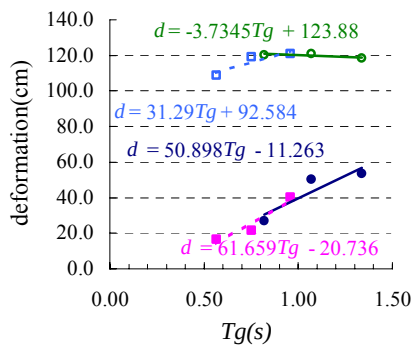


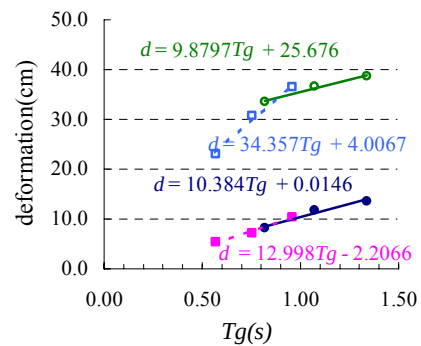
付録A 地盤固有周期と残留変形量

表-A.1 地盤固有周期と残留変形量（重力式：水深-7.5m,kh=0.10）

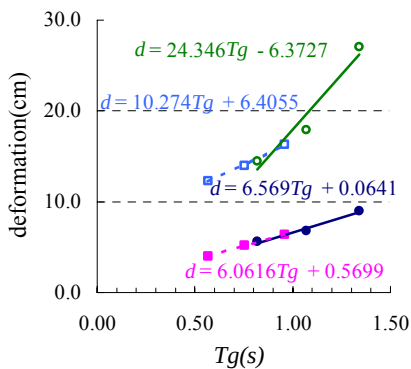
			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-7.5	1	ave	50.2	11.9	6.8	13.3	74.4	1.07	1.07	1.07	1.07	1.07	121.1	36.6	18.0	38.5	189.3	1.07	1.07	1.07	1.07	1.07
		-σ	53.5	13.6	9.0	18.3	89.0	1.34	1.34	1.34	1.34	1.34	118.3	38.7	27.1	50.4	183.7	1.34	1.34	1.34	1.34	1.34
		+σ	26.8	8.1	5.6	11.2	49.5	0.82	0.82	0.82	0.82	0.82	120.2	33.6	14.5	32.5	182.6	0.82	0.82	0.82	0.82	0.82
	2	ave	21.6	7.2	5.2	11.5	38.1	0.75	0.75	0.75	0.75	0.75	119.2	30.7	14.0	30.9	172.4	0.75	0.75	0.75	0.75	0.75
		-σ	40.3	10.4	6.4	12.3	62.3	0.96	0.96	0.96	0.96	0.96	121.1	36.5	16.3	36.4	180.5	0.96	0.96	0.96	0.96	0.96
		+σ	16.4	5.4	4.0	12.6	21.3	0.57	0.57	0.57	0.57	0.57	108.7	23.0	12.3	29.5	170.2	0.57	0.57	0.57	0.57	0.57



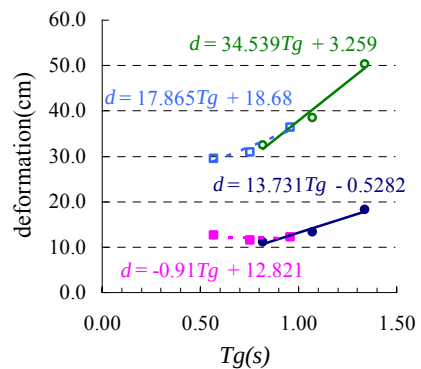
1) Dip波(no.18)



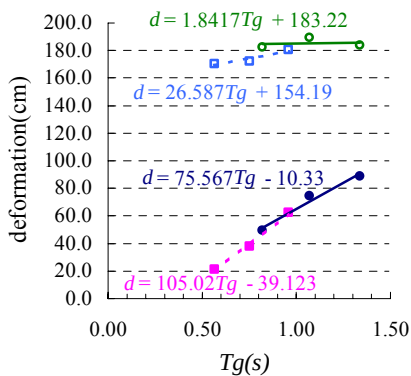
2) 八戸波(no.19)



3) 神戸波(no.20)



4) Strike波(no.22)



5) Subduction波(no.23)

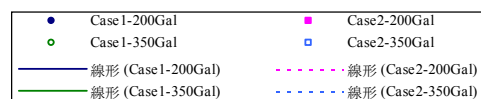
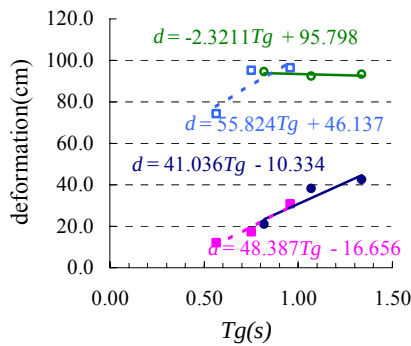


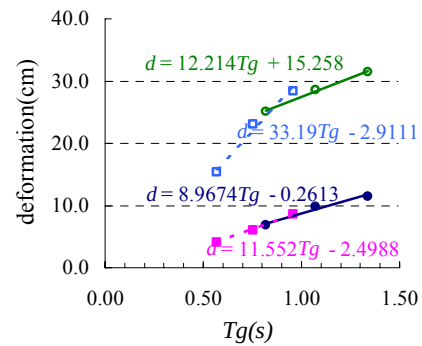
図-A.1 地盤固有周期と残留変形量の関係（重力式：水深-7.5m,kh=0.10）

表-A.2 地盤固有周期と残留変形量（重力式：水深-7.5m,kh=0.15）

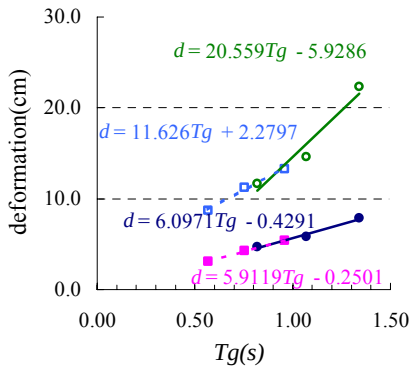
			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-7.5	1	ave	38.2	9.8	5.9	11.0	59.0	1.07	1.07	1.07	1.07	1.07	92.4	28.6	14.6	31.5	143.7	1.07	1.07	1.07	1.07	1.07
		-σ	42.4	11.5	7.9	15.9	73.3	1.34	1.34	1.34	1.34	1.34	93.2	31.5	22.3	42.4	142.6	1.34	1.34	1.34	1.34	1.34
		+σ	20.9	6.8	4.7	8.9	39.1	0.82	0.82	0.82	0.82	0.82	94.4	25.1	11.7	25.1	139.2	0.82	0.82	0.82	0.82	0.82
	2	ave	17.3	6.0	4.3	9.1	30.1	0.75	0.75	0.75	0.75	0.75	95.1	23.0	11.3	23.4	145.1	0.75	0.75	0.75	0.75	0.75
		-σ	30.8	8.6	5.4	10.0	50.1	0.96	0.96	0.96	0.96	0.96	96.3	28.4	13.3	29.5	149.0	0.96	0.96	0.96	0.96	0.96
		+σ	12.1	4.1	3.1	9.0	16.3	0.57	0.57	0.57	0.57	0.57	74.1	15.4	8.7	21.7	121.9	0.57	0.57	0.57	0.57	0.57



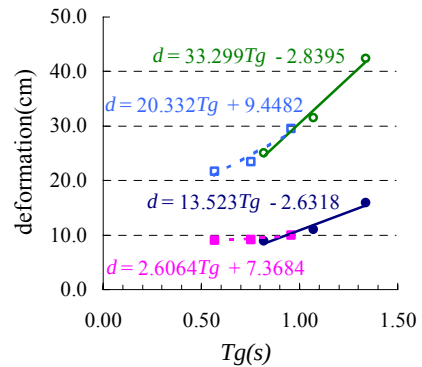
1) Dip波(no.18)



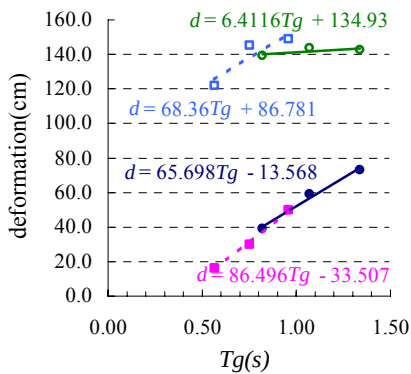
2) 八戸波(no.19)



3) 神戸波(no.20)



4) Strike波(no.22)



5) Subduction波(no.23)

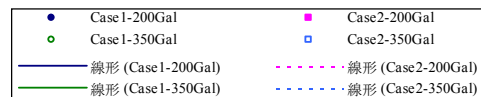


図-A.2 地盤固有周期と残留変形量の関係（重力式：水深-7.5m,kh=0.15）

表-A.3 地盤固有周期と残留変形量（重力式：水深-11.0m,kh=0.10）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-11.0	1	ave	65.8	15.4	8.6	17.8	99.8	1.16	1.16	1.16	1.16	1.16	129.8	43.8	23.3	50.6	204.8	1.16	1.16	1.16	1.16	1.16
		-σ	58.6	16.9	12.5	23.7	98.6	1.45	1.45	1.45	1.45	1.45	127.0	55.3	39.6	72.2	182.0	1.45	1.45	1.45	1.45	1.45
		+σ	45.4	11.5	6.8	12.9	71.6	0.89	0.89	0.89	0.89	0.89	123.1	40.6	17.3	37.8	190.5	0.89	0.89	0.89	0.89	0.89
	2	ave	35.5	9.8	6.4	12.6	59.4	0.79	0.79	0.79	0.79	0.79	128.5	39.0	16.3	36.3	189.5	0.79	0.79	0.79	0.79	0.79
		-σ	62.2	14.3	7.7	15.4	92.0	1.00	1.00	1.00	1.00	1.00	132.1	43.5	20.7	47.1	210.2	1.00	1.00	1.00	1.00	1.00
		+σ	23.0	7.3	4.7	13.0	35.3	0.59	0.59	0.59	0.59	0.59	120.6	32.0	14.2	30.5	176.6	0.59	0.59	0.59	0.59	0.59

