

No. 1
Jan.-Feb. 1928.
STONYHURST COLLEGE OBSERVATORY
BLACKBURN, ENGLAND.
 $\phi=53^{\circ} 50' 40''$ N. $\lambda=2^{\circ} 28' 12''$ W. $h=116$ m.

Lithologic Foundation : Millstone Grit over Carboniferous Limestone Shales. Time : Mean Greenwich, 0 or 24=Midnight.

INSTRUMENTS.

	MASS	COMP.	T_0	ϵ	V	1" TILT
II Milne	1 Kg.	E-W				
II Milne-Shaw ...	1 lb.	E-W	12.05	20:1	150	26.2 mm.

No.	Date	Phase	Time			Period	Ampl. A_E	Δ	REMARKS
			h.	m.	s.				
1.	Jan. 1.	e	10.	17.	-	s.	μ	km.	Small.
		M.		23.	30.				
2.	4.	eL	22.	34.	-				Small. Confused by wind tremors.
		M.		40.	30				
3.	6.	P	19.	42.	24				Destructive near Mt. Kenia, C. Africa.
		S.		50.	54				
		eL		59.	-				
		M ₁	20.	09.	55	12	33	7020	
		M ₂		10.	02				
		F.	21.	40.	-				
4.	10	e	2.	58.	17				Small. Confused by micros.
		M.	3.	06.	40				
		F.		12.	-				
5.	12.	eL	14	31.	-				Small.
		M.		08.	-				
		F.		24.	-				
6.	18.	eL	13.	11.	-				Very small.
7.	30	e	4.	14.	30				Very small. Confused by micros.
		M.		22.	40				
		F.		30.	-				
Very heavy micros 8 th - 10 th , and 24 th - 27 th .									

8.	Feb. 1.	i	0.	54.	05				small very rapid vibrations of uncertain origin. May be slight local shocks, or due to wind or vibration.
9		i.	3.	17.	04				
		F.			11				
10		i.	3.	17.	17				very small.
		F.			29				
11.	3	M ₁	14.	24.	-				very small.
		M ₂		26.	30				
12.	4.	e	7.	17.	-				very small.
		M		22.	-				
13.	6	eL	4.	45.	-				Small. Confused by micros.
		M		51.	-				

No. 2.

February-March 1928.

STONYHURST COLLEGE OBSERVATORY
BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl. A _E μ	Δ km.	REMARKS
			h.	m.	s.				
14.	Feb. 7	M	0.	33.	-			small.	
15.	7	e	0.	47	-			small.	
		M.	1.	04.	30				
	9-11		Very heavy micros.						
16.	16.	eL	8.	53.	-			very small.	
17.	21.	eP?	19.	58.	50		6810	P, very doubtful.	
		S.	20.	07.	09				
		M.		18.	44			small.	
		F.	21.	20	-				
18.	24.	e	14.	36.	14				
		M.		48.	27			very small.	
		F.	15.	02.	-				
19.	26.	e	1.	09.	20			very small.	
20.	26.	eS?	1.	37.	23				
		eL?		48.	43			small. no well-defined phases.	
		M.		59.	-				
		F.	3.	-	-				
21.	29.	eL	23.	30	-			very small.	
22.	Mar. 7.	iP.	10.	59.	36		2160.	Epicentre, Calabria.	
		S.	11.	03.	13				
		L		05	15				
		M.		07	-			small.	
		F.		35	-				
23.	7.	eP.	23.	03.	29				
		L		20	-				
		M.		22	-				
		F.	24	-	-				
24.	9.	iP.	18.	18.	49		10,330	Epicentre: N. Sumatra	
		PR ₁		22.	13.				
		iS.		30.	03.				
		SR ₁		36.	15	20.	230	Amplitudes approx.	
		L		50	-				
		M ₁		58.	03	23	128		
		M ₂	19.	00.	33	20	130		
		M ₃		02.	23	18	109		
		M ₄		06.	09	18	118		
		M ₅		08.	18	18	173		
		M ₆		11.	21	16	87		
		M ₇		14.	08	17	85		
		F	21.	32	-				

No. 3.

March, 1928.

