

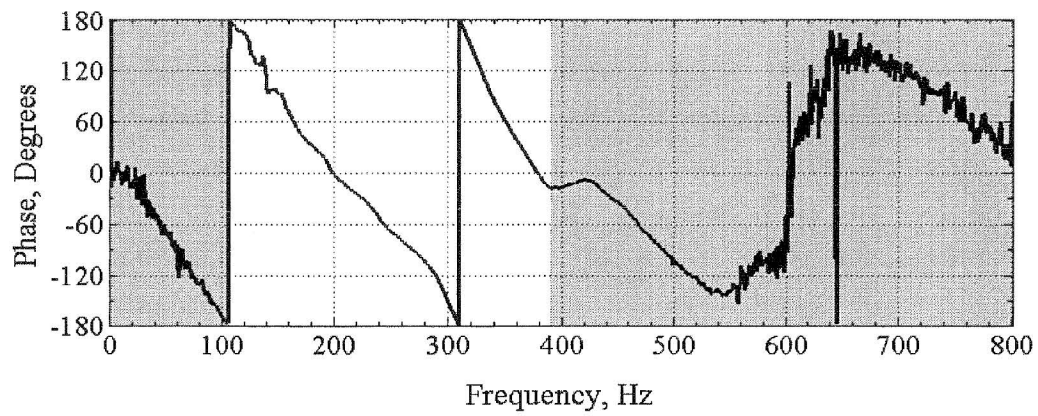


Figure X.4 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (4E6_F_43.DAT)

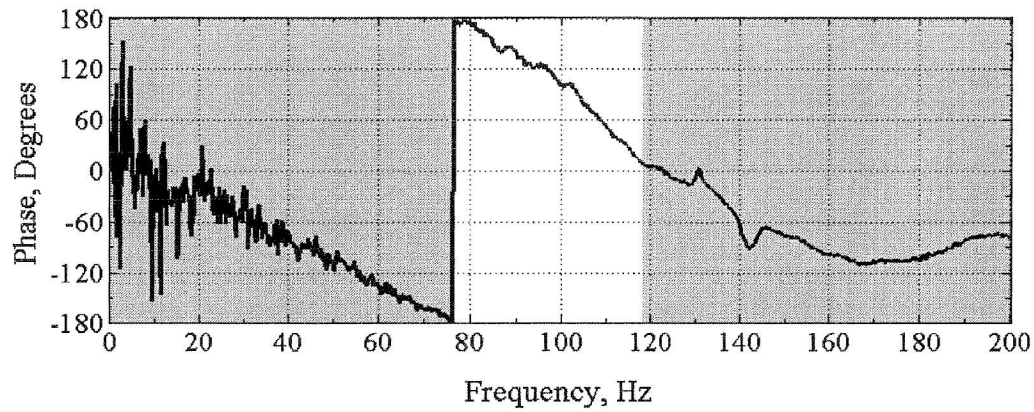


Figure X.5 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (4E3_F_21.DAT)

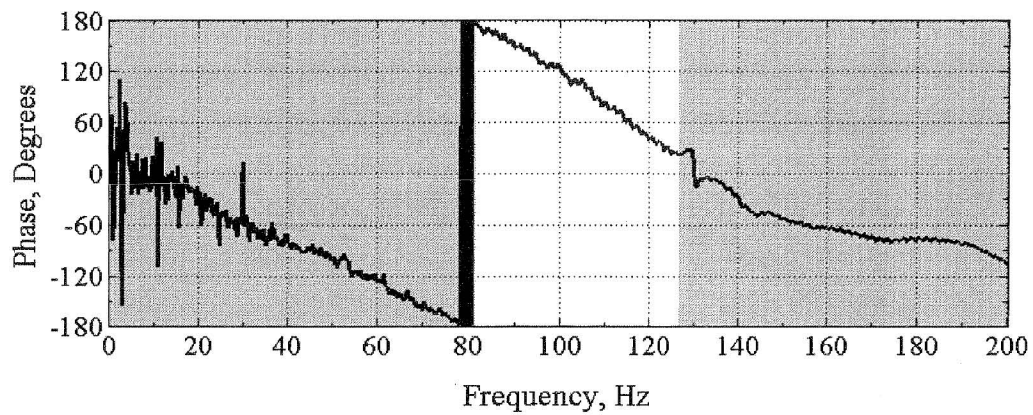


Figure X.6 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (4E4_F_21.DAT)

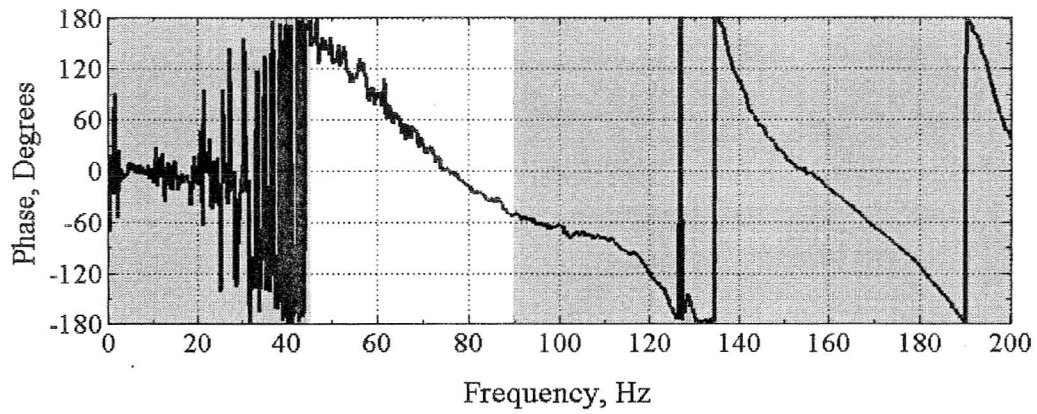


Figure X.7 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (4E3_F_43.DAT)

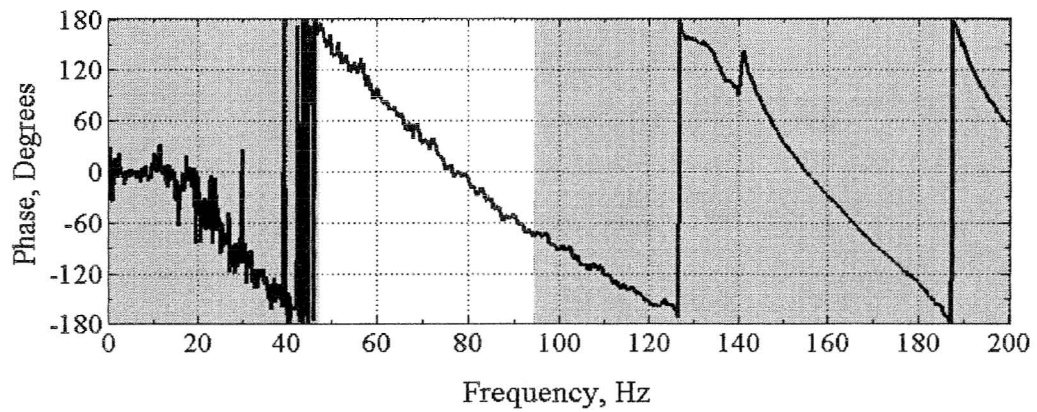


Figure X.8 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (4E4_F_43.DAT)

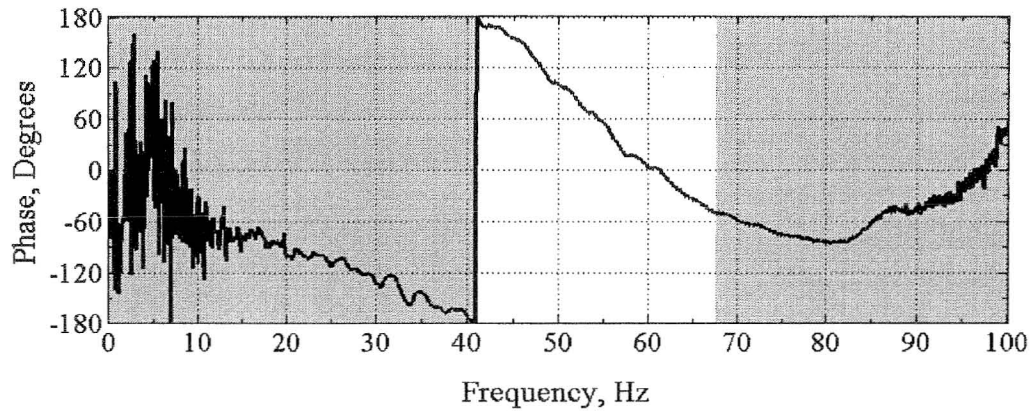


Figure X.9 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (4E1_F_21.DAT)

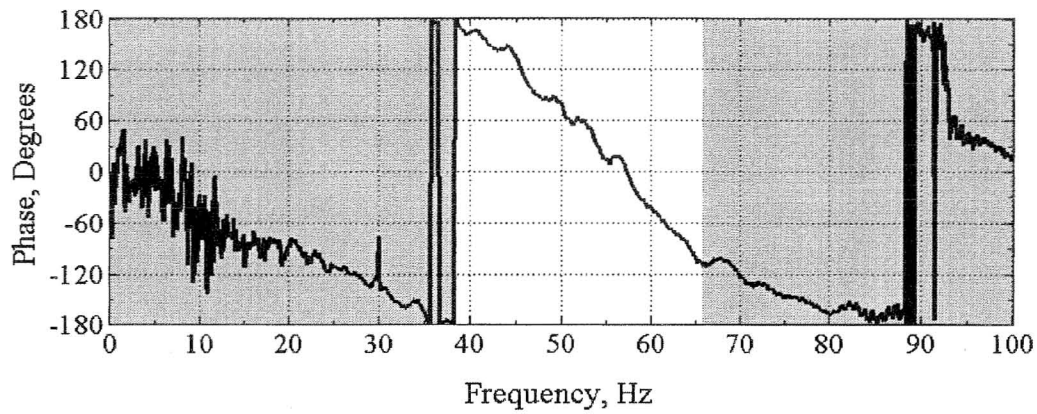


Figure X.10 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (4E2_F_21.DAT)

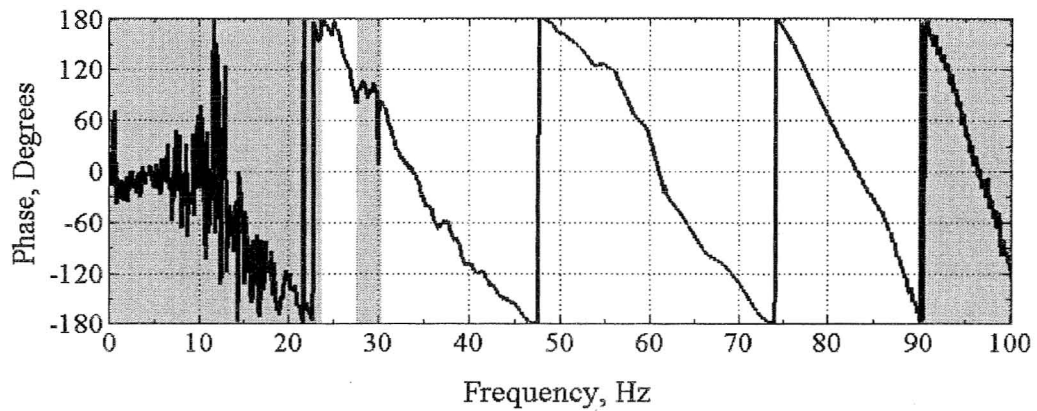


Figure X.11 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (4E1_F_43.DAT)

