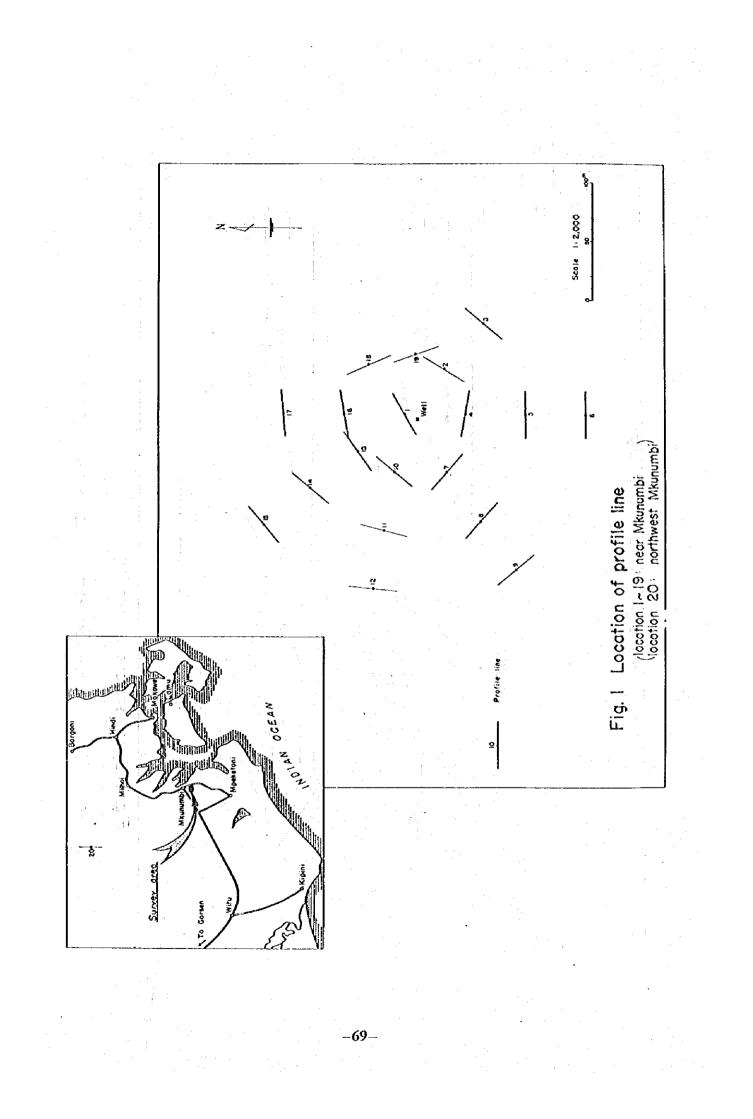
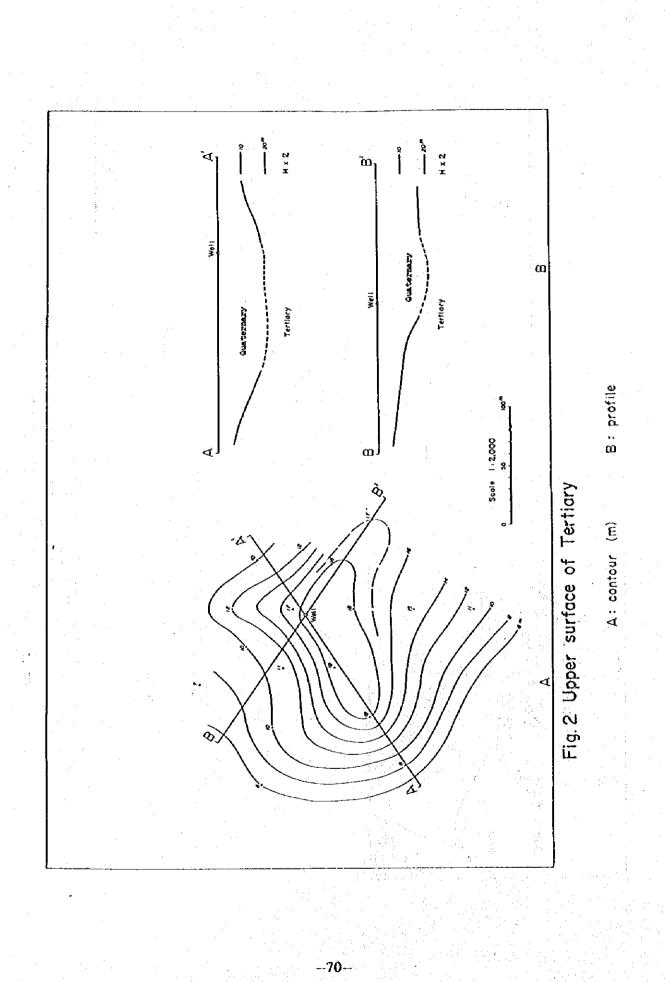
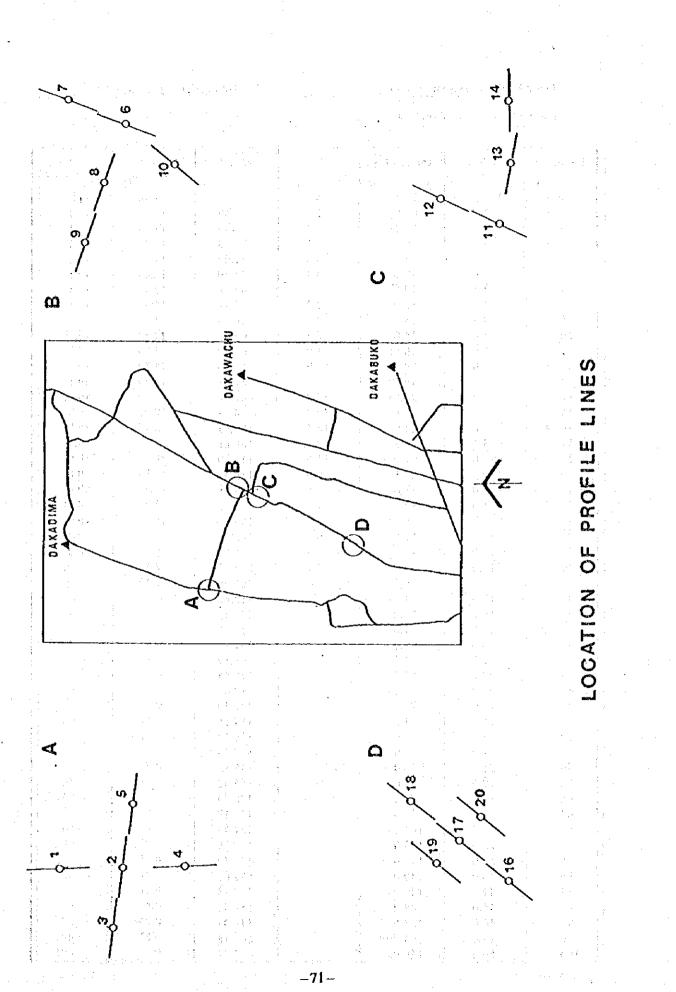
ELECTRIC PROSPECTING







DATE: 18th Jan., '82

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N. Yunohara **OBSERVER:**

Depth (a)	Inpole $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2πа	ρ	Range
៣	m	m	Ω	m	Ω	
1	0.5	1.5	4,5	6.28	28.26	x1
2	1.0	3.0	11.1	12.57	13.95	x0.1
3	. 1.5	4.5	7.4	18.85	13.95	x0,1
4	2.0	6.0	5.5	25.13	13.82	x0.1
5 6	2.5	7.5	4.5	31.42	14.14	x0.1
6	3.0	9.0	3,3	37.70	12.44	x0.1
7	3.5	10.5	2.9	43.98	12.75	x0.1
8	4.0	12.0	2.7	50.27	13.57	x0.1
9	4.5	13.5	2.3	\$6.\$5	13.01	x0.1
10	5.0	15.0	2.2	62.83	13.82	x0.1
¹ 11	5.5	16.5	1.9	69.12	13.13	x0.1
12	6.0	18.0	1.9	75.40	14.33	x0.1
13	6.5	19.5	1.7	81.68	13.89	x0.1
14	7.0	21.0	15.2	87.96	13.37	x0.01
15	7,5	22.5	13.7	94.25	12.91	x0.01
16	8.0	24.0	13.1	100.53	13.17	x0.01
10	8.5	25.5	12.8	106.81	13.67	x0.01
	8.5 9.0	27.0	11.4	113.10	12.89	x0.01
18			10.0	119.38	11.94	x0.01
19	9.5	28.5	9.4		11.81	x0.01
20	10.0	30.0	8.2	125.66	11.33	x0.01
22	11.0	33.0		138.23		x0.01
24	12.0	36.0	6.8	150.80	10.25	
26	13.0	39.0	6.6	163.36	10.78	x0.01
28	14.0	42.0	5.3	175.93	9.32	x0.01
30	15.0	45.0	4.7	188.50	8.86	x0.01
32	16.0	48.0	3,3	201.06	6.63	x0.01
34	17.0	51.0		213.63	t s s	
36	18.0	54.0		226.19		
38	19.0	57.0		238.76	and the second	
⁻ 40	20.0	60.0		251.33		
42	21.0	63.0		263.89		
44	- 22,0	66.0		276.46		
46	23.0	69.0		289.03		
48	24.0	72.0		301.59		1
50	25.0	75.0		314.15		
52	26.0	78.0		326.72		
54	27.0	81.0		339.29	1 A.	1. A.
56	28.0	84.0		351.85		
58	29.0	87.0		364.42		
60	30.0	90.0		376.99		l .
60 64		96.0		402.12	P 1 1	
	32.0	102.0		402.12	Į	
68	34.0		-			
72	36.0	108.0]	452.38		
76	38.0	\$14.0		477.52		
80	40.0	120.0		502.65		
84	42.0	126.0	1	527.78		
88	44.0	132.0	1	552.92		
92	46.0	138.0		\$78.05		· · ·
96	48.0	144.0		603.18		
100	50.0	150.0		628.31	L	· [
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DATE: 18th Jan., '82

OBSERVER: N. Yunohara

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l				r		·	
	Depth (a)	Inpole $(\frac{a}{2})$	Outpole $\left(\frac{3a}{2}\right)$	R P	2па	ρ	Range a
1	m	n in the second	e 1997 - 1997 - M	Ω	·	Ω	
	1 5	0,5	i	1.7	6.28	106.76	x10
4.1	2:5	1.0	3.0	2.2	12.57	27.65	xi
	3	1.5	4.5	8.6	18.85	16.21	x0.1
	4.5	2.0	6.0	5.9	25.13	14.83	x0.1
1	S .	2.5	7.5	5.0	31,42	15.71	x0.1
	6	: 3,0	9.0	4.4	37.70	16.59	x0.1
	7	3.5	10.5	3.9	43.98	17.15	x0.1
:	8	4.0	12.0	3,6	50.27	18.10	x0.1
	. 9 , e	4.5	13.5	3.1	56.55	17.53	x0.1 👘
	10 \cdots	5.0	15.0	2.8	62.83	17.59	x0.1
	11	5.5	16.5	2.6	69.12	17.97	x0.1
-	12	6.0	18.0	2.3	75.40	17.34	x0.1
	13.00	6.5	19.5	2.2	81.68	17,97	x0.1
4	14	7.0	21.0	1.8	87.96	15.83	x0.1
	15	7.5	22.5	1.8	94.25	16,97	x0.1
	16	8.0	24.0	15.8	100.53	15.88	x0.01
	17	8.5	25.5	13.7	106.81	14.63	x0.01
	18	9.0	27.0	12.6	113.10	14.25	x0.01
	19	9.5	28.5	7.8	119.38	9.31	x0.01
	20	10.0	30.0	6.0	125.66	7.54	x0.01
	22	11.0	33.0	6.5	138.23	8,98	x0.01
	24	12.0	36.0	7.2	150.80	10.86	x0.01
	26	13.0	39.0	5.8	163.36	9.47	x0.01
	28	14.0	42.0	3.0	175.93	5.28	x0.01
÷	30	15.0	45.0	2.8	188.50	5.28	x0.01
	32	16.0	48.0	1.7	201.06	3.42	x0.01
	34	17.0	51.0	1.2	213,63	2.56	x0.01
	36	18.0	54.0		226.19		A0.01
	38	19.0	57.0		238.76		
	40	20.0	60.0		251.33		
	42	21.0	63.0		263.89		: :
ş.	44	22.0	66.0		276,46	. '	
	46	23.0	69.0		289.03		
3	48	24.0	72.0		301.59		
	50	25.0	75.0		314.15		
÷.	52	26.0	78.0		326.72		
	54	27.0	81.0		339.29		
-	• 56	28.0	84.0		351.85		
;	58	29.0	87.0		364.42		
-	60	30.0	90.0		376.99		
	64	32.0	96.0 96.0		402.12		1
	68	34.0	102,0				
	72	36.0	102.0	$e^{-i\omega t}$	427,25 452,38		* *
	76	38.0	114,0				
	80	38.0 40.0	114,0		477.52	. — Э. — Э. — — — — — — — — — — — — — —	
•	80 84	40.0 42.0			502.65		
			126.0		527.78		
A relation of	88	44.0	132.0		552.92		
21	92 07	46.0	138.0		578,05		
	96	48.0	144.0		603.18	1997 - 19	
L	100	50.0	150.0		628,31		

 $\rho = 2\pi a R$

DATE: 18th Jan., '82

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OBSERVER: N. Yunohara

	Depth (a)	Inpole (<u>a</u>)	Outpole(3a)	R	2ла	P	Range
÷	៣	m	m`	Ω	m	Ω	
1	. 1	0.5	1.5	7.1	6.28	445.88	x10 ;
	2 ,	1.0	3.0	4.9	12.57	61.59	xl
	3	1.5	4.5	1.6	18.85	30.16	xl
	4	2.0	6.0	7.2	25.13	18.09	x0.1
	5	2.5	7.5	5,4	31.42	16.97	x0.1
	6	3.0	9.0	4.8	37.70	18.10	x0.1
	7	3.5	10.5	2.8	43.98	12.31	x0.1
	8	4.0	12.0	2.4	50.27	12.06	x0.1
	9.	4.5	13.5	22.0	56.55	12.44	x0.01
	10	5.0	15.0	1.8	62.83	11.31	x0.1
\pm	11	5.5	16.5	1.5	69.12	10.37	x0.1
	12	6.0	18.0	1.8	75.40	13.57	x0.1
	13	6.5	19.5	16.5	81.68	13.48	x0.01
	14	7.0	21.0	16.0	87.96	14.07	x0.01
	15	7.5	22.5	12.8	94.25	12.06	x0.01
			24.0	10.3	100.53	10.35	x0.01
	16	8.0		10.0	106.81	10.68	x0.01
	17	8.5	25.5	3.2	113.10	3.62	x0.01
	18	9.0	27.0	2.1		2.51	x0.01
	19	9.5	28.5	7.2	119.38	2.05	x0.01
	20	10.0	30.0	3.5	125.66	4.84	x0.01
	22	11.0	33.0		138.23	9,05	x0.01
	24	12.0	36.0	6.0	150.80	12.74	x0.01
•	26	13.0	39.0 E	7.8	163.36	8.80	x0.01
	28	14.0	42.0	5.0	175.93		x0.01
ļ	30	15.0	45.0	3.3	188.50	6.22	• •
:	32	16.0	48.0	2.0	201.06	4.02	x0.01
	34	: 17.0	51.0	1.4	213.63	2.99	x0.01
	36	18.0	54.0		226.19		
	38	19.0	57.0		238.76	·• .	
•	40	20.0	60.0		251.33	:	
	42	21.0	63.0		263.89	11	
	44	22.0	66.0		276.46	1.11	
	46	23.0	69.0		289.03		
	48	24.0	72.0		301.59		
	50	25.0	75.0		314.15	1.5	
	52	26.0	78.0		326.72	1 s.	
	54	27.0	81.0		339.29		
	56	28.0	84.0		351.85		
	58	29.0	87.0		364.42		N. 1
	60	30.0	90.0		376.99	19 - 1	
	64	32.0	96.0		402.12		
	68	34.0	102.0		427.25	10 A.	
5	72	36.0	108.0		452.38		
d.	76	38.0	114.0		477.52		
	80	40.0	120.0		502.65		
	84	40.0	126.0		\$27.78	na ing karang	4.9
					552.92		4
÷.	-: <u></u> =88	44.0	132.0		578.05	1. A.	
÷	92	46.0	138.0	· · ·		물이 가지 않는다. 물건 같은 것	
	96	48.0	144.0		603.18	n an	
	100	50.0	150.0		628.31	I	لـــــ

 $\rho = 2\pi a R$

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DATE: 18th Jan., 1982

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OBSERVER: N. Yunohara

Depth (a)	Inpole (3)	Outpole $(\frac{3a}{2})$	R	2па	ρ	Range
m	m		Ω	m	Ω	
1.	0.5	1.5	7,8	6.28	48.98	xl
2	1.0	3.0	1.7	12.57	21.37	xl
3	1.5	4.5	0.9	18.85	16.97	xl
4	2.0	6.0	6.7	25.13	16.84	x0.1
5	2.5	7.5	5,2	31.42	16.34	x0.1
6	3.0	9,0	4.6	37,70	17.34	x0.1
7	3.5	10.5	3.8	43.98	16.71	x0.1
8	4.0	12.0	3.5	50.27	17.59	x0.1
9	4.5	13.5	3.2	56,55	18.10	x0.1
10	5.0	15.0	2.8	62.83	17.59	x0.1
11 5.	5.5	16.5	2.7	69.12	18.66	x0.1
		1	2. 4		18.10	x0.1
12	6.0	18.0	2.3	75.40	18.79	x0.1
13	6.5	19.5	2.3	81.68		
14 - 3	7.0	21.0		87.96	18.47	x0.1
15	7.5	22.5	1.9	94.25	17.91	x0.1
16	8.0	24.0	1.8	100.53	18.10	x0.1
17	8.5	25.5	1.6	106.81	17.09	x0.1
18 1	9.0	27,0	1.6	113.10	18.10	x0.1
19 .:	9.5	28,5	13.7	119,38	16.36	x0,01
20	10.0	30.0	12.8	125.66	16.08	x0.01
22	11.0	33.0	11.3	138.23	15.62	x0.01
24	12.0	36.0	10.3	150.80	15.53	x0.01
26 -	13.0	39,0	8.9	163.36	14.54	x0.01
28	14.0	42.0	7.6	175.93	13.37	x0.01
30 .	15.0	45.0	6.7	188.50	12.63	x0.01
32	16.0	48,0	6.0	201.06	12.06	x0.01
34	17.0	51.0	5.3	213.63	11.32	x0.01
36	18.0	54.0		226.19		
38	19.0	57.0		238.76		
40	20.0	60.0		251.33	4	
42	21.0	63,0	•	263.89		
44	22.0	66.0		276.46		
46	23.0	69.0		289.03	the second	
48	24.0	72.0	-	301.59	1	
50	25.0	75.0		314.15		
52	26.0	78.0		326.72		
54	27.0	81.0		339.29		
'56	28.0	84.0		351.85		
58	29.0	87.0		364.42		· ·
60	30.0	90.0		376.99		
64	32.0	96.0 96.0		402.12		
68 70	34.0	102.0		427.25		
72	36,0	108.0		452.38		
76	38.0	114.0		477.52		•
80	40.0	120.0		502.65		
84	42.0	126.0		527.78	· · ·	·* .
88	44.0	132.0		552.92		. :
92	46.0	138.0	:	578.05	n - 11 - 11	÷
96	48.0	144.0	į	603.18		1.
100	50.0	150.0		628,31	$(1, 1) \in \{1, 2, 3\}$	1. S.