STONYHURST COLLEGE OBSERVATORY
BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl. A _E μ	Δ km.	REMARKS
			h.	m.	s.				
	Mar. 10.		Undulations of small amplitude and about 1 min. period continuing from about 1h. 30m. to 3h. 30m. and intermittent by to 9h. with more marked movements as below,						
		e.	7.	30	-				
		e		42	-				
		e	8.	40	-				
	10-11		Small undulations continuing to about 8 ^h on 11 th .						
25.	13.	e	19.	19.	32				
		eL		34	-				very small.
		F.	20.	11	-				
26.	13.	e	20.	25.	25				very small.
27.	16.	eP.	5.	20.	55				
		L	6.	14.	-				
		M ₁		27.	05	25.	91.		
		M ₂		33.	10				
		M ₃		36.	45				
		M ₄		39.	30				
		M ₅		50.	25				
		M ₆		59.	30				
		M ₇	7.	05.	30				
		F.	9.	-	-				
28.	22	P.	4.	29.	19				P obscured by bad focus at end of sheet.
		PR ₁		32.	13				
		iS.		39.	21				
		PS?		39.	49				Epicentre. Central America
		L		54.	34				
		M ₁	5.	00.	20	18	300		
		M ₂		04.	50				
		M ₃		07.	45				
		M ₄		11.	10				
		M ₅		13.	35				
		F.	7	-	-				
29.	25.	e	5.	54.	55				
		eL	6.	20	-				very small.
		F.		50.	-				
30	26.	eP.	14.	43.	27				Epicentre. N. Italy.
		eL		47.	06				
		M		47.	51				very small.
		F.	15	05.	-				
31.	27.	P.	8.	35	26				Epicentre. as preceding.
		S.		37.	43				
		L		39.	03				
		M.		40.	23	12.	45.		
		F.	9.	20.	-				

J. P. Howland S. J.
Observer.

No. 4.

April 1928.

STONYHURST COLLEGE OBSERVATORY

BLACKBURN, ENGLAND.

$\phi=53^{\circ} 50' 40''$ N. $\lambda=2^{\circ} 28' 12''$ W. $h=116$ m.

Lithologic Foundation : Millstone Grit over Carboniferous Limestone Shales. Time : Mean Greenwich, 0 or 24=Midnight.

INSTRUMENTS.

	MASS	COMP.	T ₀	ϵ	V	1" TILT
I Milne ...	1 kg.	E-W				
II Milne-Shaw ...	1 lb.	E-W	12.05	20.1	150	26.2 mm.

No.	Date	Phase	Time			Period s.	Ampl. A _E μ	Δ km.	REMARKS
			h.	m.	s.				
34.	April 3.	eL	17	15	-			Small & indefinite. Epicentre, Peru. (13° S. 69.5° W.)	
		F		26	-		10,170		
35.	9.	eP	17	46	46				
		iS		57	50				
		pS		58	56				
		L	18	14	-				
		M ₁		21	30	25	30		
		M ₂		29	30	20	25		
		F	19	32	-				
36	12	eL	19	02	-			v. small.	
		M		09					
		F		20					
37.	14	iP	9	04	42			Bulgaria (42° N. 26° E)	
		iS		08	55		2720		
		M		15	08	10	228		
		F	11	20	-				
38	17.	P	3	37	22			Mexico. (16.2° N. 95.6° W.) J.S.A.	
		iS		47	04		8280		
		L	4	03	-				
		M		13	-	17	15		
		F	5	07	-				
39	18	iP	19	27	42			Bulgaria (42° N. 25° E)	
		iS		31	39		2490		
		M ₁		35	22	18	466		
		M ₂		38	12	10	144		
		M ₃		41	-	10	136		
		F	9	40	-				
40	18	eS	23	23	47			v. small.	
		M		29	47				
		F		50	-				
41	22	e	20	08	15			v. small - Bulgaria. Corinth.	
42	22	eP	20	19	04		2700		
		iS		23	15				
		L		26	-				
		M		30	-	15	36		
		F	21	20	-				

