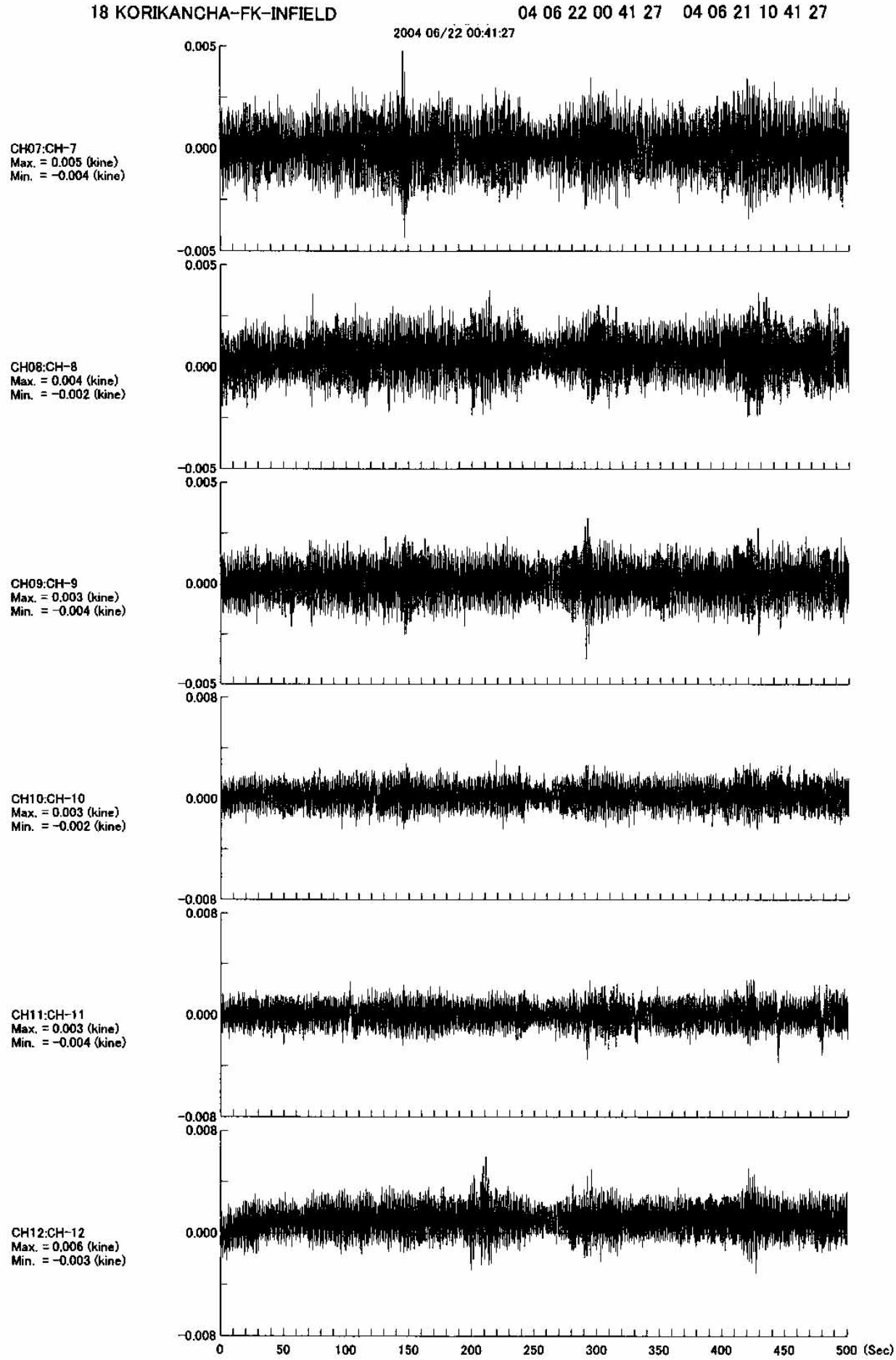
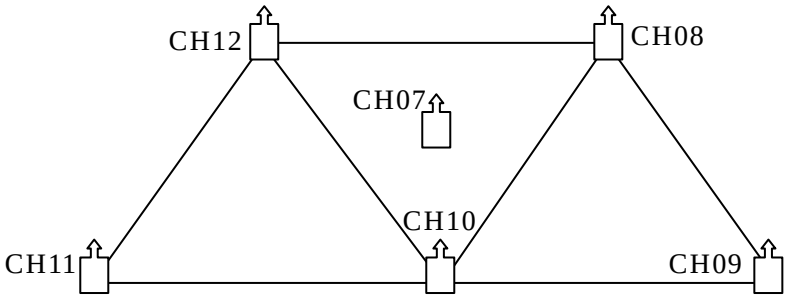
