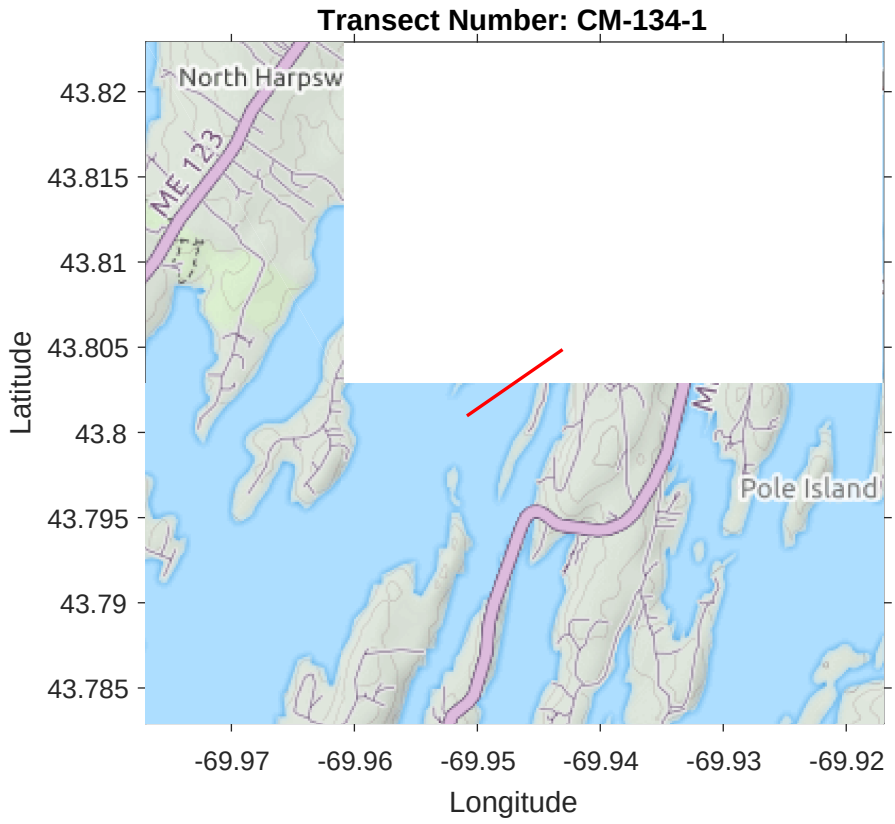
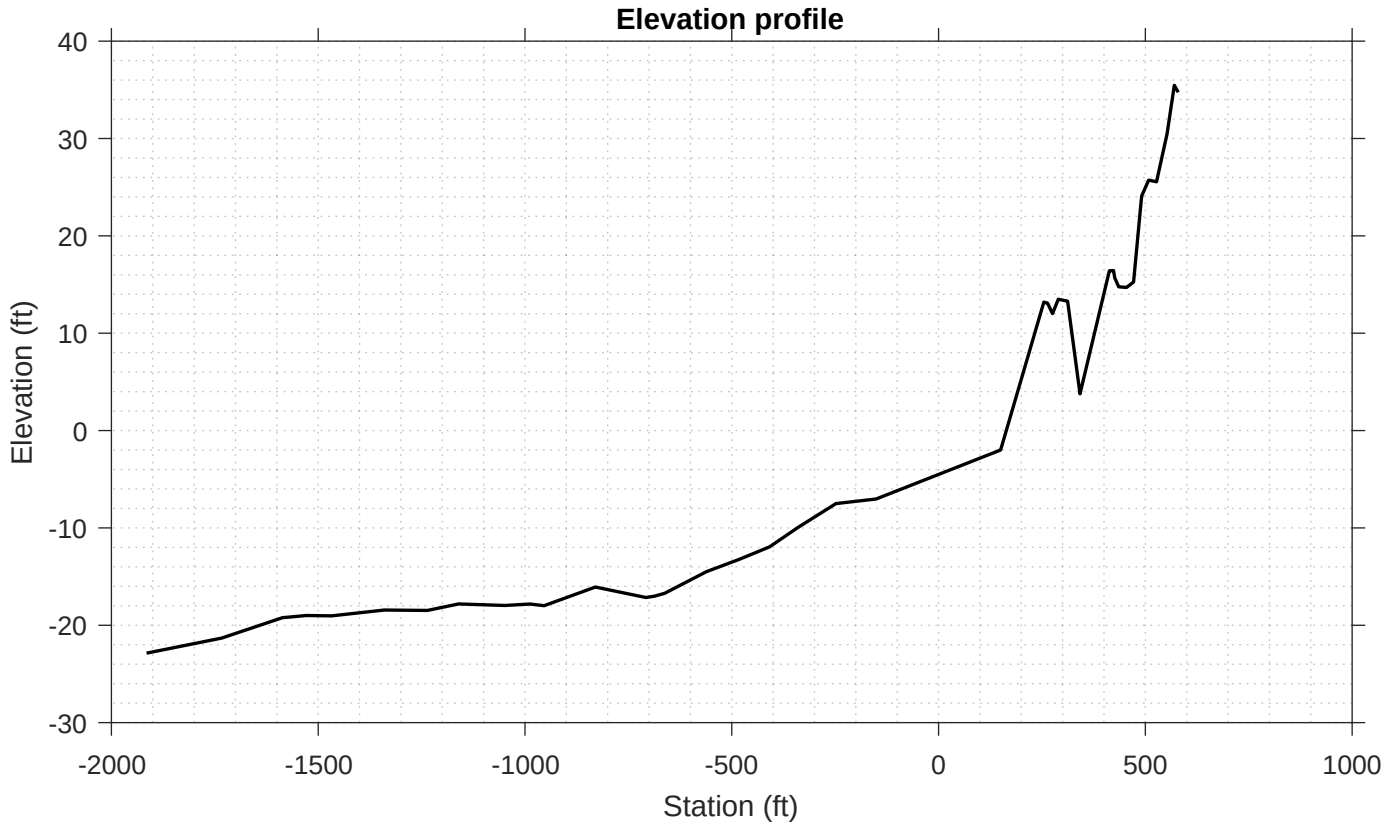

Transect Number: CM-134-1
North Harpsw
ME 123
Pole Island
43.82
43.815
43.81
43.805
43.8
43.795
43.79
43.785
Latitude
-69.97
-69.96
-69.95
-69.94
-69.93
-69.92
Longitude


Elevation profile
40
30
20
10
0
-10
-20
-30
Elevation (ft)
-2000
-1500
-1000
-500
0
500
1000
Station (ft)

DATA LOG FOR TRANSECT ID: CM-134-1

PART 1: USER INPUT

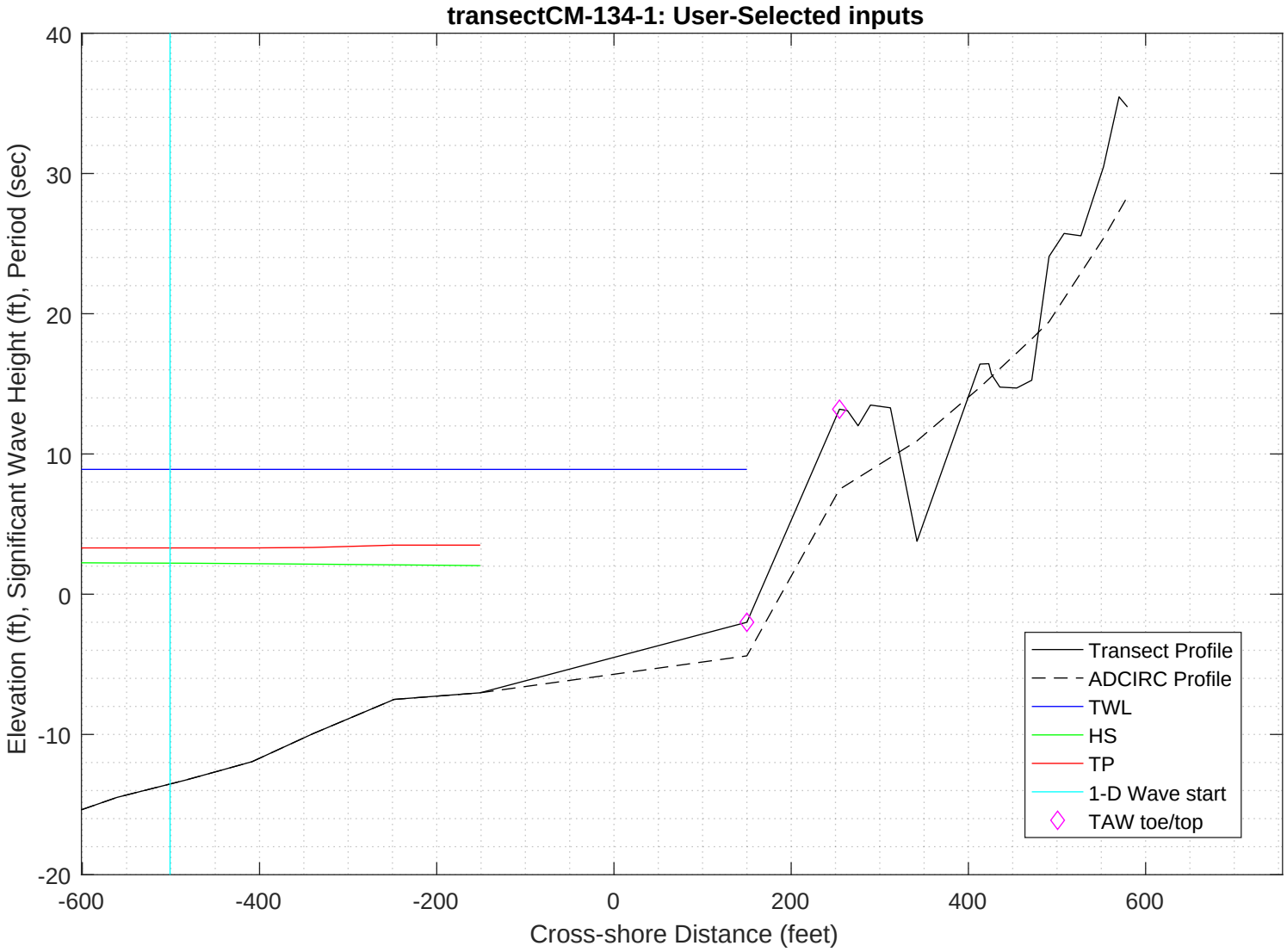
SWAN 1-D / WHAFIS input

station: -501 ft
LON: -69.9464 deg E
LAT: 43.8032 deg N
Bottom ELEV: -13.5336 ft-NAVD88
TWL: 8.8995 ft-NAVD88
HS: 2.2146 ft
TP: 3.3 sec
Wave Direction bin: 45 deg CCW from East (90 deg sector)
Transect Direction: 26.5773 deg CCW from East

TAW/RUNUP input

toe sta: 150 ft
toe elev: -2 ft-NAVD88
top sta: 254.5 ft
top elev: 13.1923 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE


transectCM-134-1: User-Selected inputs
Elevation (ft), Significant Wave Height (ft), Period (sec)
Cross-shore Distance (feet)
40
30
20
10
0
-10
-20
-600
-400
-200
0
200
400
600
Transect Profile
ADCIRC Profile
TWL
HS
TP
1-D Wave start
TAW toe/top

_____
PART 2: SWAN 1-D

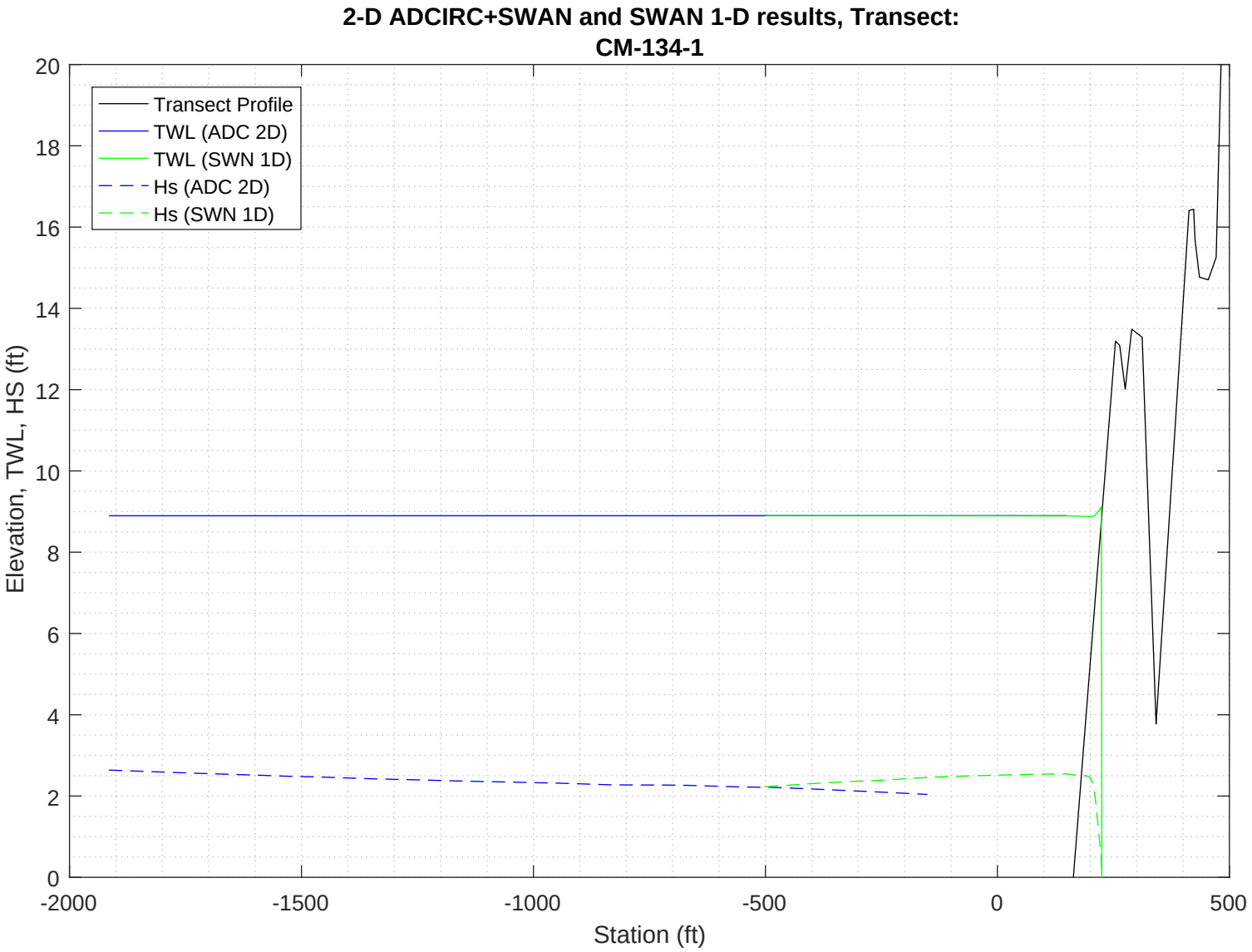
swan input grid name: 2_swan/gridfiles/CM-134-1zmeters_xmeters.grd
swan file name: 2_swan/swanfiles/CM-134-1.swn
swan output name: 2_swan/swanfiles/CM-134-1.dat