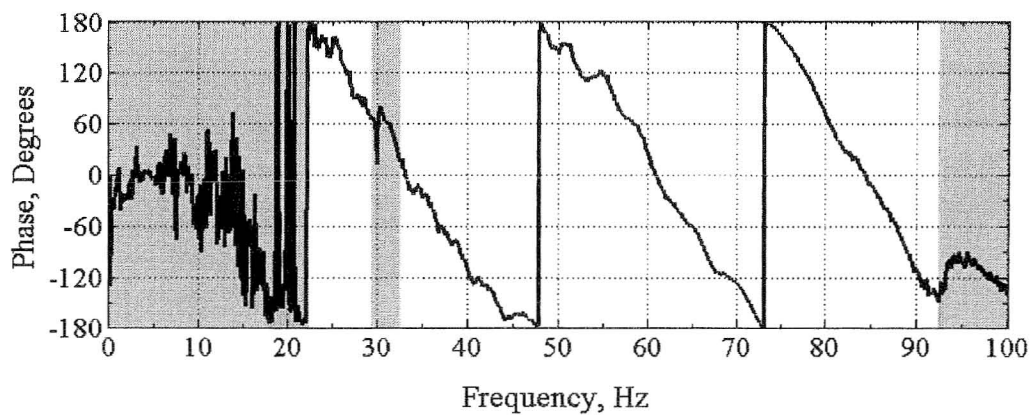


Figure X.12 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (4E2_F_43.DAT)

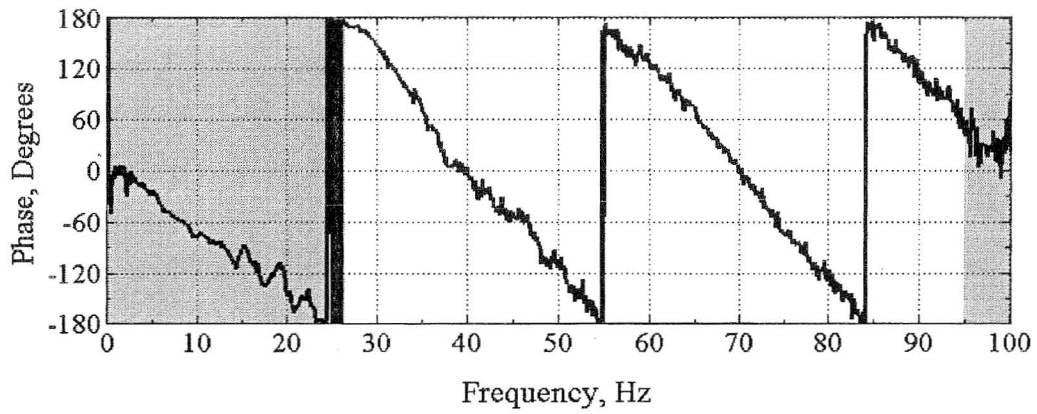


Figure X.13 Phase Plots Measured by SASW Testing with 15-ft Receiver Spacing (4G1_F_21.DAT)

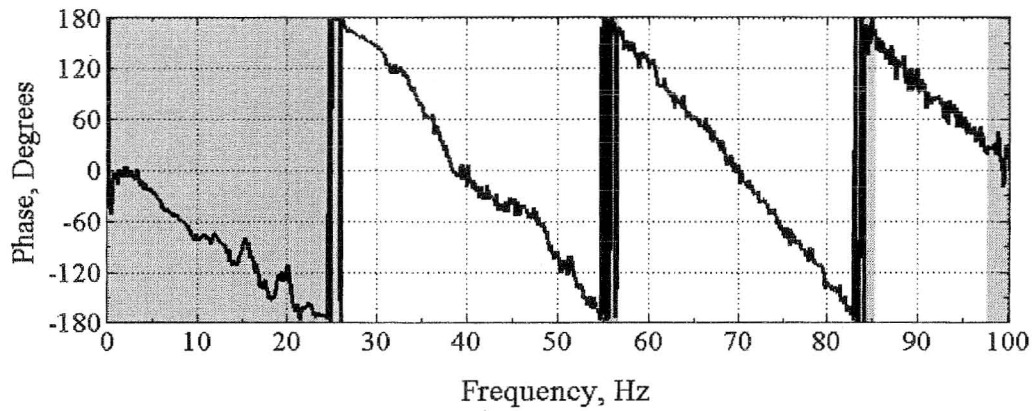


Figure X.14 Phase Plots Measured by SASW Testing with 15-ft Receiver Spacing (4G2_F_21.DAT)

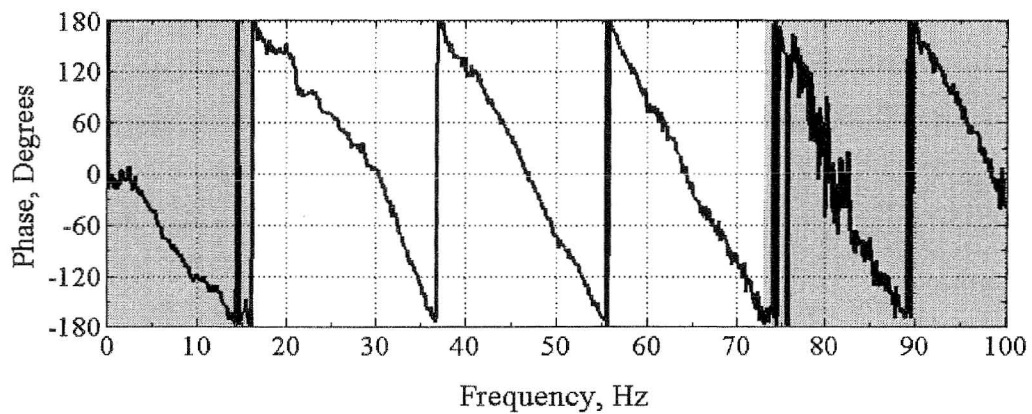


Figure X.15 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (4G3_F_21.DAT)

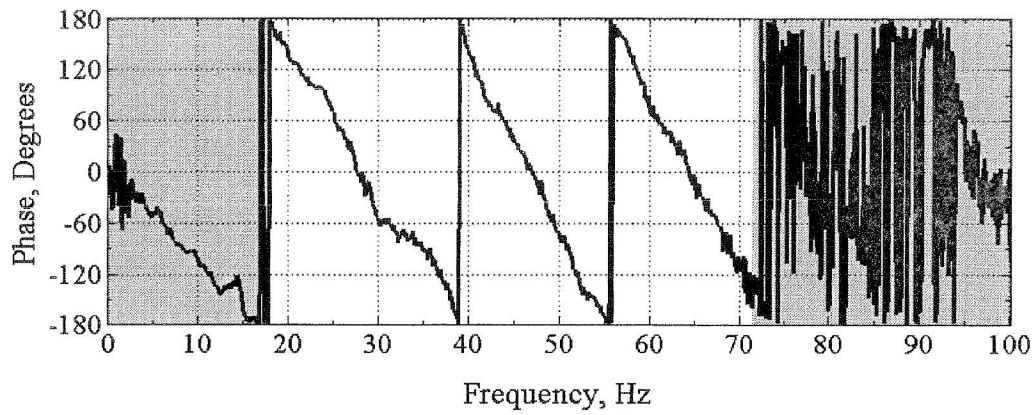


Figure X.16 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (4G3_F_43.DAT)

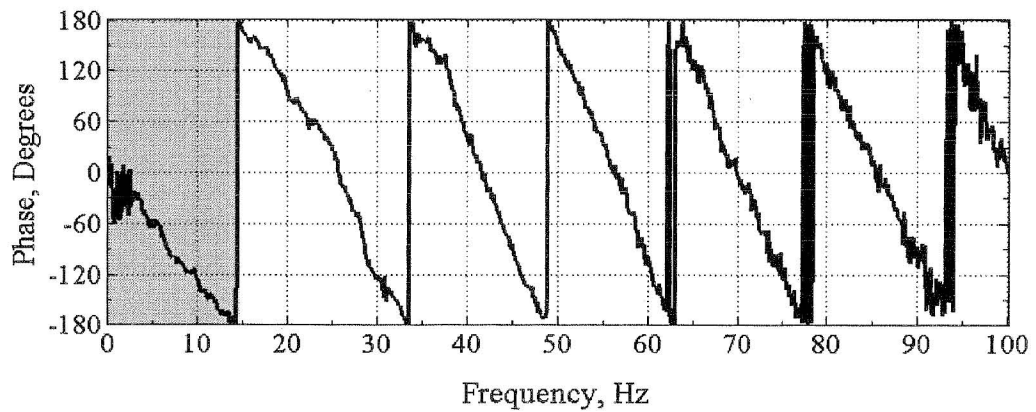


Figure X.17 Phase Plots Measured by SASW Testing with 30-ft Receiver Spacing (4G1_F_43.DAT)

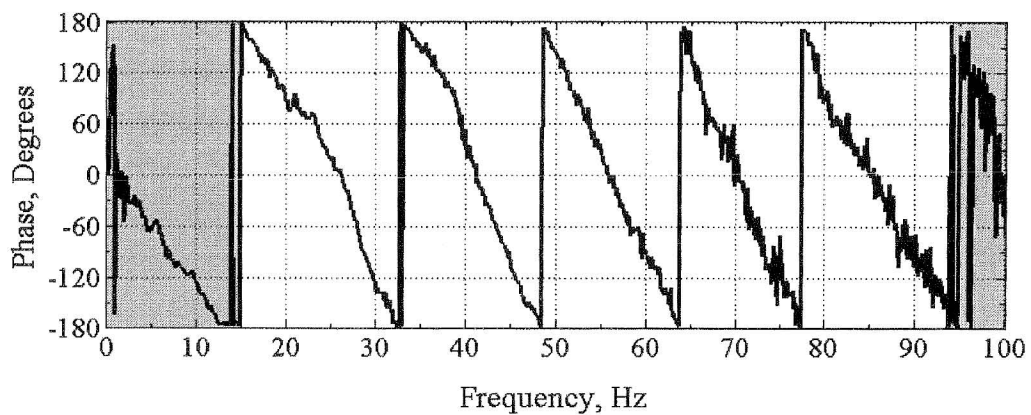


Figure X.18 Phase Plots Measured by SASW Testing with 30-ft Receiver Spacing (4G2_F_43.DAT)

