

JD	Sta#	time_UTC	depth_ft	DVD	DVD#	Tape#	sample	still_no	Hypack file	comment	comment2
		EPA Ship Bold -- Cape & Islands , Cape Cod Bay, Buzzards Bay & Vineyard Sound								Ackerman, McMullen, Worley, Andrews -- lot of CZM, DMF & EPA folks	
		<b>START JULIAN DAY 252</b>							9-Sep-11		
										depth_from Furuno fathometer	
										Nav: GPS - Garmn (no hypack) running nav logged to Seth's dell computer (day 1, then Chucks rugged Dell) & in the DryLab nav center on Novatel comp, CZM/CMF log on Marcel's (EPA) laptop	
										Equipment: Big SEABOSS	
										Video (1 down looking DVD, 1 down Dig8 tape, 1 fwd DVD)	
										CZM putting time (in local -4) on the whirly packs	
		23:00:00								Leave WHOI dock - transit to first site.	
		<b>START JULIAN DAY 253</b>							10-Sep-11	horita program reads jd 252, rather than 253	
253	395	6:34:06	56.8	DVD1	DV-1		2			vob (video on bottom) –	on watch - Kate/Brian
										sand w/sand dollars	
		6:34:56								1st grab did not trigger	
										2nd grab 6:50:54	
		6:50:54				y				Voffb – grab, muddy sand	
253	394	7:10:50	43.6				1			vob -	
										sand many sand dollars	
		7:12:20				y				voffb - Grab sandy	
253	393	7:30:25	41.7				1			vob	
										sand sand dollars	
		7:32:20				y				voofb-grab sand	
253	392	7:51:35	39.1				1			vob	
										sand sand dollars	
		7:52:30				y				voofb-grab sand	
253	391	8:15:40	69.3				2			vob	
										muddy dogfish	
		8:16:48				y				voffb-grab mud	
253	390	8:37:45	79.1				3			vob	
										sandy mud burrows fish	
		8:38:55				y				voffb-grab mud	
253	389	8:54:26	81.8				3			vob	
										mud burrows lobster	
		8:55:45				y				voffb-grab mud	
253	388	9:15:40	89.6				3			vob	
										mud burrows	

		9:16:53			y		voffb-grab mud	
253	387	9:32:30	89.3			3	vob	
							mud burrows sponge?	
		9:33:54			y		voffb-grab-mud	
253	386	9:51:28	84.1			3	vob	
							mud burrows dogfish	
		9:52:44			y		voffb-grab fine sand	
253	385	10:10:44	66	re-check time updated		5?	vob	
							sand boulders flounder dogfish lobster shells starfish sponge	
		10:13:20			y		voffb-grab	
253	384	10:34:12	52.6			3	vob	
							sand, encrusted boulders, sponges, dogfish, gravel	
		10:36:32			n		voffb	
253	383	10:54:24	72.6			3	vob	
							sand, dogfish flounder burrows shells crab	
		10:55:54			y		voffb-grab muddy sand	
253	382	11:09:02	79.8			3	vob	
							muddy sand burrows crab shells sponges	
		11:10:40			y		voffb-grab muddy sand	
253	381	11:40:20	39.1			3	vob	
							sand sand dollars shells crabs	
		11:41:52			y		voffb-grab fine sand	
253	380	11:54:02	56.5			3	vob	
							sand sand dollars shells crabs dogfish lobster	
		11:55:26			y		voffb-grab sand	
253	379	12:21:43	46.3			3	vob double check on-bottom time, mins might be off	
							sand sand dollars crab	
		12:23:00			y		voffb-grab sand	
253	378	12:43:12	58.8			3	vob	
							sand sand dollars shells lobster	
		12:44:26			y		voffb-grab fine sand	

253	377	12:59:59	95.5				3	vob	
		13:01:24			y			muddy sand sand dollars crab burrows shells voffb-grab muddy sand	
253	376	13:13:20	106.7				3	vob	
		13:14:40			y			muddy sand burrows shells voffb-grab mud	
253	375	13:30:48	82.1				3	vob	
		13:32:14			y			muddy sand sand dollars voffb-grab muddy sand	
253	374	13:56:00	94.6				3	vob	
		13:57:22			y			sand sand dollar burrow shells voffb-grab muddy sand	
253	373	14:23:26	116.6			y	3	vob	
		14:24:44						sand brittle stars burrows voffb-grab, muddy sand, deck shot at 14:28:06	
253	372	14:38:34	114.2				3	vob	
		14:39:44			y			sand brittle stars burrows shells voffb-grab, muddy sand	
253	371	14:53:56	104.4				3	vob	
		14:55:10			y			sand burrows shells voffb-grab, muddy sand	
253	370	15:07:06	110.3				3	vob	
		15:08:30			y			muddy sand, burrows, voffb-grab	
253	369	15:20:56	119.5				3	vob	
		15:22:10			y			mud burrows brittle stars sponges voffb-grab mud	
253	368	15:36:32	118.2				3	vob	
		15:37:46			y			mud brittle stars burrows voffb-grab	
253	367	15:49:08	123.4				3	vob	
		15:50:42			y			mud, burrows, brittle stars voffb-grab	28 sta on this watch watch change - Seth/Chuck on
253	366	16:05:26	128					vob	
		16:06:36			y	3		voffb - grab	
		16:30:00						downloaded photos from camera --	
								PROBLEM!!! - the still was set wrong to shutter priority - photos white or back, no good images --	
		17:00:00						fixed problem - camera reset to s:1/250 a:f:10	
253	365	17:09:54	134					vob	

