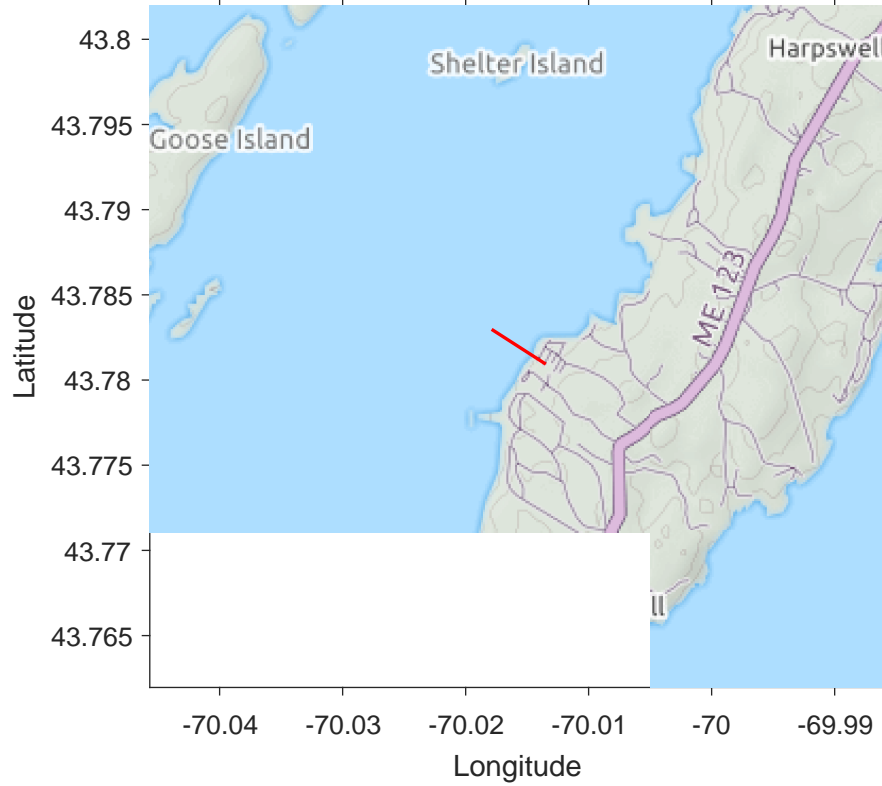
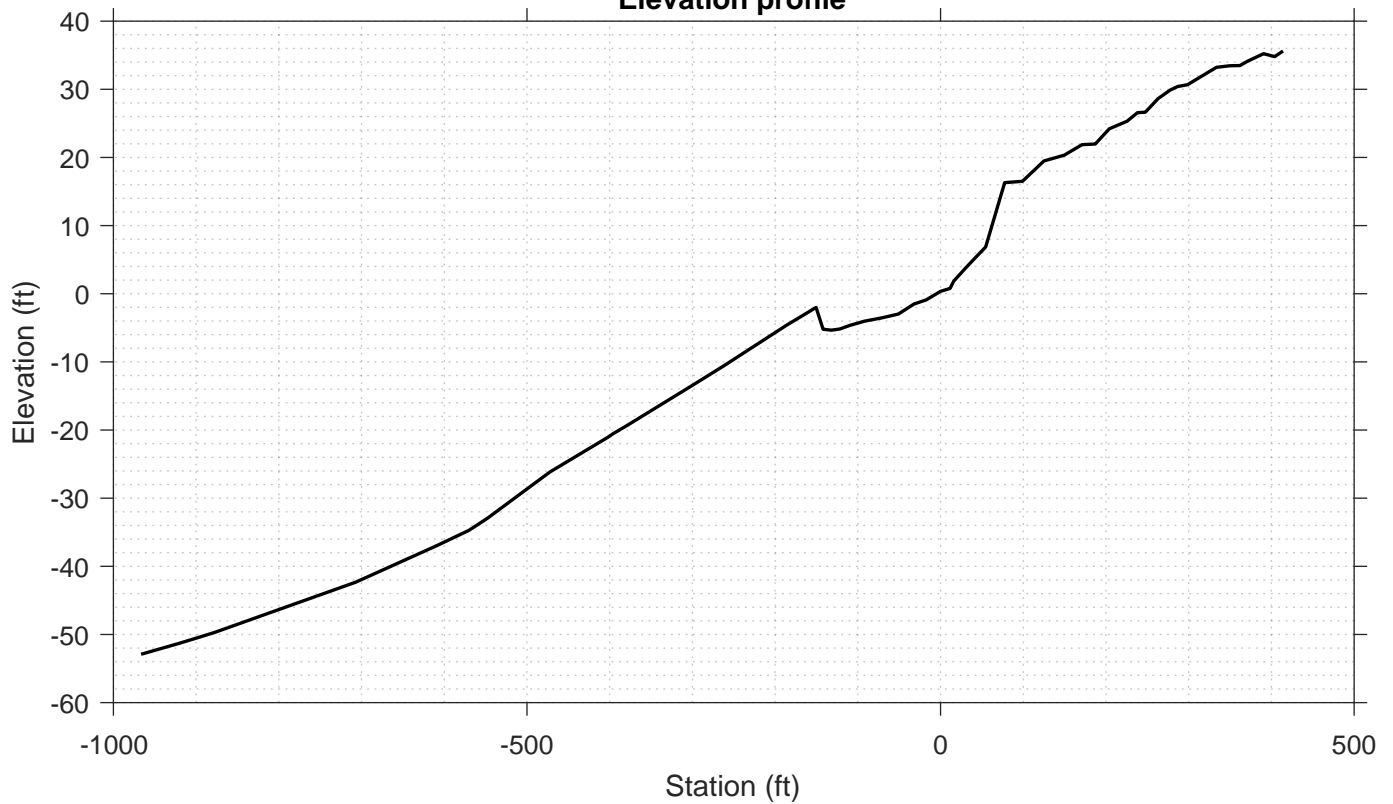


Transect Number: CM-124-2



Elevation profile



DATA LOG FOR TRANSECT ID: CM-124-2

PART 1: USER INPUT

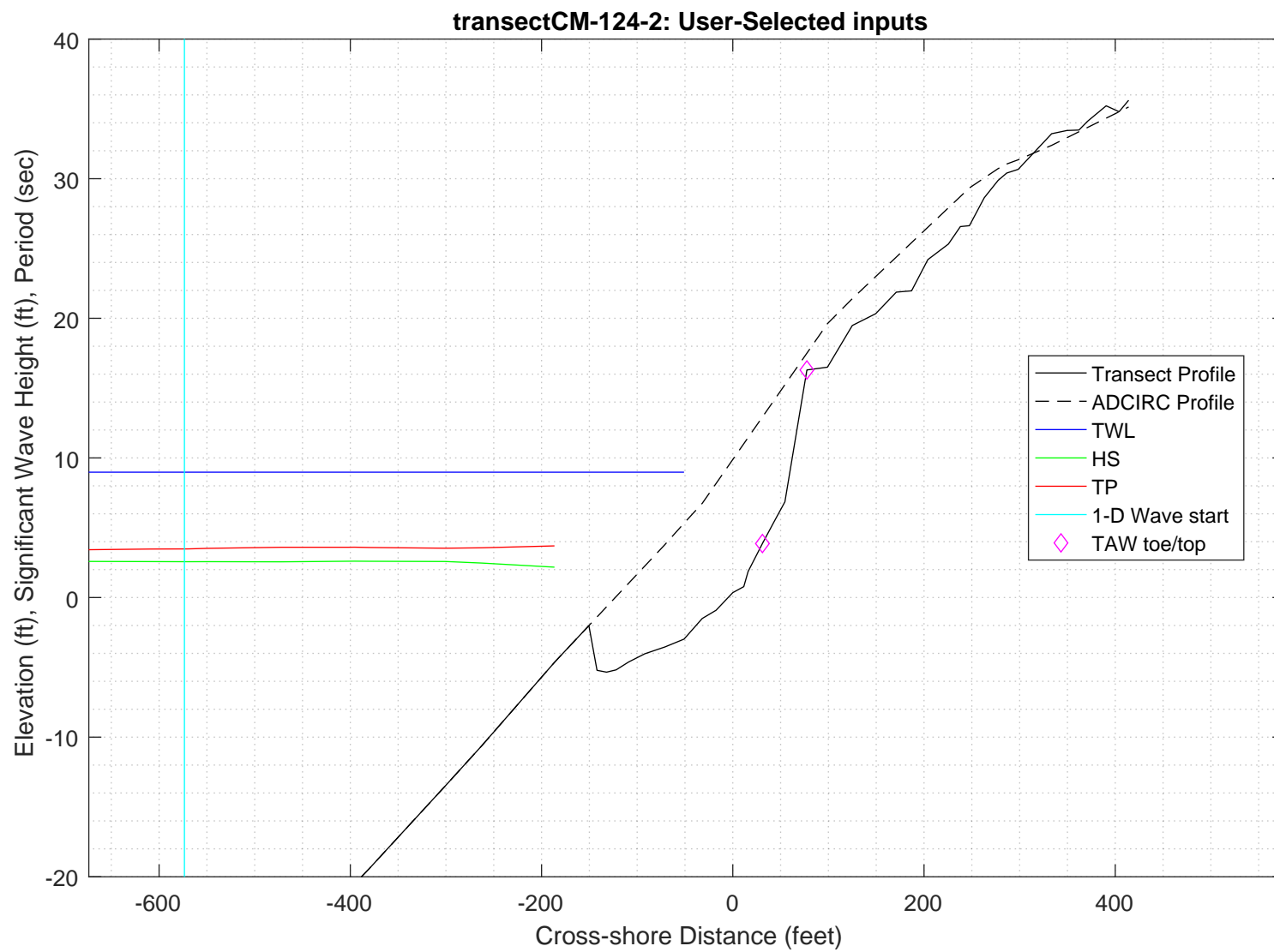
SWAN 1-D / WHAFIS input

station: -573.5 ft
LON: -70.0166 deg E
LAT: 43.7824 deg N
Bottom ELEV: -34.9136 ft-NAVD88
TWL: 8.9775 ft-NAVD88
HS: 2.5665 ft
TP: 3.481 sec
Wave Direction bin: 315 deg CCW from East (90 deg sector)
Transect Direction: 335.1113 deg CCW from East

TAW/RUNUP input

toe sta: 31 ft
toe elev: 3.8681 ft-NAVD88
top sta: 77.5 ft
top elev: 16.2992 ft-NAVD88
Wave and water level conditions at toe to be calculated in SWAN 1-D

PART 1 COMPLETE



PART 2: SWAN 1-D

swan input grid name: 2_swan/gridfiles/CM-124-2zmeters_xmeters.grd
swan file name: 2_swan/swanfiles/CM-124-2.swn
swan output name: 2_swan/swanfiles/CM-124-2.dat