 $\rho = 2\pi a R$

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DATE: 19th Jan., '82

N. Yunohara OBSERVER:

Depth (a)	Inpole (7)	Outpole $(\frac{3a}{2})$	R	2па	ρ	Range
m	m	m	Ω	m	Ω	••
134	0.5	1.5	2.4	6.28	150.72	x10
2 ::	1.0	3.0	32	12,57	40.22	×1
3	1.5	4.5	0.9	18.85	16.97	x1
4	2.0	6.0	6.5	25.13	16.33	x0.1
S (11)	2.5	7.5	5.6	31.42 37.70	17.60 19.23	x0.1 x0.1
6	3.0	9.0	5.1 4.3		19.23	x0.1
7:	3.5	10.5	4.3	43.98 50.27	21.11	x0.1
8	4.0	12.0	4.2 3.7		20.92	x0.1
9	4.5	13.5	3.2	56.55	20.92	x0.1
10	5.0	15.0	2.8	62,83	19.35	x0.1
11	5.5	16.5	2.8	69.12	21.11	x0,1
12	6.0	18.0		75.40	20.42	x0.1
13	6.5	19.5	2.5 2.3	81.68 82.06	20.42	x0.1
14	7.0	21.0	2.3	87.96	20.25	x0.1
15 \	7.5	22.5	2.3 1.9	94.25	19.10	x0.1
16	8.0	24.0	1.9	100.53	19.10	x0.1
17	8.5	25.5	1.6	106.81	18.10	x0.1
18	9.0	27.0	1,5	113.10	17.91	x0.1
19	9.5	28.5	1.3	119.38	15.08	x0.1
20	10.0	30.0	9.4	125.66	12.99	x0.01
22	11.0	33.0	6.7	138.23	10.10	x0.01
24	12.0	36.0	6,8	150,80	11.11	x0.01
26	13.0	39.0	1.6	163.36	2.81	x0.01
28	14.0	42.0	0	175.93	2.01	x0.01
30	15.0	45.0	1.8	188.50	3.62	x0.01
32	16.0	48.0	1.0	201.06	2.14	x0.01
34	17.0	\$1.0	1.0	213,63	2,17	×0.03
36	18.0	54.0		226.19		
38	19.0	\$7.0		238.76 251.33		
40	20.0	60.0 63.0		1 '		
42	21.0			263.89 276.46		
44	- 22.0	66.0		270.40		
46	23.0	69.0		301.59		
48	24.0	72.0				
50	25.0	75.0 78.0		314.15 326.72		
52	26.0	1				
54	27.0	81.0		339,29 351.85		
56	28.0	84.0				
58	29.0	87.0	· · · ·	364.42		
60	30.0	90.0		376.99		
64	32.0	96.0	* .	402.12		
68 10	34.0	102.0		427.25		
72	. 36.0	108.0		452.38		
76	38.0	114.0		477.52		
80	40.0	120.0		502.65		
84	42.0	126.0		527.78		
88	44.0	132.0		552.92		
92	46.0	138.0		\$78.05		
96	48.0	144.0		603.18		A CONTRACTOR
100	\$0.0	150,0	· · · · · · · · ·	628.31	J. S.	I

DATE: 19th Jan., '82

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OBSERVER: N. Yunohara

D (1)		Outpole $(\frac{3a}{2})$				Danaa
Depth (a)	Inpole $\left(\frac{a}{2}\right)$		R	2πа	ρ	Range
m 1	m 0.5	m	Ω 6.3	m ())	Ω 39.56	xl
		1.5		6.28		x0.1
-	1.0	3.0	3.3	12.57	4.15 3.96	
3	1.5	4.5	2.1	18.85		x0.1
	2.0	6.0	2.0	25.13	5.03	x0,1
5	2.5	7.5	1.5	31.42	4.71	x0,1
6	3.0	9.0	1.2	37.70	4.52	x0.1
7	3.5	10.5	1,3	43.98	5.72	x0.1
8	4.0	12.0	0.8	50.27	4,02	x0.1
9	4.5	13.5	9.2	56.55	5.20	x0.01
10	5.0	15.0	6.0	62,83	3.77	x0.01
11 2.00	5.5	16.5	6.5	69.12	4.49	x0.01
12	6.0	18.0	11.6	75.40	8.75	x0.01
13	6.5	19.5	11.2	81.68	9.15	x0.01
14	7.0	21.0	10.5	87.96	9.24	x0.01
15	7.5	22.5	10.9	94,25	10,27	x0.01
16	8.0	24.0	8.4	100.53	8.44	x0.01
17. ***	8.5	25.5	5.3	106.81	5.66	x0.01
18	9.0	27.0	3.0	113.10	3.39	x0.01
19	9.5	28.5	4.7	119.38	5.61	x0.01
20	10.0	30.0	6.7	125.66	8.42	x0.01
22	11.0	33.0	2.4	138.23	3.32	x0.01
24	12.0	36.0	2.0	150.80	3.02	x0.01
26	13.0	39.0	0.8	163.36	1.31	x0.01
28	14.0	42.0	0.7	175.93	1.23	x0.01
30	15.0	45.0	0.,	188.50		
30	16.0	43.0	5 g	201.06		
34	17.0	51.0	- -	213.63		
36	18.0				1	
1		54.0		226.19		
38	19.0	57.0		238.76	· · · · · · · · · · · · · · · · · · ·	
40	20.0	60.0		251.33		
42	21.0	63.0		263.89		
44	22.0	66.0		276.46		· · · ·
46	23.0	69.0	· · · ·	289.03		11
48	24.0	72.0		301.59		1 4 1
50	25.0	75.0	:	314.15		
52	26.0	78.0		326.72		а. С
54	27.0	81.0		339.29		
·56	28.0	84.0		351.85		
58	29.0	87.0	the second second	364.42		
60	30.0	90.0		376.99		2
64	32.0	96.0		402.12	1 N 1	in the second second
68	34.0	102.0		427.25	ingen og skolot	÷
72	36.0	108.0		452.38		. •
76	38.0	114.0		477.52		
80	40.0	120.0		502.65	12 - 13 ST 1	÷
84	42.0	126.0		527.78		e de la companya de l
88	44.0	132.0		552.92		
92	46.0	132.0		578.05		
96	48.0	144.0	n	603.18		
2 70	40.V [144.0 5 5 5		- UVJ-10- I	and the Article States of the	and the second

 $\rho = 2\pi a R$

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DATE: 20th Jan., 82

OBSERVER: N. Yunohara

·····		20				
Depth (a)	Inpole (^a /2)	Outpole $(\frac{3a}{2})$	R	2πа	ρ	Range
m	m	m	Ω	m	Ω 2014	
1	0.5	1.5	4.8	6.28	30.14	xl
2 : 3.5	1.0	3.0	1.4	12.57	17.60	xt
· <u>3</u>	1.5	4.5	0.8	18,85	15.08	xt -
4 . 1 ·	2.0	6.0	6.6	25.13	16.59	x0.1
5 .	2.5	7.5	5.1 s	31.42	16.02	x0.1
6	3.0	9.0	4.3	37.70	16.21	x0.1
7	3.5	10.5	3.7	43.98	16.27	x0.1
8	4.0	12.0	3.1	50.27	15.58	x0.1
9	4,5	13.5	2.7	\$6.55	15.27	x0.1
10	5.0	15.0	2.4	62,83	15.08	x0.1
11	5,5	16.5	2.2	69.12	15.21	x0.1
12	6.0	18.0	2.1	75.40	15.83	x0.1
13	6.5	19,5	1.8	81.68	14.70	x0.1
14	7.0	21.0	1.7	87.96	14,95	x0.1
15	7.5	22.5	1.7	94.25	16.02	x0.1
16	8.0	24.0	1.4	100.53	14.07	x0.1
17	8.5	25.5	1.4	106.81	14.95	x0.1
18	9.0	27.0	1.3	113.10	14,70	x0.1
19	9.5	28.5	1.3	119.38	15.52	x0.1
20	- 10.0	30.0	1.0	125.66	12.57	x0.1
20	11.0	33.0	9.6	138.23	13.27	x0.01
22	12.0	36.0	8.4	150.80	12.67	x0.01
24 26	13.0	39.0	7.1	163.36	11.60	x0.01
		42.0	5.0	175.93	8.80	x0.01
, 28	14.0	45.0	5.3	188.50	9.99	x0.01
30	15.0	43.0	5.0	201.06	10.05	x0.01
32	16.0		4.3	213.63	9.19	x0.01
34	17.0	51.0	1.3	226.19		
36	18.0	54.0				· · · ·
38	19.0	57.0		238.76	-	
40	20.0	60.0		251,33		
42	21.0	63.0		263.89		
44	22.0	66.0		276.46	and the second sec	
46	23.0	69.0		289.03		
48	24.0	72.0		301.59		
50	25.0	75.0		314,15	the second second	
52	26.0	78.0		326.72		
54	27.0	81.0		339.29		
56	28.0	84.0		351.85		
58	29.0	87.0		364.42		1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 -
60	30.0	90.0		376.99		
64	32.0	96.0		402.12		
68	34.0	102.0		427.25		
72	36.0	108.0		452.38	the second	1
76	38.0	114.0		477.52		1. B. A. A.
80	40.0	120.0		502.65		· .
84	42.0	126.0		527.78		÷.
88	44.0	132.0	- 1	552,92	1	
92	46.0	138.0	k · · ·	\$78.05		
96	48.0	144.0		603.18		
100	50.0	150.0		628.31		

 $\rho = 2\pi a R$

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LOCATION: Mkunumbi 8

DATE: 20th Jan., '82

OBSERVER: N. Yunohara

Depth (a)	Inpole $\left(\frac{a}{2}\right)$	Outpole $(\frac{3a}{2})$	R	2πа	ρ	Range
m	, m	m	Ω	m	Ω	
1 500	0.5	1.5	6.8	6.28	427.04	x10
2	1.0	3.0	4.2	12.57	52.79	x1
3	1.5	4.5	0.9	18.85	16.97	5 x1 - 1
4	2.0	6.0	7.3	25.13	18.34	x0.1
5	2.5	7.5	5.9	31.42	18.54	x0.1
6	3.0	9.0	5.1	37.70	19.23	x0.1
7	3.5	10.5	4.5	43.98	19,79	x0.1
8	4.0	12.0	3.8	50.27	19.10	x0.1
9	4.5	13.5	3.5	\$6.55	19.79	x0.1
10	5.0	15.0	3.2	62.83	20.11	x0.1
11	5.5	16.5	2.8	69.12	19.35	x0.1
12	6.0	18.0	2.8	75.40	21.11	x0.1
13	6.5	19.5	2.5	81.68	20.42	x0.1
14	7.0	21.0	1.8	87.96	15.83	x0.1
15	7.5	22,5	2.2	94.25	20.74	x0.1
16 👳	8.0	24.0	1.3	100.53	13.07	x0.1
17	8.5	25.5	1.6	106.81	17.09	x0.1
.18	9.0	27.0	1.6		18.10	x0.1
19	9.5	28.5	1.3	113.10	15,52	x0.1
20	10.0		1.3	119.38	16.34	x0.1
22		30.0	1.1	125.66	15.21	x0.1
22	11.0	33.0	1.0	138.23	15.08	x0.1
24 26 😳	12.0	36.0	7.7	150.80	12.58	x0.01
	13.0	39.0	6.5	163.36		
28	14.0	42.0	5.6	175.93	11.44	x0.01
30	15.0	45.0	6.0	188.50	10.56	x0.01
32	16.0	48.0	6.0 4.9	201.06	12.06	x0.01
34	17.0	51.0	. 4.7.	213.63	10.47	x0.01
36	18.0	54.0		226.19		
38	19,0	57.0		238,76		
40	20.0	60.0		251.33	and the second second	
42	21.0	63.0		263.89		
44	22.0	66.0		276.46		-
46	23.0	69.0		289.03	- 1	
48	24.0	72.0	-	301.59		
50	25.0	75.0	: · · ·	314.15		1
52	26.0	78.0	- E	326.72		
54	27.0	81.0		339.29		. :
56	28.0	84.0		351.85		
58	29.0	87.0		364.42		14.
60	30.0	90.0		376.99		
64	32.0	96.0		402.12	and the second	
68	34.0	102.0	- 	427.25	1. 1. 4. 4	
72	36.0	108.0		452.38		
76	38.0	114.0		477.52		. *
80	40.0	120.0		502.65		
84	42.0	126.0		527.78		
88	44.0	132.0				· · · ·
92	44.0	132.0		552.92		
				578.05		
96	48.0	144.0		603.18		
100	50.0	150.0		628.31	그는 이 것 문서	- 1월 11일

ρ = 2πaR

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DATE: 20th Jan., '82

OBSERVER: N. Yunohara

Depth (a)	Inpole $(\frac{3}{2})$	Outpole $(\frac{3a}{2})$	R	2ла	ρ	Range
		m	Ω	m m	Ω	
m	m 0.5	1.5	1.9	6.28	119,32	x10
2	1.0	3.0	1.2	12.57	15,08	x1
3	1.5	4.5	3.5	18.85	6,60	x0.1
4	2.0	6.0	2.7	25.13	6.79	x0.1
5	2.5	7.5	2.3	31.42	7.23	x0.1
6	3.0	9.0	2.4	37.70	9.05	x0.1
7	3.5	10.5	2.3	43.98	10.12	x0.1
8	4.0	12.0	2.5	50.27	12.57	x0.1
9.	4,5	13.5	1.3	56.55	7.35	x0.1
10	5.0	15.0	2.0	62.83	12.57	x0.1
11	5.5	16.5	1.6	69.12	11.06	x0.1
12	6,0	18.0	0.8	75.40	6.03	x0.1
13	6.5	19.5	1.6	81.68	13.07	x0.1
14	7.0	21.0	1.4	87.96	12.31	x0.1
15	7.5	22.5	1.6	94.25	15.08	x0.1
16	8.0	24.0	1,6	100.53	16.08	x0.1
17	8.5	25.5	1.5	106.81	16.02	x0.1
18	9.0	27.0	1.3	113.10	14.70	x0.1
19	9.5	28.5	· 1.3	119.38	15.52	x0.1
20	10.0	30.0	1.3	125.66	16,34	x0.1
22	11.0	33.0	1.2	138.23	16.59	x0.1
24	12.0	36.0	1.0	150.80	15,08	x0.1
26	13,0	39.0	1.0	163.36	16.34	x0.1
, 28	14.0	42.0	0.3	175.93	5.28	x0.1
30	15.0	45.0	0.4	188.50	7.54	x0.1
32	16.0	48.0	4.0	201.06	8.04	x0.01
34	17.0	51.0	3.3	213.63	7.05	x0.01
36	18.0	54.0		226.19		
38	19.0	57.0		238.76		
40	20.0	60.0		251.33		1 m - 1
42	21.0	63.0		263.89		
44	. 22.0	66.0		276.46		
46	23.0	69.0		289.03		
48	24.0	72.0	- A	301.59		
50	25.0	75.0	· · ·	314.15		
52	26.0	78.0		326.72	All and the second	
54	27.0	81.0	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	339.29		
56	28.0	84.0		351.85	1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 -	
58	29.0	87.0		364.42		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
60	30.0	90.0		376.99	ea Sea	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
64	32.0	96.0		402.12	19 - Č	1.4.1
68	34,0	102.0		427.25		
72	36.0	108.0	l de la contra	452.38		
76	38.0	114.0		477.52	1994) 1994	
80	40.0	120.0	. .	502.65		
84	42.0	126.0		527.78	. :	
88	44.0	132.0		552.92		1. N.S.
92	46.0	138.0		578.05		
96	48.0	144.0		603.18		
100	50.0	150.0		628.31		

 $\rho = 2\pi a R$

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DATE: 20th Jan., '82

OBSERVER: N. Yunohara

Depth (a)	Inpole (3)	Outpole (3a)				
	······································	-	R	Ź πа	Ø	Range
- m 1	m 0.5	i 1.5 - ¹⁰	Ω 5.9	m	Ω	
2	1.0	3.0	1.4	6.28	37.05	xl 🕖
3	1.5	3.0 4.5	0.9	12.57	17.60	xl
4	2.0		8.3	18.85	16.97	x1
5	2.5	6.0 7.5		25.13	20.86	x0.1
6	3.0		7.0 7.3	31.42	21.99	x0.1
7		9.0	5.7	37.70	27.52	x0.1
8	3.5 4.0	10.5 12.0	5.0	43.98	25.07	x0.1
9				50.27	25.14	x0.1
10	4.5	13.5	4.9	56.55	27.71	x0.1
	5.0	15.0	5.7	62.83	35,81	x0.1
111.00	5.5	16.5	6.2	69.12	42.85	x0.1
12:	6.0	18.0	5.8	75.40	43.73	x0.1
13:	6.5	19.5	5.4	81.68	44.11	x0.1
14.	7.0	21.0	5.3	87.96	46.62	x0.1
15° B	° 7;5₀ °	22.5	5.0 B	94.25	47.13	x0.1
16	8.0	24.0	4.6	100.53	46.24	x0.1
17	8,5	25.5	5.3	106.81	56.61	x0.1
185.05	9.0	27.0	4.3	113.10	48.63	x0.1
19	9.5	28.5	4.8	119.38	57.30	x0.1
20	10.0	30.0	4.3	125.66	54.03	x0.1
22: •••	11.0	33.0	4.8	138.23	66.35	x0.1
24	12.0	36.0	4.7	150.80	70.88	x0.1
26	13.0	39.0	3.3	163.36	53.91	x0.1
28	14.0	42.0	4.5	175.93	79.17	x0.1
30	15.0	45.0	4.4	188.50	82.94	x0.1
32	16.0	48.0	4.3	201.06	86.46	x0.1
34	17.0	51.0	4.3	213.63	91.86	x0.1
36	18.0	54.0		226.19		2011
38	19.0	57.0		238.76		
40	20.0	60.0		251.33		
42	21.0	63.0		263.89		
44	22.0	66.0		276.46		
46	23.0	69.0		289.03		
48	24,0	72.0	1	301.59		
50	25.0	75.0	•			· . · · · ·
52	26.0	78.0	a de la companya de la	314.15 326.72		
54	27.0	81.0				
56	28.0	84.0		339.29		the second second
58	29.0	87.0		351.85	e e la della <u>s</u>	
60	30.0	90.0		364.42		•
64				376.99	1.1	•
	32.0	96.0		402.12		
68 70	34.0	102.0		427,25		÷ .
72	36.0	108.0	A state of the second sec	452.38	1. A.M.	
76	38.0	114.0		477.52	6 J. (1980)	: :
80	40.0	120.0		502.65	e at a	
84	42.0	126.0		527.78	an tai	· · ·
88	44.0	132.0		552.92	e de la Maria de la	
92	46.0	138.0		578.05	(1,1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2	· ;
96	48.0	144,0		603.18	s 1 €17	• • • • • •
100	50.0	150.0		628.31		

 $\rho = 2\pi a R$

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DATE: 20th Jan., '82

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OBSERVER: N. Yunohara

Depth (a)	Inpole (3)	Outpole $(\frac{3a}{2})$	R	2na	ρ insector	Range
m	m	m	Ω	m	Ω	
1 :	0.5	1.5	10.1	6.28	634.28	x10
2	. 1.0 (3.0	4.3	12.57	54.05	xi -
3	1.5	4.5	1.2	18.85	22.62	xi
4	2.0	6.0	0.8	25.13	20.20	xi
5	2.5	7.5	7.5	31.42	23.57	x0.1
6	3,0	9.0	8.2	37.70	30.91	x0.1
7	3.5	10.5	7.3	43.98	32.11	x0.1
8	4.0	12.0	7.1	50.27	35.69	x0.1
9	4,5	13.5	6.3	56.55	35.63	x0.1
10 😒	5.0	15.0	7.2	62.83	45.24	x0.1
11	5.5	16.5	6.7	69.12	46.31	x0.1
12	6.0	18.0	6.2	75.40	46.75	x0.1
13	6.5	19.5	5.3	81.68	43.29	x0.1
14	7,0	21.0	4.3	87.96	37.82	x0.1
15	7.5	22.5	4.9	94.25	46.18	x0.1
			3.2		32.17	x0.1
16	8.0	24.0		100.53	51.27	x0.1
17	8.5	25.5	4.8	106.81	47.50	x0.1
18	9.0	27.0	4.2	113.10		
19	9.5	28.5	4.2	119.38	50.14	x0.1
20	10.0	30.0	4.7	125.66	59.06	x0.1
22	11.0	33.0	2.8	138.23	38.70	x0.1
24	12.0	36.0	4.4	150.80	66.35	x0.1
26	13.0	39.0	3.8	163.36	62.08	x0.1
, 28	14.0	42.0	2.8	175.93	49.26	x0.1
30	15.0	45.0	3.2	188,50	60.32	x0.1
32	16.0	48.0	:: 2,9 :	201.06	58.31	x0.1
34	17.0	51.0	1.0	213.63	21.36	x0.1
36	18.0	54.0	4	226.19	and the second of	·
38	19.0	57.0		238.76		
40	20.0	60.0		251.33	1 - A - A - A - A - A - A - A - A - A -	
42	21.0	63.0		263.89		
44	22.0	66.0		276.46		
46	23.0	69.0		289.03	1.10	
48	23.0	72.0		301.59		
50	25.0	75.0		314.15		
52	25.0	78.0		326.72		
54	20.0			339.29		•
		81.0				·
- 56	28.0	84.0		351.85		
58	29.0	87.0		364.42		
60	30.0	90.0	1	376.99	21144 1. 211	
64	32.0	96.0		402.12		î
68	34.0	102.0	· · ·	427.25		
72	36.0	108.0		452.38		1997 - 19
76	38.0	114.0	· · ·	477.52	1948 4 7	1
80	40.0	120.0		502.65	· · · · · · · · · · · · · · · · · · ·	4.5
84	42.0	126.0		527.78		
88	44.0	132.0		552.92	法 主体	· · · · ·
92	46.0	138.0		\$78.05	9 (9 St.	1
96	48.0	144.0		603.18		1.1.1
						and the second

