

SC V10-70 Copyright © Trimble Navigation Ltd, 1996-2003
 Serial no 4043 17-Mar-10 09:37
 Angle Degrees Dist US Feet Press inch Hg
 Temp Fahrenheit Coord N-E-Elv H.obs Right

JOB Job ID bmi-s-limit
 Atmos crn No C and R crn Yes Refrac cnst 0.20
 Elev Yes Sea level crn No

NOTE TS Time Date 01/30/2009 Time 17:08:46

LOCELL KI Local Rad 20925604.474 Flat. 298.2572229329

SITE KI Prj Lat <null> Nrth Offset 0.000
 Prj Lng <null> East Offset 0.000
 Prj Hgt 1645.000 Scale 1.0000000000

SHFTGRD KI File name <no text>

PROJ KI No Projection
 Orig Lat <null> Orig Nrth <null>
 Orig Lng <null> Orig East <null>
 Orig Hgt <null> Orig Elev <null>
 Orient 1 <null> Orient 2 <null>
 Scale <null>

DATUM KI None
 Srce Rad 20925604.474 Srce Flat 298.2572229329
 Rotn X <null> Rotn Y <null>
 Rotn Z <null> Trans X <null>
 Trans Y <null> Trans Z <null>
 Scale <null>

PLANE KI Orig Nrth <null> Orig East <null>
 Trans N <null> Trans E <null>
 Rotation <null> Scale <null>

HGTADJ KI Inclined Plane
 Orig Nrth <null> Slope N <null>
 Orig East <null> Slope E <null>
 Hgt Const <null>
 Geoid <no text>

COORD NM System Name <no text>
 Zone Name <no text>
 Datum Name <no text>
 Coord System Option <None>

F FILE FC File Used No
 ID 00000 Name

COGO NM Azmth From North Dir North-East

NOTE NM Following data imported from 6-13-08-opus-obs.job

LOCELL KI Local Rad 20925604.474 Flat. 298.2572229329

SITE CB Prj Lat 36°03'01.84216"N Nrth Offset 0.000
 Prj Lng 114°59'53.92840"W East Offset 0.000
 Prj Hgt 1648.363 Scale 1.0000786812

SHFTGRD CB File name <no text>

PROJ CB Transverse Mercator
 Orig Lat 36°03'01.84216"N Orig Nrth 18483.918
 Orig Lng 114°59'53.92840"W Orig East 19186.597
 Orig Hgt 1643.256 Orig Elev 1738.580
 Orient 1 0°00'00" Orient 2 0°00'00"
 Scale 1.0000000000

DATUM CB Molodensky
 Srce Rad 20925604.474 Srce Flat 298.2572229329
 Rotn X 0°00'00" Rotn Y 0°00'00"
 Rotn Z 0°00'00" Trans X 0.000
 Trans Y 0.000 Trans Z 0.000
 Scale 0.000000000

PLANE CB Orig Nrth 18728.937 Orig East 15068.999
 Trans N -24.769 Trans E -1.419
 Rotation -0°20'39.273751" Scale 1.000000000

HGTADJ CB Inclined Plane
 Orig Nrth 18483.893 Slope N -1.180
 Orig East 19186.576 Slope E 4.045
 Hgt Const 95.308
 Geoid <no text>

COORD NM System Name <no text>
 Zone Name <no text>
 Datum Name <no text>
 Coord System Option Keyed in

COGO NM Azmth From North Dir North-East

NOTE NM Following data imported from 6-13-08-opus-obs.job

NOTE TS Time Date 01/30/2009 Time 15:55:57

COGO NM Azmth From North Dir North-East

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0
 SURVEY EVENTKISurvey event Rover survey started
 GPSANT KI Antenna ht 0.000 Measuremt True
 GPSPOS SI Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
 Class Control Hgt 1645.648 Code 1_30_09_BASE
 Obs User Input H.pr <null> V.pr <null>
 GPSANT KI Antenna ht 0.000 Measuremt True
 GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
 Class Control Hgt 1645.648 Code 1_30_09_BASE
 Obs User Input H.pr <null> V.pr <null>
 EQUIP SI Receiver SPS851 Serial no <no text>
 Antenna Zephyr - Model 2
 Meas To Antenna Phase Center
 Tape adj 0.000 Serial no <no text>
 H.Offset 0.000 V.Offset 0.000
 NOTE NM Receiver firmware version=0.000
 GPSANT KI Antenna ht 4.245 Measuremt True
 GPSREF KI Reference 44501
 INIT KI Init event Gained Week 1516
 Init type On the fly seconds 518331.0
 Init counter 1 Point ID <no text>
 Survey type Real Time Plate H.Dist <null>
 Plate V.Dist <null> Plate azimuth <null>
 EQUIP NM Receiver SPS881 Serial no 4813149404
 Antenna R8 Model 2/SPS88x Internal
 Meas To Bottom of antenna mount
 Tape adj 0.000 Serial no <no text>
 H.Offset 0.000 V.Offset 0.213
 NOTE NM Receiver firmware version=3.710
 GPSANT KI Antenna ht 6.562 Measuremt Uncorrected
 GPSVEC SO Point ID Auto0057 DX -6175.665 DY 1205.103
 Class Stake out DZ -2024.120 Code 106-1-30-09CHK
 Obs L1 Fixed H.pr 0.020 V.pr 0.025
 GPSQC1 NM Min SVs 9 PDOP max 1.0
 Relative DOPs Yes HDOP max 0.7
 Total GPS pos 3 VDOP max 0.8
 Monitor status Not monitored RMS 12.3
 Horz SD Vert SD
 Start wk 1516 sec 518429.0 End wk 1516 sec 518454.0
 GPSQC2 NM Ttl satellites 9 Err Scale 0.00999999998
 VCV xx 0.0000153086 VCV xy 0.0000115193
 VCV xz -0.0000102203 VCV yy 0.0000515362
 VCV yz -0.0000091307 VCV zz 0.0000281475
 PT DGN SO Name 106 To the Point
 GRID D SO Delta N -0.014 Delta E -0.046
 Delta Elv -0.043
 SURVEY EVENTKISurvey event Survey ended
 NOTE TS Time Date 01/30/2009 Time 17:01:35
 SURVEY KI Elev mask 10 PDOP mask 6.0
 SURVEY KI Elev mask 10 PDOP mask 6.0
 SURVEY KI Elev mask 10 PDOP mask 6.0
 SURVEY EVENTKISurvey event Rover survey started
 GPSANT KI Antenna ht 0.000 Measuremt True
 GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
 Class Control Hgt 1645.648 Code 1_30_09_BASE
 Obs User Input H.pr <null> V.pr <null>
 EQUIP SI Receiver SPS851 Serial no <no text>
 Antenna Zephyr - Model 2
 Meas To Antenna Phase Center
 Tape adj 0.000 Serial no <no text>
 H.Offset 0.000 V.Offset 0.000
 NOTE NM Receiver firmware version=0.000
 GPSANT KI Antenna ht 4.245 Measuremt True
 GPSREF KI Reference 44501
 INIT KI Init event Gained Week 1516
 Init type On the fly seconds 522121.0
 Init counter 1 Point ID <no text>
 Survey type Real Time Plate H.Dist <null>
 Plate V.Dist <null> Plate azimuth <null>

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EQUIP  NM  Receiver  SPS881          Serial no 4813149404
          Antenna  R8 Model 2/SPS88x Internal
          Meas To  Bottom of antenna mount
          Tape adj  0.000          Serial no <no text>
          H.Offset  0.000          V.Offset  0.213

NOTE    NM  Receiver firmware version=3.710

GPSANT  KI  Antenna ht 9.700          Measuremt Uncorrected

GPSVEC  SO  Point ID Auto0058      DX   -7029.868      DY   4145.283
          Class Stake out      DZ   1039.198      Code 101-1-30-09CHK
          Obs L1 Fixed          H.pr 0.024          V.pr 0.038

GPSQC1  NM  Min SVs      12          PDOP max  1.4
          Relative DOPs Yes      HDOP max  0.8
          Total GPS pos  4          VDOP max  1.2
          Monitor status Not monitored      RMS      12.0
          Horz SD          Vert SD
          Start wk 1516 sec 522174.0      End wk 1516 sec 522177.0

GPSQC2  NM  Ttl satellites 12          Err Scale 0.0099999998
          VCV xx      0.0000606589      VCV xy      0.0000544312
          VCV xz      -0.0000263995      VCV yy      0.0000885777
          VCV yz      -0.0000315253      VCV zz      0.0000400671

PT DGN  SO  Name      101          To the Point

GRID D  SO  Delta N      -0.074      Delta E      -0.006
          Delta Elv      0.000

