

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

X Y Z

None.

PULSATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
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pc 4:

1	0420	1745	B	45-150	12
4	0045	1200	B	45-150	10
6	0410	1200	B	45-150	15
7	0600	0940	B	45-150	25
9	0215	1110	B	45-150	12
10	0345	1215	C	45-150	8
12	0600	1600	B	45-150	6
22	0355	1910	B	45-150	12
24	0530	1440	C	45-150	6
26	0615	1100	C	45-150	6
27	0445	1640	B	45-150	15
28	0405	1925	B	45-150	15
30	0300	1315	C	45-150	8
31	0400	1320	B	45-150	10

pc 5:

3	0245	1845	B	150-360	20
5	0215	1735	B	150-360	20
6	1200	2200	B	150-360	15
7	1200	2200	B	150-360	20
8	0410	1515	B	150-360	20
11	0345	1200	B	150-360	15
15	0305	1145	C	150-360	10
16	0140	1200	C	150-360	10
21	0115	1420	B	150-360	10

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X Y Z

NONE.

PULSATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
-----	-------	-----	------	--------	-----------------

pc 4:

16	0600	1345	C	45-150	6
17	0425	1055	B	45-150	12
23	0205	1530	B	45-150	8
26	0100	2210	B	45-150	10
28	0300	1045	B	45-150	7

pc 5:

1	0320	1805	B	150-360	18
2	0400	1800	A	150-360	70
3	0210	1650	B	150-360	35
4	0300	1215	C	150-360	15
6	0225	1015	C	150-360	15
7	0430	1345	C	150-360	15
8	0240	1220	C	150-360	12
15	0235	1120	B	150-360	12
18	0335	1710	B	150-360	15
21	0355	0945	C	150-360	12
24	0535	1912	B	150-360	25
25	0050	1515	B	150-360	15

SPECIAL GEOMAGNETIC EVENTS
 Normal magnetograms

Sudden commencements (SC):

		X	Y	Z
17 Mar 04:45	ssc* B			
	45.2 ±.2	-16	+74	+12
	45.7 ±.2	+147	-202	-47
31 Mar 08:32	ssc* B			
	32.2 ±.2	+18	-11	-1
	32.7 ±.2	-35	+19	+3

PULSATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
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pc 4:

1	1545	1945	B	45-150	12
3	0250	1520	B	45-150	8
4	0435	1205	C	45-150	10
5	0530	2210	B	45-150	10
6	0120	1900	B	45-150	12
8	0005	1810	B	45-150	20
10	0205	1330	C	45-150	6
12	0050	1640	B	45-150	10
14	0400	1000	C	45-150	6
23	0200	1400	B	45-150	20
24	0510	1550	B	45-150	12
27	0345	1415	C	45-150	10
29	0315	1150	B	45-150	12

pc 5:

1	0405	1455	B	150-360	35
2	0355	1740	B	150-360	35
7	0250	1450	B	150-360	30
11	0345	1400	B	150-360	15
13	0150	1445	C	150-360	9
16	0220	1805	B	150-360	25
17	0005	1235	B	150-360	25
18	0250	1400	B	150-360	40
19	0300	1630	B	150-360	35
20	0305	1415	B	150-360	25
21	0100	1525	B	150-360	30
22	0010	1510	B	150-360	40
25	0410	2120	B	150-360	30
26	0410	0800	C	150-360	10
28	0535	1815	B	150-360	15

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

X Y Z

NONE.

PULSATATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
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pc 4:

1	0145	1430	B	45-150	10
3	0115	1400	B	45-150	15
5	0200	2355	B	45-150	15
6	0235	1440	C	45-150	12
9	0255	1400	B	45-150	10
14	0310	1500	C	45-150	9
15	0555	1800	B	45-150	15
18	0100	1355	B	45-150	20
19	0040	1920	B	45-150	9
23	0345	1145	C	45-150	7
24	0110	1545	C	45-150	6
25	0040	1120	C	45-150	6
			B	45-150	

pc 5:

