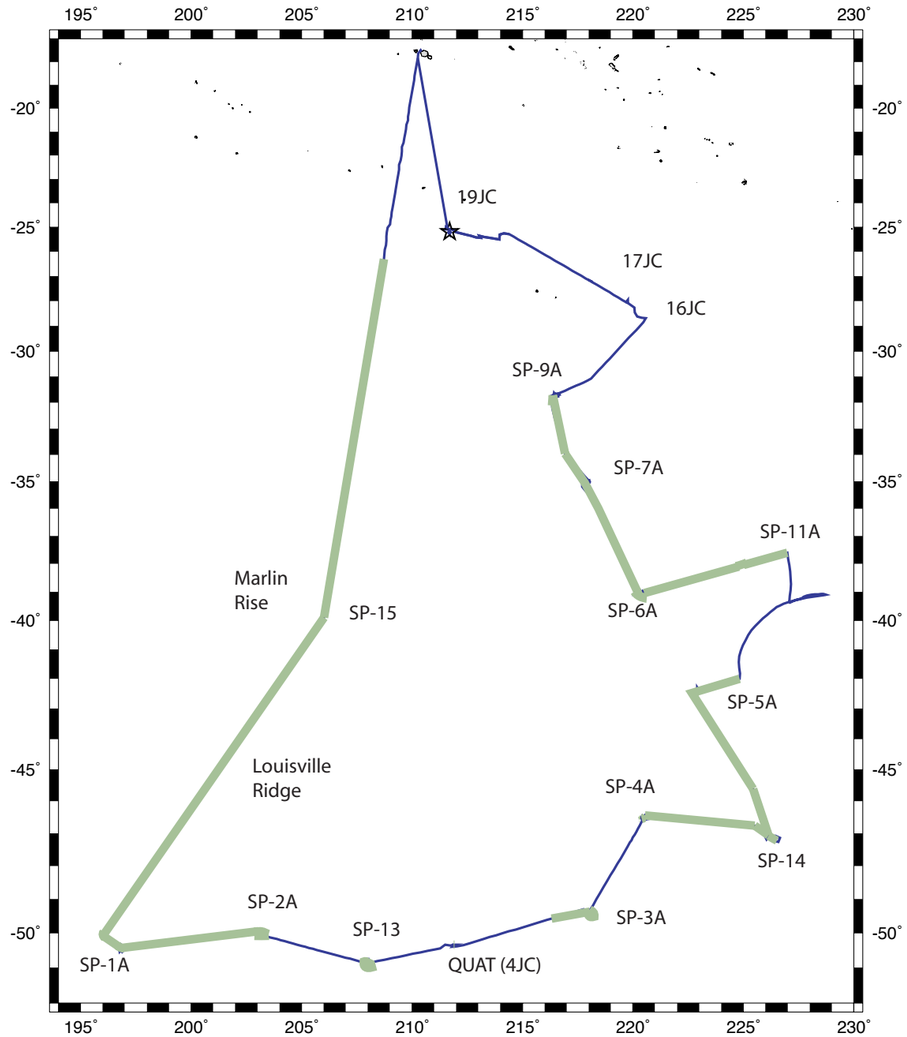
CGISS Technical Report 2005-04

Digital Chirp Subbottom Profiler images from Tui Malia Leg 3 (R/V Melville), Site Survey for IODP proposal 567 “Paleogene South Pacific Transect”

Mitchell Lyle
Christopher Paul
Brandi Murphy

Figure 1: Seismic reflection surveys were conducted at survey sites as well as underway, using a 150 c.i. GI gun source and the Scripps 4-channel streamer.



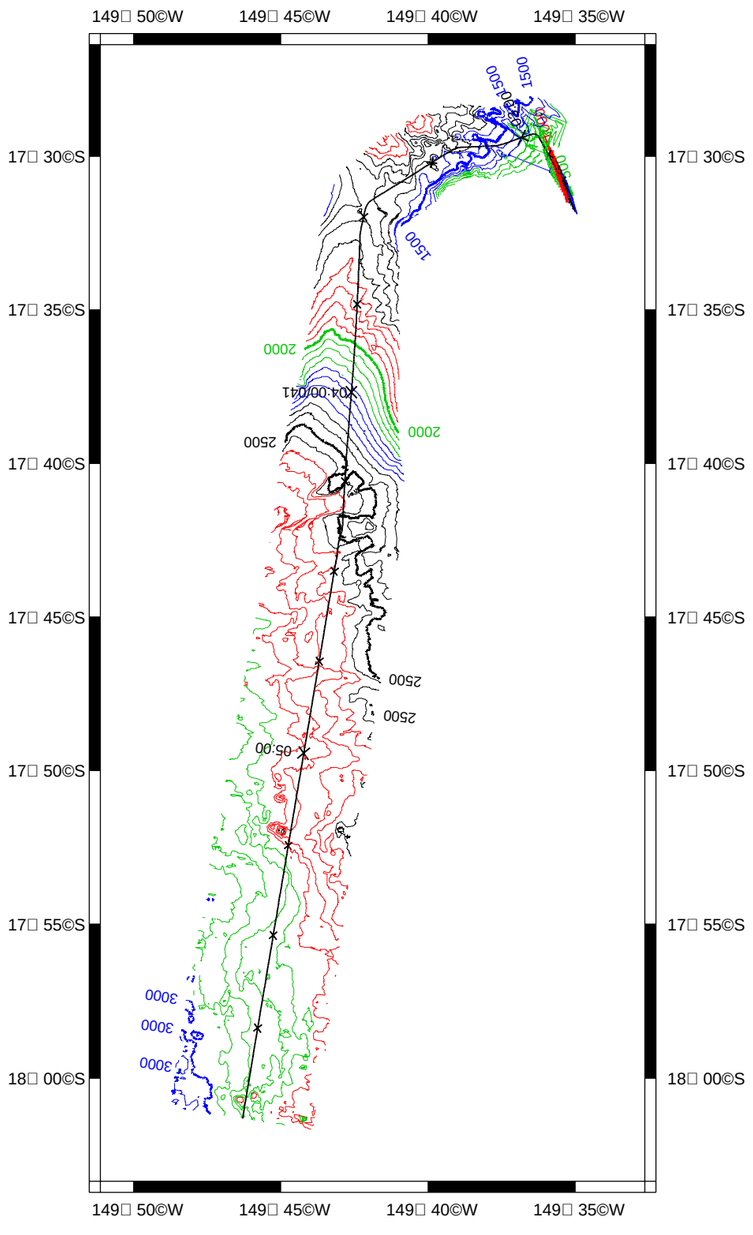
Cruise: TUIM03MV Chief Scientist: Mitch Lyle GI Airgun Seismic Data coverage
Begin date/port: 09-Feb-2005 Papeete, Tahiti
End date/port: 21-Mar-2005 Papeete, Tahiti
Last position: 19-Mar-05 / 0000Z 25-11S 148-17W course: 131 speed: 1.0 knots

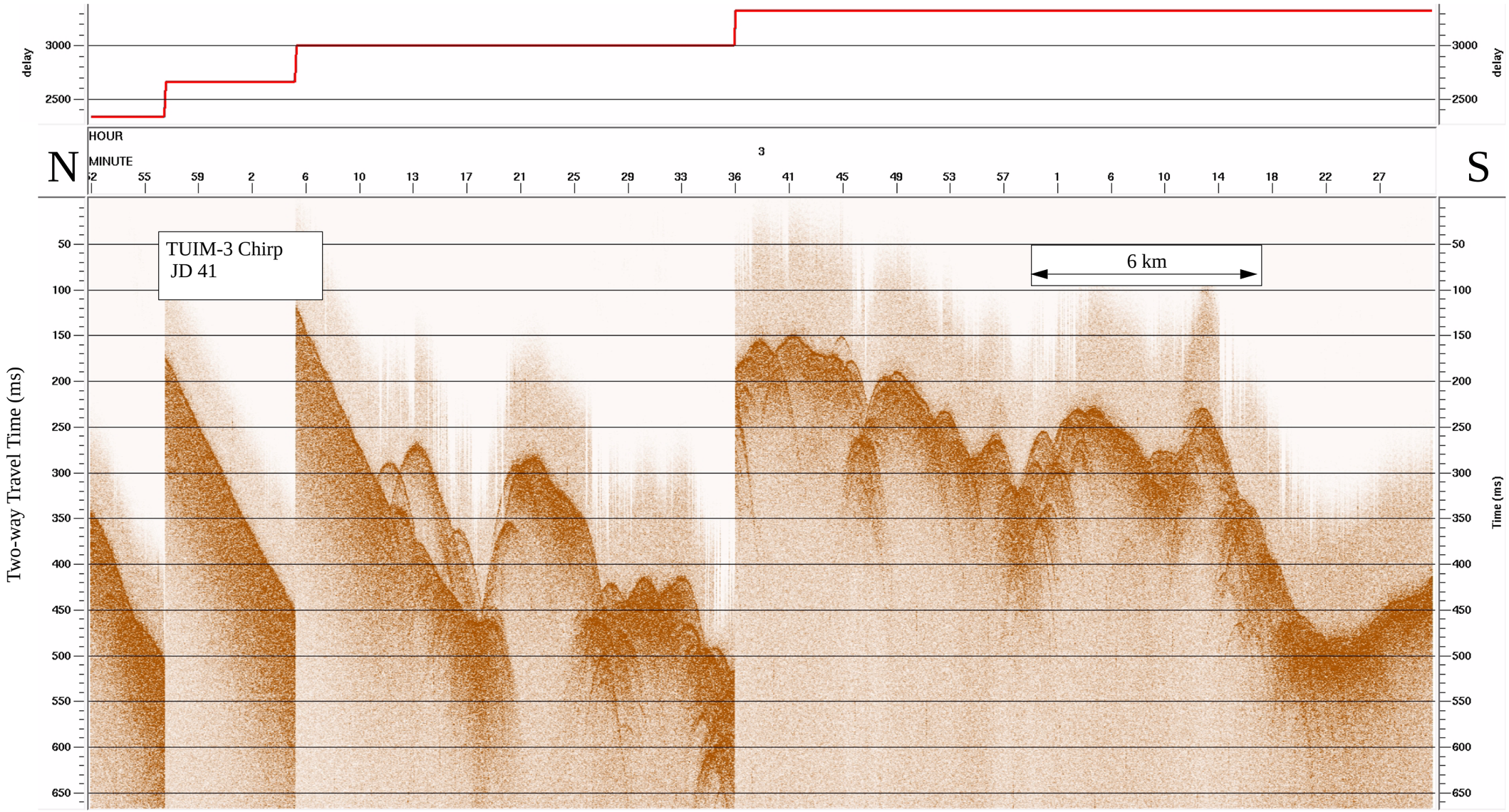
GMT 2005 Mar 19 00:15:43 :Provided by SIO/STS/ SCG & GDC

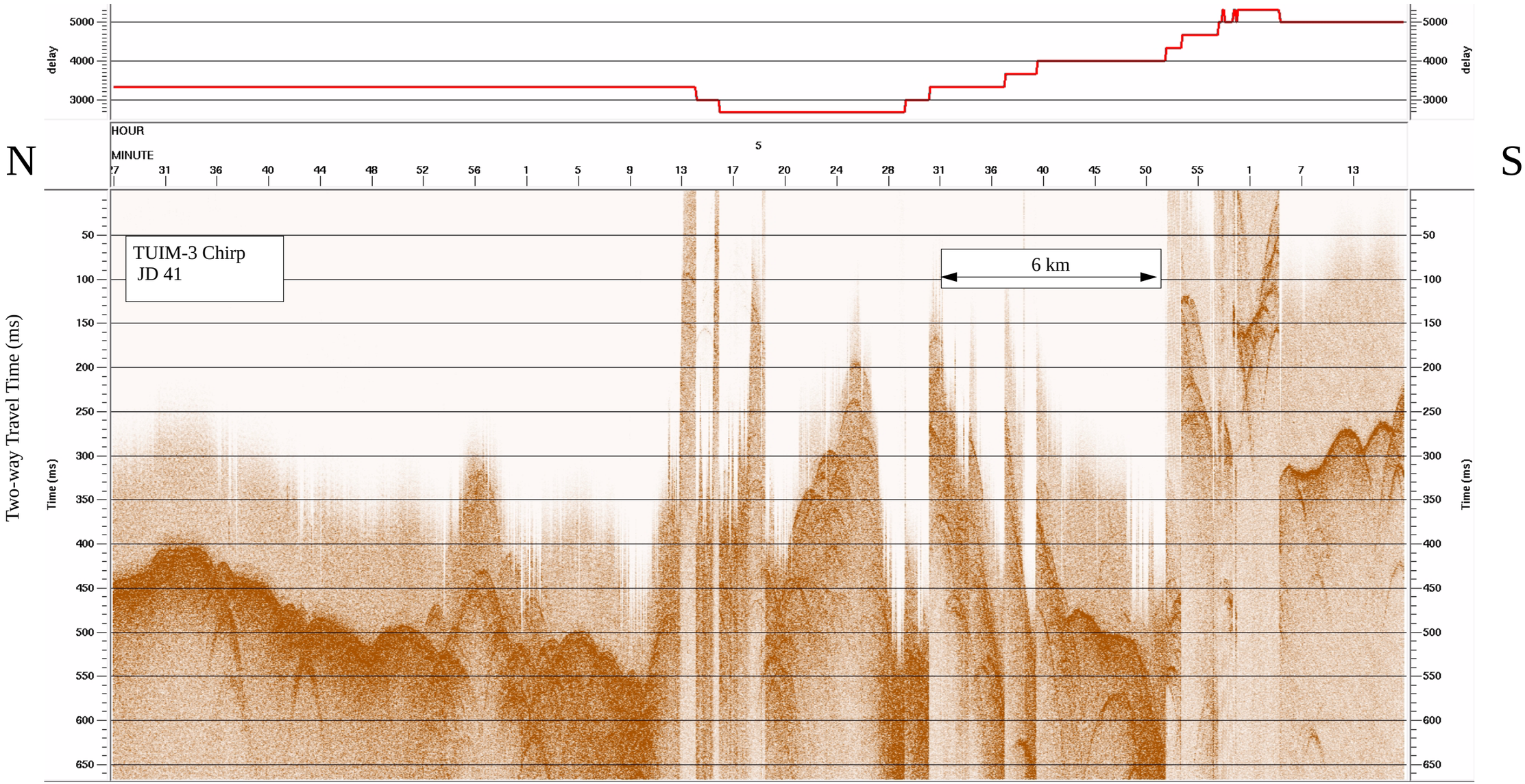
3.5 kHz Chirp coverage along entire trackline

Julian Day 41
10 February 2005
Knudsen Chirp Data

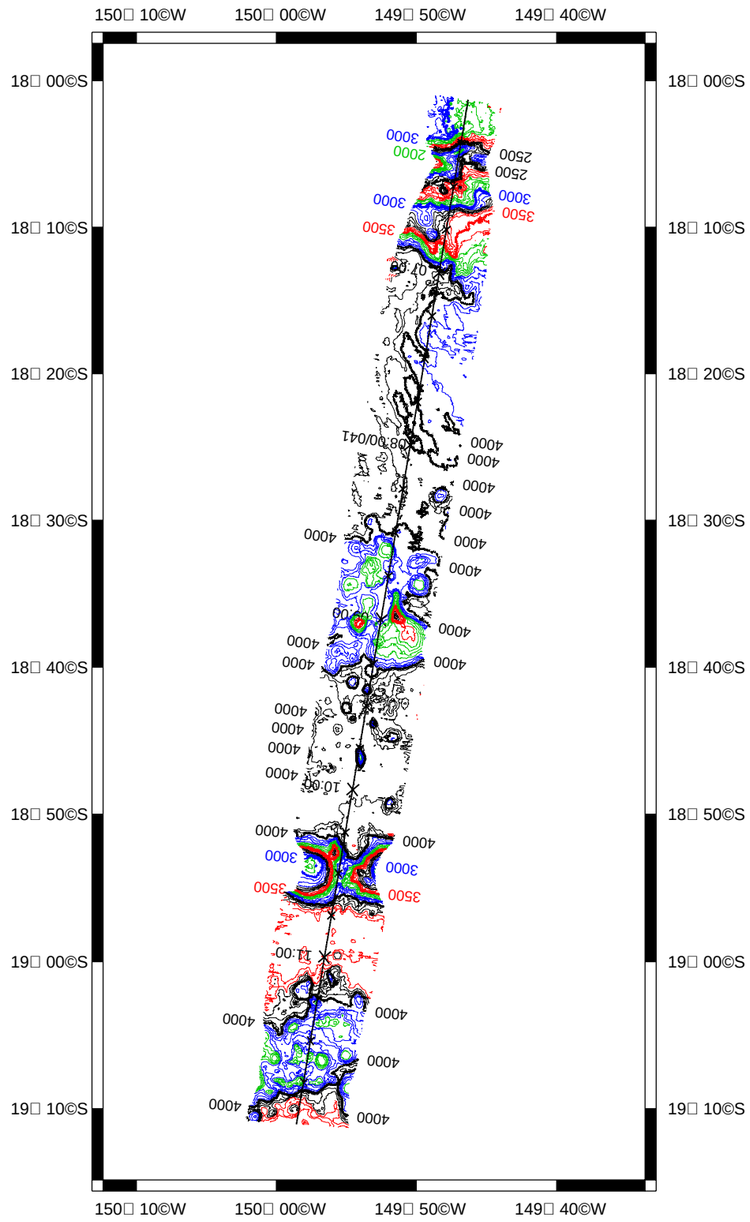
Data File SBfixavg.2005feb10.0000-0600

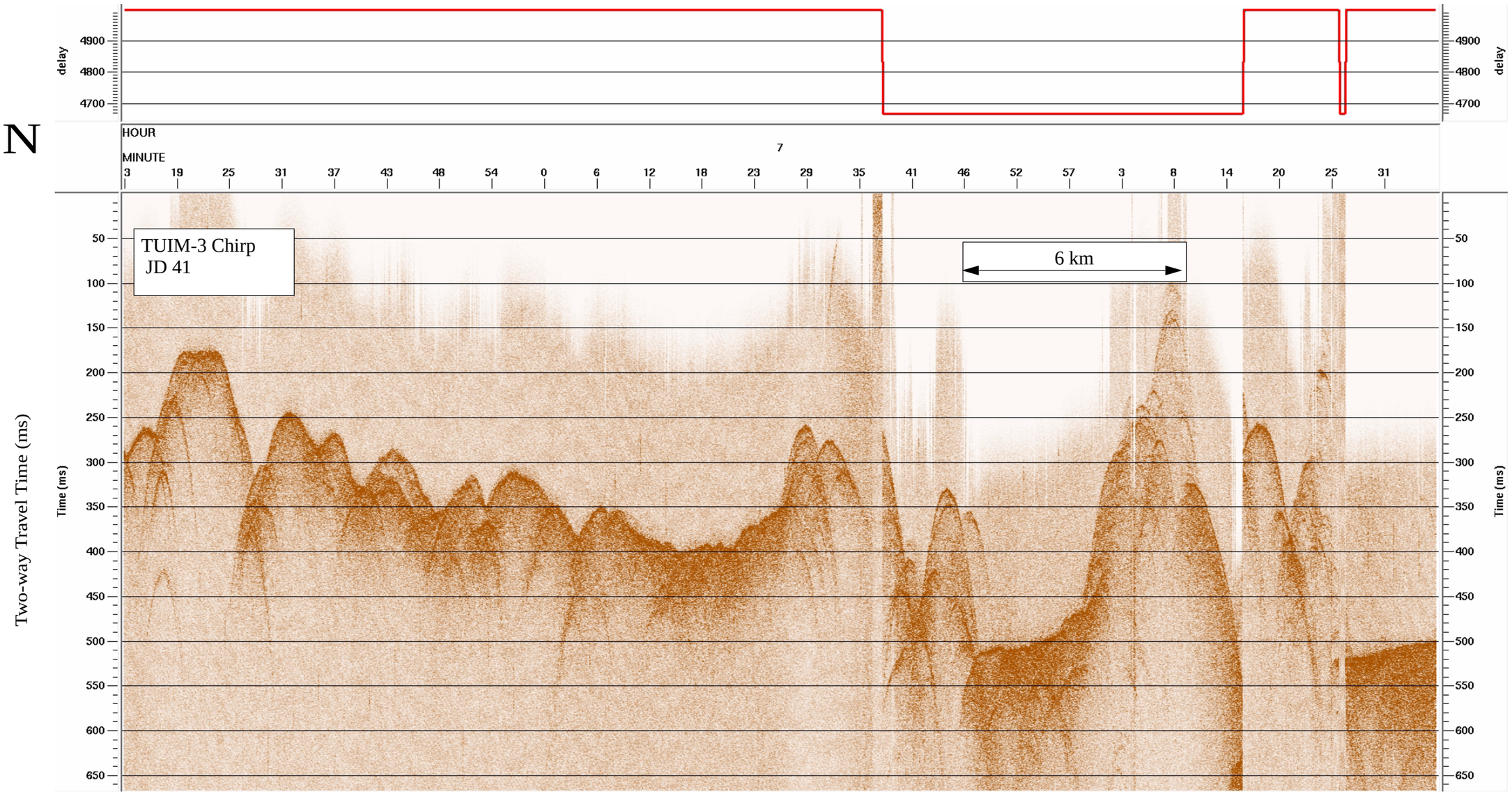


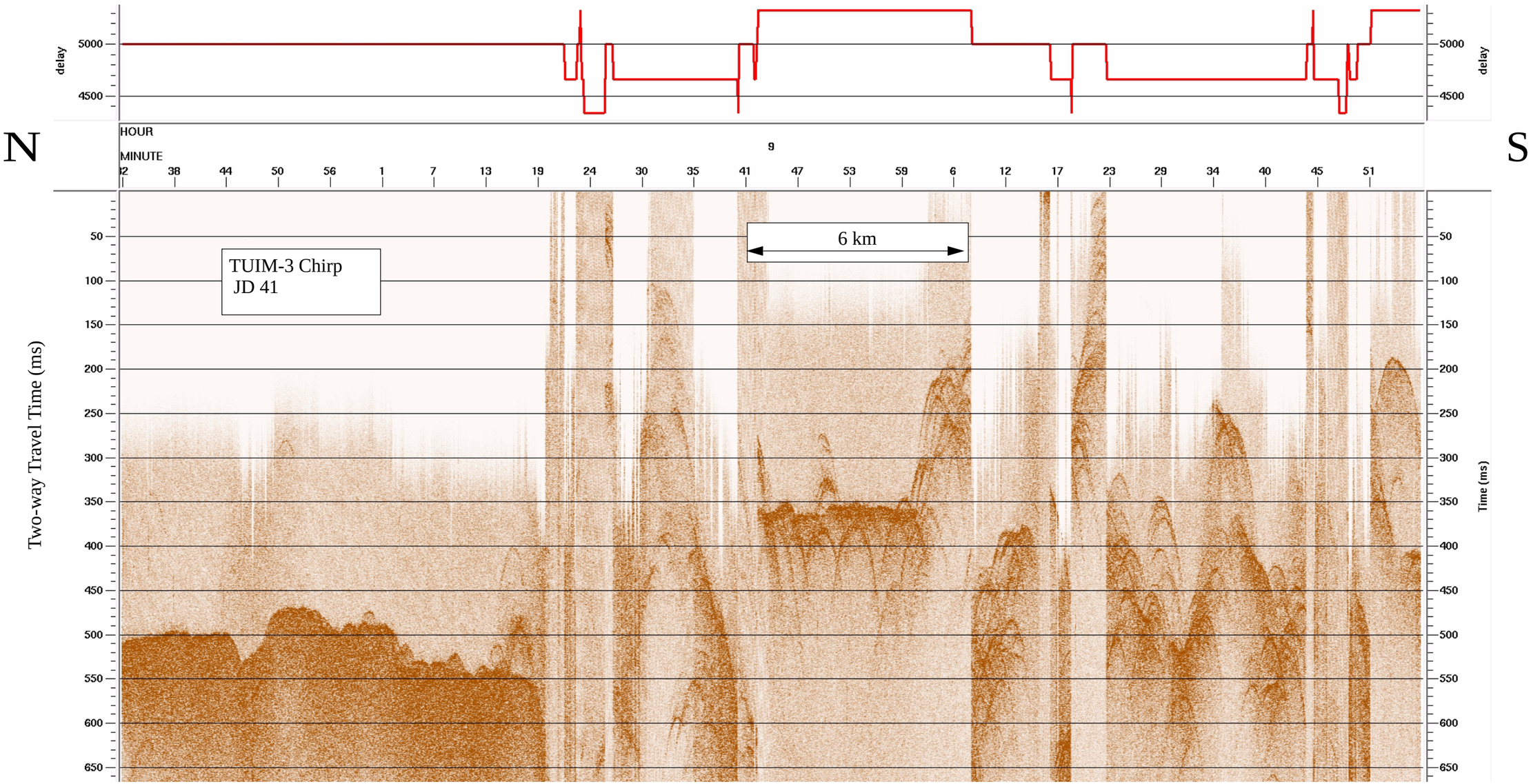

delay
3000
2500
HOUR
MINUTE
3
N
S
52 55 59 2 6 10 13 17 21 25 29 33 36 41 45 49 53 57 1 6 10 14 18 22 27
TUIM-3 Chirp
JD 41
6 km
Two-way Travel Time (ms)
Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

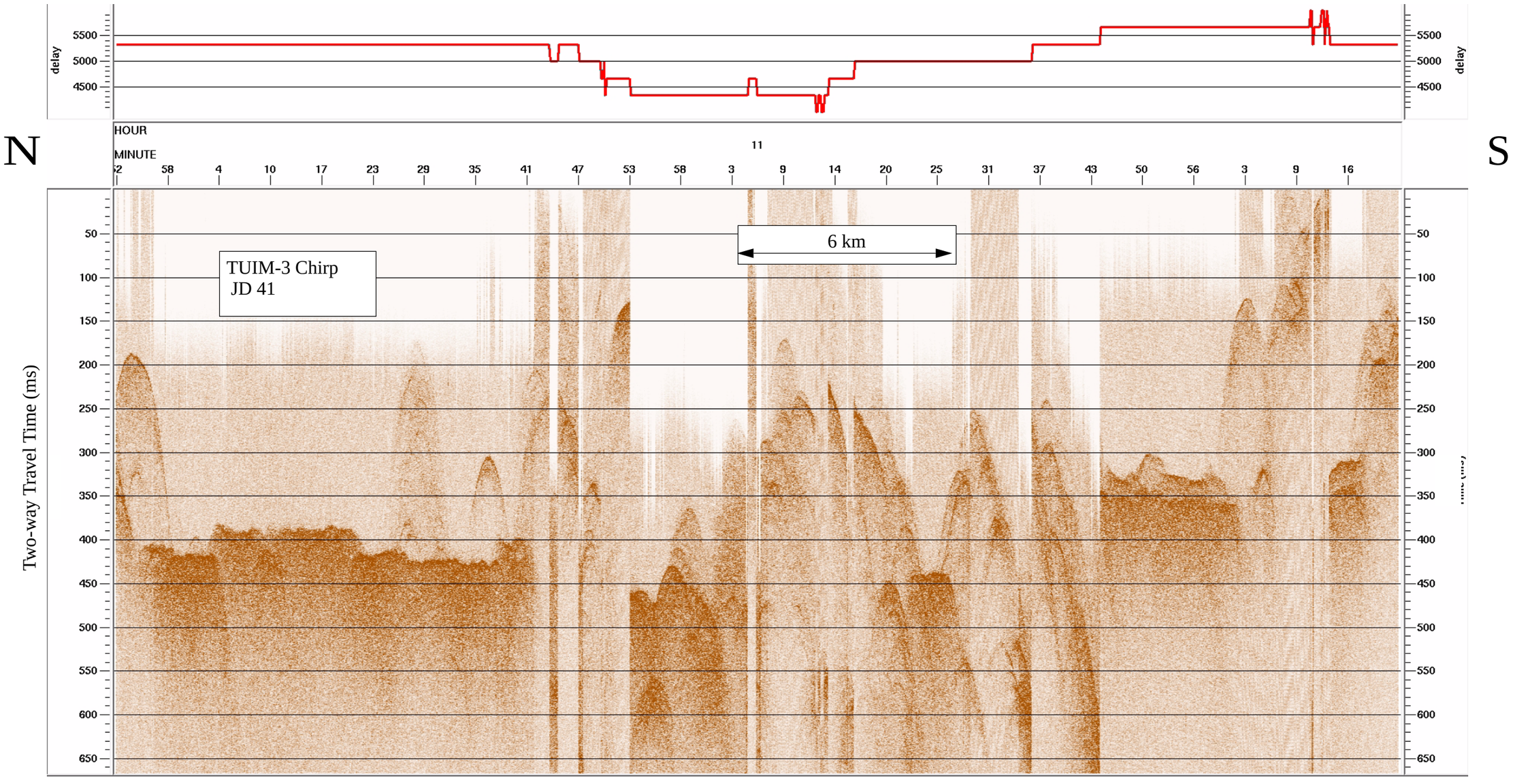

N
S
delay
5000
4000
3000
HOUR
MINUTE
5
TUIM-3 Chirp
JD 41
6 km
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

Data File SBfixavg.2005feb10.0600-1200

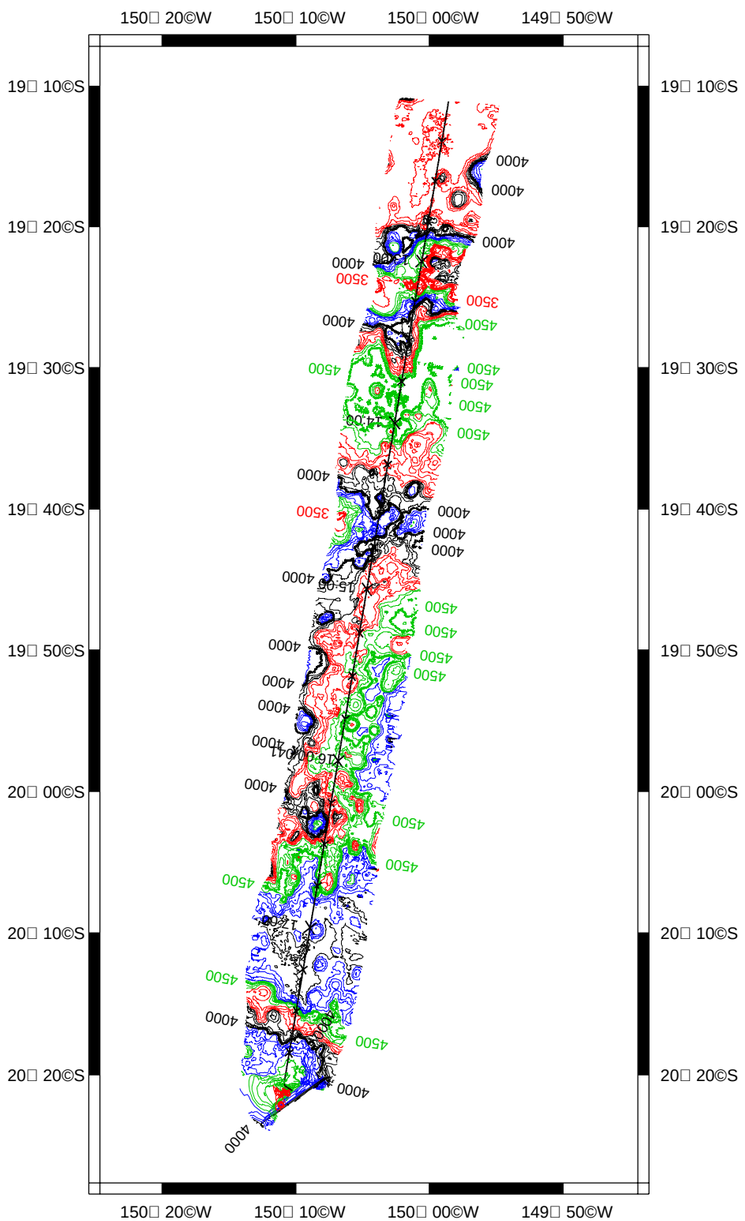


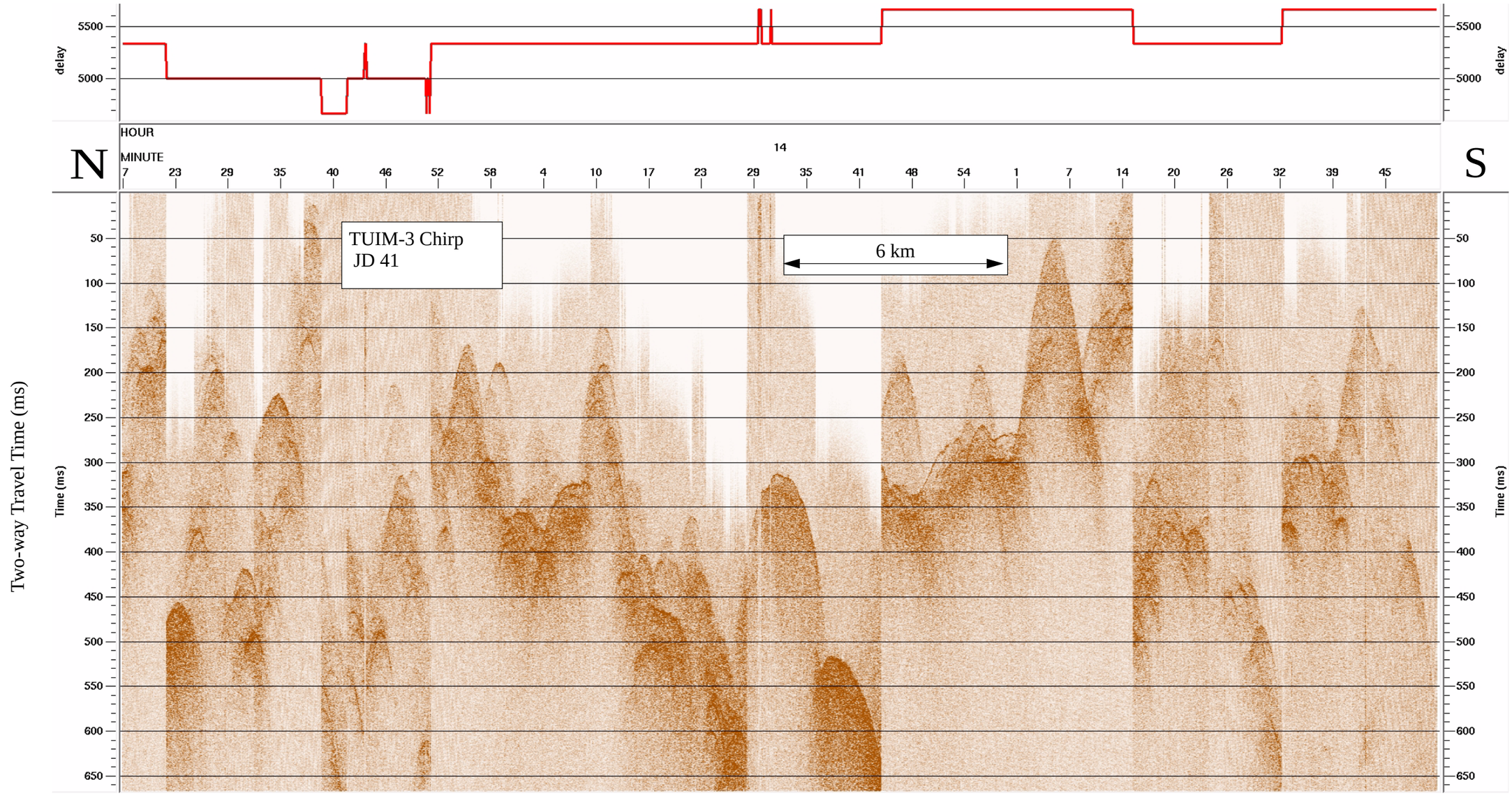

N
S
delay
4900
4800
4700
HOUR
7
MINUTE
3 19 25 31 37 43 48 54 0 6 12 18 23 29 35 41 46 52 57 3 8 14 20 25 31
TUIM-3 Chirp
JD 41
6 km
Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Two-way Travel Time (ms)


N
S
delay
5000
4500
HOUR
9
MINUTE
2 38 44 50 56 1 7 13 19 24 30 35 41 47 53 59 6 12 17 23 29 34 40 45 51
TUIM-3 Chirp
JD 41
6 km
Two-way Travel Time (ms)
Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

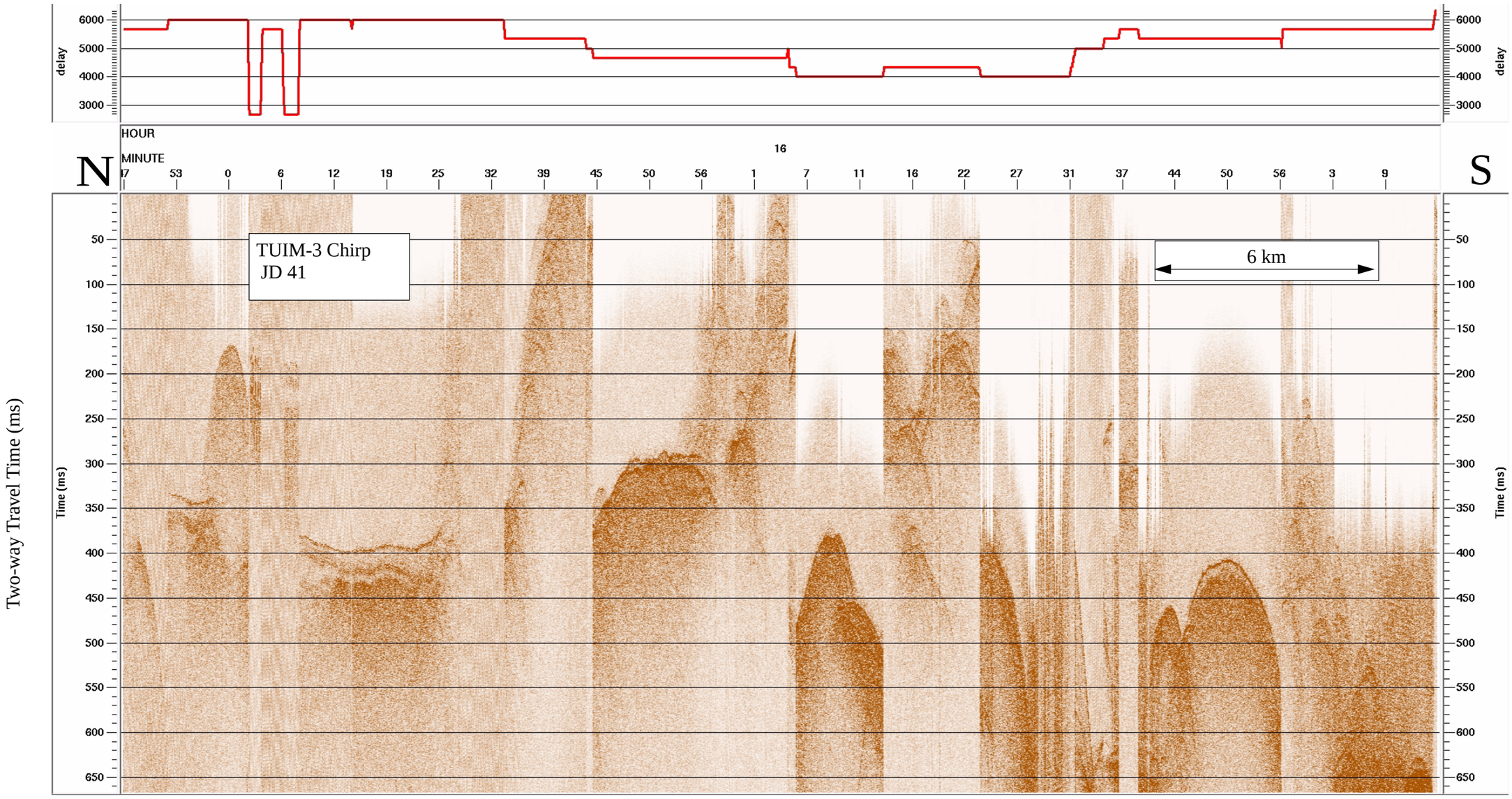

N
S
delay
5500
5000
4500
HOUR
MINUTE
11
52 58 4 10 17 23 29 35 41 47 53 58 3 9 14 20 25 31 37 43 50 56 3 9 16
6 km
TUIM-3 Chirp
JD 41
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

Data File SBfixavg.2005feb10.1200-1800

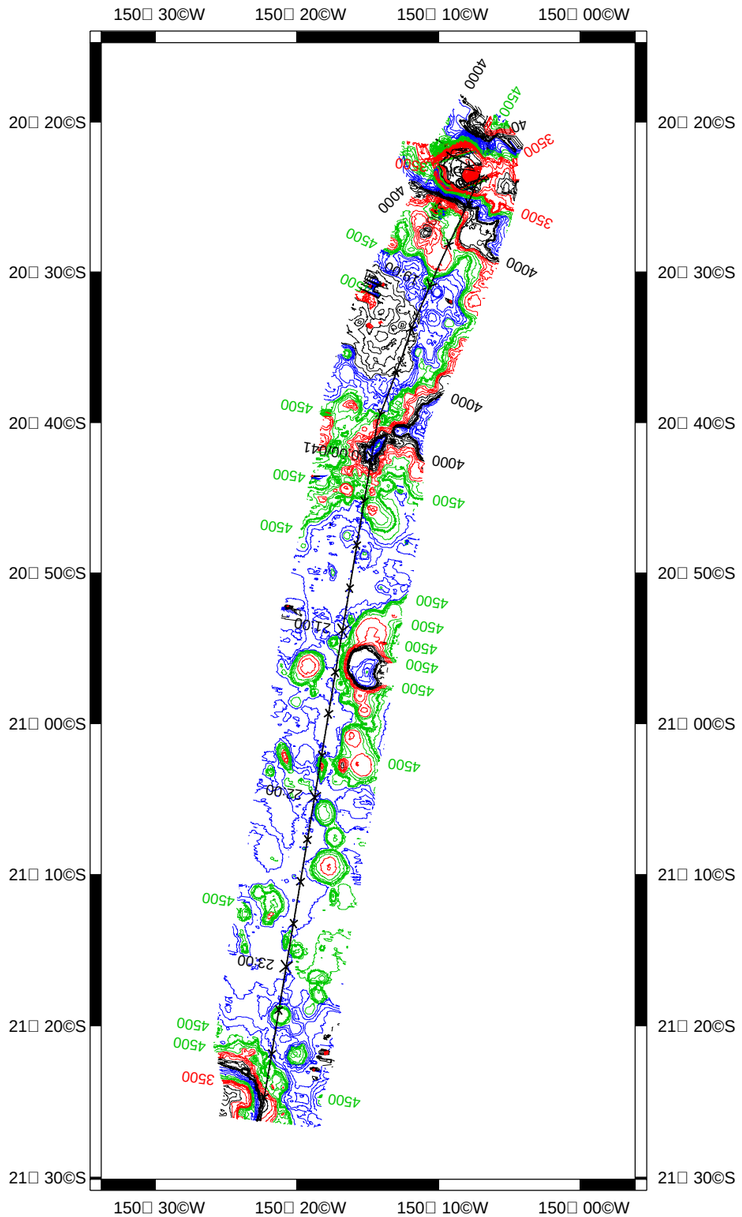


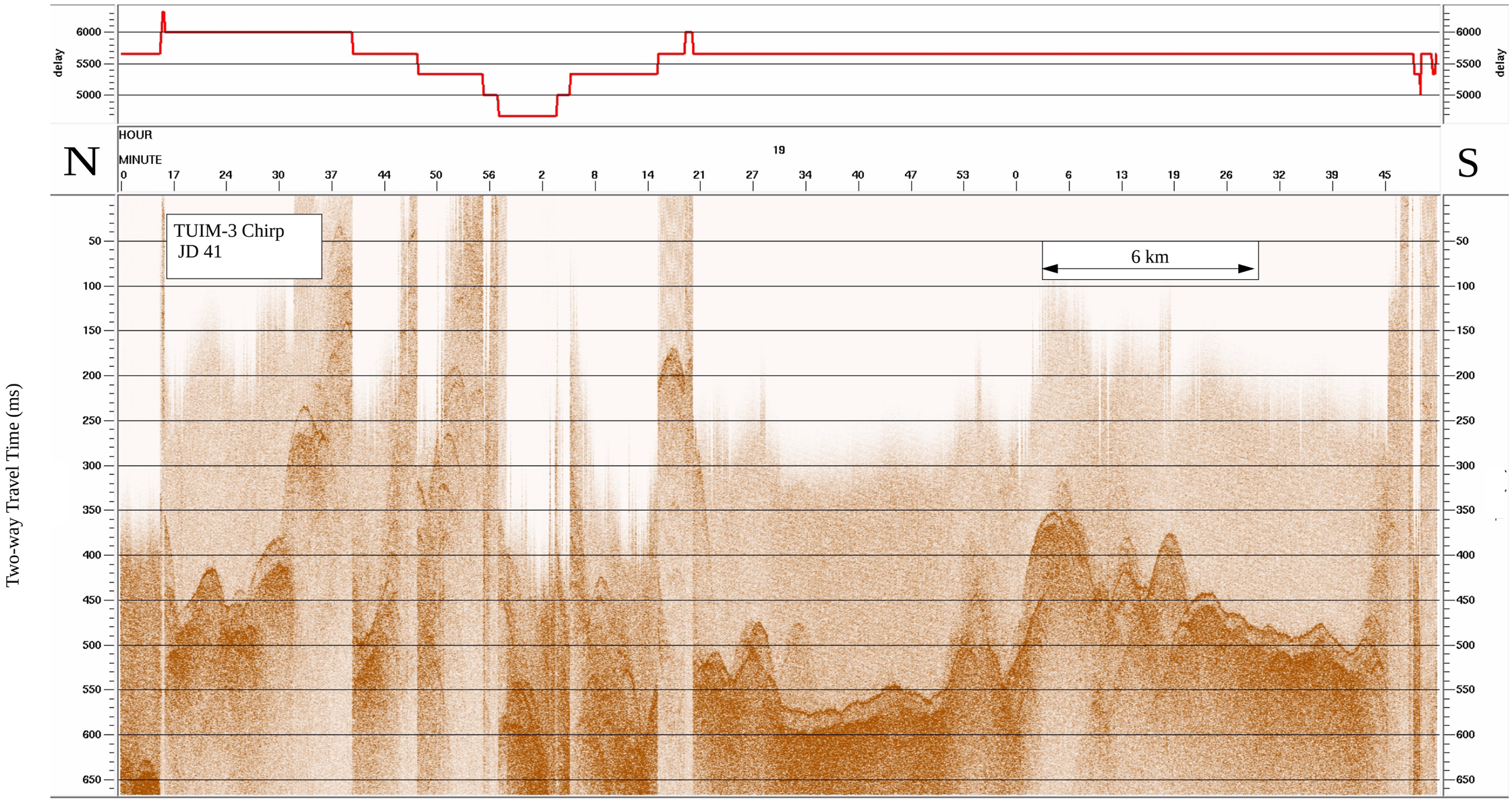


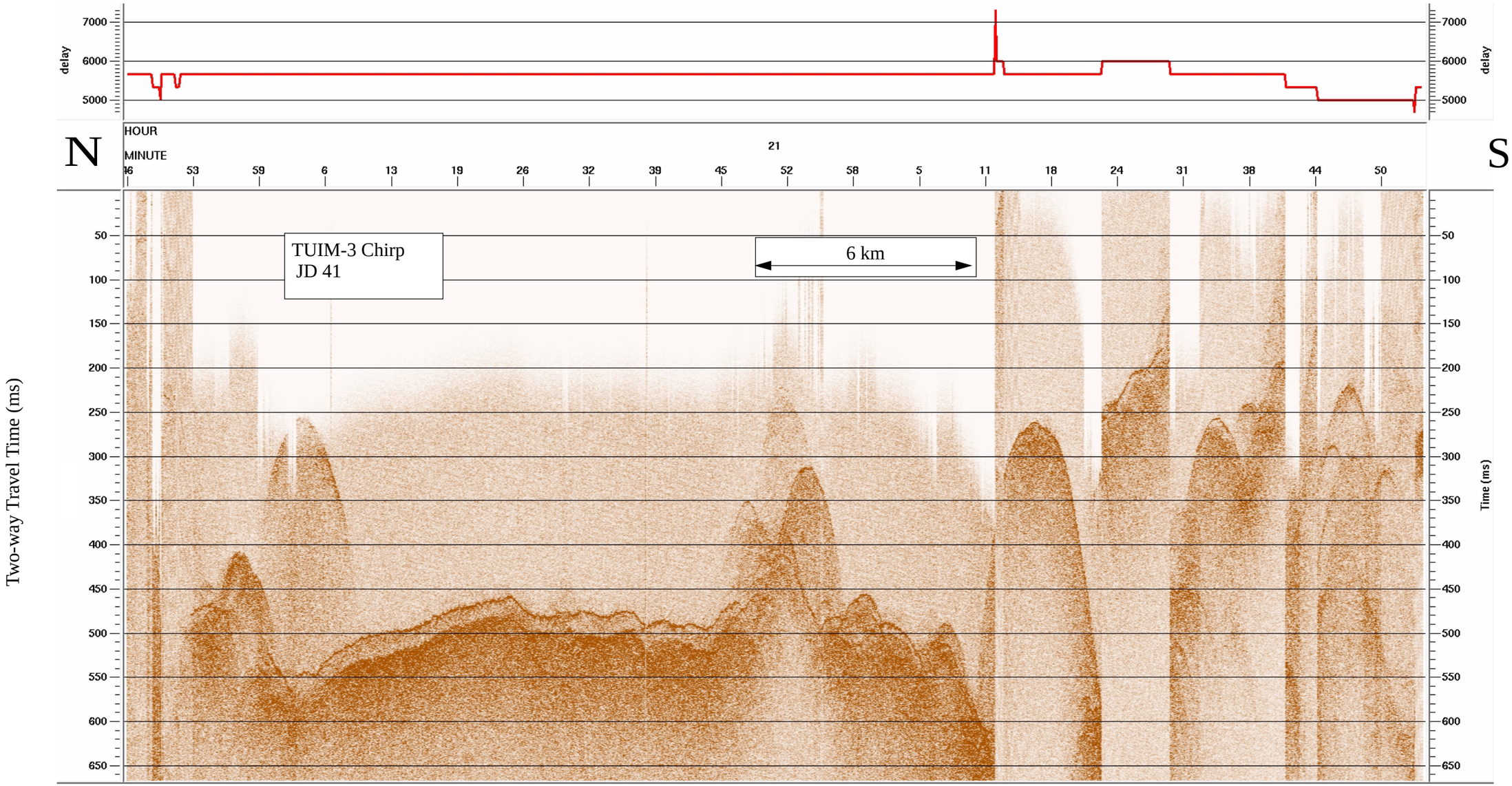
Two-way Travel Time (ms)


delay
6000
5000
4000
3000
HOUR
16
MINUTE
47 53 0 6 12 19 25 32 39 45 50 56 1 7 11 16 22 27 31 37 44 50 56 3 9
N
S
TUIM-3 Chirp
JD 41
6 km
Two-way Travel Time (ms)
Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

Data File SBfixavg.2005feb10.1800-2400

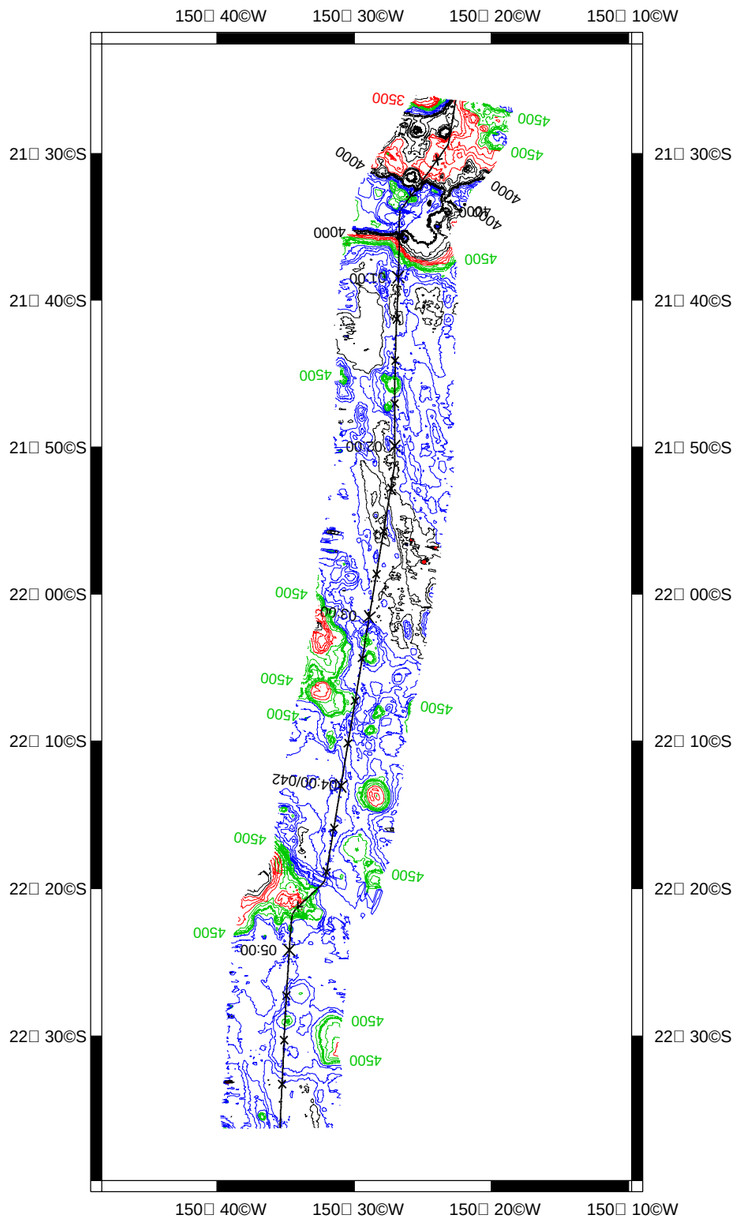


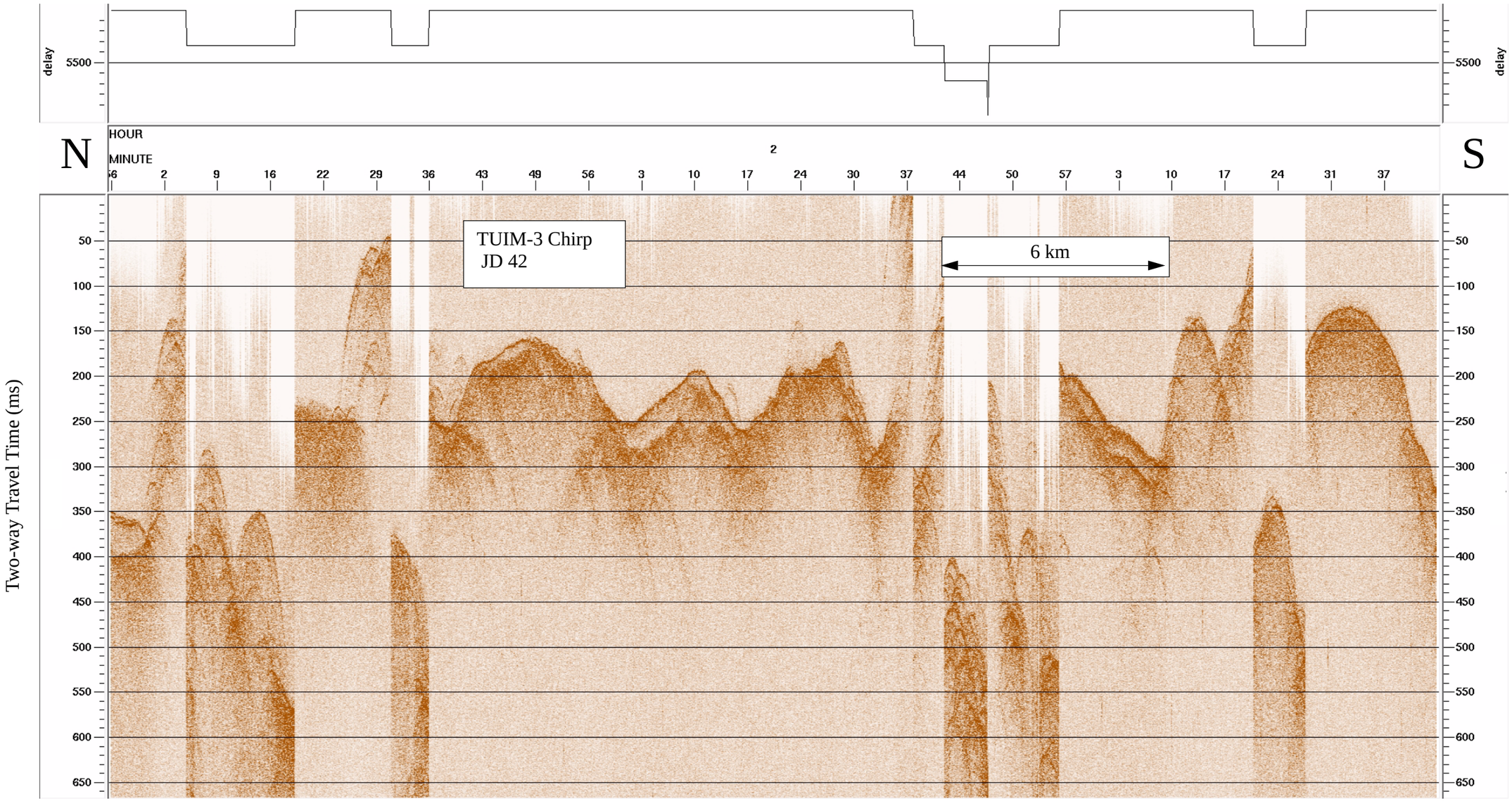

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5500
5000
N
S
HOUR
19
MINUTE
0 17 24 30 37 44 50 56 2 8 14 21 27 34 40 47 53 0 6 13 19 26 32 39 45
TUIM-3 Chirp
JD 41
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

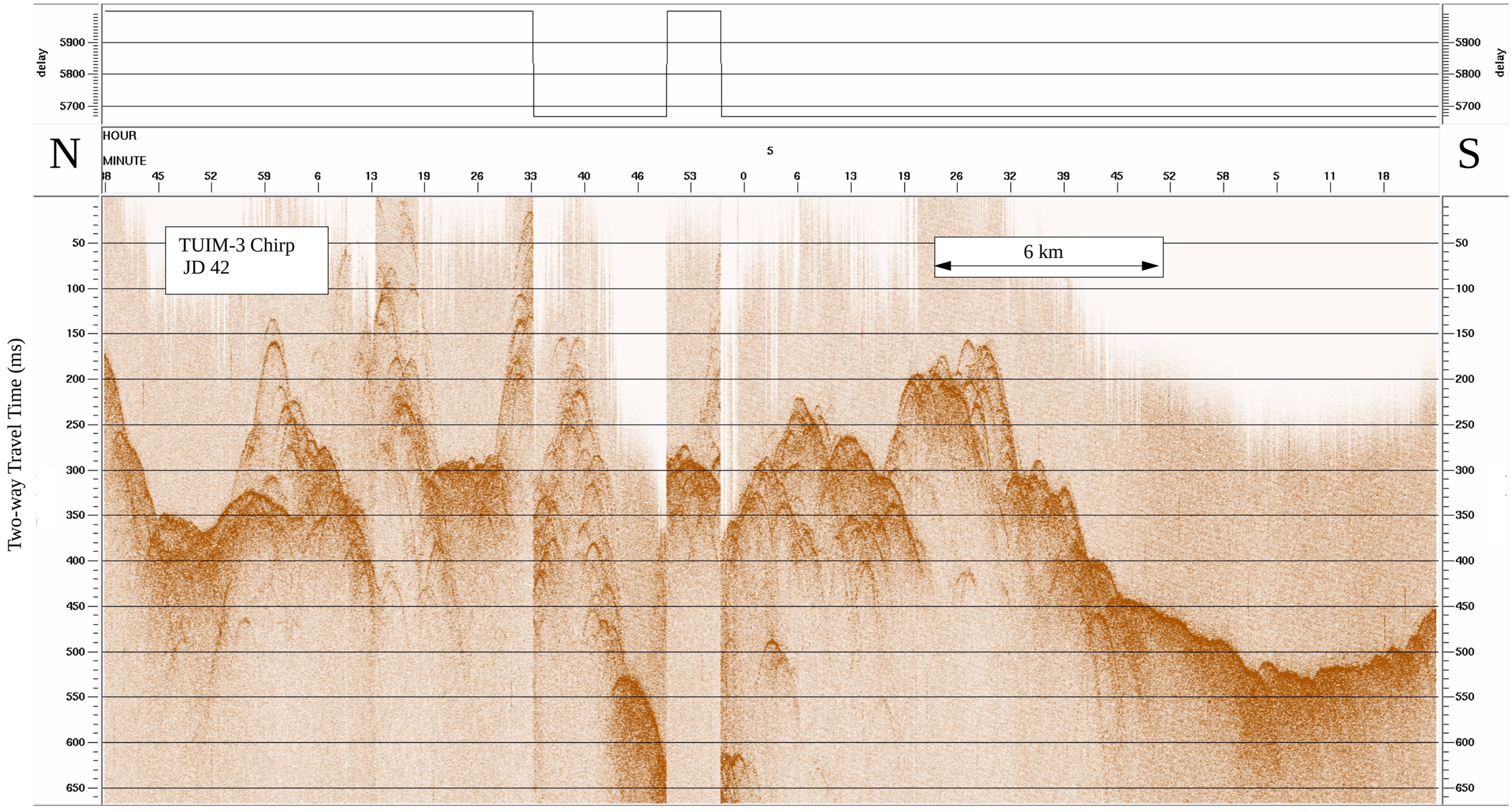

delay
7000
6000
5000
N
S
HOUR
MINUTE
21
46 53 59 6 13 19 26 32 39 45 52 58 5 11 18 24 31 38 44 50
TUIM-3 Chirp
JD 41
6 km
Two-way Travel Time (ms)
Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

