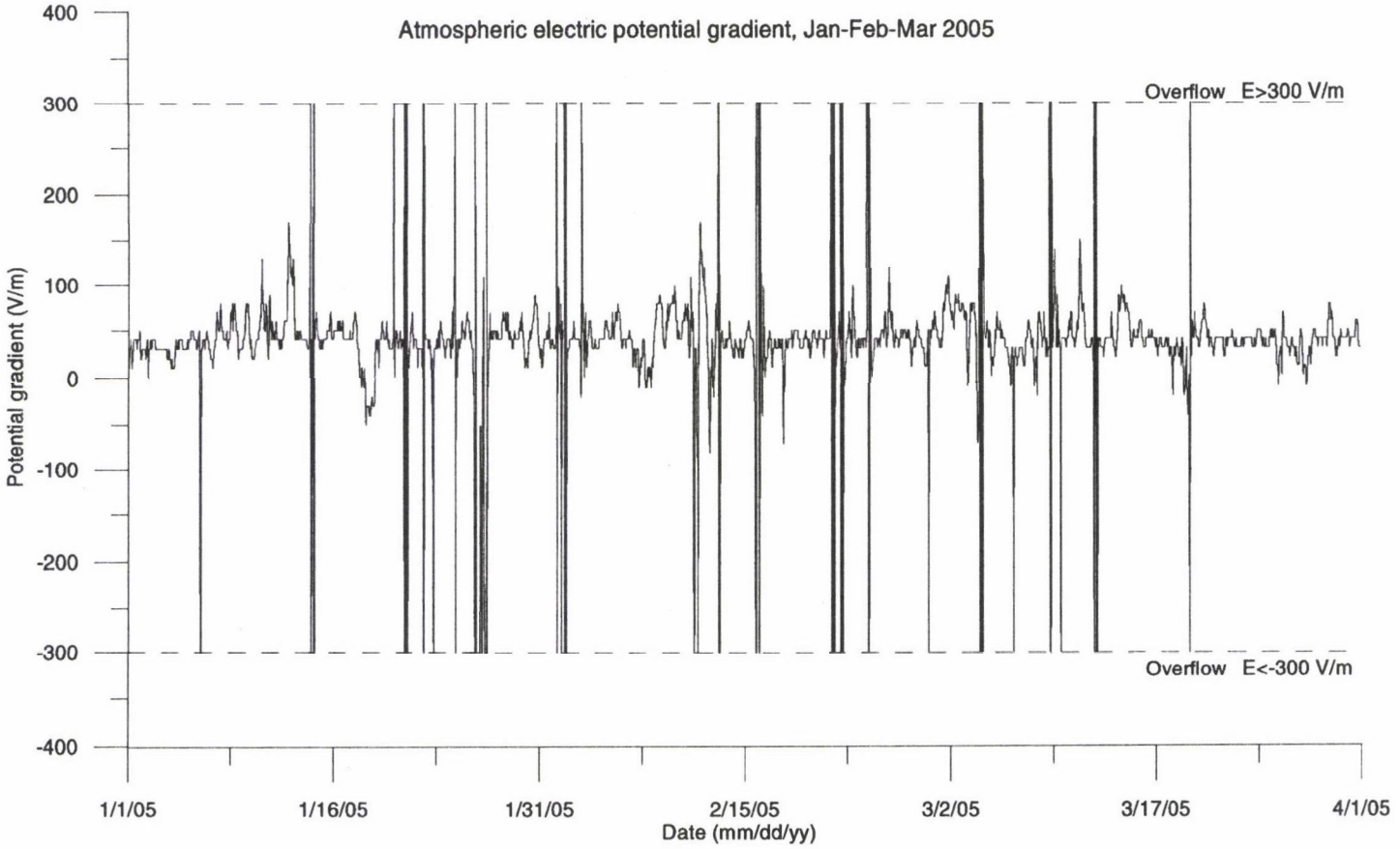
3. ATMOSPHERIC ELECTRICITY AND THE IONOSPHERE

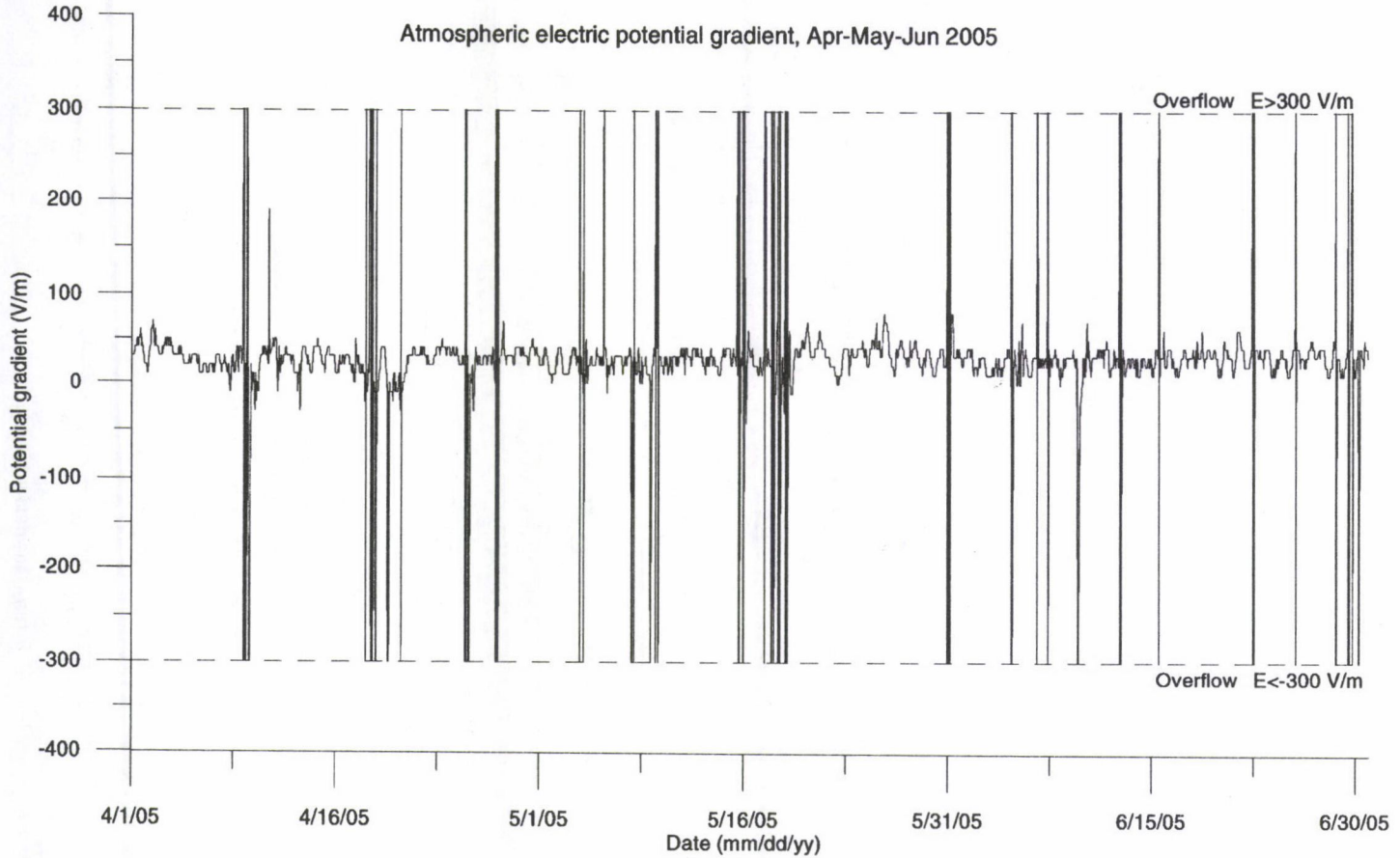
ATMOSPHERIC ELECTRICITY DATA

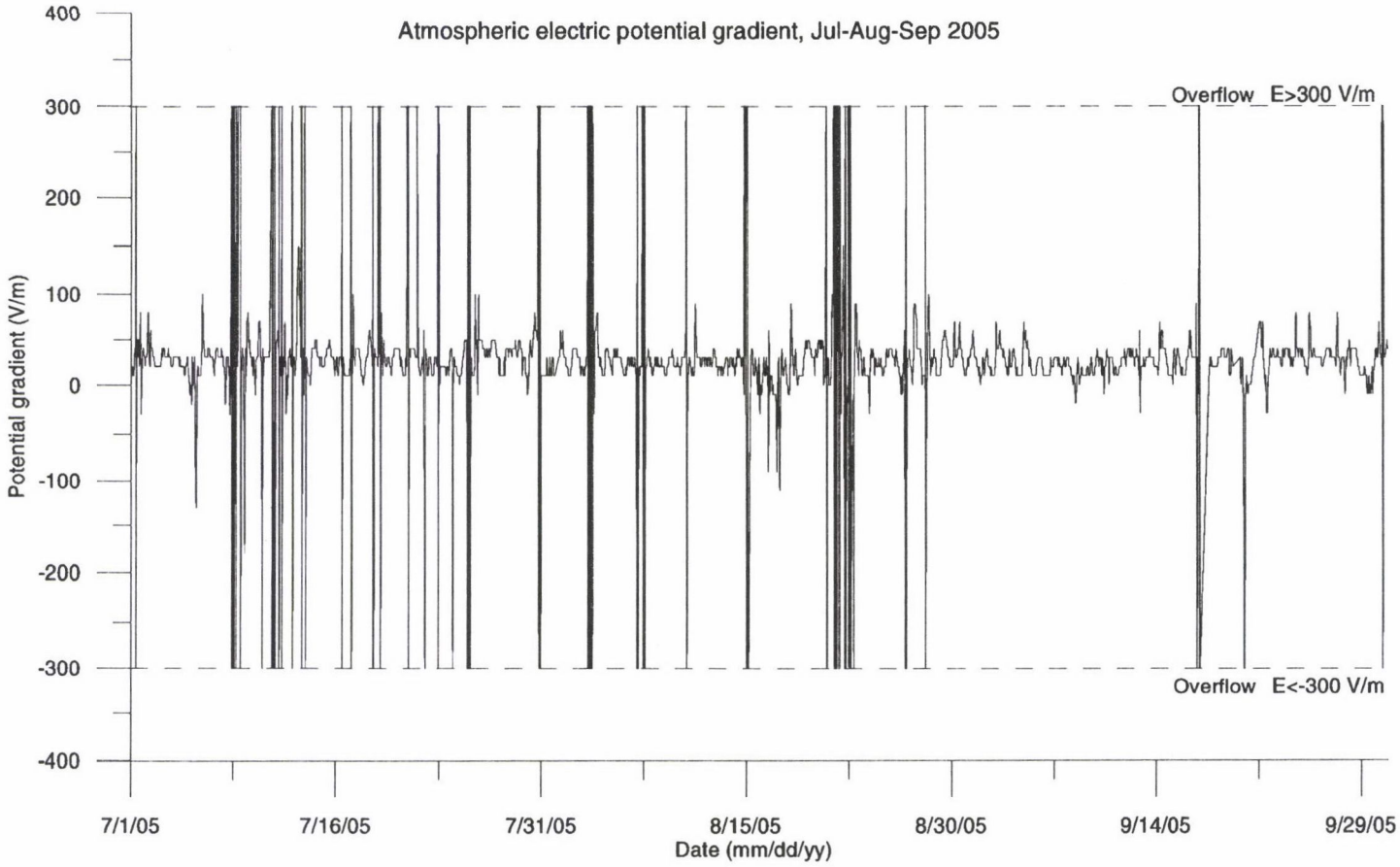
Hourly means of the potential gradient

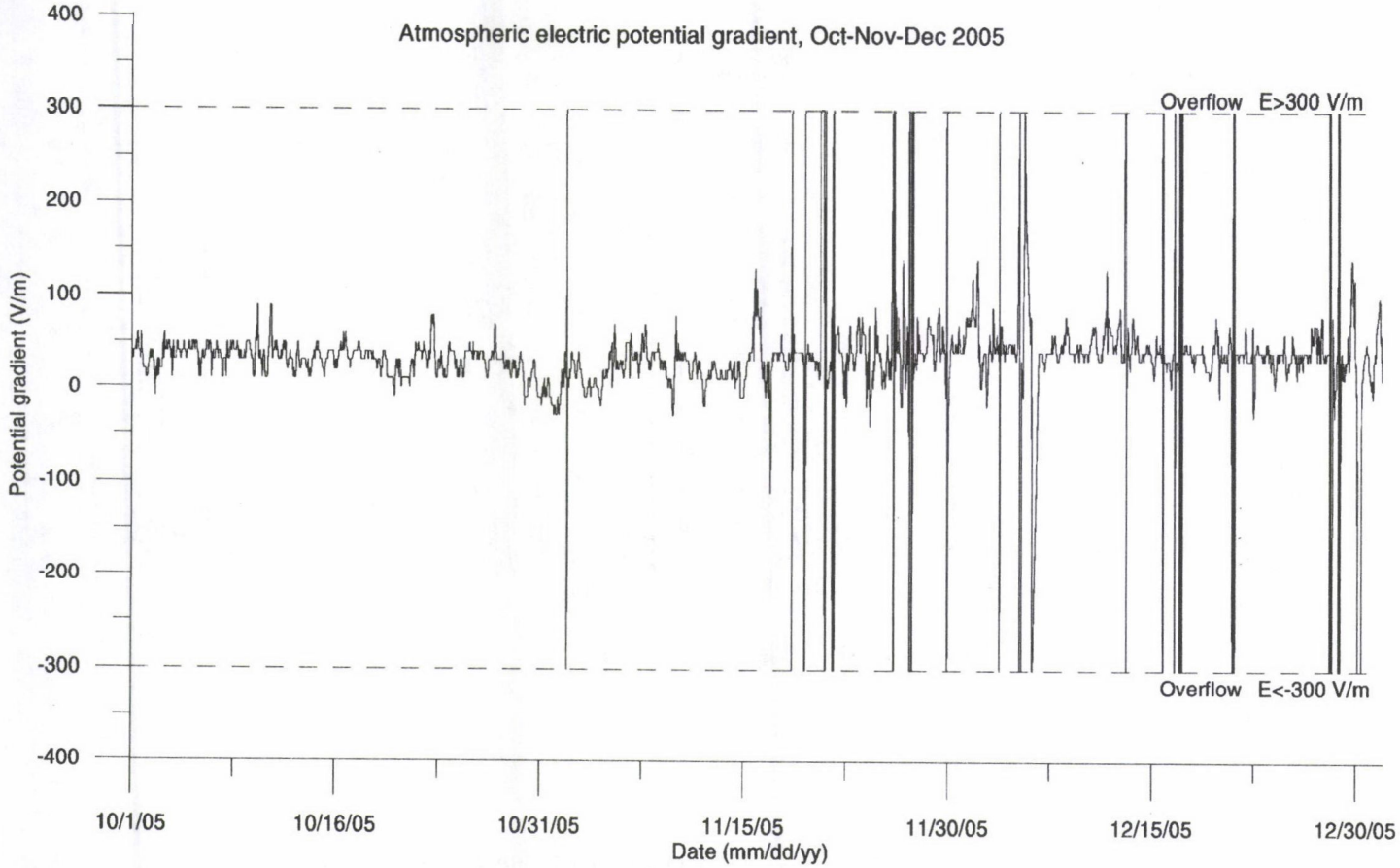
Atmospheric electricity data have been published since 1962. This table contains the hourly average values of the potential gradient expressed in V/m. The date column gives year, month, day (e.g. 990101 indicates 1999 January 1). Hourly averages have been taken only from hours having a recording period of 30 minutes or more. If values were available only for part of an hour the average is entered in square brackets [ ]. These data have been used in the determination of the daily means. Values uncertain for some reason are entered in round brackets ( ) and have not been used in calculating daily means. Daily means of each day with 24 hours of recording are entered. However, loss of a maximum of one hour's data out of twelve (for example, on account of instrument maintenance or calibration) has not precluded entering this mean value. In hours marked by S the value of the potential gradient exceeded permanently or several times the measuring limits of the equipment making the determination of an hourly average impossible. The direction of the deviations is marked by signs. OBS indicates that the potential gradient exceeded the measuring limits of the equipment both in positive and negative directions. Gaps of some days are generally due to missing records. Data are presented in universal time (GMT).