 $\rho = 2\pi a R^2$

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DATE: 20th Jan., '82

OBSERVER: N. Yunohara

Outpole $\left(\frac{3a}{2}\right)$ Inpole (3) Depth (a) R 2πa Range • • • • m m m Ω Ω m 1.7.4 0.5 5.7 -1.5 6.28 357.96 x10¹ 2 -1.0 3.0 3.3 41.48 12.57 x1 3 : ---1.5 4.5 0.2 18.85 3.77 xl 4 🕤 2,0 🗄 6.0 0.2 5.03 25.13 x1 🗄 5 2.5 7.5 0.2 6.28 31.42 **x1** : 6 3.0 : 9.0 0.2 37.70 7.54 x1 ---7 3.5 10.5 43.98 4.0 8 ... 12.0 50.27 9 4.5 13.5 56.55 10 5.0 15.0 62.83 11^{-5} 5.5 16.5 69.12 12 6.0 18.0 75.40 13 6.5 19.5 81.68 14 7.0 21.0 87.96 15:-7.5 22.5 94.25 16 8.0 24.0 100.53 17 8.5 25.5 106.81 18 9.0 27.0 113.10 19 9.5 28.5 119.38 20 10.0 30.0 125,66 22 🗄 11.0 33.0 138.23 24 12.0 36.0 150.80 26 13.0 39.0 163.36 28 14.0 42.0 175.93 30 15.0 45.0 188,50 32 16.0 48.0· 201.06 34 17.0 51.0 213.63 36 18.0 54.0 226.19 38 19.0 57.0 238.76 40 20.0 60.0 251.33 42 21.0 63.0 263.89 44 22.0 66.0 276.46 . : 46 23.0 **69.0** -289.03 48 24.0 72.0 301.59 50 25.0 75.0 314:15 52 26.0 78.0 326.72 54 81.0 27.0 339.29 156 28.0 84.0 351,85 58 29.0 87.0 364.42 60 30.0 90.0 👘 376.99 64 32.0 96.0 402.12 68 34.0 102.0 427.25 72 36.0 108.0 452.38 76 38.0 114.0 477:52 : 40.0 80 120.0 502.65 84 42.0 126.0 527.78 1 88 44.0 132,0 552.92 92 46.0 138.0 578.05 96 48.0 144.0 603.18 • 2 100 50.0 150.0 628.31 зţ

 $\rho = 2\pi a R$

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DATE: 21st Jan., '82

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1. 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 -

OBSERVER: N. Yunohara

ſ							
1	Depth (a)	Inpole $(\frac{3}{2})$	Outpole $(\frac{3a}{2})$	R	2ла	ρ	Range
t	เล	កា	m	Ω	m	Ω	
	1 1 1 1 1	0.5	1.5	8.8	6.28	55.26	x1
	2	1.0	3.0	1.8	12.57	22.63	xl
	3	1,5	4.5	1.1	18.85	20.74	x1
	4 3 2 1	2.0	6.0	6.2	25.13	15.58	x0.1
	5	2.5	7.5	4.8	31.42	15.08	x0.1
:	6	3.0	9.0	4.3	37.70	16.21	x0.1
1	7	3.5	10.5	4.4	43,98	19.35	x0.1
	8	4.0	12.0	2.6	50.27	13.07	x0,1
	9	4.5	13.5	2.6	56.55	14,70	x0.1
	10	5.0	15.0	2.3	62.83	14.45	x0.1
1	11	5.5	16.5	3.1	69.12	21.43	x0.1
	12	6.0	18.0	3.1	75.40	23.37	x0.1
	13	6.5	19.5	4.9	81.68	40.02	x0.1
	14	7.0	21.0	7.4	87.96	65.09	x0.1
	15	7.5	22.5	5.8	94.25	54.67	x0.1
	16	8.0	24.0	2.6	100.53	26.14	x0.1
			24.0	1.2	106.81	12.82	x0.1
	17	8.5 9.0		6.7	113.10	7.58	x0.01
I	18		27.0	7.4	1 . 1	8.83	x0.01
	-19	9.5	28.5	5.5	119.38	6.91	x0.01
	20	10.0	30.0		125.66	5,53	x0.01
	22	11.0	33.0	4.0	138.23		x0.01
	24	12.0	36.0	0.2	150.80	0.30	x0.01
	26	13.0	39.0		163.36		
	, 28	14.0	42.0	- -	175,93		
	30	15.0	45.0		188.50		
	32	16.0	48.0		201.06		
	34	17.0	51.0		213.63		
	36	18.0	54.0		226.19	-	
	38	19.0	57.0		238.76		
ļ	40	20.0	60.0		251.33	a se s	
	42	21.0	63.0		263.89		
	44	22.0	66.0		276.46		
	46	23.0	69.0		289.03		
	48	24.0	72.0		301.59	1997 - N	
	50	25.0	75.0		314.15	and and the second	
	52	26.0	78,0		326.72	at a star	
-	54	27.0	81.0	1	339.29	· 11月1日日	
	56	28.0	84.0		351.85	(7 d	
	58	29.0	87.0	· · · ·	364.42		
÷	60	30,0	90.0		376.99	a statistica i se	1 - 1 - 1 - 1
-	64	32.0	96.0		402.12		1. A.
	68	34,0	102.0		427.25		
	72	36,0	108.0		452.38		
	76	38.0	114.0	1 :	477.52	a taat a	
1	80	40.0	120.0	4 19 - 1	502,65		694 J.
	84	42.0	126.0		527.78		
Ì	88	42.0	132.0		552.92		
	88 92	44.0	f ' ' ' ' ' ' ' '		578.05		
			138.0				
	96	48.0	144.0		603.18 628.31		
l	100	50.0	150,0		020.31	L	

 $\rho = 2\pi a R$

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OBSERVER:

N. Yunohara

Depth (a)	Inpole (7)	Outpole $(\frac{3a}{2})$	R	2па	P	Range
m	m	m	ß	m	Ω	
1	0.5	1.5	14.7	6.28	923.16	x10
2	1.0	3.0	2.4	12.57	301,68	x10
3	1.5	4.5	3.5	18.85	65.98	x1
4	2.0	6.0	1.6	25.13	40.21	xl
5	2.5	7.5	1.1	31.42	34.56	x1
6	3.0	9.0	0.8	37.70	30.16	x1
7	::3.5	10,5	5.3	43.98	23.31	x0.1
8	4.0	12.0	6.3	50.27	31.67	x0.1
9	4,5	13,5	74	56.55	41.85	x0.1
10	5.0	15.0	6.6	62.83	41.47	x0,1
11	5.5	16.5	2.6	69.12	27.97	x0.1
.12	6.0	18.0	2.8	75.40	21.11	x0.1
: 13	6.5	19.5	1.8	81.68	14.70	x0.1
14	7.0	21.0	2.3	87.96	20.23	x0.1
15	7.5	22.5	2.4	94.25	22.62	x0.1
16	8.0	24.0	2.7	100.53	27.14	x0.1
17	8.5	25.5	2.2	106.81	23,50	x0.1
18	9.0	27.0	2.4	113.10	27.14	x0.1
19	9.5	28.5		119.38	21.14	A0.1
20	10.0	30.0		125.66		
22	11.0	33.0		123.00		
24	12.0	36.0				, ·
26	13.0		· · · ·	150.80		
28		39.0		163.36		
	14.0	42.0		175.93		
30	15.0	45.0		188.50	· · · ·	4 A
32	16.0	48.0		201.06		
34	17.0	51,0		213.63		
36	18.0	54.0		226.19	- 3	
38	19.0	57.0		238.76		÷
40	20.0	60.0		251.33		
42	21.0	63.0		263.89	part de la composition de la compositio	
44	22.0	66.0		276.46		1
46	23.0	69.0		289.03	tin dia si	
48	24.0	72.0	· .	301,59	• i	the set of the
50	25.0	75.0		314.15		
52	26.0	78.0		326.72	· · · ·	1 · · ·
54	27.0	81.0		339.29		
' 56	28.0	84.0		351.85		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
58	29.0	87.0		364.42	na ann an Anna an Anna Anna an Anna an	
60	30.0	90.0	:	376.99	the second s	:
64	32.0	96.0		402.12	an ta	1.
68	34.0	102.0		427.25	an an taon an t	1. N
72	36.0	108.0		452.38		
76	38.0	114.0		477.52	та, та	
80	40.0	120.0		502.65		
84	42.0	126.0		527.78		
88	44.0	132.0		552.92		
92	46.0	138.0		\$78.05		
96	48.0	144.0		603.18		
100	48.0 50.0	150.0		628.31	. i	
100		170.0		020.31		

14. A

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OBSERVER: N. Yunohara

r				·····			
	Depth (a)	Inpole $(\frac{3}{2})$	Outpole $(\frac{3a}{2})$	R	2ла	ρ	Range
ſ	m	m	m	Ω	́т.	Ω	10
I		0.5	1.5	28.9	6.28	1814.92	x10
	et 2	1.0	3.0	3.2	12.57	402.24	x10
	3	1.5	4.5	4.1	18.85	77.29	xl
I	4	2.0	6.0	0.3	25.13	7.54	xl
	\$	2.5	7.5	0.4	31.42	12.57	, xl
	6	3.0	9.0	0.3	37.70	11.31	x
l	7	3.5	10.5	0.1	43.98	4.40	x1
	8	4.0	12.0	* .	50.27		
l	÷ 9	4.5	13.5	,	56.55	E	
l	10	5.0	15.0		62.83		
l	11	5.5	16.5		69.12		
	12	6.0	18.0		75.40		
	13	6.5	19.5		81.68		
I	14	7.0	21.0		87.96		
I	15	7.5	22.5		94.25	in a constant	
l	16	8.0	24.0		100.53		
	17	8.5	25.5	$A_{\rm e} = A_{\rm e}$	106.81		
	18	9.0	27.0		113.10		
I	19	9.5	28.5		119.38		
l	20	10.0	30.0		125.66	1997 - Ar 1997 - Ar	
	22	11.0	33.0		138.23	1.5.1	
	24	12.0	36.0		150.80		· ·
	26	13.0	39.0		163.36	:*	
	28	14.0	42.0	and the second	175.93		
	30	15.0	45.0		188.50	1 A.	
	32	16.0	48.0		201.06	· .	1 ⁴ 2 ¹
	34	17.0	51.0		213.63	1. ¹	
l	36	18.0	54.0		225.19	1. tek	
l	38	19.0	57.0		238.76		en de la fe
l	.40	20.0	60.0		251.33		
	42	21.0	63.0	· · ·	263.89	1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -	
I	44	22.0	66.0	54 - SA	276.46		
l	46	23.0	69.0		289.03		•
I	48	24.0	72.0		301.59		
	50	25.0	75.0	· · · · .	314.15	and the second	1
l	52	26.0	78.0		326.72	and the second	
۱	54	27.0	81.0		339.29		
	56	28.0	84.0		351.85	1997 - 19	
I	58	29.0	87.0	1	364.42	1000	
	60	30.0	90.0		376.99		
	64	30.0	96.0		402.12		
	68	34.0	102.0		402.12	n an ta	
ł	72	36.0	102.0		452.38		
	72	38.0	114.0		477.52		
			120.0	1 · · ·	502.65		11 · · · · · · · · · · · · · · · · · ·
ļ	80 84	40.0	126.0		527.18		
	84	42.0			552.92		
	88	44.0	132.0				
ļ	92	46.0	138.0		\$78.05	- 14 - 14 - 14 - 14 - 14 - 14 - 14 - 14	
I	96	48.0	144.0		603.18		
l	100	50.0	150.0	Line	628.31	<u> </u>	Line

 $\rho = 2\pi a R$

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N. Yunohara **OBSERVER:**

Depth (a)	Inpole $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2ла	ρ	Range
m	m	m	$\Omega = \Omega$	m	Ω	· · · ·
$\mathbf{H}_{\mathbf{r}}$	0.5	1.5	2,1	6.28	131.88	x10
2	1.0	3.0	2.3	12.57	28.91	1 x 1
3	1.5	4.5	1.2	18.85	22.62	1 xl
4	2.0	6.0	9.6	25.13	24.12	≦x0.1
5	2.5	7.5	7.2	31.42	22.62	x0.1
6	3.0	9.0	6.7	37.70	25.26	x0.1
7	3.5	10.5	5.3	43.98	23,31	x0.1
8	4.0	12.0	5.4	\$0.27	27.15	x0.1
9	4.5	13.5	5.4	56.55	30.54	× x0.1
10	5.0	15.0	4.2	62.83	26.39	x0.1
- 11	5.5	16.5	3,8	69.12	26.27	x0.1
12	6.0	18.0	2.9	75.40	21.87	x0.1
13	6.5	19.5	1.7	81.68	13.89	x0.1
14	7.0	21.0	2.6	87.96	22.87	x0.1
14	7.5	22.5	2.6		24.51	
16			2.8	94.25		x0.1
	8.0	24.0		100.53	28.15	x0.1
17	8.5	25.5	3.8	106.81	40.59	x0.1
18	9.0	27.0	2.3	113.10	26.01	x0.1
19	9,5	28.5	2.2	119.38	26.26	. x0.1
20	10.0	30.0	2.7	125.66	33.93	x0.1
22	11.0	33.0	3.0	138.23	41.47	x0.1
24	12.0	36.0	1.8	150.80	27.14	x0.1
26	13.0	39.0	2.5	163.36	40.84	x0.1
28	14.0	42.0	10.4	175.93	18.30	x0.01
30	15.0	45.0	12.0	188.50	22.62	x0.01
32	16.0	48.0	10.8	201.06	21.71	x0.01
34	17.0	51.0	0.2	213.63	0.43	x0.01
36	18.0	54.0		226.19		
38	19.0	57.0		238.76		
40	20.0	60.0		251.33		1. A. 1. A.
42	21.0	63.0	:	263.89		11. T
44	22.0	66.0		276.46		1
46	23.0	69.0		289.03		
48	24.0	72.0	1	301.59	· · · ·	
50	•		1			
52	25.0 26.0	75.0 78.0		314.15		
				326.72		. *
54	27.0	81.0		339.29		
'56	28.0	84.0		351.85		
58	29.0	87.0		364.42		-
60	30.0	90.0		376.99	Provide States	
64	32.0	96.0		402.12		1
68	34.0	102.0		427.25		•
72	36.0	108.0	1. 1.	452.38	1	
76	38.0	114.0		··· 477.52	14.67	N.
80	40.0	120.0		502.65	1999 - N. S. C. 1997 -	1
84	42.0	126.0		527.78		
88	44.0	132.0		552.92		- •
92	46.0	138.0		578.05		
96	48.0	144.0		603.18		1
100	48.0	144.0				
100	3U.U	130.0		628.31		1 t 2

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DATE: 21st Jan., '82

OBSERVER: N. Yunohara

			l			
Depth (a)	Inpole $\left(\frac{a}{2}\right)$	Outpole $(\frac{3a}{2})$	R	Ž πа	ρ	Range
m	m	m	Ω	m	Ω	
2 1 -	0.5	1.5	9.1	6.28	571.48	x10
2	1.0	3.0	3.6	12.57	45.25	, x1 ,
3 -	1.5	4.5	ł	18.85		
4	2.0	6.0		25.13	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
: 5	2.5	7.5		31.42		
÷6	3.0 ::.	9.0	· ^	37.70	2 · · ·	
: 7	3.5	10.5		43.98	1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -	
· 8	4.0	12.0		50.27		
9	4.5	13,5	1	56.55	4 B	
10 :	5.0	15.0	5. 	62.83		
11	5.5	16,5		69.12		1
12	6.0	18.0		75.40		
13	6.5	19.5		81,68		
14	7.0	21.0		87.96		
15	7.5	22.5		94.25		1
16	8.0	24.0		100.53	-	
17	8.5	25.5		106.81	4 - ¹	
18	9.0	27.0		113.10		
19	9.5	28.5		119.38	1	
20	10.0	30.0		125.66	1. S. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1
22	11.0	33.0	t:	138.23		
24	12.0	36.0		150.80		
26	13.0	39.0		163.36		
, 28	14.0	42.0		175.93		
30	15.0	45.0	1	188.50		
32	16.0	48.0		201.06		
34	17.0	51.0		213.63		
36	18.0	54.0		226.19		
38	19.0	57.0		238.76		
40	20.0	60.0		251.33		
		•			· · ·	
42	21.0	63.0		263.89		
44	. 22.0	66.0		276.46		21
46	23.0	69.0		289.03		
48	24.0	72.0	1 · · · ·	301.59		
50 52	25.0	75.0	· .	314.15		
52	26.0	78.0		326.72		
54	27.0	81.0	1.	339.29		
56	28.0	84.0		351.85		
58	29.0	87.0		364.42		
60	30.0	90.0		376.99	$t = N_{L}$	1943 -
64	32.0	96.0		402.12		
68	34.0	102.0		427.25		
72	36.0	108.0		452.38		
76	38.0	114.0		477.52		
80	40.0	120.0		502.65		The second se
84	42.0	126.0		527.78	15.0	\$15 L
88	44.0	132.0	÷	552,92	45 (P)	4 28
92	46.0	138.0		578.05		
96	48,0	144.0		603.18		
100	50.0	150.0		628.31	The second second	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1

ο = 2πaR

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OBSERVER: N. Yunohara

Depth (a) Inpote $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	Źna	ρ	Range
	m m	m	S S	m	Ω	
1.1	0.5	1,5	6.2	6.28	389.36	x10
2 :	1.0	3.0	4.9	12.57	61.59	x1
3	1.5	4.5	0.7	18.85	13.20	× x1 ⊑
- 4	2.0	6.0	0.2	25,13	5.03	x1
÷ 5	2.5	7.5	0.2	31.42	6.28	xt :
÷ 6 -	3.0	9.0	0.3	37.70	11.31	x1
- 7	3.5	10.5	0.2	43.98	8.80	x1
÷ 8 -	4,0	12.0	0.2	50.27	10.05	x1
≣ 9 .:	4.5.	13.5	0.2	56.55	11.31	x
10	5.0	15.0	0.2	62.83	12.57	xt
11	5.5	16.5		69.12		
12	6.0	18.0	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	75.40		10 A
13	6.5	19.5		81.68		
14	7.0	21.0		87.96		· · · · ·
15	7.5	22.5	· .	94.25		
16	8.0	24.0		100.53	1 -	1
17	8.5	25.5	4	106:81		
- 18	9.0	27.0		113.10		
19	9.5	28.5		119.38	*	
20	10.0	30.0		125.66		
22	11.0	33.0		138.23		
24	12.0	36.0		150.80	. ÷	
26	13.0	39.0		163.36		
28	14.0	42.0	:	175.93		
30	15.0	45.0		188.50		
32	16.0	48.0		201.06		
34	17.0	51:0		213.63		
36	18.0	54.0		226.19		
38	19.0	57.0		238.76		
40	20.0	60.0		251.33	1993. 1993	ł
42	21.0	63.0		263,89		
44 46	22.0 23.0	66.0		276.46		,
		69.0 33.0		289.03		
48 50	24.0 25.0	72.0 75.0		301.59 314.15		
52	25.0	73.0	· · ·	326.72		
54	27.0	81.0		339.29		
56	27.0 28.0	81.0 84.0	1. 	351.85	* .	1
58	28.0	84.0 87.0		364.42		
60	30,0	87.0 90.0		376.99		
64	32.0	90.0 96.0		402.12		
68	34.0	102.0		402.12		
72	36.0	102.0		427.23		
76	38.0	114.0		477.52		
80	40.0					
		120.0	•	502.65		
84 88	42.0 44.0	126.0 132.0		527.78		
88 92	44.0 46.0	132.0		552.92		
92 96	46.0 48.0	138.0		578.05		
				603.18		
100	50.0	150.0		628.31		
ρ = 2π3F	8		-89-	· .		e seguer
11 C				and the second second		
a di ter			1.1.1		1	

