

H E L S I N K I U N I V E R S I T Y  
S e i s m o l o g i c a l S t a t i o n

Bulletin No. 2

January - Mars 1947

Jan.	03	eS	02-36-39	P indiscernible due to microseisms.
		eSS	02-41-40	
		eSSS	02-44-26	
		eL	02-50.5	
Jan.	03	eL	09.48	
Jan.	05	eL	19-05.5	
Jan.	09	eL	13-50	
Jan.	15	eL	19-12	
Jan.	24	eS	17-08-26	
		e	17-16-36	
		eL	17-23	
Jan.	25	e	04-16-21	
		eL	04-32	
Jan.	26	eP	10-19-33	c Distance = 82.6 + corr. Depth about 160 km.
		epP	10-20-12	
		ePP	10-23-04	
		eS	10-29-44	
		e	10-30-05	
		ess	10-30-55	
		eSS	10-36-08	
		esSS	10-37-14	
Jan.	29	i	08-41-10.8	Deep!
		e	08-42-15	
		e	08-45-11	
Feb.	07	eL	09-39	
Feb.	09	eL	19-29	
Feb.	10	eP	04-11-11 ?	Distance = 44. <sup>0</sup> 7 ?
		eS	04-17-43	
		c	04-21-23	
		eL	04-24.5	
Feb.	10	eL	17-22	
Feb.	12	e	20-48-12	
		e	20-48-53	
		eL	20-51	

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Feb.	18	eP iS e e e	13-42-36 13-49-46.9 13-50-22 13-52-32 13-54-31	d Distance = 50.7 + corr. Deep!
Feb.	21	eL	22-37	
Feb.	24	ePP e eS e e eL	17-50-02 17-52-08 17-56-10 17-59-14 18-04-44 18-21	
Mars	02	ePP eSKS eSKS eSKKS eS? ePS eSS e e eL	19-28-25 19-34-22 19-34-56 19-35-12 19-35-46 19-37-48 19-43-29 19-47-52 19-50-59 19-56	Distance about 110°
Mars	08	eL	15-32	
Mars	10	eL	02-30	
Mars	11	eL	17-26	
Mars	16	eL	10-12	
Mars	17	eP eS eScS eSS eL	08-29-00 08-36-39 08-38-55 08-39-35 08-40.5	e? Distance = 54.0°
Mars	21	eP eS eL	23-05-26 23-10-04 23-15	a Distance = 26.9°
Mars	25	ePKP ePKS ePP eSKS ePS eSKSP ePES eScSPKP e eSS eSS e eL	20-52-26 20-55-27 20-56-47 20-59-51 21-03-11 21-06-50 21-09-07 21-11-11 21-14-05 21-15-45 21-25-55 21-31-07 21-49	Distance about 155°
Mars	27	eL	17.45	

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Bulletin No. 3

April - May 1947



April 02	eP	05-53-14	Distance about 102°
	e	05-57-09	
	ePP	05-57-26	
	e	05-57-48	
	ePPP	05-59-47	
	ePKS	06-01-10	
	eSKS	06-03-45	
	eSKKS	06-04-24	
	eS	06-04-48	
	ePS	06-06-33	
	ePPS	06-07-12	
	eSS	06-12-02	
	ePKKS	06-13-17	
	eSKKS	06-17-04	
	e	06-18-48	
	e	06-21-26	
	eL	06-24	

April 02	eP	20-56-37	c Distance = 73.4°
	eS	21-05-57	
	e	21-11-00	
	eL	21-25	

April 04	eL	01-45	
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April 10	eP	16-10-16	d? Distance = 81.4°
	eS	16-20-20	
	ePS	16-21-23	
	eSS	16-25-28	
	e	16-29-00	
	eL	16-32	

The seismographs was not in operation from 16 o'clock to 22 o'clock, April 11.