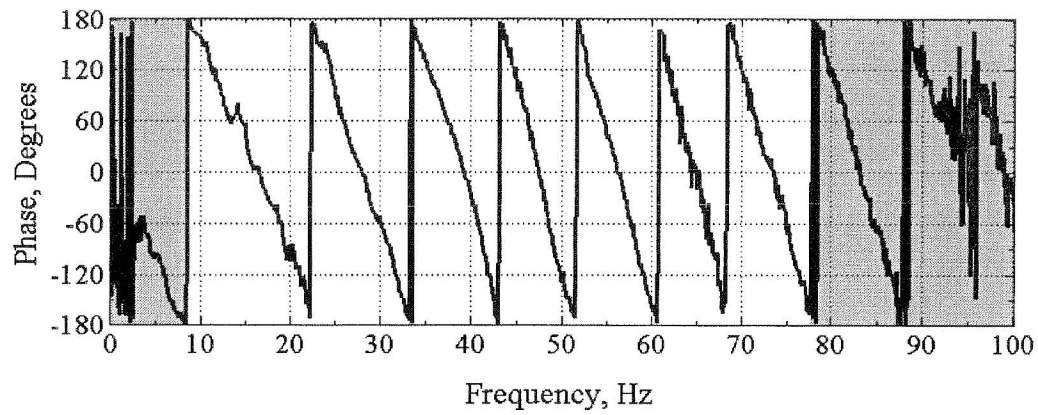


Figure X.19 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (4G4_F_21.DAT)

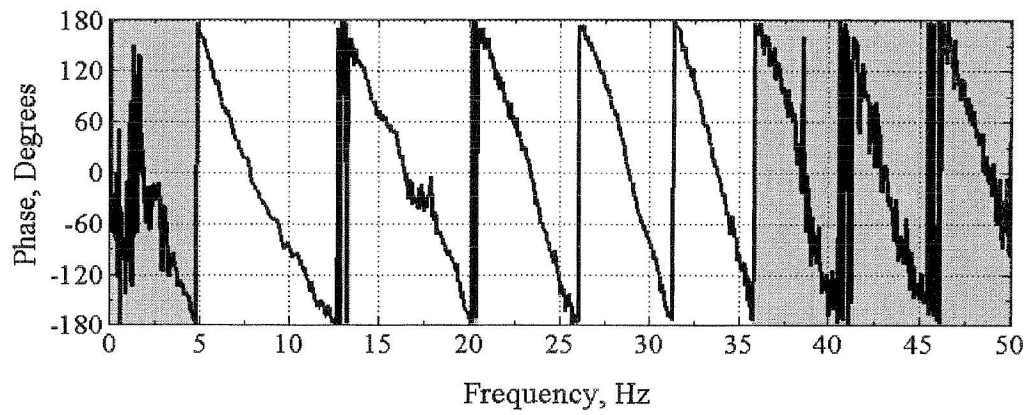


Figure X.20 Phase Plots Measured by SASW Testing with 100-ft Receiver Spacing (4G5_F_21.DAT)

Table X.1 Tables of Masking Parameters Used on Data Collected during Fourth Site Visit at Site E

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
1	1	0	190	1	4E5_F_21.DAT
	2	402	800	-	
1	1	0	199	1	4E6_F_21.DAT
	2	416	800	-	
2	1	0	119	1	4E5_F_43.DAT
	2	137	151	1	
	3	398	800	-	
2	1	0	107	1	4E6_F_43.DAT
	2	390	800	-	
3	1	0	76.5	1	4E3_F_21.DAT
	2	118	200	-	
3	1	0	81.25	1	4E4_F_21.DAT
	2	126.5	200	-	
6	1	0	45.25	1	4E3_F_43.DAT
	2	89.5	200	-	
6	1	0	47.25	1	4E4_F_43.DAT
	2	94.25	200	-	
9	1	0	41	1	4E1_F_21.DAT
	2	67.62	100	-	
9	1	0	38.38	1	4E2_F_21.DAT
	2	65.75	100	-	
18	1	0	23.75	1	4E1_F_43.DAT
	2	27.62	30.38	2	
	3	89.62	100	-	
18	1	0	22.5	1	4E2_F_43.DAT
	2	29.38	32.62	1	
	3	92.25	100	-	
15	1	0	26.38	1	4G1_F_21.DAT
	2	94.75	100	-	
15	1	0	26.25	1	4G2_F_21.DAT
	2	54.62	56.62	2	
	3	82.75	85.12	3	
	4	97.38	100	-	

Performed by Yiabei
Yiabei Yuan

Checked by Yin-Cheng Lin
Yin-Cheng Lin

Table X.2 Tables of Masking Parameters Used on Data Collected during Fourth Site Visit at Site E (Continued)

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
25	1	0	16.25	1	4G3_F_21.DAT
	2	73	100	-	
25	1	0	18	1	4G3_F_43.DAT
	2	55.38	56	3	
	3	71.38	100	-	
30	1	0	14.62	1	4G1_F_43.DAT
30	1	0	15	1	4G2_F_43.DAT
	2	32.5	33.25	2	
	3	93.5	100	-	
50	1	0	8.62	1	4G4_F_21.DAT
	2	33.25	33.75	3	
	3	77.5	100	-	
100	1	0	4.88	1	4G5_F_21.DAT
	2	12.69	13.44	2	
	3	20.06	20.5	3	
	4	35.69	50	-	

Performed by Jiabei Yuan
Jiabei Yuan

Checked by Yin-Cheng Lin
Yin-Cheng Lin

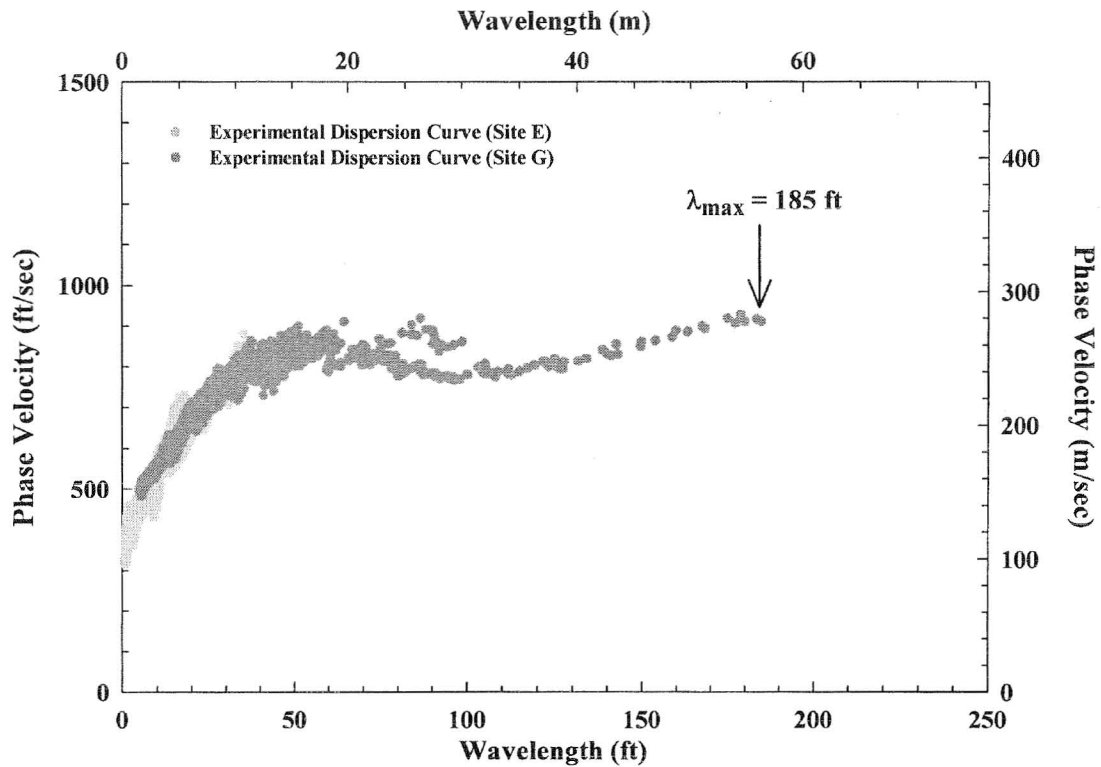


Figure X.21 Experimental Dispersion Curve Measured during Fourth Site Visit at Site E at Vogtle, GA; Linear Wavelength Axis

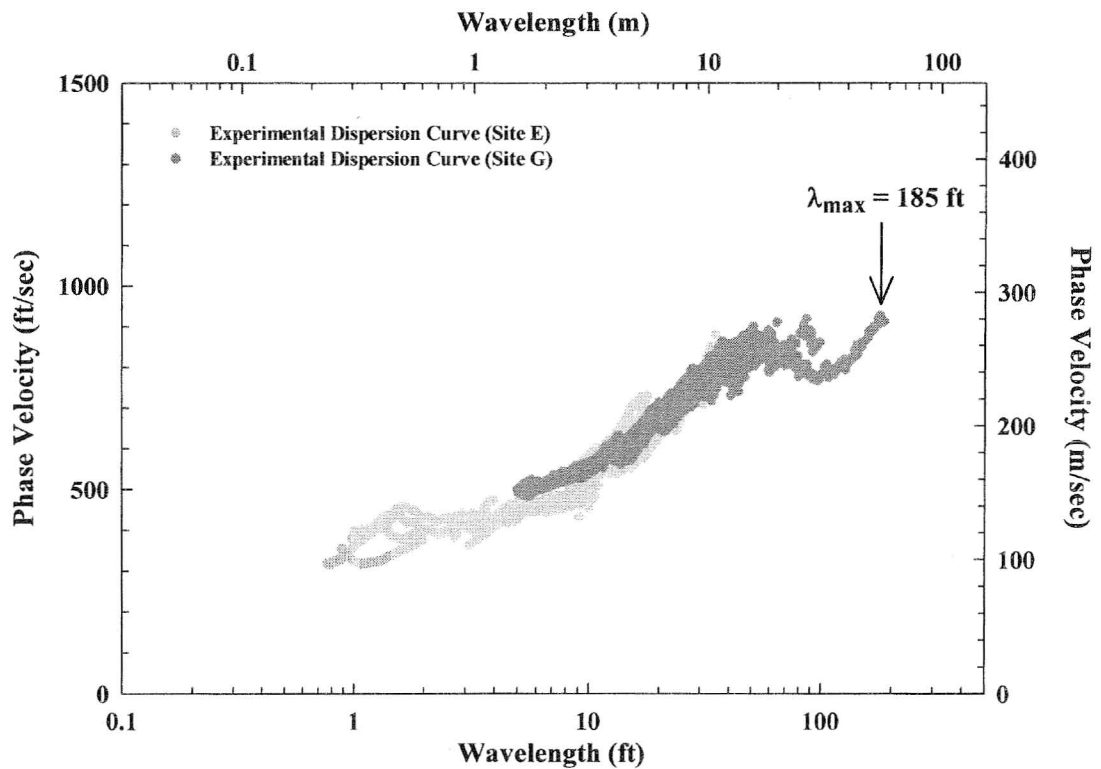


Figure X.22 Experimental Dispersion Curve Measured during Fourth Site Visit at Site E at Vogtle, GA; Logarithmic Wavelength Axis

