

MANILA OBSERVATORY
 Mirador, Baguio City
 Philippines

BAGUIO
 SEP 9 OCT 57

MONTHLY SEISMOLOGICAL BULLETIN

Lat. N. 16° 24' 39"

Long. E. 120° 34' 47"

Alt. 1507 meters

Instruments (All Sprengenthers)

Hard Limestone Bedrock

<u>Type</u>	<u>Component</u>	<u>Period</u>		<u>Magnification (Dynamic)</u> <u>Synchronous</u>
		<u>Seism.</u>	<u>Galv.</u>	
Photographic	Z	1.41 sec	1.37 sec	Circa 3367
	E-W	10.90 "	11.70 "	2000
	N-S	1.84 "	1.67 "	2451
Photoelectric	N-S	11.80 "	12.00 "	1000
	E-W	1.54 "	1.49 "	3000

SEPTEMBER 1957

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
/	1002)	1	09 - 55 - 20	ePb } Very small. $\Delta b = 130$ Km.
			36	iSb }
/	1003)		20 - 45 - 41	ePb } Very small. $\Delta b = 400$ Km.
			44 - 26	iSb }
/	1004)		21 - 18 - 13	ePb } Very small. $\Delta b = 175$ Km.
			33	eSb }
/	1005)		21 - 28 - 51	ePb } Very small. $\Delta b = 425$ Km.
			29 - 58	iSb }
/	1006)	2	00 - 05 - 27	eP } Distant. $\Delta = 3980$ Km. = 35.8° .
			11 - 15	iS }
/	1007)		07 - 09 - 32	iPg } Very small. $\Delta g = 58$ Km.
			39	iSg }
/	1008)		14 - 30 - 58	eP } Distant. $\Delta = 7300$ Km. = 65.7° .
			59 - 51	eS }
/	1009)		18 - 09 - 21	eP } Distant.
/	1010)		21 - 35 - 59	eP } Distant.
/	1011)	3	08 - 04 - 04	ePb } Very small. $\Delta b = 235$ Km.
			51	iSb }
		4	No quakes.	
/	1012)	5	08 - 10 - 22	eP } Very small.
/	1013)		11 - 46 - 32	eP } Very small.
/	1014)		15 - 41 - 28	iP } Very small.
/	1015)		14 - 24 - 24	ePb } Very small. $\Delta b = 245$ Km.
			52	iSb }
/	1016)	6	05 - 18 - 45	ePg } Very small. $\Delta g = 110$ Km.
			58	iSg }
/	1017)		08 - 58 - 55	ePb } Very small. $\Delta b = 255$ Km.
			59 - 24	iSb }

Sept. 1957...

	Date	Time (G.M.T.)	Phase	Remarks	
(1013)	7	06 - 56 - 45	iP	Distant. $\Delta = 4735$ Km. = 42.6° .	
		07 - 05 - 15	iS		
(1019)		10 - 15 - 47	eP	Distant. $\Delta = 6410$ Km. = 57.7° .	
		24 - 51	iS	Very small. $\Delta g = 50$ Km.	
(1020)		19 - 55 - 22	ePg		
		28	eSg		
(1021)	8	05 - 13 - 56	ePb	Very small. $\Delta b = 155$ Km.	
		14 - 14	iSb	Distant. $\Delta b = 750$ Km. = 6.8° .	
(1022)		05 - 41 - 48	ePb		
		43 - 12	iSb	Very small.	
(1025)		13 - 26 - 12	eP		
(1024)	9	00 - 25 - 00	eP	Distant.	
(1025)		07 - 43 - 02	ePb	Small. $\Delta b = 640$ Km. = 5.8° .	
		44 - 14	iSb	Distant. $\Delta = 6455$ Km. = 58.1° .	
(1026)		08 - 11 - 47	iP		
	19 - 54	iS	Very small.		
(1027)		18 - 32 - 21	iP		
(1028)	10	01 - 24 - 03	iPb	Very small. $\Delta b = 155$ Km.	
		21	iSb	Very small. $\Delta b = 190$ Km.	
(1029)		05 - 55 - 50	ePb		
		34 - 12	iSb	Very small.	
(1030)		15 - 50 - 54	eP	Very small.	
(1031)		16 - 04 - 15	eP	Very small.	
(1032)	11	08 - 12 - 54	iPb	Very small. $\Delta b = 235$ Km.	
		13 - 06	iSb		
(1033)	12	02 - 51 - 16	ePg	Very small. $\Delta g = 110$ Km.	
		29	iSg		
(1034)		02 - 43 - 50	ePg	Very small. $\Delta g = 100$ Km.	
		47 - 02	iSg		
(1035)		22 - 58 - 24	ePg	Very small. $\Delta g = 100$ Km.	
		35	iSg		
(1036)	13	06 - 50 - 45	ePg	Very small. $\Delta g = 100$ Km.	
		55	iSg		
(1037)		07 - 30 - 05	ePg	Very small. $\Delta g = 114$ Km.	
		19	eSg		
(1038)		16 - 49 - 00	ePb	Very small. $\Delta b = 165$ Km.	
		19	eSb		
(1039)	14	05 - 48 - 22	eP	Very small.	
(1040)		21 - 27 - 47	ePb		Distant. $\Delta b = 850$ Km. = 7.5° .
		29 - 20	iSb		
(1041)	15	04 - 27 - 41	iP	Distant. $\Delta = 3945$ Km. = 35.5° .	
		55 - 25	iS		
(1042)		18 - 49 - 44	iP	Distant. $\Delta = 4165$ Km. = 37.5° .	
		55 - 42	iS		
(1043)		22 - 17 - 47	eP	Very small.	
(1044)		23 - 29 - 15	eP	Very small.	

