FLORISSANT

SEISMOGRAPHIC STATION, ST. LOUIS UNIVERSITY, ST. LOUIS, MO., U. S. A.

Three Galitzin-Wilip, two Wood-Anderson short-period seismographs, Shortt synchronome clock

Bulletin for 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
184	Jan. 8	W-A G-W W-A G-W G-W G-W G-W	iP_N iS_{NE} eS_{NE} $i(SR_1)_E$ e_E e_E F_E	$15^h20^m48^s$ 15 27 24 15 27 24 15 30 29 15 30 57 15 31 24 15 47	Epicenter Near 3°.2 S 79°.2 W H = $15^h12^m44^s$ Focal depth may be slightly greater than normal Δ_{S-P} = 43°.6 Δ_{P-H} = 43°.6 Δ_{meas} = 43°.6
185	Jan. 13	W-A W-A W-A	e_E i_E e_E	$23^h09^m01.1^s$ 23 09 01.5 23 09 02.4	Local disturbance Phases small and weak
186	Jan. 14	W-A W-A W-A W-A W-A W-A	iP_{1N} i_N i_N iS_{1NE} i_{NE} i_N	$18^h05^m14.1^s$ 18 05 14.8 18 05 15.9 18 05 19.0 18 05 20.6 18 05 22.7	Local disturbance $\Delta_{S_1-P_1}$ = 44 km. H = $18^h05^m06.3^s$
187	Jan. 17	W-A W-A W-A G-W	eP_N iP_N eS_N F_E	$23^h24^m18^s$ 23 24 19 23 28 40 23 42	Epicenter near 17°.7 N, 99°.5 W H = $23^h19^m16^s$ Δ_{P-H} = 22°.8 Δ_{meas} = 22.8
188	Jan. 20	G-W G-W G-W G-W G-W G-W G-W G-W G-W G-W	iP_Z i_Z iPR_{1Z} iS_N i_Z i_E i_N iSR_{1N} iM_{NE} F_N	$06^h31^m00^s$ 06 31 03 06 31 34 06 35 22 06 35 26 06 35 34 06 35 38 06 36 31 06 38 46 07 42	Epicenter by J.S.A. ϕ = 17°.0 N λ = 105°.5 W H = $06^h25^m38^s$ Δ_{P-H} = 24°.7 Δ_{meas} = 25°.5
189	Jan. 23	W-A W-A W-A W-A	iE i_E i_{NE} i_E	$16^h00^m56.9^s$ 16 00 57.9 16 00 58.3 16 00 59.9	Local disturbance

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
190	Jan. 27	G-W	iP'_Z	$13^h48^m13^s$	Epicenter by J.S.A.
		G-W	iPR_1E_Z	13 50 01	Region of 0°0 N
		G-W	$i(SKP)_Z$	13 51 20	131°0 E
		G-W	$i(SKP)_E$	13 51 38	$H = 13^h29^m10+$ s
		G-W	$eSKS_{NE}$	13 55 16	Δmeas = 128°0+
		G-W	i_E	13 55 29	ΔSKS-H = 127°8
		G-W	$iSKKS_E$	13 57 08	
		G-W	i_N	13 57 13	
		G-W	iPS_Z	14 00 11	
		G-W	i_E	14 03 10	
		G-W	F_E	16 48	
191	Jan. 29	G-W	$eSKKS_E$	$09^h49^m25^s$	Record weak, distant;
		G-W	$i(S)_E$	09 50 24	Microseisms strong
		G-W	$iPKKP_E$	09 52 09	Provisional Epicenter
		G-W	$iPPS_E$	09 52 45	by Riverview 17°5 S
		G-W	F_E	10 53	167°5 E h = 100 km.
					Δmeas ~ 110°5
192	Jan. 29	W-A	eP_{1N}	$22^h12^m23.4^s$	Local disturbance
		W-A	iP_{ON}	22 12 24.1	ΔS_1-P_1 = 43 km.
		W-A	iS_{1N}	22 12 28.2	$H = 22^h12^m15.9^s$
		W-A	iS_{ON}	22 12 29.1	Felt in S.W. St.Louis
193	Jan. 31	W-A	eP_E	$05^h54^m50^s$	Epicenter Ø = 50°6 N
		W-A	iPR_1E	05 55 21	λ = 123°2 W
		G-W	$e(S)_E$	05 59 43	$H = 06^h49^m13^s$
		G-W	iM_N	06 03 04	$\Delta P-H$ = 26°2
		G-W	F_N	06 18	Δmeas = 26°2 Felt at
					Victoria and Vancouver B.C.

Minor Seismic Activity:

Jan. 17	12^h	44^m	to 13^h	19^m	Surface waves
Jan. 23	21	59	to 23	18	Mainly surface waves
Jan. 29	10	16	to 10	45	Surface waves
Jan. 30	13	11	to 14	01	Surface waves
Jan. 31	06	35	to 06	54	Surface waves

Strong Microseisms were recorded on the following dates:
Jan. 3, 4, 9(very strong), 11, 12, 29, 30, 31

J. B. Macelwane, S.J.
Director

Ed. J. Walter
Graduate Fellow

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SEISMOGRAPHIC STATION, ST. LOUIS UNIVERSITY, ST. LOUIS, MO., U. S. A.

Three Galitzin-Wilip, two Wood-Anderson short-period seismographs, Shortt synchronome clock

Bulletin, February, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
11	Feb.9	W-A W-A	i_N i_N F	$17^h31^m07^s.5$ 17 31 08.1 17 31 31	Local shock Probably surface waves
12	Feb.11	W-A G-W	iP_E $e(M)_N$ F	11 25 59 11 32 25 11 43	Epicenter by J.S.A. 25°0 N., 110°5 W. $H = 11^h21^m03^s$ $\Delta P - H = 22°1$ $\Delta_{meas} = 21°9$
13	Feb.21	W-A W-A G-W G-W G-W	iP_E iPR_1N $iSKS_E$ $iSKKS_E$ iS_E F	07 20 42 07 24 09 07 31 29 07 31 41 07 31 56 08 54	
14	Feb.28	W-A W-A W-A W-A W-A W-A	iP_oE e_E iS_oE iE iE iE F	21 34 07.7 21 34 12.0 21 34 13.3 21 34 13.5 21 34 14.3 21 34 15.5 21 34 40	Local shock $H = 21\ 33\ 57.8$ $\Delta S_o - P_o = 55$ km.

Mindr seismic activity:

Feb. 4	-	18^h26^m	to	18^h46^m
8	-	20 02	to	20 51
13	-	06 47	to	07 06
16	-	18 33	to	19 33
17	-	07 05	to	07 44
23	-	02 53	to	03 20

Microseisms strong - Feb. 1, 15, 25, 26, 27

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Three Galitzin-Wilip, two Wood-Anderson short-period seismographs, Shortt synchronome clock

Bulletin for March, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
15	Mar.1	G-W	iP_N	$09^h57^m28^s$	Epicenter 14°.0 N.,
		G-W	iPR_{1Z}	09 58 00	91°.0 W.
		G-W	iS_E	10 01 54	$H = 09^h52^m05^s$
		G-W	iX_Z	10 02 26	$\Delta S - P = 24°.8$
		G-W	iSR_{1N}	10 02 57	$\Delta P - H = 24°.8$
			F	10 57	$\Delta_{meas} = 24°.8$
16	Mar.1	W-A	eP_{3N}	14 43 50.0	Local shock. Epi-
		W-A	eP_{2N}	14 43 51.5	center 41°14'N.,
		W-A	iP_{1N}	14 43 52.7	89°44'W.
		W-A	iS_{4N}	14 44 17.8	$H = 14^h43^m08^s.5$
		W-A	eN	14 44 18.3	$\Delta S_2 - P_2 = 268$ km.
		W-A	iS_{3N}	14 44 18.6	$\Delta_{meas} = 268$ km.
		W-A	i_N	14 44 19.6	Felt in some parts
		W-A	i_N	14 44 20.4	of Illinois
		W-A	iS_{2N}	14 44 21.2	
		W-A	iS_{1N}	14 44 22.3	
		W-A	F	14 46 30	
17	Mar.5	W-A	iP_E	20 00 25	Epicenter by J.S.A.
		W-A	ipP_E	20 01 26	48°N., 141°E.
		W-A	iPR_{1E}	20 03 35	$H = 19^h48^m31^s$
		G-W	iS_N	20 10 23	Depth = 250 km.
		G-W	$iSKS_E$	20 10 30	$\Delta S - P = 82°.5$
		G-W	$iSKKS_E$	20 10 56	$\Delta P - H = 82°.5$
		G-W	iSP_E	20 11 25	$\Delta_{meas} = 82°.4$
		G-W	isS_N	20 12 08	
		G-W	$isSP_N$	20 12 58	
			F	20 46	
18	Mar.11	W-A	i_E	19 59 53.2	Local shock
		W-A	iE	19 59 57.3	Probably surface
		W-A	iE	19 59 59.8	waves
			F	20 00 40	
19	Mar.19	G-W	eP_Z	12 05 38	Epicenter by J.S.A.
		G-W	ipP_Z	12 05 56	53°2 N., 131°W.
		G-W	iPR_{1Z}	12 06 24	$H = 11^h59^m20^s$
		G-W	iS_E	12 10 49	Depth = 80 km.
		G-W	isS_N	12 11 19	$\Delta S - P = 31°.5$
			F lost	— Record change	$\Delta_{meas} = 31°.4$
20	Mar.20	G-W	iP_E	01 22 20	Epicenter by J.S.A.
		G-W	ipP_E	01 22 50	51°1 N., 167°6 W.
		G-W	iS_E	01 29 49	$H = 01^h13^m20^s$
		G-W	isS_E	01 30 59	Depth 200 km.
			F	03 22	$\Delta S-P = 54°.0$
					$\Delta_{meas} = 53°.9$