April 12	1P	14-09-48.0	d Distance = 20.8°
	eS	14-13-36	
	eL	14-16	

April 12	eL	16-21	
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April 14	e	04-36.2	
	eL	04-48	

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April	14	iP ePP ePPP ePcS eS eSS eSSS eL	07-26-28.0 07-28-15 07-30-28 07-31-02 07-35-14 07-40-01 07-42-21 07-46	c Distance = 67°0
April	14	eL?	10-02	
April	16	eL	13-34	
April	19	eS eL	17-45-11 17-48.5	
April	19	eP eS eL	20-34.4 20-38-22 22-41.0	
April	24	eP ePcP eS ePS eSS eL	19-46-28 19-46-51 19-55-35 19-55-57 19-59-55 20-07	c Distance = 71°0
April	26	eL	13-34	
April	26	eL	18-13	
April	29	eL	06-19	
May	02	eP eS eL	02-24-45 02-38-25 02-51	c Distance = 65°8
May	03	eL	10-12	
May	04	eL	22-59	
May	06	ePP ePPP ePPPP eSKS eSKKS ePS ePPS eSS eSSS eL	20-49-57 20-52-22 20-54-00 20-55-53 20-56-55 20-59-27 21-00-23 21-05-22 21-03-35 21-17	Distance about 113°
May	08	eP eS eL	18-54-51 19-03-02 19-15	Distance = 60°1

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May	09	eL	14-05	
May	09	eL	22-46	
May	10	eL	00-36	
May	11	eP eS eL	06-37-15 06-41-12 06-44	e Distance = 20.7°
May	11	e e eL	19-03-51 19-25-03 19-30	
May	11	eL	23-05	
May	17	ePKP ePKS eSKKS eSKSP eSKKS eSKSP e e e e eL	07-26-34 07-29-57 07-37-06 07-40-51 07-41-31 07-45-31 07-55-06 08-00-25 08-02-16 08-06-51 08-11	Distance about 150°
May	24	eP eS eSS eL	00-19-28 00-26-42 00-30-26 00-38	d Distance = 51.2°
May	25	eL	23-47	
May	26	eL	11-42	
May	27	ePKP ePP ePPP ePKS eSKS ePS ePPS eSS	03-51-54 03-52-58 03-53-35 03-55-47 03-59-06 04-01-44 04-03-00 04-07-30	Distance about 103° Deep!
May	27	eP e ePKP ePP ePPP ePKS eSKS eSKKS eSS ePKKS eL	06-12-52 06-14-13 06-16-09 06-17-05 06-19-11 06-20-31 06-23-38 06-24-08 06-31-33 06-32-35 06-44	Distance about 103°

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May	26	eL	16-05	
June	01	eP	11-23-46	c Distance = 23 <sup>o</sup> 2
		e	11-24-03	
		eS	11-27-54	
		e	11-28-08	
		eSS	11-29-57	
		eL	11-30.5	
June	01	e	19-15	
June	01	e	22-37	
June	02	eP	06-47-24	c Distance = 34 <sup>o</sup> 6
		eS	06-52-54	
		eL	06-58.5	
June	04	iP	00-34-26.5	c Distance = 19 <sup>o</sup> 9
		e	00-34-41	
		eS	00-38-07	
		e	00-38-16	
		eSS	00-39-30	
		eL	00-40.5	
June	07	eP	19-00-25	Distance about 85 <sup>o</sup>
		eSKS	19-10-49	
		ePS	19-11-32	
		ePPS	19-11-47	
		e	19-13-59	
		eSS	19-17-02	
		eL	19-26	
June	08	eL	21-14	
June	10	e	11-30-30	
		e	11-35-06	
		e	11-36-20	
		e	11-37-39	
		eL	11-54	
June	10	eL	20-01	
June	12	eP	09-15-47	Distance = 93 <sup>o</sup> 4
		ePP	09-19-40	
		eSKS	09-26-18	
		eS	09-26-53	
		ePS	09-28-09	
		ePPS	09-28-37	
		e	09-32-04	
		eSS	09-33-08	
		eL	09-44	

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June	13	eP	20-37-32	Distance = 86°1
		e	20-37-49	
		ePP	20-40-49	
		e	20-42-12	
		ePPP	20-42-43	
		eSKS	20-47-52	
		eS	20-48-15	
		ePS	20-48-37	
		ePPS	20-49-02	
		e	20-51-57	
		eSS	20-53-13	
		e	21-00-36	
		eL	21-05	

June	14	eP	00-03-07	Distance = 85°4
		eSKS	00-13-21	
		eS	00-13-35	
		eSS	00-19-15	
		eL	00-28	

June	14	e	16-53-07
		e	17-06.1
		eL	17-15

June	16	e	00-34-35
		eL	00-47

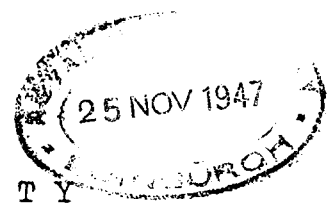
June	19	e	02-37-24
		eL	02-58

June	19	eP	07-47-14	Distance = 84°5
		eSKS	07-37-30	
		eS	07-37-37	
		ePS	07-57-50	
		eSS	08-07-47	
		eL	08-15	

June	20	eL	23-28
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July 1947

Eijo Vesanen.