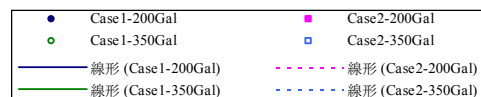
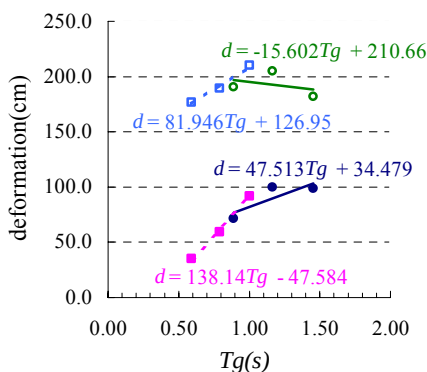
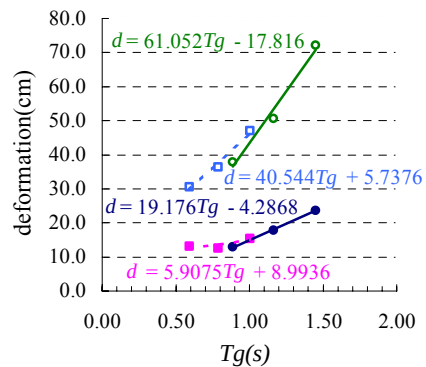
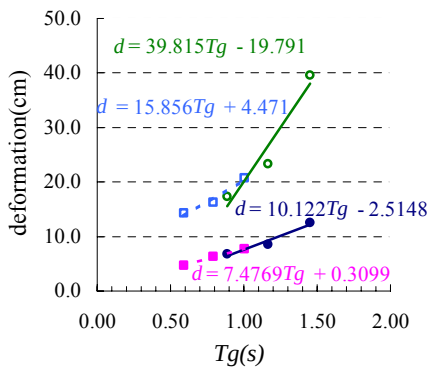
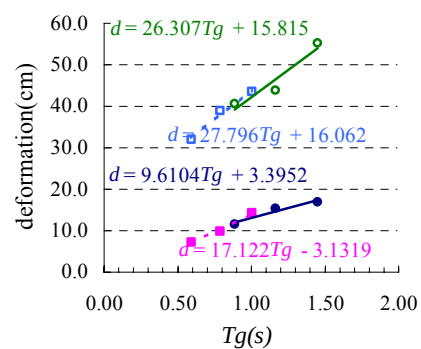
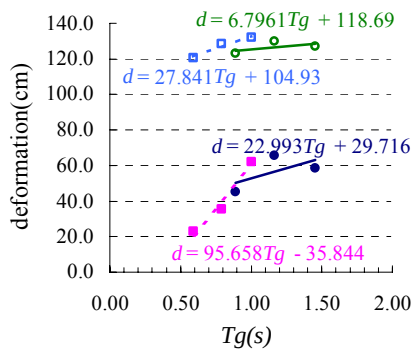
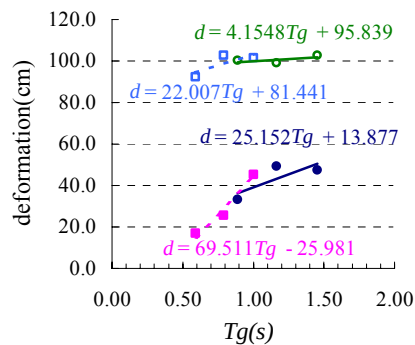


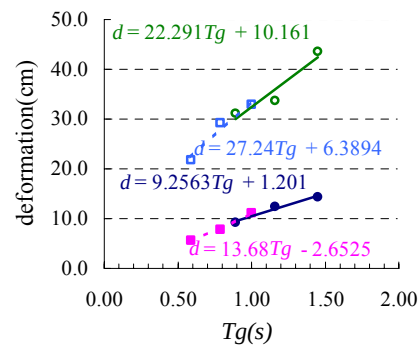
図-A.3 地盤固有周期と残留変形量の関係（重力式：水深--11.0m,kh=0.10）

表-A.4 地盤固有周期と残留変形量（重力式：水深-11.0m,kh=0.15）

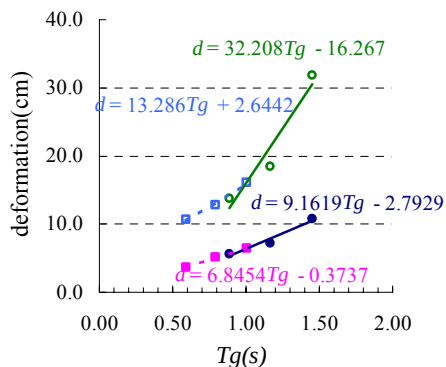
			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-11.0	1	ave	49.2	12.4	7.3	14.5	77.3	1.16	1.16	1.16	1.16	1.16	99.0	33.7	18.5	40.4	157.4	1.16	1.16	1.16	1.16	1.16
		-σ	47.5	14.4	10.8	20.5	82.8	1.45	1.45	1.45	1.45	1.45	102.7	43.6	31.8	58.2	152.0	1.45	1.45	1.45	1.45	1.45
		+σ	33.2	9.2	5.7	10.2	55.8	0.89	0.89	0.89	0.89	0.89	100.4	31.2	13.8	30.2	154.4	0.89	0.89	0.89	0.89	0.89
	2	ave	25.7	7.8	5.2	9.8	46.6	0.79	0.79	0.79	0.79	0.79	102.8	29.2	12.9	28.1	152.7	0.79	0.79	0.79	0.79	0.79
		-σ	45.3	11.2	6.4	12.1	69.5	1.00	1.00	1.00	1.00	1.00	101.6	33.0	16.1	36.5	161.4	1.00	1.00	1.00	1.00	1.00
		+σ	16.9	5.6	3.6	9.7	26.2	0.59	0.59	0.59	0.59	0.59	92.4	21.8	10.7	23.3	140.6	0.59	0.59	0.59	0.59	0.59



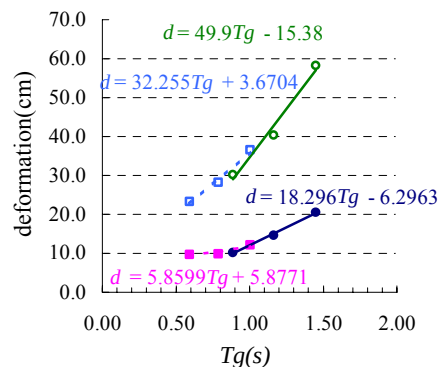
1) Dip波(no.18)



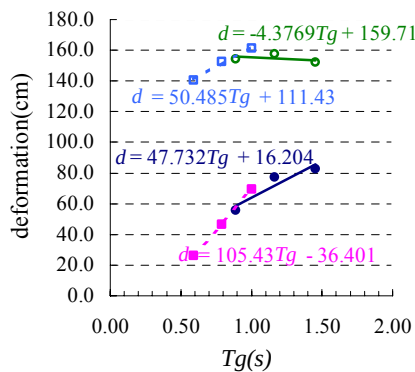
2) 八戸波(no.19)



3) 神戸波(no.20)



4) Strike波(no.22)



5) Subduction波(no.23)

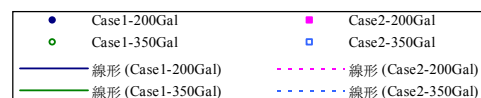
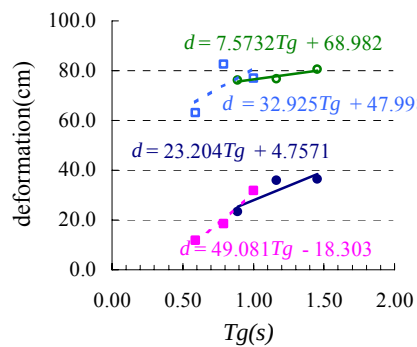


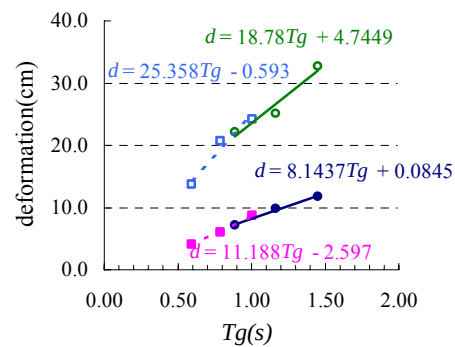
図-A.4 地盤固有周期と残留変形量の関係（重力式：水深--11.0m,kh=0.15）

表-A.5 地盤固有周期と残留変形量（重力式：水深-11.0m,kh=0.20）

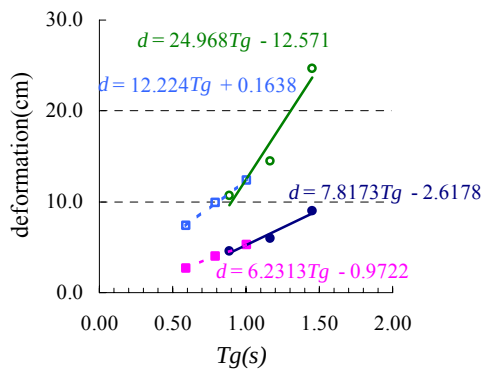
			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-11.0	1	ave	35.9	9.8	6.0	11.7	59.0	1.16	1.16	1.16	1.16	1.16	76.8	25.2	14.5	32.5	124.2	1.16	1.16	1.16	1.16	1.16
		-σ	36.4	11.8	9.0	17.2	66.5	1.45	1.45	1.45	1.45	1.45	80.5	32.7	24.7	46.0	123.0	1.45	1.45	1.45	1.45	1.45
		+σ	23.3	7.2	4.6	7.9	41.3	0.89	0.89	0.89	0.89	0.89	76.2	22.2	10.7	23.3	121.2	0.89	0.89	0.89	0.89	0.89
	2	ave	18.5	6.1	4.0	7.5	35.2	0.79	0.79	0.79	0.79	0.79	82.4	20.8	9.9	21.5	122.9	0.79	0.79	0.79	0.79	0.79
		-σ	31.9	8.7	5.3	9.4	51.4	1.00	1.00	1.00	1.00	1.00	77.0	24.2	12.4	29.2	126.5	1.00	1.00	1.00	1.00	1.00
		+σ	11.8	4.1	2.7	6.8	18.1	0.59	0.59	0.59	0.59	0.59	63.1	13.7	7.4	16.6	105.0	0.59	0.59	0.59	0.59	0.59