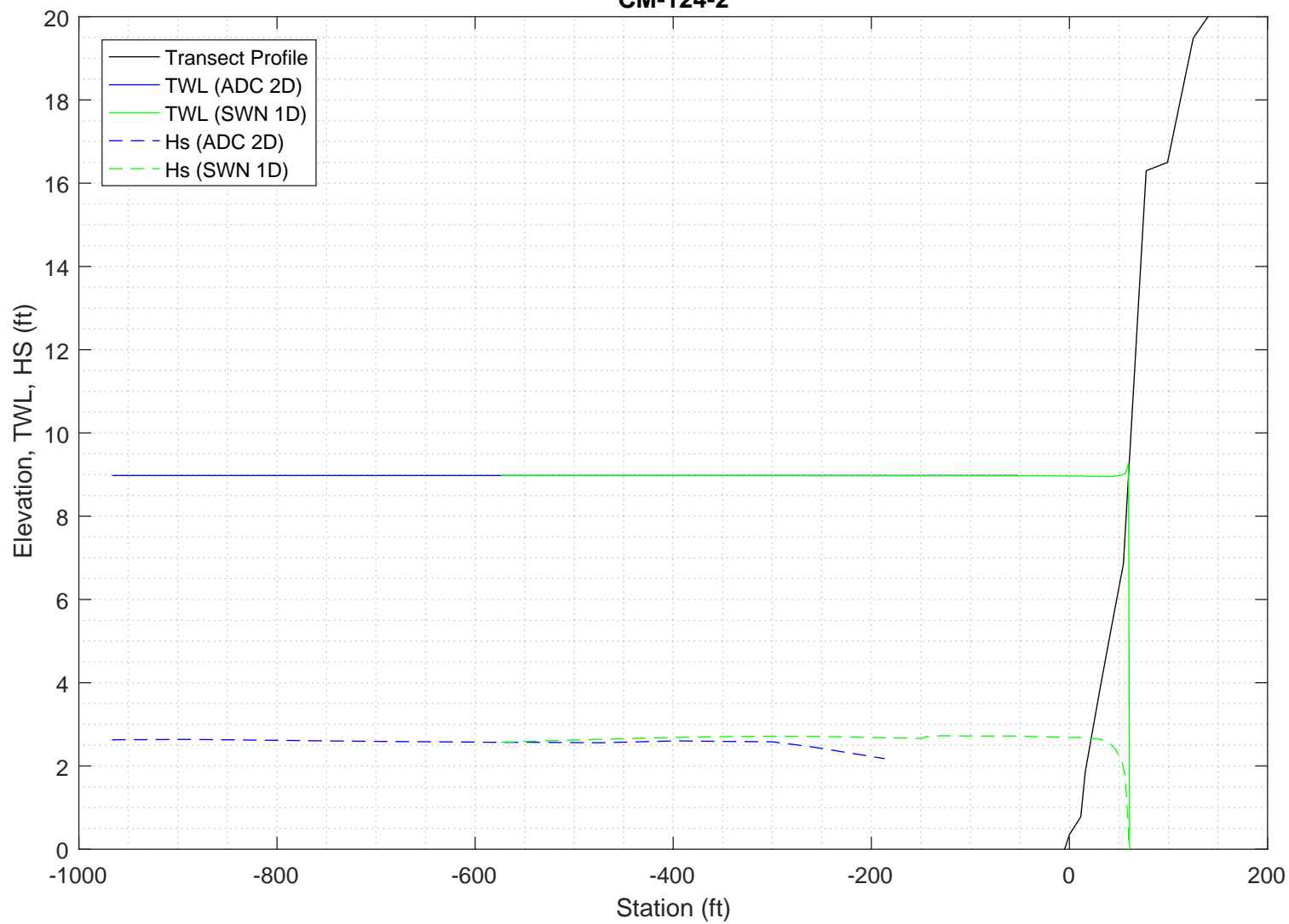
Boundary Conditions:
TWL- 2.7363 meters
HS- 0.78226 meters
PER- 3.481 seconds

Batch File: 2_swan/swanfiles/runswan.dat

SWAN maximum additional wave setup: 0.29117 feet
SWAN output at toe:
SETUP- -0.022201 feet
HS- 2.6451 feet
PER- 3.3905 seconds

PART 2 COMPLETE

2-D ADCIRC+SWAN and SWAN 1-D results, Transect:
CM-124-2



Execution started at 20200220.141920

```

-----
                        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      198      0.   198      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      198    0      1      1
!READinp BOTtom [fac] 'fname1' [idla] [nhedf] [FREe|FORmat[form]|UNFormatted]
READ    BOTTOM    -1. '../gridfiles/CM-124-2zmeters_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    0.78226      3.481      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] [edmlpm] [cdrag] [umin] [cfpm]
!-- GEN2 [cf10] [cf20] [cf30] [cf40] [cf50] [cf60] [edmlpm] [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' [xpl] [yp1] <[int] [xp] [yp] >
      CURVE 'curve' 0      0      198 198      0
!TABLE 'sname' < HEADER|NOHEAdER|INDEXed > 'fname' <output parameters> (output time)
      Table 'curve' HEADER 'CM-124-2.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          199 MYC          1
                   : MCGRD         200
                   : 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 EDMLEPM     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 4.13 % 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 0.52 % 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 5.16 % of wet grid points ( 99.50 % required)

iteration    5; sweep 1
iteration    5; sweep 2
iteration    5; sweep 3
iteration    5; sweep 4
accuracy OK in 45.88 % 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 76.29 % 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 98.97 % 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 99.49 % 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 99.49 % of wet grid points ( 99.50 % required)

iteration   10; sweep 1
iteration   10; sweep 2
iteration   10; sweep 3
iteration   10; sweep 4
accuracy OK in 99.49 % of wet grid points ( 99.50 % required)

iteration   11; sweep 1
iteration   11; sweep 2
iteration   11; sweep 3
iteration   11; sweep 4
accuracy OK in 99.49 % of wet grid points ( 99.50 % required)

iteration   12; sweep 1
iteration   12; sweep 2
iteration   12; sweep 3
iteration   12; sweep 4
accuracy OK in 100.00 % of wet grid points ( 99.50 % required)
```

STOP

Run: 1

Table:curve

SWAN version:41.20A

Xp [m]	Yp [m]	Hsig [m]	TPsmoo [sec]	RTpeak [sec]	Tm_l0 [sec]	Dir [degr]	Dspr [degr]	Depth [m]	Setup [m]
0.	0.	0.78300	3.3909	3.3473	3.1299	0.000	31.5899	13.3800	0.000000
1.	0.	0.78377	3.3908	3.3473	3.1279	0.000	31.5942	13.3200	-0.000002
2.	0.	0.78453	3.3907	3.3473	3.1259	0.000	31.5985	13.2400	-0.000004
3.	0.	0.78528	3.3906	3.3473	3.1239	0.000	31.6028	13.1600	-0.000006
4.	0.	0.78604	3.3905	3.3473	3.1219	0.000	31.6070	13.0800	-0.000008
5.	0.	0.78680	3.3904	3.3473	3.1198	0.000	31.6114	13.0000	-0.000011
6.	0.	0.78755	3.3903	3.3473	3.1178	0.000	31.6158	12.9200	-0.000013
7.	0.	0.78830	3.3902	3.3473	3.1158	0.000	31.6202	12.8400	-0.000015
8.	0.	0.78905	3.3900	3.3473	3.1138	0.000	31.6246	12.7600	-0.000017
9.	0.	0.78979	3.3899	3.3473	3.1117	0.000	31.6289	12.6700	-0.000020
10.	0.	0.79053	3.3898	3.3473	3.1097	0.000	31.6331	12.5800	-0.000022
11.	0.	0.79127	3.3897	3.3473	3.1076	0.000	31.6374	12.4900	-0.000024
12.	0.	0.79200	3.3896	3.3473	3.1056	0.000	31.6417	12.4000	-0.000027
13.	0.	0.79273	3.3894	3.3473	3.1035	0.000	31.6460	12.3100	-0.000029
14.	0.	0.79346	3.3893	3.3473	3.1015	0.000	31.6504	12.2200	-0.000032
15.	0.	0.79418	3.3892	3.3473	3.0994	0.000	31.6548	12.1300	-0.000035
16.	0.	0.79490	3.3890	3.3473	3.0974	0.000	31.6591	12.0400	-0.000037
17.	0.	0.79562	3.3889	3.3473	3.0953	0.000	31.6635	11.9500	-0.000040
18.	0.	0.79633	3.3888	3.3473	3.0932	0.000	31.6679	11.8600	-0.000043
19.	0.	0.79704	3.3886	3.3473	3.0912	0.000	31.6724	11.7700	-0.000045
20.	0.	0.79775	3.3885	3.3473	3.0891	0.000	31.6770	11.6800	-0.000048
21.	0.	0.79845	3.3883	3.3473	3.0870	0.000	31.6815	11.5899	-0.000051
22.	0.	0.79914	3.3882	3.3473	3.0850	0.000	31.6860	11.4999	-0.000054
23.	0.	0.79983	3.3880	3.3473	3.0829	0.000	31.6907	11.4099	-0.000057
24.	0.	0.80053	3.3879	3.3473	3.0809	0.000	31.6954	11.3299	-0.000060
25.	0.	0.80121	3.3877	3.3473	3.0788	0.000	31.6996	11.2399	-0.000063
26.	0.	0.80188	3.3875	3.3473	3.0767	0.000	31.7035	11.1499	-0.000066
27.	0.	0.80255	3.3874	3.3473	3.0747	0.000	31.7076	11.0599	-0.000069
28.	0.	0.80321	3.3872	3.3473	3.0726	0.000	31.7118	10.9699	-0.000072
29.	0.	0.80387	3.3870	3.3473	3.0706	0.000	31.7159	10.8799	-0.000076
30.	0.	0.80451	3.3868	3.3473	3.0685	0.000	31.7203	10.7899	-0.000079
31.	0.	0.80516	3.3867	3.3473	3.0664	0.000	31.7251	10.6999	-0.000083
32.	0.	0.80583	3.3865	3.3473	3.0644	0.000	31.7301	10.6299	-0.000086
33.	0.	0.80648	3.3863	3.3473	3.0624	0.000	31.7354	10.5499	-0.000089
34.	0.	0.80714	3.3862	3.3473	3.0605	0.000	31.7408	10.4799	-0.000093
35.	0.	0.80780	3.3860	3.3473	3.0585	0.000	31.7461	10.4099	-0.000096
36.	0.	0.80843	3.3858	3.3473	3.0565	0.000	31.7512	10.3299	-0.000100
37.	0.	0.80907	3.3856	3.3473	3.0545	0.000	31.7565	10.2599	-0.000103
38.	0.	0.80971	3.3855	3.3473	3.0526	0.000	31.7619	10.1899	-0.000107
39.	0.	0.81035	3.3853	3.3473	3.0506	0.000	31.7669	10.1199	-0.000111
40.	0.	0.81095	3.3851	3.3473	3.0486	0.000	31.7717	10.0399	-0.000115
41.	0.	0.81157	3.3849	3.3473	3.0467	0.000	31.7767	9.9699	-0.000118
42.	0.	0.81218	3.3847	3.3473	3.0448	0.000	31.7817	9.8999	-0.000122
43.	0.	0.81279	3.3846	3.3473	3.0428	0.000	31.7863	9.8299	-0.000126
44.	0.	0.81336	3.3844	3.3473	3.0408	0.000	31.7906	9.7499	-0.000130
45.	0.	0.81395	3.3842	3.3473	3.0389	0.000	31.7951	9.6799	-0.000135
46.	0.	0.81453	3.3840	3.3473	3.0370	0.001	31.7992	9.6099	-0.000139
47.	0.	0.81507	3.3838	3.3473	3.0351	0.001	31.8030	9.5299	-0.000143
48.	0.	0.81564	3.3836	3.3473	3.0331	0.001	31.8070	9.4599	-0.000148
49.	0.	0.81619	3.3834	3.3473	3.0312	0.001	31.8116	9.3898	-0.000152
50.	0.	0.81674	3.3831	3.3473	3.0294	0.001	31.8157	9.3198	-0.000156
51.	0.	0.81724	3.3829	3.3473	3.0274	0.001	31.8195	9.2398	-0.000161
52.	0.	0.81777	3.3827	3.3473	3.0255	0.001	31.8230	9.1698	-0.000166
53.	0.	0.81825	3.3825	3.3473	3.0236	0.001	31.8256	9.0898	-0.000171
54.	0.	0.81872	3.3822	3.3473	3.0216	0.001	31.8276	9.0098	-0.000176
55.	0.	0.81918	3.3820	3.3473	3.0197	0.001	31.8300	8.9298	-0.000182
56.	0.	0.81966	3.3818	3.3473	3.0178	0.001	31.8327	8.8598	-0.000187
57.	0.	0.82014	3.3816	3.3473	3.0160	0.001	31.8353	8.7898	-0.000192
58.	0.	0.82061	3.3814	3.3473	3.0141	0.001	31.8377	8.7198	-0.000198
59.	0.	0.82106	3.3811	3.3473	3.0123	0.001	31.8393	8.6498	-0.000203

