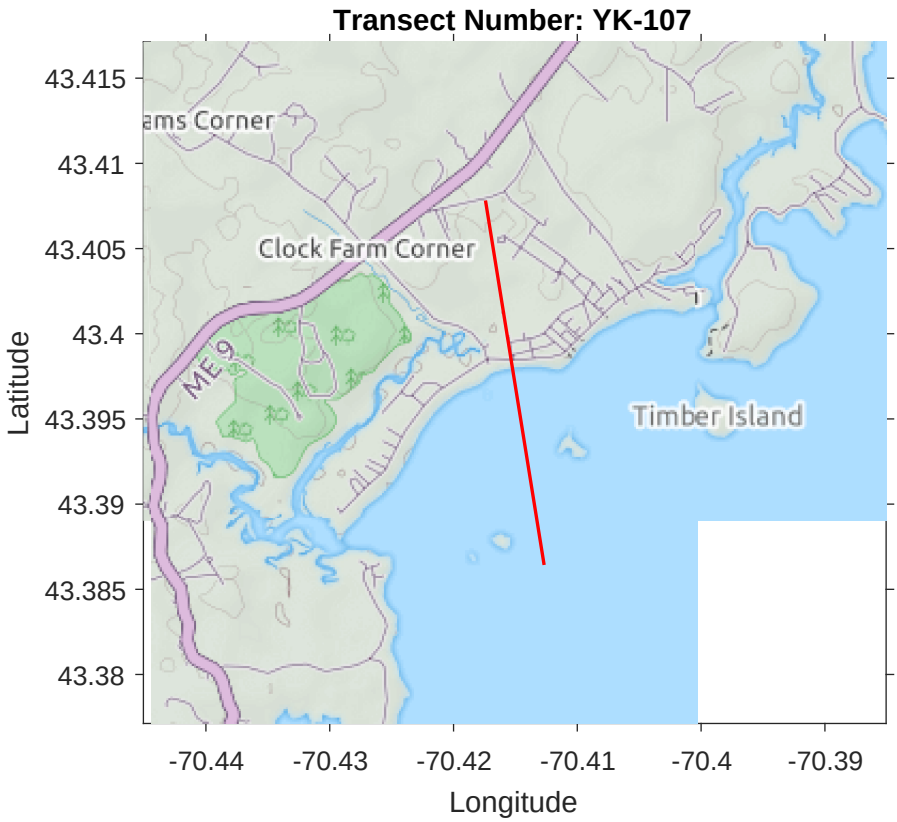
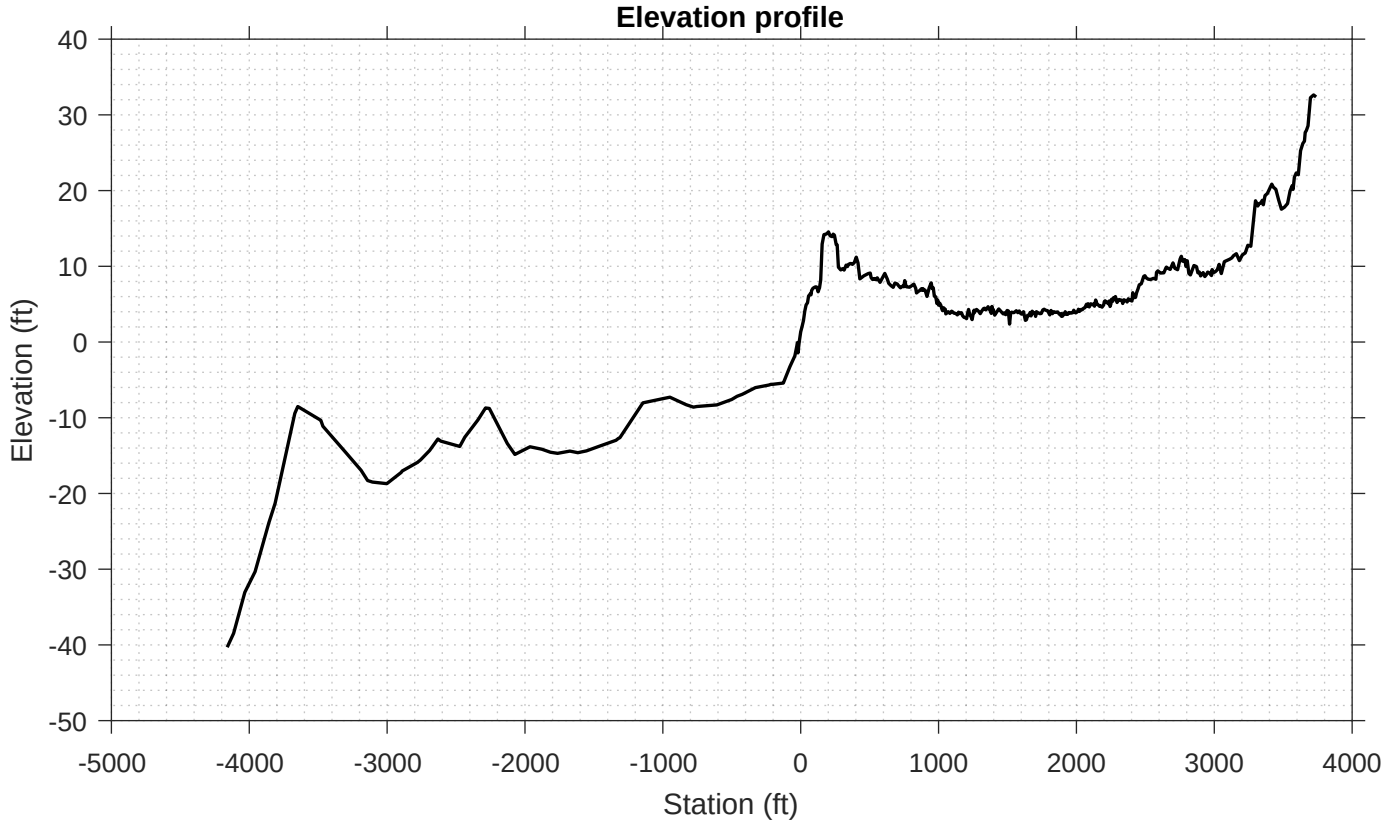

Transect Number: YK-107
43.415
43.41
43.405
43.4
43.395
43.39
43.385
43.38
Latitude
ams Corner
Clock Farm Corner
ME 9
Timber Island
-70.44
-70.43
-70.42
-70.41
-70.4
-70.39
Longitude


Elevation profile
40
30
20
10
0
-10
-20
-30
-40
-50
Elevation (ft)
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000
Station (ft)

DATA LOG FOR TRANSECT ID: YK-107

PART 1: USER INPUT

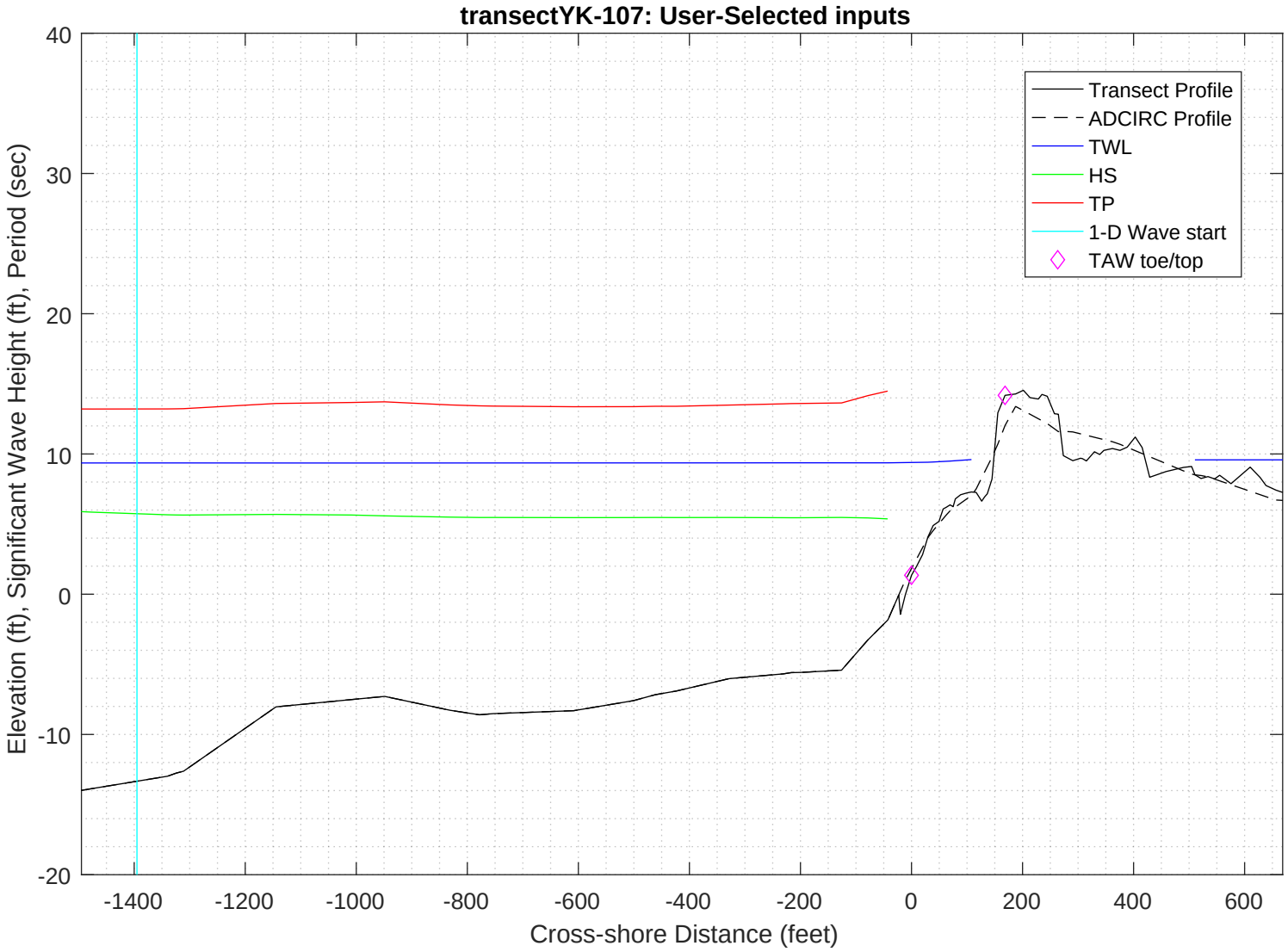
SWAN 1-D / WHAFIS input

station: -1395 ft
LON: -70.4143 deg E
LAT: 43.3939 deg N
Bottom ELEV: -13.3352 ft-NAVD88
TWL: 9.3596 ft-NAVD88
HS: 5.739 ft
TP: 13.2087 sec
Wave Direction bin: 90 deg CCW from East (90 deg sector)
Transect Direction: 102.4838 deg CCW from East

TAW/RUNUP input

toe sta: 0 ft
toe elev: 1.3517 ft-NAVD88
top sta: 168.5 ft
top elev: 14.1798 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE


transectYK-107: User-Selected inputs
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-1400
-1200
-1000
-800
-600
-400
-200
0
200
400
600

_____
PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/YK-107zmeters_xmeters.grd
swan file name: 2_swan/swanfiles/YK-107.swn
swan output name: 2_swan/swanfiles/YK-107.dat

Boundary Conditions:
    TWL- 2.8528 meters
    HS- 1.7492 meters
    PER- 13.2087 seconds

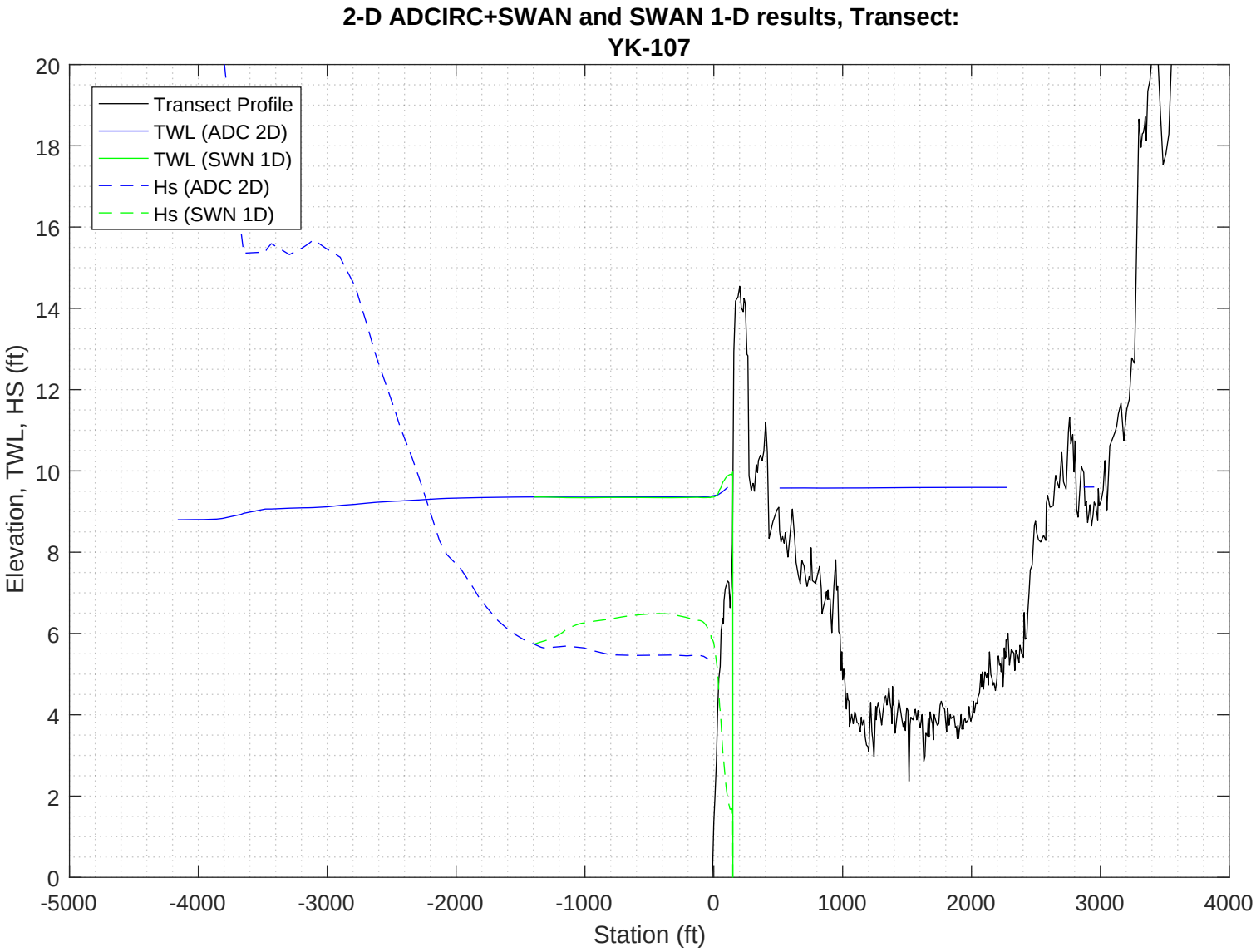
Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.61291 feet
SWAN output at toe:
    SETUP- -0.0031758 feet
    HS-   5.7654 feet
    PER-   13.2478 seconds

PART 2 COMPLETE_____

SWAN maximum additional wave setup: 0.61291 feet
SWAN output at toe:
    SETUP- -0.0031758 feet
    HS-   5.7654 feet
    PER-   13.2478 seconds

PART 2 COMPLETE_____


2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
YK-107
Transect Profile
TWL (ADC 2D)
TWL (SWN 1D)
Hs (ADC 2D)
Hs (SWN 1D)
Elevation, TWL, HS (ft)
Station (ft)
20
18
16
14
12
10
8
6
4
2
0
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000

1

```
                    Execution started at 20200401.174324


                    ---------------------------------------
                                    SWAN
                    SIMULATION OF WAVES IN NEAR SHORE AREAS
                             VERSION NUMBER 41.20A
                    ---------------------------------------


 PROJECT '2018FemaAppeal' '1'
    '100-year Wind and Wave conditions'
 ! -- SET commands ------------------------------------------------------
  SET DEPMIN=0.01 MAXMES=999 MAXERR=3 PWTAIL=4
  SET LEVEL 0
  SET CARTESIAN
 ! -- MODE commands -----------------------------------------------------
  MODE STATIONARY ONED
 !-- COORDINATES commands-----------------------------------------------
 COORDINATES CART
 !
 !  --  computational (CGRID) grid commands -------------------------------------
 !                                   xlenc=length of grid in meters
 !  mxc = number of mesh cells (one less than number of grid points)
 !CGRID REGular [xpc]  [ypc]  [alpc]  [xlenc]   [ylenc]  [mxc]  [myc] &
 !      [ CIRcle|SECtor[dir1] [dir2] ] [mdc] [flow] [fhigh] [msc]
  CGRID REGULAR   0      0       0      472       0.   472     0    &
        CIRCLE                          36    0.03    0.8     30
 Resolution in sigma-space: df/f =  0.1157
 ! -- READgrid ---- not used in 1-D mode ----------------------------------
 ! -- INPgrid commands  -------------------------------------------------------
 !INPgrid BOTtom REGular [xpinp] [ypinp] [alpinp] [mxinp] [myinp] [dxinp] [dyinp]
 !
  INPGRID BOTTOM REGULAR    0       0        0      472   0      1       1
 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]
  READ    BOTTOM   -1. '../gridfiles/YK-107zmeters_xmeters.grd'    1      0       FREE
 !-------------------------------------------------------------------------
 ! -- WIND [vel] [dir]
 WIND      25.1  0
 ! -- BOUnd SHAPespec
 BOUND SHAPE JONSWAP 3.3  PEAK DSPR POWER
 ! -- BOUndspec
 ! BOU SIDE W CCW CON FILE 'swanspec.txt' 1
 BOUN SIDE W CCW CONSTANT PAR   1.7492     13.2087     0  2
 !-- BOUndnest1  - optional for boundary from parent run
 !-- BOUndnest2
 !-- BOUndnest3
 !-- INITial -- usest to specify initial values
 !
```

```
!---------------- P H Y S I C S ------------------------
!-- GEN1 [cf10] [cf20] [cf30] [cf40] [edm1pm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edm1pm] [cdrag] [umin] [cfpm]
    GEN3 KOMEN
!   whitecapping ( on by default)
!-- WCAPping KOMen [cds2] [stpm] [powst] [delta] [powk]
    WCAP KOM
!   quadruplet wave interactions
!-- QUADrupl [iquad] [lambda] [Cn14] [Csh1] [Csh2]
! -- BREaking CONstant [alpha] [gamma]
     BREAK    CON       1.      0.73
!-- FRICtion JONswap CONstant [cfjon]
    FRIC     JONSWAP CON       0.038
!-- TRIad [itriad] [trfac] [cutfr]   [a]  [b]  [urcrit] [urslim]
! TRIAD        1      0.65    2.5    0.95 -0.75  0.2       0.01
  TRIAD
!-- VEGEtation [height] [diamtr] [nstems] [drag]
!-- MUD [layer] [rhom] [viscm]
!- LIMiter [ursell] [qb] deactivates quadruplets with Ursell number exceeds ursell
!-- OBSTacle -- not in 1-D
!-- SETUP [supcor]
   SETUP    0
!
! ----------------- N U M E R I C S -----------------------------
!
!-- PROP  can use BBST or GSE instead of default
! -- NUMeric -- lots of options
!     NUM ACCUR npnts=100. stat 30
     NUMeric STOPC
!
! -------------------O U T P U T ------------------------------
!
!OUTPut OPTIons "comment' (TABLE [field]) (BLOck [ndec] [len]) (SPEC [ndec])
 OUTPUT OPTIONS '%' TABLE 16
 $BLOCK 9 1000 SPEC 8
!CURve 'sname' [xp1] [yp1] <[int]   [xp]   [yp] >
 CURVE 'curve' 0     0      472  472    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'YK-107.dat' XP YP HSIGN TPS RTP TMM10 DIR &
 DSPR DEPTH SETUP
!QUANTITY XP hexp=99999
!
!-----------------------------------------------
COMPUTE STATIONARY
------------------------------------------------------------------
                 COMPUTATIONAL PART OF SWAN
------------------------------------------------------------------
```

```
One-dimensional mode of SWAN is activated
Gridresolution       : MXC             473 MYC              1
                     : MCGRD           474
                     : MSC              31 MDC             36
                     : MTC               1
                     : NSTATC            0 ITERMX          50
Propagation flags    : ITFRE             1 IREFR            1
Source term flags    : IBOT              1 ISURF            1
                     : IWCAP             1 IWIND            3
                     : ITRIAD            1 IQUAD            2
                     : IVEG              0 ITURBV           0
                     : IMUD              0
Spatial step         : DX       0.1000E+01 DY      0.1000E+01
Spectral bin         : df/f     0.1157E+00 DDIR    0.1000E+02
Physical constants   : GRAV     0.9810E+01 RHO     0.1025E+04
Wind input           : WSPEED   0.2510E+02 DIR     0.0000E+00
Tail parameters      : E(f)     0.4000E+01 E(k)    0.2500E+01
                     : A(f)     0.5000E+01 A(k)    0.3000E+01
Accuracy parameters  : DREL     0.1000E-01 NPNTS   0.9950E+02
                     : DHABS    0.0000E+00 CURVAT  0.5000E-02
                     : GRWMX    0.1000E+00
Drying/flooding      : LEVEL    0.0000E+00 DEPMIN  0.1000E-01
The Cartesian convention for wind and wave directions is used
Scheme for geographic propagation is SORDUP
Scheme geogr. space  : PROPSC            2 ICMAX            7
Scheme spectral space: CSS      0.5000E+00 CDD     0.5000E+00
Current is off
Quadruplets          : IQUAD             2
                     : LAMBDA   0.2500E+00 CNL4    0.3000E+08
                     : CSH1     0.5500E+01 CSH2    0.8330E+00
                     : CSH3    -0.1250E+01
Maximum Ursell nr for Snl4 :    0.1000E+02
Triads               : ITRIAD            1 TRFAC   0.8000E+00
                     : CUTFR    0.2500E+01 URCRI   0.2000E+00
Minimum Ursell nr for Snl3 :    0.1000E-01
JONSWAP (‘73)        : GAMMA    0.3800E-01
Vegetation is off
Turbulence is off
Fluid mud is off
W-cap Komen (‘84)    : EMPCOF (CDS2):   0.2360E-04
W-cap Komen (‘84)    : APM (STPM)   :   0.3020E-02
W-cap Komen (‘84)    : POWST        :   0.2000E+01
W-cap Komen (‘84)    : DELTA        :   0.1000E+01
W-cap Komen (‘84)    : POWK         :   0.1000E+01
Wind drag is fit
Snyder/Komen wind input
Battjes&Janssen (‘78): ALPHA    0.1000E+01 GAMMA   0.7300E+00
Set-up               : SUPCOR   0.0000E+00
Diffraction is off
Janssen (‘89,‘90)    : ALPHA    0.1000E-01 KAPPA   0.4100E+00
Janssen (‘89,‘90)    : RHOA     0.1280E+01 RHOW    0.1025E+04

1st and 2nd gen. wind: CF10     0.1880E+03 CF20    0.5900E+00
                     : CF30     0.1200E+00 CF40    0.2500E+03
                     : CF50     0.2300E-02 CF60   -0.2230E+00
                     : CF70     0.0000E+00 CF80   -0.5600E+00
                     : RHOAW    0.1249E-02 EDMLPM  0.3600E-02
                     : CDRAG    0.1230E-02 UMIN    0.1000E+01
                     : LIM_PM   0.1300E+00

 ---------------------------------------------------------------
 First guess by 2nd generation model flags for first iteration:
 ITER       1 GRWMX      0.1000E+23 ALFA       0.0000E+00
 IWIND      2 IWCAP      0 IQUAD      0
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    1; sweep 1
iteration    1; sweep 2
iteration    1; sweep 3
iteration    1; sweep 4
not possible to compute, first iteration

 ---------------------------------------------------------------
 Options given by user are activated for proceeding calculation:
 ITER       2 GRWMX      0.1000E+00 ALFA       0.0000E+00
 IWIND      3 IWCAP      1 IQUAD      2
 ITRIAD     1 IBOT       1 ISURF      1
 IVEG       0 ITURBV     0 IMUD       0
 ---------------------------------------------------------------
iteration    2; sweep 1
iteration    2; sweep 2
iteration    2; sweep 3
iteration    2; sweep 4
accuracy OK in  25.48 % of wet grid points ( 99.50 % required)

iteration    3; sweep 1
iteration    3; sweep 2
iteration    3; sweep 3
```

```
iteration    3; sweep 4
accuracy OK in   0.22 % of wet grid points ( 99.50 % required)

iteration    4; sweep 1
iteration    4; sweep 2
iteration    4; sweep 3
iteration    4; sweep 4
accuracy OK in  17.41 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in  45.44 % of wet grid points ( 99.50 % required)

iteration    6; sweep 1
iteration    6; sweep 2
iteration    6; sweep 3
iteration    6; sweep 4
accuracy OK in  99.58 % of wet grid points ( 99.50 % required)


STOP
```

% Run:1 Table:curve SWAN version:41.20A

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_10 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	1.74786	13.1110	12.4477	11.9153	0.025	31.6225	6.9200	0.000000
1.	0.	1.74914	13.1149	12.4477	11.8783	0.025	31.5848	6.9100	-0.000019
2.	0.	1.75056	13.1188	12.4477	11.8420	0.025	31.5624	6.9000	-0.000040
3.	0.	1.75152	13.1226	12.4477	11.8064	0.025	31.5448	6.9000	-0.000038
4.	0.	1.75279	13.1263	12.4477	11.7721	0.025	31.5132	6.8899	-0.000058
5.	0.	1.75413	13.1294	13.8874	11.7387	0.025	31.4922	6.8799	-0.000079
6.	0.	1.75502	13.1318	13.8874	11.7060	0.025	31.4743	6.8799	-0.000078
7.	0.	1.75635	13.1341	13.8874	11.6745	0.025	31.4572	6.8699	-0.000099
8.	0.	1.75720	13.1364	13.8874	11.6435	0.025	31.4405	6.8699	-0.000098
9.	0.	1.75834	13.1386	13.8874	11.6137	0.025	31.4089	6.8599	-0.000119
10.	0.	1.75957	13.1407	13.8874	11.5847	0.025	31.3871	6.8499	-0.000141
11.	0.	1.76034	13.1428	13.8874	11.5557	0.025	31.3685	6.8499	-0.000140
12.	0.	1.76145	13.1448	13.8874	11.5276	0.025	31.3363	6.8398	-0.000161
13.	0.	1.76265	13.1468	13.8874	11.5001	0.025	31.3141	6.8298	-0.000182
14.	0.	1.76339	13.1487	13.8874	11.4727	0.025	31.2977	6.8298	-0.000181
15.	0.	1.76445	13.1506	13.8874	11.4464	0.025	31.2709	6.8198	-0.000201
16.	0.	1.76559	13.1524	13.8874	11.4206	0.025	31.2531	6.8098	-0.000222
17.	0.	1.76615	13.1542	13.8874	11.3950	0.025	31.2264	6.8098	-0.000219
18.	0.	1.76743	13.1560	13.8874	11.3708	0.025	31.1849	6.7897	-0.000261
19.	0.	1.76819	13.1577	13.8874	11.3466	0.025	31.1387	6.7797	-0.000279
20.	0.	1.76938	13.1594	13.8874	11.3232	0.026	31.0911	6.7597	-0.000320
21.	0.	1.77023	13.1610	13.8874	11.2998	0.026	31.0558	6.7497	-0.000340
22.	0.	1.77111	13.1626	13.8874	11.2768	0.026	31.0245	6.7396	-0.000360
23.	0.	1.77200	13.1641	13.8874	11.2542	0.026	30.9943	6.7296	-0.000380
24.	0.	1.77288	13.1657	13.8874	11.2321	0.026	30.9646	6.7196	-0.000400
25.	0.	1.77361	13.1671	13.8874	11.2103	0.026	30.9242	6.7096	-0.000420
26.	0.	1.77450	13.1686	13.8874	11.1894	0.026	30.8585	6.6895	-0.000461
27.	0.	1.77563	13.1701	13.8874	11.1693	0.027	30.7739	6.6595	-0.000525
28.	0.	1.77681	13.1716	13.8874	11.1494	0.027	30.6936	6.6294	-0.000590
29.	0.	1.77757	13.1730	13.8874	11.1290	0.027	30.6150	6.6094	-0.000632
30.	0.	1.77867	13.1745	13.8874	11.1094	0.027	30.5259	6.5793	-0.000699
31.	0.	1.77976	13.1759	13.8874	11.0900	0.028	30.4335	6.5492	-0.000766
32.	0.	1.78087	13.1773	13.8874	11.0705	0.028	30.3397	6.5192	-0.000836
33.	0.	1.78212	13.1787	13.8874	11.0510	0.028	30.2560	6.4891	-0.000907
34.	0.	1.78296	13.1801	13.8874	11.0309	0.028	30.1758	6.4690	-0.000954
35.	0.	1.78418	13.1814	13.8874	11.0115	0.028	30.0858	6.4390	-0.001027
36.	0.	1.78539	13.1828	13.8874	10.9922	0.029	29.9928	6.4089	-0.001101
37.	0.	1.78674	13.1841	13.8874	10.9728	0.029	29.9092	6.3788	-0.001177
38.	0.	1.78765	13.1854	13.8874	10.9530	0.029	29.8291	6.3588	-0.001228
39.	0.	1.78897	13.1867	13.8874	10.9338	0.029	29.7393	6.3287	-0.001306
40.	0.	1.79027	13.1880	13.8874	10.9147	0.030	29.6465	6.2986	-0.001386
41.	0.	1.79169	13.1893	13.8874	10.8957	0.030	29.5631	6.2685	-0.001467
42.	0.	1.79267	13.1905	13.8874	10.8761	0.030	29.4834	6.2485	-0.001522
43.	0.	1.79408	13.1918	13.8874	10.8572	0.031	29.3940	6.2184	-0.001606
44.	0.	1.79547	13.1930	13.8874	10.8382	0.031	29.3018	6.1883	-0.001691
45.	0.	1.79704	13.1943	13.8874	10.8186	0.031	29.2193	6.1582	-0.001777
46.	0.	1.79817	13.1954	13.8874	10.7983	0.031	29.1405	6.1382	-0.001836
47.	0.	1.79973	13.1966	13.8874	10.7785	0.032	29.0523	6.1081	-0.001925
48.	0.	1.80130	13.1977	13.8874	10.7588	0.032	28.9613	6.0780	-0.002016
49.	0.	1.80298	13.1989	13.8874	10.7390	0.032	28.8796	6.0479	-0.002108
50.	0.	1.80420	13.2000	13.8874	10.7186	0.033	28.8016	6.0278	-0.002171
51.	0.	1.80587	13.2011	13.8874	10.6989	0.033	28.7179	5.9977	-0.002265
52.	0.	1.80756	13.2021	13.8874	10.6789	0.033	28.6357	5.9676	-0.002358
53.	0.	1.80935	13.2032	13.8874	10.6590	0.034	28.5630	5.9375	-0.002454
54.	0.	1.81067	13.2042	13.8874	10.6384	0.034	28.4940	5.9175	-0.002518
55.	0.	1.81245	13.2052	13.8874	10.6184	0.035	28.4169	5.8874	-0.002616
56.	0.	1.81424	13.2062	13.8874	10.5984	0.036	28.3376	5.8573	-0.002715
57.	0.	1.81614	13.2071	13.8874	10.5782	0.036	28.2669	5.8272	-0.002816
58.	0.	1.81757	13.2080	13.8874	10.5572	0.037	28.1995	5.8071	-0.002885
59.	0.	1.81949	13.2089	13.8874	10.5367	0.037	28.1238	5.7770	-0.002989