Sept. 1957...

- 3 -

	Date	Time (GMT)	Phase	Remarks
1045)	16	02 - 55 - 45	ePb	} Very small. $\Delta b = 405$ Km.
		56 - 29	eSb	
1046)		11 - 25 - 00	P	} Teleseismic.
1047)		15 - 04 - 00	P	
1048)	17	06 - 16 - 50	eP	} Very small.
1049)		11 - 18 - 28	ePg	
		56	iSg	} Very small. $\Delta g = 68$ Km.
1050)		13 - 37 - 56	iPg	
		38 - 10	iSg	} Very small. $\Delta g = 114$ Km.
1051)	18	09 - 09 - 28	iPb	
		48	iSb	} Very small. $\Delta b = 175$ Km.
1052)		13 - 02 - 26	ePg	
		35	iSg	} Very small. $\Delta g = 58$ Km.
1053)		19 - 48 - 49	iP	
1054)		19 - 54 - 58	iP	} Very small.
1055)	19	02 - 07 - 03	iPb	} Small. $\Delta b = 255$ Km.
		35	iSb	
	20	No quakes.		
1056)	21	12 - 29 - 18	eP	} Very small.
1057)	22	17 - 39 - 25	ePg	
		38	iSg	} Very small. $\Delta g = 110$ Km.
1058)	23	09 - 28 - 03	iP	
		55 - 11	iS	} Distant. $\Delta = 3365$ Km. = 30.3° .
1059)	24	08 - 24 - 14	iP	
		27 - 10	iS	} Distant. Strong. $\Delta = 1665$ Km. = 15.0° .
1060)	25	09 - 51 - 40	eP	
1061)		10 - 22 - 22	eP	} Teleseismic.
		29	iSg	
1062)		12 - 49 - 37	ePb	} Very small. $\Delta b = 130$ Km.
		52	iSb	
1063)		15 - 12 - 49	eP	} Very small.
1064)		16 - 55 - 11	ePb	
		31	iSb	} Very small. $\Delta b = 175$ Km.
1065)	✓	16 - 39 - 45	iP	
1066)		22 - 20 - 03	iP	} Distant.
1067)		23 - 56 - 45	eP	
			iP	} Very small.
1068)	26	02 - 16 - 49	eP	
1069)		02 - 35 - 15	iP	} Very small.
		38 - 05	iS	
1070)		03 - 04 - 05	eP	} Distant. $\Delta = 1610$ Km. = 14.5° .
		08 - 33	iS	
1071)		06 - 41 - 55	ePb	} Distant. $\Delta = 2790$ Km. = 25.1° .
		42 - 34	iSb	
1072)		10 - 10 - 59	eP	} Very small. $\Delta b = 362$ Km.
		14 - 15	iS	

Sept. 1957...

	Date	Time (GMT)	Phase	Remarks
✓ 1073)	26	14 - 24 - 04	eP	Distant. $\Delta = 5435$ Km. = 48.9° .
		31 - 15	iS	
✓ 1074)		18 - 19 - 44	iP	Distant.
✓ 1075)	27	04 - 12 - 42	iP	Distant. $\Delta = 2090$ Km. = 18.8° .
		16 - 15	iS	
✓ 1076)		03 - 02 - 11	iP	Distant. $\Delta = 1390$ Km. = 12.5° .
		04 - 40	iS	
✓ 1077)		10 - 18 - 44	ePb	Very small. $\Delta b = 155$ Km.
		19 - 02	iSb	
✓ 1078)		14 - 22 - 10	iP	Small. Felt at Binga, Int. I; Tuguegarao, Int III; Villaviciosa, Int. III.
✓ 1079)		17 - 25 - 06	ePb	Very small. $\Delta b = 175$ Km.
		26	iS	
✓ 1080)		18 - 02 - 51	iPb	Very small. $\Delta b = 130$ Km.
		46	eSb	
✓ 1081)		18 - 51 - 38	iP	Very small.
✓ 1082)		18 - 55 - 16	iP	Very small.
✓ 1085)		22 - 55 - 38	ePg	Very small. $\Delta g = 114$ Km.
		52	iSg	
✓ 1084)	28	00 - 51 - 45	iP	Distant. $\Delta = 1965$ Km. = 17.7° .
		55 - 06	iS	
✓ 1085)		04 - 16 - 45	eP	Distant. $\Delta = 5020$ Km. = 27.2° .
		21 - 28	iS	
✓ 1086)		13 - 54 - 12	iPg	Very small. $\Delta g = 35$ Km.
		16	iSg	
✓ 1087)		14 - 30 - 17	iP	Distant. $\Delta = 6910$ Km. = 67.2° .
		38 - 50	iS	
✓ 1088)		16 - 18 - 42	eP	Very small.
✓ 1039)		17 - 55 - 44	ePb	Very small. $\Delta b = 245$ Km.
		54 - 12	iSb	
✓ 1090)	29	06 - 41 - 16	iP	Distant. $\Delta = 1845$ Km. = 16.6° .
		44 - 28	iS	
✓ 1091)		08 - 25 - 40	iP	Distant. $\Delta = 6755$ Km. = 60.8° .
		52 - 04	iS	
✓ 1092)		17 - 37 - 19	eP	Distant.
✓ 1093)	30	08 - 09 - 31	ePb	Very small. $\Delta b = 190$ Km.
		55	iSb	
✓ 1094)		11 - 08 - 01	eP	Very small.
✓ 1095)		11 - 12 - 19	eP	Very small.
✓ 1096)		12 - 11 - 01	ePb	Very small. $\Delta b = 140$ Km.
		17	eSb	
✓ 1097)		16 - 57 - 26	iPb	Very small. $\Delta b = 200$ Km.
		49	eSb	
✓ 1098)		20 - 26 - 27	eP	Distant. $\Delta = 5120$ Km. = 46.1° .
		55 - 19	iS	