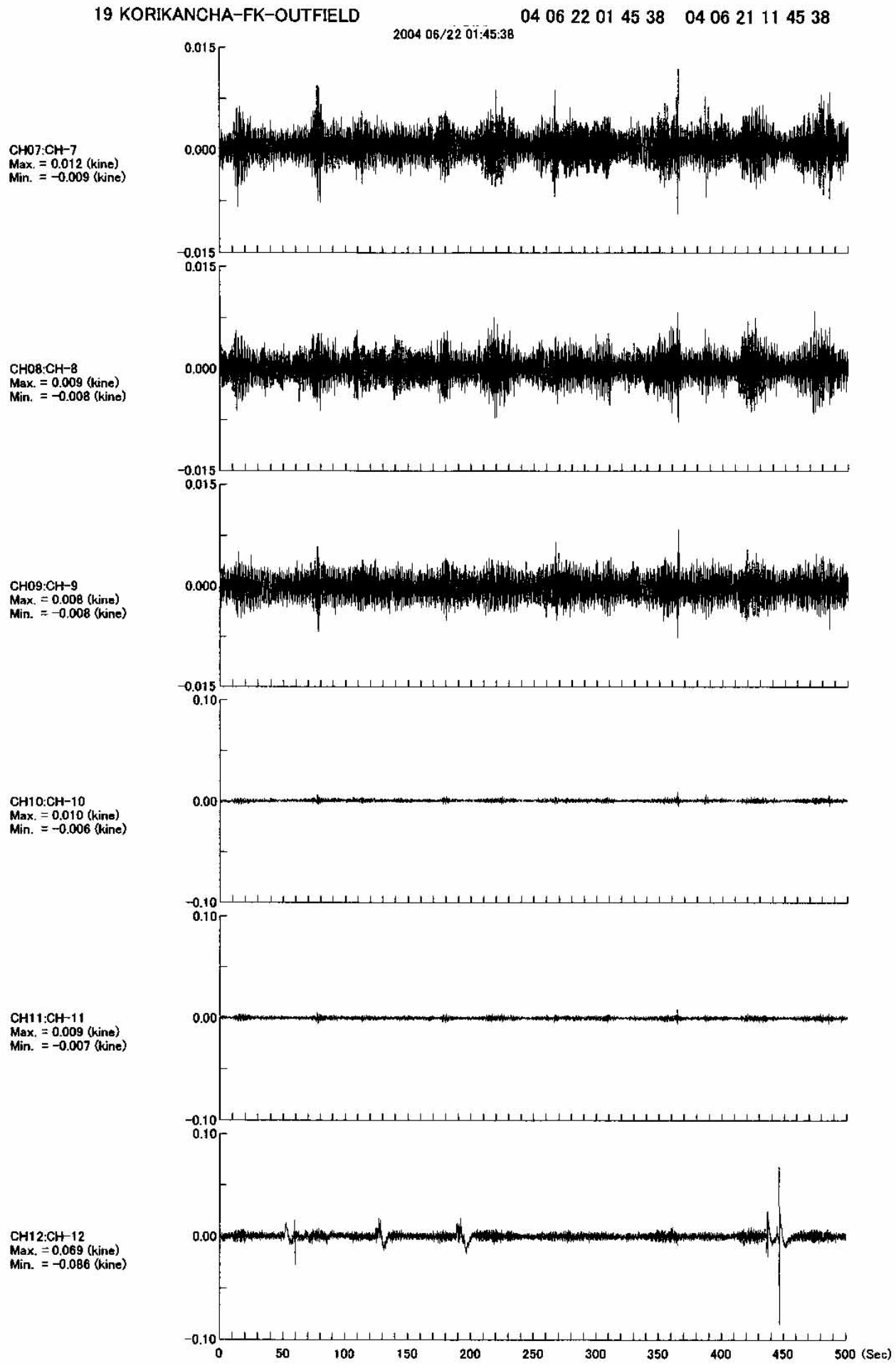

