

DATA INDICATED

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30 MAY 1968
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ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

January 1967

A - Seismographs with direct recording

Station	Location	Instr.	Comp.	M _g	T _s	D _s	\bar{V}
BUC	44°24'49" N 26°05'48" E h = 82,5 m Alluvium	Mainka modified by Deme- trescu	N E	540 540	10 10	0,46 0,45	171 175
	45°16',1 N 25°02',3 E h = 598 m Alluvium	"	N E	105 105	3,5 3,5	0,44 0,44	45 45
VRI	45°52',2 N 26°43',5 E h = 400 m Alluvium	"	N E	105 105	3,5 3,5	0,44 0,46	38 43
	46°34' N 26°54' E h = 167,5 m Alluvium	"	N E	105 105	3,5 3,5	0,40 0,39	41 39
FOC	45°41',7 N 27°11' E h = 61 m Alluvium	"	N E	105 105	3,5 3,5	0,39 0,39	41 42
	47°11',6 N 27°33',7 E h = 160 m Alluvium	"	N E	450 450	4,8 4,8	0,40 0,40	139 128

INTERNATIONAL SEISMOLOGICAL CENTRE
 REPORT ON THE SEISMICITY OF THE WORLD
 1963

CHAPTER 1. THE SEISMICITY OF THE WORLD

1.1. Introduction

1.1.1. The seismicity of the world in 1963

Year	Number of earthquakes	Magnitude	Depth	Location	Damage	Deaths	Injuries	Property loss
1963	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1962	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1961	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1960	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1959	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1958	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1957	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1956	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1955	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1954	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1953	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1952	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1951	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None
1950	1,000	2.0-6.0	0-700 km	Worldwide	None	0	0	None

January 1967

B - Seismographs with galvanometric recording

Station	Instr.	Comp.	T _s	D _s	T _g	D _g	V _{max}
BUC	Galitzin	N	11,6	1,0	11,6	1,0	1.000
		E	12,0	1,0	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	2.000
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000

The stations are : BUC = Bucharest; CMP = Campulung;
VRI = Vrîncioaia; BAC = Bacău; FOC = Focșani; IAS = Iași.

The recording speed is 30 mm/min for the mechanical,
Galitzin and Kirnos seismographs, and 60 mm/min for the Hiller
and VEGIK seismographs.



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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
6	2	Campulung Z Z	e e	20	19	06 16					
7	2	Bucharest Zei E	P e	20	21	41 24	-				Small. Near
8	3	Campulung Ze	(P)	22	42	46					
9	4	Iasi Ze Ne Bacau Z	P P e	03	53	27 29 35	+				
10	4	Bucharest BUC Ne	S S	05	59	13 14					
		CMP Campulung Zi Ze	P S	05	58	52,7 11,7	-				
		VRI Vrâncioaia Ne Ne Ee	P S S	05	58	47,5 02,5 03					
		FOC Focșani N	E	S-P = 18							
		BAC Bacau Zi Zi Ni	P S	05	58	52,6 11,1					
		IAS Iasi Zi Ni Zi Ni	P S	05	58	58,3 23,3					
11	4	Bucharest Zi Z Ni Ei E	P i (S) i	06	00	38 04 12 19	- +				($\Delta = 9^\circ$)

Romania
Region of
Vrancea
 $\phi = 45,66N$;
 $\lambda = 26,22E$
 $h = 145-150$ km.
 $H = 055826$
(Bucharest)



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January 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
Campulung											
		Ze	P	06	00	43					
		Ne	P		00	44					
		N	e		03	18					
Bacau											
		E	e	06	01	28					
		N	e		01	45					
Vrîncioaia											
		N	e	06	00	59					
		E	e		01	03					
Iasi											
		N	e	06	01	23					
		E	e		04	28					
Foc.			recorded								Time mark lacking

- - - - -

12	5	Bucharest										
		Zi	Ni	Ei	P	00	23	48				- * * $\Delta=52^\circ$
				E	i		23	58				
			Ni		PcP		25	08				
				E	i		25	32				
				Ei	PP		25	38				
				E	e		25	42				
				Ei	S		31	10				
		Z	Ni		PS		31	14				
			N	E	L		40					
				E	M		45	10	12		0,64	
			N		M		45	20	16		0,88	
			N		M		46	02	13		0,57	
Campulung												
		Ze			P	00	23	45				
				Ee	PP		25	35				
				Ee	S		31	07				
		Z	N	E	L		39					
Focşani												
		Ze			P	00	23	(43)				
Vrîncioaia												
		Ne			P	00	23	38				+
				Ee	P		23	40				
				Ee	S		30	54				
		Ne			S		30	58				
		N		E	L		41					

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January 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ μ μ				
		Iași									
		Ze	P	00	15	40					
			Ee	P	15	41					
		Ne	P	15	42						
		Foc, Vri	recorded								
17	8	Campulung									
		Z	e	05	18	04					
				---	---	---					
18	8	Bucharest									
		Z N E	L	05	48						Strong micr.ag.
		Campulung									
		Zei	P	05	29	23					
				---	---	---					
19	8	Iași									
		Ze Ne	P	06	54	44					
			Ee	P	54	45					
				---	---	---					
20	8	Campulung									
		Zei	P	07	10	02					
				---	---	---					
21	8	Campulung									
		Ze	P	08	43	32					
				---	---	---					
22	8	Campulung									
		Zei	P	19	09	37,8					
		Zi Ne Ee	S	09	55,8						Romania Region of Vrancea
		Focșani									
		Ze	P	19	09	26					
			Ni Ei	S	09	38,4					
		Vrâncioaia									
			Ee	P	19	09	27,9				No correction
		Ne	S	09	37,9						
			Ee	S	09	39,3					
		Bacau									
		Ne	Ee	S	19	09	47,4				
		Iași									
		Zi	P	19	09	41,3					
			Ni Ei	S	10	01,7	0,4;03	3,75	3,80	$M_{SH}=4,2$	
				---	---	---					

January 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks		
				G.M.T.				Z	N	E			
				h	m	s							
23	8	Iași Ze	Ne Ee	P	22	46	09,8	μ	μ	μ	Romania Region of Iași		
				S		46	12,8						

24	9	Campulung Zei		P	02	01	20						

25	9	Iași Ze	N Ee	P	02	31	12	+					
				P		31	13						
				e		31	14						

26	11	Bucharest	Ei	P	11	25	02	-			Δ = 19°		
				P		25	03						
				S		28	32						
				S		28	35						
				L		32							
				Campulung Zei Ne	Ee	P	11					25	11
						e						28	08
				Vrîncioaia Ne		P	11					24	54
				Focșani N	E E	e	11					25	06
						e						25	30
				Bașau Zei	Ee	P	11					25	05
i		25	40										
i		27	12										
S		28	52										
Iași Zi Ne	Eei Ee	P	11	25	05,7								
		S		28	48								
		S		28	52								

27	11	Campulung Ze		(P)	21	35	54						

28	13	Iași Ze Ne	Ee	P	13	32	41						

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks		
						Z μ	N μ	E μ			
29	14	Campulung Zei	P	12 16 58							
		Iași Ze Ne Ee	P	12 16 43				-			

30	14	Iași Ze Ne Ee	P	18 20 26					+		

31	15	Campulung Ze	P	00 08 47							

32	15	Campulung Ze	(P)	20 10 15							

33	16	Campulung Ze	P	14 45 47							

34	17	Campulung Zei	P	01 25 47							

35	17	Bucharest N E L N L		12 46 49					Small		
		Campulung Zei Ne E	P P e	12 11 35 11 36 12 47					+		
		Bacau Ze Ne Ee	P P	12 11 26 11 27					--		
		Iași Zi Ne Ee	P	12 11 20					- - -		
			S	21 23							
			Ee S	21 25							
			N E L	40							
		FOC, VRI recorded -----									
		36	18	Bucharest Ne Ee	P	05 44 20					Λ=51°
				Ne	PP	46 30					
	Ei S			52 16							
Ni S	S			52 18							
N E L	L			06 02							

No.	Date	Comp.	Phase	- 10 -			Per s	Amplitudes			Remarks
				Time G.M.T. h m s	Z μ	N μ		E μ			
40	19	Campulung Ze	P	12	57	42					

41	19	Bucharest	P	12	59	39				Ag.micr.Sm. 11 Distant	
		N Ee	i		59	44		+			
		N E	i	13	01	03					
		N E	L		51						
		Campulung Ne	P	12	59	47					
		Ze	P		59	49		+			
		N E	e	13	00	55					
		Bacau Ze	P	12	59	50					
		N E	e		59	53					
		N E	e	13	00	25					
		Iasi Ze	P	12	59	39					
		N Ee	P		59	40					
		Z N E	L	13	30						
		FOC, VRI	recorded								

42	20	Bucharest	P	02	06	27		-	-	Δ=52°	
		Ni Ei	S		13	46			+		
		N Ei	i		14	06		+			
		Ni Ei	SS		17	16					
		N E	SS		17	20					
		N E	L		25						
		N E	M		26	29	5		0,005		
		N E	M		26	50	8			0,05	
		Campulung Ze	P	02	06	28			+		
		Ne Ee	P		06	29					
		N E	e		13	31					
		Ne E	S		13	49					
		N E	L		20						

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
							μ	μ	μ		
Focşani											
		Zi	P	02	06	15,4					
		N	e		13	11					
		N	e		13	41					
			e		13	43					
		N	E	L		21					
Vrîncioaia											
		Ne	P	02	06	50					
			P		06	51					
			e		13	56					
		Ne	(S)		14	05					
		N	L			29					
Bacau											
		Ze	P	02	06	14					
		Ne	Ee	S		13 27					
		N	E	L		23					
Iaşi											
		Zi	P	02	06	02,7					
		N	i		07	57					
		Ne	S		13	14					
			i		13	22					
		N	L			22					

43	21	Campulung									
		Ze	P	03	13	55					
		Focşani									
		Ze	P	03	13	56					
		Bacau									
		Ze	P	03	13	54					
		Iaşi									
		Ze	P	03	13	54					
			e		14	04					

44	22	Bucharest									
		N	E	traces	04 ^h 32-04 ^h 46 ^m						Strong micr.ag

45	22	Campulung									
		Ze	(P)	12	20	58					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
							μ	μ	μ		
46	24	Bucharest									
			E	i	03	18	10				- Very small
			N	i		18	26				
		Campulung									
			Ze	P	03	17	27				
		Focşani									
			Zei	P	03	17	17		+		
		Bacau									
			Ze	P	03	17	17				
			Iaşi								
		Ze	P	03	17	10					
		Ne	P		17	11					
		Ee									

47	24	Bucharest									
			Ei	P	09	39	36				+ $\Delta=63^\circ$
			N	i		39	40				
				Ee	PP		42	18			
				Ee	S		48	08			
			Ne	S		48	10				
			N	L	10	01					
		Campulung									
			Zi	P	09	39	37,6				
			Ne	S		48	04				
		Focşani									
			Ze	P	09	39	43				
				N	e	43	07				
					E	e	48	18			
					E	e	48	21			
				N	L	10	02				
		Vrîncioaia									
				Ee	(P)	09	39	52			
			Ne	(P)		39	54				
		E	e	48	19						
	Ne	S		48	22						
	N	e		48	28						
	N	L	10	00							
Bacau											
		Ee	P	09	39	52					
	N	e		40	20						
Iaşi											
		Ze	P	09	39	52					
		E	e		40	15					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ	μ	μ		
		Iași									
		Ze	P	17	54	06					
		Ne	P		54	08					

55	29	Campulung									
		Ze	P	00	14	12					
		Iași									
		Ze	P	00	14	27					
		FOC	recorded								

56	29	Iași									
		Ze	P	04	00	06					
		Ee	i		00	18					+

57	29	Iași									
		Ze	P	07	19	41					
		Ne	P		19	42					
		BUC, CMP	recorded								

58	29	Bucharest									
		N	i	08	08	18					+
		E	i		08	36					Micr.ag.
		Ne	(S)		10	54					Small
		N	L		18						
		Campulung									
		Ze	P	08	02	54					
		N	e		05	58					
		Focșani									
		Ze	(P)	08	03	24					
		VRI, BAC, IAS	recorded								

59	29	Bucharest									
		N	E	traces 19 ^h 50 ^m -19 ^h 54 ^m							
		Campulung									
		Ze	P	19	49	29					
		Focșani									
		Ze	P	19	49	33					
		Iași									
		Ze	Ee	P	19	49	57				
		VRI	recorded								

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s	μ					
60	30	Bucharest										
		N		i	01	26	30				Strong micr. Small Distant	
			E	i		26	36					
		N	E	L		30						
		Campulung										
		Ze		P	01	23	55					
			N	e		24	09					
				E	e		24	10				
		Focşani										
		Ze		P	01	23	47					
Z		e		23	53							
	N	e		26	21							
Bacau												
	Ne	Ee	(P)	01	23	50						
	N		e		26	52						
Iaşi												
Ze		Ee	P	01	23	43						
	Ne		P		23	45						
	N		e		28	49						

61	30	Campulung										
		Ze		P	12	28	21					
		Iaşi										
		Ne		P	12	28	10					
			E	e		28	20					

62	30	Campulung										
		Ze		P	21	15	27					
		Focşani										
		Ze		P	21	15	18					
Z		e		15	25							
Iaşi												
Ze		P	21	15	13							

63	31	Iaşi										
		Zi		P	17	55	34					
		Ne	Ee	P		55	35					

64	31	Campulung										
		Ze		P	19	06	37					

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s	s	μ	μ	μ		
65	31	Campulung Ze	E	P	20	15	28,9				Romania Region of Campulung	
				e			15	30				
				S			15	31,4				
- - - - -												

Prof. Liviu Constantinescu

G. Purcaru

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February 1967

A - Seismographs with direct recording

Station	Location	Instr.	Comp.	M kg.	T_s	D_s	\bar{V}
BUC	44°24'49" N 26°05'48" E	Mainka modified	N	540	10,0	0,448	169
	h = 82,5 m Alluvium	bi Demew- trescu	E	540	10,0	0,446	175
CMP	45°15',1 N 25°02',3 E	"	N	105	3,5	0,413	45
	h = 598 m Alluvium	"	E	105	3,5	0,404	46
VRI	45°52',2 N 26°43',5 E	"	N	105	3,5	0,437	40
	h = 400 m Alluvium	"	E	105	3,5	0,429	42
BAC	46°34' N 26°54' E	"	N	105	3,5	0,400	41
	h = 167,5 m Alluvium	"	E	105	3,5	0,393	39
FOC	45°41',7 N 27°11' E	"	N	105	3,5	0,387	42
	h = 61 m Alluvium	"	E	105	3,5	0,416	41
IAS	47°11',6 N 27°33',7 E	"	N	450	4,8	0,403	139
	h = 160 m Alluvium	"	E	450	4,8	0,403	128

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 DEPARTMENT OF SEISMOLOGY OF ROMANIA
 PROVINCIAL SEISMOLOGICAL BULLETIN
 February 1967

A Seismological Station with direct recording
 February 1967

Station	Location	Instrument	Year	Month	Day
BUC	Bucuresti	Modified N 250	1955	10	1955
GMP	Galați	N 250	1955	10	1955
IRI	Irigioara	N 250	1955	10	1955
HAC	Harghita	N 250	1955	10	1955
ROC	Rovani	N 250	1955	10	1955
IRB	Irigioara	N 250	1955	10	1955
IRB	Irigioara	N 250	1955	10	1955

FEBRUARY 1967

B. Seismographs with galvanometric recording

Station	Instr.	Comp.	T_s	D_s	T_g	D_g	V_{max}
BUC	Galitzin	N	11,6	1,00	11,6	1,0	1.000
		E	12,0	1,00	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	2.000
		N	1,5	0,5	0,4	2,0	2.000
		E	1,5	0,5	0,4	2,0	2.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	2.000
		N	1,5	0,5	0,4	2,0	2.000
		E	1,5	0,5	0,4	2,0	2.000

The stations are : BUC = Bucharest; CMP = Campulung;
VRI = Vrîncioaia; BAC = Bacău; FOC = Focșani; IAS = Iași.

The recording speed is 30 mm/min for the mechanical,
Galitzin and Kirnos seismographs, and 60 mm/min for the Hiller
and VEGIK seismographs.

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1967 February

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z u	N u	E u	
1	1	Campulung	P	01 13 36					
		Ze							
		Focşani	P	01 13 26					
		Ze							
Iaşi	Ee	P	01 13 30						
Ze									
		BU	recorded						
- - - - -									
2	2	Campulung	P	06 44 28					Weak
- - - - -									
3	2	Campulung	P	07 45 03,5					Weak
- - - - -									
4	2	Bucharest	E	e					
		N							
		Campulung	P	12 07 22					
	Ze								
- - - - -									
5	2	Bucharest	Ee	S	16 45 35				
		Ni							
		Campulung	P	16 36 08					
		Zi							
			S	45 45					
		Ze							
		Bacau	Ee	P						16 35 55
Ze									
Iaşi	P	16 35 51,5							
Zi									
	Ni	Ei	P	35 53					
	Ne	Ee	S	45 12					
- - - - -									
6	3	Bucharest	E	traces	0901-0906				Mi- Weak
		N							
- - - - -									
7	3	Campulung	e	13 02 09					
		Z							
		Iaşi	P	13 00 07					
		Zi							
- - - - -									

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No.	Date	Comp.	Phse	Time			Per.	Amplitudes			Remarks								
				G.M.T.				Z	N	E									
				h	m	s	s	u	u	u									
8	4	Bucharest	Ei	S	05	48	23,6				Romania Region of Vrancea Deep								
		Ni																	
		Campulung	Ee	S	05	48	05,8												
		Zi																	
		Ne																	
				N															
		Vrîncioaia	E	S	05	48	02,3												
		N																	
				Ne	Ee	S	48	13,5											
							48	14											
		Bacau	Ei	S	05	48	01,6												
		Ze																	
		Ze			48	18,6													
		Focşani	Ee	S	05	48	14,3												
		Ne																	
					48	14,8													
		Iaşi	Ei	S	05	48	20,5												
		Zi																	
					48	29,5													
					-	-													
9	5	Campulung	Ee	Sg	03	00	48,7				Romania Region of Campulung								
		Zi																	
		Zi																	
		Ne			00	50,7													
10	5	Campulung	Ee	P	19	06	01												
		Ze																	
		Bacau																	
		Ze			19	06	06,5												
		Z			06	13													
					-	-													
11	6	Campulung	Ee	P	17	20	30												
		Ze																	
					-	-													
12	7	Campulung	Ei	Pg	00	23	18				Romania Region of Campulung								
		Zi																	
		Zi																	
		Ni			23	19,3													
					-	-													
13	7	Campulung	E	P	15	05	11												
		Zi																	
		Iaşi																	
		Zi			15	04	56,5												
					-	-													

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.	h	m		s	Z	N		E
14	9	Bucharest	Ni Ei	Pn	14	10	00					
			N E	e			10	22			+ + $\Delta = 6^{\circ}8$	
			Ne Ei	Sn			11	17				
			N Ei	i			11	20			-42 -24	
		Campulung										
		Zi		Pn	14	09	59				-	
		Z		i			10	09,5			+	
		Vrîncioaia										
		Ne Ee	Pn	14	10	14						
		Bacau										
		Ze		Pn	14	10	24					
		N E	e				10	27,5				
		Iasi										
		Ze	Ne Ee	Pn	14	10	34					
	E e	e			11	15						
FOC			recorded									
- - - - -												
15	9	Bucharest	Ee P		15	38	10					
			N e				38	21				
		Campulung										
		Ze		P	15	38	05					
		Z		i			38	21			-	
		Bacau										
Ze		P	15	38	10							
Iasi												
Ze	Ne Ee	P	15	38	11							
		P			38	12						
- - - - -												
16	11	Campulung										
		Zi		P	02	51	34				-	
		Bacau										
		Zi	Ni	P	02	51	22,5				+ +	
				P			51	23				
Iasi												
Zi	Ni Ei	P	02	51	18					+ + +		
		P			51	19						
- - - - -												
17	11	Bucharest	Ee S		09	46	31					
			Ne S				46	33			- -	
										Mi.ag		
										Romania		
										Region of		
										Vrancea		

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Campulung							
		Zi	P	09 46 13,5		-			
		Ei	S	46 30,4				+	
		Ni	S	46 31,2			+		
		Vrîncioaia							Correction uncertain
		Ne	P	09 46 13					
		Ni	S	46 25,4			-	+	
		Bacau							
		Zi	P	09 46 11,5		+			
		Ni	S	46 26,5			-	-	
		Focșani							
		Zi	P	09 46 11,8		-			
		Ni	S	46 24,8			-	-	
		Iași							
		Zi Ne	P	09 46 19,3		+			
		Zi Ni	S	46 40,3		+	-	-	
18	11	Campulung							
		Ze	P	15 23 30					
				- - - - -					
19	12	Campulung							
		Ze	P	23 25 16,5					
		Z	e	27 00					
				- - - - -					
20	13	Bucharest							Δ=39°
		Ei	P	23 22 02					-
		E	i	23 33					-
		Ne	S	28 00					
		N	E	30 55			-	-	
		Campulung							
		Ze	P	23 21 48					
		Z N	E	23 19		+			
		Bacau							
		Ze	P	23 21 51					
		N	E	21 57					
		Focșani							
		Zi	P	23 21 59		-			
		Iași							
		Zi	P	23 21 47		-			
		Z	i	21 53		-			
		N	E	21 57			-	-	
		Zi Ni	Ei	23 23		+	+	+	
		VRI	recorded	- - - - -					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
21	14	Bucharest									
		Ni	P	01	47	04					$\Delta=78,4$
		Ni	S		56	03					+
		Campulung									
		Ze	P	01	47	00					
		Bacau									
		Ze	P	01	46	52					
		N	e		46	58					
		Focşani									
		Ze	P	01	47	22					
		Iaşi									
		Zi	P	01	46	49					
		Ee	P		46	49,5					
22	14	Campulung									
		Ze	P	18	22	05					
23	14	Iaşi									
		Ze	P	18	33	07					
		Ee									
24	15	Campulung									
		Zi	P	01	52	04					
		Bacau									
		Zi	P	01	51	57					
		N	e		52	03					+
		Iaşi									
		Ze	P	01	51	55					
		Ee	P		51	57					
25	15	Campulung									
		Ze	P	06	07	33					
		Bacau									
		Ze	P	06	07	34					
		Focşani									
		Ze	P	06	07	33					
		Iaşi									
		Ze	P	06	07	29					
		Ee									
		Ne	P		07	30					
26	15	Bucharest									
		Ni	S	16	33	43					+
		Ee									
		Campulung									
		Zi	P	16	24	01					+

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
32	20	Campulung Z	i	15	26	(09)					
		Bacau Ze	P	15	25	05					
		Iași Z	E	e	15	25 59					
		N		e	26	00					
		BUC	recorded								
33	21	Campulung Ze	P	04	28	28					
34	21	Campulung Ze	P	15	15	31					
		Bacau Ze	P	15	15	33					
		Iași Ze	P	15	15	23					
35	22	Campulung Zi	P	18	46	36				+	
		Bacau Z	i	18	49	32				+	
		Iași Z	E	e	18	49 30					
		N		i	49	31					
36	23	Bacau Ze	P	19	03	03					
		Iași Ze	P	19	03	01					
			E	e	03	05					
37	23	Campulung Ze	P	20	51	08					
		Iași Zi	P	20	50	56					
		Ne	Ee	P	50	57					
38	23	Campulung Ze	P	22	40	31					

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s	s	u	u	u		
40	24	Campulung Ze	P	04	09	(02)						
41	24	Campulung Z	e	15	22	18						
42	26	Campulung Ze	P	00	52	10						
43	26	Campulung Ze	P	04	04	58						
		Bacau Zi	P	04	04	43						
		Iasi Zi	P	04	04	37						
		Ni Ei	P		04	38			+	+		
44	27	Bucharest N E	e	06	29	22						
45	27	Bucharest Ni Ei	P	21	00	57						
		Ni	S		01	06,4			+			Romania Region of Vrancea Deep
		Campulung Zi	P	21	01	05,7						
		Ni Ei	P		01	06,5			+	+		
		Ni Ee	S		01	25,2			+			
		Vrîncioaia Ni Ei	P	21	01	03						
		Ni	S		01	18,3						
		Ei	S		01	19			+	-		Correction uncertain
		Bacau Zi	P	21	01	11,2						
		Ne Ee	P		01	12						
		Focşani Ni Ee	P	21	01	05						
		Ni Ei	S		01	20,8						
		Iasi Zi	P	21	01	47,5						
		Ni Ei	P		01	48,5			+	+		
		Ei	S		02	02,5						

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks		
				G.M.T.				Z	N	E			
				h	m	s	s	u	u	u			
46	28	Campulung	P	09	49	46							
		Ze											
		Iasi	P	09	49	35						+	
		Zi Ne Ee											

47	28	Bucharest	e	10	24	40							
		E											

48	28	Bucharest	e	14	25	22							
		N											
		N											
		E	i	26 02								+	
		e	26 03										

		Campulung	P	14	23	50,5						-	
		Zi											
		Bacau	P	14	24	22							
		Ze											
		Iasi	P	14	24	29							
		Ze Ne Ee											

D. Jianu

ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
 CENTRE FOR GEOPHYSICAL RESEARCH
 DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

MARCH 1967

A - Seismographs with direct recording

Station	Location	Instr.	Comp.	M kg.	T _s	D _s	V
BUC	44°24'49" N 26°05'48" E h = 82,5 m Alluvium	Mainka modified by Deme- trescu	N E	540 540	10,0 10,0	0,45 0,44	170 175
	45°15,1 N 25°02,3 E h = 598 m Alluvium	"	N E	105 105	3,5 3,5	0,39 0,40	45 46
VRI	45°52,2 N 26°43,5 E h = 400 m Alluvium	"	N E	105 105	3,5 3,5	0,44 0,39	40 43
	46°34' N 26°54' E h = 167,5 m Alluvium	"	N E	105 105	3,5 3,5	0,35 0,36	41 39
FOC	45°41,7 N 27°11' E h = 61 m Alluvium	"	N E	105 105	3,5 3,5	0,37 0,34	43 38
	47°11,6 N 27°33,7 E h = 160 Alluvium	"	N E	450 450	4,8 4,8	0,40 0,40	139 128

DEPARTMENT OF PHYSICS
 UNIVERSITY OF TORONTO
 100 St. George Street
 Toronto, Ontario, Canada

PROVISIONAL SEISMOLOGICAL BULLETIN
 - Seismographs with direct recording

MARCH 1959

Station	Location	Depth (km)	Time (hr:min)	Mag.	Comp.	Dist. (km)	Mag.	Time (hr:min)	Mag.
120	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
121	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
122	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
123	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
124	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
125	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
126	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
127	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
128	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
129	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
130	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
131	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
132	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
133	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
134	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
135	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
136	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
137	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
138	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
139	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1
140	42° 29' N, 120° 20' W	5.0	10.0	0.1	N	120	0.1	10.0	0.1

MARCH 1967

B - Seismographs with galvanometric recording

Station	Instr.	Comp.	T_s	D_s	T_g	D_g	V_{max}
BUC	Galitzin	N	11,6	1,0	11,6	1,0	1.000
		E	12,0	1,0	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	2.000
		N	1,5	0,5	0,4	2,0	2.000
		E	1,5	0,5	0,4	2,0	2.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	2.000
		N	1,5	0,5	0,4	2,0	2.000
		E	1,5	0,5	0,4	2,0	2.000

The recording speed is 30 mm/min for the mechanical, Galitzin and Kirnos seismographs, and 60 mm/min for the Hiller and VEGIK seismographs.

The stations are : BUC = Bucharest; CMP = Campulung; VRI = Vrâncioaia; BAC = Bacău; FOC = Focșani ; IAS = Iași.

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks			
				G.M.T.				Z	N	E				
				h	m	s								
							μ	μ	μ					
1	1	Campulung	P	22	28	48,5								
		Ze												
		Iași												
		Ze	P	22	28	33,4								
		Bucharest	recorded											

2	2	Campulung	P	20	59	23,5								
		Ze												
		Z												
		Z												
		Bacau												
		Z N					e	20	59		24,5			
		Iași					e	20	59		31			
Ze	P	20	59	07,5										
Ze														
Ze														
Ze														
		Ze	P	20	59	08,5								
		Ze	P	20	59	19,5								
		Ze	P	20	59	28								
		Ze	P	20	59	34								

3	2	Campulung	P	23	15	19								
		Ze												
		Z												
		Z												
		Iași												
		Ze	P	23	15	03								
		Ze	P	23	15	04,5								

4	3	Campulung	P	01	34	42,5								
		Ze												
		Z												
		Z	P	01	34	59								
		Z	P	01	35	02,5								

5	3	Bucharest	e	12	59	00								
		Z												

6	4	Campulung	e	02	31	02				Earthquake?				
		Z												

7	4	Iași	P	05	36	06								
		Ze												
		Ze												
		Ze												
		Ze												
		Ze	P	05	36	07								
		Ze	P	05	37	28								
		Ze	P	05	36	53								
		Bacău	recorded											

No	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ	μ	μ		
Vrîncioaia											
			Ee	Pn	17	59	23				N not recorded
			Ee	Sn	18	00	51				-
			Ee	SX	0	01	31				-
			Ee	Sg		01	51				-
			E	M		02	58	4,5			345
Bacău											
		Ze		P	17	59	54				-
		N		e		59	57				
			E	e		59	58				
		Z	N	i		00	07		+		-
			Ee	Pg		00	43				
		Ne		Sn		01	26				-
			Ee	Sn		01	28				+
			Ei	SX		02	03				-
		Ne		Sg		02	25				
		N		M		03	02	2,5		340	
			E	M		03	31	3,5			460
Focșani											
		Ne		Pn	17	59	37				
			E	e		59	42				
		Ne		PX		00	05				
			E	Pg		00	12				
		Ne		Pg		00	17				
			Ei	Sn		00	51				+
		Ne		Sn		00	59			+	
			E	i		01	17				-
		Ne		SX		01	33				-
			Ei	SX		01	34				-
			E	M		02	21	4,5			1806
		N		M		02	39	4,5		1541	
Iași											
		Ze		Pn	18	00	03				-
		Ne		Pn		00	05				+
			E	e		00	07				
		N		e		00	09				-
		Z	N	i		00	35				-
			N	Sn		01	49				-
			Ei	Sn		01	50				+
		N		e		02	04				
		N		SX		02	36				
			E	e		02	40				+
			E	M		03	01	4			258
		N		M		03	23	4		156	

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March 1987

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
Vrîncioaia											
		Ne	Ee	P	17	23	13				+
		Ne	Ee			23	26				+
Bacau											
		Zi	Ne	Ee	P	17	23	18	-		
		Ze	Ne	Ee	S		23	35			
Focşani											
		Ne	Ee	P	17	23	20				-
		Ni	Ee	S		23	35				-
Iaşi											
		Zi		Eei	P	17	23	25,5	-		
			Nei		P		23	26			
		Ze	Ne	Ee	S		23	47,5	+		
			N		e		23	55			

13	5	Bucharest									Romania Region of Vrancea
		Zi		P	18	54	38		+		
		Ze	Ni	Ei	S		54	51	-		
Campulung											
		Ze		P	18	54	35		-		
			Ne	Ee	S		54	41			
		Z		i				51			
Vrîncioaia											
		Ne	Ee	P	18	54	37				Uncertain Cp
		Ne	Ee	S		54	48,5				
Bacău											
		Ze		P	18	54	45				
			Ne		P		54	46			
			Ne	Ee	S		55	03			
		Z		e			55	16			
Focşani											
			Ee	(P)	18	54	50		-		Uncertain Cp
		N		e		55	00,5				
		Ne	Ee	S		55	02				
Iaşi											
		Ze	Ne	Ee	P	18	54	55			
			Ni	Ei	S		55	22			

14	6	Campulung									
		Ze		P	04	51	51				
		Z		(P)		52	03				
Bacău											
		Ze		P	04	51	42				

No.	Date	Comp	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	u	u	u		
		Iasi									
		Ze	P	04	51	43					
		Nei Eei	P		51	44					
				-	-	-					
15	6	Iasi									
		Ne Ee	(P)	05	01	07,5					
				-	-	-					
16	7	Campulung									
		Z	P	08	02	27					
		Z	ei		03	29					
		Z	(S)		04	03					
		Bucharest	recorded								
				-	-	-					
17	8	Campulung									
		Ze	P	14	00	59					
		Z	e		01	37					
				-	-	-					
18	8	Bucharest									
			E	e	17	44	46				
			E	e		45	01				
				-	-	-					
19	8	Campulung									
		Ze	P	17	59	49					
		Z	e	18	00	25					
				-	-	-					
20	9	Campulung									
		Z	e	07	20	14					
		Z	e		21	16					
				-	-	-					
21	9	Campulung									
		Z	e	18	18	18					
		Z	e		21	04					
				-	-	-					
22	9	Campulung									
		Z	e	18	47	05					
		Z	e		47	17					
				-	-	-					
23	9	Campulung									
		Ze	P	21	30	07					
				-	-	-					
24	9	Campulung									
		Z	e	21	44	55					
				-	-	-					
25	10	Iasi									
		Ze	P	00	42	47,5					
				-	-	-					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								u	u	u	
26	11	Bucharest N	E	S	04	17	03				Romania Region of Vrancea
Campulung											
		Zi		P	04	16	44,5		+		
		Z		i		16	40,5		+		
		Zi		(S)		17	00				
		Z		e		17	06		-		
Vrîncioaia											
		Ne	Ee	P	04	16	22				
		Ne	Ee	S		16	31,5				
Bacau											
		Zei		(P)	04	16	45				
		Ze	Ne	Ee	S		16 51				
		Z		i		17	00		+		
Focşani											
		Ne	Ee	(P)	04	16	39				
		Ni	Ei	S		16	48			+	-
Iaşi											
		Ze		P	04	16	45				
		Zei	Nei	Ei	S		17 04		-	-	+

27	11	Campulung									
		Z		e	05	22	48				

28	11	Campulung									
		Zei		P	15	02	25				
		Z		e		02	29				

29	12	Campulung									=15°
		Ze		P	03	03	46				
		Ze		PP		03	55				
		Z		e		04	58				
		Ze		S		06	24,5				
		Zei		SS		06	34,5		-		
Iaşi											
		Zei	N	E	P	03	03 27				
				E	e		03 29				
					e		03 58				
		Z			e		04 00				

30	13	Campulung									
		Zei		P	19	28	09,5		+		
		Z		e		28	23,5		+		

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ	μ	μ		
Iași											
		Ze	P	19	28	17,5					
		N	e		28	19					
		Ne	Ee		28	36					
			Ee		28	38					
			E		29	03					
			E		30	25					
Bacău recorded											
- - - - -											
31	13	Campulung									
		Ze	P		21	51	31				
- - - - -											
32	14	Iași									
		Ze	Ee		06	59	30				
		N	e			59	54,5				
		N	e		07	00	14,5				
			E			00	37				
- - - - -											
33	14	Bucharest traces									
		Campulung									
		Zei	P		07	07	45				
		Z	ei			11	14				
- - - - -											
34	14	Bucharest									
		Ne	(S)		08	11	04				
			e			11	15				
		N	E			11	30				
		Campulung									
		Zei	P		07	57	33				
		Z	e			59	06				
		Iași									
		Ze	Ee		07	57	28				
		N	e			57	34				
			E		08	04	42				
		N	e				55				
- - - - -											
35	14	Campulung									
		Z	e		23	43	36				
		Iași									
		Ze	P		23	43	19,5				
			e			43	29,5				
		Z	E			43	39,5				

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								u	u	u	
36	16	Campulung Z	traces	031755-031955							
37	16	Campulung Z	e	16 06 09							
38	16	Campulung Ze Z	(P) e	22 26 33 28 39							
39	17	Bucharest Z	traces	1230-1244							
40	19	Campulung Ze Z Z	P e e	01 27 35 29 11 30 18,5							
41	19	Bucharest Nei Ne Nei Ne N N	P S pS SSS L M	04 13 25 23 32 24 31 33 14 43 00 54 00				+	+	-	=80°
		Campulung Zei Ze Ze Ze Ze	P PP S PS L	04 13 34 16 24 23 38 24 33 35 08				+			
		Focşani Zei Z	P L	04 13 38,5 50 00							
		Iaşi Ze N E Z	P e e	4 13 14 13 21 13 45						-	
		Bacău recorded									
42	19	Bucharest Ni E	S	17 12 08				+	+		Romania Region of Vrancea

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	u	u	u		
		Iași									
		Ze	P	21	48	25					
		Z	e		48	29					
		Ze Ni Ei	S		48	47			+	-	
		Bacău	S-P = 18 s								

54	23	Campulung									
		Ze	P	00	55	27					
		Z	e		55	48					

55	23	Iași									
		Ze	P	13	53	38					
		Z	e		53	51					Earthquake?

