

JD	Time UTC	site type	NURTEC site	SEABOSS site	Odyssey 7 clip #	depth (approx)	grab	Comments
Survey Times: UTC (ZD= -5 hrs)								
Personnel: Dann Blackwood (USGS); Seth Ackerman (USGS); Roman Zajac (UNewHaven); Ivar Babb (UConn); Chris Conroy (UConn); Kay								
Positions: UTM Zone 18N WGS84								
GPS Equipment: Garmin handheld GPS (GPSmap 76C; Dann's). Antenna aft port side along the rail and up the port side of the A-frame ~2 meters to the port of center. Logging that GPS to DataBridge CF card; and into ArcMap GPS via Belkin usb to serial adapter on Dell laptop Windows **XP** - saving 1 (really 2) second point shp. Ship's nav is Nobeltec getting DGPS from the antenna centered aft on the wheelhouse via feed in DryLab - logging this as a backup in Hyperterminal via Proflici usb to serial adapter on Dell laptop.								
SEABOSS Sampling: SEABOSS sampler is a modified Van Veen sediment grab with one GoPro 4; Nikon D300 Still camera w/ Photosea strobe and down/fwd-looking SD Video Cameras. GoPro Hero4 (Hero4_6) shooting 1080 video at 60 FPS. Wired lights for the down video/camera. Keldan light for fwd vid/GoPro. Down video into the GPS3; GPS from the ship's nav (use Null modem serial cable) getting NMEA nav strings parsing the time only to provide timecode to the Odyssey7. Note ship's nav is for the antenna on the wheelhouse; not the A-frame or the depolyment point of the SEABOSS. Dann's Garmin GPS is set up (WGS84; WAAS-enabled GPS) with the antenna running out the wetlab stuffhole; along the port rail and up the port side of A-frame. Antenna is ~2 meters from the deployment location. The Horita GPS3 is providing LTC timecode to the Odyssey7; NMEA strings are being endocded onto the audio-in of the Odyssey7 via the GeoStamp Audio (serial in is split off from the Garmin GPS. Roman has a point-an-shoot camera used to take topside photos of the VanVeen grab upon recovery of a sample with a sample id tag. GoPro and Nikon were set to UTC time and have calibration photos of time.is/utc and/or timecode (on Odyssey7) to determine time offset; if any. Ship's nav is also being fed to the Horita GPS3 (use Null modem serial cable) getting NMEA nav strings parsing the time only to provide timecode to the Odyssey7. **The GPS3 as flaking out on day 1; so we are setting the Odyssey's internal clock to the time from the GPS overlay and using the LTC from time-od-day NDF instead of the LTC input*** The GeoStamp Audio is taking the Garmin nav in and NMEA strings are being endocded onto the audio-in of the Odyssey7.								
Video: The primary video is a down-looking Simrad (version #????XXXXXX) SD video, fwd is the same camera model SD video, both run up the Falmat electromechanical cable on the Interoccean winch. Video feeds come into the RemoteOceanSystems (ROS) control box (beige box). Down video out ROS to the Horita SCT-50 then split to the Odyssey7 (via the Horitia GPS3 -> Etekcity upsampler set to 720P60FPS) and the JVC SR-HD1250 BluRay recorder then to the Videonics Video Mixer then to the JVC monitor. Fwd video is out ROS to Horita SCT-50 then to the JVC SR-HD1250 BluRay recorder then to the Videonics Video Mixer and the JVC monitor. GoPro Hero4 is shooting 1080P60FPS video alongside the fwd looking Simrad camera (same orientation). GoPro camera and all the video overlay are set to UTC time and have calibration photos of time.is/utc and/or timecode (on Odyssey7) to determine time offset; if any. The GoPro was time synced regularly to UTC using Camera Studio software on Seth's MBP.								

Photos: Nikon D300 Still camera w/ Photosea strobe. The Nikon is taking 12 Megapixel photos and is set to UTC time and have calibration photos of time.is/utc and/or timecode (on Odyssey7) to determine time offset; if any. The Nikon was synced regularly to UTC manually. Roman has a point-and-shoot camera used to take topside photos of the VanVeen grab upon recovery of a sample with a sample id tag.

Tuesday May 8 2018 JD 128 (all times are UTC)

128	0000							Start of survey --
128	1027							leaving the dock at UCONN Avery Point
128	104547							test photo (double check time against the vid) - might have to adjust the time
	105800							GoPro time synced with Studio for GoPro software - GoPro Hero 4_6 pass usgsusgs
128	112746	transect + grab	NB45-T	2018-018-001	clip 512	7m		vob - shells and kelp other sea-salad
128	112952							beginning transect
128	115824	transect + grab	NB45-T	2018-018-001			y	voffb - grab - muddy
128	120924							test shot with whiteboard 002 9 (check time on still camera)
128	123000							seaboss in the water, but just was told depth is 25+m, too deep for Ivar's 360 camera, bringing it
128	123226	transect + grab	NB52-T	2018-018-002	clip 513	24m		vob - shelly, crab
128	123350							beginning transect
128	124810							ArcMap crashed, logging stopped on ArcMap
128	125712							end of the transect
128	125728	transect + grab	NB52-T	2018-018-002			y	voffb - grab
128	130720							GPS is reporting 5 foot accuracy!!

128	131008							photo of board
128	131026							photo of board again
128	131408	grab	SB69g3	2018-018-003	clip 514	20m		vob - bouders, shells, gravel
128								algae stuck on sampler
128	131930		SB69g3	2018-018-003			y	voffb - grab in between the boulders; we'll see
								board shot says SB69g1 and 003 but it should be 004
128	133042	grab	SB69g1	2018-018-004	clip 515	15m		vob - shelly
128	133158			2018-018-004			y	voffb - grab
	134250	transect + grab	SB69-T	2018-018-005	clip 516			vob - first photo before recording started
128	134300							video started a few seconds after photo; shells shell hash some boulders
128	135200							boulders
128								lots of "white <explicative> -" what's his face did his whole master's thesis out here"
128	140540		SB69g2	2018-018-005			y	voffb - grab
128	143410	transect + grab	NB58-T	2018-018-006	clip 517			vob - shell hash sand?mud? lots of algae; kelp
128	144800							Roman just pointed out that the date on the video was messed up. Said 5/18/18; I updated to 5/08/18; it was a problem with the Hortia SCT-50 controlling computer; needed to change the system date (time is okay because it is pulling that from the GPS)

128	171336							lobster trap
128	172800		SB71-T	2018-018-008		19m	y	voffb - grab
128	180526	transect + grab	NB60-T	2018-018-009		10m		vob - muddy - first pic might be before vid start
	180800							something funky with the LTC timecode on the Odyssey7. ~10 min ahead of GPS time
				clip 520-522				many cycles of the Odyssey timecode input and GPS3
128	181012							had to cycle the GPS a couple times, just noticed that the LTC timecode was ~10 min ahead of GPS time. -- ***Not sure how long it has
128	181700				clip 523			restarted video on Odyssey
128	181908				clip 524			restarted video on Odyssey - switched LTC input to "time of day NDF" - I set the Odyssey clock to the GPS time. Not using the GPS3 anymore
128								** USE GoPro video until 181908
128								muddy sand lots of algae
128	183458		NB60-T	2018-018-009			y	voffb - grab
128	185010							switched the GPS to our nav (from the chips dry lab feed), split from the DataBridge to the GPS3 and DataBridge
128	185050							test shot with whiteboard 010
128	190200							Damn noticed that audio was wacky on the Odyssey. Seems the connection to the black box from the GeoStamp was not good. reseated the
128	191410	transect + grab	NB65-T	2018-018-010	clip 525	9m		vob

