Schedule for 30 June 2017

Transmitter Power: 5 kW

SLOT 1 – LEO Beam Parking Survey

Start: 06:00:00 UTC

Stop: 08:00:00 UTC

Rx pointing: Azimuth: 180°.00 Elevation: 90°.00 (@ zenith) (Declination at epoch: 44°.5)

Tx pointing: Azimuth: 17°.76 Elevation: 52°.26

Note: Geodetic quote: 875 km Slant-range: 1943 km

SLOT 2 – LEO Beam Parking Survey

Start: 08:30:00 UTC

Stop: 10:30:00 UTC

Rx pointing: Azimuth: 180°.00 Elevation: 57°.78 (@ Vir-A) (Declination at epoch: 12°.3)

Tx pointing: Azimuth: 68°.43 Elevation: 75°.23

Note: Geodetic quote: 875 km Slant-range: 1910 km

SLOT3 – LEO Catalogued Targets

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Target 1

Object NORAD ID: 120

Object Name: THOR ABLESTAR DEB

Transit time = 2017-06-30 11:30:18.637449 UTC

Elev TX (deg) = 73.7017 ; Azim TX (deg) = 109.47987

Elev RX (deg) = 47.354045 ; Azim RX (deg) = 180.00001 (DECL = +1.9°)

Rt (km) = 812.52629 ; Rr (km) = 1020.357

Slant Range (km) = 1832.8833; Altitude (km) = 784.05176

Satellite RCS (m2) = 0.2033

TLE epoch = 2017-06-28 18:25:40.437696 UTC

Doppler Shift = -6836.2387 Hz

AOS: 2017-06-30 11:20:53.847656 UTC, LOS: 2017-06-30 11:36:25.488281 UTC, Max El: 67.537662

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Target 2

Object NORAD ID: 20439

Object Name: OSCAR 16 (PACSAT)

Transit time = 2017-06-30 12:13:46.042787 UTC

Elev TX (deg) = 72.150251 ; Azim TX (deg) = 120.76353

Elev RX (deg) = 45.151892 ; Azim RX (deg) = 180 (DECL = -0.3°)

Rt (km) = 821.32114 ; Rr (km) = 1054.9398

Slant Range (km) = 1876.2609; Altitude (km) = 786.75898

Satellite RCS (m2) = 0.1143

TLE epoch = 2017-06-28 23:27:21.915072 UTC

Doppler Shift = +8192.5523 Hz

AOS: 2017-06-30 12:07:54.199219 UTC, LOS: 2017-06-30 12:22:51.738281 UTC, Max El: 77.262657

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Target 3

Object NORAD ID: 38723

Object Name: FENGYUN 1C DEB

Transit time = 2017-06-30 12:34:36.659038 UTC

Elev TX (deg) = 72.070164 ; Azim TX (deg) = 122.48937

Elev RX (deg) = 45.217239 ; Azim RX (deg) = 179.99999 (DECL = -0.3°)

Rt (km) = 835.47606 ; Rr (km) = 1071.0326

Slant Range (km) = 1906.5087; Altitude (km) = 800.05935

Satellite RCS (m2) = 0.0118

TLE epoch = 2017-06-28 01:35:18.592224 UTC

Doppler Shift = +8257.9309 Hz

AOS: 2017-06-30 12:28:45.761719 UTC, LOS: 2017-06-30 12:43:54.550781 UTC, Max El: 76.410302

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Target 4

Object NORAD ID: 30650

Object Name: FENGYUN 1C DEB

Transit time = 2017-06-30 13:03:13.624984 UTC

Elev TX (deg) = 75.149312 ; Azim TX (deg) = 107.59663

Elev RX (deg) = 50.229782 ; Azim RX (deg) = 180 (DECL = +4.8°)

Rt (km) = 888.85554 ; Rr (km) = 1080.0862

Slant Range (km) = 1968.9418; Altitude (km) = 863.29647

Satellite RCS (m2) = 0.028

TLE epoch = 2017-06-28 10:04:30.371808 UTC

Doppler Shift = +7208.2292 Hz

AOS: 2017-06-30 12:56:43.417969 UTC, LOS: 2017-06-30 13:12:31.230469 UTC, Max El: 78.558881

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Target 5

Object NORAD ID: 20978

Object Name: DMSP 5D-2 F10 (USA 68)

Transit time = 2017-06-30 13:34:33.876537 UTC

Elev TX (deg) = 74.485411 ; Azim TX (deg) = 101.85226

Elev RX (deg) = 49.082183 ; Azim RX (deg) = 180   (DECL = +3.6°)

Rt (km) = 819.37566 ; Rr (km) = 1009.4512

Slant Range (km) = 1828.8268; Altitude (km) = 793.41587

Satellite RCS (m2) = 4.156

TLE epoch = 2017-06-28 21:18:42.325632 UTC

Doppler Shift = +6561.8612 Hz

AOS: 2017-06-30 13:28:34.863281 UTC, LOS: 2017-06-30 13:43:40.839844 UTC, Max El: 78.687934

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Target 6

Object NORAD ID: 34569

Object Name: COSMOS 2251 DEB

Transit time = 2017-06-30 13:49:31.757439 UTC

Elev TX (deg) = 73.374589 ; Azim TX (deg) = 95.003066

Elev RX (deg) = 47.563147 ; Azim RX (deg) = 180.00001 (DECL = +2.1°)