MANILA OBSERVATORY
Mirador, Baguio City
Philippines

MONTHLY SEISMOLOGICAL BULLETIN

Lat. N. 16° 24' 39"

Long. E 120° 34' 47"

Alt. 1507 meters

Instruments (All Sprengnethers)

Hard Limestone Bedrock

<u>Type</u>	<u>Component</u>	<u>Period</u>		<u>Magnification (Dynamic)</u>	
		<u>Seism.</u>	<u>Galv.</u>	<u>Synchronous</u>	
Photographic	Z	1.41 sec	1.37 sec	Circa	3367
	E-W	10.90 "	11.70 "		2000
	N-S	1.84 "	1.67 "		2451
Photoelectric	N-S	11.80 "	12.00 "		1000
Visual Recording	E-W	1.54 "	1.49 "		3000

OCTOBER 1957

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
/	1099)	1	11 - 12 - 13	ePb } Very small. $\Delta b = 210$ Km.
			37	iSb }
/	1100)		11 - 18 - 24	iPb } Very small. $\Delta b = 255$ Km.
			53	iSb }
/	1101)		19 - 38 - 12	ePb } Very small. $\Delta b = 300$ Km.
			46	iSb }
/	1102)	* 2	01 - 53 - 08	iP } Very small.
/	1103)		04 - 10 - 06	ePb } Very small. $\Delta b = 265$ Km.
			36	iSb }
/	1104)		11 - 28 - 09	eP } Distant. $\Delta = 1610$ Km. = 14.5° .
			30 - 59	iS }
/	1105)	✓	12 - 47 - 49	iP } Very small.
/	1106)	✓	21 - 08 - 18	eP } Distant.
/	1107)	3	03 - 45 - 52	eP } Teleseismic.
/	1108)	✓	06 - 03 - 28	iP } Distant. $\Delta = 2765$ Km. = 24.9° .
			07 - 55	iS }
/	1109)		12 - 11 - 42	eP } Distant. $\Delta = 3465$ Km. = 31.2° .
			16 - 56	iS }
/	1110)	4	05 - 45 - 53	eP } Distant.
/	1111)	✓	14 - 28 - 59	ePg } Very small. $\Delta g = 75$ Km.
			29 - 08	iSg }
/	1112)		18 - 24 - 39	eP } Very small.
/	1113)	5	16 - 11 - 17	eP } Very small.

October 1957...

- 2 -

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
	6	No quakes.		
/	1114)	7 00 - 21 - 19	ePg } iSg }	Very small. $\Delta g = 85$ Km.
/	1115)	09 - 45 - 08 28	iPb } iSb }	Small. $\Delta b = 175$ Km.
/	1118)	8 05 - 13 - 09	ePg } eSg }	Very small. $\Delta g = 85$ Km.
/	1117)	08 - 42 - 37	eP	Very small.
	9	No quakes.		
/	1118)	10 23 - 41 - 04 24	iPb } iSb }	Very small. $\Delta b = 175$ Km.
/	1119)	11 07 - 45 - 32	eP } eS }	Very small. $\Delta = 660$ Km. = 5.9° .
/	1120)	21 - 17 - 29 43	ePg } iSg }	Very small. $\Delta g = 114$ Km.
/	1121)	12 06 - 45 - 07	eP	Very small.
/	1122)	19 - 02 - 45	eP	Very small.
/	1123)	13 02 - 04 - 32	iP	Very small.
/	1124)	04 - 28 - 15 34 - 55	iP } iS }	Distant. $\Delta = 4910$ Km. = 44.2° .
	14	No quakes.		
/	1125)	15 04 - 40 - 02	eP	Very small.
/	1126)	04 - 43 - 03 33	ePb } iSb }	Very small. $\Delta b = 265$ Km.
/	1127)	06 - 16 - 08 23	ePb } eSb }	Very small. $\Delta b = 130$ Km.
/	1128)	23 - 41 - 01 18	ePb } iSb }	Very small. $\Delta b = 148$ Km.
/	1129)	16 00 - 07 - 00 14	ePg } eSg }	Very small. $\Delta g = 114$ Km.
/	1130)	17 14 - 27 - 03 31 - 27	eP } iS }	Distant. $\Delta = 2735$ Km. = 24.6° .
/	1131)	15 - 22 - 29 24 - 23	iP } iS }	Distant. $\Delta = 1015$ Km. = 9.1° .
/	1132)	20 - 51 - 09	iP	Distant.
/	1133)	18 17 - 22 - 59	eP	Very small.
/	1134)	19 15 - 31 - 44 32 - 10	iPb } iSb }	Very small. $\Delta b = 230$ Km.
/	1135)	15 - 43 - 58 44 - 32	iPb } eSb }	Small. $\Delta b = 300$ Km.