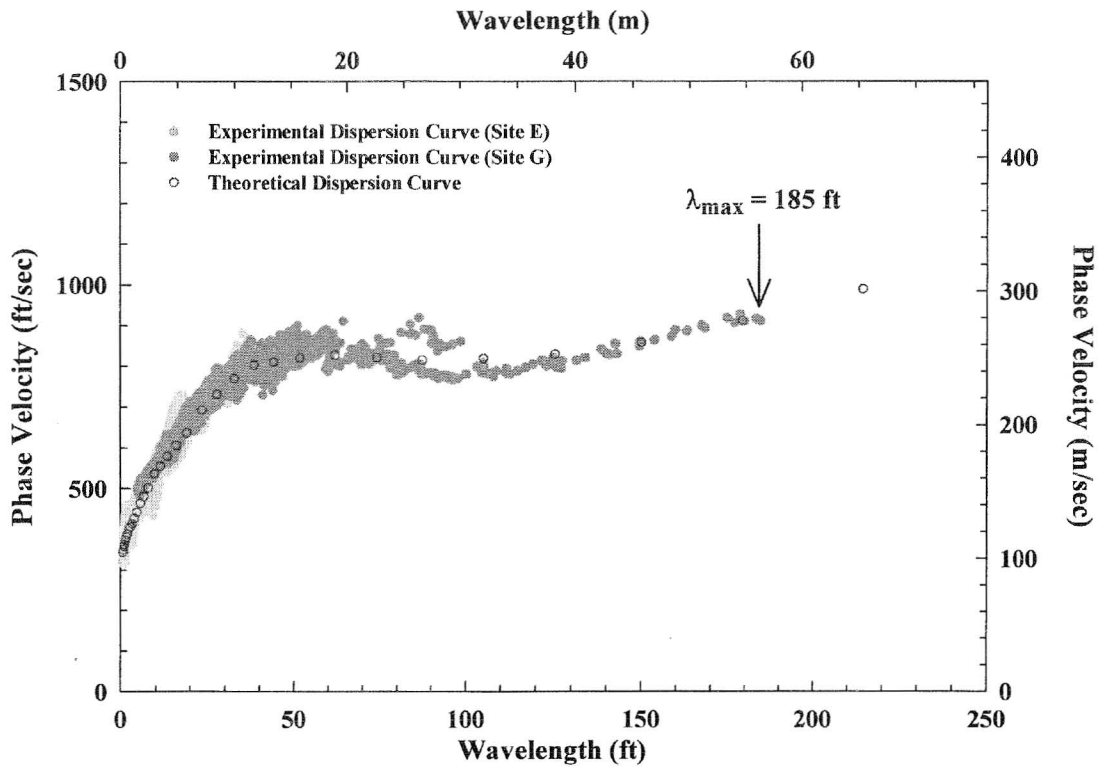


Figure X.23 Experimental and Theoretical Dispersion Curves from Site E in Fourth Site Visit at Vogtle, GA; Linear Wavelength Axis

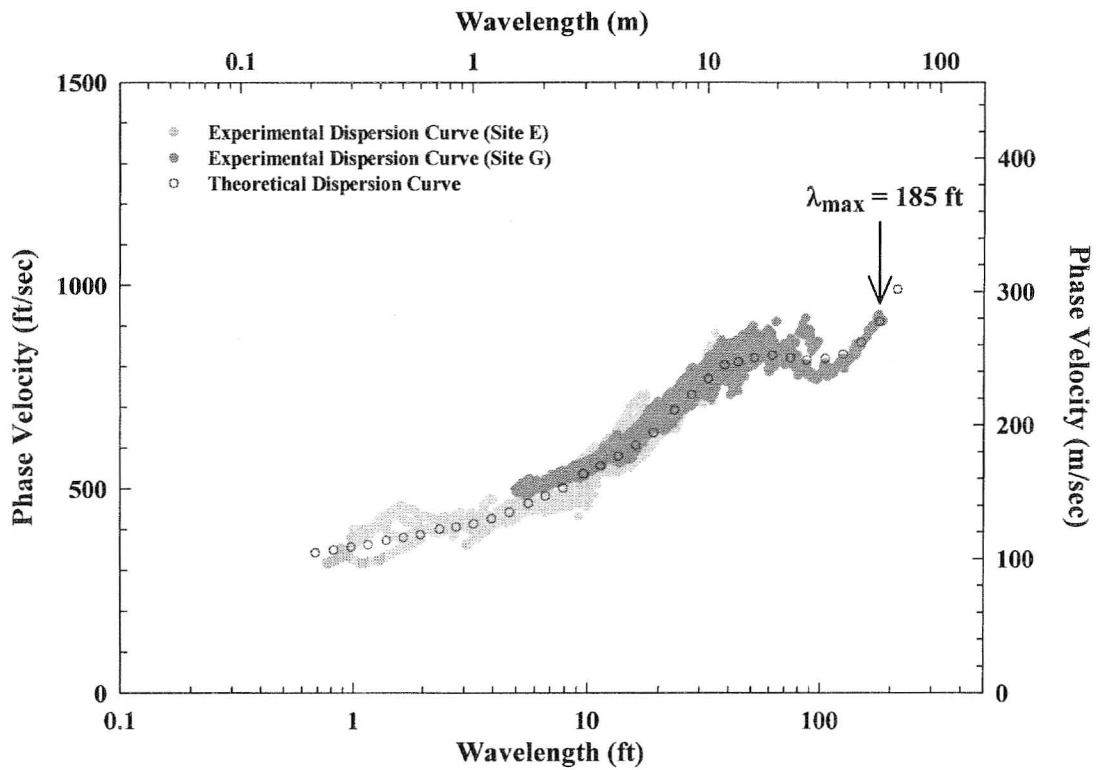


Figure X.24 Experimental and Theoretical Dispersion Curves from Site E in Fourth Site Visit at Vogtle, GA; Logarithmic Wavelength Axis

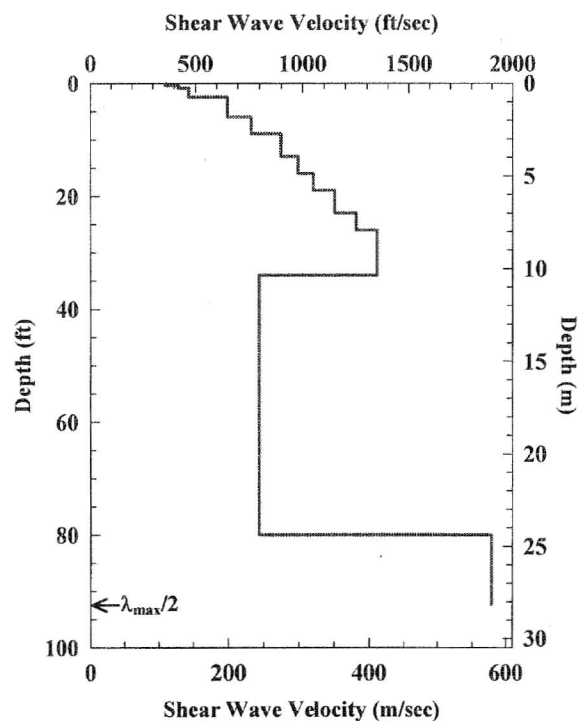


Figure X.25 Shear Wave Velocity Profile Determined at Site E during Fourth Site Visit at Vogtle, GA

Table X.3 Profile Parameters Used to Develop Preliminary Theoretical Dispersion Curve at Site E in the Fourth Site Visit at Vogtle, GA

Layer No.	Thickness, ft	Depth to Top of Layer, ft	S-Wave Velocity, ft/s	Assumed Poisson's Ratio	P-Wave Velocity, ft/s	Assumed Total Unit Weight, pcf
1	0.4	0.0	360	0.24	616	128
2	0.5	0.4	420	0.24	718	128
3	1.6	0.9	470	0.24	804	128
4	3.5	2.5	650	0.24	1111	128
5	3.0	6.0	760	0.24	1299	128
6	4.0	9.0	900	0.24	1539	128
7	3.0	13.0	980	0.24	1676	128
8	3.0	16.0	1050	0.24	1795	128
9	4.0	19.0	1150	0.24	1966	128
10	3.0	23.0	1250	0.24	2137	128
11	8.0	26.0	1350	0.24	2308	128
12	46.0	34.0	800	0.24	1368	128
13 [#]	12.3	80.0	1900	0.42	5000	135
14 ^{*#}	17.7	92.3	2200	0.38	5000	135
15 ^{*#}	Half Space	110.0	2200	0.38	5000	135

* Layer below maximum depth of the V_s Profile.

Layer below water table.

Performed by Yin-Cheng Lin Checked by K. H. Stokoe, II
Yin-Cheng Lin Kenneth H. Stokoe, II

Appendix Y

SASW Measurements of Fourth Site Visit at Vogtle, GA Site Location: Site F

1. Data Sheet(s).....	Y.2
2. Phase Plots from SASW Tests.....	Y.4
3. Table of Masking Parameters	Y.10
4. Experimental Dispersion Curves	Y.12
5. Matching the Experimental and Theoretical Dispersion Curves	Y.13
6. Shear Wave Velocity Profile	Y.14
7. Table of Profile Parameters	Y.14

3 - Receiver SASW Data Sheet

Page ____ of ____

Project : Vogtle

Data Sheet #: SA4#6

Location : F(SA4#6)

Disk #: SA4#6

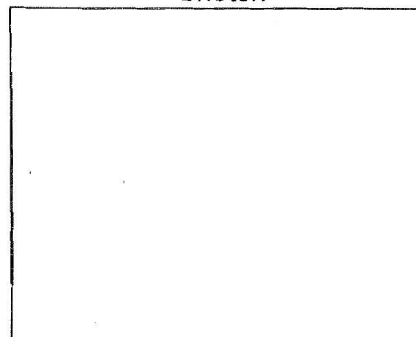
Date/(Time) : Jan, 24, 2008 : ~ :)

Personnel : Stokoe, Tuan, Minjae

Recorded by : Tuan

Checked by : Minjae

Sketch



R1 I.D. : UT07-4.5Hz-04, GBC 92003

R2 I.D. : UT07-4.5Hz-02, GBC 92002

R3 I.D. : UT07-4.5Hz-03, GBC 92001

Distance (ft)			Impact Direction	Impact Source	Record #	Freq. Range	Notes
S-R1	R1-R2	R2-R3				(Hz)	
1	1	2	For	Rev <u>small hammer</u>	4F1	0-800	hammer on plate, soft hit
1	1	2	For	Rev <u>"</u>	4F2	0-800	"
3	3	6	For	Rev <u>"</u>	4F3	0-200	"
3	3	6	For	Rev <u>"</u>	4F4	0-200	"
9	9	18	For	Rev <u>sledge hammer</u>	4F5	0-100	"
9	9	18	For	Rev <u>"</u>	4F6	0-100	"
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	
			For	Rev		~	

* Autosequence 3R_SASW saves F_2/1, C_2/1, F_4/3, C_4/3, Lin_1, Lin_2, Lin_4

* Autosequence 3R_SEWPSIN saves F_2/1, Var_2, F_4/3, Var_4, Lin_1, Lin_2, Lin_4

University of Texas at Austin

3 - Receiver SASW Data Sheet

Page ____ of ____

Project : Vogtle

Data Sheet # : SA4 #7

Location : G (SA4 #7)

Disk # : SA4 #7

Date/(Time) : Jan / 24 / 2008 (: ~ :)