No. 5.
April - May 1928,
STONYHURST COLLEGE OBSERVATORY
BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl.	Δ km.	REMARKS
			h.	m.	s.		μ_e		
43.	April 25	eP	9	30	49			2530	Bulgaria
		eS		34	49				
		M ₁		40	30		Small.		
		M ₂		45	30				
		F	10	-	-				
44	27	eP?	20	47	56			9420	
		eS		58	30				
		?		59	37				
45	28	Rest of record illegible from entanglement.						2470	Bulgaria(?)
		eP?	18	04	04				
		eS?		07	59				
		M		13	50		v. Small		
		F		25	-				
46	May 1	eS	19	12	55				
		eL		24	-				
		M		38	30		v. Small		
		F	20	20	-				
47	2	eL	20	46	-				
48	2	eP	22	00	16			2810 Km. Asia Minor.	
		eS		04	35				
		M ₁		09	-				
		M ₂		13	-				
		F	23	-	-				
49	8	eP?	4	56	42			N. of Kamchatka	
		eS	5	03	27		v. Small		
		F		40	-				
50	12	eP	20	37	36			6180	Atlantic Ocean N. of St Paul's Rock.
		S		45	20				
		eL		54	-		v. Small		
		F	21	25	-				
51	14	iP	22	27	33			9380	Columbia-Ecuador
		iS		37	51				
		L		55	-				
		M ₁	23	01	30	20	120		
		M ₂		09	30	20	85		
		M ₃		12	-	20	60		
52	15	iP	02	49	03			9000	
		S		59	20				
		eL	03	19	-		Small		
		F	04	20	-				

No. 6.

May (cont'd) 1928

STONYHURST COLLEGE OBSERVATORY
BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl. A_E μ	Δ km.	REMARKS
			h.	m.	s.				
53	May 19	eS? eL F	9	55	26 40 -			v. small	
54	26	eL F	6	07	40 -			v. small.	
55	26	eL F	18	05	- 10			v. small	
56	27	P PR ₁ PR ₂ PR ₃ S SR ₁ L M ₁ M ₂ M ₃ M ₄ M ₅ M ₆ F	10	02	44 01 50 32 55 34 05 15 40 50 25 10 20 -			8880	N. Japan.
						26	250		
						22	198		
						20	115		
						18	108		
						18	108		
						15	71		
57	28	eL F	7	56	- 21			v. small	
58	28	eS? eSR ₁ ? L F	15	58	19 39 - 05			small	
59	31	eL F	21	55	- 05			v. small	
60	31	e e eL F	23	48	54 24 38 10				

No. 7

June 1928

STONYHURST COLLEGE OBSERVATORY
BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl.	Δ km.	REMARKS
			h.	m.	s.		μ		
61	June 1	Moderate Earthquake between 13h. & 14h. Record illegible owing to tilting.							
62	3	eS?	8	54	04				
		L	9	19	-				
		M ₁		20	-				
		M ₂		21	40				
		M ₃		22	40				
		M ₄		27	-				
		F	10	30	-				
63	8	eL	15	53	-			Athens?	
		M	16	-	-		V. small		
		F		50	-				
64	15	eP?	6	26	16			10,600	
		PR ₁		30	12				
		S ₂ P ₂ S		36	30				
		SR ₁ ?		44	30				
		L	7	01	-				
		M		08	-	20	70		
		F	9	-	-				
65	15	eP?	17	29	38				
		L	18	05	-				
		M		12	-	25	60		
		F	19	-	-				
66	17	iP	3	31	35			9000	
		iS		41	52				
		L		57	38				
		M ₁		59	40	35	765		
		M ₂	4	03	30	22	395		
		M ₃		09	50	20	385		
		M ₄		11	10	18	464		
		M ₅		14	30	18	273		
		F	8	-	-				
67	17	e	22	43	22				
		eL	23	04	-			V. small	
68	17	P?	23	37	02			8730	
		S?		47	07				
		eL	0	06	40			V. small	
		F		45	-				

No. 8.

June (cont'd) 1928.

