

Structural Geology Observation Sheet

No. _____

Exp.: 333

Site: CooBA

Core: 1H

Observer: _____

Summary: inclined beddings.

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1	None												288.9	53.1	
3	bedding	44	45		90	14	332	0							curved boundary between two lithologies (clay & sandy clay) ↑ ask sediment people later different orientation curved boundary between two lithologies (sandy clay & clay) ← greenish band ← Ash
		45	47		90	20									
		46	48		90	21	302	0							
		133	140		270	50	48	0							
4	bedding	80.5	84.5		280	28	?	?							
1	None												299.892	50.348	
3	None														Ash Greenish Bands ← Sedimentologists may analyze them
4	None														
5	None														
7	None														

CT

CHIKYU Operation

Structural Geology Observation Sheet

for CT

No.

Exp.: 333 Site: C0018 Core: 14 Observer: A.Y. Summary:

1H

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
4	bedding	76	79		270	16	330	0			0	141			
					270	24	309	0			0	141	268.9	53.1	
5	"	88	91		270	13	345	0			0	68			
	"	15	17		270	13	345	0			0	68			
	"	56	56		270	6	60	0			0	68			

Structural Geology Observation Sheet

No. _____

Exp.: 333 Site: Coo (8A) Core 3~5 Observer: A.T/B.C Summary: F5H --- Ash & chaotic deposit (slumps)

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
3H	4	bedding	13	14		90	3	80	4		0	100			disturbed sediments with several subhorizontal beddings.
	8	bedding	110	111		90	1	0	3		0	41	148.9	54.3	
4H	3	bedding	31	31		270	1	180	5		0	92			bottom of sand layers
			86	87		270	1	180	9		0	92	37.8	54.3	
5H	6	fold	76	84		90	6	335	0	fold axial plane measured through CT image.		0	115		slump with fold. fold axis: strike 175-335 direction → 95-265 shortening
	7	chaotic	91	117.5											
	8	chaotic layers tilted	0	42											tens of tilted layers in same direction. 43~49cm, denser
			46	49		90	15	208	0		0	105			
			47	109		90	31	316	0		0	105			compositional change b/w clay & sand bottom of sand darker color (brownish) Ash sand?
	1	layer	28	30		90	2	?	?						
	2	layer	24	25.5		270	2	?	?	hard to measure					bottom of sand
			28.5	42.5		270	3	323	0		0	48			
			41												darker color (brownish)
	3	bedding	100.5	113		270	12	327	0		45	113			
	5	layer	25	35.5		90	4				0	61			Ash sand?
		slump layer	35	60		90	4								
			137	138		90	4								

Structural Geology Observation Sheet — From CT scan

No.

Exp.: 333 Site: C0018 Core: 5H Observer: B. Gomp Summary:

Section No.	Structure ID	Top of Struct cm	Bottom of Struct	ave; depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
5H	2	bedding	36	37.											
					270	12	298	0			0	148	84.7	46.7	
	6	fold			270	3	359	0			0	115			
	8	titled layer	92.5	101.5	90	31	306	0			0	105			
7H	10	fault	29	31	270	22	30	0			0	33	267.5	65.8	
8H	3	fault	62	70	270	59	58	0			52	115			
	5	fault	0	6	90	60	68	0			0	22	5.9	48.9	

Structural Geology Observation Sheet

No. _____

Exp.: 333 Site: C0018A Core: 64.7H Observer: B.S/A.Y Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
6H Ash	1	bedding	49	50	90	5	0	0			15	141			light color (parallel to horizontal direction of core)
		bedding	52	58	90	5	0	0		Sec.1	15	141			
	3	bedding	9	10	270	5	0	0			0	117			
			18	20	270	2	0	0			0	117	204.4	47.2	
			24.5	25.5	90	4					0	117			
			27.5	29	270	7	180	2		Sec.3	0	117			
			31.5	33	270	6					0	117			
			32.5	33.5	90	2	0	0			0	117			
	9	bedding	10	10.5	270	5	180	0			0	60			
	5	fault	18	12.5	270	5					0	60			
7H			5	20	270	65	323	0			0	140			hard to recognize offset (maybe normal fault?)
	1	bedding	124	130	270	40	37	0			15	141			thin white ash layer.
	1	bedding	85	86	270	4	0	8			0	86			ash layer.
		deformation structure	14	21									267.5	65.8	caused by deforming?
	2	bedding	38	39	90	1	300	0			0	141			
			73	74	270	4	60	0			0	141			
	3	bedding	40	41	270	10	346	0			31	97			
		bedding	51	52	270	4	168	0			31	97			

Structural Geology Observation Sheet

No.

Exp.: 333

Site: 18A

Core: 7H

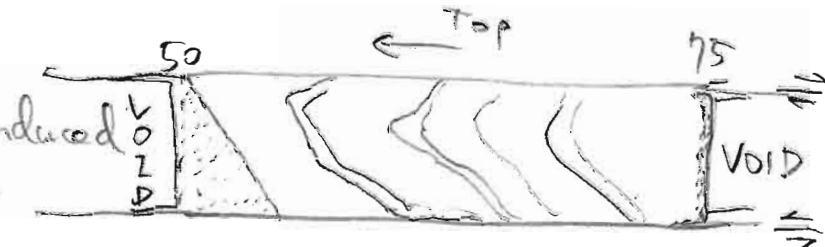
Observer: A.Y.