								muddy with burrows	
		17:11:06			y	3	voffb - grab		
		17:37:00					still cam turned off - our pencil needed sharpening - API Automatic Power Initiator malfunction.		
253	364	18:13:10	133				vob		
		18:14:15			y	4	lots of brittle stars - somme burrows -- muddy?		
253	363	18:27:18	128				vob		
		18:28:20			y	3	brittle stars, burrow, muddy		
253	362	18:47:00	128				vob		
		18:48:10			y	3	few brittle stars, burrows - muddy		
253	361	19:04:30	116				vob		
		19:05:50			y	3	many brittle stars, some burrows,		
253	360	19:20:30					vob		
		19:21:36			y	4	mud, brittle stars burrows, again.		
		19:30:00					voffb - grab		
							changed DVDs and tapes. -- restarted the hortia program and the JD error has been fixed (this seems to only be on the horita program, there was no problem with the time stamp on the video frames		
253	359	19:41:16		DVD-2	DV-2		vob		
		19:42:22			y		shark		
							muddy, burrows.		
253	358	19:57:15	114				vob -- might have taken a photo before vid start		
		19:58:40			y		mud, brittle stars burrows, again.		
253	357	20:13:28	120				vob		
		20:13:50					mud, brittle stars burrows, again.		
		20:14:51			y	4	late start on DV tape		
253	356	20:35:35					voffb - grab		
		20:36:50			y		vob		
							lobster , muddy burrows		
253	355	21:06:10					voffb - grab		
		21:07:42			y		vob		
253	354	21:28:40	118				muddy, burrows, again, again.		
		21:29:52			y	2	voffb - grab		

253	353	21:49:50	128					vob	
		21:51:20			y	2		voffb - grab	
253	352	22:08:08	120.5					vob - scar on arrival at seafloor more mud, brittle stars, burrows.	
		22:09:28			y	3		voffb - grab	
253	351	22:24:02	119.2					vob more mud, brittle stars, burrows.	
		22:25:42			y			voffb - grab	
253	350	22:41:00	125					vob dogfish, mud, burrows	
		22:42:42			y	4		voffb - grab	
253	349	22:58:27	103					vob rock, cobbles, boulders with a couple starfish -- strobe has been going haywire.	
		22:59:40			n			voffb	
253	348	23:14:28	110					vob muddy, burrows, some fish	
		23:15:58			y			voffb - grab --	
253	347	23:32:48	119.8					vob muddy, burrows	
		23:34:06			y			voffb - grab	
253	346	23:49:02	127					vob muddy, burrows	
		23:51						big hole	
		23:51:10			y			voffb - grab	20
<b>START JULIAN DAY 254</b>									
							11-Sep-11	horita program still reads jd 253, rather than 254	48 sites in 18 hrs
254	345	0:05:00	121.3					vob muddy, starfish, crab, brittle stars	
		0:06:43			y			voffb - grab	
254	344	0:20:16	124.1					vob	
		0:21:40			y			muddy, burrows voffb - grab	
254	343	0:40:20	116.5					vob muddy, brittle stars, burrows	
		0:42:00			y			voffb - grab	
254	342	0:57:36	112.9					vob muddy	
		0:58:52			y			voffb - grab	
254	341	1:11:36	111.3					vob muddy, crab, starfish,	
		1:13:10			y			voffb - grab	

254	240	1:30:16	108.9					vob	
		1:31:44			y			muddy, brittle stars, burrows voffb - grab	
254	339	1:47:46	110.6					vob	
		1:49:06			y			muddy, brittle stars, burrows, crab voffb - grab	
254	338	2:05:42	112.3					vob	
		2:07:20			y			muddy, burrows voffb - grab -- almost got a crab in the grab!	
254	337	2:23:36	107.7					vob	
		2:25:00			y			muddy, burrows voffb - grab	
254	336	2:38:56	106.9					vob	
		2:40:16			y			muddy, burrows voffb - grab	
254	335	2:56:00	107.7					vob	
		2:57:18			y			muddy, burrows, big crab shortly after touch-down, couple starfish voffb - grab	
254	334	3:14:24	96.9					vob	
		3:16:00						something funky in fwd cam (and in the top of the down cam) - muddy, burrows	
		3:16:58			y			voffb - grab	32 sta on this watch
		3:20:00						stopping SEABOSS ops to make a dump run outside state waters	
		4:00:00						downloaded camera card to photos_d2 folder replaced strobe which seemed to be malfunctioning. Missed about 15 shots of 125 from last batch downloaded.	
		4:45:00						replaced DVD and DV tapes	
254	333	9:49:50	68.6	DVD-3	DV-3		2	vob	watch change - Kate/Brian on
		9:50:52				n		gravel sand dollars voffb -	Horita is (correctly) reading 254
254	332	10:20:34	87				3	vob	noticed strobe goes off w/power surges?/clicking of voltage regulator
		10:21:48			y			mud, starfish, burrows, voffb - grab	
254	331	10:43:32	99.2				4	vob	
		10:45:02			y			mud, hake, flounder burrows, crab voffb - grab	
254	330	10:59:00	102.8					vob	
		11:00:54			y			mud burrows voffb - grab	
254	329	11:31:06	107.7					vob	
								mud starfish brittle stars burrows	