STONYHURST COLLEGE OBSERVATORY

BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl. A_E μ	Δ km.	REMARKS
			h.	m.	s.				
69	June 21	SR ₁ ?	11	21	40			Fiji Islands [J.S.A.]	
		eL		51	-		Small		
		F	13	35	-				
70	21	P	16	37	46		6720	Behring Strait 60°N. 157°W.	
		PR ₁		40	06				
		PR ₂		41	48				
		PR ₃		22	24				
		eS		46	01				
		S _e S?		47	45				
		SR ₁		50	26				
		SR ₃		53	31				
		L	16	57	-				
		M ₁	17	01	30	20	60		
		M ₂		02	06	22	67		
		M ₃		03	52	16	37		
		M ₄		06	50	16	44		
		M ₅		11	30	16	30		
		F	20	30	-				
71	24	eP?	4	43	38				
		iP		44	16				
		?		50	56				
		?		51	36				
		?		55	11				
		eL	5	09	-		v. small		
		F		20	-				
72	29	eP'	23	09	54				
		iPR ₃		18	44				
		SR ₁		30	46				
		SR ₂		36	04				
		?		48	54	40			
		L	24	-	-				
		M ₁	0	06	-	26	40		
		M ₂		16	-	20	25		
		F	2	-	-				
								J.P. Rowland S.J. <u>Observer</u>	

No. 9.

July 1928.

STONYHURST COLLEGE OBSERVATORY

BLACKBURN, ENGLAND.

$\phi=53^{\circ} 50' 40''$ N. $\lambda=2^{\circ} 28' 12''$ W. $h=116$ m.

Lithologic Foundation : Millstone Grit over Carboniferous Limestone Shales. Time : Mean Greenwich, 0 or 24=Midnight.

INSTRUMENTS.

	MASS	COMP.	T ₀	ϵ	V	1" TILT
I Milne ...	1 Kg.	E-W				
II Milne-Shaw ...	1 lb.	E-W	12.05	20:1	150	21.5mm

No.	Date	Phase	Time			Period s.	Ampl. A _E μ	Δ km.	REMARKS
			h.	m.	s.				
73	July 9	e	21	49	40				
		e	22	14	20				
		L		31	-		Small		
		F	24	-	-				
74	10	eL	2	45	-				
		M		54	20		Small		
		F	3	15	-				
75	11	eL	4	20	-				
		F	5	06	-		v. Small		
76	15	e	9	40	36				
		eS		43	31				
		M		48	25		Small		
		F	10	15	-				
77	18	iP	19	17	46				
		iS		28	21				
		L		48	-				
		M ₁		51	40	22	110		
		M ₂		59	-	16	44		
		M ₃	20	03	-	18	73		
		F	22	10	-				
78	20	e	0	05	34				
		eL		33	30				
		M		40	30		v. Small		
		F	1	30	-				
79	28	eL	20	44	-				
		F	21	-	-		v. Small		

Smyrna.

*Peru - 6.5S, 79.5W
(J.S.A. & USC 795)*

No. 10
August 1928.
STONYHURST COLLEGE OBSERVATORY,
NEAR BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl	Δ km.	REMARKS
			h.	m.	s.		μ		
80	Aug 3	eS?	12	01	48				
		eSR ₁		08	03				
		L		14	-		Small		
		F	13	-	-				
81	4	iP	18	38	28		5960	Mexico, Oaxaca - 16°N. 98°W.	
		iPR ₁		41	32				
		PR ₂		43	31				
		iS		48	43				
		SR ₁		-	-				
		SR ₂		58	22				
		L	19	04	-				
		M ₁		11	-	20	140		
		M ₂		16	-	20	170		
		M ₃		17	-	18	173		
		M ₄		18	30	17	114		
		F	22	30	-				
82	5	eL	13	38	-		Small		
		eL	14	43	-		"		
		F	15	-	-				
83	10	iP?	15	42	35		6150		
		eS?		50	17				
		?		57	05				
		M	16	05	-		v. Small		
		F		18	-				
84	12	e	8	33	37		v. Small		
		L	9	07	-				
		F		40	-				
85	15	e	15	46	12		v. Small		
		e		52	-		"		
		F	16	20	-				
86	15	eP	17	27	37		8960		
		iS		37	52				
		F	18	30	-				
87	19	eL	2	59	-		Small		
88	23	e	4	09	52				
		e:		13	27				
		M		27	-		Small		
		F		40	-				

No. 11
Aug. - Sept. 1928.