October 1957....

- 4 -

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
✓	1162)	27	10 - 34 - 12	} Very small. $\Delta g = 35$ Km.
			16	
/	1163)	✓	22 - 41 - 20	} Distant. $\Delta = 5265$ Km. = 47.4° .
			48 - 20	
/	1164)	28	04 - 20 - 00	} Very small.
/	1165)		04 - 57 - 15	
			26	} Very small. $\Delta g = 93$ Km.
/	1166)		16 - 22 - 07	
			23	} Very small. $\Delta b = 140$ Km.
/	1167)		22 - 34 - 22	
			48	} Very small. $\Delta b = 230$ Km.
/	1168)	29	02 - 25 - 55	
			29 - 42	} Distant. $\Delta = 2265$ Km. = 20.4° .
/	1169)		04 - 01 - 14	
/	1170)		05 - 26 - 55	} Very small.
			27 - 04	
/	1171)		05 - 51 - 12	} Very small. $\Delta = 750$ Km. = 6.8° .
			52 - 34	
/	1172)		17 - 13 - 32	} Very small.
/	1173)		20 - 53 - 51	
/	1174)	30	14 - 41 - 59	} Very small. $\Delta g = 117$ Km.
			42 - 13	
/	1175)		21 - 46 - 31	} Very small. $\Delta g = 68$ Km.
			39	
/	1176)	31	10 - 27 - 45	} Distant. $\Delta = 6755$ Km. = 60.8° .
			36 - 09	

- o - 0 - o -
 - 0 - 0 -
 - 0 -
 -

October 1957....

- 5 -

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
/	1136)	19	18 - 30 - 43	} Distant. $\Delta = 740$ Km. = near E coast of Formosa. Several killed at Hotal.
			32 - 06	
/	1137)		21 - 09 - 40	} Very small. $\Delta g = 35$ Km.
			44	
/	1138)		21 - 48 - 40	} Distant. $\Delta = 3565$ Km. = 32.1° .
			54 - 00	
/	1139)	20	04 - 32 - 20	} Very small. $\Delta g = 35$ Km.
			24	
/	1140)		06 - 37 - 22	} Very small. $\Delta g = 68$ Km.
			30	
/	1141)		12 - 24 - 12	} Teleseismic.
	21	No quakes.		
/	1142)	22	15 - 48 - 33	} Very small. $\Delta b = 175$ Km.
			53	
/	1143)		17 - 06 - 04	} Very small. $\Delta b = 140$ Km.
			20	
/	1144)		19 - 25 - 04	} Very small. $\Delta g = 110$ Km.
			17	
/	1145)		20 - 51 - 29	} Very small. $\Delta g = 114$ Km.
			43	
/	1146)	23	06 - 07 - 32	} Distant.
/	1147)		09 - 04 - 32	} Very small. $\Delta b = 175$ Km.
			52	
/	1148)		14 - 05 - 56	} Very small. $\Delta b = 335$ Km.
			06 - 34	
/	1149)	24	00 - 27 - 22	} Distant.
/	1150)		04 - 10 - 28	} Very small.
/	1151)		06 - 15 - 08	} Very small. $\Delta = 605$ Km. = 5.4° .
			16 - 16	
/	1152)		09 - 17 - 54	} Distant. $\Delta = 1400$ Km. = 12.6° .
			20 - 24	
/	1153)	25	01 - 44 - 12	} Distant.
/	1154)		03 - 17 - 26	} Distant. $\Delta = 1455$ Km. = 13.1° .
			20 - 02	
/	1155)		06 - 20 - 26	} Distant.
/	1156)		09 - 46 - 56	} Distant. $\Delta = 570$ Km. = 5.1° .
			48 - 00	
/	1157)		10 - 11 - 44	} Distant. $\Delta = 4765$ Km. = 42.9° .
			18 - 16	
/	1158)		22 - 45 - 36	} Small. $\Delta b = 300$ Km.
			46 - 10	
/	1159)	26	12 - 34 - 43	} Distant.
/	1160)		08 - 36 - 34	} Very small.
/	1161)		14 - 21 - 20	} Distant. $\Delta = 2235$ Km. = 20.1° .
			25 - 04	

MANILA OBSERVATORY
Mirador, Baguio City
Philippines

MONTHLY SEISMOLOGICAL BULLETIN

Lat. N. 16° 24' 39"

Long. E. 120° 34' 47"