Julian Day 42
11 February 2005
Knudsen Chirp Data

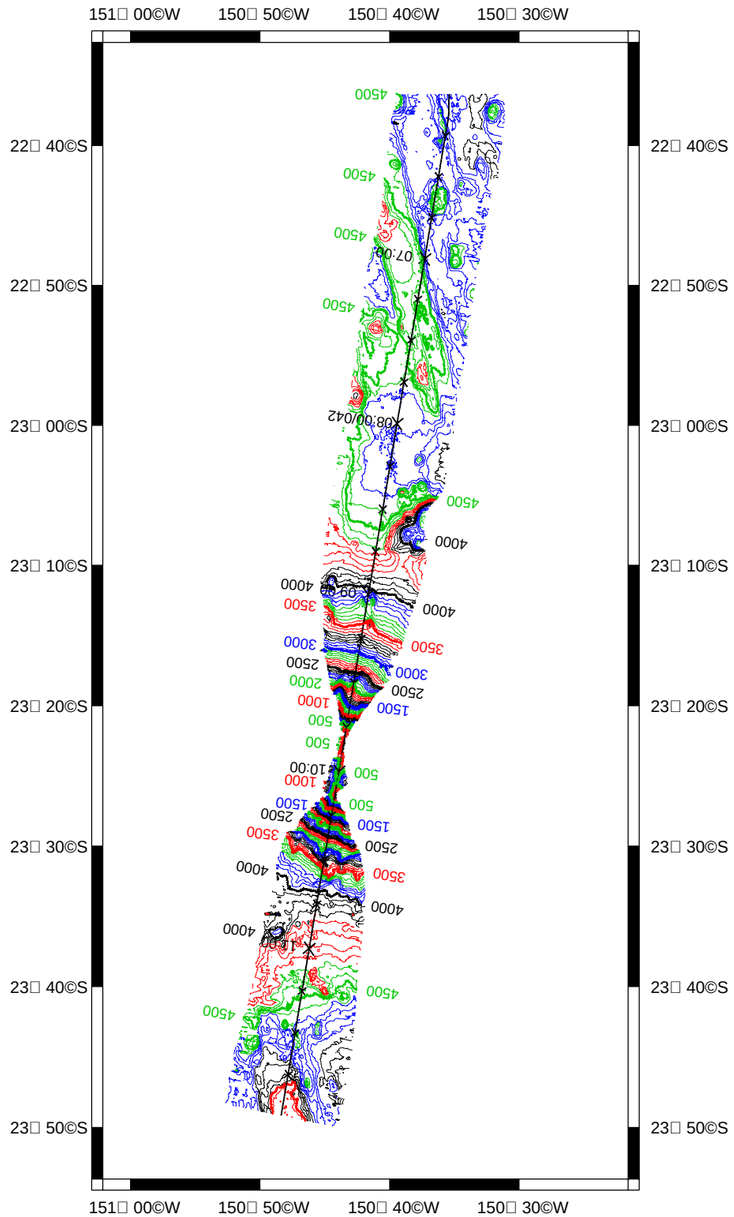
Data File SBfixavg.2005feb11.0000-0600

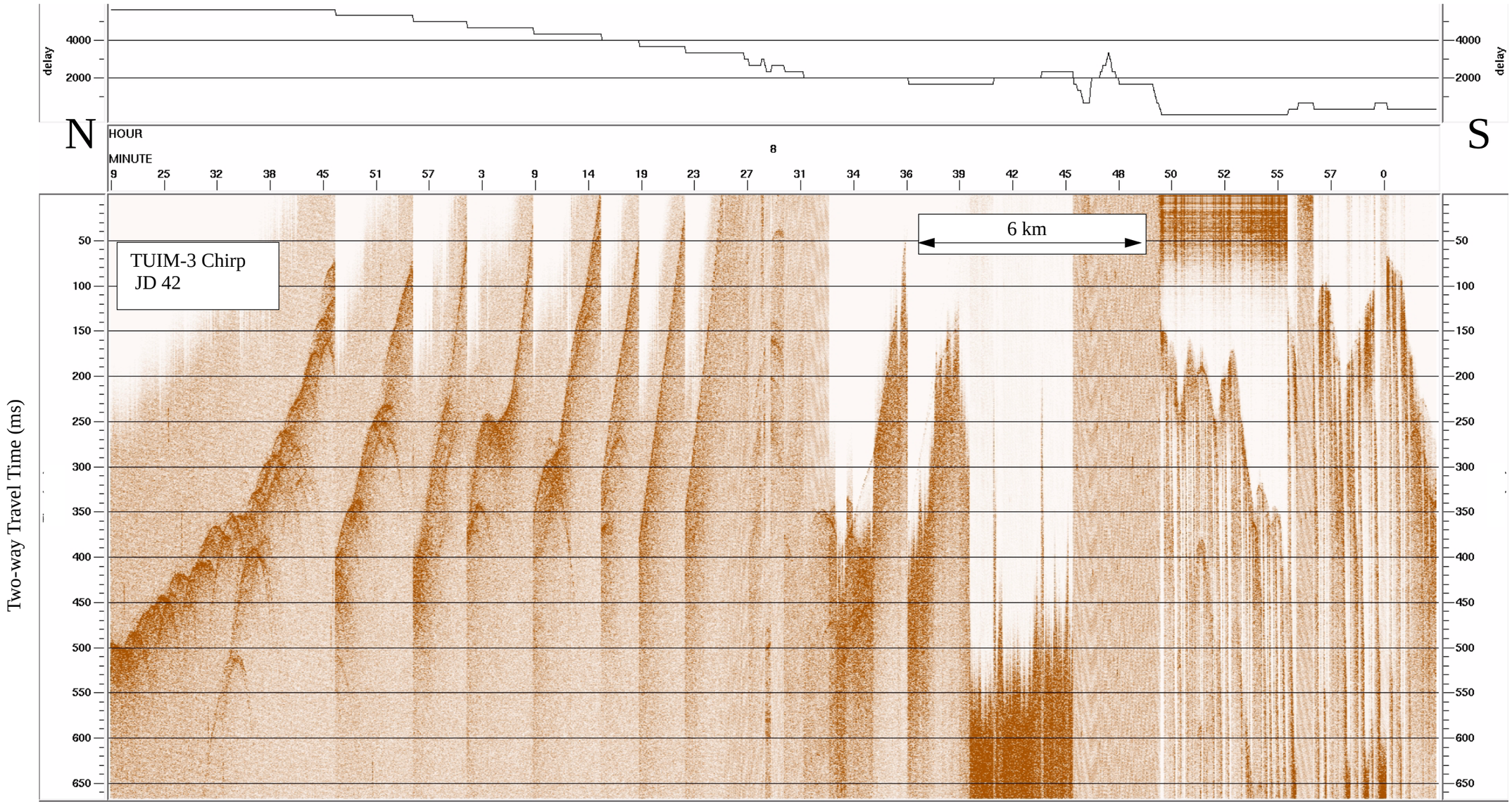


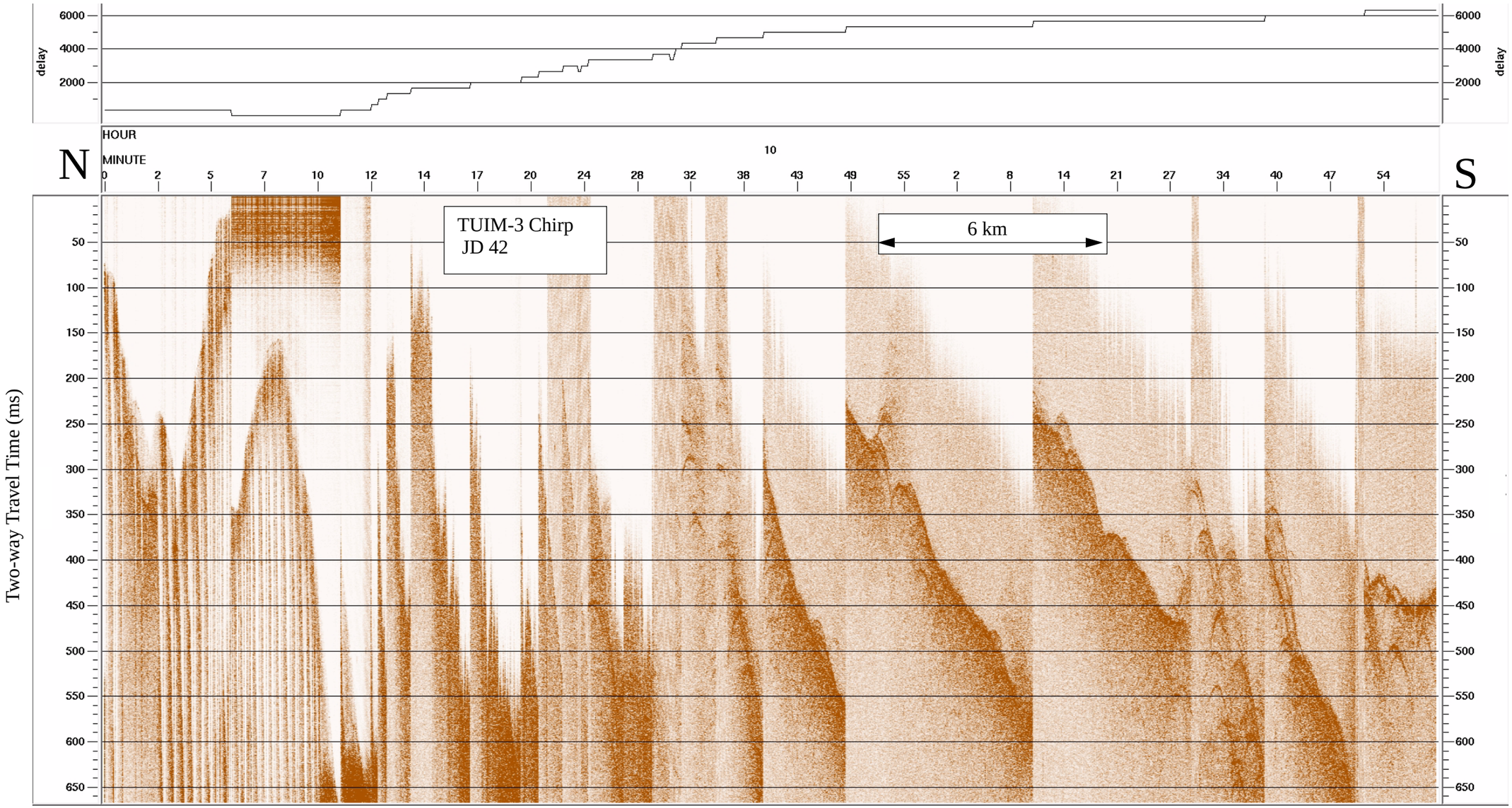

delay
5500
5500
delay
N
S
HOUR
MINUTE
2
56 2 9 16 22 29 36 43 49 56 3 10 17 24 30 37 44 50 57 3 10 17 24 31 37
TUIM-3 Chirp
JD 42
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650


delay
5900
5800
5700
N
S
HOUR
MINUTE
5
18 45 52 59 6 13 19 26 33 40 46 53 0 6 13 19 26 32 39 45 52 58 5 11 18
TUIM-3 Chirp
JD 42
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

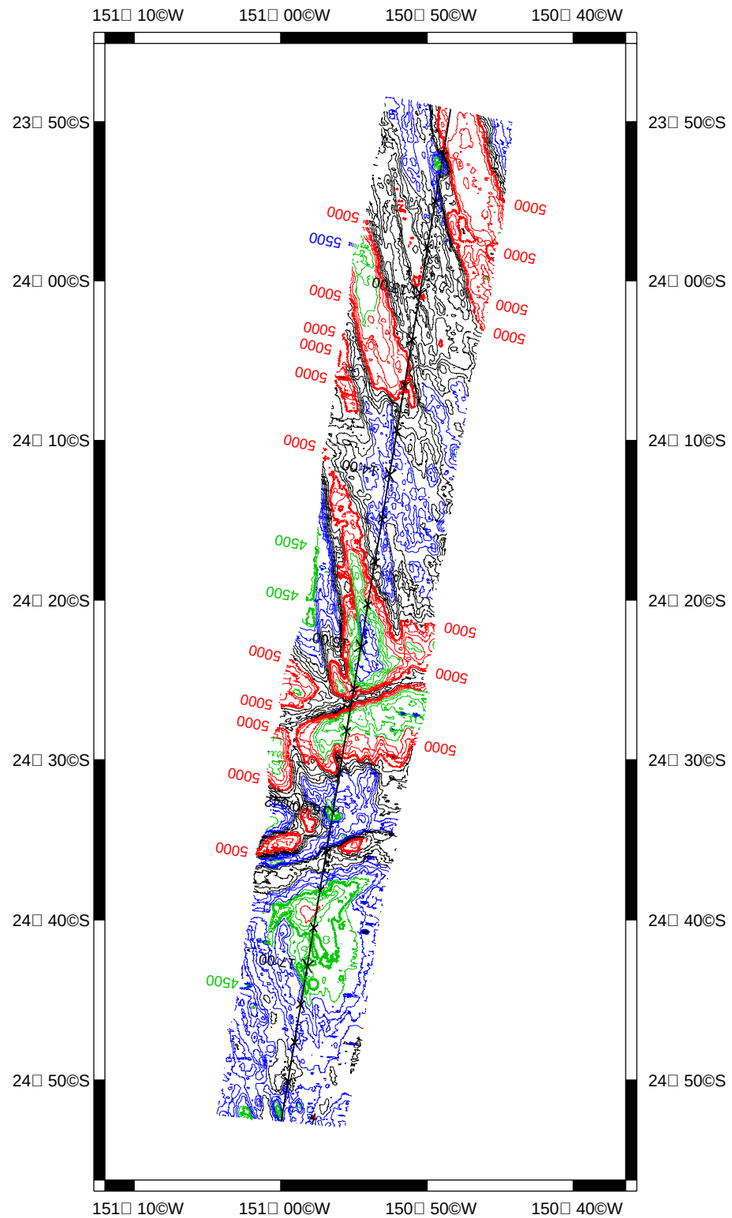
Data File SBfixavg.2005feb11.0600-1200

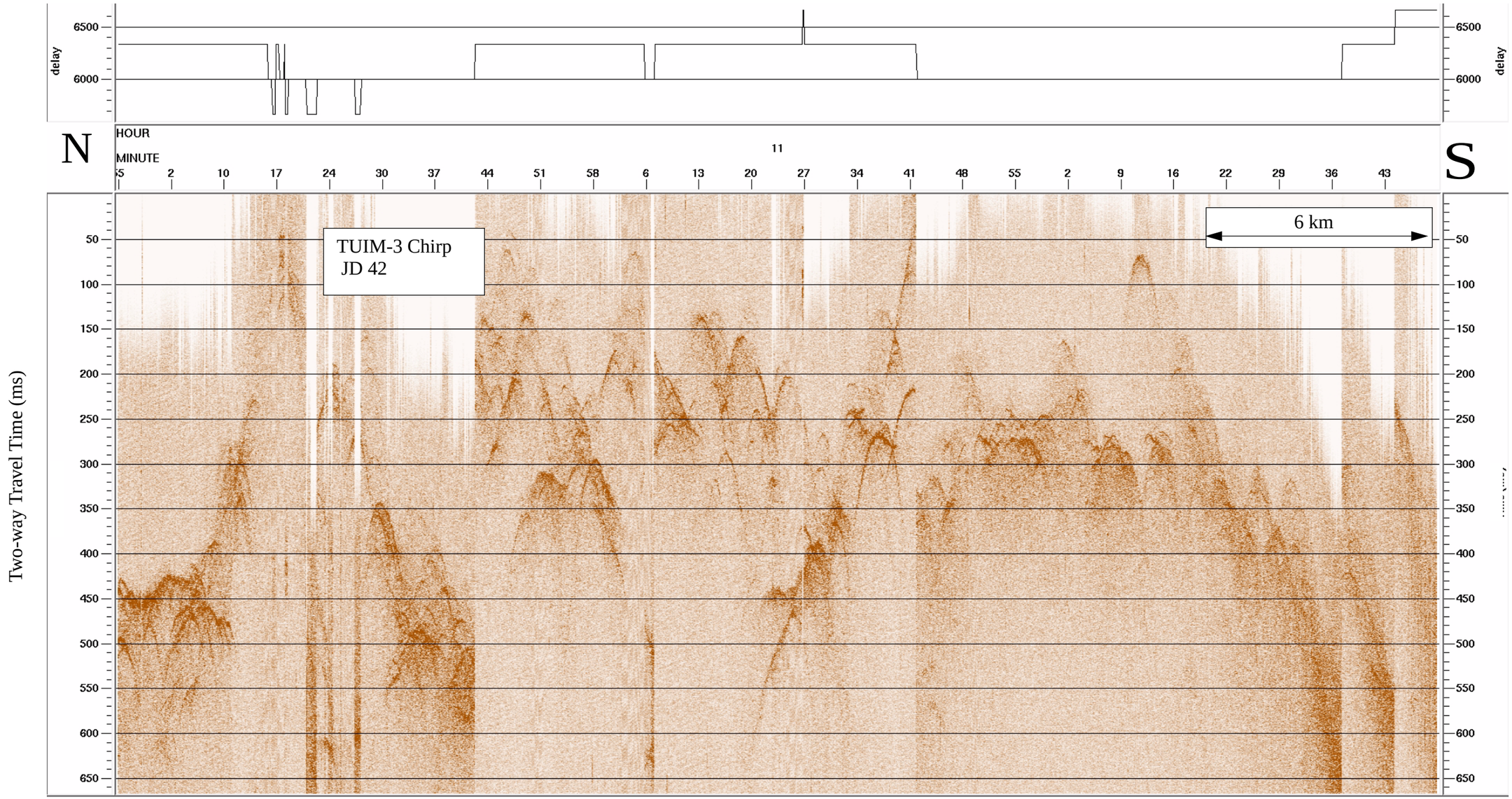


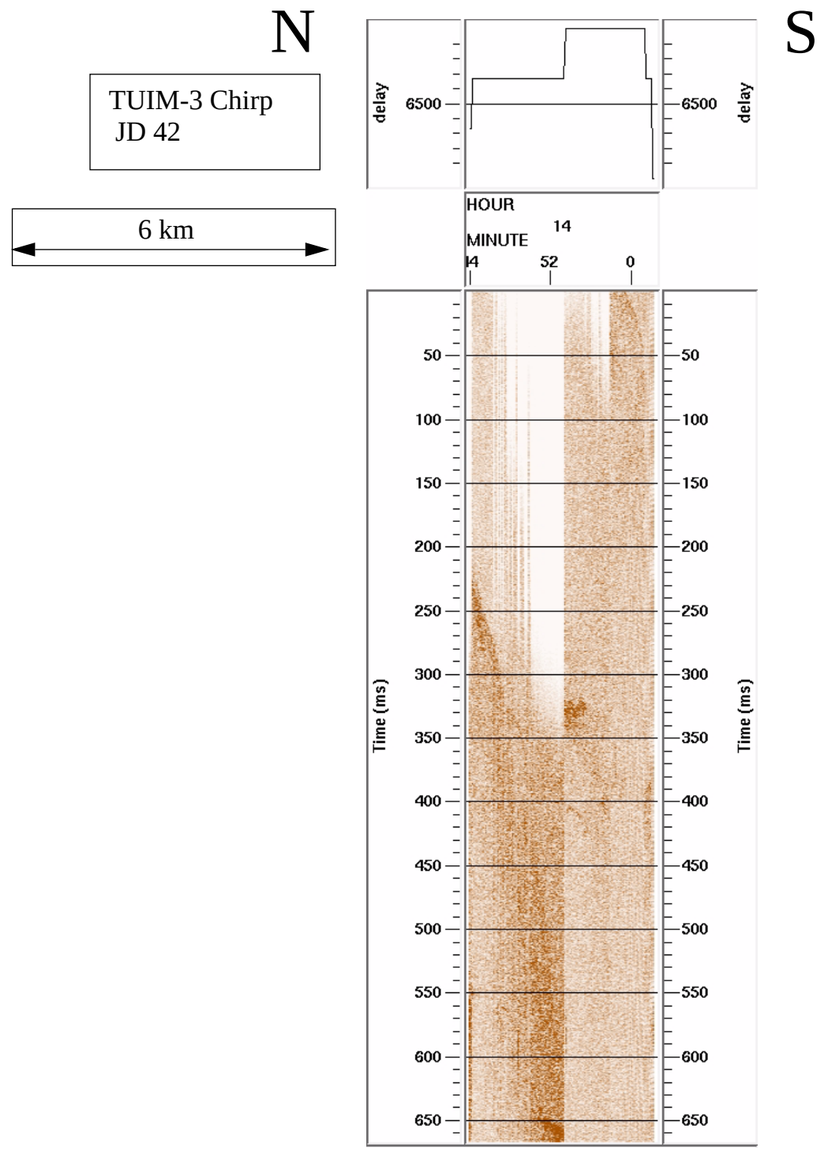

delay
4000
2000
N
S
HOUR
8
MINUTE
9 25 32 38 45 51 57 3 9 14 19 23 27 31 34 36 39 42 45 48 50 52 55 57 0
6 km
TUIM-3 Chirp
JD 42
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650


delay
6000
4000
2000
N
S
HOUR
MINUTE
10
0 2 5 7 10 12 14 17 20 24 28 32 38 43 49 55 2 8 14 21 27 34 40 47 54
TUIM-3 Chirp
JD 42
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

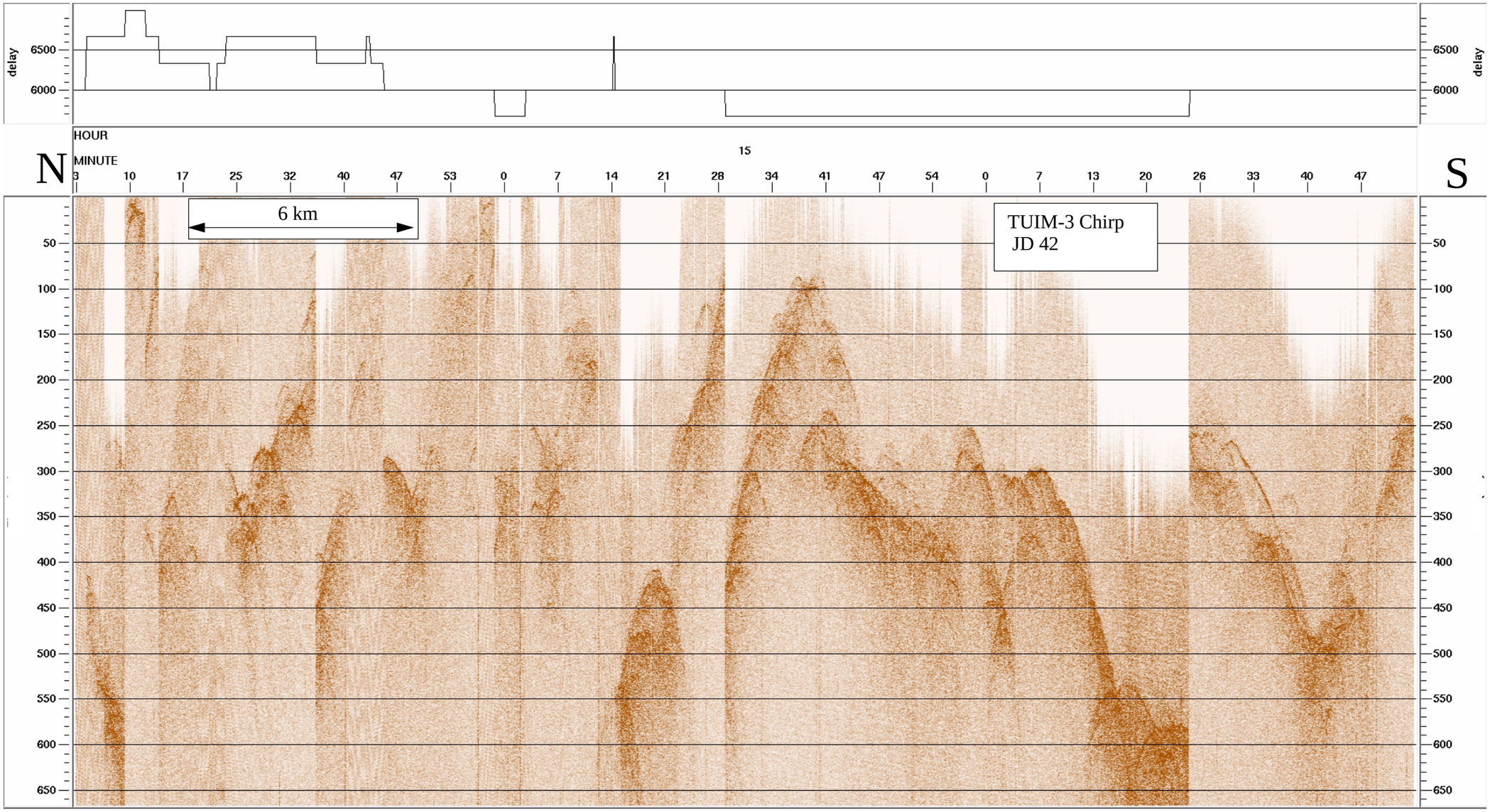
Data File SBfixavg.2005feb11.1200-1800



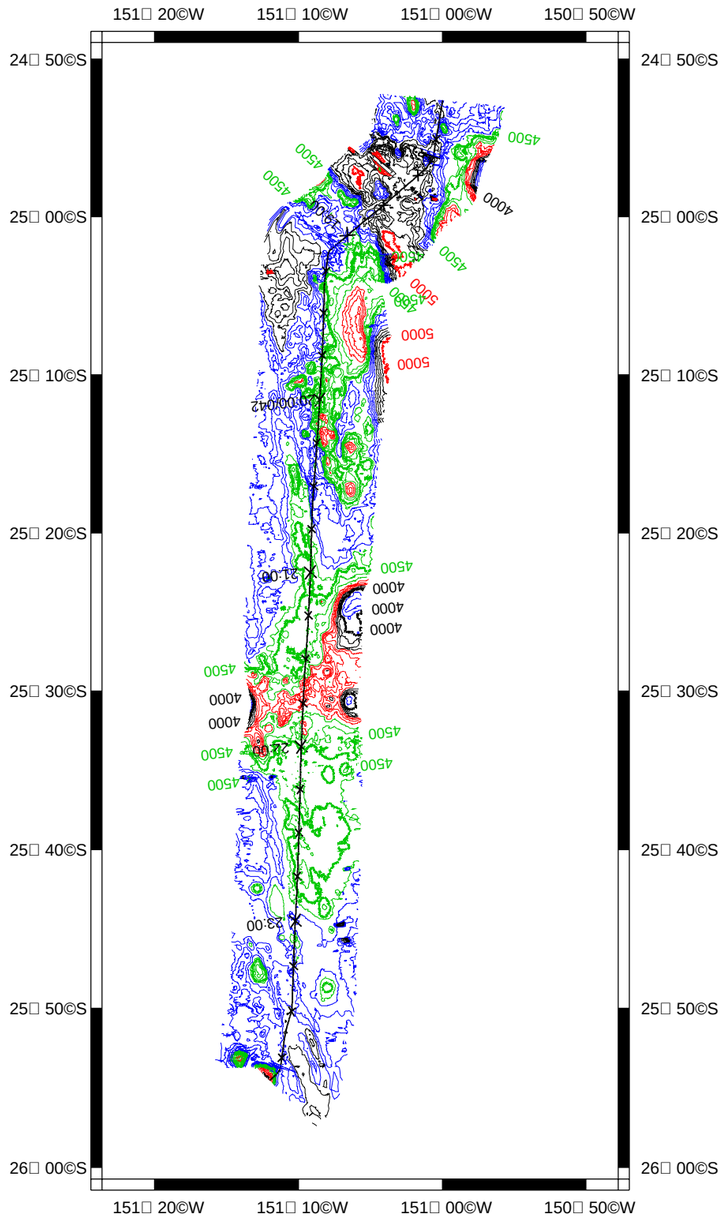

delay
6500
6000
N
S
HOUR
MINUTE
11
5 2 10 17 24 30 37 44 51 58 6 13 20 27 34 41 48 55 2 9 16 22 29 36 43
TUIM-3 Chirp
JD 42
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

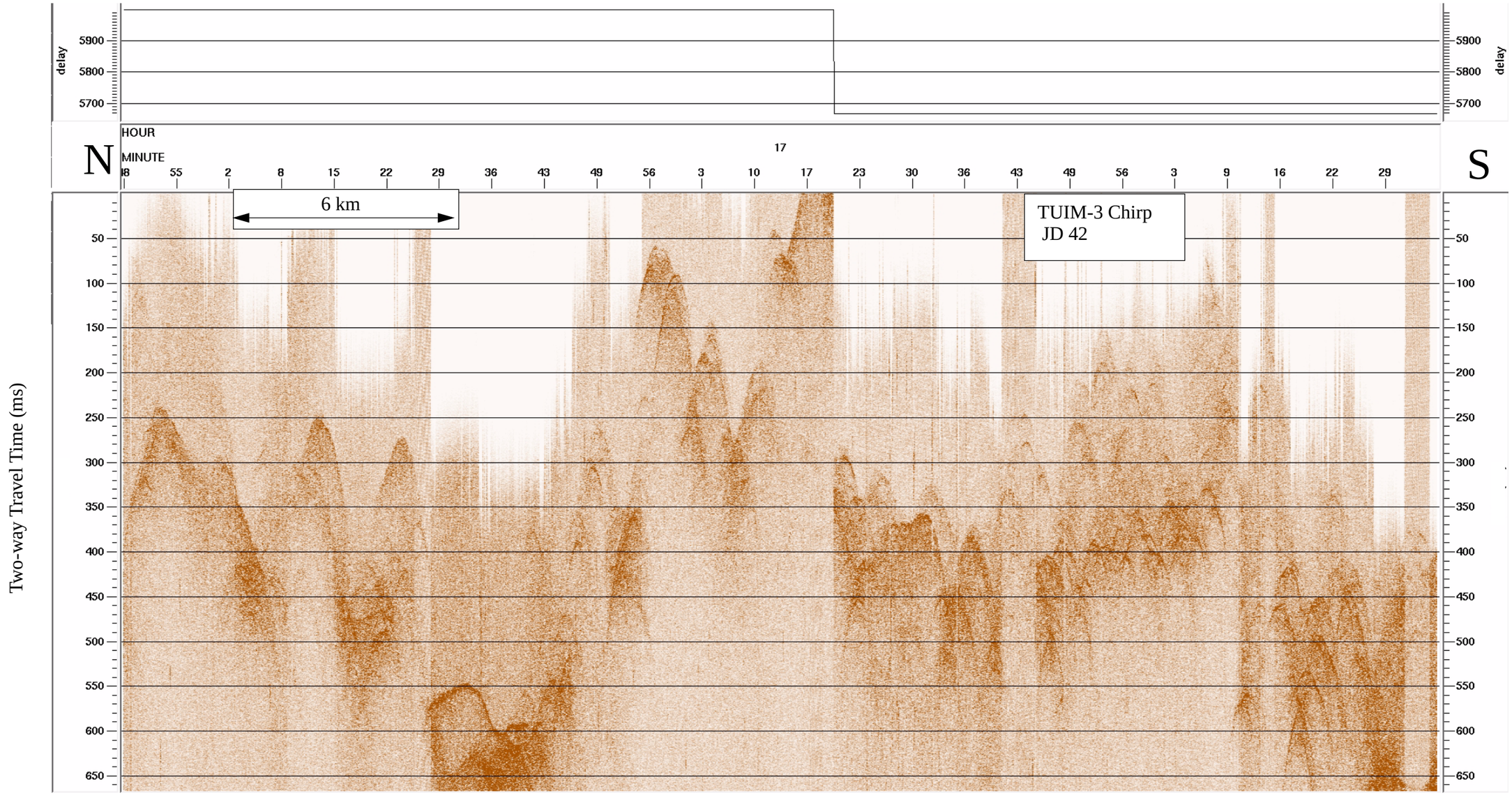


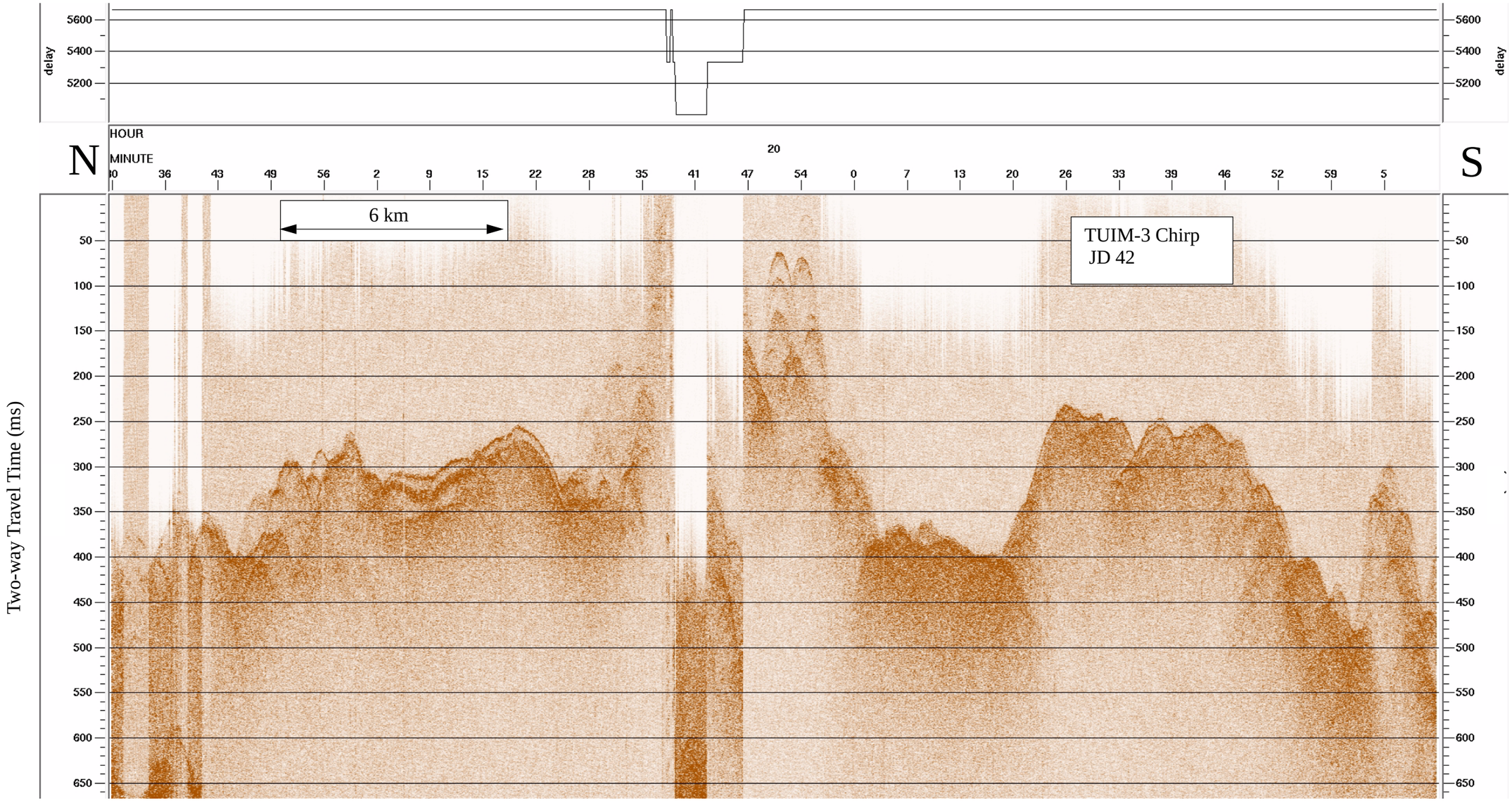
Two-way Travel Time (ms)

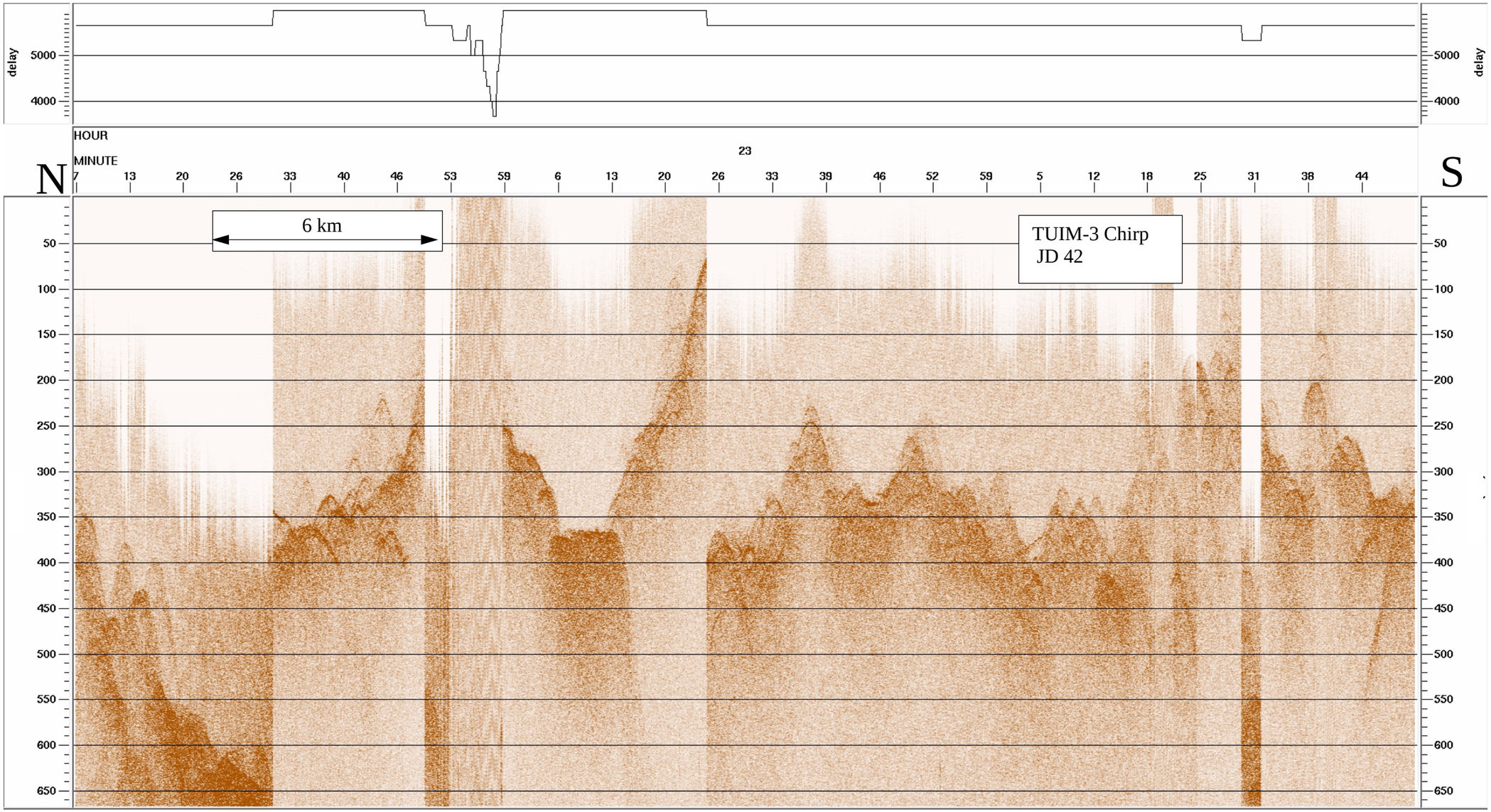

delay
6500
6000
HOUR
MINUTE
15
N
S
3 10 17 25 32 40 47 53 0 7 14 21 28 34 41 47 54 0 7 13 20 26 33 40 47
6 km
TUIM-3 Chirp
JD 42
50 100 150 200 250 300 350 400 450 500 550 600 650
Two-way Travel Time (ms)

Data File SBfixavg.2005feb11.1800-2400



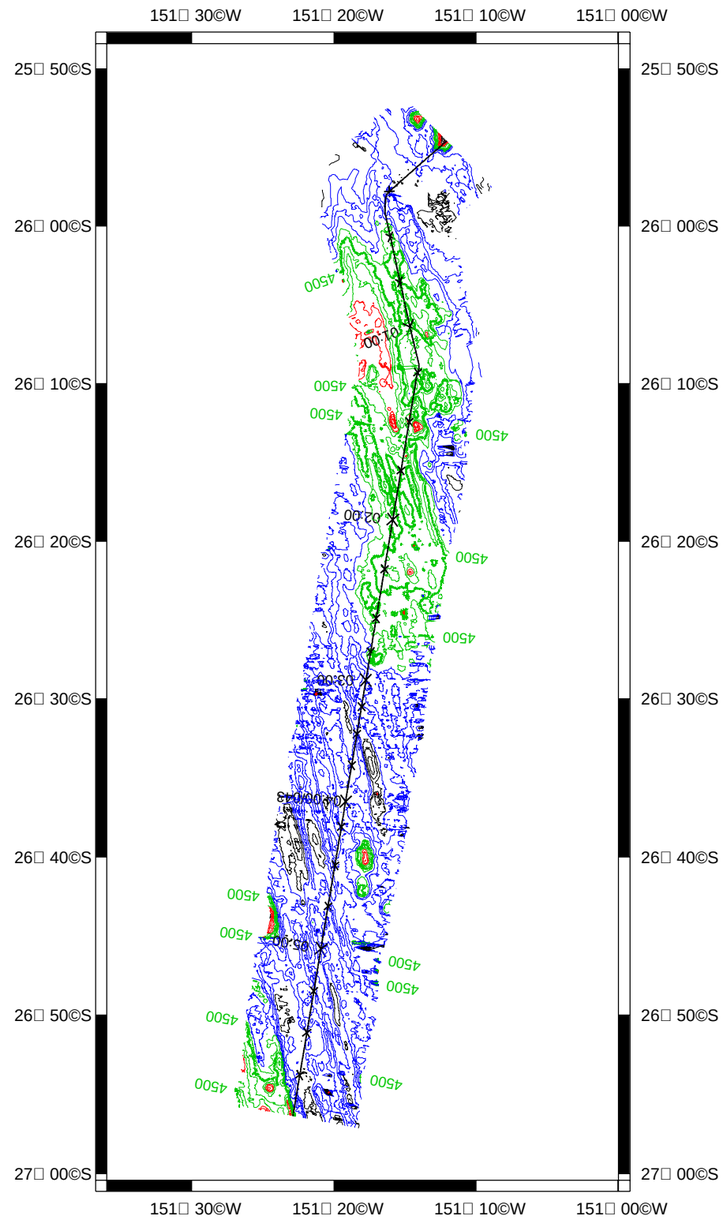

delay
5900
5800
5700
N
HOUR
MINUTE
17
18 55 2 8 15 22 29 36 43 49 56 3 10 17 23 30 36 43 49 56 3 9 16 22 29
S
6 km
TUIM-3 Chirp
JD 42
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

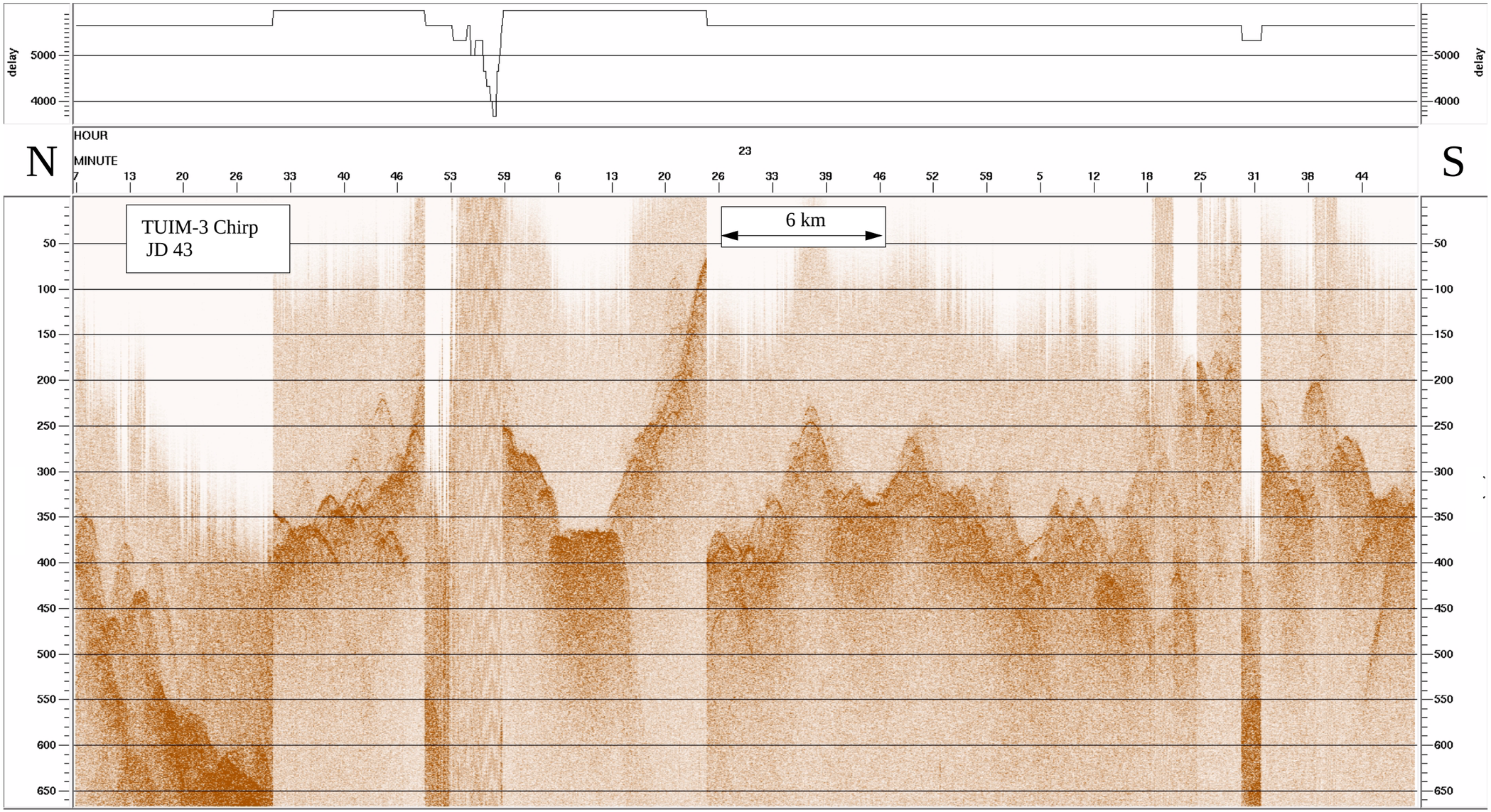

delay
5600
5400
5200
N
S
HOUR
MINUTE
20
6 km
TUIM-3 Chirp
JD 42
Two-way Travel Time (ms)
50
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150
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300
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400
450
500
550
600
650

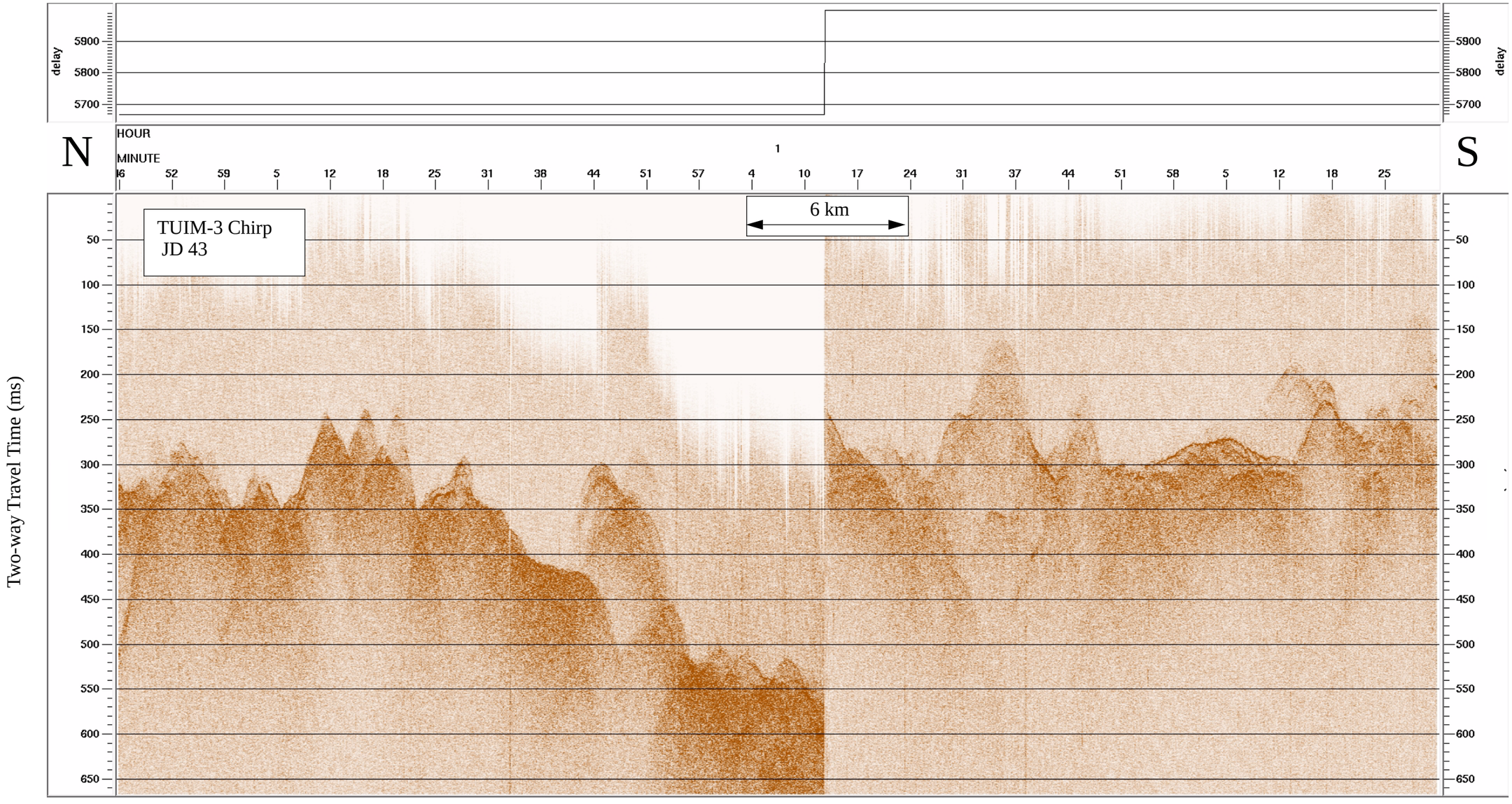

delay
5000
4000
HOUR
MINUTE
23
7 13 20 26 33 40 46 53 59 6 13 20 26 33 39 46 52 59 5 12 18 25 31 38 44
N
S
6 km
TUIM-3 Chirp
JD 42
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

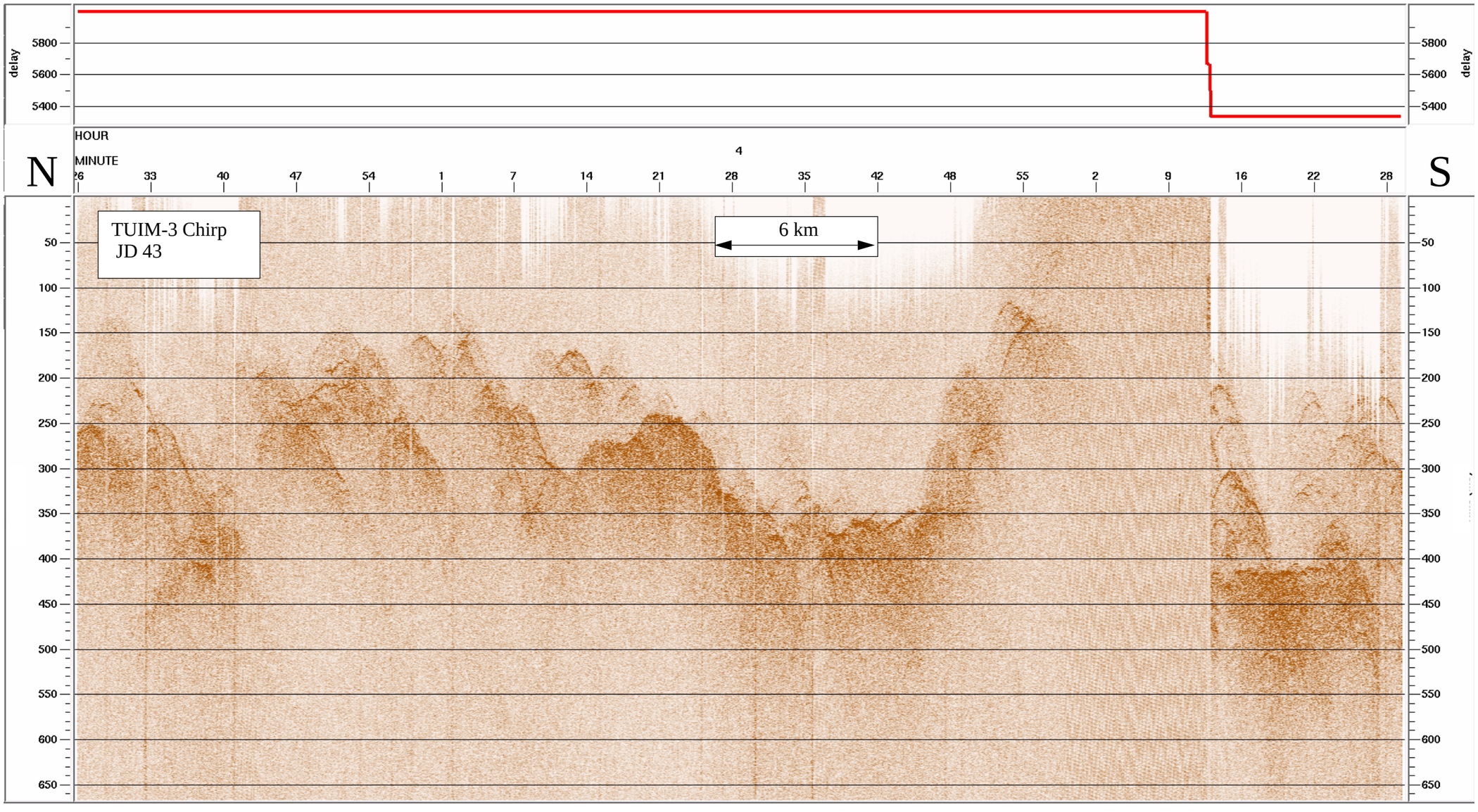
Julian Day 43
12 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb12.0000-0600

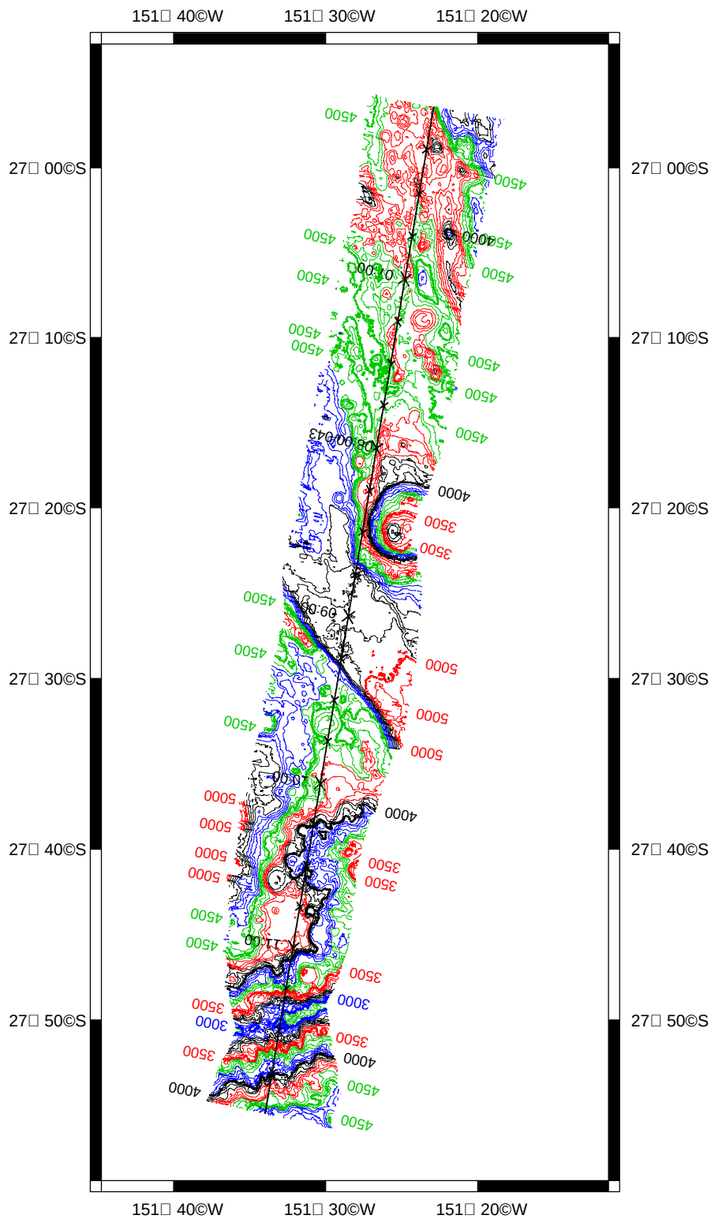


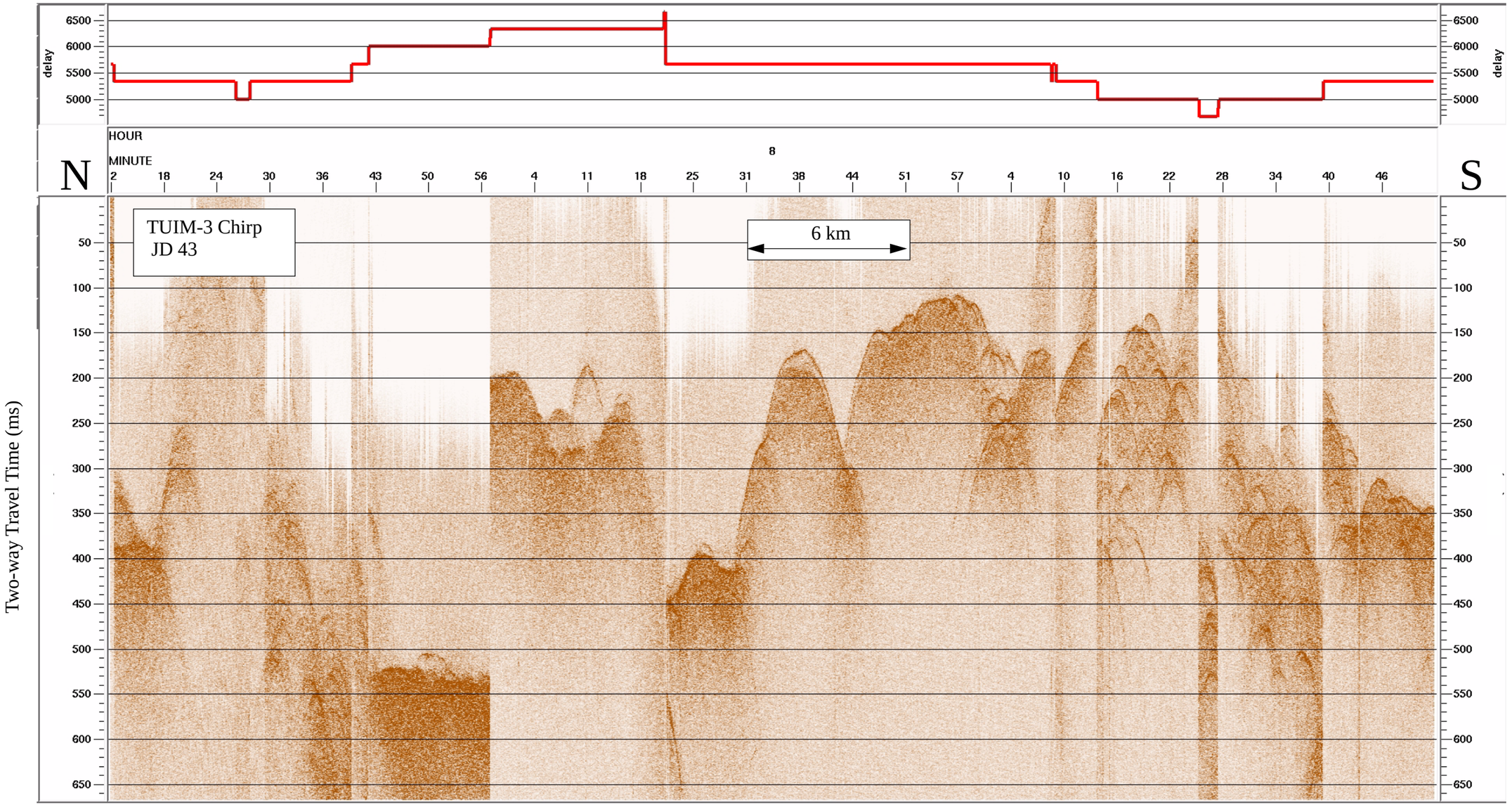

delay
5000
4000
N
HOUR
MINUTE
23
7 13 20 26 33 40 46 53 59 6 13 20 26 33 39 46 52 59 5 12 18 25 31 38 44
S
TUIM-3 Chirp
JD 43
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

