERS SR AURORA MUNICIPAL	MO	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
6M6	LEWIS COUNTY RGNL	MO	LPV	0	100	0	100	0	100
8WC	WASHINGTON COUNTY	MO	LPV	0	100	0	100	0	100
94K	CASSVILLE MUNICIPAL	MO	LPV	0	100	0	100	0	100
AIZ	LEE C FINE MEML	MO	LPV	0	100	0	100	0	100
BBG	BRANSON	MO	LPV200	0	100	0	100	0	100
BUM	BUTLER MEML	MO	LPV	0	100	0	100	0	100
CGI	CAPE GIRARDEAU RGNL	MO	LPV200	0	100	0	100	0	100
CHT	CHILLICOTHE MUNICIPAL	MO	LPV	0	100	0	100	0	100
COU	COLUMBIA RGNL	MO	LPV200	0	100	0	100	0	100
DMO	SEDALIA RGNL	MO	LPV	0	100	0	100	0	100
DXE	DEXTER MUNICIPAL	MO	LPV	0	100	0	100	0	100
EIW	COUNTY MEML	MO	LPV	0	100	0	100	0	100
EOS	NEOSHO HUGH ROBINSON	MO	LPV	0	100	0	100	0	100
EVU	NORTHWEST MISSOURI RGNL	MO	LPV	0	100	0	100	0	100
EZZ	CAMERON MEML	MO	LPV	0	100	0	100	0	100
FAM	FARMINGTON RGNL	MO	LPV	0	100	0	100	0	100
FTT	ELTON HENSLEY MEML	MO	LPV	0	100	0	100	0	100
FWB	BRANSON WEST MUNICIPAL - EMERSON FL	MO	LPV200	0	100	0	100	0	100
FYG	WASHINGTON RGNL	MO	LPV	0	100	0	100	0	100
GLY	CLINTON RGNL	MO	LPV	0	100	0	100	0	100
GPH	MIDWEST NTL AIR CENTER	MO	LPV	0	100	0	100	0	100
H19	BOWLING GREEN MUNICIPAL	MO	LPV	0	100	0	100	0	100
H79	ELDON MODEL AIRPARK	MO	LP	0	100	0	100	0	100
H88	A PAUL VANCE FREDERICKTOWN RGN	MO	LPV	0	100	0	100	0	100
HAE	HANNIBAL RGNL	MO	LPV	0	100	0	100	0	100
HFJ	MONETT RGNL	MO	LPV	0	100	0	100	0	100
HIG	HIGGINSVILLE INDUSTRIAL MUNICIPAL	MO	LPV	0	100	0	100	0	100
IRK	KIRKSVILLE RGNL	MO	LPV200	0	100	0	100	0	100
JEF	JEFFERSON CITY MEML	MO	LPV	0	100	0	100	0	100
JLN	JOPLIN RGNL	MO	LPV	0	100	0	100	0	100
K15	GRAND GLAIZE-OSAGE BEACH	MO	LP	0	100	0	100	0	100
K57	GOULD PETERSON MUNICIPAL	MO	LPV	0	100	0	100	0	100
K89	MACON-FOWER MEML	MO	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
LLU	LAMAR MUNICIPAL	MO	LPV	0	100	0	100	0	100
LRY	LAWRENCE SMITH MEML	MO	LPV	0	100	0	100	0	100
LXT	LEE'S SUMMIT MUNICIPAL	MO	LPV	0	100	0	100	0	100
M05	CARUTHERSVILLE MEML	MO	LPV	0	100	0	100	0	100
M12	STEELE MUNICIPAL	MO	LPV	0	100	0	100	0	100
M17	BOLIVAR MUNICIPAL	MO	LPV	0	100	0	100	0	100
M48	HOUSTON MEML	MO	LPV	0	100	0	100	0	100
MAW	MALDEN RGNL	MO	LPV	0	100	0	100	0	100
MBY	OMAR N BRADLEY	MO	LPV	0	100	0	100	0	100
MCI	KANSAS CITY INTL	MO	LPV200	0	100	0	100	0	100
MHL	MARSHALL MEML MUNICIPAL	MO	LPV	0	100	0	100	0	100
MKC	CHARLES B WHEELER DOWNTOWN	MO	LPV	0	100	0	100	0	100
MNF	MOUNTAIN VIEW	MO	LP	0	100	0	100	0	100
MO3	STOCKTON MUNICIPAL	MO	LP	0	100	0	100	0	100
MO8	NORTH CENTRAL MISSOURI RGNL	MO	LPV	0	100	0	100	0	100
MYJ	MEXICO MEML	MO	LPV	0	100	0	100	0	100
NVD	NEVADA MUNICIPAL	MO	LPV200	0	100	0	100	0	100
OZS	CAMDENTON MEML-LAKE RGNL	MO	LPV	0	100	0	100	0	100
PCD	PERRYVILLE RGNL	MO	LPV	0	100	0	100	0	100
PLK	M GRAHAM CLARK DOWNTOWN	MO	LPV200	0	100	0	100	0	100
POF	POPLAR BLUFF RGNL BUSINESS	MO	LPV	0	100	0	100	0	100
RAW	WARSAW MUNICIPAL	MO	LPV200	0	100	0	100	0	100
RCM	SKYHAVEN	MO	LPV	0	100	0	100	0	100
SGF	SPRINGFIELD-BRANSON NTL	MO	LPV	0	100	0	100	0	100
SIK	SIKESTON MEML MUNICIPAL	MO	LPV	0	100	0	100	0	100
STJ	ROSECRANS MEML	MO	LPV200	0	100	0	100	0	100
STL	ST LOUIS LAMBERT INTL	MO	LPV200	0	100	0	100	0	100
SUS	SPIRIT OF ST LOUIS	MO	LPV200	0	100	0	100	0	100
TBN	WAYNESVILLE-ST ROBERT RGNL FOR	MO	LPV	0	100	0	100	0	100
TKX	KENNETT MEML	MO	LPV	0	100	0	100	0	100
TRX	TRENTON MUNICIPAL	MO	LPV	0	100	0	100	0	100
UBX	CUBA MUNICIPAL	MO	LPV	0	100	0	100	0	100
UNO	WEST PLAINS RGNL	MO	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
UUV	SULLIVAN RGNL	MO	LPV	0	100	0	100	0	100
VER	JESSE VIERTEL MEML	MO	LPV	0	100	0	100	0	100
VIH	ROLLA NTL	MO	LPV	0	100	0	100	0	100
0R0	COLUMBIA/MARION COUNTY	MS	LPV	0	100	0	100	2	99.995
17M	MAGEE MUNICIPAL	MS	LP	0	100	0	100	2	99.996
5A4	OKOLONA MUNICIPAL/RICHARD STOVALL F	MS	LPV	0	100	0	100	1	99.997
5A6	WINONA-MONTGOMERY COUNTY	MS	LP	0	100	0	100	1	99.998
87I	YAZOO COUNTY	MS	LPV	0	100	0	100	2	99.998
8M1	BOONEVILLE/BALDWYN	MS	LPV	0	100	0	100	1	99.997
CKM	FLETCHER FLD	MS	LPV	0	100	0	100	0	100
CRX	ROSCOE TURNER	MS	LPV200	0	100	0	100	1	99.997
GLH	GREENVILLE MID-DELTA	MS	LPV200	0	100	0	100	1	99.999
GNF	GRENADA MUNICIPAL	MS	LPV	0	100	0	100	1	99.998
GPT	GULFPORT-BILOXI INTL	MS	LPV200	0	100	0	100	4	99.991
GTR	GOLDEN TRIANGLE RGNL	MS	LPV200	0	100	0	100	1	99.996
GWO	GREENWOOD-LEFLORE	MS	LPV	0	100	0	100	1	99.998
HBG	HATTIESBURG BOBBY L CHAIN MUNICIPAL	MS	LPV200	0	100	0	100	2	99.995
HEZ	HARDY-ANDERS FLD/NATCHEZ-ADAMS	MS	LPV200	0	100	0	100	2	99.998
HKS	HAWKINS FLD	MS	LPV	0	100	0	100	2	99.997
HSA	STENNIS INTL	MS	LPV200	0	100	0	100	4	99.989
IDL	INDIANOLA MUNICIPAL	MS	LPV	0	100	0	100	1	99.999
JAN	JACKSON-MEDGAR WILEY EVERS INT	MS	LPV200	0	100	0	100	2	99.997
JVW	JOHN BELL WILLIAMS	MS	LPV200	0	100	0	100	2	99.997
LMS	LOUISVILLE/WINSTON COUNTY	MS	LPV	0	100	0	100	1	99.996
LUL	HESLER-NOBLE FLD	MS	LPV	0	100	0	100	1	99.995
M11	COPIAH COUNTY	MS	LPV	0	100	0	100	2	99.997
M40	MONROE COUNTY	MS	LPV	0	100	0	100	1	99.997
M41	HOLLY SPRINGS-MARSHALL COUNTY	MS	LPV	0	100	0	100	1	99.999
M43	PRENTISS-JEFFERSON DAVIS COUNT	MS	LPV	0	100	0	100	2	99.995
MBO	BRUCE CAMPBELL FLD	MS	LPV	0	100	0	100	1	99.997
MCB	MC COMB/PIKE COUNTY/JOHN E LEW	MS	LPV200	0	100	0	100	3	99.996
MEI	KEY FLD	MS	LPV200	0	100	0	100	1	99.996
MJD	PICAYUNE MUNICIPAL	MS	LPV	0	100	0	100	4	99.990