60.	0.	1.82143	13.2098	13.8874	10.5161	0.038	28.0458	5.7469	-0.003094
61.	0.	1.82350	13.2107	13.8874	10.4950	0.039	27.9772	5.7168	-0.003202
62.	0.	1.82511	13.2115	13.8874	10.4729	0.041	27.9129	5.6967	-0.003275
63.	0.	1.82725	13.2123	13.8874	10.4512	0.042	27.8414	5.6666	-0.003385
64.	0.	1.82943	13.2131	13.8874	10.4290	0.043	27.7698	5.6365	-0.003496
65.	0.	1.83173	13.2138	13.8874	10.4066	0.046	27.7071	5.6064	-0.003609
66.	0.	1.83366	13.2145	13.8874	10.3817	0.050	27.6518	5.5863	-0.003686
67.	0.	1.83614	13.2152	13.8874	10.3572	0.055	27.5918	5.5562	-0.003801
68.	0.	1.83865	13.2159	13.8874	10.3323	0.061	27.5318	5.5261	-0.003918
69.	0.	1.84130	13.2166	13.8874	10.3068	0.067	27.4817	5.4960	-0.004036
70.	0.	1.84341	13.2172	13.8874	10.2808	0.074	27.4371	5.4759	-0.004117
71.	0.	1.84601	13.2179	13.8874	10.2559	0.082	27.3866	5.4458	-0.004238
72.	0.	1.84860	13.2185	13.8874	10.2310	0.089	27.3357	5.4156	-0.004361
73.	0.	1.85130	13.2191	13.8874	10.2060	0.096	27.2944	5.3855	-0.004486
74.	0.	1.85347	13.2196	13.8874	10.1802	0.101	27.2568	5.3654	-0.004572
75.	0.	1.85608	13.2202	13.8874	10.1560	0.100	27.2052	5.3353	-0.004700
76.	0.	1.85883	13.2207	13.8874	10.1321	0.095	27.1660	5.3052	-0.004830
77.	0.	1.86062	13.2212	13.8874	10.1064	0.090	27.1502	5.2951	-0.004876
78.	0.	1.86253	13.2216	13.8874	10.0812	0.086	27.1487	5.2851	-0.004922
79.	0.	1.86392	13.2220	13.8874	10.0561	0.085	27.1573	5.2851	-0.004925
80.	0.	1.86524	13.2223	13.8874	10.0316	0.085	27.1610	5.2851	-0.004928
81.	0.	1.86707	13.2226	13.8874	10.0087	0.085	27.1612	5.2750	-0.004974
82.	0.	1.86836	13.2229	13.8874	9.9856	0.085	27.1693	5.2750	-0.004976
83.	0.	1.86956	13.2231	13.8874	9.9630	0.085	27.1700	5.2750	-0.004978
84.	0.	1.87131	13.2234	13.8874	9.9417	0.085	27.1681	5.2650	-0.005024
85.	0.	1.87254	13.2236	13.8874	9.9189	0.081	27.1658	5.2650	-0.005026
86.	0.	1.87436	13.2238	13.8874	9.8971	0.077	27.1624	5.2549	-0.005071
87.	0.	1.87577	13.2240	13.8874	9.8736	0.075	27.1682	5.2549	-0.005073
88.	0.	1.87715	13.2241	13.8874	9.8502	0.075	27.1677	5.2549	-0.005075
89.	0.	1.87898	13.2243	13.8874	9.8286	0.075	27.1661	5.2449	-0.005117
90.	0.	1.88018	13.2244	13.8874	9.8066	0.075	27.1648	5.2449	-0.005114
91.	0.	1.88189	13.2245	13.8874	9.7861	0.075	27.1626	5.2348	-0.005154
92.	0.	1.88305	13.2246	13.8874	9.7652	0.073	27.1693	5.2349	-0.005149
93.	0.	1.88417	13.2247	13.8874	9.7445	0.071	27.1690	5.2349	-0.005145
94.	0.	1.88584	13.2248	13.8874	9.7249	0.070	27.1660	5.2248	-0.005185
95.	0.	1.88703	13.2249	13.8874	9.7044	0.069	27.1710	5.2248	-0.005182
96.	0.	1.88814	13.2250	13.8874	9.6843	0.068	27.1695	5.2248	-0.005178
97.	0.	1.88975	13.2251	13.8874	9.6658	0.067	27.1656	5.2148	-0.005218
98.	0.	1.89074	13.2251	13.8874	9.6466	0.064	27.1609	5.2148	-0.005213
99.	0.	1.89225	13.2252	13.8874	9.6291	0.061	27.1538	5.2047	-0.005252
100.	0.	1.89328	13.2252	13.8874	9.6106	0.057	27.1557	5.2048	-0.005247
101.	0.	1.89422	13.2253	13.8874	9.5925	0.054	27.1513	5.2048	-0.005242
102.	0.	1.89568	13.2253	13.8874	9.5759	0.050	27.1442	5.1947	-0.005281
103.	0.	1.89665	13.2253	13.8874	9.5583	0.046	27.1452	5.1947	-0.005276
104.	0.	1.89755	13.2254	13.8874	9.5409	0.042	27.1400	5.1947	-0.005270
105.	0.	1.89896	13.2254	13.8874	9.5251	0.038	27.1321	5.1847	-0.005309
106.	0.	1.89980	13.2254	13.8874	9.5082	0.034	27.1244	5.1847	-0.005304
107.	0.	1.90112	13.2255	13.8874	9.4932	0.030	27.1160	5.1747	-0.005341
108.	0.	1.90189	13.2254	13.8874	9.4776	0.024	27.1171	5.1747	-0.005333
109.	0.	1.90255	13.2254	13.8874	9.4625	0.018	27.1125	5.1747	-0.005323
110.	0.	1.90364	13.2255	13.8874	9.4496	0.011	27.1058	5.1646	-0.005357
111.	0.	1.90413	13.2254	13.8874	9.4358	0.005	27.0997	5.1647	-0.005344
112.	0.	1.90511	13.2255	13.8874	9.4236	359.999	27.0921	5.1546	-0.005376
113.	0.	1.90558	13.2254	13.8874	9.4106	359.993	27.0919	5.1546	-0.005362
114.	0.	1.90591	13.2254	13.8874	9.3983	359.987	27.0853	5.1547	-0.005347
115.	0.	1.90672	13.2254	13.8874	9.3878	359.981	27.0743	5.1446	-0.005376
116.	0.	1.90704	13.2254	13.8874	9.3762	359.974	27.0708	5.1446	-0.005361
117.	0.	1.90728	13.2253	13.8874	9.3650	359.968	27.0611	5.1447	-0.005345
118.	0.	1.90798	13.2253	13.8874	9.3555	359.964	27.0485	5.1346	-0.005374
119.	0.	1.90812	13.2253	13.8874	9.3448	359.960	27.0361	5.1346	-0.005358
120.	0.	1.90877	13.2253	13.8874	9.3358	359.956	27.0224	5.1246	-0.005386
121.	0.	1.90924	13.2252	13.8874	9.3235	359.953	27.0163	5.1246	-0.005375
122.	0.	1.90973	13.2252	13.8874	9.3109	359.950	27.0043	5.1246	-0.005367
123.	0.	1.91076	13.2251	13.8874	9.2995	359.947	26.9903	5.1146	-0.005404
124.	0.	1.91136	13.2251	13.8874	9.2866	359.945	26.9846	5.1146	-0.005396
125.	0.	1.91192	13.2250	13.8874	9.2736	359.943	26.9731	5.1146	-0.005388
126.	0.	1.91298	13.2250	13.8874	9.2621	359.942	26.9598	5.1046	-0.005426

127.	0.	1.91343	13.2249	13.8874	9.2498	359.941	26.9479	5.1046	-0.005415
128.	0.	1.91433	13.2248	13.8874	9.2394	359.939	26.9353	5.0946	-0.005448
129.	0.	1.91476	13.2248	13.8874	9.2277	359.936	26.9312	5.0946	-0.005435
130.	0.	1.91513	13.2247	13.8874	9.2161	359.933	26.9214	5.0946	-0.005421
131.	0.	1.91600	13.2246	13.8874	9.2061	359.930	26.9096	5.0845	-0.005454
132.	0.	1.91645	13.2245	13.8874	9.1944	359.927	26.9062	5.0846	-0.005440
133.	0.	1.91685	13.2244	13.8874	9.1826	359.923	26.8972	5.0846	-0.005427
134.	0.	1.91775	13.2243	13.8874	9.1724	359.920	26.8864	5.0745	-0.005459
135.	0.	1.91815	13.2242	13.8874	9.1606	359.915	26.8765	5.0746	-0.005445
136.	0.	1.91914	13.2241	13.8874	9.1502	359.910	26.8736	5.0645	-0.005477
137.	0.	1.91932	13.2240	13.8874	9.1370	359.905	26.8971	5.0746	-0.005416
138.	0.	1.91957	13.2238	13.8874	9.1240	359.900	26.9290	5.0846	-0.005355
139.	0.	1.91987	13.2236	13.8874	9.1112	359.896	26.9641	5.0947	-0.005295
140.	0.	1.92018	13.2234	13.8874	9.0985	359.892	27.0009	5.1048	-0.005236
141.	0.	1.92041	13.2232	13.8874	9.0860	359.888	27.0271	5.1148	-0.005178
142.	0.	1.92110	13.2231	13.8874	9.0751	359.884	27.0490	5.1148	-0.005165
143.	0.	1.92144	13.2229	13.8874	9.0625	359.882	27.0823	5.1249	-0.005109
144.	0.	1.92183	13.2227	13.8874	9.0500	359.880	27.1193	5.1349	-0.005054
145.	0.	1.92222	13.2225	13.8874	9.0379	359.879	27.1579	5.1450	-0.005000
146.	0.	1.92261	13.2223	13.8874	9.0260	359.878	27.1973	5.1551	-0.004945
147.	0.	1.92288	13.2221	13.8874	9.0143	359.877	27.2253	5.1651	-0.004891
148.	0.	1.92361	13.2219	13.8874	9.0042	359.876	27.2488	5.1651	-0.004882
149.	0.	1.92395	13.2217	13.8874	8.9927	359.876	27.2840	5.1752	-0.004829
150.	0.	1.92433	13.2215	13.8874	8.9814	359.875	27.3228	5.1852	-0.004777
151.	0.	1.92473	13.2212	13.8874	8.9702	359.874	27.3632	5.1953	-0.004725
152.	0.	1.92513	13.2210	13.8874	8.9592	359.874	27.4042	5.2053	-0.004673
153.	0.	1.92543	13.2208	13.8874	8.9483	359.874	27.4339	5.2154	-0.004623
154.	0.	1.92617	13.2206	13.8874	8.9389	359.874	27.4594	5.2154	-0.004615
155.	0.	1.92651	13.2204	13.8874	8.9283	359.874	27.4967	5.2254	-0.004564
156.	0.	1.92689	13.2202	13.8874	8.9178	359.874	27.5375	5.2355	-0.004513
157.	0.	1.92729	13.2199	13.8874	8.9074	359.874	27.5796	5.2455	-0.004463
158.	0.	1.92768	13.2197	13.8874	8.8972	359.874	27.6221	5.2556	-0.004413
159.	0.	1.92808	13.2195	13.8874	8.8871	359.873	27.6647	5.2656	-0.004363
160.	0.	1.92836	13.2193	13.8874	8.8771	359.872	27.6952	5.2757	-0.004315
161.	0.	1.92906	13.2191	13.8874	8.8688	359.871	27.7212	5.2757	-0.004307
162.	0.	1.92940	13.2188	13.8874	8.8592	359.870	27.7586	5.2857	-0.004260
163.	0.	1.92978	13.2186	13.8874	8.8498	359.870	27.7990	5.2958	-0.004212
164.	0.	1.93016	13.2184	13.8874	8.8405	359.870	27.8405	5.3058	-0.004165
165.	0.	1.93056	13.2182	13.8874	8.8313	359.870	27.8822	5.3159	-0.004119
166.	0.	1.93084	13.2180	13.8874	8.8221	359.870	27.9118	5.3259	-0.004074
167.	0.	1.93154	13.2178	13.8874	8.8146	359.870	27.9376	5.3259	-0.004069
168.	0.	1.93191	13.2176	13.8874	8.8055	359.870	27.9753	5.3360	-0.004024
169.	0.	1.93231	13.2173	13.8874	8.7966	359.871	28.0158	5.3460	-0.003980
170.	0.	1.93273	13.2171	13.8874	8.7878	359.871	28.0576	5.3561	-0.003936
171.	0.	1.93314	13.2169	13.8874	8.7791	359.872	28.0999	5.3661	-0.003893
172.	0.	1.93344	13.2167	13.8874	8.7704	359.872	28.1301	5.3762	-0.003850
173.	0.	1.93415	13.2165	13.8874	8.7633	359.872	28.1569	5.3762	-0.003846
174.	0.	1.93443	13.2163	13.8874	8.7546	359.873	28.1837	5.3862	-0.003804
175.	0.	1.93514	13.2162	13.8874	8.7475	359.874	28.2093	5.3862	-0.003801
176.	0.	1.93553	13.2160	13.8874	8.7390	359.874	28.2479	5.3962	-0.003759
177.	0.	1.93583	13.2158	13.8874	8.7305	359.874	28.2768	5.4063	-0.003717
178.	0.	1.93655	13.2156	13.8874	8.7237	359.875	28.3029	5.4063	-0.003715
179.	0.	1.93685	13.2154	13.8874	8.7152	359.875	28.3288	5.4163	-0.003674
180.	0.	1.93758	13.2153	13.8874	8.7083	359.875	28.3535	5.4163	-0.003673
181.	0.	1.93800	13.2151	13.8874	8.6999	359.874	28.3911	5.4264	-0.003633
182.	0.	1.93833	13.2149	13.8874	8.6916	359.873	28.4188	5.4364	-0.003593
183.	0.	1.93906	13.2148	13.8874	8.6850	359.872	28.4444	5.4364	-0.003592
184.	0.	1.93948	13.2146	13.8874	8.6769	359.871	28.4825	5.4464	-0.003553
185.	0.	1.93981	13.2144	13.8874	8.6689	359.871	28.5106	5.4565	-0.003514
186.	0.	1.94054	13.2143	13.8874	8.6624	359.870	28.5374	5.4565	-0.003513
187.	0.	1.94085	13.2141	13.8874	8.6544	359.870	28.5647	5.4665	-0.003474
188.	0.	1.94146	13.2140	13.8874	8.6479	359.870	28.5790	5.4665	-0.003474
189.	0.	1.94205	13.2138	13.8874	8.6414	359.869	28.5916	5.4665	-0.003474
190.	0.	1.94251	13.2137	13.8874	8.6350	359.868	28.5920	5.4665	-0.003473
191.	0.	1.94335	13.2136	13.8874	8.6300	359.868	28.5877	5.4565	-0.003511
192.	0.	1.94389	13.2135	13.8874	8.6233	359.868	28.5935	5.4565	-0.003510
193.	0.	1.94434	13.2134	13.8874	8.6167	359.868	28.5915	5.4565	-0.003510

194.	0.	1.94518	13.2133	13.8874	8.6118	359.868	28.5857	5.4465	-0.003547
195.	0.	1.94569	13.2132	13.8874	8.6053	359.867	28.5895	5.4465	-0.003547
196.	0.	1.94624	13.2131	13.8874	8.5989	359.866	28.5963	5.4465	-0.003547
197.	0.	1.94671	13.2130	13.8874	8.5924	359.865	28.5939	5.4465	-0.003547
198.	0.	1.94754	13.2129	13.8874	8.5875	359.864	28.5877	5.4364	-0.003585
199.	0.	1.94806	13.2128	13.8874	8.5810	359.862	28.5920	5.4364	-0.003585
200.	0.	1.94861	13.2127	13.8874	8.5746	359.861	28.5995	5.4364	-0.003584
201.	0.	1.94917	13.2126	13.8874	8.5683	359.859	28.6083	5.4364	-0.003584
202.	0.	1.94972	13.2125	13.8874	8.5620	359.858	28.6174	5.4364	-0.003583
203.	0.	1.95025	13.2124	13.8874	8.5559	359.858	28.6265	5.4364	-0.003583
204.	0.	1.95068	13.2123	13.8874	8.5497	359.858	28.6250	5.4364	-0.003582
205.	0.	1.95147	13.2122	13.8874	8.5452	359.858	28.6191	5.4264	-0.003619
206.	0.	1.95194	13.2121	13.8874	8.5393	359.858	28.6231	5.4264	-0.003618
207.	0.	1.95244	13.2120	13.8874	8.5333	359.859	28.6302	5.4264	-0.003617
208.	0.	1.95294	13.2119	13.8874	8.5274	359.859	28.6382	5.4264	-0.003616
209.	0.	1.95345	13.2119	13.8874	8.5216	359.860	28.6463	5.4264	-0.003615
210.	0.	1.95394	13.2118	13.8874	8.5158	359.861	28.6541	5.4264	-0.003614
211.	0.	1.95434	13.2117	13.8874	8.5099	359.862	28.6520	5.4264	-0.003613
212.	0.	1.95511	13.2116	13.8874	8.5057	359.863	28.6453	5.4163	-0.003650
213.	0.	1.95555	13.2115	13.8874	8.5000	359.864	28.6482	5.4164	-0.003649
214.	0.	1.95600	13.2114	13.8874	8.4945	359.865	28.6534	5.4164	-0.003648
215.	0.	1.95645	13.2114	13.8874	8.4890	359.865	28.6594	5.4164	-0.003646
216.	0.	1.95690	13.2113	13.8874	8.4836	359.866	28.6661	5.4164	-0.003645
217.	0.	1.95736	13.2112	13.8874	8.4782	359.868	28.6732	5.4164	-0.003643
218.	0.	1.95772	13.2111	13.8874	8.4727	359.871	28.6709	5.4164	-0.003641
219.	0.	1.95845	13.2111	13.8874	8.4688	359.872	28.6649	5.4063	-0.003678
220.	0.	1.95886	13.2110	13.8874	8.4633	359.874	28.6690	5.4063	-0.003676
221.	0.	1.95929	13.2109	13.8874	8.4579	359.876	28.6760	5.4063	-0.003674
222.	0.	1.95972	13.2108	13.8874	8.4527	359.878	28.6838	5.4063	-0.003672
223.	0.	1.96014	13.2107	13.8874	8.4475	359.879	28.6918	5.4063	-0.003670
224.	0.	1.96055	13.2107	13.8874	8.4425	359.881	28.6994	5.4063	-0.003667
225.	0.	1.96084	13.2106	13.8874	8.4375	359.882	28.6970	5.4063	-0.003665
226.	0.	1.96148	13.2106	13.8874	8.4342	359.884	28.6897	5.3963	-0.003700
227.	0.	1.96180	13.2105	13.8874	8.4294	359.886	28.6920	5.3963	-0.003697
228.	0.	1.96215	13.2104	13.8874	8.4247	359.888	28.6971	5.3963	-0.003695
229.	0.	1.96251	13.2103	13.8874	8.4200	359.890	28.7031	5.3963	-0.003692
230.	0.	1.96287	13.2103	13.8874	8.4153	359.892	28.7094	5.3963	-0.003689
231.	0.	1.96323	13.2102	13.8874	8.4106	359.894	28.7159	5.3963	-0.003687
232.	0.	1.96349	13.2101	13.8874	8.4060	359.896	28.7123	5.3963	-0.003684
233.	0.	1.96411	13.2101	13.8874	8.4029	359.898	28.7045	5.3863	-0.003720
234.	0.	1.96439	13.2100	13.8874	8.3985	359.900	28.7063	5.3863	-0.003716
235.	0.	1.96469	13.2099	13.8874	8.3941	359.903	28.7103	5.3863	-0.003713
236.	0.	1.96499	13.2099	13.8874	8.3898	359.905	28.7149	5.3863	-0.003709
237.	0.	1.96529	13.2098	13.8874	8.3855	359.907	28.7194	5.3863	-0.003706
238.	0.	1.96557	13.2097	13.8874	8.3813	359.909	28.7238	5.3863	-0.003702
239.	0.	1.96575	13.2097	13.8874	8.3772	359.912	28.7187	5.3863	-0.003698
240.	0.	1.96630	13.2096	13.8874	8.3747	359.914	28.7094	5.3763	-0.003733
241.	0.	1.96642	13.2096	13.8874	8.3705	359.916	28.7004	5.3763	-0.003729
242.	0.	1.96684	13.2095	13.8874	8.3680	359.918	28.6796	5.3662	-0.003764
243.	0.	1.96731	13.2095	13.8874	8.3656	359.920	28.6643	5.3562	-0.003799
244.	0.	1.96739	13.2094	13.8874	8.3616	359.921	28.6523	5.3562	-0.003794
245.	0.	1.96779	13.2094	13.8874	8.3592	359.922	28.6308	5.3462	-0.003829
246.	0.	1.96826	13.2094	13.8874	8.3567	359.924	28.6164	5.3361	-0.003863
247.	0.	1.96835	13.2093	13.8874	8.3526	359.925	28.6061	5.3361	-0.003858
248.	0.	1.96876	13.2093	13.8874	8.3500	359.926	28.5860	5.3261	-0.003893
249.	0.	1.96922	13.2092	13.8874	8.3475	359.927	28.5719	5.3161	-0.003927
250.	0.	1.96929	13.2092	13.8874	8.3434	359.928	28.5610	5.3161	-0.003922
251.	0.	1.96967	13.2091	13.8874	8.3410	359.929	28.5400	5.3060	-0.003956
252.	0.	1.97010	13.2091	13.8874	8.3387	359.931	28.5251	5.2960	-0.003990
253.	0.	1.97015	13.2090	13.8874	8.3347	359.933	28.5138	5.2960	-0.003983
254.	0.	1.97051	13.2090	13.8874	8.3323	359.935	28.4926	5.2860	-0.004018
255.	0.	1.97093	13.2090	13.8874	8.3300	359.937	28.4775	5.2759	-0.004051
256.	0.	1.97093	13.2089	13.8874	8.3262	359.939	28.4650	5.2760	-0.004044
257.	0.	1.97126	13.2089	13.8874	8.3240	359.941	28.4421	5.2659	-0.004078
258.	0.	1.97164	13.2088	13.8874	8.3219	359.942	28.4256	5.2559	-0.004111
259.	0.	1.97163	13.2087	13.8874	8.3181	359.942	28.4128	5.2559	-0.004103
260.	0.	1.97196	13.2087	13.8874	8.3158	359.943	28.3908	5.2459	-0.004136

261.	0.	1.97238	13.2087	13.8874	8.3134	359.945	28.3760	5.2358	-0.004170
262.	0.	1.97240	13.2086	13.8874	8.3092	359.946	28.3651	5.2358	-0.004161
263.	0.	1.97277	13.2085	13.8874	8.3066	359.947	28.3452	5.2258	-0.004195
264.	0.	1.97319	13.2085	13.8874	8.3042	359.949	28.3311	5.2158	-0.004229
265.	0.	1.97319	13.2084	13.8874	8.3001	359.950	28.3195	5.2158	-0.004220
266.	0.	1.97353	13.2084	13.8874	8.2977	359.951	28.2981	5.2057	-0.004254
267.	0.	1.97393	13.2083	13.8874	8.2953	359.951	28.2827	5.1957	-0.004288
268.	0.	1.97392	13.2083	13.8874	8.2912	359.952	28.2705	5.1957	-0.004279
269.	0.	1.97426	13.2082	13.8874	8.2887	359.953	28.2489	5.1857	-0.004312
270.	0.	1.97466	13.2082	13.8874	8.2863	359.954	28.2338	5.1757	-0.004345
271.	0.	1.97464	13.2081	13.8874	8.2822	359.956	28.2224	5.1757	-0.004335
272.	0.	1.97496	13.2080	13.8874	8.2798	359.956	28.2009	5.1656	-0.004368
273.	0.	1.97523	13.2080	13.8874	8.2774	359.956	28.1759	5.1556	-0.004401
274.	0.	1.97550	13.2080	13.8874	8.2750	359.956	28.1504	5.1456	-0.004435
275.	0.	1.97576	13.2079	13.8874	8.2726	359.956	28.1250	5.1355	-0.004467
276.	0.	1.97598	13.2079	13.8874	8.2704	359.956	28.0989	5.1255	-0.004499
277.	0.	1.97618	13.2078	13.8874	8.2682	359.956	28.0727	5.1155	-0.004531
278.	0.	1.97638	13.2078	13.8874	8.2660	359.957	28.0464	5.1054	-0.004562
279.	0.	1.97656	13.2078	13.8874	8.2638	359.957	28.0201	5.0954	-0.004592
280.	0.	1.97673	13.2077	13.8874	8.2617	359.957	27.9936	5.0854	-0.004623
281.	0.	1.97681	13.2077	13.8874	8.2595	359.957	27.9587	5.0753	-0.004653
282.	0.	1.97731	13.2077	13.8874	8.2588	359.957	27.9192	5.0553	-0.004729
283.	0.	1.97744	13.2077	13.8874	8.2565	359.957	27.8886	5.0452	-0.004759
284.	0.	1.97757	13.2076	13.8874	8.2541	359.958	27.8601	5.0352	-0.004788
285.	0.	1.97778	13.2076	13.8874	8.2520	359.958	27.8405	5.0252	-0.004817
286.	0.	1.97755	13.2075	13.8874	8.2480	359.958	27.8255	5.0252	-0.004798
287.	0.	1.97771	13.2074	13.8874	8.2458	359.957	27.8017	5.0152	-0.004827
288.	0.	1.97791	13.2074	13.8874	8.2435	359.957	27.7836	5.0051	-0.004854
289.	0.	1.97768	13.2073	13.8874	8.2395	359.957	27.7689	5.0052	-0.004834
290.	0.	1.97782	13.2073	13.8874	8.2373	359.957	27.7449	4.9951	-0.004861
291.	0.	1.97800	13.2072	13.8874	8.2350	359.957	27.7266	4.9851	-0.004888
292.	0.	1.97773	13.2072	13.8874	8.2311	359.957	27.7117	4.9851	-0.004867
293.	0.	1.97783	13.2071	13.8874	8.2289	359.956	27.6877	4.9751	-0.004893
294.	0.	1.97790	13.2071	13.8874	8.2267	359.956	27.6609	4.9651	-0.004919
295.	0.	1.97803	13.2071	13.8874	8.2246	359.955	27.6414	4.9551	-0.004945
296.	0.	1.97771	13.2070	13.8874	8.2207	359.955	27.6259	4.9551	-0.004922
297.	0.	1.97777	13.2070	13.8874	8.2186	359.955	27.6013	4.9451	-0.004947
298.	0.	1.97779	13.2069	13.8874	8.2165	359.955	27.5742	4.9350	-0.004971
299.	0.	1.97779	13.2069	13.8874	8.2144	359.955	27.5461	4.9250	-0.004996
300.	0.	1.97777	13.2069	13.8874	8.2123	359.955	27.5174	4.9150	-0.005019
301.	0.	1.97774	13.2068	13.8874	8.2102	359.955	27.4885	4.9050	-0.005042
302.	0.	1.97770	13.2068	13.8874	8.2081	359.955	27.4593	4.8949	-0.005065
303.	0.	1.97765	13.2068	13.8874	8.2059	359.956	27.4300	4.8849	-0.005087
304.	0.	1.97758	13.2068	13.8874	8.2037	359.956	27.4006	4.8749	-0.005108
305.	0.	1.97751	13.2067	13.8874	8.2015	359.956	27.3711	4.8649	-0.005129
306.	0.	1.97750	13.2067	13.8874	8.1993	359.957	27.3497	4.8549	-0.005148
307.	0.	1.97704	13.2067	13.8874	8.1953	359.959	27.3331	4.8549	-0.005117
308.	0.	1.97697	13.2066	13.8874	8.1931	359.960	27.3074	4.8449	-0.005136
309.	0.	1.97686	13.2066	13.8874	8.1909	359.960	27.2792	4.8348	-0.005154
310.	0.	1.97673	13.2066	13.8874	8.1887	359.961	27.2502	4.8248	-0.005172
311.	0.	1.97658	13.2066	13.8874	8.1864	359.961	27.2208	4.8148	-0.005189
312.	0.	1.97640	13.2066	13.8874	8.1842	359.962	27.1914	4.8048	-0.005205
313.	0.	1.97621	13.2066	13.8874	8.1820	359.962	27.1619	4.7948	-0.005221
314.	0.	1.97600	13.2065	13.8874	8.1798	359.963	27.1323	4.7848	-0.005235
315.	0.	1.97577	13.2065	13.8874	8.1776	359.963	27.1026	4.7748	-0.005249
316.	0.	1.97552	13.2065	13.8874	8.1755	359.964	27.0730	4.7647	-0.005262
317.	0.	1.97526	13.2065	13.8874	8.1733	359.965	27.0436	4.7547	-0.005274
318.	0.	1.97498	13.2065	13.8874	8.1711	359.966	27.0139	4.7447	-0.005285
319.	0.	1.97468	13.2065	13.8874	8.1688	359.967	26.9844	4.7347	-0.005295
320.	0.	1.97445	13.2065	13.8874	8.1666	359.968	26.9627	4.7247	-0.005304
321.	0.	1.97374	13.2065	13.8874	8.1626	359.968	26.9456	4.7247	-0.005259
322.	0.	1.97343	13.2065	13.8874	8.1605	359.969	26.9196	4.7147	-0.005268
323.	0.	1.97309	13.2065	13.8874	8.1582	359.969	26.8910	4.7047	-0.005275
324.	0.	1.97272	13.2065	13.8874	8.1561	359.969	26.8613	4.6947	-0.005282
325.	0.	1.97232	13.2065	13.8874	8.1539	359.969	26.8310	4.6847	-0.005287
326.	0.	1.97197	13.2065	13.8874	8.1518	359.970	26.8084	4.6747	-0.005291
327.	0.	1.97123	13.2065	13.8874	8.1478	359.971	26.7990	4.6748	-0.005240