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Address:

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Bulletin No. 4  
July - September 1947

July	07	eP	22-40-47	c	Distance = 23 <sup>o</sup> 6
		e	22-40-52		
		e	22-41-05		
		e	22-41-12		
		eS	22-44-58		
		eL	22-49		
July	09	eL	18-40		
July	10	eP	10-27-25		Distance = 41 <sup>o</sup> 7
		ePP	10-29-08		
		eS	10-33-39		
		eSS	10-36-43		
		eL	10-41		
July	10	eL	11-11		
July	10	eL	16-58		
July	12	e(S)	02-19-30		
		eL	02-33		
July	12	e	12-52-35		
		e	12-53-10		
		e	13-10-09		
July	16	eS	19-41-19		
		e	19-49-41		
		eL	20-00		
July	17	eL	05-32		
July	17	eL	10-06		
July	20	eL	11-56		
July	21	eP	09-41-34		Distance = 21 <sup>o</sup> 5
		eS	09-45-28		
		eL	09-48		



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July	23	e	17-39-14	
		e	17-40-50	
		e	17-53-54	
		eL	18-12	
July	24	eL	09-40	
July	24	e(PP)	11-02-37	
July	24	e(PP)	11-23-49	
July	24	ePP	12-38-36	Distance = 129°
		i	12-39-33	
		ePPP	12-41-00	
		eSKS	12-43-20	
		eSKKS	12-44-56	
		e	12-47-33	
		ePPP	12-53-00	
		eSS	12-55-53	
		eL	13-14	
July	26	e	12-15-51	
		eL	12-34	
July	27	iP	20-14-13.5	d Distance = 23°2
		eS	20-18-21	
		eL	20-21	
July	28	e(P)	03-58-38	
		eL	04-23	
July	29	iP	13-52-55.0	c Distance = 54°0
		ePcP	13-54-26	
		ePP	13-55-00	
		ePPP	13-56-06	
		eS	14-00-29	
		iPS	14-00-37	
		e	14-02-06	
		e	14-02-44	
		e	14-06-24	
		e	14-07-03	
		eL	14-11	
July	31	iP	07-59-21.8	d Distance = 20°3
		eS	08-03-05	
July	31	eL	10-28	
Aug.	04	eL	18-22	
Aug.	05	iP	14-42-18.6	c Distance = 44°3
		e	14-44-03	
		eS	14-48-48	
		e	14-51-15	
		e	14-52-00	
		e	14-53-42	
		eL	14-54	
		e	14-55-34	
		e	14-56-30	

1947					
Aug.	06	eP eSKS eS e	05-59-48 06-09-26 06-10-03 06-12-11		Distance = 83.2 + corr. Deep.
Aug.	06	eL	09-59		
Aug.	06	eL	10-32		
Aug.	07	eP eS eSS eL	00-52-21 01-02-14 01-07-00 01-16		Distance = 79.6
Aug.	07	eL	12-42		
Aug.	09	eL	03-21		
Aug.	15	iP eS eL	04-15-53.3 04-19-50 04-22	c	Distance = 21.8
Aug.	15	eP eS eL	05-03-30 05-07-34 05-10	c	Distance = 22.7
Aug.	15	eL	10-00		
Aug.	15	eL	06-11		
Aug.	17	e eL	09-25-30 09-43		
Aug.	17	eP eS eL	15-08-18 15-12-28 15-15	c	Distance = 23.5
Aug.	19	eL	20-31		
Aug.	22	eL	03-35		
Aug.	23	eL	05-03		
Aug.	24	eP ePP iS eSS eL	12-44-32 12-46-07 12-50-28.0 12-53-06 12-58	c	Distance = 38.7
Aug.	27	ePKP ePKS eSKKS ePPS eSS eL	13-57-41 14-01-11 14-09-00 14-13-50 14-21-00 14-46		Distance = 153.0