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OBSERVER: N. Yunohara

Depth (a)	Inpole $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2πа	ρ	Range
m	i m	m	Ω	m	<u>ि</u> ि	
< 1	0.5	1.5	6.3	6.28	395.64	x10
2	1.0	3.0 .	4.6	12:57	57.82	xl
3	1.5	4.5 :	0.9	18.85	16.97	xt
4	2.0	6.0	5.3	25.13	13.32	x0.1
5	2.5	7.5	1.7	31,42	5.34	x0.1
6	3.0	9.0	2.4	37.70	9.05	x0.1
7	3.5	10.5	1.8	43.98	7.92	x0.1
8	4.0	12.0	2.3	50.27	11.56	x0.1
9	4.5	13,5	0.6	56.55	3.39	x0.1
10	5.0	15.0	0.6	62.83	3.77	x0.1
11	5.5	16.5	0.2	69.12	1.38 8.29	x0.1 x0.1
12	6.0	18.0	1,1	75.40	0.29	XV.1
13	6.5	19.5		81.68		
14	7.0	21.0		87.96		
15	7.5	22.5		94.25		. ·
16	8.0	24.0		100.53		· · ·
17	8.5	25.5		106.81		
18	9.0	27.0		113.10		
19	9,5	28.5		119.38		
20	10.0	30.0		125.66		
22	11.0	33.0		138.23		
24	12.0	36.0		150.80		-
26	13.0	39.0 42.0		163.36 175.93		
, 28 30	14.0 15.0	42.0		188.50		
30	16.0	43.0		201,06		
32 34	17.0	48.0 51.0		213.63		
36	18.0	54.0		213.03		
38	19.0	57.0		238.76	an a	
40	20.0	60.0		251.33		
42	21.0	63.0		263.89		
44	22.0	66.0		276.46		
46	23.0	69.0		289.03		
48	24.0	72.0		301.59	14 1	
50	25.0	75.0		314.15		1997) 1997 - 1997 - 1997
52	26.0	78.0	÷ .	326.72	1. J. C. S.	
54	27.0	81.0		339.29		
56	28.0	84.0		351.85		
58	29.0	87.0		364.42		
60	30.0	90.0		376.99	1 1	
64	32.0	96.0		402.12		
68	34.0	102.0		427.25	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	÷
72	36.0	108.0		452.38		. *
76	38.0	114.0		477.52	ars vit≢i	1
80	40.0	120.0		502.65	 Example 	1. S. C. S.
84	42.0	126.0		527.78	$\lambda_{\mu} \sim 2\lambda$	and the second
88	44.0	132.0		552.92	an ender e	511 201
92	46.0	138.0		578.05		1
96	48.0	144.0		603.18	a secondaria de la compañía de la co	
100	50.0	150.0		628.31	24,63	
) = 2πaR		an a	-90-		₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	

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LOCATION: Northwest Mkunumbi 20

DATE: 22nd Jan., '82

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OBSERVER: N. Yunohara

Depth (a)	Inpole $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2πa	ρ	Range
m	m	m	Ω	m	Ω	
1	0.5	1.5	6.6	6.28	4.14	x0.1
2	1.0	3.0	3.6	12.57	4.53	x0.1
3	1.5	4.5	2.8	18,85	5.28	x0.1
a 4 − − − ≤ 5°	2.0	6.0	2.6	25.13	6.53	x0.1
6	2.5	7.5	2.2 2.6	31.42	6.91	x0.1
7	3.0 3.5	9.0 10.5	2.6	37.70	9.80	x0.1
8	3.3 4.0	10.5	2.0	43.98	8.80 10.56	x0.1
⇒ o ∋≣ 9	4.0	13.5	2.4	50.27 56.55	10.55	x0.1 x0.1
10	5.0	15.0	2.1	62.83	13.19	x0.1
\$11- 1-	5.5	16.5	1.8	69.12	12.44	x0.1
12	6.0	18.0	1.9	75.40	14.33	x0.1
13	6.5	19.5	2.3	81.68	18.79	x0.1
14	7.0	21.0	2.1	87.96	18.47	x0.1
15	7.5	22.5	2.4	94.25	22.62	x0.1
16	8.0	24.0	1.8	100.53	18.10	x0.1
17	8,5	25.5	1.8	106.81	19.23	x0.1
18	9.0	27.0	2.1	113.10	23.75	x0.1
19	9.5	28.5	2.1	119.38	25.07	x0.1
20	10.0	30.0	1.8	125.66	22.62	x0.1
22	11.0	33.0	2.3	138.23	31.79	x0,1
24	12.0	36.0	2.3	150.80	34.68	x0.1
26	13.0	39.0	2.8	163.36	45.74	x0.1
28	14.0	42.0	1.6	175.93	28.15	x0.1
30	15.0	45.0	1.6	188.50	30.16	x0.1
32	16.0	48.0	1.7	201.06	34.18	x0.1
34	17.0	51.0	1.8	213.63	38.45	x0.1
36	18.0	54.0		226.19	5. C	
38	19.0	57.0		238.76		10
40	20.0	60.0		251.33		
42 -	21.0	63.0		263.89	1. C	· .
44	22.0	66.0		276.46		
46	23.0	69.0		289.03	A State of the second sec	
48	24.0	72.0		301.59		
50	25.0	75.0		314.15		
52	26.0	78.0		326.72		
. 54	27.0	81.0	:	339.29		
'56	28.0	84.0		351.85		
58	29.0	87.0		364.42		· ·
60	30.0	90.0		376.99		• •
64	32.0	96.0		402.12		
68 30	34.0	102.0		427.25		
72	36.0	108.0		452.38		
76	38.0	114.0		477.52		
80	40.0	120.0		502.65		
84	42.0	126.0		527.78		
88	44.0	132.0		552.92		
92 06	46.0	138.0		\$78.05		
96	48.0	144.0		603.18		:
100	\$0.0	150.0	1	628.31		• :

LOCATION: Galana 1

DATE: 8th Aug., '82

OBSERVER: N. Yunohara

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$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Depth (a)	Inpole $\left(\frac{4}{2}\right)$	Outpole $(\frac{3a}{2})$	R	2πа	ρ	Range
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	n	m	m	Ω	m		
31.54.513.018.8524.51 $x0.1$ 42.06.07.525.1318.83 $x0.1$ 52.57.54.231.4213.19 $x0.1$ 63.09.03.037.7011.31 $x0.1$ 73.510.52.243.989.68 $x0.1$ 84.012.01.550.277.55 $x0.1$ 94.513.59.756.555.48 $x0.01$ 105.015.04.462.832.76 $x0.01$ 115.516.51.669.121.11 $x0.01$ 126.018.0075.400 $x0.01$ 136.519.5081.680 $x0.01$ 147.021.087.96113.10113.10199.528.5106.81113.10119.382010.030.0125.66122110.33.02412.036.0150.80150.802513.039.0163.36144.52613.039.0163.36144.52716.048.0201.06134.633618.054.0226.1938.19.03715.045.0328.763819.057.034.14.155226.078.0326.725327.081.0339.295427.081.0339.29		⁶ 0,Ś	4.5	0.85	6.28		x1
4 2.0 6.0 7.5 25.13 18.83 x0.1 5 2.5 7.5 4.2 31.42 13.19 x0.1 6 3.0 9.0 3.0 37.70 11.31 x0.1 7 3.5 10.5 2.2 43.98 9.68 x0.1 8 4.0 12.0 1.5 50.27 7.55 x0.1 9 4.5 13.5 9.7 56.55 5.48 x0.01 10 5.0 15.0 4.4 62.83 2.76 x0.01 11 5.5 16.5 1.6 69.12 1.11 x0.01 12 6.0 180.0 75.40 0 x0.01 13 6.5 19.5 0 81.68 0 x0.01 14 7.0 21.0 87.96 15 7.5 22.5 106.81 16 8.0 24.0 100.53 13 <td< td=""><td>2</td><td>1.0</td><td>3.0</td><td>0.25</td><td>12.57</td><td>3.14</td><td>x1</td></td<>	2	1.0	3.0	0.25	12.57	3.14	x1
5. 2.5 7.5 4.2 31.42 13.19 $x0.1$ 6 3.0 9.0 3.0 37.70 11.31 $x0.1$ 7 3.5 10.5 2.2 43.98 9.68 $x0.1$ 8 4.0 12.0 1.5 50.27 7.55 $x0.1$ 9 4.5 13.35 9.7 56.55 5.48 $x0.01$ 10 5.0 15.0 4.4 62.83 2.76 $x0.01$ 11 5.5 16.5 1.6 69.12 1.11 $x0.01$ 12 6.0 18.0 0 75.40 0 $x0.01$ 13 6.5 19.5 0 81.68 0 $x0.01$ 14 7.0 21.6 87.96 0 $x0.01$ 14 7.0 21.6 87.96 0 $x0.01$ 15 7.5 22.5 106.81 113.10 113.10 113.10 113.10 113.10 113.10 113.10	:3 -	1.5	4.5	13.0	18.85	24.51	x0.1
6 3.0 9.0 3.0 37.70 11.31 $x0.1$ 7 3.5 10.5 2.2 43.98 9.68 $x0.1$ 9 4.5 13.5 9.7 56.55 5.48 $x0.1$ 9 4.5 13.5 9.7 56.55 5.48 $x0.01$ 10 5.0 15.0 4.4 62.83 2.76 $x0.01$ 11 5.5 16.5 1.6 69.12 1.11 $x0.01$ 12 6.0 18.0 0 75.40 0 $x0.01$ 13 6.5 19.5 0 81.68 0 $x0.01$ 14 7.0 21.0 87.96 $x0.01$ $x0.01$ 15 7.5 22.5 100.53 $x0.1$ $x0.01$ 17 8.5 25.5 106.81 $x0.1$ $x0.01$ 18 9.0 27.0 113.10 $x0.1$ $x0.1$ 19 9.5 28.5 119.38 $x0.1$ $x0.1$ 20 10.0 30.0 <td>- 4</td> <td>2,0</td> <td>6.0</td> <td></td> <td>25.13</td> <td>18.83</td> <td>x0.1</td>	- 4	2,0	6.0		25.13	18.83	x0.1
63.09.03.037.7011.31 $x0.1$ 73.510.52.243.989.68 $x0.1$ 84.012.01.550.277.55 $x0.1$ 94.513.59.756.555.48 $x0.01$ 105.015.04.462.832.76 $x0.01$ 115.516.51.669.121.11 $x0.01$ 126.018.0075.400 $x0.01$ 136.519.5081.680 $x0.01$ 147.021.087.9611157.522.5106.8111189.027.0113.1011199.528.5119.38112211.033.0136.2611199.528.5119.38112412.036.0150.80112516.048.0201.06113015.045.0128.56113116.042.0175.93113216.048.0201.06113417.051.0218.76113115.054.028.93113216.048.0326.72113819.057.0314.15115025.075.03	1		7.5	4.2		13.19	x0.1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			9.0	3.0		11.31	x0.1
8 4.0 12.0 1.5 50.27 7.55 $x0.11$ 9 4.5 13.5 9.7 56.55 5.48 $x0.01$ 10 5.0 16.5 1.6 69.12 1.11 $x0.01$ 11 5.5 16.5 1.6 69.12 1.11 $x0.01$ 12 6.0 18.0 0 75.40 0 $x0.01$ 13 6.5 19.5 0 81.68 0 $x0.01$ 14 7.0 21.0 87.96 $x0.01$ $x0.01$ 15 7.5 22.5 94.25 $x0.01$ $x0.01$ 16 8.0 24.0 100.53 $x0.01$ $x0.01$ 17 8.5 25.5 106.81 $x0.01$ $x0.01$ 18 9.0 27.0 113.10 $x0.01$ $x0.01$ 19 9.5 28.5 119.38 $x0.01$ $x0.01$ 20 10.0 30.0 136.36 $x0.01$ $x0.01$ 21.0 36.0 113.00 138				2.2		9.68	x0.1
94.513.59.756.555.48 $x0.01$ 105.015.04.462.832.76 $x0.01$ 115.516.51.669.121.11 $x0.01$ 126.018.0075.400 $x0.01$ 136.519.5081.680 $x0.01$ 147.021.087.9694.251157.522.594.2511168.024.0100.531178.525.5106.811189.027.0113.101199.528.5119.3812010.030.0125.6612110.033.0138.2312412.036.0163.3612513.039.0163.3612613.039.0163.3613216.048.0201.0613417.051.0218.7613519.057.0238.7614422.066.0276.4614422.066.0326.7213819.057.0314.1515226.075.0314.1515226.075.0314.1515329.087.036.4216432.096.0452.3817236.0108.0	1			1.5	1. Sec.	7.55	x0.1
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199.528.5119.382010.0 30.0 125.662211.0 33.0 138.232412.0 36.0 150.802613.0 39.0 163.3672814.042.0175.933015.045.0188.503216.048.0201.063417.051.0213.633618.054.0226.193819.057.0238.764020.060.0251.334221.063.0263.894422.066.0276.464623.069.0301.595025.075.0314.155226.078.0326.725427.081.0339.295528.084.0351.855829.087.0364.426030.090.0452.387638.0114.0477.528040.0120.0502.658442.0126.0522.788644.0132.0552.929648.0144.0603.18					1 · · · · ·		
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2211.033.0138.23 24 12.036.0150.80 26 13.039.0163.36 28 14.042.0175.93 30 15.045.0188.50 32 16.048.0201.06 34 17.051.0213.63 36 18.054.0226.19 38 19.057.0238.76 40 20.060.0251.33 42 21.063.0263.89 44 22.066.0276.46 46 23.069.039.29 50 25.075.0314.15 52 26.078.0325.72 54 27.081.0339.29 56 28.084.0351.85 58 29.087.9364.42 60 30.090.0402.12 64 32.096.0402.12 68 34.0102.0427.25 72 36.0114.0477.52 80 40.0132.0552.92 96 48.0134.0552.92 92 46.0138.0552.92 96 48.0144.0603.18	1						1. A. A.
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26 13.0 39.0 163.36 28 14.0 42.0 175.93 30 15.0 45.0 188.50 32 16.0 48.0 201.06 34 17.0 51.0 213.63 36 18.0 54.0 226.19 38 19.0 57.0 238.76 40 20.0 60.0 251.33 42 21.0 63.0 263.89 44 22.0 66.0 276.46 46 23.0 69.0 289.03 48 24.0 72.0 301.59 50 25.0 75.0 314.15 52 26.0 78.0 326.72 54 27.0 81.0 339.29 56 28.0 84.0 351.85 58 29.0 87.0 364.42 60 30.0 90.0 376.99 64 32.0 96.0 402.12 68 34.0 102.0 427.25 72 36.0 108.0 452.38 76 38.0 114.0 477.52 80 40.0 120.0 52.65 84 42.0 126.0 527.78 88 44.0 132.0 552.92 96 48.0 144.0 603.18					2		
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	100	50.0	150.0		628.31		

LOCATION Gulana 2 DATE: 19th Aug., '82

OBSERVER: N. Yunohara

Depth (a)	Inpote $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2па	, <u>610</u> β − 13	Range
m	m	m	Ω	m	Ω	
1	0.5	1.5	1.3	6.28	8.16	x1
2	1.0	3.0	0.3	12.57	3.77	x1
1.3	1.5	4.5	1.3	18.85	2.45	x0,1
4	2.0	6.0	0.7	25.13	1.76	x0.1
5	2.5	7.5	0.5	31.42	1.57	x0.1
6	3.0	9.0	0,3	37.70	1.13	x0,1
7	3.5	10.5	0.3	43.98	1.32	x0.1
:8	4.0	12.0	0.2	50.27	1.01	x0.1
E 9 k	4.5	13.5	0.2	56.55	1.13	x0.1
10	5.0	15.0	2.4	62.83	1.51	x0.01
)in	5.5	16.5	2.1	69.12	1.45	x0.01
12	6.0	18.0	1.8	75.40	1.36	x0.01
13	6.5	19.5	1.2	81.68	0.98	x0.01
¥141	7.0	21.0	1.3	87.96	1.44	x0.01
15	7.5	22.5	1.1	94.25	1.04	x0.01
16	8.0	24.0	0.9	100.53	0.90	x0.01
17	8,5	25.5	0.8	106.81	0.85	x0.01
18	9.0	27.0	1.3	113.10	1.47	x0.01
19	9.5	28.5	1.2	119.38	1.43	x0.01
20	10.0	30.0	1.2	125.66	1.51	x0.01
22	11.0	33.0	0.9	138.23	1.24	x0.01
24	12.0	36.0	1.1	150.80	1.66	x0.01
26	13.0	39.0	1.0	163.36	1.63	x0.01
28	14.0	42.0	0.8	175.93	1.41	x0.01
30	15.0	45.0	0.6	188.50	1.13	x0.01
32	16.0	48.0	0.7	201.06	1.41	x0.01
34	17.0	51.0	0.8		1.71	x0.01
36	18.0	54.0	0.7	213.63	1.58	x0.01
38	19.0		0.7	226.19	1.67	x0.01
38 40	20.0	\$7.0	0.6	238.76	1.51	x0.01
40		60.0 (2.0	0.7	251.33	1.85	x0.01
42	21.0	63.0	0.6	263.89	1.66	
	22.0	66.0	0.6	276.46	1,73	x0.01
46	23.0	69.0	0.5	289.03		x0.01
48	24.0	72.0	0.3	301.59	1.51	x0.01
50	25.0	75.0	0.4	314.15	1.26	x0,01
52	26.0	78.0	0.3	326.72	0.98	x0.01
54	27.0	81.0		339.29	1.36	x0.01
·56	28.0	84.0	0.3	351.85	1.06	x0.01
58	29,0	87.0	0.3	364.42	1.09	x0.01
60	30.0	90.0	0.2	376,99	0.75	x0.01
64	32.0	96.0	0.1	402.12	0.40	x0.01
68	34.0	102.0	: <u> </u>	427.25	-	
72	36.0	108.0	· -	452.38	· · .	
76	38.0	114.0 🖓		477.52		
80	40.0	120.0		502.65		
84	42.0	126.0		527.78		
88	44.0	132.0		552.92 :	i statisti	e di serie d Serie di serie
92	46.0	138.0		578.05	a di sayata	e e e e e e e e e e e e e e e e e e e
96	48.0	144.0	: .	603,18	n an an San Carl An Anna	
100	50.0	150.0		628.31	4)。 1913年 - 新潟市市市市市	
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LOCATION: Galana 3 -

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DATE: 19th Aug., '82

OBSERVER: N. Yunohara

Outpole $\left(\frac{3a}{2}\right)$ Inpole (3) Range Ŕ 2па 🗠 p Depth (a) Ω Ω m m m ÷. m 29.52 x1 4.7 6.28 0.5 1.5 8,92 x0.1 7.1 1.0 3.0 12.57 6.97 x0.1 3.7 1.5 4.5 18.85 x0.1 2.2 5.52 2.0 6,0 25.13 1.7 5.34 x0.1 2.5 7.5 31.42 x0.1 4.90 1.3 3.0 9.0 37.70 0.9 3.96 x0.1 3.5 10.5 43.98 3.52 x0.1 12.0 0.7 50.27 4.0 0.6 \$6.55 3.39 x0.1 13.5 4.5. 0.5 3.14 xÖ.1 62.83 15.0 5.0 3.2 2.21 x0.01 69.12 5.5 16.5 1.9 1.43 x0.01 6.0 18.0 75.40 1.31 x0.01 1.6 19.5 81.68 6.5 1.06 x0,01 1.2 7.0 21.0 87.96 0.38 x0.01 0.4 7.5 22.5 94.25 1.11 x0.01 1.1 8.0 100.53 24.0 1:28 x0.Ö1 1.2 25.5 106.81 8.5 0.34 0.3 x0.01 113.10 9.0 27.0 \cdots 0.2 0.24 x0,01 119.38 9.5 28.5 0,3 0.38 x0.01 30.0 125.66 10.0 0.42 x0.01 0.3 138.23 11.0 33.0 0.30 x0.01 0.2 12.0 36.0 150.80 0.16 x0.01 0.1 163.36 39.0 13.0 0.18 x0.01 0.1 175.93 14.0 **42.0** - (0.19 xÓ.01 0.1 45.0 188.50 15.0 --* . . ----201.06 16.0 48.0 ÷. 17.0 \$1.0 213.63 18.0 \$4.0 226.19 19.0 \$7.0 238.76 20,0 60.0 251.33 21.0 63.0 263.89 22.0 66.0 276.46 69.0 289.03 23.0 24.0 72.0 301.59 314.15 25.0 75.0 $t \geq t$ 26.0 78.0 326.72 27.0 81.0 339.29 28.0 84.0 351.85 87.0 364.42 29.0 12 $r = \ell_{1,2}$ 90.0 376.99 30.0 $(1, \gamma, \bar{\gamma})$ 32.0 96.0 402.12 - • tj • 34.0 102.0 427.25 2 36.0 108.0 452.38