18 KORIKANCHA-FK-INFIELD
04 06 22 00 41 27 04 06 21 10 41 27
2004 06/22 00:41:27
CH07:CH-7
Max. = 0.005 (kine)
Min. = -0.004 (kine)
CH08:CH-8
Max. = 0.004 (kine)
Min. = -0.002 (kine)
CH09:CH-9
Max. = 0.003 (kine)
Min. = -0.004 (kine)
CH10:CH-10
Max. = 0.003 (kine)
Min. = -0.002 (kine)
CH11:CH-11
Max. = 0.003 (kine)
Min. = -0.004 (kine)
CH12:CH-12
Max. = 0.006 (kine)
Min. = -0.003 (kine)
0.005
0.000
-0.005
0.008
-0.008
0
50
100
150
200
250
300
350
400
450
500 (Sec)

2.5. Exterior Garden (Sacred Garden of Sun): Ground vibration measurement

In a manner similar to the interior yard, array measurements of the vertical components of the ground vibration were carried out here. The configuration of sensors again consisted of triangular array with sides of approximately 30 meters as shown in the next figure.



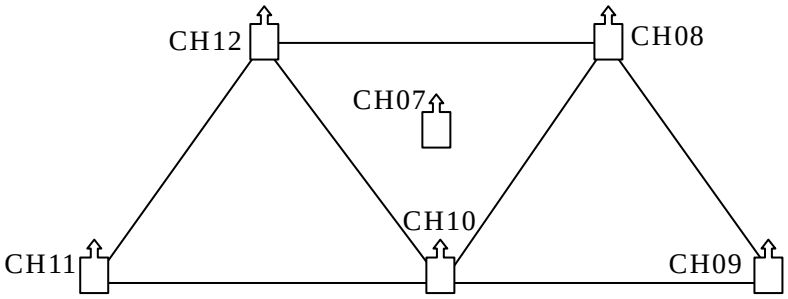
As noted above, array measurement is intended for F-K spectral analysis (F: frequency, K: wave number). The following figure shows the time domain plot of waves from microtremor measurements.


19 KORIKANCHA-FK-OUTFIELD
04 06 22 01 45 38 04 06 21 11 45 38
2004 06/22 01:45:38
CH07:CH-7
Max. = 0.012 (kine)
Min. = -0.009 (kine)
CH08:CH-8
Max. = 0.009 (kine)
Min. = -0.008 (kine)
CH09:CH-9
Max. = 0.008 (kine)
Min. = -0.008 (kine)
CH10:CH-10
Max. = 0.010 (kine)
Min. = -0.006 (kine)
CH11:CH-11
Max. = 0.009 (kine)
Min. = -0.007 (kine)
CH12:CH-12
Max. = 0.069 (kine)
Min. = -0.086 (kine)
0.015
0.000
-0.015
0.10
0.00
-0.10
0
50
100
150
200
250
300
350
400
450
500 (Sec)