128								lots of shell hash; algae
128	192520							tons of mussel shells (some live ones too)
128	192700							boulders!! coming up on the ridge in the hillshade
128	193952							a few isolated boulders
128	194342		NB65-T	2018-018-010			y	voffb - grab
128	201600	grab	NB64-T	2018-018-011	clip 526			vob - poor visibility -- will do grab here then go to transit site after
128	201810		NB64-T	2018-018-011			y	voffb - grab
128	203200	transect + grab	NB64-T	2018-018-012	clip 527			vob - fwd video started a few seconds before the down vid
128	204548		NB64-T	2018-018-012			y	voffb - grab
128	211944	grab	SB74g1	2018-018-013	clip 528			downloading the GoPro Photos - card filled during recovery of the sampler at previous site vob - no strobe firing on the still camera, coming back up
128	212034		SB74g1	2018-018-013			n	voffb - no grab
								changing the battery in the Nikon camera - did not download the photos
	212946							calibration photo in the dry lab - 21:29:46 on time.is/UTC - 21:29:45 on Nikon
	213340							photo of board (still says SB74g1 and 013) with phone on time.is/UTC

								new whiteboard shot
	213920							strobe test shot at 213920
128	214334	grab	SB74g2	2018-018-014	clip 529	14m		vob - shell hash and rippled sand, gravelly sediment
128	214452		SB74g2	2018-018-014			y	grab
128	214530		SB74g2	2018-018-014				voffb - video recorded for 30 seconds extra before coming up
128	220058	grab	SB74g3	2018-018-015	clip 530	17m		vob - gravelly sediment shell hash, some patches of finer sand
128								crepidula slippersnails
128	220256		SB74g3	2018-018-015			y	voffb - grab
128	221420	transect + grab	SB74-T	2018-018-016	clip 531	20m		vob - first photo before recording started
128								sand ripples
128	222400							fish head
128	222940							jonah crab?
128								coming up on the high releif area
128	223010							algae
128	223020							boulders!! coming up on the ridge in the hillshade

129	114920							mussels and gravel
129	114950							boulders
129	115022							big pile of boulders
129	115132							hit big boulder lots of mussel hash
129	115214							fishies (maybe scup)
129	115430		NB66-T	2018-018-017			y	voffb - grab in gravel hopefully(?)
129	123440	transect + grab	NB73-T	2018-018-018		7m		vob - rocky boulders shell hashlots of algae
129	124408							giant boulder
129	124644							line in the fwd and down camera
129	124742							transision off the boulder rocky area; sandy/gravelly/shell hash and still a lot of algae
129	125028							skate
129	130000							crepidula clusters in the troughs of small sand ripples
129	130200							more dense crepidula
129	130328							ripples s little bigger and crepidula aligned in the troughs again
129	130426		NB73-T	2018-018-018			y	voffb - grab

129	133312	transect + grab	NB63-T	2018-018-019	clip 534	6m		vob
129								sandy with patches of algae
129	133540							rocky heading up onto a bouldery ridge
129	134000							we were lined up on the wrong point, what the bridge had was different than what we're looking at in the dry lab.
129	134500							heading now for the target site NB63g1 then will continue transect to the south
129	135040							transition to the bouldery ridge, ship is going to head south now along the crest of the ridge
129	135600							off the boulder ridge, into rippled sand bedforms
129	140310							approaching the ridge; more attached algae probably on rock or gravel
129	140436							bumped a boulder. I think we've gotten to the boulder ridge
	140520							off the boulder ridge, into gravelly sediment
129	140536		NB63-T	2018-018-019				voffb - grab
129	143958	transect	NB59-T1	2018-018-020	clip 535	7m		vob
129								fishies
129	144920							going over a small boulder ridge
129	145508							camera strobe isn't firing. we'll bring the sampler back on then go to a different nearby site

129	145542		NB59-T1	2018-018-020			n	voffb - no grab
129								changed batteries in Nikon, getting camera err, Dann figured out that the shutter must have half stuck open when the battery died, with err showing he took a shot. then he reset the f22 and focus just under .5 m
129	151856							whiteboard shot
129	152150	transect + grab	NB59-T2	2018-018-021	clip 536	7m		lots of fish
129								lost of attached algae and kelp
129	152850							sargasso
129	153500							continuing on further south, to see if there is crepidula; following close to the same transect done last fall
129	154002							clearly in crepidula
129	154016		NB59-T2	2018-018-021			y	voffb - grab
129	162210	transect + grab	NB57-T	2018-018-022	clip 537			vob - sandy with clusters of algae
129	162520							gravelly sediment
129	162600							algae on cobble and small boulders
129	162910							coming up on the ridge; more sm bouldery and cobble; spider crabs hanging on to the algae

129	175556		NB53-T	2018-018-023			y	voffb - grab
129	182500							changed batteries on Nikon, GoPro, Reidian - downloaded Photos from Nikon and GoPro vid; Dann opened up the f-stop on the Nikon to f16
129	183616	transect + grab	NB46-T	2018-018-024	clip 539	14m		vob - crepidula
129	183700							lots and lots of crepidula
129	184300							spider crabs galore
129	184536							skate
129								expansive crepidula mats with ribbons of sand and shell hash between them
129	190240						n	voffb - grab (looks like we might be losing some sediment) - will re-take in same spot.
129	190850		NB46-T	2018-018-024				vob - no video; just a photo (GoPro was running for the 2nd try grab)
129	190904		NB46-T	2018-018-024			y	voffb - grab
129	193223	grab	SB68g3	2018-018-025	clip 540			vob - muddy sand (?) - ***NOTE: the whiteboard says SB68g1; it should be SB68g3
129	193344		SB68g3	2018-018-025			y	voffb - grab
129	193726		SB68g1	2018-018-026	clip 541			vob - sand and shell hash
129								some cobble
129	194842							boulder nearby, tried for grab but half on the boulder - didn't trip the sampler

129								will bump us to the east 10 meters and we'll try there
129								clear of it.going for the grab
129	195040		SB68g1	2018-018-026			y	voffb - grab
129	200636	transect + grab	SB68-T	2018-018-027	clip 542	7m		voffb - boulders with algae - we'll motor 100 west over this bouldery area then drop off to low relief seabed; sample near SB68t2 in ~28 m water
129	200804							lobster!!
129								big bouldery ledge area
129	301314							ghost lobster pot among the booulders
129								no more algae on these boulders as we get deeper
129	201416							transitino from boulders to sand
129	201550							isloated gigantic boulder several meters west of the boulder ridge
129								sand with some shell hash
129	201830							sea-robin; spider crab
129	201940							crepdula scattered
129	202030							sseveral pider crabs
129	202234							lobster pot