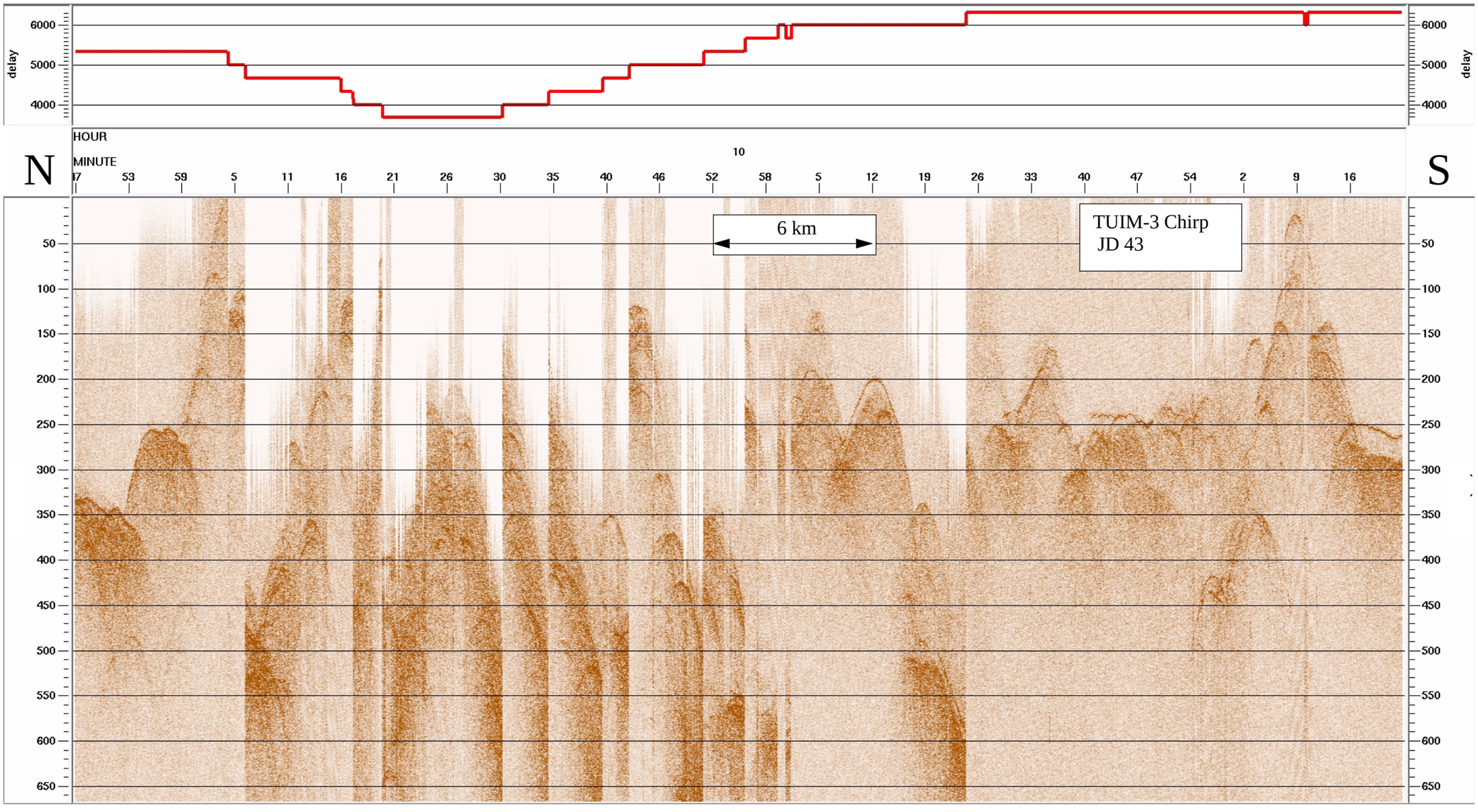

delay
5900
5800
5700
N
S
HOUR
MINUTE
1
6 km
TUIM-3 Chirp
JD 43
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650


delay
5800
5600
5400
HOUR
MINUTE
4
26
33
40
47
54
1
7
14
21
28
35
42
48
55
2
9
16
22
28
N
S
TUIM-3 Chirp
JD 43
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

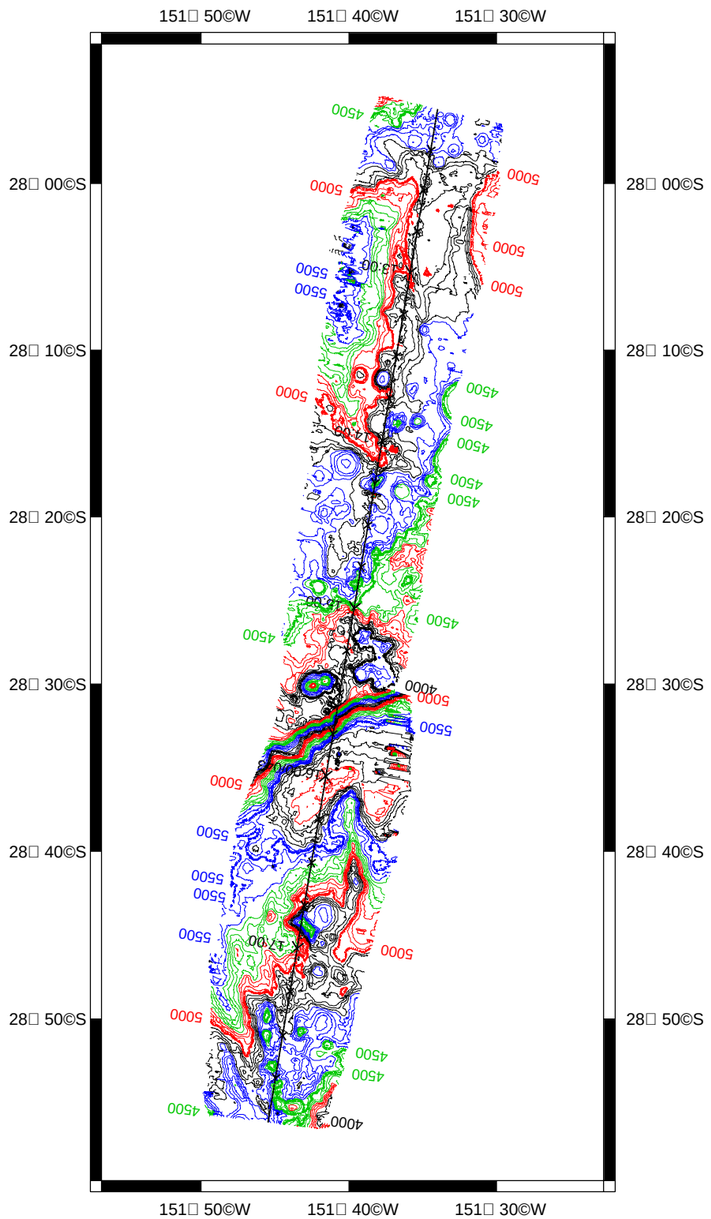
Data File SBfixavg.2005feb12.0600-1200

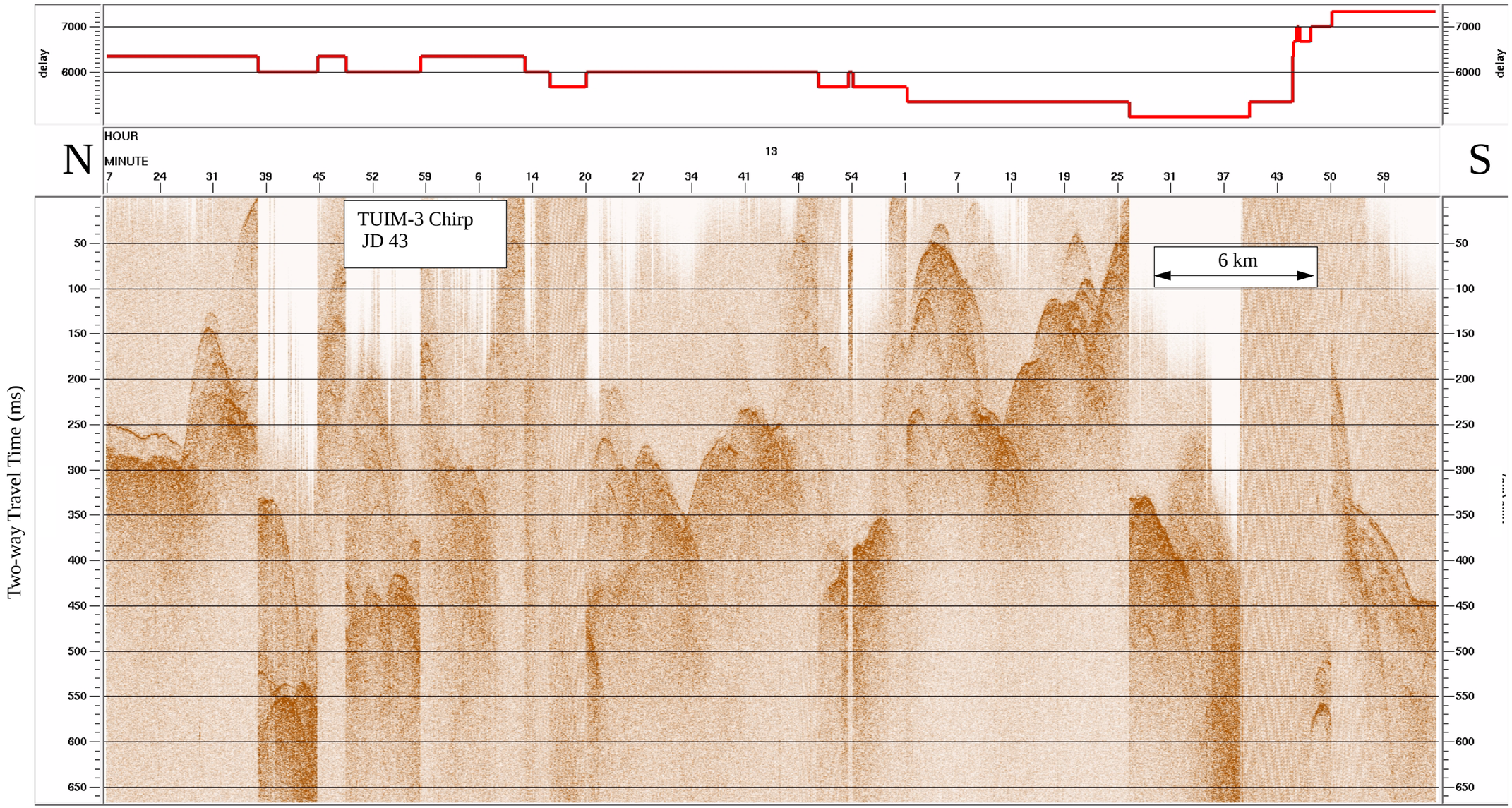


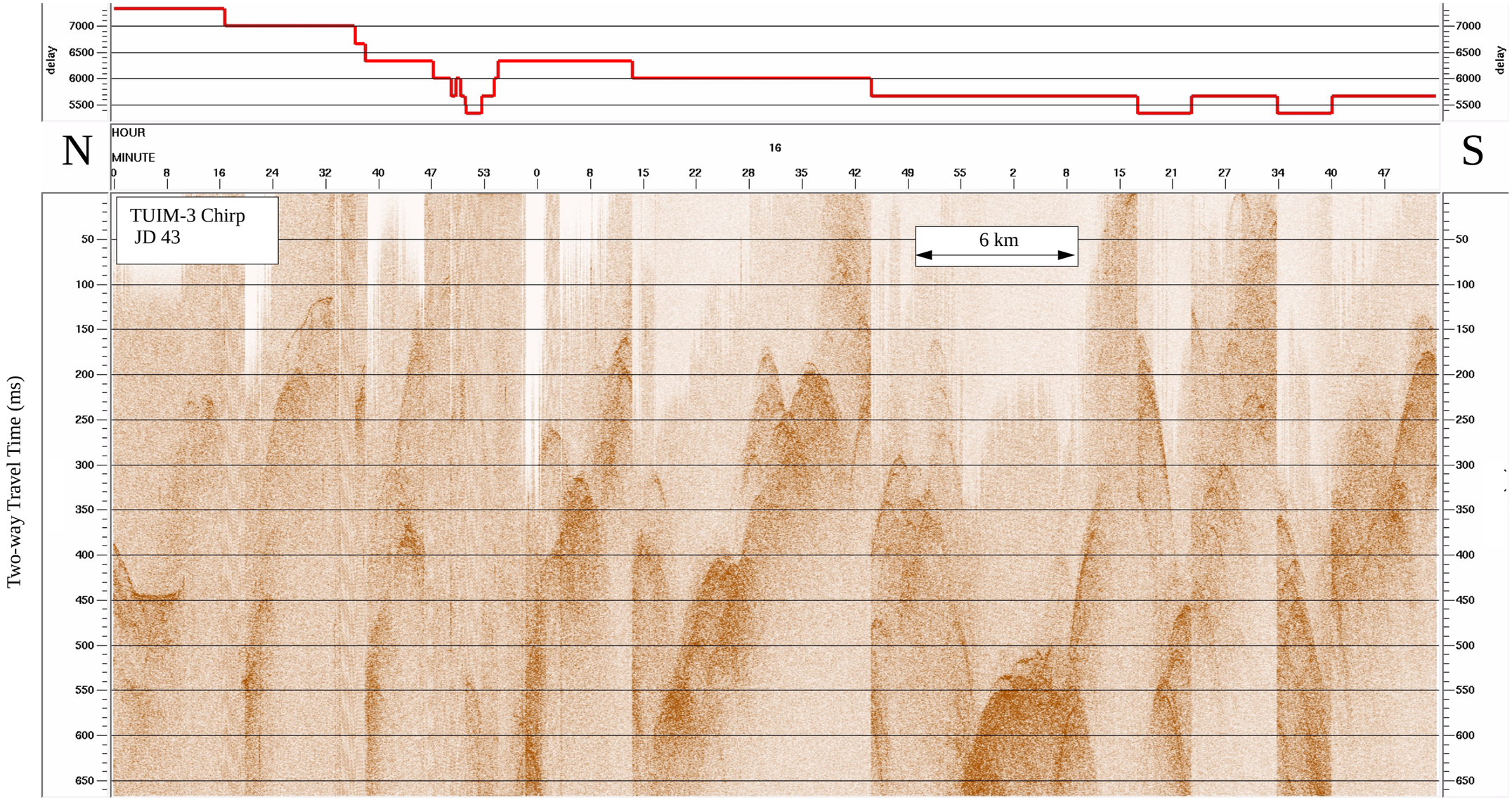

delay
6500
6000
5500
5000
HOUR
MINUTE
8
2 18 24 30 36 43 50 56 4 11 18 25 31 38 44 51 57 4 10 16 22 28 34 40 46
N
S
TUIM-3 Chirp
JD 43
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650


delay
6000
5000
4000
HOUR
MINUTE
10
N
S
6 km
TUIM-3 Chirp
JD 43
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

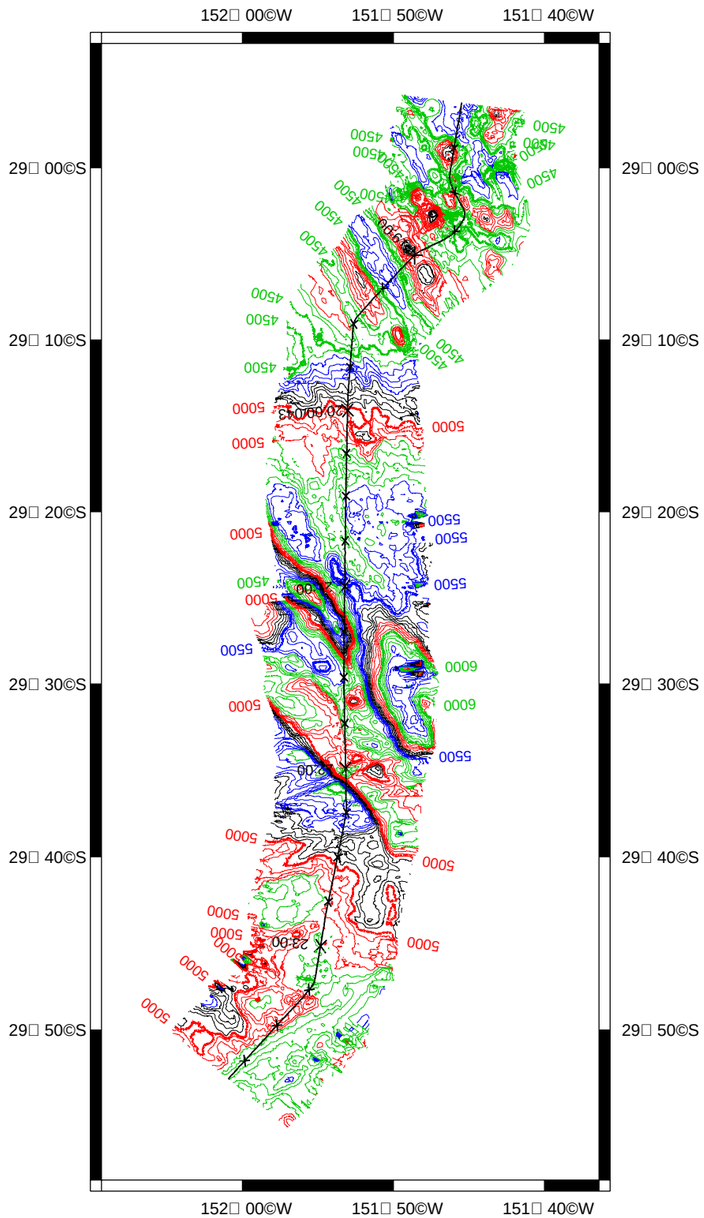
Data File SBfixavg.2005feb12.1200-1800

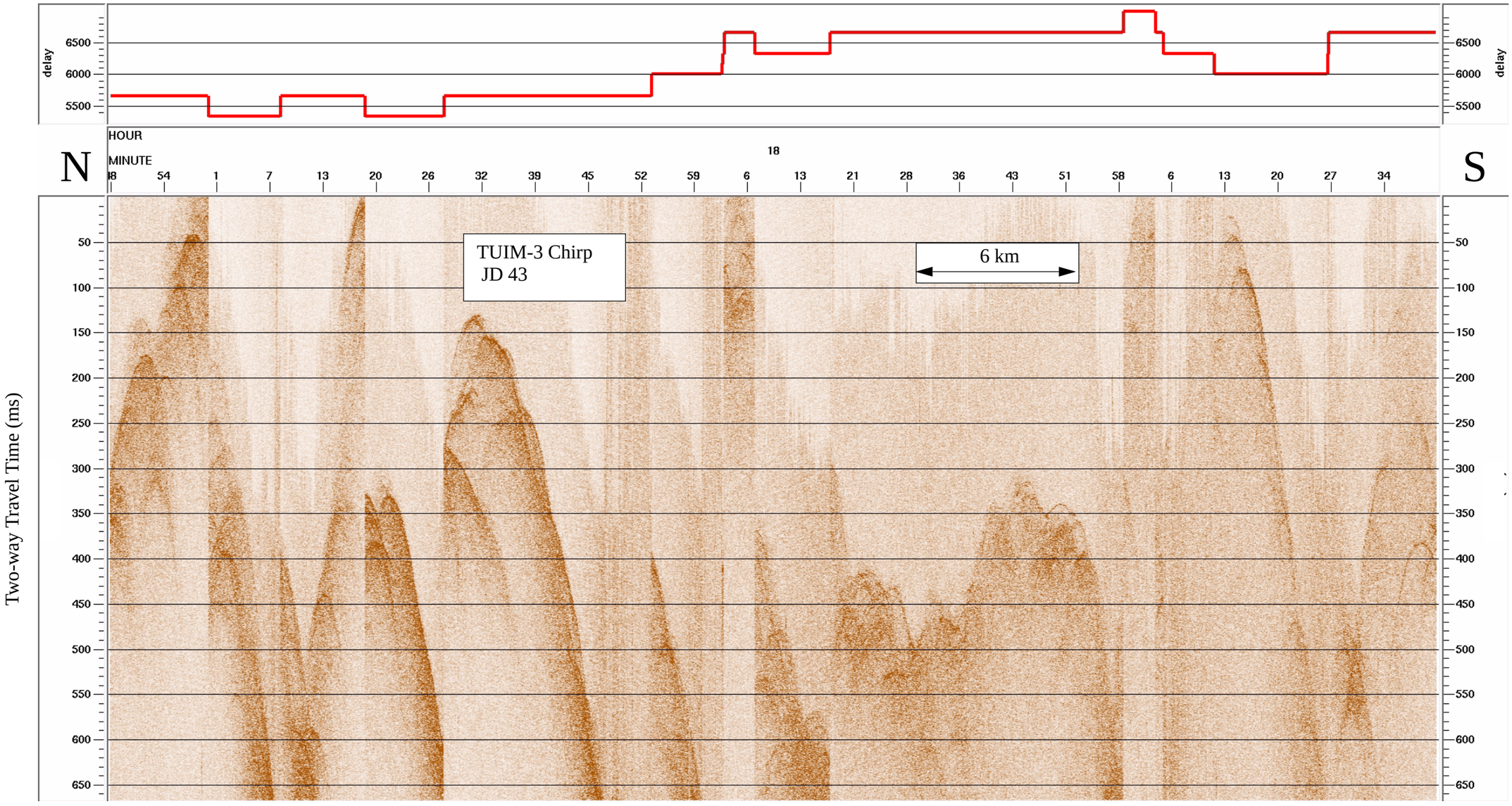


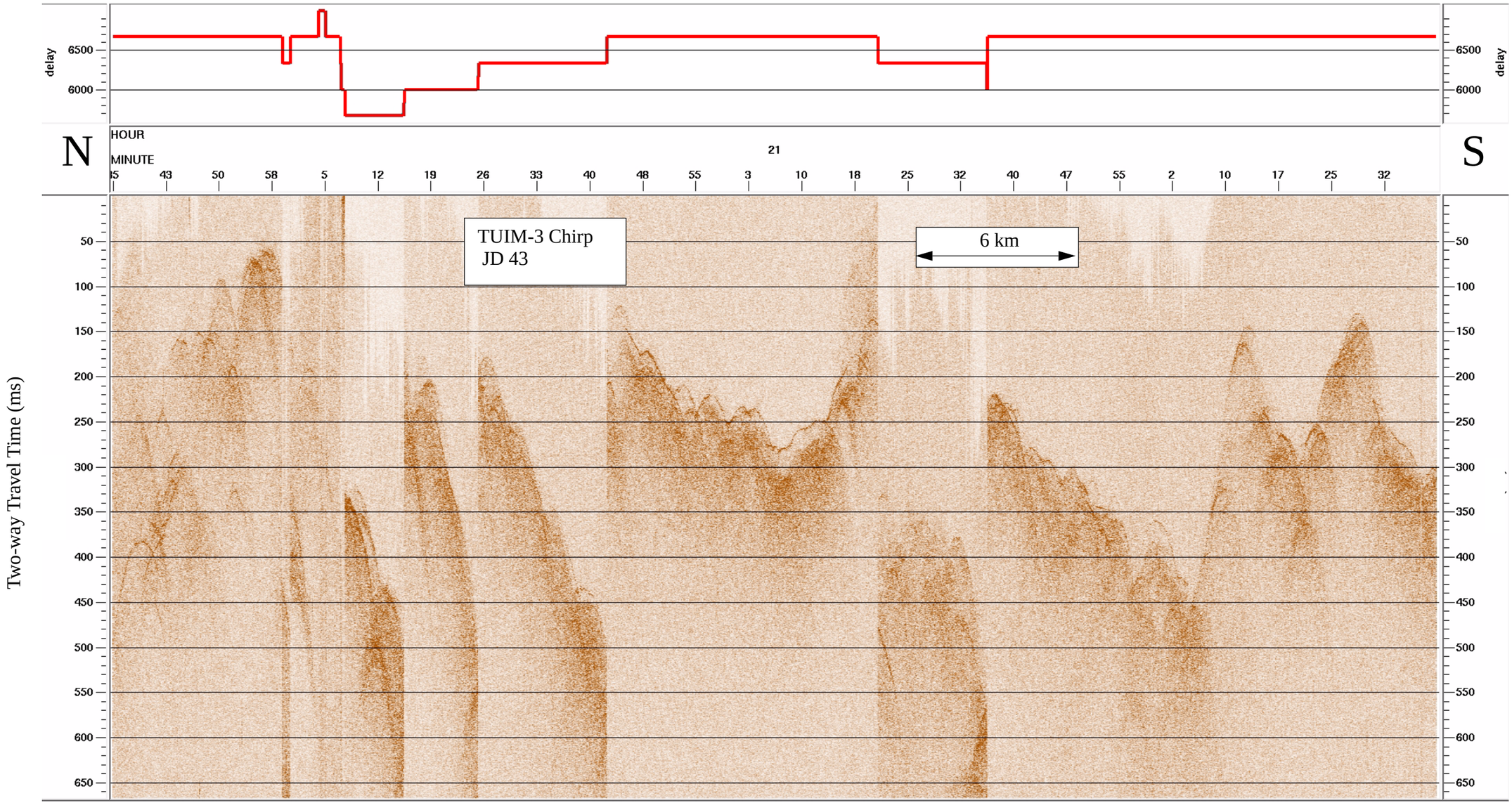

delay
7000
6000
N
S
HOUR
MINUTE
13
7 24 31 39 45 52 59 6 14 20 27 34 41 48 54 1 7 13 19 25 31 37 43 50 59
TUIM-3 Chirp
JD 43
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650


delay
7000
6500
6000
5500
N
S
HOUR
MINUTE
16
0 8 16 24 32 40 47 53 0 8 15 22 28 35 42 49 55 2 8 15 21 27 34 40 47
TUIM-3 Chirp
JD 43
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

Data File SBfixavg.2005feb12.1800-2400

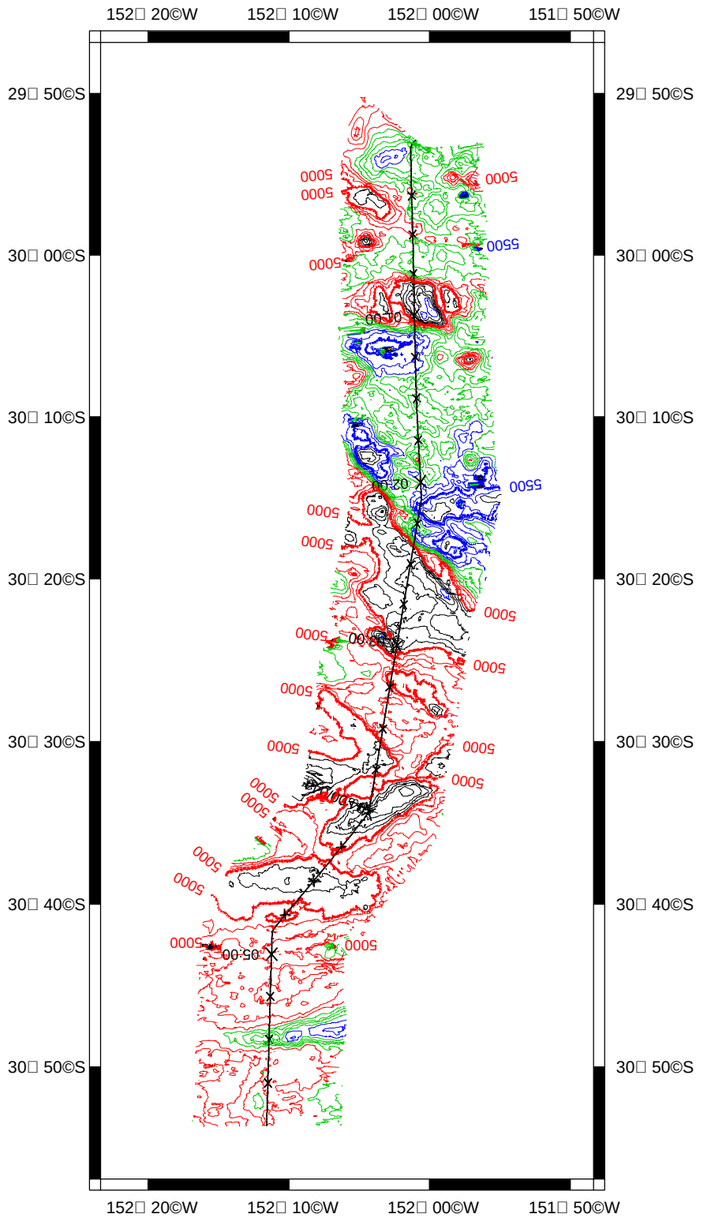


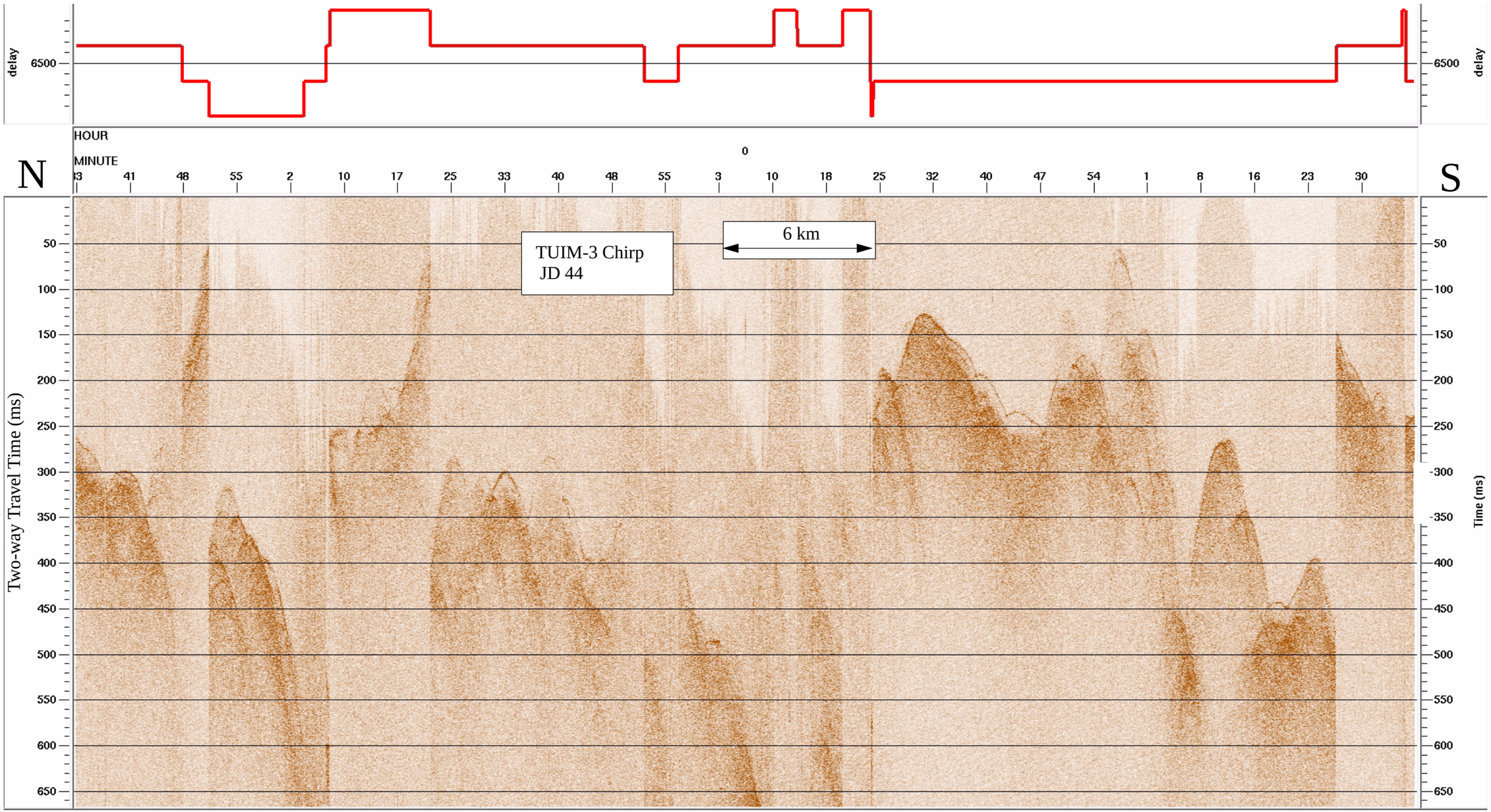

delay
6500
6000
5500
HOUR
MINUTE
18
N
S
TUIM-3 Chirp
JD 43
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

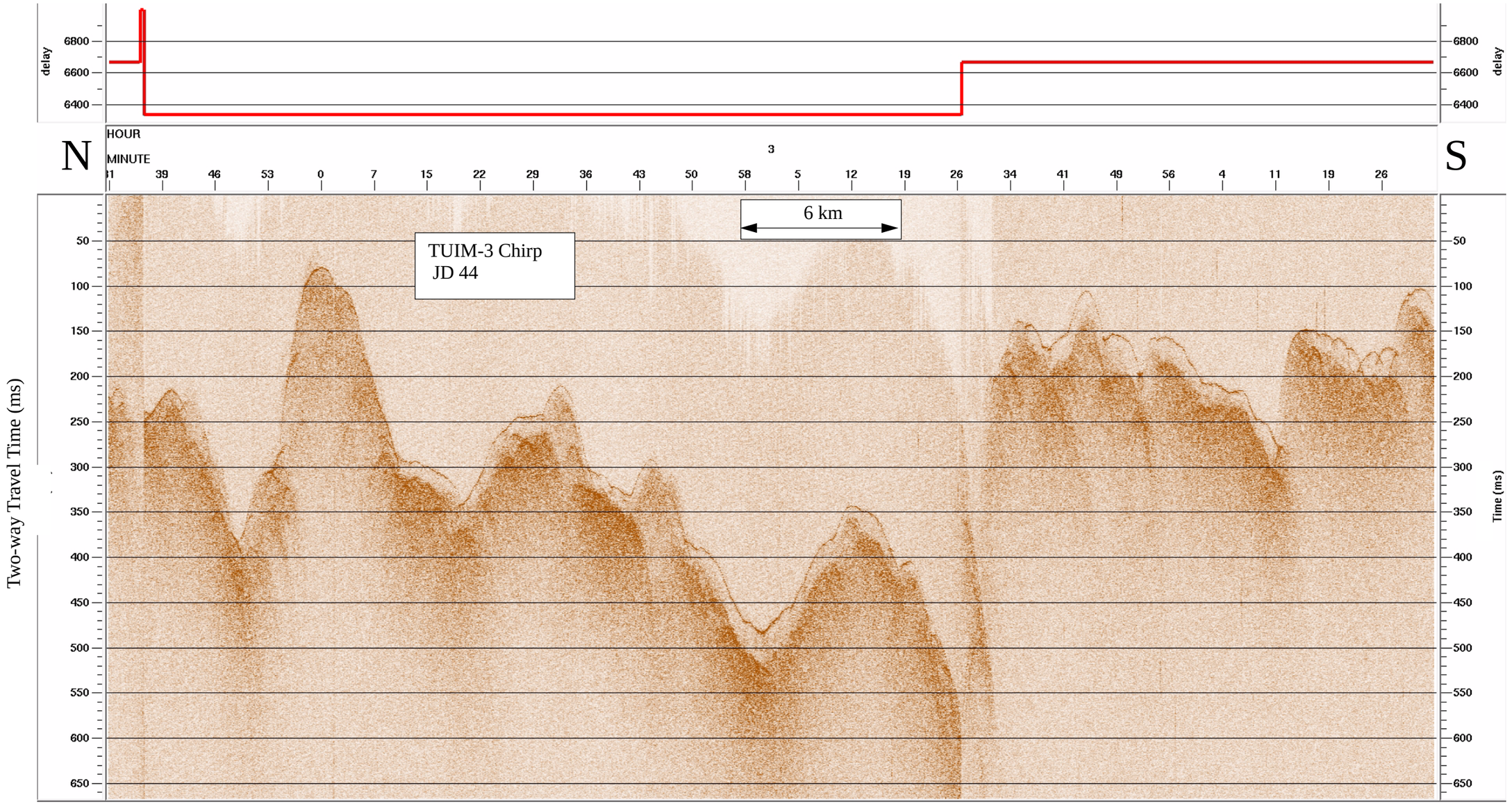

delay
6500
6000
N
HOUR
MINUTE
21
S
TUIM-3 Chirp
JD 43
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

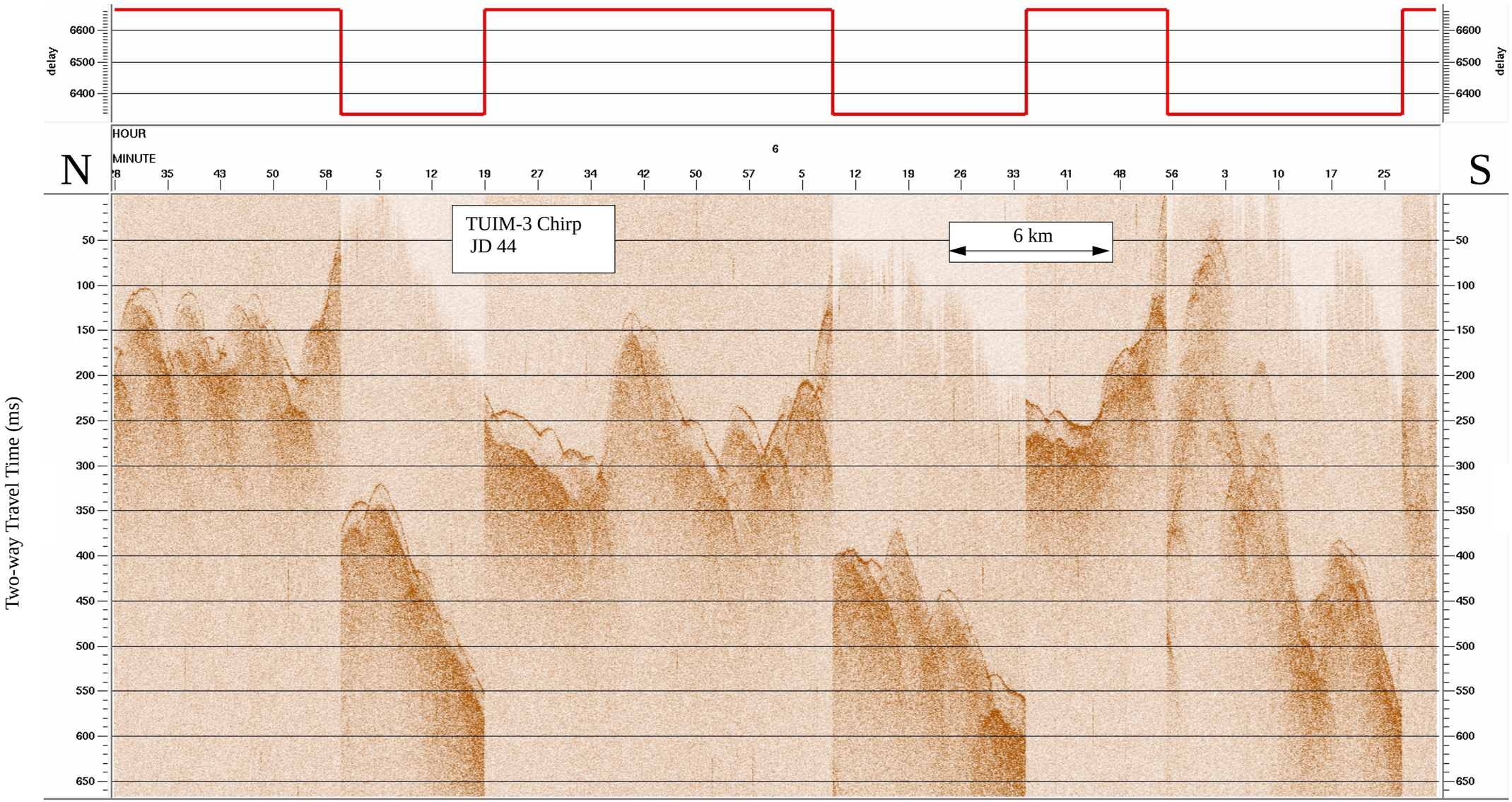
Julian Day 44
13 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb13.0000-0600

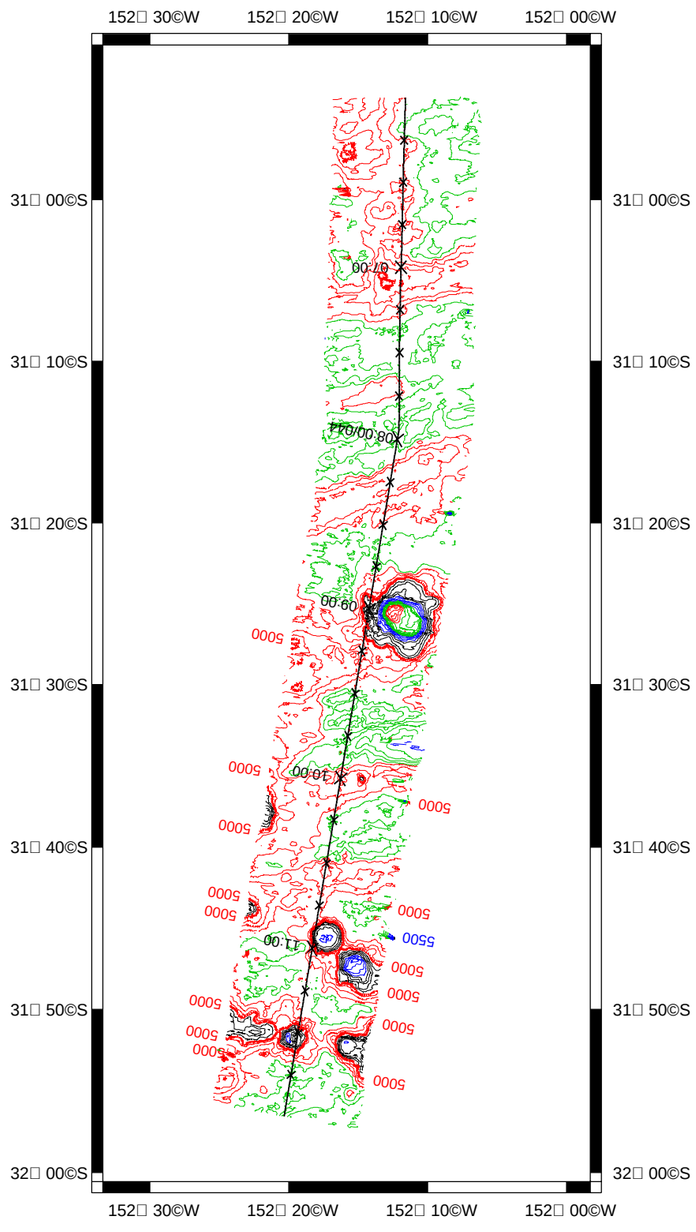


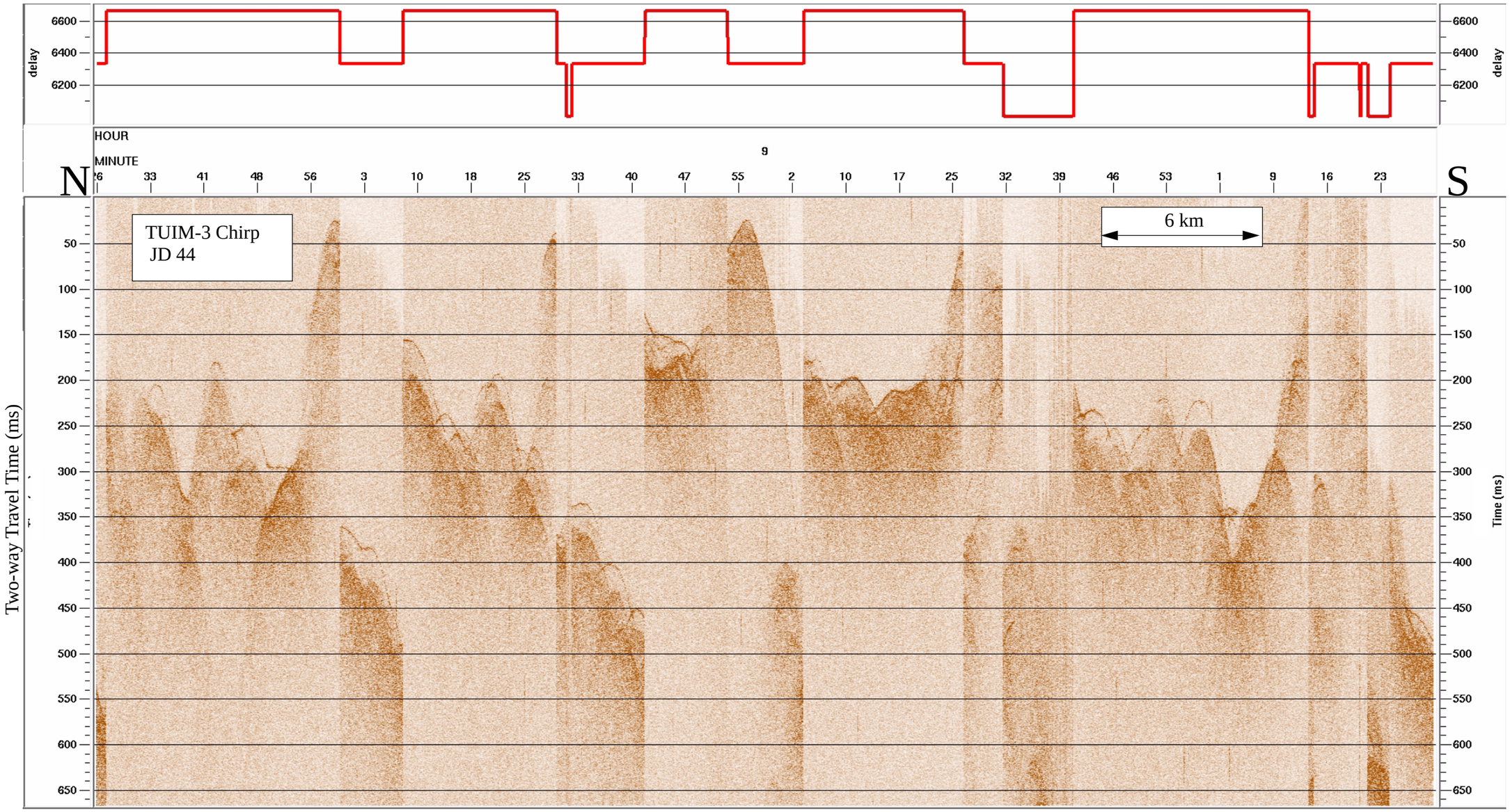

delay
6500
HOUR
MINUTE
0
N
S
TUIM-3 Chirp
JD 44
6 km
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

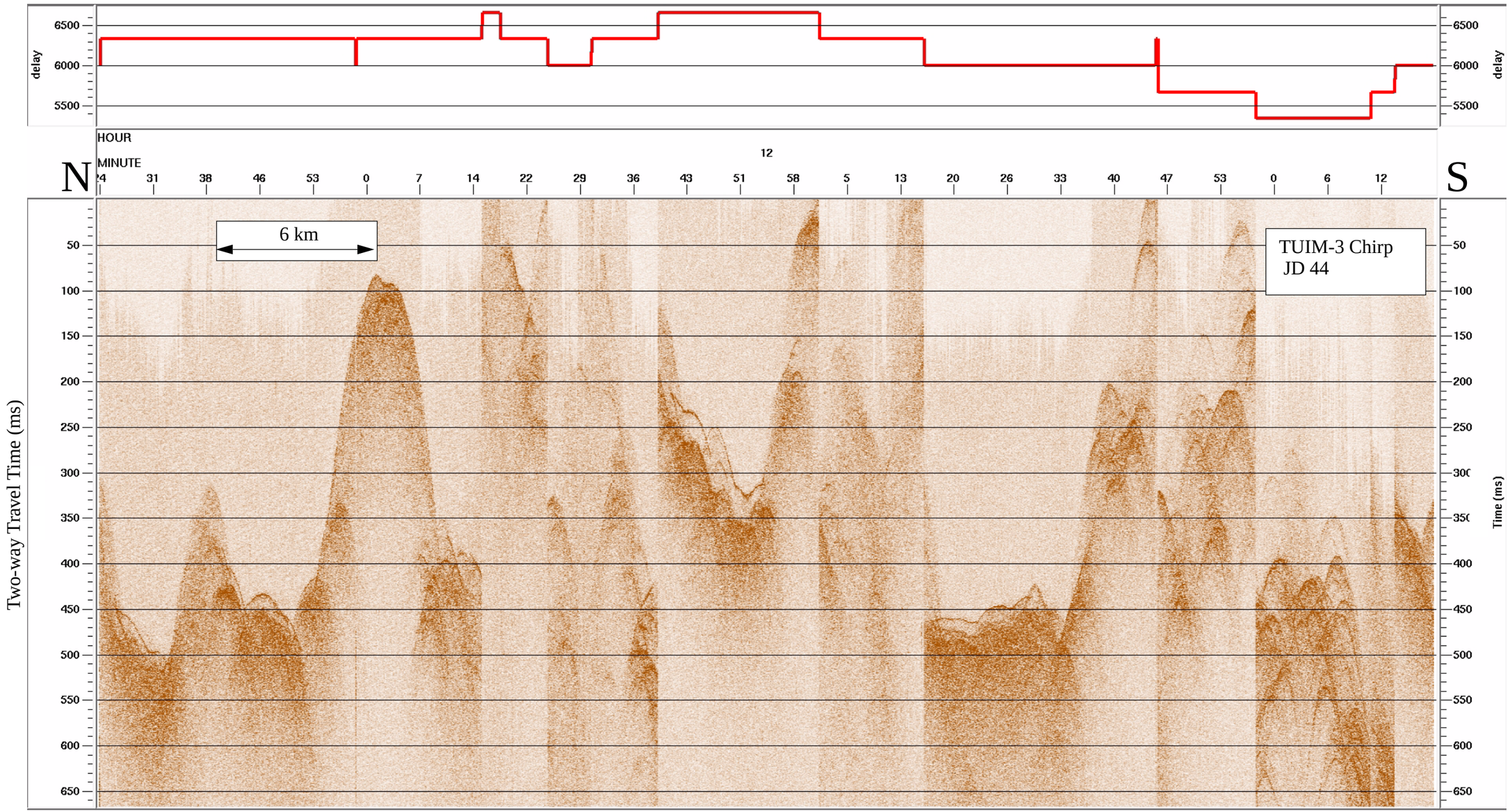

delay
6800
6600
6400
N
S
HOUR
3
MINUTE
31 39 46 53 0 7 15 22 29 36 43 50 58 5 12 19 26 34 41 49 56 4 11 19 26
6 km
TUIM-3 Chirp
JD 44
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Time (ms)


delay
6600
6500
6400
HOUR
6
MINUTE
28 35 43 50 58 5 12 19 27 34 42 50 57 5 12 19 26 33 41 48 56 3 10 17 25
N
S
TUIM-3 Chirp
JD 44
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

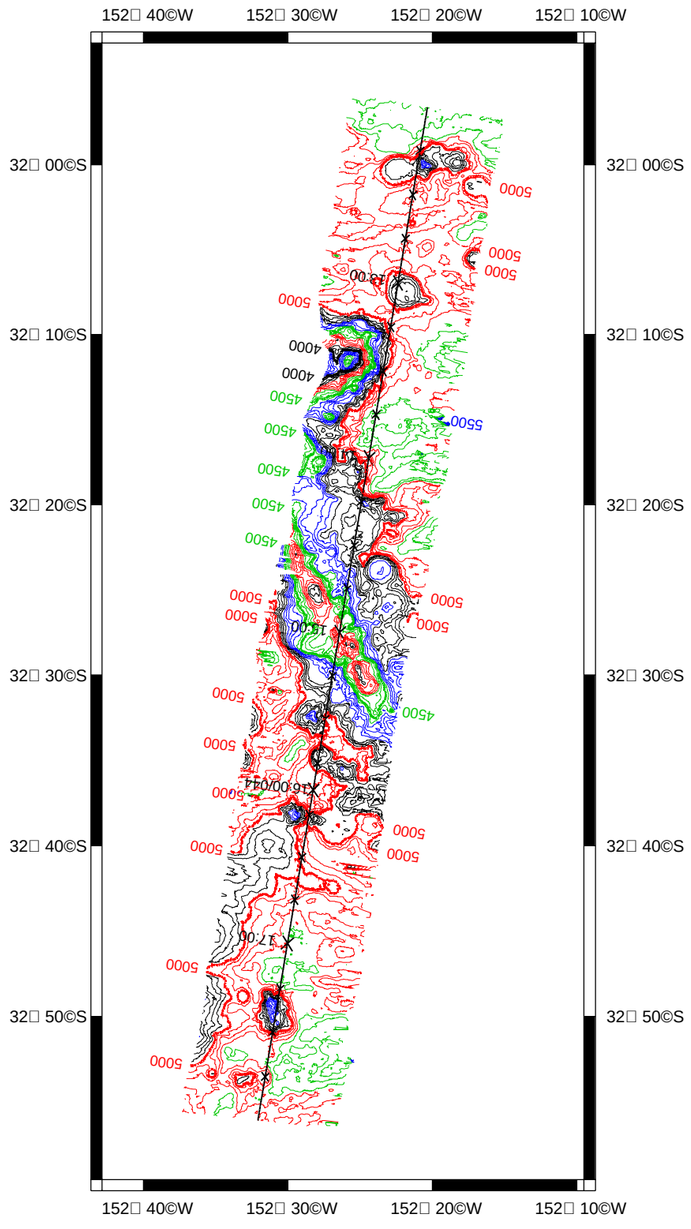
Data File SBfixavg.2005feb13.0600-1200

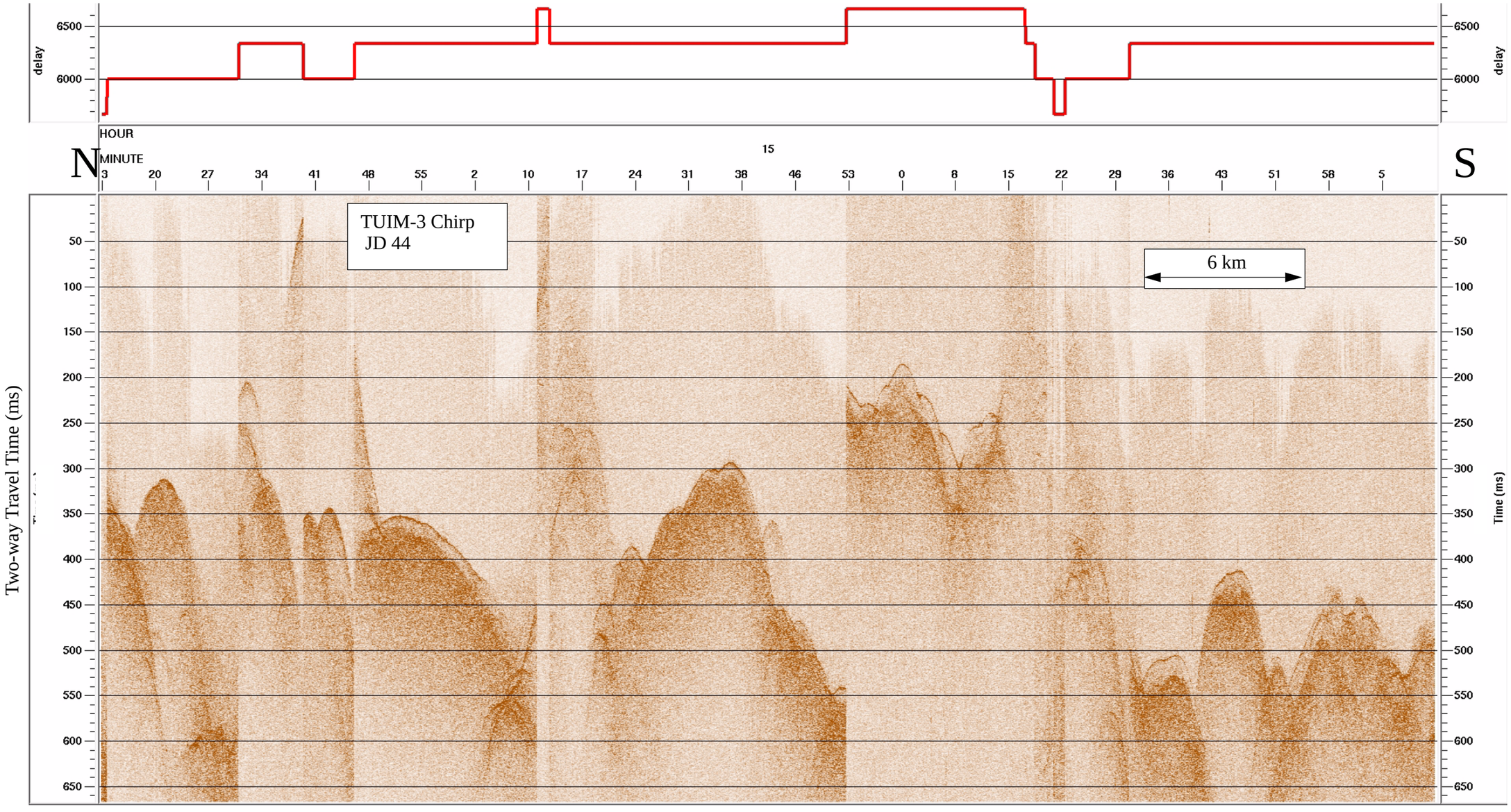


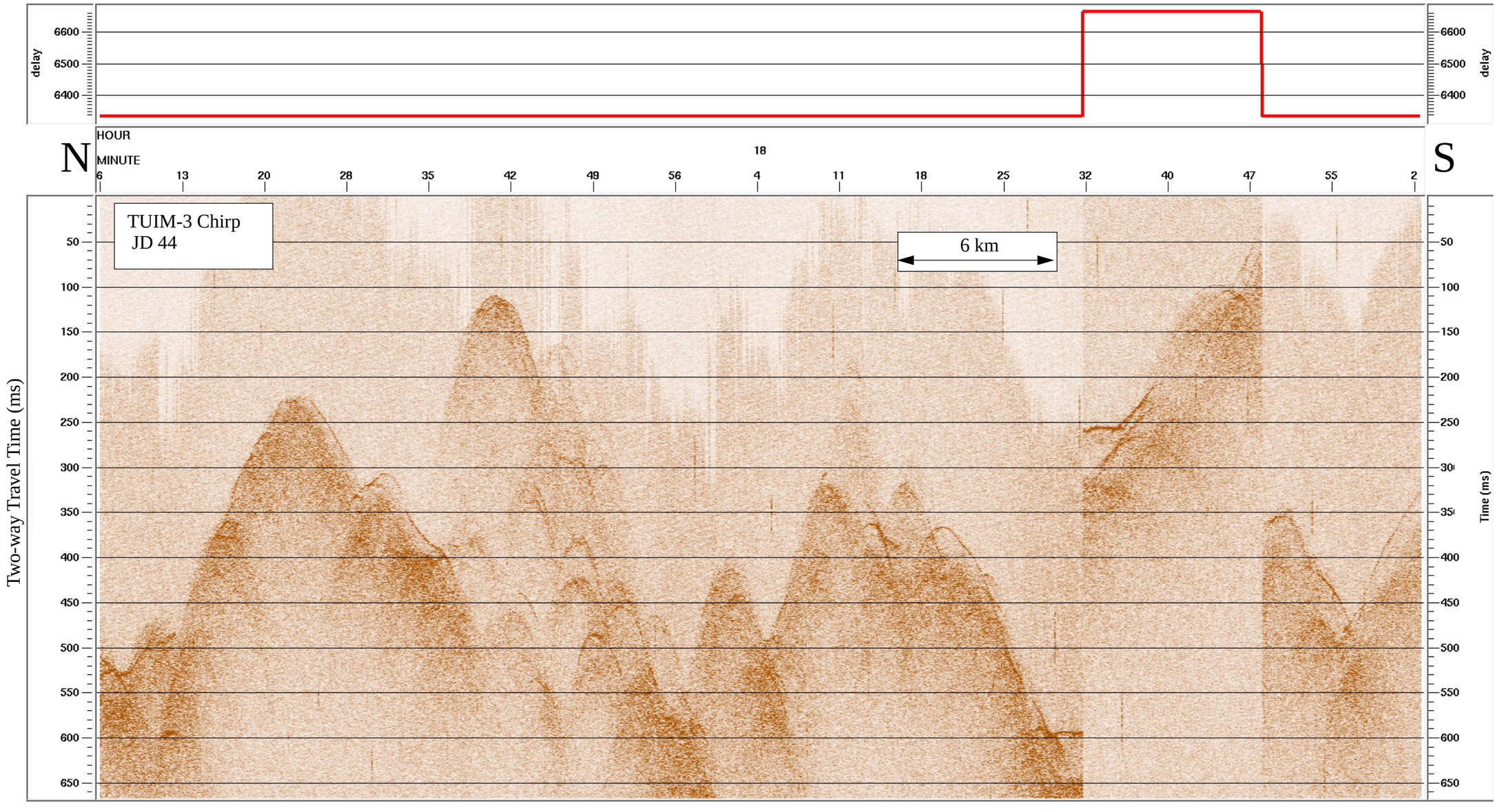

delay
6600
6400
6200
HOUR
9
MINUTE
26 33 41 48 56 3 10 18 25 33 40 47 55 2 10 17 25 32 39 46 53 1 9 16 23
N
S
TUIM-3 Chirp
JD 44
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Time (ms)


delay
6500
6000
5500
HOUR
MINUTE
12
N
S
24 31 38 46 53 0 7 14 22 29 36 43 51 58 5 13 20 26 33 40 47 53 0 6 12
6 km
TUIM-3 Chirp
JD 44
Two-way Travel Time (ms)
Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