328.	0.	1.97046	13.2065	13.8874	8.1437	359.972	26.7855	4.6748	-0.005189
329.	0.	1.97015	13.2065	13.8874	8.1416	359.973	26.7691	4.6648	-0.005192
330.	0.	1.96942	13.2065	13.8874	8.1375	359.975	26.7625	4.6649	-0.005140
331.	0.	1.96866	13.2065	13.8874	8.1333	359.976	26.7508	4.6649	-0.005088
332.	0.	1.96835	13.2066	13.8874	8.1311	359.977	26.7358	4.6549	-0.005090
333.	0.	1.96762	13.2065	13.8874	8.1270	359.978	26.7302	4.6550	-0.005036
334.	0.	1.96685	13.2066	13.8874	8.1228	359.980	26.7192	4.6550	-0.004984
335.	0.	1.96651	13.2066	13.8874	8.1206	359.980	26.7039	4.6450	-0.004985
336.	0.	1.96576	13.2066	13.8874	8.1166	359.981	26.6980	4.6451	-0.004931
337.	0.	1.96496	13.2066	13.8874	8.1125	359.982	26.6869	4.6451	-0.004877
338.	0.	1.96461	13.2067	13.8874	8.1104	359.983	26.6723	4.6351	-0.004878
339.	0.	1.96385	13.2067	13.8874	8.1063	359.984	26.6671	4.6352	-0.004823
340.	0.	1.96303	13.2067	13.8874	8.1022	359.985	26.6565	4.6352	-0.004768
341.	0.	1.96267	13.2068	13.8874	8.1001	359.987	26.6424	4.6252	-0.004768
342.	0.	1.96189	13.2068	13.8874	8.0961	359.988	26.6375	4.6253	-0.004712
343.	0.	1.96106	13.2068	13.8874	8.0920	359.990	26.6274	4.6253	-0.004657
344.	0.	1.96069	13.2069	13.8874	8.0899	359.992	26.6138	4.6153	-0.004656
345.	0.	1.95989	13.2069	13.8874	8.0858	359.993	26.6094	4.6154	-0.004599
346.	0.	1.95906	13.2070	13.8874	8.0818	359.995	26.5999	4.6155	-0.004543
347.	0.	1.95866	13.2071	13.8874	8.0797	359.996	26.5867	4.6055	-0.004541
348.	0.	1.95779	13.2071	13.8874	8.0756	359.998	26.5746	4.6055	-0.004484
349.	0.	1.95738	13.2072	13.8874	8.0735	359.999	26.5603	4.5955	-0.004482
350.	0.	1.95655	13.2072	13.8874	8.0695	0.001	26.5555	4.5956	-0.004423
351.	0.	1.95568	13.2073	13.8874	8.0654	0.002	26.5454	4.5956	-0.004366
352.	0.	1.95526	13.2074	13.8874	8.0633	0.004	26.5317	4.5856	-0.004362
353.	0.	1.95443	13.2074	13.8874	8.0592	0.005	26.5270	4.5857	-0.004303
354.	0.	1.95356	13.2075	13.8874	8.0551	0.006	26.5165	4.5858	-0.004245
355.	0.	1.95313	13.2076	13.8874	8.0530	0.008	26.5022	4.5758	-0.004241
356.	0.	1.95220	13.2077	13.8874	8.0490	0.008	26.4886	4.5758	-0.004182
357.	0.	1.95167	13.2078	13.8874	8.0469	0.008	26.4653	4.5658	-0.004177
358.	0.	1.95116	13.2079	13.8874	8.0449	0.009	26.4476	4.5558	-0.004171
359.	0.	1.95025	13.2080	13.8874	8.0409	0.010	26.4419	4.5559	-0.004109
360.	0.	1.94937	13.2081	13.8874	8.0369	0.011	26.4395	4.5560	-0.004046
361.	0.	1.94842	13.2081	13.8874	8.0330	0.012	26.4305	4.5560	-0.003984
362.	0.	1.94791	13.2083	13.8874	8.0311	0.013	26.4173	4.5460	-0.003977
363.	0.	1.94698	13.2083	13.8874	8.0273	0.013	26.4126	4.5461	-0.003914
364.	0.	1.94608	13.2084	13.8874	8.0235	0.014	26.4108	4.5461	-0.003851
365.	0.	1.94519	13.2085	13.8874	8.0197	0.015	26.4099	4.5462	-0.003788
366.	0.	1.94431	13.2086	13.8874	8.0159	0.016	26.4095	4.5463	-0.003725
367.	0.	1.94337	13.2087	13.8874	8.0121	0.016	26.4014	4.5463	-0.003663
368.	0.	1.94284	13.2088	13.8874	8.0104	0.017	26.3887	4.5363	-0.003656
369.	0.	1.94190	13.2089	13.8874	8.0068	0.018	26.3845	4.5364	-0.003592
370.	0.	1.94098	13.2090	13.8874	8.0032	0.018	26.3826	4.5365	-0.003529
371.	0.	1.94008	13.2091	13.8874	7.9995	0.019	26.3818	4.5365	-0.003466
372.	0.	1.93912	13.2092	13.8874	7.9958	0.020	26.3738	4.5366	-0.003403
373.	0.	1.93860	13.2094	13.8874	7.9941	0.020	26.3612	4.5266	-0.003396
374.	0.	1.93767	13.2095	13.8874	7.9904	0.021	26.3575	4.5267	-0.003333
375.	0.	1.93676	13.2096	13.8874	7.9867	0.022	26.3562	4.5267	-0.003270
376.	0.	1.93585	13.2097	13.8874	7.9831	0.023	26.3556	4.5268	-0.003207
377.	0.	1.93489	13.2098	13.8874	7.9795	0.024	26.3475	4.5269	-0.003144
378.	0.	1.93435	13.2099	13.8874	7.9779	0.025	26.3348	4.5169	-0.003137
379.	0.	1.93340	13.2100	13.8874	7.9743	0.026	26.3306	4.5169	-0.003073
380.	0.	1.93248	13.2102	13.8874	7.9708	0.027	26.3283	4.5170	-0.003010
381.	0.	1.93150	13.2103	13.8874	7.9672	0.028	26.3189	4.5171	-0.002948
382.	0.	1.93095	13.2104	13.8874	7.9657	0.028	26.3049	4.5071	-0.002940
383.	0.	1.92999	13.2106	13.8874	7.9622	0.029	26.2995	4.5071	-0.002877
384.	0.	1.92905	13.2107	13.8874	7.9587	0.029	26.2962	4.5072	-0.002813
385.	0.	1.92813	13.2108	13.8874	7.9553	0.030	26.2938	4.5072	-0.002750
386.	0.	1.92708	13.2109	13.8874	7.9517	0.032	26.2759	4.5073	-0.002689
387.	0.	1.92662	13.2112	13.8874	7.9520	0.033	26.2177	4.4873	-0.002738
388.	0.	1.92671	13.2115	13.8874	7.9562	0.034	26.1184	4.4471	-0.002899
389.	0.	1.92703	13.2119	13.8874	7.9626	0.036	26.0026	4.3969	-0.003114
390.	0.	1.92668	13.2122	13.8874	7.9672	0.037	25.8810	4.3567	-0.003268
391.	0.	1.92664	13.2127	13.8874	7.9742	0.038	25.7526	4.3065	-0.003476
392.	0.	1.92594	13.2131	13.8874	7.9792	0.038	25.6231	4.2664	-0.003620
393.	0.	1.92556	13.2135	13.8874	7.9864	0.038	25.4910	4.2162	-0.003818
394.	0.	1.92448	13.2140	13.8874	7.9917	0.038	25.3592	4.1761	-0.003944

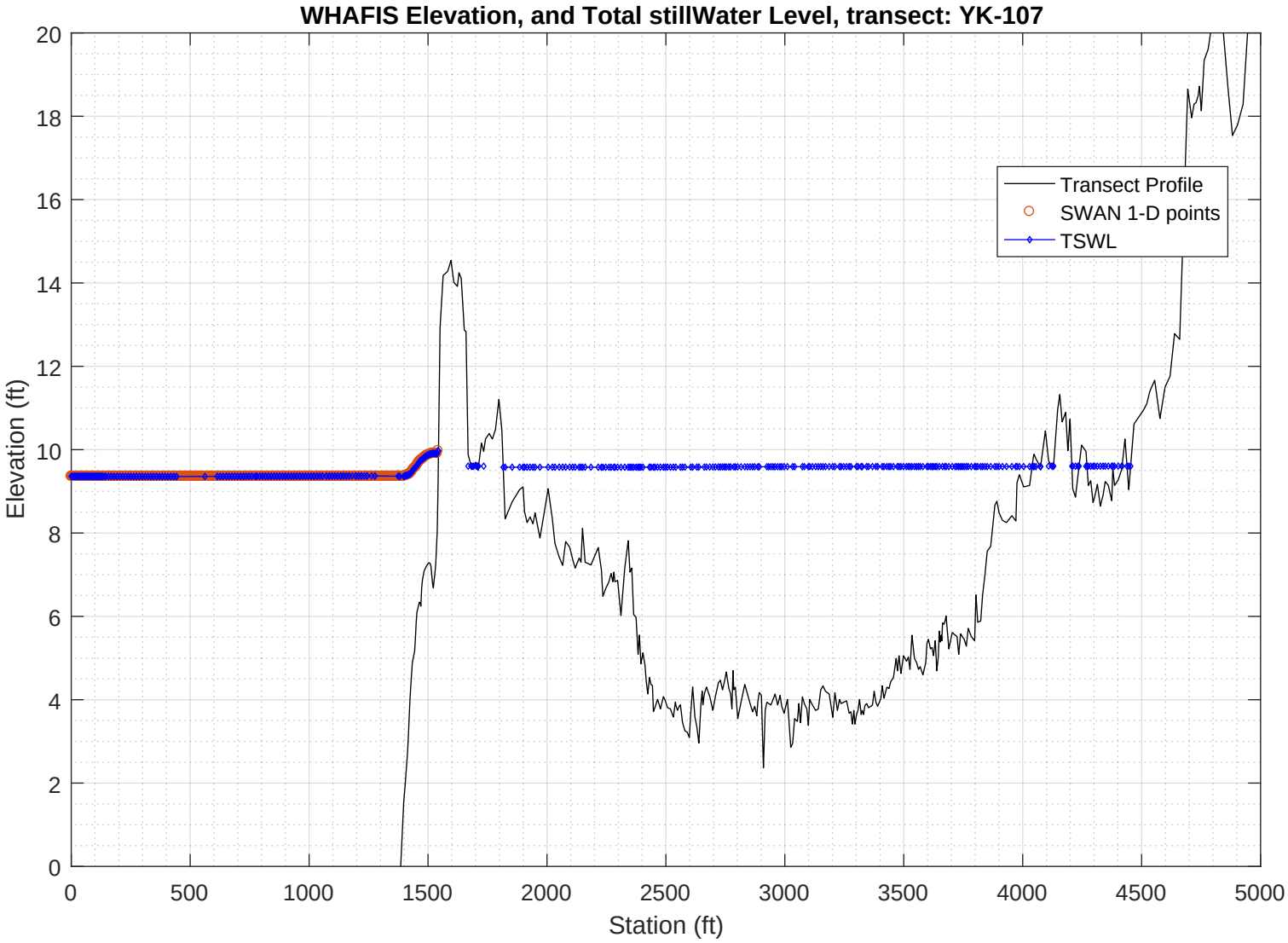
395.	0.	1.92370	13.2145	13.8874	7.9993	0.038	25.2227	4.1259	-0.004126
396.	0.	1.92217	13.2150	13.8874	8.0048	0.037	25.0858	4.0858	-0.004232
397.	0.	1.92087	13.2156	13.8874	8.0127	0.036	24.9369	4.0356	-0.004396
398.	0.	1.91934	13.2162	13.8874	8.0208	0.035	24.7906	3.9855	-0.004546
399.	0.	1.91700	13.2168	13.8874	8.0267	0.035	24.6463	3.9454	-0.004610
400.	0.	1.91494	13.2175	13.8874	8.0350	0.035	24.4979	3.8953	-0.004733
401.	0.	1.91209	13.2182	13.8874	8.0410	0.035	24.3570	3.8552	-0.004763
402.	0.	1.90899	13.2189	13.8874	8.0471	0.036	24.2165	3.8152	-0.004777
403.	0.	1.90563	13.2197	13.8874	8.0532	0.037	24.0749	3.7752	-0.004773
404.	0.	1.90199	13.2205	13.8874	8.0592	0.038	23.9321	3.7352	-0.004751
405.	0.	1.89807	13.2214	13.8874	8.0652	0.039	23.7877	3.6953	-0.004710
406.	0.	1.89387	13.2223	13.8874	8.0710	0.042	23.6418	3.6554	-0.004648
407.	0.	1.88938	13.2233	13.8874	8.0767	0.044	23.4943	3.6154	-0.004566
408.	0.	1.88460	13.2243	13.8874	8.0822	0.048	23.3455	3.5755	-0.004461
409.	0.	1.87957	13.2254	13.8874	8.0872	0.053	23.1953	3.5357	-0.004334
410.	0.	1.87430	13.2265	13.8874	8.0915	0.061	23.0439	3.4958	-0.004186
411.	0.	1.86878	13.2276	13.8874	8.0953	0.071	22.8914	3.4560	-0.004014
412.	0.	1.86271	13.2288	13.8874	8.0987	0.083	22.7032	3.4162	-0.003819
413.	0.	1.85849	13.2303	13.8874	8.1113	0.098	22.4477	3.3360	-0.003978
414.	0.	1.85398	13.2320	13.8874	8.1256	0.119	22.1547	3.2458	-0.004185
415.	0.	1.84846	13.2338	13.8874	8.1386	0.146	21.8439	3.1557	-0.004322
416.	0.	1.84182	13.2357	13.8874	8.1504	0.178	21.5282	3.0656	-0.004363
417.	0.	1.83392	13.2377	13.8874	8.1610	0.214	21.2112	2.9757	-0.004291
418.	0.	1.82789	13.2397	13.8874	8.1700	0.257	21.3864	2.8860	-0.004045
419.	0.	1.79038	13.2394	13.8874	8.0678	0.290	21.8717	3.2412	0.001169
420.	0.	1.78695	13.2407	13.8874	8.0789	0.316	21.7124	3.1510	0.000988
421.	0.	1.78686	13.2425	13.8874	8.1054	0.357	21.2942	2.9900	0.000037
422.	0.	1.78416	13.2442	13.8874	8.1282	0.404	20.8133	2.8393	-0.000739
423.	0.	1.77711	13.2457	13.8874	8.1411	0.462	20.3221	2.7190	-0.000993
424.	0.	1.76885	13.2470	13.8874	8.1538	0.531	19.8144	2.5888	-0.001199
425.	0.	1.75730	13.2478	13.8874	8.1607	0.611	19.3535	2.4690	-0.000968
426.	0.	1.73926	13.2481	13.8874	8.1553	0.692	18.9869	2.3903	0.000312
427.	0.	1.71876	13.2478	13.8874	8.1449	0.783	18.6610	2.3220	0.002007
428.	0.	1.69686	13.2471	13.8874	8.1329	0.878	18.3383	2.2539	0.003911
429.	0.	1.67465	13.2461	13.8874	8.1219	0.978	18.0025	2.1758	0.005831
430.	0.	1.65074	13.2448	13.8874	8.1088	1.082	17.6600	2.0980	0.008016
431.	0.	1.62509	13.2433	13.8874	8.0931	1.192	17.2808	2.0205	0.010465
432.	0.	1.60137	13.2419	13.8874	8.0811	1.315	16.8145	1.9125	0.012488
433.	0.	1.57677	13.2405	13.8874	8.0686	1.454	16.2830	1.7846	0.014571
434.	0.	1.54696	13.2391	13.8874	8.0505	1.600	15.7741	1.6576	0.017601
435.	0.	1.50269	13.2374	13.8874	8.0434	1.658	15.3123	1.5632	0.023244
436.	0.	1.45271	13.2357	13.8874	8.0376	1.694	14.8856	1.4801	0.030105
437.	0.	1.39958	13.2341	13.8874	8.0295	1.734	14.5491	1.4078	0.037819
438.	0.	1.33947	13.2326	13.8874	8.0151	1.775	14.3283	1.3871	0.047119
439.	0.	1.28376	13.2314	13.8874	8.0092	1.808	14.1514	1.3655	0.055503
440.	0.	1.25644	13.2302	13.8874	7.8403	2.344	14.0481	1.3400	0.060031
441.	0.	1.22261	13.2297	13.8874	7.7965	2.551	13.6977	1.2546	0.064625
442.	0.	1.17849	13.2302	13.8874	7.8171	2.531	13.2367	1.1407	0.070730
443.	0.	1.12323	13.2315	13.8874	7.8399	2.462	12.8828	1.0695	0.079494
444.	0.	1.06340	13.2321	13.8874	7.8169	2.508	12.6618	1.0596	0.089615
445.	0.	1.01258	13.2326	13.8874	7.7649	2.697	12.6611	1.0481	0.098086
446.	0.	0.96615	13.2329	13.8874	7.7459	2.801	12.6219	1.0254	0.105394
447.	0.	0.91883	13.2330	13.8874	7.7304	2.897	12.6876	1.0427	0.112741
448.	0.	0.87766	13.2330	13.8874	7.7216	2.917	12.5276	1.0687	0.118661
449.	0.	0.85947	13.2337	13.8874	7.7620	2.864	12.1151	0.9405	0.120461
450.	0.	0.82634	13.2343	13.8874	7.7804	2.844	11.8041	0.8852	0.125206
451.	0.	0.78873	13.2351	13.8874	7.7873	2.851	11.5775	0.8609	0.130904
452.	0.	0.75357	13.2362	13.8874	7.7945	2.871	11.4001	0.8362	0.136162
453.	0.	0.71957	13.2376	13.8874	7.8026	2.916	11.2834	0.8212	0.141207
454.	0.	0.68790	13.2392	13.8874	7.8078	2.979	11.2069	0.8158	0.145811
455.	0.	0.66039	13.2412	13.8874	7.8104	3.041	11.1450	0.8097	0.149672
456.	0.	0.63623	13.2433	13.8874	7.8123	3.101	11.0886	0.8030	0.152957
457.	0.	0.61481	13.2456	13.8874	7.8139	3.159	11.0349	0.7958	0.155791
458.	0.	0.59564	13.2479	13.8874	7.8151	3.221	10.9981	0.7883	0.158268
459.	0.	0.57741	13.2502	13.8874	7.8121	3.296	11.0190	0.7906	0.160601
460.	0.	0.56059	13.2524	13.8874	7.8046	3.388	11.1189	0.8027	0.162711
461.	0.	0.54560	13.2542	13.8874	7.7925	3.521	11.3924	0.8246	0.164553

462.	0.	0.52966	13.2556	13.8874	7.7647	3.696	11.8486	0.8865	0.166472
463.	0.	0.51770	13.2564	13.8874	7.7363	3.860	12.2962	0.9478	0.167816
464.	0.	0.51000	13.2571	13.8874	7.7158	3.917	12.3965	0.9886	0.168598
465.	0.	0.51257	13.2582	13.8874	7.7329	3.870	12.1983	0.9282	0.168229
466.	0.	0.51305	13.2595	13.8874	7.7489	3.800	11.9009	0.8780	0.168045
467.	0.	0.51292	13.2612	13.8874	7.7708	3.666	11.4027	0.8179	0.167858
468.	0.	0.51701	13.2643	13.8874	7.8247	3.481	10.6888	0.6869	0.166940
469.	0.	0.51121	13.2695	13.8874	7.8832	3.110	9.4948	0.5672	0.167208
470.	0.	0.40475	13.4239	13.8874	9.1657	0.492	10.9966	0.2668	0.186816
471.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
472.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

WHAFIS input: YK-107.dat
WHAFIS output: YK-107.out

PART 3 COMPLETE


WHAFIS Elevation, and Total stillWater Level, transect: YK-107
Transect Profile
SWAN 1-D points
TSWL
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Apr 2 11:05:19 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-107.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Kennebunkport\3_whafis\whafis4\YK-107.out

header

THIS IS A 100-YEAR CASE
THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 56.14 WINDOF 56.14 WINDVH 60.00

PART1 INPUT

IE	0.000	-13.335	1.000	1.000	9.360	9.182	13.209	56.140	0.007	0.000
OF	3.000	-13.315	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	4.000	-13.309	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	9.000	-13.276	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	10.000	-13.270	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	15.000	-13.237	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	16.000	-13.231	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	21.000	-13.198	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	22.000	-13.192	0.000	9.360	0.000	0.000	0.000	0.000	0.006	0.000
OF	27.000	-13.160	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	28.000	-13.153	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	33.000	-13.121	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	34.000	-13.114	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	39.000	-13.082	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	40.000	-13.075	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	45.000	-13.043	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	46.000	-13.036	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	51.000	-13.004	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
OF	52.000	-12.997	0.000	9.360	0.000	0.000	0.000	0.000	0.009	0.000
OF	57.000	-12.951	0.000	9.360	0.000	0.000	0.000	0.000	0.010	0.000
OF	58.000	-12.937	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
OF	63.000	-12.865	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
OF	64.000	-12.851	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
OF	69.000	-12.780	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
OF	70.000	-12.766	0.000	9.361	0.000	0.000	0.000	0.000	0.011	0.000
OF	76.000	-12.701	0.000	9.361	0.000	0.000	0.000	0.000	0.011	0.000
OF	79.000	-12.670	0.000	9.361	0.000	0.000	0.000	0.000	0.010	0.000
OF	84.000	-12.617	0.000	9.360	0.000	0.000	0.000	0.000	0.013	0.000
OF	85.000	-12.590	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	90.000	-12.452	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
OF	91.000	-12.424	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
OF	96.000	-12.286	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	97.000	-12.259	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	102.000	-12.121	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	103.000	-12.094	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	108.000	-11.956	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
OF	109.000	-11.928	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	114.000	-11.791	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	115.000	-11.763	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
OF	120.000	-11.625	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	121.000	-11.598	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
OF	126.000	-11.460	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	127.000	-11.432	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	132.000	-11.295	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	133.000	-11.267	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	139.000	-11.102	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	144.000	-10.964	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	145.000	-10.936	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	156.000	-10.633	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	157.000	-10.606	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	168.000	-10.303	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
OF	169.000	-10.275	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
OF	180.000	-9.973	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	181.000	-9.945	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	192.000	-9.642	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
OF	193.000	-9.615	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
OF	204.000	-9.311	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	205.000	-9.284	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	216.000	-8.981	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	217.000	-8.953	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
OF	228.000	-8.650	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
OF	229.000	-8.623	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
OF	240.000	-8.320	0.000	9.357	0.000	0.000	0.000	0.000	0.028	0.000
OF	241.000	-8.292	0.000	9.357	0.000	0.000	0.000	0.000	0.028	0.000
OF	250.000	-8.044	0.000	9.357	0.000	0.000	0.000	0.000	0.026	0.000
OF	251.000	-8.031	0.000	9.357	0.000	0.000	0.000	0.000	0.005	0.000
OF	262.000	-7.988	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	263.000	-7.985	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	274.000	-7.942	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	275.000	-7.939	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	286.000	-7.896	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	287.000	-7.893	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
OF	298.000	-7.851	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	299.000	-7.847	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	310.000	-7.805	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	311.000	-7.801	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	322.000	-7.759	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	323.000	-7.755	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	334.000	-7.713	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	335.000	-7.709	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	346.000	-7.667	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	347.000	-7.663	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	358.000	-7.621	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	359.000	-7.617	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	370.000	-7.575	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	371.000	-7.571	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	382.000	-7.529	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	383.000	-7.525	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	394.000	-7.483	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	395.000	-7.479	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	406.000	-7.438	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	407.000	-7.434	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	418.000	-7.393	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000

OF	419.000	-7.389	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	430.000	-7.348	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	431.000	-7.344	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	442.000	-7.302	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
OF	443.000	-7.299	0.000	9.356	0.000	0.000	0.000	0.000	-0.008	0.000
OF	562.000	-8.259	0.000	9.358	0.000	0.000	0.000	0.000	-0.007	0.000
OF	614.000	-8.581	0.000	9.359	0.000	0.000	0.000	0.000	-0.006	0.000
OF	615.000	-8.587	0.000	9.359	0.000	0.000	0.000	0.000	0.001	0.000
OF	626.000	-8.568	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	627.000	-8.564	0.000	9.359	0.000	0.000	0.000	0.000	0.003	0.000
OF	638.000	-8.528	0.000	9.359	0.000	0.000	0.000	0.000	0.003	0.000
OF	639.000	-8.524	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	651.000	-8.502	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	652.000	-8.500	0.000	9.359	0.000	0.000	0.000	0.000	0.001	0.000
OF	663.000	-8.484	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	664.000	-8.483	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
OF	675.000	-8.467	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
OF	676.000	-8.465	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	687.000	-8.449	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	688.000	-8.448	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
OF	699.000	-8.432	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	700.000	-8.430	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	711.000	-8.414	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
OF	712.000	-8.413	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	723.000	-8.397	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
OF	724.000	-8.395	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
OF	735.000	-8.379	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	736.000	-8.378	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	747.000	-8.362	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	748.000	-8.360	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	759.000	-8.344	0.000	9.361	0.000	0.000	0.000	0.000	0.001	0.000
OF	760.000	-8.343	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	772.000	-8.325	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	778.000	-8.317	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
OF	781.000	-8.312	0.000	9.361	0.000	0.000	0.000	0.000	0.003	0.000
OF	792.000	-8.269	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
OF	793.000	-8.263	0.000	9.361	0.000	0.000	0.000	0.000	0.007	0.000
OF	804.000	-8.190	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	805.000	-8.183	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	816.000	-8.110	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	817.000	-8.103	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	828.000	-8.030	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	829.000	-8.024	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	840.000	-7.950	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	841.000	-7.944	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	852.000	-7.871	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	853.000	-7.864	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	864.000	-7.791	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	865.000	-7.784	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	876.000	-7.711	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	877.000	-7.705	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	888.000	-7.631	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
OF	889.000	-7.625	0.000	9.362	0.000	0.000	0.000	0.000	0.009	0.000
OF	900.000	-7.528	0.000	9.363	0.000	0.000	0.000	0.000	0.009	0.000
OF	901.000	-7.517	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
OF	912.000	-7.398	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
OF	913.000	-7.387	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
OF	924.000	-7.268	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
OF	925.000	-7.258	0.000	9.363	0.000	0.000	0.000	0.000	0.010	0.000
OF	936.000	-7.148	0.000	9.363	0.000	0.000	0.000	0.000	0.010	0.000
OF	937.000	-7.141	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	948.000	-7.065	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	949.000	-7.058	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	960.000	-6.982	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	961.000	-6.975	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	972.000	-6.898	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
OF	973.000	-6.888	0.000	9.363	0.000	0.000	0.000	0.000	0.009	0.000
OF	984.000	-6.786	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	985.000	-6.777	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	996.000	-6.675	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	997.000	-6.666	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1008.000	-6.563	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1009.000	-6.554	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1020.000	-6.452	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1021.000	-6.443	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1032.000	-6.341	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1033.000	-6.332	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1044.000	-6.229	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1045.000	-6.220	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
OF	1056.000	-6.118	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
OF	1057.000	-6.109	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
OF	1072.000	-6.002	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
OF	1073.000	-5.998	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
OF	1084.000	-5.960	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
OF	1085.000	-5.956	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1096.000	-5.918	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1097.000	-5.915	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1108.000	-5.876	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1109.000	-5.873	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
OF	1120.000	-5.834	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
OF	1121.000	-5.831	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
OF	1132.000	-5.793	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
OF	1133.000	-5.789	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
OF	1144.000	-5.751	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
OF	1145.000	-5.747	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
OF	1156.000	-5.709	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
OF	1157.000	-5.705	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
OF	1168.000	-5.656	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
OF	1169.000	-5.650	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
OF	1181.000	-5.589	0.000	9.369	0.000	0.000	0.000	0.000	0.003	0.000
OF	1195.000	-5.577	0.000	9.369	0.000	0.000	0.000	0.000	0.001	0.000
OF	1196.000	-5.575	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000