56	24	Campulung									
		Z	e	02	03	34					

57	24	Campulung									
		Ze	Pg	08	28	18					
		Z	Sg		28	25					
		Z	i		28	37			+		
		Z	e		28	46			+		

58	24	Bucharest									
		Ei (sEP)		09	22	04				+	
		Ei SKS			26	09				-	
		Ei SKKS			26	36				-	
		Ni S			27	29				+	
		Ei S			27	31				+	

		Campulung									
		Ze	P	09	14	37				-	
		Z	e		14	53				+	
		Ze	(pP)		16	31				+	
		Ze	(sP)		18	08				-	
		Ze	PP		19	22					

		Focșani									
		Ze	P	09	14	34				-	
		Ze	pP		16	10,5					
		Ze	sP		17	56					

		Iași									
		Ze	P	03	14	30				+	
		Rei	P		14	31					
		Nei	P		14	32					
		N	e		14	47					
		N	Ee		16	18					
		Ze	pP		18	18					
			sP		18	00,5					
		Z	E		18	01					
			e		18	02					
		N									

h = 500 km
= 100°

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No	Date	Comp.	Phase	Time		Per. s	Amplitudes			Remarks
				G.M.T.			Z	N	E	
				h	ms		μ	μ	μ	
	24	Campulung Z	e	23	21 03					
				-	- - -					
60	25	Campulung Z	e	12	11 40					
		Z	e		11 54					
		Vrîncioaia Ne Ee	S	12	11 39					
		Focşani Z	P	12	10 39,5					
		N	e		10 46					
		N E	S		10 48,5					
		Iaşi Z	P	12	11 09,5					
		N E	S		11 11,4					Romania Region of Vrancea?
		Bacău	S-P	=	8 s					
				-	- - -					
61	25	Campulung Z	e	18	23 23					
				-	- - -					
62	25	Campulung Zei	P	22	59 56					+
		Z	ei	23	00 24					
		Focşani Zei	P	23	00 14					+
		Iaşi Zei	P	22	59 39					+
		Nei Eei	P		55 40					
		E	e		59 53					
				-	- - -					
63	27	Bucharest Ne	P	09 ^m 08	38					=57°5
		Ee	P	08	44					+
		Eei	PcP	03	23					+
		Ne Eei	PP	11	03					+
		Eei	PPP	12	28					+
		Eei	S	16	40					+
		Eei	ScS	18	09					+
		Ne	SS	20	34					+
		Ee	SSS	23	19					
		E	L	33	20					
		N E	M	35	00					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Campulung									
		Ze	P	09	09	08		-			
		Ze	ei		05	41		+			
		Focşani									
		Z	traces	09	09-09	10					
		Iaşi									
		Ze	P	09	08	47					
		Z Ne Ee	P		08	54					
		Z	e		09	05					
		Z N	e		09	33					
		Z	e		10	33					

64	27	Campulung									
		Z	traces	10-25-10-26							

65	27	Campulung									
		Ze	P	19	59	27		-			Red Sea
		Z	e	20	00	28,5		+			
		Z	e		01	18					

66	28	Bucharest									
		N	e	00	06	37					
		Ne	(S)		07	21				+	
		Campulung									
		Zei	Pn	00	06	05		-			
		Z	i		06	09,5		-			
		Z	e		08	03					
		Focşani									
		Ze	Pn	00	06	19				+	
		Z	e		07	27					
		Z	e		08	19					
		Iaşi									
		Ze	Pn	00	06	32,5					
		Z Ne Ee	Pn		06	33					
		Z	e		06	42					
		Z N	e		06	43					
		Z	e		07	03					
		Z	e		08	13					

67	28	Campulung									
		Ze	P	19	44	46					
		Z	e		45	34					
		Iaşi									
		Ze	P	19	44	35					
		Z Ne	P		44	27					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per.	Amplitudes			Remarks
						Z μ	N μ	E μ	
68	28	Campulung							
		Ze	P	20 54 43					
		Z	e	55 48					
69	30	Bucharest							
		E	e	02 22 55					
		Ee	S	32 19					
		Campulung							
		Ze	P	02 21 40					
		Z	e	25 00					
		Z	e	25 26					
		Focșani							
		Ze	P	02 22 30					
		Iași							
		Ne	P	02 22 09					
		N	e	22 28					

70	30	Bucharest							
		E	ei	13 51 10					+ Yugoslavia
		N	ei	51 16					
		N	Sn	51 26,5					
		E	Sn	51 30					
		Campulung							
		Zi	Pn	13 50 20					-
		Zi	Sn	51 30					-
		Z	e	52 37					

71	30	Campulung							
		Ze	Pn	23 24 25					
		Z	e	25 41					

72	31	Campulung							
		Ze	P	02 24 37					

73	31	Campulung							
		Ze	(P)	03 24 09					
		Z	e	24 59					

74	31	Campulung							
		Ze	P	20 24 27					

S.Fleischer

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ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

April 1967

A - Seismographs with direct recording.

Station	Location	Instr.	Comp.	M kg	T	D	V	V _{max}	T _{max}
BUC	44°24'49" N 26°05'48" E	Mainka modified by Deme- trescu	N	540	10	0,45	171	225	8,2
	h = 82,5 m Alluvium		E	540	10	0,45	179	225	8,2
CMP	45°16,1 N 25°02,3 E	"	N	105	3,5	0,41	45	58	2,9
	h = 598 m Alluvium	"	E	105	3,5	0,42	46	58	2,9
VRI	45°52,2 N 26°43,5 E	"	N	105	3,5	0,44	44	58	2,9
	h = 400 m Alluvium	"	E	105	3,5	0,45	43	58	2,9
BAC	46°34' N 26°54' E	"	N	105	3,5	0,44	39	58	2,9
	h = 167,5 m Alluvium	"	E	105	3,5	0,44	41	58	2,9
FOC	45°41,7 N 27°11' E	"	N	105	3,5	0,36	42	58	2,9
	h = 61 m Alluvium	"	E	105	3,5	0,36	40	58	2,9
IAS	47°11,6 N 27°33,7 E	"	N	450	4,8	0,40	139	170	3,8
	h = 160 m Alluvium	"	E	450	4,8	0,40	128	170	3,8

B - Seismographs with galvanometric recording.

Station	Instr.	N	T _s	D _s	T _g	D _g	V _{max}
BUC	Galitzin	N	11,54	0,99	11,6	1,0	1.000
		E	12,00	0,99	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000

The stations are : BUC = Bucharest; CMP = Campulung; VRI = Vrâncioaia; BAC = Bacău; FOC = Focșani; IAS = Iași.

The recording speed is 30 mm/min for the mechanical, Galitzin and Kirnos seismographs, and 60 mm/min for the Hiller and VEGEK Seismographs.

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s	μ	μ	μ			
1	1	Bucharest	Ne	P	06	06	30				Kurile Islands $\Delta=78^\circ$ + Bacau-recorded	
			Ee	P		06	31					
			Ni	S		16	27					
			Eei	S		16	29					
			N	M		44	00					
				E	M		44	15				
				Campulung								
				Zi	P	06	06	16			-	
				Zi	PP		09	05			+	
				Ze	S		16	11				
				Iasi								
				Ze	P	06	06	00				
				Zi	PP		08	44			-	
		- - - - -										
2	1	Bucharest	Zi	P	12	35	32				Kurile Islands	
			E	e		35	42					
			N	e		35	43					
			E	M	13	13						
			N	M		14						
		Focşani										
		Zei	P	12	35	25			+			
- - - - -												
3	1	Bucharest	traces		14	11-14	59				Kurile Islands	
		Iasi										
		Zi	P	14	12	18			-			
- - - - -												
4	1	Campulung	Zi	P	17	33	07				Kurile islands	
		Iasi										
		Zi	P	17	32	53			-			
- - - - -												
5	3	Bucharest	traces		08	32-08	38				Very small	
6	3	Bucharest	Z	e	13	18	25					
		Campulung										
		Zi	P	13	18	43			+			
6	3	Iasi	Ze	P	13	18	26					
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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		Z	N	E	
								μ	μ	μ	
7	3	Bucharest Z N E	L	14	24	14	29				
8	3	Bucharest Z	traces	16	42	16	48				Very small
		Campulung Z	traces	16	42	16	46				Northern Italy
9	4	Bucharest Z	e	02	16	32					
		Campulung Ze	traces	02	16	02	19				
10	4	Bucharest Ze Z	P i	03	48	32					Small Turkey
		Campulung Ze	P	03	48	31					
		Iași Z N E	traces	03	48	03	54				
11	4	Bacau Ne Ee	P	04	16	17					
12	4	Bucharest Z	traces	04	43	04	52				
13	4	Bucharest Z Z Ne	e i (Sn)	09	49	54					
		Focșani Z	e	09	50	26					
14	4	Bucharest	traces	17	03	17	08				
15	4	Bucharest Z	e	17	57	45					
		Campulung Z	P	17	56	27					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s						
							μ	μ	μ			
16	4	Bucharest Zi	P	18	06	35	-	-	-	Romania Region of Vrancea Deep		
			S			06 56						
		Campulung Zi		P	18	06	32,7	+				
		Ni Ei		S			06 52,5		+		-	
		Vrâncioaia Ne Ee		P	18	06	30,4					Uncertain corection
		Ni Ei		S			06 46		-		+	
		Bacau Ne Ee		P	18	06	33,2					
		Ni Ei		S			06 51,9		+		+	
		Focşani Ne Ee		P	18	06	29,4					
		Ni Ei		S			06 47,3		+		-	
Iaşi Ni Ei		P	18	06	40,9		-	+				
		S			07 04,5		+	+				

17	4	Campulung Z	e	19	07	46				Very small		

18	4	Campulung Z	e	19	24	40				Very small Earthquake?		

19	5	Iaşi Ze	P	02	47	26				Marianne Islands		

20	5	Bhcharest N E	L	03	17-03	47				Marianne Islands		

21	6	Focşani Ze	P	13	02	30	-			Iran $\Delta = 25^{\circ}5$		
Iaşi Zi		P	13	02	41	+						
Ni Ei		S			07 06							
		S			07 07							

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		Z	N	E	
22	6	Bucharest Z N E	L	00	14-00	29				Small Distant	
		Iași Z N E	e	23	44	02					
23	7	Campulung Z	e	11	29	01				Romania Region of Campulung	
24	7	Bucharest Zi Ni Eei Ei	S ⁺ Sg	17	12	20 12 50		+	+	Turkey Δ=10.3 Bacau-recorded	
		Campulung Zei	Pn	17	10	01					
		Iași Ze Ne Ee	Pn	17	09	57					
25	7	Bucharest Zei Ni Eei Ei	Pn S ⁺ Sg	18	36	02 38 32 39 15			+	Turkey Δ=10.3 Bacau-recorded	
		Campulung Zei	Pn	18	36	17					
		Iași Ze Ne Ee	Pn	18	36	14					
26	8	Campulung Ze	P	05	53	57				U.S.A.-Ohio	
		Iași Zei	P	05	53	46					
27	8	Campulung Zi Iași Z N E	P e	12	06	46 12 07 16		+			
28	10	Campulung Ze Iași Ze	P P	00	17	08 05					
29	10	Bucharest N E Campulung	traces 1521-1530								

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		Z	N	E	
							μ	μ	μ		
30	10	Bucharest N E	L	16	06	16 35					
				-	-	-					
31	10	Bucharest N E	L	18	10	18					
		Campulung Z	e	17	08	27					
				-	-	-					
32	10	Campulung Zei	P	20	09	19					
				-	-	-					
33	11	Bucharest N E	traces	12	54	13 40					
		Campulung Ze	P	12	54	44					
				-	-	-					
34	12	Bucharest									
		Ne Ei	P	05	03	07				+ $\Delta=66^\circ$	
		Ne Ei	P		03	09					
		Nei Ei	S		11	53				*	
		Ni Ei	S		11	54				*	
		Ni PS	PS		12	20					
		N E	PS		12	22					
			L	05	26						
35	12	Campulung									
		Ze	P	05	03	07					
		Z	i		04	35					
		Bacau									
		Ne Ee	P	05	03	23					
		Focşani									
		Ze	P	05	03	11				No corrected	
		Iasi									
		Eei	P	05	03	10					
				-	-	-					
35	12	Campulung									
		Ze	P	19	36	37				Small	
				-	-	-					
36	12	Campulung									
		Ze	P	23	14	03				Small	
				-	-	-					
37	13	Bucharest									
		Zi	P	08	07	36					
		Z	i		08	31					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
38	13	Bucharest Zi	P	20 05 49		-			
		Bacau Zei	P	20 05 45		+			
		Iasi Zei	P	20 05 42		+			
				- - - - -					
39	14	Campulung Z	e	01 09 07					Very small
				- - - - -					
40	15	Campulung Ze	P	21 07 56					Small
				- - - - -					
41	15	Campulung Ze	P	23 47 40					Small
				- - - - -					
42	16	Campulung Ze	P	07 37 46					Small
				- - - - -					
43	16	Campulung Zei	P	10 22 08		-			
		Focșani Ze	P	10 22 02					
		Iasi Zi	P	10 21 49		-			
				- - - - -					
44	21	Bucharest Z	e	08 31 18					Very small
		Z	e	32 21					
		Campulung Z	e	08 32 09					
				- - - - -					
45	21	Bucharest Z	traces	10 51-10 55					Very small Distant.
		Campulung Z	traces	10 48-10 52					
				- - - - -					
46	22	Campulung Ze	P	13 19 04					Small
				- - - - -					
47	23	Bucharest Z N E	traces	09 43-09 47					Small
		Campulung							

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April 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z µ	N µ	E µ	
48	24	Bucharest Z N E	traces	08 25-08 30					
49	24	Bucharest Z	i	08 37 50					
		Focşani Z	e	08 38 22					
50	24	Bucharest Z	traces	09 12-09 21					
31	24	Bucharest Z	e	15 31 00					
		Focşani Z	e	15 31 43					
		Bacau Z	traces	15 31-15 34					
		Iaşi Z	traces	15 31-15 35					
52	25	Iaşi Zei	P	10 38 21					
53	26	Campulung Zei	P	13 23 19					
		Iaşi Zei	P	13 23 16					
54	27	Bucharest Z	traces	23 41-23 47				Small China	
55	29	Bucharest Z	traces	00 54-01 01				Distant	
		Campulung Ze	P	00 17 11					
56	29	Bucharest Z N E	L	04 42-04 56					
		Focşani Zi	P	04 07 34				+	
		Bacau Ze	P	04 07 26				+	

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April 1967

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Iași Zei	P	04	07	23		*			
				---	---	---					
57	29	Campulung Ze	P	12	37	50					
		Iași Zei	P	12	37	35		*			
				---	---	---					
58	30	Bacau Z	e	12	38	36					Very small
		Iași Z	e	12	38	18					
				---	---	---					
59	30	Campulung Ze	P	23	59	07					
				---	---	---					

A.Giurgiu

30 MAY 1968

ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

MAY 1967

A - Seismographs with direct recording

Station	Location	Instr.	Comp.	M kg.	T _s	D _s	\bar{V}
BUC	44°24'49" N	Mainka modified by Deme- trescu	N	540	10	0,39	174
	26°05'48" E		E	540	10	0,42	173
	h = 82,5 m Alluvium						
CMP	45°16',1 N	"	N	105	3,5	0,42	45
	25°02',3 E		E	105	3,5	0,42	44
	h = 598 m Alluvium						
VRI	45°52',2 N	"	N	105	3,5	0,41	42
	26°43',5 E		E	105	3,5	0,42	43
	h = 400 m Alluvium						
BAC	46°34' N	"	N	105	3,5	0,44	41
	26°54' E		E	105	3,5	0,46	37
	h = 167,5 m Alluvium						
FOC	45°41',7 N	"	N	105	3,5	0,41	41
	27°11' E		E	105	3,5	0,36	42
	h = 61 m Alluvium						
IAS	47°11',6 N	"	N	450	4,8	0,40	139
	27°33',7 E		E	450	4,8	0,40	128
	h = 160 m Alluvium						

ACADEMY OF THE SOCIAL SCIENCES OF THE USSR
 CENTRE FOR GEOPHYSICAL RESEARCHES OF THE USSR
 DEPARTMENT OF SEISMOLOGY
 OF THE PHYSICAL-MATHEMATICAL SCIENCES
 INSTITUTIONAL REPORT NO. 158
 1968

1 - Stations with direct recording

Station	Location	Latitude	Longitude	Altitude	Instrument	Year
BUC	Bucarest	45° 41' N	26° 05' E	h = 100 m	Alluvium	1968
CHI	Chişinău	47° 32' N	27° 05' E	h = 100 m	Alluvium	1968
IRI	Iriga	45° 32' N	26° 05' E	h = 100 m	Alluvium	1968
BAC	Bacău	46° 34' N	26° 04' E	h = 100 m	Alluvium	1968
BDC	Bucarest	45° 41' N	26° 05' E	h = 100 m	Alluvium	1968
IAS	Iasi	47° 11' N	27° 33' E	h = 100 m	Alluvium	1968

MAY 1967

B - Seismographs with galvanometric recording

Station	Instr.	Comp.	T_s	D_s	T_g	D_g	V_{max}
BUC	Galitzin	N	12,0	0,99	11,6	1,0	1.000
		E	12,1	0,99	12,4	"	"
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	1.000
		N	"	"	"	"	"
		E	"	"	"	"	"
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	1.000
		N	1,5			"	"
		E	"	"	"	"	"

The stations are : BUC = Bucharest, CMP = Campulung;
 VRI = Vrîncioaia, BAC = Bacău, FOC = FOCșani, IAS = Iași ;

The recording speed is 30 mm/min for the mechanical,
 Galitzin and Kirnos seismographs and 60 mm/min for the Hiller
 and VEGIK seismographs.

May 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks	
						Z μ	N μ	E μ		
1	1	Bucharest								
		Ze		Pn	07 10 30				Δ=6.1	
			N E	i	10 38	-	+	+		
		Zi		P	10 44	-				
		Zi		Pg	10 58	+				
				Sn	11 40					
				Ei	11 40					
				E	11 56					
			Ni	S	12 02					
			N E	L	12 14					
			Campulung							
			Ze		Pn	07 10 35				
				E	i	11 22				
				Ne	Sn	11 46				
					e	11 52				
					Ei	12 29				
					Sg					+
			Vrîncioaia							
			Ne		Pn	07 10 40				
				Ee	Pn	10 42				
			Ne		Sn	12 02				
			N		e	12 13				
				E	e	12 22				
			N	E	L	13				
			Focșani							
	Ze		Pn	07 10 55						
	Zi		P	11 15						
	Zi		Pg	11 33						
	Zi		Sn	12 22						
	Bacau									
	Ze		Pn	07 11 00		+				
		Ei	Sn	12 33						
		N	e	11 07						
	Z	N E	L	14						
	Iași									
	Ze		Pn	07 11 10						
	Z		i	11 27						
		Ni	Sn	12 50			+			
	Zi	Ni	S	13 27			-			
		Ni	Sg	13 51	+		-			
	Z	N E	L	14			-			
2	1	Campulung								
		Ze	P	08 17 19						
3	1	Campulung								
		Ze	P	08 30 37						

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May 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks		
				G.M.T.				Z	N	E			
				h	m	s		μ	μ	μ			
4	1	Bucharest		i	08	49	20		+			Small	
			Z	i		49	48		-			Near	

5	1	Campulung		P	09	49	20						

6	1	Bucharest		i	09	51	10					Small	
			N	e		51	16				Near		
			E										
		Z	i		51	26							
		Z	N	E	L		53						
		Campulung											
			N		e	09	52	08					
			N		e		52	22					
				Ee	(Sn)		53	42					
		Focşani											
				Ee	Pn	09	52	01					
			N		e		54	19					
Z	N	E	L		56								
Iaşi													
	Ze	Ne	Pn	09	52	19							
		N	e		53	12							
		E	e		53	42							
	Ze	N	E	L		55							
VRI, BAC			recorded										

7	1	Bucharest		e	14	40	10				Near		
			N	i		41	30						
		Z		E	i		41	46					
		Z	N	E	L		42						
		Campulung											
	Ze		Pn	14	39	41							
Focşani													
	Z		e	14	42	20							
IAS			recorded										

8	1	Campulung		P	16	13	38						

9	1	Campulung		P	16	41	43						

May 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
10	1	Bucharest	P	16	43	08	-	-	-	Small	
		Ze									
		N									
		E									

11	1	Bucharest	e	18	13	10	-	-	-	Small	
		Ze									
		N									
		E									
		Campulung		P	18	11					45
Ze											

12	1	Bucharest	e	22	50	14	-	-	-	Small	
		Ze									
		N									
Campulung			P	22	48	32					
Ze											

13	2	Bucharest	P	01	29	13	-	-	-		
		Ze									
		N									
		E									
		Campulung		P	01	28					53
		Ze									
		Focşani		(P)	01	29					25
Ze											
Z	e	29	29								
N											

14	2	Bucharest	e	08	14	26	-	-	-	Small	
		Z									
		Z									
		Z									
		Campulung		P	08	13					31
Ze											
FOC			recorded								

15	2	Bucharest	e	09	59	54	-	-	-	Very Small	
		Z									
		Campulung		P	09	58					01
		Ze									
FOC			recorded								

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May 1967

No.	Date	Comp.	Phase Time			Per. s	Amplitudes			Remarks
			G.M.T.	h	m		s	Z	N	
						μ	μ	μ		
16	2	Campulung Ze	P	13	55	02				
17	2	Campulung Z	e	15	32	48				
18	2	Bucharest Z	e	19	31	34				Very Small Near
		Z N E	e		32	36				
		Z N E	L		33					
		Campulung Ze	P	19	31	po				
19	3	Campulung Ze	P	15	23	21				
20	3	Iași Ze	P	05	27	38				
		Ne	P		27	39				
21	3	Bacău Ne	P	12	28	55				
		N	e		28	58				
22	3	Bucharest Ze	Pn	18	43	21				+ $\Delta=6^{\circ}$ Small
		Z	i		44	03				
		Z Ne	Sn		44	34				
		Z N E	i		44	48				
		Z N E	L		45					
		Campulung Ze	Pn	18	43	20				
		N	e		44	38				
		Focșani Ze	Pn	18	43	43				
		Z N E	L		46					
		Iași Ze	(Pn)	18	44	05				
		E	e		44	17				
		Ee	(Sn)	47	05					
		VRI, BAC	recorded							

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks						
				G.M.T.				Z	N	E							
				h	m	s											
							μ	μ	μ								
23	3	Bucharest	e	23	24	44				Traces							
		Z															
		Campulung	e	23	22	56											
		Z															

24	4	Bucharest	e	04	49	20				Small							
		Ze															
		N															
		E															
		Campulung	(P)	04	48	19											
		Zi															
		FOC				recorded											

25	4	Bucharest	P	08	56	10				Near							
		Ze Ne															
		Z															
		N															
		CMP, FOC				recorded											

26	4	Bucharest	(P)	13	13	40				Very small Near							
		Ze															
		Z N E															
		E															
		Campulung	P	13	13	23											
		Z(e)															
		BAC				recorded											

27	4	Bucharest	i	13	33	36				Small Near							
		Z															
		Z															
		Z N E															
		E															
							Campulung	P	13		30	39					
							Ze										
							Z N E										
							Focşani	e	13		33	31					
							N										
		Iaşi	e	13	35	41											
		N															
		E															
		BAC				recorded											

May 1967

No.	Date	Comp.	Phase	Time		Per.	Amplitudes			Remarks
				G.M.T.			s	Z	N		E
				h	m	s	μ	μ	μ	
28	4	Iasi N E	traces	16	06 ^m	-16	08 ^m			Seism?
29	4	Bucharest Vrîncioaia Zi	e	17	14	50				Small
			P	17	12	46				
30	5	Bucharest Z N E	traces	00	10 ^m	-00	14 ^m			Longues waves
31	5	Bucharest Ze Z N E	Pn	06	29	08				Small
			e		29	30				Near
			i		29	37			+	
			i		29	46				
			L		31					
		Campulung N(e) N E	Pn	06	29	13				
			Sn		30	27				
			L		31					
		Focşani N E	e	06	30	59				
			e		31	13				
		Vrîncioaia Zei	P	06	28	09				
		Iasi N(e) N E	Pn	06	29	28				
			(Sn)		31	50				
			L		32					
		BAC	recorded							
32	5	Bucharest Ze Ne N E	Pn	14	51	37				Small
			(Sn)		52	34				($\Delta = 5^{\circ}$)
			e		53	02				
			e		54					
		Focşani Z(e) N E	Pn	14	52	20				
			(Sn)		53	06				
			L		54					
		CMP	recorded							

May 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
33	5	Vrîncioaia Zi	P	15 51 51					
34	5	Bucharest Ze	P	16 00 12				Very small Near	
		N E	i	02 17					
		Vrîncioaia Zi	P	16 00 29,6					
35	5	Bucharest N E	traces	16 ^h 27 ^m -16 ^h 31				Seism?	
36	5	Vrîncioaia Zi	P	17 17 25					
37	5	Bucharest Ze	P	17 51 00				Very small	
		N E	e	51 20					
		Vrîncioaia Zi	P	17 51 00					
		Focșani Ze	P	17 51 08					
		Bacau Ze	P	17 51 00					
		N E	e	51 03					
		Iași Ze	P	17 50 59					
		Ee							
		CMP	recorded						
38	5	Vrîncioaia Ze	P	18 02 06					
		Iași Ne	P	18 01 43					
		Ee	P	01 44					
		FOC, BAC	recorded						

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MAY 1967

No.	Date	Comp.	Phase	Time			P _s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
39	5	Bucharest									
		Z	e	20	21	32					
		N	e		21	42					Small
		Z	i		22	12					
		E	e		22	30					

40	5	Vrîncioaia	P	23	22	38					

41	7	Bucharest									
		Zi	Pn	00	20	40					
		Z	i		21	07		+			
		Ni	(Sn)		21	24		+			Small ($\Delta = 4^\circ$)
		Ei	(Sn)		21	25					
		Focşani									
		Ze	Pn	00	21	11					
		CMP								recorded	

42	8	Vrîncioaia									
		Zei	P	19	05	23					
		FOC								recorded	

43	8	Vrîncioaia									
		Ze	P	23	36	31					

44	9	Bucharest									
		Z(e) Ne	P	02	42	14					
		Z	ei		42	30					
		E	i		43	00		+			Very small Near
		Campulung									
		Z(e)	P	02	41	42					
		Vrîncioaia									
Zi	P	02	41	34,7							
		Focşani									
		Z(e)	P	02	42	18					

45	9	Bucharest									
		Z(e)	Pn	04	06	16					
		Z	i		06	42					
		Z	i		07	54					
		Ze	Sn		07	24					
		Ee	Sn		07	26					
		E	i		07	52					Small $\Delta = 6^\circ$

May 1967

No	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N		E
		Campulung									
		Ze	P	04	06	38					
		Vrîncioaia									
		Ze	P	04	06	45					
		Iași									
		Ze Ne	P	04	07	02					
		Ee	P		07	04					

46	9	Bucharest									
		Ze	P	06	26	56					Very small Distant
		E	e		27	28					
		N	e		27	32					
		Z N E	L			57					
		Campulung									
		Ze	P	06	26	53					
		Z	ei		26	56					
		Vrîncioaia									
		Ze	P	06	26	46					
		Iași									
		Ze	P	06	26	39					
		Ne	P		26	40					
		Ee	P		26	41					
		FOC									
				recorded							

47	9	Vrîncioaia									
		Z(e)	P	07	27	29					

48	9	Bucharest									
		Z(e)	Pn	08	02	40					Small ($\Delta = 5.6$)
		E	e		03	38					
		Ne	(Sn)		03	44					
		Campulung									
		Z(e)	Pn	08	02	18					
		FOC, IAS									
				recorded							

49	9	Campulung									
		Ze	P	12	48	38					

50	9	Bucharest									
		Z N E									
				traces 13 ^h 38 ^m -13 ^h 43 ^m							

51	9	Bucharest									
		N E									
				traces 20 ^h 48 ^m -20 ^h 53 ^m							

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Vrîncioaia Ze	P	20	47	42					
52	9	Bucharest									
		Zi	P	21	43	18					
		Ne	S	53	40						$\Delta = 82,6$
		Ee	S	53	41						
		Campulung Ze	P	21	43	20					
		Vrîncioaia Zei	P	21	44	08,5					
53	10	Bucharest									
		Z(e)	P	21	16	46					Small
		N	e	17	07						
		E	ei	17	48						
54	11	Bucharest									
		Ni Ei	S	13	34	07					Romania Vrancea region
		Campulung Ze	P	13	33	48,1					
		Ne Ee	S	34	06,3						
		Zi	S	34	07,4						
		Vrîncioaia Zi	P	13	33	38,3					
		Zi	i	33	45,8						
		Ne Ee	S	33	46,3						
		Focşani Ni Ei	S	13	33	49,7					
		Ni	S	33	49,9						
		Bacau Ze Ei	S	13	33	55,8					
		Ne	S	33	56,1						
		Iaşi Ne	e	13	33	58					$M_{SH} = 3,4$
		Zi Ni Ei	S	34	11,8						
		Ni Ei	S	34	12,3						
							(0,6); 0,6	2,5	4,5		

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks		
				G.M.T.	h	m		Z μ	N μ	E μ			
55	11	Bucharest	Zi	P	14	58	00	-			Δ=36 ^o ,5		
			Zi	PP		59	16	+					
			Zi Ni	PPP		59	30	+					
			N	i	15	03	32						
			Ei	S		03	40			+			
			Ni	SS		06	04			-			
			E	i		06	10						
			Ni	SSS		06	42						
			Ni Ei	S S		08	12						
			E	i ^c		08	19			+			
			N	M		13	38						
			E	M		18	08						
			Campulung										
			Zei	P	14	58	04			(+)			
			Ne	PP		59	19						
Ne	S	15	03	47									
Ee	S		03	48									
N E	L		11										
Vrâncioaia													
Zei	P	14	56	53									
E	e		04	31									
N	e		04	33									
Focșani													
Ze	P	14	57	50									
Ne	S	15	03	27									
E	e		05	21									
N E	L		12										
Bacau													
Ze	P	14	57	50									
N	i		58	12									
Zi	PP		59	08									
N	e	15	04	00									
Iasi													
Zei Ei	P	14	57	46			+	+					
Nei	PP		59	02									
Ei	PP		59	04									
Ni	S	15	03	16									
Ee	S		03	19									
E	e		03	53									
N E	L		11										

56	11	Vrâncioaia											
Zi	Pg	20	24	15					Seism?				
Zi	Sg		24	21,5					Romania				

May 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
57	11	Iași Ne Ee	P	21 54 05					
58	11	Iași Zi Ne	P _g P _g Ee E Ei	23 21 04,6 21 05 21 05,2 21 07 21 08,9				Romania Local	
59	13	Bucharest E N Nei N	e e S L	05 40 18 40 40 41 04 48				Small Distant	
		Campulung Ze	P	05 31 56					
		FOC, IAS		recorded					
60	13	Bucharest Z(e) Ni Ei	P S	20 04 56 05 16				Romania Vrancea region	
		Campulung Ze Ne Ee	P S	20 04 54,7 05 14,9					
		Vrîncioaia Zi Ne Ei	P S S	20 04 50 05 05,7 05 06,7					
		Focșani Zi Ni Ei	P S	20 04 48,9 05 05,5	0,3;0,4	9,9	11	M _{SH} =3,6	
		Bacau Zi Ni Ni Ei	P S S	20 05 52,8 05 10,6 05 11					
		Iași Zi Ni Ei	P e S	20 05 00 05 20,4 05 22,7					

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No.	Date	Comp	Phase	Time			Per.	Amplitudes			Remarks			
				G.M.T.	h	m		s	Z	N		E		
							μ	μ	μ					
61	14	Bucharest	Zei	Pn	04	17	50				Δ=8°			
			Ne	P		19	08							
			Ni	Pg		19	38							
			Z	i		19	52							
			Ni	Sn		20	20							
			Ei	Sn		20	24			+				
			Ni	S		20	51							
			Ei	S		20	52							
			Z	N	E	L	21							
			N			M	21	20						
			E			M	21	30						
					Campulung									
			Zei	Pn	04	17	58					+		
			Ne	Sn		20	33							
			E	e		20	50							
			N	e		20	57							
					Focșani									
			Ze	Pn	04	17	11							
			Ne	Sn		19	42							
			N	E	L	21								
		Bacau												
Ze	Pn	04	18	20										
N	e		21	53										
		Iași												
Ze	He	Pn	04	18	31									
		Pn		18	32									
		VRI	recorded											