		11:33:30			y		voffb - grab	
254	328	11:45:54	112.3				vob	
		11:47:04			y		mud burrows brittle stars starfish	
							voffb - grab	
254	327	12:18:52	115.6				vob	
		12:19:58			y		mud brittle stars burrows starfish flounder	
							voffb - grab	
254	326	12:31:54	113.6				vob	
		12:33:04			y		mud burrows shells flounder sea star	
							voffb - grab	
254	325	12:44:46	118.2			3	vob	
		12:45:54			y		mud burrows brittle stars squid flounder	
							voffb - grab	
254	324	12:58:26	118.5				vob	
		12:59:46			n		mud between gravel encrusted boulders crab sea star shells sponge	
							voffb -	
254	323	13:16:34	108.7			3	vob	
		13:18:08			y		mud burrows crab	
							voffb - grab	
254	322	13:31:50	107			3	vob	
		13:33:06			y		mud burrows brittle stars sea star crab	
							voffb - grab	
254	321	13:49:44	99.8			3	vob	
		13:51:04			y		mud burrows crab hake	
							voffb - grab	
254	320	14:02:30	97.8			3	vob	
		14:03:42			y		mud burrows sponge	
							voffb - grab	
254	319	14:22:40	89.3				vob	
					3		mud burrows shells sponge crab	
		14:23:52			y		voffb-grab	
254	318	14:35:15	82.7			3	vob	
		14:36:26			y		sand crab shells starfish sponge	
							voffb-grab	
254	317	14:53:36	53.5				vob	
					3		sand sand dollars shells	
		14:54:40			y		voffb-grab	
254	316	15:12:04	71.3				vob	

							5	sand sand dollars shells sponge	
							y	voffb-grab	
254	315	15:26:28	73.6					vob	
								sand sand dollars shells crab sponge silversides scallop	
		15:28:12					y	voffb-grab grain size came from left side of grab	
254	314	15:41:54	69.3					vob	
		15:43:34						sand sand dollars skate shells crab	
		15:49:06					y	first grab caught a rock/shell and lost the sample	
								voffb-grab #2 successful, no video/photo of second grab	
								downloaded camera card to photos_dl3	watch change - Seth/Chuck on
		16:20:00						holding to bringing small boat crew on board	
								test shot on still cam to calibrate	
254	313	16:29:38						no strobe for 1st two shots	
								sand dollars, sea urchin?, sponge	
		16:31:44					y	voffb-grab	
254	312	16:57:00	62.7	re-check time				vob - check this start time	
								photos don't show on preview screen	
		16:58:50					y	voffb-grab	
254	311	17:12:30	61.4	re-check time				vob	
								no flash on 1st photo, others look good.	
		17:14:08					y	sand, sand dollars	
								voffb-grab - late stop on the video	
254	310	17:28:10	66.3					vob	
								sand, sand dollars, little "sand volcano" burrows.	
		17:29:40					y	voffb - grab	
254	309	17:41:27	61.6					vob	
								sand, sand dollars, crab	
								strobe is up, not always going off with photos. Switching off then on again on the yellow box sets off a flash, wait, then it fires with the photo.	
		17:44:32					y	voffb - grab	
254	308	17:57:14	46.3					vob	
								sand, sand dollars -- strobe is still not working right.	
		17:59:18					y	voffb - grab	
254	307	18:11:52	40.8					vob	
								sand dollars - 1st 2 shots no flash	
		18:13:10					y	voffb - grab	
254	306	18:24:38	45					vob	
								sand dollars	
								1st couple stills = no flash - WTF??!!	
		18:25:14						sd disappear - sd-less patch, then re-appear seconds later	
		18:26:00					y	voffb - grab	

254	305	18:36:32	51.6					vob
		18:38:00			ny	but y		gravely sand, sand dollars, shell hash, cobbles - gravel voffb - rock in jaw - no official grab - but took sample <b>USGS-305</b>
254	304	18:54:04	49.9					vob
		18:55:22			y			sand, sand dollars voffb - grab
254	303	19:07:00	52.9					vob
		19:08:40			y			fine sand - sand dollars, (some covered by sediment) voffb - grab
254	302	19:19:20	52.5					vob
		19:20:30			y			sand, sand dollars voffb - grab
254	301	19:33:16	51.6	recheck time				vob
		19:35:00						sand, sand dollars - finer sand, covering sand dollars some v.sm ripples voffb - no grab - redeploy for photo & grab
		19:38:54			y			grab only (took 2 pics but no flash went off)
254	300	19:53:26	44					vob
		19:54:28						sand, sand dollars didn't trip - re-grab
		19:55:30			y			DV tape ended. Probably around same time as grab voffb - grab
254	299	20:08:00	50.6					vob
		20:09:52			y			sand, sand dollars - strobe not firing - 1 good on arrival, 1 good @ grab voffb - grab
254	298	20:24:10	48					vob
		20:25:30			y			sand dollars, sand, little shell hash voffb - grab
254	297	21:18:04	48.6					vob
		21:19:18			y			sand dollars, sand voffb - grab
254	296	21:32:28	43					vob
		21:33:42			y			few sand dollars voffb - grab
254	295	21:49:18	49.9					vob - first shot no flash
		21:50:28			y			voffb - grab
254	294	22:03:18	33.2					vob
		22:04:36			y			sand & sand dollars voffb - grab
254	293	22:19:32	41.4					vob
		22:21:00			y			sand, sand dollars, burrows voffb - grab