SURVEY  EVENTKISurvey event Survey ended

SURVEY  KI  Elev mask 10          PDOP mask 6.0

SURVEY  KI  Elev mask 10          PDOP mask 6.0

SURVEY  KI  Elev mask 10          PDOP mask 6.0

SURVEY  EVENTKISurvey event Rover survey started

GPSANT  KI  Antenna ht 0.000          Measuremt True

GPSPOS  FD  Point ID 44501      Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control      Hgt 1645.648      Code 1_30_09_BASE
          Obs User Input      H.pr <null>          V.pr <null>

EQUIP  SI  Receiver  SPS851          Serial no <no text>
          Antenna  Zephyr - Model 2
          Meas To  Antenna Phase Center
          Tape adj  0.000          Serial no <no text>
          H.Offset  0.000          V.Offset  0.000

NOTE    NM  Receiver firmware version=0.000

GPSANT  KI  Antenna ht 4.245          Measuremt True

GPSREF  KI  Reference 44501

INIT    KI  Init event  Gained          Week      1516
          Init type  On the fly          seconds    522487.0
          Init counter 1          Point ID    <no text>
          Survey type Real Time          Plate H.Dist <null>
          Plate V.Dist <null>          Plate azimuth <null>

EQUIP  NM  Receiver  SPS881          Serial no 4813149404
          Antenna  R8 Model 2/SPS88x Internal
          Meas To  Bottom of antenna mount
          Tape adj  0.000          Serial no <no text>
          H.Offset  0.000          V.Offset  0.213

NOTE    NM  Receiver firmware version=3.710

GPSANT  KI  Antenna ht 9.700          Measuremt Uncorrected

GPSVEC  SO  Point ID Auto0059      DX   -7594.793      DY   3076.144
          Class Stake out      DZ   -564.129      Code 102-1-30-09CHK
          Obs L1 Fixed          H.pr 0.025          V.pr 0.041

GPSQC1  NM  Min SVs      7          PDOP max  1.5
          Relative DOPs Yes      HDOP max  0.8
          Total GPS pos  3          VDOP max  1.3
          Monitor status Not monitored      RMS      11.9
          Horz SD          Vert SD
          Start wk 1516 sec 522535.0      End wk 1516 sec 522538.0

GPSQC2  NM  Ttl satellites 10          Err Scale 0.0099999998
          VCV xx      0.0000682628      VCV xy      0.0000617748
          VCV xz      -0.0000322563      VCV yy      0.0000946383
          VCV yz      -0.0000408528      VCV zz      0.000049765

PT DGN  SO  Name      102          To the Point

GRID D  SO  Delta N      -0.024      Delta E      -0.030
          Delta Elv      -0.001

SURVEY  EVENTKISurvey event Survey ended

SURVEY  KI  Elev mask 10          PDOP mask 6.0

SURVEY  KI  Elev mask 10          PDOP mask 6.0

SURVEY  KI  Elev mask 10          PDOP mask 6.0

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SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
 Class Control Hgt 1645.648 Code 1_30_09_BASE
 Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
 Antenna Zephyr - Model 2
 Meas To Antenna Phase Center
 Tape adj 0.000 Serial no <no text>
 H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measuremt True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
 Init type On the fly seconds 523108.0
 Init counter 1 Point ID <no text>
 Survey type Real Time Plate H.Dist <null>
 Plate V.Dist <null> Plate azimuth <null>

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
 Class Control Hgt 1645.648 Code 1_30_09_BASE
 Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
 Antenna Zephyr - Model 2
 Meas To Antenna Phase Center
 Tape adj 0.000 Serial no <no text>
 H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measuremt True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
 Init type On the fly seconds 523481.0
 Init counter 3 Point ID <no text>
 Survey type Real Time Plate H.Dist <null>
 Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
 Antenna R8 Model 2/SPS88x Internal
 Meas To Bottom of antenna mount
 Tape adj 0.000 Serial no <no text>
 H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measuremt Uncorrected

GPSVEC SO Point ID Auto0060 DX -4430.889 DY 2648.948
 Class Stake out DZ 679.259 Code 107-1-30-09CHK
 Obs L1 Fixed H.pr 0.020 V.pr 0.040

GPSQC1 NM Min SVs 11 PDOP max 1.4
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 4 VDOP max 1.3
 Monitor status Not monitored RMS 18.3
 Horz SD Vert SD
 Start wk 1516 sec 523520.0 End wk 1516 sec 523523.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
 VCV xx 0.0000598084 VCV xy 0.0000569163
 VCV xz -0.0000356114 VCV yy 0.0000798075
 VCV yz -0.0000463645 VCV zz 0.0000480059

PT DGN SO Name 107 To the Point

GRID D SO Delta N -0.027 Delta E -0.003
 Delta Elv -0.018

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 01/30/2009 Time 17:34:38

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

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GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
Init type On the fly seconds 524112.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measurement Uncorrected

GPSVEC SO Point ID Auto0061 DX -1876.101 DY 316.357
Class Stake out DZ -689.516 Code 114-1-30-09CHK
Obs L1 Fixed H.pr 0.018 V.pr 0.041

GPSQC1 NM Min SVs 10 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 4 VDOP max 1.3
Monitor status Not monitored RMS 6.4
Horz SD Vert SD
Start wk 1516 sec 524185.0 End wk 1516 sec 524188.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000547966 VCV xy 0.0000549887
VCV xz -0.000040623 VCV yy 0.0000745709
VCV yz -0.0000524861 VCV zz 0.0000537973

PT DGN SO Name 114 To the Point

GRID D SO Delta N 0.019 Delta E -0.012
Delta Elv -0.016

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
Init type On the fly seconds 524691.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measurement Uncorrected

GPSVEC SO Point ID Auto0062 DX -5210.974 DY 2243.843
Class Stake out DZ -236.928 Code 434-1-30-09HK
Obs L1 Fixed H.pr 0.019 V.pr 0.039

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GPSQC1 NM Min SVs 11 PDOP max 1.4
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 4 VDOP max 1.2
          Monitor status Not monitored RMS 15.6
          Horz SD Vert SD
          Start wk 1516 sec 524787.0 End wk 1516 sec 524790.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
          VCV xx 0.0000443369 VCV xy 0.0000438598
          VCV xz -0.0000319083 VCV yy 0.0000719584
          VCV yz -0.0000506138 VCV zz 0.000059802

PT DGN SO Name 434 To the Point

GRID D SO Delta N 0.093 Delta E -0.124
          Delta Elv -0.068

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control Hgt 1645.648 Code 1_30_09_BASE
          Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000 Serial no <no text>
          H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measuremt True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
          Init type On the fly seconds 525431.0
          Init counter 1 Point ID <no text>
          Survey type Real Time Plate H.Dist <null>
          Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
          Antenna R8 Model 2/SPS88x Internal
          Meas To Bottom of antenna mount
          Tape adj 0.000 Serial no <no text>
          H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measuremt Uncorrected

GPSVEC SO Point ID Auto0063 DX -6176.748 DY 1202.816
          Class Stake out DZ -2022.263 Code 106-130-09RECHK-
          Obs L1 Fixed H.pr 0.019 V.pr 0.036

F-CODE SO Code 106-130-09RECHK-TALL POLE

GPSQC1 NM Min SVs 11 PDOP max 1.3
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 4 VDOP max 1.1
          Monitor status Not monitored RMS 16.6
          Horz SD Vert SD
          Start wk 1516 sec 525539.0 End wk 1516 sec 525542.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
          VCV xx 0.0000342392 VCV xy 0.0000311803
          VCV xz -0.0000237039 VCV yy 0.0000573259
          VCV yz -0.0000428138 VCV zz 0.0000610667

PT DGN SO Name 106 To the Point

GRID D SO Delta N -0.026 Delta E -0.031
          Delta Elv -0.043

GPSVEC SO Point ID Auto0064 DX -6101.761 DY 1541.958
          Class Stake out DZ -1554.326 Code ABCS-CP420-1-30-
          Obs L1 Fixed H.pr 0.020 V.pr 0.037

F-CODE SO Code ABCS-CP420-1-30-09CHK

GPSQC1 NM Min SVs 7 PDOP max 1.3
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 3 VDOP max 1.2
          Monitor status Not monitored RMS 17.0
          Horz SD Vert SD
          Start wk 1516 sec 525768.0 End wk 1516 sec 525771.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
          VCV xx 0.0000322694 VCV xy 0.0000303883
          VCV xz -0.0000233197 VCV yy 0.0000614759
          VCV yz -0.0000492575 VCV zz 0.0000735323