OF	1207.000	-5.551	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1208.000	-5.549	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1219.000	-5.526	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1220.000	-5.523	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1232.000	-5.498	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1243.000	-5.474	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1244.000	-5.472	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
OF	1262.000	-5.433	0.000	9.369	0.000	0.000	0.000	0.000	0.012	0.000
OF	1276.000	-5.100	0.000	9.368	0.000	0.000	0.000	0.000	0.025	0.000
OF	1277.000	-5.054	0.000	9.368	0.000	0.000	0.000	0.000	0.039	0.000
OF	1374.700	-1.285	0.000	9.363	0.000	0.000	0.000	0.000	0.040	0.000
OF	1377.900	-0.975	0.000	9.363	0.000	0.000	0.000	0.000	0.127	0.000
OF	1381.200	-0.460	0.000	9.360	0.000	0.000	0.000	0.000	0.127	0.000
IF	1397.600	1.534	0.000	9.361	0.000	0.000	0.000	0.000	0.113	0.000
IF	1400.900	1.761	0.000	9.366	0.000	0.000	0.000	0.000	0.069	0.000
IF	1404.200	1.990	0.000	9.372	0.000	0.000	0.000	0.000	0.073	0.000
IF	1407.500	2.245	0.000	9.379	0.000	0.000	0.000	0.000	0.077	0.000
IF	1410.800	2.499	0.000	9.386	0.000	0.000	0.000	0.000	0.078	0.000
IF	1414.000	2.754	0.000	9.394	0.000	0.000	0.000	0.000	0.097	0.000
IF	1417.300	3.132	0.000	9.401	0.000	0.000	0.000	0.000	0.123	0.000
IF	1420.600	3.563	0.000	9.407	0.000	0.000	0.000	0.000	0.131	0.000
IF	1423.900	3.994	0.000	9.417	0.000	0.000	0.000	0.000	0.112	0.000
IF	1427.200	4.305	0.000	9.436	0.000	0.000	0.000	0.000	0.091	0.000
IF	1430.400	4.588	0.000	9.458	0.000	0.000	0.000	0.000	0.087	0.000
IF	1433.700	4.871	0.000	9.484	0.000	0.000	0.000	0.000	0.059	0.000
IF	1437.000	4.979	0.000	9.514	0.000	0.000	0.000	0.000	0.030	0.000
IF	1440.300	5.072	0.000	9.542	0.000	0.000	0.000	0.000	0.028	0.000
IF	1443.600	5.164	0.000	9.557	0.000	0.000	0.000	0.000	0.061	0.000
IF	1446.800	5.468	0.000	9.572	0.000	0.000	0.000	0.000	0.106	0.000
IF	1450.100	5.855	0.000	9.592	0.000	0.000	0.000	0.000	0.097	0.000
IF	1453.400	6.107	0.000	9.620	0.000	0.000	0.000	0.000	0.049	0.000
IF	1456.700	6.179	0.000	9.654	0.000	0.000	0.000	0.000	0.023	0.000
IF	1460.000	6.257	0.000	9.681	0.000	0.000	0.000	0.000	0.024	0.000
IF	1463.300	6.340	0.000	9.705	0.000	0.000	0.000	0.000	0.010	0.000
IF	1466.500	6.323	0.000	9.729	0.000	0.000	0.000	0.000	-0.015	0.000
IF	1469.800	6.245	0.000	9.749	0.000	0.000	0.000	0.000	0.053	0.000
IF	1473.100	6.672	0.000	9.755	0.000	0.000	0.000	0.000	0.095	0.000
IF	1476.400	6.872	0.000	9.770	0.000	0.000	0.000	0.000	0.046	0.000
IF	1479.700	6.974	0.000	9.789	0.000	0.000	0.000	0.000	0.031	0.000
IF	1482.900	7.076	0.000	9.806	0.000	0.000	0.000	0.000	0.023	0.000
IF	1486.200	7.124	0.000	9.823	0.000	0.000	0.000	0.000	0.013	0.000
IF	1489.500	7.162	0.000	9.838	0.000	0.000	0.000	0.000	0.011	0.000
IF	1492.800	7.199	0.000	9.851	0.000	0.000	0.000	0.000	0.011	0.000
IF	1496.100	7.233	0.000	9.861	0.000	0.000	0.000	0.000	0.009	0.000
IF	1499.300	7.260	0.000	9.871	0.000	0.000	0.000	0.000	0.008	0.000
IF	1502.600	7.287	0.000	9.879	0.000	0.000	0.000	0.000	0.003	0.000
IF	1505.900	7.279	0.000	9.887	0.000	0.000	0.000	0.000	-0.003	0.000
IF	1509.200	7.266	0.000	9.893	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1512.500	7.197	0.000	9.899	0.000	0.000	0.000	0.000	-0.042	0.000
IF	1515.700	6.993	0.000	9.906	0.000	0.000	0.000	0.000	-0.063	0.000
IF	1519.000	6.788	0.000	9.910	0.000	0.000	0.000	0.000	-0.047	0.000
IF	1522.300	6.681	0.000	9.913	0.000	0.000	0.000	0.000	0.013	0.000
IF	1525.600	6.875	0.000	9.911	0.000	0.000	0.000	0.000	0.054	0.000
IF	1528.900	7.038	0.000	9.911	0.000	0.000	0.000	0.000	0.056	0.000
IF	1532.100	7.239	0.000	9.910	0.000	0.000	0.000	0.000	0.093	0.000
IF	1535.400	7.644	0.000	9.907	0.000	0.000	0.000	0.000	0.123	0.000
IF	1538.700	8.049	0.000	9.908	0.000	0.000	0.000	0.000	0.221	0.000
IF	1542.000	9.105	0.000	9.972	0.000	0.000	0.000	0.000	0.370	0.000
IF	1543.900	9.972	0.000	9.972	0.000	0.000	0.000	0.000	0.457	0.000
AS	1681.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.021	0.000
IF	1685.500	9.521	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
IF	1692.200	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.012	0.000
AS	1705.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.023	0.000
IF	1710.000	9.501	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
IF	1712.300	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.045	0.000
AS	1816.100	9.579	0.000	9.579	0.000	0.000	0.000	0.000	-0.157	0.000
IF	1824.000	8.340	0.000	9.579	0.000	0.000	0.000	0.000	-0.022	0.000
IF	1853.500	8.747	0.000	9.579	0.000	0.000	0.000	0.000	0.012	0.000
IF	1885.000	9.042	0.000	9.579	0.000	0.000	0.000	0.000	0.008	0.000
IF	1899.500	9.108	0.000	9.579	0.000	0.000	0.000	0.000	-0.026	0.000
IF	1905.500	8.517	0.000	9.579	0.000	0.000	0.000	0.000	-0.050	0.000
IF	1916.500	8.251	0.000	9.580	0.000	0.000	0.000	0.000	-0.006	0.000
IF	1929.000	8.386	0.000	9.580	0.000	0.000	0.000	0.000	-0.001	0.000
IF	1941.000	8.222	0.000	9.580	0.000	0.000	0.000	0.000	0.004	0.000
IF	1950.000	8.481	0.000	9.580	0.000	0.000	0.000	0.000	-0.012	0.000
IF	1970.500	7.881	0.000	9.580	0.000	0.000	0.000	0.000	0.011	0.000
IF	2005.000	9.062	0.000	9.580	0.000	0.000	0.000	0.000	0.008	0.000
IF	2023.000	8.320	0.000	9.580	0.000	0.000	0.000	0.000	-0.046	0.000
IF	2033.500	7.749	0.000	9.580	0.000	0.000	0.000	0.000	-0.032	0.000
IF	2051.500	7.421	0.000	9.580	0.000	0.000	0.000	0.000	-0.016	0.000
IF	2066.000	7.224	0.000	9.581	0.000	0.000	0.000	0.000	0.014	0.000
IF	2078.500	7.795	0.000	9.581	0.000	0.000	0.000	0.000	0.015	0.000
IF	2095.500	7.661	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2108.000	7.365	0.000	9.581	0.000	0.000	0.000	0.000	-0.022	0.000
IF	2118.500	7.159	0.000	9.581	0.000	0.000	0.000	0.000	0.001	0.000
IF	2135.500	7.402	0.000	9.580	0.000	0.000	0.000	0.000	0.006	0.000
IF	2143.000	7.300	0.000	9.580	0.000	0.000	0.000	0.000	0.051	0.000
IF	2149.500	8.110	0.000	9.580	0.000	0.000	0.000	0.000	0.000	0.000
IF	2160.500	7.300	0.000	9.580	0.000	0.000	0.000	0.000	-0.025	0.000
IF	2185.000	7.234	0.000	9.579	0.000	0.000	0.000	0.000	0.006	0.000
IF	2215.500	7.651	0.000	9.578	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2229.000	7.106	0.000	9.578	0.000	0.000	0.000	0.000	-0.060	0.000
IF	2235.000	6.480	0.000	9.578	0.000	0.000	0.000	0.000	-0.024	0.000
IF	2247.000	6.667	0.000	9.578	0.000	0.000	0.000	0.000	0.014	0.000
IF	2260.500	6.831	0.000	9.578	0.000	0.000	0.000	0.000	0.016	0.000
IF	2269.500	7.028	0.000	9.578	0.000	0.000	0.000	0.000	0.011	0.000
IF	2281.500	7.060	0.000	9.578	0.000	0.000	0.000	0.000	-0.012	0.000
IF	2285.500	6.831	0.000	9.578	0.000	0.000	0.000	0.000	-0.013	0.000
IF	2297.000	6.864	0.000	9.578	0.000	0.000	0.000	0.000	-0.032	0.000
IF	2311.000	6.020	0.000	9.579	0.000	0.000	0.000	0.000	0.010	0.000
IF	2327.000	7.159	0.000	9.579	0.000	0.000	0.000	0.000	0.059	0.000
IF	2341.500	7.815	0.000	9.579	0.000	0.000	0.000	0.000	-0.004	0.000

IF	2349.000	7.060	0.000	9.579	0.000	0.000	0.000	0.000	-0.044	0.000
IF	2356.500	7.159	0.000	9.579	0.000	0.000	0.000	0.000	-0.066	0.000
IF	2364.500	6.043	0.000	9.579	0.000	0.000	0.000	0.000	-0.066	0.000
IF	2374.500	5.978	0.000	9.580	0.000	0.000	0.000	0.000	-0.051	0.000
IF	2383.000	5.092	0.000	9.580	0.000	0.000	0.000	0.000	-0.031	0.000
IF	2388.500	5.551	0.000	9.580	0.000	0.000	0.000	0.000	-0.019	0.000
IF	2395.000	4.862	0.000	9.580	0.000	0.000	0.000	0.000	-0.028	0.000
IF	2403.500	5.125	0.000	9.580	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2431.000	4.534	0.000	9.580	0.000	0.000	0.000	0.000	-0.023	0.000
IF	2437.000	4.370	0.000	9.580	0.000	0.000	0.000	0.000	-0.050	0.000
IF	2447.500	3.714	0.000	9.580	0.000	0.000	0.000	0.000	-0.033	0.000
IF	2454.000	3.812	0.000	9.580	0.000	0.000	0.000	0.000	0.017	0.000
IF	2465.000	4.009	0.000	9.580	0.000	0.000	0.000	0.000	-0.001	0.000
IF	2477.000	3.780	0.000	9.580	0.000	0.000	0.000	0.000	0.003	0.000
IF	2489.500	4.075	0.000	9.581	0.000	0.000	0.000	0.000	0.010	0.000
IF	2497.500	3.976	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2506.500	3.812	0.000	9.581	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2519.000	3.780	0.000	9.581	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2531.500	3.583	0.000	9.581	0.000	0.000	0.000	0.000	0.004	0.000
IF	2541.500	3.878	0.000	9.581	0.000	0.000	0.000	0.000	0.010	0.000
IF	2561.000	3.878	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2570.000	3.451	0.000	9.581	0.000	0.000	0.000	0.000	-0.033	0.000
IF	2580.000	3.255	0.000	9.582	0.000	0.000	0.000	0.000	0.007	0.000
IF	2604.500	3.681	0.000	9.582	0.000	0.000	0.000	0.000	0.032	0.000
IF	2612.500	4.305	0.000	9.583	0.000	0.000	0.000	0.000	-0.013	0.000
IF	2630.000	3.353	0.000	9.583	0.000	0.000	0.000	0.000	-0.052	0.000
IF	2638.500	2.959	0.000	9.583	0.000	0.000	0.000	0.000	0.025	0.000
IF	2661.500	4.140	0.000	9.584	0.000	0.000	0.000	0.000	0.042	0.000
IF	2670.500	4.305	0.000	9.584	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2684.500	4.075	0.000	9.585	0.000	0.000	0.000	0.000	-0.021	0.000
IF	2697.500	3.747	0.000	9.585	0.000	0.000	0.000	0.000	0.000	0.000
IF	2708.000	4.075	0.000	9.585	0.000	0.000	0.000	0.000	0.029	0.000
IF	2720.500	4.403	0.000	9.585	0.000	0.000	0.000	0.000	0.019	0.000
IF	2729.000	4.469	0.000	9.586	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2738.000	4.239	0.000	9.586	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2746.000	4.432	0.000	9.586	0.000	0.000	0.000	0.000	0.027	0.000
IF	2754.000	4.665	0.000	9.586	0.000	0.000	0.000	0.000	-0.009	0.000
IF	2764.500	4.272	0.000	9.587	0.000	0.000	0.000	0.000	-0.029	0.000
IF	2772.000	4.140	0.000	9.587	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2785.500	4.239	0.000	9.587	0.000	0.000	0.000	0.000	0.008	0.000
IF	2792.000	4.301	0.000	9.587	0.000	0.000	0.000	0.000	-0.042	0.000
IF	2802.000	3.547	0.000	9.587	0.000	0.000	0.000	0.000	-0.015	0.000
IF	2816.000	3.944	0.000	9.588	0.000	0.000	0.000	0.000	0.028	0.000
IF	2831.500	4.367	0.000	9.588	0.000	0.000	0.000	0.000	0.007	0.000
IF	2843.000	4.137	0.000	9.588	0.000	0.000	0.000	0.000	-0.020	0.000
IF	2854.000	3.908	0.000	9.589	0.000	0.000	0.000	0.000	-0.020	0.000
IF	2864.500	3.711	0.000	9.589	0.000	0.000	0.000	0.000	-0.003	0.000
IF	2873.500	3.842	0.000	9.589	0.000	0.000	0.000	0.000	0.012	0.000
IF	2887.000	3.973	0.000	9.590	0.000	0.000	0.000	0.000	0.017	0.000
IF	2892.500	4.170	0.000	9.590	0.000	0.000	0.000	0.000	-0.001	0.000
IF	2924.500	3.940	0.000	9.590	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2932.000	3.908	0.000	9.591	0.000	0.000	0.000	0.000	-0.004	0.000
IF	2941.500	3.875	0.000	9.591	0.000	0.000	0.000	0.000	0.005	0.000
IF	2950.500	4.006	0.000	9.591	0.000	0.000	0.000	0.000	0.015	0.000
IF	2959.000	4.137	0.000	9.591	0.000	0.000	0.000	0.000	-0.007	0.000
IF	2970.000	3.875	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2980.000	4.104	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
IF	2987.000	3.842	0.000	9.591	0.000	0.000	0.000	0.000	-0.025	0.000
IF	2997.000	3.678	0.000	9.592	0.000	0.000	0.000	0.000	0.007	0.000
IF	3011.000	4.006	0.000	9.592	0.000	0.000	0.000	0.000	-0.020	0.000
IF	3033.000	2.956	0.000	9.592	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3041.000	3.547	0.000	9.592	0.000	0.000	0.000	0.000	0.027	0.000
IF	3074.000	4.071	0.000	9.592	0.000	0.000	0.000	0.000	0.009	0.000
IF	3082.000	3.908	0.000	9.592	0.000	0.000	0.000	0.000	-0.028	0.000
IF	3099.000	3.382	0.000	9.592	0.000	0.000	0.000	0.000	0.004	0.000
IF	3104.500	4.006	0.000	9.592	0.000	0.000	0.000	0.000	0.029	0.000
IF	3116.000	3.875	0.000	9.593	0.000	0.000	0.000	0.000	-0.010	0.000
IF	3129.500	3.743	0.000	9.593	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3140.500	3.776	0.000	9.593	0.000	0.000	0.000	0.000	0.023	0.000
IF	3151.000	4.236	0.000	9.593	0.000	0.000	0.000	0.000	0.028	0.000
IF	3160.500	4.334	0.000	9.593	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3171.000	4.203	0.000	9.593	0.000	0.000	0.000	0.000	-0.008	0.000
IF	3186.500	4.137	0.000	9.593	0.000	0.000	0.000	0.000	-0.020	0.000
IF	3201.500	3.579	0.000	9.593	0.000	0.000	0.000	0.000	0.001	0.000
IF	3210.500	4.170	0.000	9.593	0.000	0.000	0.000	0.000	0.015	0.000
IF	3230.000	4.006	0.000	9.594	0.000	0.000	0.000	0.000	-0.010	0.000
IF	3236.500	3.908	0.000	9.594	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3247.500	3.940	0.000	9.594	0.000	0.000	0.000	0.000	0.003	0.000
IF	3259.500	3.973	0.000	9.594	0.000	0.000	0.000	0.000	-0.011	0.000
IF	3270.500	3.678	0.000	9.594	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3277.500	3.711	0.000	9.594	0.000	0.000	0.000	0.000	-0.001	0.000
IF	3301.500	3.645	0.000	9.594	0.000	0.000	0.000	0.000	0.001	0.000
IF	3307.500	3.743	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
IF	3321.000	3.645	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
IF	3325.500	3.743	0.000	9.594	0.000	0.000	0.000	0.000	0.011	0.000
IF	3344.000	3.908	0.000	9.594	0.000	0.000	0.000	0.000	0.002	0.000
IF	3352.000	3.809	0.000	9.594	0.000	0.000	0.000	0.000	-0.001	0.000
IF	3368.500	3.875	0.000	9.595	0.000	0.000	0.000	0.000	0.004	0.000
IF	3383.000	3.940	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3390.000	3.842	0.000	9.595	0.000	0.000	0.000	0.000	0.015	0.000
IF	3409.500	4.334	0.000	9.595	0.000	0.000	0.000	0.000	0.007	0.000
IF	3417.000	4.039	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3429.000	4.301	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
IF	3438.000	4.268	0.000	9.595	0.000	0.000	0.000	0.000	0.008	0.000
IF	3445.000	4.432	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
IF	3456.500	4.531	0.000	9.595	0.000	0.000	0.000	0.000	0.009	0.000
IF	3473.500	4.695	0.000	9.595	0.000	0.000	0.000	0.000	0.022	0.000
IF	3480.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	-0.004	0.000
IF	3488.000	4.629	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
IF	3499.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	0.013	0.000
IF	3511.500	4.924	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
IF	3519.500	5.023	0.000	9.595	0.000	0.000	0.000	0.000	-0.014	0.000