129	202630							threading the needle between a handful of isolated boulders as we head west to the sample target spot
129	203000							a little more dense bed of crepidula
129	203052		SB68-T	2018-018-027			y	voffb - grab
129	210350	transect + grab	NB43-T	2018-018-028	clip 543	18m		started recording video in the water column on the way down; cool jelly fish footage in vid (maybe in photo too)
129	210516							vob
129	210700							gravelly sediment
129	210820							object on seabed; looks like fabric
129	211030							bathy had odd rectangular feature on seabed, nothing in the backscatter or on the chart; we ar going right over it
129	211120							some linear objects(?) slightly buried
129	211200							tire?? mostly buried
129	211340							about to move off the bathy "feature" there was a linear thing, Chris caught a photo if it
129	211418							dead fish on the bottom
129	211506							more debris (maybe a coffee cup)
129	211510							more shell hash
129	211524							big bryozoan

129	211638							something man-made; metal object
129	211818							big burrow
129								a bit less gravelly and shell hash
129								more silty
129	212534							going over a small ridge - small boulder to the port side of the video
129	212628							few small boulders
129	212656							back to silty sediment
129	212950							about to grab and we've come into cobble and small boulders; doh!
129	213044		NB43-T	2018-018-028			y	voffb - grab (might have grabbed a piece of old rope on the bottom)
129	220500	transect + grab	NB41-T	2018-018-029	clip 544			vob - sand - going to make our way north towards the NB41-T1 spot
129	220638							hummocky sand
129	220742							isolated boulder - seen in the bathy data too
129	221300							boulder
129	221348							transition to shell hash and attached algae
129	221538							close to the t1 point, starting the originally planned transect to NB41-t2, beginning transect

130	135134							lobster trap
130	135300							near the T1 site; heading towards the T2 site
130	135748							into gravelly sediment
130	135900							wire is off to the side, might be hung on something or fighting the current
130								all stop
130	140400							Cptn maneuvered us around so the wire is straght down, will proceed with the transect
130	141038							trying to get moving again, but the current is very strong, sampler kiting way out to the stbd side
130	141240		SB58-T	2018-018-033			n	voffb - no grab - current too strong
130	141500							little excitement, ghost lobster trap and mrc was stuck on the sampler, Dann couldn't lift it on board, too much tension on the wire. We were
130	143000							changing batteries in the GoPro, Nikon, Keldan - downloaded pic from Nikon
130	145334	transect + grab	NB42-T	2018-018-034	clip 549	46m		vob - first photo before BR recording
130	145450							bouldery and ghost lobster trap
130	145710							more lobster gear
130	150020							didendum on the boulder
130	150400							big boulders

130	150436							fish - no id, just in video
130	150712							sea-robin
130	150900							gravelly sediment with isolated small boulders
130	151140							back into boulders large and small
130	151150							giant boulder
130	151700							gravel and shell hash
130	151806							some cobble
130	151840							lost of cobble and sm boulders
130	152034		NB42-T	2018-018-034			y	voffb - grab beyond the cobbles, in gravel/shell hash
130	153000							pausing for lunch and a parts delivery to the ship's crew
130	164330		NB39-T	2018-018-035	clip 550	97m		came right upon a lobster line on the decent. brining the sample up and moving a bit to the west
130	164850		NB39-T	2018-018-035				vob - gravelly sediment with shell hash
130	165008							another line on the bottom
130	165110							cobbles and small boulders
130	165128							fish head

130								kelp
130	165754							gravel and cobble with shell hash, spider crabs
130	170336							sea robin
130	170642							sea robin
130	170720							line in the vid - bigger than a lobster line - communication cable?
130	170946							skate in t fwd camera - got away before the botton vid picked him up
130	171020		NB39-T	2018-018-035		84m	y	voffb - grab
130	175026	grab	SB66g3	2018-018-036	clip 551	75m		vob - boulders - put down near the T2 site, so we'll motor under DP the g3 site to get a grab
130								crab
130	175810							sea-robin
130	180002							sea-robin swimming in the fwd camera
130	180200							big boulder
								Keldan light battery low, light going out, we're coming up to change out all batteries
130	180648		SB66g3	2018-018-036			n	voffb - no grab
120	182000							changed GoPro batteries, Nikon, Keldan, and strobe - downloaded the GoPro vids

130	183330				clip 552 (see comment)			something funky with the recording (or the operator); I must have hit play instead of record and we all thought we were on the bottom already. Odyssey clip 552 is just water column; not sure if anything was recorded on the BRs.
130	183448	transect + grab	SB66-T	2018-018-037	clip 553			vob - boulders
130	183828							sea robin swimming along in down vid
130	184246							beginning ascent up the wall, rise ~30m over run ~80m -- pretty good slope; Chris noted that the fwd-looking vid looks like the down vid usually
130	184608							ghost trap stuck in the rocks
130	184636							couple fish in the fwd vid (Cunner? Black Seabass?)
130	184820							leveling off at the top of the rise; lots of big boulders; not looking sample-able at this site.
130	185012		SB66-T	2018-018-037			n	voffb - no grab - boulders and cobble
130	191352	transect + grab	SB48-T gra	2018-018-038	clip 554	82m		vob - gravelly sediment with shell hash and small isolated boulders
	192100							asked the bridge to head due south so that we can continue transect across the depression feature as seen in the bathy data; we'll do a jog to
130	192320							less bryozoan, more like coarse sand and shell hash less gravel/cobble, still small isolated boulders
130	192528							sediments getting finer, medium sand and shell hash, hummocky sand
130	192540							transition to cobble and boulders, scoured out around the small boulders

130	192634							algae covered rocks and substrate
130	192700							gone far enough south to catch the depression, good stuff; great transitions; asked the bridge to head west;
130	193200							currents are tricky, might just go where we can go east then take a sample
130	193310							finer sediment but just got to small boulders as we come up on the flank of a ridge.
130	193520							heading south and up on the ridge, lots of cobble and boulders covered with algae
130	194104	NB48-T grab		2018-018-038			y	we got something, we did so we'll go back to that sandy spot in the hole and just do a grab there.
130	201350	grab	NB48g2	2018-018-039	clip 555	90m		vob - just on the edge of the sand and the boulder cobble at the northern edge of the depression
130								moving to the SW to try to get that sand
130								getting deeper still nothing grab-able
130	201838							maybe more sandy now
130	201846		NB48g2	2018-018-039			y	voffb - grab in a sandy patch - crab and skate in vid at the grab site
130	205000							changed GoPro batteries, Nikon
130	210626	grab	NB40g	2018-018-040	clip 556	25m		vob - cobbly gravelly
130	210734		NB40g	2018-018-040			n	voffb - no grab -- didn't get a good one; big rock stuck in the sampler jaw
130	211414	transect + grab	NB40-T	2018-018-041	clip 557	25m		vob - cobble gravel - came down in same spot as last grab attempt

130								lots of cobble on sediment
130	212048							small boulder
130	212140							getting a little more small bouldery
130	212240							astrangia (white stoney coral - northern star coral) on the cobble and boulders
130	212320							fewer scattered cobbles on gravelly sediment, no more astrangia
130	212800							sandy sediment
130	212820							now some cobble
130	212928							line
130	212942							small boulders
130	213010							more ghost line
130	213022							line wrapped all around the small boulders
130	213240							slightly bigger boulder, blood star on the side of one boulder
130	213344							another blood star on boulder
130	213444							crashed into a giant boulder
130	213452							anchor in the down vid