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PT DGN SO Name 420 To the Point
GRID D SO Delta N -0.001 Delta E -0.004
      Delta Elv -0.014
NOTE TS Time Date 01/30/2009 Time 18:06:59
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 05/01/2009 Time 13:43:55
NOTE TS Time Date 06/10/2009 Time 08:06:42
NOTE NM Following data imported from CAMU Control.CSV
NOTE NM Deleted 11:24:11 AM 12/16/2009
NOTE NM Modified 8:09:59 AM 6/10/2009
NOTE NM Old values sw
NOTE NM Deleted 11:24:16 AM 12/16/2009
NOTE NM Deleted 11:24:21 AM 12/16/2009
NOTE NM Modified 8:10:12 AM 6/10/2009
NOTE NM Old values
NOTE KI Deleted LINE. Name: Line0001, Code: PH1, Method: Two points,
NOTE KI Start pt: 501, End pt: 502, Azimuth: 69.650°,
NOTE KI Length: 92.753sft, Grade: -0.735°
NOTE NM Deleted 11:24:28 AM 12/16/2009
NOTE KI Deleted LINE. Name: Line0002, Code: PH1, Method: Two points,
NOTE KI Start pt: 501, End pt: 500, Azimuth: 283.751°,
NOTE KI Length: 338.323sft, Grade: -0.303°
NOTE NM Deleted 11:24:32 AM 12/16/2009
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measuremt True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
      Class Control Hgt 1645.648 Code 1_30_09_BASE
      Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
      Antenna Zephyr - Model 2
      Meas To Antenna Phase Center
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measuremt True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1535
      Init type On the fly seconds 313887.0
      Init counter 1 Point ID <no text>
      Survey type Real Time Plate H.Dist <null>
      Plate V.Dist <null> Plate azimuth <null>
NOTE TS Time Date 06/10/2009 Time 08:46:40
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 06/23/2009 Time 07:35:28
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measuremt True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
      Class Control Hgt 1645.648 Code 1_30_09_BASE
      Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
      Antenna Zephyr - Model 2
      Meas To Antenna Phase Center
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.000

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NOTE    NM Receiver firmware version=0.000

GPSANT  KI Antenna ht 4.245                      Measuremt True

GPSREF  KI Reference 44501

INIT    KI Init event      Gained                Week          1537
          Init type      On the fly              seconds       225367.0
          Init counter    1                      Point ID       <no text>
          Survey type     Real Time               Plate H.Dist   <null>
          Plate V.Dist    <null>                 Plate azimuth  <null>

SURVEY  EVENTKISurvey event Survey ended

NOTE    TS Time Date 07/17/2009 Time 08:09:15

SURVEY  KI Elev mask 10                          PDOP mask 6.0

SURVEY  KI Elev mask 10                          PDOP mask 6.0

SURVEY  KI Elev mask 10                          PDOP mask 6.0

SURVEY  EVENTKISurvey event Rover survey started

GPSANT  KI Antenna ht 0.000                      Measuremt True

GPSPOS  FD Point ID 44501      Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control      Hgt 1645.648      Code 1_30_09_BASE
          Obs User Input      H.pr <null>       V.pr <null>

EQUIP   SI Receiver SPS851                      Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000                      Serial no <no text>
          H.Offset 0.000                      V.Offset 0.000

NOTE    NM Receiver firmware version=0.000

GPSANT  KI Antenna ht 4.245                      Measuremt True

GPSREF  KI Reference 44501

INIT    KI Init event      Gained                Week          1540
          Init type      On the fly              seconds       486589.0
          Init counter    1                      Point ID       <no text>
          Survey type     Real Time               Plate H.Dist   <null>
          Plate V.Dist    <null>                 Plate azimuth  <null>

EQUIP   NM Receiver SPS881                      Serial no 4813149404
          Antenna R8 Model 2/SPS88x Internal
          Meas To Bottom of antenna mount
          Tape adj 0.000                      Serial no <no text>
          H.Offset 0.000                      V.Offset 0.213

NOTE    NM Receiver firmware version=3.710

GPSANT  KI Antenna ht 6.562                      Measuremt Uncorrected

GPSVEC  TP Point ID 5000      DX -4916.772      DY 1091.553
          Class Del normal    DZ -1462.623      Code 7-17-09 test
          Obs L1 Fixed        H.pr 0.019       V.pr 0.023

GPSQC1  NM Min SVs          8                      PDOP max 1.0
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 30  VDOP max 0.8
          Monitor status Not monitored RMS max 16.2
          Horz SD Vert SD
          Start wk 1540 sec 486637.0 End wk 1540 sec 486690.0

GPSQC2  NM Ttl satellites 8                      Err Scale 0.0099999998
          VCV xx 0.0000149235 VCV xy 0.0000117149
          VCV xz -0.000005706 VCV yy 0.0000248735
          VCV yz -0.0000125079 VCV zz 0.0000399738

NOTE    NM Deleted 8:23:08 AM 7/17/2009

SURVEY  EVENTKISurvey event Survey ended

NOTE    TS Time Date 08/18/2009 Time 06:48:17

SURVEY  KI Elev mask 10                          PDOP mask 6.0

SURVEY  KI Elev mask 10                          PDOP mask 6.0

SURVEY  KI Elev mask 10                          PDOP mask 6.0

SURVEY  EVENTKISurvey event Rover survey started

GPSANT  KI Antenna ht 0.000                      Measuremt True

GPSPOS  FD Point ID 44501      Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control      Hgt 1645.648      Code 1_30_09_BASE
          Obs User Input      H.pr <null>       V.pr <null>

EQUIP   SI Receiver SPS851                      Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000                      Serial no <no text>
          H.Offset 0.000                      V.Offset 0.000

NOTE    NM Receiver firmware version=0.000

GPSANT  KI Antenna ht 4.245                      Measuremt True

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GPSREF KI Reference 44501

INIT KI Init event Gained Week 1545
      Init type On the fly seconds 222523.0
      Init counter 1 Point ID <no text>
      Survey type Real Time Plate H.Dist <null>
      Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
      Antenna R8 Model 2/SPS88x Internal
      Meas To Bottom of antenna mount
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 6.562 Measuremt Uncorrected

GPSVECTP Point ID 5001 DX -6116.219 DY 2065.340
      Class Del normal DZ -964.660 Code mh#3
      Obs L1 Fixed H.pr 0.022 V.pr 0.034

GPSQCI NM Min SVs 11 PDOP max 1.3
      Relative DOPs Yes HDOP max 0.7
      Total GPS pos 5 VDOP max 1.1
      Monitor status Not monitored RMS 21.7
      Horz SD Vert SD
      Start wk 1545 sec 222592.0 End wk 1545 sec 222597.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
      VCV xx 0.0000412544 VCV xy 0.0000492762
      VCV xz -0.0000121389 VCV yy 0.000093474
      VCV yz -0.0000211859 VCV zz 0.0000209037

NOTE NM Deleted 11:24:47 AM 12/16/2009

GPSVECTP Point ID 5002 DX -6462.674 DY 2230.703
      Class Del normal DZ -963.601 Code mh#2
      Obs L1 Fixed H.pr 0.021 V.pr 0.034

GPSQCI NM Min SVs 7 PDOP max 1.3
      Relative DOPs Yes HDOP max 0.7
      Total GPS pos 5 VDOP max 1.1
      Monitor status Not monitored RMS 20.9
      Horz SD Vert SD
      Start wk 1545 sec 222855.0 End wk 1545 sec 222861.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
      VCV xx 0.0000355097 VCV xy 0.0000442451
      VCV xz -0.0000109997 VCV yy 0.0000925131
      VCV yz -0.0000206059 VCV zz 0.0000195427

NOTE NM Deleted 11:24:51 AM 12/16/2009

GPSVECTP Point ID 5003 DX -6496.465 DY 2278.225
      Class Del normal DZ -926.694 Code mh#1
      Obs L1 Fixed H.pr 0.021 V.pr 0.032

GPSQCI NM Min SVs 11 PDOP max 1.2
      Relative DOPs Yes HDOP max 0.7
      Total GPS pos 5 VDOP max 1.0
      Monitor status Not monitored RMS 22.4
      Horz SD Vert SD
      Start wk 1545 sec 222896.0 End wk 1545 sec 222902.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
      VCV xx 0.0000324109 VCV xy 0.0000392911
      VCV xz -0.0000097178 VCV yy 0.0000860444
      VCV yz -0.0000183543 VCV zz 0.000020616

NOTE NM Deleted 11:24:56 AM 12/16/2009

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 08/29/2009 Time 10:22:46

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
      Class Control Hgt 1645.648 Code 1_30_09_BASE
      Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
      Antenna Zephyr - Model 2
      Meas To Antenna Phase Center
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measuremt True