IF	3526.000	4.728	0.000	9.595	0.000	0.000	0.000	0.000	0.035	0.000
IF	3534.500	5.548	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
IF	3545.000	4.990	0.000	9.595	0.000	0.000	0.000	0.000	-0.034	0.000
IF	3554.000	4.892	0.000	9.595	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3562.000	4.728	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
IF	3569.000	4.793	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
IF	3580.500	4.596	0.000	9.595	0.000	0.000	0.000	0.000	0.020	0.000
IF	3597.500	5.351	0.000	9.595	0.000	0.000	0.000	0.000	0.037	0.000
IF	3603.500	5.450	0.000	9.595	0.000	0.000	0.000	0.000	-0.009	0.000
IF	3612.500	5.220	0.000	9.595	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3619.000	5.253	0.000	9.595	0.000	0.000	0.000	0.000	-0.013	0.000
IF	3625.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	0.012	0.000
IF	3632.500	5.417	0.000	9.595	0.000	0.000	0.000	0.000	-0.026	0.000
IF	3639.000	4.695	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
IF	3649.500	5.646	0.000	9.595	0.000	0.000	0.000	0.000	0.048	0.000
IF	3663.000	5.843	0.000	9.595	0.000	0.000	0.000	0.000	0.010	0.000
IF	3673.000	5.876	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
IF	3678.000	6.007	0.000	9.595	0.000	0.000	0.000	0.000	-0.040	0.000
IF	3689.500	5.220	0.000	9.595	0.000	0.000	0.000	0.000	-0.015	0.000
IF	3704.000	5.614	0.000	9.595	0.000	0.000	0.000	0.000	0.012	0.000
IF	3716.500	5.548	0.000	9.595	0.000	0.000	0.000	0.000	-0.005	0.000
IF	3724.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.032	0.000
IF	3731.000	5.089	0.000	9.595	0.000	0.000	0.000	0.000	0.004	0.000
IF	3739.000	5.581	0.000	9.595	0.000	0.000	0.000	0.000	0.028	0.000
IF	3746.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.009	0.000
IF	3754.000	5.450	0.000	9.595	0.000	0.000	0.000	0.000	-0.014	0.000
IF	3763.000	5.285	0.000	9.595	0.000	0.000	0.000	0.000	0.015	0.000
IF	3771.000	5.712	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
IF	3784.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.011	0.000
IF	3798.000	5.417	0.000	9.595	0.000	0.000	0.000	0.000	0.051	0.000
IF	3803.500	6.516	0.000	9.595	0.000	0.000	0.000	0.000	0.034	0.000
IF	3811.000	5.860	0.000	9.595	0.000	0.000	0.000	0.000	-0.031	0.000
IF	3823.500	5.889	0.000	9.595	0.000	0.000	0.000	0.000	0.032	0.000
IF	3831.500	6.516	0.000	9.595	0.000	0.000	0.000	0.000	0.062	0.000
IF	3841.500	7.005	0.000	9.595	0.000	0.000	0.000	0.000	0.054	0.000
IF	3851.000	7.566	0.000	9.595	0.000	0.000	0.000	0.000	0.028	0.000
IF	3865.500	7.680	0.000	9.595	0.000	0.000	0.000	0.000	0.034	0.000
IF	3883.000	8.665	0.000	9.595	0.000	0.000	0.000	0.000	0.042	0.000
IF	3891.500	8.763	0.000	9.595	0.000	0.000	0.000	0.000	-0.010	0.000
IF	3901.000	8.481	0.000	9.595	0.000	0.000	0.000	0.000	-0.020	0.000
IF	3915.000	8.304	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
IF	3932.000	8.251	0.000	9.595	0.000	0.000	0.000	0.000	0.003	0.000
IF	3954.500	8.415	0.000	9.595	0.000	0.000	0.000	0.000	0.001	0.000
IF	3971.500	8.287	0.000	9.595	0.000	0.000	0.000	0.000	0.037	0.000
IF	3976.000	9.206	0.000	9.595	0.000	0.000	0.000	0.000	0.077	0.000
IF	3986.000	9.400	0.000	9.595	0.000	0.000	0.000	0.000	-0.004	0.000
IF	4004.000	9.108	0.000	9.595	0.000	0.000	0.000	0.000	-0.006	0.000
IF	4029.000	9.140	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
IF	4039.600	9.595	0.000	9.595	0.000	0.000	0.000	0.000	0.043	0.000
AS	4073.900	9.595	0.000	9.595	0.000	0.000	0.000	0.000	-0.010	0.000
IF	4075.000	9.583	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
IF	4075.300	9.595	0.000	9.595	0.000	0.000	0.000	0.000	0.038	0.000
AS	4123.100	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.009	0.000
IF	4129.000	9.550	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
IF	4129.700	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.077	0.000
AS	4206.700	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.144	0.000
IF	4210.500	9.058	0.000	9.604	0.000	0.000	0.000	0.000	-0.049	0.000
IF	4222.000	8.861	0.000	9.604	0.000	0.000	0.000	0.000	0.015	0.000
IF	4232.500	9.387	0.000	9.604	0.000	0.000	0.000	0.000	0.049	0.000
IF	4237.000	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.048	0.000
AS	4270.400	9.603	0.000	9.603	0.000	0.000	0.000	0.000	-0.083	0.000
IF	4276.000	9.140	0.000	9.603	0.000	0.000	0.000	0.000	-0.022	0.000
IF	4286.000	9.255	0.000	9.603	0.000	0.000	0.000	0.000	-0.021	0.000
IF	4296.000	8.730	0.000	9.603	0.000	0.000	0.000	0.000	-0.022	0.000
IF	4303.000	8.875	0.000	9.603	0.000	0.000	0.000	0.000	0.024	0.000
IF	4314.000	9.170	0.000	9.603	0.000	0.000	0.000	0.000	-0.010	0.000
IF	4326.500	8.645	0.000	9.604	0.000	0.000	0.000	0.000	-0.011	0.000
IF	4338.000	8.911	0.000	9.604	0.000	0.000	0.000	0.000	0.029	0.000
IF	4347.000	9.236	0.000	9.604	0.000	0.000	0.000	0.000	0.010	0.000
IF	4360.000	9.140	0.000	9.604	0.000	0.000	0.000	0.000	-0.017	0.000
IF	4374.500	8.776	0.000	9.604	0.000	0.000	0.000	0.000	0.022	0.000
IF	4379.000	9.567	0.000	9.604	0.000	0.000	0.000	0.000	0.032	0.000
IF	4386.000	9.140	0.000	9.604	0.000	0.000	0.000	0.000	-0.013	0.000
IF	4401.500	9.272	0.000	9.604	0.000	0.000	0.000	0.000	0.013	0.000
IF	4416.500	9.531	0.000	9.604	0.000	0.000	0.000	0.000	0.020	0.000
IF	4417.900	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.052	0.000
AS	4438.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.076	0.000
IF	4446.000	9.042	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
IF	4453.900	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.071	0.000
ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	END STATION	END ELEVATION	FETCH LENGTH	SURGE ELEV 10-YEAR	SURGE ELEV 100-YEAR	INITIAL WAVE HEIGHT	INITIAL W. PERIOD		BOTTOM SLOPE	AVERAGE A-ZONES
IE	0.000	-13.335	1.000	1.000	9.360	9.182	13.209	56.140	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	3.000	-13.315	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	4.000	-13.309	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	9.000	-13.276	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	10.000	-13.270	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	15.000	-13.237	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	16.000	-13.231	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	21.000	-13.198	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	22.000	-13.192	0.000	9.360	0.000	0.000	0.000	0.000	0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	27.000	-13.160	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	28.000	-13.153	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	33.000	-13.121	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	34.000	-13.114	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	39.000	-13.082	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	40.000	-13.075	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	45.000	-13.043	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	46.000	-13.036	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	51.000	-13.004	0.000	9.360	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	52.000	-12.997	0.000	9.360	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	57.000	-12.951	0.000	9.360	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	58.000	-12.937	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	63.000	-12.865	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	64.000	-12.851	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	69.000	-12.780	0.000	9.361	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	70.000	-12.766	0.000	9.361	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	76.000	-12.701	0.000	9.361	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	79.000	-12.670	0.000	9.361	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	84.000	-12.617	0.000	9.360	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	85.000	-12.590	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	90.000	-12.452	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	91.000	-12.424	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	96.000	-12.286	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	97.000	-12.259	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	102.000	-12.121	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	103.000	-12.094	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	108.000	-11.956	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	109.000	-11.928	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	114.000	-11.791	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	115.000	-11.763	0.000	9.360	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	120.000	-11.625	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	121.000	-11.598	0.000	9.360	0.000	0.000	0.000	0.000	0.027	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	126.000	-11.460	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	127.000	-11.432	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	132.000	-11.295	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	133.000	-11.267	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	139.000	-11.102	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	144.000	-10.964	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	145.000	-10.936	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	156.000	-10.633	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	157.000	-10.606	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	168.000	-10.303	0.000	9.359	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	169.000	-10.275	0.000	9.359	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	180.000	-9.973	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	181.000	-9.945	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	192.000	-9.642	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	193.000	-9.615	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	204.000	-9.311	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	205.000	-9.284	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	216.000	-8.981	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	217.000	-8.953	0.000	9.358	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	228.000	-8.650	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	229.000	-8.623	0.000	9.358	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	240.000	-8.320	0.000	9.357	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	241.000	-8.292	0.000	9.357	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	250.000	-8.044	0.000	9.357	0.000	0.000	0.000	0.000	0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	251.000	-8.031	0.000	9.357	0.000	0.000	0.000	0.000	0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	262.000	-7.988	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	263.000	-7.985	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	274.000	-7.942	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	275.000	-7.939	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	286.000	-7.896	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	287.000	-7.893	0.000	9.357	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	298.000	-7.851	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	299.000	-7.847	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	310.000	-7.805	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	311.000	-7.801	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	322.000	-7.759	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	323.000	-7.755	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	334.000	-7.713	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	335.000	-7.709	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	346.000	-7.667	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	347.000	-7.663	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	358.000	-7.621	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	359.000	-7.617	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	370.000	-7.575	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	371.000	-7.571	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	382.000	-7.529	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	383.000	-7.525	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	394.000	-7.483	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	395.000	-7.479	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	406.000	-7.438	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	407.000	-7.434	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	418.000	-7.393	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	419.000	-7.389	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	430.000	-7.348	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	431.000	-7.344	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	442.000	-7.302	0.000	9.356	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	443.000	-7.299	0.000	9.356	0.000	0.000	0.000	0.000	-0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	562.000	-8.259	0.000	9.358	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	614.000	-8.581	0.000	9.359	0.000	0.000	0.000	0.000	-0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	615.000	-8.587	0.000	9.359	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	626.000	-8.568	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	627.000	-8.564	0.000	9.359	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	638.000	-8.528	0.000	9.359	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	639.000	-8.524	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	651.000	-8.502	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	652.000	-8.500	0.000	9.359	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	663.000	-8.484	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	664.000	-8.483	0.000	9.359	0.000	0.000	0.000	0.000	0.002	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	675.000	-8.467	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	676.000	-8.465	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	687.000	-8.449	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	688.000	-8.448	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	699.000	-8.432	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	700.000	-8.430	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	711.000	-8.414	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	712.000	-8.413	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	723.000	-8.397	0.000	9.360	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	724.000	-8.395	0.000	9.360	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	735.000	-8.379	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	736.000	-8.378	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	747.000	-8.362	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	748.000	-8.360	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	759.000	-8.344	0.000	9.361	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	760.000	-8.343	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	772.000	-8.325	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	778.000	-8.317	0.000	9.361	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	781.000	-8.312	0.000	9.361	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	792.000	-8.269	0.000	9.361	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	793.000	-8.263	0.000	9.361	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	804.000	-8.190	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	805.000	-8.183	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	816.000	-8.110	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	817.000	-8.103	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	828.000	-8.030	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	829.000	-8.024	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	840.000	-7.950	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	841.000	-7.944	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	852.000	-7.871	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	853.000	-7.864	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	864.000	-7.791	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	865.000	-7.784	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	876.000	-7.711	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	877.000	-7.705	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	888.000	-7.631	0.000	9.362	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	889.000	-7.625	0.000	9.362	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	900.000	-7.528	0.000	9.363	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	901.000	-7.517	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	912.000	-7.398	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	913.000	-7.387	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	924.000	-7.268	0.000	9.363	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	925.000	-7.258	0.000	9.363	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	936.000	-7.148	0.000	9.363	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	937.000	-7.141	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	948.000	-7.065	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	949.000	-7.058	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	960.000	-6.982	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	961.000	-6.975	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	972.000	-6.898	0.000	9.363	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	973.000	-6.888	0.000	9.363	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	984.000	-6.786	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	985.000	-6.777	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	996.000	-6.675	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	997.000	-6.666	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1008.000	-6.563	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1009.000	-6.554	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1020.000	-6.452	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1021.000	-6.443	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1032.000	-6.341	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1033.000	-6.332	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1044.000	-6.229	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1045.000	-6.220	0.000	9.364	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1056.000	-6.118	0.000	9.365	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1057.000	-6.109	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1072.000	-6.002	0.000	9.365	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1073.000	-5.998	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1084.000	-5.960	0.000	9.365	0.000	0.000	0.000	0.000	0.004	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1085.000	-5.956	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1096.000	-5.918	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1097.000	-5.915	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1108.000	-5.876	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1109.000	-5.873	0.000	9.366	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1120.000	-5.834	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1121.000	-5.831	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1132.000	-5.793	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1133.000	-5.789	0.000	9.367	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1144.000	-5.751	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1145.000	-5.747	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1156.000	-5.709	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1157.000	-5.705	0.000	9.368	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1168.000	-5.656	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1169.000	-5.650	0.000	9.369	0.000	0.000	0.000	0.000	0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1181.000	-5.589	0.000	9.369	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1195.000	-5.577	0.000	9.369	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1196.000	-5.575	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1207.000	-5.551	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1208.000	-5.549	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1219.000	-5.526	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1220.000	-5.523	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1232.000	-5.498	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1243.000	-5.474	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1244.000	-5.472	0.000	9.369	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1262.000	-5.433	0.000	9.369	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1276.000	-5.100	0.000	9.368	0.000	0.000	0.000	0.000	0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1277.000	-5.054	0.000	9.368	0.000	0.000	0.000	0.000	0.039	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1374.700	-1.285	0.000	9.363	0.000	0.000	0.000	0.000	0.040	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1377.900	-0.975	0.000	9.363	0.000	0.000	0.000	0.000	0.127	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1381.200	-0.460	0.000	9.360	0.000	0.000	0.000	0.000	0.127	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1397.600	1.534	0.000	9.361	0.000	0.000	0.000	0.000	0.113	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1400.900	1.761	0.000	9.366	0.000	0.000	0.000	0.000	0.069	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1404.200	1.990	0.000	9.372	0.000	0.000	0.000	0.000	0.073	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1407.500	2.245	0.000	9.379	0.000	0.000	0.000	0.000	0.077	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1410.800	2.499	0.000	9.386	0.000	0.000	0.000	0.000	0.078	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1414.000	2.754	0.000	9.394	0.000	0.000	0.000	0.000	0.097	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1417.300	3.132	0.000	9.401	0.000	0.000	0.000	0.000	0.123	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1420.600	3.563	0.000	9.407	0.000	0.000	0.000	0.000	0.131	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1423.900	3.994	0.000	9.417	0.000	0.000	0.000	0.000	0.112	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1427.200	4.305	0.000	9.436	0.000	0.000	0.000	0.000	0.091	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1430.400	4.588	0.000	9.458	0.000	0.000	0.000	0.000	0.087	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1433.700	4.871	0.000	9.484	0.000	0.000	0.000	0.000	0.059	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1437.000	4.979	0.000	9.514	0.000	0.000	0.000	0.000	0.030	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1440.300	5.072	0.000	9.542	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1443.600	5.164	0.000	9.557	0.000	0.000	0.000	0.000	0.061	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1446.800	5.468	0.000	9.572	0.000	0.000	0.000	0.000	0.106	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1450.100	5.855	0.000	9.592	0.000	0.000	0.000	0.000	0.097	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1453.400	6.107	0.000	9.620	0.000	0.000	0.000	0.000	0.049	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1456.700	6.179	0.000	9.654	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1460.000	6.257	0.000	9.681	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1463.300	6.340	0.000	9.705	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1466.500	6.323	0.000	9.729	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1469.800	6.245	0.000	9.749	0.000	0.000	0.000	0.000	0.053	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1473.100	6.672	0.000	9.755	0.000	0.000	0.000	0.000	0.095	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1476.400	6.872	0.000	9.770	0.000	0.000	0.000	0.000	0.046	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1479.700	6.974	0.000	9.789	0.000	0.000	0.000	0.000	0.031	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1482.900	7.076	0.000	9.806	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1486.200	7.124	0.000	9.823	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1489.500	7.162	0.000	9.838	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1492.800	7.199	0.000	9.851	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1496.100	7.233	0.000	9.861	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1499.300	7.260	0.000	9.871	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1502.600	7.287	0.000	9.879	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1505.900	7.279	0.000	9.887	0.000	0.000	0.000	0.000	-0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1509.200	7.266	0.000	9.893	0.000	0.000	0.000	0.000	-0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1512.500	7.197	0.000	9.899	0.000	0.000	0.000	0.000	-0.042	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1515.700	6.993	0.000	9.906	0.000	0.000	0.000	0.000	-0.063	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1519.000	6.788	0.000	9.910	0.000	0.000	0.000	0.000	-0.047	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1522.300	6.681	0.000	9.913	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1525.600	6.875	0.000	9.911	0.000	0.000	0.000	0.000	0.054	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1528.900	7.038	0.000	9.911	0.000	0.000	0.000	0.000	0.056	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1532.100	7.239	0.000	9.910	0.000	0.000	0.000	0.000	0.093	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1535.400	7.644	0.000	9.907	0.000	0.000	0.000	0.000	0.123	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1538.700	8.049	0.000	9.908	0.000	0.000	0.000	0.000	0.221	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1542.000	9.105	0.000	9.972	0.000	0.000	0.000	0.000	0.370	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1543.900	9.972	0.000	9.972	0.000	0.000	0.000	0.000	0.457	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	1681.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1685.500	9.521	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1692.200	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	1705.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1710.000	9.501	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1712.300	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.045	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	1816.100	9.579	0.000	9.579	0.000	0.000	0.000	0.000	-0.157	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1824.000	8.340	0.000	9.579	0.000	0.000	0.000	0.000	-0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1853.500	8.747	0.000	9.579	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1885.000	9.042	0.000	9.579	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1899.500	9.108	0.000	9.579	0.000	0.000	0.000	0.000	-0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1905.500	8.517	0.000	9.579	0.000	0.000	0.000	0.000	-0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1916.500	8.251	0.000	9.580	0.000	0.000	0.000	0.000	-0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1929.000	8.386	0.000	9.580	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1941.000	8.222	0.000	9.580	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1950.000	8.481	0.000	9.580	0.000	0.000	0.000	0.000	-0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	1970.500	7.881	0.000	9.580	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2005.000	9.062	0.000	9.580	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2023.000	8.320	0.000	9.580	0.000	0.000	0.000	0.000	-0.046	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2033.500	7.749	0.000	9.580	0.000	0.000	0.000	0.000	-0.032	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2051.500	7.421	0.000	9.580	0.000	0.000	0.000	0.000	-0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2066.000	7.224	0.000	9.581	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2078.500	7.795	0.000	9.581	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2095.500	7.661	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2108.000	7.365	0.000	9.581	0.000	0.000	0.000	0.000	-0.022	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2118.500	7.159	0.000	9.581	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2135.500	7.402	0.000	9.580	0.000	0.000	0.000	0.000	0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2143.000	7.300	0.000	9.580	0.000	0.000	0.000	0.000	0.051	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2149.500	8.110	0.000	9.580	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2160.500	7.300	0.000	9.580	0.000	0.000	0.000	0.000	-0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2185.000	7.234	0.000	9.579	0.000	0.000	0.000	0.000	0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2215.500	7.651	0.000	9.578	0.000	0.000	0.000	0.000	-0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2229.000	7.106	0.000	9.578	0.000	0.000	0.000	0.000	-0.060	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2235.000	6.480	0.000	9.578	0.000	0.000	0.000	0.000	-0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2247.000	6.667	0.000	9.578	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2260.500	6.831	0.000	9.578	0.000	0.000	0.000	0.000	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2269.500	7.028	0.000	9.578	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2281.500	7.060	0.000	9.578	0.000	0.000	0.000	0.000	-0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2285.500	6.831	0.000	9.578	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2297.000	6.864	0.000	9.578	0.000	0.000	0.000	0.000	-0.032	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2311.000	6.020	0.000	9.579	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2327.000	7.159	0.000	9.579	0.000	0.000	0.000	0.000	0.059	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2341.500	7.815	0.000	9.579	0.000	0.000	0.000	0.000	-0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2349.000	7.060	0.000	9.579	0.000	0.000	0.000	0.000	-0.044	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2356.500	7.159	0.000	9.579	0.000	0.000	0.000	0.000	-0.066	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2364.500	6.043	0.000	9.579	0.000	0.000	0.000	0.000	-0.066	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2374.500	5.978	0.000	9.580	0.000	0.000	0.000	0.000	-0.051	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2383.000	5.092	0.000	9.580	0.000	0.000	0.000	0.000	-0.031	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2388.500	5.551	0.000	9.580	0.000	0.000	0.000	0.000	-0.019	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2395.000	4.862	0.000	9.580	0.000	0.000	0.000	0.000	-0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2403.500	5.125	0.000	9.580	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2431.000	4.534	0.000	9.580	0.000	0.000	0.000	0.000	-0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2437.000	4.370	0.000	9.580	0.000	0.000	0.000	0.000	-0.050	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2447.500	3.714	0.000	9.580	0.000	0.000	0.000	0.000	-0.033	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2454.000	3.812	0.000	9.580	0.000	0.000	0.000	0.000	0.017	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2465.000	4.009	0.000	9.580	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2477.000	3.780	0.000	9.580	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2489.500	4.075	0.000	9.581	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2497.500	3.976	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2506.500	3.812	0.000	9.581	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2519.000	3.780	0.000	9.581	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2531.500	3.583	0.000	9.581	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2541.500	3.878	0.000	9.581	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2561.000	3.878	0.000	9.581	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2570.000	3.451	0.000	9.581	0.000	0.000	0.000	0.000	-0.033	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2580.000	3.255	0.000	9.582	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2604.500	3.681	0.000	9.582	0.000	0.000	0.000	0.000	0.032	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2612.500	4.305	0.000	9.583	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2630.000	3.353	0.000	9.583	0.000	0.000	0.000	0.000	-0.052	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2638.500	2.959	0.000	9.583	0.000	0.000	0.000	0.000	0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2661.500	4.140	0.000	9.584	0.000	0.000	0.000	0.000	0.042	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2670.500	4.305	0.000	9.584	0.000	0.000	0.000	0.000	-0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2684.500	4.075	0.000	9.585	0.000	0.000	0.000	0.000	-0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2697.500	3.747	0.000	9.585	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2708.000	4.075	0.000	9.585	0.000	0.000	0.000	0.000	0.029	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2720.500	4.403	0.000	9.585	0.000	0.000	0.000	0.000	0.019	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2729.000	4.469	0.000	9.586	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2738.000	4.239	0.000	9.586	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2746.000	4.432	0.000	9.586	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2754.000	4.665	0.000	9.586	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2764.500	4.272	0.000	9.587	0.000	0.000	0.000	0.000	-0.029	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2772.000	4.140	0.000	9.587	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2785.500	4.239	0.000	9.587	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2792.000	4.301	0.000	9.587	0.000	0.000	0.000	0.000	-0.042	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2802.000	3.547	0.000	9.587	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2816.000	3.944	0.000	9.588	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2831.500	4.367	0.000	9.588	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2843.000	4.137	0.000	9.588	0.000	0.000	0.000	0.000	-0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2854.000	3.908	0.000	9.589	0.000	0.000	0.000	0.000	-0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2864.500	3.711	0.000	9.589	0.000	0.000	0.000	0.000	-0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2873.500	3.842	0.000	9.589	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2887.000	3.973	0.000	9.590	0.000	0.000	0.000	0.000	0.017	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2892.500	4.170	0.000	9.590	0.000	0.000	0.000	0.000	-0.001	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2924.500	3.940	0.000	9.590	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2932.000	3.908	0.000	9.591	0.000	0.000	0.000	0.000	-0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2941.500	3.875	0.000	9.591	0.000	0.000	0.000	0.000	0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2950.500	4.006	0.000	9.591	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2959.000	4.137	0.000	9.591	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2970.000	3.875	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2980.000	4.104	0.000	9.591	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2987.000	3.842	0.000	9.591	0.000	0.000	0.000	0.000	-0.025	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	2997.000	3.678	0.000	9.592	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3011.000	4.006	0.000	9.592	0.000	0.000	0.000	0.000	-0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3033.000	2.956	0.000	9.592	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3041.000	3.547	0.000	9.592	0.000	0.000	0.000	0.000	0.027	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3074.000	4.071	0.000	9.592	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3082.000	3.908	0.000	9.592	0.000	0.000	0.000	0.000	-0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3099.000	3.382	0.000	9.592	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3104.500	4.006	0.000	9.592	0.000	0.000	0.000	0.000	0.029	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3116.000	3.875	0.000	9.593	0.000	0.000	0.000	0.000	-0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3129.500	3.743	0.000	9.593	0.000	0.000	0.000	0.000	-0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3140.500	3.776	0.000	9.593	0.000	0.000	0.000	0.000	0.023	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3151.000	4.236	0.000	9.593	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3160.500	4.334	0.000	9.593	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3171.000	4.203	0.000	9.593	0.000	0.000	0.000	0.000	-0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3186.500	4.137	0.000	9.593	0.000	0.000	0.000	0.000	-0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3201.500	3.579	0.000	9.593	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3210.500	4.170	0.000	9.593	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3230.000	4.006	0.000	9.594	0.000	0.000	0.000	0.000	-0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3236.500	3.908	0.000	9.594	0.000	0.000	0.000	0.000	-0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3247.500	3.940	0.000	9.594	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3259.500	3.973	0.000	9.594	0.000	0.000	0.000	0.000	-0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3270.500	3.678	0.000	9.594	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3277.500	3.711	0.000	9.594	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3301.500	3.645	0.000	9.594	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3307.500	3.743	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3321.000	3.645	0.000	9.594	0.000	0.000	0.000	0.000	0.000	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3325.500	3.743	0.000	9.594	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3344.000	3.908	0.000	9.594	0.000	0.000	0.000	0.000	0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3352.000	3.809	0.000	9.594	0.000	0.000	0.000	0.000	-0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3368.500	3.875	0.000	9.595	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3383.000	3.940	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3390.000	3.842	0.000	9.595	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3409.500	4.334	0.000	9.595	0.000	0.000	0.000	0.000	0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3417.000	4.039	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3429.000	4.301	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3438.000	4.268	0.000	9.595	0.000	0.000	0.000	0.000	0.008	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3445.000	4.432	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3456.500	4.531	0.000	9.595	0.000	0.000	0.000	0.000	0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3473.500	4.695	0.000	9.595	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3480.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	-0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3488.000	4.629	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3499.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3511.500	4.924	0.000	9.595	0.000	0.000	0.000	0.000	-0.002	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3519.500	5.023	0.000	9.595	0.000	0.000	0.000	0.000	-0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3526.000	4.728	0.000	9.595	0.000	0.000	0.000	0.000	0.035	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3534.500	5.548	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3545.000	4.990	0.000	9.595	0.000	0.000	0.000	0.000	-0.034	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3554.000	4.892	0.000	9.595	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3562.000	4.728	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3569.000	4.793	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3580.500	4.596	0.000	9.595	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3597.500	5.351	0.000	9.595	0.000	0.000	0.000	0.000	0.037	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3603.500	5.450	0.000	9.595	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3612.500	5.220	0.000	9.595	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3619.000	5.253	0.000	9.595	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3625.000	5.056	0.000	9.595	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3632.500	5.417	0.000	9.595	0.000	0.000	0.000	0.000	-0.026	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3639.000	4.695	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3649.500	5.646	0.000	9.595	0.000	0.000	0.000	0.000	0.048	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3663.000	5.843	0.000	9.595	0.000	0.000	0.000	0.000	0.010	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3673.000	5.876	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3678.000	6.007	0.000	9.595	0.000	0.000	0.000	0.000	-0.040	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3689.500	5.220	0.000	9.595	0.000	0.000	0.000	0.000	-0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3704.000	5.614	0.000	9.595	0.000	0.000	0.000	0.000	0.012	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3716.500	5.548	0.000	9.595	0.000	0.000	0.000	0.000	-0.005	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3724.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.032	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3731.000	5.089	0.000	9.595	0.000	0.000	0.000	0.000	0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3739.000	5.581	0.000	9.595	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3746.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3754.000	5.450	0.000	9.595	0.000	0.000	0.000	0.000	-0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3763.000	5.285	0.000	9.595	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3771.000	5.712	0.000	9.595	0.000	0.000	0.000	0.000	0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3784.000	5.515	0.000	9.595	0.000	0.000	0.000	0.000	-0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3798.000	5.417	0.000	9.595	0.000	0.000	0.000	0.000	0.051	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3803.500	6.516	0.000	9.595	0.000	0.000	0.000	0.000	0.034	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3811.000	5.860	0.000	9.595	0.000	0.000	0.000	0.000	-0.031	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3823.500	5.889	0.000	9.595	0.000	0.000	0.000	0.000	0.032	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3831.500	6.516	0.000	9.595	0.000	0.000	0.000	0.000	0.062	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3841.500	7.005	0.000	9.595	0.000	0.000	0.000	0.000	0.054	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3851.000	7.566	0.000	9.595	0.000	0.000	0.000	0.000	0.028	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3865.500	7.680	0.000	9.595	0.000	0.000	0.000	0.000	0.034	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3883.000	8.665	0.000	9.595	0.000	0.000	0.000	0.000	0.042	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3891.500	8.763	0.000	9.595	0.000	0.000	0.000	0.000	-0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3901.000	8.481	0.000	9.595	0.000	0.000	0.000	0.000	-0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3915.000	8.304	0.000	9.595	0.000	0.000	0.000	0.000	-0.007	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3932.000	8.251	0.000	9.595	0.000	0.000	0.000	0.000	0.003	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3954.500	8.415	0.000	9.595	0.000	0.000	0.000	0.000	0.001	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3971.500	8.287	0.000	9.595	0.000	0.000	0.000	0.000	0.037	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3976.000	9.206	0.000	9.595	0.000	0.000	0.000	0.000	0.077	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	3986.000	9.400	0.000	9.595	0.000	0.000	0.000	0.000	-0.004	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4004.000	9.108	0.000	9.595	0.000	0.000	0.000	0.000	-0.006	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4029.000	9.140	0.000	9.595	0.000	0.000	0.000	0.000	0.014	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4039.600	9.595	0.000	9.595	0.000	0.000	0.000	0.000	0.043	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4073.900	9.595	0.000	9.595	0.000	0.000	0.000	0.000	-0.010	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4075.000	9.583	0.000	9.595	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4075.300	9.595	0.000	9.595	0.000	0.000	0.000	0.000	0.038	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4123.100	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.009	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4129.000	9.550	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4129.700	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.077	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4206.700	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.144	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4210.500	9.058	0.000	9.604	0.000	0.000	0.000	0.000	-0.049	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4222.000	8.861	0.000	9.604	0.000	0.000	0.000	0.000	0.015	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4232.500	9.387	0.000	9.604	0.000	0.000	0.000	0.000	0.049	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4237.000	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.048	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4270.400	9.603	0.000	9.603	0.000	0.000	0.000	0.000	-0.083	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4276.000	9.140	0.000	9.603	0.000	0.000	0.000	0.000	-0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4286.000	9.255	0.000	9.603	0.000	0.000	0.000	0.000	-0.021	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4296.000	8.730	0.000	9.603	0.000	0.000	0.000	0.000	-0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4303.000	8.875	0.000	9.603	0.000	0.000	0.000	0.000	0.024	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4314.000	9.170	0.000	9.603	0.000	0.000	0.000	0.000	-0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4326.500	8.645	0.000	9.604	0.000	0.000	0.000	0.000	-0.011	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4338.000	8.911	0.000	9.604	0.000	0.000	0.000	0.000	0.029	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4347.000	9.236	0.000	9.604	0.000	0.000	0.000	0.000	0.010	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4360.000	9.140	0.000	9.604	0.000	0.000	0.000	0.000	-0.017	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4374.500	8.776	0.000	9.604	0.000	0.000	0.000	0.000	0.022	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4379.000	9.567	0.000	9.604	0.000	0.000	0.000	0.000	0.032	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4386.000	9.140	0.000	9.604	0.000	0.000	0.000	0.000	-0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4401.500	9.272	0.000	9.604	0.000	0.000	0.000	0.000	0.013	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4416.500	9.531	0.000	9.604	0.000	0.000	0.000	0.000	0.020	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4417.900	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.052	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	4438.600	9.604	0.000	9.604	0.000	0.000	0.000	0.000	-0.076	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4446.000	9.042	0.000	9.604	0.000	0.000	0.000	0.000	0.000	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	4453.900	9.604	0.000	9.604	0.000	0.000	0.000	0.000	0.071	0.000

----------END OF TRANSECT----------

NOTE:
SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

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PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION		CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	9.18	13.21	15.79
OF	3.00	9.19	13.21	15.79
OF	4.00	9.19	13.21	15.79
OF	9.00	9.19	13.21	15.79
OF	10.00	9.19	13.21	15.79
OF	15.00	9.20	13.21	15.80
OF	16.00	9.20	13.21	15.80

OF	21.00	9.20	13.21	15.80
OF	22.00	9.21	13.21	15.80
OF	27.00	9.21	13.21	15.81
OF	28.00	9.21	13.21	15.81
OF	33.00	9.22	13.21	15.81
OF	34.00	9.22	13.21	15.81
OF	39.00	9.22	13.21	15.82
OF	40.00	9.22	13.21	15.82
OF	45.00	9.23	13.21	15.82
OF	46.00	9.23	13.21	15.82
OF	51.00	9.24	13.21	15.83
OF	52.00	9.24	13.21	15.83
OF	57.00	9.25	13.21	15.83
OF	58.00	9.25	13.21	15.83
OF	63.00	9.26	13.21	15.84
OF	64.00	9.26	13.21	15.84
OF	69.00	9.27	13.21	15.85
OF	70.00	9.27	13.21	15.85
OF	76.00	9.29	13.21	15.86
OF	79.00	9.29	13.21	15.86
OF	84.00	9.30	13.21	15.87
OF	85.00	9.30	13.21	15.87
OF	90.00	9.33	13.21	15.89
OF	91.00	9.33	13.21	15.89
OF	96.00	9.35	13.21	15.91
OF	97.00	9.36	13.21	15.91
OF	102.00	9.38	13.21	15.92
OF	103.00	9.38	13.21	15.93
OF	108.00	9.41	13.21	15.94
OF	109.00	9.41	13.21	15.95
OF	114.00	9.43	13.21	15.96
OF	115.00	9.44	13.21	15.97
OF	120.00	9.46	13.21	15.98
OF	121.00	9.47	13.21	15.99
OF	126.00	9.49	13.21	16.00
OF	127.00	9.49	13.21	16.00
OF	132.00	9.52	13.21	16.02
OF	133.00	9.52	13.21	16.02
OF	139.00	9.55	13.21	16.04
OF	144.00	9.58	13.21	16.06
OF	145.00	9.58	13.21	16.07
OF	156.00	9.64	13.21	16.10
OF	157.00	9.64	13.21	16.11
OF	168.00	9.70	13.21	16.15
OF	169.00	9.70	13.21	16.15
OF	180.00	9.76	13.21	16.19
OF	181.00	9.77	13.21	16.19
OF	192.00	9.83	13.21	16.24
OF	193.00	9.83	13.21	16.24
OF	204.00	9.89	13.21	16.28
OF	205.00	9.90	13.21	16.29
OF	216.00	9.96	13.21	16.33
OF	217.00	9.97	13.21	16.33
OF	228.00	10.00	13.21	16.36
OF	229.00	10.00	13.21	16.36
OF	240.00	9.97	13.21	16.33
OF	241.00	9.97	13.21	16.33
OF	250.00	9.94	13.21	16.32
OF	251.00	9.94	13.21	16.32
OF	262.00	9.94	13.21	16.31
OF	263.00	9.94	13.21	16.32
OF	274.00	9.94	13.21	16.31
OF	275.00	9.94	13.21	16.31
OF	286.00	9.94	13.21	16.31
OF	287.00	9.94	13.21	16.31
OF	298.00	9.94	13.21	16.31
OF	299.00	9.94	13.21	16.31
OF	310.00	9.93	13.21	16.31
OF	311.00	9.94	13.21	16.31
OF	322.00	9.93	13.21	16.31
OF	323.00	9.93	13.21	16.31
OF	334.00	9.93	13.21	16.31
OF	335.00	9.93	13.21	16.31
OF	346.00	9.93	13.21	16.31
OF	347.00	9.93	13.21	16.31
OF	358.00	9.93	13.21	16.31
OF	359.00	9.93	13.21	16.31
OF	370.00	9.93	13.21	16.31
OF	371.00	9.93	13.21	16.31
OF	382.00	9.93	13.21	16.30
OF	383.00	9.93	13.21	16.31
OF	394.00	9.93	13.21	16.30
OF	395.00	9.93	13.21	16.30
OF	406.00	9.92	13.21	16.30
OF	407.00	9.93	13.21	16.30
OF	418.00	9.92	13.21	16.30
OF	419.00	9.92	13.21	16.30
OF	430.00	9.92	13.21	16.30
OF	431.00	9.92	13.21	16.30
OF	442.00	9.92	13.21	16.30
OF	443.00	9.92	13.21	16.30
OF	562.00	10.04	13.21	16.38
OF	614.00	10.07	13.21	16.41
OF	615.00	10.08	13.21	16.41
OF	626.00	10.08	13.21	16.41
OF	627.00	10.08	13.21	16.41
OF	638.00	10.08	13.21	16.41
OF	639.00	10.08	13.21	16.41
OF	651.00	10.08	13.21	16.41
OF	652.00	10.08	13.21	16.41
OF	663.00	10.08	13.21	16.42
OF	664.00	10.08	13.21	16.42

OF	675.00	10.08	13.21	16.42
OF	676.00	10.08	13.21	16.42
OF	687.00	10.08	13.21	16.42
OF	688.00	10.09	13.21	16.42
OF	699.00	10.09	13.21	16.42
OF	700.00	10.09	13.21	16.42
OF	711.00	10.09	13.21	16.42
OF	712.00	10.09	13.21	16.42
OF	723.00	10.09	13.21	16.42
OF	724.00	10.09	13.21	16.43
OF	735.00	10.09	13.21	16.43
OF	736.00	10.10	13.21	16.43
OF	747.00	10.10	13.21	16.43
OF	748.00	10.10	13.21	16.43
OF	759.00	10.10	13.21	16.43
OF	760.00	10.10	13.21	16.43
OF	772.00	10.10	13.21	16.43
OF	778.00	10.10	13.21	16.43
OF	781.00	10.10	13.21	16.43
OF	792.00	10.10	13.21	16.43
OF	793.00	10.10	13.21	16.43
OF	804.00	10.10	13.21	16.43
OF	805.00	10.10	13.21	16.43
OF	816.00	10.09	13.21	16.43
OF	817.00	10.09	13.21	16.43
OF	828.00	10.09	13.21	16.42
OF	829.00	10.09	13.21	16.42
OF	840.00	10.08	13.21	16.42
OF	841.00	10.08	13.21	16.42
OF	852.00	10.08	13.21	16.41
OF	853.00	10.08	13.21	16.42
OF	864.00	10.07	13.21	16.41
OF	865.00	10.07	13.21	16.41
OF	876.00	10.07	13.21	16.41
OF	877.00	10.07	13.21	16.41
OF	888.00	10.06	13.21	16.40
OF	889.00	10.06	13.21	16.40
OF	900.00	10.05	13.21	16.40
OF	901.00	10.05	13.21	16.40
OF	912.00	10.04	13.21	16.39
OF	913.00	10.04	13.21	16.39
OF	924.00	10.03	13.21	16.38
OF	925.00	10.03	13.21	16.38
OF	936.00	10.02	13.21	16.38
OF	937.00	10.02	13.21	16.38
OF	948.00	10.01	13.21	16.37
OF	949.00	10.01	13.21	16.37
OF	960.00	10.00	13.21	16.37
OF	961.00	10.01	13.21	16.37
OF	972.00	10.00	13.21	16.36
OF	973.00	10.00	13.21	16.36
OF	984.00	9.99	13.21	16.36
OF	985.00	9.99	13.21	16.36
OF	996.00	9.98	13.21	16.35
OF	997.00	9.98	13.21	16.35
OF	1008.00	9.97	13.21	16.34
OF	1009.00	9.97	13.21	16.34
OF	1020.00	9.96	13.21	16.33
OF	1021.00	9.96	13.21	16.33
OF	1032.00	9.94	13.21	16.32
OF	1033.00	9.94	13.21	16.33
OF	1044.00	9.93	13.21	16.32
OF	1045.00	9.93	13.21	16.32
OF	1056.00	9.92	13.21	16.31
OF	1057.00	9.92	13.21	16.31
OF	1072.00	9.91	13.21	16.30
OF	1073.00	9.91	13.21	16.30
OF	1084.00	9.91	13.21	16.30
OF	1085.00	9.91	13.21	16.30
OF	1096.00	9.90	13.21	16.30
OF	1097.00	9.91	13.21	16.30
OF	1108.00	9.90	13.21	16.30
OF	1109.00	9.90	13.21	16.30
OF	1120.00	9.90	13.21	16.30
OF	1121.00	9.90	13.21	16.30
OF	1132.00	9.90	13.21	16.30
OF	1133.00	9.90	13.21	16.30
OF	1144.00	9.90	13.21	16.30
OF	1145.00	9.90	13.21	16.30
OF	1156.00	9.89	13.21	16.29
OF	1157.00	9.90	13.21	16.29
OF	1168.00	9.89	13.21	16.29
OF	1169.00	9.89	13.21	16.29
OF	1181.00	9.88	13.21	16.29
OF	1195.00	9.88	13.21	16.29
OF	1196.00	9.89	13.21	16.29
OF	1207.00	9.88	13.21	16.29
OF	1208.00	9.89	13.21	16.29
OF	1219.00	9.88	13.21	16.29
OF	1220.00	9.89	13.21	16.29
OF	1232.00	9.88	13.21	16.29
OF	1243.00	9.88	13.21	16.29
OF	1244.00	9.88	13.21	16.29
OF	1262.00	9.88	13.21	16.28
OF	1276.00	9.83	13.21	16.25
OF	1277.00	9.82	13.21	16.24
OF	1374.70	8.15	13.21	15.07
OF	1377.90	7.92	13.21	14.91
OF	1381.20	7.53	13.21	14.63
IF	1397.60	6.02	13.21	13.58
IF	1400.90	5.85	13.21	13.46
IF	1404.20	5.68	13.21	13.35