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LOCATION: Galana 4

DATE: 20th Aug., '82

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OBSERVER: N. Yunohara

Depth (a)	Inpole $\left(\frac{a}{2}\right)$	Outpole $(\frac{3a}{2})$	R	2пз	p	Range
ิต	n m	m		m	Ω	
	0.5	1.5	1.3	6.28	8.16	x1
2	1.0	3.0	3.2	12.57	4.02	x0.1
3	1.5	4.5	—	18,85	-	
4.	2.0	6.0	1.3	25.13	3.26	x0.1
5	2.5	7,5	1.0	31,42	3.14	x0.1
6 :	3.0	9.0	0,8	37.70	3.02	x0.1
7	3.5	10.5	0.7	43,98	3.08	x0.1
8.	4.0	12.0	5 : :	50.27	2.52	x0.01
9	4.5	13.5	4.5	\$6.55	2.54	x0.01
10	5.0	15.0	4.1	62.83	2.57	x0.01
11	5.5	16.5	3.8	69.12	2.63	
12	6.0	18.0	3.6	75.40	2.71	÷ .
13	6.5	19.5	3,3	81.68	2.69	· .
14	7.0	21.0	 .	87.96	14,5	
15	7,5	22.5		94.25		. \$
16	8.0	24.0	2.8	100.53	2.81	
17 -	8.5	25.5	2.7	106.81	2.88	1. A. A. A.
18	9.0	27,0	2.5	113.10	2,83	
19	9.5	28,5	2.4	119.38	2.86	· . ·
20	10.0	30.0	2.4	125.66	3.02	
22	11.0	33.0	2.3	138.23	3.18	
24	12.0	36.0	2.2	150.80	3.32	
26	13.0	39.0	2.0	163,36	3.27	
28	14.0	42.0	1.9	175.93	3,34	
30 .	15.0	45.0	1.8	188.50	3.39	
32	16.0	48,0	1.7	201.06	3,42	<u>-</u>
34 -	17.0	51.0	-	213.63		
36	18.0	54.0		226.19		
38	19.0	57.0	14	238.76	3.35	
40	20.0	60.0	1.3	251.33	2.80	
42	21.0	63.0	¹ — .	263.89		
44	22.0	66.0		276,46		·
46	23.0	69.0		289.03		
48	24.0	72.0	1.1	301.59	3.32	
50	25.0	75.0	1.1	314.15	3,45	
52	26.0	78.0	1.0	326.72	3.27	
54:	27.0	81.0	0.8	339.29	2.71	an tan Tanggan a
56	28.0	84.0	0.8	351.85	2,82	
58	29.0	87.0	-	364.42		
60	30,0	90.0	0.8	376.99	3.02	
64	32.0	96.0	- 1	402.12		
68	34.0	102.0	0.6	427.25	2,56	
72	36.0	108.0	0.6	452.38	2.71	
76	38.0	114.0		432.38		
80	40.0	120.0		502.65	2000 - 120 -	
84	42.0	126.0		502.65		
88	42.0	120.0				
92	44.0		i _ i i	552.92		
96		138.0		578.05		
	48.0	144.0		603.18		
100	50.0	150.0		628.31		
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LOCATION: Galana S

DATE: 20th Aug., '82

OBSERVER: N. Yunohara

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Depth (a)	Inpole $(\frac{3}{2})$	Outpole $(\frac{3a}{2})$	R	2πа	ρ	Range
m	m	m	Ω	m	Ω	
·] · ·	0.5	1.5	<u></u> ;	6.28	n da an s	
2	1.0	3.0		12.57	· · · ·	
3	1,5	4.5	·	18.85		
4	2.0	6.0	1	25.13	1	i i i i i i i i i i i i i i i i i i i
5	2.5	7.5	+4 <i>f</i>	31.42		
6	3.0	9.0		37.70	1 (C)	
7	3.5	10.5		43.98	1	
8	4.0	12.0		50.27	· ·	:
9	4.5	13.5		56.55		
10 -	5.0	15.0	-1 :	62.83		11 a.c
11	5.5	16.5	•	69.12		
12	6.0	18.0		75.40		
13	6.5	19,5	1 J	81.68	•	
-14	7.0	21.0		87.96		
15	7.5	22.5	ан (т. 1997) 1977 - Сан (т. 1997)	94.25		
16	8.0	24.0	4.11	100.53	14 N	
17	8.5	25.5		106.81		
18	9.0	27.0	-	113.10	The second	
19	9.5	28.5		119.38		
20	10,0	30.0	<u></u> .	125.66	1. 1	
22	11.0	33.0		138,23		
24	12.0	36.0		150.80	1	1 · · · · · · · · · · · · · · · · · · ·
26	13.0	39.0		163.36	8 to 1	
28	14.0	42.0		175.93	1 1 1 1 1 1	÷
30	15.0	45.0		188.50	1 1 - 1	
32	16.0	48.0		201.06		
34	17.0	51.0		213.63		1.11
36	18.0	54.0		226.19	100 E 40	
38	19.0	57.0	1 a 1	238.76		1
40	20.0	60.0		251.33		1
42	21.0	63.0		263.89		5.2 E
44	22.0	66.0		276.46	the second second	
46	23.0	69.0		289.03		
48	24.0	72.0		301.59	and shares	
50	25.0	75.0		314.15	1	
52	26.0	78.0		326.72		
54	27.0	81.0	(m, p)	339.29		
56	28.0	84.0	1997 - 19	351.85		1
58	29.0	87.0		364.42		20 - E
60	30.0	90.0	in the first	376.99		
64	32.0	96.0		402.12	1. 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
68	34.0	102.0	a a 1	427.25		
72	36.0	102.0	6 g	452.38	n i se stand	
76	38.0	114.0		477.52		
80	40.0	120.0		502.65		
84				502.05		
	42.0	126.0		E		
88	44.0	132.0		552.92		
92 06	46.0	138.0		578.05		
96	48.0	144.0		603.18		
100	\$0.0	150.0		628.31		

 $\rho = 2\pi a R$

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LOCATION: Galana 6 🔗

DATE: 21st Aug., '82 de Arreiro

OBSERVER: N. Yunohara

m 2 3 4 5 6 7 8 9 10 11 11	m 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0	m 1.5 3.0 4.5 6.0 7.5 9.0 10.5 12.0 12.5	Ω 9.9 1.6 4.8 2.4 1.6 1.2 0.8	m 6.28 12.57 18.85 25.13 31.42 37.70	Ω 62.17 20.11 9.05 6.02 5.02	x1 x1 x0.1 x0.1
2 3 4 5 6 7 8 9 10 11	1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0	3.0 4.5 6.0 7.5 9.0 10.5 12.0	1.6 4.8 2.4 1.6 1.2 0.8	12.57 18.85 25.13 31.42	20.11 9.05 6.02	x1 x0.1
3 4 5 6 7 8 9 10 11	1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0	4.5 6.0 7.5 9.0 10.5 12.0	4.8 2.4 1.6 1.2 0.8	18.85 25.13 31.42	9.05 6.02	x0.1
4 5 7 8 9 10 11	2.0 2.5 3.0 3.5 4.0 4.5 5.0	6.0 7.5 9.0 10.5 12.0	2.4 1.6 1.2 0.8	25.13 31.42	6.02	
5 6 7 8 9 10 11	2.5 3.0 3.5 4.0 4.5 5.0	7.5 9.0 10.5 12.0	1.6 1.2 0.8	31.42		x0_1
6 7 8 9 10 11	3.0 3.5 4.0 4.5 5.0	9,0 10.5 12,0	1.2 0.8		5.02	
7 8 9 10 11	3.5 4.0 4.5 5.0	10.5 12.0	0.8	37 70		x0.1
8 9 10 11	4.0 4.5 5.0	12.0			4.52	x0.1
9 10 11	4.5 5.0			43.98	3.52	x0.i
10 11	5.0	10 2	0.7	50.27	3.52	x0,1
11	. 1	13,5	0.7	\$6.55	3.96	x0.1
		15.0	0.7	62.83	4.40	x0.1
12	5.5	16.5	0.6	69.12	4.15	x0.1
	6.0	18.0	0.6	75.40	4.52	x0.1
13	6.5	19.5	0.5	81.68	4.08	x0.1
14	7.0	21.0	0.4	87.96	3.52	x0.1
15	7.5	22.5	0.4	94.25	3.77	x0.1
16	8.0	24.0	0.3	100.53	3.02	x0.1
17	8.5	25.5	3.3	106.81	3.52	x0.01
18	9.0	27.0	1.1	113.10		
19	9.5	28.5	and a second second	119.38	5 A.	
20	10.0	30.0	2.8	125.66	3,52	x0.01
22	11.0	33.0	2.6	138.23	3.59	x0.01
24	12.0	36.0	· · ·	150.80		
26	13.0	39.0	1.8	163.36	2.94	x0.01
28	14.0	42.0		175.93		
30	15.0	45.0		188.50		
32	16.0	48.0	1.2	201.06	2.41	x0.01
34	17.0	51.0	0.9	213.63	1.93	x0.01
36	18.0	54.0	0.8	226.19	1.81	x0.01
38	19.0	57.0	0.7	238.76	1.67	x0.01
40	20.0	60.0	0,5	251.33	1.26	x0.01
42	21.0	63.0	0.2	263.89	0.53	x0.01
44	22.0	66.0	0.3	276.46	0.83	x0.01
46	23.0	69.0	0.2	289.03	0.58	x0.01
48	24.0	72.0	0.2	301.59	0.60	x0.01
50	25.0	75.0	0.2	314.15	0.63	x0.01
52	26.0	78.0	·	326.72	. T.	1.1
54	27.0	81.0	· — ·	339.29	•1	
'56	28.0	84.0	—.*	351.85	1.3.2	
58	29.0	87.0		364.42		
60	30.0	90.0		376.99	41.	1. s
64	32.0	96.0	11 - 11 - 11 - 11 - 11 - 11 - 11 - 11	402.12		i. Ca
68 5 5 5	34.0	102.0	1.1.1.1.1	427.25		· · · .
72	36.0	108.0		452.38		
76	38.0	114.0		477.52		
80	40.0	120.0		502.65		
84	42.0	126.0	·	527.78		12
88	44.0	132.0		552.92		
92	46.0	138.0		578.05		2
96	48.0	144.0		603.18		
100	50.0	150.0		628,31		
= 2#aR	L.		 97	040,31		

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LOCATION: Gulana 7

DATE: 21st Aug., 82

 $\mathcal{M}_{n}(\mathbb{R}^{n}_{n}(\mathbb{R}^{n})) \rightarrow \mathbb{R}^{n}_{n}(\mathbb{R}^{n})$

OBSERVER: N. Yunohara

	Depth (a)	Inpole $(\frac{a}{2})$	Outpole (3a)	R	2ла	ρ	Range
		- <u>2</u> m		Ω	m	Ω	
	1	0.5	1.5	3.2	6.28	20.10	×1
4 5	2	1.0	3.0	0.7	12.57	28.80	xì
	3	1.5	4.5	2.6	18.85	4.90	x0.1
1	4	2.0	6.0	1.7	25.13	4.27	x0.1
į.	5	2.5	7.5	1.2	31.42	3.77	x0.1
	6	3.0	9.0	0.8	37.70	3.02	x0.1
Ì	7	3.5	10.5	0.8	43.98	3.52	x0.1
1	8	4.0	12.0	0.7	50.27	3.52	x0.1
	9	4.5	13.5	0.6	56.55	3.39	x0.1
	10	5.0	15.0	0.5	62.83	3.14	x0.1
	11	5.5	16.5	0.4	69.12	2.76	x0.1
	12	6.0	18.0	0.3	75.40	2.26	x0.1
	13	6,5	19.5	0.4	81.68	3.26	x0.1
	14	7.0	21.0	0.3	87.96	2.64	x0.1
	15	7.5	22.5	Ó.3	94.25	2.83	x0.1
	15 16	8.0	24.0	0.3	100.53	3.02	x0.1
	10	8.5	25.5	0.3	106.81	3.20	x0.1
	18	9.0	27.0	0.3	113,10	3.39	x0.1
	18	9.5	28.5	0.3	119.38	3,58	x0.1
	20	10.0	30.0	0.3	125.66	3.77	x0.1
	22	11.0	33.0	0.3	123.00	4,15	x0.1
	24	12.0	36.0	0.2	150.80	3.02	x0.1
	26	13.0	39.0	0.2	163.36	3.27	x0.1
	, ∞28	13.0	42.0	0.1	175.93	1.76	x0.1
	30	15.0	45.0	7.1	188.50	3.96	x0.01
	32	16,0	48.0	0.8	201.06	1.61	x0.01
	34	17.0	51.0	1.6	213.63	3.42	x0.01
	36	18.0	54.0	0.8	226.19	1.81	x0.01
	38	19.0	57.0	1.0	238.76	2,39	x0.01
1	40	20,0	60.0	1.3	251.33	3.26	x0.01
	42	21.0	63.0	0.8	263.89	2.11	x0.01
	44	22.0	66.0	0.8	276.46	2.21	x0.01
	46	23.0	69.0	0.9	289.03	2.60	x0.01
:	48	24.0	72.0	0.8	301,59	2.42	x0.01
	50	25.0	75.0	0.7	314.15	2.20	x0.01
:	52	26.0	78.0	0.8	326.72	2.62	x0.01
	54	27.0	81.0	0.8	339.29	2.71	x0.01
	56	28.0	84.0	0.4	351.85	.1.41	x0.01
	58	29.0	87.0	0.5	364.42	1.82	x0.01
	60	30.0	90.0	0.1	376,99	0,38	x0.01
	64	32.0	96.0	0.6	402.12	2.41	x0.01
	68	34.0	102.0	0.2	427.25	854.0	x10
	12	36.0	108,0	0.6	452,38	2,712.0	x10
-	76	38.0	114.0		477.52		
	80	40.0	120.0		502.65		
	84	42.0	126.0		527.78	an a	
	88	44.0	132.0		552.92		
ł	92	46.0	138.0	- 1	578.05	n na stand an stand a Stand an stand an stan	
	96	48.0	144.0		603.18		
-	100	50.0	150.0		628.31		

 $\rho = 2\pi a R$

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LOCATION: Galana 8

DATE: 23rd Aug., '82

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OBSERVER: N. Yunohara

Depth (a)	Inpole $\left(\frac{a}{2}\right)$	Outpole $\left(\frac{3a}{2}\right)$	R	2πа	ρ	Range
n i	m	m	Ω	m	Ω	
1 2	0.5	1.5		6.28		
3	1.0	3.0	0.2	12.57	07.2	
3 4	1.5	4.5	U.2	18.85	27.7	x10
4 5	2.0 2.5	6.0		25.13		
6	3.0	7.5	_	31.42		
7	3.5	9.0		37.70	and the second second	. · · · · · · · · · · · · · · · · · · ·
8	3.3 4.0	10.5		43.98		
9	4.0	12.0	:	50.27		
10	4.5 5.0	13.5	·	56.55		
11		15.0	—	62.83		÷.
12	5.5	16.5		69.12		
12	6.0	18.0		75.40		
15 t4	6.5	19.5		81.68		S. A.
	7.0	21.0	:	87.96		41
15 16	7.5	22.5	:	94.25		
16	8.0	24.0		100.53	1	
18	8,5	25.5		106.81		
18	9.0	27.0		113.10		
20	9.5	28.5		119.38		•
	10.0	30.0	· — ·	125.66		· · ·
22	11.0	33.0		138.23	14 - 14 - 14 N	-
24	12.0	36.0	:	150.80	. f	
26	13.0	39.0		163.36		
28	14.0	42.0		175.93		
30	15.0	45,0		188.50		The second
32	16.0	48.0		201,06		· ·]
34	17.0	\$1.0		213.63		
36	18.0	54.0		226.19		
38	19.0	\$7.0		238.76	· ·	
40.	20.0	60.0		251.33		
42 44	21.0	63.0		263.89		-
	22.0	66.0 69.0	1	276.46		- -
46	23.0	. 07.0		289.03		1
48 50	24.0	72.0		301.59		
	25.0	75.0		314.15		
52 54	26.0	78.0		326.72		: •
56	27.0	81.0		339.29	and the second	
	28.0	84.0	and the second second	351.85		
58	29.0	87.0		364.42		
60	30.0	90.0		376.99		
64	32.0	96.0		402.12		
68	34.0	102.0	1	427.25		and the Carlos of the
72	36.0	108.0		452.38		
76	38.0	114.0		477.52	4 - 11 T	8
80	40.0	120.0		502.65		
84	42.0	126.0		527.78		
88	44.0	132.0	a - 11	552,92		
92	46.0	138.0		578.05	di saya -	1 I.S.
96	48.0	144.0		603.18		
100	50,0	150.0		628.31	E se	

LOCATION: Gulana 9

DATE: 23rd Aug., '82

OBSERVER: N. Yunohara

Depth (3)			Ŕ	2па	ρ	Range
່	n n	m	Ω	m	Ω	
1	0.5 t.0	1.5 3.0		6.28		
3	1.5	4.5		12.57 18.85		
4	2.0	6.0	3 8.	25,13		
5	2.5	7.5		31.42		
6	3.0	9.0	· .	37.70		
7	3.5	10.5		43.98		
8	4.0	12.0		50.27		
9	4,5	13,5		56.55		
9 10	5.0	15.0		62.83	a	
11	5.5	16.5		69.12		
12	6.0	18.0		75.40	t an air	
13	6.5	19,5		81.68		
14	7.0	21.0	: •	87.96	ν.	1.1.1
15	7.5	22.5		94.25		10
16	8.0	24.0		100.53		
17	8.5	25.5		106.81		
18	9.0	27.0	· · ·	113.10		
19	9.5	28,5		119.38		4
20	10.0	30.0		125.66	2 - O	
22	11.0	33.0		138.23		•
24	12.0	36.0		150.80	en stade en	
26	13.0	39.0		163.36		
28	14.0	42.0		175.93		
30	15.0	45.0		188.50		
32	16.0	48.0		201.06		· · ·
34 36	17.0	51.0	1. 1.	213.63		
38	19.0	54.0 57.0		226.19		
· 40	20.0	60.0		238.76 251.33		
42	21.0	63.0		251.55		
44	22.0	66.0	· ·	276.46		
46	23.0	69.0		289.03		
48	24.0	72.0		301.59		
50	25.0	75.0		314.15		
52	26.0	78.0		326.72		and the second
54	27.0	81.0		339.29		
56	28.0	84.0		351.85		
-58	29.0	87.0		364.42		
60	30.0	90.0	: 	376.99		
64	32.0	96.0		402.12		
68	34.0	102.0		427,25	la sur se Barros	
.72	36.0	108.0		452.38	19 (S. 1	
76	38.0	114.0		477.52	1.1	
80	40.0	120.0		502.65	मुन्त किस्तु हो	6× 1
84	42.0	126.0		527.78		
88	44.0	132.0		552.92		
92	46.0	138.0		578,05	11-11-11-11-1-1-1-1-1-1-1-1-1-1-1-1-1-	
96	48.0	144,0	and and an and an	603.18		
100	50.0	150.0		628.31		
= 2πaR			-100-			

LOCATION: Gulana 10

DATÉ: 23rd Aug., '82

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OBSERVER: N. Yunohara

Depth (a)	Inpote $(\frac{3}{2})$	Outpole $(\frac{33}{2})$	Ŕ	2ла	ρ	Range
m	m,	, m	Ω	m	Ω	
1	0.5	1.5	10.6	6.28	: 66.57	x
2	1.0	3.0	8.3	12.57	104.33	x1
3	1.5	4.5	9.0	18,85	169.65	x1.
4	2.0	6.0	9.5	25.13	238.45	xl
5	2.5	7.5	9.2	31.42	288.88	x1
6	3.0	9.0	11.5	37.70	433.55	xl
7	3.5	10.5	4.6	43,98	202.40	xl
8	4.0	12.0	7.1	50.27	357.13	
9	4.5	13.5	3.2	56.55	180.80	1
10	5.0	15.0	7.2	62.83	452.16	A second second
11	5.5	16.5	6.2	69.12	428.42	
12	6.0	18.0	5.3	75.40	399.62	:
13	6.5	19.5	5.2	81.68	424.32	¹
14 11	7.0	21.0	5.8	87.96	510.40	÷ .
15	7.5	22.5	8.8	94.25	828.96	
16	8.0	24.0	9.0	100.53	904.50	· ,
17	8,5	25.5	15.4	106.81	1,644.72	
18	9.0	27.0	11.0	113.10	1,244.10	
19	9.5	28.5	11.2	119.38	1,336.16	
20	t0.0	30.0	7.6	125.66	955.32	
22	11.0	33.0	9.0	138.23	1,243.80	
24	12.0	36.0	11.1	150.80	1,673.88	
26	13.0 117	39.0	5.4	163.36	882.36	
28	14.0	42.0	5.8	175.93	1,020.22	
30	15.0	45.0	9.1	188.50	1,715.35	
32 .	16.0	48.0	12.2	201.06	2,452.20	
34	17.0	51.0	5.7	213.63	1,219.80	
36	18.0	54.0	4.8	226.19	1,084.80	
38	19.0	57.0	5.8	238.76	1,386.20	
40	20.0	60.0	3.2	251.33	803.20	
42	21.0	63.0	3.5	263.89	924.00	1
44	22.0	66.0	2.4		662.40	
46	23.0	69.0	3.2	276.46	924.80	· · ·
48	24.0	72.0	4.1	289.03		
50	25.0	75.0	2.7	301.59	1,238.20	
52	26.0	78.0	3.3	314.15	847.80	
54	27.0	81.0	3.2	326.72	1,079.10 1,084.80	de la factoria. No servicio
56	28.0	84.0	3.0	339,29	1,056.00	
58	29.0	87.0	2.0	351.85	728.00	
60	30.0		4.4	364.42	1,658.80	a and and a second s
64	32.0	90.0	4.4 5.4	376.99	2,170.80	· · · · · ·
68 [96.0	5.4 9.2	402.12		
72	34.0	102.0	10.7	427.25	3,928.40 4,836,40	to the file
	36.0	108.0	13.0	452.38		
76	38.0	114.0		477.52	6,214.00	
80	40.0	120.0	9.4	502,65	4,728.20	1994 1997
84	42.0	126.0	5.2	527.78	2,745.60	
88	44.0	132.0	10.2	552.92	5,640.60	
92	46.0	138.0	8.1	578.05	4,681.80	t i verstere
96	48.0	144.0	8.8	603.18	5,306.40	
100	50.0	150.0	4.7	628.31	2,951.60	1
= 2πaR			-101-			
	21 A.					