Boundary Conditions:
    TWL- 2.7126 meters
    HS- 0.67501 meters
    PER- 3.3 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.21697 feet
SWAN output at toe:
    SETUP- -0.0065354 feet
    HS-   2.5462 feet
    PER-   3.2843 seconds

PART 2 COMPLETE_____


2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
CM-134-1
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
-2000
-1500
-1000
-500
0
500

1

```
                    Execution started at 20200220.141934


                    ---------------------------------------
                                    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      230       0.   230     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      230   0      1       1
 !READinp BOTtom [fac]  'fname1'  [idla]  [nhedf]  [FREe|FORmat[form]|UNFormatted]
  READ    BOTTOM   -1. '../gridfiles/CM-134-1zmeters_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   0.67501     3.3     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      230  230    0
!TABLe 'sname' < HEADer|NOHEADer|INDexed > 'fname' <output parameters> (output time)
 Table 'curve'   HEADER 'CM-134-1.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             231 MYC              1
                     : MCGRD           232
                     : 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   3.16 % 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   0.46 % 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   4.06 % 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  38.74 % 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  52.71 % of wet grid points ( 99.50 % required)

iteration    7; sweep 1
iteration    7; sweep 2
iteration    7; sweep 3
iteration    7; sweep 4
accuracy OK in  86.49 % of wet grid points ( 99.50 % required)

iteration    8; sweep 1
iteration    8; sweep 2
iteration    8; sweep 3
iteration    8; sweep 4
accuracy OK in  94.15 % of wet grid points ( 99.50 % required)

iteration    9; sweep 1
iteration    9; sweep 2
iteration    9; sweep 3
iteration    9; sweep 4
accuracy OK in  99.55 % of wet grid points ( 99.50 % required)


STOP
```

%
%
% Run:1 Table:curve SWAN version:41.20A
%
% Xp Yp Hsig TPsmoo RTpeak Tm_10 Dir Dspr Depth Setup
% [m] [m] [m] [sec] [sec] [sec] [degr] [degr] [m] [m]
%

Xp	Yp	Hsig	TPsmoo	RTpeak	Tm_10	Dir	Dspr	Depth	Setup
0.	0.	0.67992	3.2957	3.3473	2.9723	0.002	31.5458	6.8400	0.000000
1.	0.	0.68061	3.2956	3.3473	2.9700	0.002	31.5429	6.8200	-0.000005
2.	0.	0.68135	3.2955	3.3473	2.9679	0.002	31.5402	6.8100	-0.000009
3.	0.	0.68203	3.2954	3.3473	2.9656	0.002	31.5359	6.7900	-0.000013
4.	0.	0.68271	3.2953	3.3473	2.9633	0.002	31.5328	6.7700	-0.000018
5.	0.	0.68345	3.2953	3.3473	2.9612	0.002	31.5302	6.7600	-0.000022
6.	0.	0.68414	3.2952	3.3473	2.9589	0.002	31.5262	6.7400	-0.000027
7.	0.	0.68483	3.2951	3.3473	2.9566	0.002	31.5235	6.7200	-0.000032
8.	0.	0.68558	3.2950	3.3473	2.9544	0.002	31.5213	6.7100	-0.000036
9.	0.	0.68626	3.2949	3.3473	2.9522	0.002	31.5177	6.6900	-0.000041
10.	0.	0.68695	3.2948	3.3473	2.9499	0.002	31.5136	6.6700	-0.000046
11.	0.	0.68764	3.2947	3.3473	2.9476	0.002	31.5113	6.6499	-0.000051
12.	0.	0.68839	3.2946	3.3473	2.9454	0.002	31.5095	6.6399	-0.000055
13.	0.	0.68908	3.2945	3.3473	2.9431	0.002	31.5064	6.6199	-0.000060
14.	0.	0.68977	3.2944	3.3473	2.9408	0.002	31.5031	6.5999	-0.000065
15.	0.	0.69046	3.2943	3.3473	2.9385	0.002	31.5014	6.5799	-0.000070
16.	0.	0.69130	3.2943	3.3473	2.9359	0.004	31.4975	6.5699	-0.000075
17.	0.	0.69214	3.2942	3.3473	2.9327	0.009	31.4894	6.5499	-0.000080
18.	0.	0.69299	3.2941	3.3473	2.9295	0.015	31.4815	6.5299	-0.000085
19.	0.	0.69383	3.2940	3.3473	2.9265	0.023	31.4773	6.5099	-0.000091
20.	0.	0.69469	3.2939	3.3473	2.9237	0.030	31.4756	6.4999	-0.000096
21.	0.	0.69546	3.2938	3.3473	2.9210	0.036	31.4738	6.4799	-0.000101
22.	0.	0.69619	3.2937	3.3473	2.9185	0.039	31.4721	6.4599	-0.000107
23.	0.	0.69699	3.2936	3.3473	2.9157	0.047	31.4729	6.4399	-0.000112
24.	0.	0.69787	3.2935	3.3473	2.9129	0.057	31.4737	6.4299	-0.000117
25.	0.	0.69865	3.2934	3.3473	2.9103	0.061	31.4728	6.4099	-0.000123
26.	0.	0.69938	3.2934	3.3473	2.9079	0.063	31.4723	6.3899	-0.000129
27.	0.	0.70012	3.2933	3.3473	2.9055	0.066	31.4738	6.3699	-0.000135
28.	0.	0.70095	3.2932	3.3473	2.9029	0.074	31.4763	6.3599	-0.000140
29.	0.	0.70163	3.2931	3.3473	2.9002	0.082	31.4755	6.3299	-0.000146
30.	0.	0.70225	3.2930	3.3473	2.8978	0.084	31.4727	6.2998	-0.000153
31.	0.	0.70286	3.2928	3.3473	2.8954	0.085	31.4690	6.2698	-0.000160
32.	0.	0.70350	3.2927	3.3473	2.8928	0.087	31.4641	6.2398	-0.000167
33.	0.	0.70416	3.2926	3.3473	2.8902	0.089	31.4588	6.2098	-0.000174
34.	0.	0.70483	3.2925	3.3473	2.8876	0.092	31.4552	6.1798	-0.000181
35.	0.	0.70558	3.2924	3.3473	2.8850	0.096	31.4533	6.1598	-0.000187
36.	0.	0.70627	3.2923	3.3473	2.8822	0.103	31.4521	6.1298	-0.000195
37.	0.	0.70692	3.2922	3.3473	2.8796	0.106	31.4493	6.0998	-0.000202
38.	0.	0.70756	3.2921	3.3473	2.8771	0.109	31.4462	6.0698	-0.000210
39.	0.	0.70819	3.2920	3.3473	2.8745	0.112	31.4434	6.0398	-0.000217
40.	0.	0.70883	3.2919	3.3473	2.8719	0.118	31.4414	6.0098	-0.000225
41.	0.	0.70945	3.2917	3.3473	2.8694	0.122	31.4389	5.9798	-0.000232
42.	0.	0.71004	3.2916	3.3473	2.8670	0.124	31.4366	5.9498	-0.000240
43.	0.	0.71063	3.2915	3.3473	2.8646	0.125	31.4344	5.9198	-0.000248
44.	0.	0.71121	3.2914	3.3473	2.8623	0.126	31.4322	5.8897	-0.000255
45.	0.	0.71179	3.2913	3.3473	2.8600	0.128	31.4320	5.8597	-0.000263
46.	0.	0.71247	3.2912	3.3473	2.8577	0.132	31.4323	5.8397	-0.000270
47.	0.	0.71308	3.2911	3.3473	2.8552	0.136	31.4302	5.8097	-0.000278
48.	0.	0.71368	3.2910	3.3473	2.8528	0.139	31.4273	5.7797	-0.000287
49.	0.	0.71426	3.2909	3.3473	2.8505	0.141	31.4240	5.7497	-0.000295
50.	0.	0.71487	3.2908	3.3473	2.8481	0.143	31.4218	5.7197	-0.000304
51.	0.	0.71556	3.2907	3.3473	2.8458	0.147	31.4199	5.6997	-0.000312
52.	0.	0.71613	3.2906	3.3473	2.8436	0.149	31.4169	5.6697	-0.000320
53.	0.	0.71670	3.2905	3.3473	2.8413	0.152	31.4162	5.6397	-0.000329
54.	0.	0.71733	3.2904	3.3473	2.8393	0.154	31.4160	5.6197	-0.000337
55.	0.	0.71785	3.2903	3.3473	2.8372	0.155	31.4146	5.5897	-0.000345
56.	0.	0.71840	3.2903	3.3473	2.8350	0.159	31.4149	5.5596	-0.000354
57.	0.	0.71903	3.2902	3.3473	2.8330	0.163	31.4152	5.5396	-0.000362
58.	0.	0.71955	3.2901	3.3473	2.8309	0.166	31.4134	5.5096	-0.000371
59.	0.	0.72008	3.2900	3.3473	2.8288	0.169	31.4129	5.4796	-0.000381

60.	0.	0.72067	3.2899	3.3473	2.8269	0.171	31.4127	5.4596	-0.000388
61.	0.	0.72115	3.2898	3.3473	2.8249	0.172	31.4108	5.4296	-0.000398
62.	0.	0.72162	3.2897	3.3473	2.8230	0.173	31.4101	5.3996	-0.000407
63.	0.	0.72218	3.2896	3.3473	2.8212	0.173	31.4096	5.3796	-0.000415
64.	0.	0.72264	3.2896	3.3473	2.8194	0.174	31.4070	5.3496	-0.000425
65.	0.	0.72310	3.2895	3.3473	2.8175	0.174	31.4058	5.3196	-0.000435
66.	0.	0.72365	3.2894	3.3473	2.8158	0.176	31.4048	5.2996	-0.000443
67.	0.	0.72412	3.2893	3.3473	2.8139	0.179	31.4017	5.2695	-0.000453
68.	0.	0.72456	3.2892	3.3473	2.8121	0.180	31.3999	5.2395	-0.000463
69.	0.	0.72512	3.2892	3.3473	2.8104	0.181	31.3970	5.2195	-0.000472
70.	0.	0.72557	3.2891	3.3473	2.8085	0.182	31.3921	5.1895	-0.000482
71.	0.	0.72601	3.2890	3.3473	2.8067	0.183	31.3861	5.1595	-0.000493
72.	0.	0.72645	3.2889	3.3473	2.8049	0.184	31.3821	5.1295	-0.000504
73.	0.	0.72701	3.2889	3.3473	2.8032	0.186	31.3771	5.1095	-0.000513
74.	0.	0.72747	3.2888	3.3473	2.8014	0.188	31.3699	5.0795	-0.000525
75.	0.	0.72790	3.2887	3.3473	2.7997	0.190	31.3650	5.0495	-0.000536
76.	0.	0.72842	3.2887	3.3473	2.7981	0.192	31.3602	5.0295	-0.000546
77.	0.	0.72886	3.2886	3.3473	2.7964	0.194	31.3583	4.9994	-0.000557
78.	0.	0.72949	3.2885	3.3473	2.7951	0.195	31.3647	4.9894	-0.000564
79.	0.	0.73022	3.2885	3.3473	2.7939	0.195	31.3739	4.9894	-0.000569
80.	0.	0.73086	3.2884	3.3473	2.7926	0.195	31.3844	4.9794	-0.000576
81.	0.	0.73160	3.2884	3.3473	2.7915	0.197	31.3946	4.9794	-0.000581
82.	0.	0.73225	3.2883	3.3473	2.7902	0.199	31.4049	4.9694	-0.000589
83.	0.	0.73301	3.2883	3.3473	2.7891	0.201	31.4174	4.9694	-0.000594
84.	0.	0.73375	3.2882	3.3473	2.7879	0.203	31.4280	4.9694	-0.000599
85.	0.	0.73439	3.2882	3.3473	2.7867	0.205	31.4385	4.9594	-0.000606
86.	0.	0.73511	3.2881	3.3473	2.7857	0.205	31.4486	4.9594	-0.000611
87.	0.	0.73572	3.2881	3.3473	2.7846	0.206	31.4589	4.9494	-0.000618
88.	0.	0.73642	3.2880	3.3473	2.7835	0.206	31.4688	4.9494	-0.000623
89.	0.	0.73703	3.2879	3.3473	2.7824	0.206	31.4789	4.9394	-0.000630
90.	0.	0.73772	3.2879	3.3473	2.7815	0.206	31.4888	4.9394	-0.000635
91.	0.	0.73832	3.2878	3.3473	2.7804	0.206	31.4991	4.9294	-0.000642
92.	0.	0.73902	3.2878	3.3473	2.7795	0.206	31.5085	4.9294	-0.000647
93.	0.	0.73965	3.2877	3.3473	2.7784	0.206	31.5167	4.9193	-0.000654
94.	0.	0.74037	3.2877	3.3473	2.7774	0.206	31.5250	4.9193	-0.000659
95.	0.	0.74101	3.2876	3.3473	2.7764	0.209	31.5339	4.9093	-0.000667
96.	0.	0.74174	3.2875	3.3473	2.7754	0.212	31.5425	4.9093	-0.000672
97.	0.	0.74236	3.2875	3.3473	2.7744	0.213	31.5512	4.8993	-0.000680
98.	0.	0.74310	3.2874	3.3473	2.7734	0.214	31.5585	4.8993	-0.000685
99.	0.	0.74374	3.2874	3.3473	2.7723	0.215	31.5658	4.8893	-0.000693
100.	0.	0.74447	3.2873	3.3473	2.7714	0.217	31.5727	4.8893	-0.000698
101.	0.	0.74511	3.2873	3.3473	2.7704	0.219	31.5797	4.8793	-0.000706
102.	0.	0.74584	3.2872	3.3473	2.7694	0.221	31.5861	4.8793	-0.000712
103.	0.	0.74647	3.2871	3.3473	2.7684	0.223	31.5929	4.8693	-0.000719
104.	0.	0.74720	3.2871	3.3473	2.7675	0.224	31.5992	4.8693	-0.000725
105.	0.	0.74783	3.2870	3.3473	2.7665	0.226	31.6057	4.8593	-0.000733
106.	0.	0.74855	3.2870	3.3473	2.7656	0.228	31.6115	4.8593	-0.000738
107.	0.	0.74915	3.2869	3.3473	2.7646	0.229	31.6123	4.8493	-0.000746
108.	0.	0.74965	3.2868	3.3473	2.7635	0.230	31.6119	4.8292	-0.000756
109.	0.	0.75026	3.2868	3.3473	2.7624	0.233	31.6102	4.8192	-0.000765
110.	0.	0.75074	3.2867	3.3473	2.7613	0.236	31.6067	4.7992	-0.000775
111.	0.	0.75121	3.2867	3.3473	2.7602	0.239	31.6052	4.7792	-0.000786
112.	0.	0.75177	3.2866	3.3473	2.7592	0.242	31.6037	4.7692	-0.000794
113.	0.	0.75222	3.2865	3.3473	2.7582	0.246	31.5997	4.7492	-0.000804
114.	0.	0.75266	3.2865	3.3473	2.7572	0.249	31.5980	4.7292	-0.000815
115.	0.	0.75319	3.2864	3.3473	2.7563	0.251	31.5966	4.7192	-0.000823
116.	0.	0.75359	3.2864	3.3473	2.7553	0.253	31.5928	4.6992	-0.000833
117.	0.	0.75399	3.2863	3.3473	2.7544	0.255	31.5907	4.6792	-0.000844
118.	0.	0.75449	3.2863	3.3473	2.7536	0.257	31.5886	4.6691	-0.000852
119.	0.	0.75487	3.2862	3.3473	2.7528	0.259	31.5842	4.6491	-0.000863
120.	0.	0.75526	3.2862	3.3473	2.7519	0.261	31.5815	4.6291	-0.000874
121.	0.	0.75574	3.2861	3.3473	2.7512	0.262	31.5788	4.6191	-0.000882
122.	0.	0.75610	3.2860	3.3473	2.7504	0.264	31.5737	4.5991	-0.000893
123.	0.	0.75647	3.2860	3.3473	2.7496	0.265	31.5705	4.5791	-0.000904
124.	0.	0.75692	3.2859	3.3473	2.7490	0.266	31.5676	4.5691	-0.000912
125.	0.	0.75723	3.2859	3.3473	2.7483	0.267	31.5626	4.5491	-0.000923
126.	0.	0.75754	3.2858	3.3473	2.7477	0.267	31.5597	4.5291	-0.000934