Alt. 1507 meters

Instruments (All Sprengnethers)

Hard Limestone Bedrock

<u>Type</u>	<u>Component</u>	<u>Period</u>		<u>Magnification (Dynamic)</u> <u>Synchronous</u>
		<u>Seism.</u>	<u>Galv.</u>	
Photographic	Z	1.41 sec	1.37 sec	Circa 3367
	E-W	10.90 "	11.70 "	2000
	N-S	1.84 "	1.67 "	2451
Photoelectric Visual Recording	N-S	11.80 "	12.00 "	1000
	E-W	1.54 "	1.49 "	3000

NOVEMBER 1957

<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
/ 1177)	1 11 - 10 - 35 49	iPg } iSg }	Very small. $\Delta g = 114$ Km.
/ 1178)	2 16 - 19 - 56 20 - 12	ePg } iSb }	Small. $\Delta b = 140$ Km.
/ 1179) ✓	18 - 39 - 57 47 - 35	iP } iS }	Distant. $\Delta = 5955$ Km. = 53.6° .
/ 1180)	3 12 - 46 - 30	eP	Very small.
/ 1181)	18 - 51 - 19 52 - 23	ePb } iSb }	Very small. $\Delta b = 570$ Km. = 5.1° .
/ 1182)	20 - 11 - 17	eP	Distant.
/ 1183)	4 03 - 59 - 29 04 - 00 - 51	ePb } iSb }	Very small. $\Delta b = 190$ Km.
/ 1184)	06 - 56 - 48	eP	Very small.
/ 1185)	12 - 36 - 10 36	ePb } eSb }	Very small. $\Delta b = 230$ Km.
/ 1186)	13 - 48 - 53 49 - 09	ePb } iSb }	Very small. $\Delta b = 140$ Km.
5	Power off 00 - 15 to 02 - 15 GMT. Quake reported by Weather Bureau 05 - 00 - 34 59 GMT with tentative epicenter at $14^\circ 15' N 124^\circ 45' E$ not recorded in Baguio.		
/ 1187)	5 08 - 32 - 50	iP	Very small.
/ 1188)	10 - 03 - 14	iP	Very small.
/ 1189)	21 - 36 - 14	eP	Very small.

November 1957...

- 2 -

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
/	1190)	6 ✓ 13 - 20 - 09	eP	Very small.
/	1191)	7 19 - 53 - 26 47	ePb } eSb }	Very small. $\Delta b = 185$ Km.
/	1192)	8 06 - 21 - 22	iP	Very small.
/	1193)	10 - 45 - 13 43	ePb } eSb }	Very small. $\Delta b = 265$ Km.
/	1194)	18 - 45 - 06	eP	Very small.
/	1195)	23 - 49 - 04	eP	Very small.
/	1196)	9 03 - 12 - 13	iP	Very small.
/	1197)	10 ✓ 02 - 44 - 13 50 - 33	iP } iS }	Distant. $\Delta = 4545$ Km. = 40.9° .
/	1198)	03 - 51 - 43 58 - 00	iP } iS }	Distant. $\Delta = 4500$ Km. = 40.5° .
/	1199)	08 - 51 - 30 54	ePb } iSb }	Very small. $\Delta b = 210$ Km.
/	1200)	18 - 06 - 02 10	ePg } iSg }	Very small. $\Delta g = 68$ Km.
/	1201)	19 - 25 - 27 26 - 04	ePb } eSb }	Very small. $\Delta b = 325$ Km.
/	1202)	11 11 - 46 - 46	eP	Very small.
/	1203)	12 05 - 59 - 12 36	ePb } eSb }	Very small. $\Delta b = 210$ Km.
/	1204)	16 - 52 - 06 54	iPb } eSb }	Very small. $\Delta b = 245$ Km.
/	1205)	13 ✓ 17 - 34 - 29	eP	Distant.
/	1206)	23 - 50 - 55 51 - 13	iPb } iSb }	Very small. $\Delta b = 155$ Km.
/	1207)	14 08 - 32 - 59 33 - 18	eP } iS }	Very small. $\Delta b = 165$ Km.
/	1208)	12 - 33 - 55 34 - 08	ePg } iSg }	Very small. $\Delta g = 110$ Km.
/	1209)	14 - 36 - 13 27	ePg } iSg }	Very small. $\Delta g = 114$ Km.
/	1210)	14 - 41 - 03 17	ePg } iSg }	Very small. $\Delta g = 114$ Km.
/	1211)	15 - 03 - 13 25	eP } iSg }	Very small. $\Delta g = 100$ Km.
/	1212)	15 ✓ 07 - 54 - 33 56 - 45	iP } iS }	Distant. $\Delta = 1200$ Km. = 10.8° . Int. VI Dipolog; Int. V Dumaguete; Int. IV Ozamis City; Int. III Mambajao, Cotabato City; Int. I Davao, Iloilo.

November 1957...