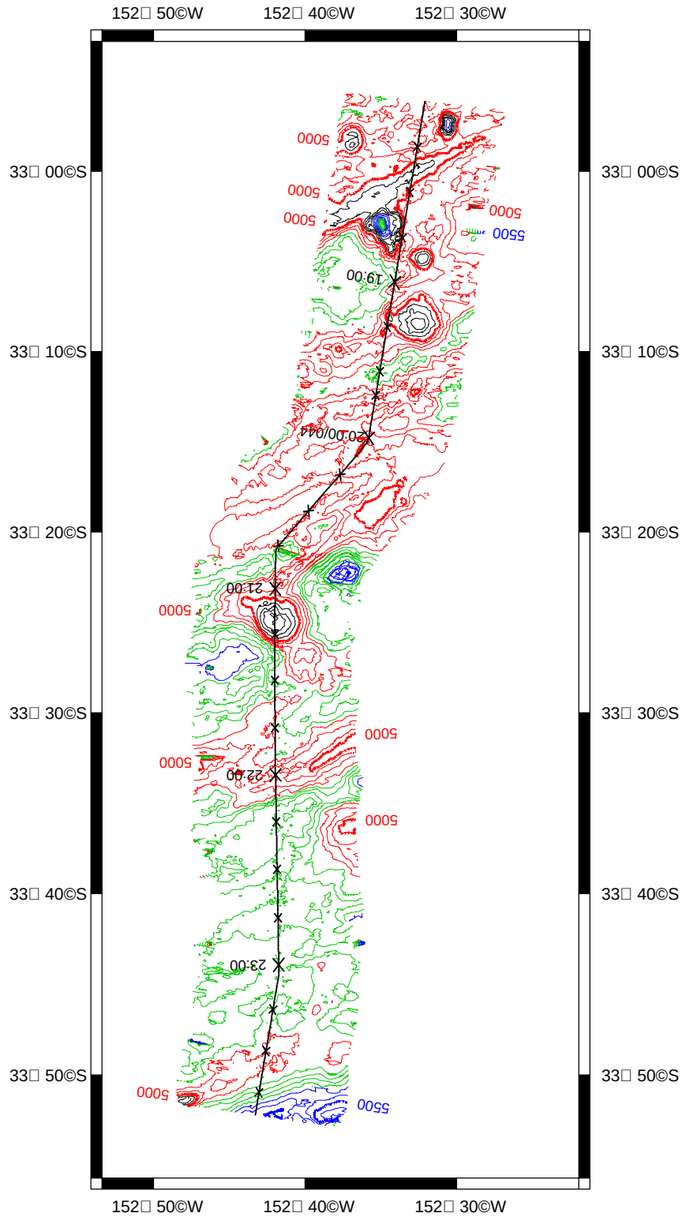
Data File SBfixavg.2005feb13.1200-1800

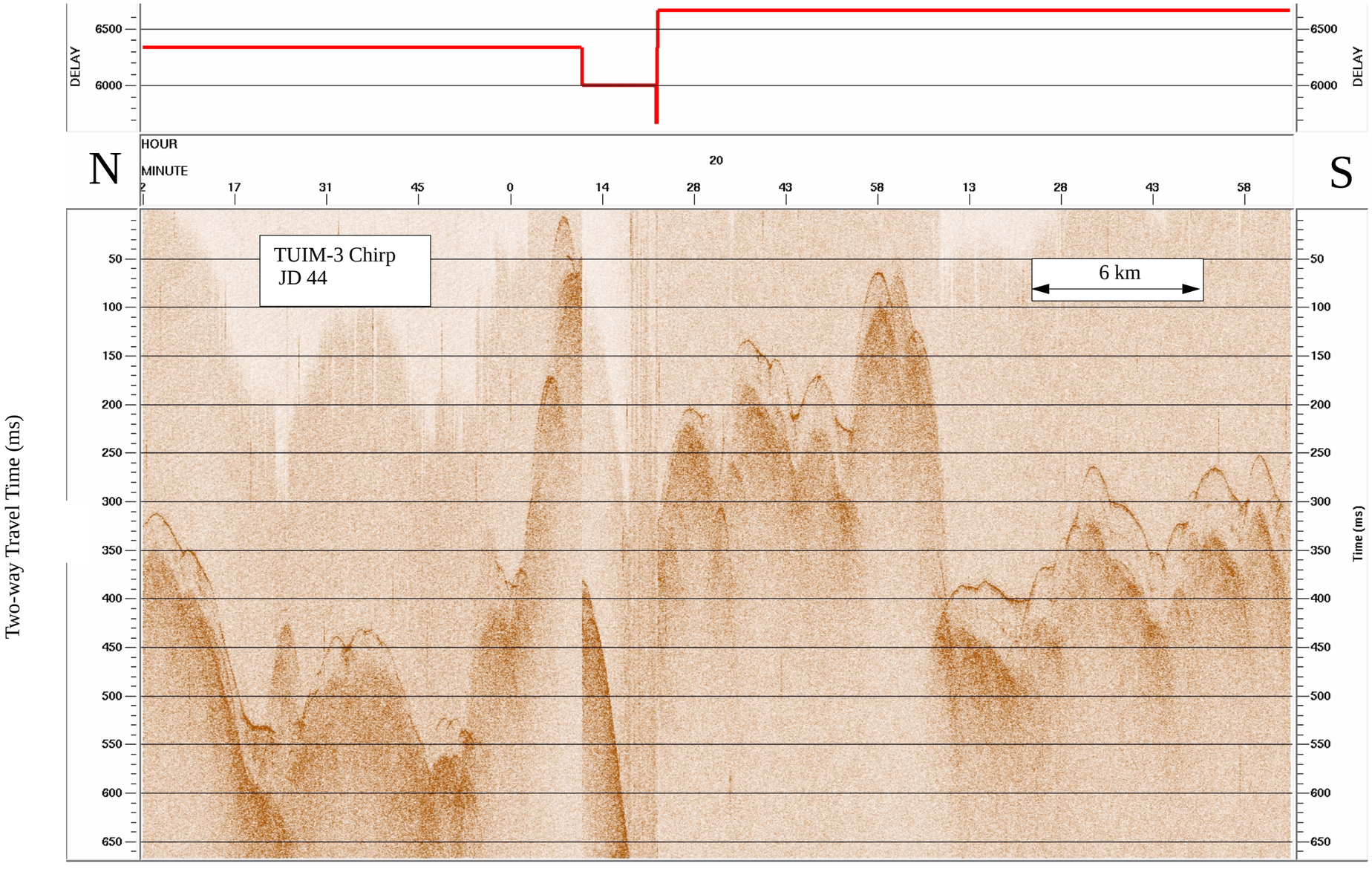


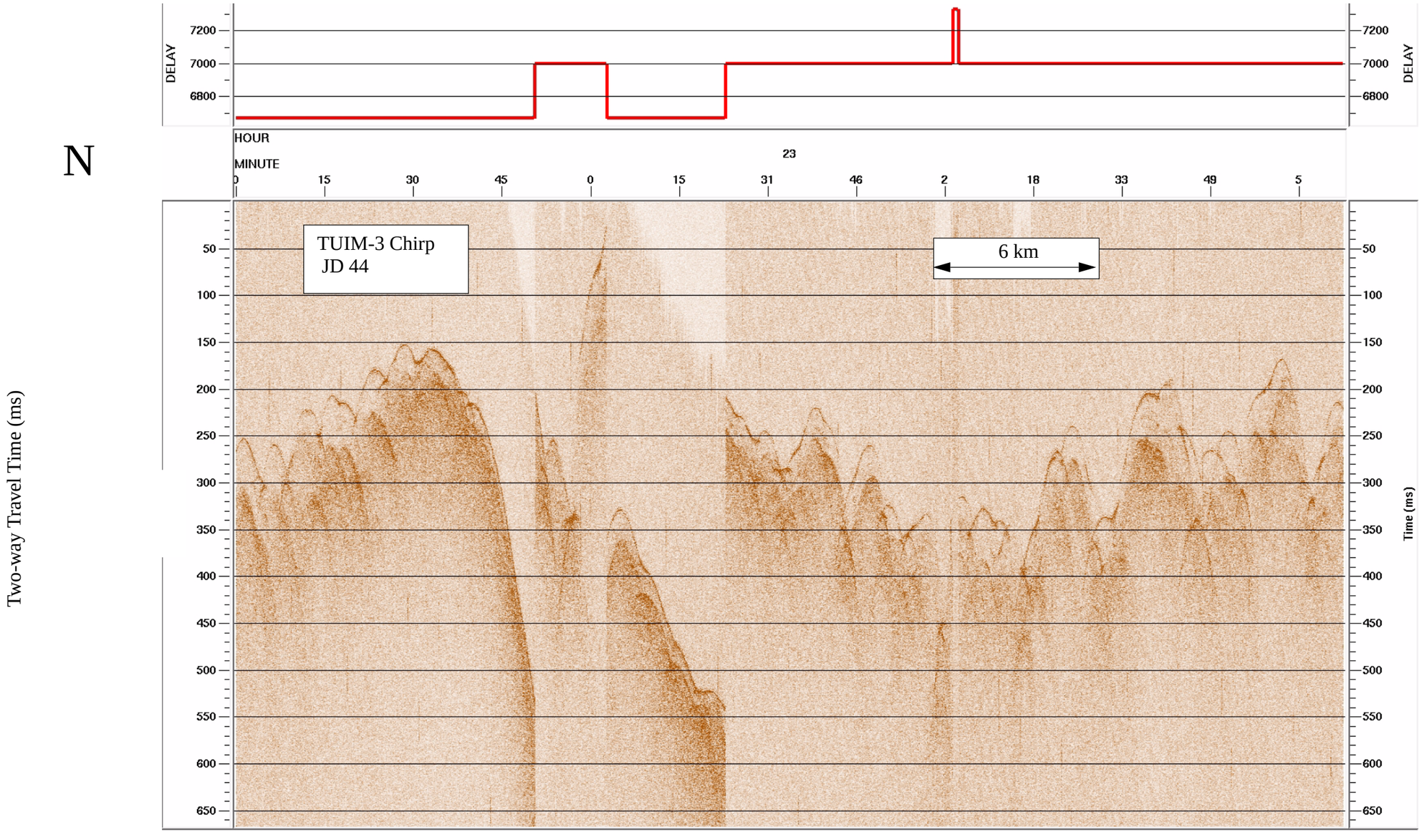

delay
6500
6000
HOUR
MINUTE
15
3 20 27 34 41 48 55 2 10 17 24 31 38 46 53 0 8 15 22 29 36 43 51 58 5
N
S
TUIM-3 Chirp
JD 44
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Time (ms)


delay
6600
6500
6400
N
S
HOUR
MINUTE
18
6
13
20
28
35
42
49
56
4
11
18
25
32
40
47
55
2
TUIM-3 Chirp
JD 44
6 km
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

Data File SBfixavg.2005feb13.1800-2400

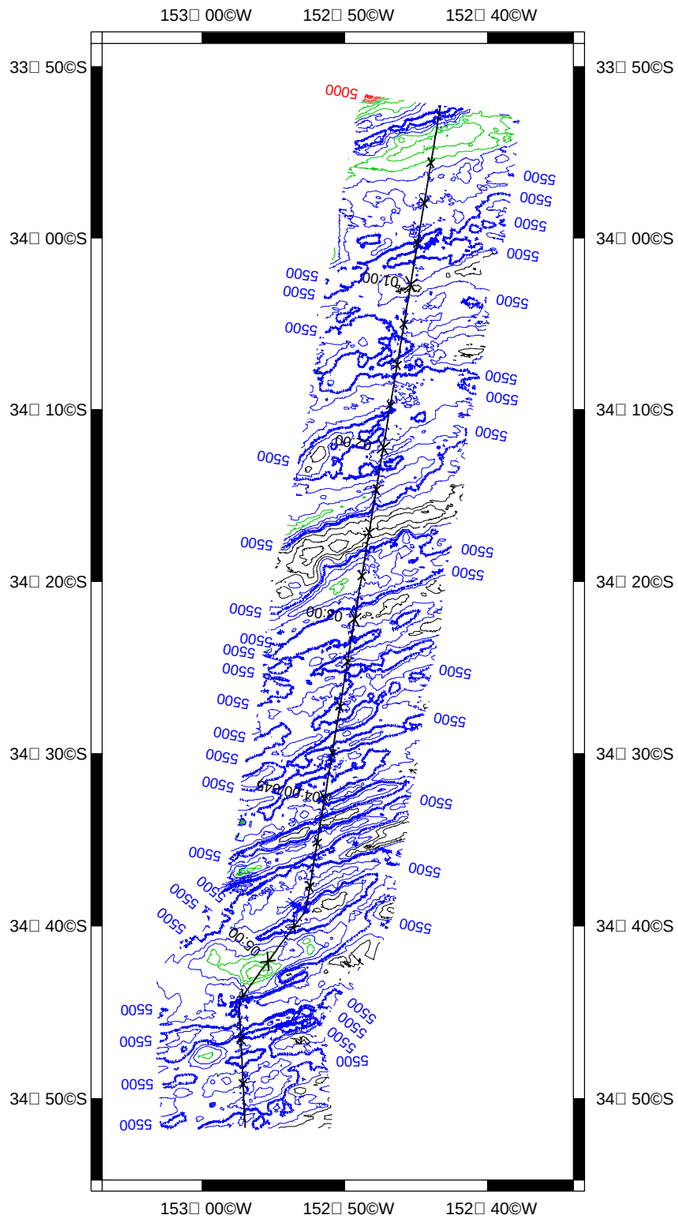


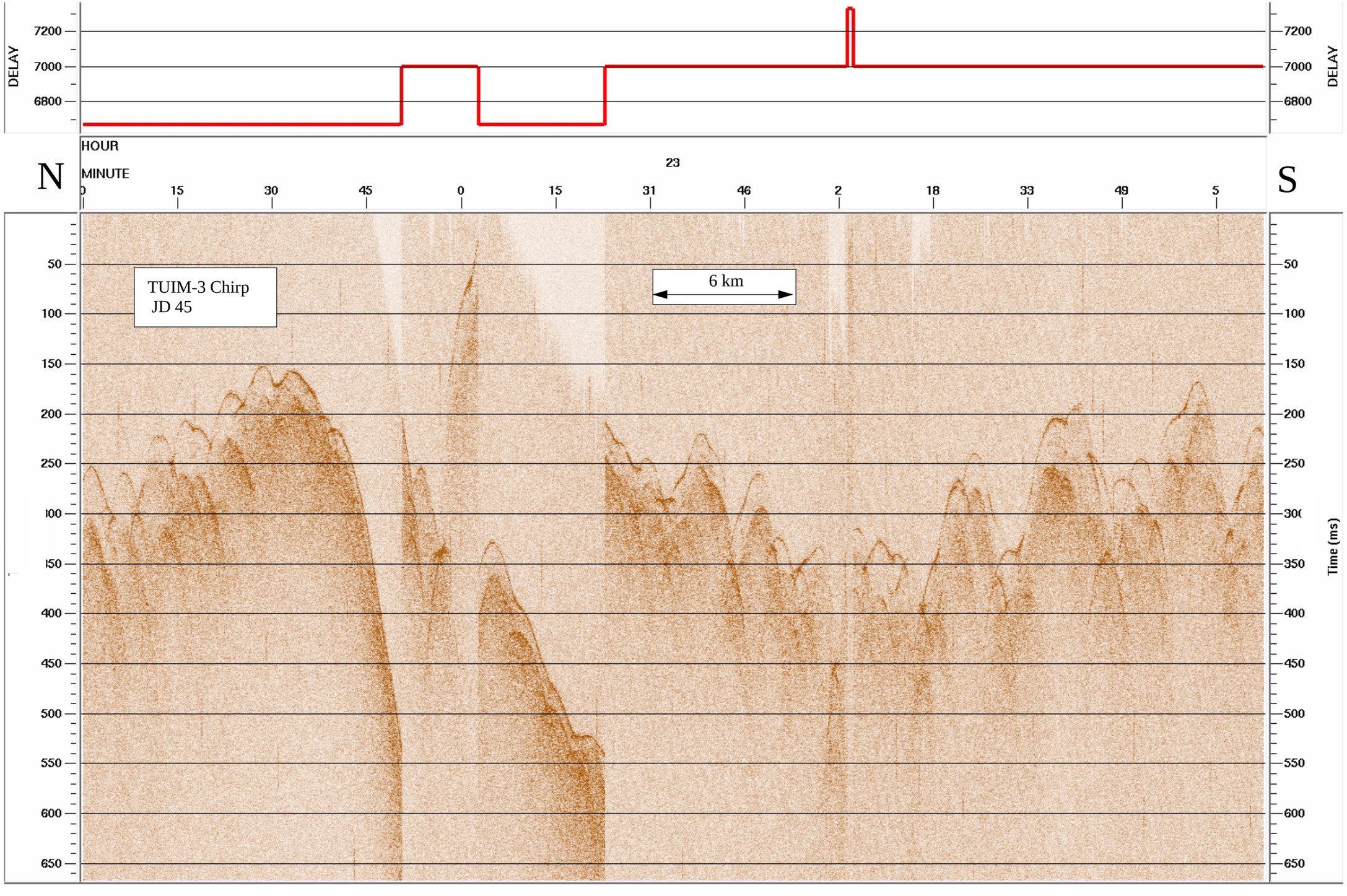

DELAY
6500
6000
N
HOUR
MINUTE
20
2
17
31
45
0
14
28
43
58
13
28
43
58
S
TUIM-3 Chirp
JD 44
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
Time (ms)

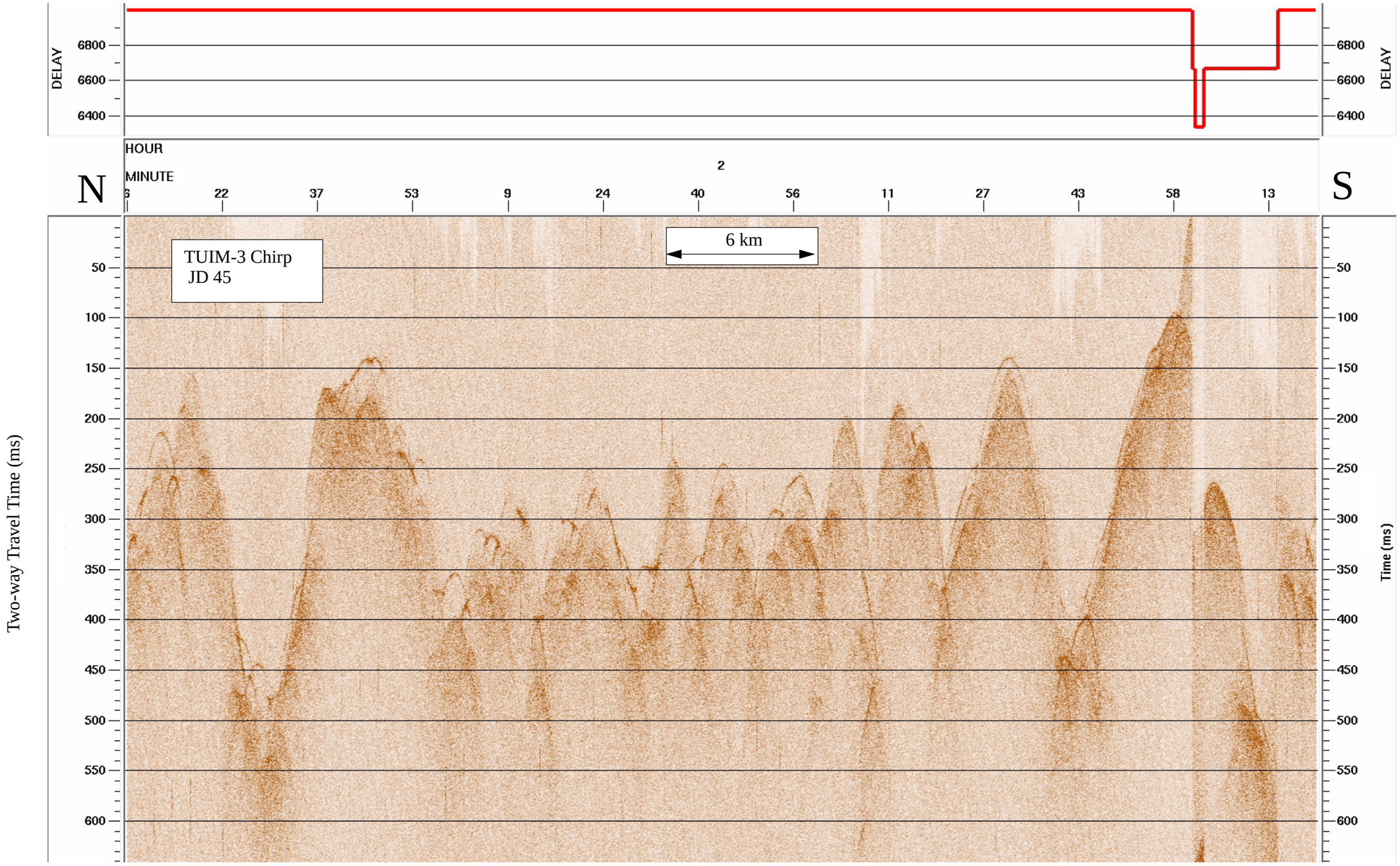

DELAY
7200
7000
6800
HOUR
23
MINUTE
0
15
30
45
0
15
31
46
2
18
33
49
5
TUIM-3 Chirp
JD 44
6 km
N
S
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

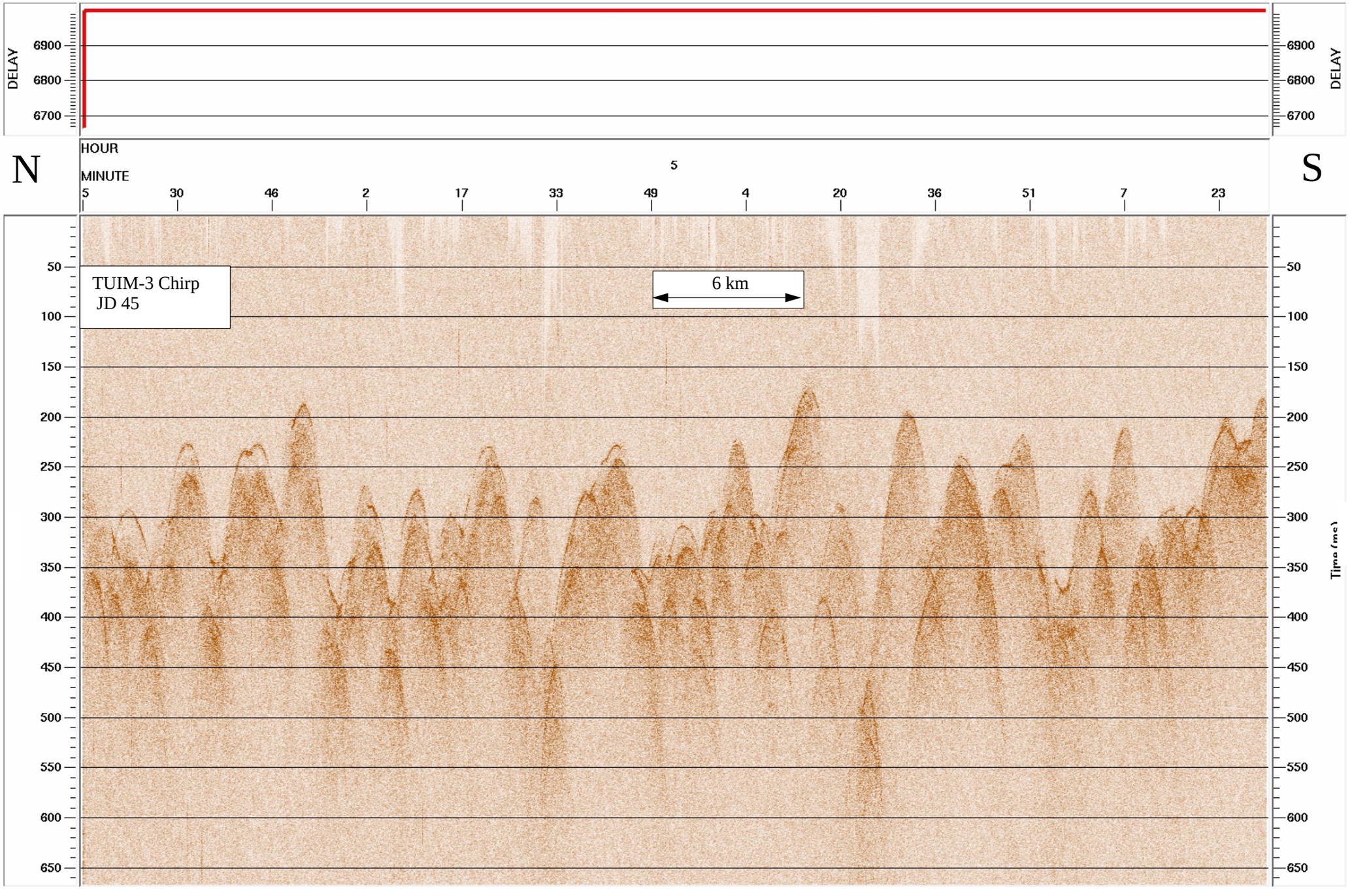
Julian Day 45
14 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb14.0000-0600

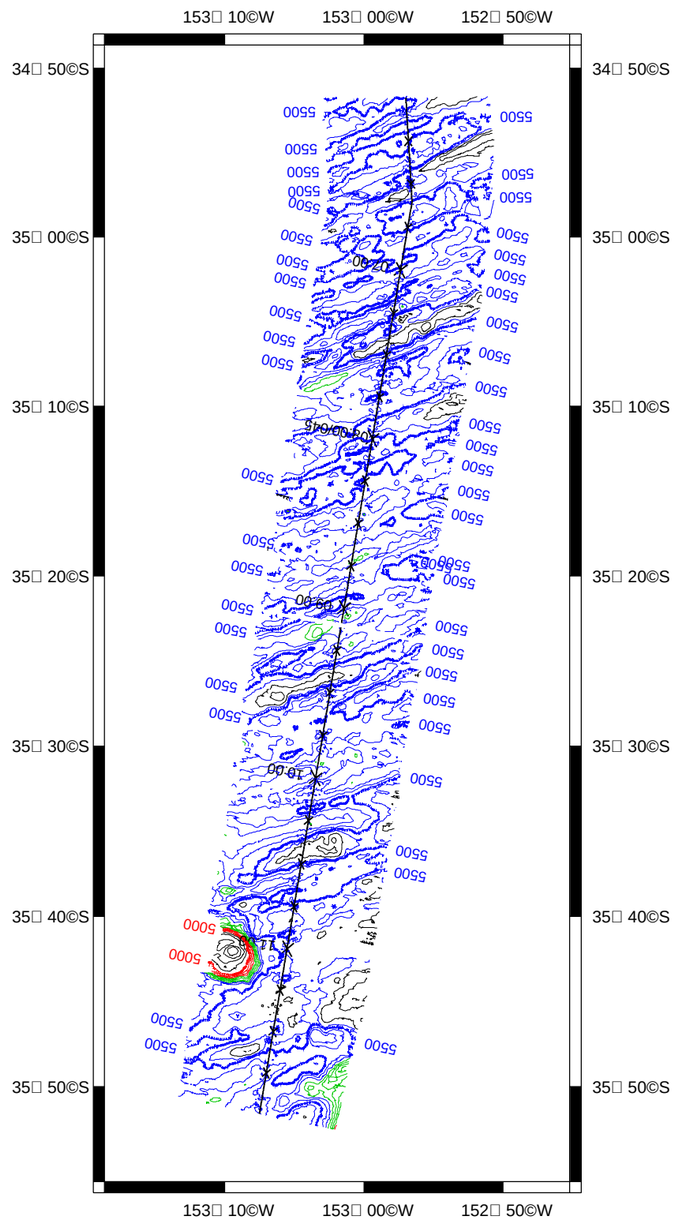


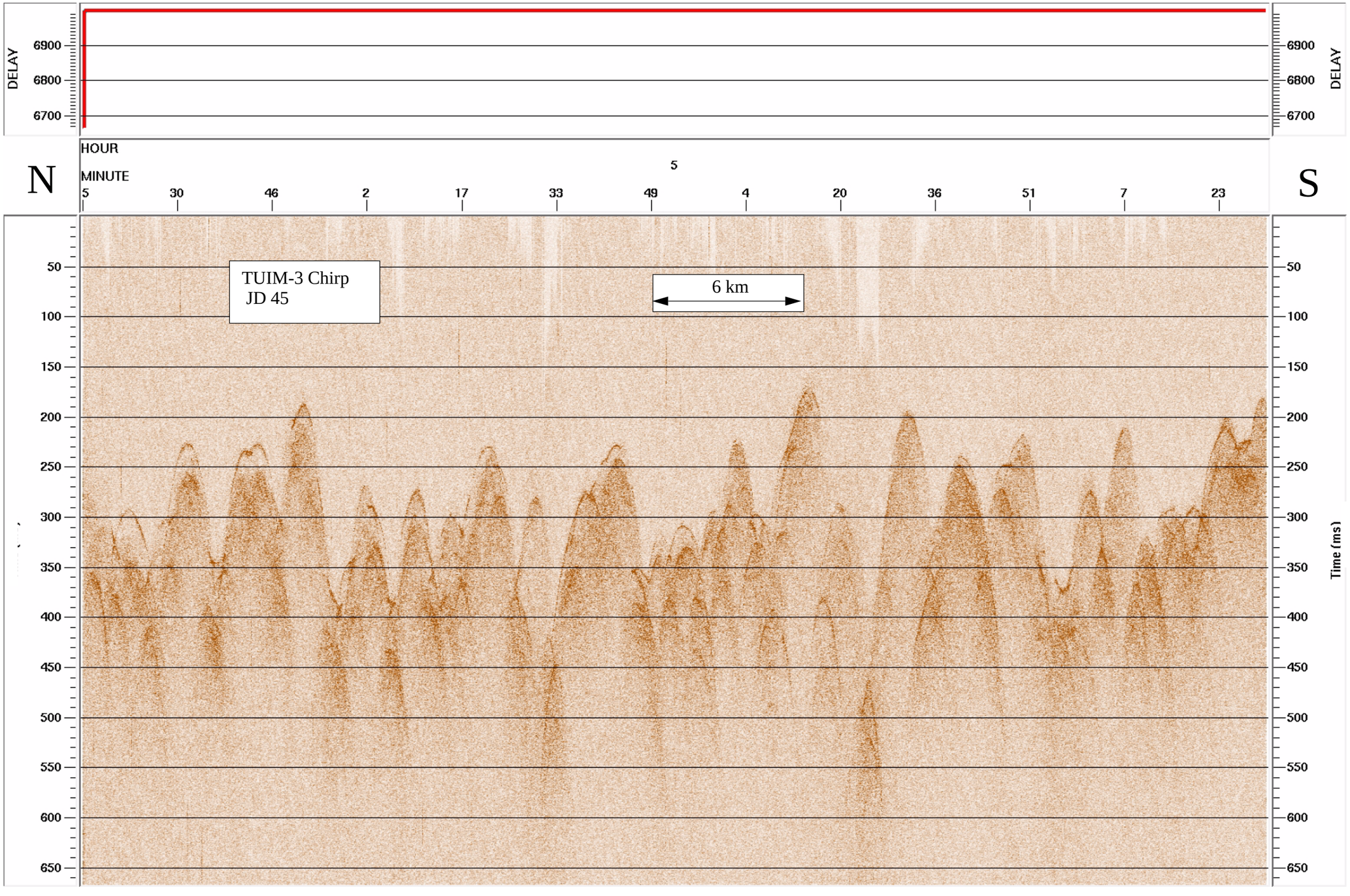

DELAY
7200
7000
6800
HOUR
23
MINUTE
0
15
30
45
0
15
31
46
2
18
33
49
5
N
S
TUIM-3 Chirp
JD 45
6 km
50
100
150
200
250
300
350
400
450
500
550
600
650
Two-way Travel Time (ms)
Time (ms)

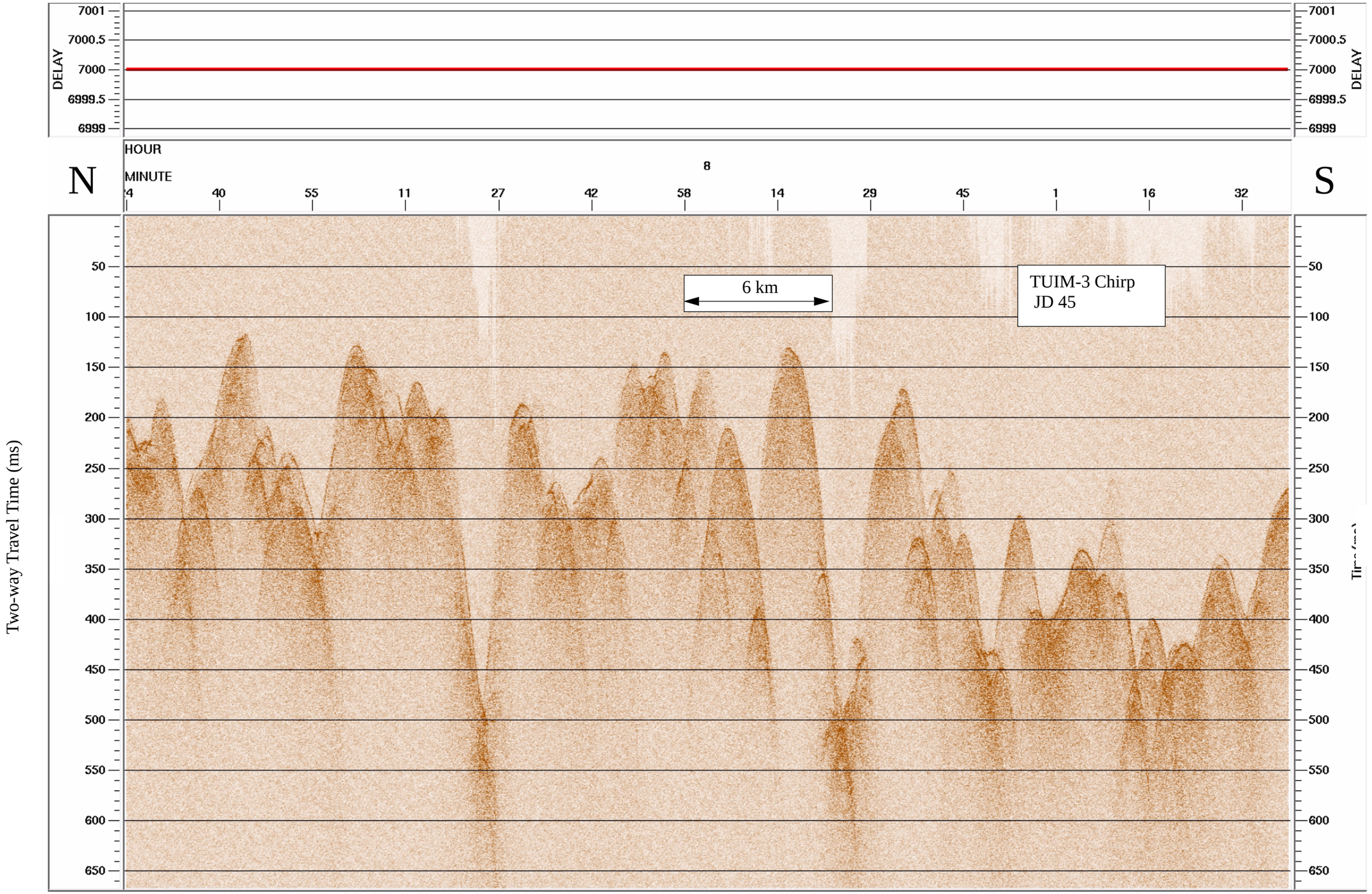

DELAY
6800
6600
6400
HOUR
MINUTE
2
6
22
37
53
9
24
40
56
11
27
43
58
13
N
S
TUIM-3 Chirp
JD 45
6 km
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600

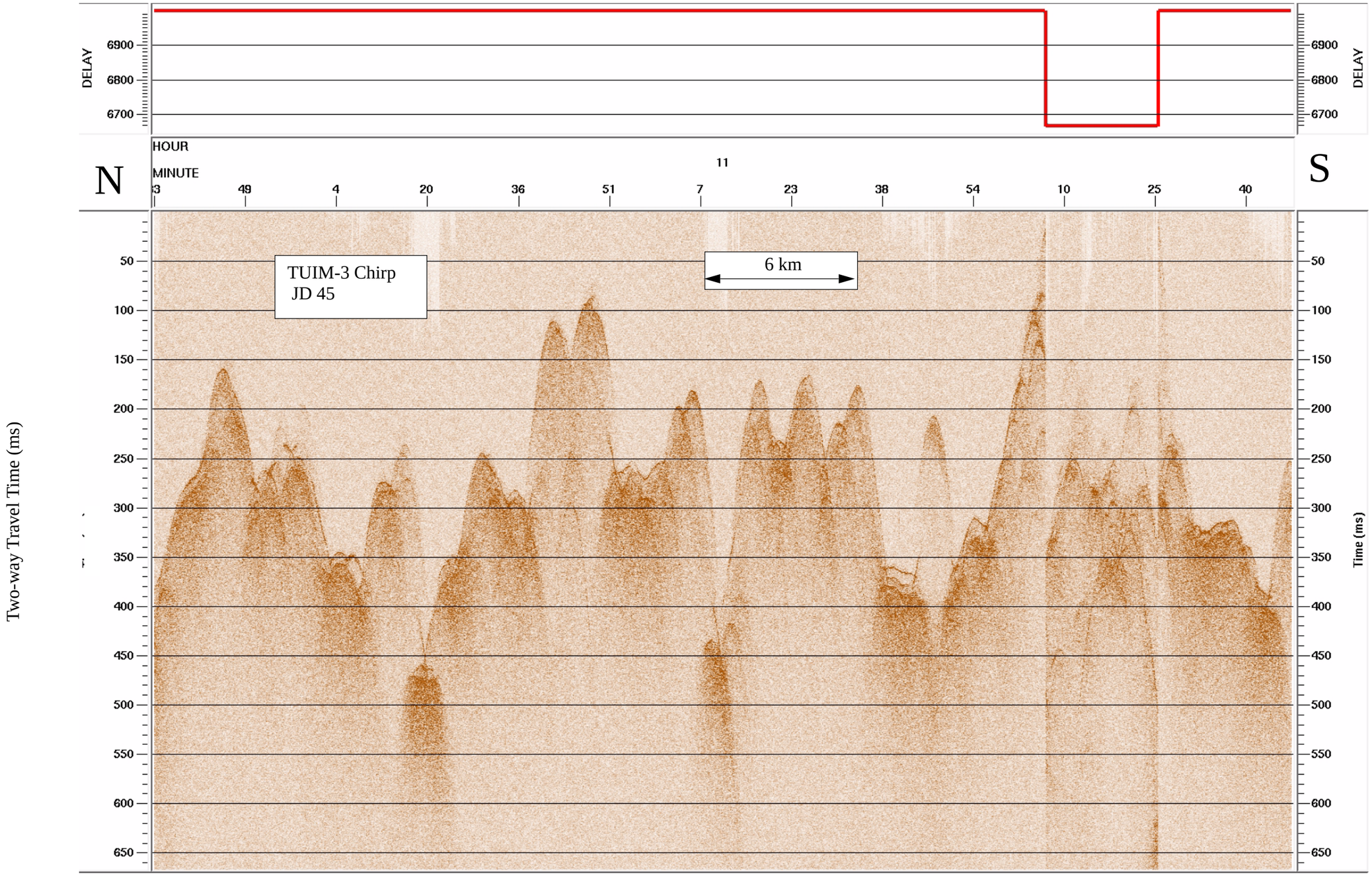

DELAY
6900
6800
6700
N
HOUR
MINUTE
5
5 30 46 2 17 33 49 4 20 36 51 7 23
S
TUIM-3 Chirp
JD 45
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

Data File SBfixavg.2005feb14.0600-1200

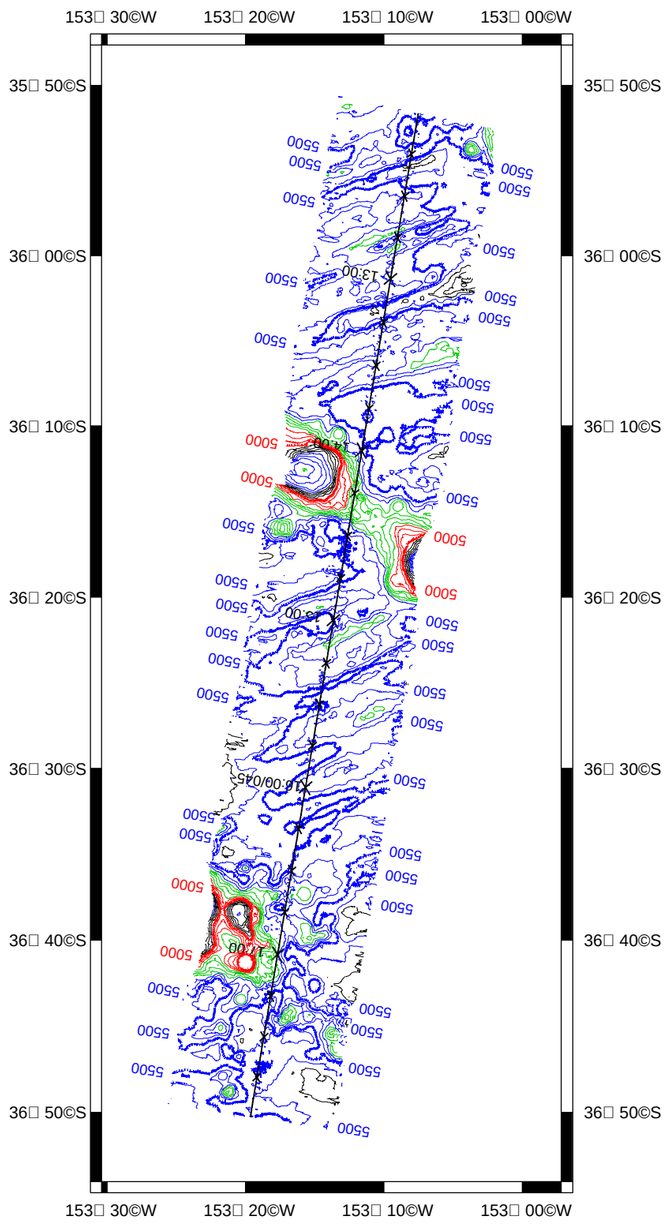


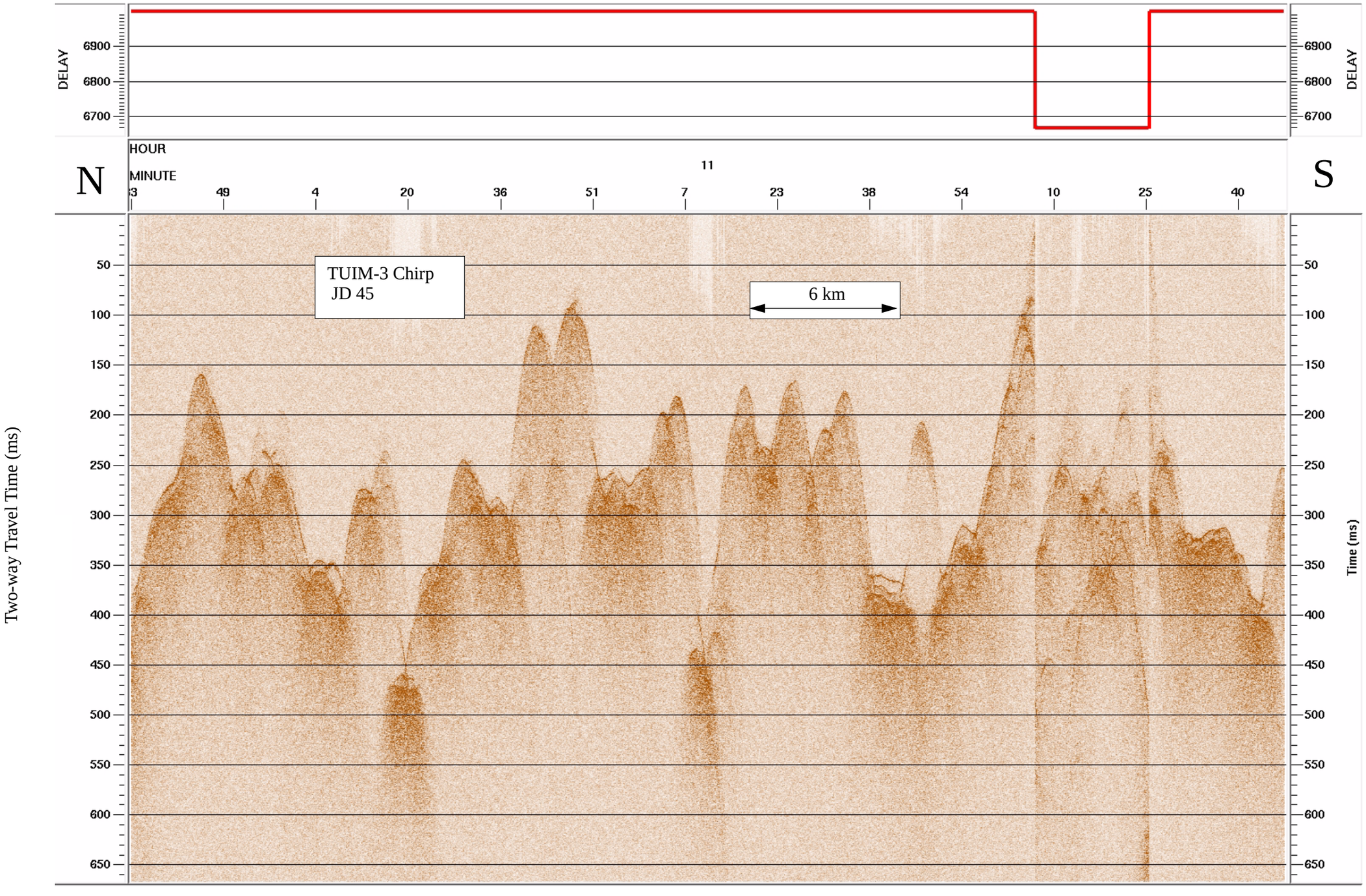

DELAY
6900
6800
6700
N
HOUR
5
MINUTE
5 30 46 2 17 33 49 4 20 36 51 7 23
S
TUIM-3 Chirp
JD 45
6 km
50 100 150 200 250 300 350 400 450 500 550 600 650
Two-way Travel Time (ms)
Time (ms)

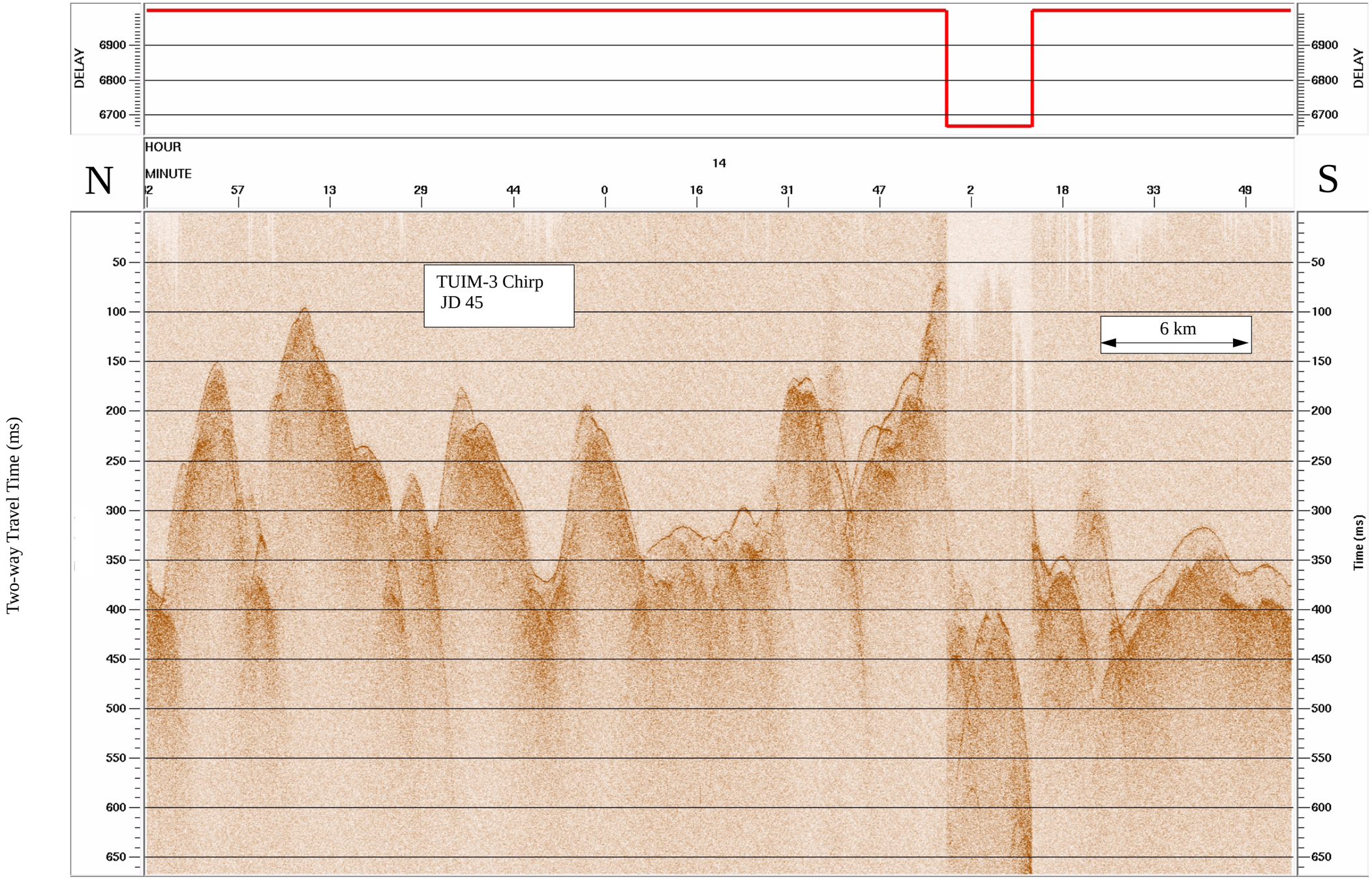

DELAY
7001
7000.5
7000
6999.5
6999
HOUR
8
MINUTE
4
40
55
11
27
42
58
14
29
45
1
16
32
N
S
6 km
TUIM-3 Chirp
JD 45
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

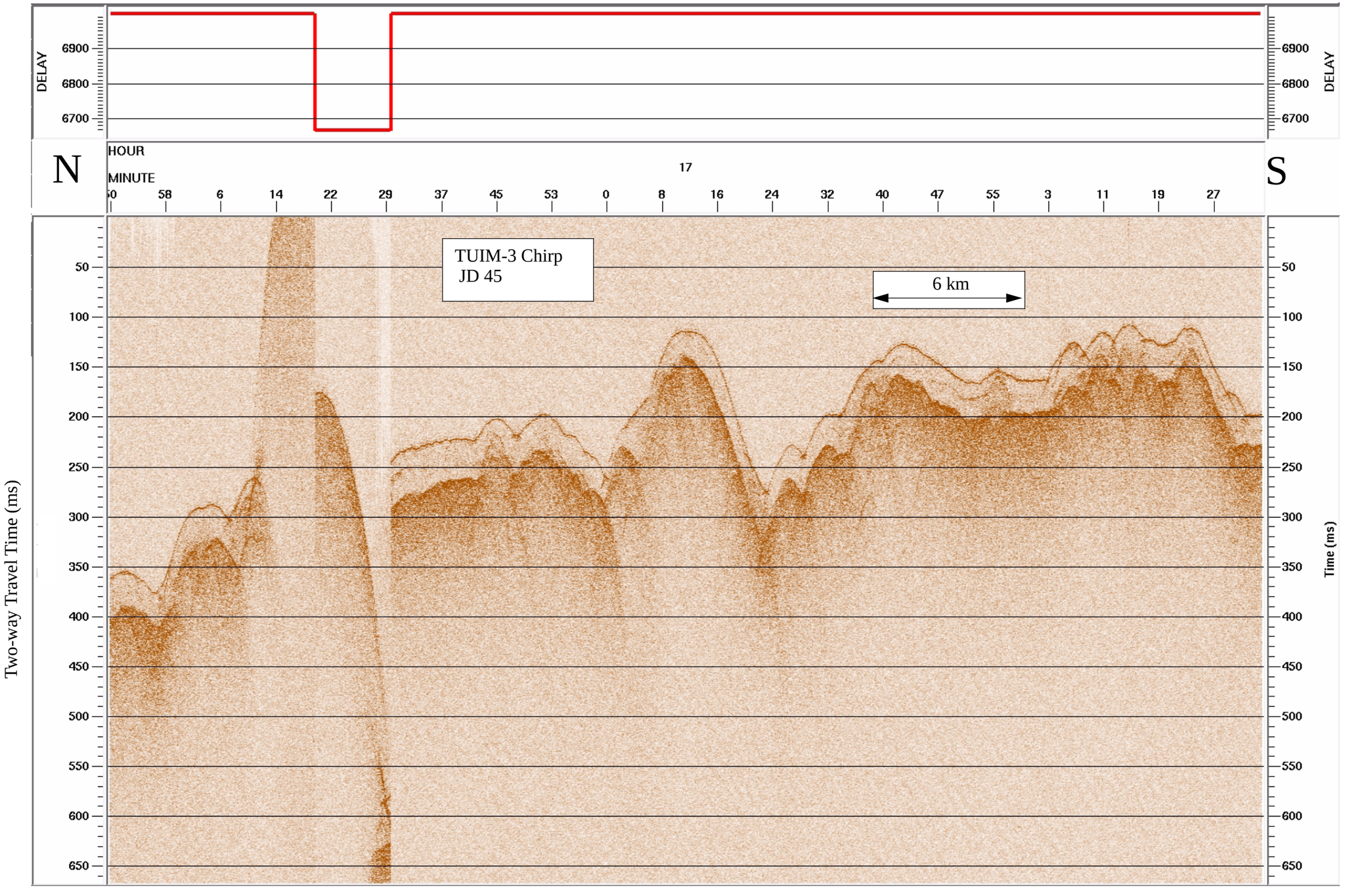

DELAY
6900
6800
6700
DELAY
6900
6800
6700
N
HOUR
11
MINUTE
3
49
4
20
36
51
7
23
38
54
10
25
40
S
TUIM-3 Chirp
JD 45
6 km
50
100
150
200
250
300
350
400
450
500
550
600
650
Two-way Travel Time (ms)
Time (ms)

Data File SBfixavg.2005feb14.1200-1800

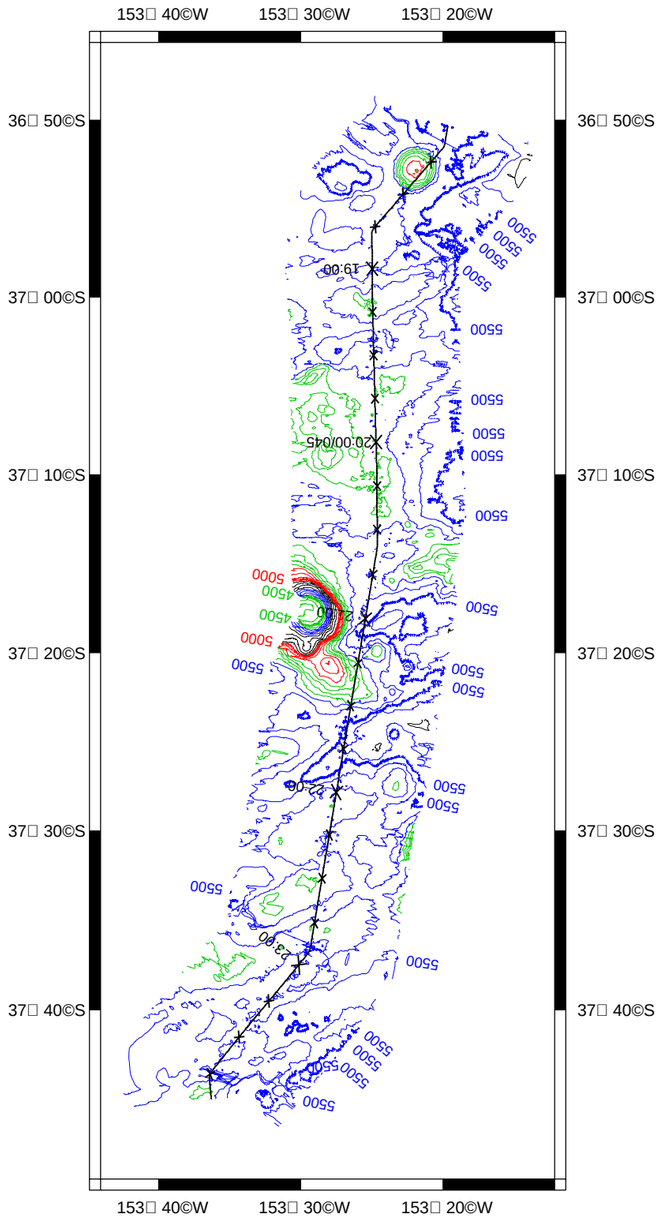


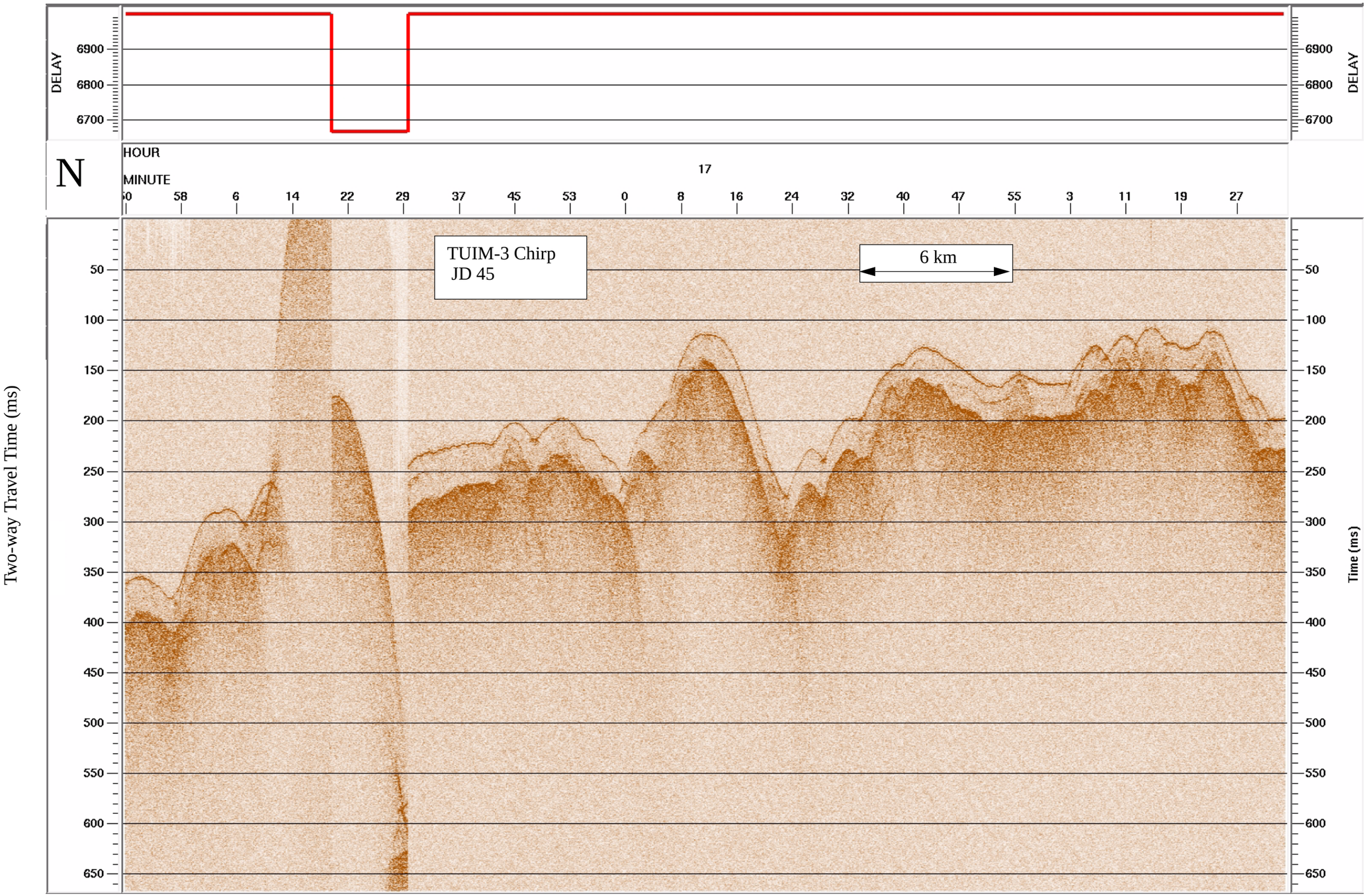

DELAY
6900
6800
6700
HOUR
11
MINUTE
3
49
4
20
36
51
7
23
38
54
10
25
40
N
S
TUIM-3 Chirp
JD 45
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
Time (ms)

