Bathymetry of MCR and Vicinity

Composite of 2001 Surveys - ODMDS E = 27 August

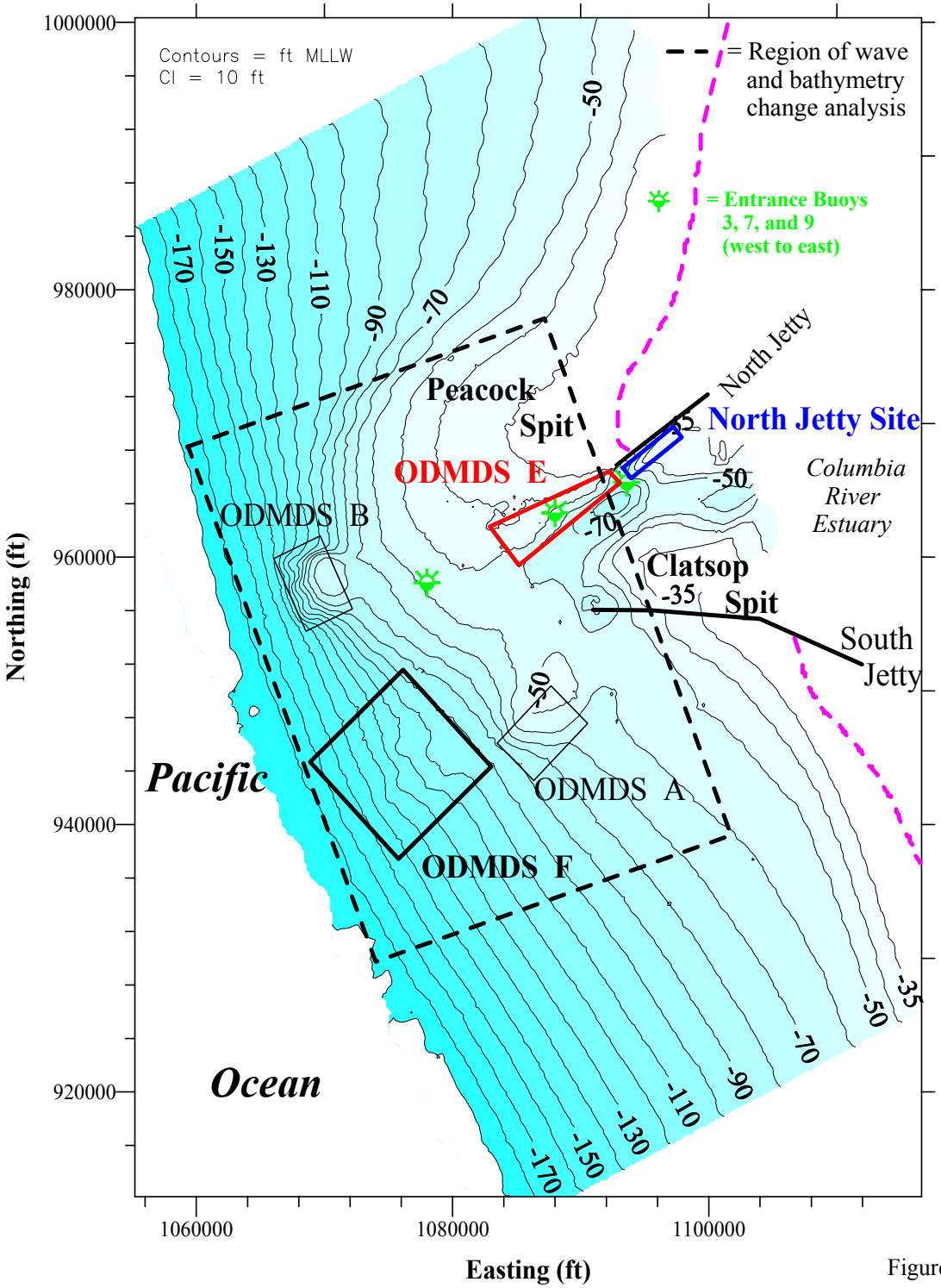
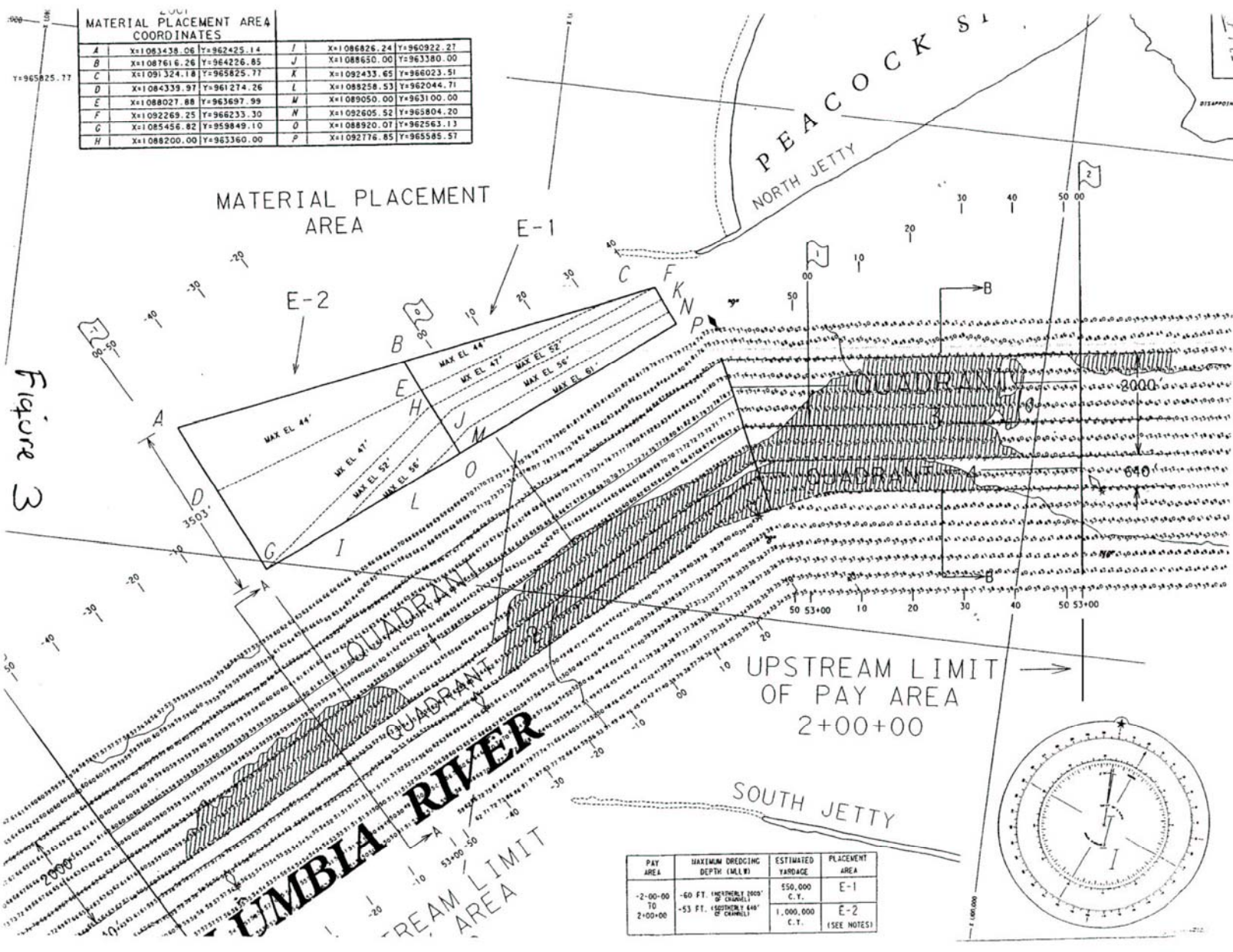