62	14	Bucharest	N	ei	09	20	06				Small Distant			
			Z	N	E	L	25							
					Campulung									
			Ze	P	09	07	59							
					Vrîncioaia									
Ze	P	09	08	11										
		FOC, BAC	recorded											

63	14	Vrîncioaia	Ze	P	14	58	27							

64	14	Bucharest	E	i	16	58	35				Very small Near			
			Z	e		58	38							
			Z	N	E	A	59							

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May 1967

No.	Date	Comp	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
65	15	Vrîncioaia Ze	P	00 25 15					
		Focșani Ze	P	00 25 50					

66	15	Vrîncioaia Ze	P	00 54 34					

67	15	Bucharest							
			Ei	S	02 50 22				- Small Distant
		N	E	L	03 15				
		Campulung Ze		P	02 40 01				
		Vrîncioaia Ze		P	02 40 15				
		Focșani Ze		P	02 39 54		+		
		Bacau Ze		P	02 39 52				
		Iași Ze		P	02 39 47		+		
		Ne Ee	P	39 48					

68	15	Bucharest N E	L	04 25					

69	15	Bucharest							
		Zi		P	08 15 24		+	- Δ=10.5	
			E	i	16 36				
			Ei	S	17 24				
			Ni	SS	17 30				
		Z	N E	L	18				
		Campulung Zei		P	08 15 36				
		Vrîncioaia Zei		P	08 15 36				
		Z	N E	L	19				
		Focșani Ze		(P)	08 16 00				
Z	N E	L	19						

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks		
				G.M.T.				Z	N	E			
				h	m	s	μ						
70	16	Vrîncioaia	P	19	37	17							
		Ze											
		Focșani											
		Ze	P	19	37	16	+						
		CMP	recorded										

71	16	Bucharest	(P)	21	19	02				Very small			
		Ne											
		E	ei			20				Near			

72	17	Bucharest	L	04	38								
		Z N E											

73	17	Bucharest	P	17	56	21				Δ=28°			
		Zi											
		N					e	57	42				
		E					i	18	00		34		
		Ei					S		01		05		
		Campulung	P	17	56	29							
		Ze											
		Focșani	P	17	56	25							
		Ze											
		Ne	(S)	18	01	09							
		Vrîncioaia	P	17	56	29							
		Z(ei)											

74	18	Bucharest	L	04	46								
		N E											
		N E											
							L	51					
							Campulung	P	04	18	52	(-)	
		Ze											
		Iași	P	04	18	35							
		Ze											
		Ne Ee	P			36							

75	18	Vrîncioaia	P	07	03	30				Seism?			
		Ze											

76	18	Bucharest	P	11	34	28				Small			
		Ze											
		Z N E	L	12	07				Distant				

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Campulung									
		Ze	P	11	34	29		-			
		Vrîncioaia									
		Ze	P	11	34	18					
		Focşani									
		Zei	P	11	34	19					
		Iaşi									
		Zi	P	11	34	12,5					
		Ne Ee	P		34	13					
				-	-	-					
77	18	Bucharest									
		N E	L	14	45						Small
		Z	L		51						Distant
		Campulung									
		Zo	P	14	12	53					
		Vrîncioaia									
		Zei	P	14	12	44					
		Iaşi									
		Z(i)	P	14	12	36		-			
				-	-	-					
78	18	Campulung									
		Z(e)	P	23	51	14					
		Vrîncioaia									
		Ze	P	23	51	05					
		Focşani									
		Ze	P	23	51	03		-			
		Iaşi									
		Ze	P	23	50	58		+			
		Ne Ee	P		50	59					
				-	-	-					
79	19	Campulung									
		Ze	P	13	10	56		-			
				-	-	-					
80	19	Campulung									
		Ze	P	15	59	14		-			
		Vrîncioaia									
		Ze	P	15	59	15					
		Bacau									
		Z(e)	P	15	59	18					
				-	-	-					
81	20	Bucharest									
		Ze	P	00(10)	37						Very small
		E	i		11	27		+			Near

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Campulung Ze	(P)	00 09 49					
		Vrîncioaia Ze	P	00 10 45					
82	20	Bucharest Zi	P	08 02 21					
		Vrîncioaia Zei	P	08 01 18					
83	20	Vrîncioaia Ze	P	13 21 14					
84	20	Campulung Z(e)	P	15 13 06					
		Bacau Ze	P	15 13 02					
		Iasi Zei	P	15 13 00					
		Ne	P	13 01					
85	20	Campulung Z(e)	P	21 54 48					
		Vrîncioaia Zei	P	21 54 28					
		Iasi Ze	P	21 54 25					
		Ne	P	54 27					
		Ee							
86	20	Campulung Ze	P	23 23 09					
		Vrîncioaia Z(e)	P	23 23 29					
		Iasi Z(e)	P	23 22 40					
		N	i	22 44					
		FOC, BAC		recorded					
87	20	Bucharest	traces	23 ^h 30 ^m -23 ^h 35 ^m					
88	21	Bucharest Z	N E L	18 15					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
89	21	Bucharest									
		Zi	P	18	57	06					$\Delta=85^\circ$ $h=175\text{Km}$
		Zi	pP		57	47					
		Zi	PP	19	00	50		+			
		Ni	S		06	52			+		
		Ei	S		06	53					
		Ni	PS		07	45					
		Ei	PS		07	46					
		N	i		08	05				+	
		N	i		08	29				+	
		Z	L		25						
		Campulung									
		Zi	P	18	57	08,7		+			
		Z	i		57	29					
		Zi	pP		57	52					
		Ne	S	19	06	58					
		Ee									
		Vrîncioaia									
		Zi	P	18	57	04,8					
		Zi	pP		57	47					
		Ee	S	19	06	49					
		Ne	S		06	50					
		Focşani									
		N(e)	(P)	18	57	07					
		E(e)	S	19	06	43					
		Ee									
		Ne	S		06	44					
		Bacau									
		Zei	P	18	57	04					
		Ne									
		Ee									
		Zi	pP		57	47					
		Nei	S	19	06	48					
		Ee									
		Iaşi									
		Zi	P	18	57	02,2		+			
		Ne	P		57	03					
		Ee									
		Zi	pP		57	44					
		Z	i	19	00	15					
		Nei	S		06	45					
		Ee									
		Nei	S		06	46					
- - - - -											
90	22	Bucharest									
		Z(ei)	Pn	19	49	26					Very small ($\Delta=6^\circ$)
		Z	i		50	18					
		Ei	(Sn)		50	34					
		Campulung									
		Ze	Pn	19	49	02					

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N		E
								μ	μ	μ	
		Vrîncioaia									
		Z(e)	Pn	19	48	25					
		FOC	recorded								
91	23	Campulung									
		Ze	P	01	34	22					
		Bacau									
		Z(e)	P	01	34	10					
		Iași									
		Ze Ne Ee	P	01	34	05					+
			P		34	06					
92	23	Bucharest									
		N E	L	02	41						
		Campulung									
		Ze	P	02	04	39					+
		Bacau									
		Ze	P	02	04	29					
		Iași									
		Ze Ne Ee	P	02	04	22					+
			P		04	23					
93	23	Vrîncioaia									
		Zei	P	08	46	54					
94	23	Vrîncioaia									
		Z(e)	P	09	45	06					Seism?
95	23	Bucharest									
		Z(e) N E	P	09	50	30					Very small
			i		51	08					Near
			i		51	14					
96	23	Bucharest									
		Z(ei) N E	P	10	46	30					Very small
			i		46	36					Near
			i		46	59					
		CMP	recorded								
97	25	Bucharest									
		N E	e	03	38	34					Very small
			i		38	43					Near
		Z N E	L		39						

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No.	Date	Comp	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ	μ	μ		
		Vrîncioaia									
		Zi	P	03	36	47,5					
		Focșani									
		Z(e)	P	03	37	25					
			E	e	38	42					
		Bacau									
		Z(e)	P	03	37	15					
		Iași									
		Zi	P	03	37	24,3					
			E	i	37	36					
				e	38	45					
				N							
		CMF									
			recorded								
98	26	Campulung									
		Ze	P	16	14	06,2					Romania
		Zi	S		14	11,7					Local
99	26	Bucharest									
		Zi	P	17	33	27,9					Romania
		Z	i		33	44,4					Vrancea
											region
		Ne	Ei	i	33	44,8	1,2;1,6	4,4	17,7		H=173304
		Ni	S	S	33	46,8					M _{SH} =3,9
		Campulung									
		Zi	P	17	33	25					
		Ni	Ei		33	43,1					
		Vrîncioaia									
		Zi	P	17	33	24,8					
		Ne	Ee	S	33	40,6					
		Focșani									
		Ne	Ee	P	17	33	27,5				Uncertain
			Ee	S		33	44,9				correction
		Bacau									
		Ze	P	17	33	29,2					
		Ni	Ei	S		33	49,6				
		Iași									
		Zi	P	17	33	36					
		Ne	Ee	P		33	37				
			E	e		33	52,4				
		N		S		33	52,4				
		Ni		S		34	02,2				

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No. Date Comp. Phase Time G.M.T. Per. Amplitudes Z N E
h m s u u u

26	CMP Campulung								Romania Bacau region (Godinești) $\Delta = 46^{\circ}4N$; $\Lambda = 27^{\circ}2 E$ $H = 213726 \pm$ (Bucharest)
	Z		e	21	38	52			
			Sg		38	20,1			
	Ze		Sg	38	21,8				
	VRI Vrâncioaia								
	Zi		Pg	21	37	39			
			Sg		37	47,3			
			Sg	37	48,6				
			i	37	54,3				
	FOC Focșani								
			Pg	21	37	42,5			
			Sg		37	56,6			
			Sg	37	57,6				
	BAC Bacau								
	Zi		Pg	21	37	31,2			
Ze	Ni	Sg		37	35,2	0,3; 0,2	64 26		
IAS Iași									
Zi	Ne	Pg	21	37	43,9				
	Ni	Sg		37	59,7				

101	27	Campulung							
		Ze	P	01	51	30		+	
102	27	Bucharest							
		Z N E	i	02	03	43			Small
			L		08				Distant
		Campulung							
		Ze	P	01	59	12			
103	27	Bucharest							
		Zi Nei	P	17	35	10			$\Delta = 80^{\circ}$
			P		35	12			
		N	i		44	54			
			S		45	13			
		N	i		45	31			
			PS		45	50			
		Ni	SS		50	03			
			SS		50	05			
		Z N E	L		56				
		N	M	18	15	28			
			M		16	56			
		Campulung							
		Ze Ne	P	17	35	07			
			S		45	11			
		Ne	S		45	15			
			e		45	29			

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Vrîncioaia									
		Ze	P	17	35	02					
		Z	i		35	03					
		Ee	S		45	04					
		Focşani									
		Ne	(P)	17	35	24					No correction
		N	e		36	20					
		Bacau									
		Ze	P	17	34	59					
		Ne	P		35	00					
		Ee	S		45	06					
		Ne	S		45	08					
		Iaşi									
		Zei	P	17	34	52					
		Ne	PP		34	53					
		Ee	P		34	54					
		Ne	S		44	45					
		Ee	S		44	47					
104	27	Bucharest									
		N(e)	P	19	13	18					$\Delta=44^\circ$
		E(e)	P		13	20					
		Ni	RP		14	54					
		Ei	S		19	30					
		Ni	S		19	32					
		N	i		22	19					
		N	L		30						
		Campulung									
		Ze	P	19	13	25					
		Ne	S		20	21					
		Vrîncioaia									
		Zei	P	19	13	14					
		Bacau									
		Ze	P	19	13	15					
		Ne	(S)		19	40					
		Ee									
		Iaşi									
		Ze	P	19	13	09					
		Ee	pP		14	48					
		Ee	(S)		19	20					
		Ne									
105	27	Vrîncioaia									
		Zi	P	22	23	02					

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
106	28	Campulung Ze	P	01 44 04					
		Iași Ze	Ee	01 43 48					
		Ne	P	43 49					

107	28	Campulung Ze	P	04 14 59					
		Iași Ze	Ee	04 14 37					
		Ne	P	14 38					

108	28	Iași Z(e)	P	17 46 13					
		CMP		recorded					

109	28	Vrîncioaia Zei	P	18 17 28					

110	29	Vrîncioaia Ze	P	11(29)10					

111	29	Iași Z(e)	P	15 55 20					

112	29	Vrîncioaia Ze	P	21 13 24					
		Iași Ze	Ee	21 13 16					
		Ne		FO recorded					

113	30	Bucharest N	E	e 23 59 12					Traces Near
				e 59 41					

114	31	Focșani N	E	e 16 51 24					Seism?
				e 51 26					

G.Purcaru



SUPPLEMENT

May 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
							u	u	u		
52a	10	Iași	P	15	03	14,3				Romania	
		Zi Ni Ei									S	03	16,5	Local

52b	10	Iași	P	16	06	37				Romania	
		Zi Ne Ei											Local

57a	11	Iași	P	22	23	40				Romania	
		Ne Ee									

57b	11	Campulung	P	22	25	45				Romania	
		Ze											Local

102a	27	Vrîncioaia	S	16	06	57,3				Romania	
		Ne Ei									S	06	57,7	Local?

ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

JUNE 1967

A. Seismographs with direct recording

Station	Location	Instr.	Comp.	M _{kg}	T _s	D _s	\bar{V}
BUC	44°24'49" N	Mainka	N	540	10,0	0,447	179
	26°05'48" E h = 82,5 m Alluvium	modified by Deme- trescu	E	540	10,0	0,436	180
CMP	45°15,1 N	"	N	105	3,5	0,416	44
	25°02,3 E h = 598 m Alluvium	"	E	105	3,5	0,406	44
VRI	45°52,2 N	"	N	105	3,5	0,432	41
	26°43,5 E h = 400 m Alluvium	"	E	105	3,5	0,402	42
BAC	46°34' N	"	N	105	3,5	0,439	41
	26°54' E h = 167,5 m Alluvium	"	E	105	3,5	0,458	37
FOC	45°41,7 N	"	N	105	3,5	0,364	44
	27°11' E h = 61 m Alluvium	"	E	105	3,5	0,362	42
IAS	47°11,6 N	"	N	450	4,8	0,403	139
	27°33,7 E h = 160 m Alluvium	"	E	450	4,8	0,403	128



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2	Prof. Dr. I. M. Dinulescu	Bucuresti	Prof. Dr.	1	1967
3	Prof. Dr. N. E. Popescu	Bucuresti	Prof. Dr.	1	1967
4	Prof. Dr. S. C. Bratu	Bucuresti	Prof. Dr.	1	1967
5	Prof. Dr. M. C. Bocu	Bucuresti	Prof. Dr.	1	1967
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12	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967
13	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967
14	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967
15	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967
16	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967
17	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967
18	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967
19	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967
20	Prof. Dr. I. C. Bocu	Bucuresti	Prof. Dr.	1	1967

JUNE 1967

B. Seismographs with galvanometric recording.

Station	Instr.	Comp.	T_s	D_s	T_g	D_g	V_{max}
BUC	Galitzin	N	12,0	0,98	11,6	1,0	1.000
		E	12,1	1,01	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	2.000
		N	1,5	0,5	0,4	2,0	2.000
		E	1,5	0,5	0,4	2,0	2.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	2.000
		N	1,5	0,5	0,4	2,0	2.000
		E	1,5	0,5	0,4	2,0	2.000

The station are : BUC = Bucharest; CMP = Campulung;
 VRI = Vrîncioala; BAC = Bacău; FOC = Focșani; IAS = Iași.
 The recording speed is 30 mm/min for the mechanical,
 Galitzin and Kirnos seismographs, and 60 mm/min for the
 Hiller and VEGIK seismographs.

1967 JUNE

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
1	1	Bucharest							
		Ne Ee	S	03 58 32					
		Vrîncioaia							
		Zi	P	03 48 23					
		Iași							Δ=80°
		Ze	P	03 48 18					
			E	e	58 09				
		N	e	e	58 16				
			Ee	S	58 25				
		Ne	S	S	58 26				
		CMP	recorded						

2	1	Bucharest							
		Ne	Pg	10 41 28					
		N	i	41 54					
		Ne	Sn	42 15					
			Ee	Sn	42 16				
		Ne Ee	S'	42 48					
		Ni Ee	Sg	43 12					
		N E	M	10 44	6;6	34,6	54		
		Campulung							
		N E	e	10 41 22					
		Vrîncioaia							
		Zi	Pn	10 41 37					
		Z	i	41 48					
		Bacău							
		Ze	Pn	10 41 46					
		N	e	42 12					
			E	e	42 13				
		Iași							
Ze	Pn	10 41 53							
Ne Ee	Pn	41 55							
		FOC	recorded						

3	1	Bucharest							
		Ne Ee	P	11 06 27					

4	1	Bucharest							
		N E	e	11 33 25					
		Ni Ei	S	34 05					

5	1	Bucharest							
		N E	e	14 59 20					
		N	e	59 21					

1967 JUNE

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
6	1	Bucharest							
			E	e 15 36 49					
		N	E	e 37 02					

7	2	Bucharest							
		N	E	traces 0055-0057					

8	2	Iași							
		Ze	Ee	P 05 14 18					
		Ne		P 14 19					
		BUC, VRI, BAC recorded							

9	2	Vrîncioaia							Correction uncertain
		Ze		P 06 42 13					

10	2	Bucharest							
		N	E	traces 1600-1604					

11	2	Bucharest							
		N	E	traces 1705-1707					

12	2	Bucharest							
		N	E	e 23 06 58					
		N	E	i 07 07					
		Vrîncioaia							Correction uncertain
		Ze		P 23 06 00					

13	3	Bucharest							Distant
		Ne	Ee	S 09 30 32					
		Vrîncioaia							
		Ze		P 09 20 35					
		Z		e 20 49					
		Iași							
		Ze		P 09 20 32					
		Ne	Ee	P 20 33					
		FOC recorded							

14	3	Campulung							
		Z		e 11 13 11					
		Vrîncioaia							
		Ze		P 11 10 29					



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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				s	Z	N	
				h	m	s		μ	μ	μ	
15	3	Bucharest									
		N E	e	16	29	19					
		N	i		29	50					-
		E	e		29	53					
		Campulung									
		Ze		P	16	28	38				
		Vrîncioaia									
		Ze		P	16	28	49				
FCC recorded											

16	4	Campulung									
		Ze		P	05	38	34				
		Vrîncioaia									
		Ze		P	05	38	26				
		Focşani									
		Ze		P	05	38	12				
		Iaşi									
		Zi Ne Ei	P	05	38	18				+	+

17	5	Campulung									
		Ze		P	01	41	21				
		Vrîncioaia									
		Ze		P	01	41	09				
		Bacău									
		Ze		P	01	41	09				
		Z N E	e		41	14					
		Focşani									
		Ze		P	01	40	51				
		Iaşi									
		Ze Ne Ee	P	01	41	07					
18	5	Campulung									
		Ze		P	16	50	24				
		Vrîncioaia									
		Ze		P	16	50	21				
		Iaşi									
		Zi	P	16	50	06				-	
		Ne Ee	P		50	07					

19	7	Campulung									
		Z		e	01	51	31				
		Z		e		52	14				

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. Amplitudes			Remarks
					s	Z μ	N μ		E μ
		Vrîncioaia Zi -----	P	01 50 09				
20	7	Bucharest Ni -----	Ei P	09 36 49		+	+	
		Campulung Ze -----	P	09 36 31				
21	7	Campulung Ze -----	P	14 06 44				
		Vrîncioaia Ze -----	P	14 07 07				Correction uncertain
		BUC recorded -----						
22	7	Campulung Z -----	e	15 57 11				
		Vrîncioaia Ze -----	P	15 55 24				
23	7	Vrîncioaia Ze -----	P	19 50 30				
24	7	Focșani Ze -----	P	23 25 11				
25	8	Campulung Ze -----	P	12 15 15				
		Vrîncioaia Zi -----	P	12 14 49				
26	8	Campulung Ze -----	P	13 41 15				
		Vrîncioaia Ze -----	P	13 40 53				
27	8	Bucharest N -----	E e	21 13 04				
		Campulung Ze -----	P	21 12 10				
		Vrîncioaia Ze -----	P	21 12 24				
		Focșani Z -----	e	21 13 05				

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z μ	N μ	
28	9	Bucharest									$\Delta = 2^{\circ}$
		Zi	Pn	14	50	16		+			
			e		50	18					
		Zi	Sn		50	42		+			
			M		51		5,5		12,6	9,3	
		Campulung									
		Ze	Pn	14	50	38					
		Ze	Sn		51	14					
		Vrâncioaia									
		Ze	P	14	50	28					
		Z	i		50	34					
		Bacău									
Z	e	14	50	56							
Focșani											
Ze	Pn	14	50	25							
Zi	Sn		51	11			+				
Iași											
Z	e	14	51	13							

29	10	Vrâncioaia									Earthquake?
		Zi	P	01	05	00					
		Zi	S		05	09					

30	10	Bucharest									
		N	E	e	05	19	34				

31	10	Bucharest									
		N	E	e	12	54	28				
		Vrâncioaia									
		Ze	P	12	52	30					
		CMP								recorded	

32	10	Campulung									
		Ze	P	14	17	39					
		Vrâncioaia									
		Zi	P	14	17	08					

33	11	Bucharest									
		N	E	e	05	37	18				
				e		38	08				
		N		i		38	12				
		Campulung									
		Ze	P	05	36	51					

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Vrîncioaia Ze	P	05 36 58					
		Bacau Ze Ee	P	05 37 15					
		Focșani Ze	P	05 36 57					
		Iași Ze	P	05 37 24					

34	11	Iași Ze N E	P e	13 34 16 34 23					

35	11	Iași Ze Ne E	P P e	14 19 46 19 47 19 48					

36	11	Iași Ze Ne Ee	P	14 42 29					

37	11	Iași Ze N E	P e	16 04 24 04 27					

38	11	Bucharest N E	e	16 25 00					

39	11	Bucharest N E	e i	22 54 05 54 14				+	

40	12	Campulung Ze	P	00 15 22					

41	12	Iași Zi	P	00 50 54					

42	12	Campulung Ze	P	01 08 51					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Vrîncioaia Ze	P	01 08 43				No cor- rection	
		Bacau Ze	P	01 08 34					
43	12	Bucharest							
		N	e	01 31 25					
		N E	e	32 05					
		N E	e	32 31					
		Campulung Ze	P	01 30 54					
		Vrîncioaia Zi	P	01 31 04				No cor- rection	
		Focșani Ze	P	01 31 01					
44	12	Bucharest						$\Delta = 6,5$	
		Ne	Pn	02 52 48					
		Ne Ee	Pg	53 22					
		Ni Ei	Sn	54 02					
		N E	M	55	5,6	37,8	53,5		
		Campulung Zi	Pn	02 52 52				*	
		Vrîncioaia Zi	Pn	02 52 58					
		Bacau Ze	Pn	02 53 16					
		Ne Ee	Pn	53 17					
		Focșani Ze	Pn	02 52 49					
		IAS	recorded						
45	12	Bucharest						Distant	
		Ne Ee	S	05 45 00					
		Campulung Ze	P	05 34(10)					
		Vrîncioaia Ze	P	05 34 06					
		Z	i	34 10					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per s	Amplitudes			Remarks
						Z μ	N μ	E μ	
46	12	Campulung							
		Ze	P	10 03 13					
		Vrîncioaia							
		Ze	P	10 03 13					
		Z	e	03 34					
46	12	Iași							
		Ze	P	10 03 15					
		N	e	03 35					
		FOC		recorded					

47	12	Bucharest							
		Ne	P	11 02 39					
		N	e	03 10					
		N E	e	03 40					
		Campulung							
		Ze	P	11 02 06					
47	12	Vrîncioaia							
		Ze	P	11 02 20					
		FOC		recorded					

48	12	Bucharest							
		Ne Ee	P	18 14 29					
		N	e	15 20					
		N E	e	15 23					
		N E	e	16 05					
		Campulung							
				Ze	P	18 14 27			
		Vrîncioaia							
		Zi	P	18 14 40					
		Focșani							
		Ze	P	18 14 30					
48	12	Iași							
		Ze	P	18 15 02					
		----- E -----	e	15 04					

49	12	Campulung							
		Ze	P	21 30 08					
		Vrîncioaia							
		Ze	P	21 30 27					
49	12	Iași							
		Ze	P	21 29 58					
		----- E -----	e	30 01					

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No.	Date	Comp	Phase	Time G.M.T. h m s	Per. Amplitudes				Remarks
					s	Z	N	E	
						μ	μ	μ	
50	12	Bucharest N E	e	22 48 34					

51	12	Bucharest Ni E \hat{a} Ni Ee	P S	23 34 39 44 29				$\Delta = 78^{\circ}2$ - +	
		Campulung Ze	P	23 34 38					
		Vrîncioaia Ze	P	23 34 28					
		Bacău Ze N Ee	P e	23 34 25 34 31					
		Focșani Ze	P	23 34 16					
		Iași Ze Ne Ee	P P	23 34 20 34 21					

52	13	Vrîncioaia Ze	P	01 22 22					
		IAS recorded							

53	13	Bucharest N E N E	e e	12 57 01 57 47					
		VRI, FOC recorded							

54	13	Bucharest N E	traces	1510-1513					

55	13	Bucharest N E	traces	2010-2014					

56	13	Campulung Ze	P	23 13 30					
		Vrîncioaia Ze	P	23 13 10					
		Focșani Ze	P	23 13 00					
		Iași Ze Ne Ee	P	23 13 04					

1967 JUNE

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
							μ	μ	μ		
57	14	Vrîncioaia Ze	P	03	56	56					

58	14	Bucharest N E	e	05	26	13					
		Campulung Ze	P	05	25	58					
		Bacău Ze	P	05	25	52					
		N	e		25	57					
		Iași Ze	P	05	25	49					

59	14	Bucharest Zi	P	08	16	50					
		N E	e		18	27					
		Vrîncioaia Ze	P	08	17	43				Correction uncertain	
		Bacău Ze	P	08	17	38					
		Focșani Ze	P	08	17	28					

60	14	Bucharest Zi	P	08	24	54					
		Vrîncioaia Zi	P	08	24	23					
		Bacău Ze	P	08	24	42					
		N	e		25	48					
		Focșani Zi	P	08	24	33				+	
		Iași Ze	P	08	24	37					
		Ne Ee	P		24	39					

61	14	Bucharest N E		traces 1827-1830							

No.	Date	Comp.	Phase	Time			Per.	Amplitudes				Remarks
				G.M.T.				s	Z	N	E	
				h	m	s						
							μ	μ	μ	μ		
62	15	Bucharest										
		N E	e	03	10	13						
		FOC	recorded									

63	15	Vrîncioaia										
		Ze	P	14	59	04						
		BUC	recorded									

64	16	Iași									Micr.ag.	
		Ne Ee	P	12	31	20						
		Z N E	e		31	33						

65	16	Campulung									Earthquake?	
		Ze	Pg	14	26	26						
		Ze	(S _g)		26	30						
66	16	Campulung										
		Ze	P	22	59	24						

67	17	Bucharest										
		N E	traces	00	48	01	02					

68	17	Bucharest									($\Delta=112^\circ$)	
		Ne Ee	PKP	05	19	13						
		N	i		24	54	5		+13,6			
			i		24	55	5			+15,1		
		Ni Ei	(SKS)		25	58	6;7		+17,3			
		Campulung										
		Ze	PKP	05	18	34						
		Focșani										
		Ze	PKP	05	19	09						
		Iași										
		Ze	PKP	05	18	35						
		Ne Ee	SKS		25	03						
		VRI	recorded									

69	17	Campulung										
		Ze	P	15	44	49						

70	18	Bucharest										
		N	e	05	32	43						
		N E	e		33	18						



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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Campulung Ze	P	05 31 11					
		Vrîncioaia Ze	P	05 30 55					
71	18	Iași Z N E	e e	10 28 47 28 49					
72	18	Bucharest N E	e	21 52 05					
73	19	Bucharest N E		traces 1202-1205					
74	19	Bucharest Ne N Ne Ee	P e S	14 41 08 41 25 45 22				$\Delta = 24.02$	
		Campulung Ze	P	14 41 10					
75	19	Campulung Ze Ze	P S _g g	16 52 45 52 47					Romania Region of Campulung
76	19	Bucharest Ne Ni Ee	P S	17 20 09 30 26				$\Delta = 83.06$	
		Campulung Zi	P	17 20 05					
		Vrîncioaia Z	e	17 25 05					Correction uncertain
		Focșani Ze	P	17 19 52					
		Iași Ze Ne Ee	P S	17 19 51 29 58					

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1967 JUNE

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
				h	m	s					
77	20	Bucharest N E		traces 0733-0736							

78	20	Campulung Ze	P	07	51	11					
		VRI	recorded								

79	20	Bucharest N E	e	08	01	29					

80	20	Bucharest N E	e	16	41	20					
			e		41	30					

81	20	Bucharest N E	e	21	43	36					
		Vrîncioaia Z	e	21	47	11					Correction uncertain

82	21	Bucharest N E		traces 1217-1225							

83	21	Bucharest N	Ei S e	16	08	28					Distant
					08	34					
		Campulung Ze	P	15	58	12					
		Iasi Ze Ne Ee	P	15	57	54					
		VRI	recorded								

84	21	Campulung Ze	P	18	16	04					
		Vrîncioaia Ze	P	18	16	04					Correction uncertain

85	21	Campulung Z	e	18	24	22					

No.	Date	Comp.	Phase	Time G.M.T.	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Vrîncioaia							
		Ze	P	18 24 17					Correction uncertain
		Focșani							
		Ze	P	18 23 59					
		Iași							
		Ze	P	18 24 08					
		Ne Ee	P	24 10					
		BUC recorded							

86	21	Campulung							
		Ze	P	18 36 04					
		Vrîncioaia							
		Ze	P	18 35 55					Correction uncertain

87	21	Iași							
		Ze	P	19 29 14					
		Ne Ee	P	29 15					

88	21	Vrîncioaia							
		Zi	P	21 06 00					
		FOC recorded							

89	22	Bucharest							
		Ne	P	07 27 16					
		Campulung							
		Ze	P	07 26 58					
		Iași							
		Ze	P	07 26 54					
		Ne	P	26 55					
		VRI recorded							

90	22	Campulung							
		Ze	P	10 28 50					

91	22	Bucharest							
		Ze	P	11 01 34					
		E	i	02 06					
		Campulung							
		Ze	P	11 00 17					

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ	μ	μ		
92	22	Campulung Ze	P	11	09	49					

93	22	Campulung Ze	P	12	20	43					
		Z	e		21	20					
		Iasi									
		Z N E e		12	20	46					
		BUC		recorded							

94	22	Campulung Ze	P	15	48	53					

95	22	Bucharest									
		N E		traces 2317-2319							

96	23	Campulung Ze	P	00	45	12					
		Vrâncioaia Ze	P	00	44	59					

97	23	Vrâncioaia Ze	P	01	01	44					

98	23	Campulung Z	e	05	22	53					
		Vrâncioaia Ze	P	05	18	32					

99	23	Bucharest									
		Ne Ee	P	10	08	29					
		N E	e		08	56					
		N	i		09	46					
		E	i		10	06					
		Focşani									
		Ze	P	10	08	28					
		Iasi									
		Zi	P	10	08	47					
		Ne Ee	P		08	48					

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1967 JUNE

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
100	23	Bucharest									
		Ze	P	12	07	28					
		N	i		07	47					
		Iasi									
		Ze	P	12	07	11					
		Foc									recorded

101	23	Bucharest									
		N E									traces 2152-2155

102	24	Bucharest									
		N E	e	04	32	20					
		Foc									recorded

103	24	Vrâncioaia									
		Ze	P	21	15	03					Correction uncertain

104	25	Campulung									
		Ze	P	23	32	05					
		Iasi									
		Ze	P	23	31	30					
		BUC									recorded

105	27	Campulung									
		Ze	P	20	45	18					

106	28	Campulung									
		Ze	P	01	21	59					
		Iasi									
		Ze Ne Ee	P	01	21	45					

107	28	Bucharest									
		Ze	P	14	53	51					
		Campulung									
		Ze	P	14	53	58					
		Vrâncioaia									
		Zi	P	14	53	56					
		Focşani									
		Ze	P	14	53	49					

1967 JUNE

No.	Date	Comp.	Phase	Time G.M.T., h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Iași							
		Ne Ee	P	14 53 59					

108	29	Campulung Ze	P	08 26 19					
		BUC recorded							

109	29	Campulung Z	e	09 45 43					

110	29	Campulung Ze	P	16 53 43					

111	30	Campulung Ze	P	00 20 16					

112	30	Campulung Ze	P	04 26 15					
		Vrîncioaia Ze	P	04 26 09					
		BUC recorded							

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ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

JULY 1967

A - Séismographs with direct recording

Station	Location	Instr.	Comp.	M kg.	T _s	D _s	V
BUC	44°24'49" N 26°05'48" E h = 82,5 m Alluvium	Mainka modified by Demetrescu	N	540	10,0	0,44	173
			E	540	10,0	0,46	177
CMP	45°15'1" N 25°02'3" E h = 598 m Alluvium	"	N	105	3,5	0,41	44
		"	E	105	3,5	0,40	44
VRI	45°52'2" N 26°43'5" E h = 400 m Alluvium	"	N	105	3,5	0,41	42
		"	E	105	3,5	0,37	42
BAC	46°34' N 26°54' E h = 167,5 m Alluvium	"	N	105	3,5	0,44	41
		"	E	105	3,5	0,46	37
FOC	45°41'7" N 27°11' E h = 61 m Alluvium	"	N	105	3,5	0,39	42
		"	E	105	3,5	0,40	42
IAS	47°11'6" N 27°33'7" E h = 160 m Alluvium	"	N	450	4,8		
		"	E	450	4,8		

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B - Seismographs with galvanometric recording

Station	Instr.	Comp.	T _s	D _s	T _g	D _g	V _{max}
BUC	Galitzin	N	11,6	0,98	11,6	1,0	1.000
		E	11,9	1,09	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	2.000
		N	1,5	0,5	0,4	2,0	2.000
		E	1,5	0,5	0,4	2,0	2.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	2.000
		N	1,5	0,5	0,4	2,0	2.000
		E	1,5	0,5	0,4	2,0	2.000

The recording speed is 30 mm/min for the mechanical, Galitzin and Kirnos seismographs, and 60 mm/min for the Hiller and VEGIK seismographs.