LOCATION: Galana 11

DATE: 24th Aug., '82

 $e^{i\omega_{1}}e^{-i\omega_{1}}=e^{-i\omega_{1}}e^{-i\omega_{1$

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OBSERVER: N. Yunohara

Depth (a)	inpole $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2па	ρ	Range
ព	m	ា	Ω	m	Ω	5 5
1	0.5	1.5	0.6	6.28	37,68	x10
2	1.0	3.0	· ·	12.57	n.d.	4 1
3	1.5	4.5		18.85	n.đ	
4	2.0	6.0	1	25.13	n,đ,	
5	2.5	7.5	· ·	31.42	n.d.	
6	3.0	9.0	·	37.70	n.d.	1
7	3.5	10.5		43.98	n.d.	
8	4.0	12.0		50.27	n.d.	
9	4.5	13.5		56.55	n.d.	
10	5.0	15.0	8.2	62.83	514.96	x1
11	5.5	16.5	9.0	69.12	621.90	x1
12	6.0	18.0	12.3	75.40	927.42	x1
13	6.5	19,5	13.8	81.68	1126.08	x1
14	7.0	21.0	25.6	87.96	2252.80	xl
15	7.5	22.5	15.7	94.25	1478.94	xl
16	8.0	24.0	8.0	100.53	804.00	xl
17	8.5		4.5	100.33	480.60	xl
18		25.5 27.0	12.6		1425.06	xi
	= 9.0 □ • • •		14.7	113.10	1753.71	xi si
19	9.5	28.5		119.38		
20	10.0	30.0	11.4	125.66	1432.98	x1
22	11.0	33.0	8.4	138.23	1160.80	xl
24	12.0	36.0	12.1	150.80	1824.68	xl
26	13.0	39.0	8.0	163.36	1307.20	x1
28	14.0	42.0	6.7	175,93	1178.53	x1
30	15.0	45.0	5.3	188.50	999.05	xi
32	16.0	48.0	7.1	201.06	1427.10	j x1 ≤
34 :	17.0	51.0	4.2	213.63	898,80	x1
36	18.0	54.0	1.7	226.19	384.20	x1 ==
38	19.0	57.0	1.7	238,76	406.30	xl 👘
40	20.0	60.0	3.3	251.33	828.30	x1
42	21.0	63.0	5.2	263.89	1372.80	x1 -
44	22.0	66.0	14.3	276.46	3946.80	y x1 and
46	23.0	69.0	3.3	289.03	953.70	x1
48	24.0	72.0	4.4	301.59	1328.80	xl 👘
50	25.0	75,0	8.7	314.15	2731.80	10 x1 (b)
52	26.0	78.0	• •	326,72	n d.	
- Ś4 - [27.0	81,0	2.3	339,29	779.70	x1
56	28.0	84.0	1.0	351.85	352.00	x1 .
58	29.0	87.0	7.6	364.42	2766.40	x1
60	30.0	90.0	10.2	376,99	3845.40	x1
64	32.0	96.0	14.3	402.12	5748.60	xl
68	34.0	102.0	4.8	427.25	2049.60	n xi ra
72	36.0	108.0	28.3	452.38	12791.60	xi
76	38.0	114.0		477.52	n.d.	
80	40.0	120.0	8.8	502.65	4426.40	x1 ()
84 ·	40.0	126.0	21.2	502.05 527.78	11193.60	
			5.8		3207.40	xi xi
88	44.0	132.0		552,92		a .
92	46.0	138.0	2.7	578.05	1560.60	xl 🤃
96	48.0	144.0	3.6	603.18	2170.80	x1
100	50.0	150.0	0.8	628.31	502,40	5 x1 (61)

 $\rho = 2\pi a R$

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DATE: 24th Aug., '82

OBSERVER: N. Yunohara

Depth (a)	Inpole $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2πa	ρ	Range
m	m	m	$1 + 1 = \Omega$	m	Ω	
En-	0.5	1.5		6.28		
2	1.0	3.0	7.8	12.57	980.46	x10
3:	1.5	4,5	4.3	18.85	810.55	x10
4 (12)	2.0	6.0	2.8	25.13	702.8	= x10
S 111	E 2,5 € E	7.5	4.4	31.42	1381.6	x10
6 (177	3.0	9.0	9.0	37.70	3393.0	x10
7 **	3.5	10.5	7.1	43.98	3124.0	x10
8 M M	4.0	12.0	8.2	50.27	4124.6	x10
9 🐖	4.5	13.5	8.8	56.55	4972.0	x10
10 197	5.0	15.0	9.4	62.83	\$903.2	x10
11 +	5.5 2.4	16.5	9.3	69.12	6426.3	x10
12	6.0	18.0	9.5	75.40	7163.0	x10
13	6.5	19,5	8.5	81.68	6936.0	x10
14	7.0	21.0	4.5	87.96	3960.0	x10
15	7.5	22.5	8,5	94.25	8007.0	x10
16	8.0	24.0	4.2	94.25 100.53	4221.0	x10
17 5	8.5	25.5	9.3	106.81		
18	9.0	23.3	7.8		9932.4	x10
19	9.5			113.10	8821.8	x10
20	10.0	28.5	7.7	119.38	9186.1	×10
20		30.0	8.3	125.66	10433.1	x10
	11.0	33.0	7.7	138.23	10641.4	x10
24	12.0	36.0	6.4	150.80	9651.2	x10
26	13.0	39.0	6.1	163.36	9967.4	x10
28	14.0	42.0	4.9	175.93	8619.1	x10
30	15.0	45.0	4.3	188.50	8155.5	x10
32	16.0	48.0	4.3	201.06	8643.0	x10
34 ::::	17.0	51.0	4.5	213.63	9630.0	x10
36	18.0	54.0	5.0	226.19	11300.0	x10
38	19.0	57.0	4.6	238.76	10994.0	x10
40	20.0	60.0	5.0	251.33	12550.0	x10
42	21.0	63.0	4.3	263.89	11352.0	x10
44 55.6	22.0	66.0	4.5.3	276.46	12420.0	x10
46	23.0	69.0	4.5	289.03	13005.0	x10
48	24.0	72.0	3.5	301.59	10570.0	x10
50	25.0	75.0	5.2	314.15	10048.0	x10
52	26.0	78.0	5.5	326.72	17985.0	x10
54	27.0	81.0	4.3	339.29	14577.0	x10
56	28.0	84.0	4.8	351.85	16896.0	x10
58	29.0	87.0	4.0	364.42	14560.0	x10
60	30.0	90.0	1.2	376.99	4524.0	x10
64	32.0	96.0	4.1	402.12	16482.0	x10
68 1	34.0	102.0	3.6	427.25	15372.0	x10
72	36.0	102.0	2,6	427.25	11752.0	
76	38.0	114.0	3.9		18642.0	x10
80	40.0	120.0	3.1	477,52	15593.0	x10
84	42.0		3.1 2.4	502.65		x10
88		-126.0		527.78	12672.0	x10
92	44.0	132.0	3.6	\$\$2,92	19909.0	×10
The second s	46.0	138.0	3.5	578.05	20230.0	x10
96	48.0	144.0		603.18	n.d.	
100 de	\$0.0	150.0		628.31	n.đ.	and the press of

ρ = 2πaR

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DATE: 25th Aug., '82

OBSERVER: N. Yunohara

Depth (a)	Inpole $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2πа	ρ	Range
m	m	m	ប	m	Ω	
3	0.5	1.5	6.0	6.28	376.8	x10
2	1.0	3.0	6.0	12.57	754.2	x10
· 3	¹ 1.5 ·	4.5	6.1	18.85	1,149.85	x10
4	2.0	6.0	5.5	25.13	1,380.50	x10
5	2,5	7.5	5.3	31.42	1,664.20	x10
6	3.0	9.0	5.3	37.70	1,998.10	x10
7 - 3	3.5	10.5	5.7	43.98	2,508.00	x10
8	4.0	12.0	5.8	50.27	2,917.4	xlÒ
9 .	4.5	13.5	6.0	56.55	3,390.0	x10
10	5.0	15.0	5.2	62.83	3,265.6	x10
11	5.5	16.5	4.9	69.12	3,385.9	x10
12	6.0	18.0	5.1 C	75.40	3,845.4	x10
13	6.5	19.5	4.8	81.68	3,916.8	x10
14	7.0	21.0	4.6	87.96	4,048.0	x10
15	7.5	22.5	4.4	94.25	4,144.8	x10
16	8.0	24.0	4.7	100.53	4,723.5	x10
17	8.5	24.0	4.2	100.33	4,485.6	x10
18	8.3 9.0	23.3 27.0	4.3	113.10	4,863.3	x10
18			4.3		5,129.9	x10
	9.5	28.5	4.3	119.38	5,405.1	x10
20	10.0	30.0		125.66		
22	11.0	33.0	4.1	138.23	5,666.2	x10
24	12.0	36.0	3.8	150.80	5,730.4	x10
26	13.0	39.0	3.8	163.36	6,209.2	x10
, 28	14.0	42.0	2.9	175.93	5,101.1	x10
30 🕔	15.0	45.0	3.4	188.50	6,409.0	x10
32	16.0	48.0	3.2	201.06	6,432.0	x10
34 -	17.0	51.0	3.4	213.63	7,276.0	x10
36	18.0	54.0	4.8	226.19	10,848.0	x10
38	19.0	57.0	3,3	238.76	7,887.0	x10
40	20.0	60.0	2.7	251.33	6,777.0	x10
42	21.0	63.0	3.1	263.89	8,184.0	x10
44	22.0	66.0	2.8	276.46	7,728.0	x10
46	23.0	69.0	2.5	289.03	7,225.0	x10
48	24.0	72.0	2.7	301.59	8,154.0	x10
50	25.0	75.0	3.0	314.15	9,420.0	x10
52	26.0	78.0	2.2	326.72	7,194.0	x10
54	27.0	81.0	2.2	339.29	7,458.0	x10
56	28.0	84.0	2.3	351.85	8,096.0	x10
58	29.0	87.0	2.1	364.42	7,644.0	x ÎO
60	30.0	90.0	2.1	376.99	7,917.0	x10
64	32.0	96.0	2.6	402.12	10,452.0	x10
68 68	34.0	102.0	1.8	402.12	7,686.0	x10
			1.5		6,780.0	x10
12 °	36.0	108.0	1.8	452.38	8,604.0	x10
76	38.0	114.0	2.2	477.52	8,004.0 11,066.0	x10
80	40.0	120.0		502.65		
84	42.0	126.0	2.2	527.78	11,616.0	x10
88	44.0	132.0	2.4	552,92	13,272.0	x10
92	46.0	138.0	2.4	578.05	13,872.0	x10
96	48.0	144.0	2.4	603.18	14,472.0	x10
100	50.0	150.0	2.4	628.31	15,072.0	x10
≠ 2πaR		· .	-104-			
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DATE: 25th Aug., '82

OBSERVER: N. Yunohara

Depth (a)	Inpole $(\frac{3}{2})$	Outpole $(\frac{3a}{7})$	R	2ла	ρ	Range
m	m	m	<u>.</u>	m	<u>.</u> Ω	
1 E 4	0.5	1.5	10.0	6.28	628	x10
2	1.0	3.0	9.0	12.57	1,131.3	x10
3	1.5 T	4.5	9.1	18.85	1,715.35	×10
4 .	2.0	6.0	8.2	25.13	2,058.20	x10
5	2.5	1.5	7.8	31,42	2,449.2	x10
6	3.0	9.0	7.9	37.70	2,978.3	x10
7	- 3.5	10.5	7.3	43.98	3,212.0	x10
8	4.0	12.0	7.2	50.27	3,621.6	x10
9:0	4.5	13.5	6.9	56.55	3,898.5	x10
10	5.0	15.0	7.6	62.83	4,772.8	x10
11	5.5	16.5	7.8	69.12	5,389.8	x10
12	6.0	18.0	7.6	75.40	5,730.4	x10
13	6.5	19.5	7.0		5,712.0	x10
14	7.0	21.0	7.0	81.68		
15	7.5		7.0	87.96	6,160.0	x10
16	1	22.5	5.7	94.25	6,594.0	x10
17	8.0	24.0		100.53	5,728.5	x10
	8.5	25.5	6.4	106.81	6,835.2	x10
18	9.0	27.0	6.6	113.10	7,464.6	x10
19 Er	9.5	28.5	6.0	119.38	7,158.0	x10
20	10.0	30.0	6.0	125.66	7,542.0	x10
22	11.0	33.0	4.7	138.23	6,495.4	x10
24	12.0	36.0	6.1	150.80	9,198.8	x10
26	13.0	39.0	5.1	163.36	8,333.4	x10
28 ¹	14.0	42.0	5.1	175,93	8,970.9	x10
30	15.0	45.0	4.7	188.50	8,859.5	x10
32	16.0	48.0	5.1	201.06	10,251.0	x10
34	17.0	51.0	5.5	213.63	11,770.0	x10
36	18.0	54,0	4.4	226.19	9,944.0	x10
38	19.0	57.0	4.9	238.76	11,711.0	x10
40	20.0	60.0	5.3	251.33	13,303.0	x10
42	21.0	63.0	5.1	263.89	13,464.0	x10
44	22.0	66.0	4.6	276.46	12,696.0	x10
46	23.0	69.0	4.3	289.03	12,427.0	x10
48	24.0	72.0	4.1	301.59	12,382.0	x10 ⁻¹
50 = 5	25.0	75.0	4.2	314.15	13,188.0	x10
52	26.0	78.0	4.7	326.72	15,369.0	x10
54	27.0	81.0	4.0	339.29	13,560.0	x10
· 56	27.0	84.0	3.8		13,376.0	x10
58	28.0 29.0		3.8 4.4	351.85	15,576.0	
3		87.0		364.42		x10
60	30.0	90.0	5.2	376.99	19,604.0	x10
64 E T	32.0	96.0	4.4	402.12	17,688.0	x10
68 : . 70 (34.0	102.0	3.3	427.25	14,091.0	x10
. 72 ∜⊗	36.0	108.0	2.7	452.38	12,204.0	x10
76 - 20	38.0	114.0	3.3	477.52	15,774.0	x10
80 .	40.0	120.0	3.1	502.65	15,593.0	x10
84	42.0	126.0	2.7	527.78	14,256.0	x10 -
88/1-8-	44.0	132.0	2.7	552.92	14,931.0	x10
92	46.0	138.0	2.7	\$78.05	15,606.0	x10
96	48.0	144.0	2,3	603.18	13,869.0	x10
100	50.0	150.0	0.6	628.31	3,768.0	x10

ρ = 2πaR

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DATE: 25th Aug., '82

(1)

a standard a

OBSERVER: N. Yunohara

Depth (a)	Inpole $(\frac{a}{2})$	Outpole (3a)	R	2πа	$\beta = \rho$	Range
m	m	m	Ω	m	Ω	
14 1 4 14 1	0.5	1.5	7.6	6.28	477.28	x10
2.2	1.0	3,0	8.9	12,57	1118.73	x10
3	1.5	4.5	6.9	18.85	1300.65	x10
4 %	2.0	6.0	8.4	25.13	2108.40	x10
5	2.5	7.5	8.3	31.42	2605.2	x10
6	3.0	9.0	8.2	37.70	3091,4	x10
7.	3.5	10.5	8.8	43.98	3872.0	
8	4.0	12.0	8.1	50.27	4074.3	x10
9.	:. 4. \$.	13.5	8.1	56.55	4576.5	x10
10	5.0	15.0	7.1	62.83	4458.8	x10
11	5.5	16.5	7.3	69.12	5044.3	x10
12	6.0	18.0	7.0	75.40	5278.0	x10
13	6.5	19.5	6.9	81.68	5630.4	x10
14	7.0	21.0	5.8	87.96	5104.0	x10
15	7.5	22.5	6.2	94,25	5840.4	x10
16	8.0	24.0	5.5	100.53	5527.5	x10
17	8.5	25.5	5.5	106.81	5874.0	x10
18	9.0	27.0	5.0	113.10	5655.0	x10
19	9.5	28.5	5.5	119.38	6561.5	x10
20	10.0	30.0	5.7	125.66	7164.9	x10
22	1		6.0		8292.0	x10
	11.0	33.0	5.2	138.23	8292.0 7841.6	
24	12.0	36.0	3.2 4.8	150.80		x10
26	13.0	39.0	4.0	163.36	7843.2	x10
, 28	14.0	42.0	3.8	175.93	8262.3	x10
30	15.0	45.0		188.50	7163.0	x10
32	16.0	48.0	3.9	201.06	7889.0	x10
34	17.0	51.0	3.6	213.63	7704.0	x10
36	18.0	54,0	4.6	226.19	10396.0	x10
38	19.0	57,0	5.0	238.76	11950.0	otx
40	20.0	60.0	4.5	251.33	11295.0	x10
42	21.0	63.0	4.1	263.89	10824.0	x10
44	22.0	66.0	3.7	276.46	10213.0	x10
46	23.0	69.0	5.2	289.03	9248.0	x10
48	24.0	72.0	3.6	301.59	10872.0	x10
50	25.0	75.0	3.2	314.15	10048.0	x10
52	26.0	78.0	2.3	326.72	7521.0	x10
54	27.0	81.0	3.1	339.29	10509.0	x10
56	28.0	84.0	3.1	351.85	10912.0	x10
58	29.0	87.0	2.5	364.42	9100.0	x10
60	30.0	90.0	2.9	376.99	10933,0	x10
64	32.0	96.0	21 . 5	402.12	6030.0	x10
68	34.0	102.0	2.2	427.25	9394.0	x10
72	36.0	108.0	2.0	452.38	9040.0	x10
76	38,0	114.0	2.1	477.52	10038.0	×10
80	40.0	120.0	1.7	502.65	8551.0	x10
84	42.0	126.0	2.8	527.78	8331.0 14784.0	x10
88	44.0	132.0	1.6	552,92	8848.0	x10 ^
92	46.0	138,0	2.2	578.05		
96	48.0	138,0	2.2		12716.0	x10 1.5
100	48.0	144.0		603.18	13266.0	x10
100	<u></u>	120.0	1.1	628.31	6908.0	x10