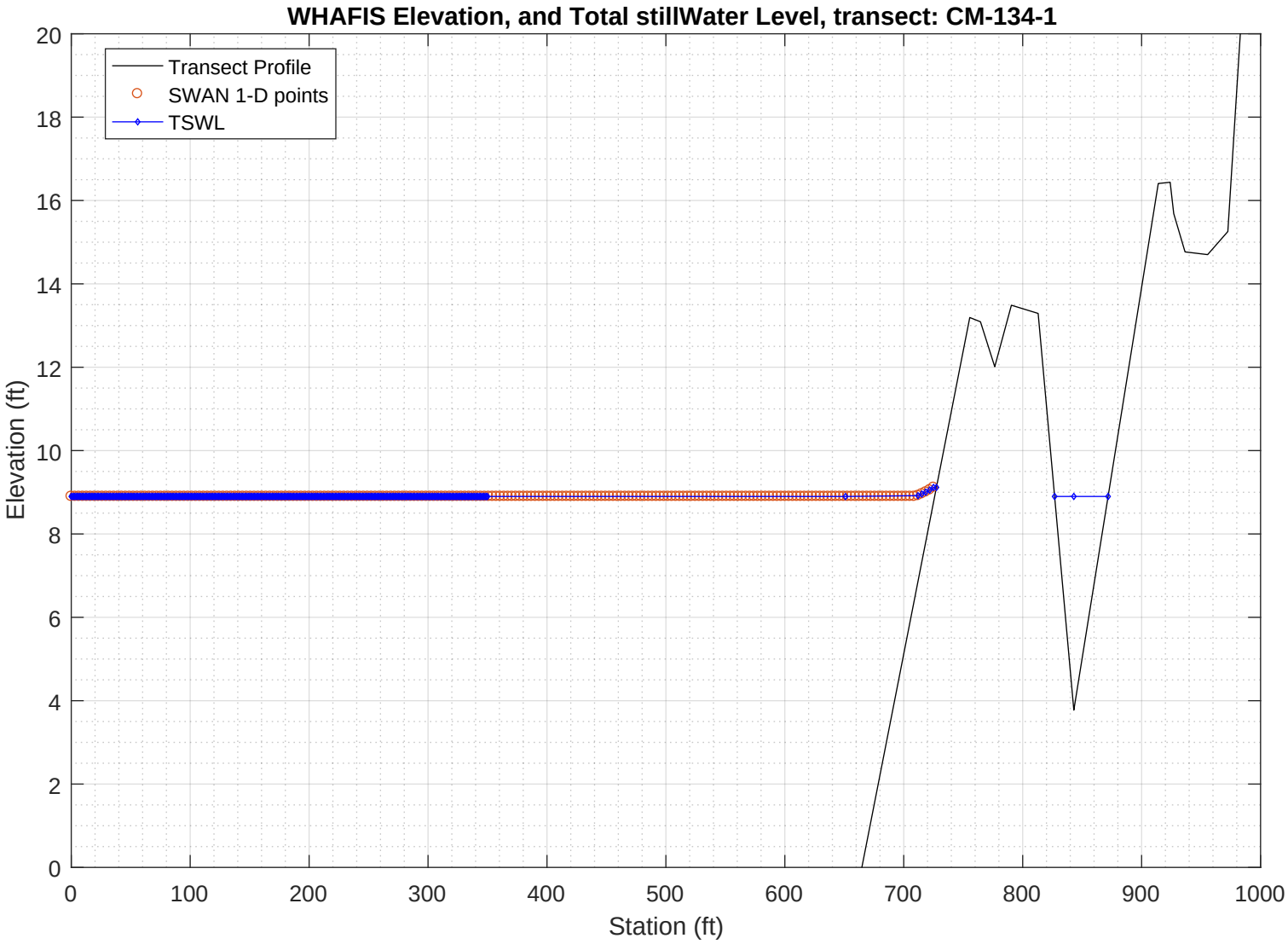
127.	0.	0.75797	3.2858	3.3473	2.7471	0.269	31.5568	4.5191	-0.000942
128.	0.	0.75830	3.2857	3.3473	2.7464	0.272	31.5515	4.4990	-0.000954
129.	0.	0.75864	3.2857	3.3473	2.7457	0.275	31.5477	4.4790	-0.000965
130.	0.	0.75908	3.2856	3.3473	2.7451	0.278	31.5439	4.4690	-0.000974
131.	0.	0.75940	3.2856	3.3473	2.7444	0.281	31.5374	4.4490	-0.000986
132.	0.	0.75972	3.2856	3.3473	2.7438	0.285	31.5328	4.4290	-0.000997
133.	0.	0.76014	3.2855	3.3473	2.7433	0.289	31.5280	4.4190	-0.001006
134.	0.	0.76044	3.2855	3.3473	2.7427	0.292	31.5206	4.3990	-0.001018
135.	0.	0.76074	3.2854	3.3473	2.7421	0.295	31.5151	4.3790	-0.001030
136.	0.	0.76115	3.2854	3.3473	2.7416	0.299	31.5094	4.3690	-0.001039
137.	0.	0.76143	3.2853	3.3473	2.7411	0.302	31.5011	4.3489	-0.001051
138.	0.	0.76173	3.2853	3.3473	2.7405	0.305	31.4908	4.3289	-0.001064
139.	0.	0.76206	3.2853	3.3473	2.7400	0.308	31.4818	4.3089	-0.001077
140.	0.	0.76249	3.2852	3.3473	2.7395	0.309	31.4724	4.2989	-0.001087
141.	0.	0.76277	3.2852	3.3473	2.7391	0.310	31.4611	4.2789	-0.001100
142.	0.	0.76304	3.2852	3.3473	2.7386	0.310	31.4520	4.2589	-0.001113
143.	0.	0.76341	3.2851	3.3473	2.7383	0.311	31.4431	4.2489	-0.001122
144.	0.	0.76366	3.2851	3.3473	2.7379	0.312	31.4313	4.2289	-0.001136
145.	0.	0.76392	3.2850	3.3473	2.7375	0.312	31.4216	4.2089	-0.001149
146.	0.	0.76431	3.2850	3.3473	2.7372	0.312	31.4109	4.1988	-0.001159
147.	0.	0.76460	3.2850	3.3473	2.7368	0.313	31.3968	4.1788	-0.001173
148.	0.	0.76488	3.2849	3.3473	2.7365	0.314	31.3856	4.1588	-0.001188
149.	0.	0.76525	3.2849	3.3473	2.7362	0.316	31.3748	4.1488	-0.001198
150.	0.	0.76550	3.2849	3.3473	2.7359	0.319	31.3611	4.1288	-0.001212
151.	0.	0.76578	3.2848	3.3473	2.7355	0.322	31.3498	4.1088	-0.001227
152.	0.	0.76616	3.2848	3.3473	2.7352	0.326	31.3386	4.0988	-0.001237
153.	0.	0.76642	3.2848	3.3473	2.7348	0.329	31.3244	4.0787	-0.001252
154.	0.	0.76671	3.2848	3.3473	2.7344	0.336	31.3134	4.0587	-0.001267
155.	0.	0.76712	3.2847	3.3473	2.7340	0.342	31.3026	4.0487	-0.001278
156.	0.	0.76740	3.2847	3.3473	2.7336	0.348	31.2886	4.0287	-0.001293
157.	0.	0.76769	3.2847	3.3473	2.7332	0.354	31.2769	4.0087	-0.001309
158.	0.	0.76809	3.2846	3.3473	2.7329	0.359	31.2665	3.9987	-0.001320
159.	0.	0.76836	3.2846	3.3473	2.7324	0.364	31.2530	3.9787	-0.001336
160.	0.	0.76865	3.2846	3.3473	2.7320	0.370	31.2418	3.9586	-0.001352
161.	0.	0.76907	3.2846	3.3473	2.7317	0.375	31.2304	3.9486	-0.001363
162.	0.	0.76934	3.2846	3.3473	2.7314	0.381	31.2167	3.9286	-0.001380
163.	0.	0.76958	3.2845	3.3473	2.7311	0.385	31.2048	3.9086	-0.001396
164.	0.	0.76992	3.2845	3.3473	2.7309	0.388	31.1929	3.8986	-0.001407
165.	0.	0.77013	3.2845	3.3473	2.7306	0.390	31.1775	3.8786	-0.001424
166.	0.	0.77035	3.2845	3.3473	2.7304	0.393	31.1646	3.8586	-0.001440
167.	0.	0.77069	3.2844	3.3473	2.7302	0.396	31.1522	3.8485	-0.001452
168.	0.	0.77089	3.2844	3.3473	2.7299	0.399	31.1368	3.8285	-0.001469
169.	0.	0.77109	3.2844	3.3473	2.7297	0.402	31.1243	3.8085	-0.001486
170.	0.	0.77139	3.2844	3.3473	2.7295	0.404	31.1122	3.7985	-0.001497
171.	0.	0.77157	3.2844	3.3473	2.7292	0.407	31.0963	3.7785	-0.001514
172.	0.	0.77176	3.2844	3.3473	2.7290	0.409	31.0832	3.7585	-0.001532
173.	0.	0.77206	3.2843	3.3473	2.7288	0.412	31.0706	3.7485	-0.001544
174.	0.	0.77223	3.2843	3.3473	2.7285	0.415	31.0547	3.7284	-0.001561
175.	0.	0.77241	3.2843	3.3473	2.7283	0.419	31.0417	3.7084	-0.001579
176.	0.	0.77270	3.2843	3.3473	2.7281	0.423	31.0292	3.6984	-0.001591
177.	0.	0.77287	3.2843	3.3473	2.7278	0.427	31.0130	3.6784	-0.001610
178.	0.	0.77305	3.2843	3.3473	2.7276	0.432	30.9998	3.6584	-0.001628
179.	0.	0.77333	3.2843	3.3473	2.7275	0.437	30.9868	3.6484	-0.001641
180.	0.	0.77349	3.2843	3.3473	2.7273	0.442	30.9700	3.6283	-0.001660
181.	0.	0.77364	3.2843	3.3473	2.7271	0.446	30.9560	3.6083	-0.001678
182.	0.	0.77388	3.2843	3.3473	2.7270	0.449	30.9424	3.5983	-0.001691
183.	0.	0.77399	3.2843	3.3473	2.7269	0.451	30.9246	3.5783	-0.001710
184.	0.	0.77411	3.2843	3.3473	2.7268	0.453	30.9096	3.5583	-0.001730
185.	0.	0.77433	3.2842	3.3473	2.7268	0.455	30.8942	3.5483	-0.001742
186.	0.	0.77443	3.2843	3.3473	2.7267	0.457	30.8745	3.5282	-0.001762
187.	0.	0.77455	3.2843	3.3473	2.7267	0.460	30.8579	3.5082	-0.001782
188.	0.	0.77478	3.2842	3.3473	2.7267	0.464	30.8416	3.4982	-0.001796
189.	0.	0.77488	3.2842	3.3473	2.7267	0.467	30.8208	3.4782	-0.001816
190.	0.	0.77498	3.2843	3.3473	2.7267	0.469	30.8028	3.4582	-0.001837
191.	0.	0.77520	3.2842	3.3473	2.7267	0.472	30.7855	3.4481	-0.001851
192.	0.	0.77529	3.2843	3.3473	2.7267	0.475	30.7639	3.4281	-0.001873
193.	0.	0.77542	3.2843	3.3473	2.7267	0.480	30.7465	3.4081	-0.001894