GPSREF KI Reference 44501

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| | | | | | |
|--------|----|---------------------------------|----------------------------|---------------|-------------------|
| INIT | KI | Init event | Gained | Week | 1546 |
| | | Init type | On the fly | seconds | 580992.0 |
| | | Init counter | 1 | Point ID | <no text> |
| | | Survey type | Real Time | Plate H.Dist | <null> |
| | | Plate V.Dist | <null> | Plate azimuth | <null> |
| EQUIP | NM | Receiver | SPS881 | Serial no | 4813149404 |
| | | Antenna | R8 Model 2/SPS88x Internal | | |
| | | Meas To | Bottom of antenna mount | | |
| | | Tape adj | 0.000 | Serial no | <no text> |
| | | H.Offset | 0.000 | V.Offset | 0.213 |
| NOTE | NM | Receiver firmware version=3.710 | | | |
| GPSANT | KI | Antenna ht | 6.562 | Measuremt | Uncorrected |
| GPSVEC | TP | Point ID | 5004 | DX | -5248.370 |
| | | Class Del | normal | DZ | -1514.472 |
| | | Obs | L1 Fixed | H.pr | 0.018 |
| | | | | DY | 1198.911 |
| | | | | Code | geocomp-8-29-09 |
| | | | | V.pr | 0.022 |
| GPSQC1 | NM | Min SVs | 13 | PDOP max | 0.9 |
| | | Relative DOPs | Yes | HDOP max | 0.6 |
| | | Total GPS pos | 6 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 14.6 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1546 sec 581045.0 | End wk | 1546 sec 581050.0 |
| GPSQC2 | NM | Ttl satellites | 13 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000157387 | VCV xy | 0.0000136631 |
| | | VCV xz | 0.0000006614 | VCV yy | 0.0000332604 |
| | | VCV yz | -0.0000114632 | VCV zz | 0.0000256359 |
| NOTE | NM | Deleted 11:25:05 AM 12/16/2009 | | | |
| GPSVEC | TP | Point ID | 5005 | DX | -5193.870 |
| | | Class Del | normal | DZ | -1377.234 |
| | | Obs | L1 Fixed | H.pr | 0.015 |
| | | | | DY | 1298.024 |
| | | | | Code | geocomp-8-29-09 |
| | | | | V.pr | 0.020 |
| GPSQC1 | NM | Min SVs | 14 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.5 |
| | | Total GPS pos | 5 | VDOP max | 0.6 |
| | | Monitor status | Not monitored | RMS | 20.8 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1546 sec 581177.0 | End wk | 1546 sec 581184.0 |
| GPSQC2 | NM | Ttl satellites | 14 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000077656 | VCV xy | 0.000006717 |
| | | VCV xz | -0.0000006491 | VCV yy | 0.0000255501 |
| | | VCV yz | -0.0000121512 | VCV zz | 0.0000247213 |
| NOTE | NM | Deleted 11:25:09 AM 12/16/2009 | | | |
| GPSVEC | TP | Point ID | 5006 | DX | -5153.594 |
| | | Class Del | normal | DZ | -1276.739 |
| | | Obs | L1 Fixed | H.pr | 0.016 |
| | | | | DY | 1365.129 |
| | | | | Code | geocomp-8-29-09 |
| | | | | V.pr | 0.019 |
| GPSQC1 | NM | Min SVs | 9 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.5 |
| | | Total GPS pos | 5 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 18.8 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1546 sec 581219.0 | End wk | 1546 sec 581226.0 |
| GPSQC2 | NM | Ttl satellites | 14 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.000010544 | VCV xy | 0.0000080344 |
| | | VCV xz | -0.0000000621 | VCV yy | 0.000023242 |
| | | VCV yz | -0.0000104792 | VCV zz | 0.0000241121 |
| NOTE | NM | Deleted 11:25:15 AM 12/16/2009 | | | |
| GPSVEC | TP | Point ID | 5007 | DX | -5120.637 |
| | | Class Del | normal | DZ | -1193.280 |
| | | Obs | L1 Fixed | H.pr | 0.016 |
| | | | | DY | 1421.231 |
| | | | | Code | geocomp-8-29-09 |
| | | | | V.pr | 0.020 |
| GPSQC1 | NM | Min SVs | 10 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.5 |
| | | Total GPS pos | 5 | VDOP max | 0.6 |
| | | Monitor status | Not monitored | RMS | 22.9 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1546 sec 581259.0 | End wk | 1546 sec 581271.0 |
| GPSQC2 | NM | Ttl satellites | 14 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000118296 | VCV xy | 0.0000093446 |
| | | VCV xz | -0.0000000711 | VCV yy | 0.0000246549 |
| | | VCV yz | -0.0000102294 | VCV zz | 0.0000232101 |
| NOTE | NM | Deleted 11:25:22 AM 12/16/2009 | | | |
| GPSVEC | TP | Point ID | 5008 | DX | -5074.840 |
| | | Class Del | normal | DZ | -1026.098 |
| | | Obs | L1 Fixed | H.pr | 0.016 |
| | | | | DY | 1542.883 |
| | | | | Code | geocomp-8-29-09 |
| | | | | V.pr | 0.020 |
| GPSQC1 | NM | Min SVs | 10 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.5 |
| | | Total GPS pos | 5 | VDOP max | 0.6 |
| | | Monitor status | Not monitored | RMS | 31.3 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1546 sec 581324.0 | End wk | 1546 sec 581334.0 |
| GPSQC2 | NM | Ttl satellites | 10 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000130871 | VCV xy | 0.0000103865 |
| | | VCV xz | -0.0000001807 | VCV yy | 0.0000256323 |
| | | VCV yz | -0.0000102122 | VCV zz | 0.0000232862 |

NOTE NM Deleted 11:25:27 AM 12/16/2009

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 11/16/2009 Time 14:49:54

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measuremt True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1558
Init type On the fly seconds 168641.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 03/04/2010 Time 07:24:20

NOTE NM Following data imported from 4-9-09 - BMI-SOUTH LINER.csv

LINE KI Line Line0003 Code <no text>
Start Pt 10193 End Pt 10194
St North 17449.246 End North 17517.439
St East 14229.294 End East 14252.864
St Elev -99999.000 End Elev -99999.000
Start Stn 0.000 Stn Int <null>

LINE KI Line Line0004 Code <no text>
Start Pt 10194 End Pt 10195
St North 17517.439 End North 17533.058
St East 14252.864 End East 14235.943
St Elev -99999.000 End Elev -99999.000
Start Stn 0.000 Stn Int <null>

LINE KI Line Line0005 Code <no text>
Start Pt 10175 End Pt 10176
St North 17487.463 End North 17464.508
St East 15001.119 End East 14999.675
St Elev -99999.000 End Elev -99999.000
Start Stn 0.000 Stn Int <null>

LINE KI Line Line0006 Code <no text>
Start Pt 10202 End Pt 10175
St North 17493.446 End North 17487.463
St East 14903.473 End East 15001.119
St Elev -99999.000 End Elev -99999.000
Start Stn 0.000 Stn Int <null>

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS SI Point ID 60000 Lat 36°03'20.28840"N Lng 115°01'24.44658"W
Class Control Hgt 1657.677 Code NEW_BASE_1_7_10
Obs User Input H.pr <null> V.pr <null>

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 60000 Lat 36°03'20.28840"N Lng 115°01'24.44658"W
Class Control Hgt 1657.677 Code NEW_BASE_1_7_10
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 5.151 Measuremt True

GPSREF KI Reference 60000

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INIT   KI   Init event   Gained           Week           1573
         Init type     On the fly      seconds        401472.0
         Init counter   1              Point ID       <no text>
         Survey type    Real Time      Plate H.Dist   <null>
         Plate V.Dist   <null>         Plate azimuth  <null>

SURVEY EVENTKISurvey event Communications error

NOTE   TS   Time Date 03/04/2010 Time 07:56:09

SURVEY EVENTKISurvey event Survey ended

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI   Antenna ht 0.000                  Measuremt True

GPSPOS FD   Point ID 60000                    Lat 36°03'20.28840"N Lng 115°01'24.44658"W
         Class Control Hgt 1657.677              Code NEW_BASE_1_7_10
         Obs User Input H.pr <null>                V.pr <null>

EQUIP SI   Receiver SPS851                      Serial no <no text>
         Antenna Zephyr - Model 2
         Meas To Antenna Phase Center
         Tape adj 0.000                      Serial no <no text>
         H.Offset 0.000                      V.Offset 0.000

NOTE NM   Receiver firmware version=0.000

GPSANT KI   Antenna ht 5.151                  Measuremt True

GPSREF KI   Reference 60000

INIT   KI   Init event   Gained           Week           1573
         Init type     On the fly      seconds        404571.0
         Init counter   1              Point ID       <no text>
         Survey type    Real Time      Plate H.Dist   <null>
         Plate V.Dist   <null>         Plate azimuth  <null>

NOTE   TS   Time Date 03/04/2010 Time 09:45:13

SURVEY EVENTKISurvey event Survey ended

NOTE   TS   Time Date 03/10/2010 Time 11:34:52

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI   Antenna ht 0.000                  Measuremt True