STONYHURST COLLEGE OBSERVATORY,

NEAR BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl A _E μ	Δ km.	REMARKS
			h.	m.	s.				
89	Aug 24	P	9	47	45			2020	Algiers
		S		51	08				
		L		53	00				
		M ₁		53	50	12	35		
		M ₂		54	30	10	34		
		M ₃		55	10	10	30		
		F	10	20	-				
90	24	i	22	06	26			v. small	
		M		57	-				
		F	23	20	-				
91	25	eL	0	26	-			v. small	
		M		41	-				
		F		50	-				
92	25	c	21	17	04			v. small	Fugo-Blavia.
		F		21	-				
93	Sept. 1	eP	6	19	01			6200	
		cPR ₃		23	18				
		cS		26	46				
		SR ₁		30	46				
		SR ₂		32	56				
		L		41	10				
		M		49	40	20	30		
		F	8.	-	-				
94	11	eP	12	48	08			7690	off coast of California 43° N. 132° W. (J.S.)
		PR ₂		52	28				
		S		57	21				
		L	13	10	-				
		M ₁		15	34	20	15		
		M ₂		18	20	18	14		
		M ₃		22	43	13	11		
		F	14	40	-				
95	12	e	1.	50	12			v. small	
		F	2	20	-				
96	13	e	3	40	26				
		e		52	12				
		i		54	54				
		L	4	22	-				
		M ₁		27	20	25	15		
		M ₂		33	20	25	22		
F	5	-	-						

No. 12
Sept.-Oct. 1928.

STONYHURST COLLEGE OBSERVATORY,
NEAR BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period	Ampl A _E	Δ	REMARKS		
			h.	m.	s.						
97	Sept. 18	M	17	58	-	12 ^{s.}	20 ^μ	6470	Epicentre vicinity of St. Paul's Rock		
		F	19	-	-					Earlier Phases lost in entanglement of trace.	
98	18	eP	20	02	36			6470	Indian Ocean		
		PR ₂	06	10							
		S	10	36							
		M ₁	28	30						Small	
		M ₂	36	10						"	
		F	21	10	-						
99	22	Eq. N. of New Hebrides of which no record, owing to stoppage of Motor Clock from 21d. 11h. to 22d. 11h.									
100	25	eP	8	14	57			8300			
		eS	24	40							
		M	55	-						Small	
		F	9	30	-						
101	27	P	0	54	29	28	20	6810	Epicentre: 12° N. 59° W. (USE & S).		
		S	1	22	48						
		M	13	30							
		F	2	-	-						
102	Oct. 4	e	11	17	37						
		M	36	-							
		F	50	-							
103	4	eP	18	32	47	16	5	6490	Abyssinia?		
		eS	40	49							
		M	50	-							
		F	19	50	-						
104	9	iP	2	13	18			8860	Mexico 15° N. 97° W. (USE & S, & J.S.A.)		
		PR ₁	16	23							
		PR ₂	18	18							
		iS	23	28							
		SR ₁	28	46							
		SR ₂	33	18							
		L	38	30							
		M ₁	49	40						20	300
		M ₂	52	-						15	224
		M ₃	53	30						15	212
F	7	05	-								

No. 13.
Oct. - Nov. 1928.

STONYHURST COLLEGE OBSERVATORY,
NEAR BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl	Δ km.	REMARKS
			h.	m.	s.		μ		
105	Oct. 12	eL M F	8	12	-				v. small
106	15	iP PR ₁ iS SR ₁ L M ₁ M ₂ M ₃ F	4	29	20 32 30 37 06 41 44 51 - 56 - 58 40 15 00 - 10 -			6220	Indian Ocean 25°5'N, 63°E (ca)
07	17	eL M F	16	23	-				small
08	19	eL ₁ eL ₂ M F	10	59	- 11 18 - 55 - 12 40 -				small
09	20	eL M F	13	33	- 45 - 14 - -				small
110	23	eL M F	17	36	- 18 36 - 19 - -				small. Confused by wind tremors.
111	25	e L M ₁ M ₂ F	12	56	- 13 11 - 14 - 19 30 14 - -				Epicentre: 11°2'N, 87°W (J.S.A.)
112	30	eL M	5	02	- 08				v. small
113	Nov. 1	iS? L M F	4	34	16 52 - 58 - 5 30 -				15 18 Mexico. 26°N, 106°W.

No. 4

 Nov. (cont^d) 1928.