130	213820							into a patch of sandy sediment - going to try for a grab
130	213836		NB40-T	2018-018-041			y	voffb - grab
130	220524	transect + grab	NB36-T	2018-018-042	clip 558	50m		vob - atlantic jack knife clams (razor clams) on gravelly sediment
130	220842							fewer clam shells more gravelly sediment
130	220950							boulders
130	221100							searobin
130	221430							searobin 3 in a row
130	221450							another searobin and another, and another all lined up facing the same way.
130	222300							gravelly sediment with shell hash
130	222836							small boulders up on the ridge as we approach the T2 site
130	222930							cobble with isolated medium sized boulders
130	223018							sharp transition sand to cobble
130	223108							searobin
130	223128		NB36-T	2018-018-042			y	voffb - grab might be spewing sediment
130	224510	grab	NB36g2	2018-018-043	clip 559	36m		vob - going for just a quick grab - Keldan is flaking out, low bat, no good fwd vid

130								boulders on sand - asking bridge to bump us to the north to try in a sandier area
130	224850			2018-018-043			y	voffb - grab
Friday May 11 2018 JD 131 (all times are UTC)								
131								changed GoPro batteries, Nikon, Keldan, and strobe
131	11228	grab	SB55g2	2018-018-044	clip 560	9m		vob -came down on a lobster line, nearby small boulders
								off the boulders into gravelly sediment going to try a grab
131	112828							sampler didn't trip
131	113002		SB55g2	2018-018-044			y	voffb - grab - grab was sandy mud
131	114252	greb	SB55g3	2018-018-045	clip 561	9m		vob- sand; shell hash
131	114400						y	voffb - grab
131	120132	transect + grab	SB55-T	2018-018-046	clip 562	4m		vob - boulders covered with algae and kelp **NOTE: whiteboard shot just says "04" for the USGS SEABOSS site # - it should read "046"
131	121456							lobster pot
131	121526							big boulder
131	122000							off of the ridge and into sandy sediment
131								over the low backscatter area, finer sediment, maybe muddy sand or sandy mud

131	122720							ghost lobster pot
131	122844							another ghost lobster pot
131	123100		SB55-T	2018-018-046			y	voffb - grab
131								personnel transfer (Roman and Kay are returning to the ship)
	133000							changed GoPro batteries, Nikon, Keldan - downloaded the Nikon pics
131	141718	transect + grab	NB37-T	2018-018-047	clip 563	19m		vob - sandy mud - lots of burrows NOTE. deployed the sampler but saw schmutz on the down video; brought it back up to wipe off; on vid
131	142402							crab; small sand ripples
131	143000							a lot of the same; rippled muddy sand with burrows and algae kelp tumbleweeds
131	143000							more of the same
131	144342							crab; maybe dead
131	144424		NB37-T	2018-018-047			y	voffb - grab
131	150920	transect + grab	NB32-T	2018-018-048	clip 564	35m		vob - gravelly sediment with shell hash
131								some cobble
131	152046							spider crab
131								getting into some small boulders

131	152000							we seem to be turning, might be heading to the wrong point now, but it could take us over an isolated large boulder (according to the bathy).
131	152440							turning to get back on course to T1 looks like we passed just east of the boulder
131								heading towards another possible boulder
131	152850							small boulder
131								spider crab
131	153250							lots of cobble or slightly bigger
131	153300							approaching another boulder feature as seen on the bathy
131	153410							passed right over the "big boulder" feature, but never saw anything; maybe someone moved it out of the way.
131	153726							asterias sea star (Chris says that's "super duper random" to see here)
131	154124							another asterias
131	154152							and another asterias; maybe not so "super duper random" after all
131	154240							more asterias
131	154702		NB32-T	2018-018-048			y	voffb - grab - in the gravelly sediment/cobble - we'll see
131	163256	grab	SB48g2	2018-018-049	clip 565	9m		vob - shell hash on sand?
131	163414		SB48g2	2018-018-049			y	voffb - grab

[illegible]

131	175758		SB48-T	2018-018-052			y	voffb - grab
131	182146	grab	SB44g1	2018-018-053	clip 569			vob - sand ripples with shell hash in troughs
131	182338		SB44g1	2018-018-053			y	voffb - grab
131	183402	grab	SB44g2	2018-018-054	clip 570	14m		vob - lots and lots of crepidula
131	183556		SB44g2	2018-018-054			y	voffb - grab
131	184600	transect + grab	SB44-T	2018-018-055	clip 571	19m		vob
131								came down in the wrong spot; arrive at the SB44g3 site; but we wanted SB44t2 (to begin the transect to the south); motoring now over to the t1 site and will continue transect NE to the t2 site and take a grab there
131								sandy gravelly with some shell hash and cobbles w/ attached algae
131	185500							Cptn need to do some sort of turning so were holding position for a few min
								fewer cobbles, just a lot of sandy substrate
131	185750							worm castings (hemichorde)
131	190308							couple big boulders in the down vid
131								more cobble and shell hash

131	190720							rocks covered with silt - coming up a small ridge to the west of the bigger ridge
131	190810							boulders!!
131								rippled sand
131	191000							boulders again; spider crab close up in pic(?)
131	191150							boulders
131								rippled sand again
131	191510							noulders
131	191540							back in to sand; gravelly sediment shell hash and cobble
131	191700							cobble and astrengia
131	191724							sandy slope; bottom is coming up on us
131	191744							boulders
131	191822							down the sandy east flank; but we might go up again in a min
131	191854							another big boulder
131	191922							coming over the ridge now, giant boulder (or ledge?) covered bryozoans and dileucona (little pink anenome)
131	192046							east of the ridges, into rippled sand

131	192248		SB44-T	2018-018-055			y	voffb - grab in the rippled sand
131	194626	grab	SB45g1	2018-018-056	clip 572	35m		vob - gravelly sediment with shell hash
131	194754		SB45g1	2018-018-056			y	voffb - grab
131	195810	grab	SB45g2	2018-018-057	clip 573	34m		vob
131	195952		SB45g2	2018-018-057			y	voffb - grab
131	201110	transect + grab	SB45-T	2018-018-058	clip 574	33m		vob - gravelly sediment with shell hash
131	202000							rippled sand with shell hash
131	202616							searobin
131	202730							back to gravelly sediment with shell hash; bryozoans
131								bryozoans(?) hydroids(?)
131	202816							heading down into the hole
131	202840							sand ripples in the hole with patches of shell hash (no ripples)
131	202950							giant giant boulder in the middle of the hole
131	203036							rippled sand on the western side heading back up out of the hole; shell hash in the troughs
131	203912							skate