Florissant Bulletin, March, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
21	Mar.21	G-W	$i(P)_Z$	$23^h34^m40^s$	Epicenter by J.S.A. region of 27°.8 N., 138°.4 E.
		G-W	iPR_1Z	23 38 49	
		G-W	i_Z	23 39 19	
		G-W	$i(SKS)_E$	23 46 15	
		G-W	i_N	23 47 55	
			F	01 22	
					$H = 23^h21^m06^s$
					$\Delta PR_1 - H = 99°.7$
					$\Delta meas = 99°.9$
22	Mar.23	W-A	e_N	21 22 31.9	Local shock. Probably surface waves.
		W-A	i_N	21 22 32.8	
			F	21 23 00	
23	Mar.29	W-A	eP_4N	07 43 36.8	Local shock $\Delta S_4 - P_4 = 215$ km. Felt in Harrisburg and Eldorado, Ill.
		W-A	e_N	07 43 36.9	
		W-A	e_N	07 43 37.5	
		W-A	e_N	07 43 37.7	
		W-A	$i(S_4)_N$	07 44 00.9	
		W-A	i_N	07 44 01.0	
		W-A	i_N	07 44 01.7	
		W-A	i_N	07 44 02.2	
		W-A	i_N	07 44 03.7	
		W-A	i_N	07 44 05.3	
			F	07 46 01	
24	Mar.30	G-W	e_Z	09 16 53	Epicenter by J.S.A. region of 27°.6 N. 40°.9 W.
		G-W	eS_N	09 23 28	
		G-W	e_N	09 26 45	
			F	10 10	
					$H = 09^h09^m03^s$
					$\Delta S - H = 42°.1$
					$\Delta meas = 42.8$
25	Mar.30	W-A	i_N	21 14 31.9	Local shock Probably surface waves
		W-A	i_N	21 14 32.3	
			F	21 14 53	

Minor Seismic Activity:

		h		
March 6	--	20^h00^m	to	20^h50^m
9	--	10 25	to	11 00
26	--	18 23	to	18 50

Microseisms strong: Mar. 1-4, 13, 14, 16, 20.

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Director

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Florissant bulletin April, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
26	Apr.4	W-A	i_E	$17^h04^m11^s.9$	Local shock
		W-A	e_E	17 04 14.6	
		W-A	i_E	17 04 16.2	
		W-A	i_E	17 04 17.5	
		W-A	e_E	17 04 17.9	
		W-A	i_E	17 04 19.3	
			F	17 05 20	
27	Mar.6	W-A	$(e)_N$	15 10 57.2	Local shock
		W-A	e_N	15 10 59.6	
		W-A	i_N	15 10 59.9	
		W-A	i_N	15 11 02.5	
			F	15 11 18	
28	Mar.8	G-W	iP_E	15 55 55	Epicenter by Regis 11° N. 119°E. $H = 15^h40^m$ Felt in the Philippine Islands
		G-W	iP_Z	15 59 33	
		G-W	iPR_E	16 00 54	
		G-W	$iSKP_E$	16 02 20	
		G-W	ePR_E	16 03 48	
		G-W	$iSKS_Z$	16 06 00	
		G-W	$iSKKS_E$	16 07 17	
		G-W	iS_E	16 08 25	
		G-W	ePS_N	16 10 30	
		G-W	eSP_N	16 10 40	
			NF	18 47	
29	Mar.11	G-W	iP_Z	01 30 17	Epicenter by J.S.A. 14°7 N., 91°2 W. $H = 01^h25^m11^s$ Depth 130 km. Δ P- H = 23°6 Δ S - P = 23°6 Δ_{meas} = 23°6 F lost, microseisms strong
		G-W	ipP_Z	01 30 43	
		G-W	eS_E	01 34 22	
		G-W	esS_E	01 35 07	
30	Mar.13	W-A	i_N	21 10 25.3	Local shock
		W-A	i_N	21 10 25.7	
		W-A	i_N	21 10 25.9	
		W-A	i_N	21 10 31.0	
		W-A	i_N	21 10 32.5	
			F	21 11 35	
31	Mar. 16	W-A	i_N	21 41 19.5	Local shock
		W-A	i_N	21 41 20.5	
		W-A	i_N	21 41 24.5	
		W-A	e_N	21 41 25.0	
		W-A	i_N	21 41 25.3	
		W-A	i_N	21 41 25.5	
		W-A	i_N	21 41 30.6	
			F	21 42 39	

Florissant Bulletin for April, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
32	Mar.20	G-W G-W G-W G-W G-W G-W	i_Z i_Z i_Z i_N e_N i_N F	08 53 17 08 57 11 08 59 00 09 03 18 09 05 47 09 06 27 09 46	Record weak Surface waves quite small
33	Mar.23	W-A	e_N F	23 02 42.3 23 03 05	Local shock
34	Mar.27	G-W G-W G-W G-W G-W	$e(P)_Z$ eP_Z eS_Z eL_Z eM_Z F	09 25 06 09 25 14 09 32 01 09 39.5 09 43.5 09 53	Epicenter region of 42° N. 29° E. Record weak H = $09^h16^m43^s$ $\Delta P - H = 46°0$ $\Delta_{meas} = 46°2$
35	Mar. 27	W-A	i_N F	20 59 19.6 20 59 34	Local shock
36	Mar. 29	G-W G-W G-W G-W	$e(P)_Z$ $e(PR_1)_Z$ $e(S)_E$ $e(SP)_E$ F	11 56 17 12 00 23 12 08 16 12 09 52 13 08	Region of Fiji Islands?

Minor seismic activity:

April 8	--	20^h44^m	to	21^h03^m
9	--	05 56	to	06 16
13	--	08 58	to	09 30
13	--	11 55	to	12 20
19	--	02 41	to	03 04
22	--	23 30	to	23 56
25	--	14 05	to	14 30
25	--	19 50	to	20 00
27	--	17 34	to	20 25
28	--	02 20	to	03 51
30	--	02 26	to	02 57

Microseisms strong - April 10, 23.