2	0245	1720	B	150-360	12
4	0320	1115	B	150-360	15
10	0425	1800	B	150-360	25
11	0500	1630	B	150-360	20
16	0355	1815	B	150-360	40
17	0400	1600	B	150-360	45
21	0130	1845	B	150-360	40
22	0250	1515	B	150-360	20
27	0005	1500	C	150-360	15
29	0150	1300	C	150-360	10

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

		X	Y	Z
06 May 01:41	SSC A			
	41.7 ±.2	+24	+10	+9
	42.7 ±.2	-31	-37	+1

PULSATATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
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pc 4:

7	0240	1130	B	45-150	8
8	0010	1615	B	45-150	12
11	0500	0800	B	45-150	12
12	0210	1155	B	45-150	10
15	0015	1340	B	45-150	20
16	0040	2020	B	45-150	10
18	0412	1245	B	45-150	12
20	0100	1200	B	45-150	15
26	0040	0530	B	45-150	8
31	0315	1900	B	45-150	8

pc 5:

2	0055	1600	B	150-360	15
5	0820	1355	C	150-360	15
6	0545	1320	B	150-360	15
9	1000	1535	C	150-360	12
10	0205	1600	C	150-360	12
13	0705	1550	B	150-360	40
14	0005	1605	B	150-360	35
19	0400	1545	B	150-360	25

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

X Y Z

NONE.

PULSATATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
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pc 4:

12	0645	1745	B	45-150	15
13	0015	1030	B	45-150	8
14	0200	1020	B	45-150	9
15	0300	1645	B	45-150	10
16	0110	1735	B	45-150	9
17	0300	1400	B	45-150	10
21	0415	2200	B	45-150	8
24	0130	2345	B	45-150	12
25	0005	0800	B	45-150	12
26	0145	1800	B	45-150	8
27	0650	1420	C	45-150	8
28	0225	1630	B	45-150	9
29	0420	1400	C	45-150	7

pc 5:

3	0035	2050	B	150-360	9
6	0225	1740	B	150-360	10
7	0240	1920	B	150-360	15
8	0005	0620	B	150-360	18
9	0320	1425	B	150-360	30
10	0205	1610	B	150-360	25
11	0100	1405	B	150-360	15
14	1025	1805	B	150-360	20
22	0200	1445	B	150-360	25
23	1400	2355	B	150-360	15
30	0200	1615	B	150-360	12

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

		X	Y	Z
10 Jul 15:53	ssc* C			
	53.9 ±.2	-9	-2	-2
	55.5 ±.2	+25	-2	+1

PULSATATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
-----	-------	-----	------	--------	-----------------

pc 4:

1	0100	1145	C	45-150	8
6	0410	0915	C	45-150	7
16	0230	1045	C	45-150	7
28	0325	1805	B	45-150	6

pc 5:

4	0030	1605	B	150-360	15
5	0515	1205	B	150-360	20
11	0400	1745	B	150-360	30
12	0305	1510	B	150-360	25
13	0515	1305	B	150-360	20
15	0100	1520	B	150-360	15
20	0500	1530	C	150-360	8
21	0140	1635	A	150-360	15
27	0235	1600	B	150-360	12

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

		X	Y	Z
11 Aug 20:40	ssc* C			
	40.9 ±.2	-5	0	-2
	41.5 ±.2	+9	+2	-4
15 Aug 08:28	SSC A			
	28.7 ±.2	+13	-7	+4
	29.2 ±.2	-28	-15	-10

PULSATATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
-----	-------	-----	------	--------	-----------------

pc 4:

2	0500	1330	B	45-150	8
4	0205	1110	B	45-150	9
7	0145	1340	B	45-150	10
8	0305	1050	B	45-150	12
9	0210	1745	B	45-150	15
10	0055	1405	B	45-150	9
20	0405	1305	B	45-150	8
26	0345	1145	B	45-150	8
28	0605	1305	B	45-150	10
29	0200	1725	B	45-150	10
30	0500	1400	B	45-150	6

pc 5:

1	0200	1255	B	150-360	15
6	0430	1730	B	150-360	15
16	0750	1745	B	150-360	15
17	0115	1630	B	150-360	15
23	0410	1400	B	150-360	15
27	0550	1200	B	150-360	15

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

X Y Z

NONE.

PULSATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
-----	-------	-----	------	--------	-----------------

pc 4:

6	0235	1600	B	45-150	8
7	0430	1400	B	45-150	12
10	1012	1645	B	45-150	12
11	0412	1200	B	45-150	20
12	0150	1400	B	45-150	20
13	0155	1615	B	45-150	10
14	0400	1200	C	45-150	8
15	0355	1725	B	45-150	10
16	0450	1520	B	45-150	12
17	0220	1400	B	45-150	12
19	0200	1135	C	45-150	8
24	0224	0740	C	45-150	8
25	0345	1350	C	45-150	10
29	0520	0930	B	45-150	10

pc 5:

4	0400	1545	B	150-360	15
5	0345	1515	C	150-360	12
8	0345	1600	B	150-360	30
18	0345	1400	C	150-360	8
20	0800	1520	B	150-360	25
21	0400	1710	B	150-360	15
22	0055	1810	A	150-360	35
23	0250	1400	A	150-360	30

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

X Y Z

None.

PULSATATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
-----	-------	-----	------	--------	-----------------

pc 4:

2	0305	1315	C	45-150	12
3	0512	1110	C	45-150	8
10	0015	1540	B	45-150	15
12	0345	1120	B	45-150	10
14	0340	1600	B	45-150	12
15	0515	1540	B	45-150	8
18	0205	0930	B	45-150	10
20	0230	1000	C	45-150	6
21	0500	1655	C	45-150	8
24	0510	1030	C	45-150	8
25	0205	1110	B	45-150	8

pc 5:

5	0410	1400	B	150-360	15
8	0125	1215	A	150-360	70
9	0212	1200	A	150-360	30
13	0215	1530	B	150-360	25
25	1130	1750	C	150-360	12

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

		X	Y	Z
Nov 3 01:35	ssc* C			
	35.3 ±.2	+3	+2	+1
	36.7 ±.2	+6	-9	-7

PULSATATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
-----	-------	-----	------	--------	-----------------

pc 4:

12	0400	1245	B	45-150	10
13	0850	1500	C	45-150	8
14	0300	1400	B	45-150	8
16	0305	1045	C	45-150	8
19	0200	1045	B	45-150	8
20	0215	1500	B	45-150	12
29	0815	1920	B	45-150	8
30	0125	1710	B	45-150	12

pc 5:

3	0135	1630	A	150-360	35
4	0200	2045	A	150-360	40
5	0035	1435	B	150-360	20
9	0225	1445	B	150-360	15
10	0145	1330	B	150-360	30
11	0200	1355	A	150-360	30
18	0745	1705	C	150-360	12
19	1045	1600	C	150-360	15
21	0140	1600	B	150-360	8

SPECIAL GEOMAGNETIC EVENTS
Normal magnetograms

Sudden commencements (SC):

		X	Y	Z
19 Dec 16:16	SSC A			
	16.8 ±.2	-5	+4	+3
	17.2 ±.2	-19	-21	+2
	17.8 ±.2	+66	+26	-11
31 Dec 00:49	SSC A			
	49.3 ±.2	+8	+4	+3
	50.3 ±.2	+11	-12	-4
	51.3 ±.2	+5	-30	-28

PULSATIONS

from normal recordings:

Day	Onset	End	Qual	Period	Amplitude nT
-----	-------	-----	------	--------	-----------------

pc 4:

7	0400	1710	B	45-150	15
8	0215	1800	B	45-150	15
10	0500	1040	B	45-150	15
12	0310	1230	B	45-150	20
13	0400	2130	B	45-150	15
14	1030	1515	C	45-150	15
17	0445	1300	B	45-150	8
22	0215	1200	B	45-150	15
24	0515	1520	B	45-150	15
25	0405	1710	B	45-150	12
26	0130	1930	B	45-150	12
27	0405	1915	B	45-150	12
28	0100	1810	B	45-150	10
31	0325	1225	B	45-150	15

pc 5:

5	0840	1600	C	150-360	12
6	0400	1200	C	150-360	15
11	0055	1400	B	150-360	25
15	0400	1500	B	150-360	18
16	0400	1200	C	150-360	10
20	0200	1310	B	150-360	35
21	0700	1600	B	150-360	15