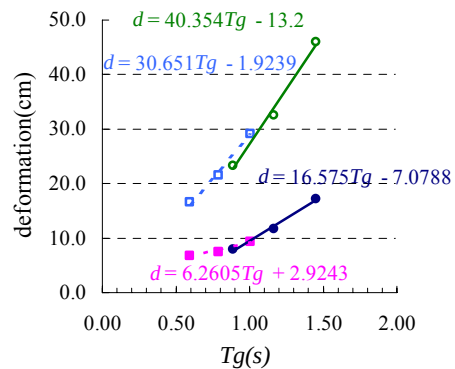
1) Dip波(no.18)



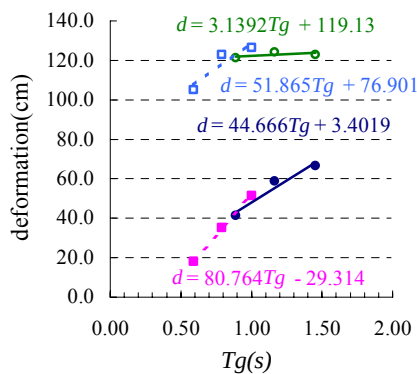
2) 八戸波(no.19)



3) 神戸波(no.20)



4) Strike波(no.22)



5) Subduction波(no.23)

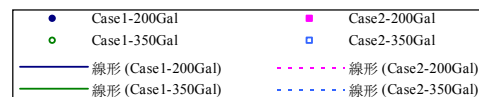


図-A.5 地盤固有周期と残留変形量の関係（重力式：水深-11.0m,kh=0.20）

表-A.6 地盤固有周期と残留変形量（重力式：水深-14.5m,kh=0.20）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-14.5	1	ave	36.7	10.8	6.8	13.9	63.8	1.25	1.25	1.25	1.25	1.25	76.6	27.9	16.9	37.7	125.2	1.25	1.25	1.25	1.25	1.25
		-σ	37.8	13.5	10.9	19.8	66.6	1.56	1.56	1.56	1.56	1.56	79.5	40.0	27.7	56.0	124.6	1.56	1.56	1.56	1.56	1.56
		+σ	28.5	8.2	5.0	8.8	48.3	0.96	0.96	0.96	0.96	0.96	74.1	23.4	11.6	26.6	123.5	0.96	0.96	0.96	0.96	0.96
	2	ave	22.0	6.9	4.4	7.8	40.0	0.85	0.85	0.85	0.85	0.85	75.0	21.4	10.3	23.1	118.2	0.85	0.85	0.85	0.85	0.85
		-σ	35.6	9.6	5.7	10.9	58.5	1.07	1.07	1.07	1.07	1.07	75.5	25.0	13.7	32.1	127.5	1.07	1.07	1.07	1.07	1.07
		+σ	13.8	4.6	2.9	6.7	23.5	0.64	0.64	0.64	0.64	0.64	66.6	15.6	7.9	17.1	107.4	0.64	0.64	0.64	0.64	0.64

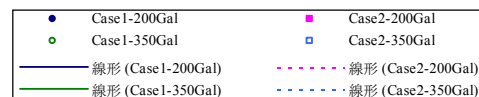
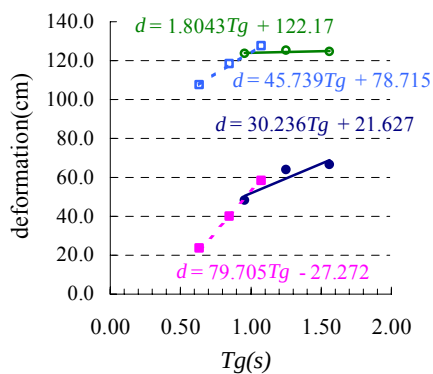
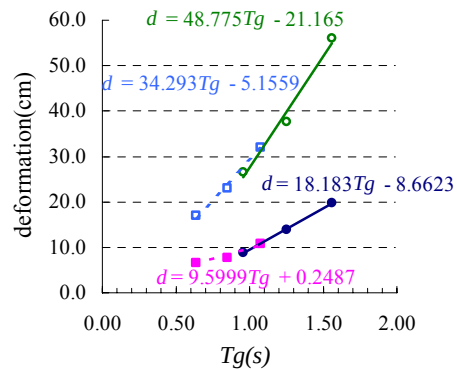
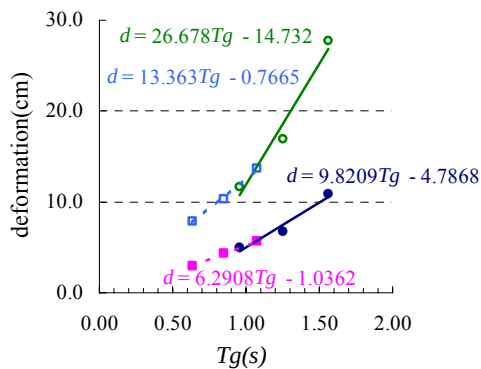
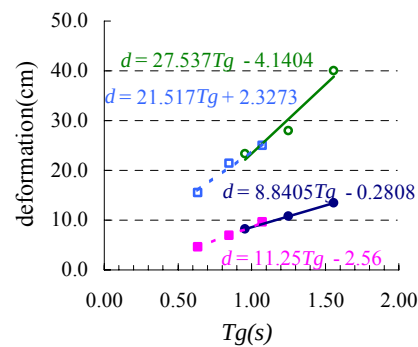
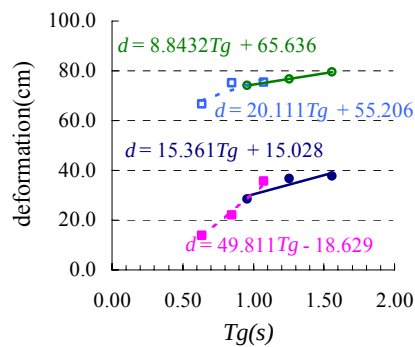


図-A.6 地盤固有周期と残留変形量の関係（重力式：水深-14.5m,kh=0.20）

表-A.7 地盤固有周期と残留変形量（重力式：水深-14.5m,kh=0.25）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-14.5	1	ave	30.1	9.4	6.0	12.2	53.4	1.25	1.25	1.25	1.25	1.25	65.0	23.1	14.3	32.3	109.0	1.25	1.25	1.25	1.25	1.25
		-σ	32.1	11.7	9.6	17.8	57.8	1.56	1.56	1.56	1.56	1.56	67.7	32.6	23.4	46.8	109.4	1.56	1.56	1.56	1.56	1.56
		+σ	22.4	6.9	4.4	7.7	39.0	0.96	0.96	0.96	0.96	0.96	62.4	19.0	9.9	22.6	106.1	0.96	0.96	0.96	0.96	0.96
	2	ave	17.3	5.8	3.8	6.7	31.7	0.85	0.85	0.85	0.85	0.85	62.1	16.9	8.7	19.3	100.9	0.85	0.85	0.85	0.85	0.85
		-σ	27.9	8.1	5.0	9.3	47.3	1.07	1.07	1.07	1.07	1.07	63.0	20.6	11.5	27.5	109.9	1.07	1.07	1.07	1.07	1.07
		+σ	10.9	3.8	2.4	5.5	18.2	0.64	0.64	0.64	0.64	0.64	53.4	11.9	6.3	14.1	91.8	0.64	0.64	0.64	0.64	0.64

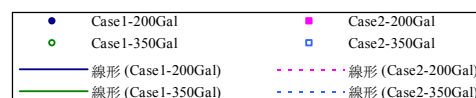
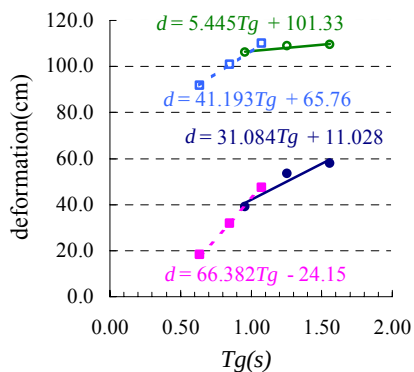
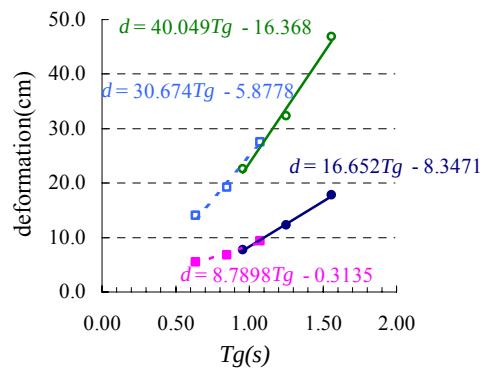
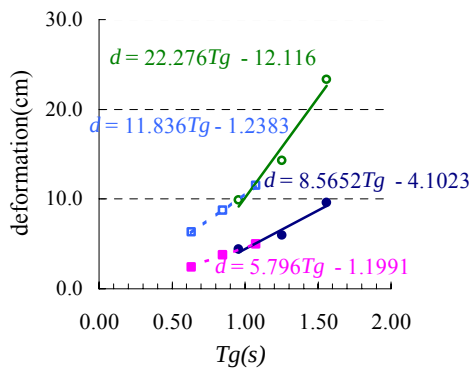
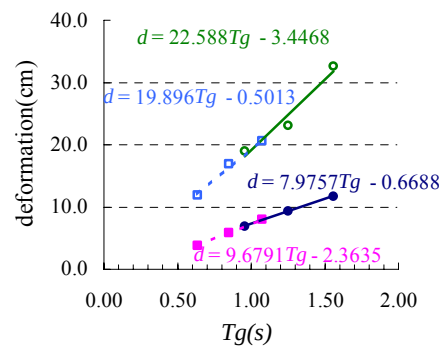
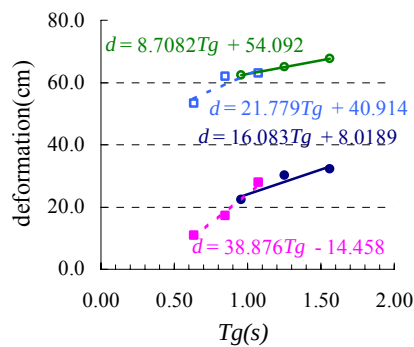