131	204000		SB45-T	2018-018-058			y	voffb - grab
131	211128	grab	SB42g1	2018-018-059	clip 575	13m		vob - almost a crash landing! - sand ripples very turbid
131	211258		SB42g1	2018-018-059			y	voffb - grab
131	212408	grab	SB42g2	2018-018-060	clip 576	22m		vob - again pretty turbid at the bottom; rippled sand with some shell hash
131	212510		SB42g2	2018-018-060			y	voffb - grab
131	214022	transect + grab	SB42-T	2018-018-061	clip 577			vob - gravelly cobble(?) bottom
131	214606							crabs (spider crabs and jonah crabs)
131	215020							alternating ribbons of gravel and crepidula
131	215110							searobin
131	215200							crab (unknown type)
131	215224							transitions to sand - rippled sand - we are moving along the SW flank of a large sandwave
131	215440							fish (no id)
131	215824							fish wizzing by the SEABOSS
131	215956							fish in the dwn vid
131	220630							changing course to head north and hopefully cross over the crest of one of the big sandwaves

131	220900							searobin buried in the sand
131								crab
131	221000							heading up the crest of the sandwave, hummocky sand in the fwd camera
131	221028							fish
131	221124							at the crest of the sandwave (according to the bathy)
131	221200							heading down the NE flank of the sandwave
131	221206							crab
131	221234							big spider crab
131	221322							lobster!!
131	221340		SB42-T	2018-018-061			y	voffb - grab
Saturday May 12 2018 JD 132 (all times are UTC)								
132	103700							changed GoPro batteries, Nikon, Keldan, and strobe
132	111018	grab	SB41g3	2018-018-062	clip 578	5m		vob hummocky sand
132	111214		SB41g3	2018-018-062			y	voffb - grab
132	112620	grab	SB41g2	2018-018-063	clip 579			vob

132	112744		SB41g2	2018-018-063			y	voffb - grab
132	114132	transect + grab	SB41-T	2018-018-064	clip 580	5m		vob - hummocky sand (among sand waves as seen on the stripy bathy)
132	114444							spider crabs frolicking
132	114904							big spider crab
132	115330							we lost the strobe. will pause here and bring the SEABOSS onboard to have a look.
132	115452		SB41-T	2018-018-064			n	voffb - no grab
132	120326	transect + grab	SB41-T	2018-018-065	clip 581			vob - sandy seabed NOTE: restarting transect from where we stopped to check out the camera/strobe - incremented the USGS site # but
132								mor muddy with atlantic jacknife (razor?) clam shells and moon snail egg case and spider crabs
132	120544							dead blue crab
132	120742							cluster of spider crabs
132	121030							strobe/camera making again; reconnected the trigger cable to the control box and that worked once; but strobe didn't trigger a second time; all stop to bring
132	121204		SB41-T	2018-018-065			n	voffb - no grab
								strobe works on deck
								changed the strobe
132	122248		SB41-T	2018-018-066				vob - strobe still flaky - sometimes work sometimes doesn't

132	122404							voffb - but didn't bring it up on deck
132	122602							vob - back down and win command along transect until the camera stops working again - same SEABOSS and NURTEC site # since we didn't
132	122902							spider crab
132	123120		SB41-T	2018-018-066			y	voffb - grab - calling this grab "SB41-T and g1" (?)
132								changing the battery in the Nikon and GoPro - download GoPro vid and Nikon pic
132								Dann thinks the connectino on the camera to the strobe might have been loose; since the camera was shooting photos (all dark); it wasn't the camera battery; and since we saw the same behavior after swapping strobes it wasn't the strobe.
132	125252							set the GoPro time using Camera Suite
132	125930-ish							whiteboard shot with Calibration photo time.is/utc
132	132204	transect + grab	NB27-T	2018-018-067	clip 584	38m		vob - gravelly sediment with shell hash
132								occasional sipder crab
132	132824							scup
132	133116				clip 585			Odyssey GSD lined (see note at 134000) - fixed in post processing ***NOTE this LTC is seed time; GeoStamp audio for the first 2 min will be wrong
132	134322							more of the same, gravelly sediment occational crabs

132	134510							crab in pic (?)
132	134656							crab & searobin
132	134858						y	vob - grab - DCR - the Odyssey DVD lined up and we missed it. Will fix by playing back the DVD and into the Odyssey
132	142814	grab	NB29g	2018-018-068	clip 586			vob - sand shell hash
132	142950		NB29g	2018-018-068			y	voffb - grab
132								set the time on the BR recorder so now the video clips on the BR will be labeled by time (just realized it didn't keep the clock setting from the
132	144140	transect + grab	NB29-T	2018-018-069	clip 587	46m		vob - small rippled sand
132	144600							hummocky sand
132	144908							welk egg case (there was another one ~10-20 earlier too)
132	145120							sea robin
132	145204							another sea robin
132	145612							another sea robin
132	145900							sculpin or sea robin; didn't get a good look
132	150218							sea robin
132	150320							flounder and something else b/w striped

132	150520		NB29-T	2018-018-069			y	voffb - grab
132	153750	transect + grab	NB25-T	2018-018-070	clip 588	50m		vob - scallop shell; graveely sediment
132	154000							getting a little more cobble-y as we approach the t1 site up on this subtle bathy high
132	154100							small boulder;
132	154140							some super circular things (probably clay); should be a pic of one here
132								more exposed gravel than at start of this deployment
132	154410							beginning transect to the t2 site
132	155100							transitions back and forth from gravel to sand with crepidula
132	155226							sea robin
132	155736							flounder
132								continuing transition after transition from gravel to crepidula
132	160040							stake captured in pic too
132	160816		NB25-T	2018-018-070			y	voffb - grab
132	164050	grab	SB47g3	2018-018-071	clip 589	47m		vob - hummocky rippled sand
132	164144		SB47g3	2018-018-071			y	voffb - grab

132	165624	grab	SB47g2	2018-018-072	clip 590	46m		vob - hummocky rippled sand - same as previous site (we're only 100m due west)
132	165734		SB47g2	2018-018-072			y	voffb - grab
132	172002	transect + grab	SB47-T	2018-018-073	clip 591	45m		vob - rippled sand
132								shell hash in the troughs
132								just a lot of rippled sand with some shell hash and some bigger shells
132	173000							something jumped on the bottom (baby flounder? says the geologist)
132								some crepidula in the troughs; maybe more hash; "maybe more going on" -CC
132	173602							flounder
132	174250							transition into gravelly sediment with cobbles and bigger shells, some of those clay nodule
132	175000							into more sandy substrate
132	175054		SB47-T	2018-018-073			y	voffb - grab
132	180000							changed GoPro; Nikon; Keldan batteries - downloaded the GoPro vids
132	182446	transect + grab	NB24-T	2018-018-074	clip 592	43m		vob - setting up just west of the hole - will try to motor over it to the
132								gravelly sediment with shells and shell hash
132	182630							no flash on the Nikon camera - will try to reseal the connection on the camera to the strobe

	182652		NB24-T	2018-018-074			n	voffb - no grab
132								Dann and I (but mostly Dann) worked on the strobe and the strobe connection to the camera. Switched out to the other strobe and
132	192502	transect + grab	NB24-T	2018-018-075	clip 593	43m		vob - at the start of the transect - renamed this site for USGS # but not NURTEC
132	192710							starting transect - about to head right down into the hole (~ 4m deeper than surrounding
132								gravelly sediment with shell hash
132	192830							rippled sand
132	193330							objects on the seabed
132	193350							lobster backing into the down vid
132								very hummocky sand
132	193540							giant angular object in the fwd camera - shipwreck!! covered with algae
132								crab
132								steep sand heading up out of the hole
132	194000							slightly hummocky sand
132	194710							more hummocky sand; the occasional algae tumbleweed and moon snail
132	194756							sea robin