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Bulletin for May, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
37	May 2	G–W W–A	$e(S)_E$ i_N F_N	$20^h 36^m 08^s$ 20 38 01 20 44	Very weak
38	May 2	W–A G–W	$i(P)_N$ $e(S)_N$ F	21 51 21 21 56 07 22 10	Very weak
39	May 6	G–W G–W G–W	$e(P)_Z$ e_N e_Z F_Z	22 56 53 23 02 34 23 13 00 23 48	Weak
40	May 8	W–A W–A W–A W–A	eP_N i_N iS_N iL_N F	20 42 07.2 20 42 07.7 20 42 09.5 20 42 10.9 20 42 29	Local shock $\Delta S_1 - P_1 = 20$ km. $H = 20^h 42^m 03^s.6$
41	May 13	W–A W–A W–A	i_E i_E i_E F_E lost in	15 05 21.8 15 05 21.9 15 05 22.6 succeeding shock	Local shock weak
42	May 13	W–A	i_E F_E	15 05 41 15 05 55	Local shock Very weak
43	May 14	G–W G–W W–A	iP_Z $i(S)_E$ $e(G)_E$	02 20 56 02 26 47 02 29 52	Epicenter by J.S.A. 0°.3 S., 80°.2 W. $H = 02^h 14^m 04^s$ $\Delta_P - H = 40°.0$ $\Delta_{meas} = 40°.1$ S doubtful because of high amplitudes on record. F lost in second shock
44	May 14	W–A	iP_N F_N	03 01 50 05 26	Second quake. One of series from epicenter of #40. S lost in surface waves of preceding shock.
45	May 14	G–W G–W	eP_Z iS_E F_E	08 46 21 08 53 26 09 25	Aftershock of #40

Florissant Bulletin for May, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
46	May 14	W-A	i_E	$21^h04^m44^s.6$	Local shock
		W-A	i_E	21 04 45.1	$\Delta S - P = 13$ km.
		W-A	i_E	21 04 48.4	$H = 21^h04^m38^s.4$
			F	21 05 20	
47	May 15	G-W	eP_Z	10 58 05	Aftershock of #40.
		G-W	iS_E	11 04 06	
		G-W	F	11 42	
48	May 15	G-W	eP_Z	11 58 54	Aftershock of #40.
		G-W	eS_E	12 04 44	
			F	13 18	
49	May 16	W-A	i_N	20 35 17.9	Local shock?
		W-A	i_N	20 35 18.6	
		W-A	i_N	20 35 22.3	
		W-A	i_N	20 35 27.9	
		W-A	i_N	20 35 28.7	
		W-A	i_N	20 35 29.1	
			F	20 36 06	
50	May 16	W-A	i_N	20 36 45.4	May not be of
		W-A	i_N	20 37 04.4	seismic origin
		W-A	i_N	20 37 06.9	
		W-A	i_N	20 37 18.6	
		W-A	i_N	20 37 26.7	
		W-A	i_N	20 37 27.5	
			F	20 37 34	
51	May 16	W-A	e_N	20 38 23.4	May not be of
		W-A	i_N	20 38 29	seismic origin
		W-A	e_N	20 38 32.8	
		W-A	i_N	20 38 36.6	
		W-A	e_N	20 39 41.6	
			F	20 40 15	
52	May 16	W-A	e_N	20 58 23.8	
		W-A	i_N	20 58 23.9	May not n
		W-A	e_N	20 58 28.0	May not be of e
		W-A	i_N	20 58 35.4	seismic origin.
		W-A	i_N	20 58 54.8	
		W-A	i_N	20 59 05.5	
			F	20 59 28	
53	May 17	G-W	iP_Z	15 21 51	Epicenter by J.S.A.
		G-W	epP_Z	15 22 58	region of 80°.2 W.
		G-W	iPR_{1Z}	15 23 52	01°.8 S.
		G-W	iS_Z	15 27 55	H = 15 15 50
		G-W	esS_Z	15 29 13	$\Delta S - P = 41°.2$
		G-W	iSR_{1Z}	15 31 m11	$\Delta meas = 41°.3$
			F	16 19	Depth = 300 km.

Florissant Bulletin for May, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
54	May 20	W-A	e_N	$11^h02^m05^s$	Record weak
		G-W	e_Z	11 03 43	
		G-W	i_Z	11 04 43	
		G-W	$e(L)_Z$	11 05 14	
		G-W	$e(M)_Z$	11 05 46	
			F	11 09	
55	May 20	W-A	$i(P)_N$	11 19 55^s	Record weak
		G-W	$e(S)_Z$	11 23 06	
		G-W	$e(L)_Z$	11 24 22	
		G-W	$e(M)_Z$	11 25 01	
			F	11 28	
56	May 20	W-A	$e(S)_N$	16 13 37.4	Local shock
		W-A	e_N	16 13 38.5	
		W-A	i_N	16 13 39.3	Record weak
			F	16 14 11	
57	May 22	G-W	eP_Z	10 37 51	Apparently aftershock of #40
		G-W	ePR_{1Z}	10 39 23	
		G-W	e_E	10 43 36	
		G-W	iS_E	10 43 51	
		G-W	eS_cP_N	10 43 58	
		G-W	eS_cS_E	10 48 02	
			F	11 04	
58	May 23	W-A	iP_{1N}	19 42 30.3	Local shock
		W-A	eP_{1N}	19 42 30.4	$\Delta S_1 - P_1 = 44$ km.
		W-A	iP_N	19 42 31.3	$H = 19^h42^m22^s.6$
		W-A	iS_N	19 42 35.2	
		W-A	iS_N	19 42 37.3	
		W-A	iL_N	19 42 38.6	
		W-A	iL_N	19 42 38.9	
			F	19 43 54	
59	May 24	G-W	e_Z	03 45 47	May not be of seismic origin
		G-W	e_Z	03 48 29	
		G-W	e_Z	03 49 21	
		G-W	$e(M)_Z$	04 46 04	
			F	05 07	
60	May 27	G-W	$e(P)_Z$	06 46 40	Wellington gives
		G-W	ePR_{1Z}	06 50 47	$34^oS.$, $177^oW.$
		G-W	ePR_{2Z}	06 53 08	and $H = 06^h31^m.8$
		G-W	ePR_{3Z}	06 55 04	$\Delta_{meas} = 108^o$
		G-W	$iSKS_E$	06 56 50	
		G-W	$e(S)_E$	06 59 03	
		G-W	eSP_E	07 00 53	
			F	08 59	
61	May 28	G-W	iP_Z	01 20 53	Epicenter by J.S.A.
		G-W	ipP_Z	01 21 47	region of $124^o.5$ E.
		G-W	$iPKP_Z$	01 23 50	$0^o.8$ S.
		G-W	$ipPKK_Z$	01 24 33	$H = 01^h04^m36^s$
		G-W	$iSKS_E$	01 30 48	Depth = 180 km.
		G-W	iS_E	01 34 32	$\Delta P - H = 132^o.2$
		G-W	isS_E	01 35 46	$\Delta_{meas} = 131^o.3$
		G-W	iSR_{1E}	01 43 51	
			F	03 55	

Florissant Bulletin for May, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
62	May 29	G-W G-W G-W	eP_Z eS_Z eL_Z F	$05^h41^m34^s$ 05 49 14 05 58 45 06 14	Record weak. $\Delta S - P = 54^o$
63	May 29	W-A W-A	e_N i_N F	20 00 13.3 20 00 14.2 20 01 03	Local shock Very weak, probably surface waves
64	May 30	G-W G-W	e_E e_E	07 17 30 07 21 08	Distant. F lost in following quake.
65	May 30	G-W G-W	$i(P)_Z$ iS_E F	07 24 55 07 28 51 08 03	$H = 07^h20^m06^s$ $\Delta S - (P) = 21^o.4$ $P - H = 04^h49^m$
66	May 31	G-W G-W G-W	e_Z e_Z e_Z F	03 06 03 03 13 16 03 15 26 03 34	Record weak
67	May 31	G-W G-W	eP_Z iS_N F	05 30 13 05 37 57 06 18	Epicenter region of $53^oN., 169^oE.$ $H = 05^h20^m43^s$ $\Delta S - P = 54^o.5$ $\Delta meas = 54^o.3$

Minor Seismic Activity:

May 3	--	01^h52^m	to	03^h37^m
3	--	04 55	to	05 59
6	--	04 17	to	05 35
10	--	12 40	to	12 53
12	--	14 28	to	14 39
14	--	10 44	to	10 52
14	--	15 54	to	16 20
15	--	03 13	to	03 36
19	--	12 09	to	12 19
20	--	18 03	to	18 27
22	--	18 32	to	19 53
23	--	03 17	to	03 55
23	--	15 05	to	15 17
23	--	15 58	to	16 08
31	--	lost	to	14 16
31	--	10 53	to	11 13

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Three Galitzin-Wilip, two Wood-Anderson short-period seismographs, Shortt synchronome clock

Bulletin, June, 1942

No.	Date	Inst.	Phase	G.M.C.T	Remarks
68	June 6	G-W W-A W-A G-W	e_Z e_N e_M e_{F^Z}	$11^h44^m22^s$ 11 49 21 11 50 16 12 19 33 12 39	Record weak
69	June 6	G-W G-W	e_N e_{LE} F	15 30 23 15 55 21 16 10	Record weak. Part lost in changing records
70	June 6	W-A W-A W-A W-A W-A	$(e)_N$ $(e)_N$ i_N i_N F	19 21 55.0 19 21 56.0 19 22 00.5 19 22 02.5 19 23 40	Local shock Probably only surface waves
71	June 9	W-A W-A G-W G-W	i_N i_N i_N F	09 41 20 09 42 17 09 43 55 09 46 21 09 49	Record weak
72	June 9	W-A W-A G-W G-W G-W	e_E i_E e_Z i_Z F	11 12 50 11 13 36 11 22 35 11 24 55 11 26 32 11 55	Record weak
73	June 9	W-A W-A	e_E i_E F	22 03 32.3 22 03 32.6 22 03 56	Local shock
74	June 10	G-W G-W G-W G-W	i_Z e_Z e_Z F	01 18 54 01 19 25 01 42 17 01 48 54 02 05	Record weak.
75	June 10	G-W G-W G-W G-W G-W G-W	i_Z i_Z e_Z e_Z e_Z F	10 41 52 10 43 16 10 44 53 10 49 20 11 36 18 11 46 58 12 29	Record weak.