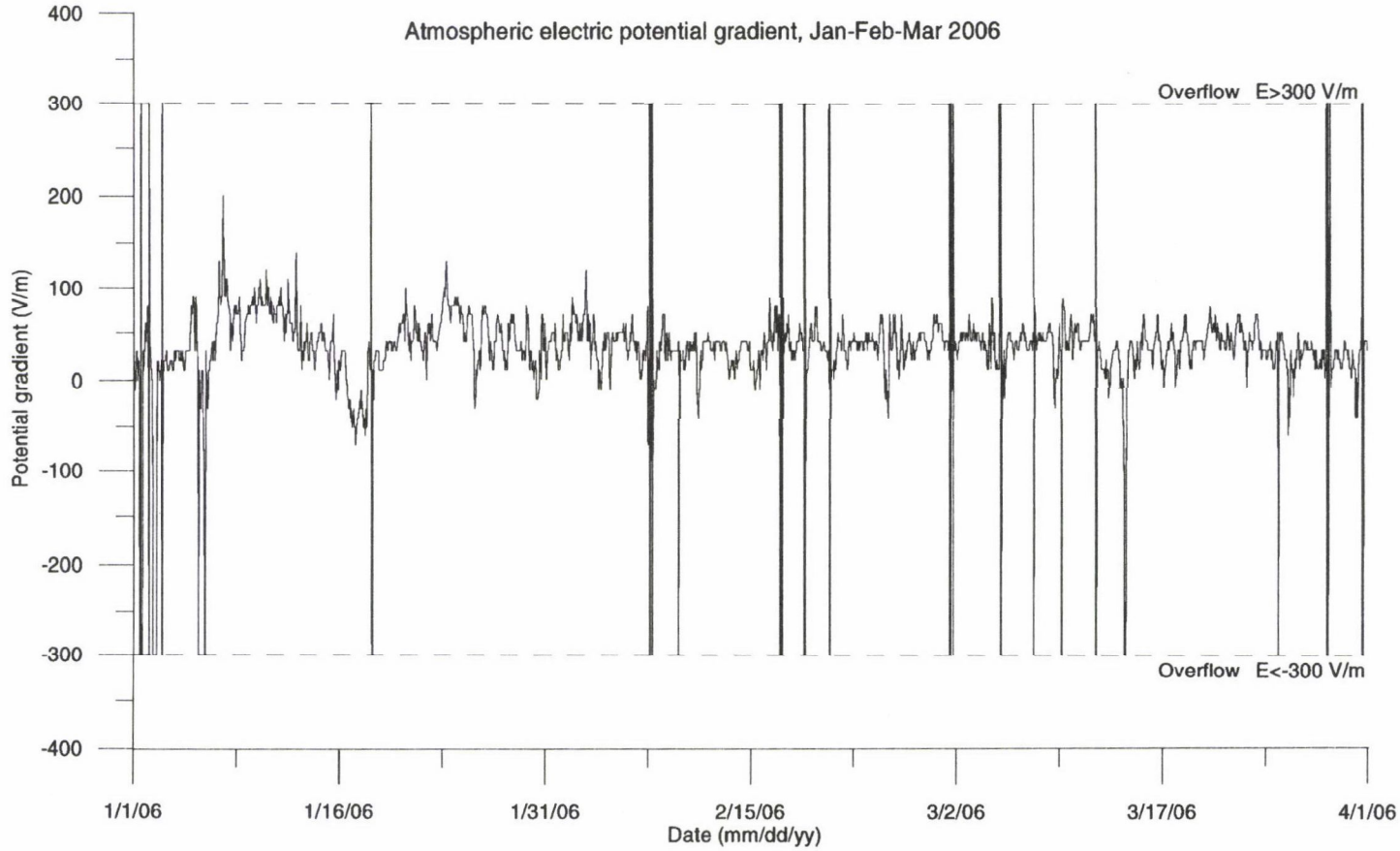
See CD (data visualization: program Seenck.exe, menu item AtmElectr/ Potgrad; path: \Nckobs\Atmelect\Potgrad\).