図-A.7 地盤固有周期と残留変形量の関係（重力式：水深-14.5m,kh=0.25）

表-A.8 地盤固有周期と残留変形量（重力式：水深-14.5m,kh=0.27）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-14.5	1	ave	27.7	8.8	5.7	11.5	49.2	1.25	1.25	1.25	1.25	1.25	60.2	21.3	13.3	30.2	102.4	1.25	1.25	1.25	1.25	1.25
		-σ	29.9	11.0	9.0	16.8	54.2	1.56	1.56	1.56	1.56	1.56	63.3	30.0	21.7	43.4	103.2	1.56	1.56	1.56	1.56	1.56
		+σ	20.2	6.5	4.1	7.3	35.5	0.96	0.96	0.96	0.96	0.96	57.4	17.4	9.3	21.1	98.8	0.96	0.96	0.96	0.96	0.96
	2	ave	15.6	5.4	3.6	6.4	28.6	0.85	0.85	0.85	0.85	0.85	56.5	15.3	8.1	17.8	94.1	0.85	0.85	0.85	0.85	0.85
		-σ	25.2	7.5	4.7	8.7	43.2	1.07	1.07	1.07	1.07	1.07	58.1	19.0	10.7	25.8	102.4	1.07	1.07	1.07	1.07	1.07
		+σ	9.7	3.5	2.2	5.0	16.2	0.64	0.64	0.64	0.64	0.64	47.7	10.5	5.7	12.8	84.6	0.64	0.64	0.64	0.64	0.64

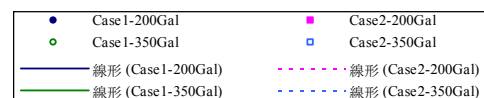
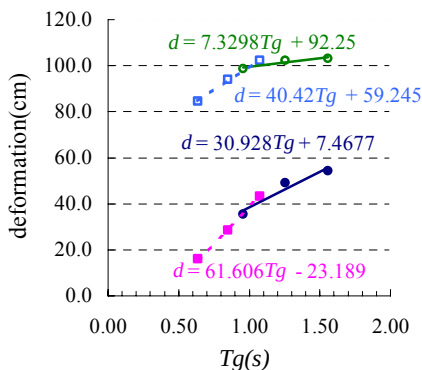
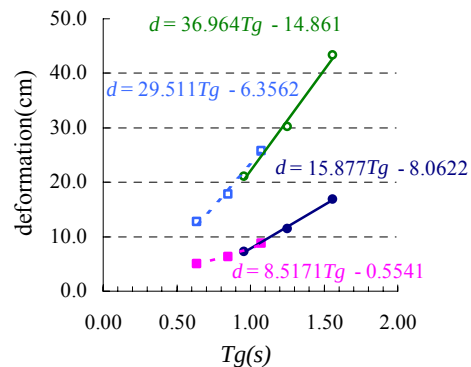
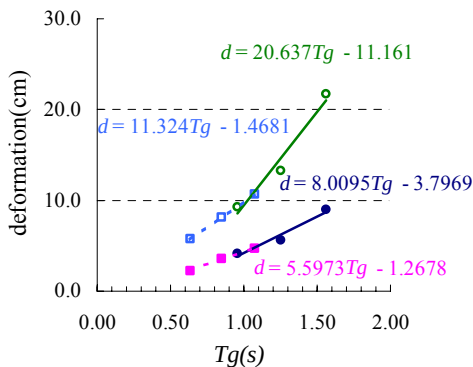
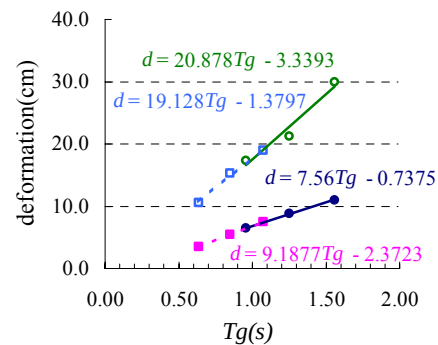
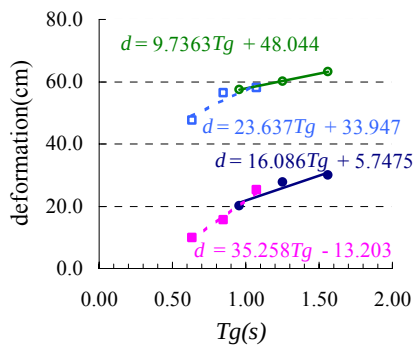


図-A.8 地盤固有周期と残留変形量の関係（重力式：水深-14.5m,kh=0.27）

表-A.9 地盤固有周期と残留変形量（控え直杭式：水深-7.5m,kh=0.10）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-7.5	1	ave	48.3	15.3	8.2	15.8	76.1	1.07	1.07	1.07	1.07	1.07	80.8	34.3	20.0	46.0	144.5	1.07	1.07	1.07	1.07	1.07
		-σ	51.1	16.6	11.3	23.0	85.6	1.34	1.34	1.34	1.34	1.34	92.2	44.1	36.5	60.2	142.5	1.34	1.34	1.34	1.34	1.34
		+σ	34.2	11.3	6.8	12.5	50.6	0.82	0.82	0.82	0.82	0.82	76.3	31.0	15.9	31.9	130.4	0.82	0.82	0.82	0.82	0.82
	2	ave	32.1	10.0	6.4	13.2	47.2	0.75	0.75	0.75	0.75	0.75	106.6	34.6	16.2	33.2	174.1	0.75	0.75	0.75	0.75	0.75
		-σ	40.7	13.3	7.6	13.6	60.6	0.96	0.96	0.96	0.96	0.96	109.0	36.8	18.0	38.9	171.0	0.96	0.96	0.96	0.96	0.96
		+σ	19.8	7.3	4.4	12.3	24.9	0.57	0.57	0.57	0.57	0.57	93.9	27.2	12.5	25.0	138.3	0.57	0.57	0.57	0.57	0.57

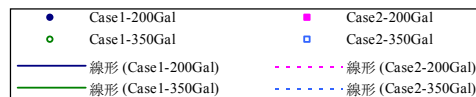
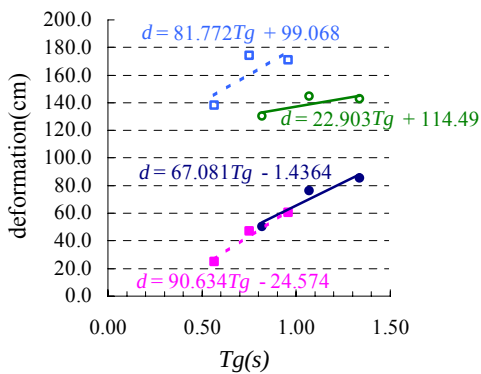
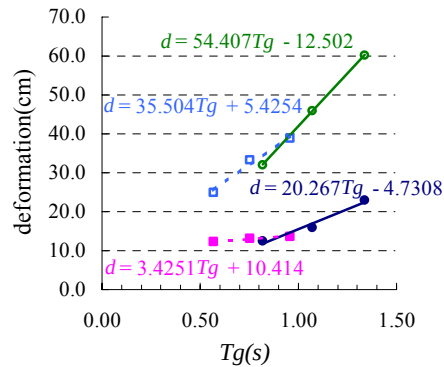
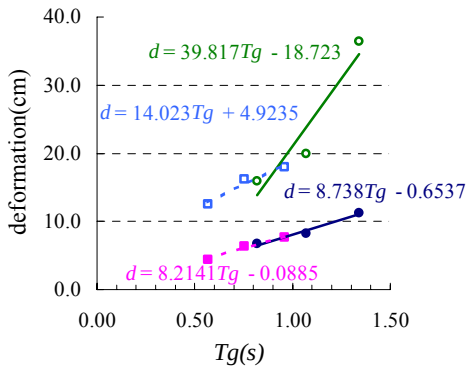
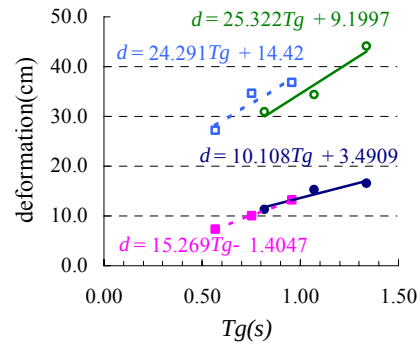
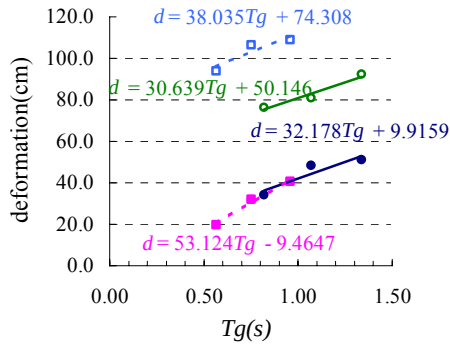


図-A.9 地盤固有周期と残留変形量の関係（控え直杭式：水深-7.5m,kh=0.10）

表-A.10 地盤固有周期と残留変形量（控え直杭式：水深-7.5m,kh=0.15）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-7.5	1	ave	46.7	13.1	7.2	13.8	71.2	1.07	1.07	1.07	1.07	1.07	86.9	31.3	17.4	38.1	146.1	1.07	1.07	1.07	1.07	1.07
		-σ	49.8	14.5	10.0	20.5	84.2	1.34	1.34	1.34	1.34	1.34	94.6	37.5	29.8	52.6	144.3	1.34	1.34	1.34	1.34	1.34
		+σ	29.0	9.4	5.8	10.8	45.4	0.82	0.82	0.82	0.82	0.82	85.9	28.9	13.7	28.1	134.2	0.82	0.82	0.82	0.82	0.82
	2	ave	26.6	9.1	5.9	12.0	40.0	0.75	0.75	0.75	0.75	0.75	96.9	31.5	14.4	30.6	143.1	0.75	0.75	0.75	0.75	0.75
		-σ	45.4	13.7	7.2	13.2	68.1	0.96	0.96	0.96	0.96	0.96	100.1	35.3	17.9	39.9	165.2	0.96	0.96	0.96	0.96	0.96
		+σ	17.4	6.7	4.1	11.5	20.0	0.57	0.57	0.57	0.57	0.57	76.2	23.6	11.7	23.6	118.3	0.57	0.57	0.57	0.57	0.57