Florissant Bulletin for June, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
76	June 11	G-W G-W G-W G-W G-W	e_E e_E i_E e_E i_E F	$02^h20^m43^s$ 02 21 03 02 21 43 02 22 14 02 23 08 02 40	Record weak
77	June 12	G-W G-W	eP_Z eS_Z F	10 29 31 10 35 49 11 41	Epicenter by J.S.A. 0.0°N., 77.0°W. $H = 10^h21^m50^s$ $\Delta S - P = 40°6$ $\Delta_{meas} = 40°3$
78	June 14	G-W G-W G-W G-W G-W G-W	e_E $e(S)_E$ $i(SKS)_E$ $i(PS)_E$ eL_E eM_E F	03 28 00 03 34 27 03 34 32 03 37 46 04 09 25 04 19 25 04 49	Phases indistinct Identifications doubtful
79	June 15	G-W G-W G-W G-W	iP_Z eS_N i_N iL_N F	16 46 54 16 51 18 16 51 37 16 55 20 17 10	Epicenter by J.S.A. 19.0°N., 106°5 W. $H = 16^h41^m33^s$ $\Delta S - P = 24°6$ $\Delta_{meas} = 24°4$
80	June 16	G-W G-W G-W	i_Z i_Z eL_E F	05 00 21 05 00 47 05 40 00 05 43	Record weak
81	June 16	G-W G-W G-W G-W G-W	$i(P)_Z$ i_N i_N iS_N i_N F	07 50 24 07 51 56 07 52 25 07 56 07 07 56 58 08 27	Phases doubtful
82	June 16	G-W G-W G-W G-W	iP_Z $i(pP)?_Z$ iS_N $i(sS)?_N$ F	21 12 43 21 14 18 21 18 20 21 21 20 21 49	Epicenter by J.S.A. 0.3°S., 80.2° W. H = 21 05 57 $\Delta S - P = 40°0$ $\Delta_{meas} = 40°0$ Aftershock of series beginning May 14.

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No.	Date	Inst.	Phase	G.M.C.T.	Remarks
83	June 18	G-W	$e(PR_1)_N$	09 49 09	Record weak
		G-W	e_N	09 51 24	Riverview gives
		G-W	e_N	09 55 25	H = 09 30 57
		G-W	$e(S)_N$	09 56 56	$\Delta S - H = 104°.1$
		G-W	e_N	09 58 09	
		G-W	$e(PPS)_N$	09 58 54	
		G-W	eL_N	10 21	
		G-W	eM_N	10 29	
			F	11 58	
84	June 19	G-W	e_E	19 59 52	Record weak
		G-W	e_E	20 00 15	
		G-W	i_E	20 00 21	
			F	20 50	
85	June 20	G-W	iP_Z	10 06 58	Epicenter by J.S.A.
		G-W	ipP_Z	10 07 06	18°.2 N., 101°.0 W.
		G-W	iS_N	10 10 55	H = 10 02 05
		G-W	isS_N	10 11 07	Depth $\cong$ 80 km.
			F	10 53	$\Delta S - P = 22°.1$
					$\Delta_{meas} = 22°.2$
86	June 20	W-A	e_N	20 11 47.6	Weak. Probably
		W-A	eL_N	20 11 48.8	surface waves
			F	20 12 12	
87	June 21	G-W	i_Z	04 51 14	Record very weak
		G-W	$i(SKS)_N$	05 01 38	
		G-W	i_N	05 02 34	
			F	05 37	
88	June 22	W-A	i_N	14 16 22.3	Local shock
			F	14 16 36	
89	June 22	W-A	i_N	15 36 57.9	Local shock
			F	15 37 23	
90	June 22	G-W	e_Z	20 00 18	
		G-W	e_Z	20 00 46	
		G-W	$i(S)_N$	20 05 19	
		G-W	i_N	20 05 40	
		G-W	e_N	20 06 23	
		G-W	eL_N	20 12 10	
			F	20 25	
91	June 22	W-A	i_N	20 22 42.7	Local shock
		W-A	i_N	20 22 43.0	
			F	20 23 20	
92	June 23	G-W	i_Z	09 01 34	
		G-W	i_Z	09 01 53	
		G-W	e_N	09 06 06	
		G-W	e_N	09 06 38	
			F	09 18	

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No.	Date	Inst.	Phase	G.M.C.T.	Remarks
93	June 23	W-A	i_E	16 34 47.7	Local shock
		W-A	i_E	16 34 49.2	
			F	16 35 12	
94	June 24	G-W	ePR_{1Z}	11 36 12	Wellington gives 40.9°S. 175.9°E.
		G-W	ePR_{2Z}	11 38 50	
		G-W	$eSKKS_N$	11 43 19	H = 11 16 29
		G-W	eS_N	11 44 13	Δ_{meas} = 117°
		G-W	iSP_N	11 46 04	Destructive in New Zealand
			F	14 22	
95	June 24	G-W	e_N	18 50 02	Record weak
		G-W	e_N	18 58 08	Z component Galitzin-Wilip not functioning at time of earthquake
		G-W	i_N	19 09 39	
		G-W	e_N	19 19 35	
		G-W	i_N	19 23 01	
		G-W	i_N	19 27 03	
		G-W	i_N	19 32 38	
			F	20 27	
96	June 27	G-W	i_N	03 00 45	Very weak
		G-W	i_N	03 06 34	
		G-W	i_N	03 07 18	
		G-W	i_N	03 09 45	
			F	03 15	
97	June 28	W-A	e_N	00 12 25	
		W-A	i_N	00 12 42	
		G-W	i_E	00 17 39	
		G-W	i_E	00 18 11	
		G-W	eL_N	00 22 37	
			F	00 36	
98	June 28	W-A	eP_{1N}	18 57 53.7	Local shock
		W-A	e_N	18 57 54.6	ΔS - P = 63 km.
		W-A	iS_{1N}	18 58 00.6	H = 18 57 42.9
		W-A	iS_N	18 58 01.4	
		W-A	iS_N	18 58 01.6	
		W-A	iL_N	18 58 03.9	
			F	18 58 39	
99	June 29	G-W	iP_Z	06 38 03	J.S.A. gives 31°9 S. 69°8 W.
		G-W	ipP_Z	06 38 28	
		G-W	iS_Z	06 47 29	H = 06 26 44
		G-W	isS_Z	06 48 07	Depth = 100 km.
			F	07 09	ΔP - H = 73°8
					Δ_{meas} = 73.2

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Minor Seismic Activity

June 1 -	13^h06^m	to	13^h47^m
2 -	17 46	to	18 06
9 -	17 25	to	17 45
13 -	17 05	to	17 26
13 -	20 04	to	20 55
15 -	06 19	to	06 34
16 -	06 28	to	06 45
21 -	15 54	to	17 42
21 -	20 12	to	22 35
23 -	07 19	to	07 26
24 -	18 34	to	18 41
25 -	21 02	to	22 40
26 -	05 29	to	05 38
26 -	07 09	to	07 51
26 -	08 21	to	09 15
26 -	09 52	to	10 33
26 -	12 31	to	14 49
28 -	02 02	to	02 06
29 -	17 46	to	18 12
30 -	05 56	to	06 14
20 -	08 28	to	08 45