60.	0.	0.82146	3.3809	3.3473	3.0104	0.001	31.8405	8.5698	-0.000209
61.	0.	0.82189	3.3806	3.3473	3.0085	0.001	31.8417	8.4998	-0.000215
62.	0.	0.82230	3.3804	3.3473	3.0067	0.001	31.8421	8.4298	-0.000221
63.	0.	0.82267	3.3802	3.3473	3.0048	0.001	31.8421	8.3498	-0.000227
64.	0.	0.82306	3.3799	3.3473	3.0029	0.001	31.8414	8.2798	-0.000233
65.	0.	0.82339	3.3797	3.3473	3.0010	0.001	31.8404	8.1998	-0.000240
66.	0.	0.82375	3.3794	3.3473	2.9992	0.001	31.8388	8.1298	-0.000247
67.	0.	0.82405	3.3792	3.3473	2.9973	0.001	31.8368	8.0497	-0.000254
68.	0.	0.82439	3.3789	3.3473	2.9955	0.001	31.8341	7.9797	-0.000261
69.	0.	0.82466	3.3787	3.3473	2.9936	0.001	31.8310	7.8997	-0.000269
70.	0.	0.82497	3.3784	3.3473	2.9918	0.001	31.8272	7.8297	-0.000276
71.	0.	0.82521	3.3782	3.3473	2.9899	0.000	31.8229	7.7497	-0.000284
72.	0.	0.82549	3.3779	3.3473	2.9881	0.000	31.8197	7.6797	-0.000292
73.	0.	0.82575	3.3777	3.3473	2.9863	0.000	31.8156	7.6097	-0.000300
74.	0.	0.82594	3.3774	3.3473	2.9844	360.000	31.8110	7.5297	-0.000308
75.	0.	0.82617	3.3772	3.3473	2.9826	359.999	31.8057	7.4597	-0.000317
76.	0.	0.82632	3.3769	3.3473	2.9807	359.998	31.7999	7.3797	-0.000326
77.	0.	0.82651	3.3767	3.3473	2.9790	359.998	31.7929	7.3097	-0.000335
78.	0.	0.82663	3.3764	3.3473	2.9771	359.997	31.7854	7.2297	-0.000345
79.	0.	0.82679	3.3762	3.3473	2.9753	359.997	31.7770	7.1596	-0.000354
80.	0.	0.82687	3.3759	3.3473	2.9735	359.997	31.7681	7.0796	-0.000365
81.	0.	0.82699	3.3757	3.3473	2.9717	359.996	31.7593	7.0096	-0.000375
82.	0.	0.82710	3.3755	3.3473	2.9700	359.996	31.7489	6.9396	-0.000385
83.	0.	0.82712	3.3752	3.3473	2.9681	359.995	31.7377	6.8596	-0.000397
84.	0.	0.82720	3.3750	3.3473	2.9664	359.995	31.7254	6.7896	-0.000408
85.	0.	0.82718	3.3748	3.3473	2.9645	359.994	31.7111	6.7096	-0.000421
86.	0.	0.82714	3.3746	3.3473	2.9627	359.993	31.6967	6.6296	-0.000433
87.	0.	0.82715	3.3744	3.3473	2.9609	359.992	31.6813	6.5596	-0.000446
88.	0.	0.82707	3.3742	3.3473	2.9591	359.992	31.6654	6.4795	-0.000459
89.	0.	0.82705	3.3740	3.3473	2.9574	359.993	31.6481	6.4095	-0.000473
90.	0.	0.82694	3.3738	3.3473	2.9555	359.993	31.6308	6.3295	-0.000487
91.	0.	0.82688	3.3736	3.3473	2.9538	359.993	31.6121	6.2595	-0.000501
92.	0.	0.82673	3.3734	3.3473	2.9519	359.993	31.5924	6.1795	-0.000517
93.	0.	0.82663	3.3732	3.3473	2.9502	359.994	31.5711	6.1095	-0.000532
94.	0.	0.82644	3.3731	3.3473	2.9484	359.994	31.5488	6.0295	-0.000549
95.	0.	0.82630	3.3729	3.3473	2.9467	359.994	31.5253	5.9594	-0.000566
96.	0.	0.82605	3.3728	3.3473	2.9449	359.995	31.4991	5.8794	-0.000584
97.	0.	0.82577	3.3727	3.3473	2.9431	359.995	31.4708	5.7994	-0.000603
98.	0.	0.82547	3.3726	3.3473	2.9413	359.995	31.4409	5.7194	-0.000623
99.	0.	0.82515	3.3725	3.3473	2.9396	359.995	31.4094	5.6394	-0.000644
100.	0.	0.82480	3.3724	3.3473	2.9378	359.995	31.3763	5.5593	-0.000666
101.	0.	0.82445	3.3723	3.3473	2.9361	359.995	31.3437	5.4793	-0.000689
102.	0.	0.82417	3.3723	3.3473	2.9345	359.995	31.3099	5.4093	-0.000710
103.	0.	0.82378	3.3722	3.3473	2.9328	359.995	31.2729	5.3293	-0.000735
104.	0.	0.82336	3.3722	3.3473	2.9311	359.994	31.2353	5.2492	-0.000760
105.	0.	0.82292	3.3722	3.3473	2.9294	359.994	31.1970	5.1692	-0.000787
106.	0.	0.82246	3.3722	3.3473	2.9278	359.993	31.1566	5.0892	-0.000815
107.	0.	0.82199	3.3723	3.3473	2.9261	359.993	31.1141	5.0092	-0.000844
108.	0.	0.82152	3.3723	3.3473	2.9245	359.994	31.0721	4.9291	-0.000875
109.	0.	0.82113	3.3724	3.3473	2.9230	359.994	31.0287	4.8591	-0.000903
110.	0.	0.82062	3.3725	3.3473	2.9214	359.994	30.9818	4.7791	-0.000937
111.	0.	0.82009	3.3726	3.3473	2.9199	359.995	30.9321	4.6990	-0.000972
112.	0.	0.81954	3.3727	3.3473	2.9184	359.995	30.8802	4.6190	-0.001008
113.	0.	0.81897	3.3728	3.3473	2.9170	359.995	30.8265	4.5390	-0.001047
114.	0.	0.81839	3.3730	3.3473	2.9157	359.996	30.7708	4.4589	-0.001087
115.	0.	0.81782	3.3732	3.3473	2.9144	359.996	30.7166	4.3789	-0.001130
116.	0.	0.81734	3.3734	3.3473	2.9132	359.996	30.6619	4.3088	-0.001170
117.	0.	0.81675	3.3736	3.3473	2.9120	359.996	30.6058	4.2288	-0.001216
118.	0.	0.81614	3.3738	3.3473	2.9109	359.996	30.5496	4.1487	-0.001265
119.	0.	0.81555	3.3741	3.3473	2.9099	359.997	30.4945	4.0687	-0.001317
120.	0.	0.81507	3.3743	3.3473	2.9091	359.997	30.4424	3.9986	-0.001365
121.	0.	0.81460	3.3746	3.3473	2.9083	359.997	30.3900	3.9286	-0.001416
122.	0.	0.81412	3.3749	3.3473	2.9075	359.998	30.3335	3.8585	-0.001469
123.	0.	0.81354	3.3752	3.3473	2.9069	359.999	30.2760	3.7785	-0.001532
124.	0.	0.81309	3.3755	3.3473	2.9064	359.999	30.2213	3.7084	-0.001591
125.	0.	0.81264	3.3758	3.3473	2.9059	360.000	30.1634	3.6383	-0.001653
126.	0.	0.81212	3.3762	3.3473	2.9056	0.000	30.1055	3.5583	-0.001728

127.	0.	0.81171	3.3766	3.3473	2.9054	0.001	30.0501	3.4882	-0.001797
128.	0.	0.81135	3.3769	3.3473	2.9053	0.001	30.0019	3.4181	-0.001870
129.	0.	0.81220	3.3771	3.3473	2.9060	0.001	30.1788	3.3781	-0.001911
130.	0.	0.81818	3.3749	3.3473	2.9064	0.000	30.6812	3.7484	-0.001602
131.	0.	0.82444	3.3732	3.3473	2.9085	0.000	31.1074	4.1286	-0.001360
132.	0.	0.82788	3.3725	3.3473	2.9099	360.000	31.2865	4.3287	-0.001257
133.	0.	0.82881	3.3724	3.3473	2.9099	359.999	31.3558	4.3387	-0.001256
134.	0.	0.82972	3.3723	3.3473	2.9098	359.999	31.4012	4.3587	-0.001251
135.	0.	0.83024	3.3722	3.3473	2.9094	359.998	31.4062	4.3587	-0.001256
136.	0.	0.83048	3.3723	3.3473	2.9088	359.997	31.3965	4.3387	-0.001271
137.	0.	0.83076	3.3722	3.3473	2.9082	359.997	31.3741	4.3287	-0.001282
138.	0.	0.83073	3.3723	3.3473	2.9074	359.996	31.3309	4.2987	-0.001302
139.	0.	0.83051	3.3723	3.3473	2.9065	359.996	31.2695	4.2587	-0.001328
140.	0.	0.83015	3.3724	3.3473	2.9055	359.995	31.2021	4.2086	-0.001360
141.	0.	0.82991	3.3725	3.3473	2.9046	359.995	31.1379	4.1686	-0.001387
142.	0.	0.82970	3.3726	3.3473	2.9038	359.994	31.0808	4.1286	-0.001415
143.	0.	0.82959	3.3727	3.3473	2.9031	359.993	31.0257	4.0986	-0.001438
144.	0.	0.82938	3.3728	3.3473	2.9024	359.992	30.9715	4.0585	-0.001468
145.	0.	0.82927	3.3728	3.3473	2.9018	359.992	30.9171	4.0285	-0.001492
146.	0.	0.82905	3.3730	3.3473	2.9012	359.991	30.8628	3.9885	-0.001522
147.	0.	0.82899	3.3730	3.3473	2.9007	359.992	30.8203	3.9585	-0.001547
148.	0.	0.82905	3.3731	3.3473	2.9002	359.994	30.7820	3.9384	-0.001566
149.	0.	0.82901	3.3732	3.3473	2.8998	359.995	30.7452	3.9084	-0.001592
150.	0.	0.82910	3.3732	3.3473	2.8994	359.997	30.7138	3.8884	-0.001611
151.	0.	0.82917	3.3732	3.3473	2.8990	359.998	30.6785	3.8684	-0.001631
152.	0.	0.82913	3.3733	3.3473	2.8986	359.999	30.6429	3.8383	-0.001658
153.	0.	0.82918	3.3734	3.3473	2.8982	0.000	30.6066	3.8183	-0.001678
154.	0.	0.82911	3.3735	3.3473	2.8979	0.001	30.5639	3.7883	-0.001706
155.	0.	0.82905	3.3736	3.3473	2.8975	0.003	30.5247	3.7583	-0.001734
156.	0.	0.82909	3.3736	3.3473	2.8972	0.004	30.4878	3.7382	-0.001755
157.	0.	0.82901	3.3737	3.3473	2.8969	0.005	30.4468	3.7082	-0.001784
158.	0.	0.82892	3.3738	3.3473	2.8966	0.006	30.4035	3.6782	-0.001814
159.	0.	0.82874	3.3739	3.3473	2.8962	0.008	30.3416	3.6482	-0.001845
160.	0.	0.82811	3.3742	3.3473	2.8959	0.009	30.2438	3.5881	-0.001901
161.	0.	0.82720	3.3747	3.3473	2.8955	0.010	30.1225	3.5080	-0.001978
162.	0.	0.82625	3.3751	3.3473	2.8952	0.011	29.9895	3.4279	-0.002059
163.	0.	0.82533	3.3756	3.3473	2.8951	0.012	29.8550	3.3479	-0.002146
164.	0.	0.82451	3.3760	3.3473	2.8951	0.013	29.7168	3.2778	-0.002228
165.	0.	0.82372	3.3765	3.3473	2.8954	0.014	29.5956	3.1977	-0.002325
166.	0.	0.82336	3.3767	3.3473	2.8955	0.014	29.4984	3.1576	-0.002380
167.	0.	0.82296	3.3770	3.3473	2.8958	0.015	29.4074	3.1075	-0.002450
168.	0.	0.82269	3.3773	3.3473	2.8960	0.015	29.3253	3.0675	-0.002509
169.	0.	0.82241	3.3775	3.3473	2.8963	0.016	29.2377	3.0274	-0.002571
170.	0.	0.82194	3.3778	3.3473	2.8966	0.017	29.1184	2.9774	-0.002649
171.	0.	0.82119	3.3784	3.3473	2.8976	0.018	28.9730	2.8972	-0.002775
172.	0.	0.82051	3.3789	3.3473	2.8986	0.019	28.8218	2.8271	-0.002894
173.	0.	0.81986	3.3794	3.3473	2.8997	0.020	28.6658	2.7570	-0.003020
174.	0.	0.81922	3.3799	3.3473	2.9011	0.020	28.5023	2.6868	-0.003155
175.	0.	0.81870	3.3805	3.3473	2.9027	0.020	28.3552	2.6167	-0.003299
176.	0.	0.81844	3.3808	3.3473	2.9038	0.021	28.2475	2.5766	-0.003389
177.	0.	0.81826	3.3810	3.3473	2.9047	0.022	28.1517	2.5465	-0.003462
178.	0.	0.81755	3.3813	3.3473	2.9057	0.024	27.9207	2.5064	-0.003562
179.	0.	0.81628	3.3829	3.3473	2.9112	0.036	27.4455	2.3260	-0.004021
180.	0.	0.81531	3.3847	3.3473	2.9191	0.057	26.8783	2.1254	-0.004640
181.	0.	0.81405	3.3861	3.3473	2.9258	0.076	26.3123	1.9849	-0.005149
182.	0.	0.81228	3.3874	3.3473	2.9319	0.101	25.6839	1.8543	-0.005663
183.	0.	0.80990	3.3889	3.3473	2.9360	0.140	24.9273	1.7137	-0.006253
184.	0.	0.80623	3.3905	3.3473	2.9325	0.191	24.0531	1.5832	-0.006767
185.	0.	0.80040	3.3923	3.3473	2.9164	0.265	23.0450	1.4529	-0.007134
186.	0.	0.79278	3.3915	3.3473	2.8841	0.472	21.9219	1.3227	-0.007320
187.	0.	0.78059	3.3883	3.3473	2.8331	0.786	20.7560	1.1930	-0.007037
188.	0.	0.75929	3.3877	3.3473	2.7714	1.216	19.6437	1.0742	-0.005798
189.	0.	0.73014	3.3920	3.3473	2.6929	1.944	18.6185	0.9464	-0.003646
190.	0.	0.69009	3.3970	3.3473	2.6003	2.621	17.6990	0.8300	-0.000012
191.	0.	0.63666	3.4007	3.3473	2.5088	3.373	16.4367	0.7052	0.005196
192.	0.	0.53624	3.4201	3.3473	2.5182	3.184	15.9433	0.4249	0.014912
193.	0.	0.13357	4.5094	4.6483	3.1129	0.394	22.9894	0.0887	0.088748