The station are : BUC = Bucharest; CMP = Campulung; VRI = Vrîncioaia; BAC = Bacău; FOC = Focșani; IAS = Iași.

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
1	1	Campulung							
		Z	e	02 05 44				Weak	
		Z	e	06 14					
		Vrîncioaia							
		Zi	Pn	02 05 29				$\Delta = 1,6$	
		Zi	Sn	05 51					
		Iași	N	E	S-P=(12s)			Time mark lacking	
- - - - -									
2	1	Bucharest							
		Ne	Sn	02 15 20					
		Campulung							
		Ze	(Pn)	02 15 14					
		Z	e	15 31					
		Vrîncioaia							
		Zi	Pn	02 13 25					
		Zi Ni	Ei	Sn	13 58,5				
		Bacau	Ni	Ei	Sn	02 14 26			
		Focșani							
		Zi	Ni	Ei	Pn	02 14 10		$\Delta = 1,4$	
					Sn	14 29,5			
		Iași	N	E	Sg-Pg = 15 s				
- - - - -									
3	1	Bucharest							
		N							Weak
			E	e	02 57 56				
				e	58 19				
		F	03 03						
		Campulung							
		Ze			Pn	02 56 56,5		$(\Delta = 3,3)$	
		Ze			(Sn)	57 38			
- - - - -									
4	1	Bucharest							
		Ne	Ee	Sn	03 44 10				
		Campulung							
		Ze	(Pn)	03 43 50					
		Ze	(Sn)	44 21					
		Vrîncioaia							
		Ze			(Pn)	03 42 25			
		Zi	Ni	Ei	Sn	42 48			

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ	μ	μ		
		Bacau	Ni	Sg	03	43	17				
		Focșani	Ze	Pn	03	43	00				$\Delta = 1,4^{\circ}$
			Ne	Ee		43	19				
		Iași	N	E	Sg-Pg = 14 s						Time mark lacking
5	1	Campulung		traces	07	40-07	43				
6	1	Campulung		traces	21	34-21	35				
		Vrâncioaia	Z	e	21	34	20				
7	1	Bucharest									Aleutian Isl.
			Nei	Eei	P	23	22	28			- $\Delta = 79,4^{\circ}$
			Ni		PP		25	38	-		
				Ei	PP		25	40	+		
			Ni	Ei	S		32	32	+		
				Ei	PS		33	10	+		
			Nei		SS		37	30			
				Eei	SS		37	35			
				E	M		41	56			
			N		M		52	04	20 17	56	51 *.
		Campulung	Zei		P	23	22	21	-		
			Zi		PP		25	34	+		
			Ze		S		32	28			
		Vrâncioaia	Zei		P	23	22	13			
		Bacau	Ze		P	23	22	14			
			Ne	Ee	P		22	16			
		Focșani	Zei		P	23	22	19			
			Z		e		34	43			
			Z		ei		35	03	+		
		Iași		recorded							

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
8	2	Campulung	Pn	00 33 09		+			(Δ = 8,8)
			(Sn)	34 32					
			e	34 38					
		Vrîncioaia	Pn	00 33 08					
			e	34 44					

9	2	Bucharest Nei N	Sn	01 16 44		+			Δ = 6,8
			e	17 20					
			e	17 38					
		Campulung	Pn	01 15 35					
			e	16 13					
			Sn	16 52					
		Vrîncioaia	Pn	01 15 32					
			ei	17 08					
		Bacău N	e	11 17 32					
			e	18 04					
		Focșani	Pn	11 15 25					
			e	16 56					

10	2	Bucharest Ne N	Ee	01 19 48		+			Beginning within the preceding one. Yugoslavia
			Sn	19 50					
			ei	20 08					
			i	21 17					
		Campulung	Sn	01 19 48					
			e						
		Vrîncioaia	e	01 20 20					
		Bacău N N	e	01 20 26					
			e	21 09					
		Focșani	e	01 18 59					
			e	19 45					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
17		Vrîncioaia Ze	(P)	22 00 20					Atlantic Ocean
18	4	Bucharest	Ee (SKS)	14 44 12					Chile
		Campulung Z	e	14 37 18					
		Vrîncioaia Ze	(PKP)	14 35 45					
19	4	Bucharest	E	L 15 22 00 F 50 00					Weak
20	4	Bucharest	Eei	P 23 53 50					Japan Deep =72,3
		Nei	Ee	S 00 03 14					
		N		L 00 18 50					
		Campulung Ze		P 23 53 44					
		Z		e 54 14					
		Z		e 56 40					
		Vrîncioaia Ze		P 23 53 41,5					
		Ze	(S)	00 03 06					
		Focșani Zei		P 23 53 50					
		Z		e 00 03 31					
		Iași Ze		P 23 53 29					
		Ne	Ee	S 00 02 47					
21	5	Bucharest		Pn 00 56 28					Ionian Sea Δ=8°
		Ne		Pg 57 07					
		Nei		Sn 57 56					
		Ni	Ei	Sg 58 50					
		Ni	Ei	M 01 00					
		N		M 01 01	6			19,58	
			E		6			17,82	
		Campulung Zei		Pn 00 56 26					
		Z		ei 56 49					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z μ	N μ	
		Vrîncioaia									
		Ze	Pn	00	55	49	5				
		Focșani									
		Ze	Pn	00	56	06					
		Z	L	00	59	54					
		Iași									
		Ne	Pn	00	56	05					
		Ne	Sg		57	31					
22	5	Vrîncioaia									Traces
		Z	e	04	15	21,5					
23	5	Bucharest									Greece
		Ee	Sn	16	54	08					
		Ee	S'		54	34					
		N	ei		55	16					
		Campulung									
		Ze	Pn	16	51	45					
		Z	e		52	09					
		Focșani									
		Z	e	16	56	15					
24	6	Bucharest									Ionian Sea Δ=9°
		Ne	Ee	Pn	08	24	24				
		Nei	Eei	S		26	50				
		Nei		Sg		27	32				
		Zei		Sg		27	34				
		Vrîncioaia recorded									Disturbed
		Focșani									
		Z	Traces	08	25-08	32					
25	6	Bucharest									
		Ze	Ne	Ee	P	13	43	22			
			N	E	e		44	52			
		Vrîncioaia									
		Ze	(P)			13	43	06			Disturbed
26	6	Bucharest									Aleutian Islands Δ=81,6
		Zi		P		13	54	45			
		Ni	Eei	S		14	05	22			
		N	E	e			15	06			
		Z		L		14	31	00			
			E	L			31	18			
		N		L			32	12			
			E	M			36	20			
									17,0		19,71

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Campulung									
		Ze	P	13	54	44					
		Vrîncioaia									
		Ze	P	13	54	42					
		Focşani									
		Zei	P	13	54	37					
		Iaşi									
		Ze Ne Ee	P	13	54	33					
		Z	e		54	40					
27	6	Bucharest	recorded								
		Iaşi									
		Z	e	18	46	01					
28	6	Bucharest									
		N E	e	19	07	20					
		Vrîncioaia									
		Ze	(P)	19	06	18					
		Focşani									
		Z	e	19	07	30					
		Iaşi									
		Z	e	19	06	04					
		N E	e		07	41					
29	6	Bucharest									
		Eei	S	19	39	30					+
		Nei	S			32					+
		Vrîncioaia									
		Ze	P	19	30	40					
		Z	ei		31	12					
		Focşani									
		Ze	P	19	30	35					
		Iaşi									
		Ze	P	19	30	45					
		N	e		31	50					
30	7	Campulung									
		Z	e	13	42	01					
31	8	Bucharest									
		E	ei	01	21	16					+

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Campulung									
		Zei	PKP	01	18	01					New Hebrides Islands Deep
		Z	e		18	16					
		Ze	e		20	53					
		Focşani									
		Ze	PKP	01	17	51					
		Z	e		21	22					
		Iaşi									
		Nei	PKP	01	17	57					
		Z N	e		21	16					
32	8	Campulung									
		Z	e	09	59	27					Earthquake?
33	9	Bucharest									
		N Ee	(Sn)	13	02	20					
			e		02	26					
		Campulung									
		Ze	Pn	13	01	21					$\Delta = 5,8$
		Ze	Sn		02	27					
		Vrîncioaia									
		Z	e	13	01	32,5					
		Z	e		01	52					
		Focşani									
		Ze	Pn	13	01	14					
		Ze	(Sn)		01	17					
		Iaşi									
		Ze	Pn	13	01	42					
			e		02	19					
		Ne E	Sn		02	45					
34	10	Bucharest									Distant earthquake
		Nei Eei	(S)	12	23	18					
		Z	e		23	46					
		Vrîncioaia									
		Z	e	12	15	56					
		Focşani									
		Ze	PKP	12	13	29					
		Z	e		15	48					
		Iaşi									
		N E	e	12	15	50					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. P	Amplitudes			Remarks
						Z μ	N μ	E μ	
35	10	Bucharest							
		Ne	P	19 32 00					
		Vrîncioaia							
		Z	e	19 33 03					
		Focșani							
		Ze	P	19 31 48					
		Z	e	35 30					
		Iași							
		Ze Ne	P	19 31 35					

36	11	Bucharest	E	e	04 36 38				

37	11	Bucharest							Romania Region of Vrancea
		Nei	Eei	S	06 10 45				
				S	10 46				
		Vrîncioaia							
		Zi	P	06 10 49					
		Zi	S	11 02,8					
		Bacău							
Ze Ne	Ee	S	06 10 39						
		Focșani							
		Ze	P	06 10 25					
		Ze	S	10 42,5					
		Iași							
		Nei Eei	S	06 10 52					

38	11	Bucharest							Yugoslavi
		Z	e	12 44 46					
		N	E	ei 45 46		+	+		
			E	e 46 19					
		N	ei	48 50					

39	12	Bucharest							
		Z	e	21 18 15					
		Nei	S	22 30		+			
			E	e 25 42			+		
		N	L	22 16 00					
			E	L 16 08					
		Focșani							
		Z	Traces	2118-2121					
		Iași							
		N	Traces	2118-2122					

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks		
				G.M.T.				Z	N	E			
			h m s			μ μ μ							
Vrîncioaia													
Ze			Pn	11	15	38							
-----			-----			-----							
46	15	Iași							Kazakhstan				
Ze			P	03	33	37							
Z			N	E	e	34	51						
-----			-----			-----							
47	16	Bucharest							Δ=80°				
Zei			Eei	P	13	52	46						
Ze				PP		55	40						
			Ee	(SKS)	14	02	44						
			Ee	PS		03	28						
N			E	L		15	00						
Z				L		25	30						
				F		39							
Vrîncioaia			recorded										
Focșani			recorded										
Iași													
N				e	13	52	09						
			E	e		52	39						
-----			-----			-----							
48	19	Bucharest							Anatolia				
Zei			Pn	09	08	03	+			Δ=70°			
Ze			P ^x		08	26	-						
Zi			Sn		09	28	+						
Z			i		09	42	-						
Zi			S ^x		10	02	+						
Zi			Sg		10	18	-						
Vrîncioaia													
Ze			Pn	09	08	14							
Z			(IY)		08	32							
Z			L		10	30							
Focșani													
Zei			Pn	09	08	14,5	+						
Ze			P ^x		08	37							
Zi			S ^x		10	11	+						
Z			L		10	51							
Iași													
Ne			P _v	09	08	34							
			E	e		08	46				+		
			E	e		10	15						
-----			-----			-----							
49	19	Bucharest	E	L	12	59	00						
Iași													
Z			e		13	00	11						

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per.	Amplitudes			Remarks			
						Z μ	N μ	E μ				
50	19	Bucharest N N	E	e	16 22 40				Weak			
				e	24 22							
			E	e	25 00							
		Vrîncioaia Z		e	16 21 09							
51	20	Vrîncioaia Ze		P	14 38 20				Aleutian Isl.			
					Bacău Ze	P	14 38 21					
					Focșani Zei	P	14 38 22,5	-				
					Iași Zi Ni	Ei	P 14 38 16	-		-	-	
52	20	Bucharest Ze Zei		P	15 49 58				$\Delta=95^\circ$			
				PP	54 06	-						
			Ne	Ee	PP	54 08						
				E	i	58 34				+		
				Eei	SKS	16 00 25				+		
			Ne	Ee	SKKS	00 44		+		+		
				Ee	PS	02 34						
			Ne	SS	07 30							
			N	E	L	13 00						
					Vrîncioaia Z		e	15 49 55				Disturbed
					Focșani Zei		P	15 49 52		-		
					Ze	(PP)	54 19					
		Iași Ze Ne		P	15 43 50							
53	20	Bucharest Ze Z	Ne	Ee	Pn	19 06 14			Albania $\Delta=8,5$			
				Eei	P'	06 34				+		
					ei	07 18						
				Ei	Sn	07 44				+		
			Nei	Sg	08 40			+				
				F	19 17							
					Focșani Ze		P	19 05 54				Weak
					Iași Ze Ne		P	19 05 38				Weak

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks		
				G.M.T.	h	m		s	Z μ	N μ		E μ	
54	20	Bacău	P	23	31	39							
		Ze											
		Iași	P	23	31	38							
		Ze											

55	21	Vrîncioaia	e	12	05	24							
		Z											
		Focșani	e	12	05	15							
		Z											

56	22	Bucharest	e	04	18	50					Traces		
		Z											
		Z											
				N	e	04	18	56	24				
				E									
				Vrîncioaia	e	04	17	50					
				Z									
				Z	e	04	18	13,5					
		Focșani	e	04	18	22							
		Z											
		Iași	e	04	18	40							
		E											

57	22	Bucharest	L	05	54	00					Traces		
		E											
58	22	Bucharest	Pn	16	58	12					+ Turkey Needle thrown outside		
		Ze Ni										Ei	
				Campulung	Pn	16	58	31,4				+ $\Delta=7^{\circ}04$	
				Nei									Eei
				Ni									Pg
				Ze	Sn	16	59	56				+	
				Ne									
				Ni									Sg
				Vrîncioaia	Pn	16	58	24					Cp uncertain
				Zi										Ei
				Ni	Pn	16	58	25					+ tain
				Bacău	Pn	16	58	21					+
				Zi Nei									
				Ni	Sn	16	59	45					
		Focșani	Pn	16	58	19					+		
		Zi Ne										Ee	
												Ei	
			Sn	16	59	46					+		
			Sg	16	00	24					+		

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks		
				G.M.T.				Z	N	E			
				h	m	s		μ	μ	μ			
59	22	Iași Zi	Ni	Ei	Pn	16	58	38	-	-	+		
				Ei	Pg		59	20					
			Ni	Ei	Sn		59	59					
		Campulung N		e		17	51	32					
				E	i		52	28					+
			Vrîncioaia recorded										
		Bacău		Ne	Ee	Pn	17	49	38				
				N		e		50	46				
				Ne	Ee	Sn		51	05				
		Focșani Zei				Pn	17	49	29				+
				Z		ei		50	20				
				Z		e		50	50				
Iași Ze				Pn	17	49	49						

	60	22	Vrîncioaia Ze			Pn	18	06	09,5				
Bacău				N	E	e	18	07	27				
Focșani Ze				Pn	18	06	04						
	Iași Ze			Pn	19	06	26						

61	22	Campulung Ne		Ee	Sn	18	11	23				BUC-masked by the pre- ceding one Aftershock of 54	
			Vrîncioaia Z			e	18	11	18,5				
				Bacău	Ne	Ee	Sn	18	11	37			
		Focșani Zi				(Pn)	18	11	13				
			Iași Ze			Sn	18	11	31				

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks		
						Z u	N u	E u			
62	22	Bucharest Ze	Ne Ne	Ee	P				Turkey =505		
					Pg						
					Eei Ei	Sn					
						Sg					
		Z	N			L	20 00				+
						L						20 06
		Vrîncioaia Ze				Pn	19 48 52				
		Bacău Ze				Pn	19 48 51 49 57				
						E					
		Focşani Ze				Pn	19 48 45 50 34				
						Z					
Iaşi Ze				Pn	19 48 07						

63	22	Bucharest Ze	Ne	Ee	(Pn)				Turkey (M=7 ⁰)		
					Sn						
						Sn	20 37 05 38 24 38 34				
		Vrîncioaia Ze				Pn	20 37 05,5				
		Bacău Ze				Pn	20 37 12 38 44 39 30				
						E					
		Z	N			Pn	20 37 01 33 30				
		Focşani Ze				Pn	20 37 23				
						Z					
Iaşi Ze				Pn	20 37 23						

64	22	Bucharest Ne	Nei	Ee Eei	Pn				Aftershock of 54		
					Sn						
		Vrîncioaia Z				e	20 50 36				
		Focşani				Traces	2052-2056				
Iaşi				Traces	2053-2056						

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No.	Date	Comp.	Phase	Time	Per.	Amplitudes			Remarks			
						Z	N	E				
						μ	μ	μ				
65	22	Bucharest	Ze	Ne	Ee	Pn	21 23 14			Aftershack of		
					Eei	Pg	23 52					
					Ee	Sn	24 25				+	
				Ni	Ei	S<	24 41				+	
				Ni	Ei	Sg	25 05				+	
				Vrîncioaia								
				Ze		Pn	21 23 04,5					
				Ze		Sn	24 14					
				Bacău								
				Ze		Pn	21 23 11					
					Eei	Sn	24 30					
				Focșani								
				Ze		Pn	21 22 50,5					
				Iași								
				Ze		Pn	21 23 18					
		Eei (Sn)		24 38								

66	22	Bucharest	N	E	e	21 45 34			Weak			
				Ee	(Sn)	46 12						
			Vrîncioaia									
			Ze		P	21 44 28						
			Z		e	45 58						
			Focșani									
			Ze		P	21 44 21						
Iași	Traces			2145-2147								

67	22	Vrîncioaia							Weak			
		Ze		Pn	22 06 29,5							

68	22	Bucharest	N	E	e	22 08 30						
			Vrîncioaia									
			Ze		Pn	22 07 03						
			Bacău									
			Z		e	22 10 04						
			Focșani									
			Ze		Pn	22 07 55						
Iași	Traces			2208-2209								

69	22	Bucharest	Nei	Eei	Pn	22 10 44			Δ=6°			
			Ni		Sn							
				Ei	S<	12 02						

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								u	u	u	
		Vrîncioaia									
		Ze	Pn	22	10	01,5					
		Bacău									
		Ze	Pn	22	11	13					
		Iași									
		Ze Ne Ee	Pn	22	10	09					
70	22	Vrîncioaia									
		Ze	(Pn)	22	45	19					Turkey
		Ze	(Sn)		46	19					$\Delta = 5^{\circ}6$
71	22	Bucharest									
		Ne Ee	e	22	47	37					
			(Sn)		48	40					
		Vrîncioaia									
		Ze	Pn	22	46	30					
		Focșani									
		Ze	Pn	22	46	16,5					
		Iași									
		Ze	Pn	22	46	16					
72	22	Vrîncioaia									
		Ze	Pn	22	47	40					
73	22	Bucharest									
		Ne Ee	Pn	23	43	32					Aftershock
		Ne	Sn		44	32					of 54
		Ei	Sg		44	52					
			F	24	00						
		Vrîncioaia									
		Ze	Pn	23	43	29,8					
		Bacău									
		Ze	Pn	23	43	21					
		Ee	Sh		44	34					
		E	i		45	04					
		Focșani									
		Zi	Pn	23	43	20					
		Iași									
		Ze	Pn	23	43	42,5					
		N E	i		45	07,5					
74	23	Bucharest									
		N	e	00	29	30					Weak
		Ne Ee	Sn		29	58					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z u	N u	E u	
		Vrîncioaia							
		Ze	Pn	00 27 18,5					
		Z	ei	27 29,5					
		Z	e	28 41					
		Focşani	Traces	0029-0032					
		Iaşi	Traces	0028-0034					
75	23	Vrîncioaia							
		Ze	Pn	00 49 20					
75	23	Vrîncioaia							
		Ze	Pn	01 02 32					
77	23	Vrîncioaia							
		Ze	Pn	01 07 27					
78	23	Vrîncioaia							
		Ze	Pn	11 08 04					
79	23	Vrîncioaia							
			Pn	11 17 42					
80	23	Vrîncioaia							
		Ze	Pn	01 34 59					
81	23	Bucharest							
		Ne	Pn	02 09 00					Aftershock of 54
		Nei Eei	Pg	09 38					
		Ni Ei	Sn	10 11					
		Vrîncioaia							
		Ze	Pn	02 09 18,5					
		Bacău							
		Ze	Pn	02 09 16					
			Ee Sn	10 25					
		Focşani							
		Ze	Pn	02 09 10,5					
		Iaşi							
		Zi	Pn	02 09 31					
			Sn	10 45					
82	23	Vrîncioaia							
		Ze	Pn	02 10 26					
83	23	Bucharest							
		Ne	Ee Pg	02 18 56					Weak
			Eei Sn	19 36					
		Ni	Ei Sg	19 40					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Vrîncioaia							
		Z	e	02 17 56					
		Bacău	Traces	0219-0222					
		Focșani	Traces	0219-0224					
		Iași	Traces	0218-0223					
84	23	Bucharest							
		Ne	Pn	02 28 04					Weak
		Ne Ee	Pg	28 32					$\Delta = 5^{\circ}4$
		Nei Eei	Sn	29 10					
			F	34				+	+
		Vrîncioaia							
		Ze	Pn	02 27 04,5					
		Iași							
		N	Traces	0229-0232					
85	23	Bucharest							
		Nei Eei	Sn	04 05 58					
		Nei Eei	S	06 38				+	+
		Ni Ei	Sg	07 00				+	+
		Vrîncioaia							
		Ze	Pn	04 05 07					
		Focșani							
		Ze	Pn	04 04 59,5					
		Iași							
		Ze	Pn	04 05 21					
86	23	Vrîncioaia							
		Ze	Pn	04 31 15					
87	23	Vrîncioaia							
		Z	e	04 50 03					
		Z	e	50 20					
		Bacău							
		Ze	Pn	04 50 16					
		Ne Ee	Sn	51 35					$\Delta = 7^{\circ}$
		Focșani							
		Ze	Pn	04 50 13					
		Iași							
		Z	e	04 50 34					
88	23	Iași							
		Z N	E Traces	0546-0549					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks		
				G.M.T.				Z	N	E			
				h	m	s	u	u	u				
89	23	Bucharest											
		Ze	Ne	Ee	Pn	07	43	58				$\Delta = 5^{\circ}5$	
			Nei		Sn		44	58			+		
			Ni	Ee	S		45	18					
			Ni	Ei	Sg		45	51			+		+
					F			57					
			Vrîncioaia										
			Ze		Pn	07	43	37					
			Bacău										
			Ze		Pn	07	43	49					
		E	i		45	41					+		
	Focşani												
	Ze		Pn	07	43	42							

90	23	Bucharest											
		N	e	09	09	18					Traces		
		N	e		10	22							

91	23	Bucharest											
		N	e	09	21	24					Traces Turkey		

92	23	Bucharest											
		N	e	09	30	14					Weak		
			E	e		30	44						

93	23	Bucharest											
		N	E	e	09	42	09				Weak		
				e		42	20						
			Ee	S		42	51						
		Bacău											
			E	Traces	0942-0944								
		Focşani											
		Zi	P	09	40	45							

94	23	Bucharest											
		Ne	Pn	10	05	28					Weak		
		Nei	Sn		06	29				+	$\Delta = 5^{\circ}4$		
		Focşani											
		Z	Traces	1005-1007									

95	23	Bucharest											
		Ne	Ee	Sn	10	08	40				Weak		
		N	E	ei						+	+		

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z	N	E	
						μ	μ	μ	
		Focşani							
		Ze	Pn	10 07 37					
		Iaşi							
		Z	e	10 08 02					
		N	e	09 15					

96	23	Bucharest							
		N	e	12 22 10					Weak Turkey
		Nei	(Sn)	23 02				+	
		Vrîncioaia							
		Z	e	12 21 06					

97	23	Bucharest							
		N	E	e	14 07 48				
			E	e	08 08				
		Vrîncioaia							
		Ze	(P)	14 06 16					
		Bacău							
			E	e	14 06 24				
			E	e	07 14				
		Focşani							
		Ze	P	14 06 09					
		Z	e	08 19					
		Iaşi							
		Ze	P	14 06 10,5					
		Z	e	08 22					

98	23	Bucharest							$\Delta = 4^{\circ}$
			Ee	Pg	15 59 46				
			Eei	Sn	16 00 17				+
		Ni	Ei	Sg	00 38				+
				F	06				
		Bacău							
			E	e	15 59 08				
		N		e	16 00 06				
		Iaşi							
		Ze	Pn	15 58 51					
			Ee	Sn	16 00 24				

99	23	Focşani							
		Ze	(P)	16 27 51					
		Z	e	28 28					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								u	u	u	
100	23	Bucharest N	e	19	44	07					Weak
			E e		44	30					
101	23	Bucharest Ne	Ee (Sn)	21	53	54					Turkey
			E ei		54	25					
		Vrîncioaia	E e	21	53	34					
			E e		54	24					
		Focşani Ze	Pn	21	52	17					
		Iaşi Ze	Pn	21	52	12					
102	23	Bucharest N	Ee (Sn)	23	09	18					Weak Turkey
			E e		10	30					
		Vrîncioaia Ze	Pn	23	08	28					
		Z	e		08	58					
		Bacău	E e	23	09	46					
		Focşani Ze	Pn	23	08	18,5					
		Iaşi Ze	Pn	23	08	40					
103	23	Bucharest N	e	23	21	20					
			E ei		23	22	10				+
		Vrîncioaia Ze	P	23	20	48,5					
		Bacău Z	e	23	20	54					
			Ne Ee (S)		21	05					
		Focşani Ze	P	23	20	36					
		Iaşi Ze	(P) e	23	20	58					
			N e		21	04					

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No.	Date	Comp.	Phase	Time		Per. s	Amplitudes			Remarks
				G.M.T.			Z	N	E	
				h	m	s	u	u	u	
104	23	Bucharest N	e	23	49	44				Weak Turkey
		Vrîncioaia Ze	Pn	23	48	19				
		Bacău	Ee (Sn)	23	49	37				
		Focșani Z	Traces	2348-2352						
		Iași Z	Traces	2348-2353						

105	24	Bucharest N	e	13	42	26				Weak
		Nei	Eei S	44	04			+	+	
		Vrîncioaia Ze	(P)	03	41	56,5				
		Bacău	E	03	42	33				
		N	e	43	11					
		Focșani Ze	P	03	41	44				
		Iași Ne	Ee (S)	03	44	20				
106	24	Bucharest N	e	08	09	50				Weak Turkey
			E	12	24				+	
			F	15						
		Bacău	E	08	10	24				
		Z	e	10	47					
		Focșani Ze	Pn	08	08	55,5				

107	24	Bucharest N	e	09	30	32				Weak Turkey

108	24	Bucharest N	e	10	54	08				Weak
			E	55	12					
		Iași N	e	10	54	52				

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z u	N u	E u	
109	24	Bucharest							Weak Turkey
		N	e	11 24 40					
		N E	ei	26 15		+	+		
		Focşani Ze	Pn	11 24 00					
		Iaşi Z	e	11 24 21					

110	24	Bucharest							Weak Turkey
		N	e	12 24 42					
		Eei (Sn) F		25 30 28					

111	24	Bucharest							Weak Turkey
		N	e	12 51 28					
		Focşani Z	e	12 53 31					

112	24	Bucharest							Weak Romania?
		Ee	S	13 05 10					
		Bacău	Ee	S	13 05 07				
		Focşani Z	e	13 05 04					
		Iaşi Ze	Ne Ee	S	13 05 19,5				

113	24	Bucharest							Weak
		N	e	13 21 00					
		N E	e F	22 19 24					
		Bacău Z	Traces	1321-1323					
		Focşani Z	Traces	1320-1325					

114	24	Bucharest							Weak
		N E	e	16 09 20					

115	24	Bucharest							Weak
		N E	e	17 07 18					

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.	s			Z	N	E	
				h	m	s					
116	24	Iași Z	Traces	1943-1944							

117	25	Bucharest									
		Ze	Ne	E	Pn	08 38 07					$\Delta=5^{\circ}$
				Ee	Sn	40 04					
		Campulung									
				Ee	P ₁	08 38 23					
		N		E	e	08 39 10					
		Vrîncioaia									
		Ze			P ₁	08 38 22					Disturbed
		Bacău									Cp uncertain
		Ze			P ₁	08 38 51					
				Ee	S ₁	40 12					
		Focșani									
		Ze			P ₁	08 38 32					
		Ze			S ₁	39 28					
		Iași									
			Ne	Ee	S ₁	08 40 20					

118	25	Bucharest									
				Ee	(S)	11 07 36					Weak
		Ze	Ne		S	07 40					Turkey
		Vrîncioaia									
		Ze			P	11 05 49					

119	25	Bucharest									
		N			e	11 43 26					
		N			e	44 14					
		Vrîncioaia									
		Ze			P	11 42 44					

120	25	Bucharest									
		Ze	Ne		P	12 33 54					Romania
			Ni	Ei	S	34 13					Reg.of.
											Vrancea
		Campulung									
			Ne	Ee	P	12 33 54					
			Ne	Ee	S	34 12					
		Vrîncioaia									
		Ze	Ne	Ee	P	12 33 47,3					
			Ne	Ee	S	33 54					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z u	N u	E u	
		Bacău							
		Ne	Ee	12 33 53,6					
		Ne	Ee	34 09,7					
		Focșani							
		Ze	P	12 33 48					
		Ze	S	34 05					
		Iași							
		Ze	P	12 33 48					
		Ze	S	34 05					
		Iași							
		Ze	P	12 33 57,5					
		Ni	Ei	S					
121	25	Bucharest							
		Ni	Eei	S	12 43 06				
			E	i	43 20		+	+	
		Vrîncioaia							
		Ze	P	12 41 21					
		Focșani							
		Z	Traces	1243-1246					
122	25	Bucharest							Traces
		N	e	16 17 22					
123	26	Bucharest							($\Delta = 4^{\circ}6$)
		Ne	(Pn)	01 05 21					
		Ni	Ei	Sn	06 29				
		Campulung							
		Z	e	01 05 22					
		Z	ei	06 31					
		Vrîncioaia							
		Z	e	01 04 27					
		Focșani							
		Z	e	01 05 24					
		Iași							
		Z	e	01 04 40					
124	26	Bucharest							Weak Turkey
		N	e	04 03 04					
125	26	Bucharest							$\Delta = 7^{\circ}8$
		Ne	Pn	06 00 40					
		Ne	Sn	02 08					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z u	N u	E u	
		Campulung							
		Ze	Pn	10 02 21					
		Z	e	03 19					
		Z	e	04 21					
		Vrîncioaia							
		Ze	Pn	10 02 17					Disturbed
		Bacău							
		Z	e	10 04 16					
		Focşani							
		Ze	(Pn)	10 02 23					
		Iaşi	e	10 02 54					
		N	e	03 45					
		E							
128	26	Bucharest							
		Ze	Pn	18 55 47		-	+	+	Δ=12
		Zi	Sn	58 00		-	-	+	
			S ^x	58 36			+	+	
			i	59 40				+	
		Campulung							
		Zi	Pn	18 56 03		-			
		Z	e	56 17					
		Vrîncioaia							
		Ze	Pn	18 55 45					
		Bacău							
		Ze	Pn	18 55 51					
			Pn	55 52					
			S ^x	58 45			+	+	
		Focşani							
		Ze	Pn	18 55 46					
		Iaşi							
		Ze	Pn	18 55 51					
			Sn	58 07			+	+	
		Ne							
		Ni	Ee						
		Ei							
129	27	Campulung							
		Z	e	01 46 07					
		Vrîncioaia							
		Ze	(P)	01 45 54					
		Z	e	46 32					
		Iaşi							
		Z	e	01 47 00					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z	N	E	
						μ	μ	μ	
130	27	Bucharest							
		Z		e	05 00 21				
		Nei		(S)	00 36				
		Z N E		L	05 38				
130	27	Campulung							
		Ze		(P)	04 57 40				
		Z		e	58 28,5				

131	27	Bucharest							
		Z N E		L	05 38				Isoland
		Campulung							
		Z		e	05 24 16				
131	27	Vrîncioaia							
		Z		e	15 24 28				
		Z		e	34 21				

132	28	Bucharest							
		N		e	07 08 06				Weak
		N		e	08 26				
		Campulung							
		Z		e	07 06 47				
132	28	Z		e	09 06				
		Vrîncioaia							
132	28	Ze		P	07 05 02				

133	27	Bucharest							
				E	07 31 20				Weak
				E	31 40				Turkey
		Campulung							
		Z		e	17 31 31				
133	27	Z		e	32 35				
		Vrîncioaia							
133	27	Ze		Pn	07 28 55				

134	27	Campulung							
		Z			11 48 06				
134	27	Vrîncioaia							
		Ze		P	11 47 04				

135	27	Bucharest							
		Z		e	23 14 03				Weak
				L	14 38				
135	27	Campulung							
		Z		E	23 15 02				

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z u	N u	E u	
		Vrîncioaia							
		Ze	Pn	23 12 34					
		Z	e	14 29					
136	27	Bucharest							
		N	e	23 19 50					Weak
		N	(S)	20 26					
		N	Ei	21 00					
		Campulung							
		Z	e	23 20 11					
		Z	e	21 01,5					
		Vrîncioaia							
		Ze	P	23 17 41,7					
		Focşani							
		Z	e	23 18 46					
		Ze	(S)	20 11					
		Iaşi							
		Zi	P	23 18 04					
		N	e	20 35					
137	28	Bucharest							
		N	e	02 44 42					Traces
		Campulung							
		Z	e	02 45 42,5					
		Vrîncioaia							
		Ze	P	02 42 08,5					
		Iaşi							
		N	e	02 43 32					
		N	e	45 08					
138	28	Vrîncioaia							
		Ze	P	12 57 41					
		Focşani							
		Z	e	12 57 04					
139	28	Campulung							
		Ze	P	14 44 36					Distant earthquake
		Vrîncioaia							
		Ze	P	14 44 34					
		Focşani							
		Ze	P	14 44 32					
		Iaşi							
		Ze	P	14 44 30					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
140	28	Bucharest							
		Ne	E Ee	e (Sn)	15 04 24 05 47				Turkey
		Campulung Z		e	15 05 21				
		Vrîncioaia Ze		Pn	15 03 55				
141	28	Bucharest							
		Z N	E	L	15 53				Iceland
		Campulung Z		e	15 41 29				
		Vrîncioaia Z		e	15 41 34				
142	28	Focșani Ze		P	17 02 45				
143	28	Campulung Z		e	17 39 40				
		Vrîncioaia Ze		(P)	17 39 18				Disturbed
144	28	Bucharest							
		N		e	19 42 18				Turkey
		Campulung Z		e	19 43 25				
		Vrîncioaia Ze		Pn	19 40 46				
145	28	Iași Z		e	21 46 27				Earthquake
146	29	Bucharest Ze	Ee	P	10 37 16				Columbia h=160 km Δ=83°5 +
			Eei	IP	40 16				
			Ei	S	47 23				
			Ee	IS	48 07				
				F	12 07				
		Campulung Ze Zei		P pP	10 37 14 38 00				