Microseisms strong - June 1 and 2

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Three Galitzin-Wilip, two Wood-Anderson short-period seismographs, Shortt synchronome clock

Florissant Bulletin for July, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
100	July 1	G-W	i_N	21 h 41 m 10 s	Weak
		G-W	i_N	21 42 43	
		G-W	e_N	21 47 13	
			F	22 07	
101	July 2	G-W	e_N	07 59 27	Weak
		G-W	i_N	08 01 03	
		G-W	e_N	08 05 05	
		G-W	i_N	08 05 58	
			F	08 40	
102	July 2	W-A	$(e)P_N$	21 20 27.3	Local shock
		W-A	$(e)S_N$	21 20 30.9	H = 21 20 21.6
		W-A	eS_N	21 20 31.2	S - P = 33 km.
		W-A	iL_N	21 20 32.5	
		W-A	iL_N	21 20 33.3	
			F	21 20 52	
103	July 3	G-W	e_E	03 09 02	Weak
		G-W	e_E	03 13 41	
		G-W	e_E	03 40 07	
		G-W	i_E	03 48 58	
		G-W	e_E	04 04 49	
			F	04 42	
104	July 4	G-W	iP_Z	02 00 35	Aftershock of #43
		G-W	ipP_Z	02 02 07	
		G-W	iS_E	02 06 33	
		G-W	esS_E	02 09 01	
			F	03 13	
105	July 4	G-W	iP_Z	06 16 02	Aftershock of #43
		G-W	$e(pP)_Z$	06 17 36	
		G-W	iS_E	06 22 02	
		G-W	$i(sS)_E$	06 24 43	
			F	07 54	
106	July 4	G-W	eP_Z	18 59 57	Epicenter region
		G-W	i_E	19 03 31	of 52° N., 174°W.
		G-W	iS_E	19 07 46	Slightly deep?
		G-W	e_E	19 17 10	H = 18 50.3
		G-W	e_E	19 26 44	
			F	20 08	
107	July 5	G-W	iP_Z	10 37 19	Aftershock of #43
		G-W	$i(pP)_Z$	10 38 51	
			F	11 35	

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No.	Date	Inst.	Phase	G.M.C.T.	Remarks
108	July 5	G-W G-W G-W	eZ e_N i_N F	14 18 41 14 20 13 14 24 37 14 44	Weak
109	July 7	G-W G-W G-W G-W G-W	ipP_Z ePR_1Z $iSKKS_E$ e_E e_F	03 08 39 03 10 24 03 18 08 03 19 42 03 23 04 04 40	Weak Δ_{calc} = 103° ca. Depth = 400-500 km.
110	July 7	G-W G-W G-W G-W	iP_Z epP_N $e(S)_N$ $(e)sS_N$ F lost in	12 45 15 12 46 48 12 50 55 12 53 01 changing records	Aftershock of #43
111	July 8	G-W G-W G-W G-W G-W G-W G-W G-W	eP_E iP_E iPR_1E iS_E iSP_E ipS_E isS_E $isSP_E$ F	07 06 22 07 06 25 07 08 42 07 15 06 07 15 36 07 16 01 07 16 16 07 16 42 10 10	J.S.A. gives 24°.5 S. 69°.5 W. Depth = 175 km. Δ_T = 66°.0 Δ_{meas} = 66°.1 H = 06 55 54
112	July 8	G-W G-W G-W G-W	iP_Z epP_Z $i(S)_E$ isS_E F	22 38 26 22 39 53 22 44 22 22 46 54 00 08	Aftershock of #43
113	July 11	W-A W-A	i_E i_F	21 27 12.9 21 27 15.2 21 27 45	Weak, probably surface. Local shock.
114	July 12	G-W G-W G-W G-W	iP_E epP_E $i\ S_E$ esS_E F	05 12 53 05 14 26 05 18 52 05 21 43 06 35	Aftershock of #43
115	July 12	W-A W-A W-A W-A W-A	eP_E eS_E i_E iL_E eL_E F	17 06 18.7 17 06 24.1 17 06 25.0 17 06 25.6 17 06 26.4 17 07 32	Local shock H = 17 06 10.3 Δ_{S-P} = 49 km.

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No.	Date	Inst.	Phase	G.M.C.T.	Remarks
116	July 13	G-W G-W G-W G-W	e_E e_E eL_E $e(L)_E$ F	$01^h44^m27^s$ 01 45 28 01 08 33 01 44 45 02 03	Weak
117	July 13	W-A W-A W-A W-A W-A W-A	i_N i_N e_N e_N i_N i_N F	14 03 39.4 14 03 40.9 14 03 41.8 14 03 44.2 14 03 45.4 14 03 46.8 14 05 10	Very weak
118	July 14	W-A W-A W-A	e_N i_N e_N F	01 09 16.9 01 09 17.6 01 09 17.8 01 09 38	Local shock Very weak
119	July 15	W-A W-A W-A W-A	i_N i_N i_N i_N F	21 45 30.9 21 45 33.1 21 45 37.5 21 45 56.4 21 46 14	Local shock Weak
120	July 20	G-W G-W G-W G-W G-W G-W G-W	e_N e_N iE_E e_E iE_E iE_E F	01 28 26 01 29 09 01 31 03 01 31 57 01 33 46 01 36 32 01 54	Weak
121	July 21	G-W G-W G-W G-W G-W	e_N iE_E iE_E iF_E $e(L)_E$ F	08 53 23 09 00 42 09 01 12 09 03 02 09 20 08 09 40	Weak
122	July 25	G-W G-W G-W G-W G-W G-W G-W G-W	ePR_{1E} ePR_{2E} $iSKS_E$ $iSKKS_E$ eS_E iSP_E eL_E $e(M)_E$ F	06 42 08 06 45 19 06 48 11 06 49 36 06 50 55 06 52 01 07 18 41 07 23 53 08 43	Epicenter region of 11° N. and 126°E. H = 06 22 +

Florissant Bulletin for July, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
123	July 23	G-W G-W	i_E e_E F	H 15 33 42 15 37 06 16 28	Very weak
124	July 25	W-A W-A W-A W-A	e_N i_N e_N i_N F	16 59 11.6 16 59 13.1 16 59 13.2 16 59 14.3 16 59 47	Local shock
125	July 25	W-A W-A	i_N i_N F	21 39 45.7 21 39 46.5 21 40 16	Local shock. "F" doubtful because of non-seismic vibrations.
126	July 26	W-A W-A W-A	i_N i_N e_N F	18 19 36.5 18 19 37.7 18 19 38.6 18 20 27	Local shock
127	July 29	W-A W-A	e_N i_N F	17 15 00.5 17 15 02.4 17 15 29	Local shock Weak
128	July 29	W-A W-A W-A W-A	iP_N iP_N iS_N iS_N F	18 25 28.2 18 25 29.2 18 25 33.4 18 25 34.9 18 27 11	Local shock ΔS - P = 47 km. H = 18 25 20.1
129	July 29	W-A W-A	e_N i_N F	19 15 22.8 19 15 25.1 19 15 44	Local shock
130	July 29	G-W G-W G-W G-W G-W G-W G-W G-W G-W	$e(P)_N$ $iPKP_N$ iPR_E $eSKS_E$ $eSKKS_E$ iS_E $iPPS_E$ eL_E eM_E F	23 08 35 23 11 50 23 13 34 23 18 40 23 20 36 23 22 17 23 25 20 00 03 00 35 01 40	Region of Ceram, Is., (Moluccas)
131	July 31	W-A W-A W-A	i_N i_N i_N F	21 24 35.0 21 24 37.1 21 24 37.4 21 27 24	Local shock

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Minor Seismic Activity

July 5 - 23^h26^m to 23^h48^m
8 - 22 08 to lost in Quake #112
13 - 06 27 to 07 41
20 - 16 27 to 17 03
24 - 06 18 to 07 03
24 - 12 23 to 12 43
25 - 01 31 to 01 56
29 - 05 24 to 05 58