 $\rho = 2\pi a R$

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• 1

DATE: 26th Aug., '82

Section 2

N. Yunohara **OBSERVER:**

	Depth (a)	Inpole $\left(\frac{3}{2}\right)$	Outpole $\left(\frac{3a}{2}\right)$	R	2ла	P	Range
	តា	i i i i i i i i i i i i i i i i i i i		Ω	m	Ω	
	1	0.5	1.5	2.9	6.28	182.12	x10
	2	1.0	3.0	2 3.1	12.57	389.67	x10
	3.5	1.5	4.5	2.8	18.85	527.8	x10
	4 ⊀, ∉,	2,0	6.0	2.8	25.13	702.8	x10
	5 5	-2.5	7.5	2.8	31.42	879.2	x10
	6	3.0	9,0	2.7	37.70	1017.9	x10
	7 (* 20	3.5	10.5	2.6	43.98	1144.0	x10
Ľ	8 : : :	4.0	12.0	2.8	\$0.27	1408.4	x10
12	9.	4.5	13.5	2.8	56.55	1582.0	x10
	10	5.0	15.0	2.7	62.83	1695.6	x10
	11.000	5.5	16.5	2.7	69.12	1865.7	x10
	12	6.0	18.0	2.7	75.40	2035.8	x10
	13	6.5	19,5	2.5	81.68	2040.0	x10
. 1	. 14 : E	7.0	21.0	2.3	87.96	2024.0	x10
	15	7.5	22.5	2.6	94.25	2449.2	x10
:	16	8.0	24.0	2.5	100.53	2512.5	x10
۰.	17	8.5	25.5	2.3	106.81	2456.4	x10
	18	9.0	27.0	2.3	113.10	2436.4	
	19	9.5	28.5	2.2			x10
	20	10.0	30.0	2.2	119.38	2624.6	x10
1.27	22	11.0	33.0		125.66	2765.4	x10
• •	24	12.0		2.3	138.23	3178.6	x10
	26		36.0	2.2	150.80	3317.6	x10
	28	13.0	39.0	2.1	163.36	3431.4	x10
•		14.0	42.0	1.8	175.93	3166.2	x10
	30	15.0	45.0	1.8	188.50	3393.0	x10
j.	32) (+	16.0	4 8.0	1.8	201.06	3618.0	x10
÷	34 : :	17.0	51.0	1.8	213.63	3852.0	x10
	36	18.0	\$4.0	1.6	226.19	3616.0	x10
0	38	19.0	57.0	1.4	238.76	3346.0	x10
s i Vi	40	20.0	60.0	1.4	251.33	3514.0	x10
i, i	42	21.0	63.0	1.3	263.89	3432.0	x10
	44	- 22.0	66.0	1.2	276.46	3312.0	x10
l	46 9 12	23.0	69.0	1.2	289.03	3468.0	x10
	48 💷 👘	24.0	72.0	1.2	301.59	3624.0	x10
-	50	25.0	75.0	1.1	314.15	3454.0	x10
1 2 7	52	26.0	78.0	0.9	326.72	2943.0	x10
i -	54	27.0	81.0	1.1	339.29	3729.0	x10
÷	56	28.0	84.0	0.8	351.85	2816.0	x10
	58 - 2	29.0	87.0	0.9	364.42	3276.0	x10
	60 at the	30.0	90.0	0.8	376.99	3016.0	x10
1	64	32.0	96.0	0.8	402.12	3216.0	x10
	68	34.0	102.0	0.8	427.25	3416.0	x10
	72	36,0	108.0	0.8	452.38	3616.0	x10
-	76	38.0	114.0	0.8	432.38	3824.0	· · · · · · · · · · · · · · · · · · ·
	80	40.0	120.0	0.8		C. S. L. S. L.	x10
	84	40.0	126.0	0.8	502.65	4024.0	x10
:	88	42.0		2 E	527.78	3696.0	x10
	92		132.0	0,4	552.92	2212.0	x10
		46.0	138.0 655	0.5	578.05	2890.0	x10
	96	48.0	144.0	0.3	603.18	1809.0	x10
:	100	50.0	150.0 ···	0.5	628.31	3140.0	x10

LOCATION: Galana 17,

DATE: 26th Aug., '82

N. Yunohara **OBSERVER:**

Depth (a)	Inpole $(\frac{a}{2})$	Outpole (<u>3a</u>)	R	2πа	p to any	Range
ហ	m	m	Ω	m	Ω	
1.000	0.5	1.5	6.8	6.28	427.04	x10
2	1.0	3.0	6.8	12.57	854.76	x10
3 .41.	1.5	4.5	6.6	18,85	1244.1	x10
4	2.0	6.0	6.4	25.13	1606.4	x10
Š *	2.5 AL	7.5	6.4	31.42	2009.6	x10
6		9.0	6.1	37.70	2299.7	x10
7 8	3.5 4.0	10.5	6.1 5.9	43.98	2684.0	x10
9	4.5	12.0		50.27	2967.7	x10
10	5.0	13.5 15.0	5.8 5.5	\$6.55	3277.0	x10
10	5.5	15.0	5.8	62,83	3454.0	x10
12	6.0	18.0	5.8 5.4	69.12 75.40	4007.8	×10
13	6.5°80	19.5	5.4	75.40	4071.6	x10
14	7.0	21.0	5.6	81.68 87.96	4406.4 4928.0	x10 x10
15	7.5	22.5	5.3	94.25	4928.0	x10
16	8.0	22.3	5.2	94.25	4992.0 5226.0	x10
17	8.5	24.0	4.9	106.81	5233.2	xi0
18	9.0	27.0	5.6	113.10	6333.6	x10
19	9.5	28.5	5.1	119.38	6084.3	x10
20	10.0	30.0	5.0	125.66	6285.0	x10
22	11.0	33.0	4.6	138.23	6357.2	xi0
24	12.0	36.0	4.8	150.80	7238,4	x10
26	13.0	39.0	4.2	163.36	6862.8	x10
28	14.0	42.0	4.2	175.93	7387.8	x10
30	15.0	45.0	4.3	188.50	8105.5	x10
32	16.0	48.0	3.8	201.06	7638.0	x10
34	17.0	51.0	3.8	213.63	8132.0	x10
36	18.0	54.0	3.3	226.19	7458.7	x10
38	19.0	57,0	3.4	238.76	8126.2	x10
40	20.0	60.0	2.8	251.33	7028.0	x10
42	21.0	63.0	2.6	263.89	6864.0	x10
44	22.0	66.0	2,7	275.46	7452.0	x10
46	23.0	69.0	2.7	289.03	7803.0	x10
-48 😥	24.0	72.0	2.6	301.59	7852.0	x10
50	25.0	75.0	2.0	314.15	6280.0	x10
52	26.0	78.0	1.8	326.72	5886.0	x10
54 🖓 🖓	27.0	81.0	1.4	339.29	4746.0	x10
56 🗇 🖉	28.0	84,0	1.8	351.85	6336.0	x10
58 - ≕	29,0	87.0	1.6	364.42	5824.0	x10
60	30,0	90.0	1.8 m	376.99	6786.0	x10
64	32.0	96.0	2.1	402.12	8442.0	x10
68	34.0	102.0	1.7	427.25	7259.0	x10
72	36.0	108.0	2.0	452,38	9040.0	x10
76	38.0	114.0	1.8	477.52	8604.0	x10
80	40.0	120.0	1.3	502.65	6539,0	x10
84	42.0	126.0	1.6	\$27.78	8448.0	x10
88	44.0	132.0	1.6	552.92	8848.0	x10
92	46.0	138.0	1.3	578.05	7514.0	x10
96 😳	48.0	144.0	13	603.18	7839.0	x10
100	50.0	150.0	1.1	628.31	6908.0	x10
= 2πaR	· · · · ·		-108-		÷	
	and the second					

OBSERVER: N. Yunohara

DATE: 26th Aug., 82

Depth (a) Inpole $\left(\frac{a}{2}\right)$ Outpole $\left(\frac{3a}{5}\right)$ R 2πа ł p $\mathcal{C}_{1} \rightarrow \frac{1}{2}$ Range m m Ω m m Ω 1 0.5 1.5 7.8 489.84 6.28 x10 2 1.0 7.8 980.46 3.0 x10 12.57 ·3 1.5 7.6 4 5 1,432.6 18.85 x10 4 2.0 6.0 6.3 1,581.3 25.13 x10 5 2.5 6.3 7.5 31.42 1,978.2 x10 6 3.0 6.2 9.0 2,337.4 x10 37.70 7 3.5 6.2 10.5 2,728.0 43.98 $\mathbf{x10}$ 8 6.1 4.0 12.0 3,068.3 50.27 x10 ģ 4.5 13.5 5.8 3,277.0 56.55 x10 10 5.0 15.0 5.9 62.83 3,705.2 x10 11 5.5 16.5 6.2 69.12 4,284.2 x10 12 6.0 18.0 5.6 75.40 4,222.4 x İ Ö 13 6.5 19.5 5.2 4,243.2 81.68 x10 14 7.0 21.0 5.Ż 4.576.0 87.96 x10 15 7.5 5.1 22.5 4.804.2 94.25 x10 : 16. 8.0 24.0 4.7 : 4,723.5 100.53 x10 17 8.5 4.6 25.5 4,912.8 106.81 x10 18 9.0 47 27.0 113.10 5,315.7 x10 19 9.5 28.5 4.1 119.38 4,891.3 x10 20 10,0 30.0 4.1 125.66 5,153.7 x10 22 11.0 3.7 33.0 138.23 5,113.4 x10 24 12.0 3.7 36.0 5,579.6 x10 150.80 26 13.0 39.0 3.6 5,882.4 x10 163.36 28 14.0 42.0 3.3 \$,804.7 175.93 x10 30 15.0 45.0 3.2 6,032.0 188.50 x10 32 16.0 48.0 3.3 6,633.0 201.06 x10 34 17.0 2.8 51,0 5,992.0 213.63 x10 36 18.0 3.2 54.0 7,232.0 x10 226.19 38 2.9 19.0 57.0 6,931.0 238,76 x10 40 20.0 2.8 60.0 7,028.0 251.33 x10 42 21.0 63.0 3.0 7,920.0 263.89 x10 44 22.0 66.0 2.8 7,728.0 276.46 x10 46 23.0 69.0 2.8 8,092.0 289.03 x10 48 24.0 2.9 72.0 8,758.0 301.59 x10 \$0 25.0 75.0 2.8 8,792.0 314,15 x10 \$2 26.0 2.6 78.0 8,502.0 326,72 x10 \$4 27.0 81.0 2.7 339.29 9,153.0 x10 \$6 28.0 84.0 2.7 9,504.0 x10 351.85 **Ś**8 29.0 87.0 2.7 9,828.0 x10 364.42 60 30.0 90.0 2.7 10,179.0 x10. 376.99 64 32.0 3.0 12,060.0 x10. 96.0 402.12 68 2.6 11,102.0 34.0 102.0 x10 427.25 72 2.9 36.0 13,108.0 108.0 x10 452,38 2.9 76 38.0 13,862.0 114.0 x10 477.52 80 2.8 14,084.0 40.0 120.0 502.65 x10 84 42.0 126.0 2.8 \$27.78 14,784.0 x10 88 44.0 2.9 132.0 16,037.0 x10 552.92 92 2.9 46.0 138.0 % 16,762.0 578.05 x10 96 48.0 3.2 19,296.0 144.0 603.18 x10 100 50.0 2.8 150.0 17,584.0 x10 628,31

 $\rho = 2\pi a R$

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DATE: 27th Aug., '82

 $(y_{i+1})_{i \in I} \in \mathcal{F}$

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OBSERVER: N. Yunohara

-						·	
Depth	(a)	Inpole $(\frac{a}{2})$	Outpole $(\frac{3a}{2})$	R	2ла	11 P 11 11	Range
	m	m	m	Ω	m	Ω	
2 1 -	-	0.5	1.5	6.1	6.28	383.08	x10
-2		1.0	3.0	4.9	12.57	615.93	x10
3		1.5	4.5	5.4	18.85	1,017.9	x10
4		2.0	6.0	4.9	25.13	1,229.9	x10 x10
5		2.5	7.5	5.2	31.42	1,632.8	
⇒ [6 -		3.0	9.0	4.9	37.70	1,847.3	x10
7		3.5	10.5	4.8	43,98	2,112.0	x10
∽ 8		4.0	12,0	4.8	50.27	2,414.4	x10
- 9		4,5	13.5	4.7	56.55	2,655.5	x10
10 -		5.0	15.0	4.7	62,83	2,951.6	x10
-11		5.5	16.5	4.8	69.12	3,316.8	x10
12	1.1	6.0	18.0	4.8	75.40	3,619.2	x10
13 -	j	6.5	19.5	4.7	81.68	3,835.2	x10
- 14		7.0	21.0	4.9	87.96	4,312.0	x10
15		7.5	22.5	4.8	94.25	4,521.6	x10
16		8.0	24.0	4.7	100.53	4,723.5	x10
:17		8.5	25.5	4,9	106.81	5,233.2	x10
18		9.0	27.0	4,8	113.10	5,428.8	x10
19		9.5	28.5	4.8	119.38	5,726.4	x10
20		10.0	30.0	4.7	125.66	5,907.9	x10
22		11.0	33.0	4.4	138.23	6,080.8	x10 .
24		12.0	36.0	4.7	150.80	7,087.6	x10
26		13.0	39.0	4.7	163.36	7,679.8	x10
, 28		14,0	42.0	4.3	175.93	7,563.7	xIÓ
30		15.0	45.0	4.3	188.50	8,105.5	x10
32		16.0	48.0	4.1	201.06	8,241	x10
34		17.0	51.0	4.1	213.63	8,774	x10
36		18.0	54.0	3.7	226.19	8,362	×10
38		19.0	57.0	3.4	238.76	8,126	x10
40		20.0	60.0	3.4	251.33	8,534	x10
42		21.0	63.0	3.3	263.89	8,712	x10
44 :		22.0	66.0	3.4	276.46	9,384	x10
46		23.0	69.0	3.2	289.03	9,248	x10
48	2	24.0	72.0	3.3	301.59	9,966	x10
50	ч. ÷	25.0	75.0	3.2	314.15	10,048	x10
52 :		26.0	78.0	3.1	326.72	10,137	x10
-54 -	:	27.0	81.0	3.8	339.29	9,492	x10
56 -		28.0	84.0	3.3	351.85	11,616	x10
58 -		29.0	87.0	3.4	364.42	17,376	x10
60 -		30.0	90.0	3,2	376.99	12,064	x10
64		32.0	96.0	3,4	402.12	13,668	x10
68		34.0	102.0	3.2	427.25	13,664	x10
12	1	36.0	108.0	2,8	452.38	12,656	x10
76	·· .	38.0	114.0	2.8	477.52	13,384	x10
80		40.0	120.0	2.5	502.65	12,575	x10
84		42.0	126.0	2.8	\$27.78	14,784	x10
88		44.0	132.0	2.8	552.92	15,484	x10
92 -		46.0	138.0	2,4	578.05	13,872	x10
96		48.0	144.0	2.3	603.18	13,869	x10
100		\$0.0	150.0	2.1	628.31	13,188	x10

 $\rho = 2\pi a R$

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OBSERVER:

N. Yunohara

DATE: 27th Aug., '82

対対人力

Depth (a)	Inpole $(\frac{3}{2})$	Outpole $\left(\frac{3a}{2}\right)$	R	2πа		Range
m					ρ	Kange
	0.5	m 1.6	Ω	m	Ω	
2		1.5	8.1	6.28	508.68	x10
3	1.0	3.0	7.4	12.57	930.18	x10
4	1.5	4.5	8.3	18.85	1,564.55	x10
	2.0	6.0	8.2	25,13	2,058.2	x10
5	2.5	7.5	8.2	31.42	2,574.8	x10
6	3.0	9.0	7.3	37.70	2,752.1	x10
7	3.5	10.5	7.3	43.98	3,212.0	x10
8	4.0	12.0	7.5	50.27	3,772.5	. x10
9	4.5	13.5	7.3	56.55	4,124.5	x10
10	5.0	15.0	7.3	62.83	4,584.4	x10
	5.5	16.5	7.3	69.12	5,044.3	x10
12	6.0	18.0	7.4	75.40	5,579.6	x10
13	6.5	19.5	7.3	81.68	5,956.8	x10
14	7.0	21.0	7.3	87.96	6,424.0	x10
15	7.5	22.5	7.1	94.25	6,688.2	x10
16	8.0	24.0	7.2	100.53	7,236.0	×10
17 _{20 1} - 5	8.5	25.5	7.2	106.81	7,689.6	x10
18	9.0	27.0	6.8	113.10	7,690.8	x10
19	9.5	28.5	6.8	119.38	8,112.4	xio xio
20	10.0	30.0	6.8		8,547.6	1
22	11.0	33.0	6.5	125.66		x10
24	12.0	36.0	5.6	138.23	8,983.0	x10
26	13.0	39.0	5.0 6.1	150.80	8,444.8	x10
28	14.0	42.0	5.8	163.36	9,967.4	x10
30	14.0		5.8	175.93	10,202.2	x10
32	16,0	45.0	5.6	188.50	10,933.0	x10
34		48.0	 A second sec second second sec	201.06	11,256.0	x10
36	17.0	51.0	5.8 5.2	213.63	12,412.0	x10
38	18.0	54.0		226.19	11,752.0	x10 1
40	19.0	57.0	4.8	238.76	11,472.0	x10
40	20.0	60,0	4.7	251.33	11,797.0	x10
	21.0	63.0	5,3	263.89	13,992.0	x10
44	22.0	66.0	5.3	276.46	14,628.0	x10
46	23.0	69.0	5.4	289.03	15,606.0	x10
48	24.0	72.0	5.5 State 3.5	301,59	16,610.0	x10
50	25.0	75.0	5.4	314,15	16,956.0	x10
52	26.0	78.0	4.7	326.72	15,369.0	x10
54	27.0	81.0	5.2	339.29	17,628.0	x10
56	28.0	84.0	4.9	351.85	17,248.0	x10
58	29.0	87.0	5.3	364.42	19,292.0	x10
60 16 2 3	30.0	90.0	4.9 1.5	376.99	18,473.0	x10
64	32,0	96.0	4.2	402,12	16,884.0	x10
68	34.0	102.0	4.6	427.25	19,642.0	x10
72	36.0	108.0	34 .1 555 (1	452.38	18,532,0	
76	38.0	114.0	3.4	477.52	16,252.0	x10
80	40.0	120.0	3.8	502.65	19,114.0	x10
84	42.0	126.0	3.6	527.78	19,008.0	x10
88	44.0	132.0	3.8	552.92	21,014.0	x10
92	46.0	138.0	3.2	578.05	18,496.0	x10
96	48.0	144.0	3.7	603.18	22,311.0	x10
100	50.0	150.0	4,0		25,120.0	x10
لمستقت		130,0		628.31		

 $\rho = 2\pi a R$

 $\frac{1}{2}$

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Kenya Soil Survey \$472/0%/RFM - 8th November, 1977

KSS Internal Communication No.7

PROPOSALS FOR RATING OF LAND QUALITIES

2ND APPPOXIMATION

(follow up of stencil S269 of 1-10-74)

The first draft of the "proposals for rating of land qualities" of late 1974 was used and tested during land evaluation exercises carried out for several soil surveys, in particular for the Kindaruma,

Kapenguria and Kwale reconnaissance surveys. During the land evaluation procedures more and more changes were made in the original "proposals". New approaches were tested and several ratings systems were completely changed.

It was felt timely to compile a second approximation of the "proposals" taking into account the experience gained during the last three years when applying the ratings.

The first approximation was completely "overhauled" and it is felt that the new proposals will be much more applicable.

The second approximation is attached for your comments. The new rating system will be discussed during one or two technical meetings in the near future and you are requested to give your first comments as soon as possible in writing.

It is planned to publish the third approximation (taking into account comments of the KSS staff) in January 1978. This third approximation should be tested then in the forthcoming land evaluation exercises.

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H.M.H. Brawn R.F. van de Weg

- AVAILABILITY OF WATER (a)
 - Climate/ccological zones (climatic characteristics) a1) see separate stencil with final proposals. (Braun)
 - cf. Technical Meeting 17th Nov. 1977
 - Soil moisture storage capacity (soil characteristics) a2)
 - depends on: TPAM (total productive available moisture)
 - (function of depth and texture)
 - hindrance to root development.
 - **(I)** If sufficient pF data are available:
 - Calculate Productive available moisture (PAM) which is taken as pF 2.3 minus pF 3.7.

Calculate TPAM for effective soil depth. (total productive evailable moisture) Profile

Example:

1.18

PAR

Al horizon	123 (or 12 rm water per	10cm
A3 horizon	soil depth) 8%	
Bl horizon	7%	
B2 horizon	67.	
C horizon	57	

TPAM for whole profile $1 \times 12 + 1 \times 8 + 2 \times 7 + 4 \times 6 + 2 \times 5 =$ $|q| \leq \kappa^{-\frac{1}{2}}$ 12 + 8 ÷ 14 + 24 10 68

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- Pating: Soil moisture storage capacity:
 - rating TPAM 1 very high 160-200 2 high 120-160 3 moderate 80~120 104 40-80 4 5 very low less than 40

Adjust final rating taking into account <u>"hindrance to root development"</u> no adjustment if hindrance is slight: in case of oxic, argillic and cambic horizon

cambic horizon downgrade rating with <u>one</u> classes if hindrance is moderate: in case of pronounced argillic horizon/

pronounced sedimentary stratification

가슴 옷을 한 것 같은 것 이 가지? 말을 것

downgrade rating two classes if hindrance is strong: in case of planic horizon (abrupt textural change)/

natric horizon/impermeable layer

II) If no or unreliable P^F data are available, the TPAM can be estimated from the table below.