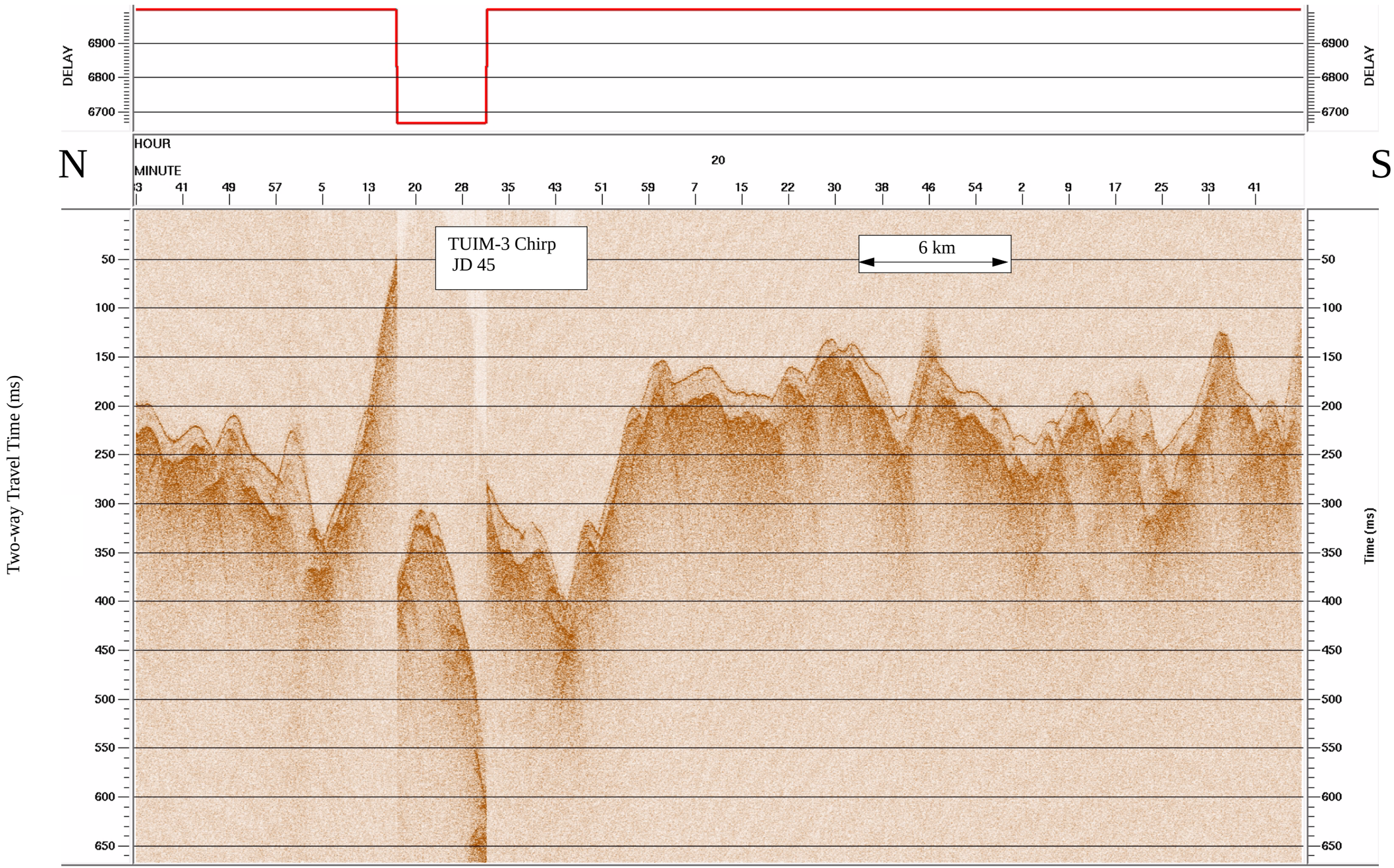

DELAY
6900
6800
6700
HOUR
14
MINUTE
2
57
13
29
44
0
16
31
47
2
18
33
49
N
S
TUIM-3 Chirp
JD 45
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
Time (ms)

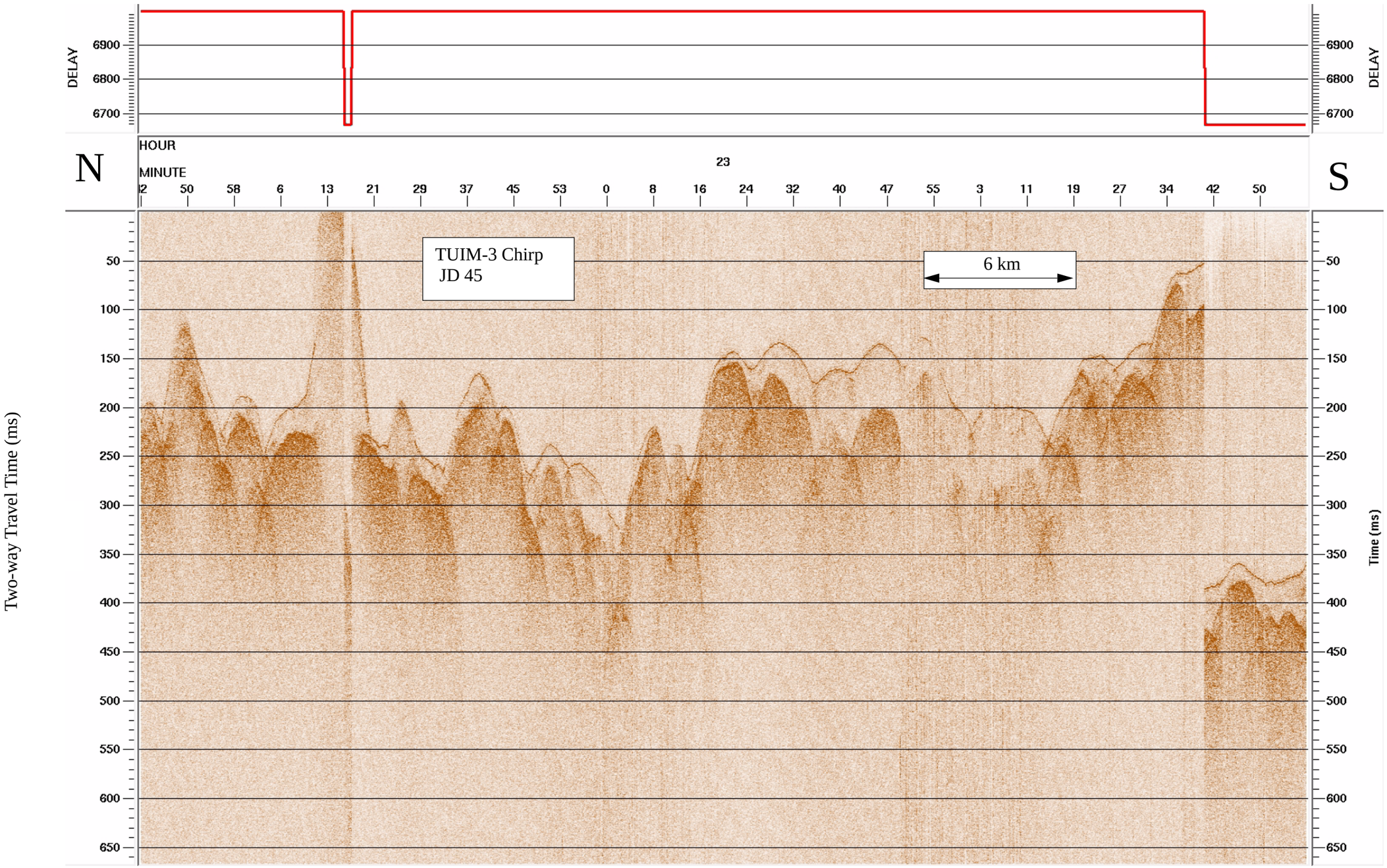

DELAY
6900
6800
6700
N
HOUR
MINUTE
17
50 58 6 14 22 29 37 45 53 0 8 16 24 32 40 47 55 3 11 19 27
S
TUIM-3 Chirp
JD 45
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Time (ms)

Data File SBfixavg.2005feb14.1800-2400



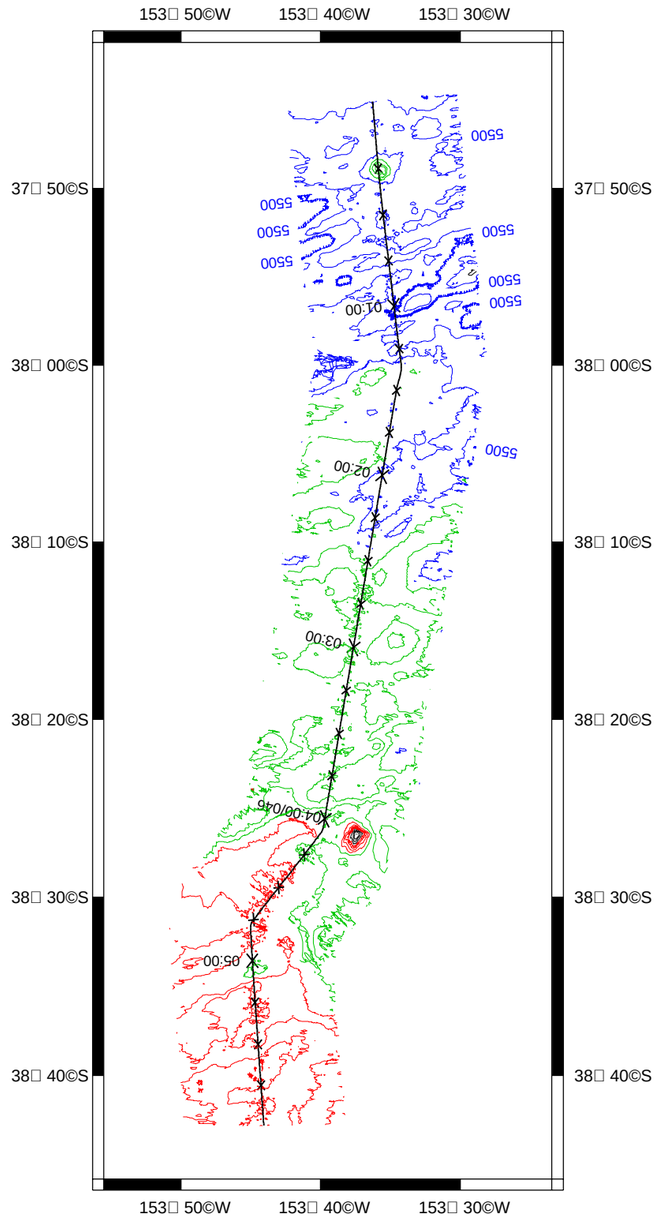

DELAY
6900
6800
6700
N
S
HOUR
MINUTE
17
50 58 6 14 22 29 37 45 53 0 8 16 24 32 40 47 55 3 11 19 27
TUIM-3 Chirp
JD 45
6 km
Two-way Travel Time (ms)
Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

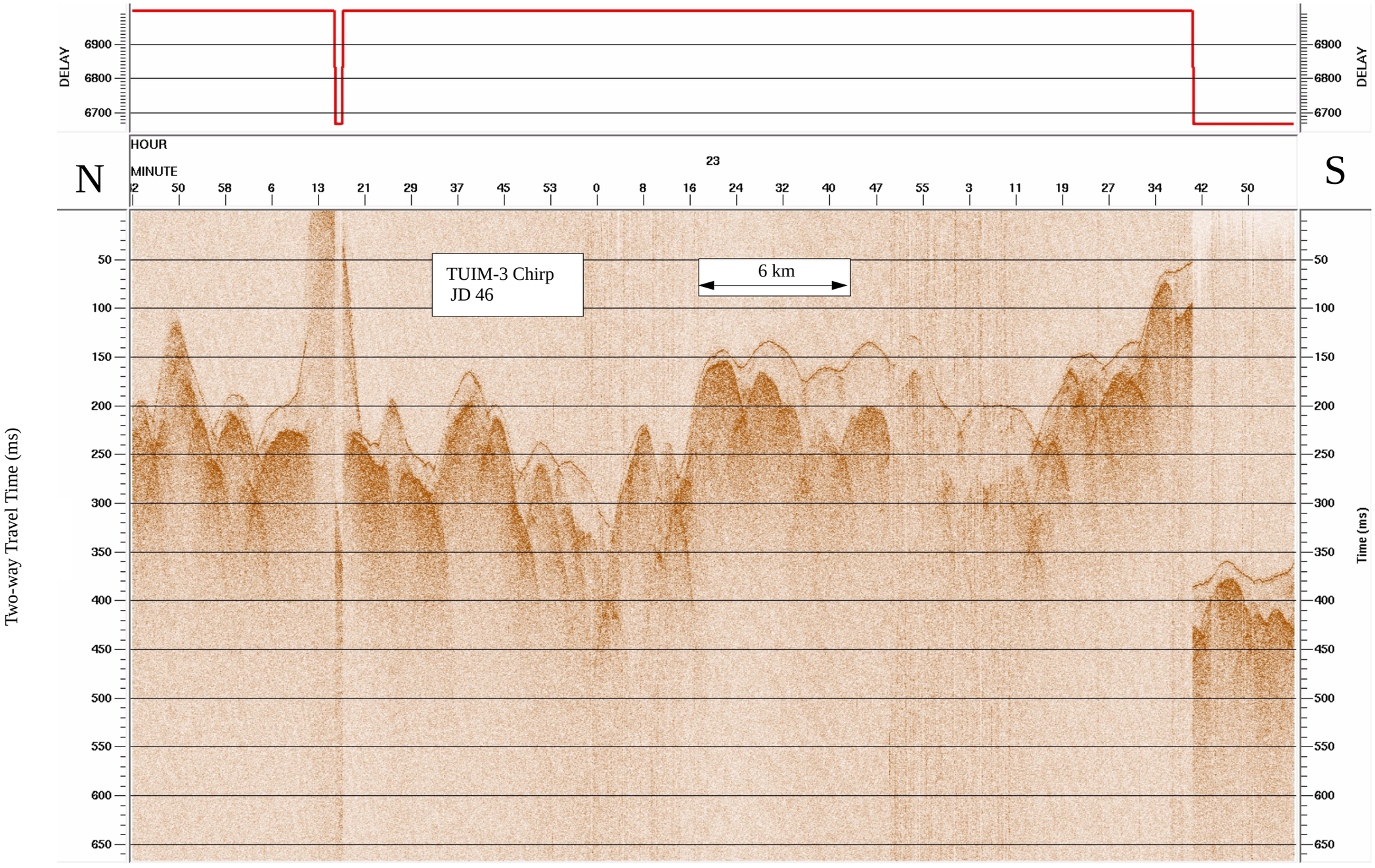

DELAY
6900
6800
6700
N
HOUR
MINUTE
20
3 41 49 57 5 13 20 28 35 43 51 59 7 15 22 30 38 46 54 2 9 17 25 33 41
S
TUIM-3 Chirp
JD 45
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Time (ms)

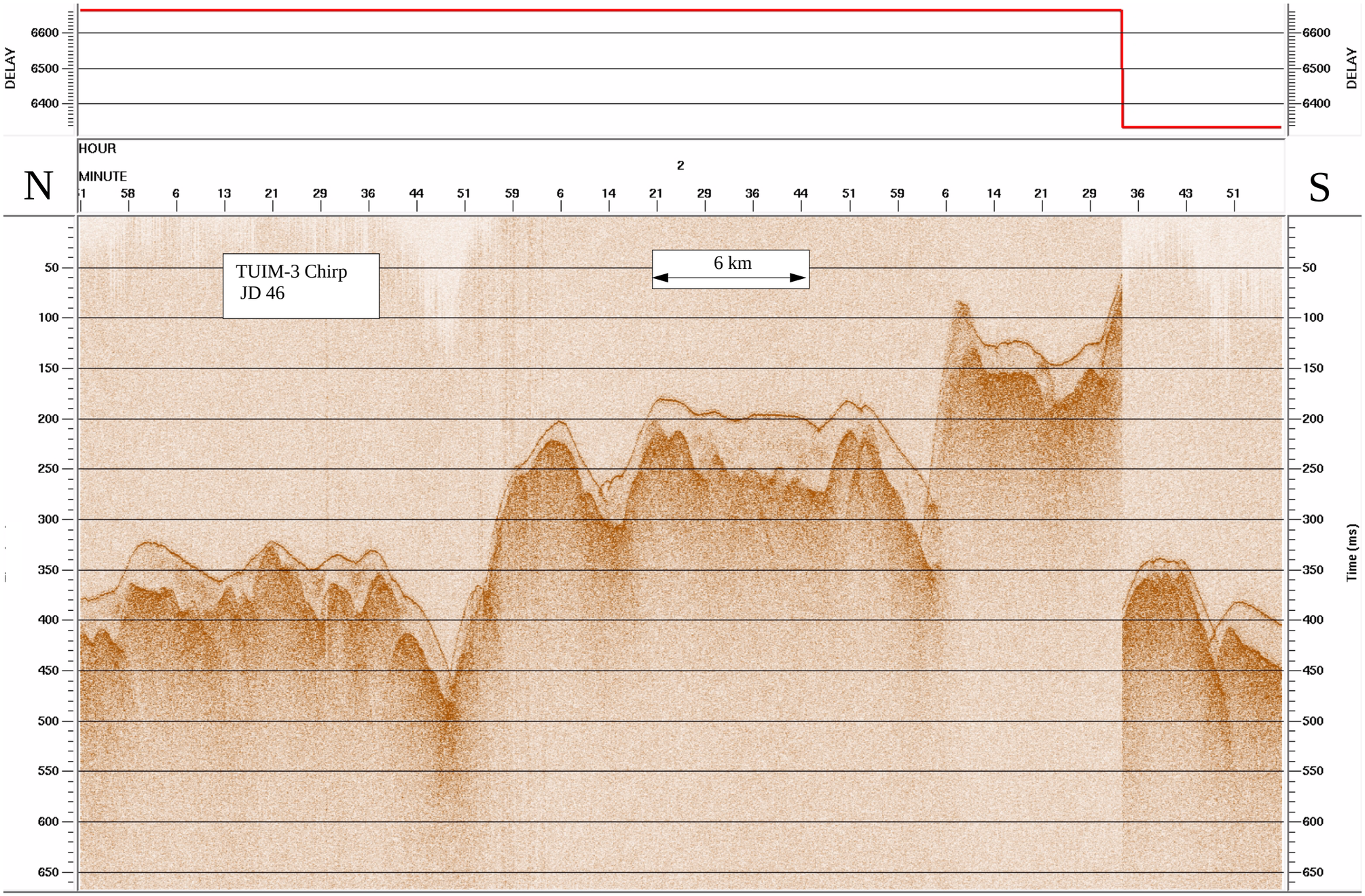

DELAY
6900
6800
6700
N
HOUR
23
MINUTE
2 50 58 6 13 21 29 37 45 53 0 8 16 24 32 40 47 55 3 11 19 27 34 42 50
S
TUIM-3 Chirp
JD 45
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Time (ms)

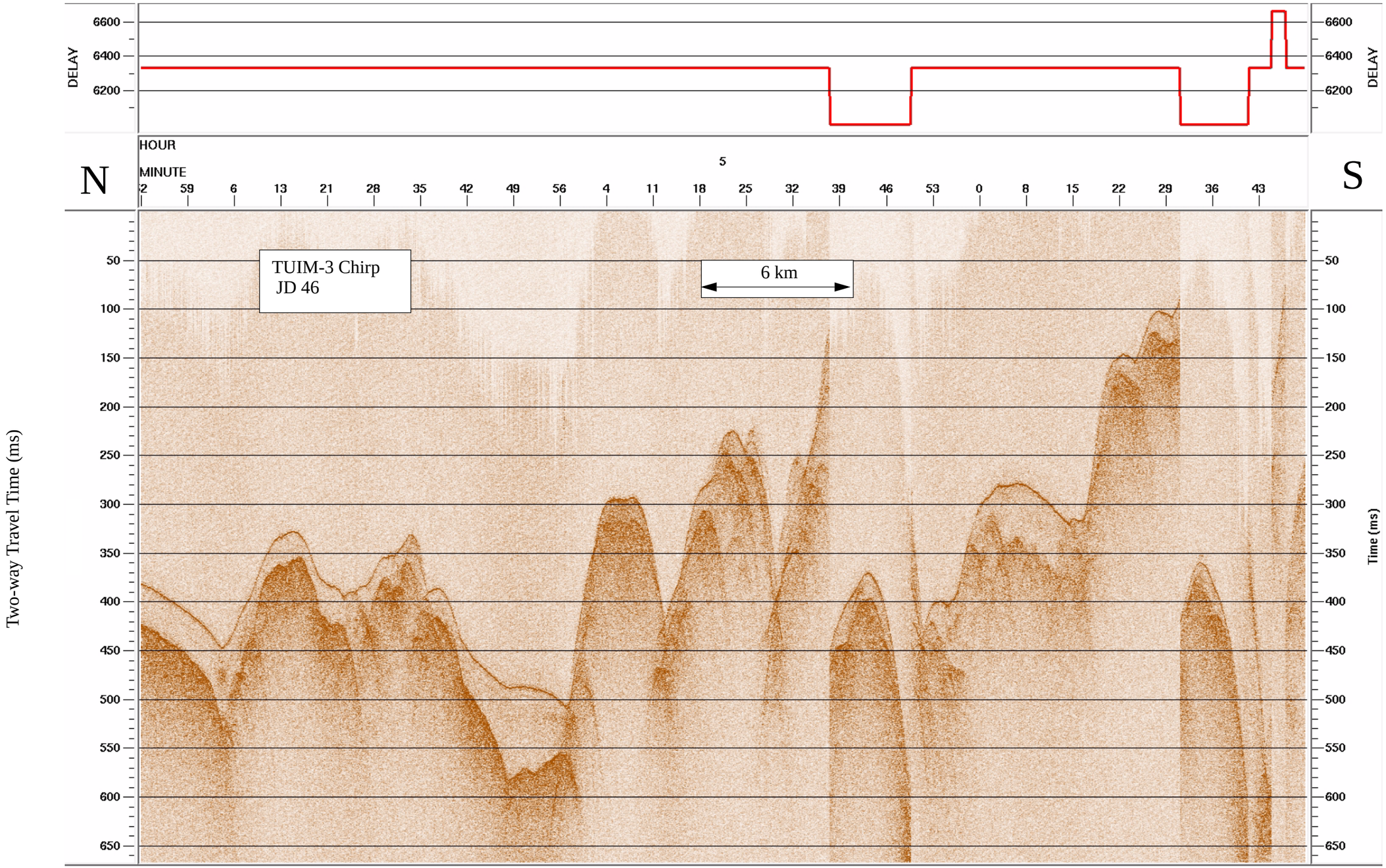
Julian Day 46
15 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb15.0000-0600

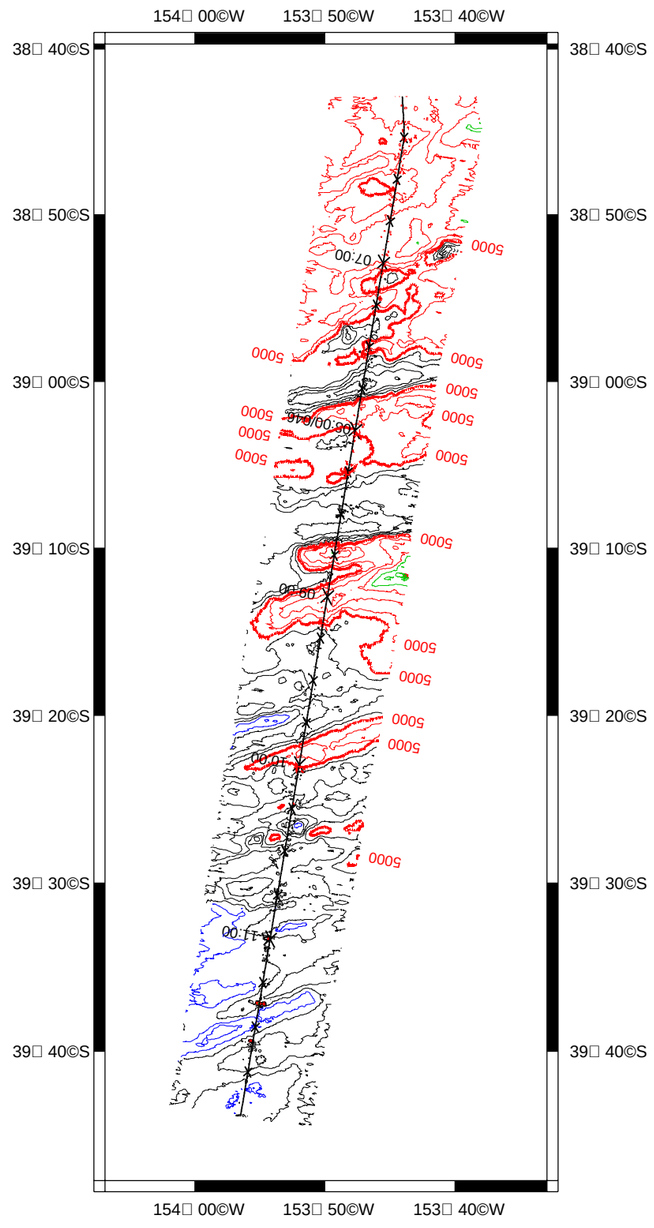


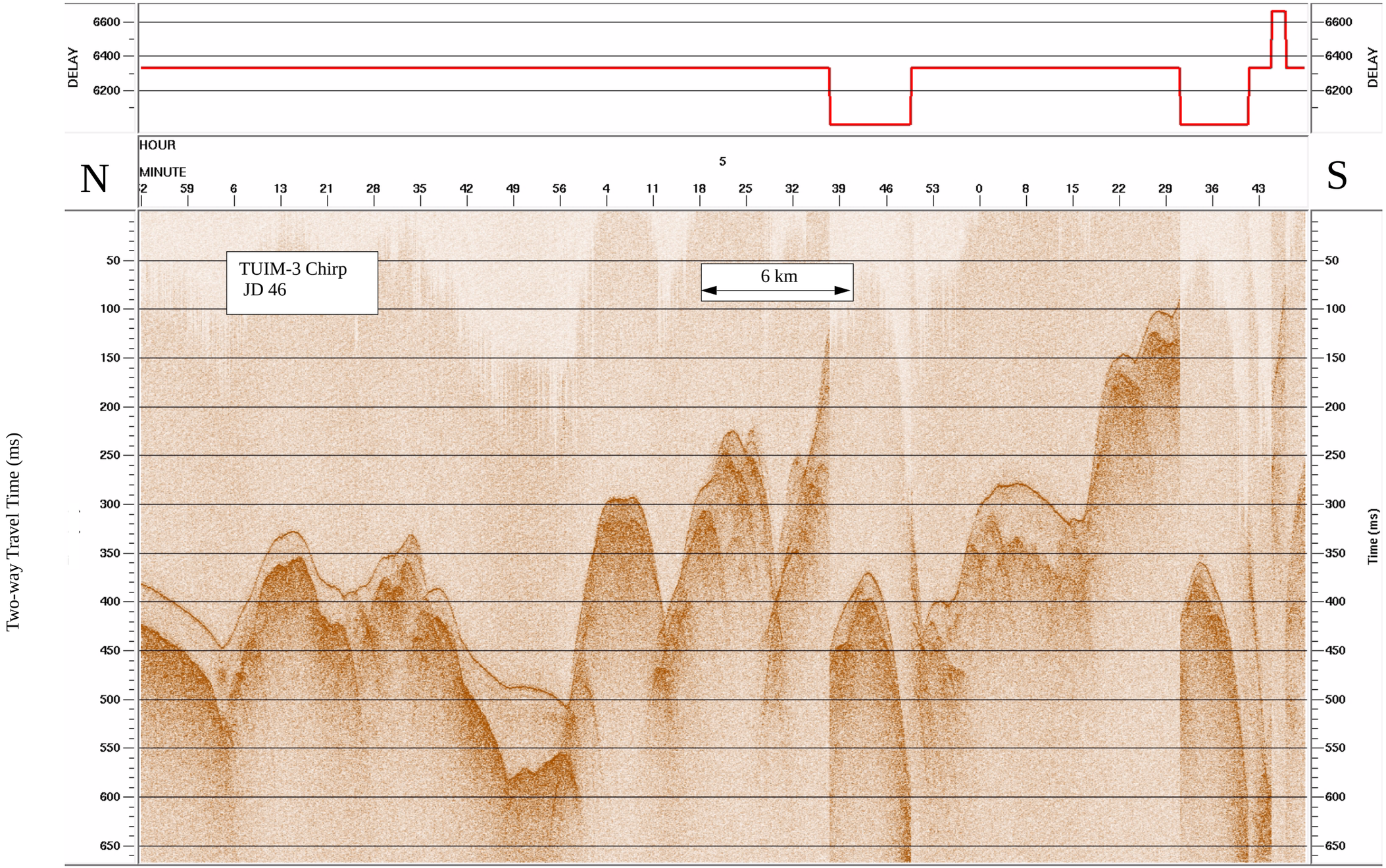

DELAY
6900
6800
6700
HOUR
23
MINUTE
N
S
TUIM-3 Chirp
JD 46
6 km
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

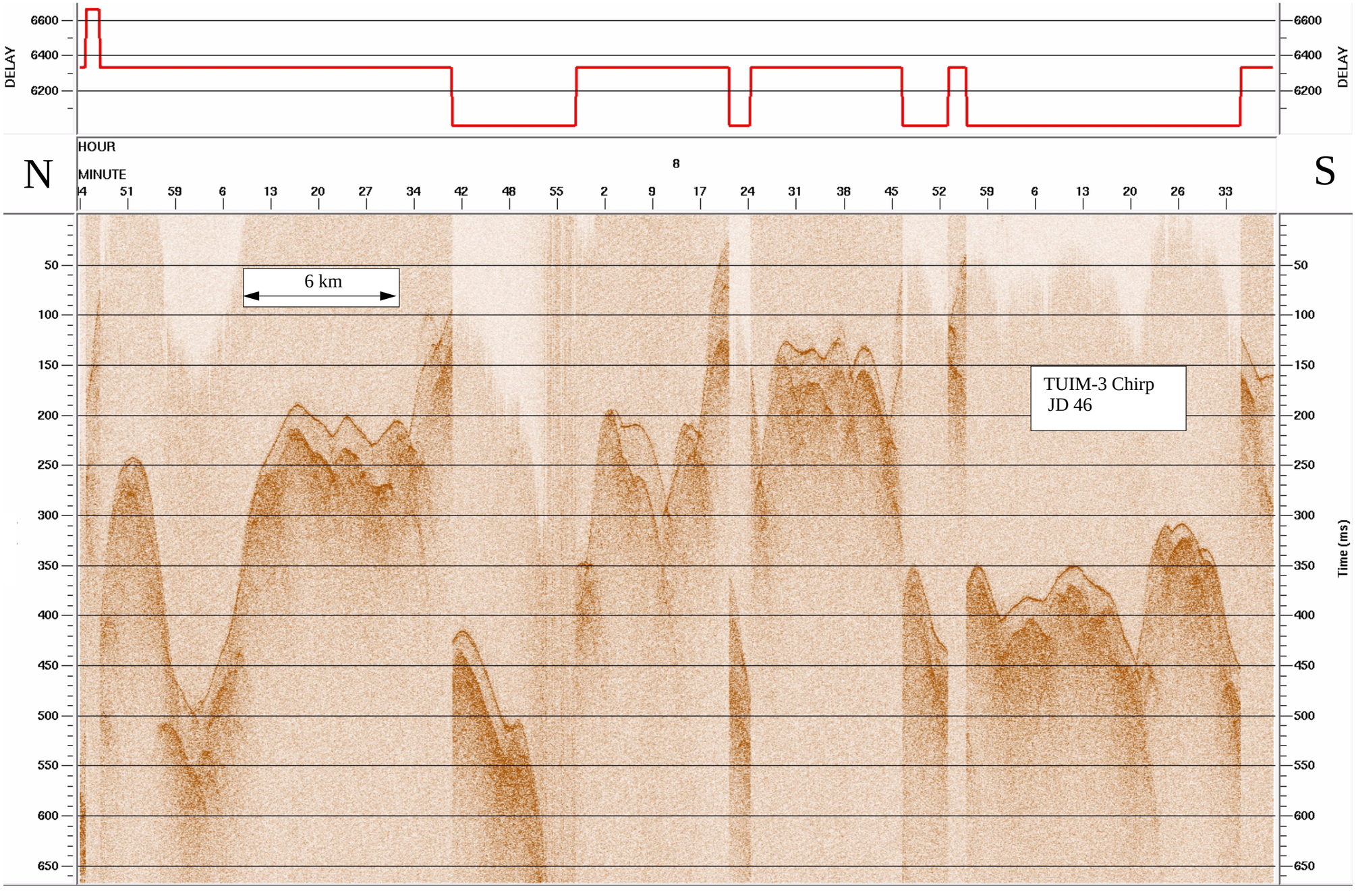

DELAY
6600
6500
6400
HOUR
2
MINUTE
N
S
TUIM-3 Chirp
JD 46
6 km
Two-way Travel Time (ms)
Time (ms)

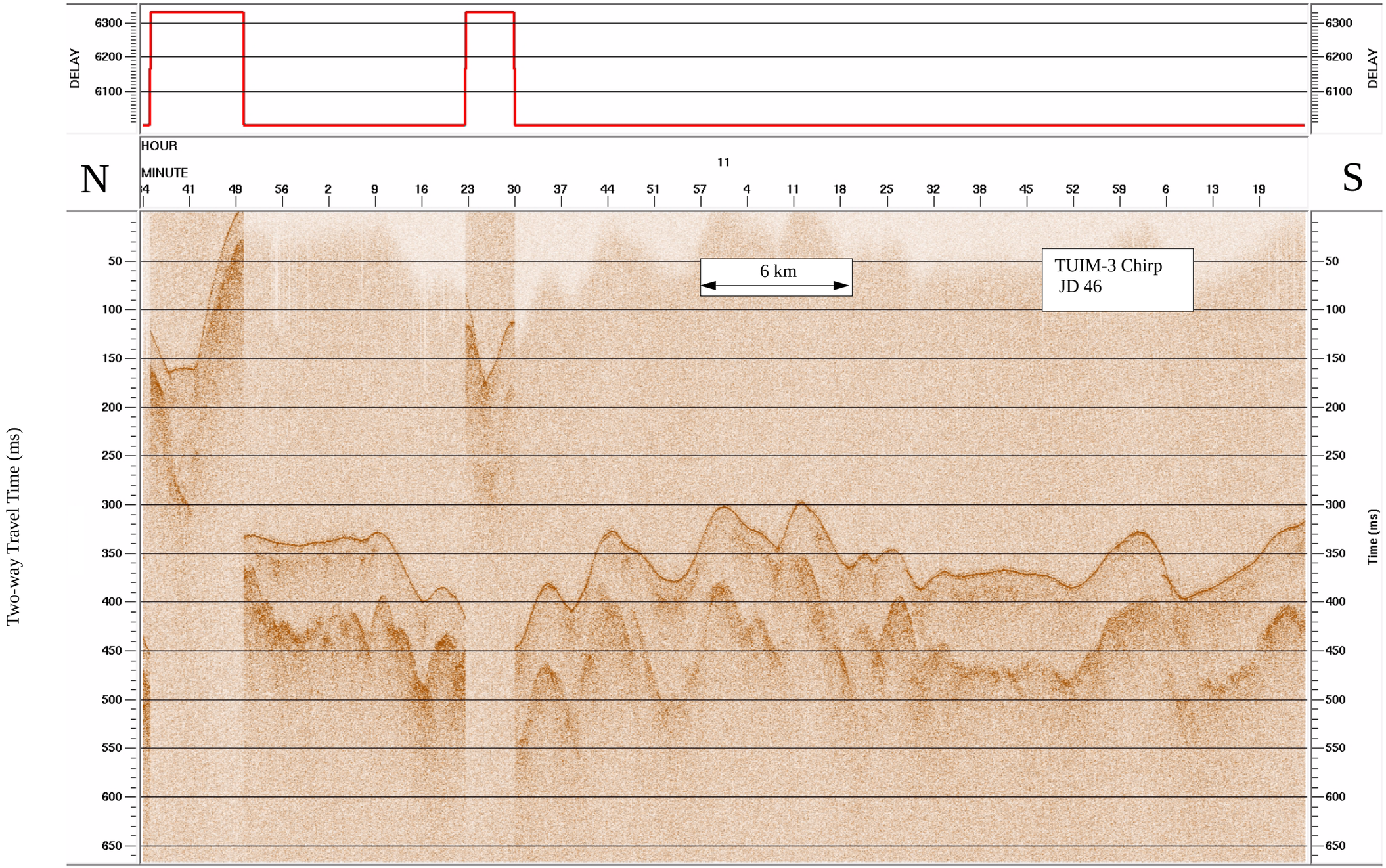

DELAY
6600
6400
6200
HOUR
MINUTE
N
S
TUIM-3 Chirp
JD 46
6 km
Two-way Travel Time (ms)
Time (ms)

Data File SBfixavg.2005feb15.0600-1200

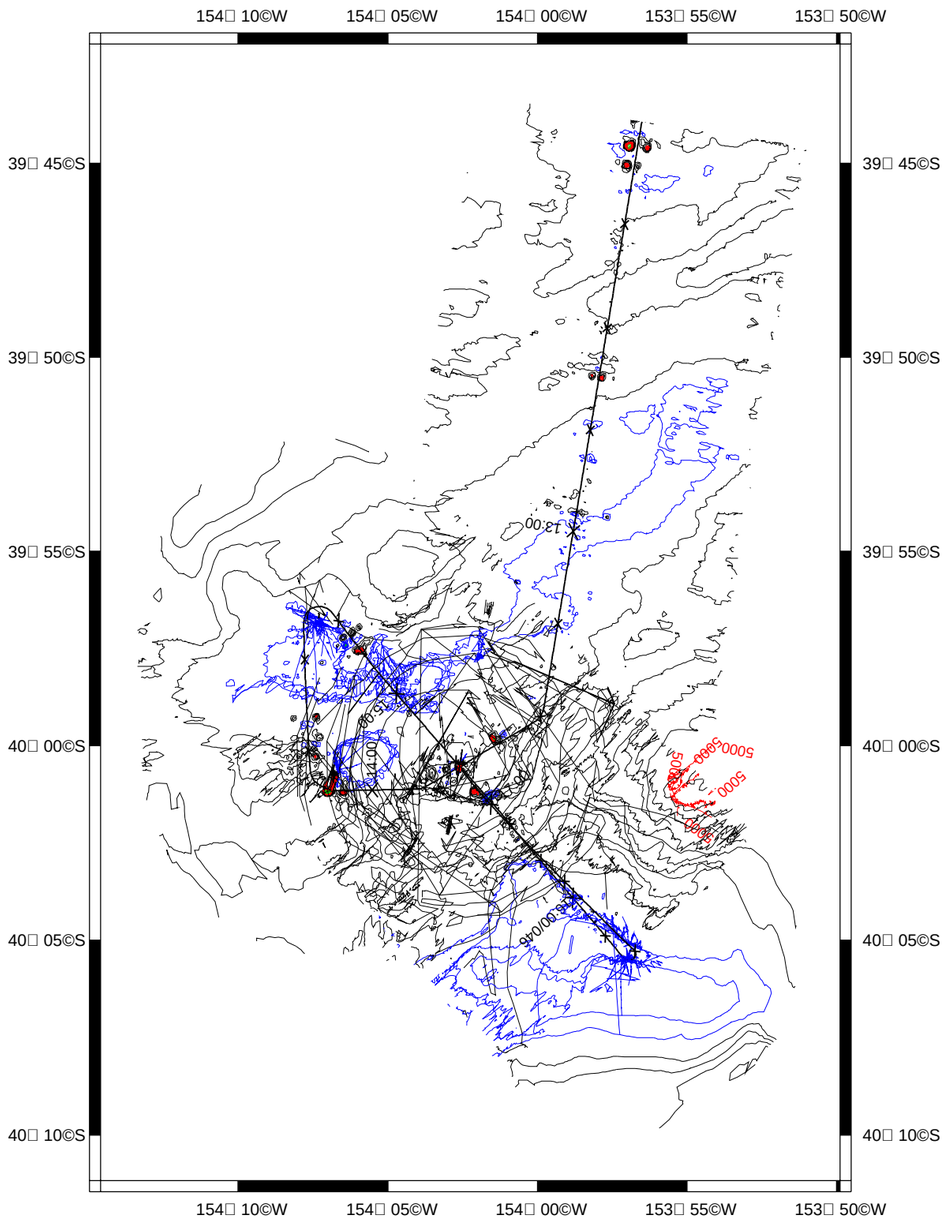


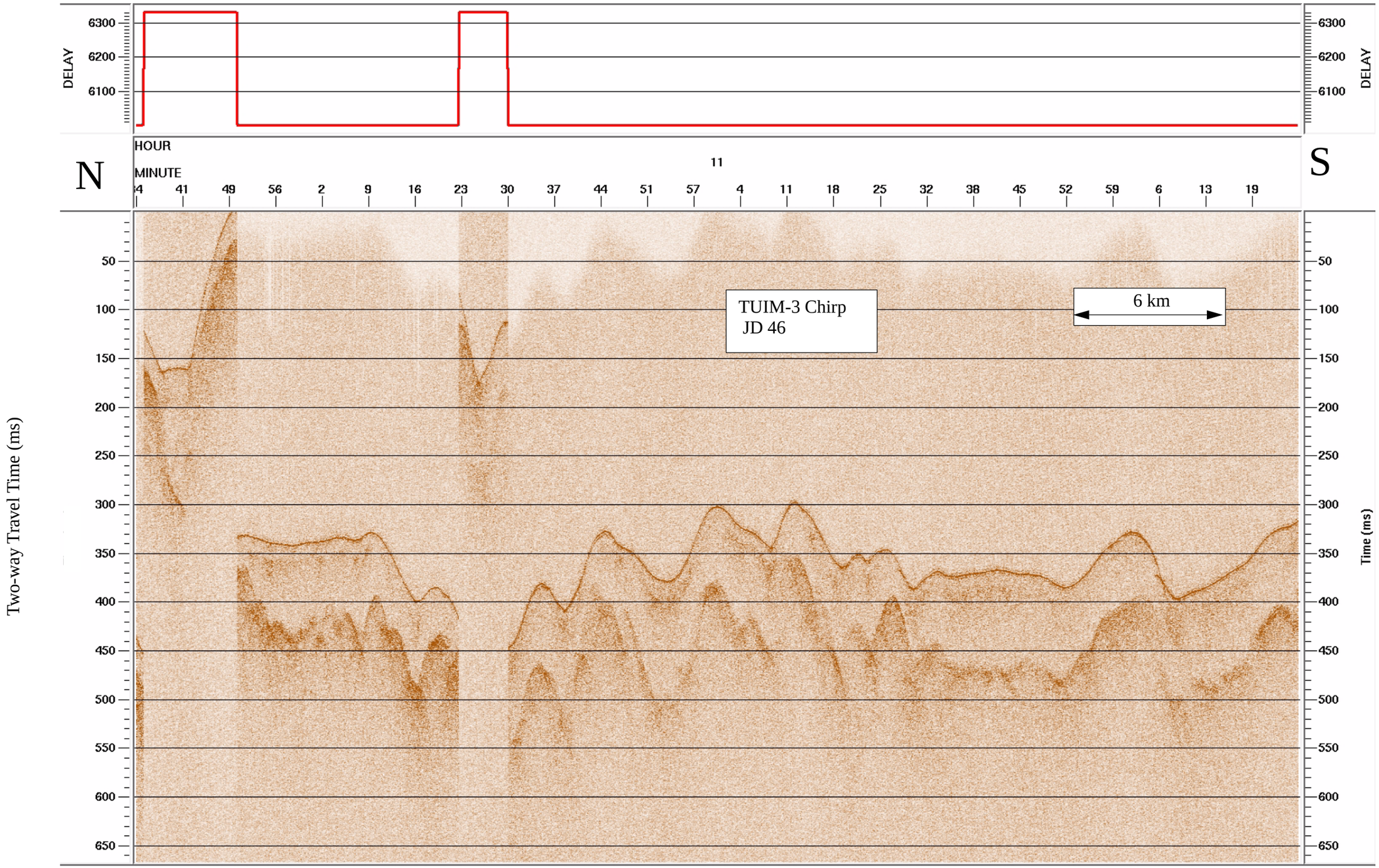

DELAY
6600
6400
6200
N
HOUR
MINUTE
5
2 59 6 13 21 28 35 42 49 56 4 11 18 25 32 39 46 53 0 8 15 22 29 36 43
S
TUIM-3 Chirp
JD 46
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Time (ms)

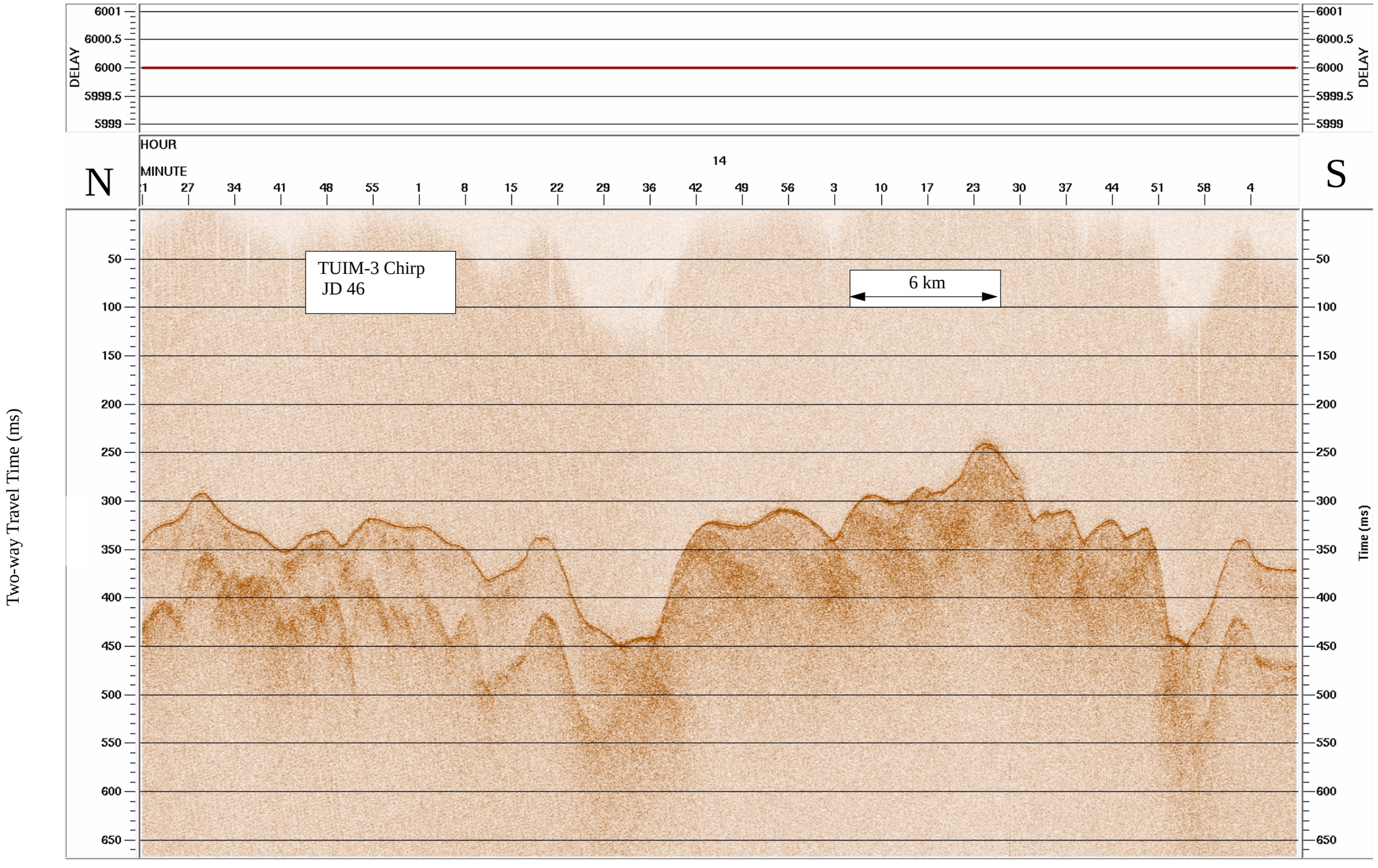

DELAY
6600
6400
6200
N
HOUR
MINUTE
8
S
6 km
TUIM-3 Chirp
JD 46
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

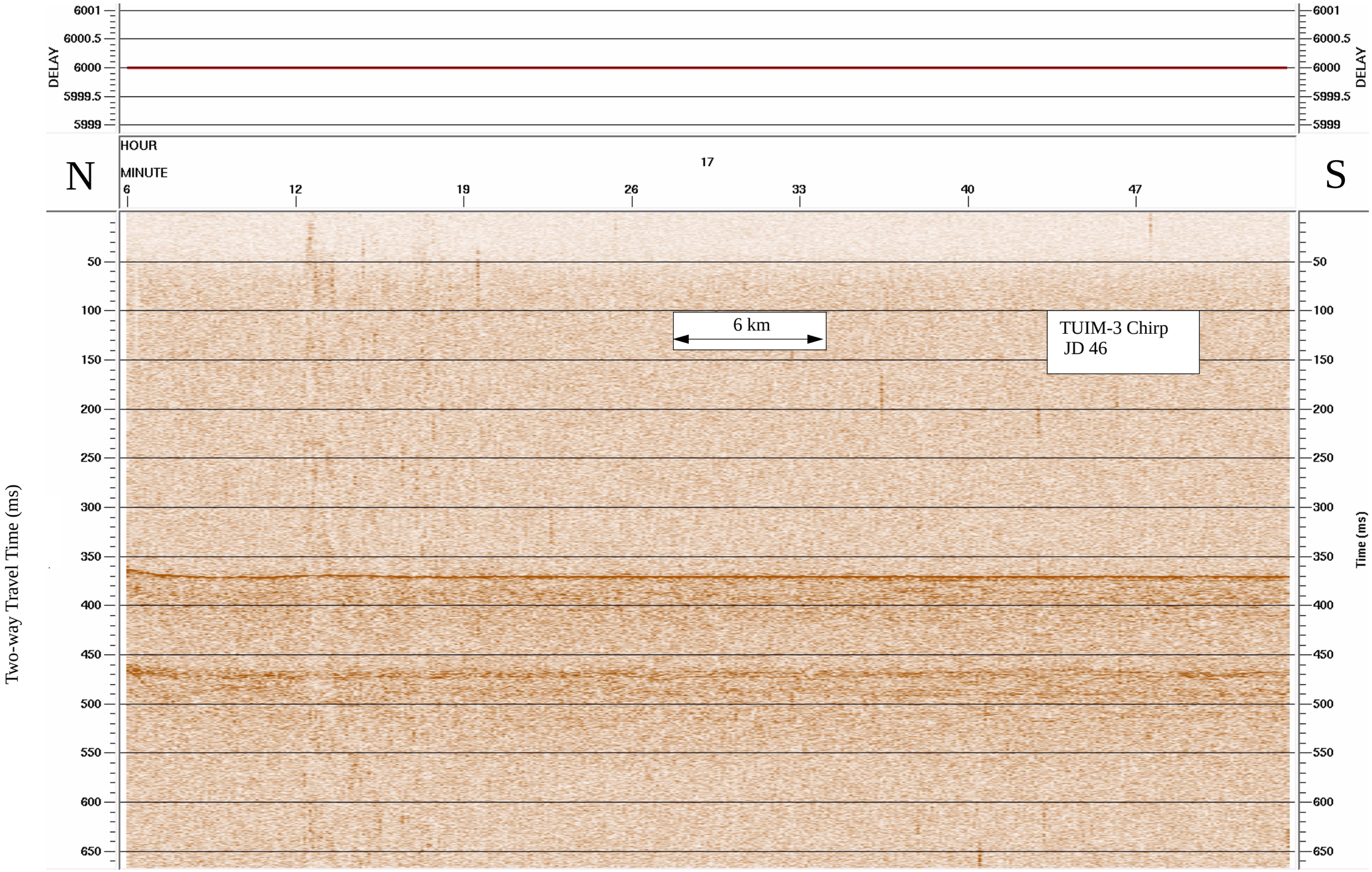

DELAY
6300
6200
6100
N
HOUR
11
MINUTE
34 41 49 56 2 9 16 23 30 37 44 51 57 4 11 18 25 32 38 45 52 59 6 13 19
S
6 km
TUIM-3 Chirp
JD 46
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
Time (ms)

Data File SBfixavg.2005feb15.1200-1800



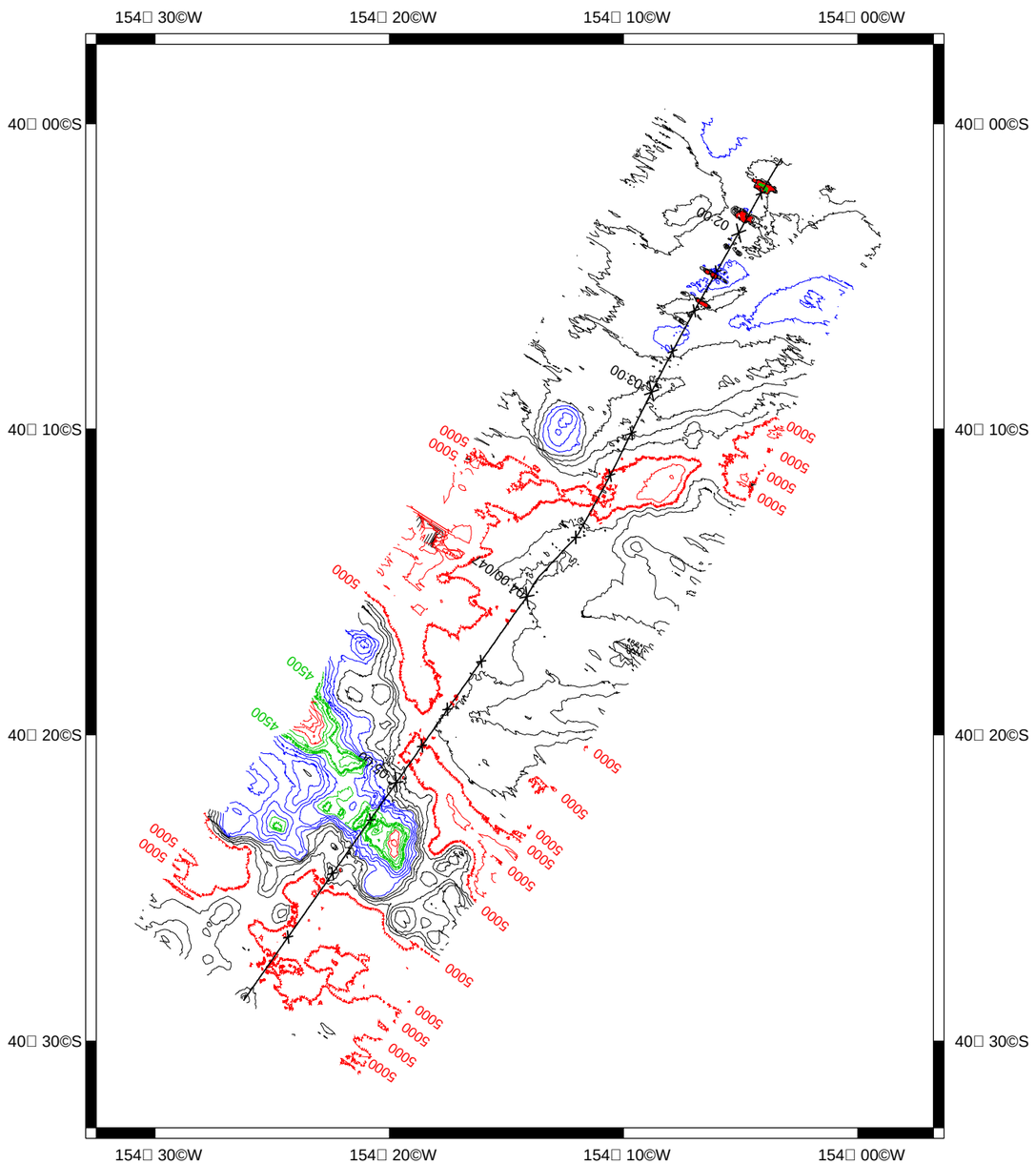

DELAY
6300
6200
6100
N
HOUR
MINUTE
11
S
TUIM-3 Chirp
JD 46
6 km
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

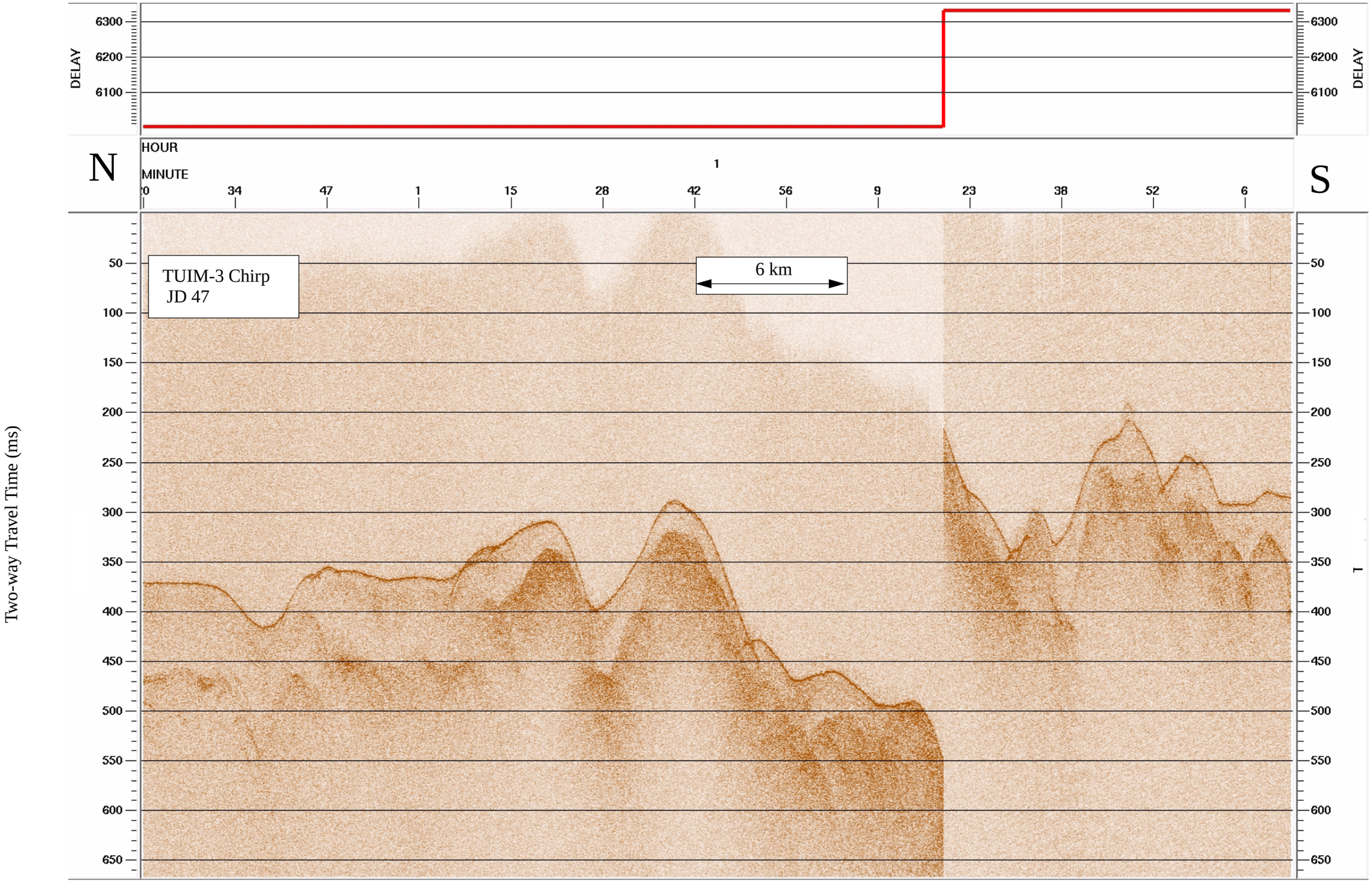

DELAY
6001
6000.5
6000
5999.5
5999
HOUR
14
MINUTE
N
S
TUIM-3 Chirp
JD 46
6 km
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