GPSPOS FD   Point ID 60000                    Lat 36°03'20.28840"N Lng 115°01'24.44658"W
         Class Control Hgt 1657.677              Code NEW_BASE_1_7_10
         Obs User Input H.pr <null>                V.pr <null>

EQUIP SI   Receiver SPS851                      Serial no <no text>
         Antenna Zephyr - Model 2
         Meas To Antenna Phase Center
         Tape adj 0.000                      Serial no <no text>
         H.Offset 0.000                      V.Offset 0.000

NOTE NM   Receiver firmware version=0.000

GPSANT KI   Antenna ht 5.151                  Measuremt True

GPSREF KI   Reference 60000

INIT   KI   Init event   Gained           Week           1574
         Init type     On the fly      seconds        329747.0
         Init counter   1              Point ID       <no text>
         Survey type    Real Time      Plate H.Dist   <null>
         Plate V.Dist   <null>         Plate azimuth  <null>

SURVEY EVENTKISurvey event Survey ended

NOTE   TS   Time Date 03/10/2010 Time 13:08:49

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY KI   Elev mask 10                      PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI   Antenna ht 0.000                  Measuremt True

GPSPOS FD   Point ID 60000                    Lat 36°03'20.28840"N Lng 115°01'24.44658"W
         Class Control Hgt 1657.677              Code NEW_BASE_1_7_10
         Obs User Input H.pr <null>                V.pr <null>