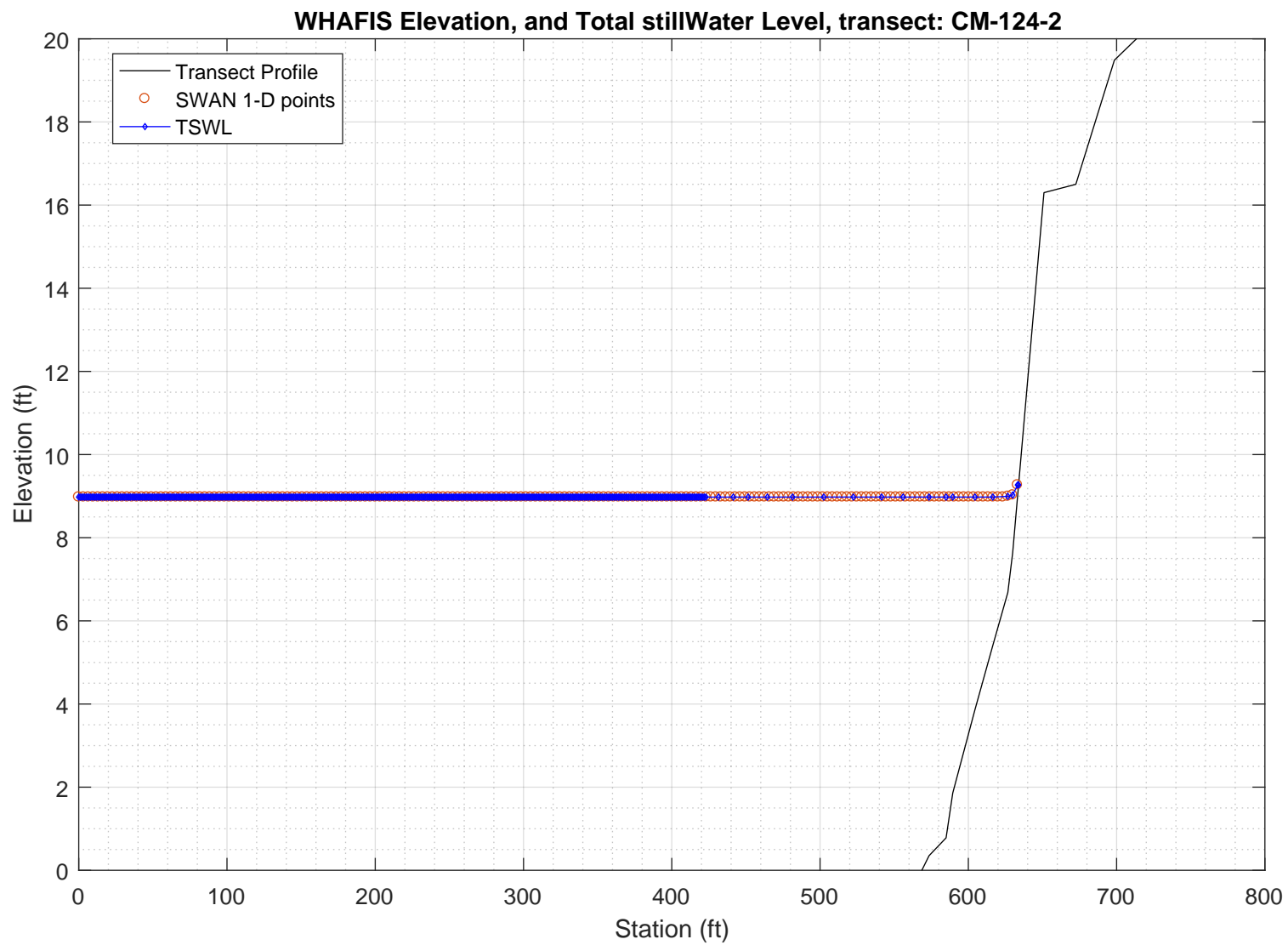
194.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
195.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
196.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
197.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000
198.	0.	-9.00000	-9.0000	-9.0000	-9.0000	-999.000	-9.0000	-99.0000	-9.000000

PART 3: WHAFIS

WHAFIS input: CM-124-2.dat

WHAFIS output: CM-124-2.out

PART 3 COMPLETE



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-124-2.dat

Output file: C:\FEMA-TransectAnalysis\LOMR-TransectAnalysis-Harpswell\3_whafis\whafis4\CM-124-2.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	-34.913	1.000	1.000	8.977	4.106	3.481	56.140	0.058	0.000
OF	1.000	-34.855	0.000	8.977	0.000	0.000	0.000	0.000	0.058	0.000
OF	2.000	-34.798	0.000	8.977	0.000	0.000	0.000	0.000	0.058	0.000
OF	3.000	-34.740	0.000	8.977	0.000	0.000	0.000	0.000	0.067	0.000
OF	4.000	-34.665	0.000	8.977	0.000	0.000	0.000	0.000	0.077	0.000
OF	5.000	-34.586	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	6.000	-34.507	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	7.000	-34.427	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	8.000	-34.348	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	9.000	-34.269	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	10.000	-34.190	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	11.000	-34.110	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	12.000	-34.031	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	13.000	-33.952	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	14.000	-33.873	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	15.000	-33.793	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	16.000	-33.714	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	17.000	-33.635	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	18.000	-33.556	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	19.000	-33.476	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	20.000	-33.397	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	21.000	-33.318	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	22.000	-33.239	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	23.000	-33.159	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	24.000	-33.080	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	25.000	-33.001	0.000	8.977	0.000	0.000	0.000	0.000	0.081	0.000
OF	26.000	-32.918	0.000	8.977	0.000	0.000	0.000	0.000	0.086	0.000
OF	27.000	-32.828	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	28.000	-32.738	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	29.000	-32.648	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	30.000	-32.559	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	31.000	-32.469	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	32.000	-32.379	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	33.000	-32.289	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	34.000	-32.199	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	35.000	-32.109	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	36.000	-32.019	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	37.000	-31.929	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	38.000	-31.839	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	39.000	-31.750	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	40.000	-31.660	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	41.000	-31.570	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	42.000	-31.480	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	43.000	-31.390	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	44.000	-31.300	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	45.000	-31.210	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	46.000	-31.120	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	47.000	-31.030	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	48.000	-30.941	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	49.000	-30.851	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	50.000	-30.761	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	51.000	-30.671	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	52.000	-30.581	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	53.000	-30.491	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	54.000	-30.401	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	55.000	-30.312	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	56.000	-30.222	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	57.000	-30.132	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	58.000	-30.042	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	59.000	-29.952	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	60.000	-29.862	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	61.000	-29.772	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	62.000	-29.683	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	63.000	-29.593	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	64.000	-29.503	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	65.000	-29.413	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	66.000	-29.323	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	67.000	-29.233	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	68.000	-29.143	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	69.000	-29.053	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	70.000	-28.963	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	71.000	-28.874	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	72.000	-28.784	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	73.000	-28.694	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	74.000	-28.604	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	75.000	-28.514	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	76.000	-28.424	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	77.000	-28.334	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	78.000	-28.244	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	79.000	-28.154	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	80.000	-28.065	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	81.000	-27.975	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	82.000	-27.885	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	83.000	-27.795	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	84.000	-27.705	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	85.000	-27.615	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	86.000	-27.525	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	87.000	-27.435	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	88.000	-27.345	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	89.000	-27.256	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	90.000	-27.166	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	91.000	-27.076	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	92.000	-26.986	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000