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No.	Date	Inst.	Phase	G.M.C.T.	Remarks
132	Aug.1	W-A	e_E	12 53 22	Wellington gives
		W-A	e_E	12 54 23	41°S 175°.8 E
			F lost in 133		Destructive in and near Wellington
133	Aug.1	G-W	ePZ	14 50 19	Epicenter Region of
		G-W	iSKSZ	15 00 55	07°.5 N 156°.0 E
		G-W	eSKKSZ	15 01 49	H = 14 36 11
		G-W	iSP$_E$	15 04 45	Δ_{meas} = 105°.2
		G-W	eL$_E$	15 26.3	Δ_{SKS-H} = 105.2
		G-W	F	17 09	Δ_{SP-H} = 105.2
134	Aug. 3	G-W	e_E	03 21 20	Very Weak
		G-W	e_E	03 26 53	
		G-W	i$_E$	03 32 49	
		G-W	e_E	03 33 28	
		G-W	i$_E$	03 34 57	
		G-W	e_E	03 36 44	
		G-W	F	03 40	
135	Aug. 3	G-W	i$_E$	20 33 15	Weak
		G-W	i$_E$	20 34 13	
		G-W	e_E	20 34 52	
			F	21 12	
136	Aug. 3	W-A	e_E	20 51 40.4	Local Shock
		W-A	e_E	20 51 41.5	
		W-A	i$_E$	20 51 42.9	
		W-A	iL$_E$	20 51 44.3	
			F	20 51 57	
137	Aug. 5	G-W	e_E	14 27 45	Weak
		G-W	e_E	14 29 14	
		G-W	e_E	14 32 36	
			F	14 38	
138	Aug. 6	G-W	iP$_Z$	23 42 19	U.S.C. and G.S.
		G-W	ipP$_E$	23 43 00	gives 14.4 N
		W-A	eS$_E$	23 46 42	90.9 W
			F	05 07	H = 23 36 57
					Depth uncertain but greater than normal.
					Δ_{meas} = 24.5
					Δ_{S-P} = 24.4
					Δ_{P-H} = 24.4

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No.	Date	Inst.	Phase	G.M.C.T.	Remarks
139	Aug.7	G–W	i_Z	07 10 08	Weak
		G–W	e_Z	07 14 47	
		G–W	e_Z	07 16 15	
		G–W	eL_Z	07 19 47	
		G–W	eM_Z	07 22 42	
		G–W	F	07 44	
140	Aug.8	W–A	eP_N	07 24 47	Epicenter region of
		W–A	iP_N	07 24 48	14°.3 N., 89°.5 W.
		G–W	eS_E	07 29 10	H = $23^h19^m32^s$
		G–W	eSR_{1N}	07 30 11	$\Delta S - P = 24°.3$
		G–W	F	08 21	$\Delta P - H = 24°.0$
					$\Delta_{meas} = 24°.1$
141	Aug. 8	G–W	iP_Z	22 41 54	Epicenter by J.S.A.
		G–W	e_E	22 46 23	13°.4 N., 91°.2 W.
		G–W	isS_E	22 46 53	After shock of #136
		G–W	iL_E	22 52 05	H = $22^h36^m32^s$(?)
		G–W	iM_E	22 56 35	
		G–W	F	00 44	
142	Aug.10	W–A	i_N	14 59 46	Weak
		W–A	i_N	14 59 58	
		G–W	e_E	15 05 27	
			F	15 20	
143	Aug.11	G–W	i_Z	04 53 40	
		G–W	i_Z	04 54 09	
		G–W	i_E	04 59 14	
		G–W	i_E	04 59 54	
		G–W	i_E	05 02 55	
		G–W	iM_Z	05 08 23	
			F	05 41	
144	Aug.11	G–W	i_Z	07 16 55	
		G–W	e_Z	07 17 28	
		G–W	i_E	07 21 05	
		G–W	i_E	07 27 46	
		G–W	i_E	07 32 44	
			F	08 07	
145	Aug.11	W–A	e_E	21 24 21.8	Local shock
		W–A	i_E	21 24 22.6	
		W–A	e_E	21 24 23.0	
		W–A	i_E	21 24 23.6	
		W–A	i_E	21 24 24.1	
		W–A	i_E	21 24 25.0	
		W–A	i_E	21 24 25.6	
		W–A	i_E	21 24 25.8	
		W–A	i_E	21 24 26.8	
		W–A	i_E	21 24 27.6	
			F	21 25 00	

Florissant Bulletin for August, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
146	Aug.13	G-W G-W G-W G-W G-W G-W G-W	e_Z e_Z i_E i_E i_E e_{L_E} e_{M_E} F	16 02 38 16 04 05 16 11 11 16 11 25 16 13 41 16 38 30 16 42 55 17 23	Epicenter region of 09°.5 S. 143°.0 E. Riverview gives H = 15h44m44s May be deeper than normal Δ_{meas} = 129°.5
147	Aug.13	G-W G-W G-W G-W	i_E i_E i_E e_E F	19 43 10 19 43 38 19 45 44 19 46 15 20 10	Weak
148	Aug.14	G-W G-W G-W G-W	e_Z e_N i_E i_E F	20 55 54 21 00 30 21 03 22 21 07 26 22 08	Very poor record Epicenter by J.S.A. 18° N. and 105°W.
149	Aug.15	G-W G-W G-W	i_Z e_E $e(L)_E$ F	06 40 25 06 46 13 06 52 08 07 16	Weak
150	Aug.15	G-W G-W G-W G-W	e_Z e_Z e_{L_E} e_{M_E} F	15 20 48 15 22 45 15 52 42 16 19 22 17 38	Weak
151	Aug.16	G-W G-W G-W	i_Z i_Z i_E F	11 40 44 11 43 04 11 43 50 12 18	Very weak
152	Aug.16	G-W G-W G-W G-W	iP_Z ipP_Z iS_E isS_E F	20 13 12 20 13 57 20 17 59 20 19 24 20 43	Depth ≅ 220 km. Δ_{calc} ≅ 30° Epicenter by J.S.A. 12°.5 N. and 90°.0 W. h ≅ 80 km.
153	Aug.18	G-W G-W G-W	e_Z e_Z e_Z F	20 07 07 20 08 50 20 09 47 20 18	Very weak
154	Aug.20	W-A W-A G-W G-W	e_N i_N e_Z eL_Z F	16 48 30 16 48 32 16 53 20 16 57 28 17 06	Very weak

Florissant Bulletin for August, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
155	Aug.20	G-W	iP_Z	22 42 24	Epicenter region
		G-W	iPR_{1Z}	22 42 54	of 15°N., 92°W.
		G-W	eS_E	22 46 33	H = $22^h37^m21^s$
		G-W	eSR_{1E}	22 47 36	ΔS - P = 22°8
			F	23 19	
156	Aug.22	G-W	iE	08 57 35	Very Weak
		G-W	iE	09 25 08	May be two separate
		G-W	$e(L)_E$	09 51 12	shocks.
			F	10 49	
157	Aug.22	W-A	iE	19 58 08	Long period
		W-A	iN	19 58 37	Records very weak.
		W-A	iN	19 58 47	May be below normal
		W-A	iN	19 59 01	depth.
		G-W	iE	20 02 04	
		G-W	iE	20 02 47	
		G-W	eE	20 03 08	
			F	20 20	
158	Aug.23	G-W	iP_Z	06 46 21	Epicenter by U.S.C.
		G-W	ipP_Z	06 46 48	and G. S. 51°.5 N.
		G-W	iS_E	06 55 20	163° E.
		G-W	$i(sS)_E$	06 56 09	H $\cong$ 06 35 24
			F	09 38	h about 100 to 150 km.
					Δ_{meas} = 67°2
159	Aug. 24	W-A	eP_N	22 59 59	Epicenter about
		W-A	iP_N	23 00 00	15°.0 S., 76°.0 W.
		G-W	ipP_N	23 00 32	H = 22 50 38
		G-W	iPR_{1N}	23 02 05	Depth $\cong$ 150 km.
		G-W	$ipPR_{1N}$	23 02 37	ΔS - P = 56°2
		G-W	iS_N	23 07 42	ΔP - H = 56°2
		G-W	iSP_N	23 08 28	Δ_{meas} = 56°.2
		G-W	isS_N	23 08 43	
		G-W	$isSP_N$	23 09 18	
		G-W	iSR_{1N}	23 11 51	
			F	03 30	
160	Aug. 25	G-W	iP_Z	20 25 26	Aftershock of #138
		G-W	ipP_Z	20 26 02	
		G-W	$i(S)_E$	20 33 0	
		G-W	eL_Z	20 48 03	
			F	22 41	
161	Aug.26	G-W	iP_Z	12 18 09	
		G-W	ipP_Z	12 18 45	
		G-W	$i(S)_E$	12 25 52	Aftershock of #138
			F	13 19	
162	Aug.27	W-A	i_N	19 59 04.7	Local shock
		W-A	e_N	19 59 10.6	
		W-A	i_N	19 59 11.4	
		W-A	iL_N	19 59 12.3	
			F	19 59 43	