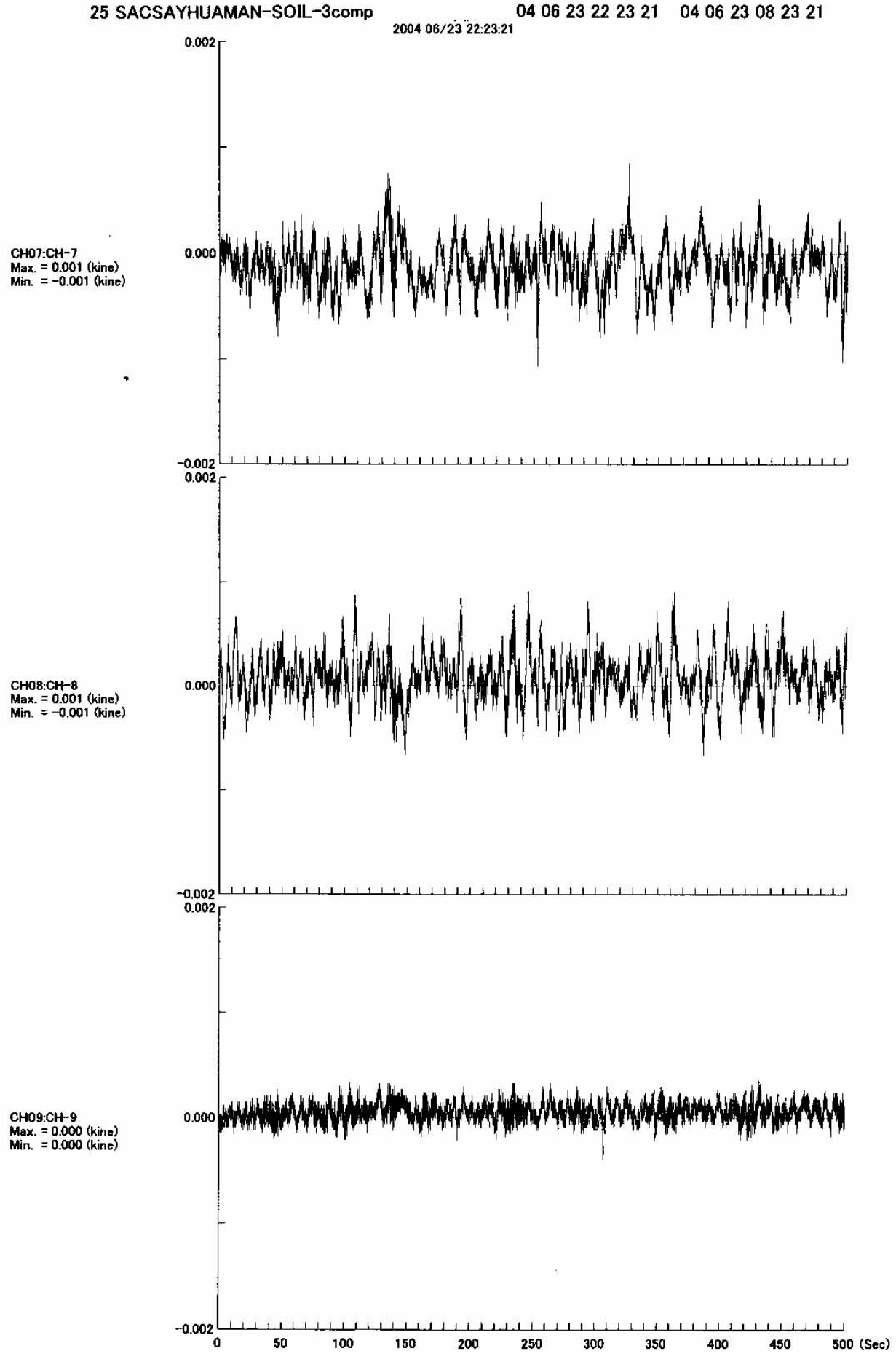
3. Sacsayhuaman

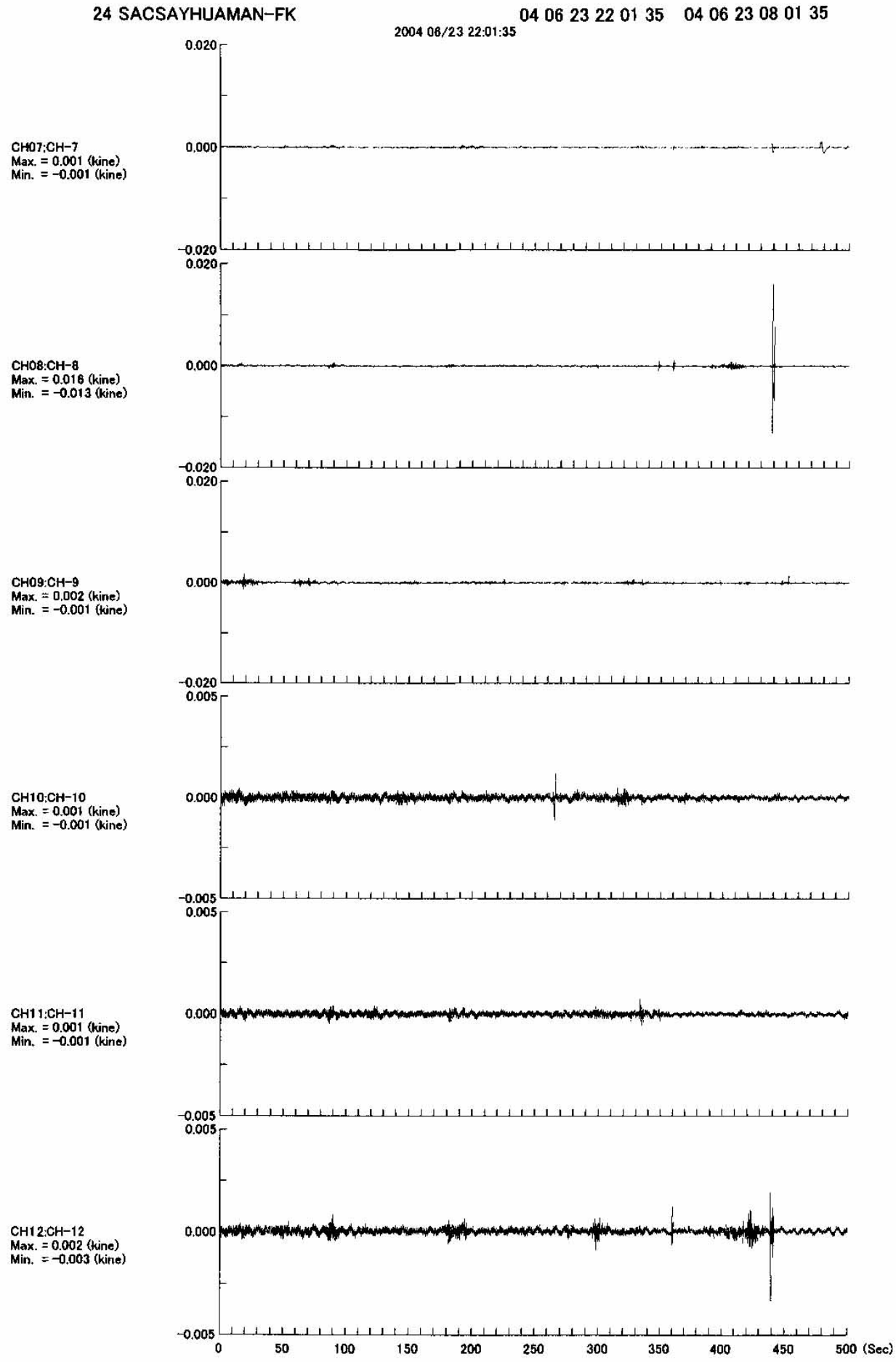
3.1. Ground vibration measurement (vertical sensors)

Array measurements of the vertical components of the ground vibration were carried out at this site as well for F-K spectral analysis. Again the configuration consisted of triangular array with approximately 30 meters side, with additional sensor at center of the trapezoid, as shown below:



The following figures show the time domain plot of waves from microtremor measurements.


25 SACSAYHUAMAN-SOIL-3comp
04 06 23 22 23 21
04 06 23 08 23 21
2004 06/23 22:23:21
CH07:CH-7
Max. = 0.001 (kine)
Min. = -0.001 (kine)
CH08:CH-8
Max. = 0.001 (kine)
Min. = -0.001 (kine)
CH09:CH-9
Max. = 0.000 (kine)
Min. = 0.000 (kine)
0.002
0.000
-0.002
0
50
100
150
200
250
300
350
400
450
500 (Sec)