Figure 1

Figure 3



MATERIAL PLACEMENT AREA COORDINATES					
A	X=1083438.06	Y=962425.14	I	X=1086826.24	Y=960922.27
B	X=1087616.26	Y=964226.85	J	X=1088650.00	Y=963380.00
C	X=1091324.18	Y=965825.77	K	X=1092433.65	Y=966023.51
D	X=1084339.97	Y=961274.26	L	X=1088258.53	Y=962044.71
E	X=1088027.88	Y=963697.99	M	X=1089050.00	Y=963100.00
F	X=1092269.25	Y=966233.30	N	X=1092605.52	Y=965804.20
G	X=1085456.82	Y=959849.10	O	X=1088920.07	Y=962563.13
H	X=1088200.00	Y=963360.00	P	X=1092776.85	Y=965585.57

PAY AREA	MAXIMUM DREDGING DEPTH (MLLW)	ESTIMATED YARDAGE	PLACEMENT AREA
-2+00+00 TO 2+00+00	-60 FT. (NORTHERLY 2000' OF CHANNEL) -53 FT. (SOUTHERLY 640' OF CHANNEL)	550,000 C.Y.	E-1
		1,000,000 C.Y.	E-2 (SEE NOTES)

MCR Bathymetry Difference: 1997 - 2001 within "Wave Analysis Area"

