

NESA BULLETIN

May 8 to June 24, 1938

Bulletin No. 1

***** (May 8) *****

Weston

Burlington

iP 14 58 50.5

i 15 01 30.0 (Comp)

i 15 01 26 (Comp)

Deep Focus

***** (May 10) *****

Burlington

i 14 51 51 (Dil) repeated throughout the hour

***** (May 21) *****

Williamstown

iP 21 08 12.2 (small)

i 13.7

i 21.2

Blast

iS? 22.2

***** (June 2) *****

Ottawa

iL 15 09 02

iM 03.5

F 08

iL 17 46 51

iM 52.5

F 47 05

iL 20 00 22

iM 22.3

F 33

A group of "locals". The amplitudes of 2nd and 3rd equal, but twice that of the 1st disturbance.

***** (June 9) *****

Weston

Fordham

Williamstown

Harvard

iP_n 22 43 46.5

iS_n 44 47.0

e 22 43 53

i 44 59

i 45 03.5

e 22 44 11

iS 45 28.2

i 30.5

i 38.2

i 41.9

S_n-P_n = 61.8 secs.

Absolute times not certain

Weston and Harvard had Dilatation to the North Δ (Weston) = 354 mi.
ca. 44°5 N., 63° W.; H = 22 42 28.6 Δ (Harvard) = 362 mi.

***** (June 15) *****

Weston

Harvard

Williamstown

iP 05 08 56.0
iS 09 51.0

S-P = 56.0 secs.

e 05 08 44

e 09 10 Harvard and Weston
e 50 had Dilatation to

H = 05 07 45.2

46° N 66° W

iS 10 18.6 North East.
i 28.6 Felt in New Bruns-
i 33.8 wick.
i 44.3

***** (June 17) *****

Weston

Williamstown

eP₂ 18 05 36.1
iP₂ 36.6
iS₂ 57.2

iP₂ 18 05 35.0
iS₂ 53.5

Blast of 20 tons of dynamite
at N. Branford, Conn.

***** (June 19) *****

Weston

Williamstown

iP 13 47 37.5
iS 49 25.5

iP 17 19 18
(Blast ?) 28

Deep Focus

***** (June 20) *****

Weston

Williamstown

iP 14 12 04

i 59 Deep Focus

i 20 45 33

i 35 local or blast

i 50.1

iS 53.0

***** (June 23) *****

Weston

Williamstown

Harvard

iP₁ 03 58 00.8
iS₁ 04.1

iP₂ 03 58 21
iS₂ 59.5

S₁-P₁ = 2.5 secs.

H = 03 57 56.6

Felt strongest near W. Chelmsford, Mass.
About IV-V on the Rossi-Forel scale.

NOTICES

From:

Ottawa: Short period disturbances which Weston, Harvard and Williamstown attribute to R.R. trains are no longer recorded here with the cessation of the winter months. Is this experienced by other stations? Explanations are welcome.

Harvard: The readings given above from this station were made at Weston, and lack of experience with Harvard grams accounts for the uncertainty of absolute times.

Weston: Weston is making a special study of the West Chelmsford quake and would appreciate any assistance available.

NESA BULLETIN

June 25 to July 31, 1938

Bulletin No. 2

***** (July 2) *****

Ottawa

e 15 51 28
F 42

***** (July 3) *****

Harvard

iP₁ 02 07 55.8
i 57.5
i 08 02.1
i 05.4
iS₁ 09 39.6
i 43.6

Weston

iP₁ 02 07 52.5
i 53.5
i 57.2
iS₁ 09 37.5
i 45.3

Δ (Harvard) = 822 km (513 mi) ca. 45° N, 62° W
Δ (Weston) = 796 km (496 mi) H = 02 05 43

***** (July 5) *****

Ottawa

e 00 03 46
F 04 00

Weston

e 20 10 06 apparently an 'M' without
F 10 11 preliminaries

***** (July 7) *****

Harvard

iS₁ 16 19 40

Weston

iS₁ 16 19 38.2

***** (July 7) *****

Harvard

eP? 23 40 47.6
i 41 32.6
iS₁ 36.4

Weston

i 23 41 26.4
iS₁ 37.3

***** (July 14) *****

Harvard

iS₁ 15 23 48.5

Weston

iS₁ 15 23 53.5

- 2 -

***** (July 15) *****

Harvard

iP₂ 22 47 33.9
i 48 35.6
iS₂ 49 01.0

Weston

iP₂ 22 47 35.1
i 48 48.3
iS₂ 49 04.0

Δ (Harvard) = 685 km (428 mi) ca. 48° N, 67°5 W.
Δ (Weston) = 701 km (437 mi) H = 22 45 47

***** (July 22) *****

Ottawa

e 17 07 34.5
F 45

recorded on long and short period instruments.