Personnel : Stokoe, Tuan, Minhjae

Recorded by : Tuan

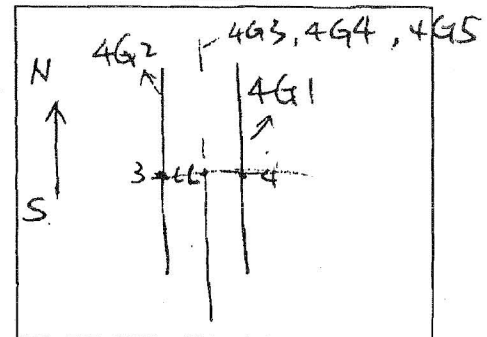
Checked by : Minhjae

R1 I.D. : UT07-4.5Hz-04, GEC 92003

R2 I.D. : UT07-4.5Hz-02, GEC 92002

R3 I.D. : UT07-4.5Hz-03, GEC 92001

Sketch



Distance (ft)			Impact Direction	Impact Source	Record #	Freq. Range	Notes	
S - R1	R1 - R2	R2 - R3				(Hz)		
15	15	30	For	Rev	bulldozer	4G1	0 - 100	
15	15	30	For	Rev	"	4G2	0 - 100	
25	25	25	For	Rev	"	4G3	0 - 100	
50	50	—	For	Rev	"	4G4	0 - 100	
100	100	—	For	Rev	"	4G5	0 - 50	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	

* Autosequence 3R_SASW saves F_2/1, C_2/1, F_4/3, C_4/3, Lin_1, Lin_2, Lin_4

* Autosequence 3R_SEWPSIN saves F_2/1, Var_2, F_4/3, Var_4, Lin_1, Lin_2, Lin_4

University of Texas at Austin

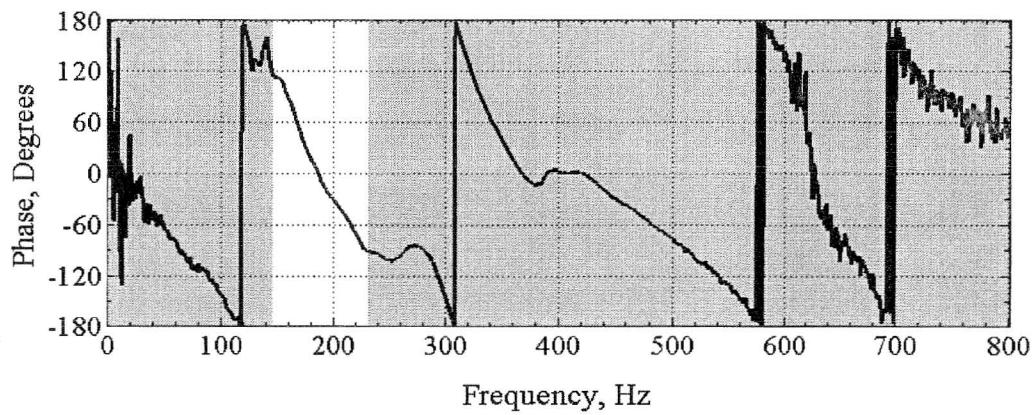


Figure Y.1 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (4F1_F_43.DAT)

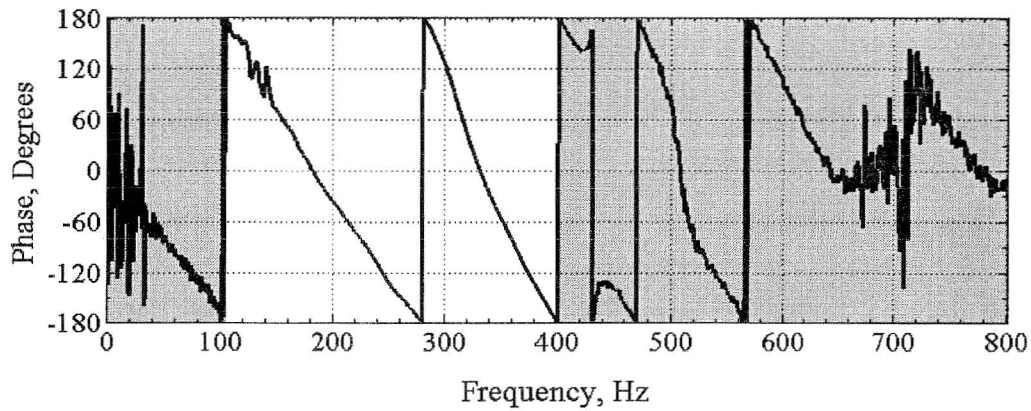


Figure Y.2 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (4F2_F_43.DAT)

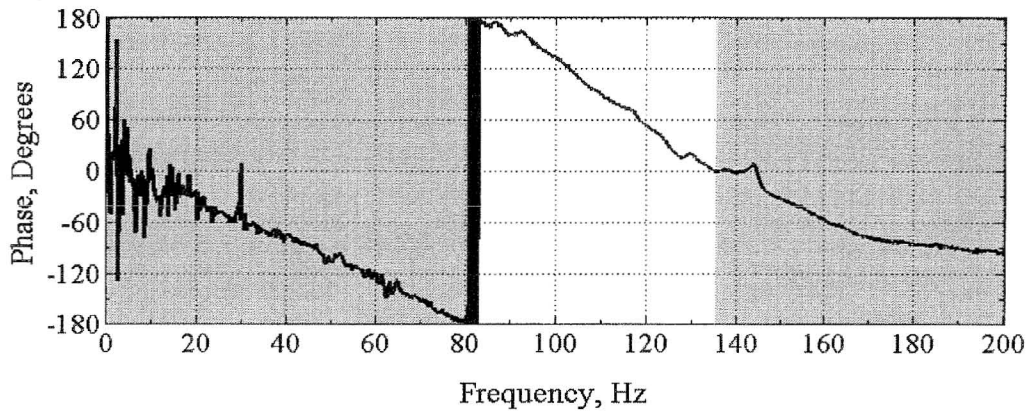


Figure Y.3 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (4F3_F_21.DAT)

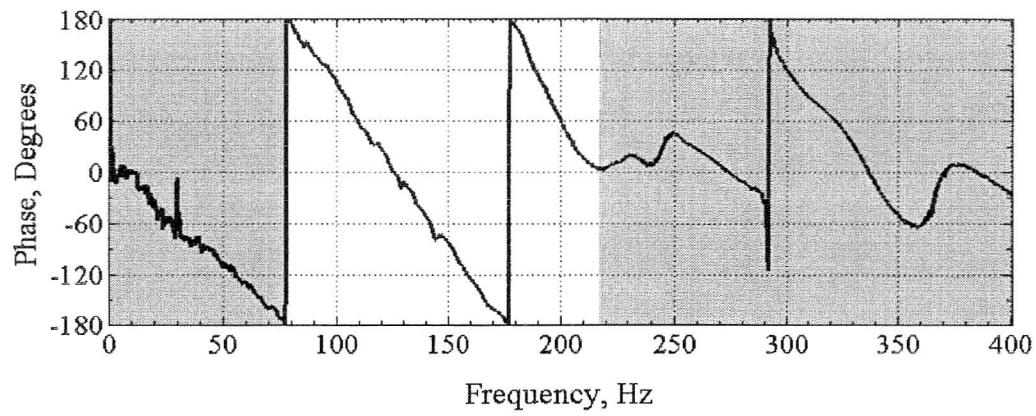


Figure Y.4 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (4F4_F_21.DAT)

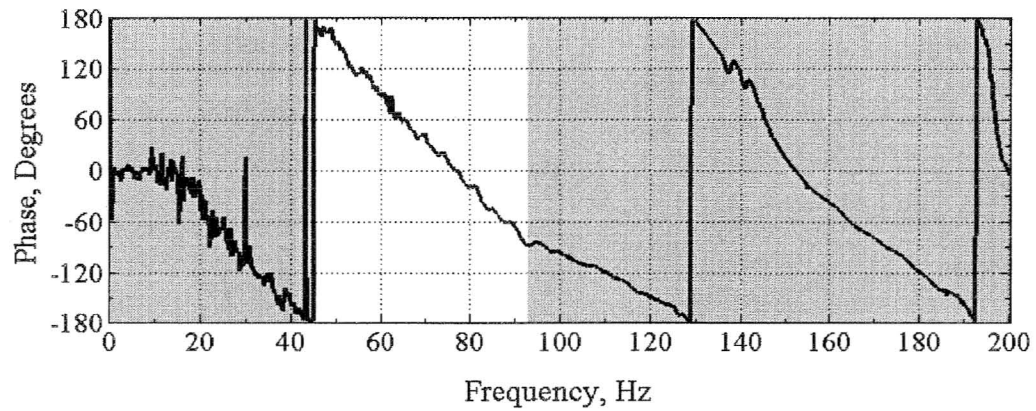


Figure Y.5 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (4F3_F_43.DAT)

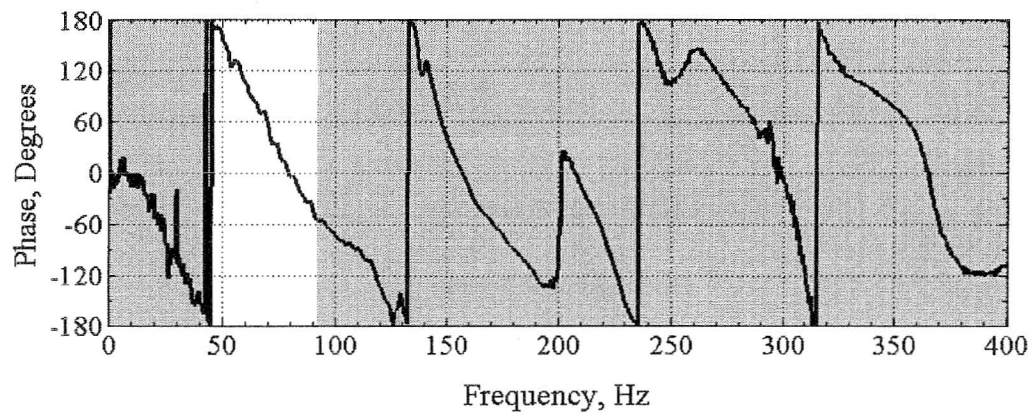


Figure Y.6 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (4F4_F_43.DAT)

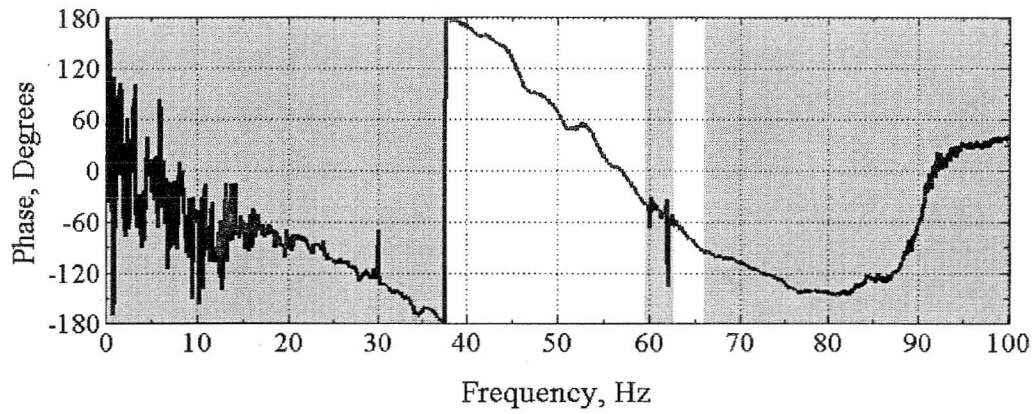


Figure Y.7 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (4F5_F_21.DAT)