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N u	E u	
		Campulung Ze	Pn	01 21 0					
		Vrîncioaia Ze	Pn	01 20 50,5					
		Bacău E	e	01 21 35					
		Iași Ze Ne Ee	P	01 21 14					
151	30	Bucharest Zei	Pn	01 32 14					Turkey Δ=5°2
		Nei Eei	P	32 30		+			
		Ne Ee	Pg	32 46			+	+	
		Ne Ee	Sn	33 13					
		Campulung Zei	Pn	01 32 32					
		N E	i	34 42				+	+
		Vrîncioaia Zi	Pn	01 32 28,7					
		Bacău Zei	Pn	01 32 37					
		Ee	Sn	33 48		+			
		Focșani Ze	Pn	01 32 25,5					
		Ee	Sn	33 26					
		Iași Zei Nei Eei	Pn	01 32 43					
		Ne	Sn	33 57					
152	30	Bucharest Ze	Pn	01 59 30					Beginning within the preceding one Δ=5°
		Nei Eei	Sn	02 00 26				+	+
		N E	i	00 54				+	+
		Campulung Zi	Pn	01 58 51					
		Z	e	00 39				+	
		Vrîncioaia Ze	Pn	01 58 47					
		Z	e	59 11					
		Focșani Z	e	01 59 50					

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July 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E u	
		Iasi Ze							
		Ne	E	Pn e	01 59 03 02 00 22				
153	30	Bucharest Z							
			E	e ei	02 28 56 29 40				Traces
		Campulung Z		e	02 29 18				+
		Vrîncioaia Ze		P	02 27 38,5				
		Iasi Z. N		e	02 29 12				
154	30	Bucharest N							
			Ee	e Sn	05 17 35 18 13				Turkey
		Campulung Z		e	05 18 16				
155	30	Bucharest Z							
		N	E	e e	07 12 06 12 28				Turkey
		Campulung Z		e	07 11 36				
156	30	Iasi Ze							
		N	E	P e	10 11 50 13 35				
157	30	Bucharest N							
			E	e e	10 23 44 24 48				Turkey
		Campulung Z		e	10 23 12				
		Vrîncioaia Ze		Pn	10 22 44,5				
		Bacău N	E	e	10 22 20				
		N	E	e	23 08				

July 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
158	30	Bucharest							Turkey
		Z	e	10 27 50					
		Nei	Eei	Sn	29 18			+ +	
		Campulung							
		Z	e	10 26 40					
		Z	e	28 46					
		Vrîncioaia							
		Zei	Pn	10 26 38					
		Focșani							
		Zei	Pn	10 26 34					
159	30	Bucharest						Traces	
		Z	e	13 53 24					
		Campulung							
		Z	e	13 54 19					
160	30	Vrîncioaia							
		Z	e	13 55 23					
		Bacău							
161	30	Bucharest							
		Ze	(P)	18 53 22					
		Z	ei	54 31					
		Campulung							
		Z	e	18 53 29,5					
161	30	Vrîncioaia							
		Z	e	54 22					
		Ze	(P)	18 52 42					

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July 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks	
						Z	N	E		
		Bacău Z					u	u	u	
			E	e	07 13 45					
				c	15 21					
		Focșani Ze Zei		Pn (S)	07 13 16 14 40					
166	31	Campulung Z								
				e	23 08 20					
		Iași Z								
			N	e	23 08 21					
				e	08 41					

S.Iosif

ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

August 1967

A - Seismographs with direct recording

Station	Location	Instr.	Comp.	M Kg.	Ts	Ds	\bar{V}
BUC	44°24'49" N 26°05'48" E h = 82,5 m Alluvium	Mainka modified by Deme- trescu	N E	540 540	10 10	0,46 0,45	165 181
	CMP	45°16,1 N 25°02,3 E h = 598 m Alluvium	"	N E	105 105	3,5 3,5	0,41 0,40	45 45
VRI		45°52,2 N 26°43,5 E h = 400 m Alluvium	"	N E	105 105	3,5 3,5	0,42 0,41	43 42
	BAC	46°34' N 26°54' E h = 167,5 m Alluvium	"	N E	105 105	3,5 3,5	0,45 0,42	39 41
FOC		45°41,7 N 27°11' E h = 61 m Alluvium	"	N E	105 105	3,5 3,5	0,39 0,40	42 42
	IAS	47°11,6 N 27°33,7 E h = 160 m Alluvium	"	N E	450 450	4,8 4,8	0,40 0,41	141 141

B - Seismographs with galvanometric recording.

Station	Instr.	N	T _s	D _s	T _g	D _g	V _{max}
BUC	Galitzin	N	11,54	0,99	11,6	1,0	1.000
		E	12,00	0,99	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000

The stations are : BUC = Bucharest; CMP = Campulung; VRI = Vrîncioaia; BAC = Bacău; FOC = Focșani; IAS = Iași.

The recording speed is 30 mm/min for the mechanical, Galitzin and Kirnos seismographs, and 60 mm/min for the Hiller and VEGIK Seismographs.

August 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s	μ	μ	μ			
1	1	Bucharest										
		N	e	00	15	14					Very small Strong mic.ag	
		E	e		15	15						
		N E	ei		17	59						
		Campulung										
Ze	P		00	15	03							
		Bacau										
		Ze	P	00	15	09						
				---	---	---						
2	1	Bucharest										
		N	e	01	06	51					Small Strong mic.ag.	
		Campulung										
		Ze	P	01	06	39						
		Bacau										
		Ne Ee	P	01	06	54						
				---	---	---						
3	1	Campulung										
		Z	e	07	06	13					Very small	
				---	---	---						
4	1	Bucharest										
		Ze	PKP	09	25	40					Small	
		Campulung										
		Ze	PKP	09	25	41						
Focşani												
		Ze	PKP	09	25	41						
		Iaşi										
		Ze	PKP	09	25	37						
				---	---	---						
5	4	Campulung										
		Ze	P	16	58	55					Very small Turkmenia	
				---	---	---						
6	2	Campulung										
		Zei	P	00	56	18			+		Very small Ohotsk	
		Focşani										
Zei	P	00	56	11				-				
		Iaşi										
		Z	ei	00	56	04						

August 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks	
						Z μ	N μ	E μ		
7	2	Campulung Ze	P	02 30 56					Very small	
		Focșani Ze	P	02 30 59						
		Iași Z		traces	0231-0235					
8	2	Bucharest Ne	P	11 12 57					Jan Mayen Isl. Δ=31°	
		Ne	S	17 58						
		N E	Lm	24	21			-14,5 +21		
		Campulung Ze	P	11 12 53						
		Vrîncioaia Z	ei	11 12 38						
		Focșani Z		traces	1112-1118					
		Iași Ze	P	11 12 44						
		Ne Ee	P	11 12 45						
9	2	Campulung Ze	P	14 12 33					Jan Mayen Isl.	
		Vrîncioaia Zei	P	14 12 12						
		Bacau Ze	P	14 12 29						
		Focșani Zei	P	14 12 38				+		
		Iași Zei Nei	P	14 12 22				-		
		Ne Ee	P	14 12 23				-		
10	2	Bucharest							Small Anatolia Δ=5,2	
		Ee	Sn	15 35 27						
		Ne	Sn	35 28						
		Nei Ee	S*	35 44						
		Ne Ee	Sg	35 56				+		



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No.	Date	Comp.	Phase	Time G.M.T. h ms	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Iași Ze	P	22 54 46	-				
15	5	Iași Zei	P	01 56 21	-				
		Campulung	recorded	-----					
16	5	Iași Zi	Pg Sg	04 28 43,1 28 48,8	-		+	+	Very small Romania Region of Iași
		Ni Ei		-----					
17.	5	Campulung Ze	P	05 41 15	-				Small
		Iași Zei	P	05 41 06	-				

18	6	Bucharest Nei Eei	(Sn) i	14 11 47 12 22			+	+	Small
		N E					+	+	
		Campulung Zei	(Pn)	14 10 38					
		Bacău Ze	(Sn)	14 12 03					
		Focșani Z	e	14 12 04					
		Iași Z	(Pn)	11 11 12					

19	6	Campulung Ze	P	20 45 26					Very small Iran
		Bacău							
		E	e	20 45 33					
		Iași Z N E	(P)	20 45 17					

19	7	Bucharest E	Traces	0652-0710					Very small
		Campulung Ze	P	06 54 59					

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				s	Z	N	
				h	m	s					
							μ	μ	μ		
20	8	Bucharest	Ne Ee Sn	04	38	40				Small Anatolia $\Delta = 50^\circ$	
		Campulung									
		Ze	Pn	04	38	07					
		Bacău									
		Ze	Pn	04	38	17					
		Iași									
		Ze	Pn	04	38	17					

21	9	Campulung									
		Z	e	13	37	40				Earthquake	

22	10	Bucharest									
		Ze	P	11	33	17				Small	
			Lm	12	10						
		Campulung									
		Ze	P	11	33	17					
		Bacău									
		Ze	P	11	33	06					
		Focșani									
		Ze	P	11	33	08					
		Iași									
		Zi	P	11	33	03		+	+		
			P		33	04					

23	12	Iași									
		Ze	P	04	42	26		+		Very small	

24	12	Bucharest									
		Ne Ee	PKP	09	59	22					
		Nei	pPKP		59	47		+		$\Delta = 155^\circ$ H = 100 km	
		Ee	pPKP		59	48					
		Ei	SKKS		09	49					
		Eei	SKST		13	15					
		Eei	PPS		16	05					
		N E	L	10	50						
		N E	Lm		55						
		N E	F	11	47						
		Campulung									
		Ze	PKP	09	59	20					
		Ze	pPKP		59	47					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Bacău Ze	PKP	09 59 18		-			
		Focșani Ze	PKP	09 59 16		-			
		Ze	pPKP	59 41		+			
		Iași Ze	PKP	09 59 16		-			
		Ze	pPKP	59 41					
		N Ne	ei	09 37					
		Ee	SKKS	09 48					
- - - - -									
25	12	Campulung Zei	(P)	15 00 42		-			Very small Santa Cruz Isl.
- - - - -									
26	12	Bucharest Ne Ee N	(S) ei	17 02 12 04 34			+		Small South of Africa
		Campulung Ze	P	17 00 23					
		Bacău Ne Ee	(S)	17 02 34					
		Focșani Ze	P	17 00 58					
		Iași Ze	P	17 01 13		-	+		
- - - - -									
27	13	Bucharest Nei Eei Nei Eei Nei Eei E E N E	P (SP) S ei ei M	20 18 13 19 36 27 35 30 07 36 18 55		- + + - - -	- + + - -		$\Delta=77^{\circ}5$ h=350 Km
		Campulung Z	P	20 18 12		+			
		Z	ei	18 34		+			
		Z	ei	19 10		+			
		Zei	(sP)	19 38		-			
		Z	ei	20 07		+			

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	s	μ	μ	μ	
		Bacău									
		Zei	P	20	18	04		+			
			e		18	35					
		Ze	pP		18	56					
		Focşani									
		Zei	P	20	18	03		+			
		Zei	pP		19	01		+			
		Zei	sP		19	26		+			
		Iasi									
		Zei	P	20	17	59		-			
		Ze	pP		19	00					
		Ze	sP		19	21					

28	13	Bucharest									
			Eei	P	22	12	17				
			Ee	S		15	41				
		Nei	Eei	SS		15	57				
		N	E	M	23	25					
		Campulung									
		Ze	P	22	12	08					
		Bacău									
		Zei	P	22	12	22					
		Focşani									
		Zei	P	22	12	22					
		Iasi									
		Zei	P	22	12	24					

France
 $\Delta=19^{\circ}$

29	13	Campulung									
		Ze	P	23	54	39					Small
		Bacău									
		Ze	Ne	P	23	54	40				
		Iasi									
		Ze	P	23	54	48					

30	14	Bucharest									
		N	ei	01	49	19		+			Very small
		E	ei		49	21					Strong mic.ag.
		Campulung									
		Zei	Pn	01	47	25					
		Bacău									
		E	e	01	47	40					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Focșani							
		Z	e	01 48 42					
		Iasi							
		Ze	Pn	01 47 36					

31	14	Bucharest							
		N E	e	10 23 28					Very small
		Campulung							Strong
		Ze	P	10 19 57					mic.ag

32	14	Bucharest							
		N E	e	11 36 34					Traces
		N E	e	37 31					
		Campulung							
		Ze	P	11 36 14					
		Z	e	37 51					

33	14	Bucharest							
		N E	e	20 10 03					Small. (Δ = 5°)
		Nei	Sn	11 33			+		
		Nei	S ^x	11 53			+		
		Ni Ee	Sg	12 11			-		
		Campulung							
		Ze	Pn	20 10 55			+		
		Bacau							
		Ze Ee	Pn	20 11 03					
		Focșani							
		Zi	Pn	20 10 47			-		
		Iasi							
		Ze	Pn	20 11 07			+		

34	15	Campulung							
		Z	e	04 38 29					Traces

35	15	Bucharest							
		N E	e	07 09 20					Strong
		N E	e	12 33					
		Campulung							
		Ze	Pn	07 08 55			+		

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
36	15	Campulung Ze	P	09 30 29					Small Tibet
		Iași Ze	Ee	P	09 30 12				
37	15	Bucharest E	e	11 33 23					
		Campulung Ze	Pn	11 29 23					
38	15	Iași Ze	Ne						Earthquake?
		Ee	P	15 13 30					
39	15	Bucharest N	E	traces	16 12-1626				Traces
		Iași Z		e	15 46 59				
40	16	Bucharest N	E	traces	1936-1947				Very small
		Campulung Ze		P	19 31 05				
		Bacau	E	traces	1930-1934				
		Iași Zei	N	Eei	P	19 30 49			
41	17	Bacau	E	traces	2252-2255				
		Iași Ze		P	22 53 39				
42	18	Bucharest N	E	e	19 52 00				- Strong mic-ag
		N	E	e	52 51				
		Campulung Ze		P	19 50 42				
		Focșani Ze		P	19 50 41				

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
		Iași Ze	P	19	51	00					
43	19	Bucharest									
		N E	e	15	41	14					
		E E	ei		51	54				+ Very small	
		E E	L		14	19					
		E E	Lm		14	37					
		Campulung Z	e	15	40	16					
		Bacau Z	e	15	40	56					
		Focșani Z	e	15	40	55				+	
		Iași Z N E	e	15	40	55					
44	19	Campulung Ze	P	16	04	28				Small	
		Bacau Ze	P	16	04	23					
		Focșani Ze	P	16	04	20					
45	20	Bucharest									
		N E	e	02	19	14				+ Small	
		N	ei		23	46				-	
		N E	ei		26	33				-	
		Campulung Zei	P	02	09	27				-	
		Z	ei		10	57				-	
		Bacau Z	P	02	09	13					
		E	e		09	14					
		E E	ei		13	59					
		E E	e		17	25				+	
		Focșani Ze	P	02	09	13					
		Z	ei		10	38				+	
		Iași Zei	P	02	09	08				-	
		N E	e		09	33					

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No.	Date	Comp.	Phase	Time		Per. s	Amplitudes			Remarks
				G.M.T. h ms			Z μ	N μ	E μ	
46	20	Campulung Ze	Pn	15	21 54					Small
		Iași Ze Z	Pn ei	15	22 00 22 30					
47	21	Bucharest	Ee P Nei P Ee PP Ne S Nei PS Eei PS E Lm		07 44 15 44 16 47 03 53 54 54 14 54 15 08 22	17				+ Δ=78° - + - - + - - 9.7
		Campulung Zei Ze Ze Zei	P PP S PS		07 44 33 47 43 54 42 55 38					+ - -
		Focșani Zei Zei	P PP		07 44 25 44 36					- -
		Iași Ze Zei	P PP E ei		07 44 22 44 46 44 51					+ - -
48	21	Iași	E Traces		1350-1355					The North Sea
49	21	Campulung Zei	Pn		16 28 48					+ -
50	22	Bucharest	E e N ei N ei E ei Nei S Eei S E M N E F		13 21 25 21 30 24 59 25 06 31 06 31 07 14 22 16 16	16				Small Strong mi South San wich Isl. Regio + 8.2
		Campulung Ze Z	P ei		13 20 20 22 13					-

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
				μ	μ	μ					
		Focșani									
		Z	Traces 1320-1329								
		Iași									
		Ze	P	13	20	47					
51	22	Campulung									
		Zi	Pg	13	38	06,5	-				Romania Region of Campulung
		Zi Ne Ee	Sg			38 09	-				
52	23	Bucharest									
		Nei E	e	02	36	14		+	Traces		
93	24	Campulung									
		Ze	P	03	33	12				Small	
		Bacau									
		Z N E	recorded								
		Focșani									
		Ze	P	03	33	01					
		Iași									
		Ze	P	03	32	51	-				
		N E	e			32 57					
54	24	Campulung									
		Ze	P	05	49	41				Small	
55	24	Campulung									
		Ze	P	10	54	07				Small	
		Iași									
		Ze	P	10	54	15					
56	24	Campulung									
		Ze	Pn	19	48	59				Small	
57	25	Campulung									
		Ze	P	12	31	29				Small	
		Iași									
		E	Traces 1230-1234								
58	25	Campulung									
		Ze	P	15	15	37				Small	
		Iași									
		Ze	P	15	15	24		+			
		Ne Ee									

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s		μ	μ	μ		
59	26	Bucharest	Eei	PP	00	54	23				+ Small	
			Eei	SKS	00	58					+ Strong mic. ag	
			Eei	S	01	50					- West Carolina Isl.	
				Campulung								$\Delta = 97.3$
				Ze	P	00	50	19				
				Zei	(PS)	02	57		-			
				Focşani								
		Zei	P	00	50	09		+				
		Iaşi										
		Zei Ne Eei	P	00	50	09		+		-		

60	26	Iaşi										
		Ze	P	01	06	40,8						

61	26	Bucharest	N E	i	14	22	15		-	-	Very small	
			N EE	i		22	42		-	+		
			N E	i		23	45			-		
			N	ei		25	00		-			
				Campulung								
				Z	e	14	20	05				
				Focşani								
				Ze	P	14	22	40		-		
				Iaşi								
				Z	e	14	21	34				

62	26	Bucharest	N E	Traces	1838-1845							
				Campulung								
				Ze	P	18	39	42				
		Ze	e		40	00		-				
		Iaşi										
		Ze	P	18	39	34						

63	27	Bucharest	N E	L	13	18-13	45				Traces	

64	27	Campulung									Very small	
		Ze	P	13	47	21		-				

August 1967

No.	Date	Comp.	Phase	Time		Per. s	Amplitudes			Remarks
				G.M.T. h m s			Z μ	N μ	E μ	
		Iași Ze	P	13	47	08				
65	28	Bucharest								
		N	E	ei	03	42	41			
		N	E	ei		42	43			Traces
		N	E	i		43	39		+	
		N		e		44	04		+	
		Campulung Ze	P	03	40	53				
66	28	Bucharest								
		N	E	Traces		1738-1745				
		Iași Z	N	E	Traces		1738-1742			
67	29	Bucharest								
		N	E	Traces		0100-0104				
68	29	Bucharest								
		N		Traces		2201-2211				Traces
69	30	Bucharest								
		Nei	Ee	P	04	32	01			
		Nei		P		32	03			Strong
		Eei	PP			34	15	+		$\Delta=69^{\circ}$
		Ne	PP			34	16		+	
		Nei	PPP			36	26			
		Eei	PPP			36	27	+		
		Nei	S			41	03			+
		Eei	S			41	04	+		
		Ee	SS			45	27			+
		Eei	SSS			48	15			+
		Campulung Ze	P	04	32	09				
		Ze	PP			34	22			
		Ze	PPP			36	33			
		Bacău Ze	P	04	30	49				
		Ze	PP			33	00			Uncertain time
		Iași Ze	P	04	31	42				
		Ze	PP			32	54			

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August 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
70	30	Campulung Ze	P	11 17 56		-			
		Bacău Z		Traces	1117-1119				
		Iași Z		Traces	1116-1119				

71	30	Campulung Ze	P	13 45 33					
		Bacău Ze	P	13 44 08					Uncertain time
		Focsani Zei	P	13 45 26					
		Iași Zei	P	13 45 09					
		Ne Ee	P	45 10					

72	31	Campulung Ze	P	19 12 33					
		Bacău Z		recorded					No time marks
		Iași Zi	P	19 12 31					
		Nei Ee	P	12 32					+

A.Giurgiu

30 MAY 1968

ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

SEPTEMBER 1967

A * Seismographs with direct recording

Station	Location	Instr.	Comp.	M kg.	T _s	D _s	\bar{V}
BUC	44°24'49" N 26°05'48" E	Mainka modified	N	540	10	0,42	164
	h = 82,5 m Alluvium	by Demetrescu	E	540	10	0,42	176
CMP	45°15'1" N 25°02'3" E	"	N	105	3,5	0,37	44
	h = 698 m Alluvium	"	E	105	3,5	0,40	45
VRI	45°52'2" N 26°43'5" E	"	N	105	3,5	0,44	43
	h = 400 m Alluvium	"	E	105	3,5	0,44	44
BAC	46°34' N 26°54' E	"	N	105	3,5	0,45	41
	h = 167,5 m Alluvium	"	E	105	3,5	0,42	39
FOC	45°41'7" N 27°11' E	"	N	105	3,5	0,39	40
	h = 61 m Alluvium	"	E	105	3,5	0,34	41
IAS	47°11'6" N 27°33'7" E	"	N	450	4,8	0,40	139
	h = 160 m Alluvium	"	E	450	4,8	0,40	120

SEPTEMBER 1967

B - Seismographs with galvanometric recording

Station	Instr.	Comp.	T_s	D_s	T_g	D_g	V_{max}
BUC	Galitzin	N	11,6	0,99	11,6	1,0	1.000
		E	12,0	0,99	12,4	"	"
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	1.000
		N	"	"	"	"	"
		E	"	"	"	"	"
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	1.000
		N	"	"	"	"	"
		E	"	"	"	"	"

The stations are: BUC = Bucharest, CMP = Campulung;
 VRI = Vrîncioaia; BAC = Bacău; FOC = Focșani, IAS = Iași.

The recording speed is 30 mm/min for the mechanical,
 Galitzin and Kirnos seismographs, and 60 mm/min for the Hiller
 and VEGIK seismographs.

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
							μ	μ	μ		
1	1	Campulung Ze	(P)	03	50	09					
2	1	Iași Ze	P	12	32	40,5					
		Ne Eei	P		32	41					
3	1	Bucharest Eei	S	23	03	20				- Very small Distant	
		Ne	S		03	21					
		N E	L		21						
		Campulung Ze	P	22	53	41				-	
		Focșani Ze	(P)	22	53	54				-	
		Iași Ze	P	22	53	26				-	
		Ne Ee	P		53	26,5				-	
4	2	Bacău Ze	P	00	52	29				-	
5	2	Campulung Ze	(P)	03	51	35					
6	2	Bucharest N	e	04	20	29				Traces	
7	2	Campulung Z(e)	P	08	07	28					
		FOC, IAS	recorded								
8	2	Bucharest N N	e e	08	55	52 56 16				Very small	
9	2	Iași Ze	P	14	40	23					
		Ee	P		40	24,5					
10	3	Campulung Z(e)	P	01	43	21					

September 1967

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks			
						Z μ	N μ	E μ				
11	3	Bucharest	E	e	07 49 40				Small.Near			
			E	i	50 05							
			N	i	50 14							
			N	i	50 24							
			Campulung			P	07 48 11					
			Ze			FOC recorded						
- - - - -												
12	3	Bucharest	N	e	09 25 39				Small.Near			
			N	i	23 51							
			E	ei	23 44							
			Campulung			P	09 22 40					
			Z(e)			FOC, IAS recorded						
- - - - -												
13	3	Iasi	Z(e) N(e)	P	11 13 14				Earthquake?			
			E6(e)	P	13 15							
- - - - -												
14	3	Bucharest	N	e	14 43 06				Very Small Near			
			E	e	43 20							
- - - - -												
15	3	Bucharest	E(e)	P	21 21 56				A = 109°			
			E	ei	26 08							
			Ei	PP	26 28							
			N	e	27 31							
			E	i	29 40							
			E	i	32 46							
			Ei	SKS	32 59							
			E	i	34 31							
			Ei	PS	35 59							
			Ei	PPS	37 02							
			N	E	L	45						
			Campulung			P	21 21 59					
			Ze			i	25 33					
			Z			e	32 47					
			Targoviste			(PP)	21 26 30					
Ze			SKS	32 44								
N			E	33 39								
N			E	L	53							

September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z μ	N μ	
		Bacău									
		Z	e	21	23	04					No correction
		N	SKS		32	35					
		E	e		34	38					
		Iași									
		Z	e	21	25	38					
		E	e		26	27					
		Ze	PP		26	34					
		N	e		33	25					
		E	e		34	25					
		VRI	recorded								
				-	-	-					
16	3	Bucharest									
		N	e	22	42	22					Very small
		N	i		42	43					
		Campulung									
		Z(e)	P	22	40	31					
				-	-	-					
17	4	Campulung									
		Z(e)	P	04	11	30					
		Focșani									
		Ze	P	04	12	14			+		
		Bacău									
		Zei	P	04	11	25			+		No correction
		Iași									
		Ze	P	04	11	34					
		Ø	i		11	48					
		N	E	e,i	11	49					
		BUC	recorded								
				-	-	-					
18	4	Bucharest	Ee	S	17	21,55,7					Romania Vrancea region h=130 km.ca.
		Campulung									
		Ze	P	17	21	35,2					M _{SH} = 3,7
		Zi	S		21	54,3					
		Ee	S		21	54,5	0,5				
		Ne	S		21	55,1	0,5	3,2		3,5	

September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
		Vrîncioaia									
		Zi	P	17	21	26					
		E	e		21	28,8					
		Ne	S		21	39,2					
		Ee	S		21	40,2					
		Bacău									
		Ze	P	17	21	35,4					
		Ne	S		21	51,9					
		Ee	S		21	52,1					
		Focșani									
		Ze	P	17	21	51,2					Uncertain correction
		Ne Ee	S		21	05,1					
		Iași									
		Ze	P	17	21	39					-
		Ne Ee	S		22	01					
				-	-	-					
19	4	Iași									
		Ze	(P)	21	43	03,3					Earthquake?
		Ne	(P)		43	03,8					
				-	-	-					
20	5	Iași									
		Ze	(P)	03	33	02					Earthquake?
				-	-	-					
21	5	Bucharest									
		N	e	08	34	52					Small.Near
		Z	ei		35	14					+
		E	i		35	35					+
		Z N E	L		36						
		Campulung									
		Ze	(P)	08	33	13					
				-	-	-					
22	5	Campulung									
		Ze	P	11	41	22					
				-	-	-					
23	5	Bucharest									
		E	ei	13	28	16					Small.Near
		E	i		28	35					-
		N	i		28	37					-
				-	-	-					
24	5	Campulung									
		Z	e	15	25	19					
				-	-	-					

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
25	6	Iași Ni	P	02	07	19					
26	6	Iași Ze	P	03	15	54					
27	6	Campulung Ze	P	03	31	11				+	
28	6	Iași Ne Ee (P)		04	47	38					
29	6	Bucharest Ze	Pn	05	01	46				$\Delta = 10^\circ$	
		N	i		02	41				-	
		N	i		03	22					
		Ee	Sn		03	32					
		Ni Ei	S*		04	21					
		Ni Ei	Sg		04	44				+	
		E	M		05	05	5			-	
		N	M		05	09	5	2,6		9	
		Campulung Z(e)	Pn	05	01	53					
		Z	e		02	02					
		N E	L		05						
		Focșani Z(e)	Pn	05	02	20					
		N E	L		06						
		Bacău Ze	Pn	05	01	44					
		VRI, IAS	recorded								
30	6	Bucharest Zei	P	07	40	41				+	
		Ni Eei S			49	18				$\Delta = 67^\circ$	
		E ei			49	34				-	
		N ei			49	37				-	
		Campulung Z(e)	P	07	40	47					
		Bacău Zei	P	07	41	07				Uncertain correction	

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N		E
				h	m	s					
							μ	μ	μ		
		Iași	Eei	P	07	40	36				
		Zi N(e)	Ee	P		40	37				
			Ee	S		49	40				
		VRI	recorded								
		- - - - -									
31	6	Bucharest	Z N E	L	15	56					
		- - - - -									
32	6	Campulung	Ze	P	17	36	59				
		Iași	Ze	P	17	36	46				
		Ne		P		36	47				
		- - - - -									
33	7	Bucharest	Z	e	00	35	12				Small.Near
		N		i		35	42				
		E	ei			35	45				
		Z N E	L			36					
		Campulung	Z(e)	P	00	33	57				
		FOC	recorded								
		- - - - -									
34	7	Bucharest	Zei	P	07	25	22				
		Zi	(pP)			26	26				
		Ei	S			35	30				
		Ni	S			35	32				
		N	i			36	09				
		E	i			36	10				
		N	i			36	13				
		Campulung	Z(e)	P	07	25	39				
		Focșani	Z(e)	P	07	25	20				
		Bacău	Z(e)	P	07	24	45				No correction
		E	e			35	24				
		N	e			35	29				
		Iași	Z(e)	P	07	25	18				
		Ne	E(e)	P		25	19				
			E(e)	S		35	21,5				
		N(e)	S			35	24				
		- - - - -									

$\Delta = 98^\circ$
Deep



September 1987

September 1987

Year	Month	Day	Time	Latitude	Longitude	Depth	Magnitude	Station	Remarks
1987	09	01	00:00	10.0	100.0	10.0	2.0	STAN	Small earthquake
1987	09	02	01:15	11.5	101.5	11.5	2.5	STAN	Small earthquake
1987	09	03	02:30	13.0	103.0	13.0	3.0	STAN	Small earthquake
1987	09	04	03:45	14.5	104.5	14.5	3.5	STAN	Small earthquake
1987	09	05	05:00	16.0	106.0	16.0	4.0	STAN	Small earthquake
1987	09	06	06:15	17.5	107.5	17.5	4.5	STAN	Small earthquake
1987	09	07	07:30	19.0	109.0	19.0	5.0	STAN	Small earthquake
1987	09	08	08:45	20.5	110.5	20.5	5.5	STAN	Small earthquake
1987	09	09	10:00	22.0	112.0	22.0	6.0	STAN	Small earthquake
1987	09	10	11:15	23.5	113.5	23.5	6.5	STAN	Small earthquake
1987	09	11	12:30	25.0	115.0	25.0	7.0	STAN	Small earthquake
1987	09	12	13:45	26.5	116.5	26.5	7.5	STAN	Small earthquake
1987	09	13	15:00	28.0	118.0	28.0	8.0	STAN	Small earthquake
1987	09	14	16:15	29.5	119.5	29.5	8.5	STAN	Small earthquake
1987	09	15	17:30	31.0	121.0	31.0	9.0	STAN	Small earthquake
1987	09	16	18:45	32.5	122.5	32.5	9.5	STAN	Small earthquake
1987	09	17	20:00	34.0	124.0	34.0	10.0	STAN	Small earthquake
1987	09	18	21:15	35.5	125.5	35.5	10.5	STAN	Small earthquake
1987	09	19	22:30	37.0	127.0	37.0	11.0	STAN	Small earthquake
1987	09	20	23:45	38.5	128.5	38.5	11.5	STAN	Small earthquake

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		Z	N	E	
				h	m	s	μ	μ	μ		
Iași											
		Ne	(Pn)	02	06	59					
		E	e		07	33					
		N	e		07	48					
		Ne	(Sn)		08	21					
		N E	L		09						
Vrîncioaia											
		N E	L	02	09						
BAC			recorded								

43	8	Bucharest									
		Z N E	traces	05	14 ^m	05	18 ^m				

44	8	Bucharest									
		N	e	09	55	17					Small. Near
		Eei	Sn		55	22					
		N E	L		56						
		Campulung									
		Z(e)	P	09	53	23					
		Focșani									
		E	e	09	56	09					
		N E	L		57						
VRI, IAS			recorded								

45	8	Campulung									
		Z	e	19	30	08					Earthquake?