254	292	22:36:00	40.6					vob	
		22:37:20			y			sand & sand dollars	
		22:39:42						voffb - no grab	
		22:40:04						no grab -- took 3 photos but no strobe	
								grab - 1 good photo on way up @22:40:12	
254	290	23:00:50	70.3					vob - skipping target site 291	
		23:02:38						sand dollars, coarse sand, shell hash	
		23:08:44		n				voffb - no grab - washout!! - back down for grab & photo	
								no grab - took 2(?) pics	
254	289	23:20:40	41.7					vob	
		23:22:14						sand, sdollars, big snail? On arrival	
		23:23:42		y				voffb - no grab - didn't trip	
								grab	
254	288	23:39:54	42.7			4		vob	
		23:40:00						sand & sand dollars	
		23:41:26						no grab didn't trip	
								voffb - grab -- may have recorded vid to here, not sure, double check this	
254	287	23:52:45	47.3					vob	
		23:54:12		y				sand & sand dollars - lots of floc in the wc	
								voffb - grab	
<b>START JULIAN DAY 255</b>				12-Sep-11	closed and restarted horita program to correct JD				
								downloaded still card to photos_dl4	
		0:05:30						test shot on still cam	
									watch change-Kate/Brian on. Yellow box had power issues-
255	007	6:47:30	75.2					vob	
		6:50:14		y				mud ripples burrows rock very turbid	
								voffb-grab	
255	008	7:10:52	75.2					vob	
		7:12:14		ny				sand rocks gravel	
								voffb-hard bottom no grab; downward video stayed on a minute longer, oops	
255	009	7:37:50	94.2					vob	
		7:39:58		y				mud burrows ripples	
								voffb-grab	
255	010	8:12:00	96.5					vob	
		8:14:10		y				mud burrows ripples	
								voffb-grab	
255	011	8:39:40	103.4					vob	
		8:41:36		y				mud ripples burrows	
								voffb-grab	
255	012	9:00:02	104.7					vob	
		9:01:58		y				mud hummocky	
								voffb-grab	
255	013	9:16:58	100.5					vob	

								encrusted boulders	
		9:17:54			n			voffb-	
<b>255</b>	014	9:32:26	110.6					vob	
		9:34:16			y			mud burrows	
								voffb-grab	
<b>255</b>	015	9:50:26	111					vob	
		9:52:10			y			mud burrows baby squid?/shrimp	
								voffb-grab	
<b>255</b>	016	10:10:18	109.3					vob	
		10:11:50			y			mud burrows	
								voffb-grab	
<b>255</b>	017	10:26:12	102.1					vob	
		10:28:20			y			rippled sandwaves, boulders at start, shells	
								voffb-grab	
<b>255</b>	018	10:42:12	109					vob	
		10:43:50						muddy sand ripples shells	
		10:52:26			y			voffb-first grab leaked out	
								grab#2, 1 picture no video of redeployment	
<b>255</b>	019	11:05:12	109					vob	
		11:06:46			y			muddy burrows-surface clay; coarser, sandy couple inches below	
								voffb-grab	
<b>255</b>	020	11:19:24	107.7					vob	
		11:20:52			y			mud burrows	
								voffb-grab	
<b>255</b>	021	11:43:10	98.2					vob	
		11:45:10			y			mud	
								voffb-grab no pictures, bottom a fluffy/oozy muck	
<b>255</b>	022	11:59:50	107					vob	
		12:01:50			y			mud, boulder?	
								voffb-grab	
<b>255</b>	023	12:13:58	110.3					vob	
		12:15:10			y			rippled mud	
								voffb-grab	
<b>255</b>	024	12:26:18	105.4					vob	
		12:27:44			y			rippled mud	
								voffb-grab	
<b>255</b>	025	12:42:28	105.7	DVD-5	DV-5			vob	
		12:43:54			y			rippled sand	
								voffb-grab	
<b>255</b>	026	13:03:40	100.8					vob	
		13:05:54			y			muddy sandy gravel ripples	
								voffb-grab	

2 starboard-side forward-looking lights  
on SEABOSS not working, downward-looking lights ok

changed dv, dvds start #5,

255	027	13:21:02	102.8					vob	
		13:22:28			n			sand between boulders and cobbles	
								voffb	
255	028	13:40:06	104.1					vob	
		13:41:50			y			sandwaves muddy	
								voffb-grab	
255	029	13:54:56	84.1					vob	
								boulders	
		13:56:14		n				voffb- no grab	lasers stopped working, suggested changing batteries...
255	030	14:11:28	73.9					vob	
		14:12:46		n				boulders sponges gravel	
								voffb-no grab	
255	031	14:29:58	73.2					vob	
								bouldery	
		14:30:40						voffb-no grab, no pics	
255	032	14:42:30	87.3					vob	
		14:46:56		y				muck	
								voffb-grab	
255	033	15:01:26	71.3					vob	
		15:03:02		n				sand gravel boulders	
								voffb-no grab	
255	034	15:17:18	88.7					vob	
		15:18:42		y				sandy gravel under fluff	
								voffb-grab	
255	035	15:30:44	87.7					vob	
		15:33:32		y				sandwaves	strobe not firing with pictures
								voffb-grab	
255	036	15:45:52	66.7					vob	
		15:48:24		n				sandwaves with gravel in troughs boulders	
								voffb	
							system shutting down for maintenance		watch change - Seth/Chuck on
							downloaded photos to photos_dl5		
255	037	17:36:20	85					vob - hit bottom on arrival but may not have tripped grab.	
		17:38:06		y				very trubid bottom -- flying lower than laser height to get a good photo	
								voffb - grab -- muddy. Very muddy looking	
255	038	17:54:54	74.9					vob	
		17:56:36		y				sand ripples, long wavelength with shell hash and plants in trough	
								voffb	
255	039	18:08:36	49.3					vob	
		18:10:02		n				boulders, with a lot of plant (maybe red algae)	
								voffb - boulder no sample	