STONYHURST COLLEGE OBSERVATORY,
NEAR BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl A _E μ	Δ km.	REMARKS
			h.	m.	s.				
114	Nov. 6	eP	4	24	43	25	20	9900	[Behring Sea?]
		ePR ₁		28	22				
		L	5	14	-				
		M		36	30				
		F	6	40	-				
115	20	S?	20	59	13	25	70	Chile [23°S, 75°W]	
		L	21	18	-				
		M		25	-				
		F	22	10	-				
116	22	e	9	03	-	30	42		
		L		16	-				
		M		21	-				
		F	10	20	-				
	23-27	Very heavy Micros 23d. to 25d. with Periods of about 10 sec. and range up to 200 μ (Ampl. 100 μ), and continuing very disturbed till 27th.							
117	28	e	7	46	-		small		
		M		50	-				
		F		56	-				
118	28	eP ₁ ?	11	01	50	30	42	12,800	epicentre: S.W. of Chile
		PR ₁		02	57				
		PR ₂		05	45				
		PS		13	05				
		SR ₁		18	45				
		L		39	-				
		M		46	-				
F	13	40	-						
119	29	eL	17	15	-		v. small		
		F		50	-				
120	29	e	18	32	-		small		
		L	19	23	-				
		M		48	-				
		F	20	32	-				
121	30	e ₁	0	10	-		v. small		
		e ₂		30	-				
		M		44	-				
		F	1	30	-				

No. 15.
December 1928.
STONYHURST COLLEGE OBSERVATORY,
NEAR BLACKBURN, ENGLAND.

No.	Date	Phase	Time	Period	Ampl A _E	Δ	REMARKS
122	Dec. 1	P	4 ^{h.} 20 ^{m.} 36	s.	μ	12,130	Chile, 34°S. 74°W. (ca)
		PR ₁	24 57				
		PR ₂	27 29				
		S _c P _c S	21 12				
		PS	34 19				
		PPS	35 27				
		SR ₁	40 39				
		PR' ₂ ?	44 13				
		PR' ₃ ?	48 49				
		L	55 -				
		M ₁	5 00 00	20	210		
		M ₂	08 20	20	390		
		M ₃	10 00	18	220		
		M ₄	13 -	16	190		
		M ₅	17 -	18	260		
		M ₆	18 -	16	180		
		M ₇	20 20	16	130		
		F	10 30 -				
123	1	e	19 32 -		v. small		
		F	50				
124	2	e PR ₁	4 39 15			12,100 (ca)	Chile - Repetition of Dec. 1.
		S _c P _c S	45 20				
		L	5 12 -				
		M ₁	19 00	22	28		
		M ₂	20 10	20	40		
		M ₃	25 -	18	40		
		M ₄	31 10	16	31		
		F	7 15 -				
125	3	eL	5 39 00				Tunis.
		M	41 30		v. small		
		F	46 -				
126	10	e	7 12 04				Ionian Sea.
		M	13 40		v. small		
		F	21 -				
127	12	eP'?	20 39 50			17,060	
		PR ₁	43 50				
		?	52 42				
		SR ₁	21 03 00				
		L	40 -				
		M	52 30	20	10		Numerous other small Max.
		F	23 15 -				

No. 16

Dec. (cont'd) 1928.

STONYHURST COLLEGE OBSERVATORY
BLACKBURN, ENGLAND.

No.	Date	Phase	Time			Period s.	Ampl. A_E μ	Δ km.	REMARKS
			h.	m.	s.				
128.	Dec. 14	eL F	1	03	-		0.5 small.		
129	19	PR ₁ S _c P _c S SR ₁ ? L M ₁ M ₂ M ₃ M ₄ W ₂ F	11	56	00			11,930	Philippine Islands S. of Mindanao. 6° N. 124° E (ca)
			12	02	10				
				11	05				
				20	35				
				27	-				
				35	35	21	230		
				37	35	20	190		
				40	30	20	210		
				42	35	20	190		
			13	52	-				
			14	45	-				
130	28	S _c P _c S SR ₁ L M ₁ M ₂ F	14	44	12			12,000 (ca)	Philippine Islands. Repetition of Dec 19.
				53	14				
			15	11	-				
				17	00	20	36		
				19	15	18	33		
			16	10	-				

J. P. Rowland S. J.
Observer.