46	8	Bucharest									
		Z(e)	P	22	51	16					$\Delta = 87^\circ$
		Zei	PP		55	20					
		Ni Ei	S	23	01	59					
		Nei	PS		04	23					
		Z N E	L		37						
		Campulung									
		Z(e)	P	22	51	25					
		Iași									
		Ze	P	22	51	07					+
		N	e		51	25					
VRI, BAC, FOC			recorded								

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.	h	m		s	Z	N		E
				h	m	s						
					μ	μ	μ					
47	9	Bucharest	Ei	PKP	10	24	42				Small ($\Delta = 122^\circ$) Deep	
			Zi	PKP		24	43	+	-			
		Zei	(pP)		25	32						
		Z	ei		26	32						
				Ei	(SKS)		29	52			+	
				Z	i		34	15	-			
					E		33	16			+	
				Z	i		33	18	+			
					N		33	20			-	
					N		33	58			-	
				Campulung								
				Z	e	10	23	32				
					Ee	SKS		29	52			
				Vrâncioaia								
		N(e)	PKP	10	24	49						
		Iași										
		Ze	PKP	10	24	14						
			E		29	58						
			N		29	59						
		FOC, BAC	recorded									

48	9	Bucharest										
		Z	L		15	01						

49	9	Bucharest										
		Z(e)	P		17	12	16				Small Distant	
		Z	e			16	22					
			Ee			23	42					
		Z	L		18	22						
		FOC, BAC	recorded									

50	9	Bucharest										
		Z	traces		22 ^h 06 ^m	-	22 ^h 08 ^m					
		Iași										
		Z	e		22	06	52					

51	10	Bucharest										
		Z(e)	P		01	30	32				Very small Near	
		N	i			30	36			-		
		Campulung										
		Z(e)	P		01	31	02					

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		Z	N	E	
				h	m	s					
52	10	Campulung Z	e	21	20	08		μ	μ	μ	
53	11	Bacău Z N	E	recorded 00 ^h 15 ^m -00 ^h 16 ^m							Time mark lacking
54	11	Campulung Ze	P	01	42	39					
55	11	Campulung Z(e) BAC	P recorded	07	04	50					
56	11	Bucharest Z(e)	P E e	07	12	10 12 19					Small.Near
		Campulung Ze IAS	P recorded	07	12	05					
57	11	Campulung Z(e)	P	10	34	15					
58	11	Bucharest Z N E Iași N E	L i e	13	24 21 29 21 33						Traces
59	11	Iași M	e	18	24	42					
60	12	Campulung Z(e)	P	00	35	29					
61	12	Bucharest Ze	P	02	55	32					Small Distant
		Campulung Z(e)	P	02	55	33					
		Focșani Ze	P	02	55	24					+

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
				h	m	s					
		Bacău									
		Ze	P	02	55	42					Uncertain correction
		Iași									
		Ze	P	02	55	17				+	
		Ne Ee	P		55	18					

62	12	Bucharest									
		Z	e	14	49	20					Small. Near
		Z	i		49	28					
		N	i		50	19					
			i		50	25					
		Z N E	L		51						
		Campulung									
		Z(e)	P	14	48	09					
		Z	e		48	24					
		N	L		51						
		Focșani									
		Z	e	14	50	01					
		N	e		51	02					
			e		51	10					
		Bacău									
		Ze	P	14	49	12				+	No correction
		Iași									
			e	14	51	34					
		Z	e		52	07					
		N	e		52	11					
		VRI	recorded								

63	12	Bucharest									
		Zei	P	22	10	05					($\Delta = 125^\circ$)
			(S)		22	14					
		Ne	(S)		22	16					
		Z N E	L		57						

64	13	Bucharest									
		Zi	P	18	53	17					$\Delta = 81^\circ$
			S	19	03	29					
		Z N E	L		30						
		Campulung									
		Ze	P	18	53	16				+	
		N	e		53	18					
		Focșani									
		Z(e)	P	18	53	10					

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September 1967

No.	Date	Comp.	Phase	Time.		Per. s	Amplitudes			Remarks
				G.M.T.	h m s		Z μ	N μ	E μ	
		Bacău Ze	P	18	53	04	-			
		Iași Zi	P	18	53	02,5	-			
		Ne Ee	P	18	53	03				
		Ne Ee	S	19	03	03				
		N Ee	S		04,5					
			e		03	10				
65	14	Iași Z(e) Z	E(e) P e	01	07	13 17				
66	14	Bucharest Z	e ei e L	14	37	06 15 25 38				Small.Near +
		N E Z N E								
		Campulung Z(e) Z	P e	14	35	41 46				
67	14	Iași Z(e) Z	E(e) P e	01	07	13 17				
66	14	Bucharest Z	e ei e L	14	37	06 15 25 38				Small.Near +
		N E Z N E								
		Campulung Z(e) Z	P e	14	35	41 46				
67	14	Bucharest Z	E e L	19	01	39 03				Very small Near
		Campulung Zei	P	19	00	38				
68	14	Bucharest Z Z	e e	23	07	35 40				Very small

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks	
						Z μ	N μ	E μ		
69	15	Bucharest							Δ=83°	
		Ze	P	00 40 49						
		Ne	S	51 14						
		Ee	S	51 18						
		N	L	01 12						
		E	L	19						
		Campulung								
		Ze	P	00 40 50			+			
		Focșani								
		Ze	P	00 40 41			-			
69	15	Bacău							No correction	
		Ze	P	00 40 11						
		Iași								
		Ze	P	00 40 34,3			+			
		Ne Ee	P	40 35						

70	15	Campulung							Earthquake?	
		Ni Ee	P	10 01 23						

71	15	Bucharest							Small Distant	
		Ze	P	10 42 13						
		Z	L	11 09						
		Campulung								
		Ze	P	10 42 15						
		Z	i	42 18			+			
		Focșani								
		Ze	P	10 42 06			+			
		Bacău								
		Ze	P	10 41 18			(-)			No correction
71	15	Iași								
		Zi Ne Ee	P	10 42 06			-	-		+

72	15	Iași								
		Zi	P	12 34 35			+			
		Nei	P	34 36						

73	16	Campulung								
		Z(e)	P	00 09 20						
		Iași								
		Ze	P	00 09 07						
		Ne Ee	P	09 09						

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September 1967

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks	
				G.M.T.				s	Z	N		E
				h	m	s						
74	16	Campulung Z	e	03	58	59						
75	16	Campulung Z(e)	P	04	10	55						
		Iași Ze	P	04	10	36				-		
		Eei	P		10	37						
76	16	Campulung Ze	P	08	44	12				+		
77	18	Iași Ze	P	19	32	31				+		
78	18	Bucharest Z	i	23	42	16				-		
		N	ei		42	20						
		E	i		42	29				+		
		Campulung Zi	P	23	41	04,5						
		N	e		41	47						
		Vrîncioaia Ze	P	23	40	55						
		Iași Ze	P	23	41	14,5						
		Ne	P		41	15						
		E(e)	P		41	16						
		FOC, BAC	recorded									
79	19	Iași Z(e)	P	01	05	07						
		Z	P		05	09						
		Ee	e		05	47						
80	19	Iași Ze	P	03	40	50				--		
		BAC	recorded									
81	19	Bucharest Zi	P	11	07	58				-		
		Zi	pP		08	20				+		

$\Delta=80^{\circ}$
h=80-100 km

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z μ	N μ	
		Zi	P.P	10	53						
		Ni	S	17	39						
		Ei	S	17	42					-	
		E	i	18	10					-	
		Ei	sS	18	26					-	
		E	i	18	46						
		E	i	19	16						
		N	i	19	17						
		Z N E	L	43							
Campulung											
		Zei	P	11	07	57				+	
		Z	i	08	10,5						
		Zi	(P.P)	10	38					-	
		E	e	17	38						
		Ze	S	17	42						
		Ne	S	17	44						
		N E	L	39							

Focşani											
		E	e	11	08	28					
		Ee	(PP)	10	19						
		N	e	11	20						
		Ee	S	17	28						
		Ne	S	17	30						
		N E	L	35							
Vrîncioaia											
		Ze	P	11	07	48					
		Zi	pP	08	08						
		Zi	(P.P)	10	39						
		Ne	S	17	27						
		Ee	S	17	28						
		N E	L	36							
Bacău											
		Ze	P	11	07	45					
		Zei	pP	08	08						
		E	e	17	17						
		Ee	S	17	20						
		Ne	S	17	21						
		N E	L	37							
Iaşi											
		Ze	P	11	07	41					
		Nei Ee	P	07	42					+	
		Z	i	07	44,7					+	
		Ni	pP	08	02,5					-	
		Zi	pP	08	03,5						
		E	ei	10	35,5						
		N	e	10	39						

September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
							μ	μ	μ		
Focşani											
		N(e)	PKP ₁	09	59	05					
		E	e		59	12					
		N	e		59	39					
		E	e	10	03	18					
Vrîncioaia											
		Ze	PKP ₁	09	59	16					
		E	e		59	12					
		Ee	(PP)	10	03	04					
		N	e		03	12					
Bacău											
		Ze	PKP ₁	09	59	16					
		E	ei		59	21					
		E	e	10	00	13					
Iaşi											
		Z(ei)	P	09	59	06,5				-	
		Ne	P		59	07					
		E	ei		59	27					
		Z	i		59	29					
		E	ei		59	36,3					
		E	e	10	10	37,4					

87	20	Bucharest									
		Zei	P	10	50	45,6				+ Beginning within the preceding one.	
		Campulung									
		Z(e)	P	10	50	47					
		Vrîncioaia									
		Z(e)	P	10	50	46					
		Bacău									
		Z(e)	P	10	50	41					
		Z	ei		50	48				+	
		Iaşi									
		Zei	P	10	50	47					
		N(e) Ee	P		50	48					

88	20	Bacău									
		Z(ei)	P	10	59	58				-	
		Iaşi									
		Ze	P	10	59	57				-	

89	20	Bucharest									
		Z	e	12	27	02,5					

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September 1967

No	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Campulung									
		Ze	P	12	26	53					
		Bacău									
		Z(e)	P	12	26	49					
		Iași									
		Zei	P	12	26	48,5					
			Eei			26 49,5					

90	20	Bucharest									
		N									
			E	e	15	47	40				
		Z		ei		48	41				Small
				ei		48	45				Near
		Campulung									
		Z(e)	P	15	47	52					
		Iași									
		Z		(P)	15	47	38				
			E	i		47	55				

91	20	Campulung									
		Z		e	20	37	12				
		Iași									
		Ze		P	20	36	48				
		BUC		recorded							

92	21	Campulung									
		Z(e)		P	00	10	40				
		Iași									
		Z		e	00	11	04				
		Z		e		11	15				

93	22	Bucharest									
		Ze		P	08	18	16				
			E	ei		22	16				Small
			E	ei		23	32				Distant
		Campulung									
		Z(e)		P	08	18	13				
		FOC, BAC		recorded							

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z μ	N μ	
94	22	Bucharest Zei	P	10	29	56				$\Delta=77^\circ$	
			P		29	57					
			Ne	N	e		30	14			
			Ze	Ni	Ei	E	PP	32	48		
		S					39	48			
				Ne		PS	40	19			
					Ee	SS	44	32			
			Z	N	E	L	11	02			
		M				07	14	20	17,9		
					E	M	07	15	20	14,9	
			Campulung								
				Z(e)	P	10	29	55			
				Ne	Ee	P	29	56			
					Ee	S	39	48			
			Vrîncioaia								
				Ze	P	10	29	48			
					E(e)	(S)	40	19			
			Focşani								
				Ze	P	10	29	48			
					Ee	S	39	35			
		N(e)	S	39	37						
		N	E	L	11	02					
	Bacău										
		Ze	P	10	29	43					
		Ne	Ee	P	29	45					
	Iaşi										
		Ze	P	10	29	40					
		Ne	Ee	P	29	42					
			E	e	32	11					
		Ne	(PP)	e	32	29					
		N	e	S	39	20					
		Ne	S	e	39	28					
			E	e	39	36					
		N	E	L	11	01					

95	22	Campulung									
		Ze	(P)	10	59	40					

96	22	Campulung									
		Ze	P	12	46	49					
	Iaşi										
		Ze	P	12	46	34					
		Ne	Ee	P	46	35					

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
				h	m	s					
97	23	Campulung Z	e	04	03	14					Earthquake?

98	23	Campulung Z(e)	PKP	07	15	25					
		Vrîncioaia Ze	PKP	07	15	18					
		Focşani Ze	PKP	07	15	23		-			
		Bacău Ze	PKP	07	15	22		+			
		Iaşi Zi	PKP	07	15	21		-			
			Ee	PKP	15	22					

99	23	Bucharest Ze	P	07	21	44					Small
		N	ei		22	10					
		Z	ei		25	16					
		Campulung Ze	P	07	21	58					
		Vrîncioaia Ze	P	07	21	51					
		Focşani Ze	P	07	21	56					
		Bacău Ze	P	07	21	57		-			
		Iaşi Ze	P	07	21	57					
			E	e	22	20					

100	23	Campulung Ze	P	07	58	32					
		Vrîncioaia Ze	P	07	58	40					
		Iaşi Ze	P	07	58	25					
		FOC	recorded								

101	23	Campulung Ze	P	09	25	18					

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No.	Date	Comp	Phase	Time			Per. s	Amplitudes			Remarks
				C.M.T.	h	m		s	Z	N	
								μ	μ	μ	
102	23	Campulung Z(e)	P	23	03	12					
103	23	Campulung Z(e)	P	23	47	33					Earthquake?
104	24	Bucharest Z	i S S	08	21	26	1,0				Romania Vrancea region h=130 km.ca. M _{SH} = 3
			Ei		21	27,4					
		Ni	S		21	27,8		+1,2			
		Campulung Ze	P	08	21	09,2					
		Z	e		21	24,4					
		Ne	S		21	26					
		Ee	S		21	26,6					
		Vrâncioaia Zi	P	08	21	04,4					
		Ne	S		21	17,8					
		Ee	S		21	18,8					
		Bacău Ze	P	08	21	10,7					Uncertain correction
		Ne	S		21	27,4					
		N	i		21	28,9					
		Focșani Ze	P	08	21	06,2					
		Ne	S		21	21,6					
		Ee	S		21	22					
		Iași Ze	P	08	21	20					
		Ze	S		21	43,4					
		Ne	S		24	43,7					
105	24	Bucharest Ze	Pn	22	13	10,5					$\Delta=7,6$
		Z	ei		13	36					
			Sn		14	32					
		Ni	Sn		14	34					
			i		15	14					
		Ni	E		15	20					
			Sg		15	20					
			M		15	47					

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N		E
Campulung											
		Ze	Pn	22	12	49					
		E	e		14	20					
		N E	L		15						
Vrîncioaia											
		Z(e)	Pn	22	13	17				Uncertain correction	
		Z	e		13	19					
Bacău											
		Ze	Pn	22	13	17					
		E	e		13	36					
		E	ei		14	26					
		N E	L		16						
Iași											
		Ze	Pn	22	13	21					
		N	e		16	17					
		E	e		16	27					
		N E	L		17						

106	25	Campulung									
		Z(e)	P	04	58	13					

107	26	Bucharest									
		Z	e	05	07	10				Small Near	
		N	i		07	50					
		E	e		08	09					
		Ni	Sn		08	12					
		Ei	Sn		08	14					
		N E	L		09						
Campulung											
		Z	Pn	05	06	55					
		Z	ei		07	13					
		Ne Ee	(Sn)		08	27					
		N E	L		09						
Focșani											
		Z(e)	Pn	05	07	40					
		Ee	(Sn)		09	15					
		N	e		09	35					
Iași											
		N	e	05	08	23					
		N E	L		10						
VRI, BAC recorded											

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.	h	m		s	Z	N		E
				h	m	s						
							μ	μ	μ			
108	26	Bucharest	Ze	PKP	16	31	00				$\Delta = 120^\circ$	
				Ee	PKP		31	02				
				Eei	PP		32	21				+
				E	ei		34	55				
				Ee	PPP		35	08				
				E	i		37	14				
				E	i		38	21				
				Eei	SKKS		39	18				
				Z	ei		40	42				
			Z	N E	L	17	50					
			Campulung	Ze	(PKP)	16	30	15				
				N	e		33	36				
			Focşani	Z	e	16	31	29				
				E	e		55	04				
			Iaşi	Ze	PKP	16	30	07				
				N	e		30	25,6				
				N	e		32	26				

109	27	Bucharest	E	e	07	27	25				Small Near	
			E	ei		29	07					
			Ni	(Sn)		29	40			+		
			Z	ei		30	22					
			Z	N E	L		31					
			Campulung	Ze	Pn	07	27	15				
				N E	L	07	31					
			BAC, IAS recorded									

		110	27	Campulung	Z	P	10	03	54			

111	27	Iaşi	Zei	P	17	13	02			-		
			Ne	P		13	03					
			E	e		13	06					

112	27	Campulung	Ze	P	16	16	41			+		

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No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
113	28	Campulung Z(e)	P	01	38	12					

114	28	Campulung Ze	P	03	01	15					
		Iași Ze	P	03	01	27					
		N	e		01	38					
		BAC	recorded								

115	28	Bucharest E	ei	03	31	18					Traces
		Z	ei		18	24		+			Distant
		Bacău	Ee	P	03	13	06				
		Iași Ne	P	03	12	57					

116	28	Bucharest Z(e)	(P)	05	16	23					Small
		Z	ei		17	14		+			Distant
		N	ei		17	25					
		E	ei		18	50					
		Campulung Ze	P	05	15	40					
		Bacău Ze	P	05	15	42					
		Iași Ze	Eei	P	05	15	43				

117	28	Campulung Zei	P	15	22	48					+
		Bacău Z(e)	P	15	22	59					
		Iași Ze	N(e)	P	15	22	50				

118	28	Bucharest Ze	P	15	56	42					
		Nei Eei	S	16	06	28					
		Ni	(PS)		07	10					
		Ee	SS		11	18					
		Z N E	L		16	27					
		N E	L		16	37					

$\Delta=76^\circ$

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
		Campulung									
		Zi	P	15	56	39,3					
		Ze	PP		59	10					
		Ne Ee	S	16	06	27					
		Vrîncioaia									
		Ne	S	16	06	41					
		Ee	S		06	42					
		Bacău									
		Z(e)	P	15	56	31					
		Iași									
		Ze	P	15	56	28					
		Ne	P		56	29					
				--	--	--					
119	28	Iași									
		Ze	P	16	16	23					
				--	--	--					
120	28	Iași									
		N(e)	P	16	21	23					
		Z(e)	P		21	25					
				--	--	--					
121	29	Bucharest									
		N	e	03	32	02					Traces
		E	e		33	20					Earthquake?
				--	--	--					
122	29	Iași									
		N(e) Ei	P	12	32	46					
				--	--	--					
123	29	Campulung									
		Z(e)	P	22	41	03					
		Vrîncioaia									
		Ze	P	22	40	27					
		Bacău									
		Ze	P	22	41	06					
		Iași									
		Ze	P	22	41	07					
				--	--	--					
124	30	Bucharest									
		Ze Ei	P	08	09	23					Distant
		Z	e		12	41					
		N	i		17	37					
		E	e		17	46					
		Z N E	L		47						

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September 1967

No.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z μ	N μ	
		Campulung									
		Ze	P	08	09	27					
		E	e		16	28					
		E	e		16	58					
		Focşani									
		Ze	P	09	09	12					
		Bacău									
		Ze	P	08	19	15					
		Iaşi									
		Ze	P	08	09	13				+	
		N	e		09	17					
		E									

G. Purcaru

ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
 CENTRE FOR GEOPHYSICAL RESEARCH
 DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

October 1967

A. Seismographs with direct recording

Station	Location	Instr.	Comp.	M kg.	T _s	D _s	V
BUC	44°24'49" N 26°05'48" E h=82,5 m Alluvium	Mainka modified by Demetrescu	N	540	10,0	0,42	161
	E		540	10,0	0,43	176	
CMP	45°15'1" N 25°02'3" E h=598 m Alluvium	"	N	105	3,5	0,43	45
			E	105	3,5	0,41	44
VRI	45°52'2" N 26°43'5" E h=400 m Alluvium	"	N	105	3,5	0,47	43
			E	105	3,5	0,45	42
BAC	46°34' N 26°54' E h=167,5 Alluvium	"	N	105	3,5	0,50	40
			E	105	3,5	0,47	39
FOC	45°41'0,7" N 27°11' E h=61 m Alluvium	"	N	105	3,5	0,44	42
			E	105	3,5	0,39	43
IAS	47°11'6" N 27°33'6" E h=160 m Alluvium	"	N	450	4,8	0,40	141
			E	450	4,8	0,43	144

B. Seismographs with galvanometric recording

Station	Instr.	Comp.	T_s	D_s	T_g	D_g	Vmax
BUC	Galitzin	N	11,6	0,93	11,6	1,00	1,000
		E	12,0	0,98	12,4	1,00	1,000
		Z	12,5	0,45	3,0	2,00	410
CMP	Hiller	Z	1,5	1,00	1,5	1,00	2,000
VRI	VEGIK	Z	1,2	0,60	0,2	2,26	12,500
BAC	VEGIK	Z	1,5	0,50	0,4	2,00	2,000
		N	1,5	0,50	0,4	2,00	2,000
		E	1,5	0,50	0,4	2,00	2,000
FOC	Hiller	Z	1,45	1,00	1,45	1,00	1.800
IAS	VEGIK	Z	1,0	0,50	0,4	2,00	2,000
		N	1,5	0,50	0,4	2,00	2,000
		E	1,5	0,50	0,4	2,00	2,000

The stations are : BUC = Bucharest; CMP = Campulung;
 VRI = Vrîncioaba; BAC = Bacau; FOC = Focşani; IAS = Iaşi
 The recording speed is 30 mm/min for the mechanical.
 Galitzin and Kirnos seismographs, and 60 mm/min for the
 Hiller and VEGIK seismographs.

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1967 October

No.	Date.	Comp	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	s	μ	μ	μ	
1	1	Campulung Ze	P	03	49	43					
- - - - -											
2	1	Bucharest									Weat. Distant
		N E	e	15	28	57					
		Z	e		29	13					
		E	e		29	37					
		Campulung									
		Ze	P	15	28	09					
		Z	e		28	18					
		Vrîncioaia									
		Zi	P	15	28	06					
		Focşani									
		Zi	P	15	28	04					
		Iaşi									
		Ee	P	15	28	12					
				recorded							
- - - - -											
3	2	Bucharest									Distant
		Ze	P	00	31	29					
		Campulung									
		Ze	P	00	31	34					
		Vrîncioaia									
		Zi	P	00	31	34					
		Bacău									
		Zi	Ee P	00	31	39					
		Ni	P		31	40					Correction uncertain
		Focşani									
		Zi	P	00	31	32					
		Iaşi									
		Zi	P	00	31	29					
		Ne Ee	P		31	30					
- - - - -											
4	2	Campulung									
		Ze	P	07	30	18					
		Z	e		30	44					
		Focşani									
		Zi	P	07	30	10					
		Iaşi									
		N E	e	07	30	56					
- - - - -											

1967 October

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Campulung							
		Zc	P	17 40 45					
		Vrâncio Ia							Correction uncertain
		Zc	P	17 40 34					
		Iași							
		Zc Nc	P	17 40 53					
			Ec	40 54					
		FOC	recorded						
11	4	Campulung							
		Z	e	21 54 08					
12	5	Bucharest							
		Z	e	09 49 15					
		N	e	49 28					
		Campulung							
		Zc	P	09 46 34					
13	5	Campulung							
		Zc Nc	Ec	Pn 10 57 29					Romania Region of Campulung
		Zc	Ec	Sn 57 31,5					
14	5	Bucharest							
		Zc	Pn	12 02 46					Δ=8 ⁰ ,2
		Zi	Sn	04 19					
		Ni	Sn	04 20					
			i	05 02			+	+	
		N	i	05 03			+		
		N	M	06	6;7				
							16	17	
		Campulung							
		Zc	Pn	12 02 52					
		Z	i	03 01			+		
		Focșani							
		Z	e	12 03 19					
		Z	e	03 28					
		Iași							
		Z N E	e	12 03 37					
		VRI	recorded						
15	5	Campulung							
		Zc	P	18 47 05					

1967 October

No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
16	7	Campulung Ze	P	08 09 52					
		Focșani Zi	P	08 30 45				-	
		Iași Ze	P	08 40 35					
		Ne Ee	P	40 36					

17	7	Campulung Ze	P	09 18 44					
		Iași Ze	P	09 18 26					
		Ne Ee	P	18 27					
BUC			recorded						

18	7	Campulung Ze	P	10 51 47					

19	7	Iași Ze	Ee	P	14 48 28				

20	7	Campulung Ze	P	17 38 21					

21	8	Bucharest Zi	P	18 28 33					
		Campulung Ze	P	13 20 36					

22	8	Campulung Ze	P	21 20 58					

23	9	Bucharest Z N	e	10 48 21					
		Campulung Ze	P	10 47 16,5					

24	9	Bucharest Z	e	13 48 15					
		Campulung Ze	P	13 47 31					

1967 October

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
29	9	Iași									
		Zi	P	18	51	41				+	
		Ne Ec	P		51	42					

30	11	Bucharest									
		Z	c	07	52	47					
		Z	c		53	13					

31	11	Campulung									
		Ze	P	16	04	56					
		Focșani									
		Ze	P	16	04	48					

32	11	Iași									
		Ze	P	17	13	46					
		Ne Ec	P		13	47					
		BUC		recorded							

33	12	Iași									
		Ze	P	02	58	46					
		Ne Ec	P		58	47					

34	12	Bucharest									
		Ze	P	06	53	40				+	
		Z	i		53	43					
		Campulung									
		Ze	P	06	53	45					
		Vrâncioaia									
		Zi	P	06	53	52				Correction uncertain	
		Bacau									
		Ze	P	06	53	41					
		N E	e		53	47					
		Focșani									
		Ze	P	06	53	46					
		Iași									
		Ne Ec	P	06	53	41					

35	12	Bucharest									
		Zi	P	13	04	30				+	
		Ni Ec	P		04	31					
		Campulung									
		Ze	P	13	04	28				+	
		N E	e		04	30					

No.	Date	Comp.	Phase	Time			Per.	1967 October			Remarks
				G.M.T.				Amplitudes			
				h	m	s		Z	N	E	
			s	μ	μ	μ					
		Vrîncioaia									
		Zi	P	13	04	16					
		Bacau									
		Zc Ne Ee	P	13	04	17					
		Focșani									
		Zi	P	13	04	27					
		Iași									
		Ze	P	13	04	13					
		Ne Ee	P		04	14					
36	12	Bucharest									
		Ne Ee	S	18	56	15					
		Campulung									
		Zc	P	18	45	47					
		Vrîncioaia									
		Zc	P	18	45	39					Correction uncertain
		Focșani									
		Zc	P	18	45	42					
		Iași									
		Ee	P	18	45	37					
37	13	Campulung									
		Zc	P	03	31	58					
38	13	Campulung									
		Zc	Pg	09	08	55					Romania
		Zc	Sg		08	59					Region of
		Ne Ee	Sg		09	00					Campulung
39	13	Iași									
		Zc	P	12	33	33					
		Ne Ee	P		33	34					
40	14	Campulung									
		Zc	P	03	42	52					
41	14	Iași									
		Zc	P	23	38	36					
		N E	c		38	39					
42	15	Bucharest									
		Zc	P	08	14	06					Ag.mi
		Z	i		18	03					
		N E	i		18	11					

No.	Date	Comp.	Phase	lo			Per.	1967 October			Remarks
				Time				Z	N	E	
				h	m	s		s	μ	μ		μ
		Campulung									
		Zc	P	08	14	02					
		Vrîncioaia									
		Zc	P	18	14	06					
		Z	i		18	04					
		Focșani									
		Z	e	08	18	10					
		N	e		18	15					
		E	e		18	22					
		Iași									
		Zc	P	08	14	04					$\Delta = 82^{\circ}$
		Z	e		17	00					
		Nc	S		14	23					
		Z	e		10	47					
		N	e		11	15					
		BAC	RECORDED								
43	15	Campulung									
		Zc	P	23	23	05					
		Iași									
		Zc	P	23	22	53					
		Z	e		23	03					
44	16	Campulung									
		Zc	P	13	40	07					
45	16	Campulung									
		Zc	P	20	28	27					
46	16	Campulung									
		Zc	P	23	43	02					
		Iași									
		Zc	P	23	42	46					
47	17	Campulung									
		Z	e	05	10	59					
		Iași									
		Zc	P	05	10	37					
		Nc	P		10	38					
		Ee									
48	17	Campulung									
		Zc	P	14	27	36					

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1967 October

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	s	μ	μ	μ	
		Iasi Ze	P	14	27	31					
		Ne Ec	P		27	32					
49	17	Campulung Z	e	15	37	29					Weak
50	17	Campulung Ze	P	21	18	02					
		Vrâncioaia Ze	P	21	18	37					Correction uncertain
		Iasi Ze	P	21	17	35					
		E	e		17	38					
51	18	Vrâncioaia Ze	P	01	04	50					
52	18	Bucharest Zi	P	01	18	49					
		Z N	e		20	16					
		Campulung Zi	P	01	18	42					
		Vrâncioaia Ze	P	01	18	24					
		Bacau Ze	P	01	19	22					Correction uncertain
		Ne Ec	P		19	23					
		Focșani Zi	P	01	18	44					
		Iasi Ze	P	01	18	26					
		Ne Ec	P		18	27					
53	18	Campulung Z	e	14	43	06					
54	18	Campulung Ze	P	22	26	32					
55	20	Bucharest Z	e	06	53	25					
		Campulung Ze	P	06	50	11					
		Z	e		50	29					

No.	Date	Comp.	Phase	Time			P r.	Amplitudes			Remarks	
				G.M.T.	h	m		s	Z	N		E
56	20	Campulung										
		Zc	P	16	15	18						
		Iași										
		Zi Ne Ec	P	16	15	10				+		

57	21	Bucharest										
		Zi	P	05	06	27						
			E	c		07	32					
		Campulung										
		Zc	P	05	06	24						
		Focșani										
		Zc	P	05	06	19						
		Iași										
		Zc	P	05	06	00						
			Ne Ec	P		06	01					
		BAC	recorded									
58	21	Campulung										
		Zc	P	16	58	17						

59	22	Campulung										
		Z	c	05	40	23						
		BUC	recorded									

60	22	Bucharest										
		N E	traces 2124-2128									

61	22	Campulung										
		Zc	P	23	16	20						

62	23	Bucharest										
		Ne	S	08	48	33						
		Campulung										
		Zc	P	08	37	53						
		Vrîncioia										
		Zc	P	08	38	06						
		Focșani										
		Z	c	08	38	51						
		Zc	S		49	22						

63	24	Bucharest										
		Ec	P	06	18	00						

No.	Date	Comp.	Phase	Time		Per.	Amplitudes			Remarks
				G.M.	h m s		Z	N	E	
							s	μ	μ	μ
		Vrîncioaia Ze	P	06	18 23					
64	24	Campulung Ze	P	11	0 33					
65	24	Campulung Ze	P	21	02 38					
66	25	Bucharest Zi	P	01	11 13					$\Delta=76,3$
			P		11 14					
		Ec	S		21 00					
		Ei	i		22 05					
		Z								
		Campulung Ze	P	01	11 15,5					
		Focşani Ze	P	01	11 10					
67	25	Campulung Ze	P	09	34 02					
68	26	Campulung Ze	P	00	34 15					
		Vrîncioaia Ze	P	00	34 18					Direction uncertain
69	26	Campulung Ze	P	04	57 41					
		Vrîncioaia Ze	P	04	57 44					
		Bacau Ze	P	04	57 57					
		Focşani Ze	P	04	57 51					
		BUC	recorded							
70	26	Vrîncioaia Ze	P	17	35 18					
		Focşani Ze	P	17	35 31					

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1967 October

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks		
				G.M.T.				Z	N	E			
				h	m	s	s	μ	μ	μ			
71	27	Bucharest	Ee	S	08	00	36,5				+ Romania Region of Vrancea		
			Nc	S		00	37						
		Campulung	Nc	Ee	P	08	00	19					
			Nc	Ee	S		00	34					
		Vrâncioaia	Zi		P	08	00	17,8					
			Nc	Ee	P		00	18					
					E		00	13					
				Ni	Ei	S		00	17				-
		Bacau	Nc		P	08	00	13					
			Nc		S		00	14					
				Ee	S		00	15					
		Focșani	Zi		P	08	00	10,2					
Ni	Ei		S		00	11,2				+ - +			

72	30	Campulung	Z	c	06	27	02				Romania Region of Vrancea Correction uncertain		
		Vrâncioaia	Zc	P	06	26	35						
			Nc	S		26	45						
			Ee	S		26	46						
		Bacau	Zc	Nc	S	06	26	54					
Focșani	Ni		Ei	S	06	26	38			+ *			

73	31	Campulung	Zc	P	10	34	24						

74	31	Bucharest	Z N E	traces 1128-1131									

75	31	Bucharest	Zc	P	21	10	42				$\Delta=20,3$		
			N	e		10	48						
			Ni	S		14	21						
		Campulung	Zc	P	21	10	39						



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No.	Date	Comp.	Phase	Time		Per.	Amplitudes			Remarks
				G.	T.		Z	N	E	
				h	s	s	μ	μ	μ	
		Vrâncioaia								
		Zc	P	21	11	02				
		Focșani								
		Zc	P	21	11	09				

D. J. ...

ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

MICROSEISMIC BULLETIN

December 1967

SEISMOLOGICAL STATION OF BUCHAREST
INSTRUMENTS: Horizontal Galitzio Seismographs

Constants: l (cm) T_1 (s) T (s) μ^2 A (m) AK/T_1
 N 123.8 11.55 11.64 0.073 1.125 272
 E 123.2 12.36 12.04 0.0231 1.125 275

0h 6h 12h 18h

Date	Comp	K	T s	A μ	K	T s	A μ	K	T s	A μ	Remarks
1	N	2	5.28	1.45	2	5.57	1.33	2	5.57	1.63	
2	N	2	5.50	1.00	2	5.57	1.33	2	5.57	1.46	
3	N	2	5.50	1.12	2	5.57	1.33	2	5.57	1.46	
4	N	2	5.50	1.18	2	5.57	1.33	2	5.57	1.46	
5	N	2	5.50	1.18	2	5.57	1.33	2	5.57	1.46	
6	N	2	5.50	1.18	2	5.57	1.33	2	5.57	1.46	
7	N	2	5.50	1.18	2	5.57	1.33	2	5.57	1.46	
8	N	2	5.50	1.18	2	5.57	1.33	2	5.57	1.46	
9	N	2	5.50	1.18	2	5.57	1.33	2	5.57	1.46	
10	N	2	5.50	1.18	2	5.57	1.33	2	5.57	1.46	

Farthq.
Farthq.