194.	0.	0.77566	3.2842	3.3473	2.7267	0.486	30.7301	3.3981	-0.001909
195.	0.	0.77578	3.2843	3.3473	2.7266	0.492	30.7091	3.3781	-0.001931
196.	0.	0.77591	3.2843	3.3473	2.7266	0.497	30.6912	3.3580	-0.001954
197.	0.	0.77615	3.2843	3.3473	2.7266	0.502	30.6740	3.3480	-0.001969
198.	0.	0.77608	3.2843	3.3473	2.7264	0.506	30.6159	3.3280	-0.001992
199.	0.	0.77494	3.2846	3.3473	2.7261	0.509	30.4722	3.2379	-0.002077
200.	0.	0.77300	3.2852	3.3473	2.7260	0.512	30.2584	3.0878	-0.002229
201.	0.	0.77112	3.2859	3.3473	2.7262	0.514	30.0062	2.9476	-0.002392
202.	0.	0.76918	3.2866	3.3473	2.7271	0.518	29.7223	2.7974	-0.002590
203.	0.	0.76746	3.2873	3.3473	2.7284	0.514	29.4069	2.6572	-0.002805
204.	0.	0.76590	3.2882	3.3473	2.7306	0.509	29.0660	2.5069	-0.003073
205.	0.	0.76460	3.2890	3.3473	2.7333	0.503	28.6901	2.3666	-0.003367
206.	0.	0.76377	3.2899	3.3473	2.7372	0.502	28.2543	2.2163	-0.003747
207.	0.	0.76333	3.2906	3.3473	2.7418	0.512	27.7636	2.0758	-0.004175
208.	0.	0.76336	3.2907	3.3473	2.7482	0.538	27.1774	1.9253	-0.004730
209.	0.	0.76320	3.2906	3.3473	2.7555	0.591	26.4865	1.7746	-0.005378
210.	0.	0.76230	3.2901	3.3473	2.7616	0.688	25.6611	1.6339	-0.006059
211.	0.	0.76112	3.2898	3.3473	2.7624	0.870	24.6458	1.4831	-0.006859
212.	0.	0.75856	3.2891	3.3473	2.7469	1.141	23.4424	1.3425	-0.007540
213.	0.	0.75382	3.2886	3.3473	2.7051	1.565	22.1295	1.1920	-0.008013
214.	0.	0.73950	3.2886	3.3473	2.6382	2.141	20.9267	1.0525	-0.007477
215.	0.	0.71343	3.2902	3.3473	2.5438	2.867	19.9416	0.9044	-0.005615
216.	0.	0.67569	3.2941	3.3473	2.4268	3.519	19.0564	0.7679	-0.002099
217.	0.	0.59568	3.2993	3.3473	2.3489	2.820	18.2281	0.6259	0.005949
218.	0.	0.48317	3.3059	3.3473	2.3404	1.944	17.4177	0.4981	0.018099
219.	0.	0.36515	3.3163	3.3473	2.3690	0.681	16.3486	0.3618	0.031809
220.	0.	0.25280	3.3308	3.3473	2.4056	359.767	14.1140	0.2369	0.046926
221.	0.	0.13789	3.3418	3.3473	2.5569	356.703	15.9022	0.1061	0.066134
222.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
223.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
224.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
225.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
226.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
227.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
228.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
229.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
230.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

WHAFIS input: CM-134-1.dat
WHAFIS output: CM-134-1.out

PART 3 COMPLETE


WHAFIS Elevation, and Total stillWater Level, transect: CM-134-1
Transect Profile
SWAN 1-D points
TSWL
Elevation (ft)
Station (ft)
0
2
4
6
8
10
12
14
16
18
20
0
100
200
300
400
500
600
700
800
900
1000

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)
Executed on: Thu Feb 20 14:57:36 2020
Input file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Harpswell\3_whafis\whafis4\CM-134-1.dat
Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Harpswell\3_whafis\whafis4\CM-134-1.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	-13.533	1.000	1.000	8.899	3.543	3.300	56.140	0.016	0.000
OF	1.000	-13.517	0.000	8.899	0.000	0.000	0.000	0.000	0.016	0.000
OF	2.000	-13.501	0.000	8.899	0.000	0.000	0.000	0.000	0.016	0.000
OF	3.000	-13.485	0.000	8.899	0.000	0.000	0.000	0.000	0.016	0.000
OF	4.000	-13.469	0.000	8.899	0.000	0.000	0.000	0.000	0.016	0.000
OF	5.000	-13.453	0.000	8.899	0.000	0.000	0.000	0.000	0.015	0.000
OF	6.000	-13.438	0.000	8.899	0.000	0.000	0.000	0.000	0.015	0.000
OF	7.000	-13.422	0.000	8.899	0.000	0.000	0.000	0.000	0.016	0.000
OF	8.000	-13.406	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	9.000	-13.390	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	10.000	-13.374	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	11.000	-13.358	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	12.000	-13.342	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	13.000	-13.326	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	14.000	-13.310	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	15.000	-13.294	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	16.000	-13.278	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	17.000	-13.262	0.000	8.900	0.000	0.000	0.000	0.000	0.016	0.000
OF	18.000	-13.245	0.000	8.900	0.000	0.000	0.000	0.000	0.017	0.000
OF	19.000	-13.228	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	20.000	-13.210	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	21.000	-13.193	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	22.000	-13.175	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	23.000	-13.158	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	24.000	-13.140	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	25.000	-13.123	0.000	8.900	0.000	0.000	0.000	0.000	0.017	0.000
OF	26.000	-13.106	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	27.000	-13.088	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	28.000	-13.071	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	29.000	-13.053	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	30.000	-13.036	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	31.000	-13.018	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	32.000	-13.001	0.000	8.900	0.000	0.000	0.000	0.000	0.017	0.000
OF	33.000	-12.984	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	34.000	-12.966	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	35.000	-12.949	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	36.000	-12.931	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	37.000	-12.914	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	38.000	-12.896	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	39.000	-12.879	0.000	8.900	0.000	0.000	0.000	0.000	0.017	0.000
OF	40.000	-12.862	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	41.000	-12.844	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	42.000	-12.827	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	43.000	-12.809	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	44.000	-12.792	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	45.000	-12.774	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	46.000	-12.757	0.000	8.900	0.000	0.000	0.000	0.000	0.017	0.000
OF	47.000	-12.740	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	48.000	-12.722	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	49.000	-12.705	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	50.000	-12.687	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	51.000	-12.670	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	52.000	-12.652	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	53.000	-12.635	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	54.000	-12.617	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	55.000	-12.600	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	56.000	-12.582	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	57.000	-12.565	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	58.000	-12.547	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	59.000	-12.530	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	60.000	-12.512	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	61.000	-12.495	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	62.000	-12.477	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	63.000	-12.459	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	64.000	-12.442	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	65.000	-12.424	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	66.000	-12.407	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	67.000	-12.389	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	68.000	-12.372	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	69.000	-12.354	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	70.000	-12.336	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	71.000	-12.319	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	72.000	-12.301	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	73.000	-12.284	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	74.000	-12.266	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	75.000	-12.249	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	76.000	-12.231	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	77.000	-12.214	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	78.000	-12.196	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	79.000	-12.178	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	80.000	-12.161	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	81.000	-12.143	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	82.000	-12.126	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	83.000	-12.108	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	84.000	-12.091	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	85.000	-12.073	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	86.000	-12.056	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	87.000	-12.038	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	88.000	-12.020	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	89.000	-12.003	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	90.000	-11.985	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	91.000	-11.968	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
OF	92.000	-11.950	0.000	8.900	0.000	0.000	0.000	0.000	0.021	0.000

OF	93.000	-11.927	0.000	8.900	0.000	0.000	0.000	0.000	0.026	0.000
OF	94.000	-11.898	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	95.000	-11.869	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	96.000	-11.840	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	97.000	-11.811	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	98.000	-11.782	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	99.000	-11.753	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	100.000	-11.724	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	101.000	-11.695	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	102.000	-11.666	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	103.000	-11.637	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	104.000	-11.608	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	105.000	-11.579	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	106.000	-11.550	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	107.000	-11.521	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	108.000	-11.492	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	109.000	-11.463	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	110.000	-11.434	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	111.000	-11.405	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	112.000	-11.376	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	113.000	-11.347	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	114.000	-11.318	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	115.000	-11.289	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	116.000	-11.260	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	117.000	-11.231	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	118.000	-11.202	0.000	8.900	0.000	0.000	0.000	0.000	0.030	0.000
OF	119.000	-11.172	0.000	8.900	0.000	0.000	0.000	0.000	0.030	0.000
OF	120.000	-11.143	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	121.000	-11.114	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	122.000	-11.085	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	123.000	-11.056	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	124.000	-11.027	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	125.000	-10.998	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	126.000	-10.969	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	127.000	-10.940	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	128.000	-10.911	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	129.000	-10.882	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	130.000	-10.853	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	131.000	-10.824	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	132.000	-10.795	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	133.000	-10.766	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	134.000	-10.737	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	135.000	-10.708	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	136.000	-10.679	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	137.000	-10.650	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	138.000	-10.621	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	139.000	-10.592	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	140.000	-10.563	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	141.000	-10.534	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	142.000	-10.505	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	143.000	-10.476	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	144.000	-10.447	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	145.000	-10.418	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	146.000	-10.389	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	147.000	-10.360	0.000	8.900	0.000	0.000	0.000	0.000	0.030	0.000
OF	148.000	-10.330	0.000	8.900	0.000	0.000	0.000	0.000	0.030	0.000
OF	149.000	-10.301	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	150.000	-10.272	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	151.000	-10.243	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	152.000	-10.214	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	153.000	-10.185	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	154.000	-10.156	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	155.000	-10.127	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	156.000	-10.098	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	157.000	-10.069	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	158.000	-10.040	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	159.000	-10.011	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	160.000	-9.983	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	161.000	-9.954	0.000	8.900	0.000	0.000	0.000	0.000	0.028	0.000
OF	162.000	-9.927	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	163.000	-9.901	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	164.000	-9.874	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	165.000	-9.847	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	166.000	-9.821	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	167.000	-9.794	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	168.000	-9.767	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	169.000	-9.741	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	170.000	-9.714	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	171.000	-9.687	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	172.000	-9.661	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	173.000	-9.634	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	174.000	-9.607	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	175.000	-9.581	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	176.000	-9.554	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	177.000	-9.527	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	178.000	-9.500	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	179.000	-9.474	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	180.000	-9.447	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	181.000	-9.420	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	182.000	-9.394	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	183.000	-9.367	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	184.000	-9.340	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	185.000	-9.314	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	186.000	-9.287	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	187.000	-9.260	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	188.000	-9.234	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	189.000	-9.207	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	190.000	-9.180	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	191.000	-9.154	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	192.000	-9.127	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	193.000	-9.100	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	194.000	-9.074	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000

OF	195.000	-9.047	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	196.000	-9.020	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	197.000	-8.994	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	198.000	-8.967	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	199.000	-8.940	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	200.000	-8.914	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	201.000	-8.887	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	202.000	-8.860	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	203.000	-8.834	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	204.000	-8.807	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	205.000	-8.780	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	206.000	-8.754	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	207.000	-8.727	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	208.000	-8.700	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	209.000	-8.674	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	210.000	-8.647	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	211.000	-8.620	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	212.000	-8.594	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	213.000	-8.567	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	214.000	-8.540	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	215.000	-8.514	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	216.000	-8.487	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	217.000	-8.460	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	218.000	-8.434	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	219.000	-8.407	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	220.000	-8.380	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	221.000	-8.354	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	222.000	-8.327	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	223.000	-8.300	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	224.000	-8.274	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	225.000	-8.247	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	226.000	-8.220	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	227.000	-8.193	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	228.000	-8.167	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	229.000	-8.140	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	230.000	-8.113	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	231.000	-8.087	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	232.000	-8.060	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	233.000	-8.033	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	234.000	-8.007	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	235.000	-7.980	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	236.000	-7.953	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	237.000	-7.927	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	238.000	-7.900	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	239.000	-7.873	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	240.000	-7.847	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	241.000	-7.820	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	242.000	-7.793	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	243.000	-7.767	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	244.000	-7.740	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	245.000	-7.713	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	246.000	-7.687	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	247.000	-7.660	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	248.000	-7.633	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	249.000	-7.607	0.000	8.900	0.000	0.000	0.000	0.000	0.027	0.000
OF	250.000	-7.579	0.000	8.900	0.000	0.000	0.000	0.000	0.028	0.000
OF	251.000	-7.550	0.000	8.900	0.000	0.000	0.000	0.000	0.029	0.000
OF	252.000	-7.521	0.000	8.900	0.000	0.000	0.000	0.000	0.025	0.000
OF	253.000	-7.501	0.000	8.900	0.000	0.000	0.000	0.000	0.012	0.000
OF	254.000	-7.496	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	255.000	-7.491	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	256.000	-7.487	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	257.000	-7.482	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	258.000	-7.477	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	259.000	-7.472	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	260.000	-7.467	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	261.000	-7.462	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	262.000	-7.457	0.000	8.900	0.000	0.000	0.000	0.000	0.005	0.000
OF	263.000	-7.452	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	264.000	-7.447	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	265.000	-7.442	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	266.000	-7.437	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	267.000	-7.432	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	268.000	-7.427	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	269.000	-7.423	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	270.000	-7.418	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	271.000	-7.413	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	272.000	-7.408	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	273.000	-7.403	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	274.000	-7.398	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	275.000	-7.393	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	276.000	-7.389	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	277.000	-7.384	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	278.000	-7.379	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	279.000	-7.374	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	280.000	-7.369	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	281.000	-7.364	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	282.000	-7.359	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	283.000	-7.354	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	284.000	-7.350	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	285.000	-7.345	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	286.000	-7.340	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	287.000	-7.335	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	288.000	-7.330	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	289.000	-7.325	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	290.000	-7.320	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	291.000	-7.316	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	292.000	-7.311	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	293.000	-7.306	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	294.000	-7.301	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	295.000	-7.296	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	296.000	-7.291	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000