Summary:

7H: gently tilted beddings
8H: high angle normal faults

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
7H	5 bedding	0	2		270	3	66	0			0	41			
													267.5	65.8	
11	bedding	85	87		90	18	75	0			17	144			
11	fault	135	137		90	38	59	0			17	144			
8H	2 bedding	35	37		90	27	56	0			0	98			
3	bedding	59	60		90	3	323	0			52	115			
4	disturbed layers	50	75										5.9	48.9	
	fault	109	115		90	63	64	0			84	115			
7	fault	89	97		270	56	56	0			0	120			
8	fault	8	21		270	66	325	0			0	147			
10	fault	118	129		90	66	319	0			108	148			

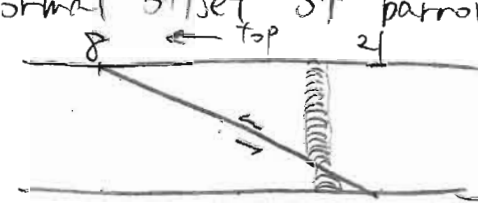
caused by
✓ maybe coreing-induced gas expansion.



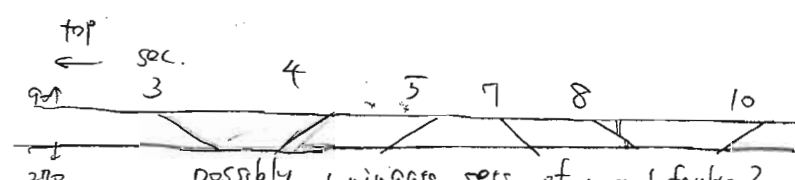
Top

VOID

normal offset of barrows, displacement = 0.8cm



top sec. 4 5 7 8 10



possibly conjugate sets of normal faults?

12, 80, 118-149

Structural Geology Observation Sheet

No.

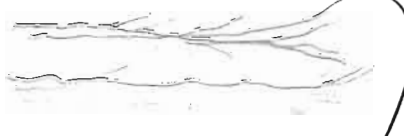
Exp.: 333 Site: C0018A Core: 9H Observer: B.S Summary: (hard to measure 2nd app. Dip)

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
3	fault?	95	98		270	27									(215.6 73.9) [Scattered 95% confidence cone $\pm 42.2^\circ$] ? data
	fault?	99.5	101.5		90	12									
	4 a fault	11	17		90	48	166	0							
	band	19	23		90	26	32	0							
	ft	35	42		90	45	10	0							
	fault?	75	78		90	20									
		52	57		90	20	25	0							
		80	82.5		90	21									
	"	82.5	84		270	10									
		84	87		90	21									
5	?	118	121.5		90	20.5									Disturbed curving layers
		31	38.5	41.5	270	26									
			39.5	42.2	270	24									
			41	43.5	270	18									
			55	72											
6	ft?	8	13												In 3D 33 ~ 43 / 27 ~ 46 / 41 ~ 50
	ft?	13	16												
		17	25												
CC	?	28.5	32												
CT	+	43	52		270	53	304	0							Z or X?
	3 fault	40	55				10	0							

Structural Geology Observation Sheet

No. _____

Exp.: 333 Site: C0018A Core: 10H Observer: B.S. Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave; depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
3	plume	23	42								0	49			 possibly caused by drilling
	plume	76	99								24	100			
5	layer	3.5	4.5								0	20	248.8	63.4	possibly drilling-related surface disturbances
		29	30								22	30			
	fault?	42	43								32	109.5			
		43	44												
		46.5	47												
		60.2	60.5												
		67.5	67.8												
		87	87.3												
	what is it?	38.5	39.5		270	3	88	0							
	bedding	34.5	36		90	13	293	0							
7	bedding	30	31		90	13	0	0							
	fault	66	74		90	51					64.5	88			
		78	85		90	45					64.5	88			
	fault?	113	119		90	43					101	129.5			
	bedding	137	137.5		90	0	0	0			132	37.5			
	bedding	138	150		90	0	0	0			137.5	144			
	bedding	141			90	0	0	0			137.5	144			
	fault	7	14.5		90	46	146	0			0	100			
		18.5	26		90	50	140	0			0	100			
8	bedding	77	76		270	28	168	0			0	100			In CT image, there is something at 16cm depth.
	ft?	91	98		90	13	217	0			0	100			

Structural Geology Observation Sheet

No.

Exp.: 332 Site: C0018A Core: 10H Observer: B. S. Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
9	Fault	0	7		90	44	29	0							
		11	17		90	52	157	0							
		22	29		90	50	212	0							
		39	46		90	46	217	0							
													248.8	63.4	
9	CC fault	10	12		270	55	21	0			9	13			

Structural Geology Observation Sheet

No.

Exp.: 333 Site: COOLBA Core: 11H Observer: B. S Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1	bedding	5.5	8.5		90	6									
	bedding	19	20		270	6	312	0							
	fault	31	36		90	40									
	4	34.5	39.5		90	31							351.5	41.3	
	4	45	49		270	29									
3	fault	5	10		90	33	324	0			0	44			
	bedding	16	19		90	26	180	13			0	44			
	bedding	54	59		270	43	180	47			50	106			Ash layer
2	layer	9.5	10		90	2	278	0			0	27			
	fault	37	44		270	53					27	51			
	layer	48	48.5		90	1	287	0			27	51			
	fault	88	93		90	45	321	0			84	93			
	layer	123	124.5		90	1	311	0			106	127			
	layer	131.8	132.2		90	1					127	134			
4	ft	13	18		90	29					0	18			
	ft	42.5	46		270	38					42	51			
	ft	73	80.5		270	42					67	80.5			
5	layer?	7.5	8		270	11									
	ft	75	14		270	50	58	0							

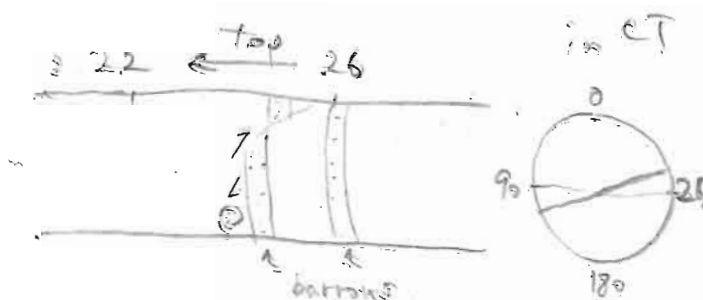
Structural Geology Observation Sheet

No. _____

Exp.: 333 Site: CoolBA Core: 11H Observer: A.Y Summary: 12H: Subhorizontal beddings & minor faults.