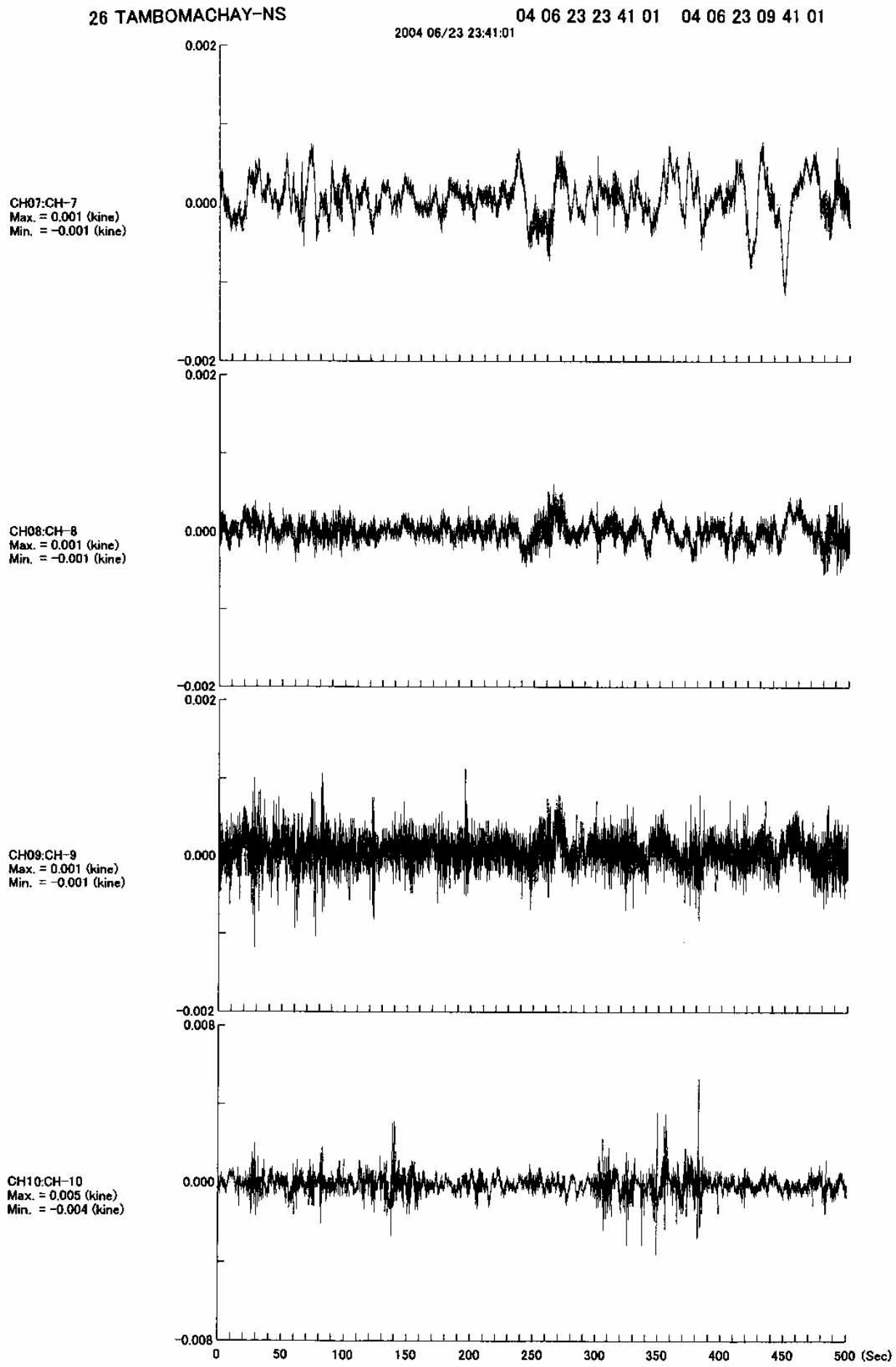

24 SACSAYHUAMAN-FK
04 06 23 22 01 35
04 06 23 08 01 35
2004 06/23 22:01:35
CH07:CH-7
Max. = 0.001 (kine)
Min. = -0.001 (kine)
CH08:CH-8
Max. = 0.016 (kine)
Min. = -0.013 (kine)
CH09:CH-9
Max. = 0.002 (kine)
Min. = -0.001 (kine)
CH10:CH-10
Max. = 0.001 (kine)
Min. = -0.001 (kine)
CH11:CH-11
Max. = 0.001 (kine)
Min. = -0.001 (kine)
CH12:CH-12
Max. = 0.002 (kine)
Min. = -0.003 (kine)
0.020
0.000
-0.020
0.005
-0.005
0
50
100
150
200
250
300
350
400
450
500 (Sec)

4. Tambomachay (Bath of the Inka)

4.1 Structure vibration

Here the horizontal vibration of the terraces was measured. The direction of measurements was transversal to the valley face (left to right in the photograph).

Measurements here are intended for analysis of the behavior of the terraces that form this archeological monument. The measurement was performed simultaneously in four consecutive terraces. The time domain plot of results observed are shown in the following figure.


26 TAMBOMACHAY-NS
04 06 23 23 41 01 04 06 23 09 41 01
2004 06/23 23:41:01
CH07:CH-7
Max. = 0.001 (kine)
Min. = -0.001 (kine)
CH08:CH-8
Max. = 0.001 (kine)
Min. = -0.001 (kine)
CH09:CH-9
Max. = 0.001 (kine)
Min. = -0.001 (kine)
CH10:CH-10
Max. = 0.005 (kine)
Min. = -0.004 (kine)
0.002
0.000
-0.002
0.008
-0.008
0
50
100
150
200
250
300
350
400
450
500 (Sec)