	195700							ship is veering off track to the south; trying to get back on course
	200530							this isn't working; fighting the current too much; will grab here and move on
132	200700		NB24-T	2018-018-075			y	voffb - grab
132	202956	transect + grab	NB23-T	2018-018-076	clip 594	43m		vob - started vid on Odyssey7 (but not on the BR recorders)
132	203012							late start on the BR recorders
132								arrived at the bottom on top of the edge of an angular boulder
132	203140							beginning transect to the t1 site
132	203200							scup and sea robin
132								corymorpha - hydroid attached to the sand(?), bryozoans, lots of shell fragments
132	203310							spider crab
132	203600							out of the hydroids; few stragglers
132								hummocky sand
132	203720							patch of hummocky sand with more gravel in the troughs
132								back to an area of more hydroids
132	203900							heading up the western flank of a big sandwave

132	204012							sea robin
132	204110							heading down a spur off of the main sandwave
132	204300							heading back up over the main sandwave again
132	204450							starting to come up fast - ~ 7m relief over 25m horizontally
132	204900							sea robin
132	205122		NB23-T	2018-018-076			y	voffb - grab
132	211350	grab	SB40g3	2018-018-077	clip 595	50m		vob - coming down on the edge of a sandwave
132								spider crab crunch in the down vid
132								strobe didn't flash
132	211502		SB40g3	2018-018-077			y	voffb - grab
132	213252	grab	SB40g1	2018-018-078	clip 596	49m		vob - gravelly with shell hash (BRS don't say 19min; must have forgot to stop them at the last site or accidentally restarted them -- will need to
132								still no strobe going off
132								second try it worked; got 2 photos
132	213426		SB40g1	2018-018-078			y	voffb - grab
132	220028	transect + grab	SB40-T	2018-018-079	clip 597			vob - sandy with hydroids - strobe seems to be working again; Yay!

132	220208							starting transect to t1
132	220230							maybe a shrimp or some type of isopod (Roman says cumacusian?)
132	220340							heading up the steep slope of the sandwave
132	220620							buried libinium (spider crabs)
132	221230							heading up the next sandwave
132	221410							scup in the down vid; drifting by in the current
132	222020							rippled sand on the flanks of the second sandwave that we've crested
132	222450							coming up on the next (third and last) steep sandwave climb for this transect
132	222730							upslope
132	222834							jonah crab at the crest of the sandwave
132	223046							couple fish (not certain on the ids - one striped might have been a sculpin or sea robin)
132	223134							moon snail flipped by
132	223830							welk shells
132	223910		SB40-T	2018-018-079			y	voffb - grab

								downloaded all the data - backed up to NURTEC and Lacie drives
Sunday May 13 2018 JD 133 (all times are UTC)								
133								changed GoPro; Nikon; Keldan; using strobe that we used yesterday
133	111602	transect + grab	NB22-T	2018-018-080	clip 598	52m		vob - crepidula and gravelly sediment
133	111700							no strobe - bringing it back up - no grab
133	111716		NB22-T	2018-018-080			n	voffb - no grab
133								Dann changed out the camera (spare Nikon D300); Dann set the camera to GPS time; took calibration photos with the whiteboard; Dann set
133	120332	transect + grab	NB22-T	2018-018-081	clip 599			vob - crepidula and gravelly sediment
133								beginning transect to the t1 site
133	120810							transitions back and forth from ribbons of gravel to sand with crepidula
133	121006							jar on the seabed - encrusted with encrusting stuff
133								
133	122448							spider crab
133	123436		NB22-T	2018-018-081			y	voffb - grab
133	130000							I just reset the time on the Odyssey- it had gotten to be a couple seconds ahead of the GPS time

133	130956	grab	SB38g3	2018-018-082	clip 600	6m		vob - muddy sand cobble-y; turbuent
133	131140		SB38g3	2018-018-082			y	voffb - grab (there were some cobbles in the grab, each sample bagged has a cobble in it)
133	122435	grab	SB38g2	2018-018-083	clip 601	4m		vob
133								hummocky sand; hermit crab
133	132610		SB38g2	2018-018-083			y	voffb - grab
133	134240	transect + grab	SB38-T	2018-018-084	clip 602	6m		vob - rippled sand
133								doh; late start on the BR vid; missed ~10 sec
133								sand ripples with POM (particulate organic matter) suspended and settled in the troughs
133	135740							not rippled sand - muddy sand with cobbles
133	135930							and more cobble crossed a transition from low to high backscatter (NOTE: need to re-watch the vid for exact time of transition)
133	140116							something; man-made object - piece of sheet metal or something
133								more cobble and gravel
133	141030		SB38-T	2018-018-084			y	voffb - grab
133								change GoPro and Reordan batteries, noticed that the Odyssey LTC is 1 min slow (must have oops-ed that when I reset the Odyssey time/date back at
133	142400-ish							took calibration shots with the GoPro - short vid clip and photo

133	144002	transect + grab	NB19	2018-018-085	clip 603		vob - sand hummocky sand - lots of POM floating around and settling into the troughs/catchin on the hummocky sand; some whole leaves; "rivers of detritous; float past the bentic desert; worms waiting for breakdown" -RZ
133	144700						lots of leaf detritous; near the mouth of the CT River
133	144812						moon snail
133	145020						big piles of detritus
133	145320						lots of leaf detritous
133							hummocky sand and some rippled sand; bathy shows us in a large field of small sandwaves but we're not really seeing much surface expression
133	145550						I think there was a white plastic bag in the fwd camera
133							a lot of allochthonous input; the leaves (as opposed to autothonous input - the algae)
133	150100						dense dense allochthonous material; crazy amounts of it here
133							at times you can't even see through it to the seabed
133	150450						another plastic bag in the fwd camera
133	150522						coffee cup top - probably Dunkin Donuts
133							going for a grab - we'll need a rake to get this sample out

133	150746		NB19	2018-018-085			y	voffb - grab
133	152000							we went to change the Nikon battery but it hadn't gone down at all (we are set to ~10s preview instead of the 10min preview-- that must really be saving battery life); not changing the battery yet; previewed some pics from that last site with all the detritus on the camera and they actually look pretty good. Will download later.
133	154244	transect + grab	NB17-T	2018-018-086	clip 604	15m		vob - rippled sand
133								no strobe on the camera again -- damn
133	154624		NB17-T	2018-018-086			n	voffb - no grab
133	161334		NB17-T	2018-018-087	clip 605			vob - continuing on with the transect (new USGS site # same NURTEC)
								took a few photos then the strobe stopped again
133	161844		NB17-T	2018-018-087			y	voffb - grab
133	171158	grab	SB36g3	2018-018-088	clip 606	39m		vob - hummocky sand - camera strobe flashed; yay!
133	171308			2018-018-088			y	voffb - grab
								strobe not working on deck now.
								working on a solution for the non-functional strobe