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
11	bedding	29.5	30.5		270	7	340	0			19.5	40			
12H	2 fault	0	5		270	30	292	0			0	40			
	fault	20	31		270	70	330	0			0	40			
3	bedding	21	22		90	2	295	0			0	140	230.1	52.4	
6	fault	44	50		90	45	304	0			0	140			
7	bedding	9	10		90	6	0	0			0	140			
	fault	8	16		90	51	296	0			0	140			
	fault	22	26		90	37	287	0			0	140			
	bedding	77	78		90	1	0	0			0	140			
9	bedding	38	39		270	3	26	0			21	87			
		69	70		90	4	0	0			21	87			

normal fault
 offset = 8.5m
 bottom of sand



Structural Geology Observation Sheet

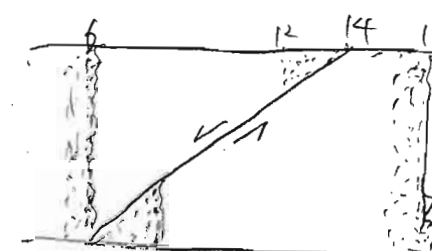
No.

Exp.: 333 Site: Coo(8A) Core: 13H Observer: A.Y Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
3	bedding	21	22		270	13	0	0			0	50			
	bedding	109	110		90	8	0	0			67	140	67.1	43.3	
4	fault	0	10		270	64	337	0			0	54			
5	bedding	23	24		270	2	62	0			15	46			
9	fault	6	14		90	52	16	0							
	bedding	7	7		270	3	188	0							
	bedding	16	17		90	1	0	0							
	bedding	30	31		270	2	93	0			0	89			
	bedding	38	38		270	3	103	0							
	fault	37	46		270	57	15	0							
	bedding	47	48		270	5	351	0							
	bedding	56	56		270	2	21	0							
	bedding	62	62		270	1	65	0							
	bedding	99	100		270	13	16	0			98	140			
	bedding	105	107		270	19	340	0							



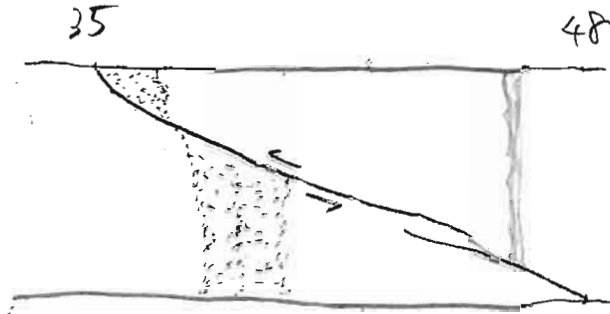
*displaced just after sedimentation

offset = 20 mm
reverse !!

Structural Geology Observation Sheet

No.

Exp.: 333 Site: CoolPA Core: 13H Observer: A.Y. Summary: Subhorizontal beddings & faults with normal and reverse offsets.
Some faults seems to be syn-sedimentary.

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
10	bedding	15	16		270	8	18	0							 offset = 28mm normal fault.
	bedding	17	18		270	5	352	0							
	bedding	26	27		270	6	299	0			0	140	67.1	43.3	
	bedding	28	29		270	6	350	0							
	fault	54	55		270	4	83	0							
11	bedding	0	2		270	10	311	0							←
	fault	35	48		270	62	20	0			0	49			
13	fault	66	83		270	67	345	0							←
	fault	130	137		270	63	150	0			0	138			

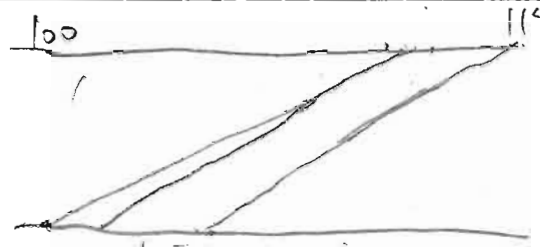
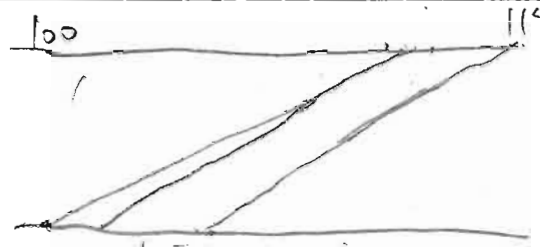
Structural Geology Observation Sheet

No.

Exp.: 333 Site: COOPA Core: 144 Observer: A.T

Summary: subhorizontal beddings & high angle faults

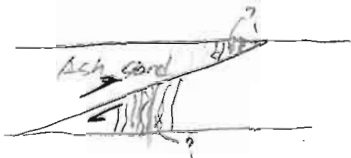
minor

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
2	fault	102	112		90	58	314	0			81	138			 hard to distinguish the offset
	fault	106	115		90	56	323	0							
6	bedding	88	89		90	0	0	0			26	120			
7	bedding	3	4		270	4	6	0					(103.5 59.6)		 highly scattered data
	fault	15	24		270	59	26	0			0	140			
	bedding	45	45		270	2	0	0							
	bedding	131	132		270	3	0	0							

Structural Geology Observation Sheet

No. _____

Exp.: 233 Site: C0018A Core: 15H Observer: B.S Summary:

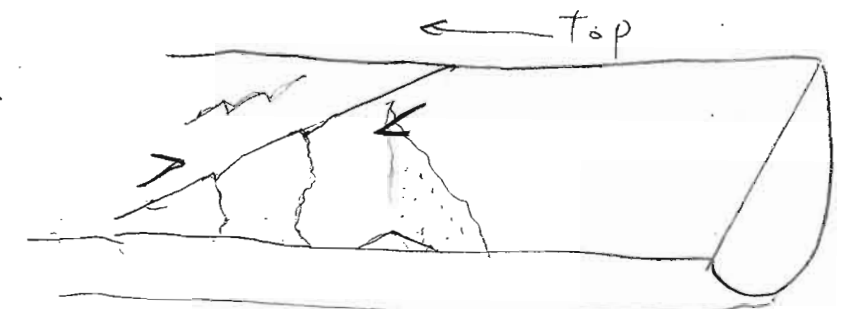
Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
2	bedding	27	29		270	13	0	0			0	50			★ Scattered data 95% confidence cone = $\pm 28.0^\circ$
	bedding	82	82.5		270	4	54	0			66	118			
	bedding	90	91		270	6	63	0			66	118	176.6 ?	48.7 ?	
4	ft	45	61		90	69	12	0			0	56			hard to find offset
6	ft	55	62		90	59	34	0			0	94			 Normal?
7	bedding	53	54		270	9	20	0			23	58			
8	ft	86	91		90	33	63	0			72	114			
9	bedding	27.5	29.5		90	18	208	0							

Structural Geology Observation Sheet

No.

Exp.: 333 Site: CoolBA Core: 161H Observer: A.Y Summary: high-angle normal faults with slickenlines.

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave, depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
not headed	4 fault	79	88		90	57	32	0	11	270	0	149			
	fault	107	117		90	56	14	0	3	90					
	fault	129	135		90	56	35	0					151.5	67.4	scattered data 95% conf. = $\pm 34^\circ$
	10 fault	17	26		90	50	180	45	11	270	0	76	?	?	
	fault	59	67		90	59	345	0							slickenlines & steps show normal faulting.
	11 fault	36	42		90	46	310	0	35	90	12	121			normal fault
	fault	54	60		90	40	312 0	51	30	90	12	122			normal fault
	fault	12	22		90	57	324	0							fault planes are not healed; suggesting recent fault activity.



Structural Geology Observation Sheet

No.

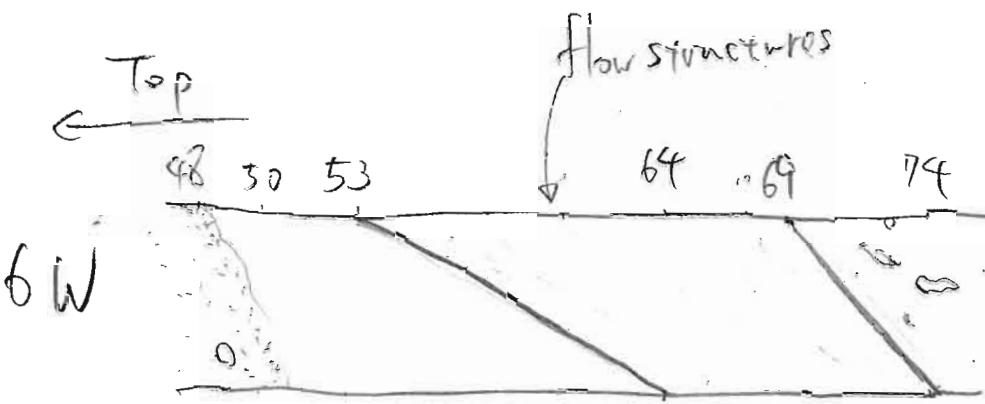
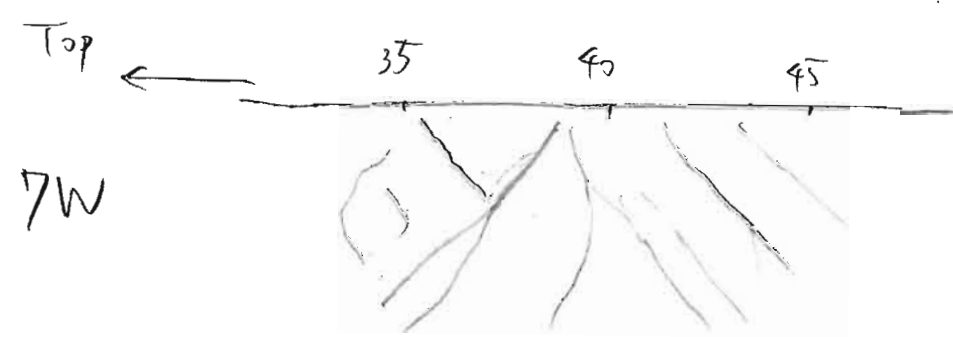
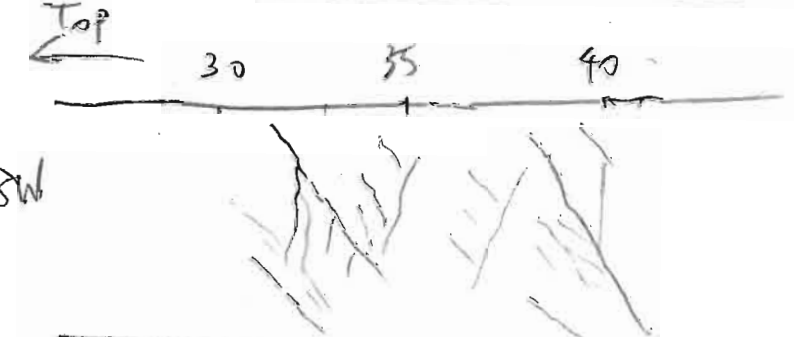
Exp.: 333 Site: C0018A Core: 16 Observer: B. S Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
2	bedding	4.5	5		270	4	180	295							
4	fault	73	82		270	46	318	0			0	40			scattered data 95% confidence $\pm 34.0^\circ$
		81	87		270	32	297	0			81	150			
10	bedding	12	16		270	39	180	55			0	76	151.5	67.4	
													?	?	
2	bedding	104	106		270	28	331	0			81	150			
11	fault	54	60		90	40	312	0	30	90	12	122			normal fault
							0	51							
10	fault	17	26		90	50	180	45	11	270	0	76			

Structural Geology Observation Sheet

No.