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
MMS	SELFS	MS	LPV	0	100	0	100	0	100
MPE	PHILADELPHIA MUNICIPAL	MS	LPV	0	100	0	100	1	99.996
OLV	OLIVE BRANCH/TAYLOR FLD	MS	LPV200	0	100	0	100	1	99.999
PIB	HATTIESBURG/LAUREL RGNL	MS	LPV200	0	100	0	100	1	99.995
PMU	PANOLA COUNTY	MS	LPV	0	100	0	100	1	99.999
PQL	TRENT LOTT INTL	MS	LPV200	0	100	0	100	4	99.993
RNV	CLEVELAND MUNICIPAL	MS	LPV	0	100	0	100	0	100
STF	GEORGE M BRYAN	MS	LPV200	0	100	0	100	1	99.996
TUP	TUPELO RGNL	MS	LPV200	0	100	0	100	1	99.997
UBS	COLUMBUS-LOWNDES COUNTY	MS	LPV	0	100	0	100	1	99.997
UOX	UNIVERSITY-OXFORD	MS	LPV	0	100	0	100	1	99.998
UTA	TUNICA MUNICIPAL	MS	LPV200	0	100	0	100	0	100
VKS	VICKSBURG MUNICIPAL	MS	LP	0	100	0	100	2	99.998
00U	BIG HORN COUNTY	MT	LPV200	0	100	0	100	0	100
1S3	TILLITT FLD	MT	LPV	0	100	0	100	0	100
4U6	CIRCLE TOWN COUNTY	MT	LPV	0	100	0	100	0	100
6S0	BIG TIMBER	MT	LPV	0	100	0	100	0	100
6S8	LAUREL MUNICIPAL	MT	LPV	0	100	0	100	0	100
7S0	RONAN	MT	LPV	0	100	0	100	0	100
7S1	TWIN BRIDGES	MT	LPV	0	100	0	100	0	100
BHK	BAKER MUNICIPAL	MT	LPV	0	100	0	100	0	100
BIL	BILLINGS LOGAN INTL	MT	LPV200	0	100	0	100	0	100
BTM	BERT MOONEY	MT	LPV	0	100	0	100	0	100
BZN	BOZEMAN YELLOWSTONE INTL	MT	LPV	0	100	0	100	0	100
CII	CHOTEAU	MT	LPV200	0	100	0	100	0	100
CTB	CUT BANK INTL	MT	LPV200	0	100	0	100	0	100
DLN	DILLON	MT	LPV	0	100	0	100	0	100
EKS	ENNIS BIG SKY	MT	LPV	0	100	0	100	0	100
GDV	DAWSON COMMUNICIPALTY	MT	LPV	0	100	0	100	0	100
GGW	WOKAL FLD/GLASGOW-VALLEY COUNT	MT	LPV200	0	100	0	100	0	100
GPI	GLACIER PARK INTL	MT	LPV	0	100	0	100	0	100
GTF	GREAT FALLS INTL	MT	LPV200	0	100	0	100	0	100
HLN	HELENA RGNL	MT	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
HRF	RAVALLI COUNTY	MT	LPV	0	100	0	100	0	100
HVR	HAVRE CITY-COUNTY	MT	LPV	0	100	0	100	0	100
HWQ	WHEATLAND COUNTY AT HARLOWTON	MT	LPV	0	100	0	100	0	100
LVM	MISSION FLD	MT	LP	0	100	0	100	0	100
LWT	LEWISTOWN MUNICIPAL	MT	LPV200	0	100	0	100	0	100
M75	MALTA	MT	LP	0	100	0	100	0	100
MLS	FRANK WILEY FLD	MT	LPV	0	100	0	100	0	100
MSO	MISSOULA MONTANA	MT	LPV200	0	100	0	100	0	100
OLF	L M CLAYTON	MT	LPV200	0	100	0	100	0	100
PO1	POPLAR MUNICIPAL	MT	LPV200	0	100	0	100	0	100
PWD	SHER-WOOD	MT	LPV200	0	100	0	100	0	100
RPX	ROUNDUP	MT	LPV	0	100	0	100	0	100
RVF	RUBY VALLEY FLD	MT	LPV	0	100	0	100	0	100
S01	CONRAD	MT	LPV	0	100	0	100	0	100
SBX	SHELBY	MT	LPV	0	100	0	100	0	100
SDY	SIDNEY-RICHLAND RGNL	MT	LPV	0	100	0	100	0	100
WYS	YELLOWSTONE	MT	LPV200	0	100	0	100	0	100
43A	MONTGOMERY COUNTY	NC	LP	0	100	0	100	0	100
7W6	HYDE COUNTY	NC	LP	0	100	0	100	0	100
ACZ	HENDERSON FLD	NC	LPV	0	100	0	100	0	100
AFP	ANSON COUNTY/JEFF CLOUD FLD	NC	LPV	0	100	0	100	0	100
AKH	GASTONIA MUNICIPAL	NC	LPV	0	100	0	100	0	100
ASJ	TRI-COUNTY AT HENRY JOYNER FIE	NC	LPV	0	100	0	100	0	100
AVL	ASHEVILLE RGNL	NC	LPV200	0	100	0	100	0	100
BUY	BURLINGTON/ALAMANCE RGNL	NC	LPV	0	100	0	100	0	100
CLT	CHARLOTTE/DOUGLAS INTL	NC	LPV200	0	100	0	100	0	100
CPC	COLUMBUS COUNTY MUNICIPAL	NC	LPV	0	100	0	100	0	100
CTZ	CLINTON-SAMPSON COUNTY	NC	LPV200	0	100	0	100	0	100
DPL	DUPLIN COUNTY	NC	LPV200	0	100	0	100	0	100
ECG	ELIZABETH CITY CG AIR STATION/	NC	LPV	0	100	0	100	0	100
EDE	NORTHEASTERN RGNL	NC	LPV200	0	100	0	100	0	100
EHO	SHELBY-CLEVELAND COUNTY RGNL	NC	LPV	0	100	0	100	0	100
EQY	CHARLOTTE/MONROE EXEC	NC	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
EWN	COASTAL CAROLINA RGNL	NC	LPV	0	100	0	100	0	100
EXX	DAVIDSON COUNTY	NC	LPV	0	100	0	100	0	100
EYF	CURTIS L BROWN JR FLD	NC	LPV	0	100	0	100	0	100
FAY	FAYETTEVILLE RGNL/GRANNIS FLD	NC	LPV200	0	100	0	100	0	100
FFA	FIRST FLIGHT	NC	LP	0	100	0	100	0	100
FQD	RUTHERFORD COUNTY/MARCHMAN FLD	NC	LPV	0	100	0	100	0	100
GEV	ASHE COUNTY	NC	LP	0	100	0	100	0	100
GSO	PIEDMONT TRIAD INTL	NC	LPV200	0	100	0	100	0	100
GWW	WAYNE EXEC JETPORT	NC	LPV200	0	100	0	100	0	100
HBI	ASHEBORO RGNL	NC	LPV	0	100	0	100	0	100
HKY	HICKORY RGNL	NC	LPV200	0	100	0	100	0	100
HNZ	HENDERSON/OXFORD	NC	LPV	0	100	0	100	0	100
HRJ	HARNETT RGNL JETPORT	NC	LPV	0	100	0	100	0	100
ILM	WILMINGTON INTL	NC	LPV200	0	100	0	100	0	100
INT	SMITH REYNOLDS	NC	LPV200	0	100	0	100	0	100
IPJ	LINCOLNTON-LINCOLN COUNTY RGNL	NC	LPV	0	100	0	100	0	100
ISO	KINSTON RGNL JETPORT AT STALLI	NC	LPV200	0	100	0	100	0	100
IXA	HALIFAX/NORTHAMPTON RGNL	NC	LPV200	0	100	0	100	0	100
JNX	JOHNSTON RGNL	NC	LPV	0	100	0	100	0	100
JQF	CONCORD-PADGETT RGNL	NC	LPV	0	100	0	100	0	100
LBT	LUMBERTON RGNL	NC	LPV	0	100	0	100	0	100
LHZ	TRIANGLE NORTH EXEC	NC	LPV200	0	100	0	100	0	100
MCZ	MARTIN COUNTY	NC	LPV	0	100	0	100	0	100
MEB	LAURINBURG/MAXTON	NC	LPV200	0	100	0	100	0	100
MQI	DARE COUNTY RGNL	NC	LPV	0	100	0	100	0	100
MRH	MICHAEL J SMITH FLD	NC	LPV	0	100	0	100	0	100
MRN	FOOTHILLS RGNL	NC	LPV	0	100	0	100	0	100
MWK	MOUNT AIRY/SURRY COUNTY	NC	LPV	0	100	0	100	0	100
OAJ	ALBERT J ELLIS	NC	LPV200	0	100	0	100	0	100
OCW	WASHINGTON-WARREN	NC	LPV	0	100	0	100	0	100
ONX	CURRITUCK COUNTY RGNL	NC	LPV	0	100	0	100	0	100
PGV	PITT-GREENVILLE	NC	LPV	0	100	0	100	0	100
PMZ	PLYMOUTH MUNICIPAL	NC	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
RCZ	RICHMOND COUNTY	NC	LPV	0	100	0	100	0	100
RDU	RALEIGH-DURHAM INTL	NC	LPV200	0	100	0	100	0	100
RHP	WESTERN CAROLINA RGNL	NC	LP	0	100	0	100	0	100
RUQ	MID-CAROLINA RGNL	NC	LPV200	0	100	0	100	0	100
RWI	ROCKY MOUNT/WILSON RGNL	NC	LPV	0	100	0	100	0	100
SCR	SILER CITY MUNICIPAL	NC	LPV	0	100	0	100	0	100
SOP	MOORE COUNTY	NC	LPV200	0	100	0	100	0	100
SUT	CAPE FEAR RGNL JETPORT/HOWIE F	NC	LPV	0	100	0	100	0	100
SVH	STATESVILLE RGNL	NC	LPV200	0	100	0	100	0	100
TDF	RALEIGH RGNL AT PERSON COUNTY	NC	LPV200	0	100	0	100	0	100
TTA	RALEIGH EXEC JETPORT AT SANFOR	NC	LPV200	0	100	0	100	0	100
UKF	WILKES COUNTY	NC	LPV200	0	100	0	100	0	100
VUJ	STANLY COUNTY	NC	LPV200	0	100	0	100	0	100
W03	WILSON INDUSTRIAL AIR CENTER	NC	LPV	0	100	0	100	0	100
W40	MOUNT OLIVE MUNICIPAL	NC	LPV	0	100	0	100	0	100
ZEF	ELKIN MUNICIPAL	NC	LP	0	100	0	100	0	100
06D	ROLLA MUNICIPAL	ND	LPV	0	100	0	100	0	100
20U	BEACH	ND	LPV	0	100	0	100	0	100
2C8	CAVALIER MUNICIPAL	ND	LPV	0	100	0	100	0	100
3H4	HILLSBORO MUNICIPAL	ND	LPV	0	100	0	100	0	100
46D	CARRINGTON MUNICIPAL	ND	LPV	0	100	0	100	0	100
4E7	ELLENDALE MUNICIPAL	ND	LPV	0	100	0	100	0	100
51D	EDGELEY MUNICIPAL	ND	LPV	0	100	0	100	0	100
5L0	LAKOTA MUNICIPAL	ND	LPV	0	100	0	100	0	100
5N8	CASSELTON ROBERT MILLER RGNL	ND	LPV	0	100	0	100	0	100
6L3	LISBON MUNICIPAL	ND	LPV	0	100	0	100	0	100
7L2	LINTON MUNICIPAL	ND	LPV	0	100	0	100	0	100
9D7	CANDO MUNICIPAL	ND	LPV	0	100	0	100	0	100
BAC	BARNES COUNTY MUNICIPAL	ND	LPV	0	100	0	100	0	100
BIS	BISMARCK MUNICIPAL	ND	LPV200	0	100	0	100	0	100
BWP	HARRY STERN	ND	LPV	0	100	0	100	0	100
BWW	BOWMAN RGNL	ND	LPV	0	100	0	100	0	100
D05	GARRISON MUNICIPAL	ND	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
D09	BOTTINEAU MUNICIPAL	ND	LPV	0	100	0	100	0	100
D55	ROBERTSON FLD	ND	LPV	0	100	0	100	0	100
D57	GLEN ULLIN RGNL	ND	LPV	0	100	0	100	0	100
D60	TIOGA MUNICIPAL	ND	LPV	0	100	0	100	0	100
DIK	DICKINSON/THEODORE ROOSEVELT R	ND	LPV200	0	100	0	100	0	100
DVL	DEVILS LAKE RGNL	ND	LPV200	0	100	0	100	0	100
FAR	HECTOR INTL	ND	LPV200	0	100	0	100	0	100
GAF	HUTSON FLD	ND	LPV	0	100	0	100	0	100
GFK	GRAND FORKS INTL	ND	LPV	0	100	0	100	0	100
GWR	GWINNER-ROGER MELROE FLD	ND	LPV	0	100	0	100	0	100
HEI	HETTINGER/JB LINDQUIST RGNL	ND	LPV	0	100	0	100	0	100
HZE	MERCER COUNTY RGNL	ND	LPV	0	100	0	100	0	100
ISN	SLOULIN FLD INTL	ND	LPV200	0	100	0	100	0	100
JMS	JAMESTOWN RGNL	ND	LPV200	0	100	0	100	0	100
K74	ROBERT ODEGAARD FLD	ND	LP	0	100	0	100	0	100
MOT	MINOT INTL	ND	LPV	0	100	0	100	0	100
RUG	RUGBY MUNICIPAL	ND	LP	0	100	0	100	0	100
S25	WATFORD CITY MUNICIPAL	ND	LPV	0	100	0	100	0	100
XWA	WILLISTON BASIN INTL	ND	LPV200	0	100	0	100	0	100
Y19	MANDAN RGNL/LAWLER FLD	ND	LPV	0	100	0	100	0	100
07K	CENTRAL CITY MUNICIPAL - LARRY REIN	NE	LPV	0	100	0	100	0	100
08K	HARVARD STATE	NE	LPV	0	100	0	100	0	100
0B4	HARTINGTON MUNICIPAL/ BUD BECKER FL	NE	LPV	0	100	0	100	0	100
0C4	PENDER MUNICIPAL	NE	LPV	0	100	0	100	0	100
0F4	LOUP CITY MUNICIPAL	NE	LPV	0	100	0	100	0	100
0G3	TECUMSEH MUNICIPAL	NE	LPV	0	100	0	100	0	100
0V3	PIONEER VILLAGE FLD	NE	LPV	0	100	0	100	0	100
12K	SUPERIOR MUNICIPAL	NE	LPV	0	100	0	100	0	100
47V	CURTIS MUNICIPAL	NE	LPV	0	100	0	100	0	100
4D9	ALMA MUNICIPAL	NE	LPV	0	100	0	100	0	100
4V9	ANTELOPE COUNTY	NE	LPV	0	100	0	100	0	100
6K3	CREIGHTON MUNICIPAL	NE	LPV	0	100	0	100	0	100
7V7	RED CLOUD MUNICIPAL	NE	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
8V2	STUART-ATKINSON MUNICIPAL	NE	LPV	0	100	0	100	0	100
93Y	DAVID CITY MUNICIPAL	NE	LPV	0	100	0	100	0	100
9V5	MODISETT	NE	LPV	0	100	0	100	0	100
AFK	NEBRASKA CITY MUNICIPAL	NE	LPV	0	100	0	100	0	100
AHQ	WAHOO MUNICIPAL	NE	LPV	0	100	0	100	0	100
AIA	ALLIANCE MUNICIPAL	NE	LPV200	0	100	0	100	0	100
ANW	AINSWORTH RGNL	NE	LPV200	0	100	0	100	0	100
AUH	AURORA MUNICIPAL - AL POTTER FLD	NE	LPV	0	100	0	100	0	100
BBW	BROKEN BOW MUNICIPAL/KEITH GLAZE FL	NE	LPV	0	100	0	100	0	100
BFF	WESTERN NEBRASKA RGNL/WILLIAM	NE	LPV	0	100	0	100	0	100
BIE	BEATRICE MUNICIPAL	NE	LPV200	0	100	0	100	0	100
BTA	BLAIR MUNICIPAL	NE	LPV	0	100	0	100	0	100
BUB	CRAM FLD	NE	LPV	0	100	0	100	0	100
BVN	ALBION MUNICIPAL	NE	LPV	0	100	0	100	0	100
CDR	CHADRON MUNICIPAL	NE	LPV200	0	100	0	100	0	100
CEK	CRETE MUNICIPAL	NE	LPV	0	100	0	100	0	100
CSB	CAMBRIDGE MUNICIPAL	NE	LPV	0	100	0	100	0	100
CZD	COZAD MUNICIPAL	NE	LPV	0	100	0	100	0	100
EAR	KEARNEY RGNL	NE	LPV200	0	100	0	100	0	100
FBY	FAIRBURY MUNICIPAL	NE	LPV	0	100	0	100	0	100
FET	FREMONT MUNICIPAL	NE	LPV	0	100	0	100	0	100
FMZ	FAIRMONT STATE AIRFIELD	NE	LPV	0	100	0	100	0	100
FNB	BRENNER FLD	NE	LPV	0	100	0	100	0	100
GGF	GRANT MUNICIPAL	NE	LPV	0	100	0	100	0	100
GRI	CENTRAL NEBRASKA RGNL	NE	LPV	0	100	0	100	0	100
GRN	GORDON MUNICIPAL	NE	LPV	0	100	0	100	0	100
HDE	BREWSTER FLD	NE	LPV	0	100	0	100	0	100
HSI	HASTINGS MUNICIPAL	NE	LPV	0	100	0	100	0	100
IBM	KIMBALL MUNICIPAL/ROBERT E ARRAJ FL	NE	LPV	0	100	0	100	0	100
IML	IMPERIAL MUNICIPAL	NE	LPV	0	100	0	100	0	100
JYR	YORK MUNICIPAL	NE	LPV	0	100	0	100	0	100
K01	FARINGTON FLD	NE	LPV	0	100	0	100	0	100
LBF	NORTH PLATTE RGNL/LEE BIRD FLD	NE	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
LCG	WAYNE MUNICIPAL/ STAN MORRIS FLD	NE	LPV	0	100	0	100	0	100
LNK	LINCOLN	NE	LPV200	0	100	0	100	0	100
LXN	JIM KELLY FLD	NE	LPV	0	100	0	100	0	100
MCK	MC COOK BEN NELSON RGNL	NE	LPV	0	100	0	100	0	100
MLE	MILLARD	NE	LPV	0	100	0	100	0	100
ODX	EVELYN SHARP FLD	NE	LPV	0	100	0	100	0	100
OFK	NORFOLK RGNL/KARL STEFAN MEML	NE	LPV200	0	100	0	100	0	100
OGA	SEARLE FLD	NE	LPV	0	100	0	100	0	100
OKS	GARDEN COUNTY/KING RHILEY FLD	NE	LPV	0	100	0	100	0	100
OLU	COLUMBUS MUNICIPAL	NE	LPV	0	100	0	100	0	100
OMA	EPPLEY AIRFIELD	NE	LPV200	0	100	0	100	0	100
ONL	THE O'NEILL MUNICIPAL-JOHN L BAKER	NE	LPV	0	100	0	100	0	100
PMV	PLATTSMOUTH MUNICIPAL/DOUGLAS V DUE	NE	LPV	0	100	0	100	0	100
RBE	ROCK COUNTY	NE	LPV	0	100	0	100	0	100
SCB	SCRIBNER STATE	NE	LPV	0	100	0	100	0	100
SNY	SIDNEY MUNICIPAL/LLOYD W CARR FLD	NE	LPV	0	100	0	100	0	100
SWT	SEWARD MUNICIPAL	NE	LPV	0	100	0	100	0	100
TIF	THOMAS COUNTY	NE	LPV	0	100	0	100	0	100
TQE	TEKAMAH MUNICIPAL	NE	LPV	0	100	0	100	0	100
VTN	MILLER FLD	NE	LPV	0	100	0	100	0	100
ASH	BOIRE FLD	NH	LPV200	0	100	0	100	0	100
CON	CONCORD MUNICIPAL	NH	LPV	0	100	0	100	0	100
DAW	SKYHAVEN	NH	LPV	0	100	0	100	0	100
EEN	DILLANT/HOPKINS	NH	LPV	0	100	0	100	0	100
HIE	MOUNT WASHINGTON RGNL	NH	LPV	0	100	0	100	0	100
LCI	LACONIA MUNICIPAL	NH	LPV	0	100	0	100	0	100
LEB	LEBANON MUNICIPAL	NH	LPV	0	100	0	100	0	100
MHT	MANCHESTER BOSTON RGNL	NH	LPV200	0	100	0	100	0	100
PSM	PORTSMOUTH INTL AT PEASE	NH	LPV200	0	100	0	100	0	100
47N	CENTRAL JERSEY RGNL	NJ	LP	0	100	0	100	0	100
4N1	GREENWOOD LAKE	NJ	LP	0	100	0	100	0	100
ACY	ATLANTIC CITY INTL	NJ	LPV200	0	100	0	100	0	100
CDW	ESSEX COUNTY	NJ	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
EWR	NEWARK LIBERTY INTL	NJ	LPV200	0	100	0	100	0	100
MIV	MILLVILLE MUNICIPAL	NJ	LPV200	0	100	0	100	0	100
MJX	OCEAN COUNTY	NJ	LPV	0	100	0	100	0	100
MMU	MORRISTOWN MUNICIPAL	NJ	LPV200	0	100	0	100	0	100
N12	LAKEWOOD	NJ	LP	0	100	0	100	0	100
N14	FLYING W	NJ	LPV	0	100	0	100	0	100
N40	SKY MANOR	NJ	LP	0	100	0	100	0	100
TEB	TETERBORO	NJ	LPV	0	100	0	100	0	100
TTN	TRENTON MERCER	NJ	LPV	0	100	0	100	0	100
VAY	SOUTH JERSEY RGNL	NJ	LP	0	100	0	100	0	100
WWD	CAPE MAY COUNTY	NJ	LPV	0	100	0	100	0	100
0E0	MORIARTY MUNICIPAL	NM	LPV	0	100	0	100	0	100
ABQ	ALBUQUERQUE INTL SUNPORT	NM	LPV200	0	100	0	100	0	100
AEG	DOUBLE EAGLE II	NM	LPV200	0	100	0	100	0	100
ALM	ALAMOGORDO-WHITE SANDS RGNL	NM	LPV	0	100	0	100	1	99.996
ATS	ARTESIA MUNICIPAL	NM	LPV200	0	100	0	100	0	100
CAO	CLAYTON MUNICIPAL AIRPARK	NM	LPV	0	100	0	100	0	100
CNM	CAVERN CITY AIR TRML	NM	LPV200	0	100	0	100	0	100
CVN	CLOVIS RGNL	NM	LPV200	0	100	0	100	0	100
DMN	DEMING MUNICIPAL	NM	LPV	0	100	1	99.996	2	99.974
E06	LEA COUNTY/ZIP FRANKLIN MEML	NM	LPV	0	100	0	100	0	100
FMN	FOUR CORNERS RGNL	NM	LPV200	0	100	0	100	0	100
HOB	LEA COUNTY RGNL	NM	LPV	0	100	0	100	0	100
LAM	LOS ALAMOS	NM	LP	0	100	0	100	0	100
LRU	LAS CRUCES INTL	NM	LPV200	0	100	0	100	1	99.975
ONM	SOCORRO MUNICIPAL	NM	LP	0	100	0	100	0	100
ROW	ROSWELL AIR CENTER	NM	LPV	0	100	0	100	0	100
SAF	SANTA FE MUNICIPAL	NM	LPV200	0	100	0	100	0	100
SRR	SIERRA BLANCA RGNL	NM	LPV200	0	100	0	100	0	100
SVC	GRANT COUNTY	NM	LPV	0	100	1	99.996	1	99.975
05U	EUREKA	NV	LP	0	100	0	100	0	100
10U	OWYHEE	NV	LPV200	0	100	0	100	0	100
67L	MESQUITE	NV	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
BAM	BATTLE MOUNTAIN	NV	LPV	0	100	0	100	0	100
BVU	BOULDER CITY MUNICIPAL	NV	LP	0	100	0	100	0	100
CXP	CARSON CITY	NV	LP	0	100	0	100	0	100
ELY	ELY/YELLAND FLD	NV	LPV	0	100	0	100	0	100
HTH	HAWTHORNE INDUSTRIAL	NV	LP	0	100	0	100	0	100
LAS	HARRY REID INTL	NV	LPV200	0	100	0	100	0	100
LOL	DERBY FLD	NV	LPV	0	100	0	100	0	100
RNO	RENO/TAHOE INTL	NV	LPV	0	100	0	100	0	100
RTS	RENO/STEAD	NV	LPV	0	100	0	100	0	100
SPZ	SILVER SPRINGS	NV	LPV	0	100	0	100	0	100
TPH	TONOPAH	NV	LP	0	100	0	100	0	100
VGT	NORTH LAS VEGAS	NV	LP	0	100	0	100	0	100
WMC	WINNEMUCCA MUNICIPAL	NV	LPV	0	100	0	100	0	100
06N	RANDALL	NY	LP	0	100	0	100	0	100
0G7	FINGER LAKES RGNL	NY	LPV	0	100	0	100	0	100
1B1	COLUMBIA COUNTY	NY	LPV	0	100	0	100	0	100
20N	KINGSTON-ULSTER	NY	LPV	0	100	0	100	0	100
44N	SKY ACRES	NY	LPV	0	100	0	100	0	100
4B6	TICONDEROGA MUNICIPAL	NY	LPV	0	100	0	100	0	100
5B2	SARATOGA COUNTY	NY	LPV	0	100	0	100	0	100
5G0	LE ROY	NY	LP	0	100	0	100	0	100
9G0	BUFFALO AIRFIELD	NY	LP	0	100	0	100	0	100
9G3	AKRON/JESSON FLD	NY	LP	0	100	0	100	0	100
ALB	ALBANY INTL	NY	LPV200	0	100	0	100	0	100
ART	WATERTOWN INTL	NY	LPV200	0	100	0	100	0	100
BGM	GREATER BINGHAMTON/EDWIN A LIN	NY	LPV200	0	100	0	100	0	100
BUF	BUFFALO NIAGARA INTL	NY	LPV200	0	100	0	100	0	100
ELM	ELMIRA/CORNING RGNL	NY	LPV200	0	100	0	100	0	100
ELZ	WELLSVILLE MUNICIPAL/TARANTINE FLD	NY	LPV200	0	100	0	100	0	100
FOK	FRANCIS S GABRESKI	NY	LPV200	0	100	0	100	0	100
FRG	REPUBLIC	NY	LPV200	0	100	0	100	0	100
FZY	OSWEGO COUNTY	NY	LPV	0	100	0	100	0	100
GFL	FLOYD BENNETT MEML	NY	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
GVQ	GENESEE COUNTY	NY	LPV200	0	100	0	100	0	100
HPN	WESTCHESTER COUNTY	NY	LPV	0	100	0	100	0	100
HTF	HORNELL MUNICIPAL	NY	LPV	0	100	0	100	0	100
HTO	EAST HAMPTON	NY	LPV	0	100	0	100	0	100
HWV	BROOKHAVEN	NY	LPV	0	100	0	100	0	100
IAG	NIAGARA FALLS INTL	NY	LPV	0	100	0	100	0	100
ISP	LONG ISLAND MAC ARTHUR	NY	LPV200	0	100	0	100	0	100
ITH	ITHACA TOMPKINS INTL	NY	LPV	0	100	0	100	0	100
IUA	CANANDAIGUA	NY	LPV	0	100	0	100	0	100
JFK	JOHN F KENNEDY INTL	NY	LPV200	0	100	0	100	0	100
JHW	CHAUTAUQUA COUNTY/JAMESTOWN	NY	LPV200	0	100	0	100	0	100
K09	PISECO	NY	LP	0	100	0	100	0	100
LGA	LAGUARDIA	NY	LPV	0	100	0	100	0	100
MAL	MALONE-DUFORT	NY	LPV	0	100	0	100	0	100
MGJ	ORANGE COUNTY	NY	LPV	0	100	0	100	0	100
MSS	MASSENA INTL-RICHARDS FLD	NY	LPV	0	100	0	100	0	100
MSV	SULLIVAN COUNTY INTL	NY	LPV	0	100	0	100	0	100
N23	SIDNEY MUNICIPAL	NY	LP	0	100	0	100	0	100
N66	ALBERT S NADER RGNL	NY	LPV	0	100	0	100	0	100
NY0	FULTON COUNTY	NY	LPV	0	100	0	100	0	100
OGS	OGDENSBURG INTL	NY	LPV	0	100	0	100	0	100
OIC	LT WARREN EATON	NY	LP	0	100	0	100	0	100
OLE	CATTARAUGUS COUNTY-OLEAN	NY	LPV	0	100	0	100	0	100
PBG	PLATTSBURGH INTL	NY	LPV	0	100	0	100	0	100
PEO	PENN YAN	NY	LPV	0	100	0	100	0	100
POU	HUDSON VALLEY RGNL	NY	LPV	0	100	0	100	0	100
RME	GRIFFISS INTL	NY	LPV200	0	100	0	100	0	100
ROC	FREDERICK DOUGLASS/GREATER ROC	NY	LPV200	0	100	0	100	0	100
SCH	SCHENECTADY COUNTY	NY	LPV200	0	100	0	100	0	100
SDC	WILLIAMSON-SODUS	NY	LPV	0	100	0	100	0	100
SLK	ADIRONDACK RGNL	NY	LPV200	0	100	0	100	0	100
SWF	NEW YORK STEWART INTL	NY	LPV200	0	100	0	100	0	100
SYR	SYRACUSE HANCOCK INTL	NY	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
VGC	HAMILTON MUNICIPAL	NY	LPV	0	100	0	100	0	100
0G6	WILLIAMS COUNTY	OH	LPV	0	100	0	100	0	100
10G	HOLMES COUNTY	OH	LP	0	100	0	100	0	100
16G	SENECA COUNTY	OH	LPV	0	100	0	100	0	100
17G	PORT BUCYRUS-CRAWFORD COUNTY	OH	LP	0	100	0	100	0	100
1G0	WOOD COUNTY	OH	LPV	0	100	0	100	1	99.999
1G3	KENT STATE UNIVERSITY	OH	LPV	0	100	0	100	0	100
2G2	GEARY A BATES/JEFFERSON COUNTY	OH	LPV	0	100	0	100	0	100
4G5	MONROE COUNTY	OH	LP	0	100	0	100	0	100
4I3	KNOX COUNTY	OH	LPV200	0	100	0	100	0	100
5A1	NORWALK-HURON COUNTY	OH	LP	0	100	0	100	0	100
6G5	BARNESVILLE-BRADFIELD	OH	LP	0	100	0	100	0	100
7G8	GEAUGA COUNTY	OH	LP	0	100	0	100	0	100
AKR	AKRON FULTON INTL	OH	LP	0	100	0	100	0	100
AOH	LIMA ALLEN COUNTY	OH	LPV200	0	100	0	100	1	99.999
AXV	NEIL ARMSTRONG	OH	LPV	0	100	0	100	1	99.999
BJJ	WAYNE COUNTY	OH	LPV	0	100	0	100	0	100
BKL	BURKE LAKEFRONT	OH	LPV	0	100	0	100	0	100
CAK	AKRON-CANTON RGNL	OH	LPV200	0	100	0	100	1	99.999
CDI	CAMBRIDGE MUNICIPAL	OH	LP	0	100	0	100	1	99.999
CGF	CUYAHOGA COUNTY	OH	LPV200	0	100	0	100	0	100
CLE	CLEVELAND-HOPKINS INTL	OH	LPV200	0	100	0	100	0	100
CMH	JOHN GLENN COLUMBUS INTL	OH	LPV200	0	100	0	100	1	99.999
CQA	LAKEFIELD	OH	LPV	0	100	0	100	1	99.999
CYO	PICKAWAY COUNTY MEML	OH	LPV	0	100	0	100	1	99.999
DAY	JAMES M COX DAYTON INTL	OH	LPV200	0	100	0	100	1	99.999
DLZ	DELAWARE MUNICIPAL/JIM MOORE FLD	OH	LPV	0	100	0	100	1	99.999
EDJ	BELLEFONTAINE RGNL	OH	LPV	0	100	0	100	1	99.999
EOP	PIKE COUNTY	OH	LP	0	100	0	100	1	99.999
FDY	FINDLAY	OH	LPV	0	100	0	100	1	99.999
FZI	FOSTORIA METRO	OH	LPV	0	100	0	100	0	100
GQQ	GALION MUNICIPAL	OH	LP	0	100	0	100	0	100
HAO	BUTLER COUNTY RGNL/HOGAN FLD	OH	LPV	0	100	0	100	1	99.999