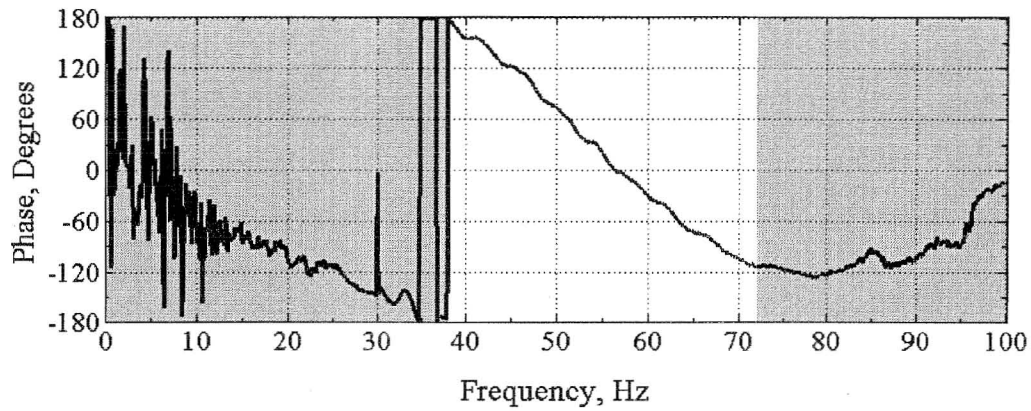


Figure Y.8 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (4F6_F_21.DAT)

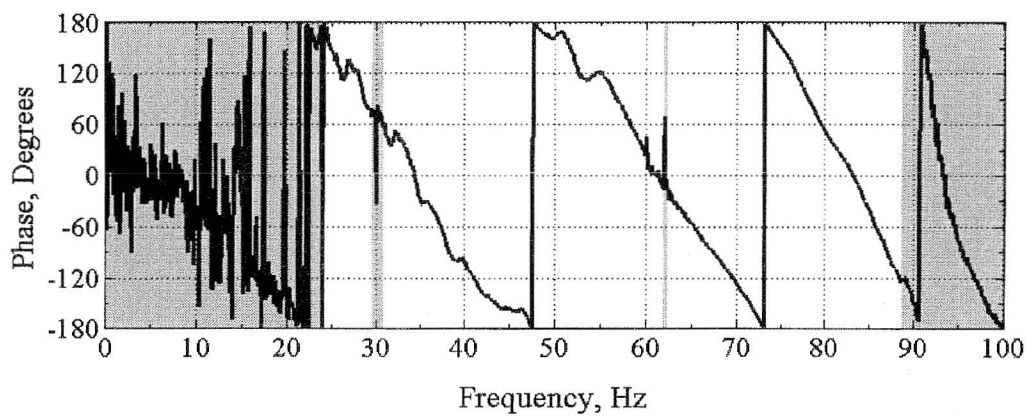


Figure Y.9 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (4F5_F_43.DAT)

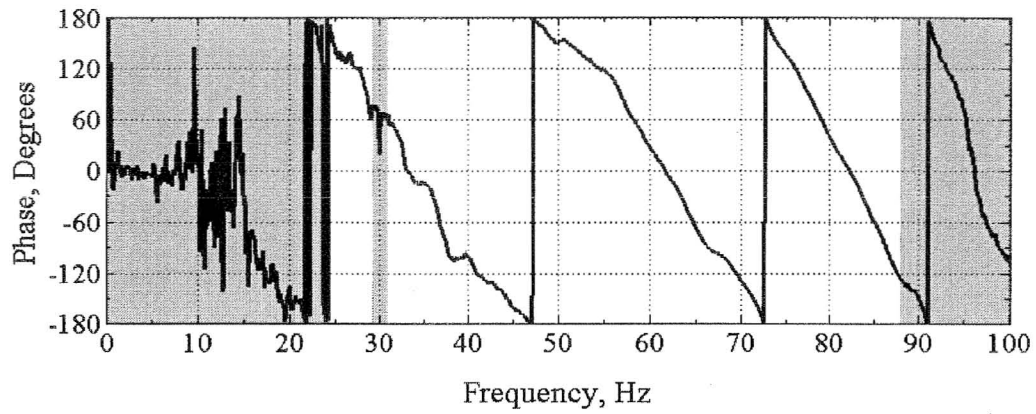


Figure Y.10 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (4F6_F_43.DAT)

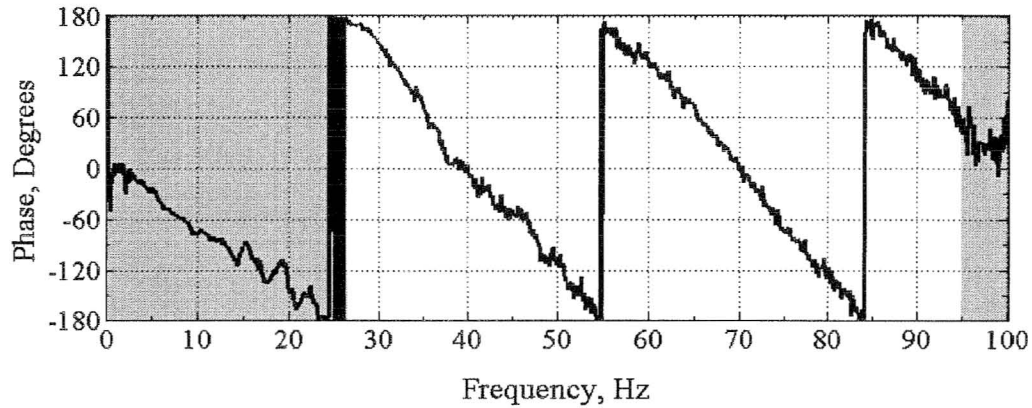


Figure Y.11 Phase Plots Measured by SASW Testing with 15-ft Receiver Spacing (4G1_F_21.DAT)

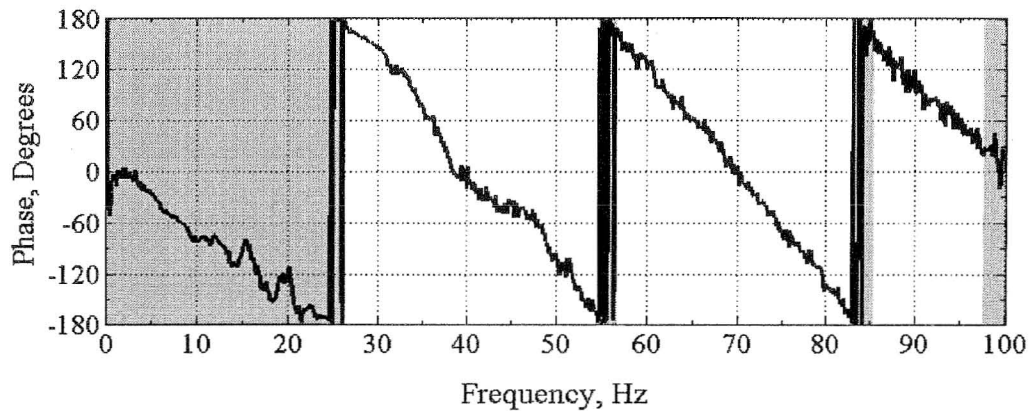


Figure Y.12 Phase Plots Measured by SASW Testing with 15-ft Receiver Spacing (4G2_F_21.DAT)

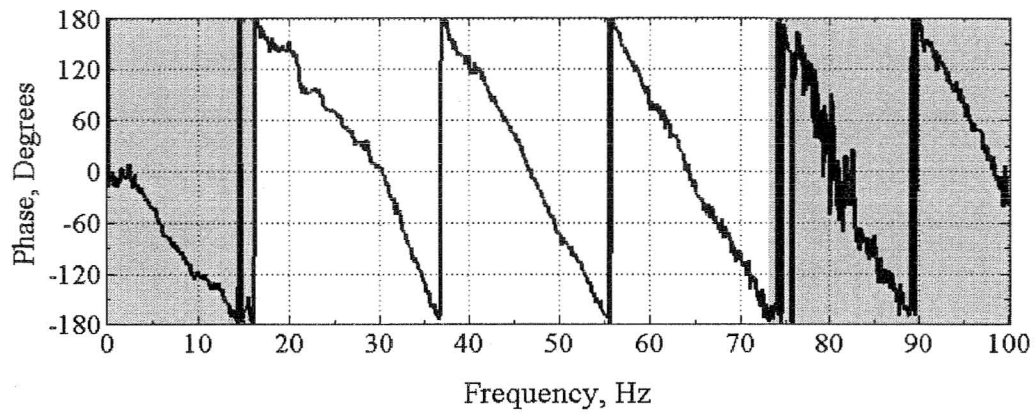


Figure Y.13 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (4G3_F_21.DAT)

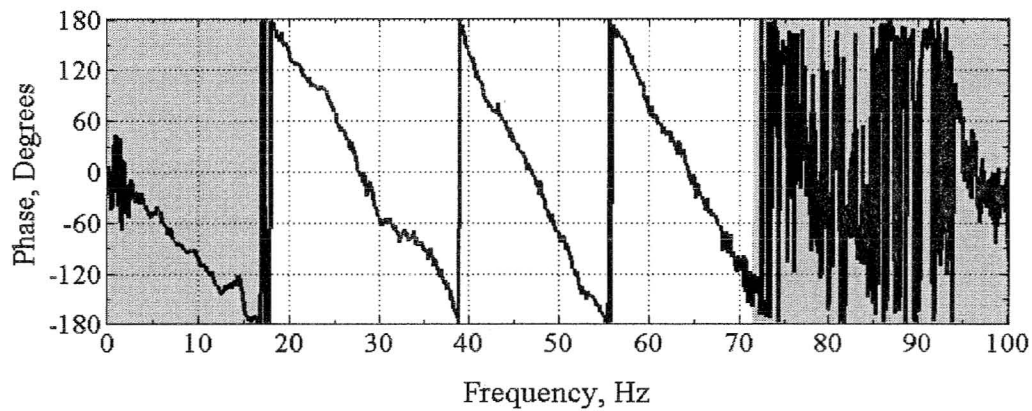


Figure Y.14 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (4G3_F_43.DAT)