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Aug.	28	eP	07-00-50	c	Distance = 62°5
		ePcP	07-01-15		
		ePPP	07-04-52		
		eS	07-09-13		
		ePPS	07-09-49		
		eSS	07-13-38		
		eL	07-18		
Aug.	28	eP	14-39-48	c	Distance = 60°9
		eS	14-48-03		
		ePPS	14-48-34		
		eSS	14-52-31		
		eL	14-57		
Aug.	28	eL	20-50		
Aug.	29	eL	21.44		
Aug.	30	iP	22-26-56.7	d	Distance = 24°2
		iS	22-31-13.1		
		eL	22-34		
Sept.	01	eL	06-55		
Sept.	02	ePP	14-53-28		Deep.
		e	14-54-18		
		e	14-54-44		
		e	14-54-56		
		e	14-55-43		
		e	14-56-11		
		eSKS	14-57-32		
		eSKKS	15-02-36		
		ePS	15-04-44		
		ePPS	15-07-08		
		eSS	15-12-00		
		e	15-13-33		
Sept.	03	eL	20-05		
Sept.	10	eL	00-28		
Sept.	13	eP	15-16-19		Distance = 22°8
		eS	15-20-24		
		eL	15-24		
Sept.	20	eL	19-20		
Sept.	23	eP	12-35-02	c	Distance = 33°8
		e	12-35-48		
		ePP	12-36-18		
		eS	12-40-27		
		eSS	12-42-20		
		eSSS	12-43-00		
		eL	12-44		
		eScS	12-46-08		
Sept.	26	e	00-02-08		
		e	00-04-58		
		eL	00-14		

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Sept.	26	e	03-18-36		
		e	03-19-57		
		e	03-22-00		
		eL	03-24		
Sept.	26	iP	16-13-17.1	c	Distance = 72.3 + corr.
		iPcP	16-13-47		Depth 160-200 km.
		ipP	16-14-05		
		i	16-14-16		
		i	16-14-47		
		iPP	16-15-57		
		iPPP	16-17-48		
		i	16-18-13		
		i	16-18-38		
		iS	16-22-31.1		
		ipS	16-23-21		
		iPKKP	16-31-33		
		eL	16-34.5		

October 1947.

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Bulletin No. 5

October - December 1947

Oct.	01	e(SKS) e(SS) eL	12-57-54 13-11-46 13-35	
Oct.	03	eP e eS eSS e eL e	06-21.5 06-22-58 06-27-40 06-31-00 06-33-58 06-37 06-40-41	Deep
Oct.	03	iSKS eS ePS e e	23-55-37.3 23-56-00 23-57-16 24-21-00 24-25-17	Deeper than normal.
Oct.	05	eSKS ePPS ePKKP ePKKS eSKKS e eL	19-05-35 19-08-44 19-11-24 19-15-20 19-18-20 19-24-19 19-27	
Oct.	06	eL	15-37	
Oct.	06	iP i iPP iPPP i i i iS i iSS iSSS eL	20-00-44.4 20-01-04 20-01-17 20-01-31 20-02-02 20-02-20 20-02-56 20-04-54 20-05-07 20-05-38 20-06-09 20-07.5	c Distance = 23°4
Oct.	09	eL	16-51	
Oct.	10	e e e e eL	07-51-28 07-52-35 07-55-45 07-58-50 08-03	

1947.

Oct.	10	e	14-24-45	
		e	14-26-10	
		e	14-27-55	
		e	14-35-00	
		e	14-39-05	
		e	14-58-00	
		eL	15-05	
Oct.	14	eL	03-29	
Oct.	14	eL	22-51	
Oct.	16	iP	02-19-23.9	c Distance = 55°7
		ePcP	02-20-30	
		ePP	02-21-33	
		e	02-21-53	
		ePPP	02-23-23	
		e	02-23-41	
		e	02-25-00	
		iS	02-27-10	
		e	02-27-47	
		e	02-28-37	
		eScS	02-29-11	
		eSS	02-31-10	
		eSSS	02-33-25	
		eL	02-34.5	
Oct.	17	eL	09-51	
Oct.	20	eP	01-52-49	c Distance = 55°7
		eS	02-00-35	
		eSS	02-04-23	
		eL	02-07.5	
Oct.	21	eL	10-21	
Oct.	22	eL	18-21	
Oct.	24	eL	18-05	
Oct.	27	eL	10-40	
Nov.	01	iP	06-12-31.0	c Distance (SS-P) = 85°7
		e	06-12-47	
		e	06-13-12	
		ePP	06-15-32	
		e	06-15-46	
		eSKS	06-22-52	
		e	06-23-28	
		eSS	06-28-44	
		eL	06-42	
Nov.	01	eP	15-13-14	c
		e	15-16-27	
		ePP	15-17-16	
		ePPP	15-19-31	
		eSKS	15-23-40	
		e	15-38-07	
		e	15-41-15	
		eL	15-42	

1947.