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
HOC	HIGHLAND COUNTY	OH	LP	0	100	0	100	1	99.999
HZY	NORTHEAST OHIO RGNL	OH	LPV	0	100	0	100	1	99.999
I10	NOBLE COUNTY	OH	LP	0	100	0	100	0	100
I19	GREENE COUNTY/LEWIS A JACKSON	OH	LPV	0	100	0	100	1	99.999
I40	RICHARD DOWNING	OH	LPV	0	100	0	100	1	99.999
I66	CLINTON FLD	OH	LPV	0	100	0	100	1	99.999
I68	WARREN COUNTY/JOHN LANE FLD	OH	LPV	0	100	0	100	1	99.999
I69	CLERMONT COUNTY	OH	LP	0	100	0	100	1	99.999
I74	GRIMES FLD	OH	LPV	0	100	0	100	1	99.999
ILN	WILMINGTON AIR PARK	OH	LPV200	0	100	0	100	1	99.999
LCK	RICKENBACKER INTL	OH	LPV200	0	100	0	100	1	99.999
LHQ	FAIRFIELD COUNTY	OH	LPV200	0	100	0	100	0	100
LNN	LAKE COUNTY EXEC	OH	LPV	0	100	0	100	0	100
LPR	LORAIN COUNTY RGNL	OH	LPV200	0	100	0	100	0	100
LUK	CINCINNATI MUNICIPAL/LUNKEN FLD	OH	LPV	0	100	0	100	1	99.999
MFD	MANSFIELD LAHM RGNL	OH	LPV200	0	100	0	100	0	100
MGY	DAYTON-WRIGHT BROTHERS	OH	LPV	0	100	0	100	1	99.999
MNN	MARION MUNICIPAL	OH	LPV	0	100	0	100	0	100
MRT	UNION COUNTY	OH	LP	0	100	0	100	1	99.999
MWO	MIDDLETOWN RGNL/HOOK FLD	OH	LPV	0	100	0	100	1	99.999
OSU	OHIO STATE UNIVERSITY	OH	LPV200	0	100	0	100	1	99.999
OWX	PUTNAM COUNTY	OH	LPV	0	100	0	100	0	100
OXD	MIAMI UNIVERSITY	OH	LPV	0	100	0	100	1	99.999
PCW	ERIE-OTTAWA INTL	OH	LPV	0	100	0	100	0	100
PHD	HARRY CLEVER FLD	OH	LP	0	100	0	100	1	99.999
PMH	GREATER PORTSMOUTH RGNL	OH	LPV	0	100	0	100	1	99.999
POV	PORTAGE COUNTY	OH	LPV	0	100	0	100	0	100
RZT	ROSS COUNTY	OH	LPV	0	100	0	100	1	99.999
S24	SANDUSKY COUNTY RGNL	OH	LPV	0	100	0	100	0	100
SCA	SIDNEY MUNICIPAL	OH	LPV	0	100	0	100	1	99.999
SGH	SPRINGFIELD/BECKLEY MUNICIPAL	OH	LPV200	0	100	0	100	1	99.999
TDZ	TOLEDO EXEC	OH	LPV	0	100	0	100	0	100
TOL	EUGENE F KRANZ TOLEDO EXPRESS	OH	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
TSO	CARROLL COUNTY-TOLSON	OH	LP	0	100	0	100	0	100
TZR	BOLTON FLD	OH	LPV	0	100	0	100	1	99.999
UNI	OHIO UNIVERSITY	OH	LPV200	0	100	0	100	2	99.999
USE	FULTON COUNTY	OH	LPV	0	100	0	100	0	100
UYF	MADISON COUNTY	OH	LPV	0	100	0	100	1	99.999
VES	DARKE COUNTY	OH	LPV	0	100	0	100	1	99.999
VTA	NEWARK-HEATH	OH	LP	0	100	0	100	0	100
YNG	YOUNGSTOWN/WARREN RGNL	OH	LPV	0	100	0	100	0	100
ZZV	ZANESVILLE MUNICIPAL	OH	LPV200	0	100	0	100	1	99.999
1F0	ARDMORE DOWNTOWN EXEC	OK	LP	0	100	0	100	0	100
1K8	SOUTH GRAND LAKE RGNL	OK	LPV	0	100	0	100	0	100
1O4	THOMAS MUNICIPAL	OK	LPV	0	100	0	100	0	100
2K4	SCOTT FLD	OK	LPV	0	100	0	100	0	100
3F7	JONES MEML	OK	LPV	0	100	0	100	0	100
4O4	MC CURTAIN COUNTY RGNL	OK	LP	0	100	0	100	0	100
6K4	FAIRVIEW MUNICIPAL	OK	LPV	0	100	0	100	0	100
80F	ANTLERS MUNICIPAL	OK	LPV	0	100	0	100	0	100
ADH	ADA RGNL	OK	LPV	0	100	0	100	0	100
ADM	ARDMORE MUNICIPAL	OK	LPV	0	100	0	100	0	100
AVK	ALVA RGNL	OK	LPV	0	100	0	100	0	100
AXS	ALTUS/QUARTZ MOUNTAIN RGNL	OK	LPV	0	100	0	100	0	100
BKN	BLACKWELL-TONKAWA MUNICIPAL	OK	LPV	0	100	0	100	0	100
BVO	BARTLESVILLE MUNICIPAL	OK	LPV	0	100	0	100	0	100
CHK	CHICKASHA MUNICIPAL	OK	LPV200	0	100	0	100	0	100
CLK	CLINTON RGNL	OK	LPV	0	100	0	100	0	100
CSM	CLINTON/SHERMAN	OK	LPV200	0	100	0	100	0	100
CUH	CUSHING MUNICIPAL	OK	LPV	0	100	0	100	0	100
DUA	DURANT RGNL/EAKER FLD	OK	LPV	0	100	0	100	0	100
DUC	HALLIBURTON FLD	OK	LPV200	0	100	0	100	0	100
ELK	ELK CITY RGNL BUSINESS	OK	LPV	0	100	0	100	0	100
F22	PERRY MUNICIPAL	OK	LPV	0	100	0	100	0	100
FDR	FREDERICK RGNL	OK	LPV200	0	100	0	100	0	100
GCM	CLAREMORE RGNL	OK	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
GMJ	GROVE MUNICIPAL	OK	LPV	0	100	0	100	0	100
GOK	GUTHRIE/EDMOND RGNL	OK	LPV	0	100	0	100	0	100
GUY	GUYMON MUNICIPAL	OK	LPV	0	100	0	100	0	100
GZL	STIGLER RGNL	OK	LPV	0	100	0	100	0	100
H71	MID-AMERICA INDUSTRIAL	OK	LPV	0	100	0	100	0	100
HBR	HOBART RGNL	OK	LPV	0	100	0	100	0	100
HHW	STAN STAMPER MUNICIPAL	OK	LPV	0	100	0	100	0	100
HSD	SUNDANCE	OK	LPV	0	100	0	100	0	100
LAW	LAWTON-FORT SILL RGNL	OK	LPV200	0	100	0	100	0	100
MKO	MUSKOGEE-DAVIS RGNL	OK	LPV	0	100	0	100	0	100
MLC	MC ALESTER RGNL	OK	LPV	0	100	0	100	0	100
OJA	WEATHERFORD STAFFORD	OK	LPV	0	100	0	100	0	100
OKC	WILL ROGERS WORLD	OK	LPV200	0	100	0	100	0	100
OKM	OKMULGEE RGNL	OK	LPV200	0	100	0	100	0	100
OUN	UNIVERSITY OF OKLAHOMA WESTHEI	OK	LPV200	0	100	0	100	0	100
OWP	WILLIAM R POGUE MUNICIPAL	OK	LPV	0	100	0	100	0	100
PNC	PONCA CITY RGNL	OK	LPV	0	100	0	100	0	100
PVJ	PAULS VALLEY MUNICIPAL	OK	LPV200	0	100	0	100	0	100
PWA	WILEY POST	OK	LPV200	0	100	0	100	0	100
RCE	CLARENCE E PAGE MUNICIPAL	OK	LPV	0	100	0	100	0	100
RKR	ROBERT S KERR	OK	LPV	0	100	0	100	0	100
RQO	EL RENO RGNL	OK	LPV	0	100	0	100	0	100
RVS	TULSA RIVERSIDE	OK	LPV200	0	100	0	100	0	100
SNL	SHAWNEE RGNL	OK	LPV200	0	100	0	100	0	100
SWO	STILLWATER RGNL	OK	LPV200	0	100	0	100	0	100
TQH	TAHLEQUAH MUNICIPAL	OK	LPV	0	100	0	100	0	100
TUL	TULSA INTL	OK	LPV200	0	100	0	100	0	100
WDG	ENID WOODRING RGNL	OK	LPV200	0	100	0	100	0	100
WWR	WEST WOODWARD	OK	LPV	0	100	0	100	0	100
3S8	GRANTS PASS	OR	LP	0	100	0	100	0	100
77S	HOBBY FLD	OR	LPV	0	100	0	100	1	99.997
AST	ASTORIA RGNL	OR	LPV	0	100	0	100	1	99.989
BDN	BEND MUNICIPAL	OR	LPV	0	100	0	100	1	99.997