***** (July 26) *****

Ottawa

P 08 18 29.5
S 32.5
F 19 02

Δ (Ottawa) = 25 km (15.5 mi) Joliat's Tables
H = 08 18 24
Recorded on Milne-Shaws as well as Benioff

***** (July 26) *****

Ottawa

e 17 18 20
F 23

recorded on long and short period instruments.

***** (July 27) *****

Ottawa

e 16 06 10.5
F 13

recorded on short period instruments.

***** (July 28) *****

Weston

iP 08 29 31

Deep Focus

***** (July 29) *****

Ottawa

i 13 48 47
F 49 09

i 14 55 00
F 13

i 16 05 25
F 42

These three disturbances have the same characteristics. They begin with a sharp offset like iL and a maximum about 1 second later which persists for about 3 seconds. After this the decrease in amplitude is very rapid.

e 16 29 27
e 43
L 48
F 54

i 18 30 28.5
L 32.5
F 41

These two disturbances are unlike the preceding, with definite preliminaries and no pronounced maximum,

i 19 51 30.5
F 52

NOTICES

From:

Weston:

Ottawa has offered to take over the labour of mimeographing and mailing the Bulletin. The preparation of the manuscript will be continued at Weston, so that members will please continue to send their reading to this latter station.

The name commonly proposed for this organization is "North Eastern Seismological Association." This title might be abbreviated to NESAs.

Determinations for the New York earthquakes of July 29 and August 2 will be reserved for a later Bulletin pending the arrival of more data.

Williamstown: Readings to be appended to the quake of June 19th 13th hr. (Bulletin No. 1)

eP 13 47 40.6
iS 49 42.7 Δ (Williamstown) = 1173 km (734 mi)

This would combine with Weston readings to place the epicentre in Cabot Straits.

Fordham:

The New York quake of July 29th 07th hr. was felt in The Bronx, Westchester County, Jersey, Manhattan and Staten Island.

The quake of August 2nd 09th hr. was felt in New Rochelle, Rye, Greenwich, and Stamford.

NESA BULLETIN



August 1 - 15, 1938

Bulletin No. 3

N.B. The following quake was held over from the last Bulletin pending the arrival of data.

***** (July 29) *****

Williamstown

P₂ ? 07 44 51.7
S₂ 45 14

$\Delta = 192$ km (120 mi)

Fordham

P₁ 07 44 15
P₁P₁ 16
S₁ 21.5
L 25.5

$\Delta = 54$ km (33 mi)

Harvard

i 07 45 22
i 30
S₁ 40.5

Weston

eP 07 44 57.5
i 45 24.1
S 33

Times from Stations do not agree to give a common 'H'. Quake was felt in Bronx, Westchester Co. Jersey, Manhattan and Staten Island.

***** (August 2) *****

Fordham

P₁ 09 02 34.5
35.25
36.0
S₁ 38.0
40
41

$\Delta = 28.5$ km (18 mi)

Williamstown

P₂ ? 09 03 00.6
S₂ 03 23

$\Delta = 194$ km (121 mi)

Weston

P_n 09 03 08.0
P₂ 10
i 31.6
S_n? 35.0
S₁ 42

$\Delta = 250$ km (156 mi)

H = 09 02 30 $\phi = 41^{\circ}05'$ N ca. 5 miles east of White Plains, N.Y.
 $\lambda = 73^{\circ}42'$ W felt in N. Rochelle, Rye, Stamford and Greenwich

***** (August 2) *****

Williamstown

P₁ 19 13 13.2
S₁ 22.7

$\Delta = 78$ km (49 mi)

Weston

P₁ 19 13 18.1
S₁ 30.3
L 36.5

$\Delta = 102$ km (64 mi)

Harvard

P₁ 19 13 15.2
S₂ 26.0

$\Delta = 89$ km (56 mi)

$\phi = 42^{\circ}1$ N

$\lambda = 72^{\circ}5$ W ca. 10 miles east of Springfield, Mass. Perhaps a quarry blast. No reports of quake having been felt.

***** (August 3) *****

Ottawa

i 13 16 31
M 32.5
F 48

i 15 12 46
M 47.5
F 13 16

i 18 01 49.5
M 51
F 02 10

***** (August 4) *****

Williamstown

iP₂? 20 07 56.2
i 59.5
S₂ ? 08 15.0
i 19.1

***** (August 6) *****

Williamstown

eP₁ 16 22 01.2
i 03.4
iS₁ 08.4
i 10.6

$\Delta = 57$ km (36 mi)

Fordham

P 16 22 21
P₁ 22
i 36.25
S 43.25
S₁ 45.5

$\Delta = 185$ km (115 mi)