IF	1407.50	5.50	13.21	13.23
IF	1410.80	5.31	13.21	13.10
IF	1414.00	5.12	13.21	12.98
IF	1417.30	4.84	13.21	12.79
IF	1420.60	4.51	13.21	12.57
IF	1423.90	4.19	13.21	12.35
IF	1427.20	3.97	13.21	12.21
IF	1430.40	3.77	13.21	12.09
IF	1433.70	3.57	13.21	11.98
IF	1437.00	3.51	13.21	11.97
IF	1440.30	3.46	13.21	11.96
IF	1443.60	3.40	13.21	11.94
IF	1446.80	3.18	13.21	11.80
IF	1450.10	2.90	13.21	11.62
IF	1453.40	2.72	13.21	11.53
IF	1456.70	2.69	13.21	11.54
IF	1460.00	2.65	13.21	11.54
IF	1463.30	2.61	13.21	11.53
IF	1466.50	2.62	13.21	11.56
IF	1469.80	2.64	13.21	11.60
IF	1473.10	2.39	13.21	11.43
IF	1476.40	2.25	13.21	11.34
IF	1479.70	2.18	13.21	11.32
IF	1482.90	2.12	13.21	11.29
IF	1486.20	2.10	13.21	11.29
IF	1489.50	2.08	13.21	11.29
IF	1492.80	2.06	13.21	11.29
IF	1496.10	2.04	13.21	11.29
IF	1499.30	2.03	13.21	11.29
IF	1502.60	2.01	13.21	11.29
IF	1505.90	2.02	13.21	11.30
IF	1509.20	2.02	13.21	11.31
IF	1512.50	2.04	13.21	11.33
IF	1515.70	2.08	13.21	11.36
IF	1519.00	2.11	13.21	11.39
IF	1522.30	2.13	13.21	11.40
IF	1525.60	2.10	13.21	11.38
IF	1528.90	2.08	13.21	11.37
IF	1532.10	2.04	13.21	11.34
IF	1535.40	1.76	13.21	11.14
IF	1538.70	1.45	13.21	10.92
IF	1542.00	0.68	13.21	10.44
IF	1543.90	0.01	13.21	9.98
AS	1681.60	0.00	0.00	9.60
IF	1685.50	0.03	0.23	9.63
IF	1692.20	0.01	0.31	9.61
AS	1705.60	0.00	0.00	9.60
IF	1710.00	0.04	0.24	9.63
IF	1712.30	0.01	0.27	9.61
AS	1816.10	0.00	0.00	9.58
IF	1824.00	0.06	0.28	9.62
IF	1853.50	0.16	0.47	9.69
IF	1885.00	0.22	0.58	9.74
IF	1899.50	0.23	0.61	9.74
IF	1905.50	0.29	0.63	9.78
IF	1916.50	0.31	0.65	9.80
IF	1929.00	0.33	0.68	9.81
IF	1941.00	0.36	0.70	9.83
IF	1950.00	0.37	0.72	9.84
IF	1970.50	0.41	0.75	9.87
IF	2005.00	0.31	0.80	9.80
IF	2023.00	0.42	0.83	9.87
IF	2033.50	0.46	0.84	9.91
IF	2051.50	0.52	0.86	9.94
IF	2066.00	0.56	0.88	9.97
IF	2078.50	0.58	0.90	9.98
IF	2095.50	0.60	0.91	10.00
IF	2108.00	0.62	0.93	10.02
IF	2118.50	0.64	0.94	10.03
IF	2135.50	0.66	0.96	10.04
IF	2143.00	0.67	0.96	10.05
IF	2149.50	0.63	0.97	10.02
IF	2160.50	0.69	0.98	10.06
IF	2185.00	0.72	1.00	10.09
IF	2215.50	0.74	1.03	10.09
IF	2229.00	0.78	1.04	10.12
IF	2235.00	0.80	1.05	10.14
IF	2247.00	0.81	1.06	10.14
IF	2260.50	0.82	1.07	10.15
IF	2269.50	0.83	1.07	10.16
IF	2281.50	0.84	1.08	10.16
IF	2285.50	0.85	1.09	10.17
IF	2297.00	0.86	1.10	10.18
IF	2311.00	0.89	1.11	10.20
IF	2327.00	0.88	1.12	10.19
IF	2341.50	0.82	1.13	10.15
IF	2349.00	0.89	1.13	10.20
IF	2356.50	0.89	1.14	10.20
IF	2364.50	0.93	1.14	10.23
IF	2374.50	0.95	1.15	10.24
IF	2383.00	0.96	1.16	10.25
IF	2388.50	0.97	1.16	10.26
IF	2395.00	0.98	1.16	10.27
IF	2403.50	0.99	1.17	10.27
IF	2431.00	1.03	1.19	10.30
IF	2437.00	1.04	1.19	10.31
IF	2447.50	1.05	1.20	10.32
IF	2454.00	1.06	1.20	10.32
IF	2465.00	1.07	1.21	10.33
IF	2477.00	1.08	1.22	10.34
IF	2489.50	1.10	1.22	10.35
IF	2497.50	1.11	1.23	10.35

IF	2506.50	1.12	1.23	10.36
IF	2519.00	1.13	1.24	10.37
IF	2531.50	1.14	1.25	10.38
IF	2541.50	1.15	1.26	10.39
IF	2561.00	1.17	1.27	10.40
IF	2570.00	1.18	1.27	10.41
IF	2580.00	1.19	1.28	10.42
IF	2604.50	1.22	1.29	10.43
IF	2612.50	1.22	1.29	10.44
IF	2630.00	1.24	1.30	10.45
IF	2638.50	1.25	1.31	10.46
IF	2661.50	1.27	1.32	10.48
IF	2670.50	1.28	1.33	10.48
IF	2684.50	1.30	1.33	10.49
IF	2697.50	1.31	1.34	10.50
IF	2708.00	1.32	1.34	10.51
IF	2720.50	1.33	1.35	10.51
IF	2729.00	1.34	1.35	10.52
IF	2738.00	1.35	1.36	10.53
IF	2746.00	1.35	1.36	10.53
IF	2754.00	1.36	1.37	10.54
IF	2764.50	1.37	1.37	10.55
IF	2772.00	1.38	1.38	10.55
IF	2785.50	1.39	1.38	10.56
IF	2792.00	1.40	1.39	10.56
IF	2802.00	1.41	1.39	10.57
IF	2816.00	1.42	1.40	10.58
IF	2831.50	1.43	1.40	10.59
IF	2843.00	1.44	1.41	10.60
IF	2854.00	1.45	1.41	10.61
IF	2864.50	1.47	1.42	10.62
IF	2873.50	1.47	1.42	10.62
IF	2887.00	1.48	1.43	10.63
IF	2892.50	1.49	1.43	10.63
IF	2924.50	1.52	1.44	10.65
IF	2932.00	1.52	1.45	10.66
IF	2941.50	1.53	1.45	10.66
IF	2950.50	1.54	1.46	10.67
IF	2959.00	1.54	1.46	10.67
IF	2970.00	1.56	1.46	10.68
IF	2980.00	1.56	1.47	10.68
IF	2987.00	1.57	1.47	10.69
IF	2997.00	1.58	1.48	10.70
IF	3011.00	1.59	1.48	10.70
IF	3033.00	1.62	1.49	10.72
IF	3041.00	1.62	1.49	10.72
IF	3074.00	1.64	1.51	10.74
IF	3082.00	1.65	1.51	10.75
IF	3099.00	1.67	1.52	10.76
IF	3104.50	1.66	1.52	10.76
IF	3116.00	1.68	1.52	10.77
IF	3129.50	1.69	1.53	10.77
IF	3140.50	1.70	1.53	10.78
IF	3151.00	1.69	1.54	10.78
IF	3160.50	1.70	1.54	10.78
IF	3171.00	1.71	1.54	10.79
IF	3186.50	1.72	1.55	10.80
IF	3201.50	1.74	1.55	10.81
IF	3210.50	1.74	1.56	10.81
IF	3230.00	1.76	1.57	10.82
IF	3236.50	1.76	1.57	10.83
IF	3247.50	1.77	1.57	10.83
IF	3259.50	1.78	1.58	10.84
IF	3270.50	1.79	1.58	10.85
IF	3277.50	1.80	1.58	10.85
IF	3301.50	1.82	1.59	10.87
IF	3307.50	1.82	1.59	10.87
IF	3321.00	1.83	1.60	10.88
IF	3325.50	1.83	1.60	10.88
IF	3344.00	1.84	1.61	10.88
IF	3352.00	1.85	1.61	10.89
IF	3368.50	1.86	1.61	10.90
IF	3383.00	1.87	1.62	10.90
IF	3390.00	1.87	1.62	10.91
IF	3409.50	1.87	1.63	10.90
IF	3417.00	1.89	1.63	10.91
IF	3429.00	1.89	1.63	10.91
IF	3438.00	1.89	1.64	10.92
IF	3445.00	1.89	1.64	10.92
IF	3456.50	1.89	1.64	10.92
IF	3473.50	1.89	1.65	10.92
IF	3480.00	1.86	1.65	10.89
IF	3488.00	1.89	1.65	10.92
IF	3499.00	1.87	1.66	10.90
IF	3511.50	1.89	1.66	10.92
IF	3519.50	1.88	1.66	10.91
IF	3526.00	1.91	1.67	10.93
IF	3534.50	1.82	1.67	10.87
IF	3545.00	1.89	1.67	10.92
IF	3554.00	1.91	1.67	10.93
IF	3562.00	1.93	1.68	10.94
IF	3569.00	1.93	1.68	10.94
IF	3580.50	1.95	1.68	10.96
IF	3597.50	1.88	1.69	10.91
IF	3603.50	1.87	1.69	10.90
IF	3612.50	1.89	1.69	10.92
IF	3619.00	1.89	1.69	10.92
IF	3625.00	1.92	1.70	10.94
IF	3632.50	1.89	1.70	10.92
IF	3639.00	1.97	1.70	10.97
IF	3649.50	1.86	1.70	10.89
IF	3663.00	1.82	1.71	10.87

IF	3673.00	1.82	1.71	10.87
IF	3678.00	1.79	1.71	10.85
IF	3689.50	1.88	1.72	10.91
IF	3704.00	1.84	1.72	10.88
IF	3716.50	1.85	1.72	10.89
IF	3724.00	1.86	1.73	10.90
IF	3731.00	1.92	1.73	10.94
IF	3739.00	1.86	1.73	10.90
IF	3746.00	1.87	1.73	10.90
IF	3754.00	1.88	1.73	10.91
IF	3763.00	1.91	1.74	10.93
IF	3771.00	1.87	1.74	10.91
IF	3784.00	1.89	1.74	10.92
IF	3798.00	1.91	1.75	10.93
IF	3803.50	1.69	1.75	10.78
IF	3811.00	1.76	1.75	10.83
IF	3823.50	1.76	1.75	10.83
IF	3831.50	1.70	1.76	10.78
IF	3841.50	1.53	1.76	10.66
IF	3851.00	1.28	1.76	10.49
IF	3865.50	1.23	1.77	10.46
IF	3883.00	0.66	1.77	10.06
IF	3891.50	0.60	1.77	10.01
IF	3901.00	0.63	1.78	10.04
IF	3915.00	0.64	1.78	10.05
IF	3932.00	0.68	1.78	10.07
IF	3954.50	0.72	1.79	10.10
IF	3971.50	0.75	1.80	10.12
IF	3976.00	0.29	1.80	9.80
IF	3986.00	0.15	1.80	9.70
IF	4004.00	0.27	1.80	9.78
IF	4029.00	0.34	1.80	9.83
IF	4039.60	0.01	1.80	9.60
AS	4073.90	0.00	0.00	9.60
IF	4075.00	0.01	0.16	9.60
IF	4075.30	0.01	0.17	9.60
AS	4123.10	0.00	0.00	9.60
IF	4129.00	0.03	0.26	9.63
IF	4129.70	0.01	0.27	9.61
AS	4206.70	0.00	0.00	9.60
IF	4210.50	0.04	0.23	9.63
IF	4222.00	0.09	0.35	9.67
IF	4232.50	0.11	0.42	9.68
IF	4237.00	0.01	0.44	9.61
AS	4270.40	0.00	0.00	9.60
IF	4276.00	0.05	0.25	9.64
IF	4286.00	0.09	0.35	9.67
IF	4296.00	0.13	0.42	9.69
IF	4303.00	0.15	0.45	9.71
IF	4314.00	0.17	0.49	9.72
IF	4326.50	0.21	0.54	9.75
IF	4338.00	0.23	0.57	9.77
IF	4347.00	0.20	0.60	9.74
IF	4360.00	0.24	0.63	9.77
IF	4374.50	0.31	0.66	9.82
IF	4379.00	0.03	0.67	9.62
IF	4386.00	0.14	0.68	9.70
IF	4401.50	0.21	0.71	9.75
IF	4416.50	0.05	0.74	9.64
IF	4417.90	0.01	0.74	9.61
AS	4438.60	0.00	0.00	9.60
IF	4446.00	0.06	0.28	9.64
IF	4453.90	0.01	0.35	9.61

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

BETWEEN	1543.90	AND	1681.60	
BETWEEN	1692.20	AND	1705.60	
BETWEEN	1712.30	AND	1816.10	
BETWEEN	4039.60	AND	4073.90	
BETWEEN	4075.30	AND	4123.10	
BETWEEN	4129.70	AND	4206.70	
BETWEEN	4237.00	AND	4270.40	
BETWEEN	4417.90	AND	4438.60	

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
58.00	1.00	9.36
84.00	1.00	9.36
126.00	1.00	9.36
180.00	1.00	9.36
240.00	1.00	9.36
298.00	1.00	9.36
562.00	1.00	9.36
614.00	1.00	9.36
675.00	1.00	9.36
735.00	1.00	9.36
804.00	1.00	9.36
900.00	1.00	9.36
984.00	1.00	9.36
1056.00	1.00	9.36
1085.00	1.00	9.37
1120.00	1.00	9.37
1144.00	1.00	9.37
1168.00	1.00	9.37
1276.00	1.00	9.37
1374.70	1.00	9.36
1381.20	1.00	9.36
1397.60	1.00	9.36
1400.90	1.00	9.37
1404.20	1.00	9.37
1407.50	1.00	9.38
1410.80	1.00	9.39
1414.00	1.00	9.39
1417.30	1.00	9.40

1420.60	1.00	9.41
1423.90	1.00	9.42
1427.20	1.00	9.44
1430.40	1.00	9.46
1433.70	1.00	9.48
1437.00	1.00	9.51
1440.30	1.00	9.54
1443.60	1.00	9.56
1446.80	1.00	9.57
1450.10	1.00	9.59
1453.40	1.00	9.62
1456.70	1.00	9.65
1460.00	1.00	9.68
1463.30	1.00	9.70
1466.50	1.00	9.73
1469.80	1.00	9.75
1473.10	1.00	9.76
1476.40	1.00	9.77
1479.70	1.00	9.79
1482.90	1.00	9.81
1486.20	1.00	9.82
1489.50	1.00	9.84
1492.80	1.00	9.85
1496.10	1.00	9.86
1499.30	1.00	9.87
1502.60	1.00	9.88
1505.90	1.00	9.89
1509.20	1.00	9.89
1512.50	1.00	9.90
1515.70	1.00	9.91
1519.00	1.00	9.91
1522.30	1.00	9.91
1525.60	1.00	9.91
1532.10	1.00	9.91
1535.40	1.00	9.91
1538.70	1.00	9.91
1542.00	1.00	9.97
1681.60	1.00	9.60
1816.10	1.00	9.58
1916.50	1.00	9.58
2066.00	1.00	9.58
2135.50	1.00	9.58
2185.00	1.00	9.58
2215.50	1.00	9.58
2311.00	1.00	9.58
2374.50	1.00	9.58
2489.50	1.00	9.58
2580.00	1.00	9.58
2612.50	1.00	9.58
2661.50	1.00	9.58
2684.50	1.00	9.59
2729.00	1.00	9.59
2764.50	1.00	9.59
2816.00	1.00	9.59
2854.00	1.00	9.59
2887.00	1.00	9.59
2932.00	1.00	9.59
2997.00	1.00	9.59
3116.00	1.00	9.59
3230.00	1.00	9.59
3368.50	1.00	9.60
4123.10	1.00	9.60
4270.40	1.00	9.60
4326.50	1.00	9.60

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
1448.88	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION		FHF
0.00	15.79	V23	EL=16	130
57.00	15.83	V23	EL=16	130
58.00	15.83	V23	EL=16	130
79.00	15.86	V23	EL=16	130
84.00	15.87	V23	EL=16	130
121.00	15.99	V23	EL=16	130
126.00	16.00	V23	EL=16	130
169.00	16.15	V23	EL=16	130
180.00	16.19	V23	EL=16	130
229.00	16.36	V23	EL=16	130
240.00	16.33	V23	EL=16	130
287.00	16.31	V23	EL=16	130
298.00	16.31	V23	EL=16	130
443.00	16.30	V23	EL=16	130
562.00	16.38	V23	EL=16	130
614.00	16.41	V23	EL=16	130
664.00	16.42			

675.00	16.42	V23	EL=16	130
724.00	16.43	V23	EL=16	130
735.00	16.43	V23	EL=16	130
793.00	16.43	V23	EL=16	130
804.00	16.43	V23	EL=16	130
889.00	16.40	V23	EL=16	130
900.00	16.40	V23	EL=16	130
973.00	16.36	V23	EL=16	130
984.00	16.36	V23	EL=16	130
1045.00	16.32	V23	EL=16	130
1056.00	16.31	V23	EL=16	130
1084.00	16.30	V23	EL=16	130
1085.00	16.30	V23	EL=16	130
1109.00	16.30	V23	EL=16	130
1120.00	16.30	V23	EL=16	130
1133.00	16.30	V23	EL=16	130
1144.00	16.30	V23	EL=16	130
1157.00	16.29	V23	EL=16	130
1168.00	16.29	V23	EL=16	130
1262.00	16.28	V23	EL=16	130
1276.00	16.25	V23	EL=16	130
1277.00	16.24	V23	EL=16	130
1338.90	15.50	V23	EL=15	130
1374.70	15.07	V23	EL=15	130
1377.90	14.91	V23	EL=15	130
1381.20	14.63	V23	EL=15	130
1383.23	14.50	V23	EL=14	130
1397.60	13.58	V23	EL=14	130
1399.83	13.50	V23	EL=13	130
1400.90	13.46	V23	EL=13	130
1404.20	13.35	V23	EL=13	130
1407.50	13.23	V23	EL=13	130
1410.80	13.10	V23	EL=13	130
1414.00	12.98	V23	EL=13	130
1417.30	12.79	V23	EL=13	130
1420.60	12.57	V23	EL=13	130
1421.60	12.50	V23	EL=13	130
1423.90	12.35	V23	EL=12	130
1427.20	12.21	V23	EL=12	130
1430.40	12.09	V23	EL=12	130
1433.70	11.98	V23	EL=12	130
1437.00	11.97	V23	EL=12	130
1440.30	11.96	V23	EL=12	130
1443.60	11.94	V23	EL=12	130
1446.80	11.80	V23	EL=12	130
1448.88	11.68	V23	EL=12	130
1450.10	11.62	A19	EL=12	95
1453.40	11.53	A19	EL=12	95
1456.70	11.54	A19	EL=12	95
1460.00	11.54	A19	EL=12	95
1463.30	11.53	A19	EL=12	95

1466.50	11.56	A19	EL=12	95
1469.80	11.60	A19	EL=12	95
1471.71	11.50	A19	EL=12	95
1473.10	11.43	A19	EL=11	95
1476.40	11.34	A19	EL=11	95
1479.70	11.32	A19	EL=11	95
1482.90	11.29	A19	EL=11	95
1486.20	11.29	A19	EL=11	95
1489.50	11.29	A19	EL=11	95
1492.80	11.29	A19	EL=11	95
1496.10	11.29	A19	EL=11	95
1499.30	11.29	A19	EL=11	95
1502.60	11.29	A19	EL=11	95
1505.90	11.30	A19	EL=11	95
1509.20	11.31	A19	EL=11	95
1512.50	11.33	A19	EL=11	95
1515.70	11.36	A19	EL=11	95
1519.00	11.39	A19	EL=11	95
1522.30	11.40	A19	EL=11	95
1525.60	11.38	A19	EL=11	95
1528.90	11.37	A19	EL=11	95
1532.10	11.34	A19	EL=11	95
1535.40	11.14	A19	EL=11	95
1538.70	10.92	A19	EL=11	95
1541.62	10.50	A19	EL=10	95
1542.00	10.44	A19	EL=10	95
1543.90	9.98			
1681.60	9.60	A19	EL=10	95
1692.20	9.61			
1705.60	9.60	A19	EL=10	95
1712.30	9.61			
1816.10	9.58	A19	EL=10	95
1905.50	9.78	A19	EL=10	95
1916.50	9.80	A19	EL=10	95
2051.50	9.94	A19	EL=10	95
2066.00	9.97	A19	EL=10	95
2118.50	10.03	A19	EL=10	95
2135.50	10.04	A19	EL=10	95
2160.50	10.06	A19	EL=10	95
2185.00	10.09	A19	EL=10	95
2215.50	10.09	A19	EL=10	95
2297.00	10.18	A19	EL=10	95
2311.00	10.20	A19	EL=10	95
2364.50	10.23	A19	EL=10	95
2374.50	10.24	A19	EL=10	95
2477.00	10.34	A19	EL=10	95
2489.50	10.35	A19	EL=10	95
2570.00	10.41	A19	EL=10	95
2580.00	10.42	A19	EL=10	95
2604.50	10.43	A19	EL=10	95
2612.50	10.44	A19	EL=10	95
2638.50	10.46	A19	EL=10	95

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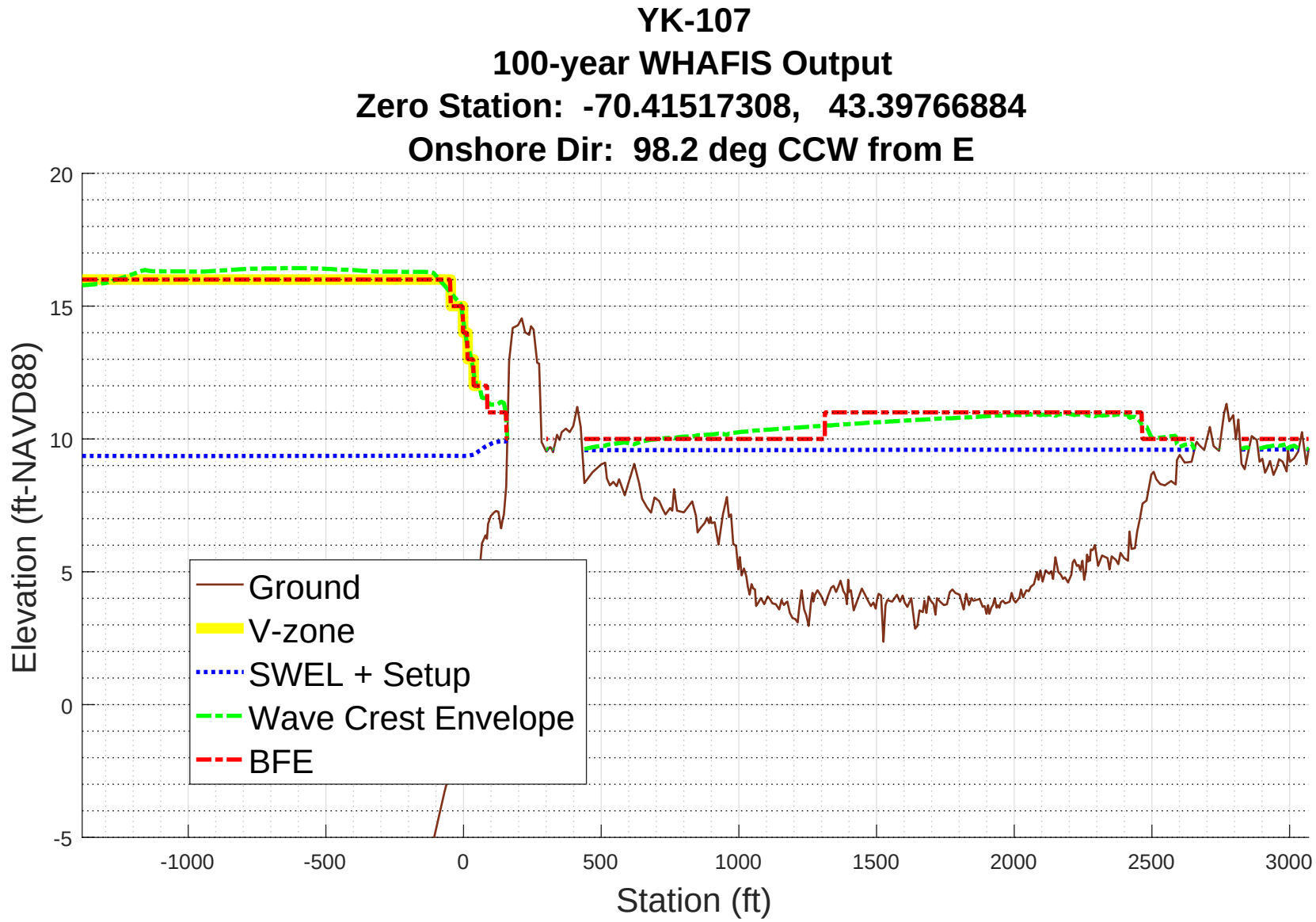
                          2661.50          10.48
                                                        A19  EL=10      95
                          2670.50          10.48
                                                        A19  EL=10      95
                          2684.50          10.49
                                                        A19  EL=10      95
                          2694.78          10.50
                                                        A19  EL=11      95
                          2720.50          10.51
                                                        A19  EL=11      95
                          2729.00          10.52
                                                        A19  EL=11      95
                          2754.00          10.54
                                                        A19  EL=11      95
                          2764.50          10.55
                                                        A19  EL=11      95
                          2802.00          10.57
                                                        A19  EL=11      95
                          2816.00          10.58
                                                        A19  EL=11      95
                          2843.00          10.60
                                                        A19  EL=11      95
                          2854.00          10.61
                                                        A19  EL=11      95
                          2873.50          10.62
                                                        A19  EL=11      95
                          2887.00          10.63
                                                        A19  EL=11      95
                          2924.50          10.65
                                                        A19  EL=11      95
                          2932.00          10.66
                                                        A19  EL=11      95
                          2987.00          10.69
                                                        A19  EL=11      95
                          2997.00          10.70
                                                        A19  EL=11      95
                          3104.50          10.76
                                                        A19  EL=11      95
                          3116.00          10.77
                                                        A19  EL=11      95
                          3210.50          10.81
                                                        A19  EL=11      95
                          3230.00          10.82
                                                        A19  EL=11      95
                          3352.00          10.89
                                                        A19  EL=11      95
                          3368.50          10.90
                                                        A19  EL=11      95
                          3850.67          10.50
                                                        A19  EL=10      95
                          4039.60           9.60
                          4073.90           9.60
                                                        A19  EL=10      95
                          4075.30           9.60
                          4123.10           9.60
                                                        A19  EL=10      95
                          4129.70           9.61
                          4206.70           9.60
                                                        A19  EL=10      95
                          4237.00           9.61
                          4270.40           9.60
                                                        A19  EL=10      95
                          4314.00           9.72
                                                        A19  EL=10      95
                          4326.50           9.75
                                                        A19  EL=10      95
                          4417.90           9.61
                          4438.60           9.60
                                                        A19  EL=10      95
                          4453.90           9.61
                               ZONE TERMINATED AT END OF TRANSECT
                               PART 7   POSTSCRIPT NOTES
                     PS#  1   START(385457.7677,4805531.4406)
                     PS#  2   END(385240.2997,4807040.9122)
-1.000000e+00
```


YK-107
100-year WHAFIS Output
Zero Station: -70.41517308, 43.39766884
Onshore Dir: 98.2 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
-1000
-500
0
500
1000
1500
2000
2500
3000
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE

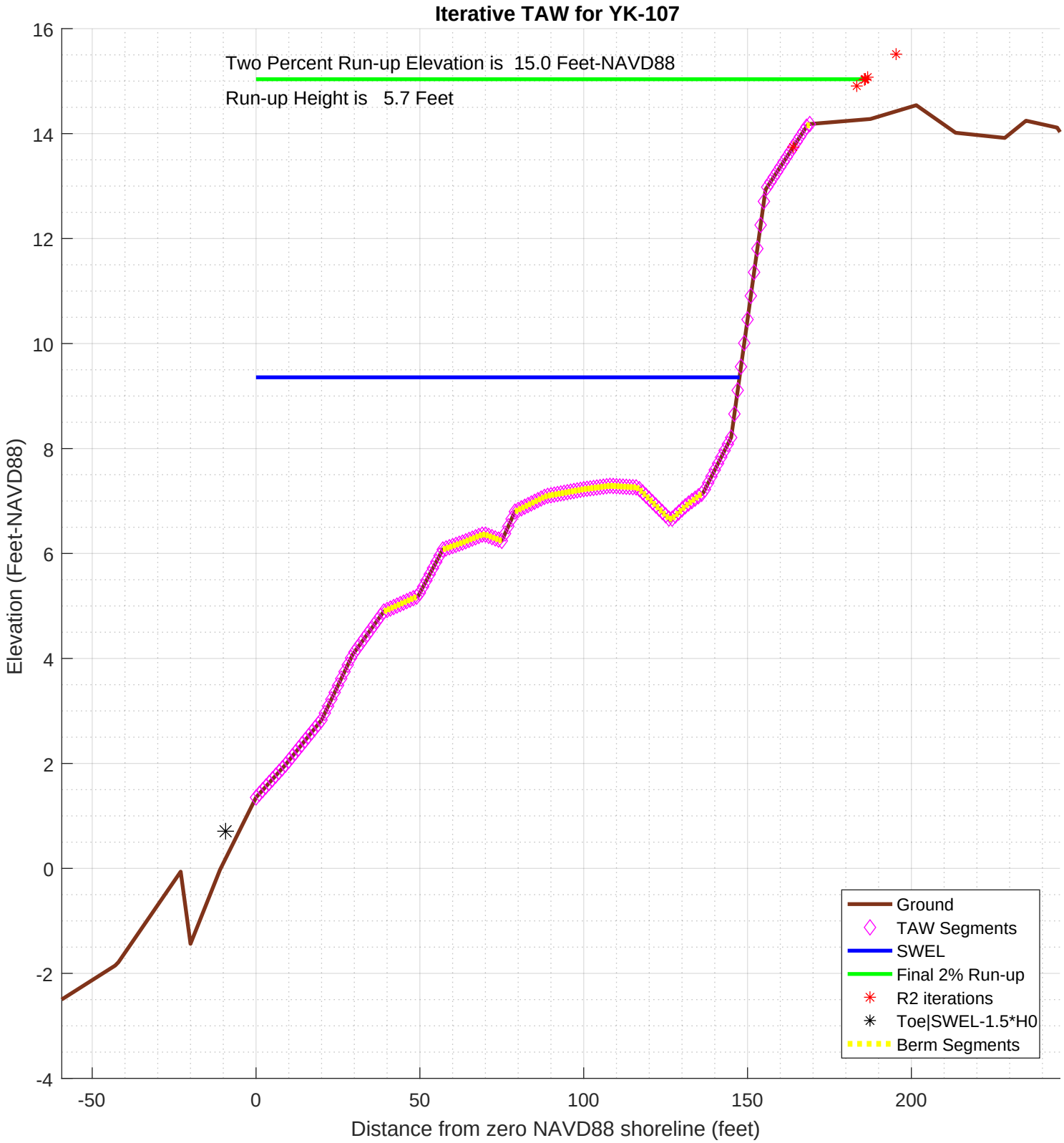
_____
PART 4: TAW

Input Paramters:
    TWL- 9.3596 feet
    HS- 5.7654 feet
    PER- 13.2478 seconds
    TOE- x: 0 , z: 1.3517 feet
    TOP- x: 168.5 , z: 14.1798 feet
    GBERM-   0.62324
    GGROUGH- 0.6
    GBETA-   1
    GPERM-   1

RUNNING TAW:
...
MATLAB DIARY: /4_taw/logfiles/YK-107-DIARY.txt

CHECKING VALIDITY:
...
TAW method is not valid!
Runup elevation to be calculated using another method

PART 4 COMPLETE_____


Iterative TAW for YK-107
Two Percent Run-up Elevation is 15.0 Feet-NAVD88
Run-up Height is 5.7 Feet
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
16
14
12
10
8
6
4
2
0
-2
-4
-50
0
50
100
150
200
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Berm Segments