Exp.: 333 Site: Coo/8A Core: 17H Observer: A.Y. Summary: inclined beddings, shear zones and web structures

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1	bedding	67	68		90	19	325	0			0	82			* healed & dark-colored planar fabric dividing lithologies are described as "shear zone".
	bedding	72	73		90	21	338	0							
3	shear zone	49	57		90	51	320	0			34	143	(249.3 58.5)		* highly scattered data
	shear zone	103	107		90	23	300	0							
4	shear zone	22	27		270	32	37	0			0	67			
6	shear zone	53	64		270	61	47	0			0	141			
	shear zone	69	76		270	63	45	0							
7	web structure	10	52												
8	web structure	12	44												
17	shear zone	103	105		270	17	80	0			0	143			
	shear zone	123	123		90	66	308	0							* Dark-colored seams (thickness < 2mm) occur in sec. 6 & 7. They truncate beds & barrows; possibly compaction-related fabrics. We tentatively describe them as "web structure".

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0018A Core: 18H Observer: A.Y. Summary: Disturbed by "flow-in".

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1		104	115		90	58	316	0			51	116			Sec. 1 0-34cm: soupy mud 34-51: void * note that all sections below sec. 1:51cm could be disturbed Sec. 2 34cm ~ bottom 3. all (Kf: IW) 5. 6. all cc. Disturbed by HPCS coring (Flow-in). 31 37 sec. 2 sec. 3 seems to be original? (may be not) 91 sec. 5 sec. 6 23 30 (56.6 37.9) highly scattered data 75% conf. = 91.8

Structural Geology Observation Sheet

No.

Exp.: 333 Site: CooBA Core: 194 Observer: A.Y. Summary: Inclined bedding

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave, depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
19H	5 bedding	17	21		90	36	56	0					(177.3	62.7)	highly scattered data Sec. 5, 86 cm ~ bottom & Sec. 6, cc: flow-in
	bedding	20	25		90	35	62	0			0	84	?	?	
	bedding	60	63		90	30	63	0							
20H	3 bedding	73	74		270	8	180	7			0	103			Sec. 6, 106 cm ~ cc: flow-in [scattered data 95% conf. $\pm 30.1^\circ$]
													217.2	61.0	
21H	1 bedding	50.5			90	12	353	0							scattered data 95% conf. $\pm 42.6^\circ$
	bedding		55		90	11	70	0					(75.2	61.4)	
	bedding	76	77		90	12	24	0			0	91	?	?	
		81	85		90	35	350	0							
	(2 ft?)	8	12		90										may be not (Asuka)
	ft?	42			90										

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0018A Core: 21H Observer: B. S Summary:

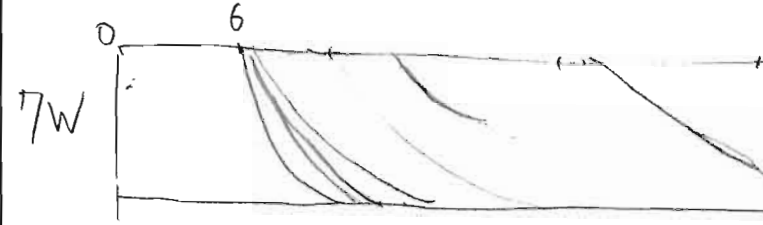
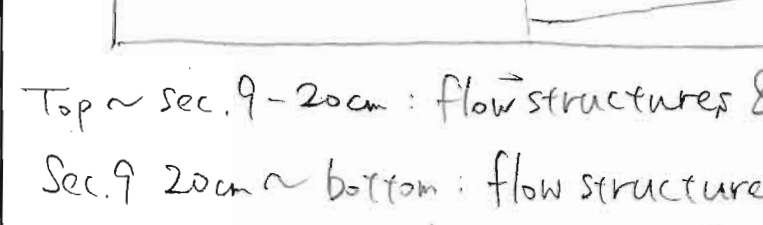
Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
4	bedding	7.5	11		270	25	62	0							
	bedding	15.5	20.5		270	40	37	0			0	23			
	ft	0	16		270	66	11	0							
5	bedding	18	21		270	30	86	0			0	48			
													(75.2 61.4)		
													?? ??		

Sec. 5 95cm ~ core bottom :
flow-in.

Structural Geology Observation Sheet

No.

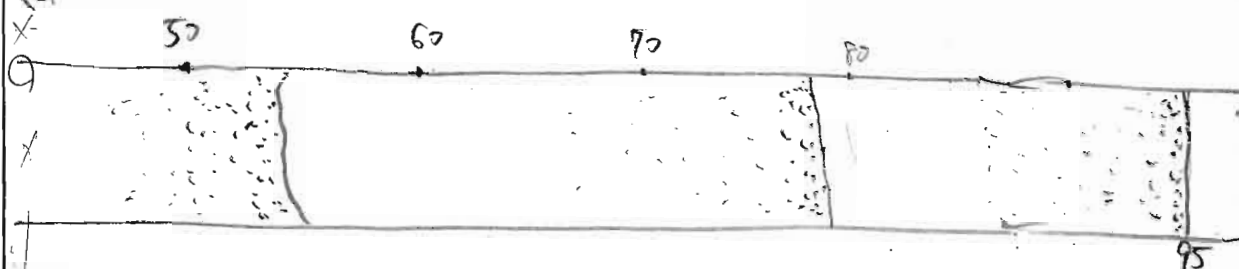
Exp.: 333 Site: G0018A Core: 22H Observer: A.Y. Summary: Flow structures & subhorizontal beddings

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1	flow structure	0	30								0	45			
2	bedding	42	43		90	14	25	0			0	124			
	flow structure	45	54		270	64	35	0							
4	flow structure	7	31												
7	bedding	121	122		90	5	335	0			0	140			
8	bedding	29	30		90	14	14	0			0	56			
															Top ~ sec. 9-20cm: flow structures & subhorizontal beddings Sec. 9 20cm ~ bottom: flow structures parallel to the core line probably caused by coring-induced disturbance (flow-in) (358.5 83.6) highly scattered

Structural Geology Observation Sheet

No.