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
BKE	BAKER CITY MUNICIPAL	OR	LPV	0	100	0	100	0	100
CVO	CORVALLIS MUNICIPAL	OR	LPV200	0	100	0	100	1	99.997
EUG	MAHLON SWEET FLD	OR	LPV200	0	100	0	100	1	99.997
GCD	GRANT COUNTY RGNL/OGILVIE FLD	OR	LPV	0	100	0	100	0	100
HIO	PORTLAND-HILLSBORO	OR	LPV200	0	100	0	100	1	99.997
LGD	LA GRANDE/UNION COUNTY	OR	LPV	0	100	0	100	0	100
LKV	LAKE COUNTY	OR	LPV	0	100	0	100	0	100
LMT	CRATER LAKE/KLAMATH RGNL	OR	LPV	0	100	0	100	0	100
MMV	MC MINNVILLE MUNICIPAL	OR	LPV	0	100	0	100	1	99.997
ONO	ONTARIO MUNICIPAL	OR	LPV	0	100	0	100	0	100
ONP	NEWPORT MUNICIPAL	OR	LPV	0	100	0	100	1	99.996
OTH	SOUTHWEST OREGON RGNL	OR	LPV	0	100	0	100	1	99.997
PDT	EASTERN OREGON RGNL AT PENDLET	OR	LPV200	0	100	0	100	0	100
PDX	PORTLAND INTL	OR	LPV200	0	100	0	100	1	99.997
RDM	ROBERTS FLD	OR	LPV200	0	100	0	100	1	99.997
S33	MADRAS MUNICIPAL	OR	LPV	0	100	0	100	1	99.997
S39	PRINEVILLE	OR	LP	0	100	0	100	0	100
SLE	MCNARY FLD	OR	LPV200	0	100	0	100	1	99.997
SPB	SCAPPOOSE	OR	LPV	0	100	0	100	1	99.997
UAO	AURORA STATE	OR	LPV	0	100	0	100	1	99.997
22N	JAKE ARNER MEML	PA	LP	0	100	0	100	0	100
29D	GROVE CITY	PA	LP	0	100	0	100	0	100
2G9	SOMERSET COUNTY	PA	LPV	0	100	0	100	0	100
6G1	TITUSVILLE	PA	LPV	0	100	0	100	0	100
6P7	MCVILLE	PA	LP	0	100	0	100	0	100
8G2	CORRY-LAWRENCE	PA	LPV	0	100	0	100	0	100
8N8	DANVILLE	PA	LP	0	100	0	100	0	100
9D4	DECK	PA	LPV	0	100	0	100	0	100
ABE	LEHIGH VALLEY INTL	PA	LPV200	0	100	0	100	0	100
AFJ	WASHINGTON COUNTY	PA	LPV200	0	100	0	100	0	100
AGC	ALLEGHENY COUNTY	PA	LPV200	0	100	0	100	0	100
AOO	ALTOONA/BLAIR COUNTY	PA	LPV	0	100	0	100	0	100
AVP	WILKES-BARRE/SCRANTON INTL	PA	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
AXQ	CLARION COUNTY	PA	LPV	0	100	0	100	0	100
BFD	BRADFORD RGNL	PA	LPV	0	100	0	100	0	100
BTP	PITTSBURGH/BUTLER RGNL	PA	LPV	0	100	0	100	0	100
BVI	BEAVER COUNTY	PA	LPV	0	100	0	100	0	100
CXY	CAPITAL CITY	PA	LPV	0	100	0	100	0	100
DUJ	DUBOIS RGNL	PA	LPV200	0	100	0	100	0	100
ERI	ERIE INTL/TOM RIDGE FLD	PA	LPV	0	100	0	100	0	100
FIG	CLEARFIELD-LAWRENCE	PA	LPV	0	100	0	100	0	100
FKL	VENANGO RGNL	PA	LPV	0	100	0	100	0	100
FWQ	ROSTRAVER	PA	LPV	0	100	0	100	0	100
GKJ	PORT MEADVILLE	PA	LP	0	100	0	100	0	100
HMZ	BEDFORD COUNTY	PA	LPV	0	100	0	100	0	100
HZL	HAZLETON RGNL	PA	LPV	0	100	0	100	0	100
IDI	INDIANA COUNTY/JIMMY STEWART F	PA	LPV	0	100	0	100	0	100
IPT	WILLIAMSPORT RGNL	PA	LPV	0	100	0	100	0	100
JST	JOHN MURTHA JOHNSTOWN/CAMBRIA	PA	LPV200	0	100	0	100	0	100
LBE	ARNOLD PALMER RGNL	PA	LPV200	0	100	0	100	0	100
LNS	LANCASTER	PA	LPV200	0	100	0	100	0	100
LOM	WINGS FLD	PA	LPV	0	100	0	100	0	100
MDT	HARRISBURG INTL	PA	LPV	0	100	0	100	0	100
MPO	POCONO MOUNTAINS RGNL	PA	LPV	0	100	0	100	0	100
MQS	CHESTER COUNTY G O CARLSON	PA	LPV	0	100	0	100	0	100
N38	GRAND CANYON RGNL	PA	LP	0	100	0	100	0	100
N57	NEW GARDEN	PA	LP	0	100	0	100	0	100
N79	NORTHUMBERLAND COUNTY	PA	LPV	0	100	0	100	0	100
N96	BELLEFONTE	PA	LPV	0	100	0	100	0	100
OQN	BRANDYWINE RGNL	PA	LP	0	100	0	100	0	100
OYM	ST MARYS MUNICIPAL	PA	LPV	0	100	0	100	0	100
PHL	PHILADELPHIA INTL	PA	LPV200	0	100	0	100	0	100
PIT	PITTSBURGH INTL	PA	LPV200	0	100	0	100	0	100
PNE	NORTHEAST PHILADELPHIA	PA	LPV200	0	100	0	100	0	100
PSB	MID-STATE	PA	LPV	0	100	0	100	0	100
PTW	HERITAGE FLD	PA	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
RDG	READING RGNL/CARL A SPAATZ FLD	PA	LPV	0	100	0	100	0	100
RVL	MIFFLIN COUNTY	PA	LPV	0	100	0	100	0	100
SEG	PENN VALLEY	PA	LP	0	100	0	100	0	100
THV	YORK	PA	LP	0	100	0	100	0	100
UCP	NEW CASTLE MUNICIPAL	PA	LPV	0	100	0	100	0	100
UKT	QUAKERTOWN	PA	LP	0	100	0	100	0	100
UNV	UNIVERSITY PARK	PA	LPV200	0	100	0	100	0	100
VVS	JOSEPH A HARDY CONNELLSVILLE	PA	LPV	0	100	0	100	0	100
WAY	GREENE COUNTY	PA	LPV	0	100	0	100	0	100
WBW	WILKES-BARRE WYOMING VALLEY	PA	LPV	0	100	0	100	0	100
XLL	ALLENTOWN QUEEN CITY MUNICIPAL	PA	LP	0	100	0	100	0	100
ZER	SCHUYLKILL COUNTY/JOE ZERBEY	PA	LPV200	0	100	0	100	0	100
BID	BLOCK ISLAND STATE	RI	LPV	0	100	0	100	0	100
OQU	QUONSET STATE	RI	LPV200	0	100	0	100	0	100
PVD	RHODE ISLAND TF GREEN INTL	RI	LPV200	0	100	0	100	0	100
SFZ	NORTH CENTRAL STATE	RI	LPV	0	100	0	100	0	100
35A	UNION COUNTY` TROY SHELTON FLD	SC	LP	0	100	0	100	0	100
6J0	LEXINGTON COUNTY	SC	LPV	0	100	0	100	0	100
AIK	AIKEN RGNL	SC	LPV200	0	100	0	100	0	100
AND	ANDERSON RGNL	SC	LPV200	0	100	0	100	0	100
AQX	ALLENDALE COUNTY	SC	LPV	0	100	0	100	0	100
ARW	BEAUFORT EXEC	SC	LPV200	0	100	0	100	0	100
BBP	MARLBORO COUNTY JETPORT - H E	SC	LPV	0	100	0	100	0	100
BNL	BARNWELL RGNL	SC	LPV	0	100	0	100	0	100
CAE	COLUMBIA METRO	SC	LPV200	0	100	0	100	0	100
CDN	WOODWARD FLD	SC	LPV	0	100	0	100	0	100
CEU	OCONEE COUNTY RGNL	SC	LPV200	0	100	0	100	0	100
CHS	CHARLESTON AFB/INTL	SC	LPV200	0	100	0	100	0	100
CKI	WILLIAMSBURG RGNL	SC	LPV	0	100	0	100	0	100
CQW	CHERAW MUNICIPAL/LYNCH BELLINGER FL	SC	LPV	0	100	0	100	0	100
CRE	GRAND STRAND	SC	LPV200	0	100	0	100	0	100
CUB	JIM HAMILTON L B OWENS	SC	LPV	0	100	0	100	0	100
DCM	CHESTER CATAWBA RGNL	SC	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
DYB	SUMMERVILLE	SC	LPV200	0	100	0	100	0	100
FDW	FAIRFIELD COUNTY	SC	LPV	0	100	0	100	0	100
FLO	FLORENCE RGNL	SC	LPV	0	100	0	100	0	100
GGE	GEORGETOWN COUNTY	SC	LPV	0	100	0	100	0	100
GMU	GREENVILLE DOWNTOWN	SC	LPV200	0	100	0	100	0	100
GRD	GREENWOOD COUNTY	SC	LPV	0	100	0	100	0	100
GSP	GREENVILLE SPARTANBURG INTL	SC	LPV200	0	100	0	100	0	100
GYH	DONALDSON FLD	SC	LPV	0	100	0	100	0	100
HVS	HARTSVILLE RGNL	SC	LPV	0	100	0	100	0	100
HXD	HILTON HEAD	SC	LPV	0	100	0	100	0	100
HYW	CONWAY-HORRY COUNTY	SC	LPV	0	100	0	100	0	100
JZI	CHARLESTON EXEC	SC	LPV200	0	100	0	100	0	100
LKR	LANCASTER COUNTY-MC WHIRTER FL	SC	LPV200	0	100	0	100	0	100
LQK	PICKENS COUNTY	SC	LPV	0	100	0	100	0	100
LRO	MT PLEASANT RGNL-FAISON FLD	SC	LPV	0	100	0	100	0	100
LUX	LAURENS COUNTY	SC	LPV	0	100	0	100	0	100
MAO	MARION COUNTY	SC	LPV	0	100	0	100	0	100
MKS	BERKELEY COUNTY	SC	LPV	0	100	0	100	0	100
MYR	MYRTLE BEACH INTL	SC	LPV200	0	100	0	100	0	100
OGB	ORANGEBURG MUNICIPAL	SC	LPV	0	100	0	100	0	100
PYG	PAGELAND	SC	LPV	0	100	0	100	0	100
RBW	LOWCOUNTRY RGNL	SC	LPV200	0	100	0	100	0	100
SMS	SUMTER	SC	LPV200	0	100	0	100	0	100
SPA	SPARTANBURG DOWNTOWN MEML/SIMP	SC	LPV200	0	100	0	100	0	100
UDG	DARLINGTON COUNTY	SC	LPV	0	100	0	100	0	100
UZA	ROCK HILL/YORK COUNTY/BRYANT F	SC	LPV200	0	100	0	100	0	100
0D8	GETTYSBURG MUNICIPAL	SD	LP	0	100	0	100	0	100
49B	STURGIS MUNICIPAL	SD	LPV	0	100	0	100	0	100
4X4	WESSINGTON SPRINGS	SD	LP	0	100	0	100	0	100
8D3	SISSETON MUNICIPAL	SD	LPV	0	100	0	100	0	100
8D7	CLARK COUNTY	SD	LP	0	100	0	100	0	100
8V3	PARKSTON MUNICIPAL	SD	LPV	0	100	0	100	0	100
98D	ONIDA MUNICIPAL	SD	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
9D0	HIGHMORE MUNICIPAL	SD	LPV	0	100	0	100	0	100
9D1	GREGORY MUNICIPAL - FLYNN FLD	SD	LPV	0	100	0	100	0	100
9V6	MARTIN MUNICIPAL	SD	LPV	0	100	0	100	0	100
9V9	CHAMBERLAIN MUNICIPAL	SD	LP	0	100	0	100	0	100
ABR	ABERDEEN RGNL	SD	LPV200	0	100	0	100	0	100
AGZ	WAGNER MUNICIPAL	SD	LPV	0	100	0	100	0	100
ATY	WATERTOWN RGNL	SD	LPV200	0	100	0	100	0	100
BKX	BROOKINGS RGNL	SD	LPV200	0	100	0	100	0	100
EFC	BELLE FOURCHE MUNICIPAL	SD	LPV	0	100	0	100	0	100
FSD	JOE FOSS FLD	SD	LPV200	0	100	0	100	0	100
HON	HURON RGNL	SD	LPV200	0	100	0	100	0	100
HSR	HOT SPRINGS MUNICIPAL	SD	LP	0	100	0	100	0	100
ICR	WINNER RGNL	SD	LPV	0	100	0	100	0	100
IEN	PINE RIDGE	SD	LPV	0	100	0	100	0	100
LEM	LEMMON MUNICIPAL	SD	LPV	0	100	0	100	0	100
MBG	MOBRIDGE MUNICIPAL	SD	LPV	0	100	0	100	0	100
MDS	MADISON MUNICIPAL	SD	LPV	0	100	0	100	0	100
MHE	MITCHELL MUNICIPAL	SD	LPV	0	100	0	100	0	100
MKA	MILLER MUNICIPAL	SD	LPV	0	100	0	100	0	100
PHP	PHILIP	SD	LPV	0	100	0	100	0	100
PIR	PIERRE RGNL	SD	LPV	0	100	0	100	0	100
RAP	RAPID CITY RGNL	SD	LPV200	0	100	0	100	0	100
SPF	BLACK HILLS-CLYDE ICE FLD	SD	LPV	0	100	0	100	0	100
SUO	ROSEBUD SIOUX TRIBAL	SD	LPV	0	100	0	100	0	100
VMR	HAROLD DAVIDSON FLD	SD	LPV	0	100	0	100	0	100
YKN	CHAN GURNEY MUNICIPAL	SD	LPV200	0	100	0	100	0	100
0A3	SMITHVILLE MUNICIPAL	TN	LPV	0	100	0	100	0	100
0M3	PAUL BRIDGES FLD	TN	LP	0	100	0	100	1	99.998
0M4	BENTON COUNTY	TN	LPV	0	100	0	100	1	99.998
0M5	HUMPHREYS COUNTY	TN	LP	0	100	0	100	1	99.998
1A3	MARTIN CAMPBELL FLD	TN	LP	0	100	0	100	0	100
1M5	PORTLAND MUNICIPAL	TN	LPV	0	100	0	100	1	99.999
2A0	MARK ANTON	TN	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
2M2	LAWRENCEBURG-LAWRENCE COUNTY	TN	LPV	0	100	0	100	1	99.998
2M8	CHARLES W BAKER	TN	LPV	0	100	0	100	0	100
3A2	NEW TAZEWELL MUNICIPAL	TN	LP	0	100	0	100	0	100
3M7	LAFAYETTE MUNICIPAL	TN	LPV	0	100	0	100	1	99.999
8A3	LIVINGSTON MUNICIPAL	TN	LP	0	100	0	100	0	100
BGF	WINCHESTER MUNICIPAL	TN	LPV	0	100	0	100	0	100
BNA	NASHVILLE INTL	TN	LPV200	0	100	0	100	1	99.999
CHA	LOVELL FLD	TN	LPV200	0	100	0	100	0	100
CKV	OUTLAW FLD	TN	LPV	0	100	0	100	1	99.998
CSV	CROSSVILLE MEML-WHITSON FLD	TN	LPV200	0	100	0	100	0	100
DYR	DYERSBURG RGNL	TN	LPV	0	100	0	100	0	100
FYE	FAYETTE COUNTY	TN	LPV	0	100	0	100	1	99.999
FYM	FAYETTEVILLE MUNICIPAL	TN	LPV	0	100	0	100	1	99.999
GCY	GREENEVILLE MUNICIPAL	TN	LPV	0	100	0	100	0	100
GHM	CENTERVILLE MUNICIPAL	TN	LP	0	100	0	100	1	99.998
GKT	GATLINBURG-PIGEON FORGE	TN	LPV	0	100	0	100	0	100
GZS	ABERNATHY FLD	TN	LPV	0	100	0	100	1	99.998
HZD	CARROLL COUNTY	TN	LPV	0	100	0	100	1	99.998
JAU	COLONEL TOMMY C STINER AIRFIEL	TN	LP	0	100	0	100	0	100
JWN	JOHN C TUNE	TN	LPV	0	100	0	100	1	99.998
LUG	ELLINGTON	TN	LPV	0	100	0	100	1	99.998
M01	GENERAL DEWITT SPAIN	TN	LPV	0	100	0	100	0	100
M08	WILLIAM L WHITEHURST FLD	TN	LP	0	100	0	100	1	99.998
M53	HUMBOLDT MUNICIPAL	TN	LPV	0	100	0	100	1	99.999
M54	LEBANON MUNICIPAL	TN	LPV	0	100	0	100	1	99.999
M91	SPRINGFIELD ROBERTSON COUNTY	TN	LPV	0	100	0	100	1	99.998
MBT	MURFREESBORO MUNICIPAL	TN	LPV	0	100	0	100	1	99.999
MEM	MEMPHIS INTL	TN	LPV200	0	100	0	100	0	100
MKL	MC KELLAR-SIPES RGNL	TN	LPV200	0	100	0	100	1	99.998
MMI	MCMINN COUNTY	TN	LPV	0	100	0	100	0	100
MNV	MONROE COUNTY	TN	LPV	0	100	0	100	0	100
MOR	MOORE-MURRELL	TN	LPV	0	100	0	100	0	100
MQY	SMYRNA	TN	LPV200	0	100	0	100	1	99.998