OF	297.000	-7.286	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	298.000	-7.281	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	299.000	-7.277	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	300.000	-7.272	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	301.000	-7.267	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	302.000	-7.262	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	303.000	-7.257	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	304.000	-7.252	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	305.000	-7.247	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	306.000	-7.243	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	307.000	-7.238	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	308.000	-7.233	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	309.000	-7.228	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	310.000	-7.223	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	311.000	-7.218	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	312.000	-7.213	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	313.000	-7.208	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	314.000	-7.204	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	315.000	-7.199	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	316.000	-7.194	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	317.000	-7.189	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	318.000	-7.184	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	319.000	-7.179	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	320.000	-7.174	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	321.000	-7.169	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	322.000	-7.165	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	323.000	-7.160	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	324.000	-7.155	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	325.000	-7.150	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	326.000	-7.145	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	327.000	-7.140	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	328.000	-7.135	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	329.000	-7.131	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	330.000	-7.126	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	331.000	-7.121	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	332.000	-7.116	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	333.000	-7.111	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	334.000	-7.106	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	335.000	-7.101	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	336.000	-7.097	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	337.000	-7.092	0.000	8.899	0.000	0.000	0.000	0.000	0.005	0.000
OF	338.000	-7.087	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	339.000	-7.082	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	340.000	-7.077	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	341.000	-7.072	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	342.000	-7.067	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	343.000	-7.062	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	344.000	-7.058	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	345.000	-7.053	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	346.000	-7.048	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	347.000	-7.043	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	348.000	-7.038	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	349.000	-7.033	0.000	8.898	0.000	0.000	0.000	0.000	0.005	0.000
OF	350.000	-7.028	0.000	8.898	0.000	0.000	0.000	0.000	0.017	0.000
OF	651.000	-2.000	0.000	8.898	0.000	0.000	0.000	0.000	0.038	0.000
IF	711.900	6.860	0.000	8.919	0.000	0.000	0.000	0.000	0.145	0.000
IF	715.200	7.337	0.000	8.959	0.000	0.000	0.000	0.000	0.145	0.000
IF	718.500	7.813	0.000	9.004	0.000	0.000	0.000	0.000	0.145	0.000
IF	721.800	8.290	0.000	9.054	0.000	0.000	0.000	0.000	0.145	0.000
IF	725.100	8.767	0.000	9.116	0.000	0.000	0.000	0.000	0.145	0.000
IF	727.500	9.116	0.000	9.116	0.000	0.000	0.000	0.000	0.145	0.000
AS	826.800	8.900	0.000	8.900	0.000	0.000	0.000	0.000	-0.317	0.000
IF	843.000	3.773	0.000	8.900	0.000	0.000	0.000	0.000	0.000	0.000
IF	871.800	8.900	0.000	8.900	0.000	0.000	0.000	0.000	0.178	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	-13.533	1.000	1.000	8.899	3.543	3.300	56.140	0.016	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	1.000	-13.517	0.000	8.899	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
OF	2.000	-13.501	0.000	8.899	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
OF	3.000	-13.485	0.000	8.899	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
OF	4.000	-13.469	0.000	8.899	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
OF	5.000	-13.453	0.000	8.899	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
OF	6.000	-13.438	0.000	8.899	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
OF	7.000	-13.422	0.000	8.899	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
OF	8.000	-13.406	0.000	8.900	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
OF	9.000	-13.390	0.000	8.900	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
OF	10.000	-13.374	0.000	8.900	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
OF	11.000	-13.358	0.000	8.900	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
OF	12.000	-13.342	0.000	8.900	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
OF	13.000	-13.326	0.000	8.900	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
OF	14.000	-13.310	0.000	8.900	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
OF	15.000	-13.294	0.000	8.900	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
OF	16.000	-13.278	0.000	8.900	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
OF	17.000	-13.262	0.000	8.900	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
OF	18.000	-13.245	0.000	8.900	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
OF	19.000	-13.228	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	20.000	-13.210	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	21.000	-13.193	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	22.000	-13.175	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	23.000	-13.158	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	24.000	-13.140	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	25.000	-13.123	0.000	8.900	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
OF	26.000	-13.106	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	27.000	-13.088	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	28.000	-13.071	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	29.000	-13.053	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	30.000	-13.036	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	31.000	-13.018	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	32.000	-13.001	0.000	8.900	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
OF	33.000	-12.984	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	34.000	-12.966	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	35.000	-12.949	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	36.000	-12.931	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	37.000	-12.914	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	38.000	-12.896	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	39.000	-12.879	0.000	8.900	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
OF	40.000	-12.862	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	41.000	-12.844	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	42.000	-12.827	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	43.000	-12.809	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	44.000	-12.792	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	45.000	-12.774	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	46.000	-12.757	0.000	8.900	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
OF	47.000	-12.740	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	48.000	-12.722	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	49.000	-12.705	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	50.000	-12.687	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	51.000	-12.670	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	52.000	-12.652	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	53.000	-12.635	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	54.000	-12.617	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	55.000	-12.600	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	56.000	-12.582	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	57.000	-12.565	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	58.000	-12.547	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	59.000	-12.530	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	60.000	-12.512	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	61.000	-12.495	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	62.000	-12.477	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	63.000	-12.459	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	64.000	-12.442	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	65.000	-12.424	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	66.000	-12.407	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	67.000	-12.389	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	68.000	-12.372	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	69.000	-12.354	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	70.000	-12.336	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	71.000	-12.319	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	72.000	-12.301	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	73.000	-12.284	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	74.000	-12.266	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	75.000	-12.249	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	76.000	-12.231	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	77.000	-12.214	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	78.000	-12.196	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	79.000	-12.178	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000

	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	80.000	-12.161	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	81.000	-12.143	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	82.000	-12.126	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	83.000	-12.108	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	84.000	-12.091	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	85.000	-12.073	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	86.000	-12.056	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	87.000	-12.038	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	88.000	-12.020	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	89.000	-12.003	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	90.000	-11.985	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	91.000	-11.968	0.000	8.900	0.000	0.000	0.000	0.000	0.018	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
OF	92.000	-11.950	0.000	8.900	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
OF	93.000	-11.927	0.000	8.900	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	94.000	-11.898	0.000	8.900	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
OF	95.000	-11.869	0.000	8.900	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
OF	96.000	-11.840	0.000	8.900	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
OF	97.000	-11.811	0.000	8.900	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
OF	98.000	-11.782	0.000	8.900	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
OF	99.000	-11.753	0.000	8.900	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
OF	100.000	-11.724	0.000	8.900	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
OF	101.000	-11.695	0.000	8.900	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
OF	102.000	-11.666	0.000	8.900	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
OF	103.000	-11.637	0.000	8.900	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
OF	104.000	-11.608	0.000	8.900	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
OF	105.000	-11.579	0.000	8.900	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
OF	106.000	-11.550	0.000	8.900	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
OF	107.000	-11.521	0.000	8.900	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
OF	108.000	-11.492	0.000	8.900	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
OF	109.000	-11.463	0.000	8.900	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
OF	110.000	-11.434	0.000	8.900	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
OF	111.000	-11.405	0.000	8.900	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
OF	112.000	-11.376	0.000	8.900	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
OF	113.000	-11.347	0.000	8.900	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
OF	114.000	-11.318	0.000	8.900	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
OF	115.000	-11.289	0.000	8.900	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
OF	116.000	-11.260	0.000	8.900	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
OF	117.000	-11.231	0.000	8.900	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
OF	118.000	-11.202	0.000	8.900	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
OF	119.000	-11.172	0.000	8.900	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
OF	120.000	-11.143	0.000	8.900	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
OF	121.000	-11.114	0.000	8.900	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
OF	122.000	-11.085	0.000	8.900	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
OF	123.000	-11.056	0.000	8.900	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
OF	124.000	-11.027	0.000	8.900	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
OF	125.000	-10.998	0.000	8.900	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
OF	126.000	-10.969	0.000	8.900	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
OF	127.000	-10.940	0.000	8.900	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
OF	128.000	-10.911	0.000	8.900	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
OF	129.000	-10.882	0.000	8.900	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
OF	130.000	-10.853	0.000	8.900	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
OF	131.000	-10.824	0.000	8.900	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
OF	132.000	-10.795	0.000	8.900	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
OF	133.000	-10.766	0.000	8.900	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
OF	134.000	-10.737	0.000	8.900	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
OF	135.000	-10.708	0.000	8.900	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
OF	136.000	-10.679	0.000	8.900	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
OF	137.000	-10.650	0.000	8.900	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
OF	138.000	-10.621	0.000	8.900	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
OF	139.000	-10.592	0.000	8.900	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
OF	140.000	-10.563	0.000	8.900	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
OF	141.000	-10.534	0.000	8.900	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
OF	142.000	-10.505	0.000	8.900	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
OF	143.000	-10.476	0.000	8.900	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
OF	144.000	-10.447	0.000	8.900	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
OF	145.000	-10.418	0.000	8.900	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
OF	146.000	-10.389	0.000	8.900	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
OF	147.000	-10.360	0.000	8.900	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
OF	148.000	-10.330	0.000	8.900	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
OF	149.000	-10.301	0.000	8.900	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
OF	150.000	-10.272	0.000	8.900	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
OF	151.000	-10.243	0.000	8.900	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
OF	152.000	-10.214	0.000	8.900	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
OF	153.000	-10.185	0.000	8.900	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
OF	154.000	-10.156	0.000	8.900	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
OF	155.000	-10.127	0.000	8.900	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
OF	156.000	-10.098	0.000	8.900	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
OF	157.000	-10.069	0.000	8.900	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
OF	158.000	-10.040	0.000	8.900	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
OF	159.000	-10.011	0.000	8.900	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
OF	160.000	-9.983	0.000	8.900	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
OF	161.000	-9.954	0.000	8.900	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	162.000	-9.927	0.000	8.900	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	163.000	-9.901	0.000	8.900	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	164.000	-9.874	0.000	8.900	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	165.000	-9.847	0.000	8.900	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	166.000	-9.821	0.000	8.900	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	167.000	-9.794	0.000	8.900	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	-9.767	0.000	8.900	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	169.000	-9.741	0.000	8.900	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	170.000	-9.714	0.000	8.900	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	171.000	-9.687	0.000	8.900	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	172.000	-9.661	0.000	8.900	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	173.000	-9.634	0.000	8.900	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	174.000	-9.607	0.000	8.900	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	175.000	-9.581	0.000	8.900	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	176.000	-9.554	0.000	8.900	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	177.000	-9.527	0.000	8.900	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	178.000	-9.500	0.000	8.900	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	179.000	-9.474	0.000	8.900	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	-9.447	0.000	8.900	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	-9.420	0.000	8.900	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	182.000	-9.394	0.000	8.900	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	183.000	-9.367	0.000	8.900	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	184.000	-9.340	0.000	8.900	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	185.000	-9.314	0.000	8.900	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	186.000	-9.287	0.000	8.900	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	187.000	-9.260	0.000	8.900	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	188.000	-9.234	0.000	8.900	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	189.000	-9.207	0.000	8.900	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	190.000	-9.180	0.000	8.900	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	191.000	-9.154	0.000	8.900	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	-9.127	0.000	8.900	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	193.000	-9.100	0.000	8.900	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	194.000	-9.074	0.000	8.900	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	195.000	-9.047	0.000	8.900	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	196.000	-9.020	0.000	8.900	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	197.000	-8.994	0.000	8.900	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	198.000	-8.967	0.000	8.900	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	199.000	-8.940	0.000	8.900	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	200.000	-8.914	0.000	8.900	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	201.000	-8.887	0.000	8.900	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	202.000	-8.860	0.000	8.900	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	203.000	-8.834	0.000	8.900	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	204.000	-8.807	0.000	8.900	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	-8.780	0.000	8.900	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	206.000	-8.754	0.000	8.900	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	207.000	-8.727	0.000	8.900	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	208.000	-8.700	0.000	8.900	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	209.000	-8.674	0.000	8.900	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	210.000	-8.647	0.000	8.900	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	211.000	-8.620	0.000	8.900	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	212.000	-8.594	0.000	8.900	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	213.000	-8.567	0.000	8.900	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	214.000	-8.540	0.000	8.900	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	215.000	-8.514	0.000	8.900	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	-8.487	0.000	8.900	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	-8.460	0.000	8.900	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	218.000	-8.434	0.000	8.900	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	219.000	-8.407	0.000	8.900	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	220.000	-8.380	0.000	8.900	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	221.000	-8.354	0.000	8.900	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	222.000	-8.327	0.000	8.900	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	223.000	-8.300	0.000	8.900	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	224.000	-8.274	0.000	8.900	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	225.000	-8.247	0.000	8.900	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	226.000	-8.220	0.000	8.900	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	227.000	-8.193	0.000	8.900	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	-8.167	0.000	8.900	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	229.000	-8.140	0.000	8.900	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	230.000	-8.113	0.000	8.900	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	231.000	-8.087	0.000	8.900	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	232.000	-8.060	0.000	8.900	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	233.000	-8.033	0.000	8.900	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	234.000	-8.007	0.000	8.900	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	235.000	-7.980	0.000	8.900	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	236.000	-7.953	0.000	8.900	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	237.000	-7.927	0.000	8.900	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	238.000	-7.900	0.000	8.900	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	239.000	-7.873	0.000	8.900	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	240.000	-7.847	0.000	8.900	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	241.000	-7.820	0.000	8.900	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	242.000	-7.793	0.000	8.900	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	243.000	-7.767	0.000	8.900	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	244.000	-7.740	0.000	8.900	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	245.000	-7.713	0.000	8.900	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	246.000	-7.687	0.000	8.900	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	247.000	-7.660	0.000	8.900	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	248.000	-7.633	0.000	8.900	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	249.000	-7.607	0.000	8.900	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	250.000	-7.579	0.000	8.900	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	251.000	-7.550	0.000	8.900	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
OF	252.000	-7.521	0.000	8.900	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	253.000	-7.501	0.000	8.900	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	254.000	-7.496	0.000	8.900	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	255.000	-7.491	0.000	8.900	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	256.000	-7.487	0.000	8.900	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	257.000	-7.482	0.000	8.900	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	258.000	-7.477	0.000	8.900	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	259.000	-7.472	0.000	8.900	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	260.000	-7.467	0.000	8.900	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	261.000	-7.462	0.000	8.900	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	-7.457	0.000	8.900	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	263.000	-7.452	0.000	8.899	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	264.000	-7.447	0.000	8.899	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	265.000	-7.442	0.000	8.899	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	266.000	-7.437	0.000	8.899	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	267.000	-7.432	0.000	8.899	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	268.000	-7.427	0.000	8.899	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	269.000	-7.423	0.000	8.899	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	270.000	-7.418	0.000	8.899	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	271.000	-7.413	0.000	8.899	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	272.000	-7.408	0.000	8.899	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	273.000	-7.403	0.000	8.899	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	274.000	-7.398	0.000	8.899	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	275.000	-7.393	0.000	8.899	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	276.000	-7.389	0.000	8.899	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	277.000	-7.384	0.000	8.899	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	278.000	-7.379	0.000	8.899	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	279.000	-7.374	0.000	8.899	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	280.000	-7.369	0.000	8.899	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	281.000	-7.364	0.000	8.899	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	282.000	-7.359	0.000	8.899	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	283.000	-7.354	0.000	8.899	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	284.000	-7.350	0.000	8.899	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	285.000	-7.345	0.000	8.899	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	286.000	-7.340	0.000	8.899	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	287.000	-7.335	0.000	8.899	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	288.000	-7.330	0.000	8.899	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	289.000	-7.325	0.000	8.899	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	290.000	-7.320	0.000	8.899	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	291.000	-7.316	0.000	8.899	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	292.000	-7.311	0.000	8.899	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	293.000	-7.306	0.000	8.899	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	294.000	-7.301	0.000	8.899	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	295.000	-7.296	0.000	8.899	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	296.000	-7.291	0.000	8.899	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	297.000	-7.286	0.000	8.899	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	298.000	-7.281	0.000	8.899	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	299.000	-7.277	0.000	8.899	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	300.000	-7.272	0.000	8.899	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	301.000	-7.267	0.000	8.899	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	302.000	-7.262	0.000	8.899	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	303.000	-7.257	0.000	8.899	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	304.000	-7.252	0.000	8.899	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	305.000	-7.247	0.000	8.899	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	306.000	-7.243	0.000	8.899	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	307.000	-7.238	0.000	8.899	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	308.000	-7.233	0.000	8.899	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	309.000	-7.228	0.000	8.899	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	310.000	-7.223	0.000	8.899	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	311.000	-7.218	0.000	8.899	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	312.000	-7.213	0.000	8.899	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	313.000	-7.208	0.000	8.899	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	314.000	-7.204	0.000	8.899	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	315.000	-7.199	0.000	8.899	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	316.000	-7.194	0.000	8.899	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	317.000	-7.189	0.000	8.899	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	318.000	-7.184	0.000	8.899	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	319.000	-7.179	0.000	8.899	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	320.000	-7.174	0.000	8.899	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	321.000	-7.169	0.000	8.899	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	322.000	-7.165	0.000	8.899	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	323.000	-7.160	0.000	8.899	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	324.000	-7.155	0.000	8.899	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	325.000	-7.150	0.000	8.899	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	326.000	-7.145	0.000	8.899	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	327.000	-7.140	0.000	8.899	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	328.000	-7.135	0.000	8.899	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	329.000	-7.131	0.000	8.899	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	330.000	-7.126	0.000	8.899	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	331.000	-7.121	0.000	8.899	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	332.000	-7.116	0.000	8.899	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	333.000	-7.111	0.000	8.899	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	334.000	-7.106	0.000	8.899	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	335.000	-7.101	0.000	8.899	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	336.000	-7.097	0.000	8.899	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	337.000	-7.092	0.000	8.899	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	338.000	-7.087	0.000	8.898	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	339.000	-7.082	0.000	8.898	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	340.000	-7.077	0.000	8.898	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	341.000	-7.072	0.000	8.898	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	342.000	-7.067	0.000	8.898	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	343.000	-7.062	0.000	8.898	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	344.000	-7.058	0.000	8.898	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	345.000	-7.053	0.000	8.898	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	346.000	-7.048	0.000	8.898	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	347.000	-7.043	0.000	8.898	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	348.000	-7.038	0.000	8.898	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	349.000	-7.033	0.000	8.898	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	350.000	-7.028	0.000	8.898	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
OF	651.000	-2.000	0.000	8.898	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
IF	711.900	6.860	0.000	8.919	0.000	0.000	0.000	0.000	0.145	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	715.200	7.337	0.000	8.959	0.000	0.000	0.000	0.000	0.145	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	718.500	7.813	0.000	9.004	0.000	0.000	0.000	0.000	0.145	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	721.800	8.290	0.000	9.054	0.000	0.000	0.000	0.000	0.145	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	725.100	8.767	0.000	9.116	0.000	0.000	0.000	0.000	0.145	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	727.500	9.116	0.000	9.116	0.000	0.000	0.000	0.000	0.145	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
AS	826.800	8.900	0.000	8.900	0.000	0.000	0.000	0.000	-0.317	0.000
	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE	AVERAGE A-ZONES
IF	843.000	3.773	0.000	8.900	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	871.800	8.900	0.000	8.900	0.000	0.000	0.000	0.000	0.178	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	3.54	3.30	11.38
OF	1.00	3.54	3.30	11.38
OF	2.00	3.54	3.30	11.38
OF	3.00	3.54	3.30	11.38
OF	4.00	3.54	3.30	11.38
OF	5.00	3.54	3.30	11.38
OF	6.00	3.54	3.30	11.38
OF	7.00	3.54	3.30	11.38
OF	8.00	3.54	3.30	11.38
OF	9.00	3.54	3.30	11.38
OF	10.00	3.54	3.30	11.38
OF	11.00	3.55	3.30	11.38
OF	12.00	3.55	3.30	11.38
OF	13.00	3.55	3.30	11.38
OF	14.00	3.55	3.30	11.38
OF	15.00	3.55	3.30	11.38
OF	16.00	3.55	3.30	11.38
OF	17.00	3.55	3.30	11.38
OF	18.00	3.55	3.30	11.38
OF	19.00	3.55	3.30	11.38
OF	20.00	3.55	3.30	11.38
OF	21.00	3.55	3.30	11.38
OF	22.00	3.55	3.30	11.38
OF	23.00	3.55	3.30	11.38
OF	24.00	3.55	3.30	11.38
OF	25.00	3.55	3.30	11.38
OF	26.00	3.55	3.30	11.38
OF	27.00	3.55	3.30	11.38
OF	28.00	3.55	3.30	11.38
OF	29.00	3.55	3.30	11.38
OF	30.00	3.55	3.30	11.38
OF	31.00	3.55	3.30	11.38
OF	32.00	3.55	3.30	11.38
OF	33.00	3.55	3.30	11.38
OF	34.00	3.55	3.30	11.38
OF	35.00	3.55	3.30	11.38
OF	36.00	3.55	3.30	11.38
OF	37.00	3.55	3.30	11.38
OF	38.00	3.55	3.30	11.38
OF	39.00	3.55	3.30	11.38
OF	40.00	3.55	3.30	11.38
OF	41.00	3.55	3.30	11.38
OF	42.00	3.55	3.30	11.38
OF	43.00	3.55	3.30	11.39
OF	44.00	3.55	3.30	11.39
OF	45.00	3.55	3.30	11.39
OF	46.00	3.55	3.30	11.39
OF	47.00	3.55	3.30	11.39
OF	48.00	3.55	3.30	11.39
OF	49.00	3.55	3.30	11.39
OF	50.00	3.55	3.30	11.39
OF	51.00	3.55	3.30	11.39
OF	52.00	3.55	3.30	11.39
OF	53.00	3.55	3.30	11.39
OF	54.00	3.55	3.30	11.39
OF	55.00	3.55	3.30	11.39
OF	56.00	3.55	3.30	11.39
OF	57.00	3.55	3.30	11.39
OF	58.00	3.55	3.30	11.39
OF	59.00	3.55	3.30	11.39
OF	60.00	3.55	3.30	11.39
OF	61.00	3.55	3.31	11.39
OF	62.00	3.55	3.31	11.39
OF	63.00	3.55	3.31	11.39
OF	64.00	3.55	3.31	11.39
OF	65.00	3.55	3.31	11.39
OF	66.00	3.55	3.31	11.39