Exp.: 333 Site: CoolPA Core: 234 Observer: A.Y Summary: 24T: subhorizontal beddings / 25T: subhorizontal beddings

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
24T	1 bedding	41	42		90	0	0	0			0	140			X (spot, 93-95 cm)
	bedding	60	60		270	2	2	0					154.7	25.8	
	bedding	124	124		90	2	95	0							
25T	1 bedding	27	28		270	4	330	0							(spot, 39-41 cm)  turbidites!! (spot, 120-122 cm) (spot, 28-30 cm)
	bedding	36	37		270	3	46	0					293.0	46.0	
	bedding	65	66		90	5	34	0			0	140			
	bedding	87	88		90	2	76	0							
	bedding	118	119		90	2	7	0					182.7	41.6	
	2 bedding	5	6		270	1	0	0							
	bedding	23	24		270	2	298	0					127.3	35.2	
	bedding	35	36		270	11	5	0			0	103			
	bedding	77	78		270	10	325	0							
	bedding	95	96		270	3	82	0							

Structural Geology Observation Sheet

No.

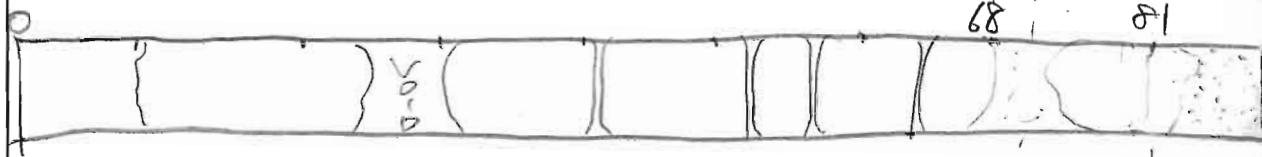
Exp.: 333

Site: Coo/8A

Core: 23H

Observer: A.T.

Summary: 23H: sand below MTD, 24T: subhorizontal beddings

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
															Sec. 1 0~81 cm: mud with bioturbations. 81 cm ~ bottom: very fine sand Sec. 2 ~ cc: very fine sand (soupy)
													213.9	24.3	
24T	2	bedding	47	47	270	1	72	0			22	67			from sec. 2-4, 221.7°, 22.8° * scattered data 95% conf = ±22.5°
	2	bedding	66	67	90	2	336	0			22	67			
		bedding	86	87	90	6	47	0			70	90			
	4	bedding	67	68	90	7	310	0			0	140			(spot, 15-17cm) X (spot, 3-5cm)
		bedding	83	83	270	3	0	0			0	140			
	5														
		bedding	131	132	90	2	50	0			126	140	76.6	3.9	
	6	bedding	8	10	270	9	334	0					126.7	38.6	X 9 56
			16	17	270	9	47	0							
			27	28	90	1	36	0			0	56			
			35	36	90	3	308	0							
			42	43	90	2	73	0							
			54	55	270	4	0	0							

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0018A Core: 27T Observer: B.G. Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1.	bedding	9	9.5		90	6	315	0			0	10			--- disturbed
	bedding	24	25		90	10	35	0			24	30			
2.	bedding	18.5	19		270	11	335	0			0	38	336.4	17.0	(spot 20-22cm) ○
	bedding	61.5	62.5		270	5	69	0			53	102			
	bedding	90.5	91		270	2	26	0			53	102	45.4	65.3	(spot, 92-94cm) ○
	bedding	112.5	113		270	2	97	0			110	146			
3	bd	1.7	2.3		270	6	105	0			0	24	159.0	61.6	(spot, 3-5cm) ○
	bd	56.2	58		270	2	99	0			49	24			
	bd	75.5	76		90	2	61	0			49	24	310.8	5.8	(spot, 77-79cm) ○
	bd	97.7	99.2		270	6	40	0			86	115			
4	bd	25.2	25.5		270	4	30	0			1	51	340.1	79.9	(spot, 10-12cm)
	bd	48.8	49.1		270	2	313	0			1	51			
	bd	68	69		90	3	11	0			62	97			
	bd	83.5	84.2		90	4	0	6			62	97	352.3	15.0	(spot, 86-88cm) ○
	bd	101	101.5		90	2	180	2			98	110			
6	bd	7.5	8.5		90	2	180	3			0	45	192.7	1.4	(spot, 9-11cm) ○
	bd	27.5	28		270	1	180	4							
	bd	38.4	38.7		90	1	180	1							
	bd	66	66.2		270	1	180	3			50	125	193.0	59.8	(spot, 68-70cm) ○

Structural Geology Observation Sheet

No. .

Exp.: 333 Site: COOBA Core: 287 Observer: B.G. Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
6.	bd	78.3	78.7		270	1	0	2							
	bd	98	98.5		270	4	0	0			50	125			
	bd	115	115.5		90	3	180	10							
7	bd	57.2	6.2		90	1	0	4			0	39	211.6	72.6	(spot, 17-19cm) X
	bd	42	42.2		270	1	180	3			40	140			
	bd	71.8	72.3		90	3	0	0					351.7	33.9	(spot, 88-90cm) O
	bd	87.5	88		90	1	0	0							
	bd	101.5	102		270	2	0	0							
	bd	114	114.3		270	2	180	2							
	bd	124	124.3		90	3	180	2							
8	bd	22.5	23.5		90	2	0	0			0	67	202.0	20.0	(spot, 10-12cm) O
	bd	52	52.5		90	5	0	0			0	67			
	bd	79.5	80.5		90	4	0	0			69	78	103.6	30.0	(spot, 90-92cm) Q
	bd	100.5	101		270	3	180	3			89	124			
	bd	120	120.5		90	1	0	6			89	124			