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
MRC	MAURY COUNTY RGNL	TN	LPV	0	100	0	100	1	99.998
NQA	MILLINGTON/MEMPHIS	TN	LPV200	0	100	0	100	0	100
PHT	HENRY COUNTY	TN	LPV200	0	100	0	100	1	99.998
PVE	BEECH RIVER RGNL	TN	LPV	0	100	0	100	1	99.998
RKW	ROCKWOOD MUNICIPAL	TN	LPV	0	100	0	100	0	100
RNC	WARREN COUNTY MEML	TN	LPV	0	100	0	100	0	100
RVN	HAWKINS COUNTY	TN	LP	0	100	0	100	0	100
RZR	CLEVELAND RGNL JETPORT	TN	LPV200	0	100	0	100	0	100
SCX	SCOTT MUNICIPAL	TN	LPV	0	100	0	100	0	100
SNH	SAVANNAH-HARDIN COUNTY	TN	LPV	0	100	0	100	1	99.998
SRB	UPPER CUMBERLAND RGNL	TN	LPV	0	100	0	100	0	100
SYI	BOMAR FLD/SHELBYVILLE MUNICIPAL	TN	LPV	0	100	0	100	1	99.999
SZY	ROBERT SIBLEY	TN	LPV	0	100	0	100	1	99.997
TGC	GIBSON COUNTY	TN	LP	0	100	0	100	1	99.999
THA	TULLAHOMA RGNL/WM NORTHERN FLD	TN	LPV	0	100	0	100	1	99.999
TRI	TRI-CITIES	TN	LPV200	0	100	0	100	0	100
TYS	MC GHEE TYSON	TN	LPV200	0	100	0	100	0	100
UCY	EVERETT-STEWART RGNL	TN	LPV200	0	100	0	100	1	99.999
XNX	MUSIC CITY EXEC	TN	LPV	0	100	0	100	1	99.998
0F2	BOWIE MUNICIPAL	TX	LPV	0	100	0	100	0	100
11R	BRENHAM MUNICIPAL	TX	LPV	0	100	0	100	1	99.998
2R9	KENEDY RGNL	TX	LP	0	100	0	100	2	99.991
3R9	LAKEWAY AIRPARK	TX	LP	0	100	0	100	1	99.998
3T5	FAYETTE RGNL AIR CENTER	TX	LPV	0	100	0	100	1	99.997
41F	FLOYDADA MUNICIPAL	TX	LP	0	100	0	100	0	100
45R	HAWTHORNE FLD	TX	LP	0	100	0	100	1	99.998
4T2	KENNETH COPELAND	TX	LPV	0	100	0	100	0	100
50R	LOCKHART MUNICIPAL	TX	LPV	0	100	0	100	1	99.996
5C1	BOERNE STAGE FLD	TX	LP	0	100	0	100	1	99.996
5T9	MAVERICK COUNTY MEML INTL	TX	LPV	0	100	0	100	2	99.971
60R	NAVASOTA MUNICIPAL	TX	LPV	0	100	0	100	1	99.998
6R3	CLEVELAND MUNICIPAL	TX	LPV	0	100	0	100	1	99.998
77F	WINTERS MUNICIPAL	TX	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
8F3	CROSBYTON MUNICIPAL	TX	LP	0	100	0	100	0	100
ABI	ABILENE RGNL	TX	LPV200	0	100	0	100	0	100
ACT	WACO RGNL	TX	LPV200	0	100	0	100	0	100
ADS	ADDISON	TX	LPV	0	100	0	100	0	100
AFW	FORT WORTH ALLIANCE	TX	LPV200	0	100	0	100	0	100
ALI	ALICE INTL	TX	LPV	1	99.994	1	99.994	3	99.981
AMA	RICK HUSBAND AMARILLO INTL	TX	LPV200	0	100	0	100	0	100
ARM	WHARTON RGNL	TX	LPV	0	100	0	100	2	99.994
ASL	HARRISON COUNTY	TX	LPV	0	100	0	100	0	100
AUS	AUSTIN-BERGSTROM INTL	TX	LPV200	0	100	0	100	1	99.998
AXH	HOUSTON/SOUTHWEST	TX	LPV	0	100	0	100	1	99.995
BAZ	NEW BRAUNFELS NTL	TX	LPV	0	100	0	100	1	99.996
BBD	CURTIS FLD	TX	LPV	0	100	0	100	0	100
BEA	BEEVILLE MUNICIPAL	TX	LPV	0	100	1	99.997	2	99.986
BFE	TERRY COUNTY	TX	LPV	0	100	0	100	0	100
BGD	HUTCHINSON COUNTY	TX	LPV	0	100	0	100	0	100
BKD	STEPHENS COUNTY	TX	LP	0	100	0	100	0	100
BKS	BROOKS COUNTY	TX	LPV	1	99.993	1	99.993	5	99.972
BMT	BEAUMONT MUNICIPAL	TX	LPV	0	100	0	100	2	99.996
BPG	BIG SPRING MC MAHON-WRINKLE	TX	LPV200	0	100	0	100	0	100
BPT	JACK BROOKS RGNL	TX	LPV200	0	100	0	100	2	99.995
BRO	BROWNSVILLE/SOUTH PADRE ISLAND	TX	LPV200	1	99.986	1	99.975	3	99.920
BWD	BROWNWOOD RGNL	TX	LPV	0	100	0	100	0	100
BYY	BAY CITY RGNL	TX	LPV	0	100	0	100	2	99.992
CDS	CHILDRESS MUNICIPAL	TX	LPV200	0	100	0	100	0	100
CFD	COULTER FLD	TX	LPV	0	100	0	100	1	99.999
CLL	EASTERWOOD FLD	TX	LPV200	0	100	0	100	1	99.999
CNW	TSTC WACO	TX	LPV200	0	100	0	100	0	100
COM	COLEMAN MUNICIPAL	TX	LPV	0	100	0	100	0	100
COT	COTULLA-LA SALLE COUNTY	TX	LPV	0	100	0	100	3	99.990
CPT	CLEBURNE RGNL	TX	LPV	0	100	0	100	0	100
CRP	CORPUS CHRISTI INTL	TX	LPV200	1	99.995	1	99.995	3	99.974
CVB	CASTROVILLE MUNICIPAL	TX	LPV	0	100	0	100	1	99.995