```
diary on         % begin recording

% FEMA appeal for The Town of Kennebunkport, York county, Maine
% TRANSECT ID: YK-107
% calculation by SJH, Ransom Consulting, Inc. 02-Apr-2020
% 100-year wave runup using TAW methodology
% including berm and weighted average with foreshore if necessary
%
% chk nld 20200220
%
% This script assumes that the incident wave conditions provided
% as input in the configuration section below are the
% appropriate values located at the end of the foreshore
% or toe of the slope on which the run-up is being calculated
% the script does not attempt to apply a depth limit or any other
% transformation to the incident wave conditions other than
% conversion of the peak wave period to the spectral mean wave
% as recommended in the references below
%
% references:
%
% Van der Meer, J.W., 2002. Technical Report Wave Run-up and
% Wave Overtopping at Dikes. TAW Technical Advisory Committee on
% Flood Defence, The Netherlands.
%
% FEMA. 2007,  Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update
%
%
%

%-------------------------------------------------------------------------
% CONFIG
%-------------------------------------------------------------------------
fname='inpfiles/YK-107sta_ele_include.csv';   % file with station, elevation, include
                                      % third colunm is 0 for excluded points
imgname='logfiles/YK-107-runup';
SWEL=9.3596;  % 100-yr still water level including wave setup.
H0=5.7654;    % significant wave height at toe of structure
Tp=13.2478;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=0.70525;   % this may get changed automatically below
gamma_rough=0.6;
gamma_beta=1;
gamma_perm=1;

setupAtToe=-0.0031758;
maxSetup=0.61291;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for YK-107'

plotTitle =

Iterative TAW for YK-107



% END CONFIG
%------------------------------

SWEL=SWEL+setupAtToe

SWEL =

                9.3564242

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                9.9693342



% FIND WAVELENGTH USING DEEPWATER DISPERSION RELATION
% using English units
L0=32.15/(2*pi)*T0^2

L0 =

          742.169776643312


% Find Hb (Munk, 1949)
%Hb=H0/(3.3*(H0/L0)^(1/3))
%Db=-Hb/.78+SWEL;  % depth at breaking

% The toe elevation here is only used to determine the average
% structure slope, it is not used to depth limit the wave height.
% Any depth limiting or other modification of the wave height
```

```
% to make it consitent with TAW guidance should be performed
% prior to the input of the significant wave height given above.
Ztoe=SWEL-1.5*H0

Ztoe =

         0.708324200000002


% read the transect
[sta,dep,inc] = textread(fname,'%n%n%n%*[^\n]','delimiter',',','headerlines',0);

% remove unselected points
k=find(inc==0);
sta(k)=[];
dep(k)=[];

sta_org=sta;  % used for plotting purposes
dep_org=dep;


% initial guess at maximum run-up elevation to estimate slope
Z2=SWEL+1.5*H0

Z2 =

                18.0045242


% determine station at the max runup and -1.5*H0 (i.e. the toe)
top_sta=-999;
toe_sta=-999;
for kk=1:length(sta)-1
    if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
       top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
    end
    if  ((Ztoe > dep(kk)) & (Ztoe <= dep(kk+1)))    % here is the intersection of Ztoe with profile
       toe_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Ztoe)
    end
end
% check to make sure we got them, if not extend the end slopes outward
S=diff(dep)./diff(sta);
if toe_sta==-999
   dy=dep(1)-Ztoe;
   toe_sta=sta(1)-dy/S(1)
end

toe_sta =

         -9.28910224942969

if top_sta==-999
   dy=Z2-dep(end);
   top_sta=sta(end)+dy/S(end)
end

top_sta =

          244.624605765617


% just so the reader can tell the values aren't -999 anymore
top_sta

top_sta =

          244.624605765617

toe_sta

toe_sta =

         -9.28910224942969




% check for case where the toe of slope is below SWL-1.5*H0
% in this case interpolate setup from the setupAtToe(really setup as first station), and the max setup
% also un-include points seaward of SWL-1.5*H0
if Ztoe > dep(1)
   dd=SWEL_fore-dep;
   k=find(dd<0,1); % k is index of first land point
   staAtSWL=interp1(dep(k-1:k),sta(k-1:k),SWEL_fore);
   dsta=staAtSWL-sta(1);
   dsetup=maxSetup-setupAtToe;
   dsetdsta=dsetup/dsta;
   setup=setupAtToe+dsetdsta*(toe_sta-sta(1));
   sprintf('-!!- Location of SWEL-1.5*H0 is %4.1f ft landward of toe of slope',dsta)
   sprintf('-!!- Setup is interpolated between setup at toe of slope and max setup')
```

```
   sprintf('-!!-       setup is adjusted to %4.2f feet',setup)
   SWEL=SWEL-setupAtToe+setup;
   sprintf('-!!-       SWEL is adjusted to %4.2f feet',SWEL)
   k=find(dep < SWEL-1.5*H0)
   sta(k)=[];
   dep(k)=[];
else
   sprintf('-!!- The User has selected a starting point that is %4.2f feet above the elevation of SWEL-1.5H0\n',dep(1
   sprintf('-!!- This may be reasonable for some cases.  However the user may want to consider:\n')
   sprintf('-!!-   1) Selecting a starting point that is at or below %4.2f feet elevation, or\n', Ztoe)
   sprintf('-!!-   2) Reducing the incident wave height to a depth limited condition.\n')
end

ans =

-!!- The User has selected a starting point that is 0.64 feet above the elevation of SWEL-1.5H0



ans =

-!!- This may be reasonable for some cases.  However the user may want to consider:



ans =

-!!-   1) Selecting a starting point that is at or below 0.71 feet elevation, or



ans =

-!!-   2) Reducing the incident wave height to a depth limited condition.




% now iterate converge on a runup elevation
tol=0.01;  % convergence criteria
R2del=999;
R2_new=3*H0; %initial guess
R2=R2_new;
iter=0;
R2_all=[];
topStaAll=[];
Berm_Segs=[];
TAW_ALWAYS_VALID=1;
while(abs(R2del) > tol && iter <= 25)
    iter=iter+1;
    sprintf ('!----------------- STARTING ITERATION %d -----------------!',iter)
    % elevation of toe of slope
    Ztoe
    % station of toe slope (relative to 0-NAVD88 shoreline
    toe_sta
    % station of top of slope/extent of 2% run-up
    top_sta
    % elevation of top of slope/extent of 2% run-up
    Z2
    % incident significant wave height
    H0
    % incident spectral peak wave period
    Tp
    % incident spectral mean wave period
    T0

    R2=R2_new
    Z2=R2+SWEL
    % determine slope for this iteration
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end)
    end

    % get the length of the slope (not accounting for berm)
    Lslope=top_sta-toe_sta

    % loop over profile segments to determine berm factor
    % re-calculate influence of depth of berm based on this run-up elevation
    % check for berm, berm width, berm height
    berm_width=0;
    rdh_sum=0;
```

```
Berm_Segs=[];
Berm_Heights=[];
for kk=1:length(sta)-1
   ddep=dep(kk+1)-dep(kk);
   dsta=sta(kk+1)-sta(kk);
   s=ddep/dsta;
   if  (s < 1/15)     % count it as a berm if slope is flatter than 1:15 (see TAW manual)
      sprintf ('Berm Factor Calculation: Iteration %d, Profile Segment: %d',iter,kk)
      berm_width=berm_width+dsta;   % tally the width of all berm segments
      % compute the rdh for this segment and weight it by the segment length
      dh=SWEL-(dep(kk)+dep(kk+1))/2
      if  dh < 0
          chi=R2;
      else
          chi=2* H0;
      end
      if (dh <= R2 & dh >=-2*H0)
         rdh=(0.5-0.5*cos(3.14159*dh/chi)) ;
      else
         rdh=1;
      end
      rdh_sum=rdh_sum + rdh * dsta
      Berm_Segs=[Berm_Segs, kk];
      Berm_Heights=[Berm_Heights, (dep(kk)+dep(kk+1))/2];
   end
   if dep(kk) >= Z2  % jump out of loop if we reached limit of run-up for this iteration
      break
   end
end
sprintf ('!------- End Berm Factor Calculation, Iter: %d ---------!',iter)
berm_width
rB=berm_width/Lslope
if (berm_width > 0)
   rdh_mean=rdh_sum/berm_width
else
   rdh_mean=1
end
gamma_berm=1- rB * (1-rdh_mean)
if gamma_berm > 1
   gamma_berm=1
end
if gamma_berm < 0.6
   gamma_berm =0.6
end
% Iribarren number
slope=(Z2-Ztoe)/(Lslope-berm_width)
Irb=(slope/(sqrt(H0/L0)))
% runup height
gamma_berm
gamma_perm
gamma_beta
gamma_rough
gamma=gamma_berm*gamma_perm*gamma_beta*gamma_rough

% check validity
TAW_VALID=1;
if (Irb*gamma_berm < 0.5 | Irb*gamma_berm > 10 )
   sprintf('!!! - - Iribaren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gam
   TAW_VALID=0;
else
   sprintf('!!! - - Iribaren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_
end
islope=1/slope;
if (slope < 1/8 | slope > 1)
   sprintf('!!! - - slope: 1:%3.1f V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!\n', islope)
   TAW_VALID=0;
else
   sprintf('!!! - - slope: 1:%3.1f V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!\n', islope)
end
if TAW_VALID == 0
   TAW_ALWAYS_VALID=0;
end

if (Irb*gamma_berm < 1.8)
   R2_new=gamma*H0*1.77*Irb
else
   R2_new=gamma*H0*(4.3-(1.6/sqrt(Irb)))
end


% check to see if we need to evaluate a shallow foreshore
if berm_width > 0.25 * L0;
   disp ('!   Berm_width is greater than 1/4 wave length')
   disp ('!   Runup will be weighted average with foreshore calculation assuming depth limited wave height on ber
   % do the foreshore calculation
   fore_H0=0.78*(SWEL_fore-min(Berm_Heights))
   % get upper slope
   fore_toe_sta=-999;
   fore_toe_dep=-999;
   for kk=length(dep)-1:-1:1
```

```
          ddep=dep(kk+1)-dep(kk);
          dsta=sta(kk+1)-sta(kk);
          s=ddep/dsta;
          if s < 1/15
             break
          end
          fore_toe_sta=sta(kk);
          fore_toe_dep=dep(kk);
          upper_slope=(Z2-fore_toe_dep)/(top_sta-fore_toe_sta)
       end
       fore_Irb=upper_slope/(sqrt(fore_H0/L0));
       fore_gamma=gamma_perm*gamma_beta*gamma_rough;
       if (fore_Irb < 1.8)
          fore_R2=fore_gamma*fore_H0*1.77*fore_Irb;
       else
          fore_R2=fore_gamma*fore_H0*(4.3-(1.6/sqrt(fore_Irb)));
       end
       if berm_width >= L0
          R2_new=fore_R2
          disp ('berm is wider than one wavelength, use full shallow foreshore solution');
       else
          w2=(berm_width-0.25*L0)/(0.75*L0)
          w1=1-w2
          R2_new=w2*fore_R2 + w1*R2_new
       end
    end % end berm width check

    % convergence criterion
    R2del=abs(R2-R2_new)
    R2_all(iter)=R2_new;

    % get the new top station (for plot purposes)
    Z2=R2_new+SWEL
    top_sta=-999;
    for kk=1:length(sta)-1
       if ((Z2 > dep(kk)) & (Z2 <= dep(kk+1)))    % here is the intersection of z2 with profile
          top_sta=interp1(dep(kk:kk+1),sta(kk:kk+1),Z2)
          break;
       end
    end
    if top_sta==-999
       dy=Z2-dep(end);
       top_sta=sta(end)+dy/S(end);
    end
    topStaAll(iter)=top_sta;
end
ans =
!----------------- STARTING ITERATION 1 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          244.624605765617
Z2 =
               18.0045242
H0 =
                   5.7654
Tp =
                  13.2478
T0 =
          12.0434545454545
R2 =
                  17.2962
Z2 =
               26.6526242
top_sta =
          415.735189252295
Lslope =
          425.024291501724
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 40
dh =
                4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 41
dh =
                4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 42
dh =
                4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 43
```

```
dh =
                4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 44
dh =
                4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 45
dh =
                4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 46
dh =
                4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 47
dh =
                4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 48
dh =
                4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 49
dh =
                4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 58
dh =
                3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 59
dh =
                3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 60
dh =
                3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 61
dh =
                3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 62
dh =
                3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 63
dh =
                3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 64
dh =
                3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 65
dh =
                3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 66
```

```
dh =
                3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 67
dh =
                3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 68
dh =
                3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 69
dh =
                3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 70
dh =
                2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 71
dh =
                3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 72
dh =
                3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 73
dh =
                3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 74
dh =
                3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 75
dh =
                3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 80
dh =
                2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 81
dh =
                2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 82
dh =
                2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 83
dh =
                2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 84
dh =
                2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 85
```

```
dh =
                2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 86
dh =
                2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 87
dh =
                2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 88
dh =
                2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 89
dh =
                2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 90
dh =
                2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 91
dh =
                2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 92
dh =
                2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 93
dh =
                2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 94
dh =
                2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 95
dh =
                2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 96
dh =
                2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 97
dh =
                2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 98
dh =
                2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 99
dh =
                2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 100
```

```
dh =
                2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 101
dh =
                2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 102
dh =
                2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 103
dh =
                2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 104
dh =
                2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 105
dh =
                2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 106
dh =
                2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 107
dh =
                2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 108
dh =
                2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 109
dh =
                2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 110
dh =
                2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 111
dh =
                2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 112
dh =
                2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 113
dh =
                2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 114
dh =
                2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 115
```

```
dh =
                2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 116
dh =
                2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 117
dh =
                2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 118
dh =
                2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 119
dh =
                2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 120
dh =
                2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 121
dh =
                2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 122
dh =
                2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 123
dh =
                2.4732222
rdh_sum =
          10.042635033858
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 124
dh =
                2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 125
dh =
                2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 126
dh =
                2.6602302
rdh_sum =
           10.40305503766
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 127
dh =
                2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 128
dh =
                2.6635107
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 129
dh =
                2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 130
```

```
dh =
                2.5454007
rdh_sum =
           10.893791140033
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 131
dh =
                2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 132
dh =
                2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 133
dh =
                2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 134
dh =
                2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 135
dh =
                2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 136
dh =
                2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 1, Profile Segment: 169
dh =
               -4.8006863
rdh_sum =
          11.6723599774653
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
    86
rB =
           0.20234137605674
rdh_mean =
          0.135725116017038
gamma_berm =
          0.825121430683608
slope =
         0.0765263748065912
Irb =
          0.868256515356538
gamma_berm =
          0.825121430683608
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                        0.6
gamma =
          0.495072858410165
ans =
!!! - - Iribaren number:   0.72 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:13.1 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
           4.38651762330388
R2del =
           12.9096823766961
Z2 =
           13.7429418233039
top_sta =
           163.944816826593
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
          0.708324200000002
toe_sta =
          -9.28910224942969
top_sta =
           163.944816826593
```

```
Z2 =
          13.7429418233039
H0 =
             5.7654
Tp =
            13.2478
T0 =
          12.0434545454545
R2 =
          4.38651762330388
Z2 =
          13.7429418233039
top_sta =
          163.944816826593
Lslope =
          173.233919076022
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 40
dh =
          4.4473502
rdh_sum =
     1
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 41
dh =
          4.4192287
rdh_sum =
     2
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 42
dh =
          4.3911072
rdh_sum =
     3
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 43
dh =
          4.3629857
rdh_sum =
          3.31356880446997
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 44
dh =
          4.3348642
rdh_sum =
          3.62358849323221
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 45
dh =
          4.3067427
rdh_sum =
          3.93007021856423
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 46
dh =
          4.2786212
rdh_sum =
          4.23302534043006
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 47
dh =
          4.2504997
rdh_sum =
          4.53246542581338
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 48
dh =
          4.2223782
rdh_sum =
          4.82840224803855
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 49
dh =
          4.1942567
rdh_sum =
          5.12084778607947
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 58
dh =
          3.2693722
rdh_sum =
          5.30643214751562
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 59
dh =
          3.2475002
rdh_sum =
          5.48970539181282
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 60
```

```
dh =
                3.2256282
rdh_sum =
          5.67067876607207
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 61
dh =
                3.2037557
rdh_sum =
          5.84936354687711
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 62
dh =
                3.1818832
rdh_sum =
          6.02577114478887
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 63
dh =
                3.1600112
rdh_sum =
          6.19991310289693
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 64
dh =
                3.1364562
rdh_sum =
          6.37162802893531
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 65
dh =
                3.1112187
rdh_sum =
          6.54075756982839
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 66
dh =
                3.0859817
rdh_sum =
          6.70731741965698
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 67
dh =
                3.0607447
rdh_sum =
          6.87132334261507
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 68
dh =
                3.0355077
rdh_sum =
          7.03279122363974
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 69
dh =
                3.0102702
rdh_sum =
          7.19173701785245
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 70
dh =
                2.9973072
rdh_sum =
          7.34939362711243
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 71
dh =
                3.0088937
rdh_sum =
          7.50820232468385
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 72
dh =
                3.0327542
rdh_sum =
          7.66939425714935
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 73
dh =
                3.0566147
rdh_sum =
          7.83298374280792
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 74
dh =
                3.0804757
rdh_sum =
          7.99898504932325
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 75
```

```
dh =
                3.1043362
rdh_sum =
          8.16741224135596
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 80
dh =
                2.5429832
rdh_sum =
          8.28269497854575
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 81
dh =
                2.5119012
rdh_sum =
          8.39528706484565
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 82
dh =
                2.4808197
rdh_sum =
          8.50521632489492
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 83
dh =
                2.4497382
rdh_sum =
          8.61251073077935
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 84
dh =
                2.4186562
rdh_sum =
          8.71719840182517
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 85
dh =
                2.3875747
rdh_sum =
          8.81930772815424
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 86
dh =
                2.3564932
rdh_sum =
          8.91886724262204
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 87
dh =
                2.3254112
rdh_sum =
          9.01590562060754
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 88
dh =
                2.2943297
rdh_sum =
          9.11045179939306
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 89
dh =
                2.2681657
rdh_sum =
          9.20292260924562
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 90
dh =
                2.2518362
rdh_sum =
          9.29410862674016
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 91
dh =
                2.2404247
rdh_sum =
          9.38440159808547
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 92
dh =
                2.2290132
rdh_sum =
          9.47380548367804
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 93
dh =
                2.2176017
rdh_sum =
          9.56232425250861
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 94
```

```
dh =
                2.2061902
rdh_sum =
          9.64996188212385
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 95
dh =
                2.1947782
rdh_sum =
          9.73672232024246
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 96
dh =
                2.1833667
rdh_sum =
          9.82260959992809
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 97
dh =
                2.1719552
rdh_sum =
          9.90762772416446
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 98
dh =
                2.1605437
rdh_sum =
          9.99178070433689
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 99
dh =
                2.1491322
rdh_sum =
          10.0750725601935
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 100
dh =
                2.1377202
rdh_sum =
          10.1575072823409
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 101
dh =
                2.1279132
rdh_sum =
          10.2392086440214
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 102
dh =
                2.1197112
rdh_sum =
          10.3202989589916
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 103
dh =
                2.1115092
rdh_sum =
          10.4007803191467
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 104
dh =
                2.1033072
rdh_sum =
          10.4806548194225
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 105
dh =
                2.0951052
rdh_sum =
          10.5599245577854
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 106
dh =
                2.0869032
rdh_sum =
          10.6385916352218
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 107
dh =
                2.0787012
rdh_sum =
          10.7166581557274
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 108
dh =
                2.0704992
rdh_sum =
          10.7941262262972
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 109
```

```
dh =
                2.0683277
rdh_sum =
          10.8714362088885
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 110
dh =
                2.0721872
rdh_sum =
          10.9490272701886
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 111
dh =
                2.0760472
rdh_sum =
           11.026899913765
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 112
dh =
                2.0799072
rdh_sum =
            11.10505460649
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 113
dh =
                2.0837672
rdh_sum =
          11.1834918149241
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 114
dh =
                2.0876267
rdh_sum =
          11.2622119686294
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 115
dh =
                2.0914862
rdh_sum =
          11.3412155334203
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 116
dh =
                2.0953462
rdh_sum =
          11.4205030116042
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 117
dh =
                2.1138252
rdh_sum =
          11.5011561102995
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 118
dh =
                2.1615422
rdh_sum =
          11.5853846297494
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 119
dh =
                2.2238782
rdh_sum =
          11.6743897347005
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 120
dh =
                2.2862142
rdh_sum =
          11.7682899703553
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 121
dh =
                2.3485502
rdh_sum =
          11.8672024699906
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 122
dh =
                2.4108862
rdh_sum =
          11.9712429211723
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 123
dh =
                2.4732222
rdh_sum =
          12.0805255323868
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 124
```

```
dh =
                2.5355582
rdh_sum =
          12.1951630000995
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 125
dh =
                2.5978942
rdh_sum =
          12.3152664762495
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 126
dh =
                2.6602302
rdh_sum =
          12.4409455361888
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 127
dh =
                2.6922182
rdh_sum =
          12.5695277519809
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 128
dh =
                2.6635107
rdh_sum =
          12.6955032377589
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 129
dh =
                2.6044557
rdh_sum =
          12.8161884687011
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 130
dh =
                2.5454007
rdh_sum =
          12.9316816385617
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 131
dh =
                2.4863452
rdh_sum =
          13.0420822424794
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 132
dh =
                2.4305707
rdh_sum =
           13.147765799008
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 133
dh =
                2.3813582
rdh_sum =
          13.2493628579932
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 134
dh =
                2.3354267
rdh_sum =
           13.347210470601
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 135
dh =
                2.2894952
rdh_sum =
          13.4413716144701
ans =
Berm Factor Calculation: Iteration 2, Profile Segment: 136
dh =
                2.2435632
rdh_sum =
          13.5319098054553
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
berm_width =
    85
rB =
         0.490666033842359
rdh_mean =
          0.15919893888771
gamma_berm =
         0.587447478093586
gamma_berm =
                        0.6
slope =
         0.147727968561311
```

```
Irb =
          1.67609888130617
gamma_berm =
                       0.6
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
                      0.36
ans =
!!! - - Iribaren number:   1.01 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:6.8 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          6.15750604840807
R2del =
          1.77098842510419
Z2 =
          15.5139302484081
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          195.345922091136
Z2 =
          15.5139302484081
H0 =
                    5.7654
Tp =
                   13.2478
T0 =
          12.0434545454545
R2 =
          6.15750604840807
Z2 =
          15.5139302484081
top_sta =
          195.345922091136
Lslope =
          204.635024340565
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 40
dh =
                  4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 41
dh =
                  4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 42
dh =
                  4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 43
dh =
                  4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 44
dh =
                  4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 45
dh =
                  4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 46
dh =
                  4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 47
```

```
dh =
                4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 48
dh =
                4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 49
dh =
                4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 58
dh =
                3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 59
dh =
                3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 60
dh =
                3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 61
dh =
                3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 62
dh =
                3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 63
dh =
                3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 64
dh =
                3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 65
dh =
                3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 66
dh =
                3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 67
dh =
                3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 68
dh =
                3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 69
dh =
                3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 70
```

```
dh =
                2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 71
dh =
                3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 72
dh =
                3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 73
dh =
                3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 74
dh =
                3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 75
dh =
                3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 80
dh =
                2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 81
dh =
                2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 82
dh =
                2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 83
dh =
                2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 84
dh =
                2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 85
dh =
                2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 86
dh =
                2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 87
dh =
                2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 88
dh =
                2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 89
```

```
dh =
                2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 90
dh =
                2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 91
dh =
                2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 92
dh =
                2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 93
dh =
                2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 94
dh =
                2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 95
dh =
                2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 96
dh =
                2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 97
dh =
                2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 98
dh =
                2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 99
dh =
                2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 100
dh =
                2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 101
dh =
                2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 102
dh =
                2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 103
dh =
                2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 104
```

```
dh =
                2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 105
dh =
                2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 106
dh =
                2.0869032
rdh_sum =
           8.600701136693
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 107
dh =
                2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 108
dh =
                2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 109
dh =
                2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 110
dh =
                2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 111
dh =
                2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 112
dh =
                2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 113
dh =
                2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 114
dh =
                2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 115
dh =
                2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 116
dh =
                2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 117
dh =
                2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 118
dh =
                2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 119
```

```
dh =
                2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 120
dh =
                2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 121
dh =
                2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 122
dh =
                2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 123
dh =
                2.4732222
rdh_sum =
          10.042635033858
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 124
dh =
                2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 125
dh =
                2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 126
dh =
                2.6602302
rdh_sum =
           10.40305503766
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 127
dh =
                2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 128
dh =
                2.6635107
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 129
dh =
                2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 130
dh =
                2.5454007
rdh_sum =
          10.893791140033
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 131
dh =
                2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 132
dh =
                2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 133
dh =
                2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 134
```

```
dh =
                2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 135
dh =
                2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 136
dh =
                2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 3, Profile Segment: 169
dh =
               -4.8006863
rdh_sum =
           12.378922429044
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
    86
rB =
          0.420260413764136
rdh_mean =
          0.143940958477256
gamma_berm =
          0.640232273003122
slope =
          0.124799620775612
Irb =
           1.41595736275642
gamma_berm =
          0.640232273003122
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                        0.6
gamma =
          0.384139363801873
ans =
!!! - - Iribaren number:   0.91 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:8.0 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
           5.55062259206032
R2del =
          0.606883456347744
Z2 =
           14.9070467920603
ans =
!----------------- STARTING ITERATION 4 -----------------!
Ztoe =
          0.708324200000002
toe_sta =
          -9.28910224942969
top_sta =
           183.338176768571
Z2 =
           14.9070467920603
H0 =
                    5.7654
Tp =
                   13.2478
T0 =
          12.0434545454545
R2 =
           5.55062259206032
Z2 =
           14.9070467920603
top_sta =
           183.338176768571
Lslope =
           192.627279018001
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 40
dh =
                4.4473502
rdh_sum =
          0.324280978646442
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 41
dh =
                4.4192287
```