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| | | | | | |
|--------|----|---------------------------------|----------------------------|---------------|-------------------|
| EQUIP | SI | Receiver | SPS851 | Serial no | <no text> |
| | | Antenna | Zephyr - Model 2 | | |
| | | Meas To | Antenna Phase Center | | |
| | | Tape adj | 0.000 | Serial no | <no text> |
| | | H.Offset | 0.000 | V.Offset | 0.000 |
| NOTE | NM | Receiver firmware version=0.000 | | | |
| GPSANT | KI | Antenna ht | 5.151 | Measuremt | True |
| GPSREF | KI | Reference | 60000 | | |
| INIT | KI | Init event | Gained | Week | 1574 |
| | | Init type | On the fly | seconds | 335364.0 |
| | | Init counter | 1 | Point ID | <no text> |
| | | Survey type | Real Time | Plate H.Dist | <null> |
| | | Plate V.Dist | <null> | Plate azimuth | <null> |
| EQUIP | NM | Receiver | SPS881 | Serial no | 4813149404 |
| | | Antenna | R8 Model 2/SPS88x Internal | | |
| | | Meas To | Bottom of antenna mount | | |
| | | Tape adj | 0.000 | Serial no | <no text> |
| | | H.Offset | 0.000 | V.Offset | 0.213 |
| NOTE | NM | Receiver firmware version=3.710 | | | |
| GPSANT | KI | Antenna ht | 6.562 | Measuremt | Uncorrected |
| GPSVEC | TP | Point ID | 5009 | DX | 1732.456 |
| | | Class | Normal | DZ | -2642.705 |
| | | Obs | L1 Fixed | Code | slope-chk |
| | | | | H.pr | 0.015 |
| | | | | V.pr | 0.021 |
| GPSQC1 | NM | Min SVs | 16 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.5 |
| | | Total GPS pos | 5 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 13.3 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1574 sec 335414.0 | End wk | 1574 sec 335419.0 |
| GPSQC2 | NM | Ttl satellites | 16 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000143895 | VCV xy | 0.0000139448 |
| | | VCV xz | -0.0000089324 | VCV yy | 0.0000288397 |
| | | VCV yz | -0.0000075556 | VCV zz | 0.000016431 |
| GPSVEC | TP | Point ID | 5010 | DX | 1741.221 |
| | | Class | Normal | DZ | -2612.780 |
| | | Obs | L1 Fixed | Code | slope-chk |
| | | | | H.pr | 0.015 |
| | | | | V.pr | 0.021 |
| GPSQC1 | NM | Min SVs | 10 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.5 |
| | | Total GPS pos | 6 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 21.4 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1574 sec 335433.0 | End wk | 1574 sec 335439.0 |
| GPSQC2 | NM | Ttl satellites | 10 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000144112 | VCV xy | 0.0000139607 |
| | | VCV xz | -0.0000088665 | VCV yy | 0.000029778 |
| | | VCV yz | -0.0000076546 | VCV zz | 0.0000162973 |
| GPSVEC | TP | Point ID | 5011 | DX | 1641.483 |
| | | Class | Normal | DZ | -2596.814 |
| | | Obs | L1 Fixed | Code | slope-chk |
| | | | | H.pr | 0.014 |
| | | | | V.pr | 0.020 |
| GPSQC1 | NM | Min SVs | 16 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.6 |
| | | Monitor status | Not monitored | RMS | 20.2 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1574 sec 335488.0 | End wk | 1574 sec 335493.0 |
| GPSQC2 | NM | Ttl satellites | 16 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000142688 | VCV xy | 0.0000133782 |
| | | VCV xz | -0.0000092348 | VCV yy | 0.0000251993 |
| | | VCV yz | -0.000008222 | VCV zz | 0.0000165269 |
| GPSVEC | TP | Point ID | 5012 | DX | 1634.539 |
| | | Class | Normal | DZ | -2617.860 |
| | | Obs | L1 Fixed | Code | slope-chk |
| | | | | H.pr | 0.014 |
| | | | | V.pr | 0.020 |
| GPSQC1 | NM | Min SVs | 16 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 5 | VDOP max | 0.6 |
| | | Monitor status | Not monitored | RMS | 22.5 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1574 sec 335505.0 | End wk | 1574 sec 335511.0 |
| GPSQC2 | NM | Ttl satellites | 16 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000144526 | VCV xy | 0.0000136443 |
| | | VCV xz | -0.0000090573 | VCV yy | 0.0000269994 |
| | | VCV yz | -0.0000079183 | VCV zz | 0.0000149926 |
| GPSVEC | TP | Point ID | 5013 | DX | 1618.311 |
| | | Class | Normal | DZ | -2612.643 |
| | | Obs | L1 Fixed | Code | slope-chk |
| | | | | H.pr | 0.014 |
| | | | | V.pr | 0.020 |
| GPSQC1 | NM | Min SVs | 9 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.5 |
| | | Total GPS pos | 5 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 24.6 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1574 sec 335543.0 | End wk | 1574 sec 335548.0 |

```

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000129483 VCV xy 0.0000125105
VCV xz -0.0000071823 VCV yy 0.0000264488
VCV yz -0.0000066867 VCV zz 0.0000139938

GPSVEC TP Point ID 5014 DX 1623.055 DY -2879.697
Class Normal DZ -2595.965 Code slope-chk
Obs L1 Fixed H.pr 0.014 V.pr 0.020

GPSQC1 NM Min SVs 16 PDOP max 0.8
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.6
Monitor status Not monitored RMS 18.1
Horz SD Vert SD
Start wk 1574 sec 335560.0 End wk 1574 sec 335565.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000139356 VCV xy 0.0000133916
VCV xz -0.0000076851 VCV yy 0.0000285378
VCV yz -0.0000073448 VCV zz 0.0000148573

LINE KI Line Line0007 Code <no text>
Start Pt 60003 End Pt 60001
St North 17450.141 End North 17294.080
St East 14981.454 End East 14899.230
St Elev <null> End Elev <null>
Start Stn 0.000 Stn Int <null>

LINE KI Line Line0008 Code <no text>
Start Pt 60002 End Pt 60001
St North 17173.985 End North 17294.080
St East 14965.128 End East 14899.230
St Elev <null> End Elev <null>
Start Stn 0.000 Stn Int <null>

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 03/15/2010 Time 05:45:43

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 60000 Lat 36°03'20.28840"N Lng 115°01'24.44658"W
Class Control Hgt 1657.677 Code NEW BASE_1_7_10
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 5.151 Measuremt True

GPSREF KI Reference 60000

INIT KI Init event Gained Week 1575
Init type On the fly seconds 135969.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

NOTE TS Time Date 03/15/2010 Time 06:31:48

EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 6.562 Measuremt Uncorrected

GPSVEC TP Point ID 5015 DX 2056.027 DY -3005.210
Class Normal DZ -2502.245 Code R-82-PS
Obs L1 Fixed H.pr 0.013 V.pr 0.022

GPSQC1 NM Min SVs 10 PDOP max 0.8
Relative DOPs Yes HDOP max 0.4
Total GPS pos 5 VDOP max 0.7
Monitor status Not monitored RMS 16.9
Horz SD Vert SD
Start wk 1575 sec 138719.0 End wk 1575 sec 138724.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000105622 VCV xy 0.0000108694
VCV xz -0.000007787 VCV yy 0.0000363699
VCV yz -0.000013512 VCV zz 0.0000167236

GPSVEC TP Point ID 5016 DX 2055.306 DY -3006.467
Class Normal DZ -2504.143 Code R-82-PS
Obs L1 Fixed H.pr 0.013 V.pr 0.022

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GPSQC1 NM Min SVs 10 PDOP max 0.8
          Relative DOPs Yes HDOP max 0.4
          Total GPS pos 5 VDOP max 0.7
          Monitor status Not monitored RMS 21.9
          Horz SD Vert SD
          Start wk 1575 sec 138729.0 End wk 1575 sec 138734.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000105309 VCV xy 0.0000108654
          VCV xz -0.0000077517 VCV yy 0.0000364084
          VCV yz -0.0000134866 VCV zz 0.0000166441

GPSVEC TP Point ID 5017 DX 2056.041 DY -3006.713
          Class Normal DZ -2504.054 Code R-82-PS
          Obs L1 Fixed H.pr 0.013 V.pr 0.022

GPSQC1 NM Min SVs 16 PDOP max 0.8
          Relative DOPs Yes HDOP max 0.4
          Total GPS pos 6 VDOP max 0.7
          Monitor status Not monitored RMS 17.2
          Horz SD Vert SD
          Start wk 1575 sec 138739.0 End wk 1575 sec 138744.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.00001036 VCV xy 0.0000106583
          VCV xz -0.0000076031 VCV yy 0.0000357397
          VCV yz -0.0000132177 VCV zz 0.0000163527

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 03/16/2010 Time 06:44:07

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 60000 Lat 36°03'20.28840"N Lng 115°01'24.44658"W
          Class Control Hgt 1657.677 Code NEW_BASE_1_7_10
          Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000 Serial no <no text>
          H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 5.151 Measurement True

GPSREF KI Reference 60000

INIT KI Init event Gained Week 1575
          Init type On the fly seconds 225970.0
          Init counter 1 Point ID <no text>
          Survey type Real Time Plate H.Dist <null>
          Plate V.Dist <null> Plate azimuth <null>

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 03/16/2010 Time 08:13:03

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 60000 Lat 36°03'20.28840"N Lng 115°01'24.44658"W
          Class Control Hgt 1657.677 Code NEW_BASE_1_7_10
          Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000 Serial no <no text>
          H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 5.151 Measurement True

GPSREF KI Reference 60000

INIT KI Init event Gained Week 1575
          Init type On the fly seconds 231210.0
          Init counter 1 Point ID <no text>
          Survey type Real Time Plate H.Dist <null>
          Plate V.Dist <null> Plate azimuth <null>

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| | | | | | |
|--------|----|---------------------------------|----------------------------|-----------|-------------------|
| EQUIP | NM | Receiver | SPS881 | Serial no | 4813149404 |
| | | Antenna | R8 Model 2/SPS88x Internal | | |
| | | Meas To | Bottom of antenna mount | | |
| | | Tape adj | 0.000 | Serial no | <no text> |
| | | H.Offset | 0.000 | V.Offset | 0.213 |
| NOTE | NM | Receiver firmware version=3.710 | | | |
| GPSANT | KI | Antenna ht | 6.562 | Measuremt | Uncorrected |