Rt (km) = 742.08811 ; Rr (km) = 930.67435

Slant Range (km) = 1672.7625; Altitude (km) = 714.79046

Satellite RCS (m2) = 0.0193

TLE epoch = 2017-06-28 05:35:40.771392 UTC

Doppler Shift = -6341.4742 Hz

AOS: 2017-06-30 13:40:53.027344 UTC, LOS: 2017-06-30 13:55:23.144531 UTC, Max El: 74.623509

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Target 7

Object NORAD ID: 35229

Object Name: FENGYUN 1C DEB

Transit time = 2017-06-30 14:24:54.316279 UTC

Elev TX (deg) = 73.622356 ; Azim TX (deg) = 115.08802

Elev RX (deg) = 47.391514 ; Azim RX (deg) = 180.00001 (DECL = +1.9°)

Rt (km) = 848.22074 ; Rr (km) = 1062.7485

Slant Range (km) = 1910.9692; Altitude (km) = 818.32674

Satellite RCS (m2) = 0.0122

TLE epoch = 2017-06-26 14:39:21.105216 UTC

Doppler Shift = -6803.3293 Hz

AOS: 2017-06-30 14:15:27.714844 UTC, LOS: 2017-06-30 14:30:52.675781 UTC, Max El: 78.304695

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Target 8

Object NORAD ID: 25986

Object Name: ORBCOMM FM 34

Transit time = 2017-06-30 14:43:58.175219 UTC

Elev TX (deg) = 73.483405 ; Azim TX (deg) = 112.0834

Elev RX (deg) = 46.989099 ; Azim RX (deg) = 179.99999 (DECL = +1.5°)

Rt (km) = 817.53796 ; Rr (km) = 1030.4325

Slant Range (km) = 1847.9704; Altitude (km) = 788.1217

Satellite RCS (m2) = 0.5409

TLE epoch = 2017-06-28 20:35:56.421888 UTC

Doppler Shift = +1290.0624 Hz

AOS: 2017-06-30 14:36:55.136719 UTC, LOS: 2017-06-30 14:52:31.699219 UTC, Max El: 50.371794

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Target 9

Object NORAD ID: 31683

Object Name: FENGYUN 1C DEB

Transit time = 2017-06-30 16:04:38.210839 UTC

Elev TX (deg) = 74.651853 ; Azim TX (deg) = 103.92995

Elev RX (deg) = 49.309786 ; Azim RX (deg) = 180 (DECL = +3.8°)

Rt (km) = 837.88716 ; Rr (km) = 1029.3504

Slant Range (km) = 1867.2376; Altitude (km) = 811.97192

Satellite RCS (m2) = 0.0138

TLE epoch = 2017-06-28 18:53:25.526400 UTC

Doppler Shift = +6771.2838 Hz

AOS: 2017-06-30 15:58:29.707031 UTC, LOS: 2017-06-30 16:13:45.878906 UTC, Max El: 78.60978

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Target 10

Object NORAD ID: 4174

Object Name: THORAD AGENA D DEB

Transit time = 2017-06-30 16:33:29.010265 UTC

Elev TX (deg) = 74.987768 ; Azim TX (deg) = 96.217312

Elev RX (deg) = 50.567488 ; Azim RX (deg) = 179.99999 (DECL = +5.1°)

Rt (km) = 832.61924 ; Rr (km) = 1008.9371

Slant Range (km) = 1841.5563; Altitude (km) = 807.98571

Satellite RCS (m2) = 0.0431

TLE epoch = 2017-06-28 22:23:18.880224 UTC

Doppler Shift = +4623.8272 Hz

AOS: 2017-06-30 16:26:56.777344 UTC, LOS: 2017-06-30 16:42:36.152344 UTC, Max El: 72.276501

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Target 11

Object NORAD ID: 29216

Object Name: CZ-4B DEB

Transit time = 2017-06-30 16:54:35.768006 UTC

Elev TX (deg) = 75.813568 ; Azim TX (deg) = 102.18583

Elev RX (deg) = 51.78303 ; Azim RX (deg) = 179.99999 (DECL = +6.3°)

Rt (km) = 906.7018 ; Rr (km) = 1084.2516

Slant Range (km) = 1990.9534; Altitude (km) = 882.998

Satellite RCS (m2) = 0.0014

TLE epoch = 2017-06-27 06:26:33.153792 UTC

Doppler Shift = +6988.946 Hz

AOS: 2017-06-30 16:47:49.980469 UTC, LOS: 2017-06-30 17:03:49.746094 UTC, Max El: 79.380033

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Target 12

Object NORAD ID: 30822

Object Name: FENGYUN 1C DEB

Transit time = 2017-06-30 17:36:36.802559 UTC

Elev TX (deg) = 73.161723 ; Azim TX (deg) = 121.23599

Elev RX (deg) = 47.059346 ; Azim RX (deg) = 180 (DECL = +1.6°)

Rt (km) = 881.16711 ; Rr (km) = 1105.1338

Slant Range (km) = 1986.3009; Altitude (km) = 848.44642

Satellite RCS (m2) = 0.011

TLE epoch = 2017-06-28 13:17:22.303104 UTC

Doppler Shift = +8071.6075

AOS: 2017-06-30 17:30:31.582031 UTC, LOS: 2017-06-30 17:46:16.230469 UTC, Max El: 77.592047