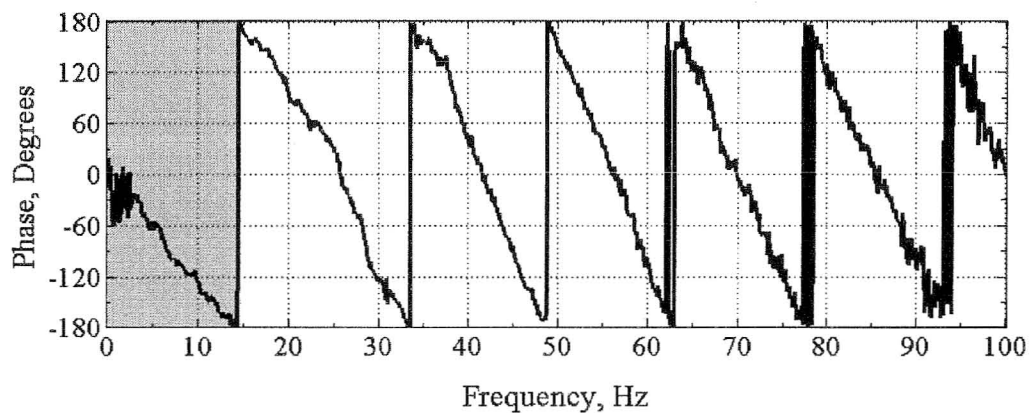


Figure Y.15 Phase Plots Measured by SASW Testing with 30-ft Receiver Spacing (4G1_F_43.DAT)

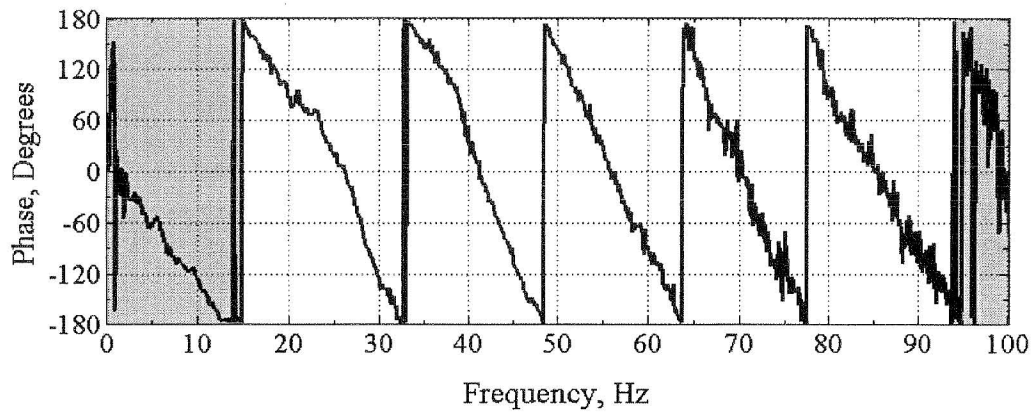


Figure Y.16 Phase Plots Measured by SASW Testing with 30-ft Receiver Spacing (4G2_F_43.DAT)

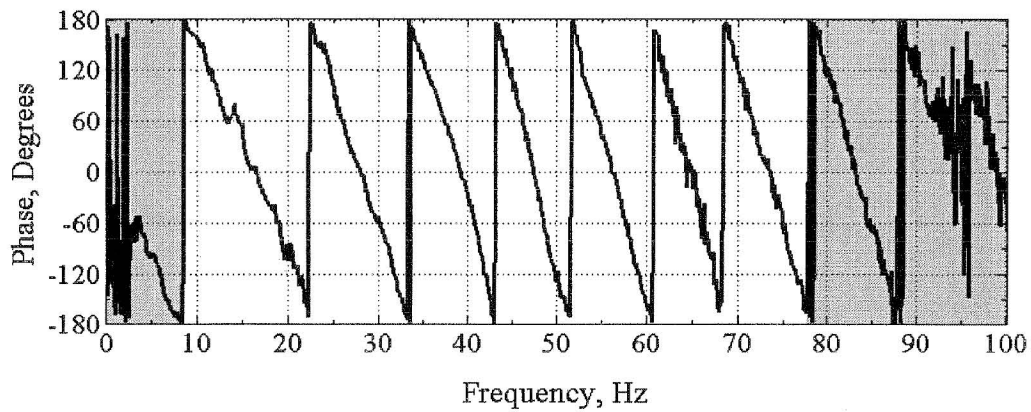


Figure Y.17 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (4G4_F_21.DAT)

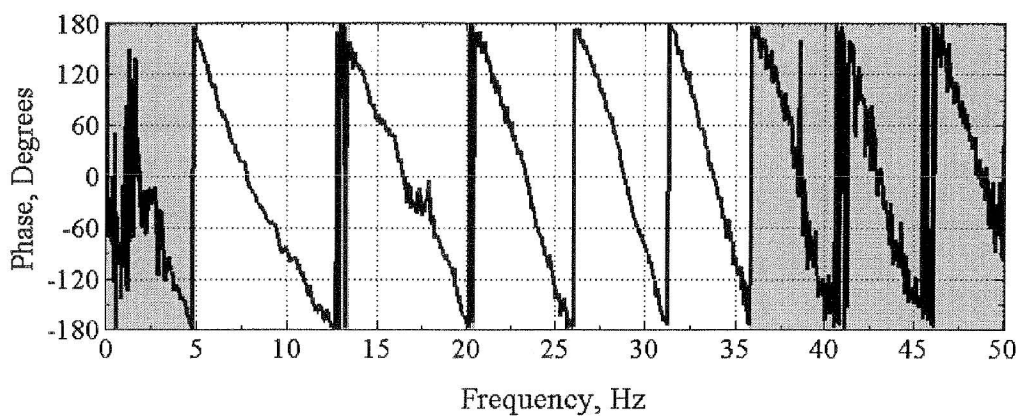


Figure Y.18 Phase Plots Measured by SASW Testing with 100-ft Receiver Spacing (4G5_F_21.DAT)

Table Y.1 Tables of Masking Parameters Used on Data Collected during Fourth Site Visit at Site F

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
2	1	0	146	1	4F1_F_43.DAT
	2	231	800	-	
2	1	0	106	1	4F2_F_43.DAT
	2	400	800	-	
3	1	0	83	1	4F3_F_21.DAT
	2	135.5	200	-	
3	1	0	78	1	4F4_F_21.DAT
	2	216.5	400	-	
6	1	0	45.25	1	4F3_F_43.DAT
	2	92.75	200	-	
6	1	0	45.5	1	4F4_F_43.DAT
	2	92.5	400	-	
9	1	0	37.62	1	4F5_F_21.DAT
	2	59.5	62.5	1	
	3	66	100	-	
9	1	0	38	1	4F6_F_21.DAT
	2	71.88	100	-	
18	1	0	24.12	1	4F5_F_43.DAT
	2	29.5	30.88	2	
	3	61.88	62.25	2	
	4	88.38	100	-	
18	1	0	24.38	1	4F6_F_43.DAT
	2	29.25	31	1	
	3	87.62	100	-	
15	1	0	26.38	1	4G1_F_21.DAT
	2	94.75	100	-	
15	1	0	26.25	1	4G2_F_21.DAT
	2	54.62	56.62	2	
	3	82.75	85.12	3	
	4	97.38	100	-	

Performed by


Jiabei Yuan

Checked by

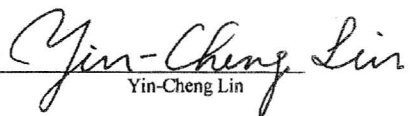

Yin-Cheng Lin

Table Y.2 Tables of Masking Parameters Used on Data Collected during Fourth Site Visit at Site F (Continued)

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
25	1	0	16.25	1	4G3_F_21.DAT
	2	73	100	-	
25	1	0	18	1	4G3_F_43.DAT
	2	55.38	56	3	
	3	71.38	100	-	
30	1	0	14.62	1	4G1_F_43.DAT
30	1	0	15	1	4G2_F_43.DAT
	2	32.5	33.25	2	
	3	93.5	100	-	
50	1	0	8.62	1	4G4_F_21.DAT
	2	33.25	33.75	3	
	3	77.5	100	-	
100	1	0	4.88	1	4G5_F_21.DAT
	2	12.69	13.44	2	
	3	20.06	20.5	3	
	4	35.69	50	-	

Performed by Jiabei Yuan
Jiabei Yuan

Checked by Yin-Cheng Lin
Yin-Cheng Lin

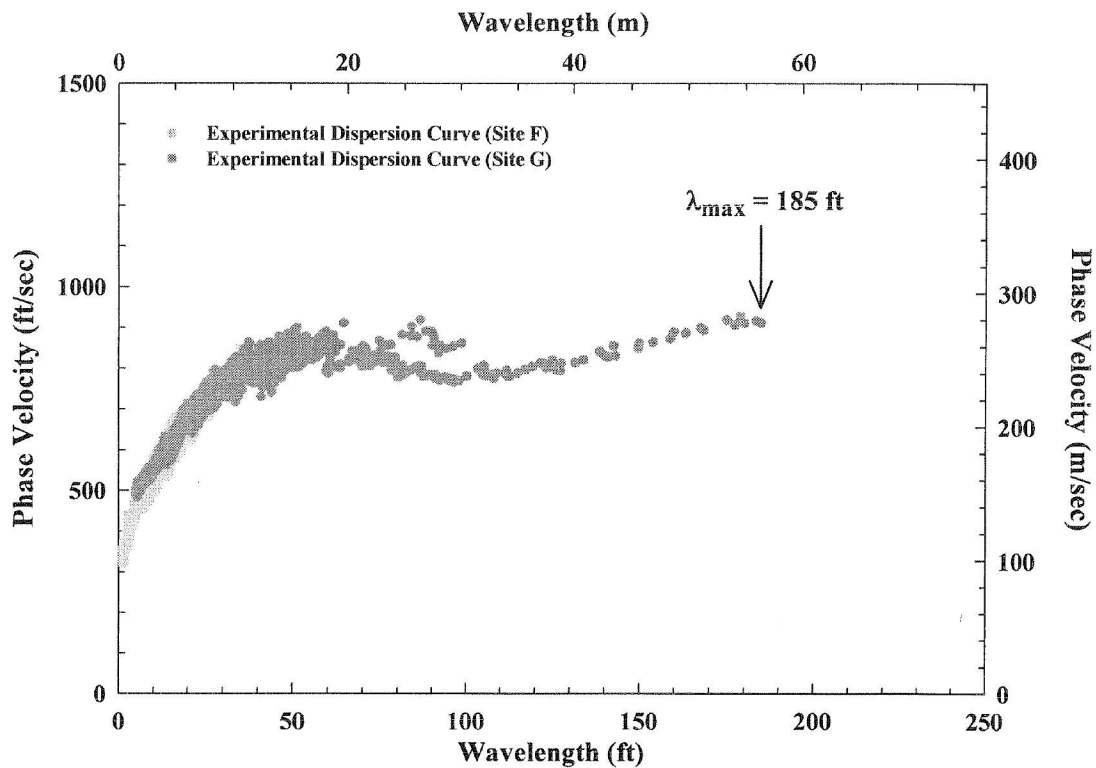


Figure Y.19 Experimental Dispersion Curve Measured during Fourth Site Visit at Site F at Vogtle, GA; Linear Wavelength Axis