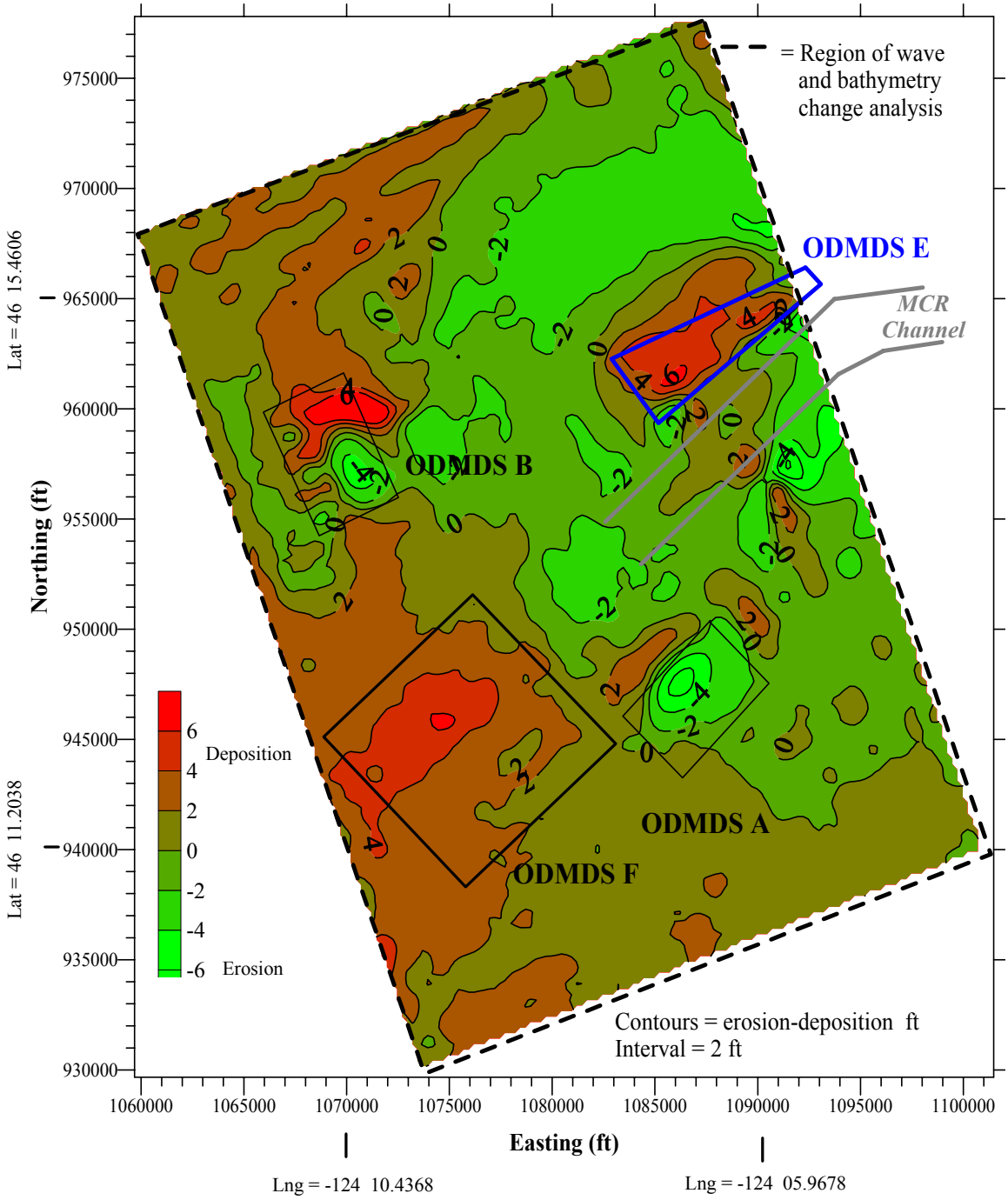


Figure 17

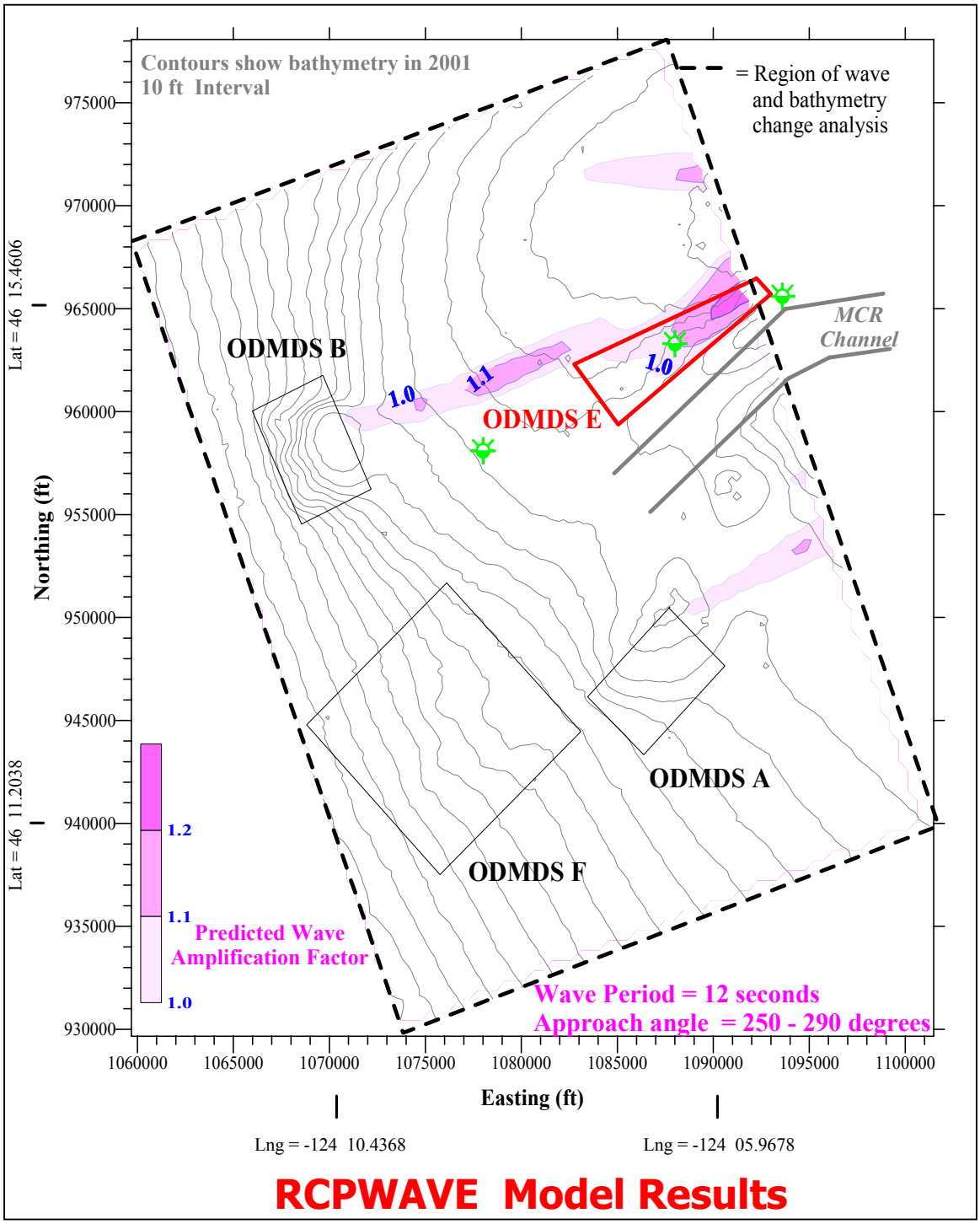


Figure 18. RCPWAVE model estimate of potential wave height amplification in 27 August 2001, above heights that would have occurred if the same incident waves crossed 1997 bathymetry. Note that amplifications between 1 and 1.1 were within the model's margin of error. Using this model, one area within Site E shows a potential for 20 to 30 percent amplification.