Harvard

P₁ 16 22 22.8
P₁P₁ 23.8
S₁ 45.2
S₁S₁ 46.1

$\Delta = 185$ km (115 mi)

Weston

P₂ 16 22 24.3
P₁ 26.0
i 35.6
S₁ 49.8
 $\Delta = 205$ km (128 mi)

Quarry blast in So. Bethlehem, N.Y.
H = 16 21 52

***** (August 8) *****

Ottawa

i 15 04 31.5
M 33
F 53

i 16 09 27
M 28.5
F 42

- 3 -

***** (August 8) *****

Williamstown

eP₁ 18 45 15.0
iS₁? 23.7
iS₂)
S₁S₁) 25.4
i 27.6
i 30.6
Δ = 69 km (43 mi)

Fordham

P₂ 18 45 20
P₁ 21.5
S₂ 41.3
Δ = 155 km (97 mi)

Harvard

P₂ 18 45 32.2
P₁ 33.3
S₂ 53.5
S₁ 55.8
Δ = 185 km (115 mi)

Weston

i 18 45 34.3
P₁ 36.3
S₂ 58.1
Δ = 201 km (126 mi)

Quarry blast near Hudson, N.Y.
H = 18 45 02.8 (computed)
18 45 00 (blast fired at this time)

***** (August 15) *****

Weston

iP 11 12 51

Deep Focus phase

August 16 - 31, 1938

Bulletin No. 4



***** (August 16) *****

Weston

iP 14 01 35 Deep focus

***** (August 17) *****

Weston

iP 01 58 06 Deep focus

***** (August 22) *****

Harvard

Williamstown

Weston

iP_n 12 48 59.6
P₂ 49 04.1
P₁ 06.0
17.2
21.1
27.7
S_n 34.4
S₂ 40.6
43
S₁ 48.1

iP 12 49 19.7
29.2
39.2
iS_n 50 06.2 strong
max. 12.2 23.5 mm.
i(S₂?) 16.7
i(S₁?) 27.7
or 29.0

P_n 12 48 58
P₂ 49 00
02.5
P₁ 05.5
07.5
S_n 33
36
S₂ 39.5
S₁ 46.5

Δ = 330 km. (206 mi.)
H = 12 48 12.8

Δ = ca. 430 km. (270 mi.)

Δ = 325 km. (203 mi.)
H = 12 48 12.5

Ottawa

Fordham

Portland

eP₁ 12 49 39
S₁ 50 37

i 12 50 19
i 29
i 33
48
iS₂ 51 00
i 05

R.L. Arringdale determined the isoseismal center to be near Orrington, Me. Greatest intensity appears to be about V(R-F). Instrumental epicentre ca. 5 mi. west of Orrington.

Δ = 500 km. (312 mi.) Δ = 630 km. (395 mi.)

***** (August 22) *****

Williamstown

Weston

Harvard

eP₂ 20 45 32.1
i 50.6
i(S₁?) 53.1 2.5 mm.

S₁ 20 46 16

eP? 20 45 46.1
S₁ 46 11.6
L 30

***** (August 23) *****

Weston

Pn 03 37 20.4
iP2 26.4
i 29.2
i 33.1
i 35.0
i 52.9
Sn 38 00.3
i 09.0
S2 09.6
i 12.4
S1 22.4
i 39 05.4
 $\Delta = 360$ km. (225 mi.)
H = 03 36 33
 $\phi =$ ca. $40^{\circ}15'$ N.
 $\lambda = 74^{\circ}15'$ W.

Williamstown

eP2 in minute mark
i 03 37 19
iP1 24 sharp; 4 mm.
iS2 48.5
i 54.5 sharp; 22mm.
i 59.5
i 38 04.5
i 14.5
i 22.5
 $\Delta = 300$ km. (187 mi.)

Harvard

iPn 03 37 21.4
P1 25.1
i 33.2
i 56.6
i 57.3
i 38 11.6
 $\Delta = 370$ km. (231 mi.)

Fordham

P 03 36 47
 $\Delta = 93$ km. (58 mi.)

Ottawa

e 03 37 50.5
e 38 09
e 49
S1 39 12
F 42
 $\Delta = 620$ km. (385 mi.)

***** (August 23) *****

Ottawa

e 05 06 12
e 30
e 07 12
S1? 40
F 11

Williamstown

e 05 05 38
i 39.7
i 41.7
iP1 44.2 sharp; 6mm.
iS2 06 14.7 {cert. 23 mm.
iS1 20.7 {may be 38
i 25.7
i 30.7
i 40.7
i 48.5

Weston

iPn 05 05 42.4
i 46.9
iP2 50.4
i 51.4
P1 53.9
i 59.6
i 06 01.2
i 15.0
Sn 21.6
i 23.2
i 30.4
i 33.4
i 07 26.4

Harvard

P2 05 05 54.6
S 18.3
S2 28.1
S1 06 33.6
H = 05 05 54

Fordham

P 05 05 08.5 ampl. 19 cm.