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CWC	KICKAPOO DOWNTOWN	TX	LPV	0	100	0	100	0	100
CXO	CONROE/NORTH HOUSTON RGNL	TX	LPV200	0	100	0	100	1	99.998
CZT	DIMMIT COUNTY	TX	LPV	0	100	0	100	3	99.990
DAL	DALLAS LOVE FLD	TX	LPV200	0	100	0	100	0	100
DFW	DALLAS-FORT WORTH INTL	TX	LPV200	0	100	0	100	0	100
DHT	DALHART MUNICIPAL	TX	LPV	0	100	0	100	0	100
DKR	HOUSTON COUNTY	TX	LP	0	100	0	100	0	100
DRT	DEL RIO INTL	TX	LPV	0	100	0	100	3	99.993
DTO	DENTON ENTERPRISE	TX	LPV200	0	100	0	100	0	100
DUX	MOORE COUNTY	TX	LPV200	0	100	0	100	0	100
DWH	DAVID WAYNE HOOKS MEML	TX	LPV	0	100	0	100	1	99.997
E01	ROY HURD MEML	TX	LP	0	100	0	100	0	100
E11	ANDREWS COUNTY	TX	LPV	0	100	0	100	0	100
E19	GRUVER MUNICIPAL	TX	LP	0	100	0	100	0	100
E30	BRUCE FLD	TX	LPV	0	100	0	100	0	100
E38	ALPINE-CASPARIS MUNICIPAL	TX	LPV	0	100	0	100	1	99.983
EBG	SOUTH TEXAS INTL AT EDINBURG	TX	LPV	1	99.986	1	99.975	4	99.937
EDC	AUSTIN EXEC	TX	LPV200	0	100	0	100	1	99.998
EFD	ELLINGTON	TX	LPV200	0	100	0	100	1	99.995
ELA	EAGLE LAKE	TX	LP	0	100	0	100	1	99.995
ELP	EL PASO INTL	TX	LP	0	100	0	100	1	99.975
ERV	KERRVILLE MUNICIPAL/LOUIS SCHREINER	TX	LPV	0	100	0	100	1	99.997
ETN	EASTLAND MUNICIPAL	TX	LP	0	100	0	100	0	100
F00	JONES FLD	TX	LPV	0	100	0	100	0	100
F05	WILBARGER COUNTY	TX	LPV	0	100	0	100	0	100
F49	CITY OF SLATON/LARRY T NEAL ME	TX	LPV	0	100	0	100	0	100
F98	YOAKUM COUNTY	TX	LPV	0	100	0	100	0	100
FST	FORT STOCKTON-PECOS COUNTY	TX	LPV	0	100	0	100	0	100
FTW	FORT WORTH MEACHAM INTL	TX	LPV200	0	100	0	100	0	100
FWS	FORT WORTH SPINKS	TX	LPV200	0	100	0	100	0	100
GDJ	GRANBURY RGNL	TX	LPV	0	100	0	100	0	100
GGG	EAST TEXAS RGNL	TX	LPV	0	100	0	100	0	100
GKY	ARLINGTON MUNICIPAL	TX	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
GLE	GAINESVILLE MUNICIPAL	TX	LPV	0	100	0	100	0	100
GLS	SCHOLES INTL AT GALVESTON	TX	LPV200	0	100	0	100	2	99.993
GNC	GAINES COUNTY	TX	LPV	0	100	0	100	0	100
GRK	ROBERT GRAY AAF	TX	LPV200	0	100	0	100	0	100
GTU	GEORGETOWN MUNICIPAL	TX	LPV	0	100	0	100	1	99.999
GVT	MAJORS	TX	LPV200	0	100	0	100	0	100
GYI	NORTH TEXAS RGNL/PERRIN FLD	TX	LPV200	0	100	0	100	0	100
GZN	GREGORY M SIMMONS MEML	TX	LPV	0	100	0	100	0	100
HBV	JIM HOGG COUNTY	TX	LPV	0	100	0	100	5	99.972
HDO	SOUTH TEXAS RGNL AT HONDO	TX	LPV	0	100	0	100	1	99.995
HHF	HEMPHILL COUNTY	TX	LPV	0	100	0	100	0	100
HOU	WILLIAM P HOBBY	TX	LPV200	0	100	0	100	1	99.995
HQZ	MESQUITE METRO	TX	LPV	0	100	0	100	0	100
HRL	VALLEY INTL	TX	LPV200	1	99.986	1	99.975	3	99.927
HRX	HEREFORD MUNICIPAL	TX	LPV200	0	100	0	100	0	100
HYI	SAN MARCOS RGNL	TX	LPV200	0	100	0	100	1	99.997
IAH	GEORGE BUSH INTCNTL/HOUSTON	TX	LPV200	0	100	0	100	1	99.997
IKG	KLEBERG COUNTY	TX	LPV	1	99.994	1	99.994	3	99.979
ILE	SKYLARK FLD	TX	LPV200	0	100	0	100	0	100
INJ	HILLSBORO MUNICIPAL	TX	LPV	0	100	0	100	0	100
INK	WINKLER COUNTY	TX	LPV200	0	100	0	100	0	100
IWS	WEST HOUSTON	TX	LP	0	100	0	100	1	99.996
JAS	JASPER COUNTY/BELL FLD	TX	LPV	0	100	0	100	1	99.999
JSO	CHEROKEE COUNTY	TX	LPV	0	100	0	100	0	100
JWY	MID-WAY RGNL	TX	LPV200	0	100	0	100	0	100
JXI	FOX STEPHENS FLD - GILMER MUNICIPAL	TX	LP	0	100	0	100	0	100
LBB	LUBBOCK PRESTON SMITH INTL	TX	LPV200	0	100	0	100	0	100
LBX	TEXAS GULF COAST RGNL	TX	LPV	0	100	0	100	1	99.993
LFK	ANGELINA COUNTY	TX	LPV	0	100	0	100	0	100
LHB	HEARNE MUNICIPAL	TX	LPV200	0	100	0	100	0	100
LIU	LITTLEFIELD TAYLOR BROWN MUNICIPAL	TX	LPV	0	100	0	100	0	100
LLN	LEVELLAND MUNICIPAL	TX	LPV	0	100	0	100	0	100
LNC	LANCASTER RGNL	TX	LPV200	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
LRD	LAREDO INTL	TX	LPV200	0	100	0	100	5	99.969
LUD	DECATUR MUNICIPAL	TX	LPV	0	100	0	100	0	100
LUV	LAMESA MUNICIPAL	TX	LPV200	0	100	0	100	0	100
LVJ	PEARLAND RGNL	TX	LPV	0	100	0	100	1	99.995
LXY	MEXIA-LIMESTONE COUNTY	TX	LP	0	100	0	100	0	100
MAF	MIDLAND INTL AIR AND SPACE POR	TX	LPV200	0	100	0	100	0	100
MDD	MIDLAND AIRPARK	TX	LPV	0	100	0	100	0	100
MFE	MC ALLEN MILLER INTL	TX	LPV200	1	99.975	1	99.975	4	99.920
MKN	COMANCHE COUNTY-CITY	TX	LPV	0	100	0	100	0	100
MNZ	HAMILTON MUNICIPAL	TX	LPV	0	100	0	100	0	100
MWL	MINERAL WELLS RGNL	TX	LPV200	0	100	0	100	0	100
OCH	NACOGDOCHES A L MANGHAM JR RGN	TX	LPV200	0	100	0	100	0	100
ODO	ODESSA-SCHLEMEYER FLD	TX	LPV200	0	100	0	100	0	100
ONY	OLNEY MUNICIPAL	TX	LPV	0	100	0	100	0	100
ORG	ORANGE COUNTY	TX	LPV	0	100	0	100	2	99.996
PEQ	PECOS MUNICIPAL	TX	LPV200	0	100	0	100	0	100
PIL	PORT ISABEL-CAMERON COUNTY	TX	LPV	1	99.987	1	99.975	4	99.941
PKV	CALHOUN COUNTY	TX	LPV	0	100	0	100	3	99.984
PPA	PERRY LEFORS FLD	TX	LPV	0	100	0	100	0	100
PRX	COX FLD	TX	LPV	0	100	0	100	0	100
PSX	PALACIOS MUNICIPAL	TX	LPV	0	100	0	100	2	99.990
PVW	HALE COUNTY	TX	LPV	0	100	0	100	0	100
PWG	MC GREGOR EXEC	TX	LPV	0	100	0	100	0	100
PYX	PERRYTON OCHILTREE COUNTY	TX	LPV	0	100	0	100	0	100
RAS	MUSTANG BEACH	TX	LPV	1	99.995	1	99.995	2	99.960
RBD	DALLAS EXEC	TX	LPV200	0	100	0	100	0	100
RBO	NUECES COUNTY	TX	LPV	1	99.995	1	99.995	2	99.979
RKP	ARANSAS COUNTY	TX	LPV	1	99.999	1	99.996	2	99.965
RYW	LAGO VISTA TX/RUSTY ALLEN	TX	LPV	0	100	0	100	1	99.999
SAT	SAN ANTONIO INTL	TX	LPV200	0	100	0	100	1	99.995
SGR	SUGAR LAND RGNL	TX	LPV200	0	100	0	100	1	99.995
SJT	SAN ANGELO RGNL/MATHIS FLD	TX	LPV	0	100	0	100	0	100
SLR	SULPHUR SPRINGS MUNICIPAL	TX	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
SNK	WINSTON FLD	TX	LPV200	0	100	0	100	0	100
SWI	SHERMAN MUNICIPAL	TX	LP	0	100	0	100	0	100
SWW	AVENGER FLD	TX	LPV	0	100	0	100	0	100
T23	ALBANY MUNICIPAL	TX	LPV	0	100	0	100	0	100
T41	LA PORTE MUNICIPAL	TX	LPV	0	100	0	100	1	99.995
T74	TAYLOR MUNICIPAL	TX	LPV	0	100	0	100	1	99.999
T78	LIBERTY MUNICIPAL	TX	LP	0	100	0	100	1	99.997
T82	GILLESPIE COUNTY	TX	LPV	0	100	0	100	1	99.998
TDW	TRADEWIND	TX	LPV	0	100	0	100	0	100
TFP	MCCAMPBELL-PORTER	TX	LPV	1	99.995	1	99.995	2	99.960
TKI	MCKINNEY NTL	TX	LPV200	0	100	0	100	0	100
TME	HOUSTON EXEC	TX	LPV	0	100	0	100	1	99.996
TPL	DRAUGHON-MILLER CENTRAL TEXAS	TX	LPV200	0	100	0	100	0	100
TRL	TERRELL MUNICIPAL	TX	LPV	0	100	0	100	0	100
TX2	CHASE FLD INDUSTRIAL	TX	LPV	0	100	1	99.997	2	99.985
TXW	MID VALLEY	TX	LPV	1	99.986	1	99.975	3	99.921
TYR	TYLER POUNDS RGNL	TX	LPV200	0	100	0	100	0	100
UTS	HUNTSVILLE MUNICIPAL	TX	LPV	0	100	0	100	1	99.999
VCT	VICTORIA RGNL	TX	LPV200	0	100	0	100	2	99.991
XBP	BRIDGEPORT MUNICIPAL	TX	LPV	0	100	0	100	0	100
41U	MANTI-EPHRAIM	UT	LPV	0	100	0	100	0	100
74V	ROOSEVELT MUNICIPAL	UT	LPV	0	100	0	100	0	100
BCE	BRYCE CANYON	UT	LPV	0	100	0	100	0	100
BDG	BLANDING MUNICIPAL	UT	LPV	0	100	0	100	0	100
BMC	BRIGHAM CITY RGNL	UT	LP	0	100	0	100	0	100
CDC	CEDAR CITY RGNL	UT	LPV	0	100	0	100	0	100
CNY	CANYONLANDS RGNL	UT	LP	0	100	0	100	0	100
DTA	DELTA MUNICIPAL	UT	LP	0	100	0	100	0	100
ENV	WENDOVER	UT	LPV	0	100	0	100	0	100
FOM	FILLMORE MUNICIPAL	UT	LPV	0	100	0	100	0	100
LGU	LOGAN-CACHE	UT	LPV	0	100	0	100	0	100
OGD	OGDEN-HINCKLEY	UT	LPV	0	100	0	100	0	100
PUC	CARBON COUNTY RGNL/BUCK DAVIS	UT	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
PVU	PROVO MUNICIPAL	UT	LPV200	0	100	0	100	0	100
RIF	RICHFIELD MUNICIPAL	UT	LP	0	100	0	100	0	100
SGU	ST GEORGE RGNL	UT	LPV	0	100	0	100	0	100
SLC	SALT LAKE CITY INTL	UT	LPV200	0	100	0	100	0	100
SPK	SPANISH FORK MUNICIPAL/WOODHOUSE FL	UT	LP	0	100	0	100	0	100
TVY	BOLINDER FLD-TOOELE VALLEY	UT	LPV200	0	100	0	100	0	100
U14	NEPHI MUNICIPAL	UT	LPV	0	100	0	100	0	100
U42	SOUTH VALLEY RGNL	UT	LPV	0	100	0	100	0	100
U55	PANGUITCH MUNICIPAL	UT	LPV200	0	100	0	100	0	100
VEL	VERNAL RGNL	UT	LPV	0	100	0	100	0	100
0V4	BROOKNEAL/CAMPBELL COUNTY	VA	LPV	0	100	0	100	0	100
0VG	LEE COUNTY	VA	LPV	0	100	0	100	0	100
AVC	MECKLENBURG-BRUNSWICK RGNL	VA	LPV	0	100	0	100	0	100
BCB	VIRGINIA TECH/MONTGOMERY EXEC	VA	LPV	0	100	0	100	0	100
BKT	ALLEN C PERKINSON BLACKSTONE A	VA	LPV	0	100	0	100	0	100
CHO	CHARLOTTESVILLE-ALBEMARLE	VA	LPV200	0	100	0	100	0	100
CJR	CULPEPER RGNL	VA	LPV	0	100	0	100	0	100
CPK	CHESAPEAKE RGNL	VA	LPV200	0	100	0	100	0	100
DAN	DANVILLE RGNL	VA	LPV200	0	100	0	100	0	100
EMV	EMPORIA-GREENSVILLE RGNL	VA	LPV	0	100	0	100	0	100
FCI	RICHMOND EXEC/CHESTERFIELD COU	VA	LPV	0	100	0	100	0	100
FKN	FRANKLIN RGNL	VA	LPV	0	100	0	100	0	100
FVX	FARMVILLE RGNL	VA	LPV	0	100	0	100	0	100
FYJ	MIDDLE PENINSULA RGNL	VA	LPV	0	100	0	100	0	100
HLX	TWIN COUNTY	VA	LPV	0	100	0	100	0	100
HSP	INGALLS FLD	VA	LPV	0	100	0	100	0	100
HWY	WARRENTON/FAUQUIER	VA	LPV200	0	100	0	100	0	100
JFZ	TAZEWELL COUNTY	VA	LPV	0	100	0	100	0	100
JYO	LEESBURG EXEC	VA	LPV	0	100	0	100	0	100
LKU	LOUISA COUNTY/FREEMAN FLD	VA	LPV	0	100	0	100	0	100
LNP	LONESOME PINE	VA	LPV	0	100	0	100	0	100
LUA	LURAY CAVERNS	VA	LP	0	100	0	100	0	100
LYH	LYNCHBURG RGNL/PRESTON GLENN F	VA	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
MFV	ACCOMACK COUNTY	VA	LPV	0	100	0	100	0	100
MKJ	MOUNTAIN EMPIRE	VA	LPV	0	100	0	100	0	100
MTV	BLUE RIDGE	VA	LPV	0	100	0	100	0	100
OFP	HANOVER COUNTY MUNICIPAL	VA	LPV	0	100	0	100	0	100
OKV	WINCHESTER RGNL	VA	LPV200	0	100	0	100	0	100
ORF	NORFOLK INTL	VA	LPV200	0	100	0	100	0	100
PHF	NEWPORT NEWS/WILLIAMSBURG INTL	VA	LPV200	0	100	0	100	0	100
PSK	NEW RIVER VALLEY	VA	LPV200	0	100	0	100	0	100
PTB	DINWIDDIE COUNTY	VA	LPV	0	100	0	100	0	100
PVG	HAMPTON ROADS EXEC	VA	LPV200	0	100	0	100	0	100
RIC	RICHMOND INTL	VA	LPV200	0	100	0	100	0	100
RMN	STAFFORD RGNL	VA	LPV	0	100	0	100	0	100
ROA	ROANOKE/BLACKSBURG RGNL (WOODR	VA	LPV	0	100	0	100	0	100
SFQ	SUFFOLK EXEC	VA	LPV	0	100	0	100	0	100
SHD	SHENANDOAH VALLEY RGNL	VA	LPV200	0	100	0	100	0	100
VJI	VIRGINIA HIGHLANDS	VA	LPV	0	100	0	100	0	100
W78	WILLIAM M TUCK	VA	LPV	0	100	0	100	0	100
W96	NEW KENT COUNTY	VA	LP	0	100	0	100	0	100
WAL	WALLOPS FLIGHT FACILITY	VA	LPV	0	100	0	100	0	100
XSA	TAPPAHANNOCK/ESSEX COUNTY	VA	LPV	0	100	0	100	0	100
BTV	BURLINGTON INTL	VT	LPV200	0	100	0	100	0	100
EFK	NORTHEAST KINGDOM INTL	VT	LP	0	100	0	100	0	100
FSO	FRANKLIN COUNTY STATE	VT	LPV	0	100	0	100	0	100
MPV	EDWARD F KNAPP STATE	VT	LPV	0	100	0	100	0	100
MVL	MORRISVILLE-STOWE STATE	VT	LPV	0	100	0	100	0	100
RUT	RUTLAND - SOUTHERN VERMONT RGN	VT	LPV	0	100	0	100	0	100
ALW	WALLA WALLA RGNL	WA	LPV200	0	100	0	100	0	100
AWO	ARLINGTON MUNICIPAL	WA	LPV200	0	100	0	100	1	99.997
BLI	BELLINGHAM INTL	WA	LPV200	0	100	0	100	1	99.997
BVS	SKAGIT RGNL	WA	LPV	0	100	0	100	1	99.997
CLM	WILLIAM R FAIRCHILD INTL	WA	LPV	0	100	0	100	1	99.989
CLS	CHEHALIS-CENTRALIA	WA	LPV	0	100	0	100	1	99.997
DEW	DEER PARK	WA	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
EPH	EPHRATA MUNICIPAL	WA	LPV	0	100	0	100	0	100
FHR	FRIDAY HARBOR	WA	LPV	0	100	0	100	1	99.989
GEG	SPOKANE INTL	WA	LPV200	0	100	0	100	0	100
HQM	BOWERMAN	WA	LPV200	0	100	0	100	1	99.989
KLS	SOUTHWEST WASHINGTON RGNL	WA	LPV	0	100	0	100	1	99.997
MWH	GRANT COUNTY INTL	WA	LPV200	0	100	0	100	0	100
OLM	OLYMPIA RGNL	WA	LPV200	0	100	0	100	1	99.997
ORS	ORCAS ISLAND	WA	LP	0	100	0	100	1	99.989
PAE	SNOHOMISH COUNTY (PAINE FLD)	WA	LPV200	0	100	0	100	1	99.997
PLU	PIERCE COUNTY - THUN FLD	WA	LPV	0	100	0	100	1	99.997
PSC	TRI-CITIES	WA	LPV200	0	100	0	100	0	100
PWT	BREMERTON NTL	WA	LPV200	0	100	0	100	1	99.997
RLD	RICHLAND	WA	LPV	0	100	0	100	0	100
RNT	RENTON MUNICIPAL	WA	LPV	0	100	0	100	1	99.997
SEA	SEATTLE-TACOMA INTL	WA	LPV200	0	100	0	100	1	99.997
SFF	FELTS FLD	WA	LPV	0	100	0	100	0	100
SHN	SANDERSON FLD	WA	LPV	0	100	0	100	1	99.989
TDO	ED CARLSON MEML FLD - SOUTH LE	WA	LPV	0	100	0	100	1	99.997
TIW	TACOMA NARROWS	WA	LPV	0	100	0	100	1	99.997
YKM	YAKIMA AIR TRML/MCALLISTER FLD	WA	LPV200	0	100	0	100	0	100
3T3	BOYCEVILLE MUNICIPAL	WI	LPV	0	100	0	100	0	100
57C	EAST TROY MUNICIPAL	WI	LPV	0	100	0	100	0	100
61C	FORT ATKINSON MUNICIPAL	WI	LP	0	100	0	100	0	100
82C	MAUSTON/NEW LISBON UNION	WI	LP	0	100	0	100	0	100
8D1	NEW HOLSTEIN MUNICIPAL	WI	LPV	0	100	0	100	0	100
AHH	AMERY MUNICIPAL	WI	LP	0	100	0	100	0	100
AIG	LANGLADE COUNTY	WI	LPV	0	100	0	100	0	100
ARV	LAKELAND/NOBLE F LEE MEML FLD	WI	LPV	0	100	0	100	0	100
ASX	JOHN F KENNEDY MEML	WI	LPV	0	100	0	100	0	100
ATW	APPLETON INTL	WI	LPV200	0	100	0	100	0	100
AUW	WAUSAU DOWNTOWN	WI	LPV200	0	100	0	100	0	100
BCK	BLACK RIVER FALLS AREA	WI	LPV	0	100	0	100	0	100
BUU	BURLINGTON MUNICIPAL	WI	LP	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
C29	MIDDLETON MUNICIPAL/MOREY FLD	WI	LPV	0	100	0	100	0	100
C35	REEDSBURG MUNICIPAL	WI	LP	0	100	0	100	0	100
C47	PORTAGE MUNICIPAL	WI	LP	0	100	0	100	0	100
CLI	CLINTONVILLE MUNICIPAL	WI	LPV	0	100	0	100	0	100
CMY	SPARTA/FORT MC COY	WI	LPV	0	100	0	100	0	100
CWA	CENTRAL WISCONSIN	WI	LPV200	0	100	0	100	0	100
DLL	BARABOO/WISCONSIN DELLS RGNL	WI	LPV	0	100	0	100	0	100
EAU	CHIPPEWA VALLEY RGNL	WI	LPV200	0	100	0	100	0	100
EGV	EAGLE RIVER UNION	WI	LPV	0	100	0	100	0	100
ENW	KENOSHA RGNL	WI	LPV200	0	100	0	100	0	100
ETB	WEST BEND MUNICIPAL	WI	LPV	0	100	0	100	0	100
EZS	SHAWANO MUNICIPAL	WI	LPV	0	100	0	100	0	100
FLD	FOND DU LAC COUNTY	WI	LPV	0	100	0	100	0	100
GRB	GREEN BAY/AUSTIN STRAUBEL INTL	WI	LPV200	0	100	0	100	0	100
GTG	GRANTSBURG MUNICIPAL	WI	LP	0	100	0	100	0	100
HXF	HARTFORD MUNICIPAL	WI	LPV	0	100	0	100	0	100
HYR	SAWYER COUNTY	WI	LPV	0	100	0	100	0	100
ISW	ALEXANDER FLD SOUTH WOOD COUNT	WI	LPV	0	100	0	100	0	100
JVL	SOUTHERN WISCONSIN RGNL	WI	LPV200	0	100	0	100	0	100
LNR	TRI-COUNTY RGNL	WI	LPV	0	100	0	100	0	100
LSE	LA CROSSE RGNL	WI	LPV	0	100	0	100	0	100
LUM	MENOMONIE MUNICIPAL/SCORE FLD	WI	LPV	0	100	0	100	0	100
MDZ	TAYLOR COUNTY	WI	LPV	0	100	0	100	0	100
MFI	MARSHFIELD MUNICIPAL	WI	LPV	0	100	0	100	0	100
MKE	GENERAL MITCHELL INTL	WI	LPV200	0	100	0	100	0	100
MRJ	IOWA COUNTY	WI	LPV200	0	100	0	100	0	100
MSN	DANE COUNTY RGNL/TRUAX FLD	WI	LPV200	0	100	0	100	0	100
MTW	MANITOWOC COUNTY	WI	LPV200	0	100	0	100	0	100
MWC	LAWRENCE J TIMMERMAN	WI	LPV	0	100	0	100	0	100
OCQ	OCONTO/J DOUGLAS BAKE MUNICIPAL	WI	LP	0	100	0	100	0	100
OEO	L O SIMENSTAD MUNICIPAL	WI	LPV200	0	100	0	100	0	100
OSH	WITTMAN RGNL	WI	LPV200	0	100	0	100	0	100
OVS	BOSCOBEL	WI	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
PBH	PRICE COUNTY	WI	LPV	0	100	0	100	0	100
PCZ	WAUPACA MUNICIPAL	WI	LPV	0	100	0	100	0	100
PVB	PLATTEVILLE MUNICIPAL	WI	LPV	0	100	0	100	0	100
RAC	BATTEN INTL	WI	LPV	0	100	0	100	0	100
RCX	RUSK COUNTY	WI	LPV	0	100	0	100	0	100
RHI	RHINELANDER/ONEIDA COUNTY	WI	LPV200	0	100	0	100	0	100
RNH	NEW RICHMOND RGNL	WI	LPV	0	100	0	100	0	100
RPD	RICE LAKE RGNL/CARL'S FLD	WI	LPV200	0	100	0	100	0	100
RRL	MERRILL MUNICIPAL	WI	LPV	0	100	0	100	0	100
SBM	SHEBOYGAN COUNTY MEML	WI	LPV200	0	100	0	100	0	100
STE	STEVENS POINT MUNICIPAL	WI	LPV	0	100	0	100	0	100
SUE	DOOR COUNTY CHERRYLAND	WI	LPV	0	100	0	100	0	100
SUW	RICHARD I BONG	WI	LP	0	100	0	100	0	100
TKV	TOMAHAWK RGNL	WI	LP	0	100	0	100	0	100
UBE	CUMBERLAND MUNICIPAL	WI	LPV	0	100	0	100	0	100
UES	WAUKESHA COUNTY	WI	LPV200	0	100	0	100	0	100
UNU	DODGE COUNTY	WI	LPV	0	100	0	100	0	100
VIQ	NEILLSVILLE MUNICIPAL	WI	LPV	0	100	0	100	0	100
Y50	WAUTOMA MUNICIPAL	WI	LP	0	100	0	100	0	100
Y55	CRANDON/STEVE CONWAY MUNICIPAL	WI	LPV	0	100	0	100	0	100
Y72	BLOYER FLD	WI	LP	0	100	0	100	0	100
3I2	MASON COUNTY	WV	LPV	0	100	0	100	1	99.999
6L4	LOGAN COUNTY	WV	LPV	0	100	0	100	0	100
BKW	RALEIGH COUNTY MEML	WV	LPV200	0	100	0	100	0	100
BLF	MERCER COUNTY	WV	LPV	0	100	0	100	0	100
CKB	NORTH CENTRAL WEST VIRGINIA	WV	LPV200	0	100	0	100	0	100
CRW	WEST VIRGINIA INTL YEAGER	WV	LPV200	0	100	0	100	0	100
HLG	WHEELING OHIO COUNTY	WV	LPV200	0	100	0	100	0	100
HTS	TRI-STATE/MILTON J FERGUSON FL	WV	LPV200	0	100	0	100	1	99.999
I18	JACKSON COUNTY	WV	LPV200	0	100	0	100	1	99.999
LWB	GREENBRIER VALLEY	WV	LPV	0	100	0	100	0	100
MGW	MORGANTOWN MUNICIPAL (WALTER L BILL	WV	LPV200	0	100	0	100	0	100
MRB	EASTERN WV RGNL/SHEPHERD FLD	WV	LPV	0	100	0	100	0	100