This table was derived from graphical correlations between water and clay content and equations derived from these graphs. (Braun, internal paper KSS or Kwale rec. survey)

TPAM for different soil depths and textures

	Ť	E X	T	U	P. E
DEPTH	LS	SL	SCL	SC	C
25 cm (very shallow)	8	10	14	20	28
50 cm (shallow)	15	20	28	40	55
80 cm (moderately deep)	24	32	44	64	83
120 cm (deep)	36	48	66	96	132
150 cm (very deep)	45	1	33	120	165
180 cm (extremely deep)	54	72	99	144 .	198

(b)

CHEMICAL SOIL FERTILITY

components for rating: (compound topsoil samples 0-30 cm)

1. CEC soil or [₹] cations

2. Available nutrients

3. Hineral reserve (total mineral content of soil)

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subrating

I	CECp or Scations	sub- rating	1) 			an a	
R ₁	m.c.7	P2	Hp meZ	exch.K* mo%	avail.P** ppm	Psorbtion*** Z	C X
1.	>16						
2	12-16	1.1 × 1	0-tr	>0.6	>60	<25	>2.5
3	6-12	2	tr-0.5	0.2-0.6	20-60	25-50	1.5-2.5
4	2-6	3	> 0.5	0-0.2	< 20	>50	0-1.5
5	0-2						

- 3 -

III

25% HCl extractable

sub-				<u> </u>			
rating R3	Ca ne%	Mg me%	K ne%	P ppm			
1 2 3	>75 25-75 0-25	> 40 1640 0-10	>25 5-25 0-5	>500 250-500 0-250			
Subratin	ng:			Subrąt	ing:		
<u>11</u>	2 [≃] 0~5 ≃ 6-10	I	$R_2 = 1$ W = 2	<u>111</u> \$	R3 =	0-4 · 5-8	$ > \frac{12}{5} = 1 $
17 FF	= 11-15		" ⊨ 3	. 1	:;; =	9-12	^{#1} ≃ 3

For final rating:

Pf is a combination of F1 P2 R3 (3 digits) in 5 classes, which are set out in a trapezoid arrangement (see p.4)

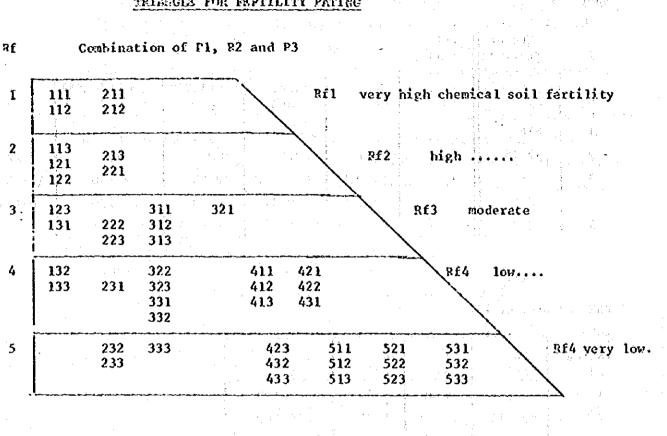
Footnotes:

* exch.K must be > 2.5% of < cations

** Avail.P figures depict Mehlich procedure. For Olsen extraction different levels are to be set.

*** see Bache.

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TRIANGLE FOR FEPTILITY PATING



(c) Presence/hazard of SALINITY:

cf. FAO classification:

saline phase: ECe of more than 4 within 100 cm of surface Solonchal:: "high salinity": ECe of more than 15 within 125 cm if coarse

texture

ECe of more than 15 within 90 cm if medium texture ECe of more than 15 within 75 cm if fine texture

ECe of more than 4 within 25 cm if pH is >8.5As root systems of most crops are best developed in the upper 30 cm of the soil, more weight is given to the surface soil and less severe

criteria are used for the subsoil. For tree crops however, the more severe criteria of the surface soil should be maintained for the whole profile.

			:		
Rating	ECe (0-30cm)		<u> </u>	ECe (30-120cm)	'
1	<2		18.5	<4	•
2	2-4			4-8	7
3	4-8	1		8-15	
4	8-15			16-24	
5	> 16			>24	

ECe electrical conductivity of saturation extract

 (d) <u>Presence/hazard of ALKALIKITY: /sodicity</u> or alkalization
 cf. PAO classification: <u>sodic phase</u>: more than 6% saturation with exch. Na within 100 cm <u>natric B</u>: more than 15% sat. with exch. Na within the upper 40 cm of the horizon.

Fating	ESP (0-30cm)	ESP (30-100cm)
1	≪6	<15
1 2 - Jack 1 - 1	6-15	15-30
₫ 3 - 6 ¹ 5 , 689 - 194	15-30 ja hara a hara	30-50
4	30-50	>50
5	>50	

(for note see salinity)

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К (e) RESISTANCE TO EROSICH: (sheet and gully crosion hazard after clearing) I sheet erosion depends on: A) slope class 3) climate C) slope length 2 description of "erodability" (before called "susceptability to sealing") D) Contract and the second second $\theta > 1$ subrating slope classes A) slope class rating A + AB1 dominant, so "heavy" subrating B + BC + C3 CD + D E+F 7 subrating climate: **B**) rating eco zone I and II , C III 1 IV and V 2 subrating slope length Ç) slope length rating 1 less than 50 m 2 50 to 200 m 3 more than 200 m subrating "erodability" D) "erodability based on lab. data hased upon: 1. organic matter content 2. flocculation index silt/clay ratio in topsoil 3. bulkdensity in topsoil 4. ad 1: 7C 1-27 2 flocculation index ad 2: >70% 1 1 ri 50-70% 2 <50% 3 -118--

ad 3) silt/clay ratio < 0.20 1 0.20-0.40 2

ad 4) bulkdensity

< 1.2 1 1.2-1.5 2 > 1.5 3

subrating "erodability" to be found by adding 1, 2, 3 and 4;

	subrating "erodability"	<pre></pre>	\$ 1, 2, 3
1	none	4-5	3-4
2	slight	6-7	5
3	moderate	8-9	6
4	strong	10-11	7
5 _	very strong	12	8-9

note: not applicable when every sandy topsoil: LS(excl. vfLS), S,SL (excl. fSL and vfSL) these soils fall directly in subrating 1. Proposals are awaited how to bring field observations and infiltration measurements into line with the "erodability" rating based on lab. date.

Combined the subratings A), B), C) and D) give the following final rating for RESISTANCE TO ENOSION:

final rating			combined subratings			
1.	very high rea	sistance	3-4-5			
2.	high	77	6-7-8			
3.	moderate	te tt i han star i star en ser en s	9-10-11	· · · · · ·		
4.	slight	t 👬 👘 🖓 Ala 🖓 Ala 🦉	12 -1314	· ·		
5.	very slight	• • • • • • • • • • • • • • • • • • •	15-16-17			
-						

rating depends on:

Alternative proposal by Kisii group for sheat erosion hazard

A) Slope classes

B) Climate

C) "erodability"

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E); see above

"erodability" **c)**:

.

soil characteristics: rating 1 no problem C1)

1.1.1.1.1.1.1.1

.

rating 2 soils on granite,

21.1.1.1.1

quartzite or for soils with a silt/clay ratio in the topsoil. higher than 0.5.

rating 3 ... soils like those of rating 1, but without a lussic topsoil

C2) infiltration rates: rating 0 for Nitosols Luvisols, Luvic Phaeozeus, Rumic Acrisols and Rumic in and **Ferralsols**

rating 1 for shallow soils

(Rankers, Lithosols, Cambisols) and moderately well to imperfectly drained soils (gleyic Luvisols, Vertisols)

> rating 2 for Planosols and Solonetz soils

C3)

 \odot

Note:

Pun-off hazard: rating 1 if a paralithic contact (semi-permeable layer) occurs within 50 cm depth, or an impermeable layer between 50 and 100 cm depth) rating: 2 if an impermeable

layer (claypan, or continuous laterite) occurs within 50 cm depth

Final rating for sheet erosion resistance is found by adding up subratings A, B; C1, C2 and C3

ξ Α, Β,	C1, C2, C3	resistance to sheet	erosion
	0-3	same stars very high	
	4-6	states slight	the second second
	79	moderate	an a
	10-12	strong	an a
	13-15	very strong	

This rating was devised in particular reconnaissance soil map.

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~ Q ...

- Gully erosion (proposal of Kisii group) ÷ ... depends on: (only applicable if subrating D is 1 or more)
 - A) Slope class
 - Climate . E)
 - **C)** Run-off hazard
 - D) "soil characteristics"

Subrating A:	see above
Subrating B:	see above
Subrating C:	Run-off hazard:

rating:

E 2 1

description

in the second second 2

paralithic contact (semi-permeable layer) within 50cm depth or impermeable layer between 50 and 100cm depth innermeable layer (claypan, or continuous laterite) within 50cm depth

e seguere de la composition de la comp

and the spins

Subrating D: "soil characteristics"

factorial and arating: S. A. B. Berner and Oaks 1 te Keriji 2 at his second hant ya nekki

Σ

10-12

13-15

description systems and the no soil hazard Vertisols and Management Vertisols with a dense compact subsoil and planosols with a dense layer deeper than 50cm

Planosol with a dense layer shallow wer than 50 cm and Solonetz soils.

Final subrat	ing: adding up	of subrating A,B,C,D,
A.B.C.D		esistance to gully crosion
0-3		very high
4-6		slight
7-9		moderate

moderate strong very strong

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		- 10 -	:	
(f)	POSSIBILITIES OF	MECHANISATION		lang sa San Dan Ka
(-7	(possibilities fo	r the use of agricultur	al implements)	
			et.	
	based out 1)steepn	ess of stope ess/rockiness/shallowne	ee of the soil	$X_{i} = \left\{ \frac{\partial^{2} \theta}{\partial t} \right\}^{-1} = \left\{ \partial$
		bility" of the soil	55 of the soll	
	4)slope			
	5)width	· · · · · · · · · · · · · · · · · · ·		
		•		
		steepness of slope:		n de l'heren (en streffaffen) Ø ∀ N
	rating: 1	syobe classes:	A-B-C (up to CD-D (up to	
	: 2	•	DE-E (up to	
	;) , /	*	F (up to	
-	energe ele ser art. • S		G (over 7	
	4 5 5 5 5 5 5 5 5 5 5			
1.		stoniness/rockiness/sh		
		non-stony, non		
		fairly stony, f	-	for snallow
		stony-rocky and		
	: 4	very stony, ver	-	VEEY BISITION
			an andlar ware	noolur
	≴ , 5 √	exceedingly sto	ny, and/or very	rocky
	3. <u>Subrating for</u>	"workability" of the s	oil (éasé of cu	ltivation)
	3. <u>Subrating for</u> For practical reas	"workability" of the s sons use is made of dry	oil (éasé of cu and moist cons	ltivation) istence:
	3. <u>Subrating for</u> For practical reas subrating r1:	"workability" of the s sons use is made of dry dry consistence	oil (éasé of cu and moist cons subrating t2:	ltivation) istence: Hoist consistence
	3. <u>Subrating for</u> For practical reas subrating r1: 1	"workability" of the s sons use is made of dry dry consistence loose	oil (éasé of cu and moist cons subrating t2: 1	ltivation) istence: <u>Hoist consistence</u> loose
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2	"workability" of the s sons use is made of dry dry consistence loose soft	oil (éasé of cu and moist cons subrating t2: 1 2	ltivation) istence: <u>Hoist consistence</u> loose very friable
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard	oil (éasé of cu and moist cons subrating t2: 1 2 3	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard	oil (éasé of cu and moist cons subrating t2: 1 2 3 4	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard hard
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard	oil (éasé of cu and moist cons subrating t2: 1 2 3	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard	oil (éasé of cu and moist cons subrating t2: 1 2 3 4	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard hard
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard very hard g for "workability";	oil (éasé of cu and moist cons subrating t2: 1 2 3 4	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard hard very hard/extr.h.
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5 combined subrating	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard very hard g for "workability";	oil (éasé of cu and moist cons subrating t2: 1 2 3 4 5	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard hard very hard/extr.h.
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5 combined subrating combined subrating	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard very hard g for "workability";	oil (éasé of cu and moist cons subrating t2: 1 2 3 4 5 rating "workAbi	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard hard very hard/extr.h.
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5 combined subrating corbined subrating 2-3	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard very hard g for "workability";	oil (éasé of cu and moist cons subrating t2: 1 2 3 4 5 rating "workabi 1	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard hard very hard/extr.h.
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5 combined subrating combined subrating 2-3 4~5	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard very hard g for "workability";	oil (éasé of cu and moist cons subrating t2: 1 2 3 4 5 rating "workabi 1 2	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard hard very hard/extr.h.
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5 combined subrating 2-3 4-5 6-7	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard very hard g for "workability";	oil (éasé of cu and moist cons subrating t2: 1 2 3 4 5 rating "workabi 1 2 3	ltivation) istence: <u>moist consistence</u> loose very friable slightly hard hard very hard/extr.h.
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5 combined subrating combined subrating 2-3 4-5 6-7 8-9	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard very hard g for "workability": g (r 1 + r2)	oil (éasé of cu and moist cons subrating t2: 1 2 3 4 5 rating "workabi 1 2 3 4	Itivation) istence: <u>moist consistence</u> loose very friable slightly hard hard very hard/extr.h.
	3. <u>Subrating for</u> For practical reas <u>subrating r1:</u> 1 2 3 4 5 combined subrating combined subrating 2-3 4-5 6-7 8-9	"workability" of the s sons use is made of dry dry consistence loose soft slightly hard hard very hard g for "workability": g (r 1 + r2)	oil (éasé of cu and moist cons subrating t2: 1 2 3 4 5 rating "workabi 1 2 3 4	Itivation) istence: <u>moist consistence</u> loose very friable slightly hard hard very hard/extr.h.

note: 'downgrade rating 'workability' <u>one</u> class if sticky and plastic when wet, and downgrade <u>two</u> classes if very sticky and very plastic when wet

note: in future use should be made of results "tooth-test" in field; experimental data may call for new rating system.

4. Subrating for slope	length bet and the start she had a start she
rating: 1	slopes longer than 200m
, 1997 - 1997 - 199 2 2006 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 2007 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997	slopes from 50 to 200m slopes shorter than 50m
5. Subrating for minim	um width of field

4 A. 4	Ji bootucing for sitter	AGIA WITCH OF FICIA	가장(Albert 문화)에서 Albert (Albert - Albert	
a ter p	rating: all the second as the	more than 100m		
Domeski je	the second second second second second	more than 50m, less	than 100m	ł.
	3	less than 50m		

To find final rating make use of tables underneath . <u>Most limiting subrating will determine final rating for the land</u> quality under consideration.

Cultivation by hand only:

final rating	stee	epness	slope	stoniness etc.	"workability"
1. very good	2.4 5	1		61 (A) 2 (B)	2
800d States	: *	2		-3 - 3 - 8	3 an 1977 an
3 modérate		3		tatut (4 -2-2)	4
4 . Apoor and a second		4		5 (5 (2) ¹	5
5 very poor	1	5		5	2 5

Cultivation with mechanisation

	final rating	steepness slope		stoniness etc.	"vorkabi li ty"	slope length	width of field
1	very good	1 (1)		1	3	1	1
2	good	1 (2)		2	4	2	2
3	moderate	2 (3)		3	5	. 3.	3
4	poor	3	, t	4	5	3	3
5	very poor	4	1.1	5	5	5	5

()applies to ox cultivation

an a	
	- 12 -
	NCE/HAZARD OF WATERLOCGING
(g) PRESE	NCE/HAZARD OF WATERLOCGING
Avail	ability of oxygen for root growth
ratingst	drainage classcolour and mottling

	<u></u>		and a star way and a
1.	No	well to excessively drained soils	no distinct nottling within 90cm, and/or reduced colours within 150 cm
2.		moderately well drained soils	50cm and/or reduced colours
3.	Noderate	imperfectly drained soils	no reduced colours or distinct mottles within 50 cm
4.	High	poorly drained soils	partly reduced colours and distinct mottles within 50 cm
5.	Very high	very poorly drained soils	predominantly reduced colours
,		المراجعة من معنية من المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة الم المراجعة المراجعة الم	
(h)	FLCC DUIG H	L'ZATD	
			· · · · · · · · · · · · · · · · · · ·

rating	flooding frequency	inundation frequency/duration
1. very low	ev. 10 years or more	nóne:
2. low	ev. 5 to 10 years	1-2 months every 3-5 years
3. moderate	ev. 3 to 5 years	2-3 months in 5 out of 10 years
4. high	ev. 1-3 years	2-4 months almost every year
5. very high	ev. year	more than 4 months every year
· *		

for cropping (clearin rating: 1. none to very slight 2. slight 3. moderate 4. high 5. very high		rable or unfavourable effec physiognomic type: grassland (G) bushed wooded grassland wooded grassland (WG) bushed grassland (WG) bushed grassland (BG) wooded bushed grassland bushland (D) wooded bushland (WB) bushed woodland (BW) woodland (W) dense bushland (Bd) dense woodland (Bd) dense woodland (Wd) bushland thicket (Bt)	(BWC (WBC
 rating: none to very slight slight slight moderate high very high very high For percentages tree/scrub 		grassland (G) bushed wooded grassland wooded grassland (WG) bushed grassland (WG) wooded grassland (BG) wooded grassland bushland (D) wooded bushland (WB) bushed woodland (BW) woodland (W) dense bushland (Bd) dense woodland (Wd)	(MBQ)
 none to very slight slight slight moderate high very high very high percentages tree/scrub 		grassland (G) bushed wooded grassland wooded grassland (WG) bushed grassland (WG) wooded grassland (BG) wooded grassland bushland (D) wooded bushland (WB) bushed woodland (BW) woodland (W) dense bushland (Bd) dense woodland (Wd)	(MBQ)
 none to very slight slight slight moderate high high very high very high For percentages tree/scrub 		bushed wooded grassland wooded grassland (WG) bushed grassland (BG) wooded bushed grassland bushland (B) wooded bushland (WB) bushed woodland (BW) woodland (W) dense bushland (Bd) dense woodland (Bd) dense woodland (Wd)	(MBQ)
 moderate high very high very high For percentages tree/scrub 		wooded bushed grasslard bushland (B) wooded bushland (WB) bushed woodland (BW) woodland (W) dense bushland (Bd) dense wooded bushland (dense bushed woodland (dense woodland (Wd)	(/8q.)
 moderate high very high For percentages tree/scrub 		wooded bushland (WB) Eushed woodland (BW) woodland (W) dense bushland (Bd) dense wooded bushland (dense bushed woodland (dense woodland (Wd)	
 high very high For percentages tree/scrub 		dense bushland (Bd) dense vooded bushland (dense bushed voodland (dense woodland (Wd)	
For percentages tree/scrub	nigasin ang Dagatèn kanang	bushland thicket (Bt)	
		wooded bushland thicket	(HB1
for Soil Profile Description	cover in phys	slognowic types see: Guide	lines
	on Forms, ster	ncil \$202/JK/RFW - 9/1/74	
	a a herri da da		х. Х
(j) Presence of overgrazin	ng (and other	mismanagements)	
······································		s and estimates of the surv	evors
1 1 1 1 1 1 1 1 1 1	· · · · · · · · · · · · · · · · · · ·	a statuli a statuli a statuli sa s	- ,
<u>rating:</u>			
 no to very sligh actual production 	t overgrazing/ n = 80-100Z of	f potential one	
2. slight overgrazin actual production	n = 60-80% of	potential one	
3. moderate overgraa actual production	zing/		
4. strong/sovere over actual production	ETGEGOTER/	picad days constants	

actual production = 0-20% of votential one

(k) Conditions for gemination (seedbed 0.a.)

۹Ė., for seedling establishment)

("tilth")

(

soil noisture storage capacity topsoil depends on:

structure topsoil/consistence

"susceptability to (re) sealing and crusting"

ad 1) Soil moisture storage capacity: the higher the moisture c. the greater the chance that a seed germinates and survives the y 1. 7.

early growth stages.

- ad 2) Contact of soil with seed; field structure might be used and perhaps the results of aggregate distribution of our future field experiments.
- "susceptability to (re) sealing and crusting: rating based ad 3) on lab. tests, field observations etc. See part on resistance to erosion

Preliminary proposal:

ra	tine: tine: 	topsoil structure	"erodability based on lab. data"
1	very high	single grain, crumby, granular	4 -5
2	high	medium subangular hlocky	6-7
3	moderate	coarse subangular blocky	89
4	1ow	massive	10-11
5	very low	platy	12 marshi 13 marshi 13 marshi 13 marshi 13 marshi 13 marshi 13 marshi 14 marshi 14 marshi 14 marshi 14 marshi 1

The rating is determined by any one of the libted characteristics, singly or in combination with the other.

\$ 5 .

在自己已经 法正常权 (1) Availability of foothold for roots

> up till now only used in "Land utilization type: Forestry/Silviculture) Criterion taken: depth to bedrock the provide the segmentation of

ra	ting:	depth to bedrock	depth classes
	very high high	tiore that 150cm 80 to 150cm	deep
3	moderate	50 to 80cm	moderately deep
4	low	25 to 50cm	shallow
5	very low	less than 25cm -126-	very shallow

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