Aftershock of the preceding.

***** (August 23) *****

Fordham

P 05 18 28.5
S-P = 3.5 sec.
Local in Westchester

Williamstown

iP₁? 05 23 59.2 faint
iS₁? 24 29.7 1 mm.

***** (August 23) *****

Harvard

P₂ 07 04 27.1
31
i 44.6
i 05 02.3
S₂ 05.6
S₁ 14.0

Weston

i 07 04 19.9
P₂ 23.6
P₁ 26.4
35.4
47.2
i 05 03.2
iS₂ 06.9
iS₁ 11.4
14.4

Williamstown

i 07 04 11.4
i 12.9
i 14.8
iP₁ 17.4 4 mm.
iS₂ 41.9
iS₁ 47.9 24 mm.
i 53
i 58
i 05 08
i 16.5

Ottawa

e 07 04 46
e 05 03
e 44
L 06 06
F 10

Fordham

P 07 05 41.5

Aftershock of 03 37 and
05 05. After S₁ all
three records show phases
following by 5, 10, 20,
and 20.5 sec. Very fine
records of P₁, S₂, and S₁

***** (August 23) *****

Fordham

P 07 12 00
S-P = 3.5 sec.
Local in Westchester
H = 07 11 46

Williamstown

e 07 12 21
eP₁ 25.5
eS₂ 50.0
iS₁ 56.0 1 mm.

***** (August 23) *****

Weston

i 11 12 08.4
i 45.5
i 48.5

Williamstown

e? 11 11 55
iS₁ 29.2
i 38.7

Harvard

i 11 12 08.6
i 42.1
i 48

Fordham

P 11 11 22 S-P = 11.5 sec. Aftershock of 03 37, 05 05, and 07 04.

***** (August 25) *****

Burlington

01 47 37 Dil.
48 17 Dil.

***** (August 26) *****

Williamstown

P 19 55 42.9
S 52.6

$\Delta = 77$ km. (48 mi.)

Weston

P 19 56 04.6
i 05.1
S? 28.0
S 29.1

$\Delta = 197$ km. (123 mi.)
Compression to East.

***** (August 27) *****

Fordham

P 22 36 40
S-P = 11.5 sec.
Felt in Trenton, N.J.

Weston

i 22 37 24.5
S 38 03.6
S 07.9

***** (August 27) *****

Fordham

P 22 37 24
S-P = 11.5 sec.
Felt in Trenton N.J.

Weston

S 22 38 49.4 Preliminaries lost in
S 52.9 previous quake

NOTICES

From:

Burlington: Readings for August 6, 1938 (Bulletin No. 3)

05 52 11.0 Rarefaction
55 08.0 "

Fordham:

Add 1 sec. to all previous times for contact correction. This includes the New York quake of July 29 (Bulletin No. 3) for which

P₁ 07 44 16
S₁ 22.5

(The correction has been made on the times given in this present Bulletin.)

NESA BULLETIN

September 1 - 15, 1938

Bulletin No. 5

****August 27 (Bulletin No. 4)

Williamstown

e	22	37	13.7		(probable S phases only)		Two overlapping			
i			18.5				quakes, with the P			
i			41.2				group of the second			
i			48.4	sharp	i	22	38	27.5		hidden in the S
i			53.9		i			34.0	sharp	group of the first.
i			57.6		i			39.5		The S groups of the
					i			42.0		two quakes are simi-
										lar in practically
										every detail.

*****September 2*****

Fordham

i	15	50	00	
i			16.5	Possibly deep focus.

*****September 7*****

Ottawa

Williamstown

Fordham

P	23	18	32	Compr.	e?	23	19	14	first cer-	iP	23	35	47
S			42		P	i		17.8	tain P	i			48.5
L			47		i			22.0		i			52
F		22			i			54.3		i			54
					i		20	01.8		i			57
Δ	=	70	km.	(44 mi.)	S	iS ₂ ?		04.5	start of max.				
H	=	23	18	18		iS ₁ ?		10.5					Possible P phase
						i		16.3					14.5 sec. earlier
													in middle of time
													mark.

Recorded by long and short
period Benioff Vertical and
Milne-Shaw horizontal. Δ
and H based on Joliat's tables.