- 3 -

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
/ 1213)	15	10 - 02 - 25	eP	Very small.
/ 1214)		13 - 38 - 50	eP	Teleseismic.
/ 1215)	16	01 - 58 - 56	ePg } iSg }	Very small. $\Delta g = 114$ Km.
/ 1216)		04 - 01 - 40 02 - 14	ePb } iSb }	Very small. $\Delta b = 300$ Km.
/ 1217)	17	06 - 04 - 44 53	iPg } iSg }	Very small. $\Delta g = 75$ Km.
/ 1218)		06 - 10 - 15	iP	Very small.
/ 1219)		17 - 59 - 21 28	ePg } iSg }	Very small. $\Delta g = 58$ Km.
/ 1220)	18	11 - 37 - 31 50	ePb } iSb }	Very small. $\Delta b = 165$ Km.
/ 1221)		14 - 06 - 28	iP	Very small.
/ 1222)		16 - 05 - 54	iP	Very small.
/ 1223)	19	09 - 58 - 00	eP	Very small.
/ 1224)		16 - 20 - 07	eP	Very small.
/ 1225)		19 - 29 - 45	iP	Very small.
/ 1226)	20	12 - 51 - 24 13 - 00 - 24	eP } iS }	Distant. $\Delta = 7465$ Km. = 67.2° .
/ 1227)		15 - 44 - 32 45 - 09	ePb } iSb }	Small. $\Delta b = 325$ Km.
/ 1228)	21	04 - 12 - 43 13 - 01	ePb } iSb }	Very small. $\Delta b = 165$ Km.
/ 1229)		05 - 15 - 53 19 - 23	eP } iS }	Distant. $\Delta = 2055$ Km. = 18.5° .
/ 1230)		11 - 34 - 13 43	iPb } iSb }	Very small. $\Delta b = 263$ Km.
/ 1231)		18 - 02 - 14	eP	Very small.
/ 1232)	22	18 - 31 - 16 44	ePb } iSb }	Very small. $\Delta b = 245$ Km.
/ 1233)		21 - 55 - 28 59 - 08	eP } iS }	Distant. Small. $\Delta = 2180$ Km. = 19.6° .
/ 1234)	23	01 - 09 - 24 53	ePb } iSb }	Very small. $\Delta b = 255$ Km.
/ 1235)		13 - 24 - 58 26 - 02	iPb } iSb }	Very small. $\Delta b = 570$ Km. = 5.1° .
/ 1236)	24	00 - 05 - 28 56	ePb } eSb }	Very small. $\Delta b = 245$ Km.
/ 1237)		03 - 22 - 50 23 - 23	iPb } eSb }	Very small. $\Delta b = 290$ Km.
/ 1238)		08 - 02 - 16 51	ePb } iSb }	Very small. $\Delta b = 310$ Km.

November 1957...

- 4 -

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
/ 1239)	25	00 - 30 - 17	eP	Distant. $\Delta = 1780$ Km. = 16.0° .
		33 - 23	iS	
/ 1240)		09 - 38 - 57	iP	Very small.
/ 1241)		20 - 07 - 44	eP	Distant. $\Delta = 2165$ Km. = 19.5° .
		11 - 23	iS	
/ 1242)	✓	22 - 39 - 24	iP	Distant. $\Delta = 2100$ Km. = 18.9° .
		42 - 58	iS	
/ 1243)	26	05 - 14 - 25	iP	Distant. $\Delta = 2165$ Km. = 19.5° .
		18 - 04	iS	
/ 1244)		07 - 58 - 56	eP	Very small.
/ 1245)	✓	11 - 46 - 02	eP	Very small.
/ 1246)		12 - 37 - 39	iPb	Distant. $\Delta b = 415$ Km.
		38 - 24	iSb	
/ 1247)		19 - 07 - 53	ePb	Very small. $\Delta b = 318$ Km.
		08 - 29	iSb	
/ 1248)		19 - 28 - 44	ePb	Very small. $\Delta b = 355$ Km.
		29 - 24	eSb	
/ 1249)	27	02 - 24 - 07	eP	Very small.
/ 1250)		15 - 36 - 29	ePb	Very small. $\Delta b = 535$ Km.
		37 - 29	iSb	
/ 1251)		15 - 55 - 21	ePg	Very small. $\Delta g = 100$ Km.
		33	iSg	
/ 1252)	28	05 - 11 - 55	eP	Distant. $\Delta = 1135$ Km. = 10.2° .
		14 - 23	iS	
/ 1253)		11 - 40 - 33	iPb	Small. $\Delta b = 210$ Km.
		57	iSb	
/ 1254)		15 - 12 - 51	ePg	Very small. $\Delta g = 85$ Km.
		13 - 01	iSg	
/ 1255)		15 - 39 - 53	ePb	Very small. $\Delta b = 210$ Km.
		40 - 41	iSb	
/ 1256)		16 - 28 - 41	iP	Very small.
/ 1257)	✓	20 - 59 - 50	eP	Distant. $\Delta = 6245$ Km. = 56.2° .
		21 - 07 - 45	iS	
/ 1258)	29	15 - 25 - 04	iPg	Very small. $\Delta g = 114$ Km.
		18	iSg	
/ 1259)	✓	22 - 39 - 26	iP	Distant. $\Delta = 3565$ Km. = 32.1° .
		44 - 46	iS	
/ 1260)	30	00 - 13 - 44	iPb	Very small. $\Delta b = 175$ Km.
		14 - 04	eSb	
/ 1261)		05 - 22 - 30	ePb	Very small. $\Delta b = 318$ Km.
		23 - 06	iSb	
/ 1262)		07 - 49 - 06	ePb	Very small. $\Delta b = 175$ Km.
		26	iSb	