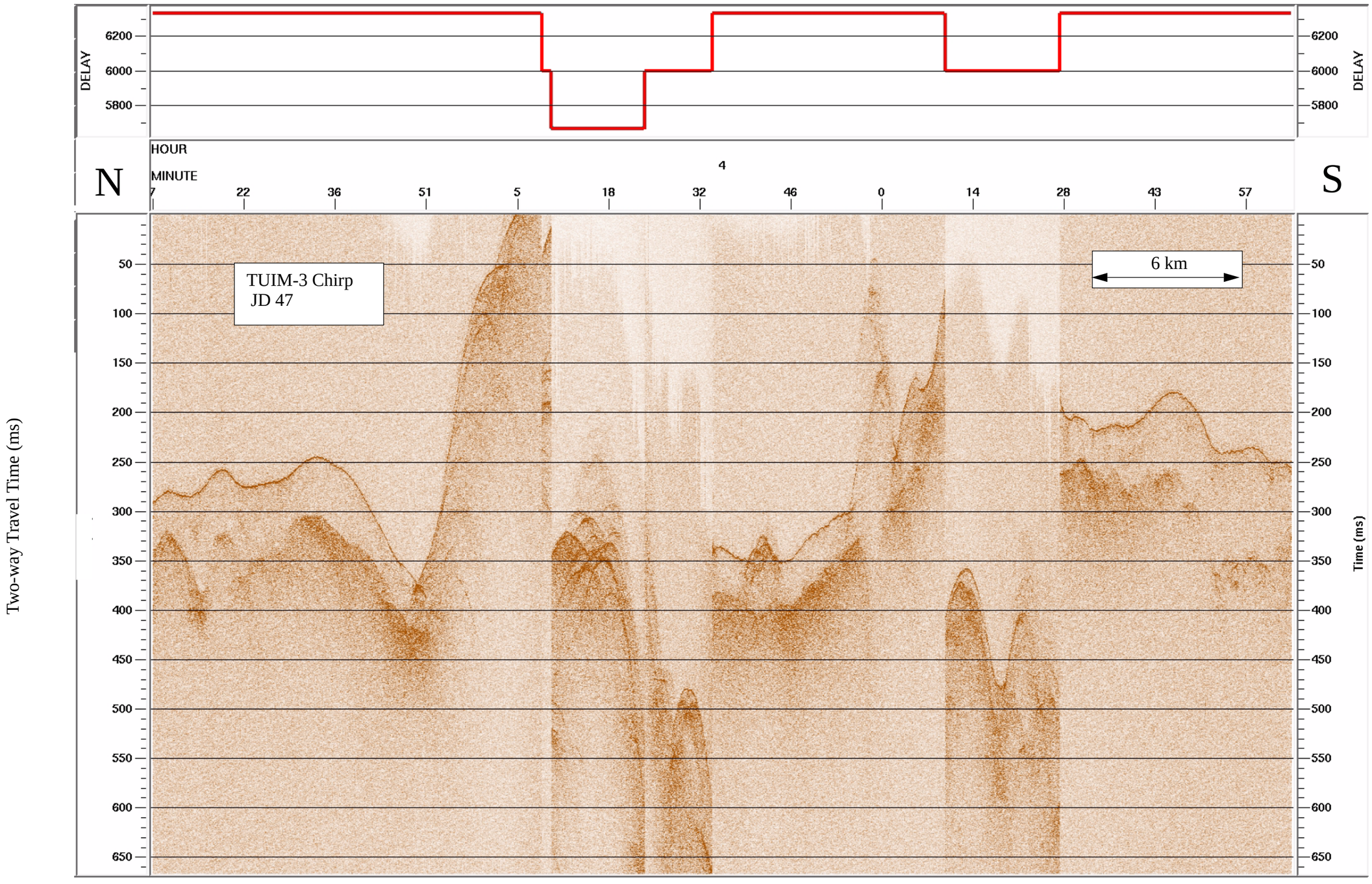

DELAY
6001
6000.5
6000
5999.5
5999
N
S
HOUR
17
MINUTE
6
12
19
26
33
40
47
6 km
TUIM-3 Chirp
JD 46
Two-way Travel Time (ms)
Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

Julian Day 47
16 February 2005
Knudsen Chirp Data

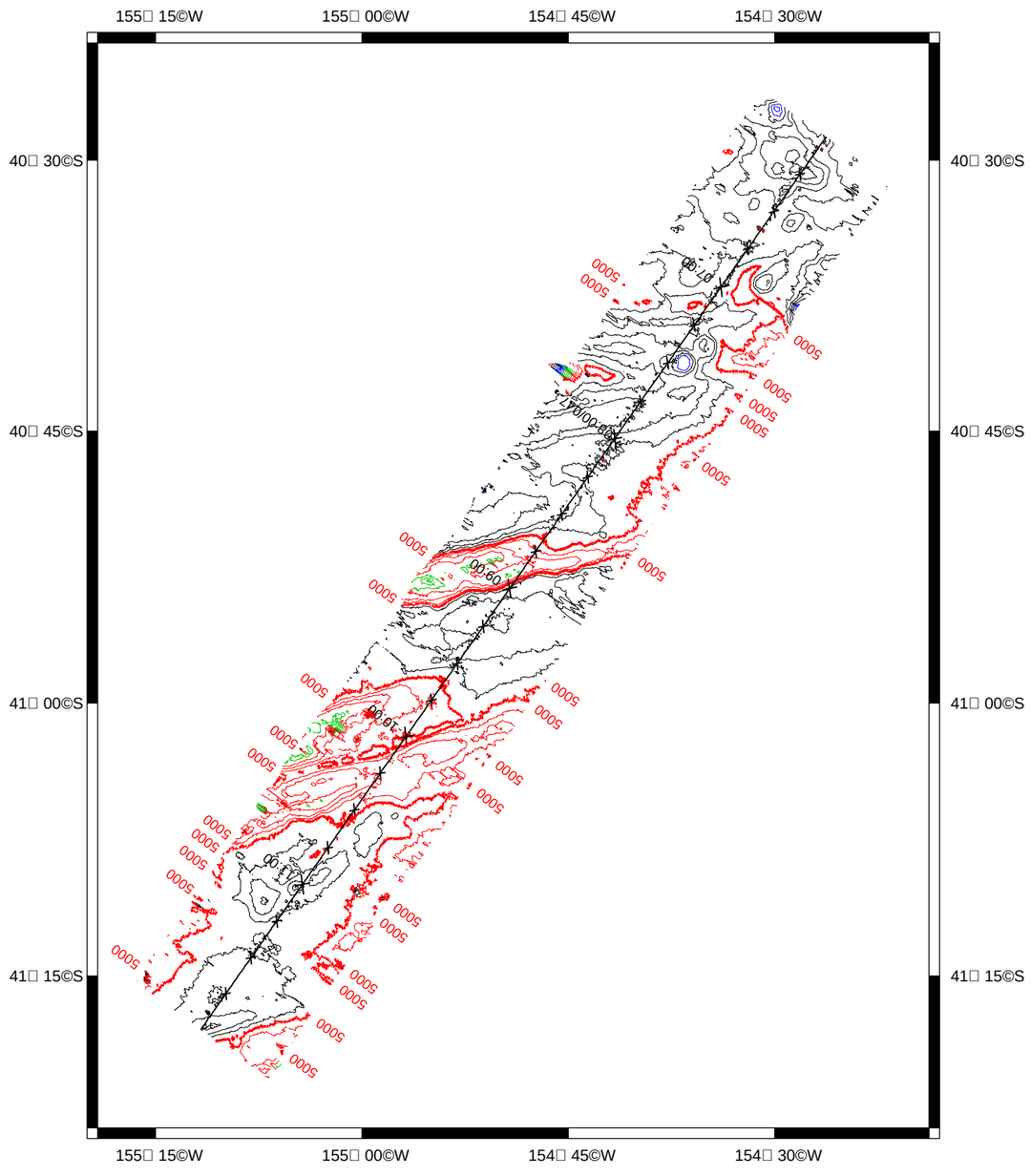
Data File SBfixavg.2005feb16.0000-0600

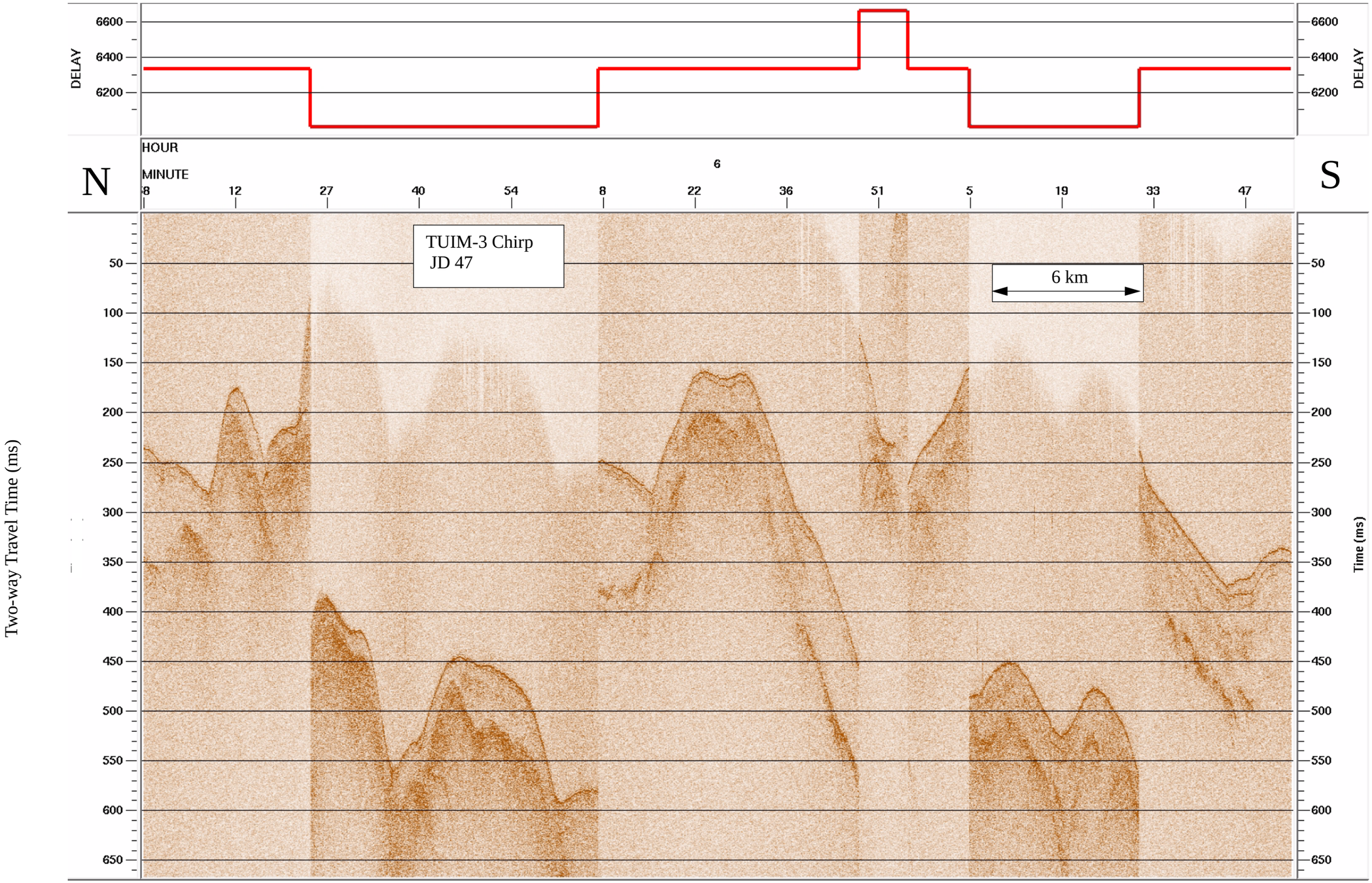


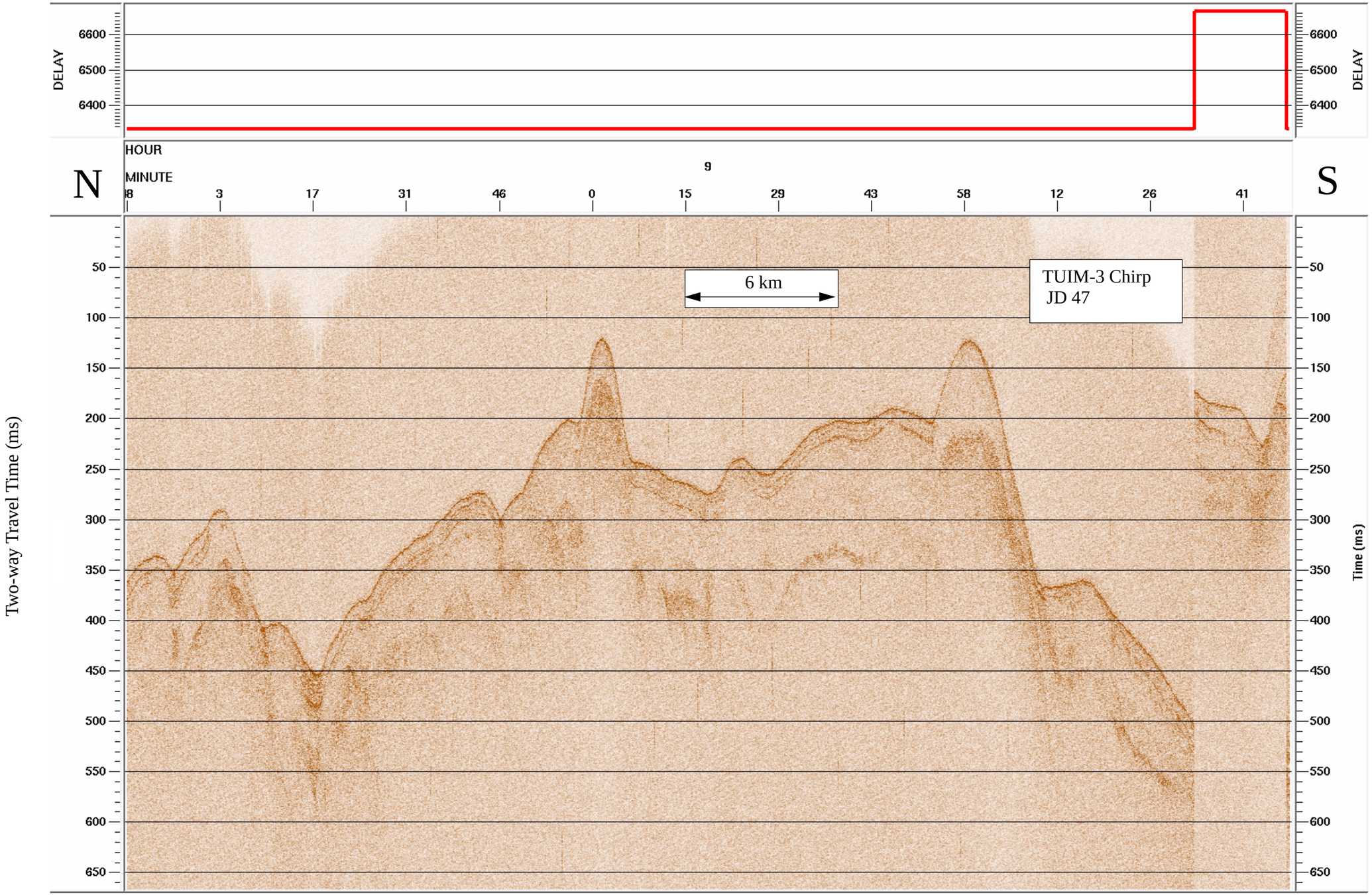

DELAY
6300
6200
6100
N
S
HOUR
MINUTE
1
0
34
47
1
15
28
42
56
9
23
38
52
6
TUIM-3 Chirp
JD 47
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650


DELAY
6200
6000
5800
N
HOUR
4
MINUTE
7
22
36
51
5
18
32
46
0
14
28
43
57
S
TUIM-3 Chirp
JD 47
6 km
50
100
150
200
250
300
350
400
450
500
550
600
650
Two-way Travel Time (ms)
Time (ms)

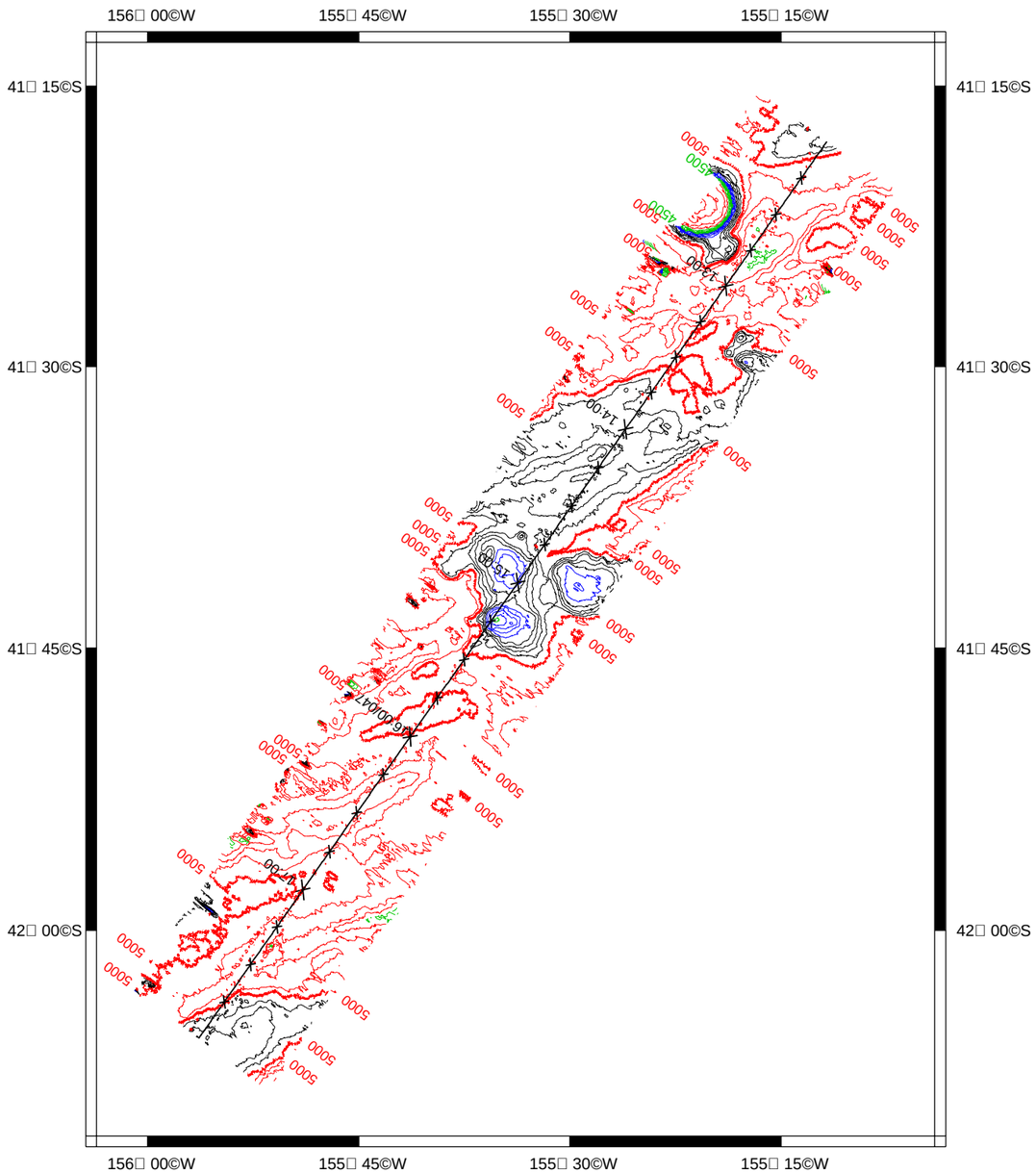
Data File SBfixavg.2005feb16.0600-1200

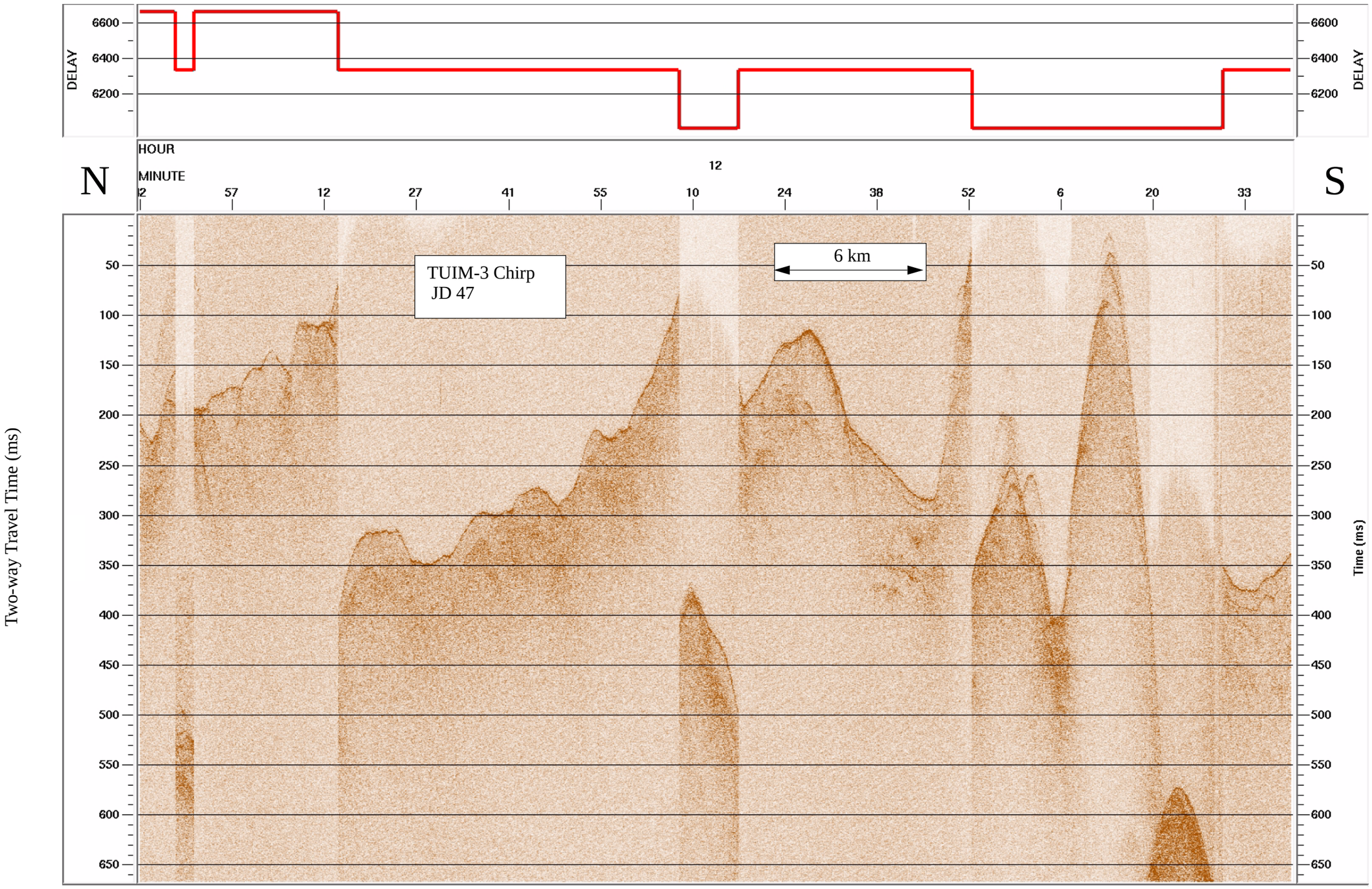


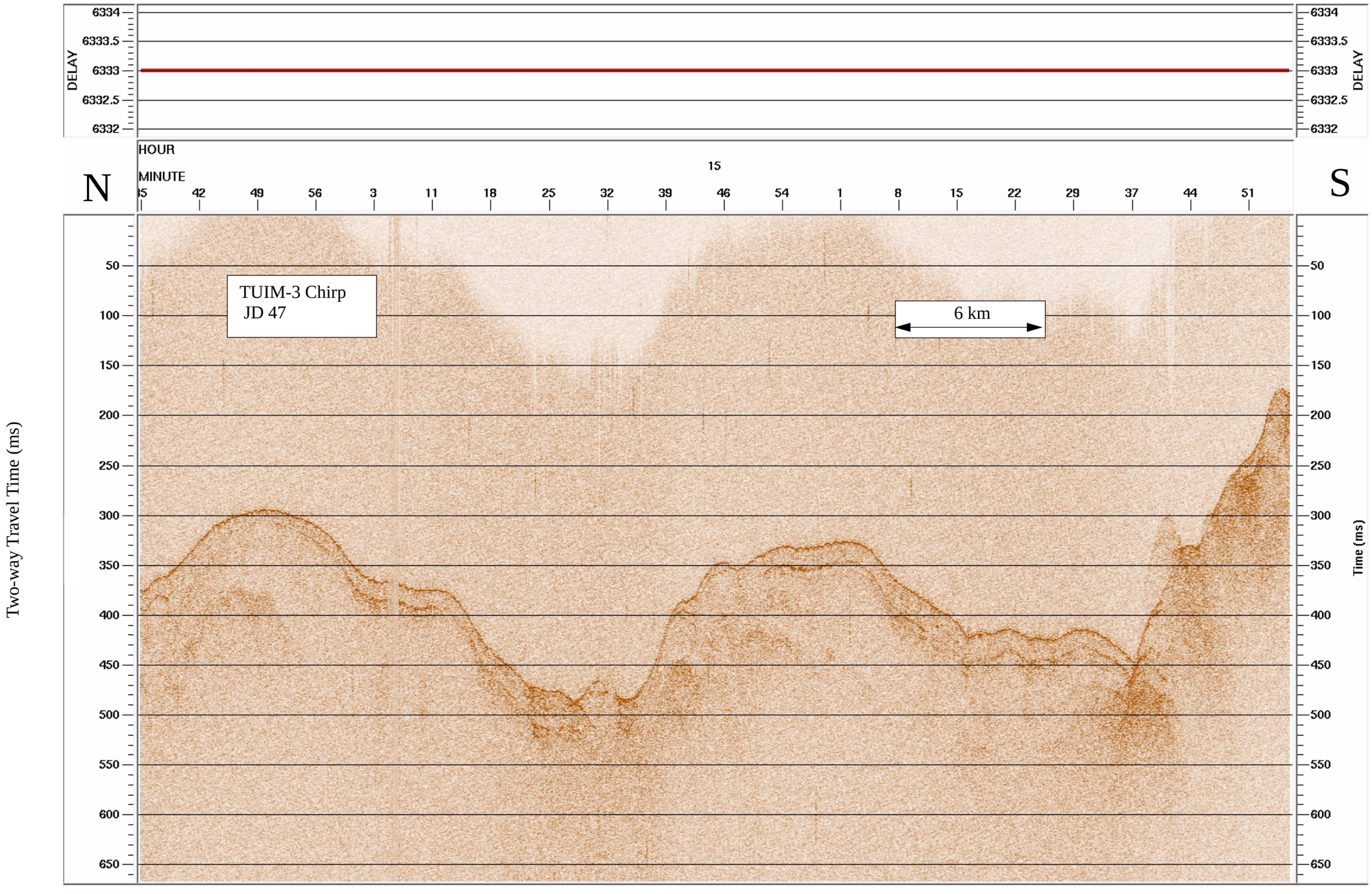

DELAY
6600
6400
6200
N
S
HOUR
6
MINUTE
8
12
27
40
54
8
22
36
51
5
19
33
47
TUIM-3 Chirp
JD 47
6 km
50
100
150
200
250
300
350
400
450
500
550
600
650
Two-way Travel Time (ms)
Time (ms)


DELAY
6600
6500
6400
HOUR
9
MINUTE
8
3
17
31
46
0
15
29
43
58
12
26
41
N
S
6 km
TUIM-3 Chirp
JD 47
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
Time (ms)

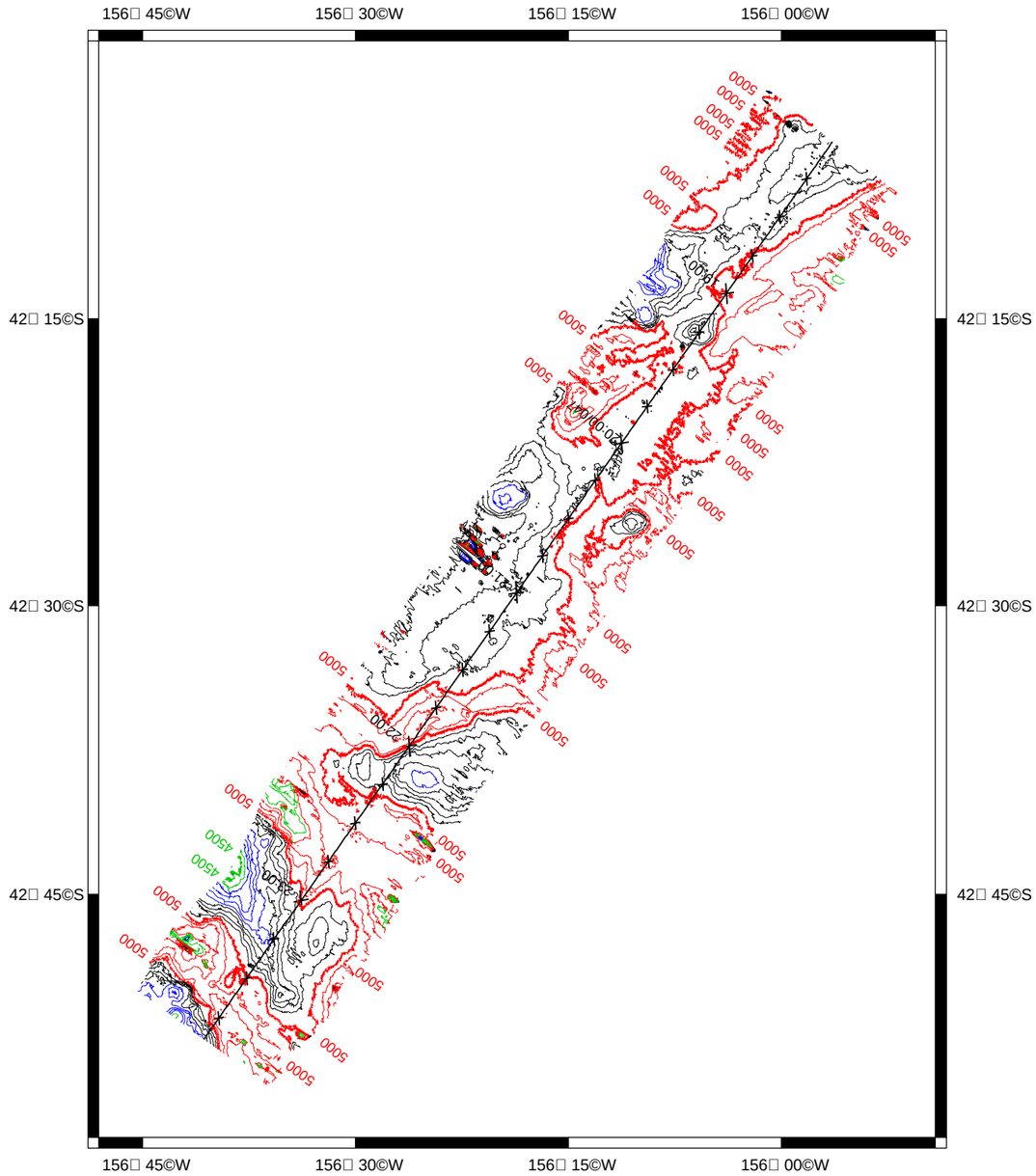
Data File SBfixavg.2005feb16.1200-1800

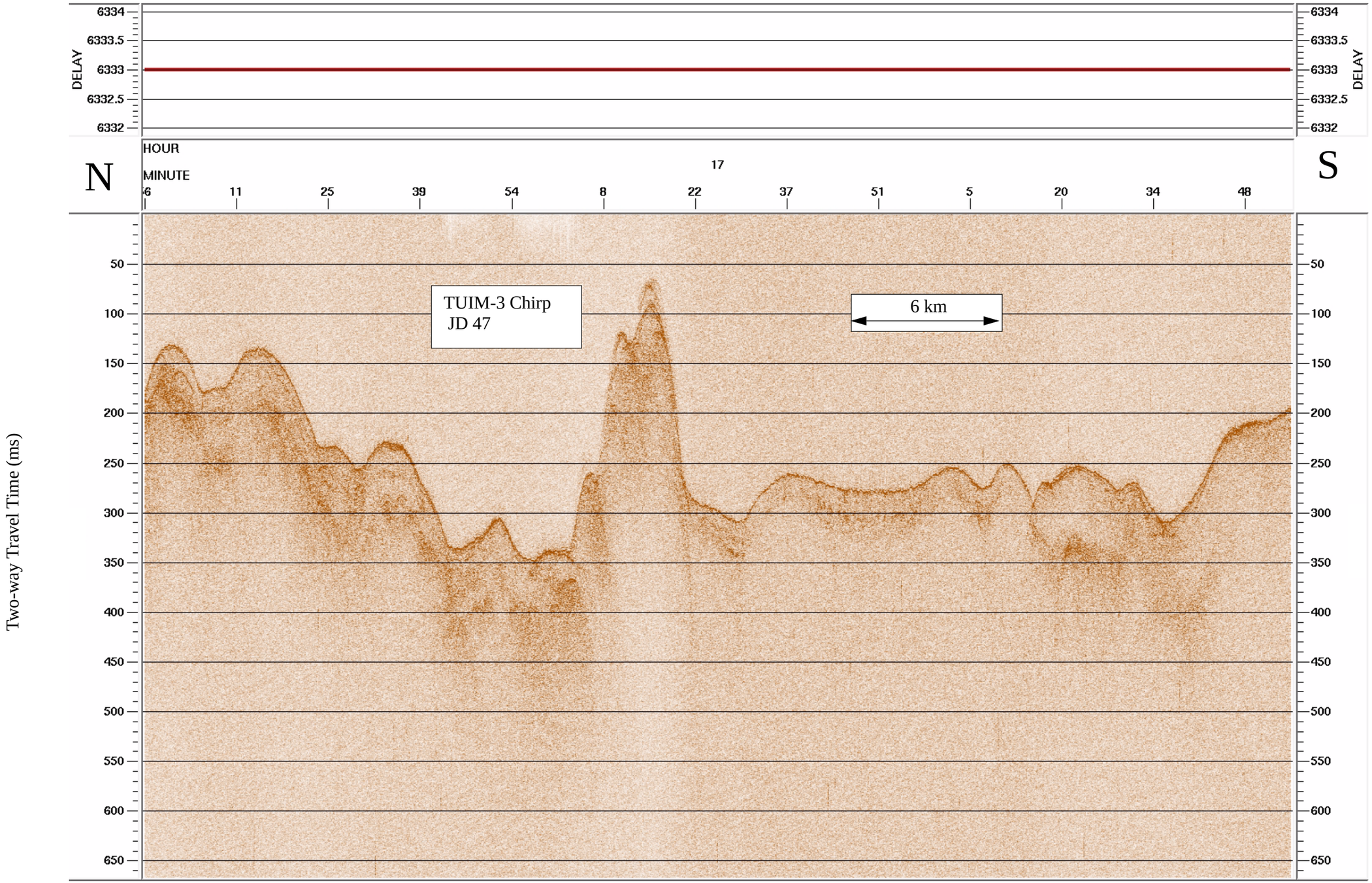


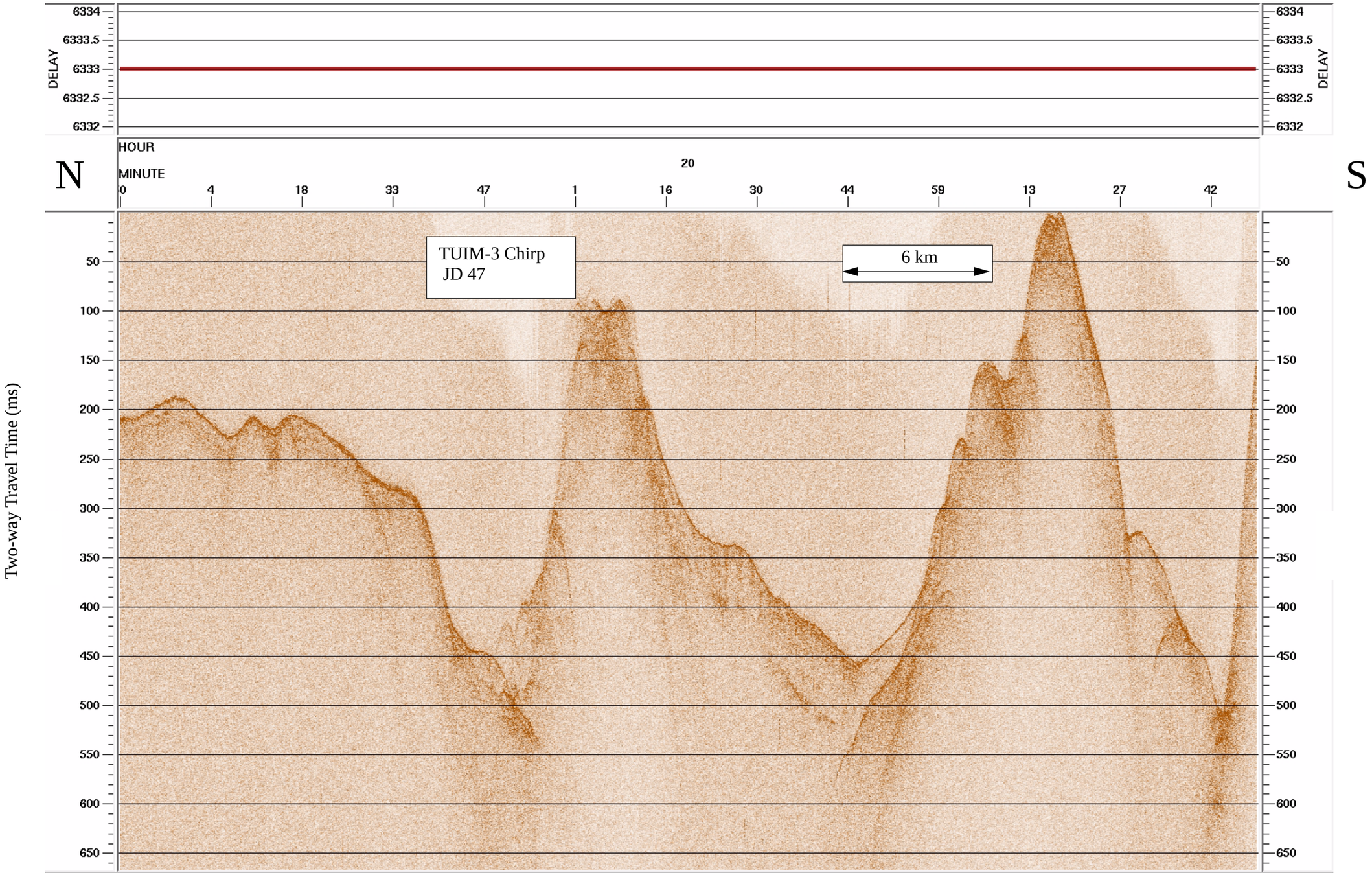

DELAY
6600
6400
6200
HOUR
12
MINUTE
2
57
12
27
41
55
10
24
38
52
6
20
33
N
S
TUIM-3 Chirp
JD 47
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
Time (ms)


DELAY
6334
6333.5
6333
6332.5
6332
HOUR
15
MINUTE
35 42 49 56 3 11 18 25 32 39 46 54 1 8 15 22 29 37 44 51
N
S
TUIM-3 Chirp
JD 47
6 km
Two-way Travel Time (ms)
Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

Data File SBfixavg.2005feb16.1800-2400

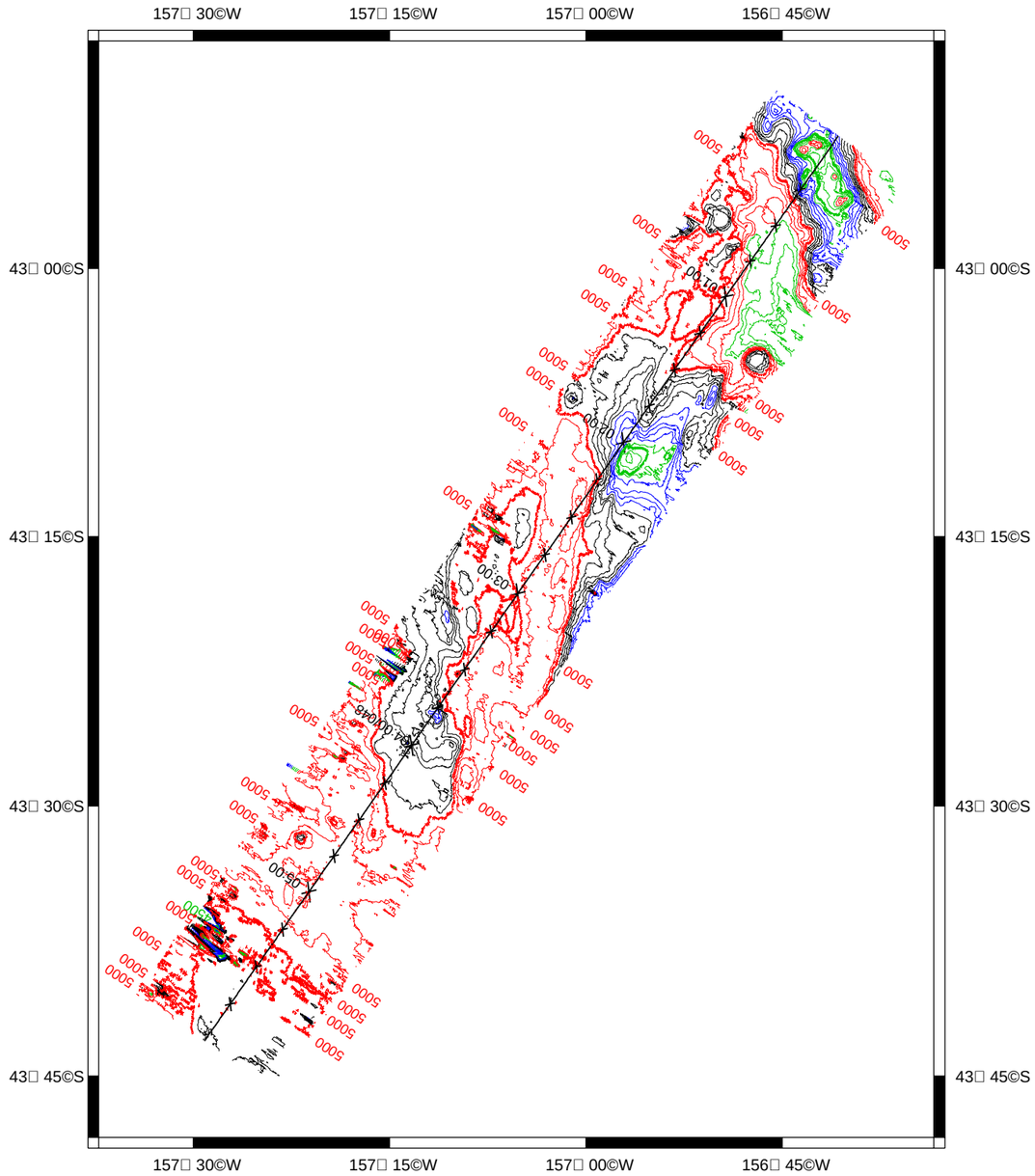


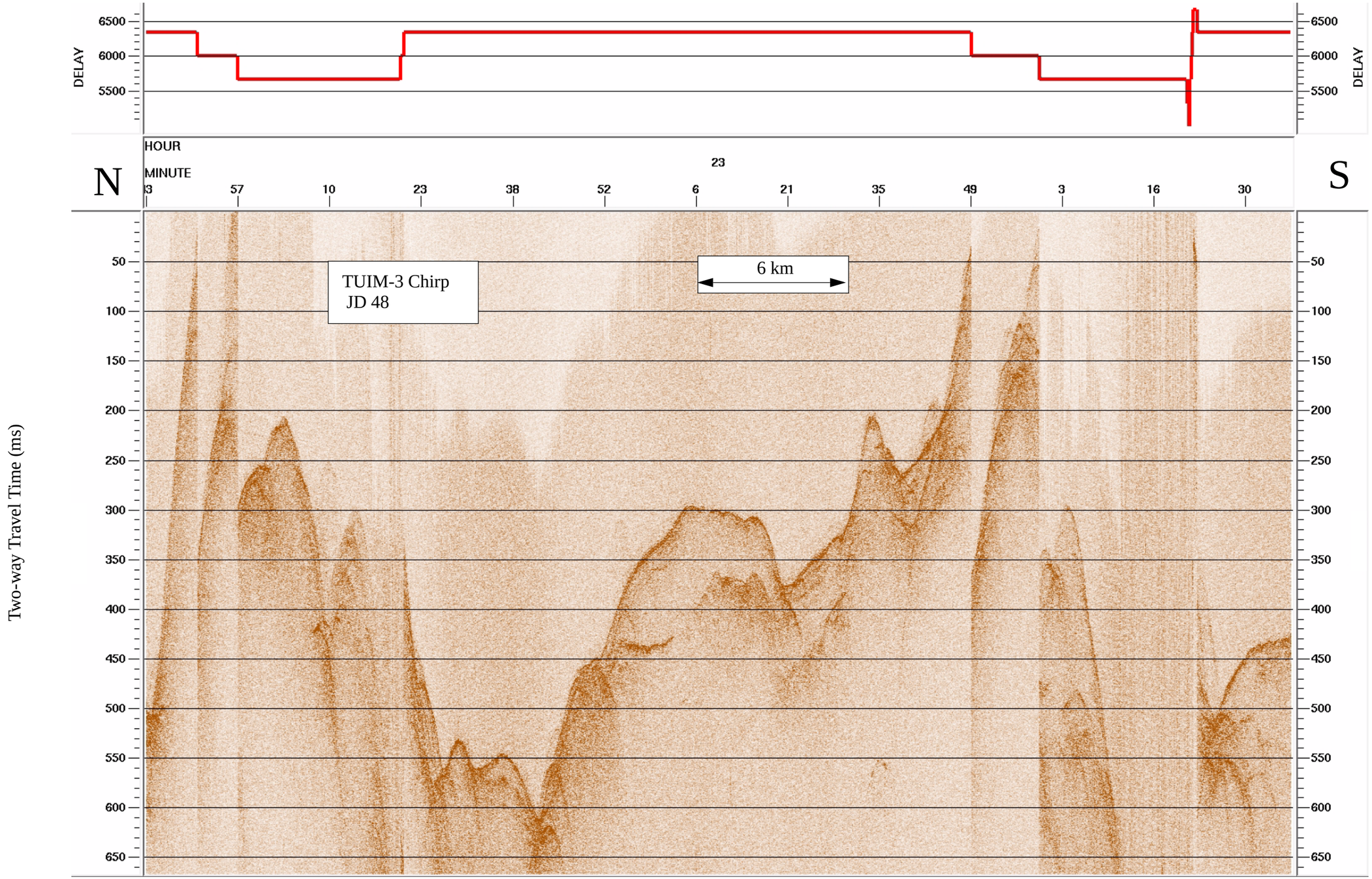

DELAY
6334
6333.5
6333
6332.5
6332
N
S
HOUR
17
MINUTE
6
11
25
39
54
8
22
37
51
5
20
34
48
TUIM-3 Chirp
JD 47
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

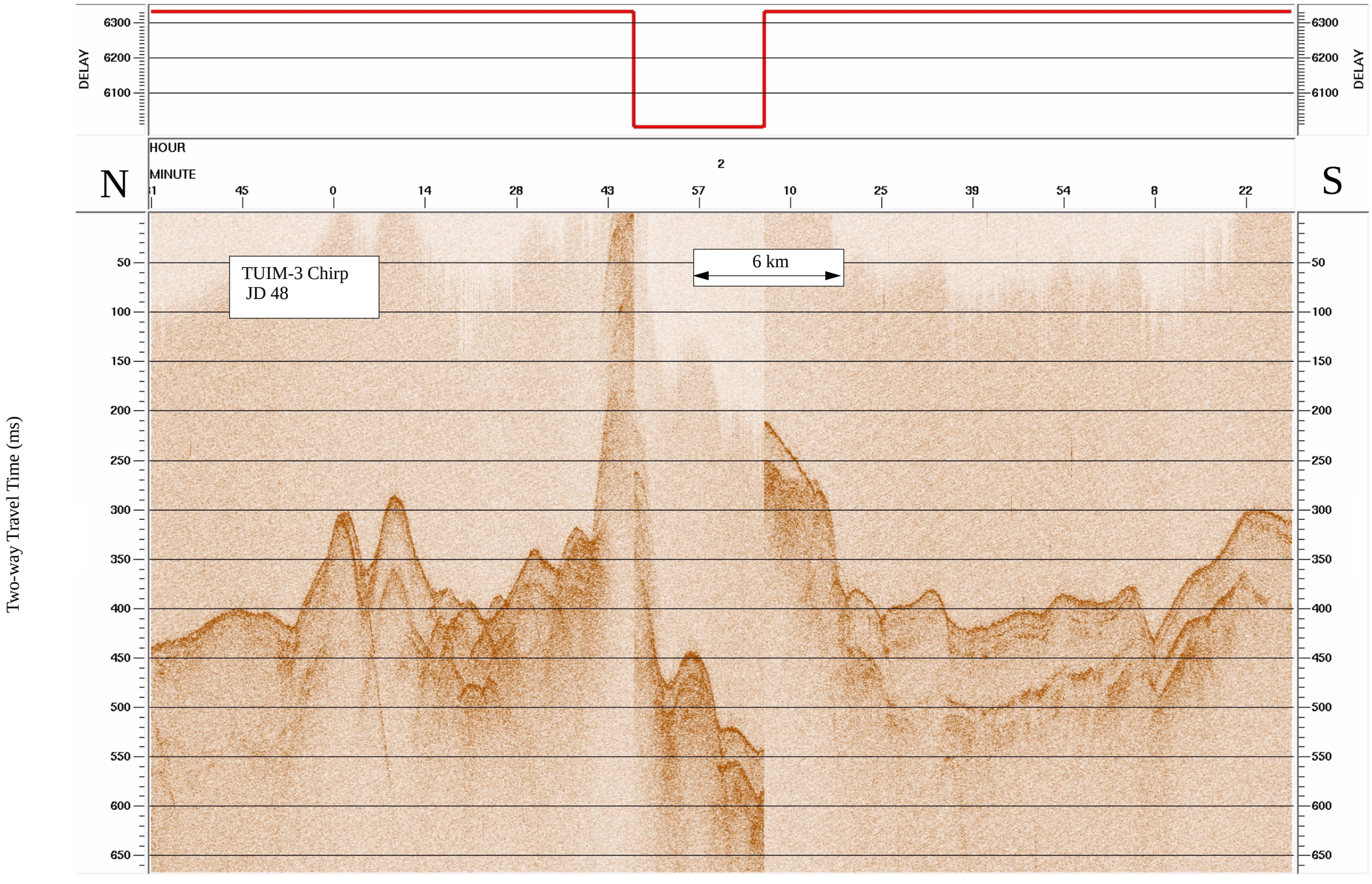

DELAY
6334
6333.5
6333
6332.5
6332
N
S
HOUR
20
MINUTE
0
4
18
33
47
1
16
30
44
59
13
27
42
TUIM-3 Chirp
JD 47
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

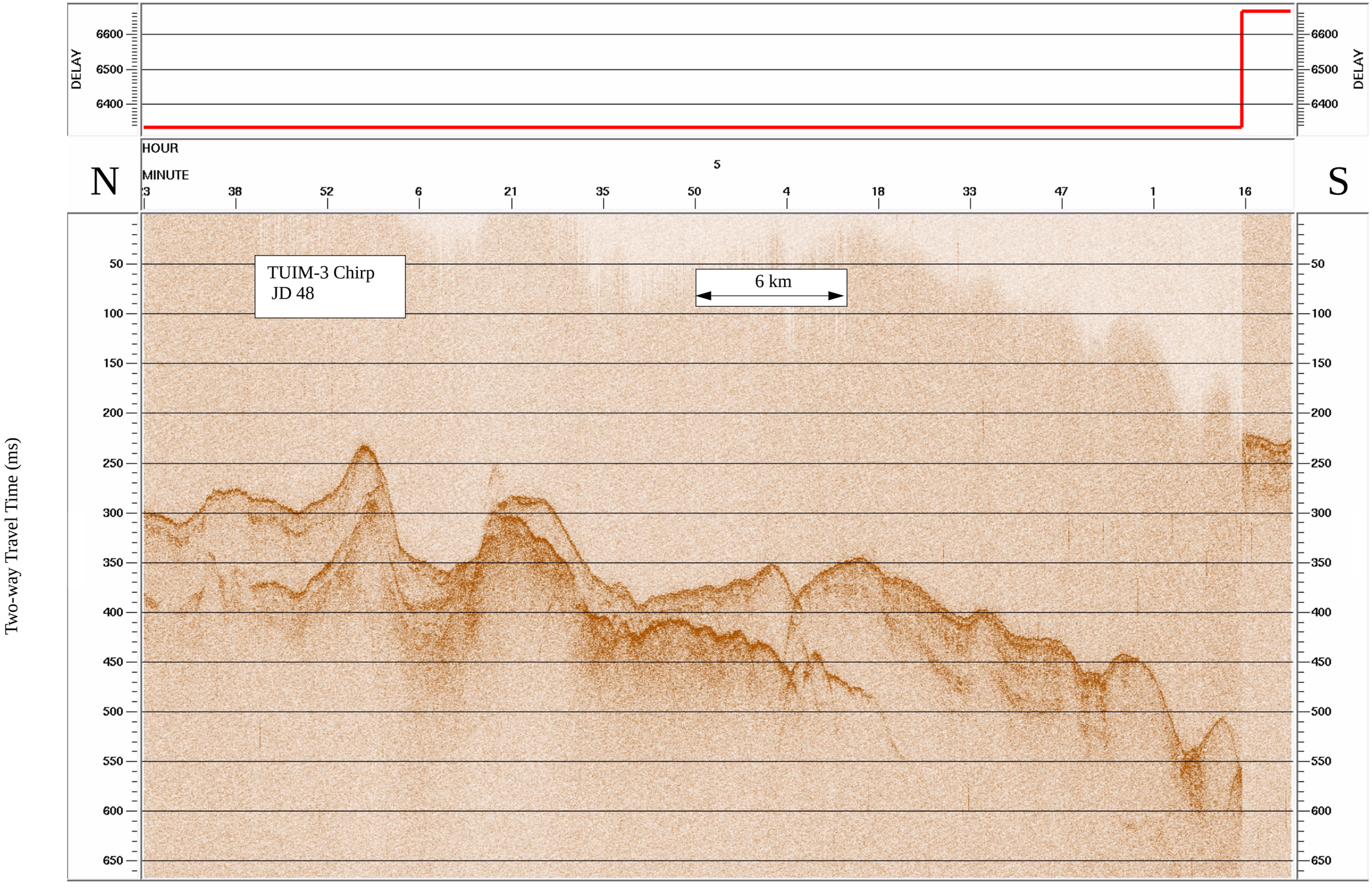
Julian Day 48
17 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb17.0000-0600

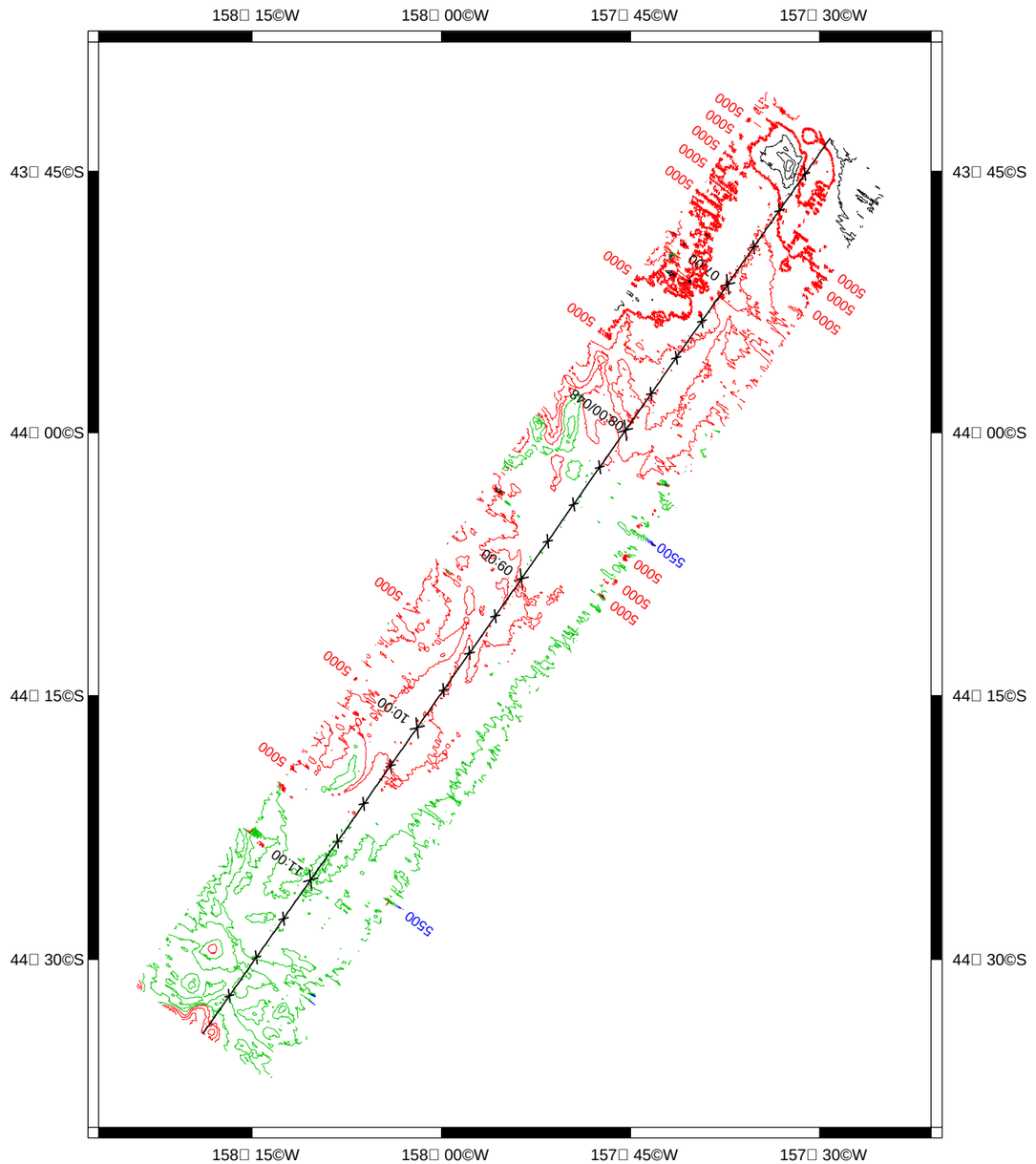


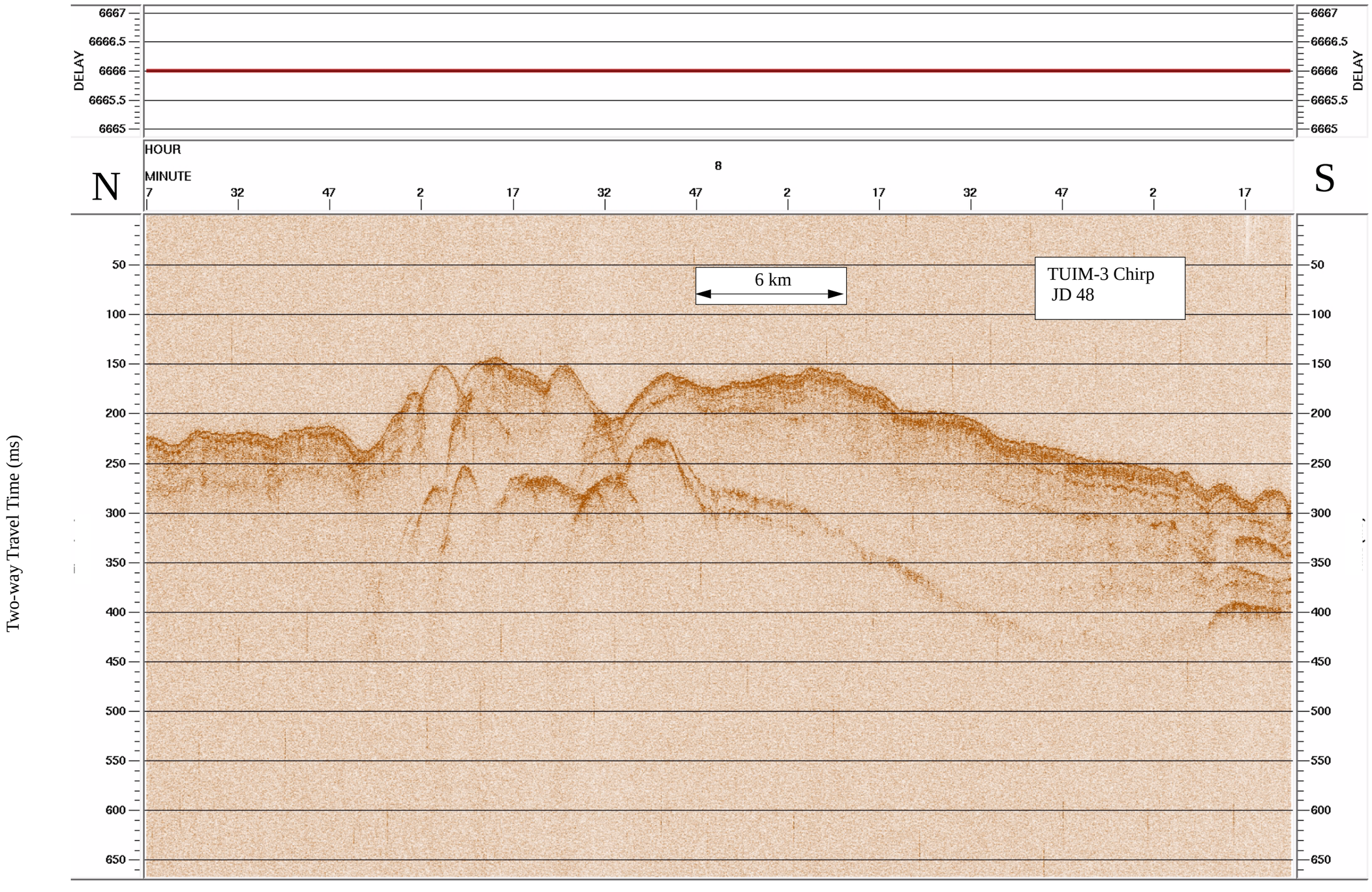

DELAY
6500
6000
5500
HOUR
MINUTE
23
3
57
10
23
38
52
6
21
35
49
3
16
30
N
S
TUIM-3 Chirp
JD 48
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650