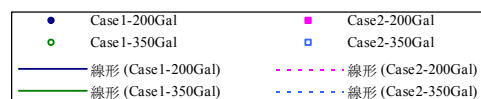
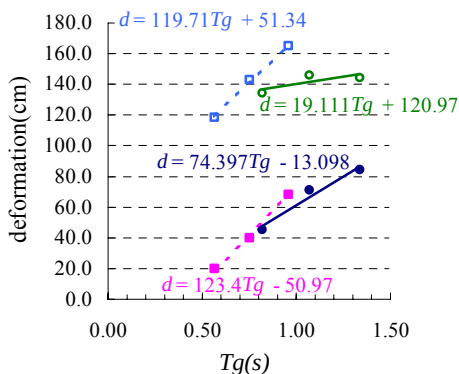
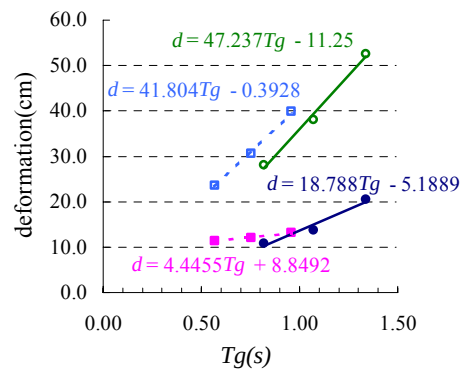
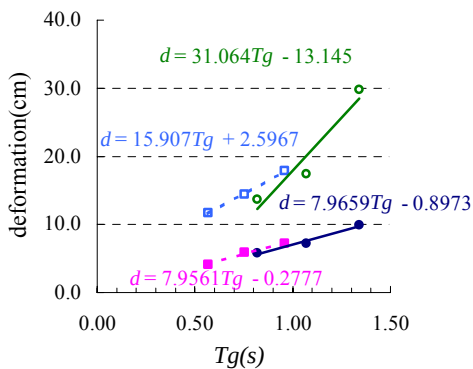
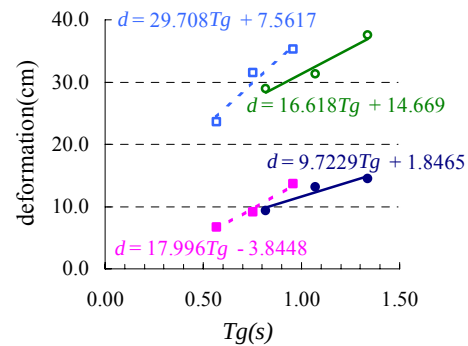
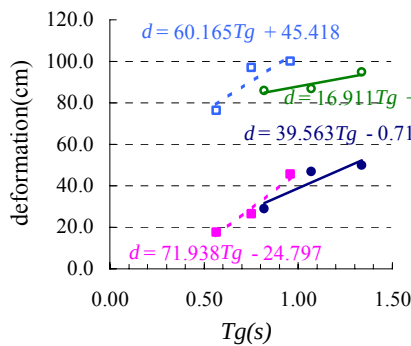


図-A.10 地盤固有周期と残留変形量の関係（控え直杭式：水深-7.5m,kh=0.15）

表-A.11 地盤固有周期と残留変形量（控え直杭式：水深-11.0m,kh=0.10）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-11.0	1	ave	61.4	17.7	10.0	21.2	94.9	1.16	1.16	1.16	1.16	1.16	112.1	44.6	29.1	60.2	172.4	1.16	1.16	1.16	1.16	1.16
		-σ	56.6	17.5	13.5	25.2	92.7	1.45	1.45	1.45	1.45	1.45	111.5	52.4	40.3	70.2	162.3	1.45	1.45	1.45	1.45	1.45
		+σ	39.8	15.2	8.2	14.1	61.6	0.89	0.89	0.89	0.89	0.89	69.9	33.6	19.0	38.7	126.6	0.89	0.89	0.89	0.89	0.89
	2	ave	42.2	16.7	9.0	15.2	62.7	0.79	0.79	0.79	0.79	0.79	82.6	36.0	19.8	41.9	140.7	0.79	0.79	0.79	0.79	0.79
		-σ	55.1	19.9	11.6	21.9	81.8	1.00	1.00	1.00	1.00	1.00	91.0	48.3	32.5	64.9	174.8	1.00	1.00	1.00	1.00	1.00
		+σ	31.1	12.4	7.3	12.2	44.5	0.59	0.59	0.59	0.59	0.59	69.4	28.6	16.4	29.6	118.2	0.59	0.59	0.59	0.59	0.59

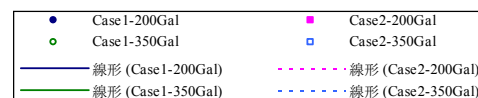
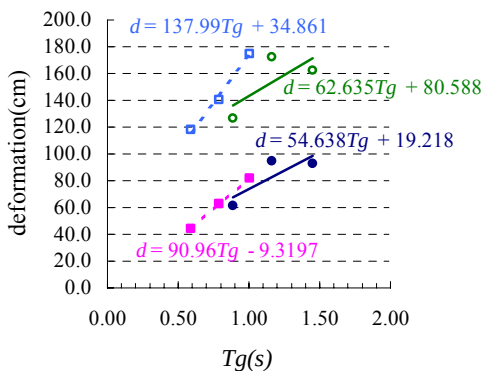
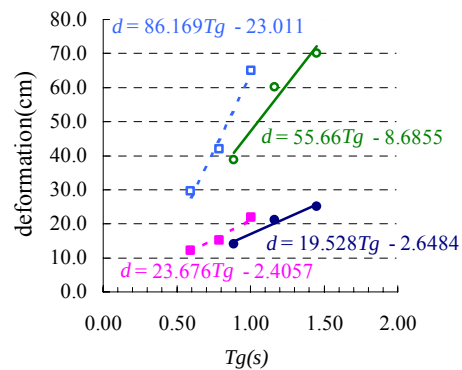
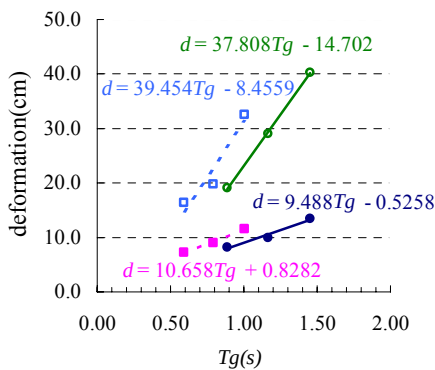
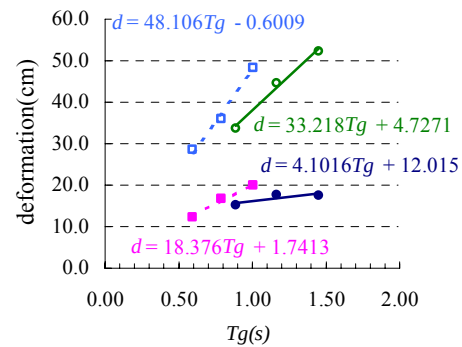
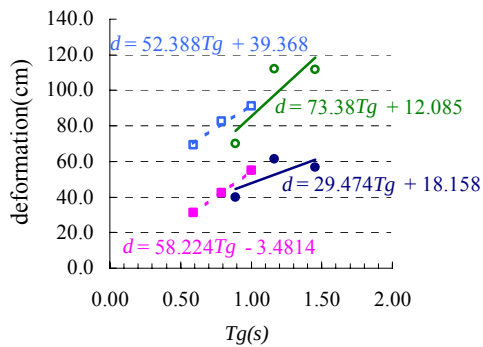


図-A.11 地盤固有周期と残留変形量の関係（控え直杭式：水深--11.0m,kh=0.10）

表-A.12 地盤固有周期と残留変形量（控え直杭式：水深-11.0m,kh=0.15）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-11.0	1	ave	35.6	13.4	8.3	16.0	62.1	1.16	1.16	1.16	1.16	1.16	59.6	30.9	21.4	42.1	106.7	1.16	1.16	1.16	1.16	1.16
		-σ	54.1	16.7	13.5	25.1	88.1	1.45	1.45	1.45	1.45	1.45	103.4	55.2	42.4	71.7	147.8	1.45	1.45	1.45	1.45	1.45
		+σ	30.7	11.8	6.5	11.1	49.3	0.89	0.89	0.89	0.89	0.89	53.0	25.8	14.9	30.1	102.7	0.89	0.89	0.89	0.89	0.89
	2	ave	30.3	12.5	6.8	11.1	48.2	0.79	0.79	0.79	0.79	0.79	64.1	27.1	15.4	33.5	123.8	0.79	0.79	0.79	0.79	0.79
		-σ	67.9	18.6	9.2	19.1	99.2	1.00	1.00	1.00	1.00	1.00	123.3	44.9	24.7	58.9	206.3	1.00	1.00	1.00	1.00	1.00
		+σ	28.7	9.2	5.8	13.0	42.9	0.59	0.59	0.59	0.59	0.59	107.3	32.6	15.1	30.0	155.3	0.59	0.59	0.59	0.59	0.59