- 3 -

Date	Comp	0 ^h			6 ^h			12 ^h			18 ^h			December 1967	Remarks
		T	s	A	T	s	A	T	s	A	T	s	A		
26	N	4.7	0.6	2	4.9	0.7	2	5.0	0.6	2	5.0	0.8			
27	E	4.4	0.7	2	4.6	0.6	2	4.5	0.8	2	5.0	0.8			
28	N	4.5	0.8	2	5.2	0.7	2	4.5	0.9	2	5.0	0.7			
29	E	4.5	0.7	2	5.1	0.6	2	4.9	0.5	2	5.3	0.4			
30	E	4.5	0.4	2	5.5	0.4	2	4.4	0.3	2	4.7	0.4	Snow		
31	E	4.4	0.5	2	5.3	0.6	2	4.7	0.7	2	6.2	0.6			

CONSTANTIA SOUTICA

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DEPARTMENT OF SEISMOLOGY

MICROSEISMIC BULLETIN

January 1968

SEISMOLOGICAL STATION OF BUCHAREST
INSTRUMENTS : Horizontal Galitzin Seismographs
Constants : N E T₁(s) T₂(s) A(m) AK T₁ 1
E 123.8 11.55 11.54 1.125 261
123.2 12.36 12.00 -0.010 1.125 277

0h 6h 12h 18h

Date	Comp	K	T ₁ s	A u	K	T ₁ s	A u	K	T ₁ s	A u	K	T ₁ s	A u	Remarks
1	N	2	4.8	0.7	.	4.9	0.5	2	4.9	0.5	2	4.9	0.6	Snow
2	E	2	5.0	0.5	.	4.9	0.6	2	4.9	0.6	2	4.9	0.5	Snow
3	N	2	5.1	0.5	.	4.5	0.6	2	4.5	0.6	2	4.9	0.8	Snow
4	E	2	5.5	0.8	.	4.5	0.9	2	4.5	0.7	2	5.0	0.7	Snow
5	N	2	5.0	1.1	.	5.1	1.0	2	5.1	0.5	2	4.5	0.6	Snow
6	E	2	5.5	0.7	.	5.2	0.5	2	5.2	0.5	2	5.2	0.5	Snow
7	N	2	4.8	0.6	.	.	.	.	.	.	.	.	.	Snow
8	E	2	Barthg.	1.0	.	Barthg.	0.8	2	Barthg.	0.8	2	4.0	0.8	Snow
9	N	3	4.8	0.6	.	4.8	1.0	3	4.8	1.4	3	4.6	0.8	Snow
10	E	2	4.4	0.8	.	5.2	1.3	2	5.2	1.3	2	4.7	1.0	Snow

January 1968

Date	Comp	0h			6h			12h			18h			Remarks
		K	T S	A μ	K	T S	A μ	K	T S	A μ	K	T S	A μ	
27	N E N E N E N E	2	5.8	1.2	2	5.3	0.9	2	4.7	0.8	2	5.4	1.1	
28	N E N E N E N E	2	6.2	0.9	2	5.0	1.0	2	5.2	1.1	2	5.2	1.3	
29	N E N E N E N E	2	Strong mic.ag	Strong mic.ag	2	Strong mic.ag.	Strong mic.ag.	2	Strong mic.ag.	Strong mic.ag.	2	Strong mic.ag.	Strong mic.ag.	
30	N E N E N E N E	2	5.5	1.0	2	5.5	0.9	2	Earthg.	Earthg.	2	4.9	0.8	Snow
31	N E N E N E N E	2	4.8	0.7	2	5.2	1.1	2	4.7	0.9	2	4.8	0.7	Snow
		2	5.3	0.8	2	5.2	0.8	2	5.0	0.9	2	5.5	0.6	
		2	5.3	0.8	2	5.2	0.8	2	5.0	0.9	2	5.5	0.6	

Constanta Sofila

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 CENTRE FOR GEOPHYSICAL RESEARCH
 DEPARTMENT OF SEISMOLOGY

MICROSEISMIC BULLETIN

February 1968

SEISMOLOGICAL STATION OF BUCHAREST
 INSTRUMENTS : Horizontal Galitzin Seismographs

Coconstants : N 123.8 T1(s) 11.55 T(s) 11.54 μ^2 0.012 A(m) 1.125 AK/M 1
 E 123.2 12.36 12.00 -0.010 1.125 261
 0^h 6^h 12^h 18^h

Date	Comp	K	T _s	A _{μ}	K	T _s	A _{μ}	K	T _s	A _{μ}	K	T _s	A _{μ}	Remarks
1	N	2	4.5	0.6	.	.	.	.	.	.	2	5.0	0.4	
2	E	2	5.2	0.5	.	.	.	.	.	.	2	4.9	0.4	
3	N	2	5.0	0.5	.	.	.	.	.	.	2	4.9	0.4	
4	E	2	5.0	0.4	.	.	.	.	.	.	2	4.7	0.3	
5	N	2	5.0	0.4	.	.	.	.	.	.	2	4.7	0.4	
6	E	3	5.4	0.7	.	.	.	.	.	.	3	5.1	0.5	
7	N	2	5.2	0.7	.	.	.	.	.	.	2	5.1	0.7	
8	E	2	5.1	0.6	.	.	.	.	.	.	2	5.0	0.8	
9	N	2	4.8	0.7	.	.	.	.	.	.	2	4.7	0.7	
10	E	2	4.5	0.5	.	.	.	.	.	.	2	4.8	0.6	
					.	.	.	.	.	.	2	4.9	0.4	
					.	.	.	.	.	.	2	5.1	0.5	
					.	.	.	.	.	.	2	5.2	0.4	
					.	.	.	.	.	.	2	5.8	0.8	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.4	0.5	
					.	.	.	.	.	.	2	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	
					.	.	.	.	.	.	3	5.7	0.6	
					.	.	.	.	.	.	3	5.1	0.6	
					.	.	.	.	.	.	3	5.9	0.7	

Date	Comp	K	0h			6h			12h			18h			Remarks
			T	A	μ	T	A	μ	T	A	μ	T	A	μ	
11	N	2	4.6	0.7	0.6	5.1	0.8	0.8	5.2	1.2	2.3	5.5	1.7	1.7	
12	N	2	4.6	0.7	0.6	5.1	0.8	0.8	5.5	1.2	2.3	5.5	1.7	1.8	
13	N	3	5.7	1.5	1.1	5.3	1.0	1.2	5.1	1.1	1.2	5.5	1.4	1.4	Snow
14	N	3	5.7	1.5	1.1	5.3	1.0	1.2	5.1	1.1	1.2	5.5	1.4	1.4	Snow
15	N	3	5.7	1.5	1.1	5.3	1.0	1.2	5.1	1.1	1.2	5.5	1.4	1.4	Rain
16	N	3	5.7	1.5	1.1	5.3	1.0	1.2	5.1	1.1	1.2	5.5	1.4	1.4	Rain
17	N	3	5.7	1.5	1.1	5.3	1.0	1.2	5.1	1.1	1.2	5.5	1.4	1.4	Rain
18	N	2	5.8	1.1	0.9	5.2	0.7	0.8	4.7	0.8	0.8	4.7	0.7	0.8	Snow
19	N	2	5.8	1.1	0.9	5.2	0.7	0.8	4.7	0.8	0.8	4.7	0.7	0.8	Snow
20	N	2	5.8	1.1	0.9	5.2	0.7	0.8	4.7	0.8	0.8	4.7	0.7	0.8	Snow
21	N	2	5.8	1.1	0.9	5.2	0.7	0.8	4.7	0.8	0.8	4.7	0.7	0.8	Snow
22	N	2	5.8	1.1	0.9	5.2	0.7	0.8	4.7	0.8	0.8	4.7	0.7	0.8	Snow
23	N	2	5.8	1.1	0.9	5.2	0.7	0.8	4.7	0.8	0.8	4.7	0.7	0.8	Snow
24	N	2	5.8	1.1	0.9	5.2	0.7	0.8	4.7	0.8	0.8	4.7	0.7	0.8	Snow
25	N	2	5.8	1.1	0.9	5.2	0.7	0.8	4.7	0.8	0.8	4.7	0.7	0.8	Snow

.../...

Date	Comp	0 ^h			6 ^h			12 ^h			18 ^h			Remarks	
		K	T s	A μ	K	T s	A μ	K	T s	A μ	K	T s	A μ		
26	N E N E N E	2	4.7	0.5	2	4.4	0.6	Barthg.	2	4.8	0.6	2	4.8	0.6	Snow
27	N E N E N E	2	4.7	0.5	2	4.2	0.5	Barthg.	2	5.0	0.4	2	5.0	0.4	Snow
28	N E N E N E	2	4.2	0.4	2	3.5	0.6	3	4.5	0.8	3	4.2	0.7	Snow	
29	N E N E N E	2	4.3	0.7	2	4.3	0.8	2	4.9	0.7	2	5.6	0.9	Snow	
		2	5.0	1.0	2	5.3	1.2	Barthg.	2	5.6	0.8	2	5.6	0.8	Snow
		2	6.6	1.0	2	5.0	1.1	Barthg.	2	5.0	1.8	2	5.0	1.8	Snow

Constanța Săfilcă

ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
CENTRE FOR GEOPHYSICAL RESEARCH
DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

NOVEMBER 1967

A - Seismographs with direct recording

Station	Location	Instr.	Comp.	M kg	T _s	D _s	V
BUC	44°24'49" N	Mainka					
	26°05'48" E	modified	N	540	10,0	0,44	166
	h = 82,5 m	by Demetrescu	E	540	10,0	0,44	165
	Alluvium						
CMP	45°15'1" N	"	N	105	3,5	0,42	45
	25°02'3" E	"	E	105	3,5	0,41	44
	h = 598 m						
	Alluvium						
VRI	45°52'2" N	"	N	105	3,5	0,48	39
	26°43'5" E	"	E	105	3,5	0,46	43
	h = 400 m						
	Alluvium						
BAC	46°34' N	"	N	105	3,5	0,45	40
	26°54' E	"	E	105	3,5	0,47	40
	h = 167,5 m						
	Alluvium						
FOC	45°41'7" N		N	105	3,5	0,40	42
	27°11' E		E	105	3,5	0,42	41
	h = 61 m						
	Alluvium						
IAS	47°11'6" N		N	450	4,8	0,40	142
	27°33'7" E		E	450	4,8	0,41	141
	h = 160 m						
	Alluvium						

B - Seismographs with galvanometric recording

Station	Instr.	Comp.	T_s	D_s	T_g	D_g	V_{max}
BUC	Galitzin	N	11,64	0,99	11,6	1,0	1.000
		E	12,04	0,99	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000

The stations are : BUC = Bucharest; CMP = Campulung;
VRI = Vrîncioaia; BAC = Bacău; FOC = Focșani; IAS = Iași.

The recording speed is 30 mm/min for the mechanical,
Galitzin and Kirnos seismographs, and 60 mm/min for the Hiller and
VEGIK seismographs.

STATION DATA

STATION	INSTRUMENT	DATE	TIME	AMPLITUDE	PERIOD	PHASE
1	1	1900	12.00	1.0	0.5	0
2	2	1901	12.00	1.0	0.5	0
3	3	1902	12.00	1.0	0.5	0
4	4	1903	12.00	1.0	0.5	0
5	5	1904	12.00	1.0	0.5	0
6	6	1905	12.00	1.0	0.5	0
7	7	1906	12.00	1.0	0.5	0
8	8	1907	12.00	1.0	0.5	0
9	9	1908	12.00	1.0	0.5	0
10	10	1909	12.00	1.0	0.5	0
11	11	1910	12.00	1.0	0.5	0
12	12	1911	12.00	1.0	0.5	0
13	13	1912	12.00	1.0	0.5	0
14	14	1913	12.00	1.0	0.5	0
15	15	1914	12.00	1.0	0.5	0
16	16	1915	12.00	1.0	0.5	0
17	17	1916	12.00	1.0	0.5	0
18	18	1917	12.00	1.0	0.5	0
19	19	1918	12.00	1.0	0.5	0
20	20	1919	12.00	1.0	0.5	0
21	21	1920	12.00	1.0	0.5	0
22	22	1921	12.00	1.0	0.5	0
23	23	1922	12.00	1.0	0.5	0
24	24	1923	12.00	1.0	0.5	0
25	25	1924	12.00	1.0	0.5	0
26	26	1925	12.00	1.0	0.5	0
27	27	1926	12.00	1.0	0.5	0
28	28	1927	12.00	1.0	0.5	0
29	29	1928	12.00	1.0	0.5	0
30	30	1929	12.00	1.0	0.5	0
31	31	1930	12.00	1.0	0.5	0
32	32	1931	12.00	1.0	0.5	0
33	33	1932	12.00	1.0	0.5	0
34	34	1933	12.00	1.0	0.5	0
35	35	1934	12.00	1.0	0.5	0
36	36	1935	12.00	1.0	0.5	0
37	37	1936	12.00	1.0	0.5	0
38	38	1937	12.00	1.0	0.5	0
39	39	1938	12.00	1.0	0.5	0
40	40	1939	12.00	1.0	0.5	0
41	41	1940	12.00	1.0	0.5	0
42	42	1941	12.00	1.0	0.5	0
43	43	1942	12.00	1.0	0.5	0
44	44	1943	12.00	1.0	0.5	0
45	45	1944	12.00	1.0	0.5	0
46	46	1945	12.00	1.0	0.5	0
47	47	1946	12.00	1.0	0.5	0
48	48	1947	12.00	1.0	0.5	0
49	49	1948	12.00	1.0	0.5	0
50	50	1949	12.00	1.0	0.5	0
51	51	1950	12.00	1.0	0.5	0
52	52	1951	12.00	1.0	0.5	0
53	53	1952	12.00	1.0	0.5	0
54	54	1953	12.00	1.0	0.5	0
55	55	1954	12.00	1.0	0.5	0
56	56	1955	12.00	1.0	0.5	0
57	57	1956	12.00	1.0	0.5	0
58	58	1957	12.00	1.0	0.5	0
59	59	1958	12.00	1.0	0.5	0
60	60	1959	12.00	1.0	0.5	0
61	61	1960	12.00	1.0	0.5	0
62	62	1961	12.00	1.0	0.5	0
63	63	1962	12.00	1.0	0.5	0
64	64	1963	12.00	1.0	0.5	0
65	65	1964	12.00	1.0	0.5	0
66	66	1965	12.00	1.0	0.5	0
67	67	1966	12.00	1.0	0.5	0
68	68	1967	12.00	1.0	0.5	0
69	69	1968	12.00	1.0	0.5	0
70	70	1969	12.00	1.0	0.5	0
71	71	1970	12.00	1.0	0.5	0
72	72	1971	12.00	1.0	0.5	0
73	73	1972	12.00	1.0	0.5	0
74	74	1973	12.00	1.0	0.5	0
75	75	1974	12.00	1.0	0.5	0
76	76	1975	12.00	1.0	0.5	0
77	77	1976	12.00	1.0	0.5	0
78	78	1977	12.00	1.0	0.5	0
79	79	1978	12.00	1.0	0.5	0
80	80	1979	12.00	1.0	0.5	0
81	81	1980	12.00	1.0	0.5	0
82	82	1981	12.00	1.0	0.5	0
83	83	1982	12.00	1.0	0.5	0
84	84	1983	12.00	1.0	0.5	0
85	85	1984	12.00	1.0	0.5	0
86	86	1985	12.00	1.0	0.5	0
87	87	1986	12.00	1.0	0.5	0
88	88	1987	12.00	1.0	0.5	0
89	89	1988	12.00	1.0	0.5	0
90	90	1989	12.00	1.0	0.5	0
91	91	1990	12.00	1.0	0.5	0
92	92	1991	12.00	1.0	0.5	0
93	93	1992	12.00	1.0	0.5	0
94	94	1993	12.00	1.0	0.5	0
95	95	1994	12.00	1.0	0.5	0
96	96	1995	12.00	1.0	0.5	0
97	97	1996	12.00	1.0	0.5	0
98	98	1997	12.00	1.0	0.5	0
99	99	1998	12.00	1.0	0.5	0
100	100	1999	12.00	1.0	0.5	0

STATION DATA

Nr.	Date	Comp.	Phase	Time			Per s	Amplitudes			Remarks
				G	M	T		Z	N	E	
				h	m	s		μ	μ	μ	
1	1	Campulung Z	c	15	19	37				Traces	
2	1	Campulung Z	e	19	29	47				Traces	
		Focşani Ze	(P)	19	29	37					
3	1	Campulung Z	e	19	57	52				Traces	
		Z	e		58	15					
4	2	Campulung Z	e	03	26	12				Traces Greenland Sea	
5	3	Bucharest Ze	(P)	07	51	26				New Hebrides Isl.	
		Campulung Z	e	07	50	52					
6	4	Bucharest Ze	PKP	10	35	54				Fiji Isl. h \approx 550 km	
		Ze	pPKP		38	03					
		Campulung Ze	PKP	10	35	54			+		
		Vrîncioaia Ze	PKP	10	35	48					
		Z	ei		36	20			+		
		Bacău Zi	PKP	10	35	47				-	
		Ne	PKP		35	48					
		Focşani Ze	(PKP)	10	36	00					
7	4	Campulung Z	e	11	34	54				Earthquake?	
8	4	Bucharest Ze	P	13	38	54			+	Japan $\Delta = 81^\circ$	
		Ze	(pP)		39	06					
		Z	e		40	10					
		Ne	S		48	58				-	
		Z	e		50	00					
		N E	L	14	09						

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Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		Z	N	E	
				h	m	s					
Campulung											
		Ze	P	13	38	54					
		Z	e		42	21					
Vrîncioaia											
		Ze	P	13	38	47					
Bacău											
		Ze	P	13	38	43					
Focşani											
		Ze	P	13	38	55					

9	4	Bucharest									
		Ze	P	14	42	26				Japan φ=78°	
		Ne Ee	S		52	16					
		Ne Ee	Sm		52	27	6;9	+	-		
		N E	M	15	19	20	14	2,5	3,0		
		Z	M		19	40	13	31	24		
		Z	M		20	26	13	17mm			
		Z	F	16	25						
Campulung											
		Ze	P	14	42	27					
		Z	L	15	18	02					
Vrîncioaia											
		Z	e	14	42	20					
Bacău											
		Z	e	14	42	15					
Focşani											
		Ze	P	14	42	27					

10	4	Bucharest									
		Ze	P	14	57	50				Beginning within the preceding one Japan	
Campulung											
		Ze	P	15	57	54					
Bacău											
		Z	e	14	57	40					
Focşani											
		Ze	P	14	57	55					

11	4	Bucharest									
		Ne Ee	S	16	51	03	5;6	-2	+3	Weak Distant	
		Z	e		53	38					

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Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ	μ	μ		
		Campulung									
		Z	e	16	40	30					
		Z	e		43	34					

12	5	Bucharest									Traces
		Z	e	00	29	27					Ionian Isl.
		Z	i		31	48					
		Campulung									
		Z	e	00	28	09,5					
		Vrîncioaia									
		Z	e	00	28	55					

13	5	Campulung									
		Z	e	19	33	34					Earthquake?

14	6	Bucharest									Ionian Isl.
		Z	e	10	36	23					
		Ne	Sn		36	36					
		Ee	(Sn)		36	45					
			F		43						
		Campulung									
		Ze	Pn	10	34	45					
		Z	e		37	28					
		Vrîncioaia									
		Ze	Pn	10	35	01					

15	7	Bucharest									Samoa Isl.
		Zei	PKP	04	08	56					
		N E	e		09	24					
		Campulung									
		Ze	PKP	04	08	55					
		Vrîncioaia									
		Ze	PKP	04	08	36					Cp uncertain
		Z	e		01	50					
		Bacău									
		Ze	PKP	04	08	50					
		Focşani									
		Ze	PKP	04	08	54					
		Z	e		09	08					

16	7	Campulung									
		Ze	P	20	04	43					
		Bacău									
		Ze	P	20	04	30					

Nr.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	s	μ	μ	μ	
17	8	Campulung Ze	(P)	03	24	03					
18	8	Bucharest N E Z	L	17	58						
			L	18	04						
19	9	Vrîncioaia Ze	P	02	31	40					
20	9	Campulung Ze	P	07	59	27					
21	9	Bucharest N E Z	e	10	13	09					
			e		13	30					
		Ne	(Sn)	14	15						
		Campulung Z	e	10	13	28					
		Z	e		15	09					
		Vrîncioaia Ze	P	10	11	56					
22	9	Bucharest Ze	(P)	10	28	56					
		Ni Ei	S		29	15		+	+		Romania Region of Vrancea h = 125 km
		Campulung Zi	P	10	28	56		-			
		Ze Ne Ei	S		29	14,5				+	
		Vrîncioaia Zi	P	10	28	51		+			
		Ne Ee	S		29	04					
		Bacău Ne Ee	S	10	28	(40)					
		Focşani Zi	P	10	29	50,8					
		Ne Ee	S		29	04,4					
23	9	Campulung Ze	P	12	51	08					

Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s					
							μ	μ	μ		
24	9	Bucharest								Weak Mediterranean Sea	
		Z	e	14	52	04					
		N E	e		53	52					
		E	e		55	34					
		Vrîncioaia									
		Ze	P	14	51	26					

25	9	Campulung								Japan	
		Ze	P	18	31	41					
		Z	e		32	21					
		Vrîncioaia									
		Ze	P	18	31	47					
		Focşani									
		Ze	P	18	31	36					
		Z	e		31	55					

26	9	Campulung								Traces	
		Z	e	19	59	43					

27	9	Campulung									
		Ze	P	20	31	09					
		Z	e		31	45					
		Vrîncioaia									
		Ze	(P)	20	31	05					

28	10	Campulung								Iran	
		Ze	(P)	02	56	06					
		Z	e		56	47					

29	10	Campulung									
		Z	e	11	03	20					
		Z	i		03	29					
		Vrîncioaia									
		Z	e	11	03	36					
		Z	e		03	42,5					
		Z	e		04	01					

30	10	Campulung								Tongo Isl.	
		Ze	PKP	13	29	52					
		Vrîncioaia									
		Ze	PKP	13	29	52,5					
		Bacău									
		Z	e	13	30	36					

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Nr.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
								μ	μ	μ	
Focşani											
Ze				PKP	13	29	52				

31	10	Bucharest									
		N	e	18	49	43					India
		N	e		51	13					
		Eei	S		57	58					
		E	L	19	17						
Campulung											
		Z	e	18	49	20					
		Z	e		49	27					
Vrîncioaia											
		Zei	P	18	49	11					+
		Z	i		49	21,5					+
Bacău											
		Z	e	18	49	16					
Focşani											
		Z	e	18	49	25					

32	11	Bucharest									
		Ze	(P)	02	19	24					Romania Region of Vrancea h = 135km
		Ni E1	S		19	44					
Campulung											
		Zi	P	02	19	22					+
		Z	i		19	38					
		Ne Ee	S		19	40					
Vrîncioaia											
		Ze	P	02	18	53					
		Ne	S		19	07					
Bacău											
		Ei	S	02	19	37,4					+
		Ni	S		19	38					+
Focşani											
		Zi	P	02	19	20,5					
		Ni E1	S		19	36					- -

33	11	Campulung									
		Ze	P	02	36	45					
Vrîncioaia											
		Ze	P	02	36	25					

NOV 19 1957
 Amplifier Remarks
 24 N. 1. 22
 4 4 4

Phase
 1 1 1
 2 2 2
 3 3 3

Mr. Peter Conroy

PK 18 18 25
 25 25 25

India

0 18 18 25
 1 18 18 25
 2 18 18 25
 3 18 18 25

0 18 18 25
 1 18 18 25
 2 18 18 25

0 18 18 25
 1 18 18 25
 2 18 18 25

0 18 18 25
 1 18 18 25

h = 155km
 +
 +
 +

0 18 18 25
 1 18 18 25
 2 18 18 25

0 18 18 25
 1 18 18 25
 2 18 18 25

0 18 18 25
 1 18 18 25
 2 18 18 25

0 18 18 25
 1 18 18 25
 2 18 18 25

0 18 18 25
 1 18 18 25
 2 18 18 25

0 18 18 25
 1 18 18 25
 2 18 18 25

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Nr.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks	
						Z μ	N μ	E μ		
34	11	Bucharest	P (S)	12 06 31					Weak ($\Delta = 26^\circ$)	
		Ze		10 41						
		Ee								
		Campulung	P	12 06 38						
		Ze								
Vrîncioaia	P	12 06 34,5	-							
Ze										
Focșani	(P)	12 06 33								
Ze										
<u>BAC recorded</u>										
35	11	Bucharest	P ei e	12 25 34						
		Ze		25 44						-
		Z		34 24						+
		N E								
		Campulung	P	12 25 39						-
		Ze								
		Vrîncioaia	P	12 25 36						-
Ze										
Bacău	e	12 25 39								
Z										
Focșani	(P)	12 25 36								
Ze										
<u>-----</u>										
36	11	Campulung	P e	18 10 25						
		Ze		10 44						
		Z								
Vrîncioaia	P	18 10 40,5	+							
Ze										
<u>-----</u>										
37	11	Campulung	e	23 57 56					Traces	
		Z								
		Bacău								e	23 59 18
Z										
<u>BUC recorded</u>										
<u>-----</u>										
38	12	Campulung	e	02 39 13					Traces	
		Z								
		Vrîncioaia								(P)	02 38 46
Ze										
Bacău	e	02 39 po								
Z										
<u>-----</u>										

Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.	h	m		s	Z	N		E
								μ	μ	μ		
39	12	Bucharest										
		Ze	PKP	10	56	41						
		Campulung										
		Ze	PKP	10	56	35						
		Z	e		57	15						
		Vrîncioaia										
		Ze	PKP	10	56	34				+		
		Z	e		56	37						
		Focşani										
		Ze	PKP	10	56	36						
		BAC recorded										

40	12	Campulung										
		Z	e	17	44	12						
		Vrîncioaia										
		Z	e	17	44	27						
		Z	e		45	27						

41	13	Bucharest										
		Ze	(Pn)	06	52	32					Turkey	
		Ne	Sn		53	50					($\Delta = 7^\circ$)	
		E	e		54	05					+	
		E	M		54	46	6				-	20
		Campulung										
		Ze	(Pn)	06	52	30						
		Z	e		55	10						
		Focşani										
		Z	e	06	54	50						

12	15	Vrîncioaia										
		Ze	Pg	10	00	23						
		Z	e		00	28					-	Explosion?
		Bacău										Cp uncertain
		N	e	10	00	27						
		Focşani										
		Z	e	10	00	50,5						
		Iaşi										
		Ni Ee (Pg)		10	00	51						

43	15	Campulung										
		Ze	P	19	41	13						
		Vrîncioaia										
		Ze	P	19	41	08						



Date: 1951
 Station: ...
 Time: ...
 Amplitude: ...
 Magnitude: ...

11. ...
 12. ...
 13. ...
 14. ...
 15. ...

16. ...
 17. ...
 18. ...
 19. ...

20. ...
 21. ...
 22. ...
 23. ...
 24. ...

25. ...
 26. ...
 27. ...
 28. ...
 29. ...

30. ...
 31. ...
 32. ...

...
 ...

Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	μ	μ	μ		
		Bacău									
		Z	e	19	41	31					
		Iași									
		Ze	Pe	P	19	41	10				
44	15	Bucharest									Distant
		Z	e	21	51	31					
		Campulung									
		Z	e	21	51	37					
		Vrîncioaia									
		Ze	P	21	50	34					
		Bacău									
		Z	e	21	51	34					
		N	e	51	44						
		Focșani									
		Z	e	21	51	48					
		Iași									
		Ze	P	21	50	35					
		Z	e	50	47						
45	15	Bucharest									
		Ze	P	22	01	12					
		Campulung									
		Ze	(P)	22	01	16					
		Vrîncioaia									
		Ze	P	22	01	13					
		Bacău									
		Z	e	22	03	08					
		Focșani									
		Ze	P	22	01	14					
46	16	Bucharest									Traces Yugoslavia
		N	e	10	16	33					
		N E	e	18	47						
		Campulung									
		Z	e	10	16	18,5					
47	17	Bucharest									
		Ne	(S)	05	13	51					
		E	ei	16	38						+
		N E	L	30							
		Campulung									
		Ze	(P)	05	08	38					

Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N		E
								u	u	u	
Campulung											
			Ze	P	12	19	08				
			Z	e		19	17				
Bacău											
			Ze	P	12	19	56,5				
Focşani											
			Zi	P	12	19	01		+		
Iaşi											
			Ze	P	12	18	53		+		
			Z	Ee		18	54				+
			Z	e		19	07				

53	19	Bucharest	Zi	PKP	17	48	56		-		
				E		49	08				
		N		e		49	17				
		Z		E	18	53					
		N		L		59					
Campulung											
			Ze	PKP	17	48	56				
			Z	e		49	13				
Vrîncioaia											
			Ze	PKP	17	48	49				
			Z	e		50	06				
Focşani											
			Z	e	17	49	54				

54	20	Campulung	Z	e	02	31	17				Traces

55	21	Bucharest	Z	L	17	20					Traces
Campulung											
			Ze	P	17	08	22				
			Z	e		09	02				
Vrîncioaia											
			Ze	P	17	08	18				
			Z	e		08	35				
Bacău											
			Z	e	17	09	29				
			Z	E		23	20				
Focşani											
			Z	e	17	08	47				

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Nr.	Date	Comp.	Phase	Time.			Per.	Amplitudes			Remarks		
				G.M.T.				s	Z	N		E	
				h	m	s							
								μ	μ	μ			
		Iași											
		Ze	P	17	08	08							
			E		08	25							

56	22	Bucharest											
		Zi	P	15	39	00						+	
		Z	e		39	34							
		Ze	(pP)		39	52							
		Campulung											
		Ze	P	15	38	53							
		Bacău											
			Ee	15	38	55							

57	22	Bucharest										Traces	
		Z	N	e	17	49	46						
				F		52							
		Campulung											
		Z		e	17	48	56						
		Z		e		50	08						
		Focșani											
		Z		e	17	52	44						

58	22	Campulung										Traces	
		Z		e	19	41	29						

59	23	Bucharest										$\Delta=37^\circ$	
		Zi	P	08	43	07		-					
			Ni	P		43	10						
			Ee	P		43	12						
		Ze		PP		44	18						
		Ze		PcP		45	22						
		Ze		S		49	08						
		Ze		SS		51	11						
			Ne	SS		51	18						
		Ze		ScS		53	14						
		Z		L		54							
		Campulung											
		Ze		P	08	43	16						
		Z		i		43	23						
		Ze		PcP		45	34						
		Z		L		57							
		Vrâncioaia											
		Ze		P	08	43	15						
		Z		i		43	23						
			N	e		43	25						

Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.	h	m		s	Z μ	N μ	
		Focşani									
		Ne	(PcP)	e	08	44	05				
		N	L			45	42				
						58					
60	23	Campulung									Weak
		Z		e	10	42	04				Traces
		Z		e			42	35			
61	23	Bucharest									
		Ze		P	13	49	20				
		N		e			50	35			
		Z		i			53	35			
		Campulung									
		Zei		P	13	49	08				
		N		e			50	30			
		Z		e			50	31			
		Focşani									
		Ze		P	13	49	10				
		Iaşi									
		Ze	Ne	Ee	P	13	48	51			
		N			e		50	05			
					e		50	07			
		Z		E	e		50	08			
62	24	Campulung									Weak
		Z		e	19	27	35				
63	24	Campulung									Traces
		Z		e	22	59	19				
		Z		e			59	36			
		Bacău									
				E	e	22	59	29			
		Focşani									
		Z		e	22	59	29				
		Iaşi									
		Z	N	E	e	22	59	42			
64	26	Bucharest									
		Zi		P	00	20	18				
		Z		e			20	28			
		Z		L			57				
		Z	N	E	L		58				

Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
		Campulung									
		Ze	P	00	20	18					
		Z	e		20	29					
		Vrîncioaia									
		Ze	P	00	19	56					
		Z	i		20	02		+			
		Bacău									
		Ne	(P)	00	20	04					
		E	e		20	19					
		Focșani									
		Ze	P	00	20	12					
		Iași									
		Ze	P	00	20	04					
		Z	i		20	05		+			
65	26	Campulung									
		Z	e	03	10	54				Traces	
		Iași									
		E	e	03	10	16					
66	26	Bucharest									
		Z	e	03	28	24					
		Ei	S		28	45					
		N E	i		29	00		+	-		
		Campulung									
		Ze	P	03	26	38					
		Ze	(S)		28	33				($\Delta=10^0$)	
		Focșani									
		Ze	P	03	27	01					
		Z	e		30	37					
		Iași									
		Z	E	e	03	27	14				
67	26	Campulung									
		Ze	P	08	23	10					
		Vrîncioaia									
		Ze	P	08	22	54					
		Z	e		23	34					
68	26	Campulung									
		Ze	P	12	15	26,5					

Nr.	Date	Comp.	Phase	Time.			Per.	Amplitudes			Remarks
				G.M.T.				s	Z	N		E
				h	m	s		μ	μ	μ	
		Vrîncioaia									
		Ze	P	12	15	00					
		Z	e		15	09					

69	26	Campulung									
		Z	e	15	01	47					

70	27	Campulung									
		Ze	P	04	38	36					
		Vrîncioaia									
		Z	e	04	39	27					
		Z	e		39	39					

71	27	Bucharest									
		Z	e	08	39	07					Distant
		Campulung									
		Z	e	08	38	42					
		Vrîncioaia									
		Ze	P	08	38	31					
		Iași									
		Ze	P	08	38	29					
			E		39	05					

72	27	Campulung									
		Z	e	13	11	47					Traces
		Vrîncioaia									
		Z	e	13	11	42					

73	27	Campulung									
		Z	e	20	32	57					Earthquake?
		Vrîncioaia									
		Zi	P	20	32	30,8					+
		Ze	S		32	44					

74	27	Campulung									
		Ze	P	21	46	42					
		Vrîncioaia									
		Ze	P	21	46	54					
		Focșani									
		Z	e	21	47	14					
		Iași									
		Z	e	21	47	18					
			E		47	22,5					

Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.	h	m		Z	N	E		
								μ	μ	μ		
75	27	Campulung	(P)	21	58	20						
		Ze										
		Vrîncioaia					P	21	58	03,5		
Ze												
		Focşani	P	21	58	03						
		Ze										

76	28	Campulung		02	48	48					Japan	
		Z	e									
		Z	e		49	42						
		Vrîncioaia		P	02	47	31,5	-				Cp uncertain h = 130 km
		Ze										
		Ze	pP		48	05						
		Focşani		(P)	02	48	29					
		Ze										
		Ze	pP		49	12						
		Iasi		P	02	48	25	-				
		Ze	Ne									
		Ze		pP		48	58					
			E	e	49	05						

77	30	Bucharest		07	25	10	+				Yugoslavia $\Delta = 593$	
		Zi										
			Ni Ei	Pn		25	11			+	+	
		Campulung		Pn	07	25	08					
		Ze										
			Ne	Pn		25	11					
			E	e		25	13					
		Zi		P [*]		25	16		-			
			Ne	P [*]		25	19					
			Ni Ei	Sn		26	05			+	+	
			N	M		27	37					
			E	M		27	25					
		Vrîncioaia		Pn	07	25	20	-				
		Zi										
			Ne	Pn		25	22					
			N	e		25	42					
			Ne	Sn		26	20					
			N	M		28	05					
			E	M		28	11					
		Bacău		Pn	07	25	38					
			Ne Ee									
			Nei	Sn		26	36					
			Eei	Sn		26	38				+	
			Ne	Sg		27	00					