255	040	18:21:58	47.8					vob	
		18:22:10						sand with some large boulders	
		18:22:20		ny	but y			boulder	
								voffb - no official grab - sizeable rock caught in jaw.	
255	041	18:36:10	36.5					vob	
		18:37:30		ny	but y			gravel, pebbles, shell hash, some decent sized cobble	
								voffb - no official grab - jaw ajar, but plenty of gravelly sed to sample for USGS	
255	042	18:57:34	45					vob	
		18:58:46						sand, red algae	
		19:00:04		y				voffb - no trip - back down for a grab	
								voffb - grab - van veen looks closed this time	
255	043	19:23:10	78.1					vob	
		19:24:30		y				short wavelenght sand ripples, muddy sand, kind of turbid	
								voffb - grab	
255	044	19:38:16	82.1					vob	
		19:39:46		y				muddy sand, small ripples	
								voffb - grab	
255	045	20:39:39	66					vob	
		20:41:10		n				small boulders, cobbles on sand. - purple algae on rocks	
								voffb - no grab	
255	046	21:11:52	72.2					vob	
		21:13:26		y				sand ripples,some shell hash in troughs	
								voffb - grab	
255	047	21:27:56	75.2					vob	
		21:29:26		y				sand waves with micro ripples on the crest,	
								voffb - grab	
255	048	21:47:58	95.5					vob	
		21:50:05						sand, s waves, shell hash	
		21:57:00						flash not triggering	
		22:01:10		y				looks like coarser on crest and fines (with micro ripples) in troughs	
								voffb - no grab - jaw caught open. - redeploy (photo and grab only)	
								test shot - flash works now.	
								test shot @ 21:57:00	
								voffb - grab (took 2 photos before grab)	
255	049	22:22:28	103.4					vob	
		22:23:54		ny				sand ripples with coarse sediment, cobble, shells, sm boulders in trough	
								voffb - unofficial grab - CZM doesn't want b/c we saw cobble/boulders	
255	050	22:41:02	104.1					vob	
		22:43:38		y				sand, flash is freaking out.	
								voffb - grab	
255	051	23:00:40	101.8					vob	
		23:02:16		y				sand	
								voffb - grab	

255	052	23:18:02	101.8					vob	
		23:19:14			y			sand, shells hash, sand ripples not as pronounced as previously	
								voffb - grab	
255	053	23:37:46	102.1					vob	
								sand, cobble	
		23:40:40			ny			voffb - no official grab - usgs sample collected	
255	054	23:54:46						vob	
					y			skate, jelly fish	
		23:56:40						voffb - grab	
<b>START JULIAN DAY 256</b>				13-Sep-11	closed and restarted horita program to correct JD				
256	055	0:09:32	92.2					vob	
		0:11:42			y			skate, sand, jellies, -- strobe freakin'	
								voffb - grab	
256	056	0:24:08	93.9	DVD06	DV06			vob	
		0:27:12						sand, crab	
								voffb - grab on ridge crest	
256	057	0:41:08	94.6					vob - check video, something funny on arrival	
		0:43:00			y			sand, shell hash,	
								voffb - grab	
256	058	0:53:48	95.5					vob	
		0:55:30			y			sand ripples, fines in the troughs	
								voffb - grab	
256	059	1:08:58	95.9					vob	
		1:10:30			y			sand, crab	
								voffb - grab	
256	060	1:27:16	91.6					vob	
		1:28:26			y			sand, skate, scallops	
								voffb - grab	
256	061	1:46:04	79.1					vob	
		1:47:34			n			sand waves, with cobble (sm boulders) in troughs	
								voffb - no grab - washout - cobble caught in jaw	
256	062	1:59:34	84.1					vob	
		2:00:42			y			sandwaves, short eavelenght, lots o' shells in troughs	
								voffb - grab	
256	063	2:14:50	79.5	check time				vob	
		2:15:50						sand, sdollars, shell hash	
		2:16:09			n			boulders in video	
								voffb - no grab	
256	064	2:35:10	84.7					vob	
		2:36:34			y			short wavelenght sand waves, shells in troughs, sdollars on crests	
								voffb - grab on crest	
256	065	2:49:28	81.1	check time				vob	

									murky, sand (probably fine sand or muddy sand) --	
		2:50:34							voffb - no grab -- not enough sed for CZM's method	
		2:57:52			n				voffb - no grab -- sand waves too steep for a good grab	
<b>256</b>	066	3:11:24	78.2	check	time			vob		
								murky, sand?		
		3:12:26			y			voffb - grab		
<b>256</b>	067	3:27:10	72.6				vob			
							fine sand, hummocky looking			
		3:29:36			y		voffb - grab		downloaded photos_dl6	
									watch change, Kate/Brian on	
<b>256</b>	068	4:04:58	66.3				vob			
							sand waves gravel, shells in troughs			
		4:06:38			y		voffb - grab			
<b>256</b>	069	4:20:06	72.6				vob			
							sand waves shells sand dollars in troughs			
		4:21:48					voffb - grab			
<b>256</b>	070	4:32:42	70.6				vob			
							sand waves fine sand			
		4:34:20			y		voffb - grab			
<b>256</b>	071	4:45:44	63.4				vob			
							sand waves			
		4:47:20			y		voffb - grab			
<b>256</b>	072	5:00:52	65				vob			
							sand waves			
		5:02:14			y		voffb - grab			
<b>256</b>	073	5:25:32	63.1				vob			
							sand waves sand dollars			
		5:26:50			y		voffb - grab			
<b>256</b>	074	5:43:26	75.5				vob			
							sand waves			
		5:44:42			y		voffb - grab			
<b>256</b>	075	5:59:44	72.2				vob			
							rippled mud waves burrows			
		6:01:24			y		voffb - grab			
<b>256</b>	076	6:15:06	66				vob			
							encrusted boulders			
		6:16:02			n		voffb -			
<b>256</b>	077	6:54:06	52.6				vob			
							rippled sand sand dollars			
		6:55:34			y		voffb - grab			
<b>256</b>	078	7:06:56	44				vob			
							rippled sand sand dollars			
		7:08:16			y		voffb - grab			