36°
138.8
221.2

36°
165.7
195.3

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0018A Core: 28T/29T Observer: B.S Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
28T	1	bedding	11.5	13	90	5	0	0					1.0	65.7	(spot, 25-27cm)
		ft?													
		bedding	38	39	90	3	180	1					81.0	10.0	(95-97cm) ○
		bedding	89	90	90	9	180	6							light color - ash
	2	bedding	43.5	44.5	90	3	0	1			-	-	332.4	52.9	(20-22cm) homogeneous clay with roundabout bands ⇒ compaction? No! what is the white thin band?
5	bedding	20	21	90	4	0	2						236.7	48.2	In CT image boundary b/w black & gray
	bedding	36.8	37.8	270	3	0	4						(11-13cm)		"
29T	1	bedding	6	2	90	3	0	5			0	55			Bright clay to dark sand sets ⇒ turbidites Boundaries are curvy
		bedding	22.5	23.5	90	5	180	4					283.2	42.0	(spot, 32-34cm)
		bedding	46	46.5	270	2	180	3							
		bedding	52.5	53.5	90	4	180	6							
		bedding	72.5	75	270	19	0	0			69	108			
		bedding	95.5	96.5	90	4	0	7			69	109	131.9	5.2	(spot, 97-99cm) ○

360
105.1
254.9

360
36.1
324.9

260
142.8
117.2

1 set:
bright mud
thr darker
mud

Structural Geology Observation Sheet

No.

Exp.: 223 Site: C0018A Core: 29T Observer: B. S Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
2	bedding	10.5	12		90	3	180	3			0	20	247.6	30.1	Q (spot, 12-14cm)
	bed.	18.5	19.5		90	6	180	8			0	20			
					(90	4)					21	36			
	bed.	27	30		270	12	180	12			21	36			
	bed.	36.5	37		90	1	0	14			36.5	52			
	bed.	43	44		90	10	180	3			36.5	52			
3	bed.	43	44		90	2	180	2			15	53	180.2	21.5	Q ← not able to measure because of void
	→ bed	?	?		?	?					64	104			
	bed.	77.5	79		270	8	0	10							
	bed.	84	86		270	3	0	0							
	bed.	90.5	92.5		90	3	0	8							
	bed.	95	96		90	4	0	7							
	bed.	117	118		90	3	180	2							
	bed.	135.5	136		90	3	0	0			131	140			

Structural Geology Observation Sheet

No. _____

Exp.: 333 Site: C0018A Core: 29T Observer: B. S. Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
4	bedding	14.5	15.5		270	6	0	2			0	32			 0~13cm just curious. What is it? (spot, 16-18cm) (spot, 76-78cm)
	bed.	63.3	64		90	4	0	9			53	127	97.8	51.2	
	bed.	74.5	75.5		270	8	0	/					150.0	43.8	
	bed.	91.5	92.5		90	3	0	0							
	bed.	114	116.5		90	3	0	/							
	bed.	124	126		270	15	0	3							
5	bed.	55	6		0	0	0	/			0	20			(spot, 53-55cm) Q
		31.5	33		90	2	180	7			22	PP	167.0	80.2	
		50.5	52		0	6	0	0							
		70	71.5		90	5	180	5							
Cc	bed.	12	13		90	9	180	17							

In CT image,
1 set:

Structural Geology Observation Sheet

No.

Exp.: 332 Site: COOLBA Core: 30T Observer: P. G Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1	Bedding	15	16.5		90	5	0	0			0	44			(spot, 28-30cm) X
	Bed.	21.5	26.5		90	23	180	1			0	44	350.0	46.2	
	Bed.	54.5	55		90	5	180	5			45	116			X
	Bed.	79.5	80.5		90	2	180	7					181.4	35.6	
	Bed.	103.5	104		270	3	0	10							
	Bed.	121	121.3		90	2	180	1			117	141			
2	Bedding	8.5	9		270	1	180	2			0	9.5	29.4	33.6	(spot, 13-15cm) O
	Bed.	30.8	31.8		270	4	180	2			10	38			
	Bed.	59.7	60.2		270	4	180	17			69	96	150.0	40.2	(spot, 71-73cm) O
	Bed.	82	82.8		90	3	180	6							
	Bed.	94.3	95.3		90	9	180	10							
CC	Bedding	7.7	9		90	8	180	5							

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0018A Core: 31X Observer: A.Y. Summary: Subhorizontal beddings and fisilities.

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1	fishity	0	117												* Entirely disturbed by ESCS coring (biscuitting), but total stratigraphy is preserved. Biscuit lengths are 1~3 cm.
2	fishity	0	155		270	7	180	4			92	96	80.8 (93-95)	39.4 (25)	relatively hard
3	fishity	0	98		270	2	180	8			83	87	298.1 (83.5-85.5)	43.1 (25)	seem to be original?
5	fishity	25	145		270	4	0	6			36	39	167.6 (36.5-38.5)	47.8 (25)	biscuit sand
6	fishity	0	146		90	3	0	2			15	18	176.2 (15.5-17.5)	41.5 (25)	drilling mud ... soft
1	bedding	34	35		90	2	0	0							turbidite sequence
1	bedding	49	50		270	4	101	0							* Beddings (bottom of turbidite) seem to be horizontal.
1	bedding	67	68		270	4	311	0							* Fisilities (cleavage-like planar fabric within muddy part) are weakly developed throughout the core.
3	bedding	3	4		90	3	307	0							* Beddings (bottom of turbidite) seem to possess original stratigraphic relationships because bottoms of sands is bounded by mud "biscuits" in many places. In that case we can measure and calculate dip angle of beddings.
3	bedding	15	16		270	2	28	0							* Orientations of fisilities are measured only from the same coherent pieces (biscuits) of P-MAG samples.
3	bedding	29	30		90	5	16	0							
6	bedding	31	32		90	6	36	0							
6	bedding	40	40		90	0	330	0							
6	bedding	51	52		90	3	21	0							

Structural Geology Observation Sheet

No.