MANILA OBSERVATORY
Mirador, Baguio City
Philippines

11
Baguio

MONTHLY SEISMOLOGICAL BULLETIN

Lat. N. 16° 24' 39"

Long. E. 120° 34' 47"

Alt. 1507 meters

Instruments (All Sprengnethers)

Hard Limestone Bedrock

<u>Type</u>	<u>Component</u>	<u>Period</u>		<u>Magnification (Dynamic)</u> <u>Synchronous</u>
		<u>Seism.</u>	<u>Galv.</u>	
Photographic	Z	1.41 sec	1.37 sec	Circa 3367
	E-W	10.90 "	11.70 "	2000
	N-S	1.84 "	1.67 "	2451
Photoelectric	N-S	11.80 "	12.00 "	1000
	Visual Recording	E-W	1.54 "	1.49 "

DECEMBER 1957

<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
/1263)	1 12 - 33 - 56	ePb } iSb }	Very small. $\Delta b = 148$ Km.
/1264)	14 - 23 - 12	eP	
	2 No quakes.		
/1265)	3 03 - 25 - 30	iPb } iSb }	Very small. $\Delta b = 175$ Km.
1266)	09 - 07 - 10	ePg } iSg }	
/1267)	4 ✓ 00 - 31 - 05	iP } iS }	Distant. $\Delta = 2545$ Km. = 22.9° .
1268)	02 - 09 - 52	ePg } iSg }	
/1269)	✓ 03 - 44 - 30	eP } M }	Distant. $\Delta = 4145$ Km. = 37.3° . Severe quake in outer Mongolia.
/1270)	5 19 - 53 - 52	iP	
/1271)	6 18 - 09 - 04	iPb } eSb }	Very small. $\Delta b = 150$ Km.
/1272)	22 - 56 - 18	ePb } iSb }	
/1273)	7 01 - 46 - 20	ePb } iSb }	Very small. $\Delta b = 290$ Km.
4)	✓ 03 - 21 - 16	eP } eS }	
	24 - 10		

December 1957...

- 2 -

Date	Time (GMT)	Phase	Remarks
1275)	7	08 - 15 - 06	} Very small. $\Delta g = 40$ Km.
		11	
1276)	✓	14 - 29 - 00	Teleseismic.
1277)		20 - 31 - 00	Teleseismic.
1278)	8	06 - 52 - 00	Teleseismic.
1279)		12 - 22 - 12	Distant.
1280)		14 - 48 - 58	} Very small. $\Delta g = 114$ Km.
		49 - 12	
1281)	✓	16 - 40 - 00	Teleseismic.
1282)		21 - 52 - 56	} Very small.
		55 - 20	
1283)	9	01 - 16 - 48	} Small. $\Delta b = 335$ Km.
		17 - 26	
1284)		09 - 57 - 50	} Very small. $\Delta b = 362$ Km.
		58 - 31	
1285)	10	14 - 45 - 42	} Distant. $\Delta = 4445$ Km. = 40.0° .
		49 - 53	
1286)		16 - 00 - 44	} Very small. $\Delta b = 695$ Km. = 6.2° .
		02 - 02	
1287)	11	02 - 25 - 48	} Very small. $\Delta b = 145$ Km.
		24 - 05	
1288)		03 - 25 - 29	} Very small. $\Delta b = 185$ Km.
		50	
1289)	✓	07 - 01 - 59	} Very small. $\Delta g = 100$ Km.
		02 - 11	
1290)		18 - 16 - 26	} Distant. $\Delta = 2700$ Km. = 24.3° .
		20 - 48	
1291)		19 - 10 - 54	} Very small. $\Delta g = 110$ Km.
		11 - 07	
1292)		21 - 35 - 32	} Very small. $\Delta b = 785$ Km. = 7.0° .
		37 - 00	
1293)	12	03 - 12 - 46	} Very small. $\Delta b = 290$ Km.
		15 - 19	
1294)		12 - 14 - 50	} Very small. $\Delta b = 285$ Km.
		15 - 22	
1295)		15 - 44 - 50	} Distant. $\Delta b = 765$ Km. = 6.8° . Felt at Legaspi, Int. III.
		46 - 16	
1296)		16 - 21 - 56	} Very small. $\Delta b = 190$ Km.
		22 - 18	
1297)	✓	18 - 47 - 50	} Distant. $\Delta = 3062$ Km. = 54.2° .
		55 - 32	
1298)	13	01 - 51 - 40	} Very small.
1299)		01 - 55 - 50	
		02 - 04 - 50	
1300)		08 - 34 - 01	
		26	} Distant. $\Delta = 7455$ Km. = 67.1° . Destructive quake in Iran.
			} Very small. $\Delta b = 220$ Km.

December 1957...