| GPSVEC | TP | Point ID | 5018 | DX | 1593.444 |
| | | Class | Normal | DZ | -2634.878 |
| | | Obs | L1 Fixed | Code | FINAL-ASB-LIMIT |
| | | | | H.pr | 0.013 |
| | | | | V.pr | 0.023 |
| GPSQC1 | NM | Min SVs | 13 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 12.8 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1575 sec 231244.0 | End wk | 1575 sec 231249.0 |
| GPSQC2 | NM | Ttl satellites | 13 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000147082 | VCV xy | 0.0000127906 |
| | | VCV xz | -0.0000065142 | VCV yy | 0.0000307258 |
| | | VCV yz | -0.0000156683 | VCV zz | 0.0000185033 |
| GPSVEC | TP | Point ID | 5019 | DX | 1627.706 |
| | | Class | Normal | DZ | -2637.803 |
| | | Obs | L1 Fixed | Code | FINAL-ASB-LIMIT |
| | | | | H.pr | 0.013 |
| | | | | V.pr | 0.023 |
| GPSQC1 | NM | Min SVs | 13 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 29.1 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1575 sec 231267.0 | End wk | 1575 sec 231272.0 |
| GPSQC2 | NM | Ttl satellites | 13 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000146256 | VCV xy | 0.0000127878 |
| | | VCV xz | -0.0000065105 | VCV yy | 0.0000306945 |
| | | VCV yz | -0.0000156491 | VCV zz | 0.000018367 |
| GPSVEC | TP | Point ID | 5020 | DX | 1661.436 |
| | | Class | Normal | DZ | -2640.222 |
| | | Obs | L1 Fixed | Code | FINAL-ASB-LIMIT |
| | | | | H.pr | 0.013 |
| | | | | V.pr | 0.023 |
| GPSQC1 | NM | Min SVs | 13 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 24.7 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1575 sec 231289.0 | End wk | 1575 sec 231294.0 |
| GPSQC2 | NM | Ttl satellites | 13 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000146664 | VCV xy | 0.0000128704 |
| | | VCV xz | -0.0000065616 | VCV yy | 0.0000309201 |
| | | VCV yz | -0.0000157613 | VCV zz | 0.0000184078 |
| GPSVEC | TP | Point ID | 5021 | DX | 1698.802 |
| | | Class | Normal | DZ | -2643.070 |
| | | Obs | L1 Fixed | Code | FINAL-ASB-LIMIT |
| | | | | H.pr | 0.013 |
| | | | | V.pr | 0.023 |
| GPSQC1 | NM | Min SVs | 13 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 5 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 22.5 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1575 sec 231312.0 | End wk | 1575 sec 231317.0 |
| GPSQC2 | NM | Ttl satellites | 13 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000145996 | VCV xy | 0.0000128562 |
| | | VCV xz | -0.0000065611 | VCV yy | 0.0000309 |
| | | VCV yz | -0.0000157351 | VCV zz | 0.0000182831 |
| GPSVEC | TP | Point ID | 5022 | DX | 1745.761 |
| | | Class | Normal | DZ | -2646.617 |
| | | Obs | L1 Fixed | Code | FINAL-ASB-LIMIT |
| | | | | H.pr | 0.013 |
| | | | | V.pr | 0.021 |
| GPSQC1 | NM | Min SVs | 13 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 28.0 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1575 sec 231337.0 | End wk | 1575 sec 231342.0 |
| GPSQC2 | NM | Ttl satellites | 13 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000140063 | VCV xy | 0.0000120578 |
| | | VCV xz | -0.0000056935 | VCV yy | 0.0000280127 |
| | | VCV yz | -0.0000123007 | VCV zz | 0.0000139672 |
| GPSVEC | TP | Point ID | 5023 | DX | 1768.931 |
| | | Class | Normal | DZ | -2654.085 |
| | | Obs | L1 Fixed | Code | FINAL-ASB-LIMIT |
| | | | | H.pr | 0.013 |
| | | | | V.pr | 0.022 |
| GPSQC1 | NM | Min SVs | 13 | PDOP max | 0.8 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 23.1 |
| | | Horz SD | | Vert SD | |
| | | Start wk | 1575 sec 231362.0 | End wk | 1575 sec 231367.0 |


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GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000143081 VCV xy 0.0000124623
VCV xz -0.0000061032 VCV yy 0.0000294719
VCV yz -0.0000137547 VCV zz 0.0000156842

GPSVEC TP Point ID 5024 DX 1799.437 DY -3005.441
Class Del normal DZ -2663.426 Code FINAL-ASB-LIMIT
Obs L1 Fixed H.pr 0.013 V.pr 0.022

GPSQC1 NM Min SVs 9 PDOP max 0.8
Relative DOPs Yes HDOP max 0.4
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 22.4
Horz SD Vert SD
Start wk 1575 sec 231383.0 End wk 1575 sec 231397.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000138275 VCV xy 0.0000121525
VCV xz -0.0000060516 VCV yy 0.0000289363
VCV yz -0.0000138813 VCV zz 0.0000157813

NOTE NM Deleted 8:16:58 AM 3/16/2010

SURVEY EVENTKISurvey event Communications error

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 60000 Lat 36°03'20.28840"N Lng 115°01'24.44658"W
Class Control Hgt 1657.677 Code NEW_BASE_1_7_10
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 5.151 Measurement True

GPSREF KI Reference 60000

INIT KI Init event Gained Week 1575
Init type On the fly seconds 231448.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 6.562 Measurement Uncorrected

GPSVEC TP Point ID 5024 DX 1799.442 DY -3005.442
Class Normal DZ -2663.440 Code FINAL-ASB-LIMIT
Obs L1 Fixed H.pr 0.013 V.pr 0.023

GPSQC1 NM Min SVs 13 PDOP max 0.8
Relative DOPs Yes HDOP max 0.4
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 15.9
Horz SD Vert SD
Start wk 1575 sec 231462.0 End wk 1575 sec 231467.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000149866 VCV xy 0.000013466
VCV xz -0.0000068488 VCV yy 0.0000323109
VCV yz -0.0000160084 VCV zz 0.0000179517

GPSVEC TP Point ID 5025 DX 1839.702 DY -3034.772
Class Normal DZ -2675.849 Code FINAL-ASB-LIMIT
Obs L1 Fixed H.pr 0.013 V.pr 0.023

GPSQC1 NM Min SVs 13 PDOP max 0.8
Relative DOPs Yes HDOP max 0.4
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 26.2
Horz SD Vert SD
Start wk 1575 sec 231485.0 End wk 1575 sec 231490.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000151575 VCV xy 0.0000136926
VCV xz -0.0000069727 VCV yy 0.0000328512
VCV yz -0.0000162943 VCV zz 0.0000181727

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| | | | | | | |
|--------|----|------------------------------|------|--------------------------|--------------|-----------------|
| GPSVEC | TP | Point ID 5026 | DX | 1843.334 | DY | -3036.776 |
| | | Class Normal | DZ | -2676.107 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr | 0.013 | V.pr | 0.023 |
| GPSQC1 | NM | Min SVs 13 | | PDOP max | 0.8 | |
| | | Relative DOPs Yes | | HDOP max | 0.4 | |
| | | Total GPS pos 6 | | VDOP max | 0.7 | |
| | | Monitor status Not monitored | | RMS | 21.2 | |
| | | Horz SD | | Vert SD | | |
| | | Start wk 1575 sec 231498.0 | | End wk 1575 sec 231503.0 | | |
| GPSQC2 | NM | Ttl satellites 13 | | Err Scale | 0.0099999998 | |
| | | VCV xx 0.0000151514 | | VCV xy | 0.0000137177 | |
| | | VCV xz -0.0000069914 | | VCV yy | 0.0000329207 | |
| | | VCV yz -0.0000163314 | | VCV zz | 0.0000181636 | |
| GPSVEC | TP | Point ID 5027 | DX | 1899.932 | DY | -3065.640 |
| | | Class Normal | DZ | -2678.127 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr | 0.013 | V.pr | 0.023 |
| GPSQC1 | NM | Min SVs 13 | | PDOP max | 0.9 | |
| | | Relative DOPs Yes | | HDOP max | 0.4 | |
| | | Total GPS pos 6 | | VDOP max | 0.7 | |
| | | Monitor status Not monitored | | RMS | 26.7 | |
| | | Horz SD | | Vert SD | | |
| | | Start wk 1575 sec 231524.0 | | End wk 1575 sec 231529.0 | | |
| GPSQC2 | NM | Ttl satellites 13 | | Err Scale | 0.0099999998 | |
| | | VCV xx 0.0000153124 | | VCV xy | 0.0000139217 | |
| | | VCV xz -0.0000071103 | | VCV yy | 0.0000334526 | |
| | | VCV yz -0.0000165923 | | VCV zz | 0.0000183509 | |
| GPSVEC | TP | Point ID 5028 | DX | 1937.158 | DY | -3084.181 |
| | | Class Normal | DZ | -2679.832 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr | 0.013 | V.pr | 0.023 |
| GPSQC1 | NM | Min SVs 13 | | PDOP max | 0.8 | |
| | | Relative DOPs Yes | | HDOP max | 0.4 | |
| | | Total GPS pos 6 | | VDOP max | 0.7 | |
| | | Monitor status Not monitored | | RMS | 26.7 | |
| | | Horz SD | | Vert SD | | |
| | | Start wk 1575 sec 231545.0 | | End wk 1575 sec 231550.0 | | |
| GPSQC2 | NM | Ttl satellites 13 | | Err Scale | 0.0099999998 | |
| | | VCV xx 0.0000153136 | | VCV xy | 0.0000139663 | |
| | | VCV xz -0.0000071415 | | VCV yy | 0.0000335848 | |
| | | VCV yz -0.0000166428 | | VCV zz | 0.0000183226 | |
| GPSVEC | TP | Point ID 5029 | DX | 1965.747 | DY | -3098.719 |
| | | Class Normal | DZ | -2681.089 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr | 0.014 | V.pr | 0.023 |
| GPSQC1 | NM | Min SVs 13 | | PDOP max | 0.9 | |
| | | Relative DOPs Yes | | HDOP max | 0.4 | |
| | | Total GPS pos 6 | | VDOP max | 0.7 | |
| | | Monitor status Not monitored | | RMS | 26.7 | |
| | | Horz SD | | Vert SD | | |
| | | Start wk 1575 sec 231564.0 | | End wk 1575 sec 231569.0 | | |
| GPSQC2 | NM | Ttl satellites 13 | | Err Scale | 0.0099999998 | |
| | | VCV xx 0.0000154147 | | VCV xy | 0.0000140941 | |
| | | VCV xz -0.000007215 | | VCV yy | 0.0000339273 | |
| | | VCV yz -0.000016794 | | VCV zz | 0.0000184179 | |
| GPSVEC | TP | Point ID 5030 | DX | 2007.037 | DY | -3119.797 |
| | | Class Normal | DZ | -2682.498 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr | 0.014 | V.pr | 0.024 |
| GPSQC1 | NM | Min SVs 13 | | PDOP max | 0.9 | |
| | | Relative DOPs Yes | | HDOP max | 0.4 | |
| | | Total GPS pos 6 | | VDOP max | 0.7 | |
| | | Monitor status Not monitored | | RMS | 26.8 | |
| | | Horz SD | | Vert SD | | |
| | | Start wk 1575 sec 231586.0 | | End wk 1575 sec 231591.0 | | |
| GPSQC2 | NM | Ttl satellites 13 | | Err Scale | 0.0099999998 | |
| | | VCV xx 0.000015525 | | VCV xy | 0.0000142359 | |
| | | VCV xz -0.0000072975 | | VCV yy | 0.0000343144 | |
| | | VCV yz -0.0000169609 | | VCV zz | 0.0000185162 | |
| GPSVEC | TP | Point ID 5031 | DX | 2051.545 | DY | -3141.635 |