Weston

iS?	23	20	34.7
i			36.7
iS ₁ ?			46.2

*****September 8*****

Williamstown

iP 20 44 44.0
i 45 02.5
iS₁? 04.2 max. series

*****September 10*****

Williamstown

Weston

e? 14 26 39.5 (absolute time
iP₁? 41 somewhat doubtful)
i 46
i 48
iS₁? 52 max. series
i 58
 $\Delta = 69$ km. (43 mi.)

iP_n? 14 27 02.7
iP₁ 04.2
iS₂ 27.4
iS₁ 30.3
 $\Delta = 201$ km. (126 mi.)
H = 14 26 30

*****September 11*****

Weston

i 04 09 36 i 04 13 23 i 04 30 27

A series of short period disturbances. Apparently S waves. Resemble the N. J. group of quakes. Nothing on long period records.

*****September 11*****

Williamstown

Weston

e? 23 26 37.8
iS? 27 12.0
iS? 16.2
i 24.2

i 23 27 10 Beginning disturbed
iS₁? 16 by R.R. train

*****September 13*****

Ottawa

i 14 08 24.5
L 26
F 40

e 17 01 17.5
L 19
F 23

i 17 54 05
L 06
F 20

Recorded on both the long and short period Benioffs.

- 3 -

*****September 14*****

Weston

i	18	01	55.0
i			57.2
i		02	09.8
i			14.0

*****September 15*****

Weston

i	18	22	10.7
i			11.2
i			15.9

NOTICES

From:

Portland: This station reports hearing of a disturbance in Lewiston, Me., September 8, 07:13 G.C.T. No other NESAs station has reported the disturbance.

Weston: Report of above quake received from resident of Lewiston, but no trace discovered on our records.

Daniel Linehan, S.J.

NESA BULLETIN

September 16 - 30, 1938

Bulletin No. 6

Held over from Bulletin No. 5

***** (September 12) *****

Fordham

i 15 08 32 Deep?

***** (September 14) *****

Fordham

iP 18 00 40.5
iS 01 04.0 $\Delta = 205$ kms. (128 mi.) approx.

***** (September 15) *****

Fordham

iP 18 21 43.2
iS 22 03.6 $\Delta = 172$ kms. (107 mi.)

***** (September 17) *****

Weston

eP 03 38 14
eS 41 20
e 42 03
iL 42 55

Fordham

eP 03 37 14 Felt in Arkansas
iP 44 and Tennessee
eS 40 31.5
iS 52.5

***** (September 17) *****

Weston

e? 17 35 42 Resembles
iL 36 13 Arkansas quake
eM 38 37 above

Fordham

iP₂ 17 34 11.5
i 35 10
M? 38

***** (September 17) *****

Fordham

Weston

iP	19	03	49		e	19n03	00	Small trace of the quake
i			55.5	Local				reported by Fordham; dis-
i		04	00.5					turbed by R.R. train.
i			02.5					

***** (September 19) *****

Fordham

i 08 42 44.0 Deep

***** (September 19) *****

Weston

Fordham

iP	12	14	37	Deep focus	i	12	14	35	Deep focus
----	----	----	----	------------	---	----	----	----	------------

***** (September 20) *****

Fordham

i 14 04 48 Deep?

***** (September 20) *****

Ottawa

i	14	40	53	i	15	24	41	i	16	07	15.5	i	19	38	14.5
M			54	M			42	M			17	M			16
F		41	07	F			56	F			33	F			30

***** (September 22) *****

Ottawa

P	0	12	32	Δ	=	85 km. (53 mi.)
S			43.5	H	=	0 ^h 12 ^m 3
F		13	37	Δ and H based on Joliat's Tables		

***** (September 22) *****

Fordham

e 14 31 55 Deep

***** (September 28) *****

Williamstown

e? 04 34 45
e 35 16
i 50.5
i 36 19
i 23
iS₁? 30.5

***** (September 28) *****

Fordham

i 04 38 20.5 Perhaps is the same quake as the above, but
i 26.0 difference in absolute times makes this
i 29.0 doubtful.

***** (September 29) *****

Fordham

i 19 20 04.0
i 08.5

***** (September 29) *****

Williamstown

e? 22 01 52
i 59
iS? 10
i 16

Fordham

i 22 02 04.2 e 22 02 - -
i 08.0 S₁-P₁ = 25.5 sec. (ca.)
i 10.0 Absolute time uncertain.

***** (September 30) *****

Weston

e 15 40 - - Local or blast, disturbed by microseisms.

NOTICES

From:

Weston:

Z short period out of order from 16 - 29. No records from 21 - 29; power service off due to hurricane.

Harvard:

Power service off due to hurricane from 21st to end of month.

Williamstown: Power service off due to hurricane for 20 hours.

NESA BULLETIN

October 1 - 15, 1938

Bulletin No. 7

***** (October 2) *****

Fordham

i 10 36 46

Weston

eP? 10 36 28 probably same location
eS? 55 as the following

***** (October 2) *****

Fordham

i 10 40 29

Weston

eP₂ 10 40 05 H = 10 39 50.5
eP₁ 08 Δ = 384 km. (240 mi.)
eS₂? 49.5
iS₁ 56.5

***** (October 6) *****

Fordham

i? 17 14 25.8
i 36.1
i 39.0
i 40.1
i 43.1 max.