133	174004	grab	SB36g2	2018-018-089	clip 607	28m		vob - no strobe
133								1 photo worked (out of 5+)
133	174200		SB36g2	2018-018-089			n	voffb - grab attempt - oyster shel stuck in jaw; will redeploy for a grab
133	174906		SB36g2	2018-018-089	clip 608			vob - didn't change the site number for USGS or NURTEC
133	175000		SB36g2	2018-018-089			y	voffb - grab
133	175550							fwd BR was still recording; just turned it off now
133								trying something new for a bit. GoPro (Hero4_4 black) down facing attached to the Nikon housing via 1/4-20 stud (Bill cut a bolt Dann had). Took off the strobe and replaced with another Keldan down facing in the mount for the strobe. The down-looking GoPro is set to time lapse interval 10 seconds (can't use the one-button mode). I set the GoPro time using Camera Suite to GPS time. We will do the transect stopping periodically to make sure we get some good pics from the down GoPro - stoping every ~2min
133	181800	transect + grab	SB36-T	2018-018-090	clip 609	32m		vob - sandy maybe muddy sand come cobbles
133								small boulders (or big big cobbles)
133	181946							rippled hummocky sand; sea robin

133	182220							spider crab
133	182328							sea robin
133	182706							sea robin; spider crab
133	183456							little fish
133	183622							sea robin
133	184220							lots of hummocky sand; occasionally more shell-hash in the troughs
133	184250							entering into the bigger sandwave area
133	184312							sea robin
133	185524		SB36-T	2018-018-090			y	voffb - grab
133								Dann opened up the Nikon settings to f8, shutter 1/400; ISO 2000. We'll see if the lighting with the extra Keldan can give us good Nikon pics. If so
133	195620	transect + grab	NB20-T	2018-018-091	clip 610	42m		vob - sea robin; some of those circular clay depositis
133	195710							spider crab; gravelly cobble seabed
133	195830							lots of clay deposits
133	195920							crepidula too; sea robin; spider crabs; still lots of clay
133	200150							big welk

133	200210							skate egg casings (mermaid's purses)
133								tons of cerpidula and clay nodules
133								maybe just got a little slitier
133	200732							skate
133	200754							driftwood
133	201010							clay pavement under the silty substrate
133	201100							changed to gravel with the clay deposits
133	201610							lots of cerpidula; sea robin
133	201748							striped fish
133	202036							spider crab
133	202052							rope
133	202450							another ribbon of clay pavement
133								gravelly cobble shell hash
133	202914							fish scup(?)
133	202920							sea robin

133	204048		NB20-T	2018-018-091			y	voffb - grab
								Nikon photos w/o the strobe are too under exposed; we'll need to use the down looking GoPro for all of this afternoon's sites ; maybe
133	210042	grab	SB37g1	2018-018-092	clip 611	43m		vob - sand ripples
133								worm tubes; little shell hash
133	210146		SB37g1	2018-018-092			y	voffb - grab
133	211602	grab	SB37g2	2018-018-093	clip 612	43m		vob - gravelly sand some shell hash
133	211734							flounder
133	211804		SB37g2	2018-018-093				voffb - grab
133	213624	transect + grab	SB37-T	2018-018-094	clip 613	41m		vob - sandy seabed
133								just noticed that the Odyssey7's timecode is a couple seconds faster than the GPS time.
133	214200							spider crab
133	214258							mermaid's purse (skate eggs)
133	214348							spider crab
133	214434							sea robin
133	214920							squid

133	214938							same squid; keeps flying past the down camera
133	215046							that squid just inked
133	215550							something? muffler?
133	220338							2 fish - 1 w/ vlack stripes; then a sea robin
133	220626							spider crab
133	220728							moon snail cruised by in the current
133								about to head down the slope 35m down to 50m
133								sandy slope, not as interesting as I thought it would be
133	220940							spoke too soon, hyrdoids and fish down slope
133	221100							seems like we're in some substantiak current (down vid looks like fwd)
133	221152						n	voffb - grab - piece of wood got stuck- re do the grab
133	221846							vob - going for a grab - no video or photos
133	221916		SB37-T	2018-018-094			y	voffb - grab
133	224658	grab	NB21g	2018-018-095	clip 614	35m		vob - shells and gravelly sediment
133	224806		NB21g	2018-018-095			y	voffb - grab

133	225706	transect + grab	NB21-T	2018-018-096	clip 615	36m		vob - sand
133								hydroids
133	230640							at the top of the big sandwave
133	230710							flounder and sea robin
133	230930							hydroidd
133	231020							shell hash
133	231312							couple fish fighting the current over this sandwave with us in the down vid
133	232542							sea robin; lots of shells and shell hash
133	232610							moon snail cruised by in the current
133	233130							up on the rise; crepidula and gravelly sediment
133	233314		NB21-T	2018-018-096			y	voffb - grab
133								downloaded photos from down GoPro; vids from fwd GoPro; vids from Odyssey7
								downloaded all the data - backed up to NURTEC and Lacie drives

Monday May 14 2018 JD 134 (all times are UTC)

134								battery change on GoPros; Nikon and Keldans; we put the strobe back on and it seems to be working. we fitted the 2nd Keldan next to the strobe in case we need to fall back on the down-looking GoPro. If the strobe is working; we will not do the "stop and go" during the transects
134								personnel transfer (Ivar off; Peter on)
134	145408	transect + grab	NB33-T	2018-018-097	clip 616	39m		bouldery with lots of attached algae
134								down video failed on the ORP and the Sony screen (and the feed out to Dann); didn't affect the Odyssey video (so must be a squirrely connecting
134								lots of boulders covered with yellow algae cliona (orange algae cliona to) estrangia; red beard sponge
134	150320							transition from boulders to gravel and cobble and shell hash
134	150530							more small boulders and bigger cobble; more shell hash too
134	151000							just crossed over a low backscatter area; but didn't see any difference of seabed in the video
134	151938		NB33-T	2018-018-097			y	voffb - grab
134	160544	grab	SB52g1	2018-018-098	clip 617	48m		vob - sandy with shell hash, rippled sand - were sitting in the trough of a couple sizeable sand waves
134	160608		SB52g1	2018-018-098				voffb - grab - Roman pointed out the worm tubes (also a cool view in the fwd camera
134	162122	grab	SB52g2	2018-018-099	clip 618	49m		vob - another site in the trough of 2 big sandwaves; rippled sand with shell hash in troughs
134	162234		SB52g2	2018-018-099			y	voffb - grab

[illegible]

134	175754		NB35g	2018-018-101			y	voffb - grab
134								We tested all the strobes using the Electro pigtail that Peter brought out. All the strobes seem to fire okay so it doesn't seem like any of them are dead (we named the strobes A (the one we've used all morning - the more reliable one on this trip so far); B - tight connection; C - the hidden away one - Dann thinks the connection on this one is loose
134								Dann and I cut the wire on the SEABOSS to strobe thinking the connection to the strobe is bad. We spliced in the pigtail; then adjusted/tightened the cable inside the camera housing; and the strobe is back to working now. Yay!
134	200152	grab	SB59g3	2018-018-102	clip 621	45m		vob - boulders; line; lobster trap
134	200214							transiton to sand
134	200248		SB59g3	2018-018-102			y	voffb - grab
134	201708	grab	SB59g1	2018-018-103	clip 622	59m		vob - boulders; cobble shell hash
134								too cobble-y to grab; asking the bridge to bump us aft a bit
134	202054		SB59g1	2018-018-103			y	voffb - grab
134	203432	transect + grab	SB59-T	2018-018-104	clip 623	45m		vob - coarse sand with lots of shell hash