| | | Class Normal | DZ | -2683.668 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr | 0.014 | V.pr | 0.024 |
| GPSQC1 | NM | Min SVs 13 | | PDOP max | 0.9 | |
| | | Relative DOPs Yes | | HDOP max | 0.4 | |
| | | Total GPS pos 5 | | VDOP max | 0.7 | |
| | | Monitor status Not monitored | | RMS | 27.7 | |
| | | Horz SD | | Vert SD | | |
| | | Start wk 1575 sec 231610.0 | | End wk 1575 sec 231615.0 | | |
| GPSQC2 | NM | Ttl satellites 13 | | Err Scale | 0.0099999998 | |
| | | VCV xx 0.0000156497 | | VCV xy | 0.0000143932 | |
| | | VCV xz -0.0000073888 | | VCV yy | 0.0000347489 | |
| | | VCV yz -0.000017145 | | VCV zz | 0.0000186251 | |
| GPSVEC | TP | Point ID 5032 | DX | 2065.266 | DY | -3123.673 |
| | | Class Normal | DZ | -2652.583 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr | 0.014 | V.pr | 0.024 |

| | | | | | |
|--------|----|----------------------------|---------------|--------------------------|-----------------|
| GPSQC1 | NM | Min SVs | 9 | PDOP max | 0.9 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 5 | VDOP max | 0.7 |
| | | Monitor status | Not monitored | RMS | 26.0 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231633.0 | | End wk 1575 sec 231639.0 | |
| GPSQC2 | NM | Ttl satellites | 13 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000156143 | VCV xy | 0.0000143952 |
| | | VCV xz | -0.0000074033 | VCV yy | 0.0000348369 |
| | | VCV yz | -0.0000171611 | VCV zz | 0.0000185643 |
| GPSVEC | TP | Point ID 5033 | DX 2081.466 | DY | -3102.046 |
| | | Class Normal | DZ -2614.117 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs | 12 | PDOP max | 0.9 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.8 |
| | | Monitor status | Not monitored | RMS | 17.8 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231708.0 | | End wk 1575 sec 231713.0 | |
| GPSQC2 | NM | Ttl satellites | 12 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000171583 | VCV xy | 0.0000164291 |
| | | VCV xz | -0.000008467 | VCV yy | 0.0000380382 |
| | | VCV yz | -0.0000186604 | VCV zz | 0.0000192401 |
| GPSVEC | TP | Point ID 5034 | DX 2092.463 | DY | -3080.858 |
| | | Class Normal | DZ -2580.000 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs | 12 | PDOP max | 0.9 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 5 | VDOP max | 0.8 |
| | | Monitor status | Not monitored | RMS | 18.8 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231739.0 | | End wk 1575 sec 231745.0 | |
| GPSQC2 | NM | Ttl satellites | 12 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000173126 | VCV xy | 0.0000167723 |
| | | VCV xz | -0.0000086254 | VCV yy | 0.0000384101 |
| | | VCV yz | -0.0000187725 | VCV zz | 0.0000190669 |
| GPSVEC | TP | Point ID 5035 | DX 2100.096 | DY | -3066.815 |
| | | Class Normal | DZ -2557.468 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs | 8 | PDOP max | 0.9 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 5 | VDOP max | 0.8 |
| | | Monitor status | Not monitored | RMS | 16.0 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231760.0 | | End wk 1575 sec 231765.0 | |
| GPSQC2 | NM | Ttl satellites | 12 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000176584 | VCV xy | 0.0000172682 |
| | | VCV xz | -0.0000088272 | VCV yy | 0.0000392141 |
| | | VCV yz | -0.0000190643 | VCV zz | 0.0000191627 |
| GPSVEC | TP | Point ID 5036 | DX 2111.947 | DY | -3052.316 |
| | | Class Normal | DZ -2533.273 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs | 12 | PDOP max | 0.9 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.8 |
| | | Monitor status | Not monitored | RMS | 18.5 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231784.0 | | End wk 1575 sec 231789.0 | |
| GPSQC2 | NM | Ttl satellites | 12 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000176291 | VCV xy | 0.000017294 |
| | | VCV xz | -0.0000088606 | VCV yy | 0.0000393162 |
| | | VCV yz | -0.000019092 | VCV zz | 0.0000190894 |
| GPSVEC | TP | Point ID 5037 | DX 2123.615 | DY | -3036.173 |
| | | Class Normal | DZ -2507.070 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs | 12 | PDOP max | 0.9 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.8 |
| | | Monitor status | Not monitored | RMS | 20.7 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231804.0 | | End wk 1575 sec 231809.0 | |
| GPSQC2 | NM | Ttl satellites | 12 | Err Scale | 0.0099999998 |
| | | VCV xx | 0.0000174907 | VCV xy | 0.0000172049 |
| | | VCV xz | -0.0000088223 | VCV yy | 0.0000391527 |
| | | VCV yz | -0.0000189838 | VCV zz | 0.0000189022 |
| GPSVEC | TP | Point ID 5038 | DX 2133.730 | DY | -3022.045 |
| | | Class Normal | DZ -2484.105 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs | 12 | PDOP max | 0.9 |
| | | Relative DOPs | Yes | HDOP max | 0.4 |
| | | Total GPS pos | 6 | VDOP max | 0.8 |
| | | Monitor status | Not monitored | RMS | 16.4 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231823.0 | | End wk 1575 sec 231828.0 | |

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|--------|----|------------------------------|--------------|--------------------------|-----------------|
| GPSQC2 | NM | Ttl satellites 12 | | Err Scale | 0.0099999998 |
| | | VCV xx 0.0000173972 | | VCV xy | 0.0000171619 |
| | | VCV xz -0.0000087997 | | VCV yy | 0.000039086 |
| | | VCV yz -0.0000189135 | | VCV zz | 0.0000187568 |
| GPSVEC | TP | Point ID 5039 | DX 2147.995 | DY | -3003.344 |
| | | Class Normal | DZ -2453.700 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs 12 | | PDOP max | 0.9 |
| | | Relative DOPs Yes | | HDOP max | 0.4 |
| | | Total GPS pos 6 | | VDOP max | 0.8 |
| | | Monitor status Not monitored | | RMS | 20.6 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231851.0 | | End wk 1575 sec 231856.0 | |
| GPSQC2 | NM | Ttl satellites 12 | | Err Scale | 0.0099999998 |
| | | VCV xx 0.0000174045 | | VCV xy | 0.0000172542 |
| | | VCV xz -0.0000088362 | | VCV yy | 0.0000393343 |
| | | VCV yz -0.000018962 | | VCV zz | 0.0000186854 |
| GPSVEC | TP | Point ID 5040 | DX 2164.305 | DY | -2981.196 |
| | | Class Normal | DZ -2418.453 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs 12 | | PDOP max | 0.9 |
| | | Relative DOPs Yes | | HDOP max | 0.4 |
| | | Total GPS pos 5 | | VDOP max | 0.8 |
| | | Monitor status Not monitored | | RMS | 18.4 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231921.0 | | End wk 1575 sec 231927.0 | |
| GPSQC2 | NM | Ttl satellites 12 | | Err Scale | 0.0099999998 |
| | | VCV xx 0.0000173254 | | VCV xy | 0.0000173007 |
| | | VCV xz -0.0000088775 | | VCV yy | 0.0000398329 |
| | | VCV yz -0.0000190697 | | VCV zz | 0.0000185857 |
| GPSVEC | TP | Point ID 5041 | DX 2172.303 | DY | -2967.620 |
| | | Class Normal | DZ -2400.573 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs 8 | | PDOP max | 0.9 |
| | | Relative DOPs Yes | | HDOP max | 0.4 |
| | | Total GPS pos 6 | | VDOP max | 0.8 |
| | | Monitor status Not monitored | | RMS | 17.9 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231941.0 | | End wk 1575 sec 231946.0 | |
| GPSQC2 | NM | Ttl satellites 12 | | Err Scale | 0.0099999998 |
| | | VCV xx 0.0000174715 | | VCV xy | 0.0000175261 |
| | | VCV xz -0.0000089631 | | VCV yy | 0.0000403349 |
| | | VCV yz -0.0000192294 | | VCV zz | 0.0000186472 |
| GPSVEC | TP | Point ID 5042 | DX 2186.548 | DY | -2943.077 |
| | | Class Normal | DZ -2367.119 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs 12 | | PDOP max | 0.9 |
| | | Relative DOPs Yes | | HDOP max | 0.4 |
| | | Total GPS pos 6 | | VDOP max | 0.8 |
| | | Monitor status Not monitored | | RMS | 21.3 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 231966.0 | | End wk 1575 sec 231971.0 | |
| GPSQC2 | NM | Ttl satellites 12 | | Err Scale | 0.0099999998 |
| | | VCV xx 0.0000171316 | | VCV xy | 0.0000171831 |
| | | VCV xz -0.0000088183 | | VCV yy | 0.0000398024 |
| | | VCV yz -0.000018961 | | VCV zz | 0.00001836 |
| GPSVEC | TP | Point ID 5043 | DX 2196.702 | DY | -2923.329 |
| | | Class Normal | DZ -2339.143 | Code | FINAL-ASB-LIMIT |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.025 |
| GPSQC1 | NM | Min SVs 12 | | PDOP max | 0.9 |
| | | Relative DOPs Yes | | HDOP max | 0.4 |
| | | Total GPS pos 6 | | VDOP max | 0.8 |
| | | Monitor status Not monitored | | RMS | 20.1 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 232089.0 | | End wk 1575 sec 232094.0 | |
| GPSQC2 | NM | Ttl satellites 12 | | Err Scale | 0.0099999998 |
| | | VCV xx 0.0000172296 | | VCV xy | 0.0000175138 |
| | | VCV xz -0.0000089761 | | VCV yy | 0.0000413031 |
| | | VCV yz -0.0000193736 | | VCV zz | 0.0000184142 |
| GPSVEC | SO | Point ID 5044 | DX 1975.962 | DY | -3241.901 |
| | | Class Stake out | DZ -2848.501 | Code | CP-104POSTCHK |
| | | Obs L1 Fixed | H.pr 0.014 | V.pr | 0.024 |
| GPSQC1 | NM | Min SVs 13 | | PDOP max | 0.9 |
| | | Relative DOPs Yes | | HDOP max | 0.4 |
| | | Total GPS pos 6 | | VDOP max | 0.7 |
| | | Monitor status Not monitored | | RMS | 12.1 |
| | | Horz SD | | Vert SD | |
| | | Start wk 1575 sec 232529.0 | | End wk 1575 sec 232534.0 | |
| GPSQC2 | NM | Ttl satellites 13 | | Err Scale | 0.0099999998 |
| | | VCV xx 0.0000164621 | | VCV xy | 0.0000156228 |
| | | VCV xz -0.0000079784 | | VCV yy | 0.0000381535 |
| | | VCV yz -0.0000169188 | | VCV zz | 0.0000164526 |
| PT DGN | SO | Name 106 | | To the Point | |

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|--------|----|-----------|-------|---------|-------|
| GRID D | SO | Delta N | 0.003 | Delta E | 0.016 |
| | | Delta Elv | 0.017 | | |

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