Exp.: 333 Site: Coda Core: 32X Observer: A. Y. Summary: Beddings & Fisilities

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
32X	1 bedding	94	95		270	3	313	0							
	bedding	123	124		270	2	314	0							
	2 bedding	69	70		90	4	300	0							
	bedding	127	128		270	4	293	0							
	4 bedding	56	57		90	5	333	0							
	bedding	111	112		90	2	59	0							
	5 fisility	6	8		270	3	0	3			6	8	232.0	55.2	(spot, 7-9 cm)
	1 fisility	24	27		90	4	0	3			24	27	232.4	41.5	(spot, 25-27 cm)
33X															
															Heavily disturbed by ESCS coring (worse than 31X and 32X) in Length of coherent pieces: less than 2cm. But still possess beddings and fisilities.

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0018A Core: 34X Observer: B.S Summary: partially disturbed by ESCS coring with biscuit of 3-5cm length.
 & better than core 33X

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1	bedding	15.2	15.8		90	5	0	9							
	bed.	24.2	24.5		90	2	0	2							← flowing down through whole bed x reaching lower bedding boundary (more than 10cm) almost
	bed.	36.8	37		270	2	0	6							←
	bed.	47.3	47.5		90	2	0	0							←
	bed.	70.6	71.4		90	3	0	2							←
	bed.	98.4	98.6		90	2	180	3							← even flowing down 25cm from original position
	bed.	123.9	123.6		270	1	180	12							
2	bed.	4.5	5.6		90	5	0	3							
	bed.	14	15.2		270	4	180	2							
	bed.	40.5	42		270	3	180	5							
	bed.	50	51		270	2	0	0							
	bed.	81.6	82.8		90	5	0	0							
	bed.	107.3	108.7		90	4	180	2							
3	bed.	13	14.5		270	5	180	3							seeming to be formed during coring because upper sandy sediments flow down and lower mud materials are rigid. which one is original structure: convex or concave? #2. 

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0018A Core: 24X Observer: B.S Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave, depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
4	bedding	19.2	19.6		90	3	180	3							
	bed.	24.8	25.4		270	5	180	2							
	bed.	48	48.5		220	5	0	0							
	bed.	21.4	21.6		270	2	0	0							
5	bed	15	16		90	4	180	2							
	bed.	26	26.2		90	2	180	3							
7	bed.	11.5	12.5		90	4	0	3							
	bed.	25.8	26.1		90	1	0	4							
	bed.	52	52.5		90	2	180	3			0	54			
	bed.	85.5	86.5		270	2	180	5			55	93			
8	bed.	7	7.5		90	1	0	3			0	23			
	bed.	31	32.5		270	10	0	5			23	41			
	bed.	62.4	68		90	2	180	9			43	85			
	bed.	70.5	71.5		270	3	180	21			43	85			
9	bed.	12	12.5		90	4	180	5			0	32			
	bed.	43.5	44.5		90	9	180	7			33	62			
	bed.	59.5	60		270	4	180	3			33	62			

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0018A Core: 35X Observer: B.S Summary: sand-rich turbidites

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
2	bedding	35.4	36.9		90	8	180	5			27	138			#1 --- damaged due to liner patch
	bed.	62	62.5		90	3	0	3							
	bed.	26	26.6		90	4	180	2							
	bed.	92	94		90	2	0	2							
	bed.	116.5	117.2		90	7	180	10							
3	bed.	19.5	20		270	3	0	5							
	bed.	49.3	49.8		90	5	180	2							
5	bed.	12.4	14		90	16	0	0							
6	bed.	31.5	32.5		90	3	180	11			0	63			
	bed.	58.8	59.8		270	3	0	5			0	63			
	bed.	95	92		270	15	0	0			81	138			
7	bed.	58	59		90	2	0	8			54	86			#7: 64 cm depth ~ 147 cm depth ⇒ 83 cm length sand layer
	bed.	146	146.2		270	1	0	4			87	149			
8	bed.	31	31.8		270	12	0	17							#10, #11, #CC - damaged & blown out

Structural Geology Observation Sheet

No.

Exp.: 333 Site: C0013A Core: 36X Observer: BG Summary: Sand-rich turbidites

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		notes
					az.	dip	az.	dip	rake	from	top	bottom	az./trend	dip	
1	bedding	16	12.5		90	4	180	5							
2	bedding	36	36.3		90	1	180	11							
	bed.	59	59.5		90	2	0	3							
3	bed.	41.2	41.6		90	3	0	0			0	64	53.8	19.8	(42-44cm) 9
4	bed.	27.2	27.7		270	4	180	3			0	46	126.6	8.2	(28-30cm) 9
	bed.	66.4	66.7		90	1	0	21			59	134			
6	bed.	27	29		90	6	180	3			7	41	18.6	45.4	(32-34cm)
	bed.	51	51.2		90	2	180	5			43	71			
	bed.	?	?	void	some where around 95cm										
7	bed.	3	3.5	void	270	3	0	5			0	21			
	bed.	26	28		270	10	0	10			24	53			
	bed.	46	46.4		270	2	0	9			24	53			
	bed.	92	92.4		90	5	0	0			55	116	213.9	35.7	(96-98cm)
8	bed.	4	5		90	3	180	10							
	bed.	27.5	28.5		90	9									
	bed.	65	65.2		270	1	180	2					34.8	40.4	(67-68cm)
	bed.	104.5	106		90	6	180	5							
	bed.	128	130		270	15	180	5					98.3	35.2	(85-87cm)
9	bed.	83.1	83.4		270	2	180	5							- 0 to 80cm disturbed.
cc	bed.	44	44.2		90	2	0	0							- 0 to 44cm including bedding boundary blew out.