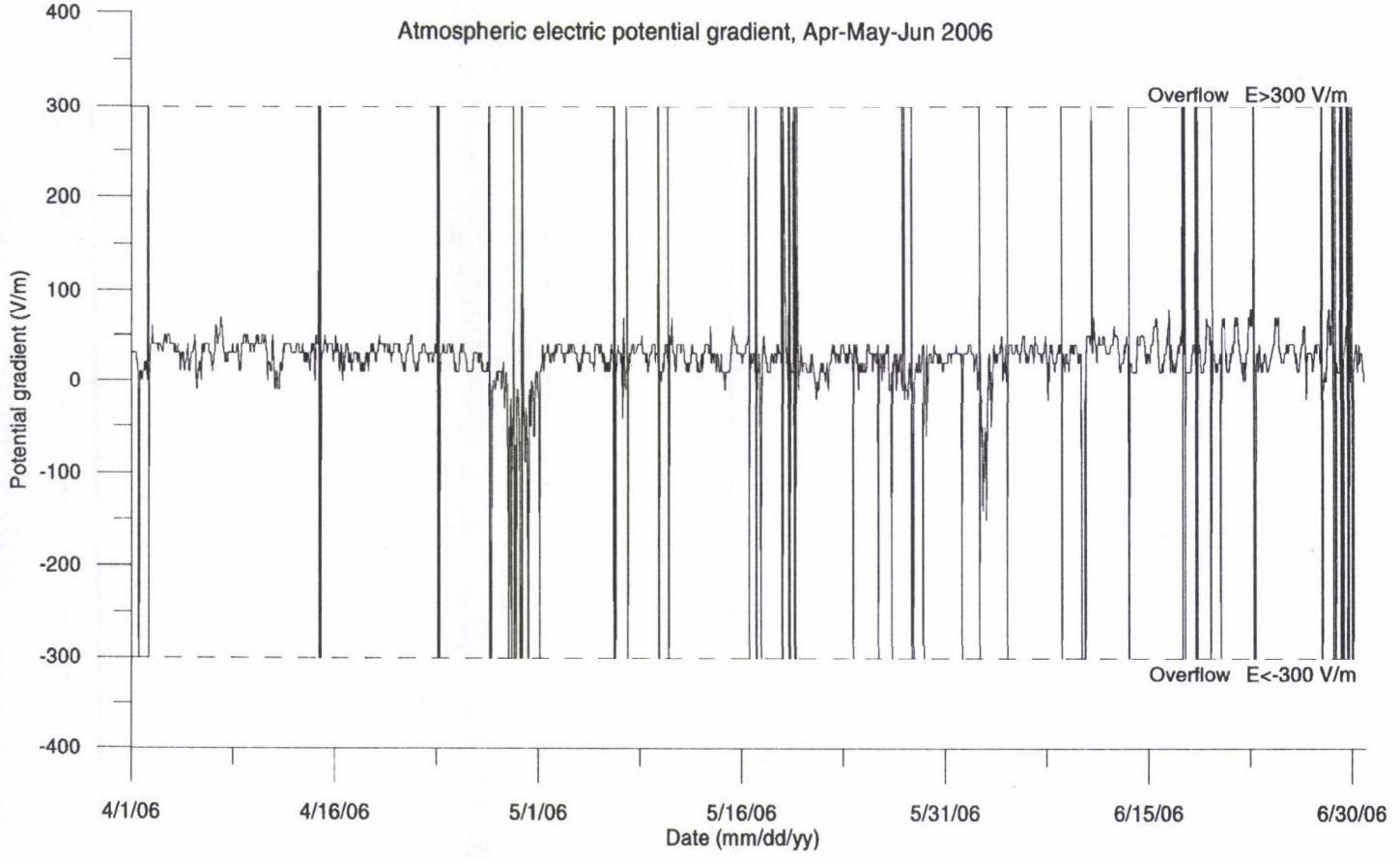

Atmospheric electric potential gradient, Jan-Feb-Mar 2005
Overflow E>300 V/m
Overflow E<-300 V/m
Potential gradient (V/m)
400
300
200
100
0
-100
-200
-300
-400
1/1/05
1/16/05
1/31/05
2/15/05
3/2/05
3/17/05
4/1/05
Date (mm/dd/yy)