- 3 -

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
1301)	13	17 - 40 - 34 53	iPb } iSb }	Very small. $\Delta = 165$ Km.
1302)		20 - 37 - 16	eP	Teleseismic.
1303)		21 - 15 - 42 58	ePb } iSb }	Very small. $\Delta b = 140$ Km.
1304)	14	17 - 05 - 24 46	ePb } iSb }	Very small. $\Delta b = 190$ Km.
1305)		18 - 08 - 08 12	ePg } iSg }	Very small. $\Delta g = 35$ Km.
1306)		21 - 29 - 48 30 - 22	ePb } iSb }	Very small. $\Delta b = 300$ Km.
1307)	15	09 - 07 - 16 28	iPg } iSg }	Very small. $\Delta g = 100$ Km. Felt by people in Mirador, Int. I. Strong motion seismograph not disturb.
1308)		17 - 35 - 26 48	iPb } iSb }	Very small. $\Delta b = 190$ Km.
1309)	16	13 - 22 - 40 54	ePg } iSg }	Very small. $\Delta g = 114$ Km.
1310)	17	05 - 19 - 00 26 - 06	eP } iS }	Distant. $\Delta = 5380$ Km. = 48.4° .
1311)		07 - 14 - 08 15 - 07	ePb } eSb }	Very small. $\Delta b = 525$ Km.
1312)		13 - 59 - 28 14 - 06 - 56	iP } iS }	Distant. $\Delta = 5765$ Km. = 51.9° .
1313)	18	07 - 58 - 06 20	ePg } iSg }	Very small. $\Delta g = 114$ Km.
1314)	19	09 - 55 - 17	iP	Very small.
	20	No quakes.		
1315)	21	07 - 50 - 15 30	iPb } iSb }	Very small. $\Delta b = 130$ Km.
1316)		21 - 11 - 34 50	ePb } iSb }	Very small. $\Delta b = 140$ Km.
1317)	22	09 - 00 - 52 01 - 48	ePb } iSb }	Very small. $\Delta b = 495$ Km.
1318)		09 - 15 - 04 14	iPg } iSg }	Very small. $\Delta g = 85$ Km.

Dec. 1957...

- 4 -

	<u>Date</u>	<u>Time (GMT)</u>	<u>Phase</u>	<u>Remarks</u>
✓	1319)	23	19 - 30 - 08	IP } Distant. $\Delta = 2955$ Km. = 26.6° .
			34 - 48	IS }
✓	1320)		21 - 06 - 22	IP } Very small. $\Delta = 980$ Km. = 8.8° .
			08 - 12	IS }
✓	1321)	24	10 - 07 - 54	ePb } Very small. $\Delta b = 185$ Km.
			08 - 15	iSb }
✓	1322)		10 - 11 - 26	ePg } Very small. $\Delta g = 114$ Km.
			40	iSg }
✓	1323)		11 - 47 - 02	eP } Very small. $\Delta = 830$ Km. = 7.5° .
			48 - 35	iS }
✓	1324)	25	15 - 02 - 28	ePb } Very small. $\Delta b = 175$ Km.
			48	iSb }
✓	1325)	26	04 - 55 - 52	iPg } Very small. $\Delta g = 110$ Km.
			56 - 06	iSg }
✓	1326)		10 - 52 - 38	ePg } Very small. $\Delta g = 93$ Km.
			49	iSg }
✓	1327)	27	02 - 47 - 30	eP } Distant. Secondary not certain. Δ pro-
			52 - 11	eS } bably 2965 Km. = 26.7° .
✓	1328)		15 - 46 - 33	eP } Very small.
✓	1329)		21 - 19 - 45	eP } Very small. $\Delta = 1635$ Km. = 14.7° .
			22 - 35	iS }
✓	1330)		25 - 25 - 33	ePb } Very small. $\Delta b = 140$ Km.
			49	iSb }
✓	1331)	28	00 - 46 - 01	ePb } Very small. $\Delta b = 155$ Km.
			19	iSb }
✓	1332)		10 - 00 - 00	eP } Teleseismic.
✓	1333)		14 - 02 - 50	eP } Teleseismic.
✓	1334)		19 - 55 - 00	eP } Teleseismic.
	29		No quakes.	
✓	1335)	30	13 - 59 - 04	iPb } Small. $\Delta b = 220$ Km. Felt at Bangued
			29	eSb } for 50 sec; Tagudin, Int. I. This
				quake moved the starting pendulum of
				the strong motion seismograph. No
				record made.
✓	1336)		14 - 19 - 50	ePb } Very small. $\Delta = 220$ Km.
			20 - 15	iSb }
✓	1337)		15 - 22 - 47	ePb } Very small. $\Delta b = 255$ Km.
			23 - 16	iSb }
✓	1338)		16 - 03 - 17	ePb } Very small. $\Delta b = 235$ Km.
			44	iSb }
✓	1339)		16 - 14 - 16	iPb } Very small. $\Delta b = 155$ Km.
			34	iSb }
✓	1340)		23 - 43 - 09	iP } Very small.
✓	1341)	31	08 - 14 - 09	ePb } Very small. $\Delta b = 245$ Km.
			37	iSb }
✓	1342)		14 - 50 - 00	eP } Teleseismic.
✓	1343)		22 - 22 - 22	ePb } Very small. $\Delta b = 362$ Km.
			23 - 03	iSb }