```
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 42
dh =
                  4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 43
dh =
                  4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 44
dh =
                  4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 45
dh =
                  4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 46
dh =
                  4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 47
dh =
                  4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 48
dh =
                  4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 49
dh =
                  4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 58
dh =
                  3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 59
dh =
                  3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 60
dh =
                  3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 61
dh =
                  3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 62
dh =
                  3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 63
dh =
                  3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 64
dh =
                  3.1364562
```

```
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 65
dh =
                  3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 66
dh =
                  3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 67
dh =
                  3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 68
dh =
                  3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 69
dh =
                  3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 70
dh =
                  2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 71
dh =
                  3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 72
dh =
                  3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 73
dh =
                  3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 74
dh =
                  3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 75
dh =
                  3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 80
dh =
                  2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 81
dh =
                  2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 82
dh =
                  2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 83
dh =
                  2.4497382
```

```
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 84
dh =
                  2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 85
dh =
                  2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 86
dh =
                  2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 87
dh =
                  2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 88
dh =
                  2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 89
dh =
                  2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 90
dh =
                  2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 91
dh =
                  2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 92
dh =
                  2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 93
dh =
                  2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 94
dh =
                  2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 95
dh =
                  2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 96
dh =
                  2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 97
dh =
                  2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 98
dh =
                  2.1605437
```

```
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 99
dh =
                2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 100
dh =
                2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 101
dh =
                2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 102
dh =
                2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 103
dh =
                2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 104
dh =
                2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 105
dh =
                2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 106
dh =
                2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 107
dh =
                2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 108
dh =
                2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 109
dh =
                2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 110
dh =
                2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 111
dh =
                2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 112
dh =
                2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 113
dh =
                2.0837672
```

```
rdh_sum =
          9.1456013163953
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 114
dh =
                2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 115
dh =
                2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 116
dh =
                2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 117
dh =
                2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 118
dh =
                2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 119
dh =
                2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 120
dh =
                2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 121
dh =
                2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 122
dh =
                2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 123
dh =
                2.4732222
rdh_sum =
           10.042635033858
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 124
dh =
                2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 125
dh =
                2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 126
dh =
                2.6602302
rdh_sum =
           10.40305503766
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 127
dh =
                2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 128
dh =
                2.6635107
```

```
rdh_sum =
         10.6576127392301
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 129
dh =
                2.6044557
rdh_sum =
         10.7782979701724
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 130
dh =
                2.5454007
rdh_sum =
          10.893791140033
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 131
dh =
                2.4863452
rdh_sum =
         11.0041917439506
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 132
dh =
                2.4305707
rdh_sum =
         11.1098753004792
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 133
dh =
                2.3813582
rdh_sum =
         11.2114723594644
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 134
dh =
                2.3354267
rdh_sum =
         11.3093199720722
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 135
dh =
                2.2894952
rdh_sum =
         11.4034811159413
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 136
dh =
                2.2435632
rdh_sum =
         11.4940193069266
ans =
Berm Factor Calculation: Iteration 4, Profile Segment: 169
dh =
               -4.8006863
rdh_sum =
          12.449650311268
ans =
!------- End Berm Factor Calculation, Iter: 4 ---------!
berm_width =
    86
rB =
         0.446458053285192
rdh_mean =
         0.144763375712419
gamma_berm =
         0.618172721622367
slope =
          0.13316219566724
Irb =
          1.51083785530769
gamma_berm =
         0.618172721622367
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.6
gamma =
         0.37090363297342
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.5 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
         5.71849380898391
R2del =
         0.167871216923583
Z2 =
          15.0749180089839
```

```
ans =
!----------------- STARTING ITERATION 5 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          186.659662630022
Z2 =
          15.0749180089839
H0 =
                    5.7654
Tp =
                   13.2478
T0 =
          12.0434545454545
R2 =
          5.71849380898391
Z2 =
          15.0749180089839
top_sta =
          186.659662630022
Lslope =
          195.948764879451
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 40
dh =
                  4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 41
dh =
                  4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 42
dh =
                  4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 43
dh =
                  4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 44
dh =
                  4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 45
dh =
                  4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 46
dh =
                  4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 47
dh =
                  4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 48
dh =
                  4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 49
dh =
                  4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 58
dh =
                  3.2693722
rdh_sum =
          3.26854164898686
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 59
dh =
                3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 60
dh =
                3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 61
dh =
                3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 62
dh =
                3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 63
dh =
                3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 64
dh =
                3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 65
dh =
                3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 66
dh =
                3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 67
dh =
                3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 68
dh =
                3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 69
dh =
                3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 70
dh =
                2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 71
dh =
                3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 72
dh =
                3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 73
dh =
                3.0566147
rdh_sum =
          5.79509324427916
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 74
dh =
                3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 75
dh =
                3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 80
dh =
                2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 81
dh =
                2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 82
dh =
                2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 83
dh =
                2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 84
dh =
                2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 85
dh =
                2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 86
dh =
                2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 87
dh =
                2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 88
dh =
                2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 89
dh =
                2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 90
dh =
                2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 91
dh =
                2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 92
dh =
                2.2290132
rdh_sum =
          7.43591498514927
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 93
dh =
                2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 94
dh =
                2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 95
dh =
                2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 96
dh =
                2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 97
dh =
                2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 98
dh =
                2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 99
dh =
                2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 100
dh =
                2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 101
dh =
                2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 102
dh =
                2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 103
dh =
                2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 104
dh =
                2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 105
dh =
                2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 106
dh =
                2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 107
dh =
                2.0787012
rdh_sum =
          8.67876765719867
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 108
dh =
                2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 109
dh =
                2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 110
dh =
                2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 111
dh =
                2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 112
dh =
                2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 113
dh =
                2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 114
dh =
                2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 115
dh =
                2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 116
dh =
                2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 117
dh =
                2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 118
dh =
                2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 119
dh =
                2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 120
dh =
                2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 121
dh =
                2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 122
dh =
                2.4108862
rdh_sum =
           9.9333524226435
```

```
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 123
dh =
                2.4732222
rdh_sum =
           10.042635033858
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 124
dh =
                2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 125
dh =
                2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 126
dh =
                2.6602302
rdh_sum =
           10.40305503766
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 127
dh =
                2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 128
dh =
                2.6635107
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 129
dh =
                2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 130
dh =
                2.5454007
rdh_sum =
           10.893791140033
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 131
dh =
                2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 132
dh =
                2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 133
dh =
                2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 134
dh =
                2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 135
dh =
                2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 136
dh =
                2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 5, Profile Segment: 169
dh =
               -4.8006863
rdh_sum =
           12.431794626244
```

```
ans =
!------- End Berm Factor Calculation, Iter: 5 ---------!
berm_width =
    86
rB =
         0.438890237725702
rdh_mean =
         0.144555751467954
gamma_berm =
         0.624553870400686
slope =
         0.130666259186591
Irb =
          1.48251934268095
gamma_berm =
         0.624553870400686
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                        0.6
gamma =
         0.374732322240412
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.7 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           5.669232040686
R2del =
        0.0492617682979093
Z2 =
          15.025656240686
ans =
!----------------- STARTING ITERATION 6 -----------------!
Ztoe =
         0.708324200000002
toe_sta =
         -9.28910224942969
top_sta =
          185.684973401516
Z2 =
          15.025656240686
H0 =
                    5.7654
Tp =
                   13.2478
T0 =
         12.0434545454545
R2 =
           5.669232040686
Z2 =
          15.025656240686
top_sta =
          185.684973401516
Lslope =
          194.974075650946
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 40
dh =
                  4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 41
dh =
                  4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 42
dh =
                  4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 43
dh =
                  4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 44
dh =
                  4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 45
```

```
dh =
                4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 46
dh =
                4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 47
dh =
                4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 48
dh =
                4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 49
dh =
                4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 58
dh =
                3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 59
dh =
                3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 60
dh =
                3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 61
dh =
                3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 62
dh =
                3.1818832
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 63
dh =
                3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 64
dh =
                3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 65
dh =
                3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 66
dh =
                3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 67
dh =
                3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 68
```

```
dh =
                3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 69
dh =
                3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 70
dh =
                2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 71
dh =
                3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 72
dh =
                3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 73
dh =
                3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 74
dh =
                3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 75
dh =
                3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 80
dh =
                2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 81
dh =
                2.5119012
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 82
dh =
                2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 83
dh =
                2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 84
dh =
                2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 85
dh =
                2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 86
dh =
                2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 87
```

```
dh =
                2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 88
dh =
                2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 89
dh =
                2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 90
dh =
                2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 91
dh =
                2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 92
dh =
                2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 93
dh =
                2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 94
dh =
                2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 95
dh =
                2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 96
dh =
                2.1833667
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 97
dh =
                2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 98
dh =
                2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 99
dh =
                2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 100
dh =
                2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 101
dh =
                2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 102
```

```
dh =
                2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 103
dh =
                2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 104
dh =
                2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 105
dh =
                2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 106
dh =
                2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 107
dh =
                2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 108
dh =
                2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 109
dh =
                2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 110
dh =
                2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 111
dh =
                2.0760472
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 112
dh =
                2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 113
dh =
                2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 114
dh =
                2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 115
dh =
                2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 116
dh =
                2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 117
```

```
dh =
                2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 118
dh =
                2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 119
dh =
                2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 120
dh =
                2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 121
dh =
                2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 122
dh =
                2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 123
dh =
                2.4732222
rdh_sum =
          10.042635033858
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 124
dh =
                2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 125
dh =
                2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 126
dh =
                2.6602302
rdh_sum =
           10.40305503766
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 127
dh =
                2.6922182
rdh_sum =
          10.5316372534521
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 128
dh =
                2.6635107
rdh_sum =
          10.6576127392301
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 129
dh =
                2.6044557
rdh_sum =
          10.7782979701724
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 130
dh =
                2.5454007
rdh_sum =
          10.893791140033
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 131
dh =
                2.4863452
rdh_sum =
          11.0041917439506
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 132
```

```
dh =
                2.4305707
rdh_sum =
          11.1098753004792
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 133
dh =
                2.3813582
rdh_sum =
          11.2114723594644
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 134
dh =
                2.3354267
rdh_sum =
          11.3093199720722
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 135
dh =
                2.2894952
rdh_sum =
          11.4034811159413
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 136
dh =
                2.2435632
rdh_sum =
          11.4940193069266
ans =
Berm Factor Calculation: Iteration 6, Profile Segment: 169
dh =
               -4.8006863
rdh_sum =
          12.4372150827059
ans =
!------- End Berm Factor Calculation, Iter: 6 ---------!
berm_width =
    86
rB =
          0.441084281142907
rdh_mean =
          0.144618780031464
gamma_berm =
          0.622704789487036
slope =
          0.131382917956981
Irb =
           1.49065044321003
gamma_berm =
          0.622704789487036
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                        0.6
gamma =
          0.373622873692222
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.6 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
           5.68344916884426
R2del =
          0.014217128158263
Z2 =
           15.0398733688443
ans =
!----------------- STARTING ITERATION 7 -----------------!
Ztoe =
          0.708324200000002
toe_sta =
          -9.28910224942969
top_sta =
           185.966272310486
Z2 =
           15.0398733688443
H0 =
                     5.7654
Tp =
                    13.2478
T0 =
          12.0434545454545
R2 =
           5.68344916884426
Z2 =
           15.0398733688443
top_sta =
           185.966272310486
```

```
Lslope =
         195.255374559916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 40
dh =
                4.4473502
rdh_sum =
         0.324280978646442
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 41
dh =
                4.4192287
rdh_sum =
         0.644980637357216
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 42
dh =
                4.3911072
rdh_sum =
         0.962109501471238
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 43
dh =
                4.3629857
rdh_sum =
          1.27567830594121
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 44
dh =
                4.3348642
rdh_sum =
          1.58569799470345
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 45
dh =
                4.3067427
rdh_sum =
          1.89217972003547
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 46
dh =
                4.2786212
rdh_sum =
           2.1951348419013
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 47
dh =
                4.2504997
rdh_sum =
          2.49457492728462
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 48
dh =
                4.2223782
rdh_sum =
          2.79051174950979
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 49
dh =
                4.1942567
rdh_sum =
           3.0829572875507
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 58
dh =
                3.2693722
rdh_sum =
          3.26854164898686
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 59
dh =
                3.2475002
rdh_sum =
          3.45181489328406
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 60
dh =
                3.2256282
rdh_sum =
          3.63278826754331
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 61
dh =
                3.2037557
rdh_sum =
          3.81147304834834
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 62
dh =
                3.1818832
```

```
rdh_sum =
          3.98788064626011
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 63
dh =
                  3.1600112
rdh_sum =
          4.16202260436817
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 64
dh =
                  3.1364562
rdh_sum =
          4.33373753040655
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 65
dh =
                  3.1112187
rdh_sum =
          4.50286707129962
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 66
dh =
                  3.0859817
rdh_sum =
          4.66942692112822
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 67
dh =
                  3.0607447
rdh_sum =
          4.83343284408631
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 68
dh =
                  3.0355077
rdh_sum =
          4.99490072511098
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 69
dh =
                  3.0102702
rdh_sum =
          5.15384651932369
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 70
dh =
                  2.9973072
rdh_sum =
          5.31150312858367
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 71
dh =
                  3.0088937
rdh_sum =
          5.47031182615509
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 72
dh =
                  3.0327542
rdh_sum =
          5.63150375862059
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 73
dh =
                  3.0566147
rdh_sum =
          5.79509324427916
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 74
dh =
                  3.0804757
rdh_sum =
          5.96109455079449
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 75
dh =
                  3.1043362
rdh_sum =
           6.1295217428272
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 80
dh =
                  2.5429832
rdh_sum =
          6.24480448001698
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 81
dh =
                  2.5119012
```

```
rdh_sum =
          6.35739656631689
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 82
dh =
                  2.4808197
rdh_sum =
          6.46732582636616
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 83
dh =
                  2.4497382
rdh_sum =
          6.57462023225059
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 84
dh =
                  2.4186562
rdh_sum =
          6.67930790329641
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 85
dh =
                  2.3875747
rdh_sum =
          6.78141722962548
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 86
dh =
                  2.3564932
rdh_sum =
          6.88097674409328
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 87
dh =
                  2.3254112
rdh_sum =
          6.97801512207878
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 88
dh =
                  2.2943297
rdh_sum =
           7.0725613008643
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 89
dh =
                  2.2681657
rdh_sum =
          7.16503211071685
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 90
dh =
                  2.2518362
rdh_sum =
           7.2562181282114
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 91
dh =
                  2.2404247
rdh_sum =
          7.34651109955671
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 92
dh =
                  2.2290132
rdh_sum =
          7.43591498514927
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 93
dh =
                  2.2176017
rdh_sum =
          7.52443375397985
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 94
dh =
                  2.2061902
rdh_sum =
          7.61207138359508
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 95
dh =
                  2.1947782
rdh_sum =
           7.6988318217137
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 96
dh =
                  2.1833667
```

```
rdh_sum =
          7.78471910139933
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 97
dh =
                2.1719552
rdh_sum =
           7.8697372256357
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 98
dh =
                2.1605437
rdh_sum =
          7.95389020580813
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 99
dh =
                2.1491322
rdh_sum =
          8.03718206166478
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 100
dh =
                2.1377202
rdh_sum =
          8.11961678381213
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 101
dh =
                2.1279132
rdh_sum =
           8.2013181454926
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 102
dh =
                2.1197112
rdh_sum =
          8.28240846046287
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 103
dh =
                2.1115092
rdh_sum =
          8.36288982061794
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 104
dh =
                2.1033072
rdh_sum =
          8.44276432089374
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 105
dh =
                2.0951052
rdh_sum =
          8.52203405925664
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 106
dh =
                2.0869032
rdh_sum =
            8.600701136693
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 107
dh =
                2.0787012
rdh_sum =
          8.67876765719867
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 108
dh =
                2.0704992
rdh_sum =
          8.75623572776848
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 109
dh =
                2.0683277
rdh_sum =
          8.83354571035977
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 110
dh =
                2.0721872
rdh_sum =
          8.91113677165987
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 111
dh =
                2.0760472
```

```
rdh_sum =
          8.98900941523621
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 112
dh =
                  2.0799072
rdh_sum =
          9.06716410796121
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 113
dh =
                  2.0837672
rdh_sum =
           9.1456013163953
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 114
dh =
                  2.0876267
rdh_sum =
          9.22432147010061
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 115
dh =
                  2.0914862
rdh_sum =
           9.3033250348915
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 116
dh =
                  2.0953462
rdh_sum =
          9.38261251307542
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 117
dh =
                  2.1138252
rdh_sum =
          9.46326561177069
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 118
dh =
                  2.1615422
rdh_sum =
          9.54749413122066
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 119
dh =
                  2.2238782
rdh_sum =
          9.63649923617176
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 120
dh =
                  2.2862142
rdh_sum =
          9.73039947182654
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 121
dh =
                  2.3485502
rdh_sum =
          9.82931197146185
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 122
dh =
                  2.4108862
rdh_sum =
           9.9333524226435
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 123
dh =
                  2.4732222
rdh_sum =
          10.042635033858
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 124
dh =
                  2.5355582
rdh_sum =
          10.1572725015708
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 125
dh =
                  2.5978942
rdh_sum =
          10.2773759777207
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 126
dh =
                  2.6602302
```

```
rdh_sum =
          10.40305503766
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 127
dh =
                2.6922182
rdh_sum =
         10.5316372534521
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 128
dh =
                2.6635107
rdh_sum =
         10.6576127392301
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 129
dh =
                2.6044557
rdh_sum =
         10.7782979701724
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 130
dh =
                2.5454007
rdh_sum =
          10.893791140033
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 131
dh =
                2.4863452
rdh_sum =
         11.0041917439506
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 132
dh =
                2.4305707
rdh_sum =
         11.1098753004792
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 133
dh =
                2.3813582
rdh_sum =
         11.2114723594644
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 134
dh =
                2.3354267
rdh_sum =
         11.3093199720722
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 135
dh =
                2.2894952
rdh_sum =
         11.4034811159413
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 136
dh =
                2.2435632
rdh_sum =
         11.4940193069266
ans =
Berm Factor Calculation: Iteration 7, Profile Segment: 169
dh =
               -4.8006863
rdh_sum =
         12.4356649294839
ans =
!------- End Berm Factor Calculation, Iter: 7 ---------!
berm_width =
    86
rB =
          0.44044882346432
rdh_mean =
         0.144600754993998
gamma_berm =
         0.623240408944839
slope =
         0.131174774939651
Irb =
          1.48828888444837
gamma_berm =
         0.623240408944839
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                      0.6
```

```
gamma =
         0.373944245366903
ans =
!!! - - Iribaren number:   0.93 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:7.6 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
          5.67932605393606
R2del =
       0.00412311490820283
Z2 =
          15.0357502539361
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          15.0357502539361
diary off
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: YK-107

Station locations shifted by: -10.79 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: YK-107

Incident significant wave height: 5.74 feet

Peak wave period: 13.21 seconds

Mean wave height: 3.59 feet

Local Depth below SWEL: 22.69 feet

Mean wave height deshoaled using Hunt approximation for
celerity assuming constant wave energy flux.
References: R.G. Dean and R.A. Dalrymple. 2000. Water

Wave Mechanics for Engineers and Scientists. World
Scientific Publishing Company, River Edge New Jersy

USACE (1985), Direct Methods for Calculating Wavelength, CETN-1-17
US Army Engineer Waterways Experiment Station Coastel Engineering
Research Center, Vicksburg, MS

also see Coastal Engineering Manual Part II-3
for discussion of shoaling coefficient

Depth, D = 22.69
Period, T = 11.23
Waveheight, H = 3.59
Deep water wavelength, L0 (ft)
L0 = g*T*T/twopi
L0 = 32.17*11.23*11.23/6.28 = 645.48
Deep water wave celerity, C0 (ft/s)
C0 = L0/T
C0 = 645.48/11.23 = 57.49
Angular frequency, sigma (rad/s)
sigma = twopi/T
sigma = 6.28/11.23 = 0.56
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
y = sigma.*sigma.*D./g
y = 0.56*0.56*22.69/32.17 = 0.22
C1H = sqrt(g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)))
C1H = 26.03
Shoaling Coefficient KsH
KsH = sqrt(C0/C1H)
KsH = sqrt(57.49/26.03) = 1.49
Deepwater Wave Height H0_H (ft)
H0_H = H/KsH
H0_H = 3.59/1.49 = 2.42

Deepwater mean wave height: 2.42 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: YK-107

RUNUP2 SWEL:
9.40
9.40
9.40
9.40

9.40
9.40
9.40
9.40
9.40

RUNUP2 deepwater mean wave heights:
2.30
2.30
2.30
2.42
2.42
2.42
2.54
2.54
2.54

RUNUP2 mean wave periods:
10.67
11.23
11.79
10.67
11.23
11.79
10.67
11.23
11.79

RUNUP2 runup above SWEL:
0.98
1.15
1.27
1.11
1.22
1.32
1.17
1.26
1.37

RUNUP2 Mean runup height above SWEL: 1.21 feet

RUNUP2 2-percent runup height above SWEL: 2.65 feet

RUNUP2 2-percent runup elevation: 12.05 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 5.74 feet

Significant wave height is mean wave height divided by 0.626
Reference: D.2.8.1.2.1 Atlanic and Gulf of Mexico G&S Feb. 2007

Deepwater significant wave height: 3.86 feet

Peak wave period: 13.21 seconds

Average beach Slope: 1:56.82 (H:V)

ACES IRREGULAR WAVE RUNUP ON BEACHES

Reference:
Leenknecht, David A., Andre Szuwaiski, and Ann Sherlock. 1992.
"Automated Coastal Engineering System Technical Reference",
Coastal Engineering Research Center, Department of the Army

```
# Waterways Experiments Station, Corps of Eniggneers, 3909 Halls
# Ferry Road, Vicksburg, Mississippi 39180-6199.

INPUTS:

Acceleration Due to Gravity,        g  =   32.174
Deepwater Significant Wave height,  Hs =     3.86
Wave Period,                        T  =    13.21
Beach Slope,                        S  =    0.018

EQUATIONS:

Runup,           R   = Hs * a * Irb^b
Iribarren,       Irb = S/sqrt(Hs/L0)
Wavelength,      L0  = g * T^2 / 2 / pi

COEFFICIENTS:
(Mase, H. 1989, "Random Wave Runup Height on Gentle Slopes,"
j. Waterway, Port, Coastal and Ocean Engineering Division,
ASCE, Vol 115, No. 5, pp 649-661.)

               [Rmax,  R2%, R-1/3, R-1/10, R-mean]
          a = [2.32, 1.86,  1.70,   1.38,   0.88]
          b = [0.77, 0.71,  0.71,   0.70,   0.69]

RESULTS:

       RUNUP = [ 3.2,  2.8,   2.6,    2.1,    1.4]

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 2.82 feet

ACES Beach 2-percent runup elevation: 12.22 feet-NAVD88

ACES BEACH RUNUP is valid

_____________END ACES BEACH RESULTS_____________________

PART 5 COMPLETE_____________________________________________
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```
  FEMA                                                  sjh           job 2
  RUNUP2 transect: YK-107                                               1
11.0
  -13.34 -1384.2 0.6
  -12.62 -1300.2 0.6
  -8.04 -1134.2 0.6
  -7.29 -938.2 0.6
  -7.29 -462.2 0.6
  -6.03 -318.2 0.6
  -5.58 -189.2 0.6
  -5.42 -115.2 0.6
  -1.85 -32.2  0.6
  -0.06 -12.2  0.6
  -0.03 -0.2   0.6
  1.35  10.8   0.6
  2.83  30.8   0.6
  4.90  49.8   0.6
  6.08  67.8   0.6
  7.09  99.3   0.6
  7.29  147.3  0.6
  8.21  155.8  0.6
  12.93 166.3  0.6
1 14.18 179.3  0.6
 9.4   2.30  10.67
 9.4   2.30  11.23
 9.4   2.30  11.79
 9.4   2.42  10.67
 9.4   2.42  11.23
 9.4   2.42  11.79
 9.4   2.54  10.67
 9.4   2.54  11.23
 9.4   2.54  11.79
```

****

CROSS SECTION PROFILE

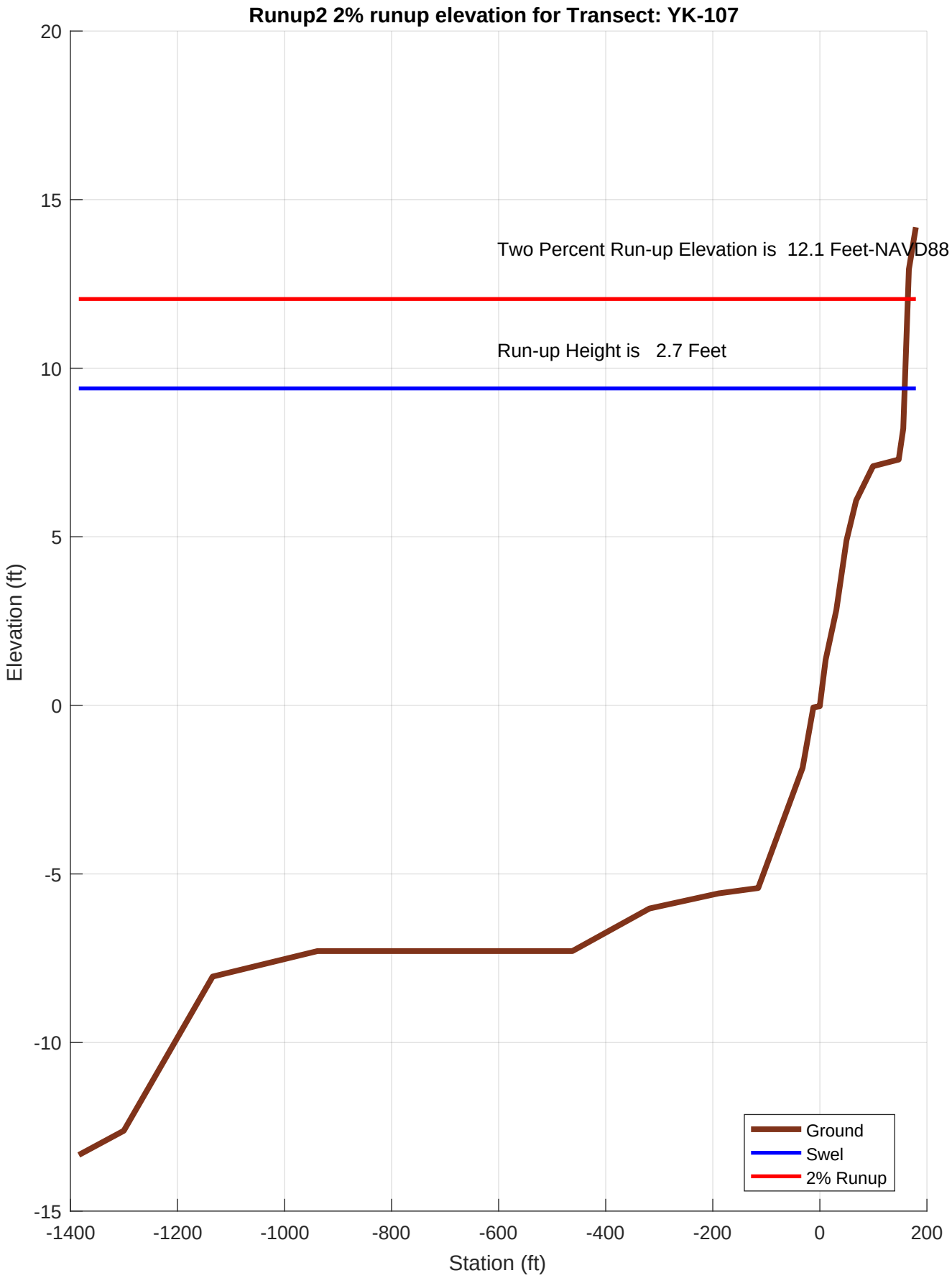
	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-138.4	-13.3		
2	-130.0	-12.6	.00	20.60
3	-1134.0	-8.0	-220.18	20.60
4	-938.2	-7.3	261.07	.60
5	-462.2	-7.3	FLAT	.60
6	-318.2	-6.0	114.29	.60
7	-189.2	-5.6	286.67	.60
8	-115.2	-5.4	462.50	.60
9	-32.2	-1.8	23.25	.60
10	-12.2	-.1	11.17	.60
11	-.2	.0	400.00	.60
12	10.8	1.4	7.97	.60
13	30.8	2.8	13.51	.60
14	49.8	4.9	9.18	.60
15	67.8	6.1	15.25	.60
16	99.3	7.1	31.19	.60
17	147.3	7.3	240.00	.60
18	155.8	8.2	9.24	.60
19	166.3	12.9	2.22	.60
20	179.3	14.2	10.40	.60

LAST SLOPE 11.00 LAST ROUGHNESS .60

****

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.40	2.30	10.67	11	18	.98	5.53
9.40	2.30	11.23	11	18	1.15	5.69
9.40	2.30	11.79	11	18	1.27	5.85
9.40	2.42	10.67	11	18	1.11	5.74
9.40	2.42	11.23	11	18	1.22	5.91
9.40	2.42	11.79	11	18	1.32	6.07
9.40	2.54	10.67	11	18	1.17	5.95
9.40	2.54	11.23	11	18	1.26	6.12
9.40	2.54	11.79	11	18	1.37	6.28


Runup2 2% runup elevation for Transect: YK-107
Two Percent Run-up Elevation is 12.1 Feet-NAVD88
Run-up Height is 2.7 Feet
Ground
Swel
2% Runup
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-15
-1400
-1200
-1000
-800
-600
-400
-200
0
200