Airport	Airport Name	State	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
PKB	MID-OHIO VALLEY RGNL	WV	LPV	0	100	0	100	1	99.999
USW	BOGGS FLD	WV	LPV	0	100	0	100	1	99.999
W22	UPSHUR COUNTY RGNL	WV	LPV	0	100	0	100	0	100
W35	POTOMAC AIRPARK	WV	LP	0	100	0	100	0	100
W99	GRANT COUNTY	WV	LP	0	100	0	100	0	100
BYG	JOHNSON COUNTY	WY	LPV	0	100	0	100	0	100
COD	YELLOWSTONE RGNL	WY	LPV	0	100	0	100	0	100
CPR	CASPER/NATRONA COUNTY INTL	WY	LPV	0	100	0	100	0	100
CYS	CHEYENNE RGNL/JERRY OLSON FLD	WY	LPV200	0	100	0	100	0	100
DGW	CONVERSE COUNTY	WY	LPV200	0	100	0	100	0	100
DWX	DIXON	WY	LP	0	100	0	100	0	100
EAN	PHIFER AIRFIELD	WY	LPV200	0	100	0	100	0	100
ECS	MONDELL FLD	WY	LPV	0	100	0	100	0	100
EMM	KEMMERER MUNICIPAL	WY	LPV	0	100	0	100	0	100
EVW	EVANSTON-UINTA COUNTY BURNS FL	WY	LPV	0	100	0	100	0	100
FBR	FORT BRIDGER	WY	LP	0	100	0	100	0	100
GCC	NORTHEAST WYOMING RGNL	WY	LPV	0	100	0	100	0	100
GEY	SOUTH BIG HORN COUNTY	WY	LPV	0	100	0	100	0	100
GUR	CAMP GUERNSEY	WY	LP	0	100	0	100	0	100
HSG	HOT SPRINGS COUNTY	WY	LPV	0	100	0	100	0	100
JAC	JACKSON HOLE	WY	LPV200	0	100	0	100	0	100
LAR	LARAMIE RGNL	WY	LPV	0	100	0	100	0	100
LND	HUNT FLD	WY	LPV	0	100	0	100	0	100
PNA	RALPH WENZ FLD	WY	LPV	0	100	0	100	0	100
POY	POWELL MUNICIPAL	WY	LPV	0	100	0	100	0	100
RIW	CENTRAL WYOMING RGNL	WY	LPV200	0	100	0	100	0	100
RKS	SOUTHWEST WYOMING RGNL	WY	LPV200	0	100	0	100	0	100
RWL	RAWLINS MUNICIPAL/HARVEY FLD	WY	LPV	0	100	0	100	0	100
SAA	SHIVELY FLD	WY	LPV	0	100	0	100	0	100
SHR	SHERIDAN COUNTY	WY	LPV	0	100	0	100	0	100
U68	NORTH BIG HORN COUNTY	WY	LPV	0	100	0	100	0	100
W43	HULETT MUNICIPAL	WY	LPV	0	100	0	100	0	100
WRL	WORLAND MUNICIPAL	WY	LPV	0	100	0	100	0	100

Table D-2 Canada Airports—Outages and Availability

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CAL4	ALBIAN	AB	LPV	0	100	0	100	2	99.996
CEA3	OLDS-DIDSBURY	AB	LPV	0	100	0	100	1	99.996
CEB5	FAIRVIEW	AB	LPV	0	100	1	99.984	1	99.971
CEC4	JASPER-HINTON	AB	LP	0	100	1	99.988	1	99.976
CEH3	PONOKA (LABRIE FIELD)	AB	LPV	0	100	0	100	1	99.996
CEH5	RED EARTH CREEK	AB	LP	0	100	1	99.996	1	99.983
CEH6	PROVOST	AB	LPV	0	100	0	100	1	99.997
CEN3	THREE HILLS	AB	LPV	0	100	0	100	1	99.996
CEN5	COLD LAKE REGIONAL	AB	LPV	0	100	0	100	1	99.997
CEQ3	CAMROSE	AB	LPV	0	100	0	100	1	99.996
CET2	CONKLIN (LEISMER)	AB	LPV	0	100	0	100	1	99.996
CEV3	VEGREVILLE	AB	LPV	0	100	1	99.999	1	99.997
CEW3	ST. PAUL	AB	LPV	0	100	0	100	1	99.997
CEX3	WETASKIWIN REGIONAL	AB	LPV	0	100	0	100	1	99.996
CEZ3	COOKING LAKE	AB	LPV	0	100	0	100	1	99.996
CFB6	JOSEPHBURG	AB	LPV	0	100	0	100	1	99.997
CFM4	DONNELLY	AB	LPV	0	100	1	99.992	1	99.977
CYBF	BONNYVILLE	AB	LPV	0	100	0	100	1	99.996
CYBW	SPRINGBANK	AB	LPV	0	100	0	100	1	99.996
CYEG	EDMONTON INTL	AB	LPV200	0	100	0	100	1	99.996
CYFI	FIREBAG	AB	LPV	0	100	0	100	2	99.996
CYLB	LAC LA BICHE	AB	LPV	0	100	0	100	1	99.996
CYLL	LLOYDMINSTER	AB	LPV	0	100	0	100	1	99.997
CYMM	FORT MCMURRAY	AB	LPV200	0	100	0	100	1	99.996
CYNR	HORIZON	AB	LPV	0	100	0	100	2	99.996
CYOD	GROUP CAPTAIN R.W. MCNAIR	AB	LP	0	100	0	100	1	99.997
CYOJ	HIGH LEVEL	AB	LPV	0	100	1	99.994	2	99.980
CYOP	RAINBOW LAKE	AB	LPV	0	100	1	99.993	1	99.980
CYPE	PEACE RIVER	AB	LPV	0	100	1	99.989	1	99.978
CYPY	FORT CHIPEWYAN	AB	LPV	0	100	0	100	2	99.990
CYQF	RED DEER REGIONAL	AB	LPV	0	100	0	100	1	99.996
CYQL	LETHBRIDGE	AB	LPV200	0	100	0	100	1	99.998
CYQU	GRANDE PRAIRIE	AB	LPV200	0	100	1	99.983	1	99.971
CYWM	ATHABASCA	AB	LPV	0	100	0	100	1	99.996

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CYXH	MEDICINE HAT	AB	LPV	0	100	0	100	0	100
CYYC	YYC CALGARY INTL	AB	LPV200	0	100	0	100	1	99.996
CYZU	WHITECOURT	AB	LPV	0	100	1	99.997	1	99.982
CZPC	PINCHER CREEK	AB	LPV	0	100	0	100	1	99.997
CZVL	VILLENEUVE	AB	LPV	0	100	0	100	1	99.996
CAJ4	ANAHIM LAKE	BC	LPV	0	100	0	100	1	99.989
CAJ9	FORT WARE	BC	LP	0	100	0	100	1	99.992
CAU4	VANDERHOOF	BC	LPV	0	100	1	99.989	1	99.981
CBN9	TSAY KEH	BC	LP	0	100	0	100	1	99.986
CBW4	BOB QUINN LAKE	BC	LP	0	100	0	100	1	99.989
CYBL	CAMPBELL RIVER	BC	LPV	0	100	0	100	1	99.981
CYCD	NANAIMO	BC	LPV	0	100	0	100	1	99.989
CYCZ	FAIRMONT HOT SPRINGS	BC	LPV	0	100	0	100	1	99.996
CYDL	DEASE LAKE	BC	LP	0	100	0	100	1	99.995
CYDQ	DAWSON CREEK	BC	LPV	0	100	1	99.989	1	99.975
CYKA	KAMLOOPS	BC	LPV	0	100	1	99.999	1	99.982
CYLW	KELOWNA	BC	LPV	0	100	0	100	1	99.996
CYPK	PITT MEADOWS	BC	LPV	0	100	0	100	1	99.989
CYPR	PRINCE RUPERT	BC	LPV	0	100	0	100	1	99.989
CYQQ	COMOX	BC	LPV200	0	100	0	100	1	99.981
CYQZ	QUESNEL	BC	LPV	0	100	1	99.984	1	99.979
CYVR	VANCOUVER INTL	BC	LPV200	0	100	0	100	1	99.989
CYWL	WILLIAMS LAKE	BC	LPV	0	100	1	99.995	1	99.981
CYXJ	FORT ST. JOHN	BC	LPV200	0	100	1	99.989	1	99.981
CYXS	PRINCE GEORGE	BC	LPV200	0	100	1	99.989	1	99.981
CYXT	TERRACE	BC	LPV	0	100	0	100	1	99.989
CYXX	ABBOTSFORD	BC	LPV	0	100	0	100	1	99.997
CYYD	SMITHERS	BC	LPV	0	100	0	100	1	99.992
CYYE	FORT NELSON	BC	LPV200	0	100	1	99.997	1	99.982
CYYF	PENTICTON	BC	LPV	0	100	0	100	1	99.996
CYYJ	VICTORIA INTL	BC	LPV200	0	100	0	100	1	99.989
CYZP	SANDSPIT	BC	LPV	1	99.999	1	99.999	1	99.989
CYZT	PORT HARDY	BC	LPV	0	100	0	100	1	99.981
CZBB	BOUNDARY BAY	BC	LPV	0	100	0	100	1	99.989

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CJA3	MORDEN REGIONAL	MB	LPV	0	100	0	100	0	100
CJJ4	DELORAINE	MB	LPV	0	100	0	100	0	100
CJW5	RUSSELL	MB	LPV	0	100	0	100	0	100
CKK7	STEINBACH (SOUTH)	MB	LPV	0	100	0	100	0	100
CKZ7	WINKLER	MB	LPV	0	100	0	100	0	100
CYAV	ST. ANDREWS	MB	LPV	0	100	0	100	0	100
CYBR	BRANDON MUNICIPALCIPALITY	MB	LPV	0	100	0	100	0	100
CYFO	FLIN FLON	MB	LPV	0	100	0	100	1	99.998
CYGX	GILLAM	MB	LPV	0	100	0	100	1	99.999
CYIV	ISLAND LAKE	MB	LPV	0	100	0	100	0	100
CYQD	THE PAS	MB	LPV	0	100	0	100	1	99.999
CYTH	THOMPSON	MB	LPV200	0	100	0	100	2	99.996
CYVD	R.J. (BOB) ANDREW FIELD REGIONAL	MB	LPV	0	100	0	100	0	100
CYWG	JAMES ARMSTRONG RICHARDSON INTL	MB	LPV200	0	100	0	100	0	100
CYYQ	CHURCHILL	MB	LPV	0	100	0	100	0	100
CZJG	JENPEG	MB	LPV	0	100	0	100	1	99.999
CCE3	JUNIPER	NB	LP	0	100	0	100	0	100
CCN2	GRAND MANAN	NB	LPV	0	100	0	100	0	100
CCR3	FLORENCEVILLE	NB	LPV	0	100	0	100	0	100
CDJ4	CLEARWATER	NB	LPV	0	100	0	100	0	100
CYCH	MIRAMICHI	NB	LPV	0	100	0	100	0	100
CYCL	CHARLO	NB	LPV	0	100	0	100	0	100
CYFC	FREDERICTON INTL	NB	LPV	0	100	0	100	0	100
CYQM	GREATER MONCTON ROMEO LEBLANC INTL	NB	LPV200	0	100	0	100	0	100
CYSJ	SAINT JOHN	NB	LPV	0	100	0	100	0	100
CYSL	ST. LEONARD	NB	LPV	0	100	0	100	0	100
CZBF	BATHURST	NB	LPV	0	100	0	100	0	100
CVB2	VOISEY'S BAY	NL	LPV	0	100	0	100	2	99.987
CYDF	DEER LAKE	NL	LPV200	0	100	0	100	0	100
CYJT	STEPHENVILLE	NL	LPV	0	100	0	100	0	100
CYQX	GANDER INTL	NL	LPV200	0	100	0	100	7	99.917
CYWK	WABUSH	NL	LPV	0	100	0	100	0	100
CYYR	GOOSE BAY	NL	LPV	0	100	0	100	1	99.999
CYYT	ST. JOHN'S INTL	NL	LPV	0	100	1	99.992	116	99.192