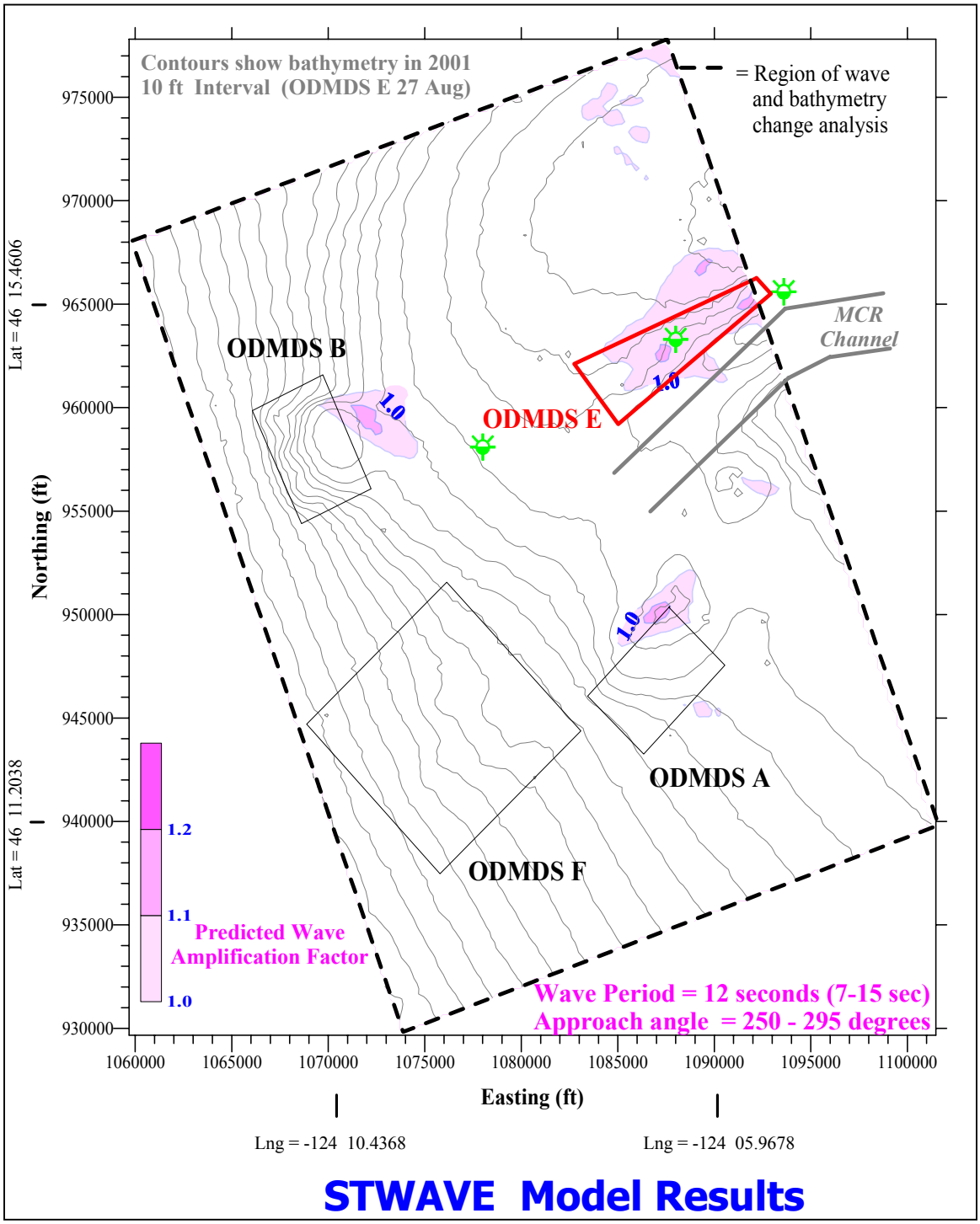
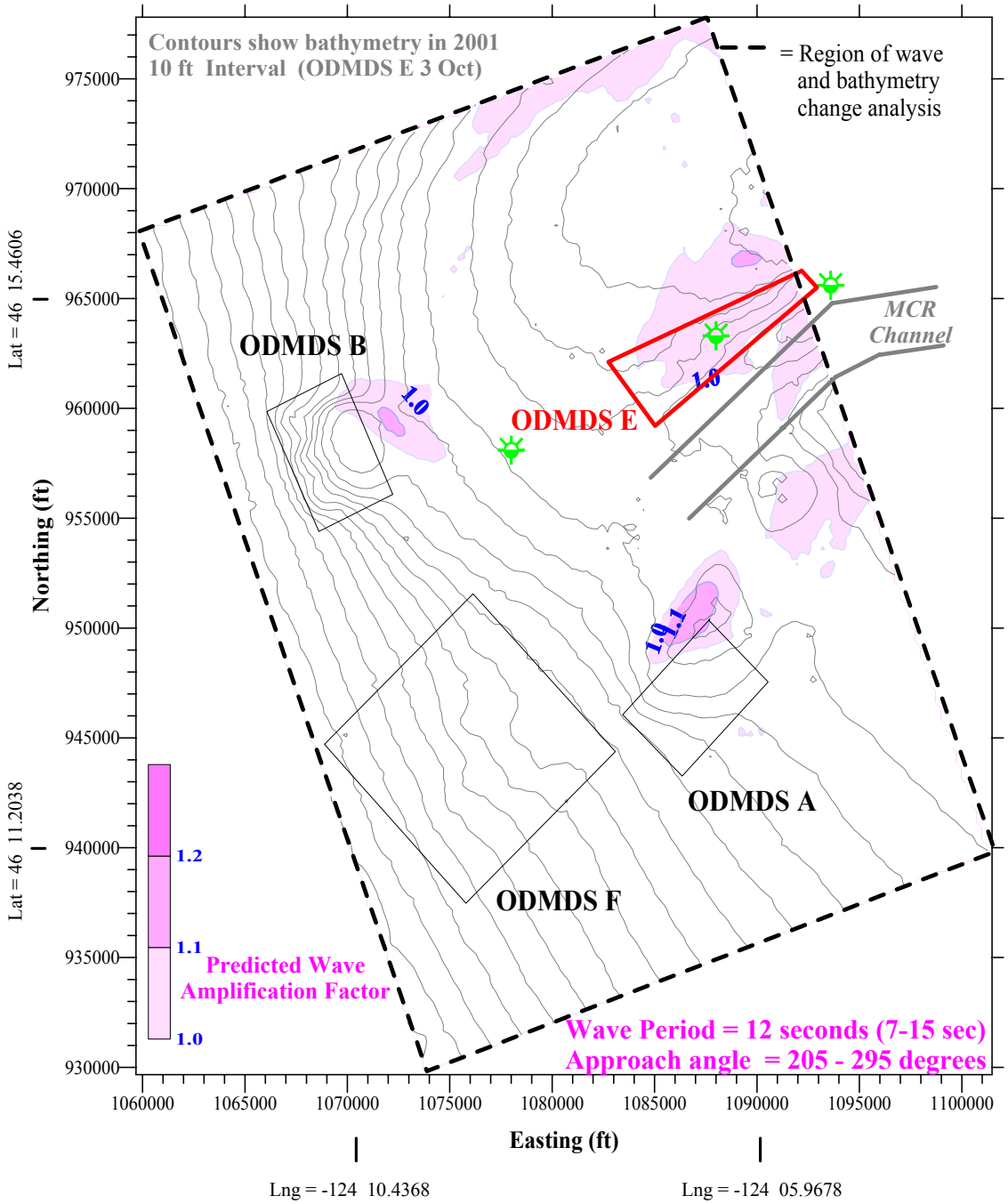
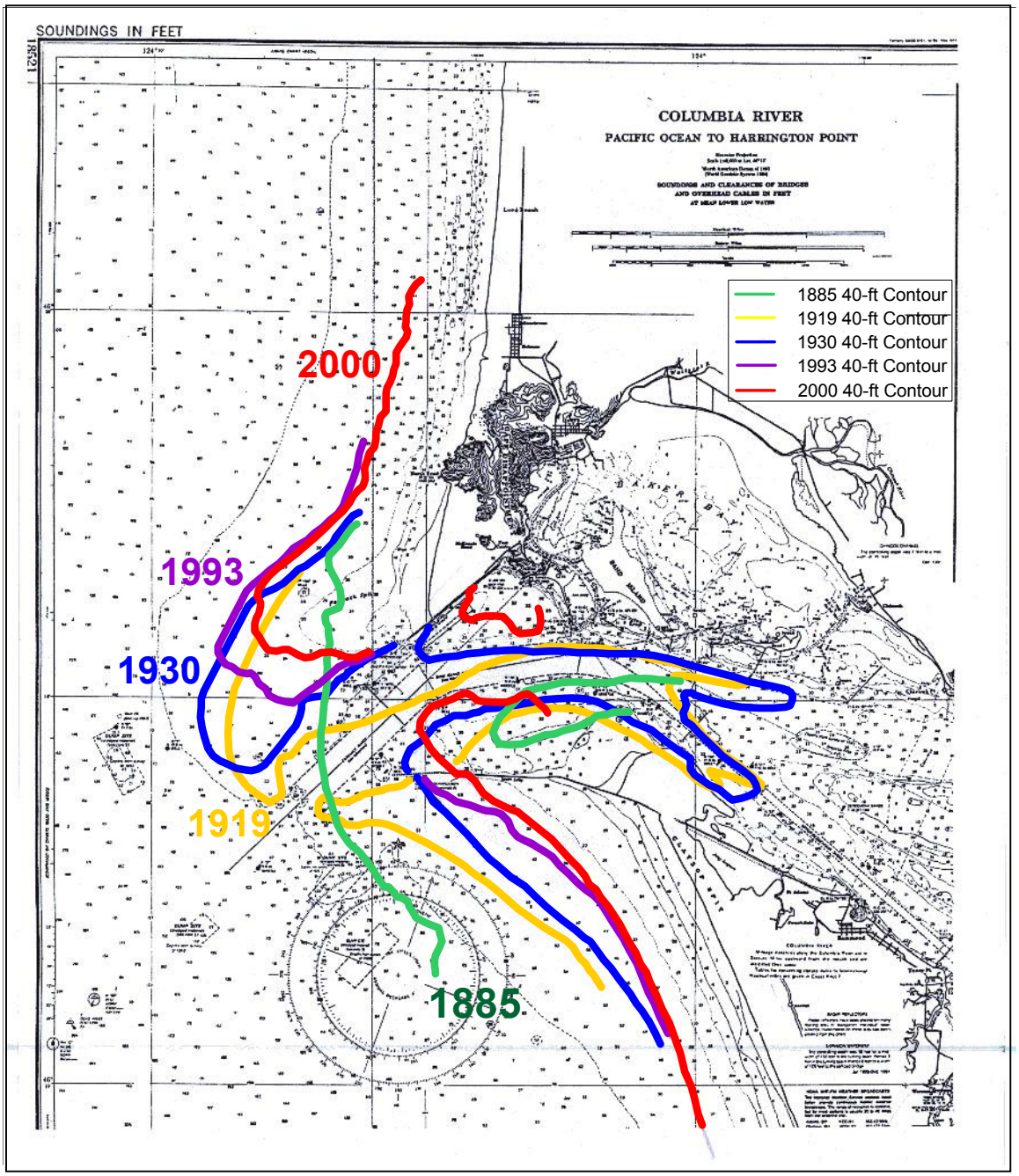


Figure 19. Spectral estimate of potential amplification for comparable conditions to those used with the monochromatic model shown in the previous figure; for 27 August 2001. Note STWAVE indicates less intense amplification than does RCPWAVE. Maximum estimated wave amplification near Site E is 11 percent.

Predicted Wave Amplication due to Bathymetry Change during 1997 - 3 Oct 2001



STWAVE Model Results

Figure 20

40-ft Contour Changes for the Mouth of the Columbia River