OF	93.000	-26.896	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	94.000	-26.806	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	95.000	-26.716	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	96.000	-26.627	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	97.000	-26.537	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	98.000	-26.447	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	99.000	-26.357	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	100.000	-26.267	0.000	8.977	0.000	0.000	0.000	0.000	0.090	0.000
OF	101.000	-26.177	0.000	8.977	0.000	0.000	0.000	0.000	0.083	0.000
OF	102.000	-26.100	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	103.000	-26.027	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	104.000	-25.954	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	105.000	-25.882	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	106.000	-25.809	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	107.000	-25.736	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	108.000	-25.663	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	109.000	-25.591	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	110.000	-25.518	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	111.000	-25.445	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	112.000	-25.373	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	113.000	-25.300	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	114.000	-25.227	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	115.000	-25.154	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	116.000	-25.082	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	117.000	-25.009	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	118.000	-24.936	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	119.000	-24.864	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	120.000	-24.791	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	121.000	-24.718	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	122.000	-24.646	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	123.000	-24.573	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	124.000	-24.500	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	125.000	-24.428	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	126.000	-24.355	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	127.000	-24.282	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	128.000	-24.209	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	129.000	-24.137	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	130.000	-24.064	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	131.000	-23.991	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	132.000	-23.919	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	133.000	-23.846	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	134.000	-23.773	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	135.000	-23.700	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	136.000	-23.628	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	137.000	-23.555	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	138.000	-23.482	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	139.000	-23.410	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	140.000	-23.337	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	141.000	-23.264	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	142.000	-23.192	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	143.000	-23.119	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	144.000	-23.046	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	145.000	-22.973	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	146.000	-22.901	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	147.000	-22.828	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	148.000	-22.755	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	149.000	-22.683	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	150.000	-22.610	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	151.000	-22.537	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	152.000	-22.465	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	153.000	-22.392	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	154.000	-22.319	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	155.000	-22.247	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	156.000	-22.174	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	157.000	-22.101	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	158.000	-22.029	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	159.000	-21.956	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	160.000	-21.883	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	161.000	-21.810	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	162.000	-21.738	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	163.000	-21.665	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	164.000	-21.592	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	165.000	-21.520	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	166.000	-21.447	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	167.000	-21.374	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	168.000	-21.301	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	169.000	-21.229	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	170.000	-21.156	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	171.000	-21.083	0.000	8.977	0.000	0.000	0.000	0.000	0.077	0.000
OF	172.000	-21.002	0.000	8.977	0.000	0.000	0.000	0.000	0.082	0.000
OF	173.000	-20.919	0.000	8.977	0.000	0.000	0.000	0.000	0.083	0.000
OF	174.000	-20.836	0.000	8.977	0.000	0.000	0.000	0.000	0.083	0.000
OF	175.000	-20.754	0.000	8.977	0.000	0.000	0.000	0.000	0.083	0.000
OF	176.000	-20.671	0.000	8.977	0.000	0.000	0.000	0.000	0.083	0.000
OF	177.000	-20.588	0.000	8.977	0.000	0.000	0.000	0.000	0.082	0.000
OF	178.000	-20.508	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	179.000	-20.437	0.000	8.977	0.000	0.000	0.000	0.000	0.071	0.000
OF	180.000	-20.366	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	181.000	-20.294	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	182.000	-20.223	0.000	8.977	0.000	0.000	0.000	0.000	0.071	0.000
OF	183.000	-20.152	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	184.000	-20.080	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	185.000	-20.009	0.000	8.977	0.000	0.000	0.000	0.000	0.071	0.000
OF	186.000	-19.938	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	187.000	-19.866	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	188.000	-19.795	0.000	8.977	0.000	0.000	0.000	0.000	0.071	0.000
OF	189.000	-19.724	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	190.000	-19.652	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	191.000	-19.581	0.000	8.977	0.000	0.000	0.000	0.000	0.071	0.000
OF	192.000	-19.510	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000
OF	193.000	-19.438	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000
OF	194.000	-19.364	0.000	8.977	0.000	0.000	0.000	0.000	0.074	0.000

OF	195.000	-19.290	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	196.000	-19.215	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	197.000	-19.141	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	198.000	-19.066	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	199.000	-18.992	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	200.000	-18.917	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	201.000	-18.843	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	202.000	-18.768	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	203.000	-18.694	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	204.000	-18.619	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	205.000	-18.545	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	206.000	-18.470	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	207.000	-18.396	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	208.000	-18.321	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	209.000	-18.247	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	210.000	-18.172	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	211.000	-18.098	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	212.000	-18.023	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	213.000	-17.949	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	214.000	-17.874	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	215.000	-17.800	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	216.000	-17.725	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	217.000	-17.651	0.000	8.977	0.000	0.000	0.000	0.000	0.074	0.000
OF	218.000	-17.577	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	219.000	-17.502	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	220.000	-17.428	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	221.000	-17.353	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	222.000	-17.279	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	223.000	-17.204	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	224.000	-17.130	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	225.000	-17.055	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	226.000	-16.981	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	227.000	-16.906	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	228.000	-16.832	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	229.000	-16.757	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	230.000	-16.683	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	231.000	-16.608	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	232.000	-16.534	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	233.000	-16.459	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	234.000	-16.385	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	235.000	-16.310	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	236.000	-16.236	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	237.000	-16.161	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	238.000	-16.087	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	239.000	-16.012	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	240.000	-15.938	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	241.000	-15.863	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	242.000	-15.789	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	243.000	-15.714	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	244.000	-15.640	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	245.000	-15.565	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	246.000	-15.491	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	247.000	-15.416	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	248.000	-15.342	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	249.000	-15.267	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	250.000	-15.193	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	251.000	-15.118	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	252.000	-15.044	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	253.000	-14.969	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	254.000	-14.895	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	255.000	-14.820	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	256.000	-14.746	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	257.000	-14.671	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	258.000	-14.597	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	259.000	-14.522	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	260.000	-14.448	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	261.000	-14.373	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	262.000	-14.299	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	263.000	-14.224	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	264.000	-14.150	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	265.000	-14.075	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	266.000	-14.001	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	267.000	-13.926	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	268.000	-13.852	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	269.000	-13.777	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	270.000	-13.703	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	271.000	-13.628	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	272.000	-13.554	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	273.000	-13.479	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	274.000	-13.404	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	275.000	-13.328	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	276.000	-13.253	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	277.000	-13.178	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	278.000	-13.102	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	279.000	-13.027	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	280.000	-12.952	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	281.000	-12.876	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	282.000	-12.801	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	283.000	-12.725	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	284.000	-12.650	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	285.000	-12.574	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	286.000	-12.499	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	287.000	-12.424	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	288.000	-12.348	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	289.000	-12.273	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	290.000	-12.197	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	291.000	-12.122	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	292.000	-12.047	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	293.000	-11.971	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	294.000	-11.896	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	295.000	-11.820	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	296.000	-11.745	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000

OF	297.000	-11.669	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	298.000	-11.594	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	299.000	-11.519	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	300.000	-11.443	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	301.000	-11.368	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	302.000	-11.292	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	303.000	-11.217	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	304.000	-11.142	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	305.000	-11.066	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	306.000	-10.991	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	307.000	-10.915	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	308.000	-10.840	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	309.000	-10.765	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
OF	310.000	-10.689	0.000	8.977	0.000	0.000	0.000	0.000	0.076	0.000
OF	311.000	-10.613	0.000	8.977	0.000	0.000	0.000	0.000	0.077	0.000
OF	312.000	-10.535	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	313.000	-10.456	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	314.000	-10.378	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	315.000	-10.299	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	316.000	-10.221	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	317.000	-10.142	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	318.000	-10.064	0.000	8.977	0.000	0.000	0.000	0.000	0.078	0.000
OF	319.000	-9.986	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	320.000	-9.907	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	321.000	-9.828	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	322.000	-9.750	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	323.000	-9.671	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	324.000	-9.593	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	325.000	-9.514	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	326.000	-9.436	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	327.000	-9.357	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	328.000	-9.278	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	329.000	-9.200	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	330.000	-9.121	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	331.000	-9.043	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	332.000	-8.964	0.000	8.977	0.000	0.000	0.000	0.000	0.079	0.000
OF	333.000	-8.886	0.000							

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	19.000	-33.476	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	20.000	-33.397	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	21.000	-33.318	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	22.000	-33.239	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	23.000	-33.159	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	24.000	-33.080	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	25.000	-33.001	0.000	8.977	0.000	0.000	0.000	0.000		0.081	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	26.000	-32.918	0.000	8.977	0.000	0.000	0.000	0.000		0.086	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	27.000	-32.828	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	28.000	-32.738	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	29.000	-32.648	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	30.000	-32.559	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	31.000	-32.469	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	32.000	-32.379	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	33.000	-32.289	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	34.000	-32.199	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	35.000	-32.109	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	36.000	-32.019	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	37.000	-31.929	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	38.000	-31.839	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	39.000	-31.750	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	40.000	-31.660	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	41.000	-31.570	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	42.000	-31.480	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	43.000	-31.390	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	44.000	-31.300	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	45.000	-31.210	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	46.000	-31.120	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	47.000	-31.030	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	48.000	-30.941	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	49.000	-30.851	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	50.000	-30.761	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	51.000	-30.671	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	52.000	-30.581	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000

[illegible]

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	87.000	-27.435	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	88.000	-27.345	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	89.000	-27.256	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	90.000	-27.166	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	91.000	-27.076	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	92.000	-26.986	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	93.000	-26.896	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	94.000	-26.806	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	95.000	-26.716	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	96.000	-26.627	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	97.000	-26.537	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	98.000	-26.447	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	99.000	-26.357	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	100.000	-26.267	0.000	8.977	0.000	0.000	0.000	0.000		0.090	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	101.000	-26.177	0.000	8.977	0.000	0.000	0.000	0.000		0.083	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	102.000	-26.100	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	103.000	-26.027	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	104.000	-25.954	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	105.000	-25.882	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	106.000	-25.809	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	107.000	-25.736	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	108.000	-25.663	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	109.000	-25.591	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	110.000	-25.518	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	111.000	-25.445	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	112.000	-25.373	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	113.000	-25.300	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	114.000	-25.227	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	115.000	-25.154	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	116.000	-25.082	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	117.000	-25.009	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	118.000	-24.936	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	119.000	-24.864	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	120.000	-24.791	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	121.000	-24.718	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	122.000	-24.646	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	123.000	-24.573	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	124.000	-24.500	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	125.000	-24.428	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	126.000	-24.355	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	127.000	-24.282	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	128.000	-24.209	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	129.000	-24.137	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	130.000	-24.064	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	131.000	-23.991	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	132.000	-23.919	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	133.000	-23.846	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	134.000	-23.773	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	135.000	-23.700	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	136.000	-23.628	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	137.000	-23.555	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	138.000	-23.482	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	139.000	-23.410	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	140.000	-23.337	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	141.000	-23.264	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	142.000	-23.192	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	143.000	-23.119	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	144.000	-23.046	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	145.000	-22.973	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	146.000	-22.901	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	147.000	-22.828	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	148.000	-22.755	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	149.000	-22.683	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	150.000	-22.610	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	151.000	-22.537	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	152.000	-22.465	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	153.000	-22.392	0.000	8.977	0.000	0.000	0.000	0.000	0.073	0.000	
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	154.000	-22.319	0.000	8.977	0.000	0.000	0.000	0.000	0.072	0.000	

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	155.000	-22.247	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	156.000	-22.174	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	157.000	-22.101	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	158.000	-22.029	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	159.000	-21.956	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	160.000	-21.883	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	161.000	-21.810	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	162.000	-21.738	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	163.000	-21.665	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	164.000	-21.592	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	165.000	-21.520	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	166.000	-21.447	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	167.000	-21.374	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	168.000	-21.301	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	169.000	-21.229	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	170.000	-21.156	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	171.000	-21.083	0.000	8.977	0.000	0.000	0.000	0.000		0.077	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	172.000	-21.002	0.000	8.977	0.000	0.000	0.000	0.000		0.082	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	173.000	-20.919	0.000	8.977	0.000	0.000	0.000	0.000		0.083	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	174.000	-20.836	0.000	8.977	0.000	0.000	0.000	0.000		0.083	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	175.000	-20.754	0.000	8.977	0.000	0.000	0.000	0.000		0.083	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	176.000	-20.671	0.000	8.977	0.000	0.000	0.000	0.000		0.083	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	177.000	-20.588	0.000	8.977	0.000	0.000	0.000	0.000		0.082	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	178.000	-20.508	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	179.000	-20.437	0.000	8.977	0.000	0.000	0.000	0.000		0.071	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	180.000	-20.366	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	181.000	-20.294	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	182.000	-20.223	0.000	8.977	0.000	0.000	0.000	0.000		0.071	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	183.000	-20.152	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	184.000	-20.080	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	185.000	-20.009	0.000	8.977	0.000	0.000	0.000	0.000		0.071	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	186.000	-19.938	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	187.000	-19.866	0.000	8.977	0.000	0.000	0.000	0.000		0.072	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	188.000	-19.795	0.000	8.977	0.000	0.000	0.000	0.000		0.071	0.000