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No	Date	Inst.	Phase	G.M.C.T.	Remarks
163	Aug.29	G-W	iP_N	12h30m01s	Weak. Apparently deeper than normal
		G-W	i_E	12 34 52	
		G-W	$i(S)_E$	12 35 57	
			F	13 10	
164	Aug.29	G-W	e_N	21 45 42	Weak.
		G-W	e_N	21 49 56	
		G-W	i_N	21 50 21	
		G-W	i_E	21 51 57	
		G-W	eL_N	21 53 15	
			F	22 15	
165	Aug.31	W-A	i_N	10 27 44.1	Local Shock
		W-A	i_N	10 27 49.2	
		W-A	i_N	10 27 53.5	
		W-A	i_N	10 27 57.3	
		W-A	i_N	10 27 59.7	
		W-A	i_N	10 28 04.1	
		W-A	$i(L)_N$	10 28 10.1	
		W-A	i_N	10 28 11.8	
			F	10 30 29	

Minor Seismic Activity

Aug.	1	05 36	lost	(record off Paper)
	3	19 42	19 50	
	3	23 22	23 49	
	18	19 25	19 38	
	27	20 42	23 36	

No Strong Microseisms

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Rec rds read by:
L. S. Buckie, Jr.

Florissant Bulletin for September, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
166	Sept.1	G-W	e_Z	09 54 55	Weak
		G-W	i_E	10 05 28	
		G-W	i_E	10 05 42	
		G-W	i_E	10 06 49	
		G-W	eL_Z	10 29 00	
			F	10 58	
167	Sept.2	G-W	iP_Z	03 26 42	J.S.A. gives region of 52° N., 165°5 W.
		G-W	iS_E	03 34 06	H = 03 17 32 f
		G-W	$e(L)_E$	03 42 20	Δ_P - H = 52°3
		G-W	eM_E	03 49 45	Δ_S - P = 51°2
			F	04 58	Δ_{meas} = 52°3
168	Sept.3	W-A	i_N	20 59 45.4	Local shock
		W-A	i_N	20 59 48.0	
		W-A	iL_N	20 59 49.6	
		W-A	iM_N	20 59 56.4	
			F	21 00 21	
169	Sept.4	G-W	iP_Z	02 59 17	J.S.A. gives 12°3 N. 88°0 W.
		G-W	ipP_Z	02 59 45	H = $02^h53^m49^s$
		G-W	$i(S)_N$	03 03 48	h = about 100 km.
		G-W	eL_N	03 07 57	Δ_S - P = 26°6
		G-W	eM_N	03 11 47	Δ_P - H = 26°1
			F	03 38	Δ_{meas} = 26°5
170	Sept.4	G-W	iP_Z	17 55 38	J.S.A. gives 52°0 N. 165°5 W.
		G-W	iS_Z	18 03 04	H = $17^h46^m30^s$
		G-W	eL_Z	18 07 37	Δ_S - P = 51°6
		G-W	eM_Z	18 15 27	Δ_P - H = 52°1
			F	19 04	Δ_{meas} = 52°3
171	Sept.6	G-W	iP_Z	16 04 29	Weak
		G-W	ipP_Z	16 04 46	H = $15^h52^m21^s$(?)
		G-W	iS_E	16 13 30	h = 75 km. (?)
		G-W	isS_E	16 13 55	Δ_S - P = 79.6
			F	16 47	
172	Sept.9	G-W	iP_Z	01 34 27	J.S.A. gives 52° N. 164°W. H= $01^h25^m27^s$
		G-W	ipP_Z	01 34 45	h = 100 km.
		G-W	iPR_{1Z}	01 36 28	Δ_S - P = 51°8
		G-W	iS_E	01 41 46	Δ_P - H = 52°2
		G-W	isS_E	01 42 12	Δ_{meas} = 51.2
			F	03 14	

Florissant Bulletin for September, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
173	Sept.11	W-A	i_N	15 00 07.1	Local shock
		W-A	iN	15 00 12.8	
		W-A	iL_N	15 00 15.6	
			F	15 00 50	
174	Sept.11	G-W	i_N	05 50 12	Weak
		G-W	e_N	05 58 08	
		G-W	eL_N	06 02 57	
			F	06 39	
175	Sept.14	G-W	e_Z	11 49 53	Weak. Possibly below normal depth.
		G-W	$i(S)_N$	11 57 33	
		G-W	$i(sS)_N$	11 58 36	
		G-W	eL_E	12 22 36	
		G-W	eM_E	12 33 54	
			F	12 59	
176	Sept.16	W-A	i_N	09 01 13.8	Local shock
		W-A	iL_N	09 01 16.1	Weak
		W-A	iM_N	09 01 22.8	
			F	09 01 30	
177	Sept.22	G-W	e_Z	00 58 35	Weak. P masked by microseisms
		G-W	$e(S)_E$	01 07 35	
		G-W	$i(S)_E$	01 07 42	
		G-W	eM_N	01 26 15	
			F	02 47	
178	Sept.25	G-W	i_N	08 30 59	Very weak
		G-W	$e(L)_N$	08 39 32	Masked by microseisms.
			F	09 41	
179	Sept.26	G-W	iP_Z	04 05 50	J.S.A. gives 12°.3 N. 88°.0 W.
		G-W	ipP_Z	04 06 09	$H = 04^h00^m21^s$
		G-W	iS_N	04 10 16	$h = 100$ km.
		G-W	isS_N	04 11 48	$\Delta S - P = 26°.0$
		G-W	$e(M)_N$	04 13 50	$\Delta P - H = 26°.2$
			F	05 10	$\Delta_{meas} = 26°.2$
180	Sept.27	G-W	iP_Z	17 07 26	Weak
		G-W	$i(pP)_Z$	17 07 42	$H = 17\ 02\ 48$ (?)
		G-W	iS_E	17 11 09	$h = 80$ km. (?)
		G-W	$i(sS)_E$	17 11 34	$\Delta S - P = 21°.8$

Florissant Bulletin for September, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
181	30	W-A	e_N	22 46 32.1	Local Shock
		W-A	e_N	22 46 34.1	Very Weak
		W-A	$i(L)_N$	22 46 36.2	
		W-A	$i(M)_N$	22 46 38.6	
			F	22 46 46	

Minor Seismic Activity

Sept.	1	19^h	44^m	to 20^h 07^m
	5	11	25	11 51
	7	05	02	05 43
	10	05	24	05 05
	10	23	45	00 11
	16	00	36	00 57
	17	20	52	21 15
	20	00	01	00 51
	23	04	04	05 31

Microseisms Strong

Sept. 7
14
15
17
20
21
24
28
29
30

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Three Galitzin-Wilip, two Wood-Anderson short-period seismographs, Shortt synchronome clock

Bulletin for October , 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
182	Oct.4	W-A W-A W-A W-A W-A	i_N i_E i_E $i_{(L)E}$ $i_{(M)E}$ F	19 05 50.2 19 05 55.2 19 05 57.0 19 05 58.3 19 06 04.9 19 07 19	Local shock
183	Oct.5	W-A G-W G-W G-W	iP_E $e_{(S)E}$ $i_{(S)E}$ iM_N F	03 04 15 03 08 58 03 09 17 03 13 59 03 31	Weak
184	Oct.6	G-W G-W G-W	i_E eL_E eM_E F	12 19 27 12 44 13 12 48 48 01 16	Weak
185	Oct.9	G-W G-W	eL_N eM_E F	16 38 55 16 50 45 17 41	Very weak Surface waves only
186	Oct. 12	G-W G-W G-W G-W	i_Z e_Z i_Z $e_{(L)Z}$ F	01 33 47 01 35 42 01 35 54 01 42 49 01 59	Weak
187	Oct.12	G-W G-W G-W	i_Z e_Z $e_{(L)N}$ F	05 31 33 05 33 42 05 45 48 06 00	Weak
188	Oct. 14	G-W G-W G-W	i_N i_N e_N F	00 25 56 00 26 36 00 28 46 00 39	Weak
189	Oct.15	G-W G-W G-W	i_N e_N i_N F	07 45 19 07 45 47 07 47 06 07 49	Very weak
190	Oct.15	G-W G-W G-W	i_N i_N e_N F	08 25 37 08 26 01 08 27 19 08 29	Very weak
191	Oct.15	G-W G-W	i_N i_N	08 44 03 08 44 31 08 47	Very weak