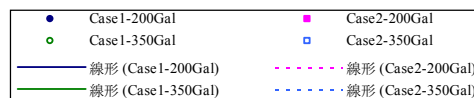
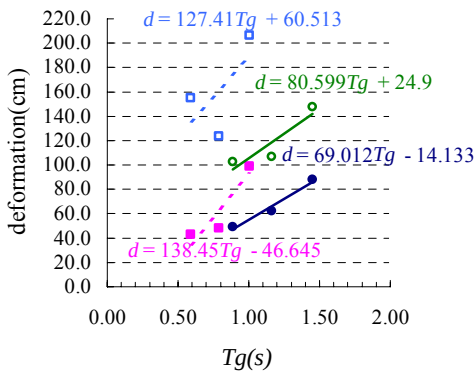
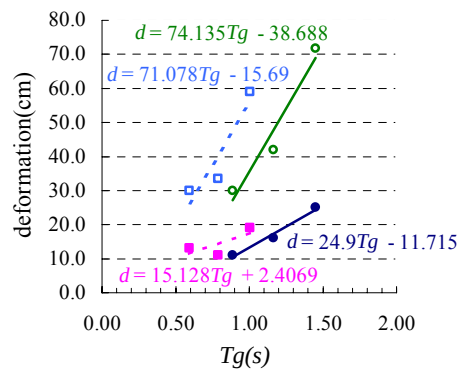
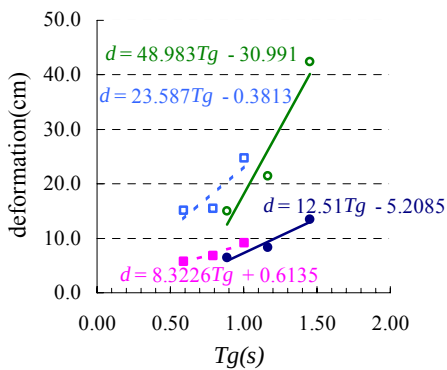
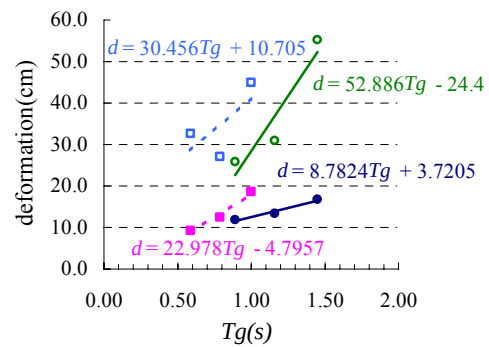
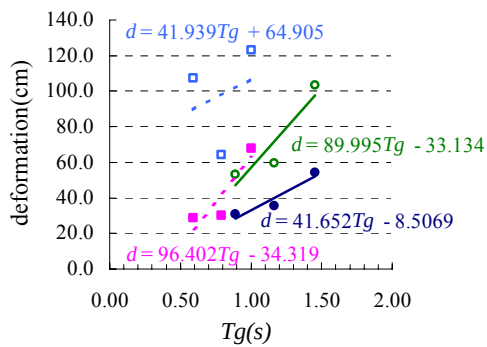
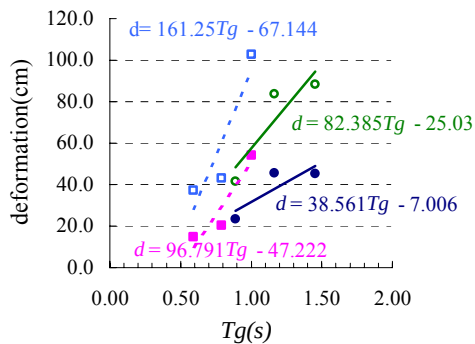


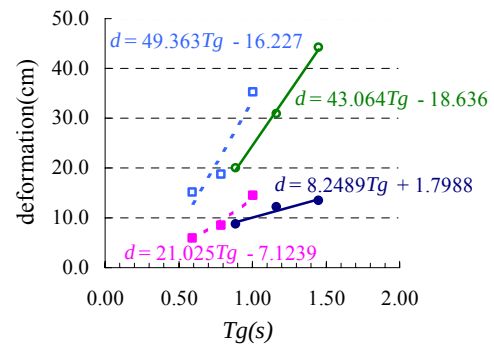
図-A.12 地盤固有周期と残留変形量の関係（控え直杭式：水深--11.0m,kh=0.15）

表-A.13 地盤固有周期と残留変形量（控え直杭式：水深-11.0m,kh=0.20）

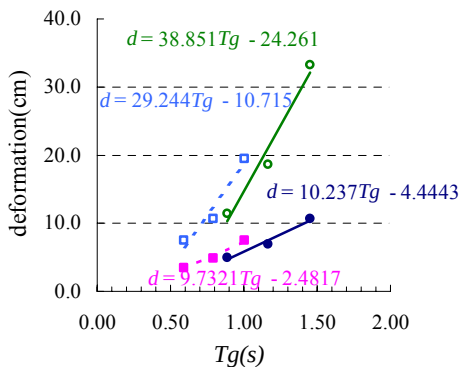
			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-11.0	1	ave	45.7	12.1	6.9	14.8	73.6	1.16	1.16	1.16	1.16	1.16	83.7	30.8	18.7	45.4	134.4	1.16	1.16	1.16	1.16	1.16
		-σ	45.2	13.4	10.7	21.0	77.8	1.45	1.45	1.45	1.45	1.45	88.3	44.2	33.3	58.5	131.0	1.45	1.45	1.45	1.45	1.45
		+σ	23.3	8.8	4.9	8.5	39.2	0.89	0.89	0.89	0.89	0.89	41.6	20.0	11.5	23.3	82.6	0.89	0.89	0.89	0.89	0.89
	2	ave	20.4	8.4	4.8	8.0	33.9	0.79	0.79	0.79	0.79	0.79	43.2	18.7	10.7	20.8	85.7	0.79	0.79	0.79	0.79	0.79
		-σ	54.1	14.5	7.5	15.0	80.8	1.00	1.00	1.00	1.00	1.00	102.8	35.2	19.4	46.1	172.1	1.00	1.00	1.00	1.00	1.00
		+σ	14.6	5.9	3.5	6.9	21.7	0.59	0.59	0.59	0.59	0.59	37.2	15.1	7.5	14.9	72.4	0.59	0.59	0.59	0.59	0.59



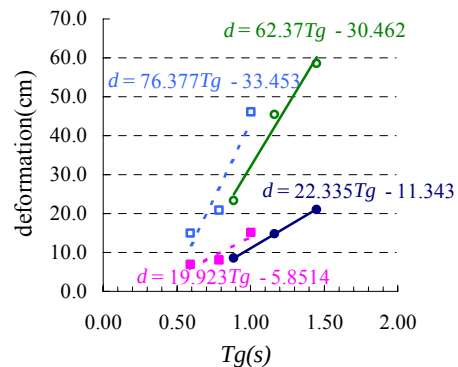
1) Dip波(no.18)



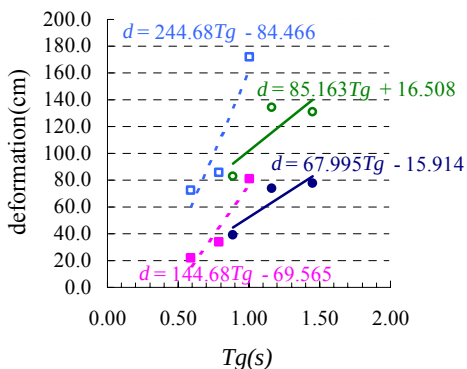
2) 八戸波(no.19)



3) 神戸波(no.20)



4) Strike波(no.22)



5) Subduction波(no.23)

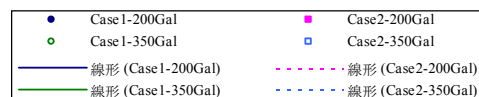


図-A.13 地盤固有周期と残留変形量の関係（控え直杭式：水深-11.0m,kh=0.20）

表-A.14 地盤固有周期と残留変形量（控え組杭式：水深-11.0m,kh=0.15）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-11.0	1	ave	39.2	13.2	8.7	16.0	62.6	1.16	1.16	1.16	1.16	1.16	74.1	27.9	17.8	37.6	124.0	1.16	1.16	1.16	1.16	1.16
		-σ	40.9	15.9	13.0	23.1	67.9	1.45	1.45	1.45	1.45	1.45	81.7	38.1	30.6	53.7	119.2	1.45	1.45	1.45	1.45	1.45
		+σ	28.9	10.4	6.7	10.7	44.4	0.89	0.89	0.89	0.89	0.89	71.3	24.5	13.2	28.1	122.7	0.89	0.89	0.89	0.89	0.89
	2	ave	39.3	13.2	7.9	13.3	59.0	0.79	0.79	0.79	0.79	0.79	103.7	33.0	16.9	36.3	172.3	0.79	0.79	0.79	0.79	0.79
		-σ	56.2	16.7	9.7	17.4	82.8	1.00	1.00	1.00	1.00	1.00	106.8	36.3	21.1	46.3	176.7	1.00	1.00	1.00	1.00	1.00
		+σ	17.5	6.9	4.4	8.8	27.6	0.59	0.59	0.59	0.59	0.59	77.8	21.8	9.7	20.3	120.9	0.59	0.59	0.59	0.59	0.59