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 189.000	ELEVATION -19.724	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.072	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 190.000	ELEVATION -19.652	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.072	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 191.000	ELEVATION -19.581	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.071	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 192.000	ELEVATION -19.510	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.072	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 193.000	ELEVATION -19.438	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.073	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 194.000	ELEVATION -19.364	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.074	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 195.000	ELEVATION -19.290	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 196.000	ELEVATION -19.215	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 197.000	ELEVATION -19.141	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 198.000	ELEVATION -19.066	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 199.000	ELEVATION -18.992	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 200.000	ELEVATION -18.917	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 201.000	ELEVATION -18.843	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 202.000	ELEVATION -18.768	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 203.000	ELEVATION -18.694	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 204.000	ELEVATION -18.619	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 205.000	ELEVATION -18.545	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 206.000	ELEVATION -18.470	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 207.000	ELEVATION -18.396	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 208.000	ELEVATION -18.321	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 209.000	ELEVATION -18.247	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 210.000	ELEVATION -18.172	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 211.000	ELEVATION -18.098	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 212.000	ELEVATION -18.023	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 213.000	ELEVATION -17.949	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 214.000	ELEVATION -17.874	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 215.000	ELEVATION -17.800	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 216.000	ELEVATION -17.725	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 217.000	ELEVATION -17.651	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.074	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 218.000	ELEVATION -17.577	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 219.000	ELEVATION -17.502	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 220.000	ELEVATION -17.428	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 221.000	ELEVATION -17.353	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION 222.000	ELEVATION -17.279	10-YEAR 0.000	100-YEAR 8.977	0.000	0.000	0.000	0.000	0.000	SLOPE 0.075	A-ZONES 0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	223.000	-17.204	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	224.000	-17.130	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	225.000	-17.055	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	226.000	-16.981	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	227.000	-16.906	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	228.000	-16.832	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	229.000	-16.757	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	230.000	-16.683	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	231.000	-16.608	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	232.000	-16.534	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	233.000	-16.459	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	234.000	-16.385	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	235.000	-16.310	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	236.000	-16.236	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	237.000	-16.161	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	238.000	-16.087	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	239.000	-16.012	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	240.000	-15.938	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	241.000	-15.863	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	242.000	-15.789	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	243.000	-15.714	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	244.000	-15.640	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	245.000	-15.565	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	246.000	-15.491	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	247.000	-15.416	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	248.000	-15.342	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	249.000	-15.267	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	250.000	-15.193	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	251.000	-15.118	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	252.000	-15.044	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	253.000	-14.969	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	254.000	-14.895	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	255.000	-14.820	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	256.000	-14.746	0.000	8.977	0.000	0.000	0.000	0.000	0.075	0.000

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	257.000	-14.671	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	258.000	-14.597	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	259.000	-14.522	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	260.000	-14.448	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	261.000	-14.373	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	262.000	-14.299	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	263.000	-14.224	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	264.000	-14.150	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	265.000	-14.075	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	266.000	-14.001	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	267.000	-13.926	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	268.000	-13.852	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	269.000	-13.777	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	270.000	-13.703	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	271.000	-13.628	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	272.000	-13.554	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	273.000	-13.479	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	274.000	-13.404	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	275.000	-13.328	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	276.000	-13.253	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	277.000	-13.178	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	278.000	-13.102	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	279.000	-13.027	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	280.000	-12.952	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	281.000	-12.876	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	282.000	-12.801	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	283.000	-12.725	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	284.000	-12.650	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	285.000	-12.574	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	286.000	-12.499	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	287.000	-12.424	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	288.000	-12.348	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	289.000	-12.273	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	290.000	-12.197	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	291.000	-12.122	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	292.000	-12.047	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	293.000	-11.971	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	294.000	-11.896	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	295.000	-11.820	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	296.000	-11.745	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	297.000	-11.669	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	298.000	-11.594	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	299.000	-11.519	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	300.000	-11.443	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	301.000	-11.368	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	302.000	-11.292	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	303.000	-11.217	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	304.000	-11.142	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	305.000	-11.066	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	306.000	-10.991	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	307.000	-10.915	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	308.000	-10.840	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	309.000	-10.765	0.000	8.977	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	310.000	-10.689	0.000	8.977	0.000	0.000	0.000	0.000		0.076	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	311.000	-10.613	0.000	8.977	0.000	0.000	0.000	0.000		0.077	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	312.000	-10.535	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	313.000	-10.456	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	314.000	-10.378	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	315.000	-10.299	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	316.000	-10.221	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	317.000	-10.142	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	318.000	-10.064	0.000	8.977	0.000	0.000	0.000	0.000		0.078	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	319.000	-9.986	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	320.000	-9.907	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	321.000	-9.828	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	322.000	-9.750	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	323.000	-9.671	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	324.000	-9.593	0.000	8.977	0.000	0.000	0.000	0.000		0.079	0.000

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	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	359.000	-6.843	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	360.000	-6.765	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	361.000	-6.686	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	362.000	-6.607	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	363.000	-6.529	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	364.000	-6.450	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	365.000	-6.372	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	366.000	-6.293	0.000	8.976	0.000	0.000	0.000	0.000		0.078	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	367.000	-6.215	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	368.000	-6.136	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	369.000	-6.057	0.000	8.976	0.000	0.000	0.000	0.000		0.078	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	370.000	-5.979	0.000	8.976	0.000	0.000	0.000	0.000		0.078	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	371.000	-5.901	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	372.000	-5.822	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	373.000	-5.744	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	374.000	-5.665	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	375.000	-5.586	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	376.000	-5.508	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	377.000	-5.429	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	378.000	-5.351	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	379.000	-5.272	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	380.000	-5.194	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	381.000	-5.115	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	382.000	-5.036	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	383.000	-4.958	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	384.000	-4.879	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	385.000	-4.801	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	386.000	-4.722	0.000	8.976	0.000	0.000	0.000	0.000		0.079	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	387.000	-4.644	0.000	8.976	0.000	0.000	0.000	0.000		0.077	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	388.000	-4.568	0.000	8.976	0.000	0.000	0.000	0.000		0.075	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	389.000	-4.495	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	390.000	-4.422	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	391.000	-4.349	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	392.000	-4.276	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000

	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	393.000	-4.203	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	394.000	-4.130	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	395.000	-4.057	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	396.000	-3.984	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	397.000	-3.911	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	398.000	-3.838	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	399.000	-3.765	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	400.000	-3.692	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	401.000	-3.619	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	402.000	-3.546	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	403.000	-3.473	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	404.000	-3.400	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	405.000	-3.327	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	406.000	-3.254	0.000	8.976	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	407.000	-3.181	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	408.000	-3.108	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	409.000	-3.035	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	410.000	-2.962	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	411.000	-2.889	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	412.000	-2.816	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	413.000	-2.743	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	414.000	-2.670	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	415.000	-2.596	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	416.000	-2.523	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	417.000	-2.451	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	418.000	-2.378	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	419.000	-2.305	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	420.000	-2.231	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	421.000	-2.158	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	422.000	-2.086	0.000	8.977	0.000	0.000	0.000	0.000		0.073	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	423.000	-2.013	0.000	8.977	0.000	0.000	0.000	0.000		-0.329	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	431.500	-5.213	0.000	8.977	0.000	0.000	0.000	0.000		-0.180	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	441.500	-5.345	0.000	8.977	0.000	0.000	0.000	0.000		0.002	0.000
	END	END	NEW SURGE	NEW SURGE						BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE	A-ZONES
	451.500	-5.180	0.000	8.977	0.000	0.000	0.000	0.000		0.032	0.000

	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	464.500	-4.619	0.000	8.977	0.000	0.000	0.000	0.000	0.038	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	481.500	-4.029	0.000	8.977	0.000	0.000	0.000	0.000	0.028	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	502.500	-3.540	0.000	8.977	0.000	0.000	0.000	0.000	0.026	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	522.500	-2.979	0.000	8.977	0.000	0.000	0.000	0.000	0.052	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	541.500	-1.503	0.000	8.977	0.000	0.000	0.000	0.000	0.062	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
OF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	556.000	-0.912	0.000	8.977	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	573.500	0.351	0.000	8.977	0.000	0.000	0.000	0.000	0.058	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	585.000	0.781	0.000	8.977	0.000	0.000	0.000	0.000	0.094	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	589.500	1.860	0.000	8.977	0.000	0.000	0.000	0.000	0.158	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	604.500	3.868	0.000	8.977	0.000	0.000	0.000	0.000	0.131	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	616.500	5.407	0.000	8.977	0.000	0.000	0.000	0.000	0.127	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	626.600	6.682	0.000	8.995	0.000	0.000	0.000	0.000	0.167	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	629.900	7.642	0.000	9.026	0.000	0.000	0.000	0.000	0.350	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	633.200	8.990	0.000	9.269	0.000	0.000	0.000	0.000	0.407	0.000
	END	END	NEW SURGE	NEW SURGE					BOTTOM	AVERAGE
IF	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	A-ZONES
	633.900	9.269	0.000	9.269	0.000	0.000	0.000	0.000	0.399	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	SPECTRAL PEAK	WAVE CREST		
		WAVE HEIGHT	WAVE PERIOD	ELEVATION		
IE	0.00	4.11	3.48	11.85		
OF	1.00	4.11	3.48	11.85		
OF	2.00	4.11	3.48	11.85		
OF	3.00	4.11	3.48	11.85		
OF	4.00	4.11	3.48	11.85		
OF	5.00	4.11	3.48	11.85		
OF	6.00	4.11	3.48	11.85		
OF	7.00	4.11	3.48	11.85		
OF	8.00	4.11	3.48	11.85		
OF	9.00	4.11	3.48	11.85		
OF	10.00	4.11	3.48	11.85		
OF	11.00	4.11	3.48	11.85		
OF	12.00	4.11	3.48	11.85		
OF	13.00	4.11	3.48	11.85		
OF	14.00	4.11	3.48	11.85		
OF	15.00	4.11	3.48	11.85		
OF	16.00	4.11	3.48	11.86		
OF	17.00	4.11	3.48	11.86		
OF	18.00	4.11	3.48	11.86		
OF	19.00	4.11	3.48	11.86		
OF	20.00	4.11	3.48	11.86		
OF	21.00	4.11	3.48	11.86		
OF	22.00	4.11	3.48	11.86		
OF	23.00	4.11	3.48	11.86		
OF	24.00	4.11	3.48	11.86		
OF	25.00	4.11	3.48	11.86		
OF	26.00	4.12	3.48	11.86		
OF	27.00	4.12	3.48	11.86		
OF	28.00	4.12	3.48	11.86		
OF	29.00	4.12	3.48	11.86		
OF	30.00	4.12	3.48	11.86		
OF	31.00	4.12	3.48	11.86		
OF	32.00	4.12	3.48	11.86		
OF	33.00	4.12	3.48	11.86		
OF	34.00	4.12	3.48	11.86		
OF	35.00	4.12	3.48	11.86		
OF	36.00	4.12	3.48	11.86		
OF	37.00	4.12	3.48	11.86		
OF	38.00	4.12	3.48	11.86		
OF	39.00	4.12	3.48	11.86		
OF	40.00	4.12	3.48	11.86		
OF	41.00	4.12	3.48	11.86		
OF	42.00	4.12	3.48	11.86		
OF	43.00	4.12	3.48	11.86		
OF	44.00	4.12	3.48	11.86		
OF	45.00	4.12	3.48	11.86		
OF	46.00	4.12	3.48	11.86		
OF	47.00	4.12	3.48	11.86		
OF	48.00	4.12	3.48	11.86		