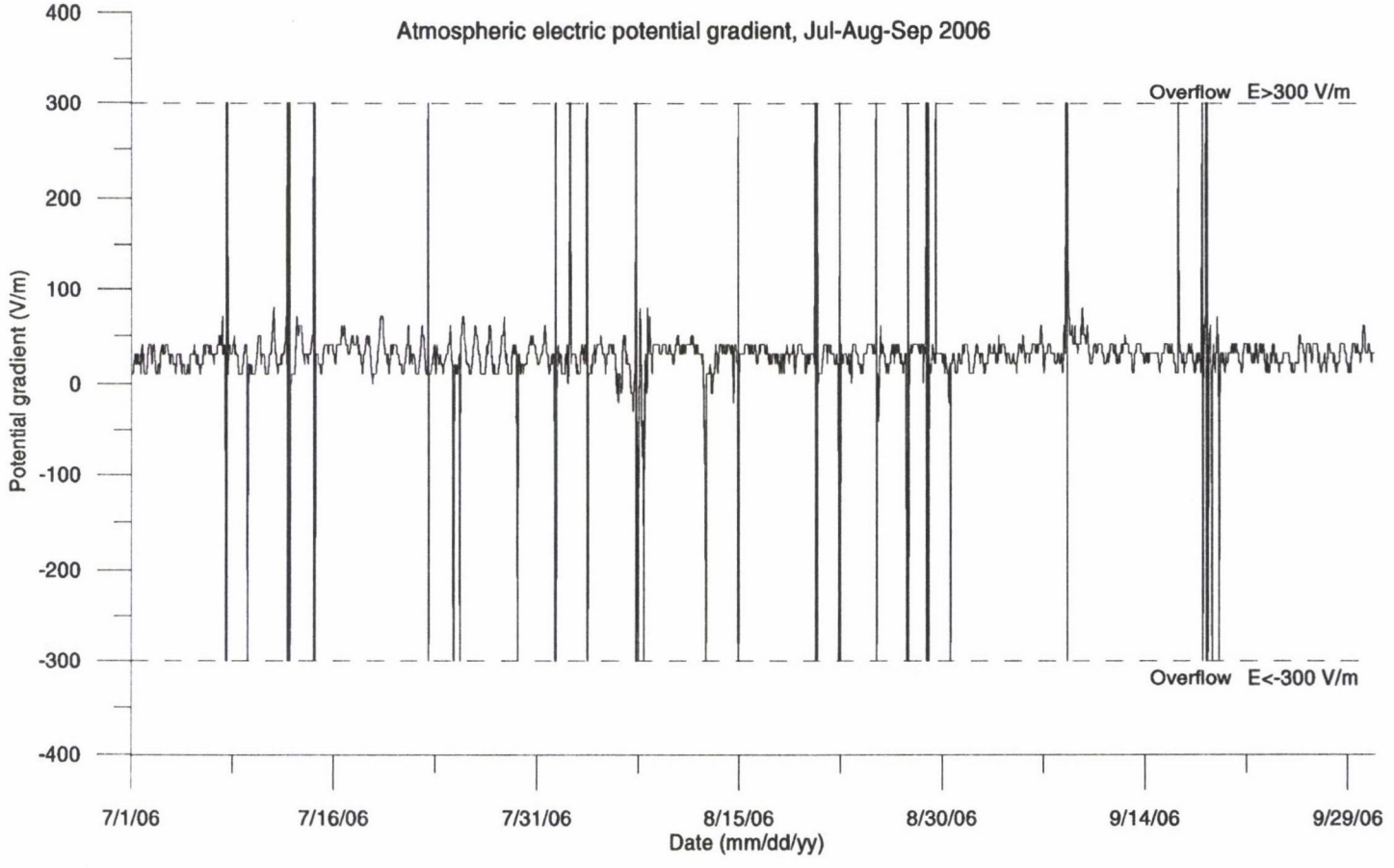

Atmospheric electric potential gradient, Apr-May-Jun 2005
Overflow E>300 V/m
Overflow E<-300 V/m
Potential gradient (V/m)
400
300
200
100
0
-100
-200
-300
-400
4/1/05
4/16/05
5/1/05
5/16/05
5/31/05
6/15/05
6/30/05
Date (mm/dd/yy)