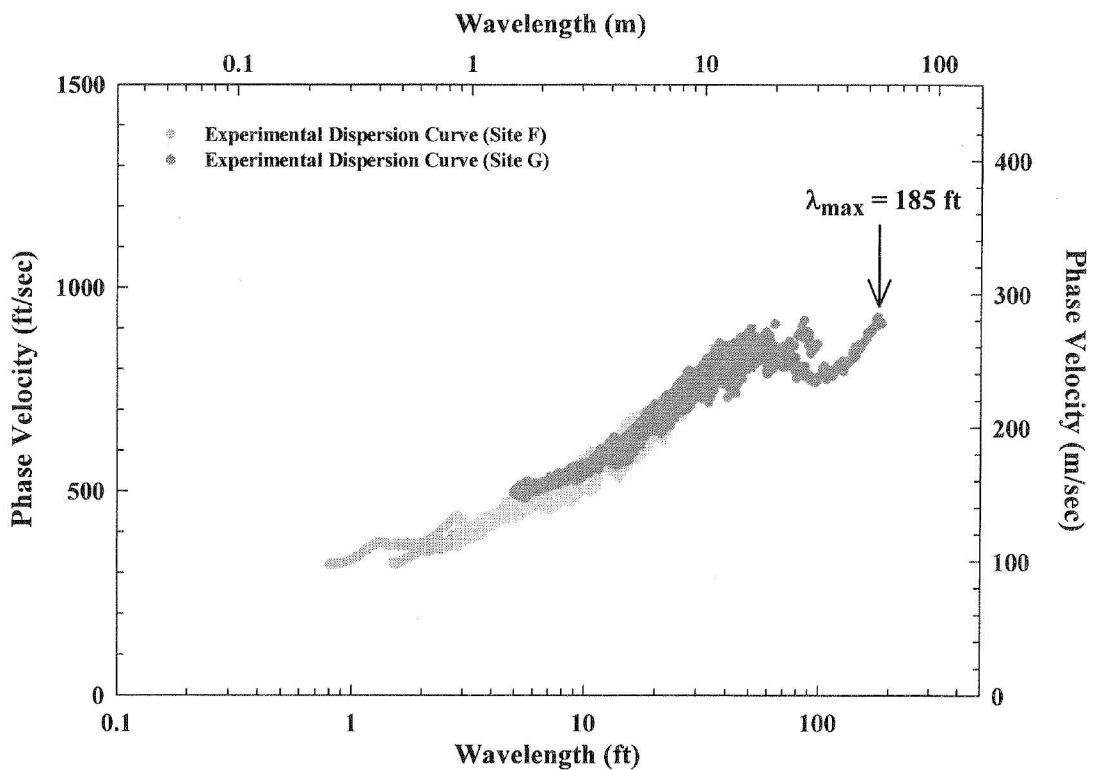


Figure Y.20 Experimental Dispersion Curve Measured during Fourth Site Visit at Site F at Vogtle, GA; Logarithmic Wavelength Axis

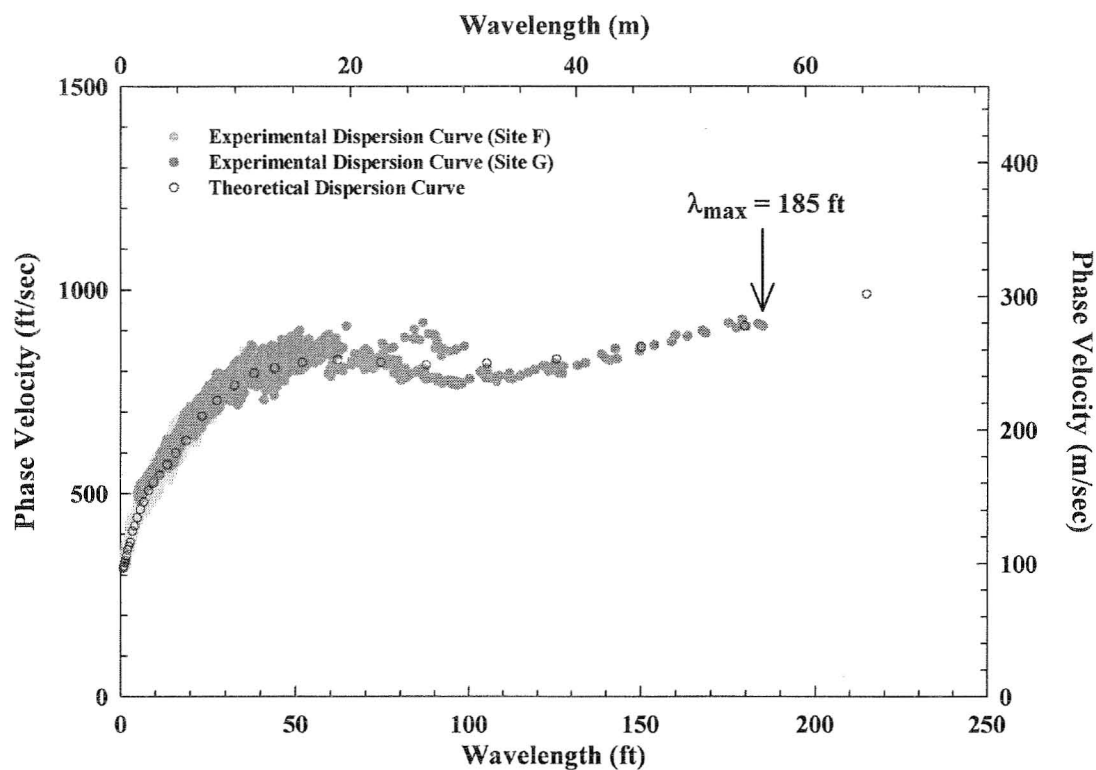


Figure Y.21 Experimental and Theoretical Dispersion Curves from Site F in Fourth Site Visit at Vogtle, GA; Linear Wavelength Axis

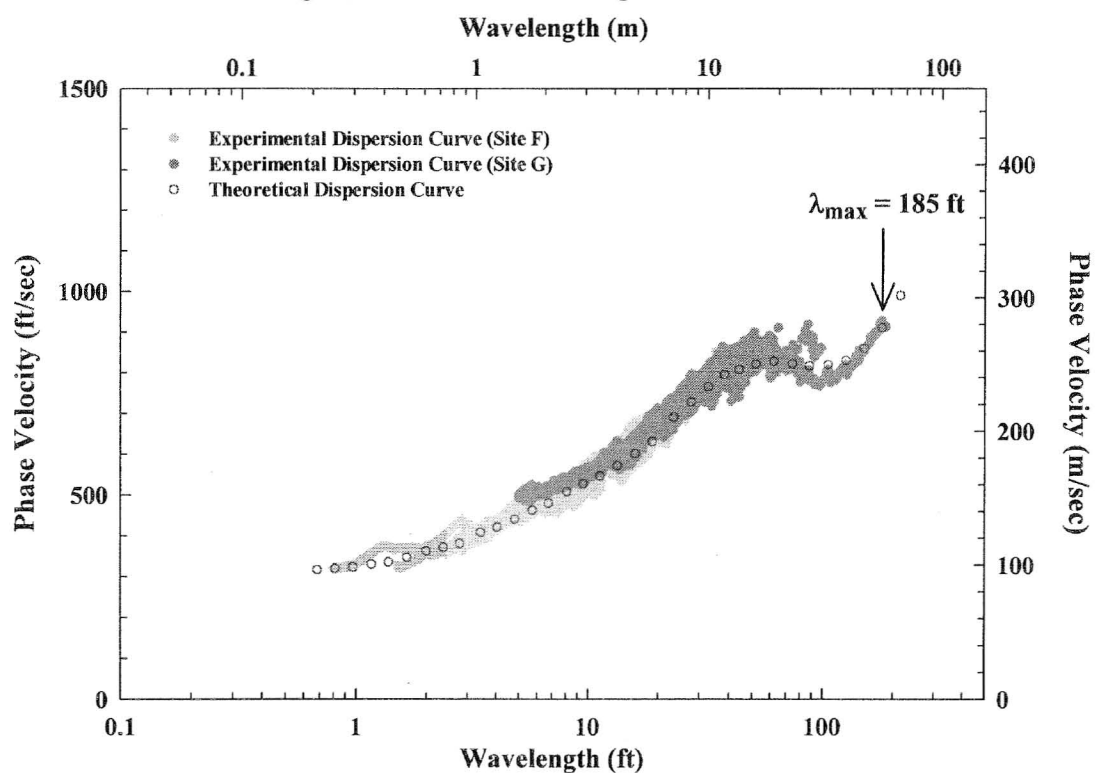


Figure Y.22 Experimental and Theoretical Dispersion Curves from Site F in Fourth Site Visit at Vogtle, GA; Logarithmic Wavelength Axis

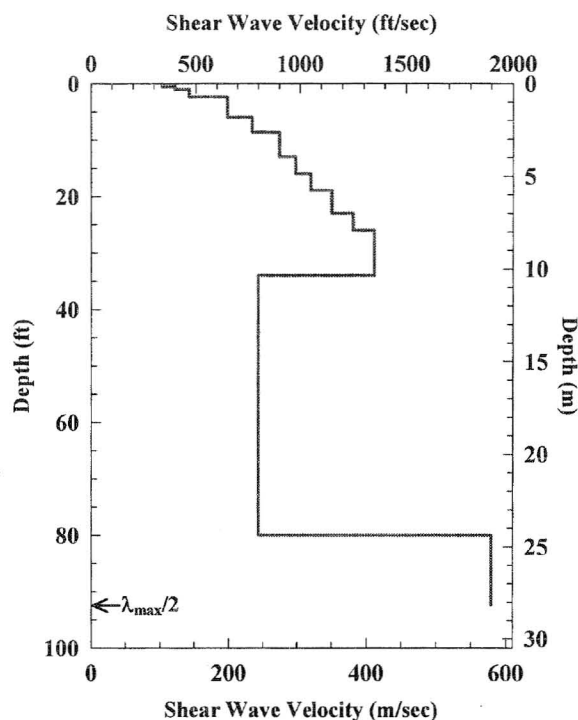


Figure Y.23 Shear Wave Velocity Profile Determined at Site F during Fourth Site Visit at Vogtle, GA

Table Y.3 Profile Parameters Used to Develop Preliminary Theoretical Dispersion Curve at Site F in the Fourth Site Visit at Vogtle, GA

Layer No.	Thickness, ft	Depth to Top of Layer, ft	S-Wave Velocity, ft/s	Assumed Poisson's Ratio	P-Wave Velocity, ft/s	Assumed Total Unit Weight, pcf
1	0.6	0.0	340	0.24	581	128
2	0.5	0.6	400	0.24	684	128
3	1.3	1.1	470	0.24	804	128
4	3.6	2.4	650	0.24	1111	128
5	2.7	6.0	770	0.24	1317	128
6	4.3	8.7	900	0.24	1539	128
7	3.0	13.0	980	0.24	1676	128
8	3.0	16.0	1050	0.24	1795	128
9	4.0	19.0	1150	0.24	1966	128
10	3.0	23.0	1250	0.24	2137	128
11	8.0	26.0	1350	0.24	2308	128
12	46.0	34.0	800	0.24	1368	128
13 [#]	12.3	80.0	1900	0.42	5000	135
14 ^{*#}	17.7	92.3	2200	0.38	5000	135
15 ^{*#}	Half Space	110.0	2200	0.38	5000	135

* Layer below maximum depth of the V_s Profile.

Layer below water table.

Performed by Yin-Cheng Lin Checked by K. H. Stokoe, II
Yin-Cheng Lin Kenneth H. Stokoe, II