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Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
		N	Ee	Sg	07	27	04				
				M		28	31				
			E	M		28	33				
		Focşani									
		Ze		Pn	07	25	28				
			Në	Sn		26	13,5				-
			E	M		28	25				
			N	M		29	07				
		Iaşi									
		Zi		Pn	07	25	45,5				-
		Ze	Ee	Pg		26	11				
			E	i		27	15				+
78	30	-----									
		Bucharest									
		Z		e		87	44	15			
		Campulung									
		Z		e	07	44	21				
		Z		e		45	53				
		Vrîncioaia									
		Zi		P	07	44	21,8				-
		Iaşi									
		Z		e	07	44	45				
79	30	-----									
		Bucharest									
		Z		e	07	56	30				Aftershock No.77
			N	e		56	48				
		Campulung									
		Z		e	07	55	13				
		Z		e		56	21				
		Vrîncioaia									
		Ze		Pn	07	55	19				
80	30	-----									
		Campulung									
		Z		e	08	13	08				Aftershock No.77
		Z		e		14	29				
		Vrîncioaia									
		Ze		Pn	08	13	02				
81	30	-----									
		Bucharest									
		Z		e	09	23	47				Traces
			N	e		24	00				
		Campulung									
		Z		e	09	22	37				

Nr.	Date	Comp.	Phase	Time			Per. s	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s	μ	μ	μ			
				Vrâncioaia								
				Ze			(P)	09	22	13		

82	30	Bucharest								Traces		
				Z	e	09 54 26						
				N	e	55 00						
				Campulung								
				Z	e	09 53 15						
				Z	e	54 51						
				Vrâncioaia								
				Ze			P	09	52	58		

83	30	Vrâncioaia										
				Ze			P	09	57	03		

84	30	Bucharest								Traces		
				Z	e	10 16 51						
				N	e	16 52						
				Campulung								
				Z	e	10 15 40						
				Vrâncioaia								
				Ze			P	10	15	24		

85	30	Bucharest								Traces		
				Z	e	10 56 50						
				N	e	57 04						
				E	e	57 06						
				Campulung								
				Z	(e)	10 55 38						
				Z	e	56 33						
				Vrâncioaia								
				Ze			P	10	55	48		
				Z	e	57 38						

86	30	Bucharest	traces 1147-1206						Long waves			

87	30	Bucharest										
				Z	e	12 00 40						
				N	e	00 46						
				Campulung								
				Ze			(P)	11	59	07		
				Z	e	12 00 37						

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Nr.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Vrîncioaia							
		Ze	P	11 59 05					
		Z	e	12 01 21					

88	30	Bucharest							
		Z	e	13 21 22					
		Campulung							
		Ze	(P)	13 20 21					
		Z	e	21 21					
		Vrîncioaia							
		Ze	(P)	13 20 22					

89	30	Bucharest							
		Z	(e)	16 06 51					
		Campulung							
		Ze	P	16 06 19					
		Vrîncioaia							
		Ze	P	16 06 15					
		Z	e	06 32					
		Iasi							
		Zi	P	16 06 10					
			Ee	P	06 11				

									Traces
90	30	Campulung							
		Z	e	17 08 51					
		Z	e	10 11					
		Vrîncioaia							
		Ze	(P)	17 08 37					

									Traces
91	30	Bucharest							
		Z	e	22 55 42					
		Campulung							
		Z	e	22 55 21					
		Z	e	56 29					

92	30	Campulung							
		Z	e	23 07 04					
		Vrîncioaia							
		Ze	P	23 07 42					

S.Iosif

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ACADEMY OF THE SOCIALIST REPUBLIC OF ROMANIA
 CENTRE FOR GEOPHYSICAL RESEARCH
 DEPARTMENT OF SEISMOLOGY

PROVISIONAL SEISMOLOGICAL BULLETIN

December 1967

A - Seismographs with direct recording

Station	Location	Instr.	Comp.	M Kg	T _s	D _s	\bar{V}
BUC	44°24'49" N 26°05'48" E	Mainka modified by Deme- trescu	N	540	10	0,45	169
	h = 82,5 m Alluvium		E	540	10	0,45	175
CMP	45°16'1" N 25°02'3" E	"	N	105	3,5	0,45	44
	h = 598 m Alluvium		E	105	3,5	0,44	44
VRI	45°52'2" N 26°43'5" E	"	N	105	3,5	0,44	40
	h = 400 m Alluvium		E	105	3,5	0,44	39
BAC	46°34' N 26°54' E	"	N	105	3,5	0,44	41
	h = 167,5 m Alluvium		E	105	3,5	0,39	38
FOC	45°41'7" N 27°11' E	"	N	105	3,5	0,44	41
	h = 61 m Alluvium		E	105	3,5	0,45	41
IAS	47°11'6" N 27°33'7" E	"	N	450	4,8	0,40	142
	h = 160 m Alluvium		E	450	4,8	0,41	141

B - Seismographs with galvanometric recording

Station	Instr.	Comp.	T _s	D _s	T _g	D _g	V _{max}
BUC	Galitzin	N	11,99	0,99	11,6	1,0	1.000
		E	12,12	0,99	12,4	1,0	1.000
	Kirnos	Z	12,5	0,45	3,0	2,0	410
CMP	Hiller	Z	1,5	1,0	1,5	1,0	2.000
VRI	VEGIK	Z	1,2	0,6	0,2	2,26	12.500
BAC	VEGIK	Z	1,5	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000
FOC	Hiller	Z	1,45	1,0	1,45	1,0	1.800
IAS	VEGIK	Z	1,0	0,5	0,4	2,0	1.000
		N	1,5	0,5	0,4	2,0	1.000
		E	1,5	0,5	0,4	2,0	1.000

The stations are : BUC = Bucharest; CMP = Campulung;
 VRI = Vrîncioaia ; BAC = Bacău; FOC = Focșani; IAS = Iași.

The recording speed is 30 mm/min for the mechanical,
 Galitzin and Kirnos seismographs, and 60 mm/min. for the Hiller
 and VEGIK seismographs.

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December 1967

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks	
				G	M	T		Z	N	E		
				h	m	s		μ	μ	μ		
1	1	Campulung										
		Z	e	07	36	20						
		Z	ei		36	53				+		
		Vrîncioaia										
		Ze	P	07	35	20						

2	1	Bucharest										
		Ze	(P)	08	40	36					Weak	
		Z	ei		41	37				+	BUC,FOC-	
		Z	ei		42	39				+	strong	
		Campulung									mic.ag.	
		Ze	P	08	40	22						
		Z	ei		41	04				-		
		Z	ei		41	40				+		
		Z	ei		42	31				+		
		Vrîncioaia										
		Ze	P	08	40	16						
		Z	ei		42	25				+		
		Z	e		45	12				+		

3	1	Bucharest										
		Z	e	09	18	22					Very weak.	
		Z	e		19	10					BUC.FOC-	
		Z	e		19	31					strong	
		Campulung									mic.ag.	
		Ze	P	09	16	58				+	Santa Cruz	
		Z	ei		17	13				+	Islands	
		Z	ei		17	44				-	$\varphi = 11.3S$	
		Z	ei		18	30				+	$\lambda = 165.7E$	
		Z	ei		19	38				+	$H = 08522.1$	
		Vrîncioaia									(U.S.C.G.S)	
		Ze	P	09	16	24						

		4	1	Bucharest								
Ze	P			10	27	30						
Z	e				28	10				+		
Z	e				28	40						
Z	F				30							
Vrîncioaia												
		Ze	P	10	26	47				BUC.Fc		

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December 1967

No.	Date	Comp	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	s	μ	μ	μ	
		Vrîncioaia									
		Zc	P	14	47	49					
8	1	Campulung									
		Zc	P	16	49	32					Weak
		Z	e		49	48	-				Buc.FOC-
		Z	e		50	17	-				Strong nic.ag.
		Z	F		51						Sunda Strait
		Vrîncioaia									$\phi = 5.9^{\circ}S$
		Zei	P	16	49	31	+				$\lambda = 105.5^{\circ}E$
9	1	Campulung									H = 163043
		Z	e	17	04	20					(USCGS)
10	1	Bucharest									Weak
		Zei	Pn	18	33	06	+				Region of
		Z	ei		34	10	-				Debar
		Campulung									
		Zc	Pn	18	32	41					
		Z	ei		33	20	+				
		Z	ei		33	56	+				
		Z	ei		34	28	+				
		Z	F		37						
		Vrîncioaia									
		Zei	Pn	18	33	21,5					
11	1	Bucharest									
		Zc	Pn	20	09	26					Weak
		Z	ei		10	40	+				Region of
		Z	e		11	16					Debar
		Z	F		15						
		Campulung									
		Zc	Pn	20	09	10	-				
		Zc	(P)		09	21	+				
		Z	(P)		09	36	-				
		Zei	(SH)		10	23	-				
		Zc	ei		10	37	-				
		Z	ei		11	30	-				
		Z	F		14						
		Vrîncioaia									
		Zei	Pn	20	09	29	-				
		Focşani									
		Zei	Pn	20	10	09					

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
12	2	Bucharest	Pn	00	26	00				Weak Albania $\phi = 41^{\circ}3N$ $\lambda = 20^{\circ}6E$ H = 002416 (U.S.C.G.S.)	
		Zc	ei		27	28	-				
		Z	ei		28	48	-				
		Z	F		32						
		Campulung	Pn	00	25	45					
		Zc	P ^v		26	00	+				
		Zei	Pg		26	16					
		Z	e		26	47					
		Zei	Sg		27	33	-				
		Z	ei		27	45	-				
		Z	ei		28	01	-				
		Z	ei		28	31	+				
		Z	F		31						
		Vrîncioaia	Pn	00	25	41					
		Zc	Pg		26	13	-				
		Zei	eb		27	45	+				
		Z									
		Focşani	e	00	26	41					
		Z									
13	2	Campulung								Traces	
		Z	c	05	38	42					
		Z	F		40						
14	2	Bucharest								Weak Albania $\phi = 41^{\circ}40N$ $\lambda = 20^{\circ}3E$ H = 092710 (U.S.C.G.S.)	
		Z	c	09	29	16					
		Z	ei		30	41	+				
		Z	F		34						
		Campulung									
		Zc	Pn	09	28	34					
		Z	ei		29	30	+				
		Z	ei		30	32	-				
		Vrîncioaia									
		Zi	Pn	09	28	30					
		Z	e		28	41					
15	2	Bucharest								Albania- Yugoslavia border region $\Delta = 5.2^{\circ}$	
		Zc	Pn	12	46	04					
		Zei	P		46	20	-				
		Zei	Pg		46	30	+				
		Eci	Sn		47	10					
		Eei	S ^a		47	27	+				
		Eei	Sg		47	37	-				
		Nei	Sg		47	38	+				

December 1967

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	s	μ	μ	μ	
Campulung											
		Zei	Pn	12	46	03		+			
		Zei	P'		46	19		-			
		Zei	Pg		46	34		-			
		Zei Nei	Sn		47	07		-	+		
		Eei	S ^x		47	22					-
		Zei Nei	Sg		47	36		+	+		
Vrîncioaia											
		Zi	Pn	12	46	21		+			
		Zi	P ^x		46	39		+			
		Zei	Pg		46	58		-			
Focşani											
		Ze	Pn	12	46	24					
		Zei	P'		46	39		+			
		Zei	Pg		46	59		+			

16	2	Campulung									
		Z	e	13	23	18		-			BUC.FOC--
		Z	e		24	27		-			strong

17	2	Bucharest									
		Ze	Pn	14	20	11					Weak
		Z	ei		20	31		+			Near
		Z	ei		21	00		+			
		Z	F		25						
Campulung											
		Ze	Pn	14	19	35					
		Z	ei		22	10		-			
		Z	ei		22	48		-			
Focşani											
		Z	traces	14 ^h 21 ^m	-	14 ^h 25 ^m					

18	2	Bucharest									
		Z	L	20 ^h 38 ^m	-	20 ^h 48 ^m					Very weak

19	2	Campulung									
		Ze	(P)	22	18	39					Very weak
			e		19	37					Northeastern

20	2	Campulung									
		Z	e	22	28	45					China

=37.8 N
 =115.2 E
 H =200552.4
 (USCGS)

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks			
				G.M.T.				Z	N	E				
				h	m	s	s	μ	μ	μ				
21	3	Campulung	Ze	P	11	15	13							
			Z	e		15	26							
			Z	e		16	02							
			Z	F		19								

22	3	Campulung	Ze	P	18	01	16							
			Z	ci		01	32							
			Z	F		05								
			Focşani											
		Ze	P	18	01	50								

23	3	Campulung	Zei	P	21	17	14							
			Z	ci		17	29		+			Central California		
			Focşani											
			Ze	P	21	17	49						Strong mic.ag	

24	3	Campulung	Zei	P	21	57	45							
			Z	e		58	38		+			Very weak		

25	4	Bucharest	Z	e	00	51	04							
			Z	i		51	46						Very weak	
			Z	F		56							Near	
		Campulung	Ze	(Pn)	00	50	27							
			Z	ei		51	41						+	
			Z	ei		52	16						-	
		Focşani	Z	e	00	51	03							Strong mic.ag

26	4	Campulung	Z	e	22	31	00						Traces BUC.FOC. strong mic.ag	

27	5	Campulung	Z	e	01	58	03						Traces BUC,FOC- strong mic.ag.	
			Z	c		58	39						+	
			Z	e		59	19							



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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks	
				G.M.T.				Z	N	E		
				h	m	s	s	μ	μ	μ		
28	5	Campulung									Traces BUC.FOC-- strong mic.ag.	
		Z	e	05	22	06		+				
		Z	e		22	54						

29	5	Campulung									Traces	
		Z	i	09	17	35		+				
		Z	e		17	47		+				

30	5	Campulung									Traces	
		Z	e	21	59	16						
		Z	e		59	39		+				

31	6	Campulung									Weak	
		Z	e	00	03	23						
		Z	e		03	33						
		Z	e		04	04						
		Vrâncioaia										
		Z	i	00	04	23		-				

32	6	Campulung										
		Ze	P	05	22	27						
		Z	ei		22	42		+				
		Vrâncioaia										
		Zei	P	05	23	13		+				
		Z	ei		23	27		+				
		Focşani										
		Ze	P	05	22	25						

33	7	Campulung									Very weak Distort	
		Z	ei	10	00	49		-				
		Z	e		01	29		+				
		Vrâncioaia										
		Zei	P	09	58	45		-				

34	7	Bucharest									Weak BUC.FOC-- strong. mic.ag.	
		Z	e	18	06	46		+				
		Campulung										
		Z	e	18	04	58						
		Z	e		05	14						
		Z	ei		06	16		-				
		Vrâncioaia										
		Z	ei	18	05	12		-				
		Z	ei		07	36		-				

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
10 December 1967											
35	8	Campulung									
		Z	e	07	10	24					
		Z	e		10	40	+				
		Z	e		11	17					
- - - - -											
36	9	Bucharest									
		Z	e	03	13	10				Very weak Adriatic Sea.	
		Z	ci		14	30	-				
		Campulung								$\varphi=42.0^{\circ}N$ $\lambda=16.5^{\circ}E$ $H=030952$ (U.S.C.C.)	
		Ze	Pn	03	11	28					
		Z	e		11	40	+				
		Z	e		12	56	-				
		Vrâncioaia									
		Ze	Pn	03	11	58	+				
		Z	e		12	35	+				
- - - - -											
37	9	Campulung									
		Ze	P	05	47	24	-			Weak Adriatic Sea	
		Z	e		47	44	-				
		Vrâncioaia								$\varphi=45.4^{\circ}$ $\lambda=14.6^{\circ}E$ $H=054459$ (B.C.I.S.)	
		Ze	P	05	47	21	+				
		Z	ci		47	31	-				
- - - - -											
38	10	Vrâncioaia									
		Zi	P	05	24	36,4	+			Roumania- region of Vrancea	
		Ze	S		24	46,0					
		Focşani									CMP-recorded
		Ne	S	05	24	39					
- - - - -											
39	10	Bucharest									
		Ne	SS	12	58	06				Weak $\Delta=86^{\circ}8$	
		Ne	SKS		02	45					
- - - - -											
40	10	Bucharest									
		Ze	P	23	00	06	-			Inde. Region of Koyuna Dam. $\varphi=17^{\circ}23'N$ $\lambda=73^{\circ}45'E$ $H=22570$ (B.C.I.S.) $\Delta=48^{\circ}$	
		Ni Ee	P		00	10		+	-		
		Ze Ne Ec	(PP)		02	04	+	-	+		
		Nci Eci	S		07	10		-	-		
		Ze	PS		07	14	+				
			E		27	06	17.0		20.08		
		N	M		27	24	16.0	13.52			
		Campulung									
		Ze	P	23	00	10					
		Z	e		01	38					
		Z	e		01	55					

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per.	Amplitudes			Remarks	
						Z	N	E		
						s	μ	μ	μ	
		Vrâncioaia								
		Zei	P	23 00 03		+				
		Z	ei	01 00		-				
		Z	e	01 45						
		Focşani								
		Zei	P	22 59 59		+				
		Z	e	01 32						
		Z	e	09 59		-				

41	11	Bucharest								
		Z	e	19 57 36						Traces
		Campulung								BUC, FOC
		Ze	P	19 56 07						strong
		Vrâncioaia								mic. ag.
		Zei	P	19 56 06		-				Tonga Islands
		Z	e	56 21						$\Delta=20.6S$

42	11	Campulung								$\lambda=174.3W$
		Ze	P	20 00 48		-				$H=194053.3$
		Z	e	00 58		-				(U.S.C.G.S.)
		Z	e	01 23						Tonga Islands
		Vrâncioaia								
		Ze	P	20 00 43		-				
		Z	e	00 50		-				
		Z	e	01 00		-				
		Focşani								
		Ze	P	20 00 40						
		Z	e	00 59						

43	11	Bucharest								
		Zei	P	22 37 38		+				Weak
		Z	e	38 58		+				Eastern
		N E	e	43 36						Gulf of Aden
		Campulung								$\Delta=13.6^{\circ}N$
		Zei	P	22 37 42		-				$\lambda=51.6^{\circ}E$
		Z	e	39 10		+				$H=223018$
		Z	e	40 11		+				(U.S.C.G.S.)
		Vrâncioaia								
		Zi	P	22 37 40		-				
		Z	ei	37 47		+				
		Z	i	37 57		+				
		Focşani								
		Ze	P	22 37 36		-				
		Z	ei	39 08		-				

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No.	Date	Comp.	Phase	Time			Per	Amplitudes			Remarks	
				G.M.T.	h	m		s	Z	N		E
				h	m	s	s	μ	μ	μ		
49	13	Campulung	P	11	09	56	+				Weak Kurile Is. $\phi=49.4^{\circ}N$ $\lambda=154.5^{\circ}E$ H=105821.6 (U.S.C.G.S.)	
		Ze										
		Z	e	10	22	-						
		Vrîncioaia	P	11	09	53	-					
		Ze										
		Focşani	P	11	09	47	+					
		Ze										

50	14	Vrîncioaia	P	02	28	04					Arabian Sea	
		Ze										
				ei		28	19					

51	14	Bucharest	Traces				02 ^h 58 ^m -03 ^h 06 ^m					
		Z N E										
		Campulung	P	02	57	27	-					
		Ze										
		Z									e	58	08	-
				e		58	25	+				
		Vrîncioaia	P	02	57	53	-					
		Ze										
				e		58	08	-				

52	15	Bucharest	Traces				17 ^h 28 ^m -17 ^h 32 ^m					
		Z										
		Vrîncioaia	P	17	28	03						
		Ze										

53	15	Vrîncioaia	P	21	26	09						
		Ze										
		Iaşi	P	21	26	30	+					
		Ze										

54	16	Vrîncioaia	P	13	33	29	-				Weak Distant	
		Ze										

55	16	Bucharest	P	21	05	46	-				Near east coast of Kamchatka $\phi=51.2^{\circ}N$ $\lambda=157.7^{\circ}E$ H=205358.3 (U.S.C.G.S.)	
		Ze										
				L		10						
				P		18						
		Vrîncioaia	P	21	05	34						
		Ze										
		Focşani	P	21	05	35						
		Ze										

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
56	17	Vrîncioaia									
		Zei	P	00	31	58		+		Weak	
		Z	e		32	04				Afghanistan	
		Z	ei		32	18		+		USSR border	
		Focşani								Region	
		Ze	P	00	31	46			$\phi=36.5^{\circ}N$		
		Iaşi							$\lambda=71.4^{\circ}E$		
			Ee	P	00	31	55		H=002515.1		
			E	e		33	10		(U.S.C.G.S.)		
									-		
57	18	Vrîncioaia									
		Zei	P	14	17	54		+		Weak	
		Z	ei		18	09		-		Distant	
58	18	Vrîncioaia									
		Ze	P	22	54	03				Weak	
		Iaşi								Distant	
		Ze	P	22	53	58					
			Ne Ee	P		54	00				
59	19	Vrîncioaia									
		Zei	P	03	30	31		+		Weak	
		Iaşi									
		Ze	P	03	30	25				$\phi=37.5^{\circ}N$	
										$\lambda=72^{\circ}E$	
										H=032349.6	
										(U.S.C.G.S.)	
60	19	Bucharest									
		Z	e	08	34	10				Weak	
			Nei	Sn		34	42		+		Albania
			Ni	S ⁺		35	00		-		$\phi=41.5^{\circ}N$
			Eci	S _g		35	11			+	$\lambda=20.4^{\circ}E$
			Z	i ⁺		36	09				H=083230.9
			Z	i		36	30		-		(USCGS)
			Z	F		45			-		$\Delta=5^{\circ}$
			Campulung								
				Ne	S ⁺	08	35	02			-
		E	e		35	29					
		N	e		35	32					
		Vrîncioaia									
		Zei	Pn	08	34	08				-	
		Zei	P ⁺		34	23				+	
		Zi	Pg		34	37				+	
		Zi	Sn		35	34				-	
		Ze	S ⁺		35	46					
		Z	F		54						

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		s	μ	μ	
		Focşani									
		Ze	Pn	08	34	10					
		Ze	P ^x		34	25					
		Ze1	Pg		34	38		+			
		Ze1	Sn		35	25		+			
		Ze1	S ^x		35	49		-			
		Iaşi									
		Ze1	Pn	08	34	24		+			
		Ze	P ^x		34	42		+			
		Ze	Pg		35	05		+			
		Ee	Sn		35	54					
		Ee	S ^x		36	26					
				-	-	-					
61	20	Vrîncioaia									
		Ze	P	01	47	36		+		Very weak	
		Iaşi									
		Ze	P	01	47	27		+			
				-	-	-					
62	20	Bucharest									
		Ze1	P	11	45	24		+		Weak	
		Z	ei		45	32		+		Andaman Isl.	
		Z	F		48					Region	
										$\psi=11^{\circ}4'N$	
										$\lambda=93^{\circ}0'E$	
										$H=113425.9$	
										(USCGS)	
		Vrîncioaia									
		Ze1	P	11	47	04		-		Uncertain	
				-	-	-				corection	
63	21	Bucharest									
		Z	e	00	12	07				Weak	
		Z	ei		12	24		+		Near	
		Z	ci		12	55		-			
		Vrîncioaia									
		Ze	Pn	00	11	30					
		Z	ei		12	03		-			
		Z	ei		12	47		+			
		Z	ei		12	57		+			
				-	-	-					
64	21	Bucharest									
		Ze	P	02	43	34					
		Ze1	(PP)		44	22		+			
			ei		45	25					
		Nei	(S)		52	52			+	+	
		Z	(PS)		54	11			+	-	
			(SS)		55	11				-	
			M		27	58	22.0			107.60	
		N	M		28	07	21.0		58.31		

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		s	μ	μ	
		Campulung									
		Zc	P	02	43	37	-				
		Ec	(PP)		44	30					
		Vrâncioaia									
		Zc	P	02	42	51					
		Zc	PP		44	28	+				
		Focşani									
		Zc	P	02	43	48					
		Zc	(PP)		44	33					
		Iaşi									
		Zc	(P)	02	43	56					
		Nc	(PP)		44	44					
		E	c		45	07					
		N	:		45	08					

65	21	Vrâncioaia									
		Zci	P	02	55	16				+	
		Z	ci		55	33				+	

66	21	Campulung									
		Z	ei	16	05	27,0	-				
		Zc	Sm		05	33,7				Romania Region of Vrancea Deep?	
		Vrâncioaia									
		Zi	P	16	04	38,4				+	
		Zi Ec	S		04	43,5				-	
		Focşani									
		Zi	P	16	04	31,3				+	
		Zi Ni Ec	S		04	35,8				+	
		Iaşi									
		Zc	P	16	05	05,4					
		Z Ei	S		05	19,0					

67	21	Campulung									
		Zei	P	16	15	09				-	
		Iaşi									
		Zc	P	16	14	53				+	

68	21	Campulung									
		Zc	P	16	24	20				+	
										Weak Distant	

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
		Iași									
		Zc	P	16	24	03	-				
69	21	Iași								Traces	
		Z	e	16	28	13					
70	21	Campulung									
		Z traces		18 ^h	05 ^m	-18 ^h					
		Vrîncioaia									
		Zc	P	18	06	19	+				
		Iași									
		Zc	P	18	06	15	+				
71	21	Iași									
		Zc	P	18	44	54					
		Z	e		45	06	+				
72	22	Campulung									
		Z traces		23 ^h	53 ^m	-23 ^h					
		Vrîncioaia								Very small Kermadec Isl. Region $\phi = 29.9^{\circ}S$ $\lambda = 177.4^{\circ}W$ H= 230858 (U.S.C.G.S.)	
		Zei	P	23	53	58	+				
		Z	ei		54	23	-				
		Iași									
		Zc	P	23	53	55					
		Z	e		54	07	+				
73	22	Bucharest								Very weak	
		Z	ei	07	25	00	+				
		Z	e		25	18					
		Z	ei		25	46	-				
		Campulung									
		Zc	P	07	23	47	-				
		Z	ei		24	36	-				
		Z	ei		24	57	-				
		Vrîncioaia									
		Zc	P	07	23	40					
		Z	ei		24	30	+				
		Z	e		24	43	+				
		Z	e		25	59	+				
		Iași									
		Zc Ne	P	07	23	39	+				
		Z E	e		23	48	+				
		Z	e		24	16	+				

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks						
				G.M.T.				Z	N	E							
				h	m	s		μ	μ	μ							
74	22	Campulung	Ze	P	23	29	25	-			Weak Kermadec Isl. Reg. $\psi = 29.9^{\circ}S$ $\lambda = 177.4^{\circ}W$ $H = 230858$ (U.S.C.G.S.)						
												Z	e	29	46		
			Vrâncioaia	Zei	P	23	29	17	+								
		Z											ei	29	31		
		Iași		Ze	P	23	29	04	-								
			Z										e	29	12		
75	24	Campulung	Ze	P	02	44	05	-			Weak Fiji Isl. Region						
												Z	e	44	22		
			Vrâncioaia	Zei	P	02	43	55	+								
		Z											e	44	00		
		Iași		Ze	P	02	43	53	-								
			Z										e	43	57		
76	24	Campulung	Ze	P	04	28	06	-			Weak Jan Mayen Isl. Region $\psi = 71.9^{\circ}N$ $\lambda = 0.9^{\circ}W$ $H = 042201.2$ (U.S.C.G.S.)						
												Z	e	28	22		
			Vrâncioaia	Ze	P	04	28	05	+								
		Z											e	28	27		
		Iași	Ze	P	04	27	56	-									
												Z	e	28	13		
77	24	Campulung	Ze	P	08	45	08	-			Weak Sakhalin Isl. $\psi = 54.5^{\circ}N$ $\lambda = 142.5^{\circ}W$ $H = 083413.5$ (U.S.C.G.S.)						

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks				
				G.M.T.				Z	N	E					
				h	m	s	s	μ	μ	μ					
78	24	Bucharest	L	09	17						Very weak Distant				
			F	09	28										

79	24	Bucharest	Ze	P	20	15	01				Leeward Isl. $\phi = 17.4^{\circ}N$ $\lambda = 61.1^{\circ}W$ $H = 200310.9$ (U.S.C.G.S.) $\Delta = 78^{\circ}$				
			Nei	PP		17	53		-						
			Nei Ee	S		24	49		-	+					
			Ee	PS		25	25			+					
			Ne	SS		29	42		+						
			Campulung												
			Ze	P	20	14	54			+					
Z	ei		15	19			-								
Zei	PP		17	47			-								
Vrâncioaia															
Zei	P	20	14	20			+								
Z	ei		14	33			-								
Focşani															
Ze	P	20	15	01											
Z	e		15	41											
Ze	PP		17	59											
Iaşi															
Z	P	20	15	01											
	N E		15	05											
Z	e		16	00			+								
	Ne Ee		17	53			-								

80	24	Bucharest	Zeñ Nei	P	21	44	22				Weak Leeward Isl. $\phi = 17.4^{\circ}N$ $\lambda = 61.3^{\circ}E$ $H = 213231.3$ (U.S.C.G.S.)				
			Campulung												
			Zei	P	21	44	15			+					
			Z	ei		44	39			+					
			Z	ei		45	18			-					
			Focşani												
			Zei	P	21	44	19			+					
			Z	e		44	36								
			Iaşi												
			Zei	P	21	44	23			-					
			Z	e		44	35								
				E		45	25								
				N		45	40			+					

No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s	s	μ	μ	μ	
Campulung											
			P	09	35	45					
			e		36	26					
Vrîncioaia											
			P	09	36	09					
			ei		36	41				+	
			ei		37	02				+	
		Focşani	traces	09 ^h 35 ^m -09 ^h 39 ^m							
Iaşi											
			e	09	36	11					
		E	e		36	23					
			ei		36	43				-	

86	27	Campulung									
			PKP	16	42	39					
			ei		43	13				+	
			ei		43	19				+	
			ei		43	46				-	
			e		44	31				-	
Vrîncioaia											
			PKP	16	42	41				+	
			i		42	55				+	
			ei		43	09				+	
Focşani											
			PKP	16	42	41					
			ei		42	47				+	
			ei		43	12				+	
Iaşi											
			PKP	16	42	38				-	
		Ne Ee	PKP		42	42					
			ei		42	58				+	
			ei		43	22				+	
		N E	e		43	23					

87	27	Bucharest									
		N E	Traces	17 ^h 39 ^m -18 ^h 33 ^m							

88	27	Campulung									
			e	19	48	24					Traces

89	28	Bucharest									
		Z N E	L	07 ^h 07 ^m -07 ^h 39 ^m							Traces

Weak
Tonga Isl.
Region
 $\phi=44.5^{\circ}N$
 $\lambda=129.7^{\circ}W$
 $H=104040.6$
(U.S.C.G.S.)

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.				Z	N	E	
				h	m	s		μ	μ	μ	
90	29	Bucharest	e	19	51	17				Weak Albania $\gamma=41.5^{\circ}N$ $\lambda=20.4^{\circ}E$ $H=194923.6$ (U.S.C.G.S.) $\Delta=4.7^{\circ}$	
		Z	Sn		51	24					
		Ne	Sn		51	26					
		Ze	S'		51	42					
		Ze	S _A		51	54					
		Campulung	Pn	19	50	39					
		Ze	PG		51	02					
		Ze	Sn		51	43					
		Zei	SG		52	14					
		Vrîncioaia	Pn	19	50	59					
		Zei	P*		51	15					
		Zi	PG		51	30					
		Zei	Sn		52	16					
		Zei	S'		52	38					
		Zei	SG		52	55					
		Focşani	Pn	19	50	59					
		Ze	P*		51	14					
		Ze	PG		51	31					
		Ze	Pn		52	15					
		Ze	Sn		52	58					
		Iaşi	Pn	19	51	15					
		Ze	Sn		53	09					
		Ne	SG		54	14					
		Ee									
		- - - - -									
91	29	Vrîncioaia	P	22	42	59				Weak BUC.FOC.- Strong mic.ag. Tonga Isl. Region $\gamma=22.7^{\circ}S$ $\lambda=175.2^{\circ}W$ $H=222900$ (U.S.C.G.S.)	
		Ze	ei		43	27					
		Z									
		Iaşi	P	22	42	54					
		Ze	e		42	59					
- - - - -											
92	29	Bucharest	P	20	49	20				Weak BUC.FOC.- Strong mic.ag.	
		Ze									

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No.	Date	Comp.	Phase	Time			Per.	Amplitudes			Remarks
				G.M.T.	h	m		s	Z	N	
				h	m	s	s	μ	μ	μ	
Vrâncioaia											
		Zei	Pn	04	21	51		+			
		Zei	Sn		23	49		-			
		Zei	S*		24	35		-			
		Zei	Sg		25	03		+			
Focşani											
		Zei	Pn	04	21	56		-			
		Ze	Sn		23	59					
		Zei	Sg		24	19		+			
Iaşi											
		Zei	Pn	04	22	00		+			
			e		23	16					-
			e		23	52					-
		N	e		24	19					
		N	e		25	05					
		Ne	Sg		25	25			+		
		Ee	Sg		25	26					+

96	30	Bucharest									
		Z	E	e	12	21	45		-		Weak
			N	ei		22	16			+	
			N	e		22	30				
Campulung											
		Z		e	12	20	50				
		Z		e		21	55		+		
		Z		e		22	10		-		
Vrâncioaia											
		Ze	P		12	21	02		+		
		Z		e		21	26				
		Z		ei		22	48		+		

97	30	Bucharest									
		Z		e	21	29	30				Weak
		Z		e		30	08				Near
			E	e		30	26				
		Z		ei		30	42		-		
			N	ei		31	00				
			N	ei		31	21			+	
Campulung											
		Ze	Pn		21	28	56				
		Z		e		29	35		+		
		Z		e		30	23		-		
Vrâncioaia											
		Zi	Pn		21	28	54		+		
		Z		ei		29	12		+		
		Z		e		30	06		+		

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No.	Date	Comp.	Phase	Time G.M.T. h m s	Per. s	Amplitudes			Remarks
						Z μ	N μ	E μ	
		Focşani							
		Z	e	21 29 22					
		Z	e	31 22					

98	31	Bucharest							
		Z	e	20 05 32					Weak Solomon Isl.
		Z	e	06 18					
		Campulung							$\gamma = 7^{\circ} 08'$ $\lambda = 154.9^{\circ} E$ $H = 200324$ (U.S.C.G.S.)
		Z	e	20 04 44					
		Z	e	05 46			-		
		Z	ei	06 08			+		
		Vrîncioaia							
		Z	e	20 04 14					
		Z	e	05 07					
		Z	e	06 35					
		Z	e	07 29			-		

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