OF	67.00	3.55	3.31	11.39
OF	68.00	3.55	3.31	11.39
OF	69.00	3.55	3.31	11.39
OF	70.00	3.55	3.31	11.39
OF	71.00	3.55	3.31	11.39
OF	72.00	3.55	3.31	11.39
OF	73.00	3.55	3.31	11.39
OF	74.00	3.55	3.31	11.39
OF	75.00	3.55	3.31	11.39
OF	76.00	3.55	3.31	11.39
OF	77.00	3.55	3.31	11.39
OF	78.00	3.55	3.31	11.39
OF	79.00	3.55	3.31	11.39
OF	80.00	3.55	3.31	11.39
OF	81.00	3.55	3.31	11.39
OF	82.00	3.55	3.31	11.39
OF	83.00	3.55	3.31	11.39
OF	84.00	3.56	3.31	11.39
OF	85.00	3.56	3.31	11.39
OF	86.00	3.56	3.31	11.39
OF	87.00	3.56	3.31	11.39
OF	88.00	3.56	3.31	11.39
OF	89.00	3.56	3.31	11.39
OF	90.00	3.56	3.31	11.39
OF	91.00	3.56	3.31	11.39
OF	92.00	3.56	3.31	11.39
OF	93.00	3.56	3.31	11.39
OF	94.00	3.56	3.31	11.39
OF	95.00	3.56	3.31	11.39
OF	96.00	3.56	3.31	11.39
OF	97.00	3.56	3.31	11.39
OF	98.00	3.56	3.31	11.39
OF	99.00	3.56	3.31	11.39
OF	100.00	3.56	3.31	11.39
OF	101.00	3.56	3.31	11.39
OF	102.00	3.55	3.31	11.39
OF	103.00	3.55	3.31	11.39
OF	104.00	3.55	3.31	11.39
OF	105.00	3.55	3.31	11.39
OF	106.00	3.55	3.31	11.39
OF	107.00	3.55	3.31	11.39
OF	108.00	3.55	3.31	11.39
OF	109.00	3.55	3.31	11.39
OF	110.00	3.55	3.31	11.39
OF	111.00	3.55	3.31	11.39
OF	112.00	3.55	3.31	11.39
OF	113.00	3.55	3.31	11.39
OF	114.00	3.55	3.31	11.39
OF	115.00	3.55	3.31	11.39
OF	116.00	3.55	3.31	11.39
OF	117.00	3.55	3.31	11.39
OF	118.00	3.55	3.31	11.39
OF	119.00	3.55	3.31	11.39
OF	120.00	3.55	3.31	11.39
OF	121.00	3.55	3.31	11.39
OF	122.00	3.55	3.31	11.39
OF	123.00	3.55	3.31	11.39
OF	124.00	3.55	3.31	11.39
OF	125.00	3.55	3.31	11.39
OF	126.00	3.55	3.31	11.39
OF	127.00	3.55	3.31	11.39
OF	128.00	3.55	3.31	11.39
OF	129.00	3.55	3.31	11.39
OF	130.00	3.55	3.31	11.39
OF	131.00	3.55	3.31	11.39
OF	132.00	3.55	3.31	11.39
OF	133.00	3.55	3.31	11.39
OF	134.00	3.55	3.31	11.39
OF	135.00	3.55	3.31	11.39
OF	136.00	3.55	3.31	11.38
OF	137.00	3.55	3.31	11.38
OF	138.00	3.55	3.31	11.38
OF	139.00	3.55	3.31	11.38
OF	140.00	3.55	3.31	11.38
OF	141.00	3.55	3.31	11.38
OF	142.00	3.55	3.31	11.38
OF	143.00	3.55	3.31	11.38
OF	144.00	3.55	3.31	11.38
OF	145.00	3.55	3.31	11.38
OF	146.00	3.55	3.31	11.38
OF	147.00	3.55	3.31	11.38
OF	148.00	3.55	3.31	11.38
OF	149.00	3.55	3.31	11.38
OF	150.00	3.55	3.31	11.38
OF	151.00	3.55	3.31	11.38
OF	152.00	3.55	3.31	11.38
OF	153.00	3.55	3.31	11.38
OF	154.00	3.55	3.31	11.38
OF	155.00	3.55	3.31	11.38
OF	156.00	3.55	3.31	11.38
OF	157.00	3.55	3.31	11.38
OF	158.00	3.55	3.31	11.38
OF	159.00	3.55	3.31	11.38
OF	160.00	3.55	3.31	11.38
OF	161.00	3.54	3.31	11.38
OF	162.00	3.54	3.31	11.38
OF	163.00	3.54	3.31	11.38
OF	164.00	3.54	3.31	11.38
OF	165.00	3.54	3.31	11.38
OF	166.00	3.54	3.31	11.38
OF	167.00	3.54	3.31	11.38
OF	168.00	3.54	3.31	11.38

OF	169.00	3.54	3.31	11.38
OF	170.00	3.54	3.31	11.38
OF	171.00	3.54	3.31	11.38
OF	172.00	3.54	3.31	11.38
OF	173.00	3.54	3.31	11.38
OF	174.00	3.54	3.31	11.38
OF	175.00	3.54	3.31	11.38
OF	176.00	3.54	3.31	11.38
OF	177.00	3.54	3.31	11.38
OF	178.00	3.54	3.31	11.38
OF	179.00	3.54	3.31	11.38
OF	180.00	3.54	3.31	11.38
OF	181.00	3.54	3.31	11.38
OF	182.00	3.54	3.31	11.38
OF	183.00	3.54	3.31	11.38
OF	184.00	3.54	3.32	11.38
OF	185.00	3.54	3.32	11.38
OF	186.00	3.54	3.32	11.38
OF	187.00	3.54	3.32	11.38
OF	188.00	3.54	3.32	11.38
OF	189.00	3.54	3.32	11.38
OF	190.00	3.54	3.32	11.38
OF	191.00	3.54	3.32	11.38
OF	192.00	3.54	3.32	11.38
OF	193.00	3.54	3.32	11.38
OF	194.00	3.54	3.32	11.38
OF	195.00	3.54	3.32	11.38
OF	196.00	3.54	3.32	11.38
OF	197.00	3.54	3.32	11.38
OF	198.00	3.54	3.32	11.38
OF	199.00	3.54	3.32	11.38
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OF	201.00	3.54	3.32	11.38
OF	202.00	3.54	3.32	11.38
OF	203.00	3.54	3.32	11.38
OF	204.00	3.54	3.32	11.38
OF	205.00	3.54	3.32	11.37
OF	206.00	3.54	3.32	11.37
OF	207.00	3.53	3.32	11.37
OF	208.00	3.53	3.32	11.37
OF	209.00	3.53	3.32	11.37
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OF	237.00	3.53	3.32	11.37
OF	238.00	3.53	3.32	11.37
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OF	242.00	3.53	3.32	11.37
OF	243.00	3.53	3.32	11.37
OF	244.00	3.53	3.32	11.37
OF	245.00	3.52	3.32	11.37
OF	246.00	3.52	3.32	11.37
OF	247.00	3.52	3.32	11.37
OF	248.00	3.52	3.32	11.37
OF	249.00	3.52	3.32	11.37
OF	250.00	3.52	3.32	11.37
OF	251.00	3.52	3.32	11.37
OF	252.00	3.52	3.32	11.37
OF	253.00	3.52	3.32	11.37
OF	254.00	3.52	3.32	11.37
OF	255.00	3.52	3.32	11.37
OF	256.00	3.52	3.32	11.37
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OF	258.00	3.52	3.32	11.37
OF	259.00	3.52	3.32	11.37
OF	260.00	3.52	3.32	11.37
OF	261.00	3.52	3.32	11.37
OF	262.00	3.52	3.32	11.37
OF	263.00	3.53	3.32	11.37
OF	264.00	3.53	3.32	11.37
OF	265.00	3.53	3.32	11.37
OF	266.00	3.53	3.32	11.37
OF	267.00	3.53	3.32	11.37
OF	268.00	3.53	3.32	11.37
OF	269.00	3.53	3.32	11.37
OF	270.00	3.53	3.32	11.37