OF	49.00	4.12	3.48	11.86
OF	50.00	4.12	3.48	11.86
OF	51.00	4.12	3.48	11.86
OF	52.00	4.12	3.48	11.86
OF	53.00	4.12	3.48	11.86
OF	54.00	4.12	3.49	11.86
OF	55.00	4.12	3.49	11.86
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OF	57.00	4.12	3.49	11.86
OF	58.00	4.13	3.49	11.86
OF	59.00	4.13	3.49	11.86
OF	60.00	4.13	3.49	11.86
OF	61.00	4.13	3.49	11.87
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OF	66.00	4.13	3.49	11.87
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OF	70.00	4.13	3.49	11.87
OF	71.00	4.13	3.49	11.87
OF	72.00	4.13	3.49	11.87
OF	73.00	4.13	3.49	11.87
OF	74.00	4.13	3.49	11.87
OF	75.00	4.13	3.49	11.87
OF	76.00	4.13	3.49	11.87
OF	77.00	4.13	3.49	11.87
OF	78.00	4.13	3.49	11.87
OF	79.00	4.13	3.49	11.87
OF	80.00	4.13	3.49	11.87
OF	81.00	4.13	3.49	11.87
OF	82.00	4.13	3.49	11.87
OF	83.00	4.13	3.49	11.87
OF	84.00	4.13	3.49	11.87
OF	85.00	4.13	3.49	11.87
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OF	384.00	3.90	3.51	11.71
OF	385.00	3.90	3.51	11.71
OF	386.00	3.90	3.51	11.71
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OF	420.00	3.87	3.51	11.69
OF	421.00	3.87	3.51	11.69
OF	422.00	3.87	3.51	11.69
OF	423.00	3.87	3.51	11.69
OF	431.50	3.93	3.51	11.72
OF	441.50	3.93	3.51	11.73
OF	451.50	3.93	3.51	11.73
OF	464.50	3.92	3.51	11.72
OF	481.50	3.92	3.52	11.72
OF	502.50	3.91	3.52	11.72
OF	522.50	3.91	3.52	11.72
OF	541.50	3.91	3.52	11.71
OF	556.00	3.92	3.52	11.72
IF	573.50	3.94	3.52	11.74
IF	585.00	3.96	3.52	11.75
IF	589.50	4.02	3.52	11.79
IF	604.50	3.51	3.52	11.44
IF	616.50	2.55	3.52	10.76
IF	626.60	1.71	3.53	10.19
IF	629.90	1.04	3.53	9.76
IF	633.20	0.22	3.53	9.42
IF	633.90	0.01	3.53	9.27

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE
NO AREAS ABOVE 100-YEAR SURGE IN THIS TRANSECT

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
354.00	1.00	8.98
407.00	1.00	8.98
626.60	1.00	8.99
629.90	1.00	9.03
633.20	1.00	9.27

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
610.92	WINDWARD

PART6 NUMBERED A ZONES AND V ZONES

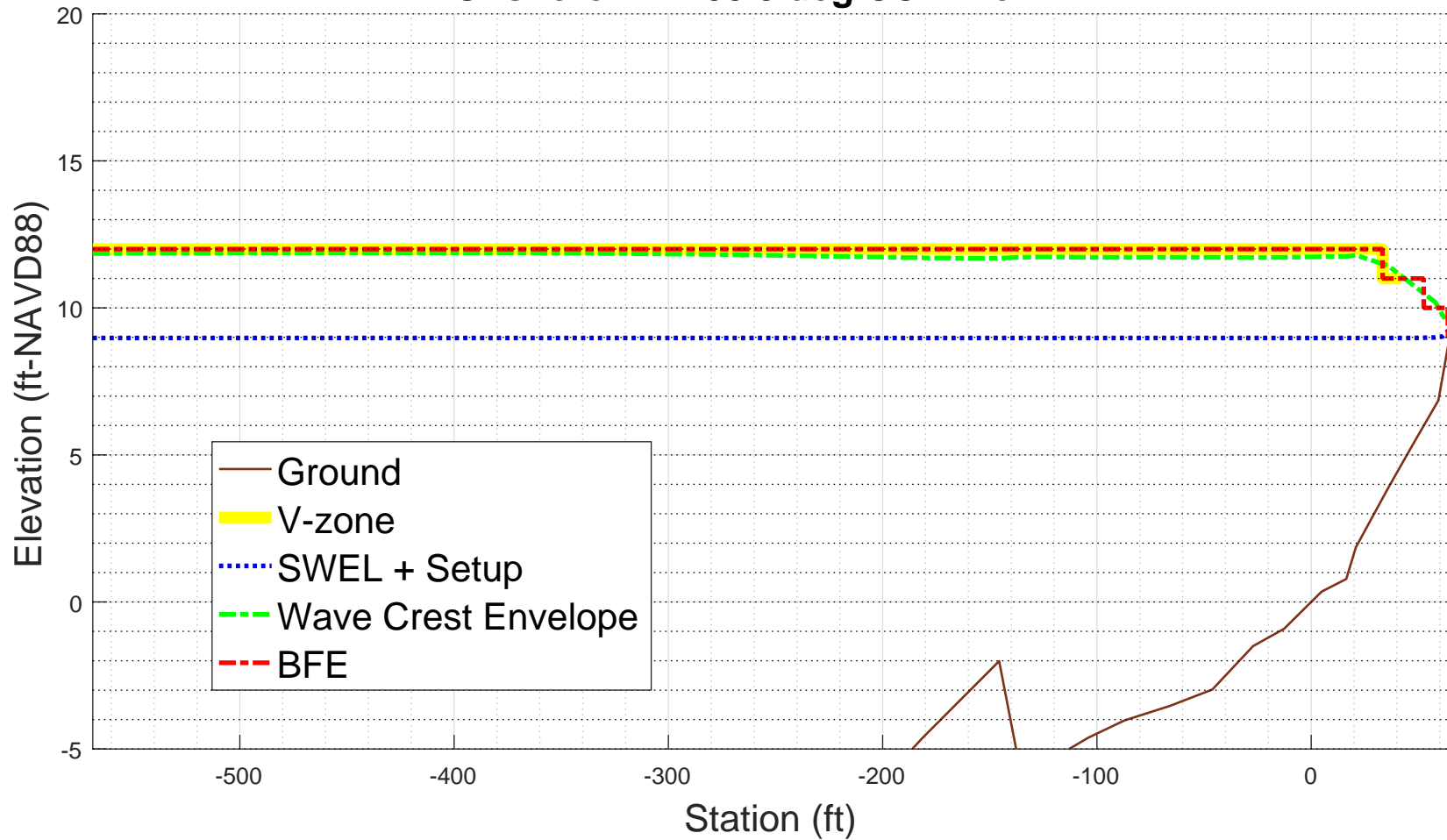
STATION OF GUTTER	ELEVATION	ZONE DESIGNATION	FHF
0.00	11.85		

		V22	EL=12	120
353.00	11.74			
		V22	EL=12	120
354.00	11.74			
		V22	EL=12	120
406.00	11.69			
		V22	EL=12	120
407.00	11.69			
		V22	EL=12	120
601.83	11.50			
		V22	EL=11	120
610.92	11.08			
		A19	EL=11	95
616.50	10.76			
		A19	EL=11	95
621.14	10.50			
		A19	EL=10	95
626.60	10.19			
		A19	EL=10	95
629.90	9.76			
		A19	EL=10	95
632.42	9.50			
		A19	EL= 9	95
633.20	9.42			
		A19	EL= 9	95
633.90	9.27			

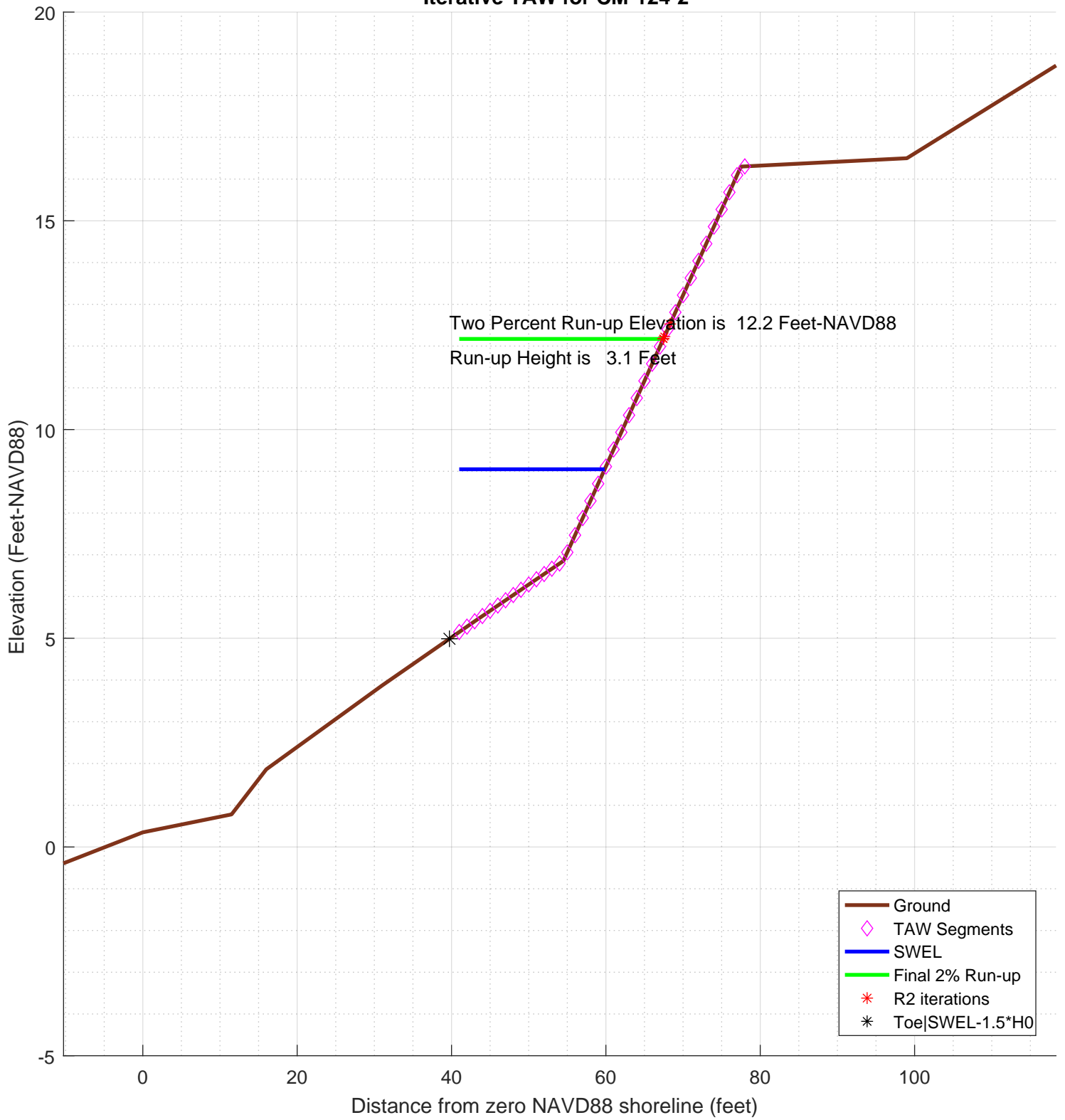
ZONE TERMINATED AT END OF TRANSECT
 PART 7 POSTSCRIPT NOTES
 PS# 1 START(418195.319,4848206.4682)
 PS# 2 END(418393.3087,4848076.2337)

-1.000000e+00

CM-124-2
100-year WHAFIS Output
Zero Station: -70.01481346, 43.78155261
Onshore Dir: -33.3 deg CCW from E



Iterative TAW for CM-124-2




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diary on          % begin recording

% FEMA appeal for The Town of Harpswell, Cumberland county, Maine
% TRANSECT ID: CM-124-2
% 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-124-2sta_ele_include.csv'; % file with station, elevation, include
% third column is 0 for excluded points
imgname='logfiles/CM-124-2-runup';
SWEL=8.9775; % 100-yr still water level including wave setup.
H0=2.6451; % significant wave height at toe of structure
Tp=3.3905; % peak period, 1/fma,
T0=Tp/1.1;

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

setupAtToe=-0.022201;
maxSetup=0.29117; % only used in case of berm/shallow foreshore weighted average

plotTitle='Iterative TAW for CM-124-2'

plotTitle =

Iterative TAW for CM-124-2

% END CONFIG
%-----

SWEL=SWEL+setupAtToe

SWEL =

8.955299

SWEL_fore=SWEL+maxSetup

SWEL_fore =

9.246469

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

L0 =

48.6119716563246

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

Ztoe =

    4.987649

% 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 =

    12.922949

% 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 =

    39.7309671985401

top_sta =

    69.2787557070676

% 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 =

    69.2787557070676

toe_sta

toe_sta =

    39.7309671985401

% 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')