256	156	7:21:40	41.4					vob		
		7:23:00				y		rippled sand voffb - grab		
256	155	7:46:50	29.3					vob		
		7:48:40			XyX- N			sand waves shells/gravel in troughs voffb - grab		
256	079	8:20:56	58.1					vob		
						y		sand waves sand dollars jellies crab voffb - grab	strobe randomly firing/not coordinated w/all pics	
256	080	8:43:08	68					vob		
						y		rippled sand, burrows, mats/mounds of worm tubes-worms out feeding?/swaying in currents, burrowing anemone voffb - grab	I think the strobe is better now	
256	081	8:58:28	75.9					vob		
		9:00:18			y			rippled sand, crab, thick mats/mounds of worm tubes, boring anemone voffb - grab		
256	082	9:16:20	79.5					vob		
		9:18:14			y			mats of worms, jelly fish, fish, mud, hummocky bottom voffb - grab	still camera not working, turned on and off a few times, seems to be ok now strobe not firing with camera	
256	083	10:07:58	35.8					vob		
		10:09:36						rippled sand sand dollars voffb - grab did not trigger		
		10:14:02						vob	1 good shot, then strobe not working video cameras shut off when cameras out of water and until on deck. 3rd time this happened this shift (once early on, 2x this station).	
		10:14:40		n				voffb- grab 2 did not trigger	chuck worked on seaboss	
256	095	12:40:36	69					vob		
		12:43:16			n			sand mats of worm tubes crab squid voffb - grab didn't trip	no still camera-not getting power	
256	096	12:59:12	65					vob		
		13:01:00			n			sand sandwaves shells in troughs voffb - no grab, but got still photos		
256	097	13:13:26	60.1					vob		
		13:14:48						rippled sand waves voffb - no grab first time; 13:22:16 grab on bottom-no video	finalizing video, dv start 07	
256	098	14:11:44	75.9	DVD-7	DV-7			vob		
		14:13:22			y			rippled sand, shells in troughs, mud veneer voffb - grab	no still camera VIDEO says station 97!	
256	099	14:35:10	85					vob		
		14:36:40			y			rippled sand sand dollars mud veneer shells/gravel in troughs voffb-grab	camera is back up and running	

256	100	14:52?	50.3					vob-check video start time, issues with camera/video	
								sand waves	video and camera went in and out, down video stopped recording at some point, took a few stills
		14:53:30			y		voffb-grab		
256	101	15:14:20	83.1				vob		video/camera in and out, camera not working for station.
							sand waves ripples mud veneer shells in troughs		
		15:15:20			y		voffb-grab		
256	102	16:18:10	73.6				vob		
							sand sdollars, - 1 photo, then camera truned off.		
		16:19:00			y		voffb - grab - late stop on video		
256	103	16:33:44	57.6				vob - no stills, just vid		
							sand, shell hash		
		16:34:40			y		voffb - grab - still cam back on during recovery of seaboss		
256	104	16:52:58	66.7				vob		
							sand		
		16:53:20					still on arrival at bottom, then all cams when off.		
							gravel		
		16:53:54					fwd dvd recorder went off - so only down vid		
		16:54:14			ny		all cams back on - another photo		
							voffb - no offical grab -- usgs sample taken 104		
256	105	17:09:26	43				vob		
							cobble, gravel		
		17:10:00					boulder		
		17:10:24			n		voffb - no grab		
256	106	17:22:02	72.9				vob		
							gravel cobble sponges boulder		
		17:22:54					probably large sandwaves with cobble boulder in trough, sand with micro ripples on the crests/flanks		
		17:23:30			n		voffb - no grab - tried for USGS sample - in the sand - but didn't trip, probably too steep on the flank of sandwave		
256	107	17:43:36	88				vob		
							gravelly sand - similar to last site, but perhaps we're along the crest, didn't see any cobble, boulders.		
		17:44:10					grab attempt #1 - - didn't trip		
		17:45:18			y		voffb - grab		
256	108	18:07:00	50.6			4	vob - still camera is working again		
							gravelly pavement, cobbles		
		18:08:18			n		lots of algae, some sponges		
256	113	18:48:00	44.1				vob -- no still, just vid -- target too shallow so setting up west of mark		
							sand, sand waves, ripples		
		18:49:06			y		voffb - grab		

