```
wv1_i2g_colo1b
eph_start_time =
                    9.54514
first_line_time =
                  16.876479
avg_line_rate =
         24000
dtl =
       4.16666666666667e-05
dte =
                      0.02
do for point CORS DSRC
line =
                   20385.5
samp =
                   18499.5
h =
                  1657.161
vec0 =
                   0.05372
                  140.71193
                   7949.165
vec_img =
                         0
                  -147.996
                         0
vSensor =
                   0.05372
          -7.28407000000001
                   7949.165
vSensor =
       6.75793966352817e-06
      -0.00091633107901928
         0.999999580145754
vSat =
       6.75793966352817e-06
      -0.00091633107901928
         0.999999580145754
tline =
          17.7258748333333
num_intvl =
          409.036741666667
nintvl =
   409
frac =
         0.0367416666666145
idx1 =
   410
idx2 =
   411
idx1 =
   410
idx2 =
   411
intx =
           -1563231.0458952
inty =
           -4958384.60693808
intz =
            4484957.36767794
intvx =
           -3078.78791734896
intvy =
           -4180.13741700661
intvz =
           -5678.98947979829
intqi =
           0.483633601449901
intqj =
           -0.79963592180916
intqk =
         -0.0593621027292691
intqs =
          -0.350937419556703
m =
          -0.285882933910279         -0.815126368067739          0.503825319113231
           -0.73179683542804          0.525149360419038          0.434386395860853
          -0.618663349291323         -0.244514116836173         -0.746638136523624
after rotation into ecf
vEcf =
           0.504570101224802
           0.433900057362941
          -0.746417948049502
vNad =
            1563231.0458952
            4958384.60693808
           -4484957.36767794
vNad =
           0.227671905595658
           0.722148447027101
          -0.653197614706904
theta =
           0.41336300917015
HH =
           495.156989398049
hh =
                   1.657161
K =
       3.87245401190084e-06
dtheta =
        1.6985952923779e-06
AR angle correction (rad)
dtheta =
        1.6985952923779e-06
AR angle correction (sec)
ans =
           0.35036042885571
vNorm =
           0.636314615944158
           0.397433473376498
```

Point DSRC (CORS)
39 59 29.13021 N
105 15 39.67502 W
1657.161 m

```
         0.661173459672824
vEcfCor =
         0.504569110034814
         0.433901430787034
         -0.74641781969594
satPos =
          -1563231.0458952
         -4958384.60693808
          4484957.36767794
satVel =
         -3078.78791734896
         -4180.13741700661
         -5678.98947979829
corrected for velocity aberration
vEcfCorr =
         0.504580789176531
         0.433916702549762
        -0.746401046651417
iterate for the height
k =
          544794.693168156
XG =
         -1288338.10967722
         -4721989.09011194
          4078322.03848709
dh =
      -0.00226377478247741
k =
          544794.690658889
XG =
         -1288338.11094335
         -4721989.09120075
          4078322.04036001
dh =
     -3.41242412105203e-09
k =
          544794.690658885
XG =
         -1288338.11094335
         -4721989.09120075
          4078322.04036001
dh =
     -6.18456397205591e-10
computed enu ( = discrepancy)
enu =
        -0.279213269817579
          1.12726154920029
     -1.06546717892897e-07
diary off
```