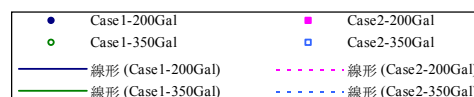
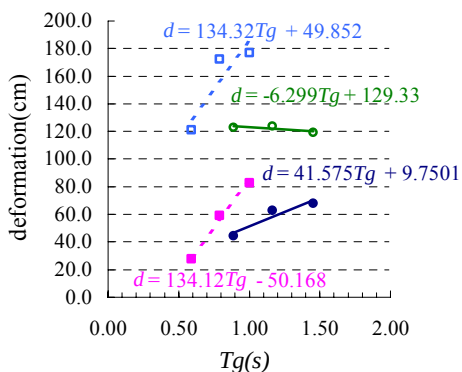
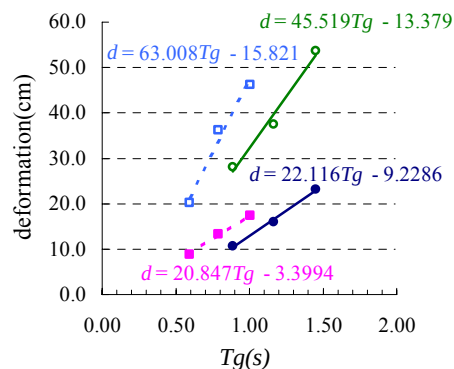
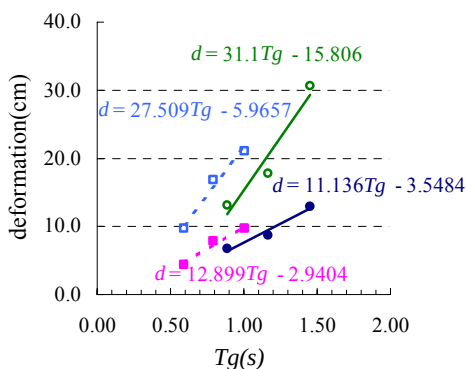
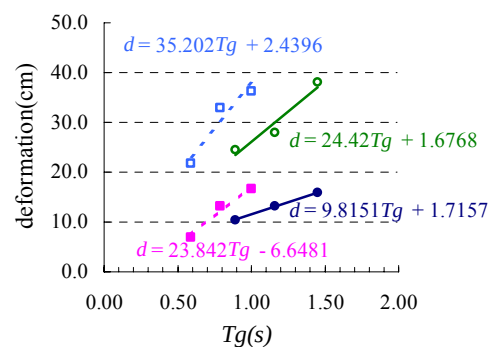
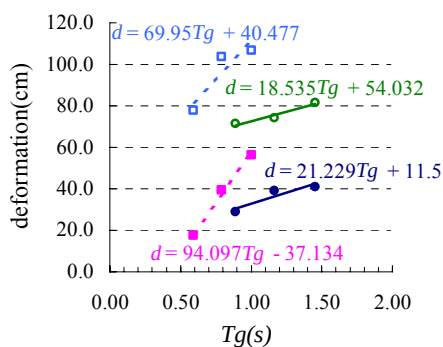


図-A.14 地盤固有周期と残留変形量の関係（控え組杭式：水深--11.0m,kh=0.15）

表-A. 15 地盤固有周期と残留変形量（控え組杭式：水深-11.0m,kh=0.20）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-11.0	1	ave	41.4	12.8	8.5	15.5	61.2	1.16	1.16	1.16	1.16	1.16	72.2	27.3	17.7	36.6	116.8	1.16	1.16	1.16	1.16	1.16
		-σ	40.5	15.6	12.8	22.7	68.5	1.45	1.45	1.45	1.45	1.45	74.7	37.4	29.9	52.3	114.9	1.45	1.45	1.45	1.45	1.45
		+σ	27.0	9.8	6.5	10.3	42.3	0.89	0.89	0.89	0.89	0.89	69.9	23.9	12.9	27.0	115.0	0.89	0.89	0.89	0.89	0.89
	2	ave	30.3	11.1	7.2	12.0	45.6	0.79	0.79	0.79	0.79	0.79	92.5	28.4	14.6	30.1	140.2	0.79	0.79	0.79	0.79	0.79
		-σ	45.5	14.2	8.8	15.0	66.8	1.00	1.00	1.00	1.00	1.00	88.3	29.8	18.1	38.5	148.4	1.00	1.00	1.00	1.00	1.00
		+σ	19.4	8.5	5.8	10.7	29.4	0.59	0.59	0.59	0.59	0.59	86.7	24.1	11.7	22.5	129.6	0.59	0.59	0.59	0.59	0.59

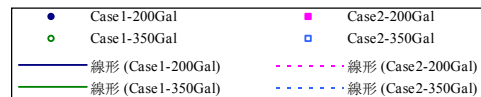
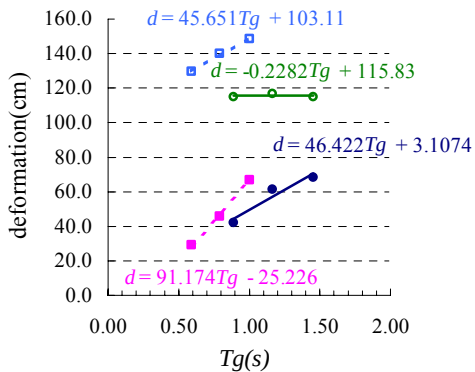
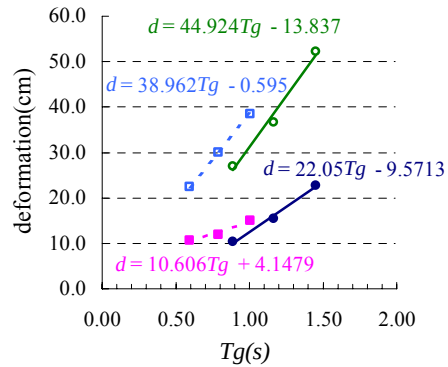
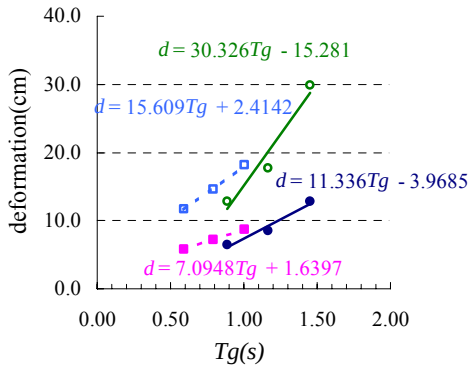
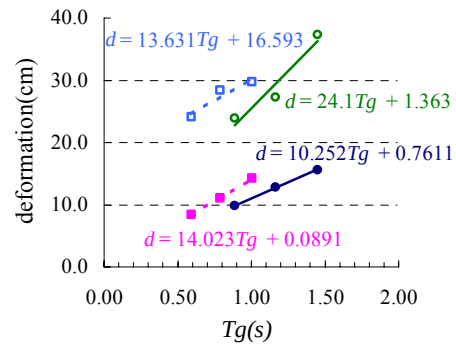
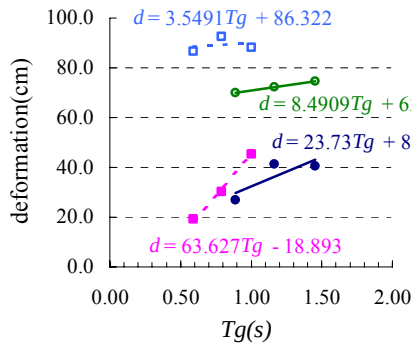
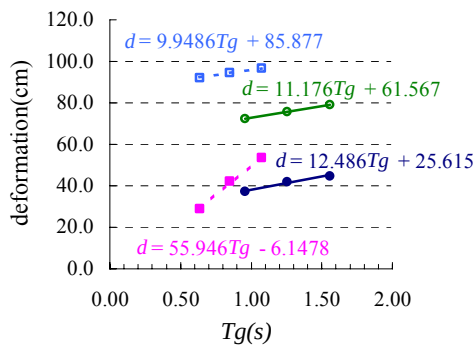


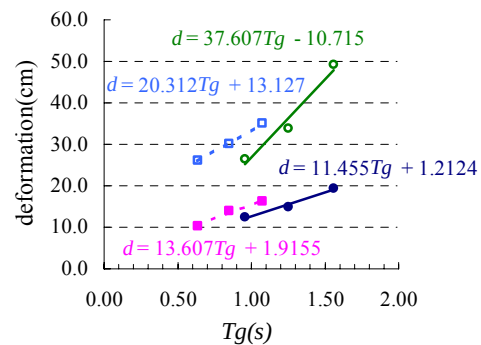
図-A. 15 地盤固有周期と残留変形量の関係（控え組杭式：水深-11.0m,kh=0.20）

表-A. 16 地盤固有周期と残留変形量（控え組杭式：水深-14.5m,kh=0.20）

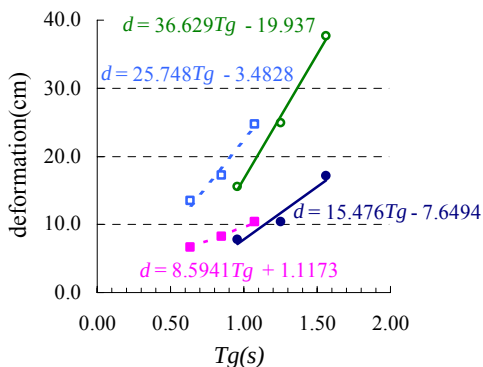
			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-14.5	1	ave	41.9	14.9	10.4	19.9	68.9	1.25	1.25	1.25	1.25	1.25	75.6	33.8	24.9	47.5	124.3	1.25	1.25	1.25	1.25	1.25
		-σ	44.8	19.4	17.1	27.6	69.9	1.56	1.56	1.56	1.56	1.56	79.0	49.2	37.7	68.2	121.2	1.56	1.56	1.56	1.56	1.56
		+σ	37.2	12.5	7.8	13.4	56.4	0.96	0.96	0.96	0.96	0.96	72.3	26.5	15.6	33.9	124.4	0.96	0.96	0.96	0.96	0.96
	2	ave	42.3	14.0	8.3	14.0	61.9	0.85	0.85	0.85	0.85	0.85	94.4	30.1	17.2	37.3	156.2	0.85	0.85	0.85	0.85	0.85
		-σ	53.5	16.3	10.4	20.2	83.2	1.07	1.07	1.07	1.07	1.07	96.5	35.1	24.7	50.4	152.4	1.07	1.07	1.07	1.07	1.07
		+σ	28.9	10.3	6.6	11.4	41.6	0.64	0.64	0.64	0.64	0.64	92.2	26.2	13.5	28.0	146.5	0.64	0.64	0.64	0.64	0.64



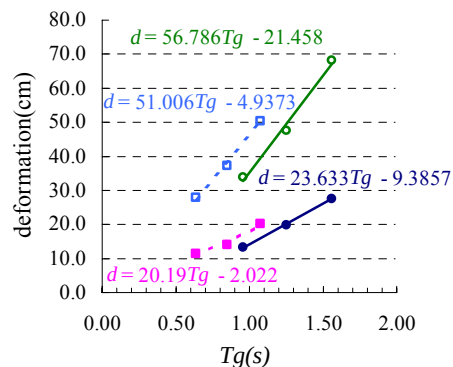
1) Dip波(no.18)