***** (October 7) *****

Williamstown

e 16 31 22
eS₁? 50

Weston

S₁ 16 32 33.5

***** (October 9) *****

Williamstown

iP 16 56 21

Weston

iP 16 56 22 Deep focus

***** (October 10) *****

Weston

P ₁	22 02	10.5
P ₁ P ₁		11.1
i		22.5
S ₁		24.2
S ₁ S ₁		25.6

$\Delta = 114 \text{ km. (72 mi.)}$

***** (October 11) *****

Weston

e	09 41	29
S ₁	42	16

***** (October 12) *****

Fordham

i	16 23	46.2
i		47.8
i		48.0
i		52.0

***** (October 13) *****

Williamstown

i	17 33	27.4
i		31.0
i		45.6
iS ₁ ?		47.4

Fordham

i	17 33	12.7
i		19.9
i		24.5
i		27.5 max.
i		30.7

Weston

iP?	17 33	45.4
i	34	00.9
S ₁ ?		09.4

***** (October 14) *****

Fordham

i	17 14	06.5
i		09.0

***** (October 15) *****

Williamstown

S ₁ ?	21 15	04.4
------------------	-------	------

NOTICES From:

Fordham: In Bulletin No. 5, the report for September 7, 23^h35^m47^s, should read 23^h20^m47^s etc.

Add to the same Bulletin:

September 8

i	20	44	31.0	Probably S phases of shock reported by Williamstown, although times do not agree very well.
			38.7 max.	

September 10

iP ₂	14	26	58.0	$\Delta = 180$ km. (112 mi.)
iS ₂		27	19.0	
i			20.8	
i			25.1	

September 10

i	14	52	49.2	Deep?
i			51.1	
i			55.0	
i			57.0	

Daniel Linehan, S.J.

October 15 - 31, 1938

Bulletin No. 8

International
Seismological
Centre

***** (October 16) *****

Fordham

i 02 28 45 Comp.

Weston

iP 02 28 23.8 Probably preliminary of
i 29.3 teleseism.

***** (October 17) *****

Williamstown

i 20 28 14.8
i 20.4
i 24.7
iS₁? 29.5

Weston

i 20 27 57.5
i 28 00
i 04
i 09
iS₁? 12.5

***** (October 19) *****

Weston

e 01 43 50.9
i 58.4
i 44 02.9
i 04.4

***** (October 19) *****

Fordham

i 21 18 49.8 Deep

***** (October 20) *****

Fordham

i 03 01 24.0

Weston

iP? 03 01 22
i 02 01

May be late body phase of teleseism at 02 38 or preliminaries
of a new quake.

***** (October 20) *****

Harvard

e 21 40 23.9
e 26.2
iM 27.4

Weston

e 21 40 23.4
e 30.6

***** (October 21) *****

Harvard

Weston

iP 06 58 35.0 Comp. iP 06 58 36 Comp. Deep focus

***** (October 21) *****

Weston

Harvard

Williamstown

eP? 07 19 26.0
iP₁ 26.6
i 27.5
iS₂ 49.2
iS₁ 52.0
i2(S₁S₁) 55.3
i 57.3

i? 07 19 22.0
iS₂ 46.5
iS₁ 49.0

iP₁S₁ 07 19 15.6
iS₁P₂S₁ 16.9
iS₁ 25.3

$\Delta = 195$ km. (122 mi.) $\Delta = 110$ km. (69 mi.)

H = 07 18 55

$\phi = 41^{\circ}10'$ N. in South Dutchess

$\lambda = 73^{\circ}40'$ W. County, New York.

$\Delta = 210$ km. (127 mi.)

Dil. to S. West.

***** (October 21) *****

Fordham

iP₁ 07 20 02.1
iP₁P₁ 03.6
iS₁ 06.3
i 07.2
i 08.8
i 11.7
i 15.0

max.

$\Delta = 35$ km, (22 mi.)

***** (October 21) *****

Ottawa

i 17 14 52.2
LM 54
F 15 10

i 20 05 53
LM 54
F 06 06

i 20 09 19
LM 20
F 32

***** (October 22) *****

Fordham

i 13 22 55.0 Deep focus

***** (October 22) *****



Fordham

iP₂ 16 11 03.5
iS₂ 24.7
i 26.2
i 27.5 max.

Δ = 190 km. (119 mi.)

Williamstown

iP₁ 16 10 44.1
i 51.1
i 53.6
iS₁? 55.1
i 11 06.6

Δ = 90 km. (56 mi.)

Weston

iP 16 11 06.4
iP₁ 08.3
iS 29.5
iS₁ 31.8

3 = 193 km. (120 mi.)