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CZUM	CHURCHILL FALLS	NL	LPV	0	100	0	100	0	100
LFVM	MIQUELON	NL	LPV	0	100	0	100	1	99.999
LFVP	ST PIERRE	NL	LPV	0	100	0	100	3	99.987
CCQ3	DEBERT	NS	LPV	0	100	0	100	0	100
CYHZ	STANFIELD INTL	NS	LPV200	0	100	0	100	0	100
CYQI	YARMOUTH	NS	LPV	0	100	0	100	0	100
CYQY	J.A. DOUGLAS MCCURDY	NS	LPV200	0	100	0	100	0	100
CYTN	TRENTON	NS	LPV	0	100	0	100	0	100
CYZX	GREENWOOD	NS	LP	0	100	0	100	0	100
CDK2	DIAVIK	NT	LPV	0	100	0	100	3	99.987
CEU9	SAMBAA K'E	NT	LPV	0	100	1	99.998	2	99.989
CGK2	GAHCHO KUE	NT	LPV	0	100	0	100	3	99.989
CSK6	SNAP LAKE	NT	LPV	0	100	0	100	3	99.988
CYEV	INUVIK (MIKE ZUBKO)	NT	LPV	0	100	0	100	1	99.997
CYFR	FORT RESOLUTION	NT	LPV	0	100	1	99.998	2	99.987
CYFS	FORT SIMPSON	NT	LPV	0	100	1	99.997	2	99.984
CYGH	FORT GOOD HOPE	NT	LPV	0	100	0	100	2	99.997
CYHY	MERLYN CARTER AIRPORT	NT	LPV	0	100	1	99.998	2	99.987
CYJP	FORT PROVIDENCE	NT	LPV	0	100	1	99.998	2	99.987
CYKD	FREDDIE CARMICHAEL	NT	LPV	0	100	0	100	0	100
CYOA	EKATI	NT	LPV	0	100	0	100	3	99.987
CYOC	OLD CROW	NT	LPV	0	100	0	100	0	100
CYPC	PAULATUK (NORA ALIQATCHIALUK RUBEN)	NT	LPV	0	100	0	100	6	99.978
CYSM	FORT SMITH	NT	LPV	0	100	1	99.999	2	99.987
CYSY	SACHS HARBOUR (DAVID NASOGALUAK JR. SAARYUAQ)	NT	LPV	0	100	0	100	5	99.893
CYUB	JAMES GRUBEN	NT	LPV	0	100	0	100	4	99.987
CYVQ	NORMAN WELLS	NT	LPV	0	100	0	100	2	99.995
CYWJ	DELINE	NT	LPV	0	100	0	100	3	99.988
CYZF	YELLOWKNIFE	NT	LPV200	0	100	1	99.999	2	99.986
CZFM	FORT MCPHERSON	NT	LPV	0	100	0	100	0	100
CZFN	TULITA	NT	LPV	0	100	0	100	3	99.989
CMB2	MEADOWBANK	NU	LPV	0	100	0	100	3	99.967
CMR2	MARY RIVER	NU	LPV	233	98.876	273	98.675	970	90.273
CYBK	BAKER LAKE	NU	LPV	0	100	0	100	3	99.980

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CYCS	CHESTERFIELD INLET	NU	LPV	0	100	0	100	2	99.979
CYEK	ARVIAT	NU	LPV	0	100	0	100	3	99.998
CYFB	IQALUIT	NU	LPV200	4	99.977	4	99.976	60	99.598
CYRB	RESOLUTE BAY	NU	LPV	78	99.590	99	99.443	1449	81.232
CYRT	RANKIN INLET	NU	LPV	0	100	0	100	2	99.980
CYSK	SANIKILUAQ	NU	LPV	0	100	0	100	0	100
CYTE	KINNGAIT AIRPORT	NU	LPV	1	99.997	1	99.997	12	99.843
CYYH	TALOYOAK	NU	LPV	1	99.997	1	99.997	12	99.883
CNV8	EDENVALE	ON	LPV	0	100	0	100	0	100
CNY3	COLLINGWOOD	ON	LPV	0	100	0	100	0	100
CYAC	CAT LAKE	ON	LPV	0	100	0	100	0	100
CYAM	SAULT STE. MARIE	ON	LPV200	0	100	0	100	0	100
CYCC	CORNWALL REGIONAL	ON	LPV	0	100	0	100	0	100
CYCK	CHATHAM-KENT	ON	LPV	0	100	0	100	0	100
CYEE	HURONIA	ON	LPV	0	100	0	100	0	100
CYFA	FORT ALBANY	ON	LPV	0	100	0	100	0	100
CYGK	KINGSTON	ON	LPV	0	100	0	100	0	100
CYHD	DRYDEN REGIONAL	ON	LPV	0	100	0	100	0	100
CYHF	HEARST (RENE FONTAINE) MUNICIPALCIPALITY	ON	LPV	0	100	0	100	0	100
CYHM	HAMILTON	ON	LPV	0	100	0	100	0	100
CYHS	SAUGEEN MUNICIPALCIPALITY	ON	LPV	0	100	0	100	0	100
CYKF	WATERLOO	ON	LPV200	0	100	0	100	0	100
CYKM	KINCARDINE	ON	LPV	0	100	0	100	0	100
CYKZ	BUTTONVILLE MUNICIPALCIPAL	ON	LPV	0	100	0	100	0	100
CYLS	LAKE SIMCOE	ON	LPV	0	100	0	100	0	100
CYMG	MANITOUWADGE	ON	LPV	0	100	0	100	0	100
CYMO	MOOSONEE	ON	LPV	0	100	0	100	0	100
CYOO	OSHAWA EXECUTIVE AIRPORT	ON	LPV	0	100	0	100	0	100
CYOS	BILLY BISHOP REGIONAL	ON	LPV	0	100	0	100	0	100
CYOW	MACDONALD-CARTIER INTL	ON	LPV200	0	100	0	100	0	100
CYPL	PICKLE LAKE	ON	LPV	0	100	0	100	0	100
CYPQ	PETERBOROUGH	ON	LPV	0	100	0	100	0	100
CYPT	PELEE ISLAND	ON	LPV	0	100	0	100	0	100
CYQG	WINDSOR	ON	LPV	0	100	0	100	0	100

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CYQK	KENORA	ON	LPV	0	100	0	100	0	100
CYQS	ST. THOMAS MUNICIPALCIPALITY	ON	LPV	0	100	0	100	0	100
CYQT	THUNDER BAY	ON	LPV200	0	100	0	100	0	100
CYRL	RED LAKE	ON	LPV	0	100	0	100	0	100
CYSA	STRATFORD MUNICIPALCIPALITY	ON	LPV	0	100	0	100	0	100
CYSB	SUDBURY	ON	LPV	0	100	0	100	0	100
CYSN	NIAGARA DISTRICT	ON	LPV	0	100	0	100	0	100
CYTL	BIG TROUT LAKE	ON	LPV	0	100	0	100	0	100
CYTS	TIMMINS (VICTOR M. POWER)	ON	LPV200	0	100	0	100	0	100
CYTZ	BILLY BISHOP TORONTO CITY AIRPORT	ON	LPV	0	100	0	100	0	100
CYVV	WIARTON	ON	LPV	0	100	0	100	0	100
CYWP	WEBEQUIE	ON	LPV	0	100	0	100	0	100
CYXL	SIOUX LOOKOUT	ON	LPV	0	100	0	100	0	100
CYXR	EARLTON (TIMISKAMING REGIONAL)	ON	LPV	0	100	0	100	0	100
CYXU	LONDON	ON	LPV200	0	100	0	100	0	100
CYYB	NORTH BAY	ON	LPV200	0	100	0	100	0	100
CYYU	KAPUSKASING	ON	LPV	0	100	0	100	0	100
CYYW	ARMSTRONG	ON	LPV	0	100	0	100	0	100
CYYZ	LESTER B. PEARSON INTL	ON	LPV200	0	100	0	100	0	100
CYZD	DOWNSVIEW	ON	LPV	0	100	0	100	0	100
CYZR	SARNIA (CHRIS HADFIELD)	ON	LPV	0	100	0	100	0	100
CZPB	SACHIGO LAKE	ON	LP	0	100	0	100	0	100
CYYG	CHARLOTTETOWN	PE	LPV	0	100	0	100	0	100
CEL8	ELEONORE	QC	LPV	0	100	0	100	0	100
CFX5	RENARD	QC	LPV	0	100	0	100	0	100
CSC3	DRUMMONDVILLE	QC	LPV	0	100	0	100	0	100
CSD4	MONT-LAURIER	QC	LPV	0	100	0	100	0	100
CSF3	POSTE MONTAGNAIS (MILE 134)	QC	LPV	0	100	0	100	0	100
CSH4	LEBEL-SUR-QUEVILLON	QC	LPV	0	100	0	100	0	100
CSR3	VICTORIAVILLE (ANDRE-FORTIN)	QC	LPV	0	100	0	100	0	100
CSU2	CHISASIBI	QC	LPV	0	100	0	100	0	100
CTP9	DONALDSON	QC	LPV	0	100	0	100	5	99.911
CTT5	LA ROMAINE	QC	LPV	0	100	0	100	0	100
CTU2	FONTANGES	QC	LPV	0	100	0	100	0	100

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CYAD	LA GRANDE-3	QC	LPV	0	100	0	100	0	100
CYAH	LA GRANDE-4	QC	LPV	0	100	0	100	0	100
CYAS	KANGIRSUK	QC	LPV	0	100	0	100	3	99.931
CYBC	BAIE-COMEAU	QC	LPV200	0	100	0	100	0	100
CYBG	BAGOTVILLE	QC	LPV200	0	100	0	100	0	100
CYBX	LOURDES-DE-BLANC-SABLON	QC	LPV	0	100	0	100	3	99.981
CYEY	MAGNY	QC	LPV	0	100	0	100	0	100
CYFJ	MONT-TREMBLANT	QC	LPV	0	100	0	100	0	100
CYGL	LA GRANDE RIVIERE	QC	LPV	0	100	0	100	1	99.999
CYGP	GASPE (MICHEL-POULIOT)	QC	LPV	0	100	0	100	0	100
CYGR	ILES-DE-LA-MADELEINE	QC	LPV	0	100	0	100	0	100
CYGV	HAVRE ST-PIERRE	QC	LPV	0	100	0	100	0	100
CYGW	KUUJJUARAPIK	QC	LPV	0	100	0	100	0	100
CYHA	QUAQTAQ	QC	LPV	1	99.999	1	99.999	6	99.911
CYHH	NEMISCAU	QC	LPV	0	100	0	100	0	100
CYHR	CHEVERY	QC	LPV	0	100	0	100	0	100
CYHU	ST-HUBERT	QC	LPV	0	100	0	100	0	100
CYIF	ST-AUGUSTIN	QC	LPV	0	100	0	100	0	100
CYIK	IVUJIVIK	QC	LPV	0	100	0	100	5	99.930
CYKG	KANGIQSUJUAQ (WAKEHAM BAY)	QC	LPV	0	100	0	100	5	99.910
CYKL	SCHEFFERVILLE	QC	LPV	0	100	0	100	1	99.998
CYKO	AKULIVIK	QC	LPV	0	100	0	100	2	99.960
CYKQ	WASKAGANISH	QC	LPV	0	100	0	100	0	100
CYLA	AUPALUK	QC	LPV	0	100	0	100	3	99.931
CYLQ	LA TUQUE	QC	LPV	0	100	0	100	0	100
CYLU	KANGIQSUALUJJUAQ (GEORGES RIVER)	QC	LPV	0	100	0	100	4	99.928
CYME	RUSSELL-BURNETT	QC	LPV	0	100	0	100	0	100
CYMT	CHAPAIS	QC	LPV	0	100	0	100	0	100
CYMU	UMIUJAQ	QC	LPV	0	100	0	100	1	99.999
CYMW	MANIWAKI	QC	LPV	0	100	0	100	0	100
CYMX	MONTREAL INTL (MIRABEL)	QC	LPV200	0	100	0	100	0	100
CYNA	NATASHQUAN	QC	LPV	0	100	0	100	0	100
CYNC	WEMINDJI	QC	LPV	0	100	0	100	0	100
CYND	GATINEAU	QC	LPV	0	100	0	100	0	100

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CYNM	MATAGAMI	QC	LPV	0	100	0	100	0	100
CYPH	INUKJUAK	QC	LPV	0	100	0	100	2	99.987
CYPN	PORT-MENIER	QC	LPV	0	100	0	100	0	100
CYPX	PUVIRNITUQ	QC	LPV	0	100	0	100	2	99.961
CYQB	JEAN LESAGE INTL	QC	LPV200	0	100	0	100	0	100
CYRI	RIVIERE-DU-LOUP	QC	LPV	0	100	0	100	0	100
CYRJ	ROBERVAL	QC	LPV	0	100	0	100	0	100
CYRQ	TROIS-RIVIERES	QC	LPV200	0	100	0	100	0	100
CYSC	SHERBROOKE	QC	LPV	0	100	0	100	0	100
CYSG	ST-GEORGES	QC	LPV	0	100	0	100	0	100
CYTF	ALMA	QC	LPV	0	100	0	100	0	100
CYTQ	TASIUJAQ	QC	LPV	0	100	0	100	3	99.961
CYUL	PIERRE-ELLIOTT-TRUDEAU INTL	QC	LPV200	0	100	0	100	0	100
CYUY	ROUYN-NORANDA	QC	LPV200	0	100	0	100	0	100
CYVB	BONAVENTURE	QC	LPV	0	100	0	100	0	100
CYVO	VAL-DOR	QC	LPV200	0	100	0	100	0	100
CYVP	KUUJJUAQ	QC	LPV200	0	100	0	100	3	99.966
CYYY	MONT-JOLI	QC	LPV	0	100	0	100	0	100
CYZG	SALLUIT	QC	LPV	0	100	0	100	5	99.919
CYZV	SEPT-ILES	QC	LPV200	0	100	0	100	0	100
CCB2	SEABEE MINE	SK	LPV	0	100	0	100	1	99.996
CJC5	SHAUNAVON	SK	LPV	0	100	0	100	0	100
CJE3	WEYBURN	SK	LPV	0	100	0	100	0	100
CJH3	MAIDSTONE	SK	LPV	0	100	0	100	1	99.997
CJP9	CHARLOT RIVER	SK	LP	0	100	0	100	2	99.987
CJQ4	MAPLE CREEK	SK	LPV	0	100	0	100	0	100
CJU4	HUMBOLDT	SK	LPV	0	100	0	100	0	100
CJW7	CIGAR LAKE	SK	LPV	0	100	0	100	2	99.989
CJY3	TISDALE	SK	LPV	0	100	0	100	1	99.998
CJZ3	MELFORT (MILLER FIELD)	SK	LPV	0	100	0	100	1	99.997
CKQ8	MCARTHUR RIVER	SK	LPV	0	100	0	100	2	99.989
CYBE	URANIUM CITY	SK	LPV	0	100	0	100	2	99.984
CYBU	NIPAWIN	SK	LPV	0	100	0	100	1	99.997
CYEN	ESTEVAN REGIONAL	SK	LPV	0	100	0	100	0	100

Airport	Airport Name	Province	Service	LP Outages	LP Avail (%)	LPV Outages	LPV Avail (%)	LPV200 Outages	LPV200 Avail (%)
CYES	EDMUNDSTON	SK	LPV	0	100	0	100	0	100
CYKC	COLLINS BAY	SK	LPV	0	100	0	100	2	99.989
CYKJ	KEY LAKE	SK	LPV	0	100	0	100	2	99.990
CYLJ	MEADOW LAKE	SK	LPV	0	100	0	100	1	99.997
CYMJ	AIR VICE MARSHAL C.M. MCEWEN	SK	LPV200	0	100	0	100	1	99.998
CYNL	POINTS NORTH LANDING	SK	LPV	0	100	0	100	2	99.989
CYPA	PRINCE ALBERT (GLASS FIELD)	SK	LPV	0	100	0	100	1	99.997
CYQR	REGINA INTL	SK	LPV200	0	100	0	100	1	99.998
CYQV	YORKTON MUNICIPALCIPALITY	SK	LPV	0	100	0	100	0	100
CYQW	NORTH BATTLEFORD	SK	LPV	0	100	0	100	1	99.997
CYVC	LA RONGE (BARBER FIELD)	SK	LPV	0	100	0	100	1	99.996
CYXE	JOHN G. DIEFENBAKER INTL	SK	LPV200	0	100	0	100	1	99.997
CYYN	SWIFT CURRENT	SK	LPV	0	100	0	100	1	99.999
CYMA	MAYO	YT	LPV	0	100	0	100	0	100
CYQH	WATSON LAKE	YT	LPV	0	100	0	100	1	99.987
CYXY	ERIK NIELSEN INTL	YT	LPV200	0	100	0	100	0	100
CYZW	TESLIN	YT	LPV	0	100	0	100	0	100