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```

    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 29.3 ft landward of toe of slope

ans =

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

ans =

-!!-      setup is adjusted to 0.07 feet

ans =

-!!-      SWEL is adjusted to 9.05 feet

k =

    1
    2
    3
    4
    5
    6
    7
    8
    9
   10

% 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
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('!!! - - Iribarren number: %6.2f is outside the valid range (0.5-10), TAW NOT VALID - - !!!\n', Irb*gamma_berm)
    TAW_VALID=0;
else
    sprintf('!!! - - Iribarren number: %6.2f is in the valid range (0.5-10), TAW RECOMMENDED - - !!!\n', Irb*gamma_berm)
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 berm')
    % 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 =
    4.987649
toe_sta =
    39.7309671985401
top_sta =
    69.2787557070676
Z2 =
    12.922949
H0 =
    2.6451
Tp =
    3.3905
T0 =
    3.08227272727273
R2 =
    7.9353
Z2 =
    16.9838946011536
top_sta =
    81.2383500378758
Lslope =
    41.5073828393357
ans =
!----- End Berm Factor Calculation, Iter: 1 -----!
berm_width =
    0
rB =
    0
rdh_mean =
    1
gamma_berm =
    1
slope =

```

```

Irb = 0.289014743415357
gamma_berm = 1.2389978937578
gamma_perm = 1
gamma_beta = 1
gamma_rough = 0.6
gamma = 0.6
ans =
!!! - - Iribaren number: 1.24 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:3.5 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new = 3.48046427516304
R2del = 4.45483572483696
Z2 = 12.5290588763166
top_sta = 68.3196287981685
ans =
!----- STARTING ITERATION 2 -----!
Ztoe = 4.987649
toe_sta = 39.7309671985401
top_sta = 68.3196287981685
Z2 = 12.5290588763166
H0 = 2.6451
Tp = 3.3905
T0 = 3.08227272727273
R2 = 3.48046427516304
Z2 = 12.5290588763166
top_sta = 68.3196287981685
Lslope = 28.5886615996284
ans =
!----- End Berm Factor Calculation, Iter: 2 -----!
berm_width = 0
rB = 0
rdh_mean = 1
gamma_berm = 1
slope = 0.263790239009113
Irb = 1.13086116875514
gamma_berm = 1
gamma_perm = 1
gamma_beta = 1
gamma_rough = 0.6
gamma = 0.6
ans =
!!! - - Iribaren number: 1.13 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:3.8 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new = 3.17669781187763
R2del = 0.303766463285413
Z2 = 12.2252924130312
top_sta = 67.5799535229348
ans =
!----- STARTING ITERATION 3 -----!
Ztoe = 4.987649
toe_sta =

```

```

top_sta = 39.7309671985401
Z2 = 67.5799535229348
H0 = 12.2252924130312
Tp = 2.6451
T0 = 3.3905
R2 = 3.08227272727273
Z2 = 3.17669781187763
Z2 = 12.2252924130312
top_sta = 67.5799535229348
Lslope = 27.8489863243947
ans =
!----- End Berm Factor Calculation, Iter: 3 -----!
berm_width =
0
rB =
0
rdh_mean =
1
gamma_berm =
1
slope = 0.259888935587265
Irb = 1.11413639317636
gamma_berm =
1
gamma_perm =
1
gamma_beta =
1
gamma_rough = 0.6
gamma = 0.6
ans =
!!! - - Iribaren number: 1.11 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:3.8 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new = 3.12971630835343
R2del = 0.0469815035242021
Z2 = 12.178310909507
top_sta = 67.4655528325489
ans =
!----- STARTING ITERATION 4 -----!
Ztoe = 4.987649
toe_sta = 39.7309671985401
top_sta = 67.4655528325489
Z2 = 12.178310909507
H0 = 2.6451
Tp = 3.3905
T0 = 3.08227272727273
R2 = 3.12971630835343
Z2 = 12.178310909507
top_sta = 67.4655528325489
Lslope = 27.7345856340089
ans =
!----- End Berm Factor Calculation, Iter: 4 -----!
berm_width =
0
rB =
0
rdh_mean =
1
gamma_berm =
1
slope =

```

```

Irb = 0.259266967402955
gamma_berm = 1.11147003345631
gamma_perm = 1
gamma_beta = 1
gamma_rough = 0.6
gamma = 0.6
ans =
!!! - - Iribaren number: 1.11 is in the valid range (0.5-10), TAW RECOMMENDED - - !!!
ans =
!!! - - slope: 1:3.9 V:H is in the valid range (1:8 - 1:1), TAW RECOMMENDED - - !!!
R2_new = 3.12222624739599
R2del = 0.00749006095743887
Z2 = 12.1708208485496
top_sta = 67.4473144178477
% final 2% runup elevation
Z2=R2_new+SWEL
Z2 = 12.1708208485496
diary off
-1.000000e+00
-1.000000e+00

```

PART 5: RUNUP2

for transect: CM-124-2

Station locations shifted by: -4.86 feet from their
original location to set the shoreline to
elevation 0 for RUNUP2 input

RUNUP2 INPUT CONVERSIONS

for transect: CM-124-2

Incident significant wave height: 2.57 feet

Peak wave period: 3.48 seconds

Mean wave height: 1.61 feet

Local Depth below SWEL: 43.89 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 Jersey

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

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

Depth, $D = 43.89$

Period, $T = 2.96$

Waveheight, $H = 1.61$

Deep water wavelength, L_0 (ft)

$L_0 = g \cdot T^2 / 2\pi$

$L_0 = 32.17 \cdot 2.96^2 / 6.28 = 44.83$

Deep water wave celerity, C_0 (ft/s)

$C_0 = L_0 / T$

$C_0 = 44.83 / 2.96 = 15.15$

Angular frequency, σ (rad/s)

$\sigma = 2\pi / T$

$\sigma = 6.28 / 2.96 = 2.12$

Hunts (1979) approximation for Celerity C_{1H} (ft/s) at Depth D (ft)

$y = \sigma \cdot \sigma \cdot D / g$

$y = 2.12 \cdot 2.12 \cdot 43.89 / 32.17 = 6.15$

$C_{1H} = \sqrt{g \cdot D / (y + 1 / (1 + 0.6522 \cdot y + 0.4622 \cdot y^2 + 0.0864 \cdot y^4 + 0.0675 \cdot y^5))}$

$C_{1H} = 15.15$

Shoaling Coefficient K_{sH}

$K_{sH} = \sqrt{C_0 / C_{1H}}$

$K_{sH} = \sqrt{15.15 / 15.15} = 1.00$

Deepwater Wave Height H_{0_H} (ft)

$H_{0_H} = H / K_{sH}$

$H_{0_H} = 1.61 / 1.00 = 1.61$

Deepwater mean wave height: 1.61 feet

END RUNUP2 CONVERSIONS

RUNUP2 RESULTS

for transect: CM-124-2

RUNUP2 SWEL:

9.00

9.00

9.00

9.00

9.00
9.00
9.00
9.00
9.00

RUNUP2 deepwater mean wave heights:

1.53
1.53
1.53
1.61
1.61
1.61
1.69
1.69
1.69

RUNUP2 mean wave periods:

2.81
2.96
3.11
2.81
2.96
3.11
2.81
2.96
3.11

RUNUP2 runup above SWEL:

0.02
0.02
0.02
0.02
0.02
0.02
0.03
0.03
0.03

RUNUP2 Mean runup height above SWEL: 0.02 feet

RUNUP2 2-percent runup height above SWEL: 0.05 feet

RUNUP2 2-percent runup elevation: 9.05 feet-NAVD88

RUNUP2 Messages:

No Messages

END RUNUP2 RESULTS

ACES BEACH RUNUP

Incident significant wave height: 2.57 feet

Significant wave height deshoaled using Hunt equation

Deepwater significant wave height: 2.25 feet

Peak wave period: 3.48 seconds

Average beach Slope: 1:12.71 (H:V)

ACES RUNUP CALCULATED USING 'Aces_Beach_Runup.m'

ACES Beach 2-percent runup height above SWEL: 2.23 feet

ACES Beach 2-percent runup elevation: 11.23 feet-NAVD88

ACES BEACH RUNUP is valid

_____END ACES BEACH RESULTS_____

PART 5 COMPLETE_____

FEMA
RUNUP2 transect: CM-124-2

sjh

job 2
1

3.00
-34.91 -568.6 0.6
-34.67 -564.6 0.6
-32.92 -542.6 0.6
-26.18 -467.6 0.6
-21.08 -397.6 0.6
-20.51 -390.6 0.6
-19.36 -374.6 0.6
-13.48 -295.6 0.6
-10.61 -257.6 0.6
-4.64 -181.6 0.6
-2.01 -145.6 0.6
-2.01 -46.1 0.6
-1.50 -27.1 0.6
-0.91 -12.6 0.6
0.35 4.9 0.6
0.78 16.4 0.6
1.86 20.9 0.6
3.87 35.9 0.6
6.85 59.4 0.6
1 16.30 82.4 0.6
9.0 1.53 2.81
9.0 1.53 2.96
9.0 1.53 3.11
9.0 1.61 2.81
9.0 1.61 2.96
9.0 1.61 3.11
9.0 1.69 2.81
9.0 1.69 2.96
9.0 1.69 3.11

CLIENT- FEMA
PROJECT-RUNUP2 transect: CM-124-2

** WAVE RUNUP-VERSION 2.0 **

ENGINEERED BY sjh

JOB job 2
RUN 1 PAGE 1

CROSS SECTION PROFILE

	LENGTH	ELEV.	SLOPE	ROUGHNESS
1	-568.0	-34.9		
2	-564.0	-34.6	.00	.60
3	-542.0	-32.9	12.94	.60
4	-467.0	-26.1	11.03	.60
5	-397.0	-21.0	13.73	.60
6	-390.0	-20.5	14.00	.60
7	-374.0	-19.3	13.33	.60
8	-295.0	-13.4	13.39	.60
9	-257.0	-10.6	13.57	.60
10	-181.6	-4.6	12.65	.60
11	-145.6	-2.0	13.69	.60
12	-46.1	-2.0	FLAT	.60
13	-27.1	-1.5	37.25	.60
14	-12.6	-.9	24.58	.60
15	4.9	.4	13.89	.60
16	16.4	.8	26.74	.60
17	20.9	1.9	4.17	.60
18	35.9	3.9	7.46	.60
19	59.4	6.9	7.89	.60
20	82.4	16.3	2.43	.60
	LAST SLOPE		3.00	LAST ROUGHNESS .60

CLIENT- FEMA
PROJECT-RUNUP2 transect: CM-124-2

** WAVE RUNUP-VERSION 2.0 **

ENGINEERED BY sjh

JOB job 2
RUN 1 PAGE 2

OUTPUT TABLE

INPUT PARAMETERS			RUNUP RESULTS			
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WATER LEVEL ABOVE DATUM (FT.)	DEEP WATER WAVE HEIGHT (FT.)	WAVE PERIOD (SEC.)	BREAKING SLOPE NUMBER	RUNUP SLOPE NUMBER	RUNUP ABOVE WATER LEVEL (FT.)	BREAKER DEPTH (FT.)
9.00	1.53	2.81	11	19	.02	2.06
9.00	1.53	2.96	11	19	.02	2.08
9.00	1.53	3.11	11	19	.02	2.09
9.00	1.61	2.81	11	19	.02	2.17
9.00	1.61	2.96	11	19	.02	2.18
9.00	1.61	3.11	11	19	.02	2.19
9.00	1.69	2.81	11	19	.03	2.27
9.00	1.69	2.96	11	19	.03	2.28
9.00	1.69	3.11	11	19	.03	2.29

Runup2 2% runup elevation for Transect: CM-124-2