DELAY
6300
6200
6100
HOUR
MINUTE
2
1
45
0
14
28
43
57
10
25
39
54
8
22
N
S
TUIM-3 Chirp
JD 48
6 km
50
100
150
200
250
300
350
400
450
500
550
600
650
Two-way Travel Time (ms)

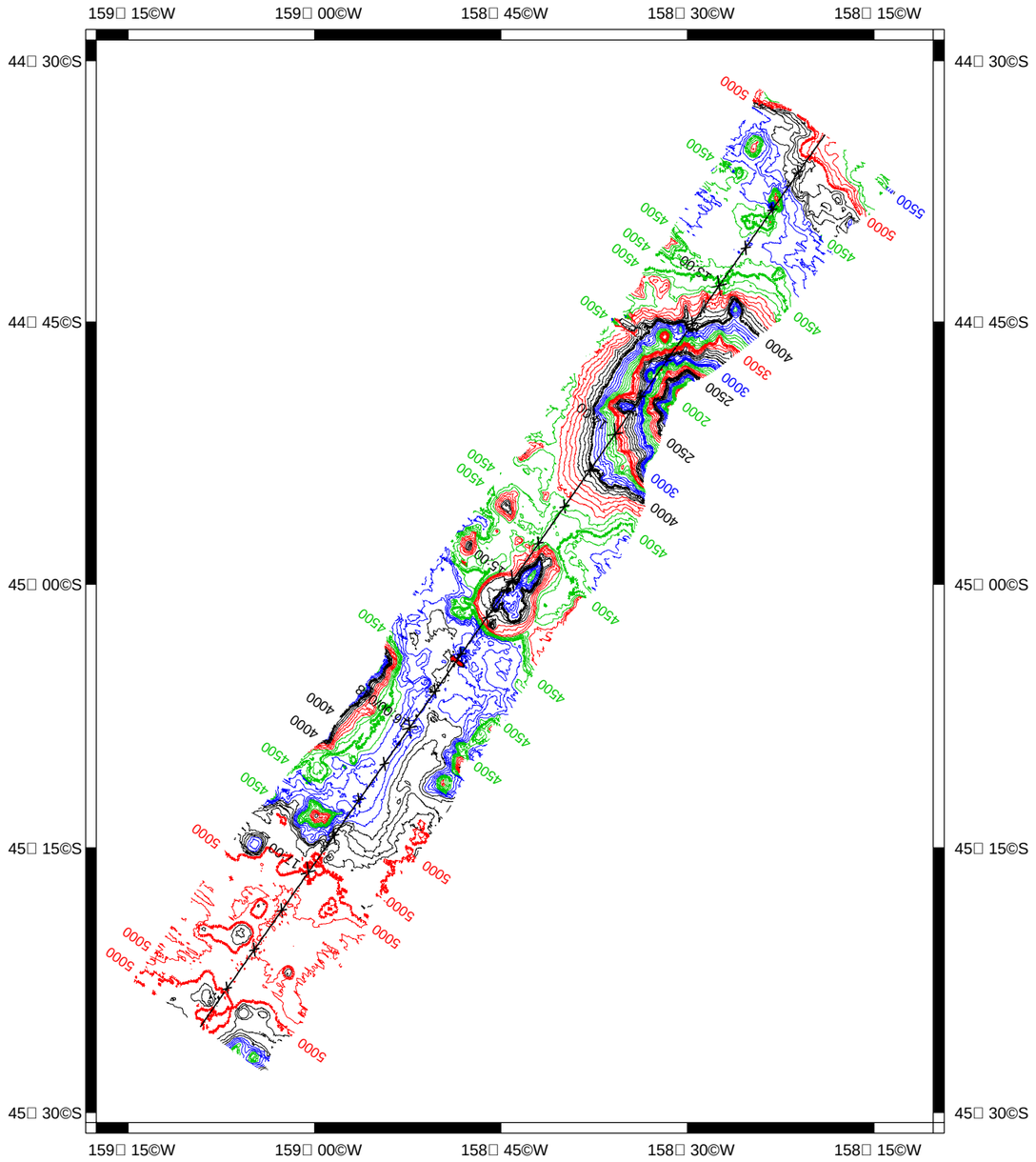

DELAY
6600
6500
6400
N
S
HOUR
MINUTE
5
3
38
52
6
21
35
50
4
18
33
47
1
16
TUIM-3 Chirp
JD 48
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

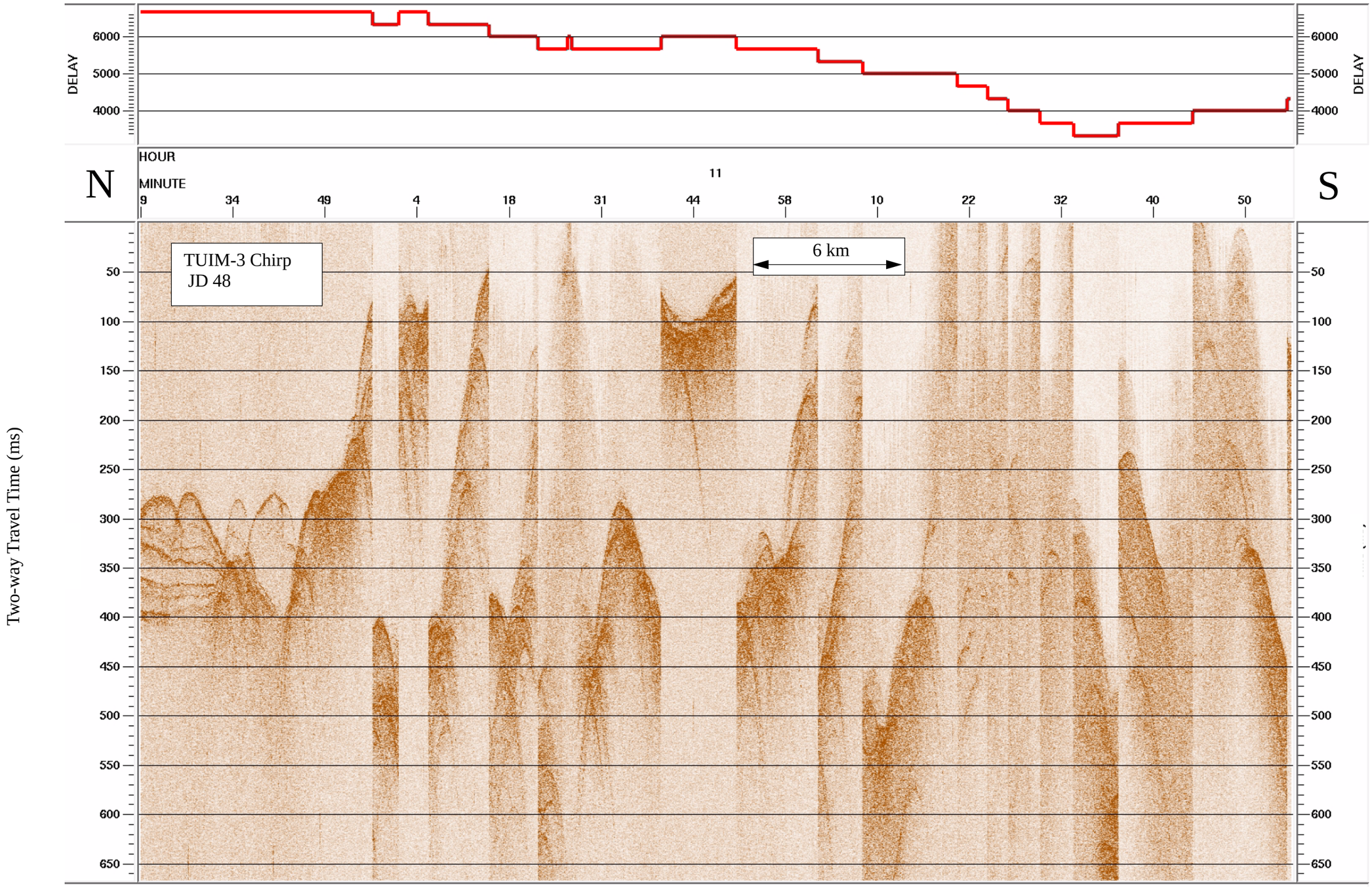
Data File SBfixavg.2005feb17.0600-1200

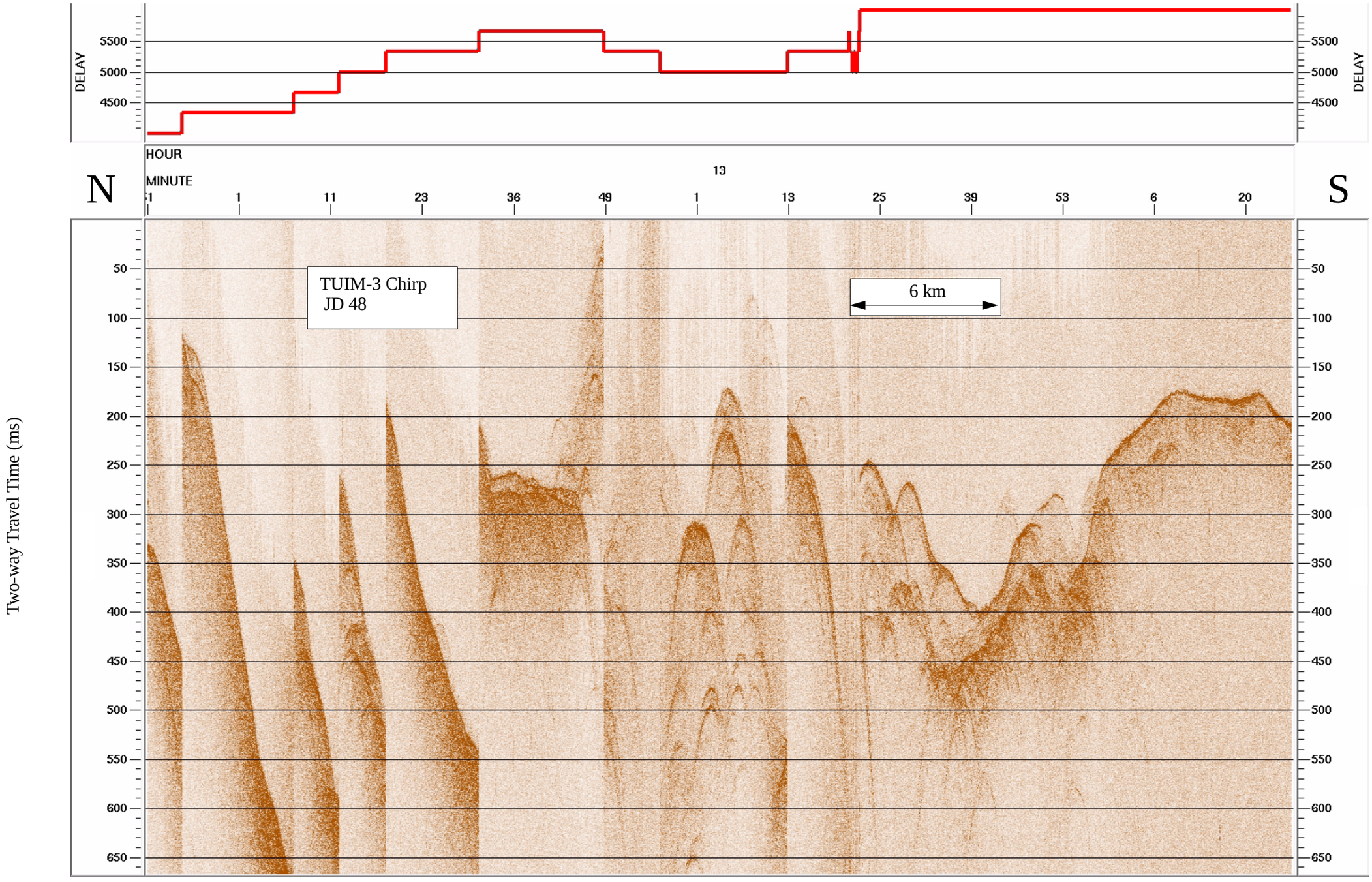



DELAY
6667
6666.5
6666
6665.5
6665
N
S
HOUR
8
MINUTE
7
32
47
2
17
32
47
2
17
32
47
2
17
6 km
TUIM-3 Chirp
JD 48
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

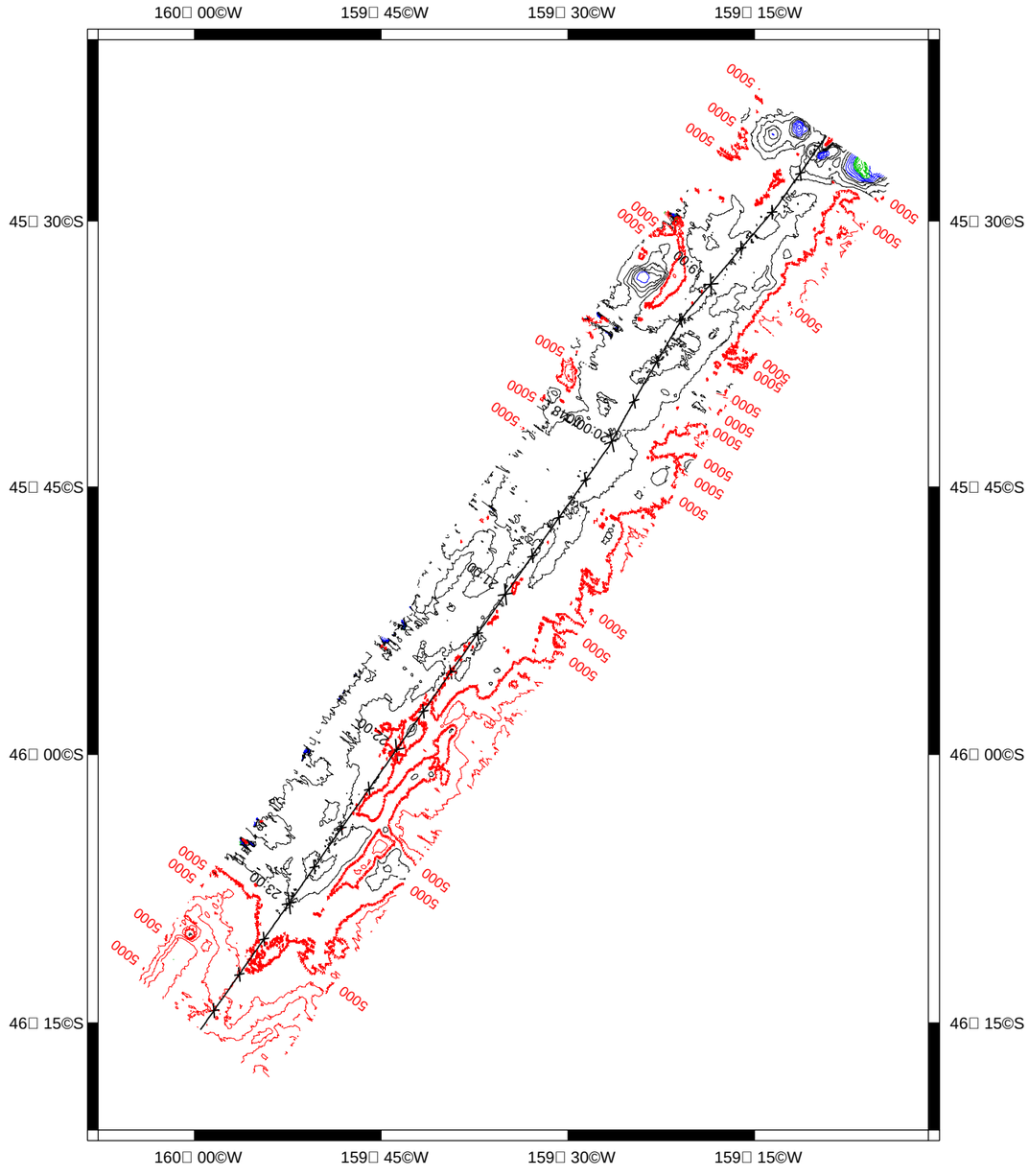
Data File SBfixavg.2005feb17.1200-1800

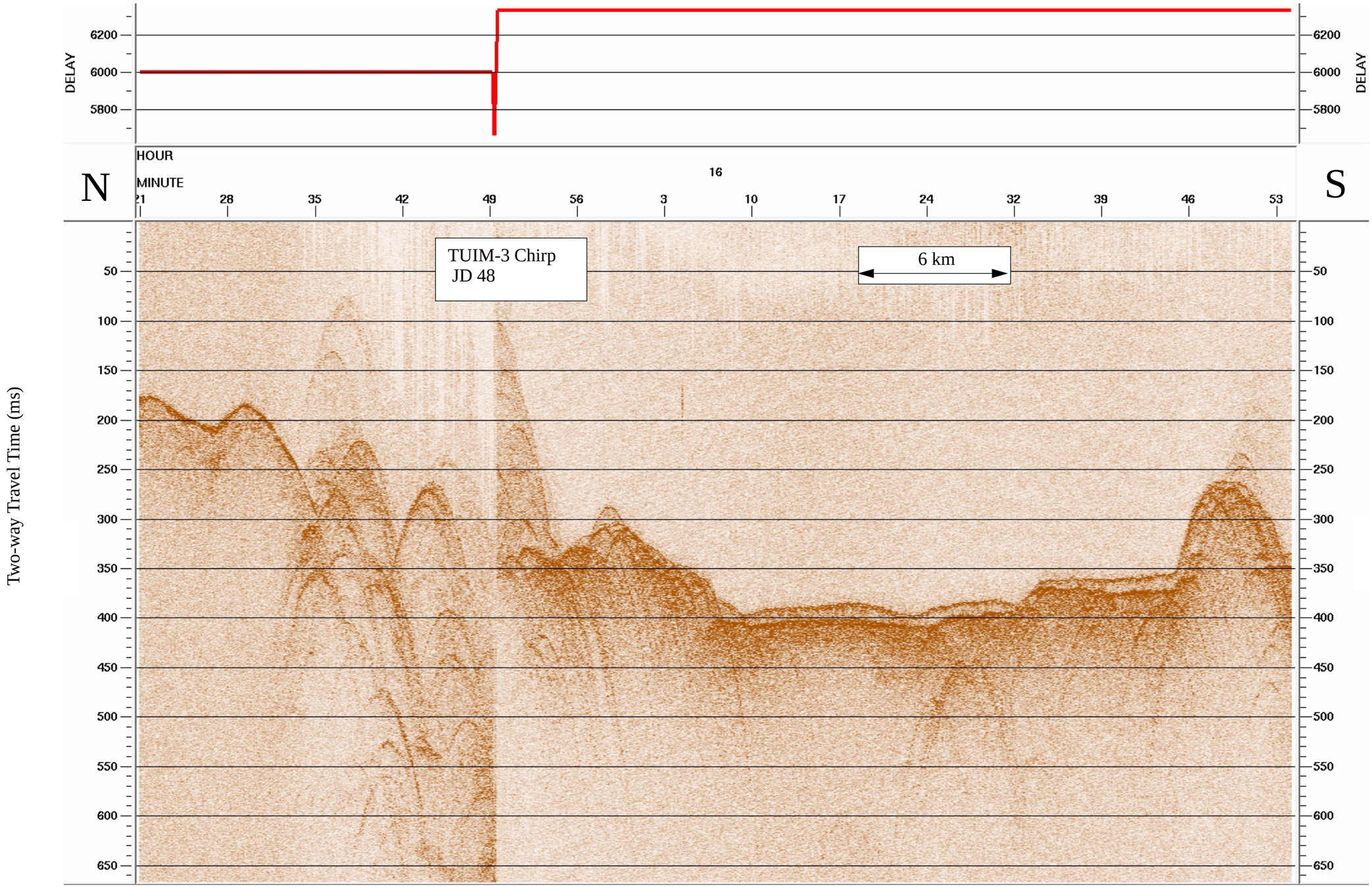


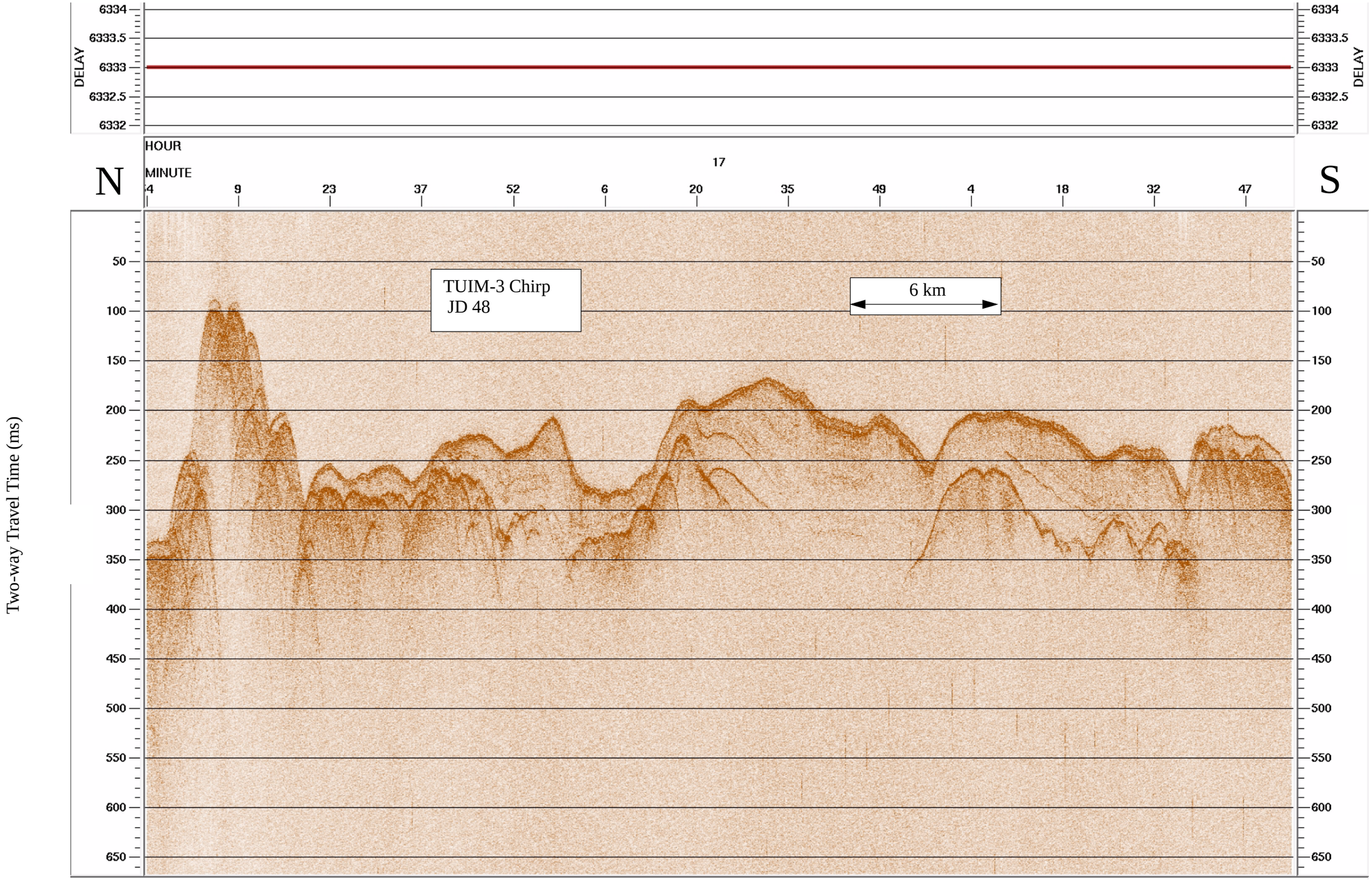

DELAY
6000
5000
4000
N
HOUR
MINUTE
11
9
34
49
4
18
31
44
58
10
22
32
40
50
S
TUIM-3 Chirp
JD 48
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

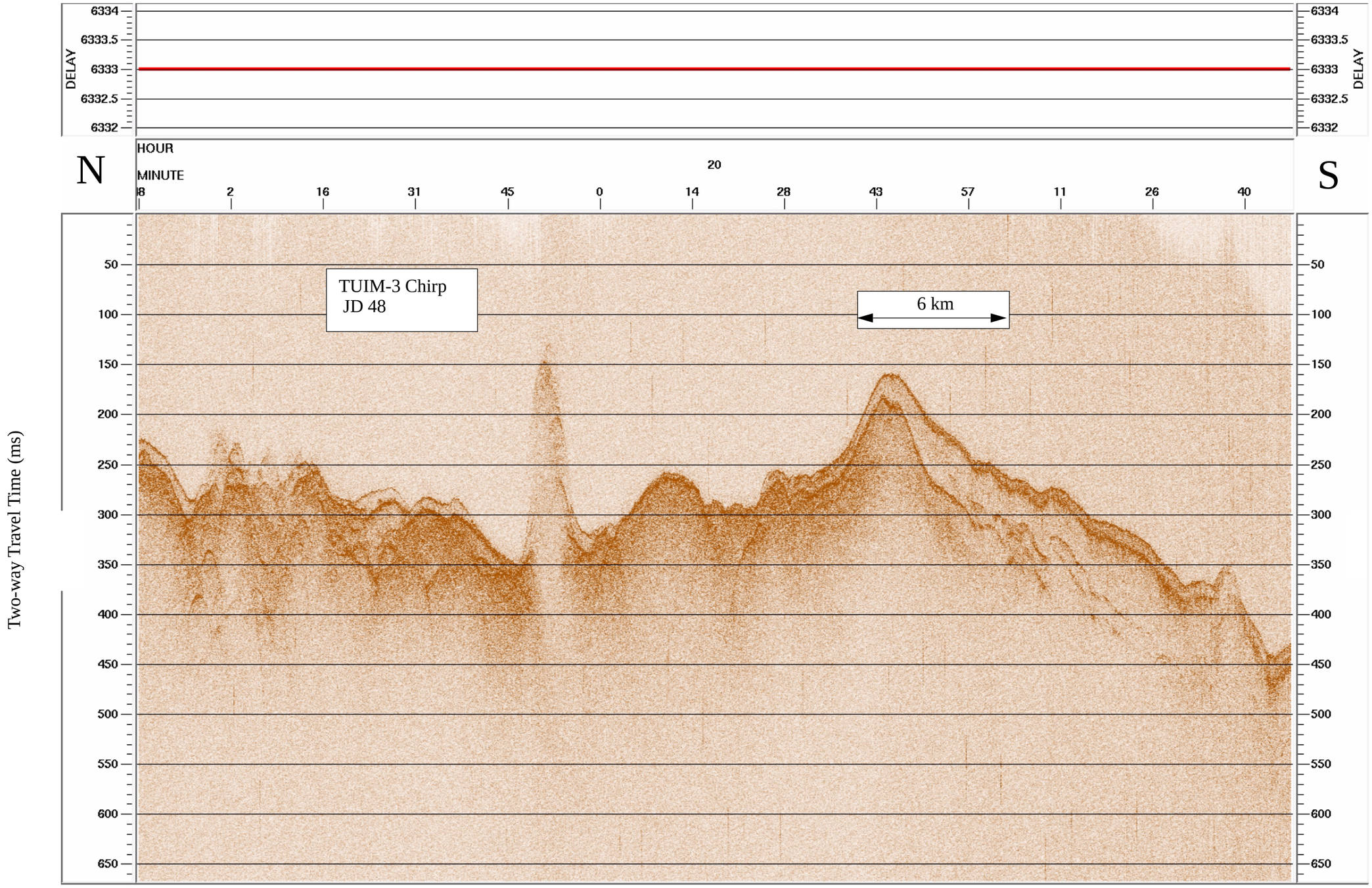

DELAY
5500
5000
4500
HOUR
13
MINUTE
1
1
11
23
36
49
1
13
25
39
53
6
20
N
S
TUIM-3 Chirp
JD 48
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

Data File SBfixavg.2005feb17.1800-2400



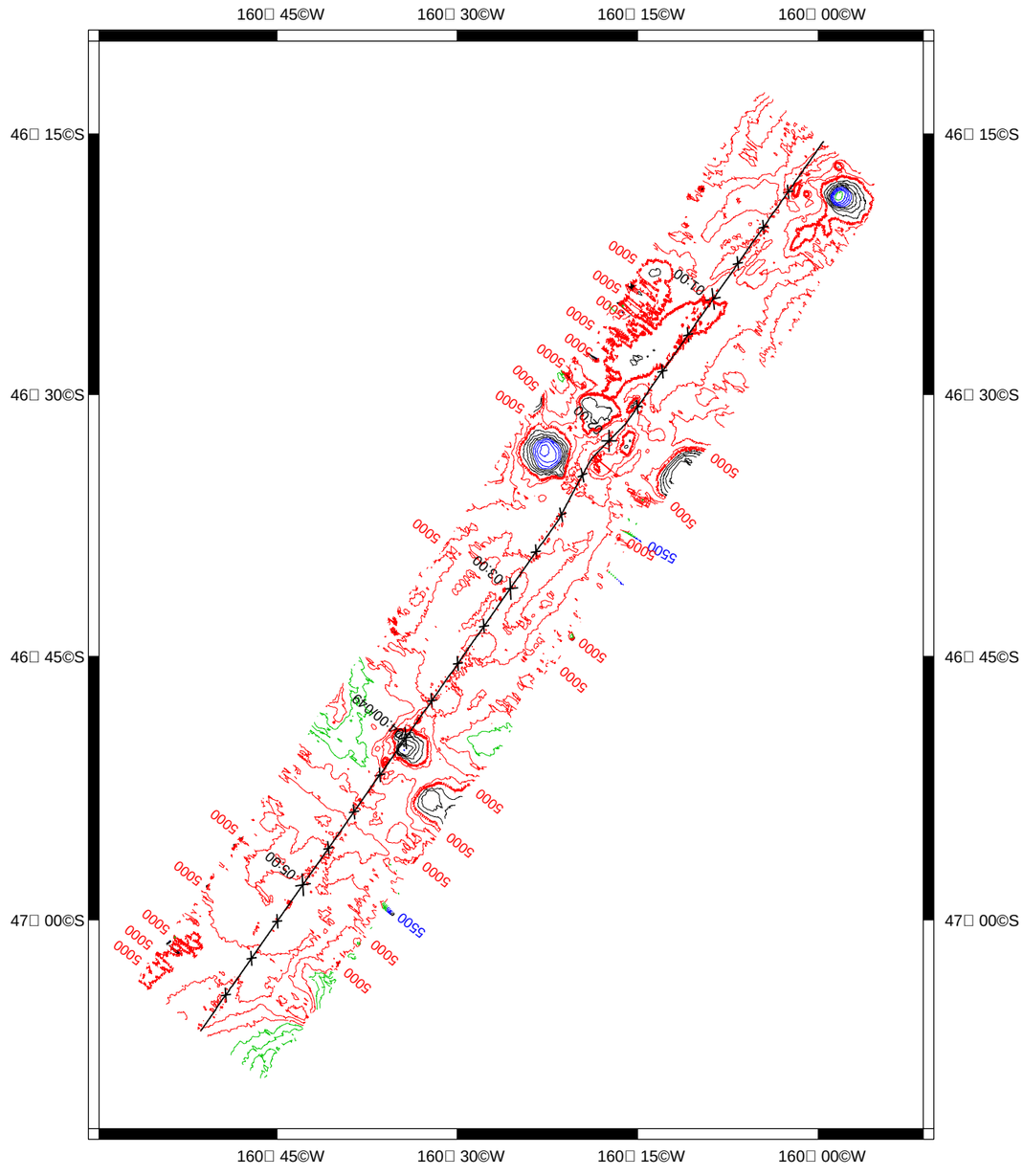

DELAY
6200
6000
5800
N
HOUR
16
MINUTE
21
28
35
42
49
56
3
10
17
24
32
39
46
53
S
TUIM-3 Chirp
JD 48
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

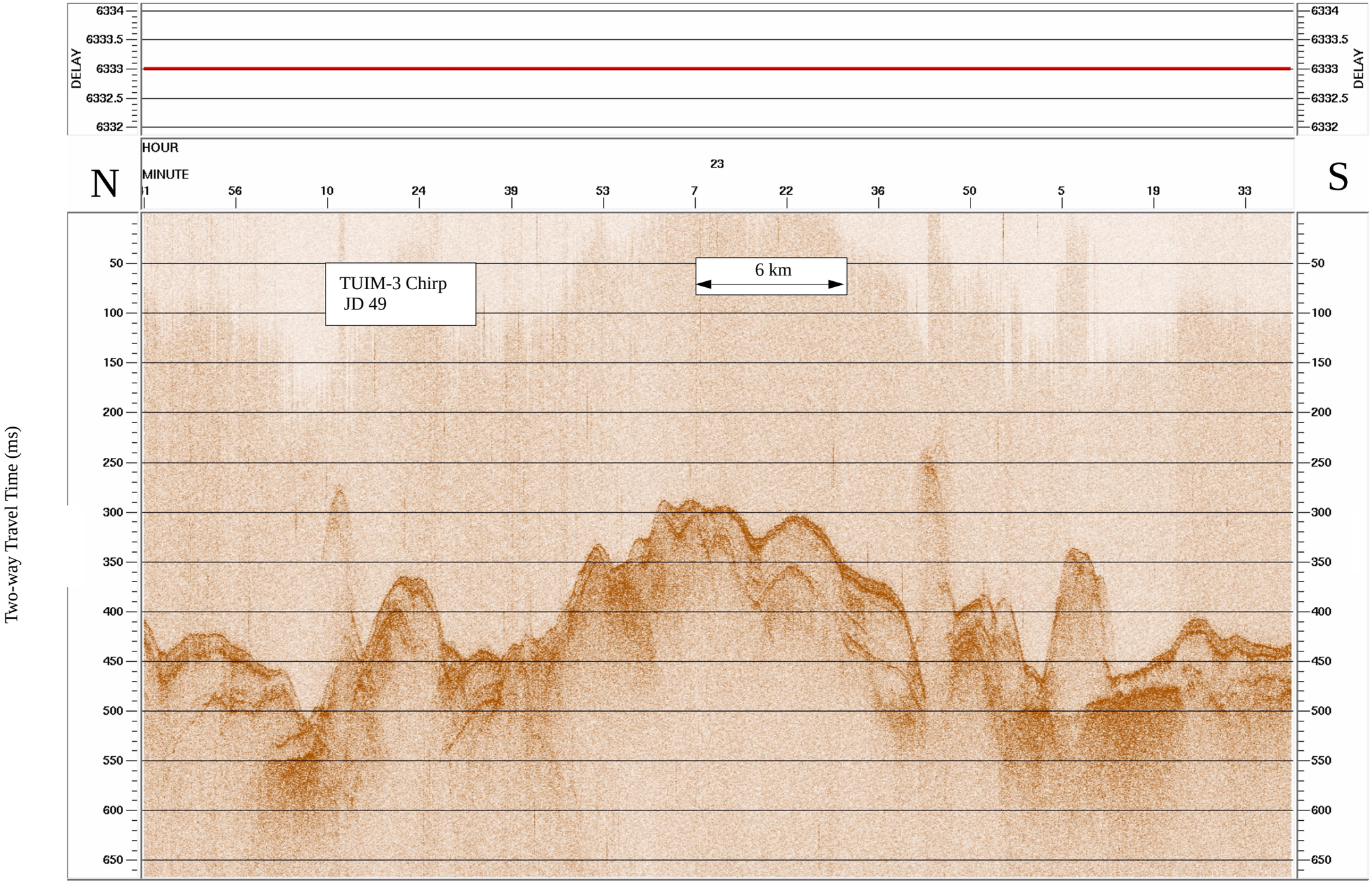

DELAY
6334
6333.5
6333
6332.5
6332
HOUR
17
MINUTE
4
9
23
37
52
6
20
35
49
4
18
32
47
N
S
TUIM-3 Chirp
JD 48
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

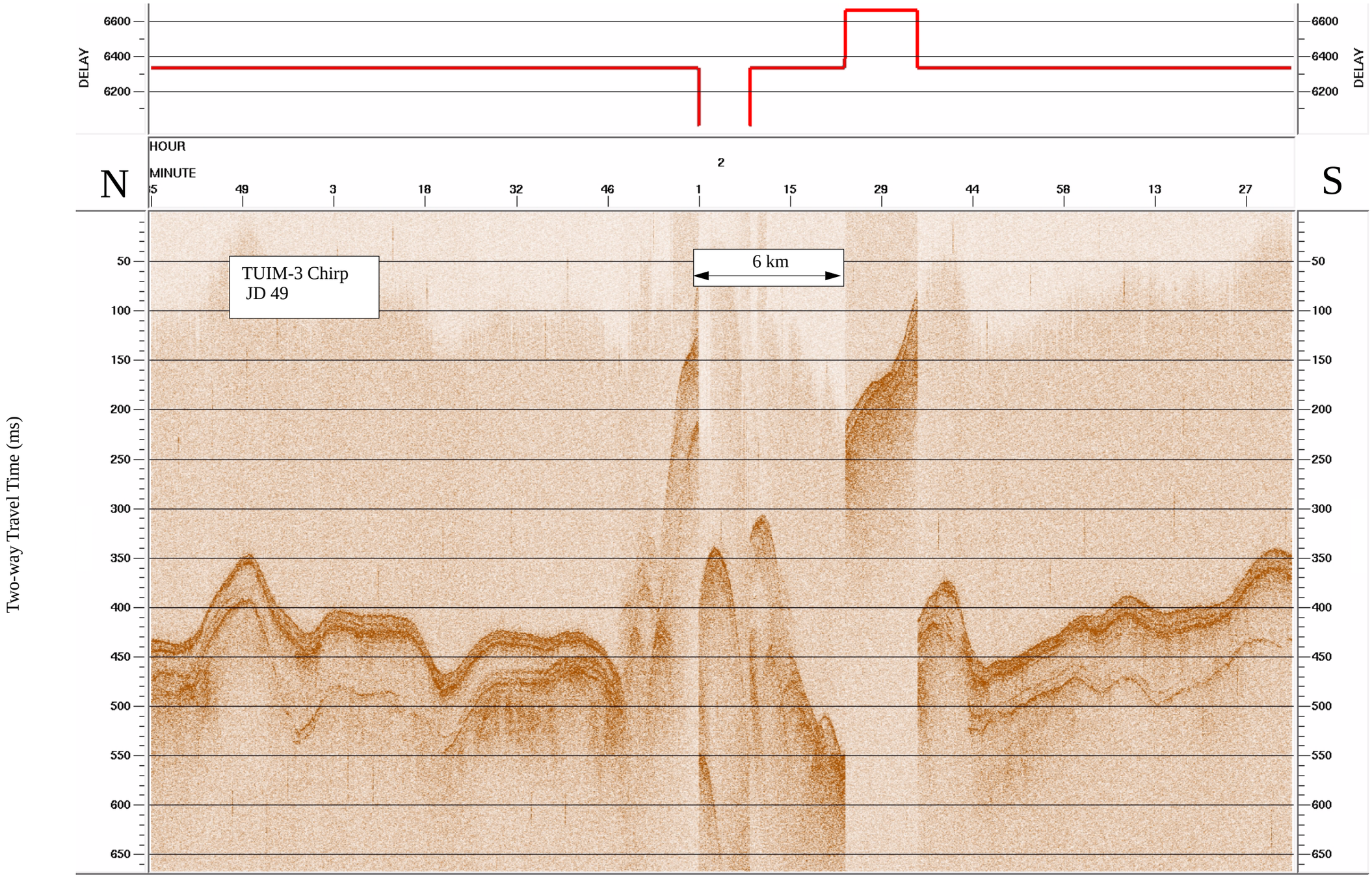

DELAY
6334
6333.5
6333
6332.5
6332
N
S
HOUR
MINUTE
20
8
2
16
31
45
0
14
28
43
57
11
26
40
TUIM-3 Chirp
JD 48
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

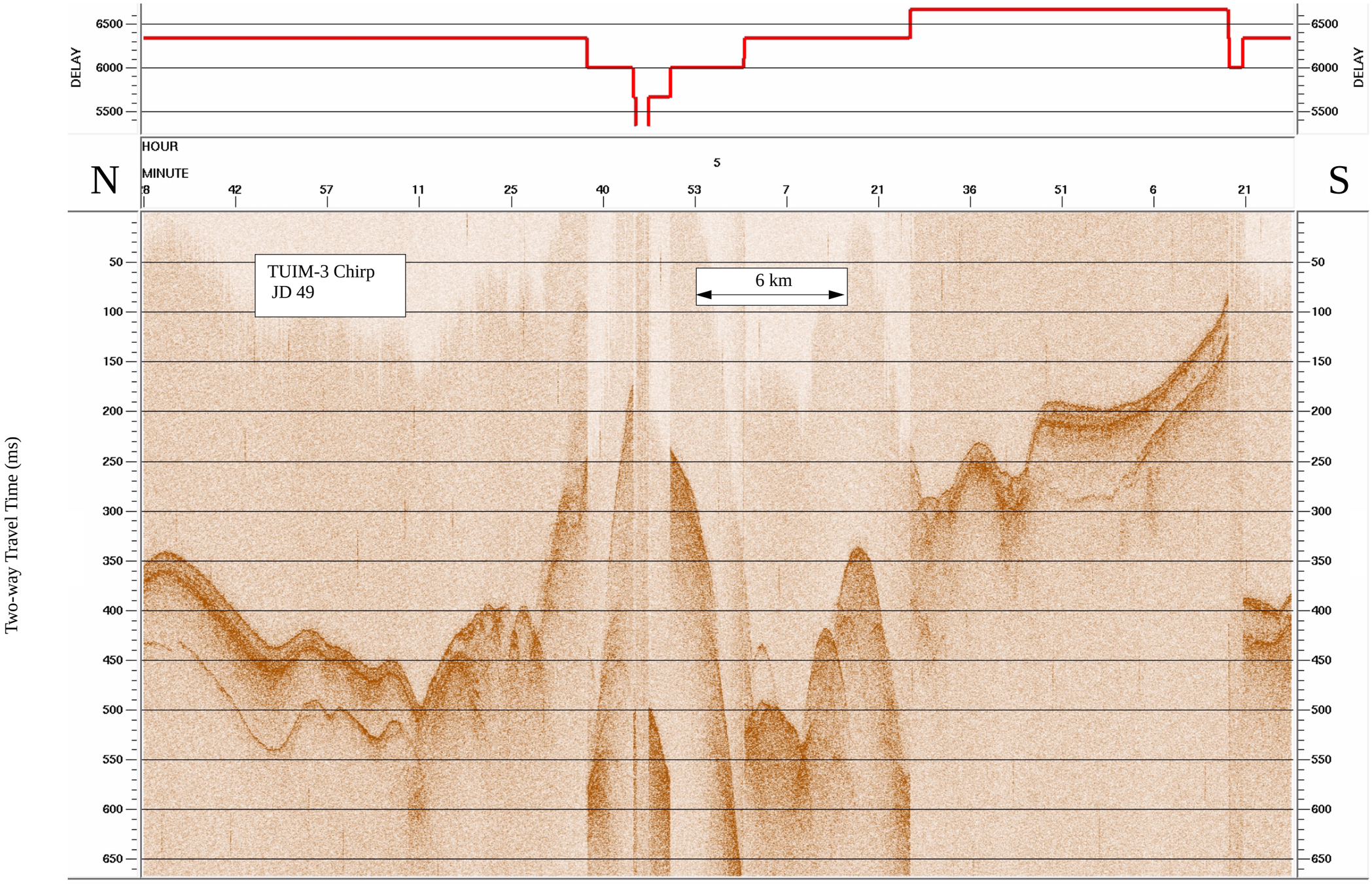
Julian Day 49
18 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb18.0000-0600

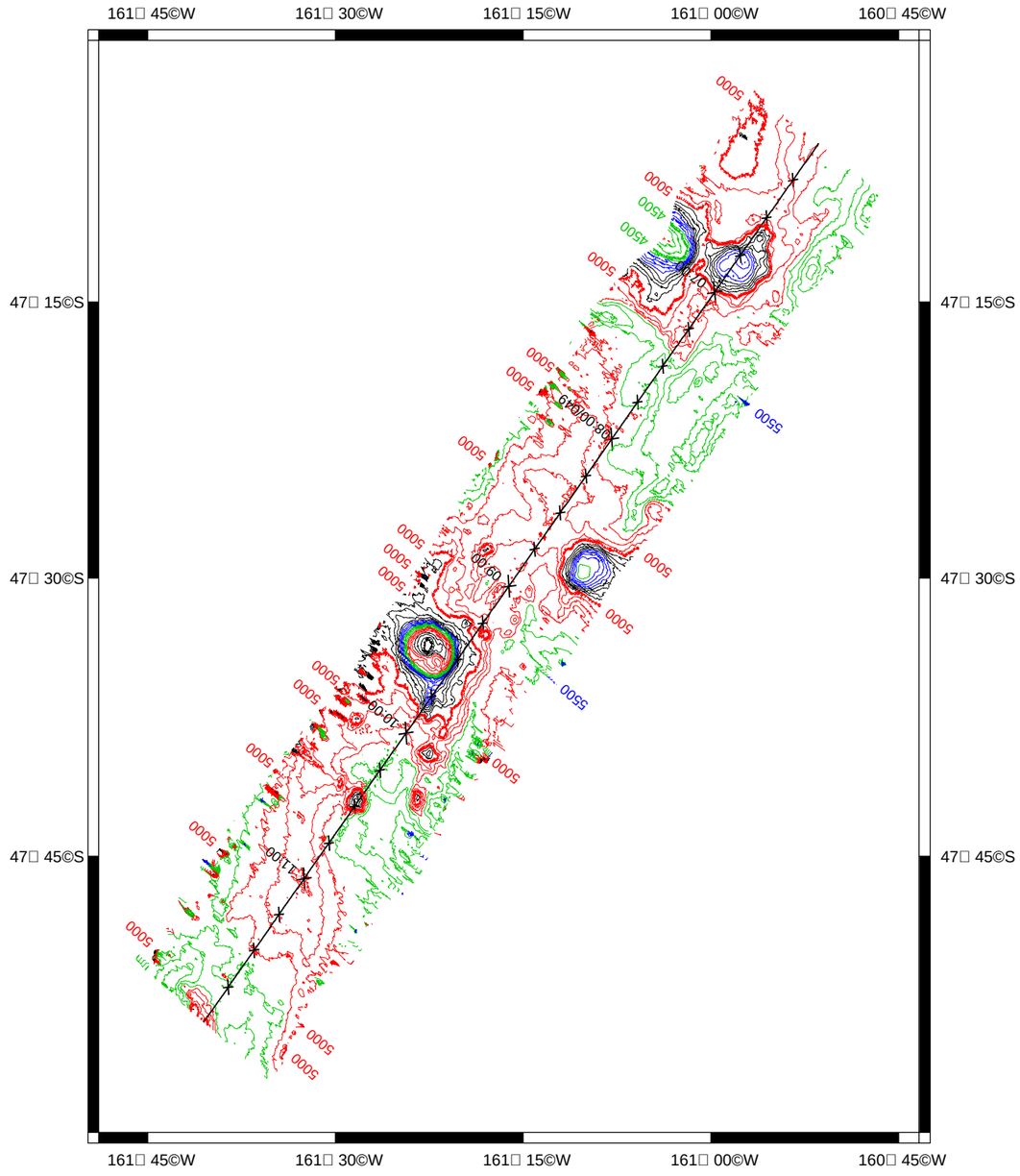


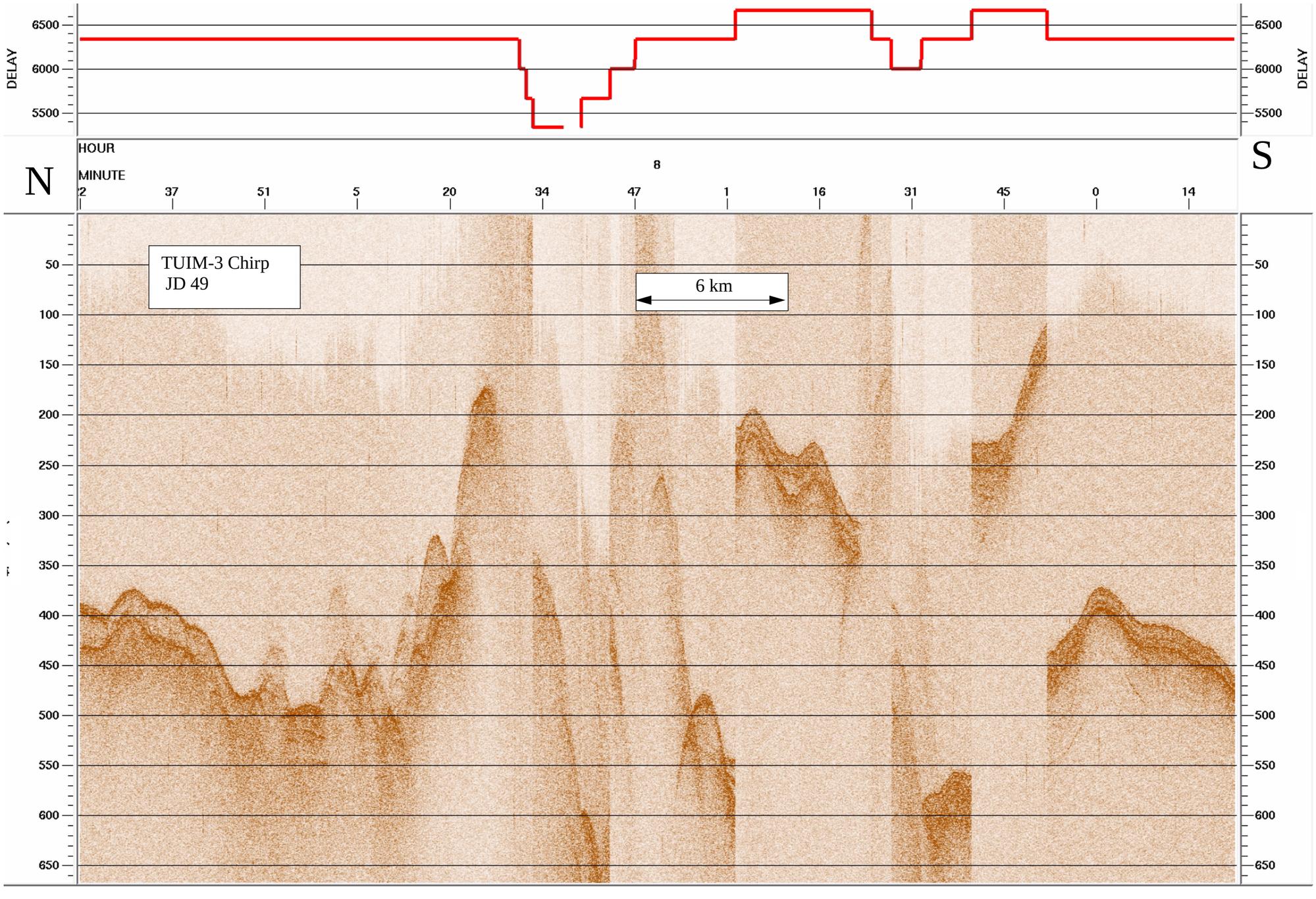

DELAY
6334
6333.5
6333
6332.5
6332
HOUR
MINUTE
23
1
56
10
24
39
53
7
22
36
50
5
19
33
N
S
TUIM-3 Chirp
JD 49
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

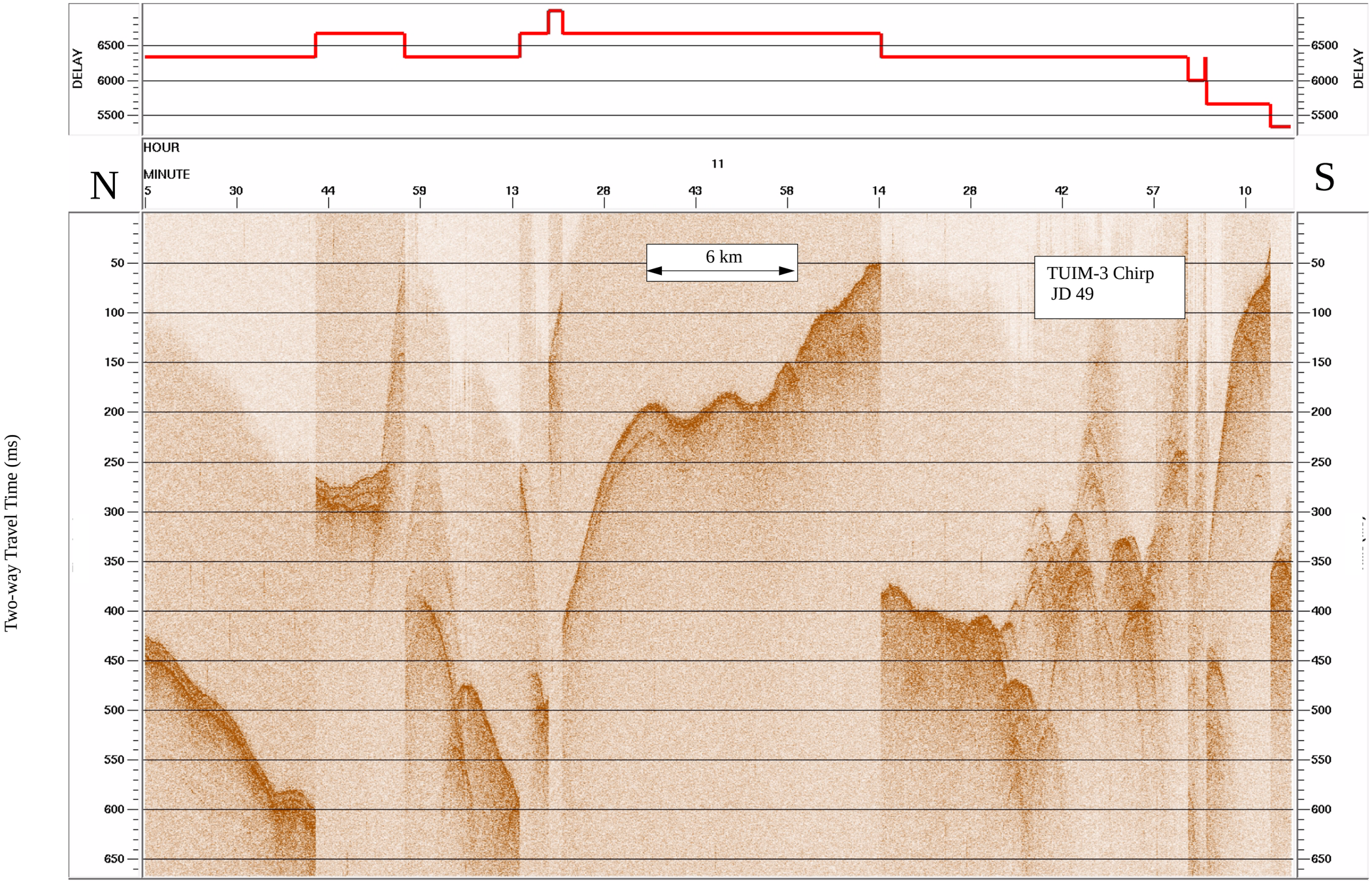

DELAY
6600
6400
6200
HOUR
MINUTE
2
N
S
5
49
3
18
32
46
1
15
29
44
58
13
27
TUIM-3 Chirp
JD 49
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650


DELAY
6500
6000
5500
HOUR
MINUTE
5
8
42
57
11
25
40
53
7
21
36
51
6
21
N
S
TUIM-3 Chirp
JD 49
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