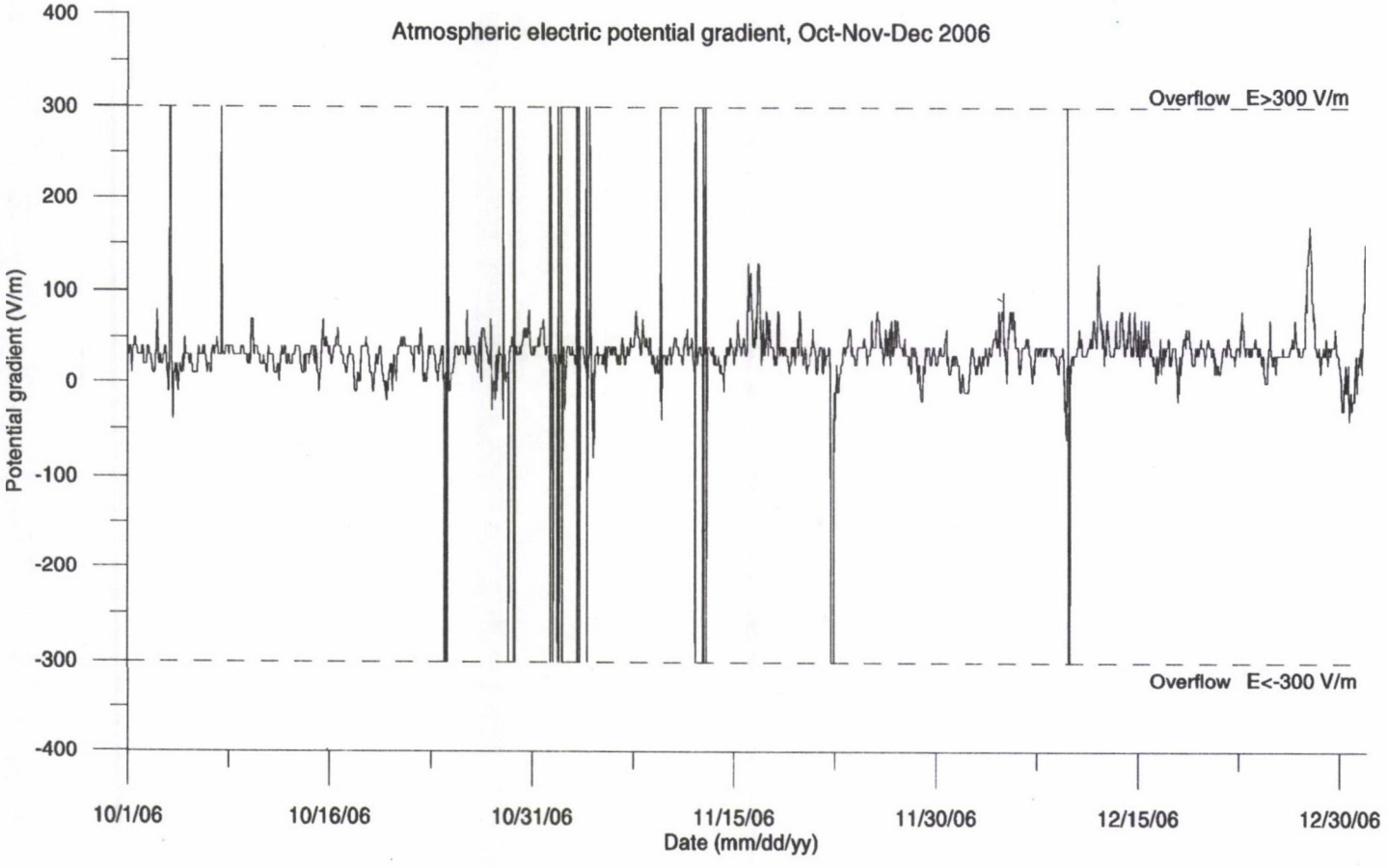

Atmospheric electric potential gradient, Jul-Aug-Sep 2005
Overflow E>300 V/m
Overflow E<-300 V/m
Potential gradient (V/m)
400
300
200
100
0
-100
-200
-300
-400
7/1/05
7/16/05
7/31/05
8/15/05
8/30/05
9/14/05
9/29/05
Date (mm/dd/yy)


Atmospheric electric potential gradient, Oct-Nov-Dec 2005
Overflow E>300 V/m
Overflow E<-300 V/m
Potential gradient (V/m)
400
300
200
100
0
-100
-200
-300
-400
10/1/05
10/16/05
10/31/05
11/15/05
11/30/05
12/15/05
12/30/05
Date (mm/dd/yy)


Atmospheric electric potential gradient, Jan-Feb-Mar 2006
Overflow E>300 V/m
Overflow E<-300 V/m
Potential gradient (V/m)
400
300
200
100
0
-100
-200
-300
-400
1/1/06
1/16/06
1/31/06
2/15/06
3/2/06
3/17/06
4/1/06
Date (mm/dd/yy)


Atmospheric electric potential gradient, Apr-May-Jun 2006
Overflow E>300 V/m
Overflow E<-300 V/m
Potential gradient (V/m)
400
300
200
100
0
-100
-200
-300
-400
4/1/06
4/16/06
5/1/06
5/16/06
5/31/06
6/15/06
6/30/06
Date (mm/dd/yy)


Atmospheric electric potential gradient, Jul-Aug-Sep 2006
Overflow E>300 V/m
Overflow E<-300 V/m
Potential gradient (V/m)
400
300
200
100
0
-100
-200
-300
-400
7/1/06
7/16/06
7/31/06
8/15/06
8/30/06
9/14/06
9/29/06
Date (mm/dd/yy)


Atmospheric electric potential gradient, Oct-Nov-Dec 2006
Overflow E>300 V/m
Overflow E<-300 V/m
Potential gradient (V/m)
400
300
200
100
0
-100
-200
-300
-400
10/1/06
10/16/06
10/31/06
11/15/06
11/30/06
12/15/06
12/30/06
Date (mm/dd/yy)