134	203700						on the flank of big sandwaves; sand ripples with shell hash in the troughs
134	204556						cobble-y patch
134	204630						back to sand and shell hash
134	204640						moon snail
134	204710						skate
134	204850						sea robin
134	204900						we're moving along the crest of a sand ripple for a bit there; sand on one side; gravel and shell hash on the other
134	205050						cluster of ghost lobster pots hung up on an isolated small boulder.
134	205210						getting very gravelly in the troughs
134	205318						we're skimming along the crest of a sand ripple again; gravel on the right side of the video; sand on the left
134	205348						elongate boulder
134							another small boulder
134	205420						bunch of small boulders
134	205440						back into gravel/sand
134	205526						boulders on the sand ripples w/ gravel

134	205814							small boulder/big cobbles clustered among the sand
134	205918		SB59-T	2018-018-104			n	voffb - no grab - attempt - big rock stuck in it. - will clear and regrab
134	210430	grab	SB59-T	2018-018-104				vob - just for a grab - recording the Corros (two and down) but no Odyssey or BR - Chris took a couple pics with the Nikon.
134	210618		SB59-T	2018-018-104			y	voffb - grab
								no strobe again
134	213010	grab	SB63g1	2018-018-105	clip 624	28m		vob - boulders covered with algae
134								one of the Reddan lights must be dying, keeps flashing in the video; shouldn't effect the photos since the strobe is working okay now.
134	213314		SB63g1	2018-018-105			n	voffb - no grab - all boulder down there
134	215024	grab	SB63g1	2018-018-106	clip 625	24m		vob - muddy sand with some small boulders - not sure if we'll get a grab
								asking the bridge to shimmy us to the SE to see if there's something grabable there.
134	215342			2018-018-106				voffb - grab
								downloaded all the data - backed up to NURTEC and Lacie drives
Tuesday May 15 2018 JD 135 (all times are UTC)								
135								strobe seems to be working this AM
135	123712	grab	NL1	2018-018-107	clip 626	17m		vob - gravelly sand some shell hash

135	123744		NL1	2018-018-107			y	voffb - grab
135	124808	grab	NL2	2018-018-108	clip 627	14m		vob - sm boulder cobble gravel
135								algae covered boulders
135	125056							big boulder
135	125300							transition to fewer boulders; mostly coarse sand; going for the grab
135	125330		NL2	2018-018-108				voffb - grab
135								transect next (Roman's station is called T11 to T12 - the brigde was given a different station # (call transect 1))
135	131546	transect + grab	NT1-NT2	2018-018-109	clip 628	18m		vob - gravel with some cobble
135	132128							spider crab
135	132520							boulders as we approach the ridge; rope; astrangia
135	132542							big boulder; cliona; blood star
135	132800							out of the boulders; into gravelly sediment with shell hash
135	132820							sm boulders; cable/line
135	133120							line; boulder
135	133148							small patch of sand ripples around the boulders

135	133400							bottom is a little more cobble-y or coarser gravel
135	133500							sea robin
								strobe seems to be firing weak (see calibration shot)
135	133726		T11-T12	2018-018-109			y	voffb - grab (grab and log calling this T11-T12; ***NOTE the whiteboard says "NT1-NT2"
								Odyssey LTO was a couple seconds ahead again; reset the time on the Odyssey with the GPS time
135	142054	grab	NL4	2018-018-110	clip 629	21m		vob - muddy sand with shell hash
135	142216		NL4	2018-018-110			y	voffb - grab
135	143630	grab	NL5	2018-018-111	clip 630	16m		vob - cobble; boulder; algae
135	143918		NL5	2018-018-111			n	voffb - no grab - too much boulder down there
135	150628		T21-T22	2018-018-112		14m		vob - boulders covered with algae
135	150806							line; giant boulder
	151200							gravelly sand - fewer boulder and cobble; going for a grab here.
135	151300		T21-T22	2018-018-112			y	grab and continuing b/c we're not going to get to the end of the line
135	151400							back to boulders
135	151720							cliona towers among the boulder

135	151828		T21-T22	2018-018-112				voffb - grab-at-151300 ***NOTE: USGS sample has a cobble in it; LDEO is just gravelly sediment
135	161234	transect + grab	SB63-T	2018-018-113	clip 632	17m		vob - algae covered boulders and cobble
135	161600							lots of big boulders - we're moving sideways and crashing into them
135								more big boulders as we head east over this ridge;
135	162240							huge huge boulder
135								heading down the east slope of the ridge 14m to 20m to 30m near the end of the transect
135	162530							hung up on big boulder
135								big boulders with more gravel and cobble between
135								back to piles of boulders
135	163300							more finer sediment between the boulder
135	163520							more fine sediment with cobble and occasional isolated small boulder
135	163802		SB63-T	2018-018-113			n	voffb - no grab - too much sm boulder and cobble down there
135	170048	transect + grab	NB44-T	2018-018-114	clip 633	70m		vob - starting off deep ~70m with a gradual climb to ~50m then steep climb to ~20m
135	170500							muddy sand (or sandy mud) seabed; some shell hash and algae floating by
135	170736							some sort of angular man-made object mostly buried

135	170928							a little gravel and cobble now; couple spider crabs
135	171630							jonah crab?
135	171730							lots of cobble; some sponge covered; several spider crabs
135	171818							sea robin
135	171920							cobbles are getting bigger
135	171950							one of the Keldan lights must be dying; keeps flashing in the video; shouldn't effect the photos.
135	172240							skate; more of the sponge covered cobbles
135	172510							hermit crab in a welk shell
135	172654		NB44-T	2018-018-114			n	voffb - grab
135	174400	grab	NB44g	2018-018-115	clip 634	70m		vob - returning to the same site that we started the NB44 transect at ~70m to get a sediment sample
								turbid and murky - but looks sandy
135	174432		NB44g	2018-018-115			y	voffb - grab
135	181030	grab	NB50-T	2018-018-116	clip 635	64m		vob - gravel and cobble -- too much current (~4knots) to do a transect here; just grab
135								clay mound? Dann is trying a grab; maybe we'll scrape some of it up
135	181214		NB50-T	2018-018-116			y	voffb - grab

135	184418	transect + grab	NB55-T	2018-018-117	clip 636	32m		vob - rippled sand; some shell hash; shells
135	184700							beginning transect to the t1 site
135	185000							hummocky sand with more scattered shell hash
135	185656							sea robin
135	190200							hummocky to rippled sand; shell hash and a gravel in the troughs
135	190620							transition to gravelly sediment
135								then back to hummocky sand
135	191442		NB55-T	2018-018-117			y	voffb - grab - looks like some clay nodules in when we got in close for the grab
								downloaded all the data - will back up to NURTEC and Lacie drives tonight or tomorrow
135	201000							END of SURVEY -- heading back in to Avery Point.
135								
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