OF	271.00	3.53	3.32	11.37
OF	272.00	3.53	3.32	11.37
OF	273.00	3.53	3.32	11.37
OF	274.00	3.53	3.32	11.37
OF	275.00	3.53	3.32	11.37
OF	276.00	3.53	3.32	11.37
OF	277.00	3.53	3.32	11.37
OF	278.00	3.53	3.32	11.37
OF	279.00	3.53	3.32	11.37
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OF	305.00	3.54	3.32	11.37
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OF	308.00	3.54	3.33	11.37
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OF	310.00	3.54	3.33	11.38
OF	311.00	3.54	3.33	11.38
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OF	314.00	3.54	3.33	11.38
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OF	316.00	3.54	3.33	11.38
OF	317.00	3.54	3.33	11.38
OF	318.00	3.54	3.33	11.38
OF	319.00	3.54	3.33	11.38
OF	320.00	3.54	3.33	11.38
OF	321.00	3.54	3.33	11.38
OF	322.00	3.54	3.33	11.38
OF	323.00	3.54	3.33	11.38
OF	324.00	3.54	3.33	11.38
OF	325.00	3.54	3.33	11.38
OF	326.00	3.54	3.33	11.38
OF	327.00	3.54	3.33	11.38
OF	328.00	3.54	3.33	11.38
OF	329.00	3.54	3.33	11.38
OF	330.00	3.54	3.33	11.38
OF	331.00	3.54	3.33	11.38
OF	332.00	3.54	3.33	11.38
OF	333.00	3.54	3.33	11.38
OF	334.00	3.54	3.33	11.38
OF	335.00	3.54	3.33	11.38
OF	336.00	3.54	3.33	11.38
OF	337.00	3.54	3.33	11.38
OF	338.00	3.54	3.33	11.38
OF	339.00	3.54	3.33	11.38
OF	340.00	3.55	3.33	11.38
OF	341.00	3.55	3.33	11.38
OF	342.00	3.55	3.33	11.38
OF	343.00	3.55	3.33	11.38
OF	344.00	3.55	3.33	11.38
OF	345.00	3.55	3.33	11.38
OF	346.00	3.55	3.33	11.38
OF	347.00	3.55	3.33	11.38
OF	348.00	3.55	3.33	11.38
OF	349.00	3.55	3.33	11.38
OF	350.00	3.55	3.33	11.38
	560.70	3.54	3.35	11.37
OF	651.00	3.54	3.35	11.38
IF	711.90	1.52	3.36	9.98
IF	715.20	1.21	3.36	9.81
IF	718.50	0.90	3.36	9.63
IF	721.80	0.58	3.36	9.46
IF	725.10	0.27	3.36	9.30
IF	727.50	0.01	3.36	9.12
AS	826.80	0.00	0.00	8.90
IF	843.00	0.09	0.36	8.97
IF	871.80	0.01	0.50	8.91

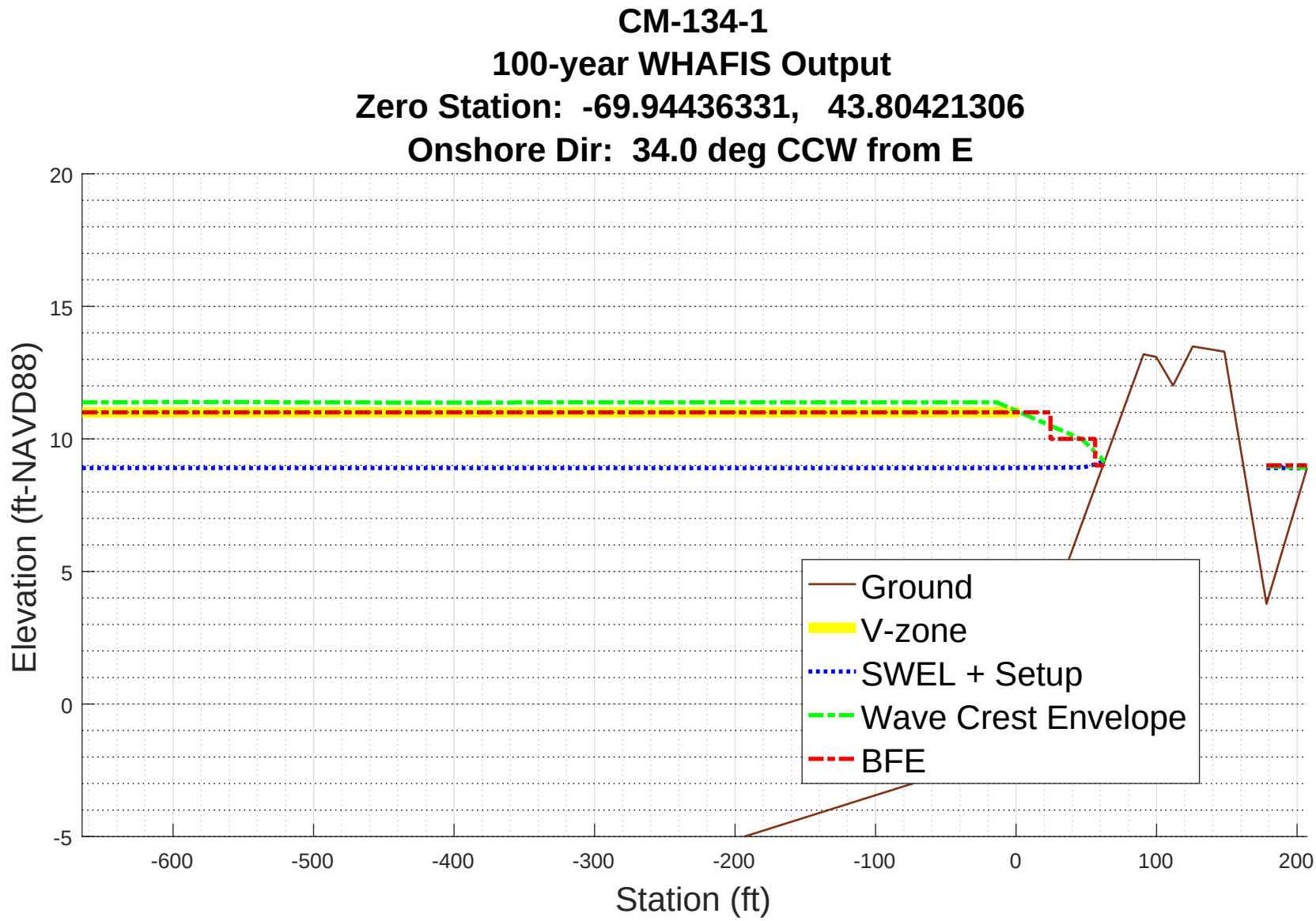
PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

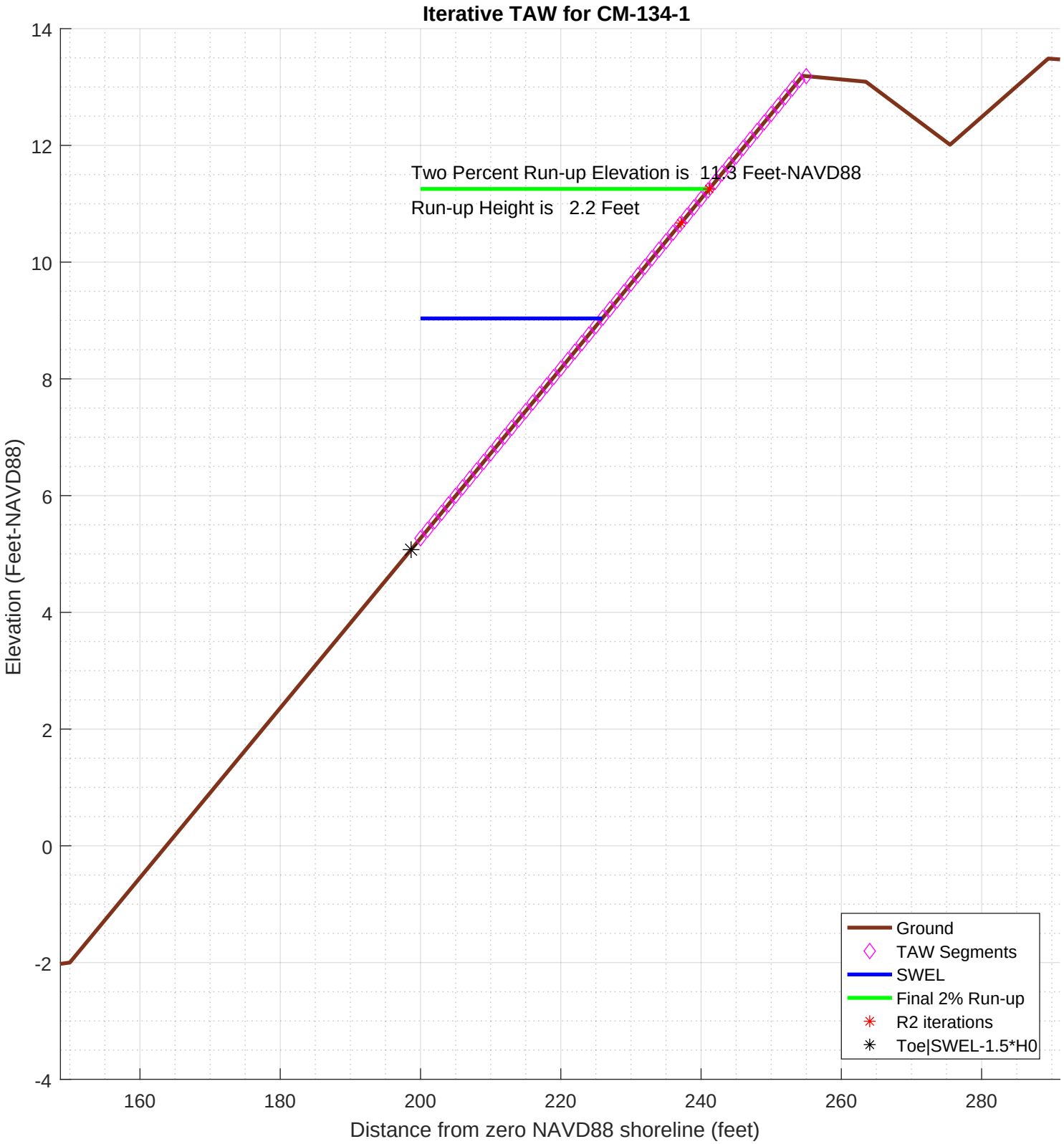
BETWEEN 727.50 AND 826.80

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
8.00	1.00	8.90
263.00	1.00	8.90
338.00	1.00	8.90
711.90	1.00	8.92
715.20	1.00	8.96
718.50	1.00	9.00
721.80	1.00	9.05

```
725.10                1.00                9.12
826.80                1.00                8.90
                PART5  LOCATION OF V ZONES
     STATION OF GUTTER          LOCATION OF ZONE
               667.32              WINDWARD
           PART6 NUMBERED A ZONES AND V ZONES
STATION OF GUTTER  ELEVATION  ZONE DESIGNATION   FHF
       0.00          11.38
                                   V22  EL=11     120
       7.00          11.38
                                   V22  EL=11     120
       8.00          11.38
                                   V22  EL=11     120
     262.00          11.37
                                   V22  EL=11     120
     263.00          11.37
                                   V22  EL=11     120
     337.00          11.38
                                   V22  EL=11     120
     338.00          11.38
                                   V22  EL=11     120
     651.00          11.38
                                   V22  EL=11     120
     667.32          11.01
                                   A17  EL=11      85
     689.32          10.50
                                   A17  EL=10      85
     711.90           9.98
                                   A17  EL=10      85
     715.20           9.81
                                   A17  EL=10      85
     718.50           9.63
                                   A17  EL=10      85
     721.08           9.50
                                   A17  EL= 9      85
     721.80           9.46
                                   A17  EL= 9      85
     725.10           9.30
                                   A17  EL= 9      85
     727.50           9.12
     826.80           8.90
                                   A17  EL= 9      85
     871.80           8.91
          ZONE TERMINATED AT END OF TRANSECT
          PART 7   POSTSCRIPT NOTES
PS#  1   START(423869.8108,4850447.6827)
PS#  2   END(424120.5442,4850616.6674)
-1.000000e+00
```


CM-134-1
100-year WHAFIS Output
Zero Station: -69.94436331, 43.80421306
Onshore Dir: 34.0 deg CCW from E
Elevation (ft-NAVD88)
Station (ft)
20
15
10
5
0
-5
-600
-500
-400
-300
-200
-100
0
100
200
Ground
V-zone
SWEL + Setup
Wave Crest Envelope
BFE