Nov.	03	e	20-21-00	
		e	20-21-36	
		iL	20-22-00	
Nov.	04	eP	00-19-42	c Distance = 63 <sup>o</sup> .9
		ePcP	00-20-28	
		ePPP	00-23-28	
		eS	00-28-12	
		eScS	00-29-38	
		eSS	00-32-12	
		e	00-34-36	
		eL	00-39	
Nov.	06	eL	16-27	
Nov.	07	eL	23-54	
Nov.	08	eL	02-27	
Nov.	08	eL	04-38	
Nov.	08	eL	16-47	
Nov.	09	ePKP	05-17-10	Distance (SS-PKP) = 136 <sup>o</sup>
		ePKS	05-20-40	
		eSKKS	05-26-36	
		ePS	05-30-21	
		eSS	05-37-50	
		ePKPSKS	05-42-50	
		e	05-45-42	
		eL	05-56	
Nov.	09	eL	16-58	
Nov.	10	eL	04-15	
Nov.	12	e	11-02-07	
		eL	11-25	
Nov.	12	e	16-41-47	
		e	16-47-36	
		e	16-48-26	
		e	16-50-08	
		e	16-57-06	
		e	16-58-58	
		e	17-03-36	
		e	17-04-09	
Nov.	13	eL	03-45	
Nov.	14	eL	05-53	
Nov.	14	eP	11-00-46?	c? Distance = 61 <sup>o</sup> .1 + corr.
		epP	11-01-35	Depth about 200 km.
		eS	11-09-02	
		epS	11-10-11	
		e	11-16-18	

1947.			
Nov.	15	eL	21-10
Nov.	15	eL	23-44
Nov.	16	eL	02-21
Nov.	17	eL	10-22
Nov.	17	eL	11-53
Nov.	20	e eL	08-38-47 08-53
Nov.	21	eL	04-36
Nov.	21	eL	20-07
Nov.	23	eL	10-16
Nov.	25	eL	19-10
Dec.	02	e eL	23-29-23 23-43
Dec.	04	eL	05-06
Dec.	04	eL	10-52
Dec.	09	eL	09-55
Dec.	09	eL	17-01
Dec.	09	eL	23-28
Dec.	09	eP epP iS epS e e eL	23-45-15 23-45-39 23-49-33.0 23-50-06 23-50-26 23-50-53 23-51.5
Dec.	10	eL	04-56
Dec.	15	eL	13-32
Dec.	15	ePKP ePKP e ePKS ePP ePP eSKS ePcPPKP ePPP ePPP ePcSPKP eSKKS	19-40-38 19-42-21 19-42-42 19-44-14 19-46-07 19-46-34 19-48-06 19-49-22 19-50-41 19-51-08 19-52-28 19-53-09

Distance = 24.5° + corr.  
Depth about 120 km.

Distance (SS-PKP) = 177°

continued



1947.				
Dec.	15	e	19-53-25	continued
		eSKKKS	19-54-37	
		eSKKKS	19-55-03	
		e	19-55-35	
		e	19-58-48	
		ePPS	20-00-09	
		e	20-02-00	
		e	20-03-20	
		e	20-06-30	
		eSS	20-07-46	
		e	20-15-30	
		eL	20-40	
Dec.	16	e	21-10-27	
		e	21-14-22	
		eL	21-32	
Dec.	19	eL	03-05	
Dec.	19	e	04-30-06	
		eL	04-55	
Dec.	19	eL	17-23	
Dec.	19	eL	17-42	
Dec.	24	eL	06-35	
Dec.	26	eL	18-02	
Dec.	31	eL	04-09	
Dec.	31	e	04-41-31	
		e	04-42-16	
		e	04-44-03	
		e	04-45-36	
		e	04-47-05	
		e	04-48-11	
		e	04-52-43	
		e	04-56-18	
		e	05-05-40	
		e	05-11-20	
		e	05-20-39	
		e	05-23-38	
		e	05-25-30	
		e	05-34-13	
		e	05-41-33	
		e	05-51-02	
		e	05-55-25	
Dec.	31	e	15-29-28	
		eL	16-08	

January 1948  
Eijo Vesanen.