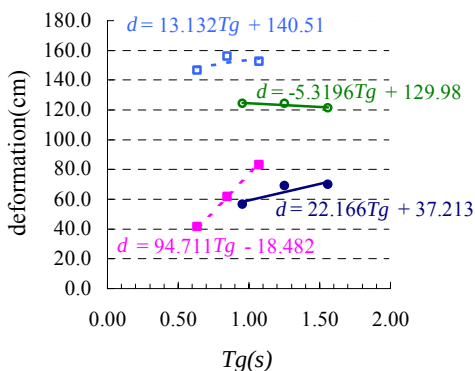
2) 八戸波(no.19)



3) 神戸波(no.20)



4) Strike波(no.22)



5) Subduction波(no.23)

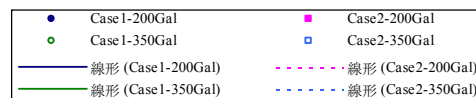


図-A. 16 地盤固有周期と残留変形量の関係（控え組杭式：水深-14.5m,kh=0.20）

表-A.17 地盤固有周期と残留変形量（控え組杭式：水深-14.5m,kh=0.25）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-14.5	1	ave	36.7	13.3	9.3	17.6	61.5	1.25	1.25	1.25	1.25	1.25	67.5	29.4	20.9	40.6	110.5	1.25	1.25	1.25	1.25	1.25
		-σ	39.1	17.1	15.0	24.6	63.6	1.56	1.56	1.56	1.56	1.56	69.8	42.4	31.9	57.8	108.9	1.56	1.56	1.56	1.56	1.56
		+σ	31.3	10.9	7.0	11.8	48.3	0.96	0.96	0.96	0.96	0.96	64.7	23.4	13.8	29.7	110.3	0.96	0.96	0.96	0.96	0.96
	2	ave	44.8	14.4	8.3	14.3	66.6	0.85	0.85	0.85	0.85	0.85	103.0	32.7	17.9	39.2	168.2	0.85	0.85	0.85	0.85	0.85
		-σ	56.9	16.9	10.6	20.8	88.7	1.07	1.07	1.07	1.07	1.07	105.2	37.4	25.6	53.2	164.1	1.07	1.07	1.07	1.07	1.07
		+σ	30.3	10.1	6.7	11.7	45.5	0.64	0.64	0.64	0.64	0.64	100.1	28.8	14.0	29.4	159.4	0.64	0.64	0.64	0.64	0.64

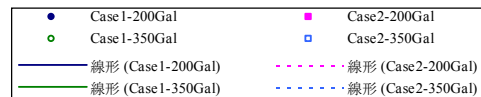
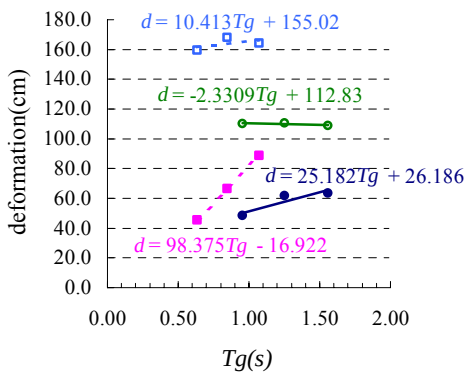
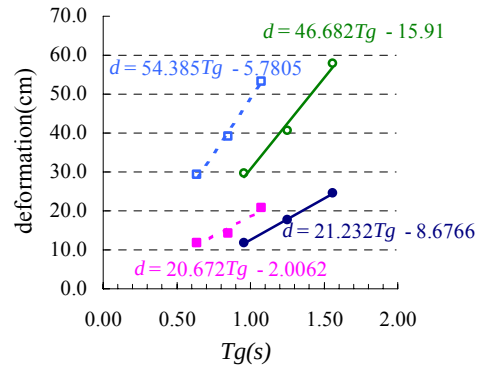
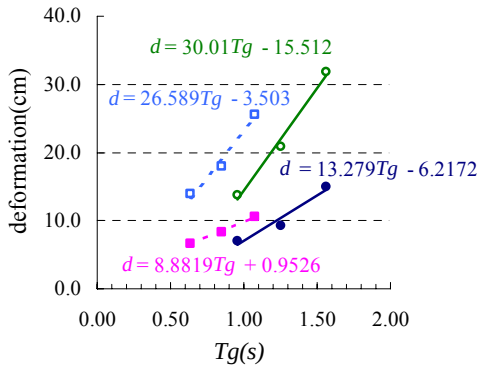
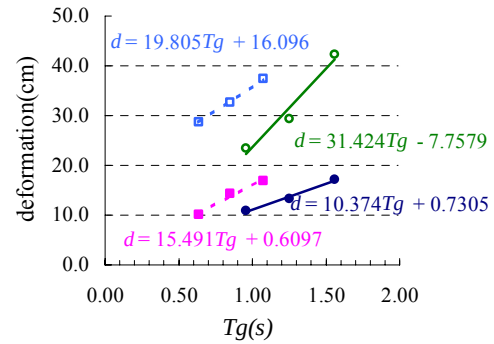
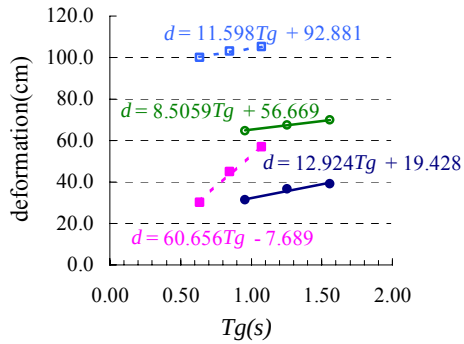


図-A.17 地盤固有周期と残留変形量の関係（控え組杭式：水深-14.5m,kh=0.25）

表-A. 18 地盤固有周期と残留変形量（控え組杭式：水深-14.5m,kh=0.27）

			加速度200Gal										加速度350Gal									
			変形量(cm)					Tg(s)					変形量(cm)					Tg(s)				
			no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23	no18	no19	no20	no22	no23
-14.5	1	ave	35.3	12.9	9.1	17.1	59.7	1.25	1.25	1.25	1.25	1.25	65.5	28.4	20.2	39.1	107.3	1.25	1.25	1.25	1.25	1.25
		-σ	37.7	16.6	14.6	23.9	62.1	1.56	1.56	1.56	1.56	1.56	68.0	40.9	30.8	55.5	106.2	1.56	1.56	1.56	1.56	1.56
		+σ	29.8	10.5	6.8	11.4	46.3	0.96	0.96	0.96	0.96	0.96	62.4	22.6	13.3	28.7	106.8	0.96	0.96	0.96	0.96	0.96
	2	ave	41.3	13.7	8.2	13.9	61.5	0.85	0.85	0.85	0.85	0.85	94.6	30.4	17.1	36.7	154.7	0.85	0.85	0.85	0.85	0.85
		-σ	53.2	16.2	10.3	19.9	83.2	1.07	1.07	1.07	1.07	1.07	94.7	34.8	23.7	49.0	153.1	1.07	1.07	1.07	1.07	1.07
		+σ	27.1	9.7	6.6	11.5	41.4	0.64	0.64	0.64	0.64	0.64	93.4	26.9	13.4	27.4	146.0	0.64	0.64	0.64	0.64	0.64

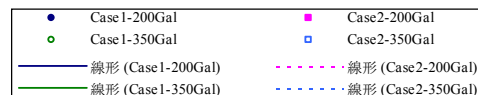
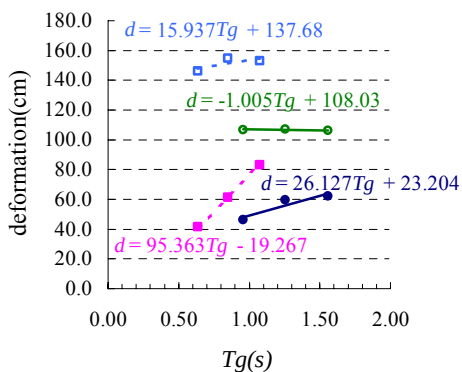
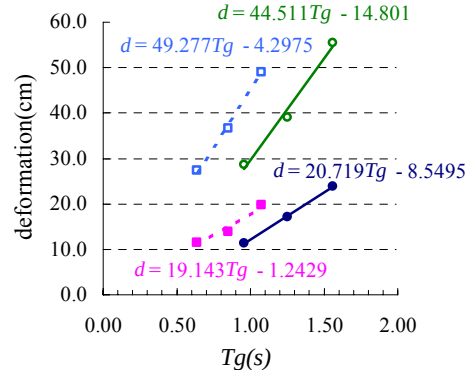
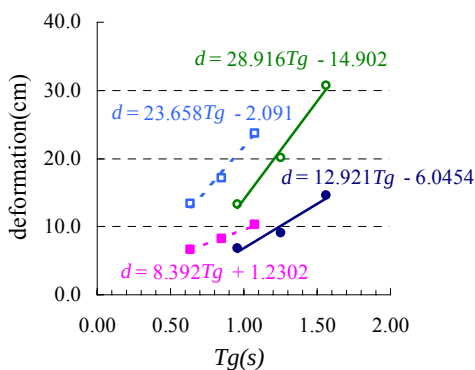
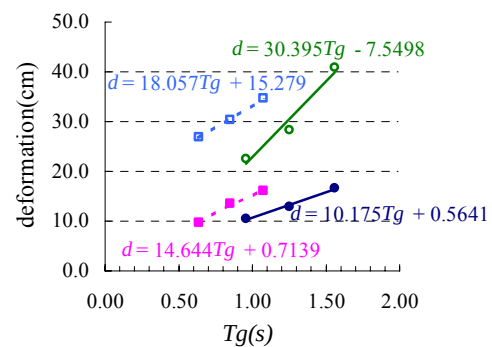
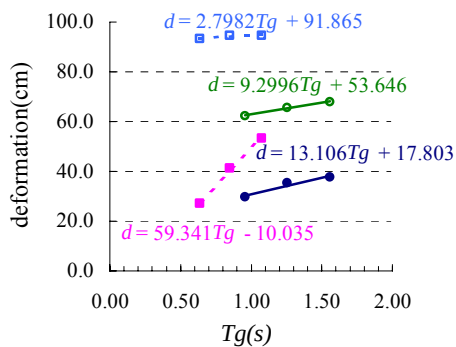


図-A. 18 地盤固有周期と残留変形量の関係（控え組杭式：水深-14.5m,kh=0.27）