256	114	18:59:28	63.1					vob -- no photos, just vid gravelly sediment with mussels, shells voffb - no grab -- just a clump of mussels and small barnacles. forgot to turn off DV tape, ran until next station, oops!	
		19:00:52			n				
256	115	19:13:16	44				vob - no photos, just vid sand, gravel, shell frags, biota hanging on. Maybe some gravelly sed		
		19:14:44			y		voffb - grab -- moon snail shell in grab		
256	116	19:29:46	52.2				vob sand,, gravel, shells, mussels		
		19:31:00					fewer shells, more gravel, pebble		
		19:31:20			ny		voffb - no official grab - USGS sample taken		
256	117	19:55:30	58.9				vob - no photos just vid sand, small sand ripples		
		19:57:04				y	grab attempt - no trip voffb - grab		
256	119	20:55:55	66				vob - no photos, just vid sand, small sand ripples w/ shell hash in trough, sdollars,		
		20:56:46			y		voffb - grab cycled camera power on ascent - and still cam came back		
256	120	21:11:04	59.5				vob - no DVD video only DV & still photos		
		21:11:10					photo - working - shot at 21:11:10		
		21:13:20			y		video not recording on DVD, only DV. voffb - grab		
							recorded station to DVD off the DV tape (down only). Note there is no time/lat/long stamp on the transferred vid.		
							Didn't finalize DVDs, We should try to run the DV tape though the GPS3 box to create the time/lat/long stamp and record another clip of sta 120 on the DVD07		
256	121	21:27:40	36.5	DVD08	DV08		vob - all systems are working, yippie!!		
		21:28:56				y	sand, short wavelength ripples, with coarser sed/shells in troughs voffb - grab		
256	122	21:47:20	38.5				vob sand, sdollars		
		21:48:30			y		small ripples voffb - grab		
256	123	22:07:28	34.5				vob sand, little ripples, sdollars		
		22:08:48					voffb - grab, didn't trip		
		22:09:44					2nd attempt		
		22:10:24					3rd attempt		
		22:11:00					on deck to re-arm		
		22:13:46					back in		
		22:14:34				y	vob		
		22:14:42					voffb - grab		
256	125	22:47:32	44.3				vob finer sand, algae, shell hash		

		22:49:06			y		voffb - grab		
<b>256</b>	127	23:28:02	37.8				vob		
							sand ripples with pockets of gravel/cobble.		
							isolated boulders small to mid sized.		
		23:29:46			n		voffb - no grab - visibility too poor to risk hitting a boulder		
<b>256</b>	129	23:48:24	37.8				vob		
							sand, with cobbles and algae, boulders		
							large sponges, dogfish		
		23:49:56			n		voffb - no grab - too many boulders		
<b>START JULIAN DAY 257</b>									
<b>257</b>	130	0:10:00	86				vob		
							sand, shell hash, sand ripples with gravel/shell in troughs		
							some small cobble gravel in the troughs, strange black stuff in troughs-- maybe algae???		
		0:14:00			y		voffb - grab - late stop on the DV tape		
<b>257</b>	131	0:27:32	66				vob		
							sand waves, skate		
		0:28:38			y		voffb - grab		
<b>257</b>	133	0:47:00	58.8				vob		
							gravel shells, hydroids		
		0:48:48			n		voffb - no grab - too dense with cobble		
<b>257</b>	132	1:04:40	157.9				vob		
		1:05:50					bottom drops off to the abyss		
							strong bottom current		
		1:07:20					seaboss cable is nearly straight out aft of the ship.		
		1:07:44					grab attempt #1		
		check time					grab attempt #2		
							voffb - no grab - current too strong - gravel/cobble bottom - attempt #3		
<b>257</b>	134	1:28:20	115.6				vob		
							gravel, hydroids		
		1:29:40			ny		voffb - no official grab - no enough sediment - USGS sample taken		
<b>257</b>	135	1:43:30	116.9				vob - no photos - still camera when off just before deployment		
							sand long wavelength with shell hash and ripples on flanks, clam,		
		1:45:10					video reset, all vids start here.		
		1:46:36					reset camera, which shut off the down dvd recorded. Will need to replay this site off the DV tape for down camera		
		1:47:28			y		voffb - grab - probably in the gravelly trough of the sand wave		hard reset of the triplite. Still camera back on.
<b>257</b>	136	2:02:50	73.6				vob		
							gravel sand hydroids		
							crabs		
		2:04:42			n		voffb - grab		watch change, Kate Brian on
<b>257</b>	140	5:40:42	39.8				vob		
							sand with mounds of worm tubes, worms floating in water, crab		

		5:42:30			y		voffb - grab in the sand, but still a fair number of worms in it...more than the sed lab wants to see anyway.			
257	141	6:10:58	43				vob rippled sand, shells in troughs, sand dollar, small fish			
		6:12:30			y		voffb - grab			
257	142	6:28:38	49.3				vob rippled sand waves, crab, sand dollar,			
		6:30:26			y		voffb - grab			revisiting 95 to get worms
257	095	6:58:32	68				vob-video label 95.2 rippled sand with mounds of worms, crabs, squid			
		7:00:34			y		voffb - grab got a good mound of worms and mud			trying to get more worms
257	081	8:37:36	74.9				vob- video label 81.2 sand with mounds of worms, crabs			
		8:39:20			y		voffb - grab			
257	157	9:18:16	40.4				vob sand waves with shells and gravel in troughs, crabs, mud			
		9:19:52			n		voffb - grab caught shells and stayed open			
257	158	9:32:38	45.7				vob sand waves with gravel/shells in troughs			
		9:33:52			y		voffb - grab grain-size side had sand, infaunal side had gravel			
257	159	9:51:48	66				vob rippled sand, sand dollars, mud veneer			
		9:52:56			y		voffb - grab			
257	160	10:09:44	38.1				vob rippled fine sand, crabs,			
		10:11:14			y		voffb - grab			
257	161	10:35:54	48.3				vob rippled sand sand dollars			
		10:36:58			y		voffb - grab			
257	162	10:59:02	45.7				vob murky, rippled sand, sand dollars			
		11:00:10			y		voffb - grab			finalized dvds, dv, start #9
257	163	11:24:26	54.9	DVD-9	DV-9		vob murky, fine sand			