Florissant Bulletin for October, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
192	Oct.18	W-A G-W G-W	e_E $i(S)_N$ $i(L)_N$ F	05 29 59 05 33 57 05 36 38 06 04	Weak
193	Oct. 22	G-W	i_N F	18 24 59 18 33	Very weak
194	Oct.26	G-W G-W G-W G-W G-W	iP_Z ipP_Z eS esS eM F	21 21 13 21 21 23 21 31 04 21 31 21 21 50 55 23 10	J.S.A. gives region of 47°7 N., 151°2 E. H = $21^h09^m21^s$ h ≅ 50 km. $\Delta S - P = 77.9$ $\Delta P - H = 78.0$ $\Delta_{meas} = 78.2$
195	Oct.28		iP_Z eS_N $e(M)_N$ F	10 49 56 10 54 13 10 57 40 11 48	J.S.A. gives region of 15°4 N., 96°8 W. H = 10 44 45 $\Delta S - P = 23°7$ $\Delta P - H = 23°8$ $\Delta_{meas} = 23°8$
196	Oct. 31	G-W G-W	e_Z eL_Z F	15 34 14 15 37 40 15 52	Weak

Minor Seismic Activity

October 3 - 10^h27^m to 10^h33^m
8 - 20 58 to 21 20
9 - 01 14 to 01 23
18 - 11 51 to 12 07
25 - 07 46 to 08 08

Microseisms strong - October 4, 12, 14, 18, 19, 28, 29.

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Three Galitzin-Wilip, two Wood-Anderson short-period seismographs, Shortt synchronome clock

Bulletin for November, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
197	Nov.1	W-A G-W G-W	e_E i_Z $i_{(L)Z}$ F	15 44 56 15 49 36 15 51 21 15 56	Very Weak
198	Nov.2	W-A W-A W-A W-A W-A W-A W-A	i_N i_N i_N i_N i_N $i_{(L)N}$ $i_{(M)N}$ F	20 03 30.3 20 03 32.2 20 03 33.2 20 03 35.5 20 03 36.5 20 03 38.4 20 03 48.5 20 04 58	Local shock. Felt by occasional persons in and near St. Louis
199	Nov.7	G-W	i_Z F	07 54 52 08 47	Very weak
200	Nov.7	W-A W-A W-A W-A W-A W-A	e_N i_N i_N e_N e_N i_N	16 25 15.3 16 25 59.4 19 28 51.7 19 29 50.2 19 57 06.9 19 59 31.4	Local disturbance Readings are beginnings of disturbances which lasted between 30 sec. and 90sec. each.
201	Nov.10	G-W G-W	iP'_Z iPR_{1Z} F	12 00 46 12 03 37 17 00	J.S.A. gives region of 46°S., 35° E. H = 11 41 18 $\Delta_{P'} - H = 140°$ $\Delta_{meas} = 140°$ Amplitudes very large Records difficult to read.
202	Nov.12	G-W G-W G-W G-W G-W	iP_Z ipP_Z iS_{EZ} isS_E eL_E F	05 00 24 05 00 42 05 04 28 05 04 52 05 06 24 06 08	J.S.A. gives 16°.8 N. 93°.8 W. H = $04^h55^m31^s$ h = 100 km. $\Delta_P - H = 22°.5$ $\Delta_{meas} = 22°.6$
203	Nov.12	G-W G-W G-W	iP_Z i_Z iS_N F	15 33 50 15 35 31 15 40 00 16 43	U.S.C. and G.S. gives 0°.1 S., 81.0 W. H = 15 26 18 $\Delta S - P = 39°.3$ $\Delta P - H = 39°.6$ $\Delta_{meas} = 39.7$

Florissant Bulletin for November, 1944?

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
204	Nov.15	G–W G–W G–W G–W	i_Z i_N eL_N eM_N F	17 29 28 17 35 36 17 42 01 17 58 41 18 58	Weak
205	Nov.15	W–A W–A W–A W–A	i_E i_E i_E i_E F	18 30 38.3 18 30 39.3 18 30 41.0 18 30 43.8 18 32 01	Local shock
206	Nov.19	G–W G–W G–W G–W G–W	iP_Z i_Z ipP_Z iS_N isS_N F	08 59 29 08 59 44 09 01 11 09 05 39 09 08 26 10 30	Epicenter region of 0°3 S., 80°2 W. H = 08 51 14 h = about 500 km. $\Delta P - H = 40°2$ $\Delta_{meas} = 40.1$
207	Nov.20	G–W G–W G–W	i_Z iZ i_N F	04 08 34 04 08 54 04 13 10 04 27	Very weak
208	Nov.25	G–W G–W G–W G–W G–W G–W	iP_Z iPR_{1Z} iS_N iSR_{1N} eL_N eM_N F	01 23 06 01 23 29 01 27 25 01 28 02 01 30 45 01 32 25 02 28	J.S.A. gives 16°6 N. 97°4 W. H= 01 17 57 Depth probably below normal. $\Delta S - P = 23°9$ $\Delta P - H = 23°4$ $\Delta_{meas} = 22°9$
209	Nov.26	G–W G–W G–W G–W G–W	iP_Z ipP_Z $iSKS_E$ iS_E isS_E F	14 39 32 14 40 04 14 49 28 14 49 43 14 50 47 15 41	Region of 42° N. 143°5 E. H = 14 27 13 h =140 km. $\Delta S - P = 84.3$ $\Delta P - H = 85.1$ $\Delta_{meas} = 85.1$
210	Nov.28	G–W G–W G–W	iP_Z iS_N iSR_{1E} F	10 48 41 10 56 40 11 06 36 12 15	J.S.A. gives 7°7 N. 36°6 W. H = 10 38 50 $\Delta P - H = 57.5$ $\Delta S - P = 56.9$ $\Delta_{meas} = 57.3$

Minor Seismic Activity - Nov. 2 - 23^h45^m to 02^h41^m, 7 - 01^h23^m to 01^h28^m, 14 - 05^h57^m to 07^h33^m, 17 - 10^h57^m to 11^h17^m, 17-23^h46^m to 00^h07^m, 21 - 14^h22^m to 14^h27^m, 22 - 17^h09^m to 17^h55^m, 26-10^h47^m to 11^h05^m.

Microseisms strong - Nov. 2, 3, 14, 15, 17, 20, 22, 26, 27, 28.

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Three Galitzin-Wilip, two Wood-Anderson short-period seismographs, Shortt synchronome clock

Florissant Bulletin for December, 1942

No.	Date	Inst.	Phase	G.M.C.T.	Remarks
211	Dec.22	W-A W-A W-A W-A W-A W-A	i_E e_E i_E $i(L)_E$ i_E $i(M)_E$ F	$18^h22^m03^s0$ 18 22 05.2 18 22 07.1 18 22 08.3 18 22 13.0 18 22 15.5 18 23 27	Local shock
212	Dec.26	W-A G-W G-W	iP_N eS_E eM_N F lost in changing the records	12 38 18 12 43 29 12 50 00	J.S.A. gives region of 09°5 N., 75°0 W. H = 12 31 47 $\Delta P - H = 32°1$ $\Delta meas = 32°0$
213	Dec. 31	W-A G-W G-W	iP_E iS_N eL_N F lost in changing records	12 11 42 12 18 07 12 21 30	J.S.A. gives region of 18°1 N., 48°0 W. $H = 12^h03^m50^s$ $\Delta S - P = 41.8$ $\Delta P - H = 42.1$ $\Delta meas = 41.9$
214	Dec.31	G-W G-W	i_N i_N F	19 28 31 19 31 49 20 03	Very weak

Minor Seismic Activity

Dec. 11	03 05	to	04 07
15	09 22	to	09 54
20	14 26	to	15 57
22	04 58	to	05 15
22	06 39	to	07 02
23	01 24	to	01 50
23	14 58	to	15 27
23	16 06	to	16 12
27	17 24	to	18 04
29	04 17	to	04 39
29	23 43	to	23 52

Microseisms strong - Dec. 1-5 incl., 14-20 incl.

Note: Shocks were recorded on the long period instruments Dec. 5, about 15^h G.M.T. and Dec. 9 about 22^h30^mG.M.T. but due to the failure of the timing relays from Dec. 1-9, readings were not possible.

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