Harvard

iP₂ 16 11 05.0
iS₂ 27.3

Probably Albany blast $\phi = 42^{\circ}31'2''$ N.
 $\lambda = 73^{\circ}51'3''$ W.
H = 16 10 25

***** (October 24) *****

Weston

i 19 44 42.6
iS₁ 52.3

***** (October 25) *****

Fordham

i 00 22 04 Deep?

***** (October 27) *****

Fordham

i 17 13 54 Deep?

***** (October 29) *****

Fordham

i 23 12 32.8 Dil.
i 35.0
i 36.1
i 38.8

Weston

iP 23 12 30 Comp.
i 57

Deep focus.

***** (October 30) *****

Fordham

i 08 38 06.5 Comp.
i 07.9
i 09.1
i 10.0

Weston

iP 08 38 04 Comp.
i 23

Deep focus

***** (October 31) *****

Fordham

i 20 44 07.8

i 21 29 01.5
i 02.5
i 03.6
i 10.0

i 21 44 33.5

Daniel Linehan, S.J.

NESA B U L L E T I N

November 1 - 15, 1938

Bulletin No. 9

(November 1)

Fordham

i 18 48 44.5

***** (November 2) *****

Fordham

i 07 37 29

***** (November 2) *****

Ottawa

i 21 46 16
L 29
F 47.5

Weston

iS₁ 21 47 22.0

***** (November 5) *****

Fordham

i 09 11 21

Weston

e? 09 11 31

***** (November 5) *****

Fordham

i 12 02 04

***** (November 7) *****

Weston

iP₁ 21 28 46.3
iS₁ 52.5

$\Delta = 51$ km. (31 mi.)
Blast ?

***** (November 8) *****

Fordham

i 03 56 56.1
i 57.4
i 58.1

Looks like nearby blast, but time of day is
strange.

***** (November 9) *****

Fordham

i 20 37 42.5 S phases of distant local?
i 44.8

***** (November 9) *****

Fordham

Weston

i 22 16 03.3
i? 05.1
i 24.0 ?
i 25.5

e 22 17 23

***** (November 10) *****

Fordham

i 21 43 22

***** (November 11) *****

Fordham

i 04 16 57

***** (November 11) *****

Fordham

Weston

i 07 23 39

iP 07 23 41 Deep focus?

***** (November 11) *****

Fordham

Weston

i 22 43 15

iP 22 43 15.5 Deep focus
i 30.0

***** (November 13) *****

Fordham

i 00 41 52

NOTICE From:

Weston:

The only Deep Focus phases listed in this Bulletin from Weston are those corresponding to phases sent in by member stations, and which might be mistaken for locals. The number of apparent Deep Focus or teleseismic preliminaries during the interval is large, but their identity should be interpretable.

NESA BULLETIN

November 16 - 30, 1938

Bulletin No. 10

***** (November 18) *****

Fordham

iP₂ 16 47 49.0
iS₂ 48 06.8

$\Delta = 152$ km. (95 mi.)

Harvard

e 16 49 06

Weston

i 16 49 07
iS₁ 15.5

***** (November 18) *****

Ottawa

iP₁ 22 19 16.6
eS₁ 24
F 21

$\Delta = 62$ km. (39 mi.)

Williamstown

iP₂ 22 19 51.5
iP₁ 53.5
iP₁P₁ 55.0
iS₂ 20 24.5
i 26.0
iS₁ 31.0

S - P = 33^s

$\Delta = \text{ca. } 295$ km. (184 mi.)

Weston

e? 22 20 07
eP₁ 13
iP₁P₁? 15
i 33
iS₂ 46.5
i 21 02.5
iS₁ 05.5

$\Delta = 420$ km. (262 mi.)

H = ca. 22 19 06

$\phi = \text{ca } 44^{\circ}45' \text{ N}$

$\lambda = \text{ca } 75^{\circ}15' \text{ W}$

Fordham

i 22 20 57.4
i 21 13.4
i 18.3

$\Delta = 497$ km. (310 mi.) $\Delta = 400$ km. (250 mi.)

Harvard

e? 22 20 12
i? 47.5
iS₁ 54.5

Quake reported from Morrisburg, Ont., by AP. Harvard located a quake in this approximate region on Jan. 6, 1938.

***** (November 23) *****

Weston

i 08 29 42 Deep focus

e 22 14 45
i 49
iS₁? 15 04
i 08

***** (November 26) *****

Williamstown

eP 07 49 17.5
iS_n? 50 14.5
i 23.5

Δ = ca 530 km. (331 mi.)