		11:26:12			y		voffb - grab at start of station 11:25ish			
<b>257</b>	164	11:39:06	42.7				vob			
							rippled sand, murky			
		11:40:04			y		voffb - grab			
<b>257</b>	165	11:53:08	60.1				vob-maybe? Bottom is invisible			
							murky			
		11:53:28			y		voffb - grab			
<b>257</b>	166	12:07:32	45				vob			
							murky rippled muddy sand			
		12:08:52			y		voffb - grab			
<b>257</b>	167	12:28:18	46.3				vob			
							murky			
		12:29:30			n		voffb - grab empty			
<b>257</b>	168	12:44:34	49				vob			
							murky rippled sand			
		12:45:34			y		voffb - grab surficial sand layer, clay underneath			
<b>257</b>	169	13:01:16	49.3				vob			
							rippled sand, sand dollar			
		13:02:44			y		voffb - grab			
<b>257</b>	170	13:16:16	69.6				vob			
							rippled sand, sand dollars, shells in troughs			
		13:18:00			y		voffb - grab			video/camera went out for the first time in a long time...SEABOSS swinging a lot on recovery
<b>257</b>	171	13:31:06	53.2				vob			
							rippled sand sand dolairs			
		13:32:28			y		voffb - grab			
<b>257</b>	172	14:50:28	51.3				vob			this station looks like it isn't quite on the planned spot
							sand waves with stuff in troughs (ropes of mussel threads holding sand grains together)			
		14:52:18			y		voffb - grab			
<b>257</b>	173	15:14:16	83.1				vob			
							rippled sand, algae in troughs			
		15:16:04			y		voffb - grab			
<b>257</b>	174	15:28:08	73.9				vob			

								sand waves with shells/gravel/algae in troughs, boulders	
		15:30:20						voffb - grab did not trip	cameras/video out at surface...not coming back on with Marcel's technique...found new technique...adjusting tension on winch
257	175	15:43:07	92.3					vob fine sand, ripples, burrows	
		15:44:32						voffb - grab	watch change Seth/Chuck on
257	176	16:35:24	104.1					vob - fwd dvd not record fine sand,	
		16:36:30		y				voffb - grab	
257	177							vob --- no deployment	
257	180							no more seaboss, we're giving up switched to the Bold's van veen on their winch attached Kathryn's GoPro camera with dive lights to the frame	
		18:07:00		y				grab	
257	181		18:18:16		y			grab - sandy mud	
257	182		18:34:00		y			grab - sandy mud	
257	001		18:57:00		y			grab - sand	
257	002		19:09:00		y			grab - sand	
257	003		19:19:00		y			grab - sand	
257	179	20:34:00			y			grab - muddy sand	
257	004		21:00:00		y			grab	
257	005		21:16:00		y			grab	
257	006		21:28:00		y			grab	transit to Buzzards Bay
								finished in Vineyard Snd, short transit to BB, Kathryn and I moved lights to outside of van veen frame. Switched gopro to 1 sec interval.	

257	440					y		grab
257	441	22:32:00						drop, but chain wrapped on grab - so didn't trip - might have good gopro
		22:35:00				y		grab
257	442					y		grab
257	443					y		grab
257	444							grab
257	445							grab
257	446							grab
<b>START JULIAN DAY 258</b>								
						15-Sep-11	closed and restarted horita program to correct JD	
258	447					0:04:00		grab
258	448					0:21:00		grab
258	449					0:37:00		grab
258	450					0:50:00		grab
258	451					1:19:00		grab
258	452					1:34:00		grab
258	453					1:46:00		grab
258	455					1:59:00		grab
258	456					2:12:00		grab
258	458					2:27:00		grab
258	459							

		2:39:00					grab	
258	460						grab	
		2:53:00					grab	
258	462						grab	
		3:09:00					grab	
258	463						grab	
		3:20:00					grab	
258	404						grab	
		3:48:00					grab	
258	405						grab	
		4:10:00					grab	
258	406						grab	
		4:20:00					grab	
258	407						grab	
		4:43:00					grab	
258	408						grab	
		5:06:00					grab	
258	409						grab	
		5:21:00					grab	
258	410						grab	
		5:42:00					grab	
258	411						grab	
		6:06:00					grab	
258	412						grab	
		6:17:00					grab	
258	413						grab	
		6:38:00					grab	
258	414						grab	
		7:03:00					grab	
258	415						grab didn't trip	
		7:26:00					grab	
		7:29:00					grab	
258	416						grab	
		7:50:00					grab	
258	417						grab	
		8:08:00					grab	
258	418						grab	
		8:20:00					grab	



		12:43:00				grab	
258	438	12:56:00				grab	
258	439	13:07:00				grab	
258	403	15:33:00				grab	
258	222	22:44:00	n			no grab - gopro shows sand/gravel/shells - XXXX dumped it, but we should have taken a USGS grab.	
258	221	23:09:00	n			no - official grab - cobble, gravel - USGS sample taken	
258	220	23:21:16	y			gravel, gravelly sediments grab - gravelly sediment	
258	183	23:42:58	y			grab - sand	
<b>START JULIAN DAY 259</b>				16-Sep-11	closed and restarted horita program to correct JD		
259	184	0:12:46	y			grab	
259	185	0:33:14	n			grab	
259	219	1:03:04	n			grab	
259	218	1:23:16	y			grab	
						End of SURVEY	