Iterative TAW for CM-134-1
Two Percent Run-up Elevation is 11.3 Feet-NAVD88
Run-up Height is 2.2 Feet
Ground
TAW Segments
SWEL
Final 2% Run-up
R2 iterations
Toe|SWEL-1.5*H0
Elevation (Feet-NAVD88)
Distance from zero NAVD88 shoreline (feet)
14
12
10
8
6
4
2
0
-2
-4
160
180
200
220
240
260
280

```
diary on         % begin recording

% FEMA appeal for The Town of Harpswell, Cumberland county, Maine
% TRANSECT ID: CM-134-1
% calculation by SJH, Ransom Consulting, Inc. 20-Feb-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/CM-134-1sta_ele_include.csv';   % file with station, elevation, include
                                        % third colunm is 0 for excluded points
imgname='logfiles/CM-134-1-runup';
SWEL=8.8995;  % 100-yr still water level including wave setup.
H0=2.5462;    % significant wave height at toe of structure
Tp=3.2843;    % peak period, 1/fma,
T0=Tp/1.1;

gamma_berm=1;   % this may get changed automatically below
gamma_rough=0.8;
gamma_beta=1;
gamma_perm=1;

setupAtToe=-0.0065354;
maxSetup=0.21697;   % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for CM-134-1'

plotTitle =

Iterative TAW for CM-134-1



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

SWEL=SWEL+setupAtToe

SWEL =

                8.8929646

SWEL_fore=SWEL+maxSetup

SWEL_fore =

                9.1099346



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

L0 =

          45.6143383009907


% 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 =

                 5.0736646


% 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 =

                12.7122646


% 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

toe_sta =

          198.656229192461


top_sta =

          251.198365673644

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

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

top_sta =

          251.198365673644

toe_sta

toe_sta =

          198.656229192461




% 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 =

-!!- Location of SWEL-1.5*H0 is 76.4 ft landward of toe of slope


ans =

-!!- Setup is interpolated between setup at toe of slope and max setup


ans =

-!!-       setup is adjusted to 0.14 feet


ans =

-!!-       SWEL is adjusted to 9.04 feet


k =

     1
     2
     3
     4
     5
     6
     7
     8
     9
    10
    11
    12
    13
    14
    15
    16
    17
    18
    19
    20
    21
    22
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    41
    42
    43
    44
    45
    46
    47
    48
    49
    50



% 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 =
                5.0736646
toe_sta =
          198.656229192461
top_sta =
          251.198365673644
Z2 =
               12.7122646
H0 =
                    2.5462
Tp =
                    3.2843
T0 =
          2.98572727272727
R2 =
                    7.6386
Z2 =
          16.6738698750873
top_sta =
          307.017644318127
Lslope =
          108.361415125666
ans =
!------- End Berm Factor Calculation, Iter: 1 ---------!
berm_width =
     0
rB =
     0
rdh_mean =
     1
gamma_berm =
     1
slope =
         0.107051068515805
Irb =
          0.453101436653365
gamma_berm =
     1
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                        0.8
gamma =
                        0.8
ans =
!!! - - Iribaren number:   0.45 is outside the valid range (0.5-10), TAW NOT VALID - - !!!
ans =
!!! - - slope: 1:9.3 V:H is outside the valid range (1:8 - 1:1), TAW NOT VALID - - !!!
R2_new =
          1.63362061925762
R2del =
          6.00497938074238
Z2 =
          10.6688904943449
top_sta =
          237.143007940191
ans =
!----------------- STARTING ITERATION 2 -----------------!
Ztoe =
                5.0736646
toe_sta =
          198.656229192461
top_sta =
          237.143007940191
Z2 =
          10.6688904943449
H0 =
                    2.5462
Tp =
                    3.2843
T0 =
          2.98572727272727
R2 =
          1.63362061925762
Z2 =
          10.6688904943449
top_sta =
          237.143007940191
Lslope =
          38.4867787477295
ans =
!------- End Berm Factor Calculation, Iter: 2 ---------!
```

```
berm_width =
     0
rB =
     0
rdh_mean =
     1
gamma_berm =
     1
slope =
         0.145380467693077
Irb =
         0.615333407562822
gamma_berm =
     1
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.8
gamma =
                       0.8
ans =
!!! - - Iribaren number:   0.62 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:6.9 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
         2.21853488202842
R2del =
          0.5849142627708
Z2 =
         11.2538047571157
top_sta =
         241.166347439595
ans =
!----------------- STARTING ITERATION 3 -----------------!
Ztoe =
                5.0736646
toe_sta =
         198.656229192461
top_sta =
         241.166347439595
Z2 =
         11.2538047571157
H0 =
                    2.5462
Tp =
                    3.2843
T0 =
         2.98572727272727
R2 =
         2.21853488202842
Z2 =
         11.2538047571157
top_sta =
         241.166347439595
Lslope =
         42.5101182471335
ans =
!------- End Berm Factor Calculation, Iter: 3 ---------!
berm_width =
     0
rB =
     0
rdh_mean =
     1
gamma_berm =
     1
slope =
         0.14538045086554
Irb =
         0.615333336339047
gamma_berm =
     1
gamma_perm =
     1
gamma_beta =
     1
gamma_rough =
                       0.8
gamma =
                       0.8
ans =
!!! - - Iribaren number:   0.62 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:6.9 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new =
         2.21853462523686
R2del =
      2.56791565345083e-07
```

```
Z2 =
          11.2538045003241
top_sta =
          241.166345673259
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 =
          11.2538045003241
diary off
-1.000000e+00
-1.000000e+00
-1.000000e+00
```

_____
PART 5: RUNUP2

for transect: CM-134-1

Station locations shifted by: 163.76 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

_____RUNUP2 INPUT CONVERSIONS_____
for transect: CM-134-1

Incident significant wave height: 2.21 feet

Peak wave period: 3.30 seconds

Mean wave height: 1.39 feet

Local Depth below SWEL: 22.43 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 = 22.43
Period, T = 2.80
Waveheight, H = 1.39
Deep water wavelength, L0 (ft)
L0 = g*T*T/twopi
L0 = 32.17*2.80*2.80/6.28 = 40.29
Deep water wave celerity, C0 (ft/s)
C0 = L0/T
C0 = 40.29/2.80 = 14.36
Angular frequency, sigma (rad/s)
sigma = twopi/T
sigma = 6.28/2.80 = 2.24
Hunts (1979) approximation for Celerity C1H (ft/s) at Depth D (ft)
y = sigma.*sigma.*D./g
y = 2.24*2.24*22.43/32.17 = 3.50
C1H = sqrt(g.*D./(y+1./(1 + 0.6522.*y + 0.4622.*y.^2 + 0.0864.*y.^4 +0.0675.*y.^5)))
C1H = 14.33
Shoaling Coefficient KsH
KsH = sqrt(C0/C1H)
KsH = sqrt(14.36/14.33) = 1.00
Deepwater Wave Height H0_H (ft)
H0_H = H/KsH
H0_H = 1.39/1.00 = 1.38

Deepwater mean wave height: 1.38 feet

_____END RUNUP2 CONVERSIONS_____

_____RUNUP2 RESULTS_____
for transect: CM-134-1

RUNUP2 SWEL:
8.90
8.90
8.90
8.90

8.90
8.90
8.90
8.90
8.90

RUNUP2 deepwater mean wave heights:
1.32
1.32
1.32
1.38
1.38
1.38
1.45
1.45
1.45

RUNUP2 mean wave periods:
2.66
2.80
2.95
2.66
2.80
2.95
2.66
2.80
2.95

RUNUP2 runup above SWEL:
0.72
0.76
0.79
0.73
0.77
0.81
0.76
0.79
0.83

RUNUP2 Mean runup height above SWEL: 0.77 feet

RUNUP2 2-percent runup height above SWEL: 1.70 feet

RUNUP2 2-percent runup elevation: 10.60 feet-NAVD88

RUNUP2 Messages:
No Messages

_____END RUNUP2 RESULTS_____

_____ACES BEACH RUNUP_____

Incident significant wave height: 2.21 feet

Significant wave height deshoaled using Hunt equation

Deepwater significant wave height: 1.94 feet

Peak wave period: 3.30 seconds

Average beach Slope: 1:28.27 (H:V)

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 1.11 feet

ACES Beach 2-percent runup elevation: 10.01 feet-NAVD88

ACES BEACH RUNUP is valid

_____END ACES BEACH RESULTS_____

PART 5 COMPLETE_____

```
  FEMA                                                  sjh           job 2
  RUNUP2 transect: CM-134-1                                               1
7.00
  -13.53 -664.8 0.8
  -13.26 -647.8 0.8
  -13.11 -638.8 0.8
  -12.64 -611.8 0.8
  -12.60 -609.8 0.8
  -11.95 -572.8 0.8
  -11.93 -571.8 0.8
  -9.98 -504.8 0.8
  -9.95 -503.8 0.8
  -9.02 -468.8 0.8
  -8.49 -448.8 0.8
  -7.61 -415.8 0.8
  -7.58 -414.8 0.8
  -7.52 -412.8 0.8
  -7.50 -411.8 0.8
  -7.49 -409.8 0.8
  -7.44 -399.8 0.8
  -7.03 -314.8 0.8
  -2.00 -13.8  0.8
1 13.19 90.7   0.8
 8.9   1.32  2.66
 8.9   1.32  2.80
 8.9   1.32  2.95
 8.9   1.38  2.66
 8.9   1.38  2.80
 8.9   1.38  2.95
 8.9   1.45  2.66
 8.9   1.45  2.80
 8.9   1.45  2.95
```

****

CROSS SECTION PROFILE

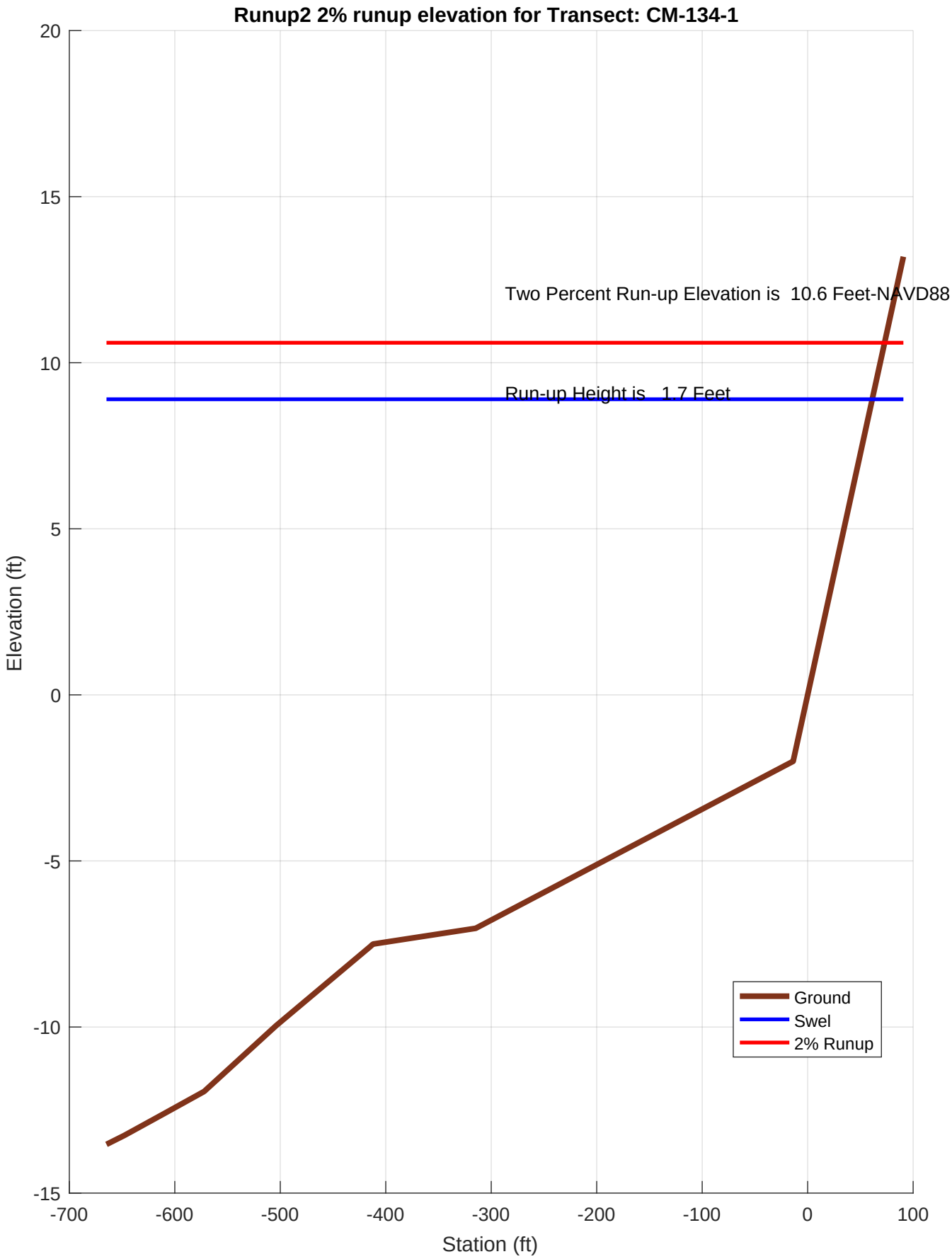
	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-664.0	-13.5		
			.00	.80
2	-647.0	-13.2		
			90.00	.80
3	-638.0	-13.1		
			54.00	.80
4	-611.0	-12.6		
			FLAT	.80
5	-609.0	-12.6		
			52.86	.80
6	-572.0	-11.9		
			FLAT	.80
7	-571.0	-11.9		
			34.48	.80
8	-504.8	-10.0		
			33.33	.80
9	-503.8	-9.9		
			37.63	.80
10	-468.8	-9.0		
			37.74	.80
11	-448.8	-8.5		
			37.50	.80
12	-415.8	-7.6		
			33.33	.80
13	-414.8	-7.6		
			33.33	.80
14	-412.8	-7.5		
			50.00	.80
15	-411.8	-7.5		
			200.00	.80
16	-409.8	-7.5		
			200.00	.80
17	-399.8	-7.4		
			207.32	.80
18	-314.8	-7.0		
			59.84	.80
19	-13.8	-2.0		
			6.88	.80
20	90.7	13.2		

LAST SLOPE 7.00 LAST ROUGHNESS .80

****

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.)
8.90	1.32	2.66	11	19	.72	2.03
8.90	1.32	2.80	11	19	.76	2.06
8.90	1.32	2.95	11	19	.79	2.09
8.90	1.38	2.66	11	19	.73	2.11
8.90	1.38	2.80	11	19	.77	2.14
8.90	1.38	2.95	11	19	.81	2.17
8.90	1.45	2.66	11	19	.76	2.20
8.90	1.45	2.80	11	19	.79	2.23
8.90	1.45	2.95	11	19	.83	2.26


Runup2 2% runup elevation for Transect: CM-134-1
Two Percent Run-up Elevation is 10.6 Feet-NAVD88
Run-up Height is 1.7 Feet
Ground
Swel
2% Runup
Elevation (ft)
Station (ft)
20
15
10
5
0
-5
-10
-15
-700
-600
-500
-400
-300
-200
-100
0
100