Fordham

i 07 50 55
i 51 09
i 13

Harvard

i 07 50 49.0
iS₁? 51.1

Weston

i 07 50 10
i 30
e 43.5
i 54
iS₁ 57

***** (November 28) *****

Fordham

i 06 38 24

***** (November 28) *****

Weston

i? 07 49 46.0
i 57.5
i 50 39.0
iS 53.5
iS₁ 58.3 max.

Daniel Linehan, S.J.

NESA BULLETIN

December 1 - 15, 1938

Bulletin No. 11

***** (December 1) *****

Fordham

i 12 04 55
i 12 29 27

i 12 11 51
i 12 35 49

i 12 19 05
i 12 43 46

A swarm of short period disturbances, similar to blasts but not quite the same.

***** (December 1) *****

Data from the three disturbances on this day, at 23^h29^m, 23^h34^m, and 23^h53^m, which were reported from all NESA stations, will appear in a later Bulletin.

***** (December 2) *****

Fordham

i 10 00 08 Deep focus

***** (December 2) *****

Weston

iP 17 29 30

Fordham

iP 17 29 31 Deep focus ?

***** (December 2) *****

Fordham

i 21 07 57 ?

***** (December 5) *****

Fordham

iP 18 05 12

Weston

iP 18 05 12 Deep focus



Fordham

1	19	22	05.0			
1			05.8	1	19	38
1			13.0			22.2
						24.0
						25.0

A Mrs. F. N. Brown in Verona, N.J., reported to Harvard having felt a tremor at the time of the second of these two disturbances.

***** (December 12) *****

Fordham

1 07 49 37 Deep focus

***** (December 12) *****

Weston

e	20	31	00			
				i	22	09 50

P of teleseism, or trace of local?

***** (December 13) *****

Weston

Fordham

eS	09	23	59			
eS ₁ ?		27	35	1	09	27 54
		28	00 max.	i		28 24
				i		44 max.
				i		30 40

Appears also on long period grams at both stations. Difficult to say whether it is deep focus or a local of ca. 10°

***** (December 13) *****

Fordham

1	20	29	42			
M			51.5			

S phases of distant local?

***** (December 15) *****

Weston

1S₁ 21 02 43

NOTICE From:

Weston: The manuscript for Bulletin No. 11 is appearing at this late date due to other pressing duties at the Central Station during the Christmas Season.

Daniel Linehan, S.J.

NESA BULLETIN

December 16- 31, 1938

Bulletin No. 12

***** (December 17) *****

Ottawa

i	15	48	29
i			30
LM			31
F			36

***** (December 18) *****

Weston

iP	04	29	07.5	Deep focus
i			15.5	

***** (December 19) *****

Fordham

i	18	14	25
---	----	----	----

Weston

iP	18	14	28	Comp. to NE
e		33	53	Deep focus

***** (December 21) *****

Fordham

iP	12	46	23	Small comp.
iP			24	Large dil.
i			36	

Weston

iP	12	46	24	
pP			34	Deep focus

***** (December 23) *****

Weston

i	18	24	26.5	
i			31.5	Deep focus ?
i			36.3	

***** (December 25) *****

Williamstown

e 07 47 36.6
i 40.3
e 48 18
i 30
i 34.6
i 58.7

Weston

i 07 48 18.0
i 54.3
iS₁ 49 04.2
i 10.0
i 14.0

Harvard

e 07 48 57
iS₁? 49 00.5
i 02.5
i 04.0

Fordham

i 07 49 07
i 17
29 max.

***** (December 26) *****

Weston

i 19 03 09

***** (December 26) *****

Weston

e 22 13 02

Fordham

e 22 13 34

***** (December 27) *****

Ottawa

P_n 11 50 52
P 51 01
S_n 37
S (50)
F 53 ca.

H = 11 49 54. A "rock burst" (not blast) which took the lives of two men in the Lakeshore Mines, Kirkland Lake, Canada. No other NESA station reports. Please recheck records for traces and report to Ottawa. Microseismic activity quite intense during this period.

***** (December 28) *****

Fordham

i 15 14 08
i 11

i 16 53 00

***** (December 29) *****

Fordham

23 22 16 ?

- - 3 -

***** (December 30) *****

Fordham

03 52 11 ?

***** (December 30) *****

Fordham

Weston

i 12 19 40 iP 12 19 45 Deep focus

NOTICE

From A type of local disturbance recorded by both Harvard and Weston during the past year appears to be a blast, due to similarity of times of occurrence. These times run through all hours of day and night. The following are disturbances of this type recorded at both Harvard and Weston:-

December 22	03 44 --
24	03 45 --
29	18 49 --
30	14 20 --
31	01 02 --
31	09 49 --

Other stations might be recording these, but it is doubtful.

NOTE: The report of the registration of the rock burst at Kirkland Lake was inadvertently given in Eastern Standard Time. The correction to Universal Time changes the date to December 28 and the hour readings to four.