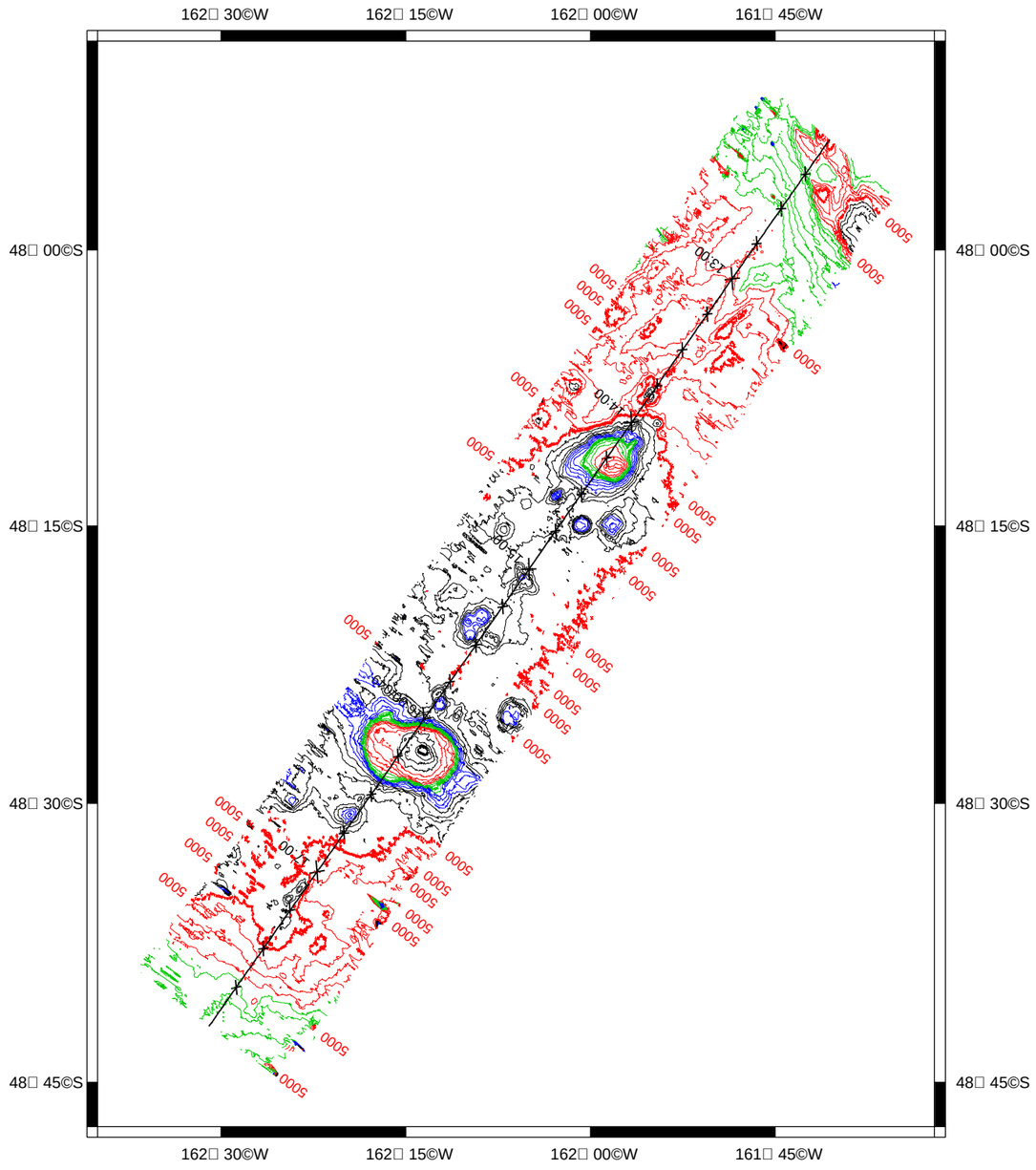
Data File SBfixavg.2005feb18.0600-1200

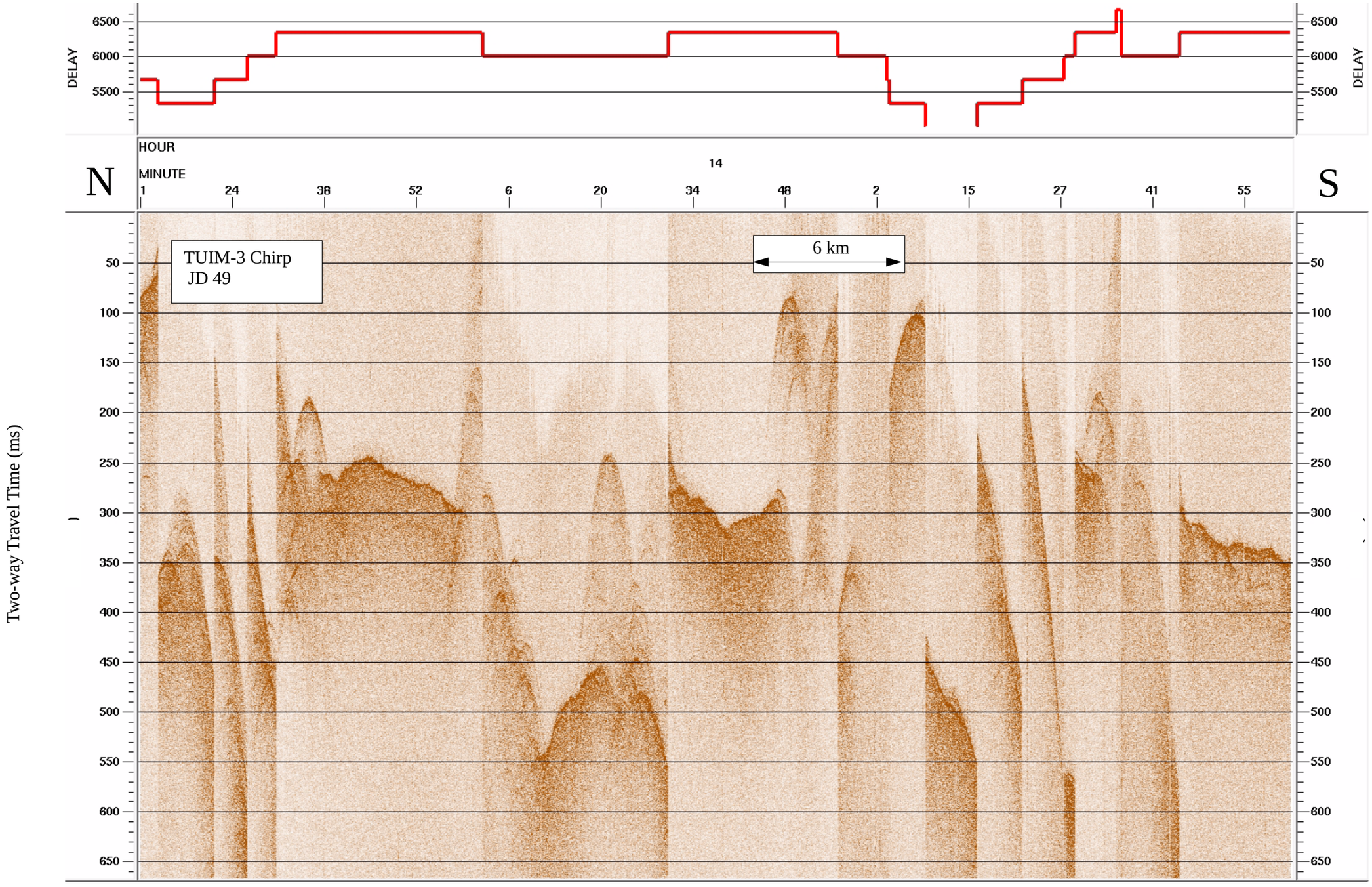


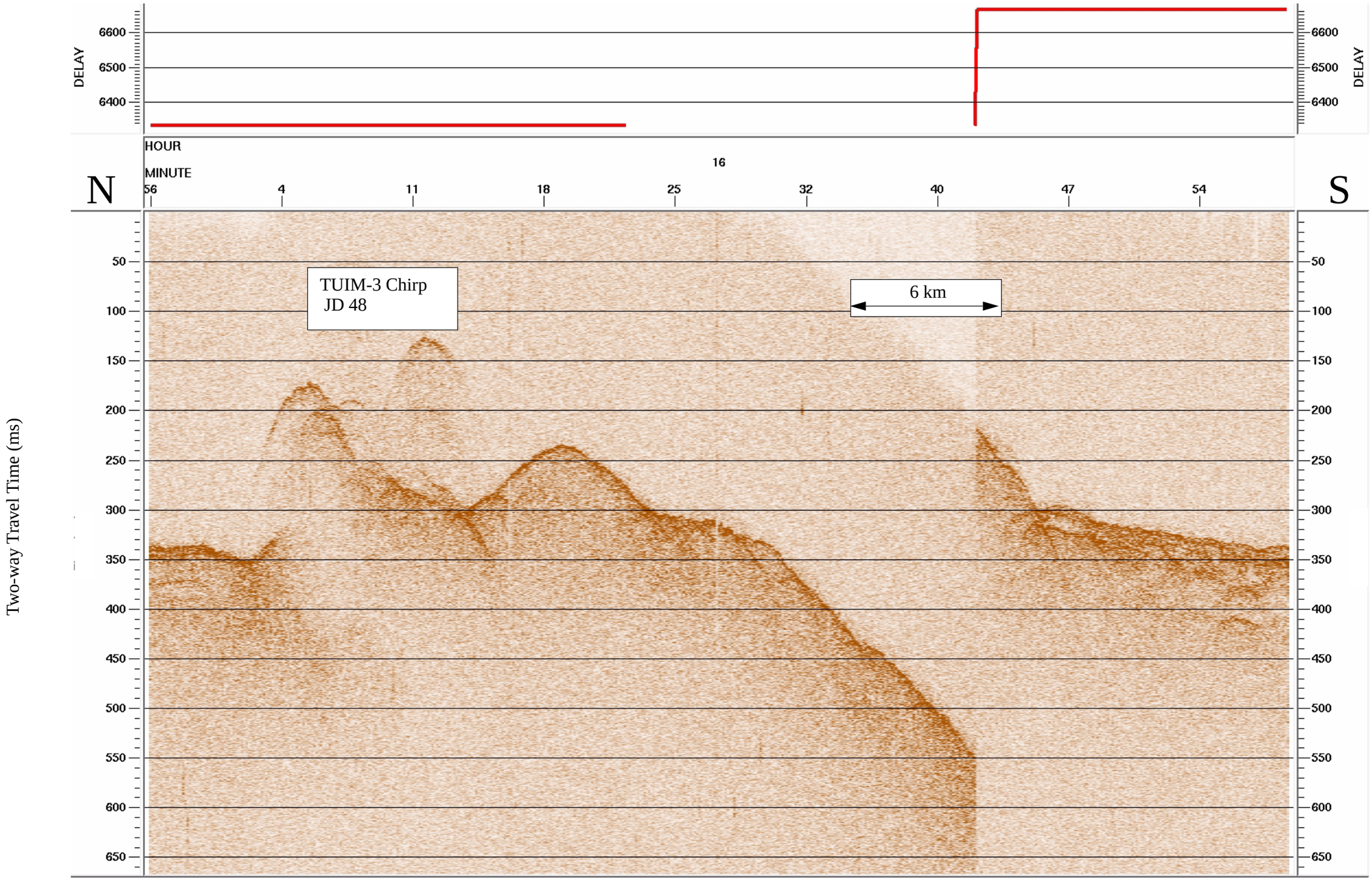

DELAY
6500
6000
5500
N
S
HOUR
8
MINUTE
2
37
51
5
20
34
47
1
16
31
45
0
14
TUIM-3 Chirp
JD 49
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650


DELAY
6500
6000
5500
HOUR
MINUTE
11
5
30
44
59
13
28
43
58
14
28
42
57
10
N
S
6 km
TUIM-3 Chirp
JD 49
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

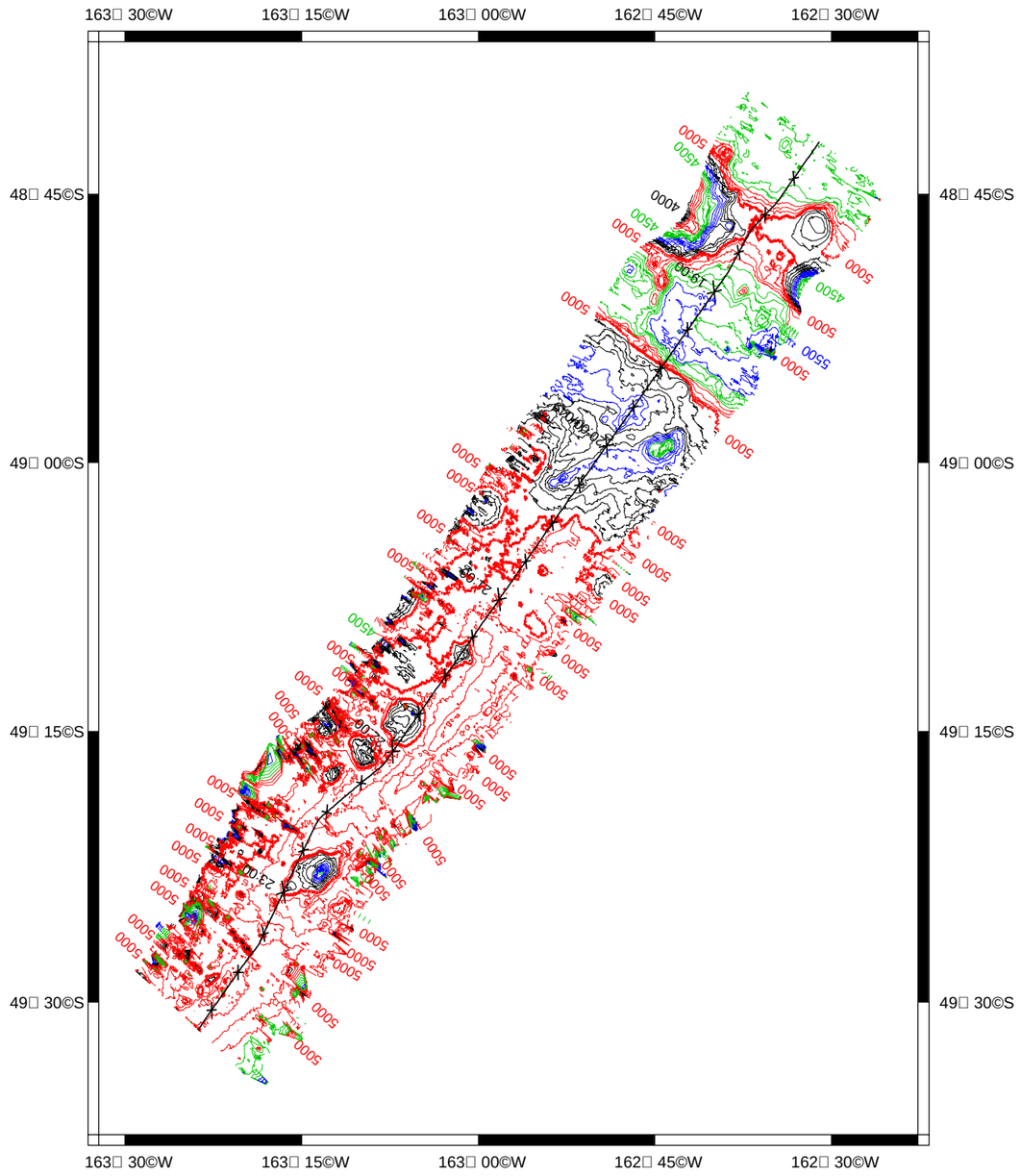
Data File SBfixavg.2005feb18.1200-1800

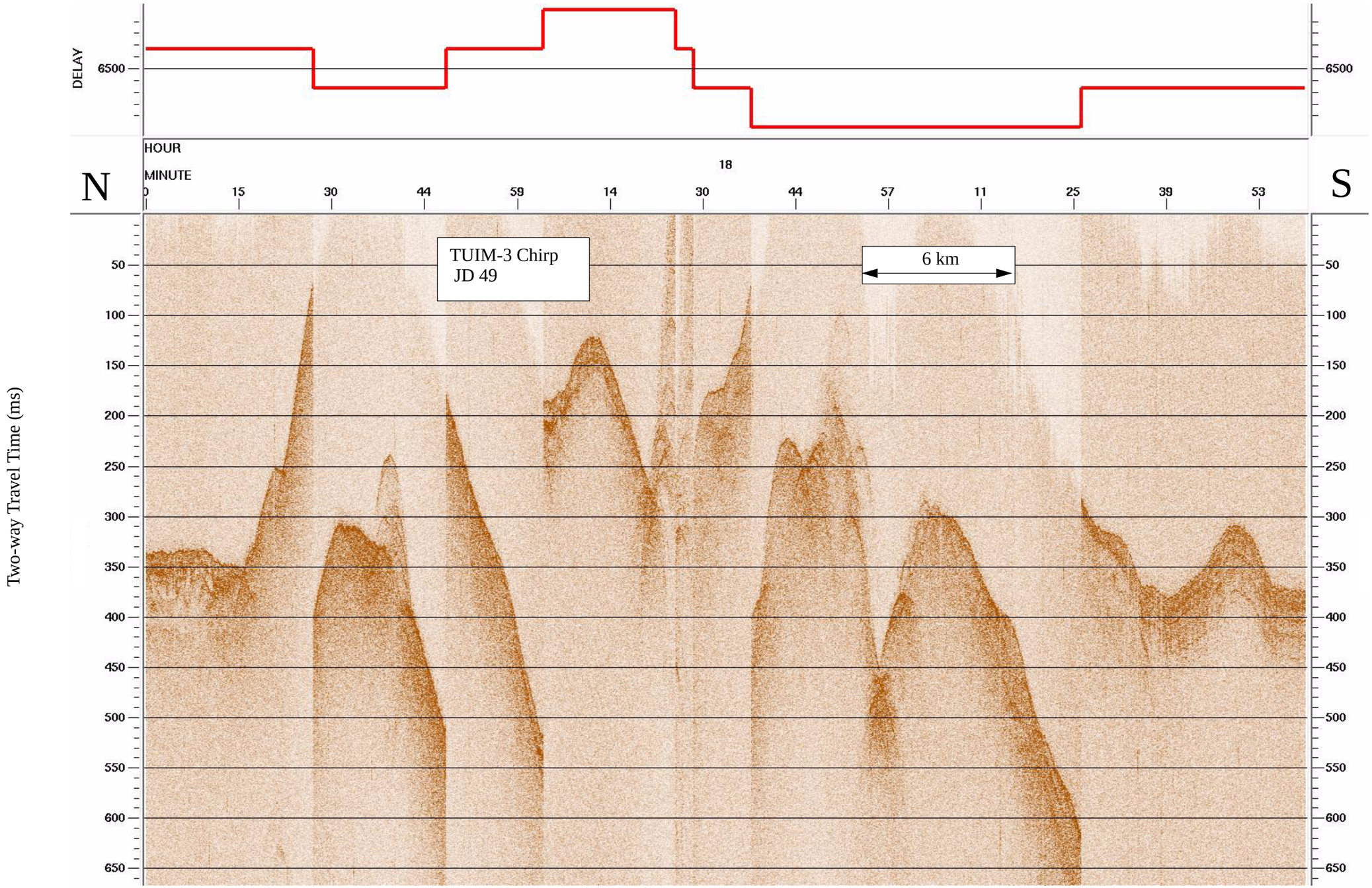


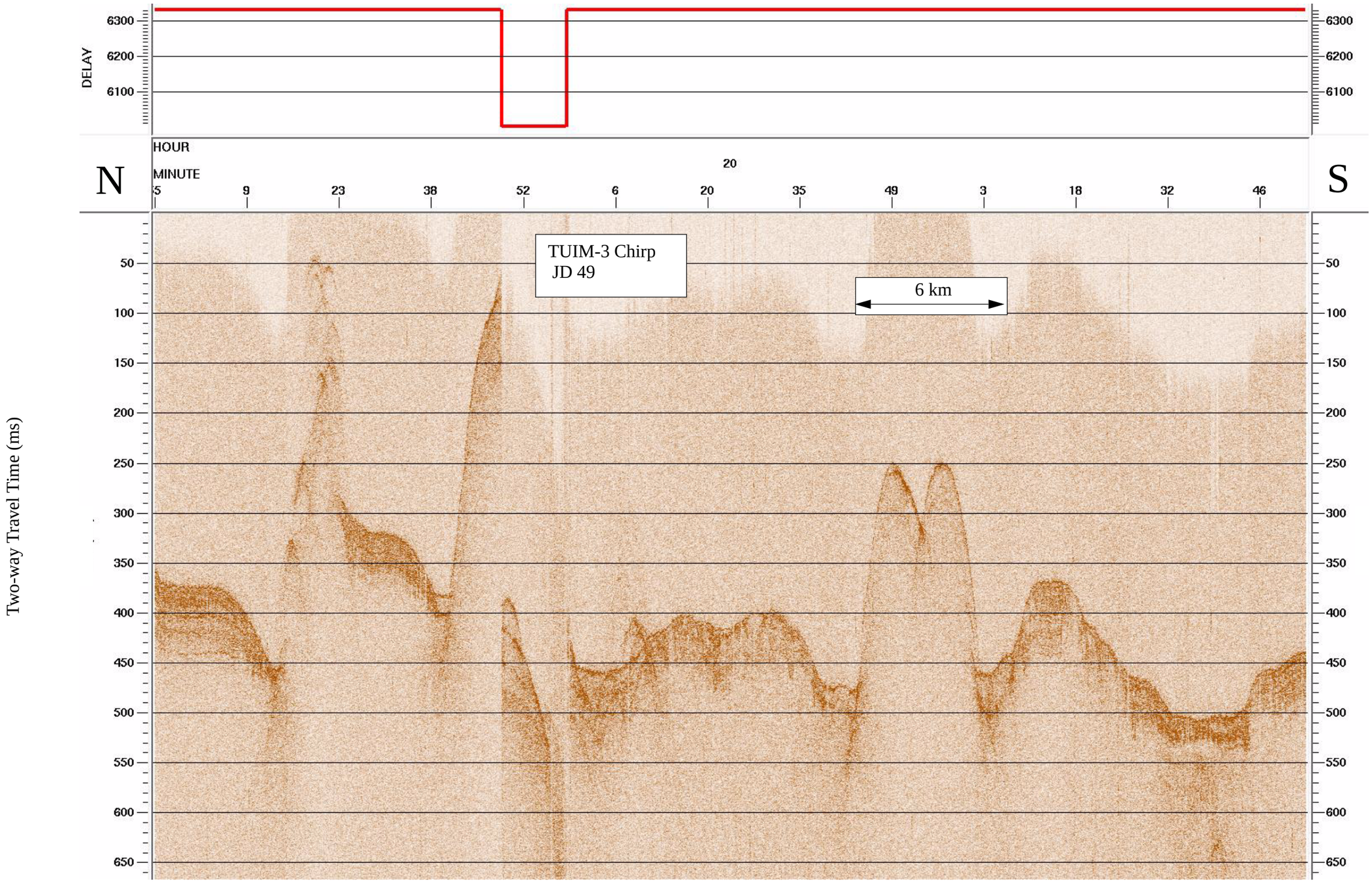

DELAY
6500
6000
5500
HOUR
MINUTE
14
1
24
38
52
6
20
34
48
2
15
27
41
55
N
S
TUIM-3 Chirp
JD 49
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650


DELAY
6600
6500
6400
HOUR
16
MINUTE
56
4
11
18
25
32
40
47
54
N
S
TUIM-3 Chirp
JD 48
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

Data File SBfixavg.2005feb18.1800-2400

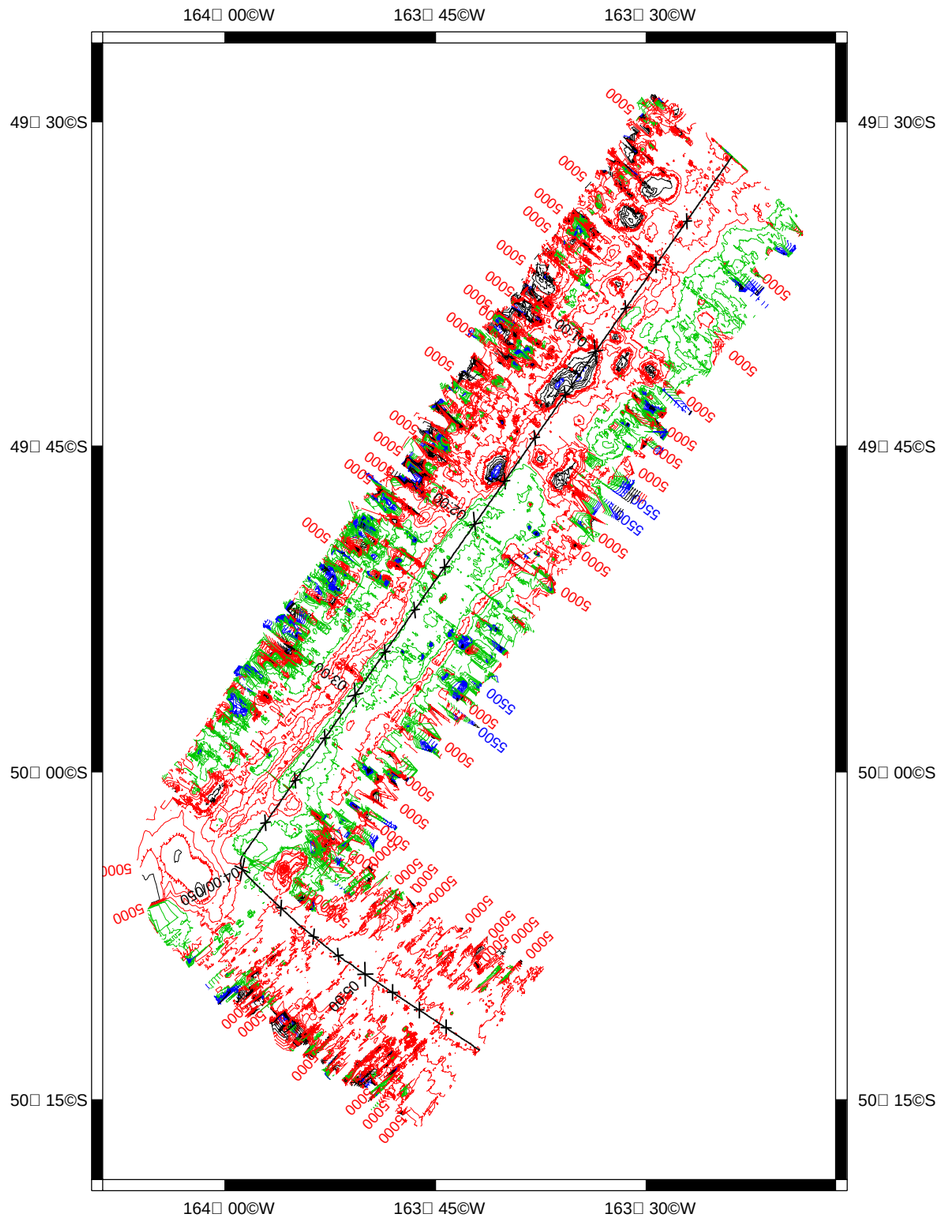


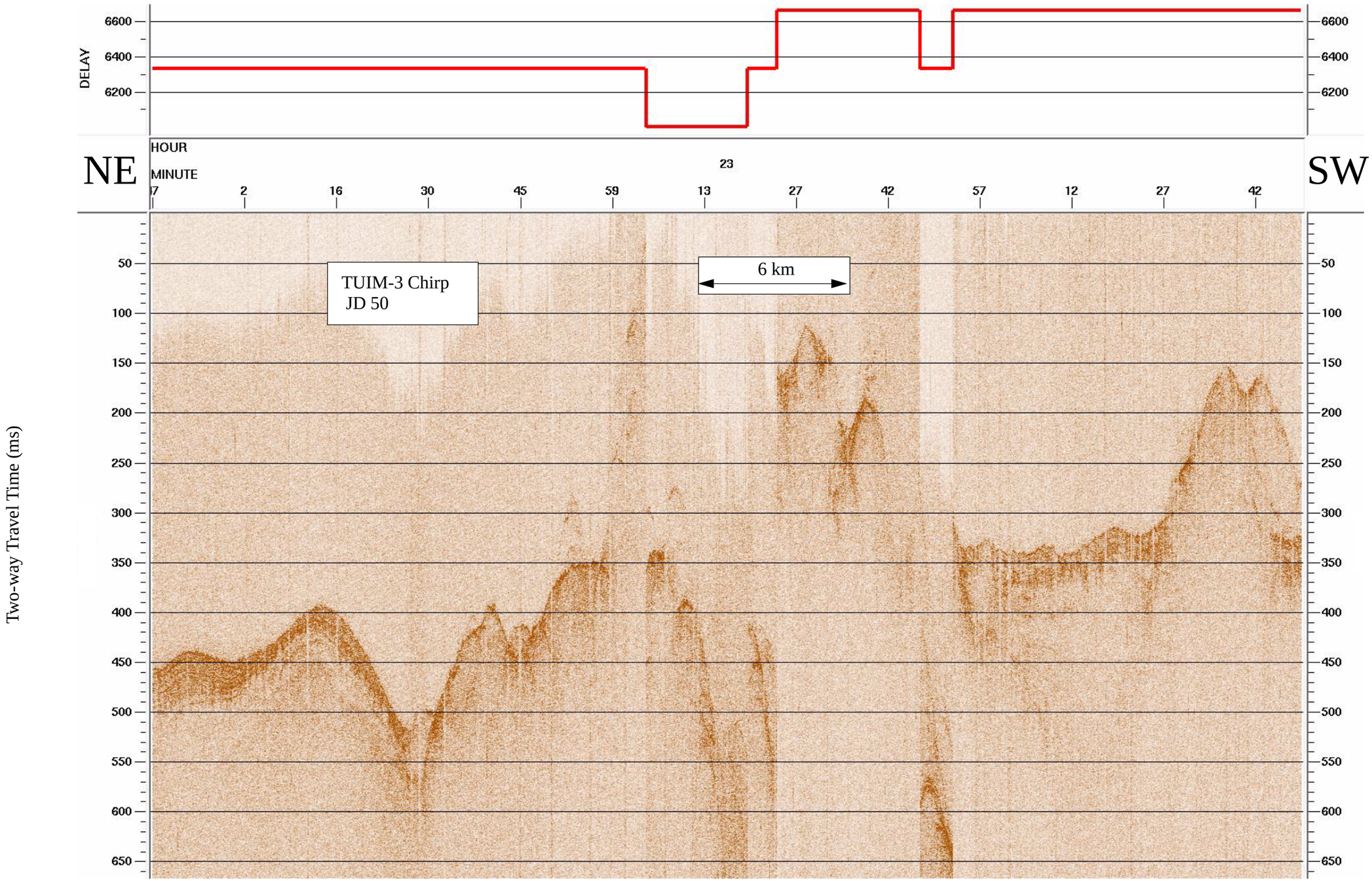

DELAY
6500
6500
HOUR
MINUTE
18
N
S
0
15
30
44
59
14
30
44
57
11
25
39
53
TUIM-3 Chirp
JD 49
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

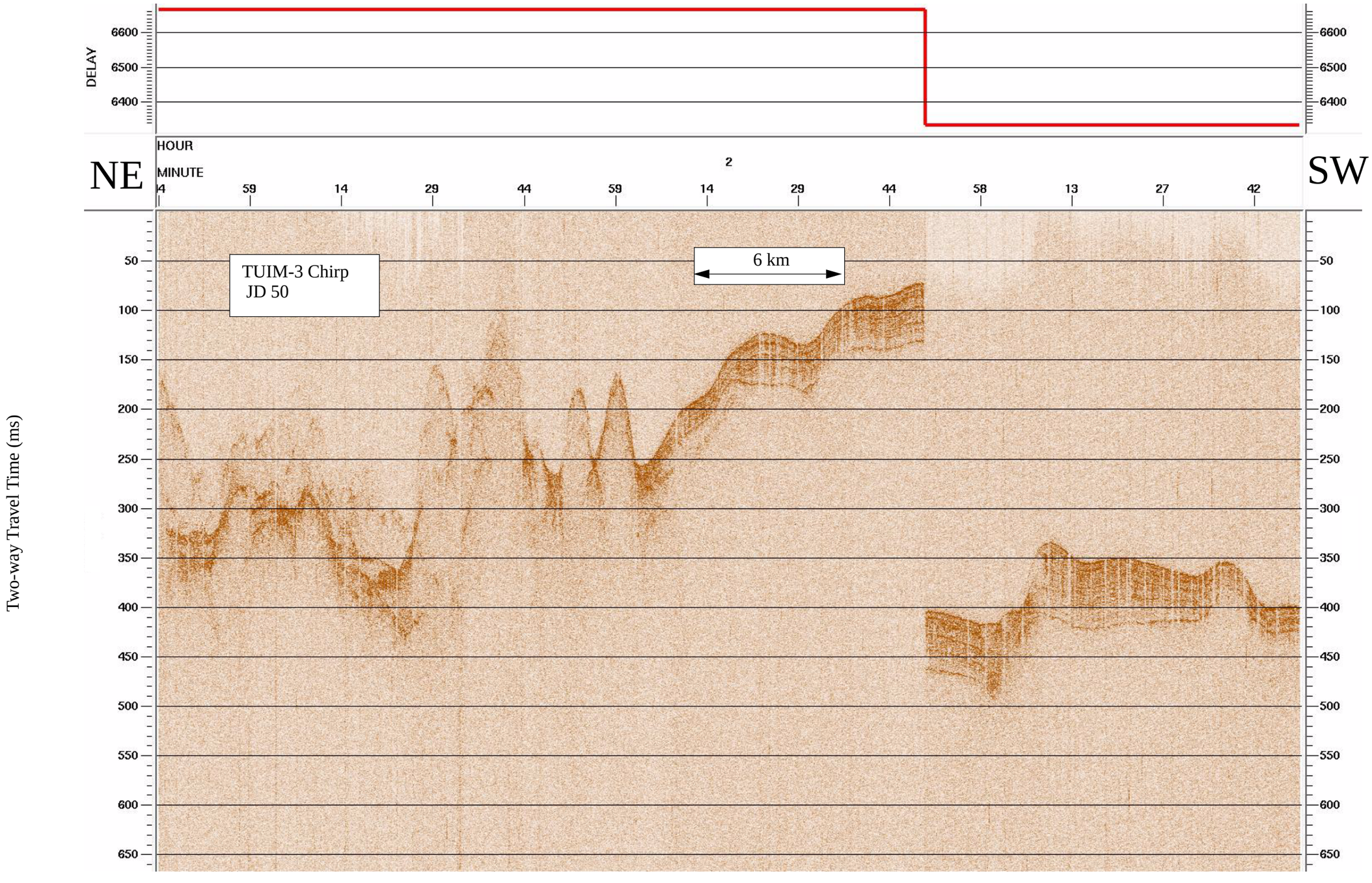

DELAY
6300
6200
6100
N
S
HOUR
20
MINUTE
5
9
23
38
52
6
20
35
49
3
18
32
46
TUIM-3 Chirp
JD 49
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

Julian Day 50
19 February 2005
Knudsen Chirp Data

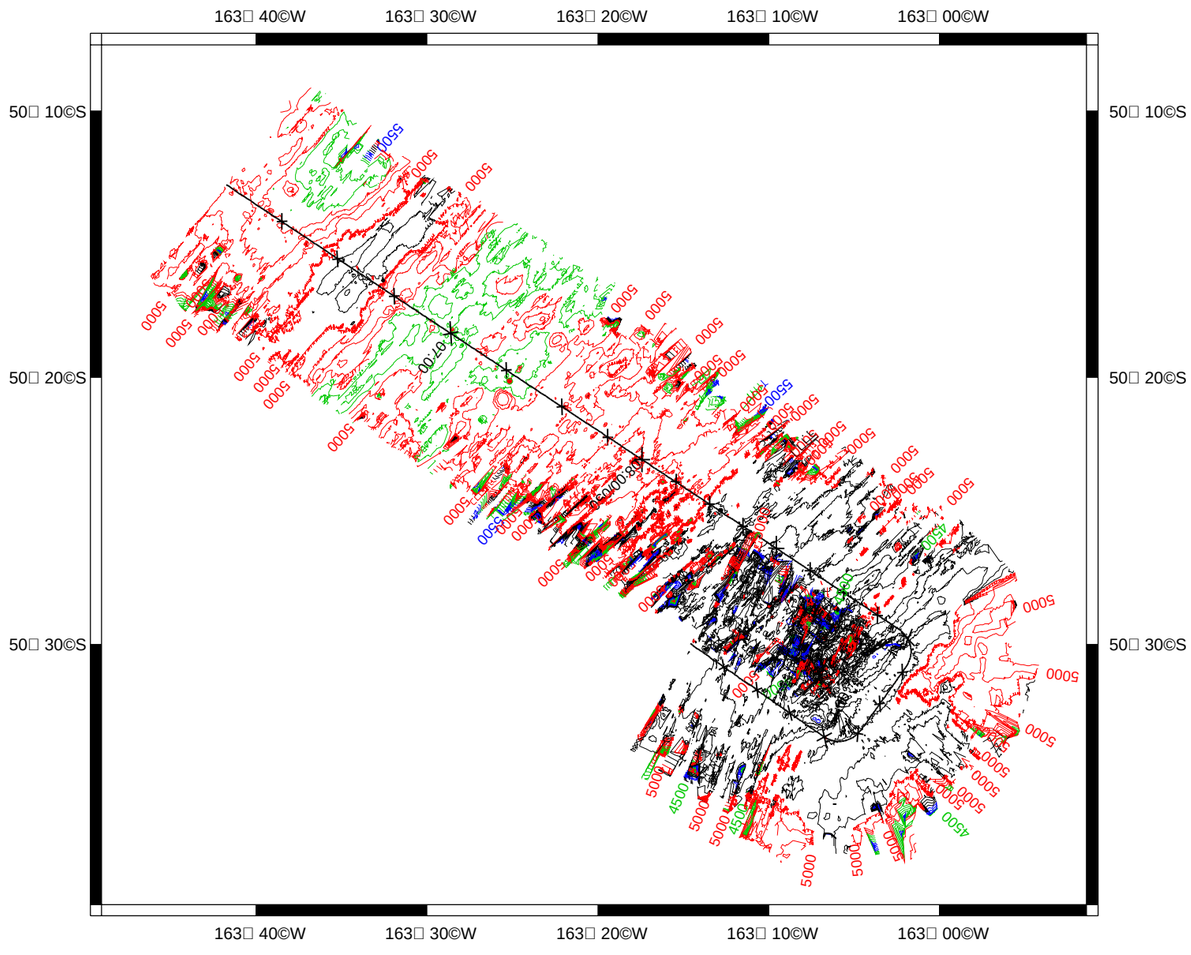
Data File SBfixavg.2005feb19.0000-0600

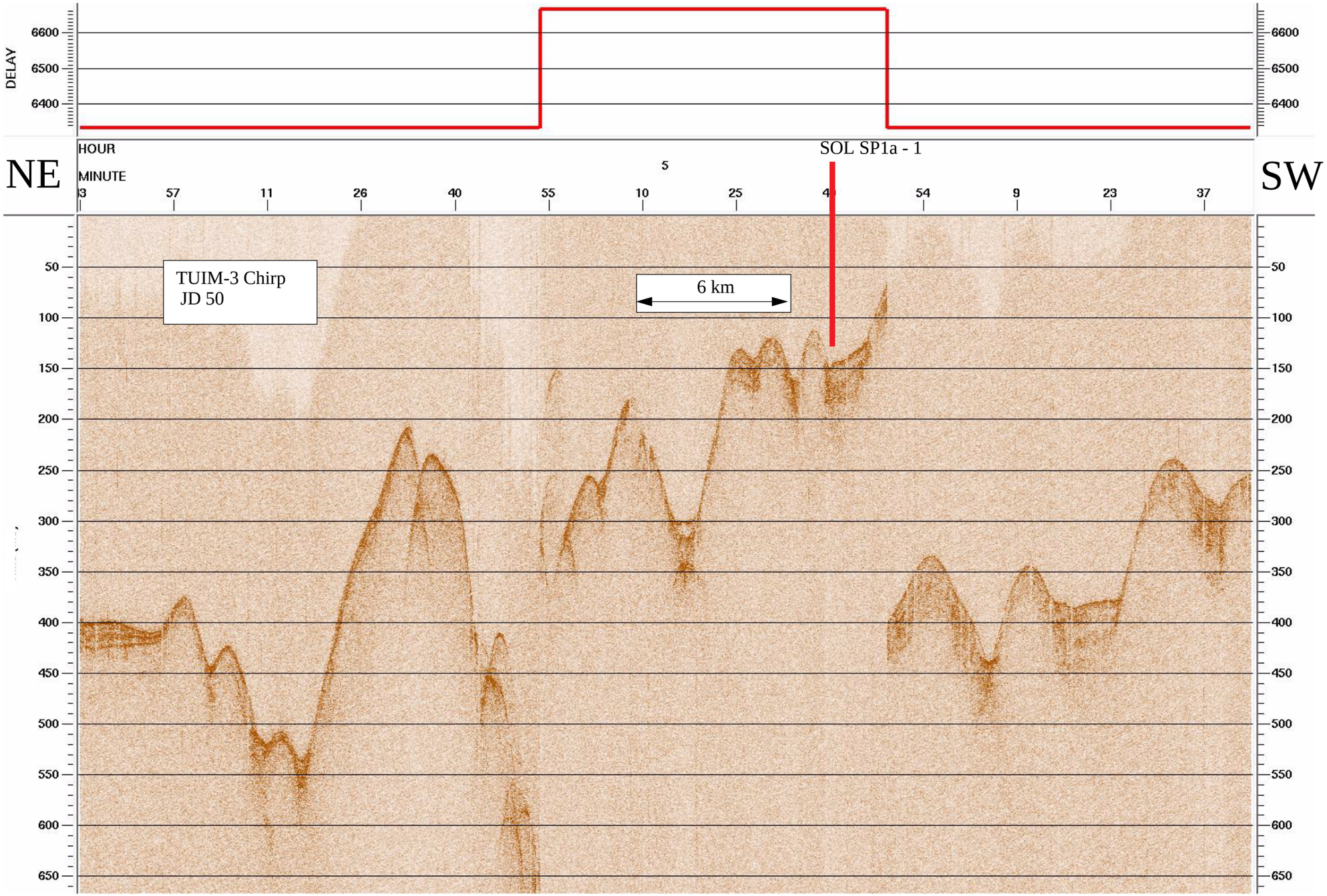


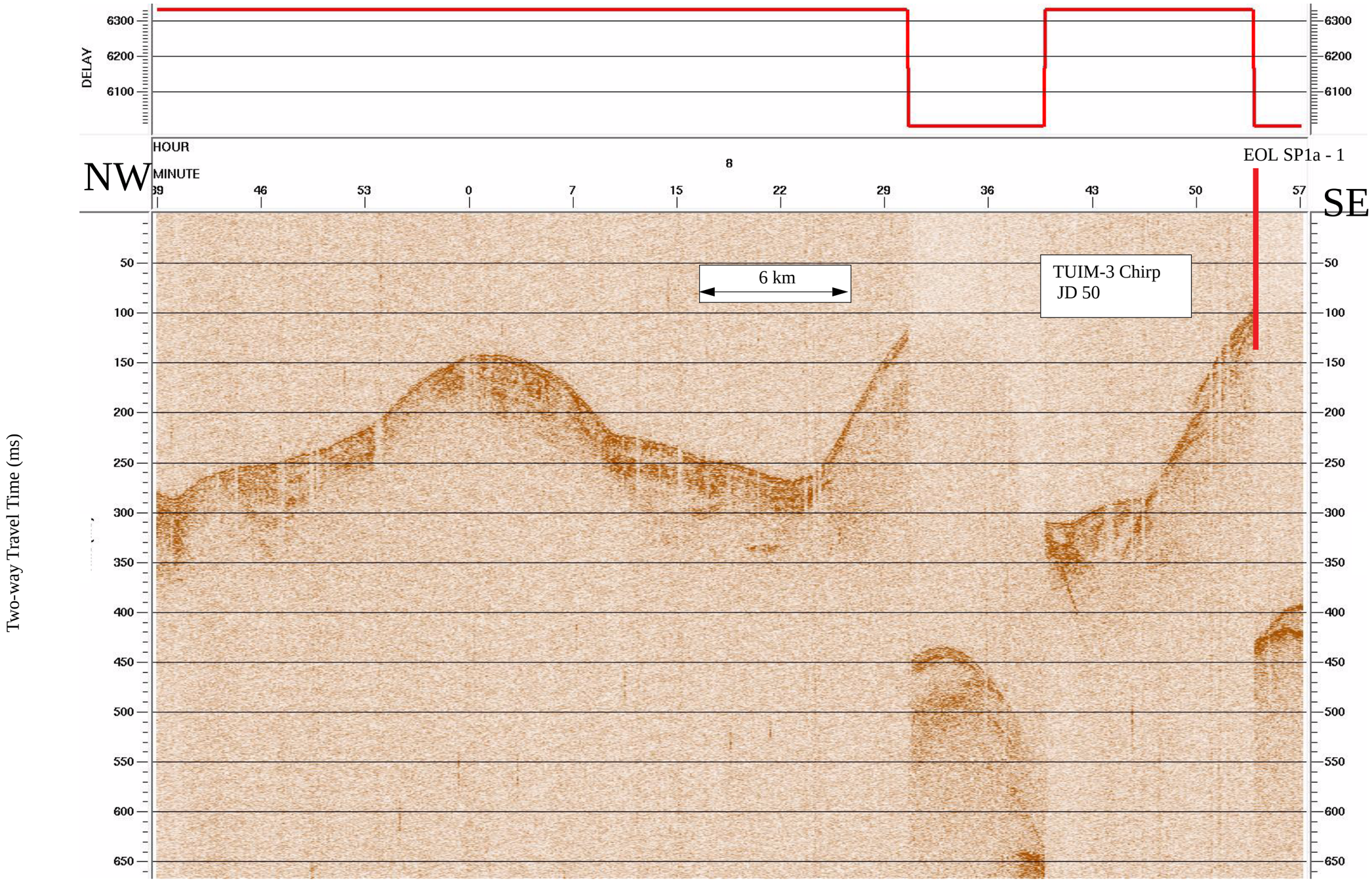

DELAY
6600
6400
6200
NE
SW
HOUR
23
MINUTE
7
2
16
30
45
59
13
27
42
57
12
27
42
TUIM-3 Chirp
JD 50
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

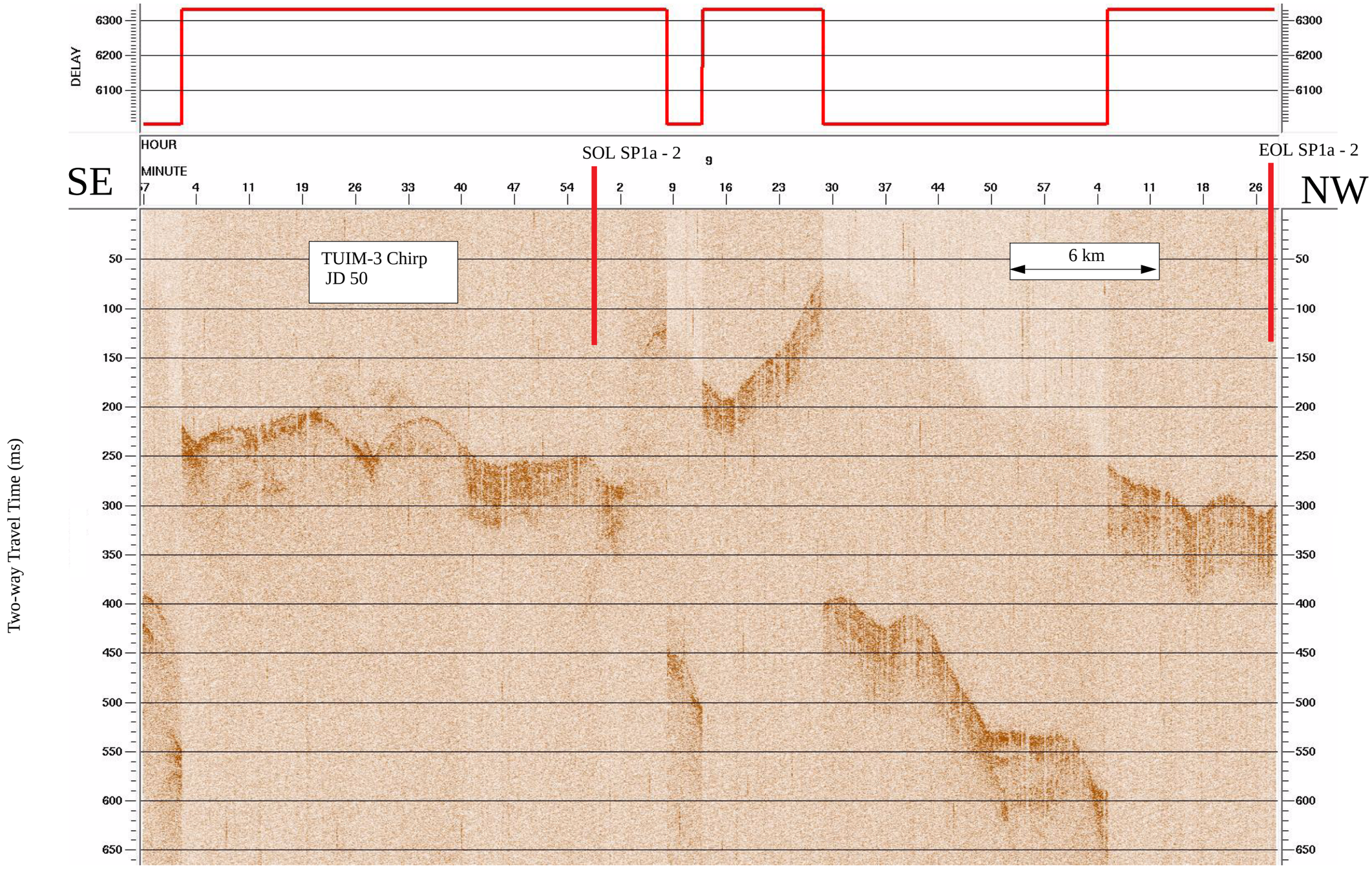

DELAY
6600
6500
6400
NE
SW
HOUR
2
MINUTE
4
59
14
29
44
59
14
29
44
58
13
27
42
TUIM-3 Chirp
JD 50
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

Data File SBfixavg.2005feb19.0600-1200

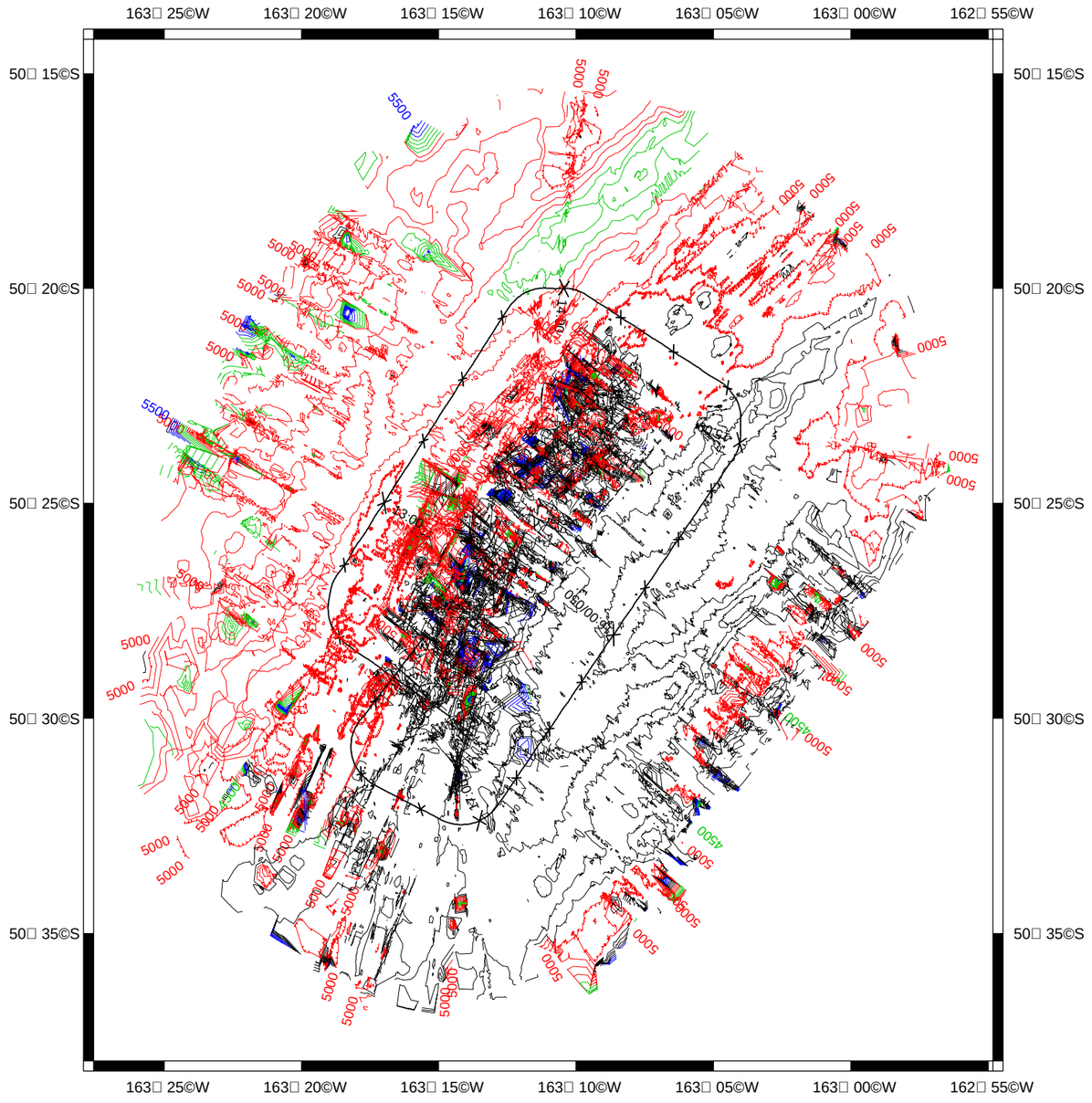


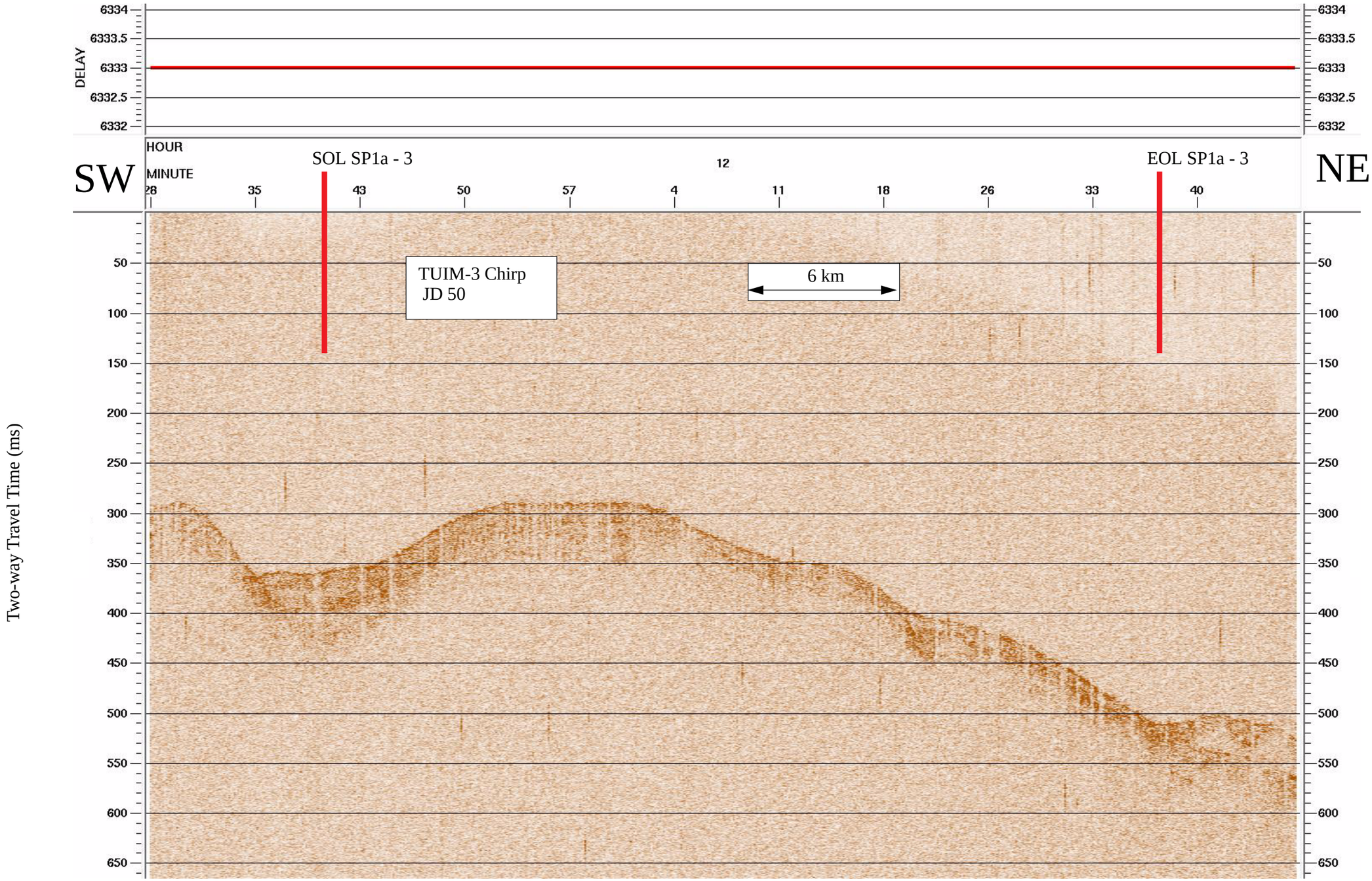

DELAY
6600
6500
6400
NE
HOUR
MINUTE
3
57
11
26
40
55
10
25
4
54
9
23
37
5
SOL SP1a - 1
SW
TUIM-3 Chirp
JD 50
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

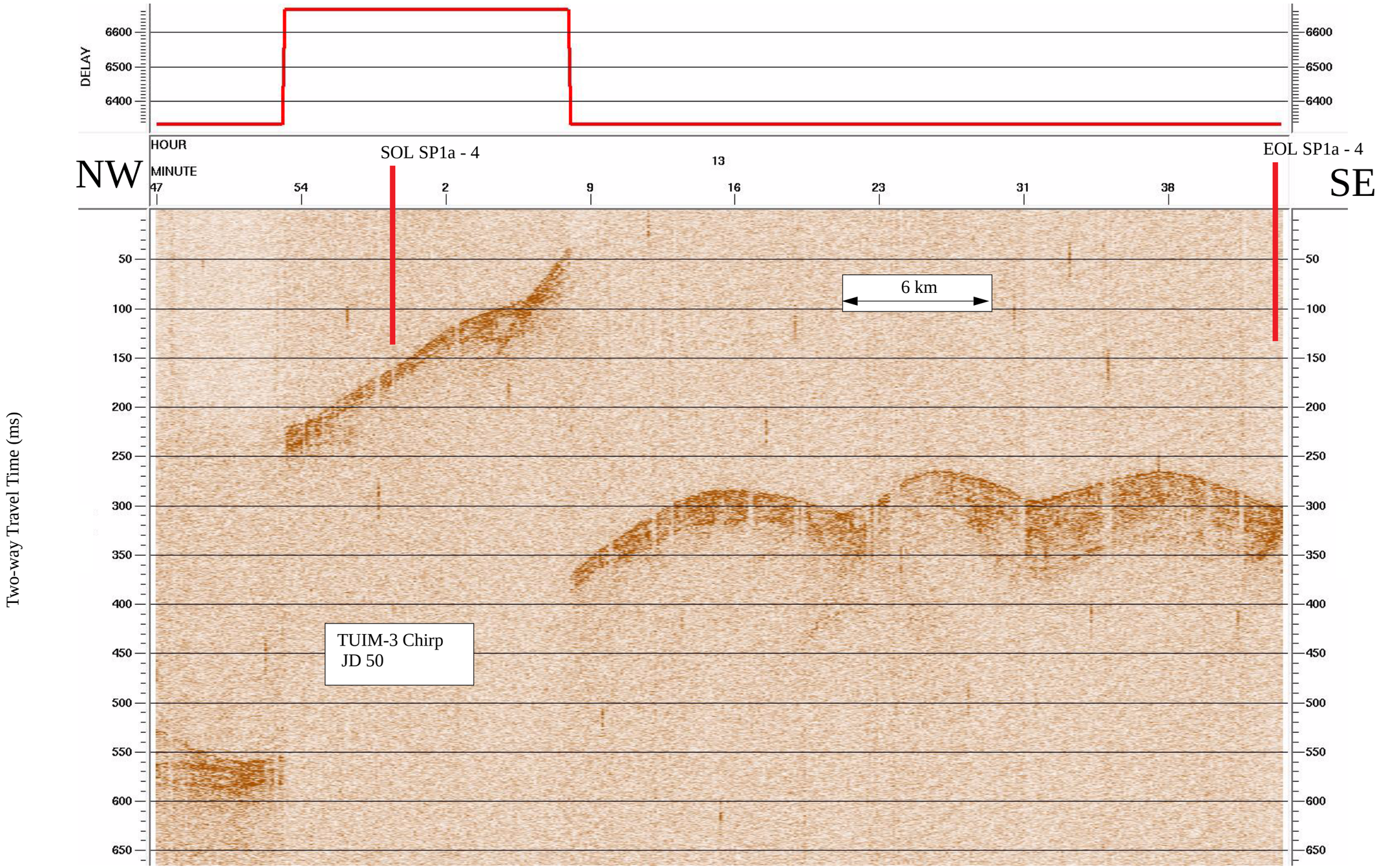

DELAY
6300
6200
6100
NW
HOUR
MINUTE
8
39
46
53
0
7
15
22
29
36
43
50
57
SE
EOL SP1a - 1
6 km
TUIM-3 Chirp
JD 50
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

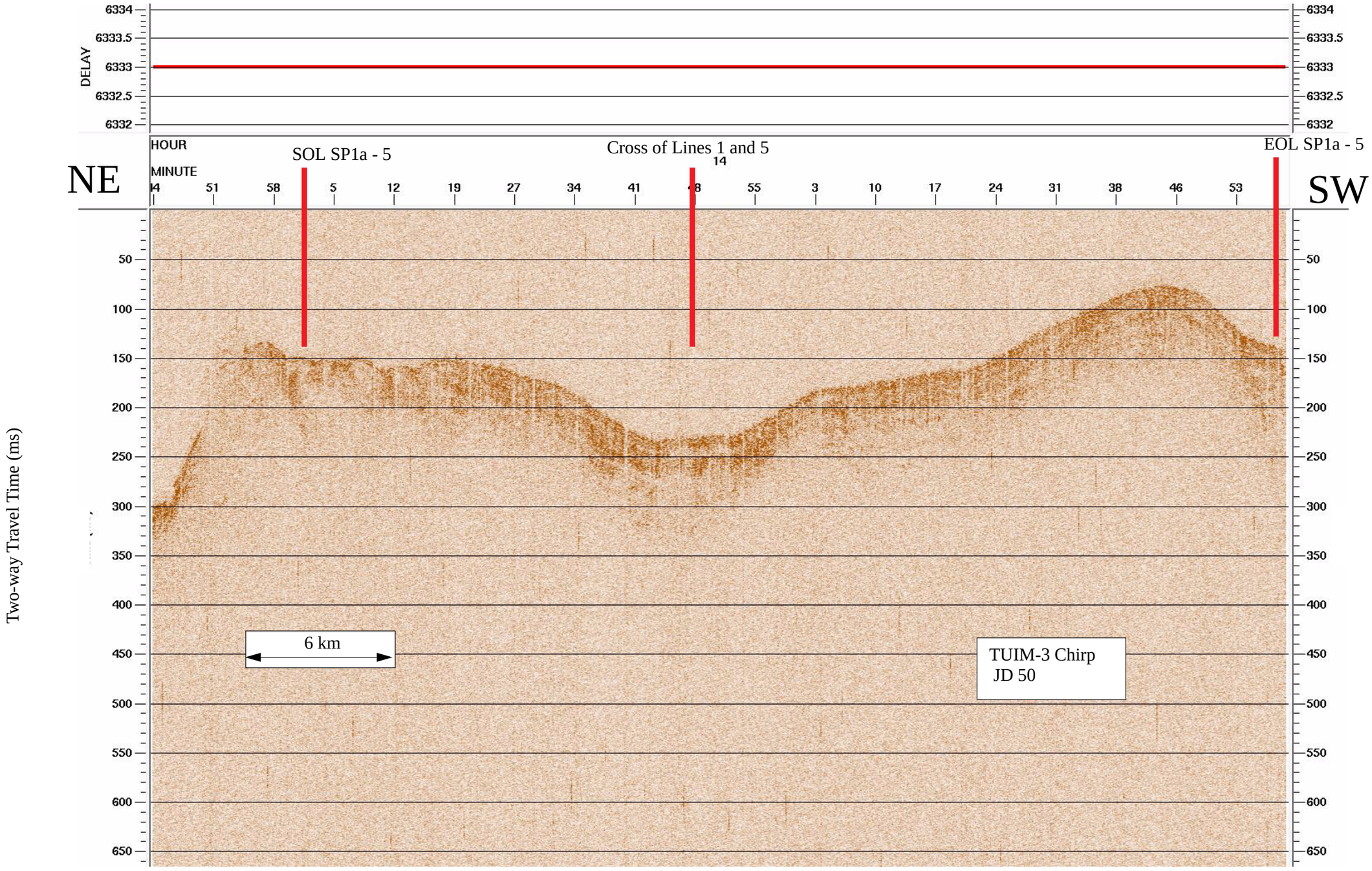

DELAY
6300
6200
6100
HOUR
MINUTE
SE
NW
SOL SP1a - 2
EOL SP1a - 2
9
57 4 11 19 26 33 40 47 54 2 9 16 23 30 37 44 50 57 4 11 18 26
TUIM-3 Chirp
JD 50
6 km
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650

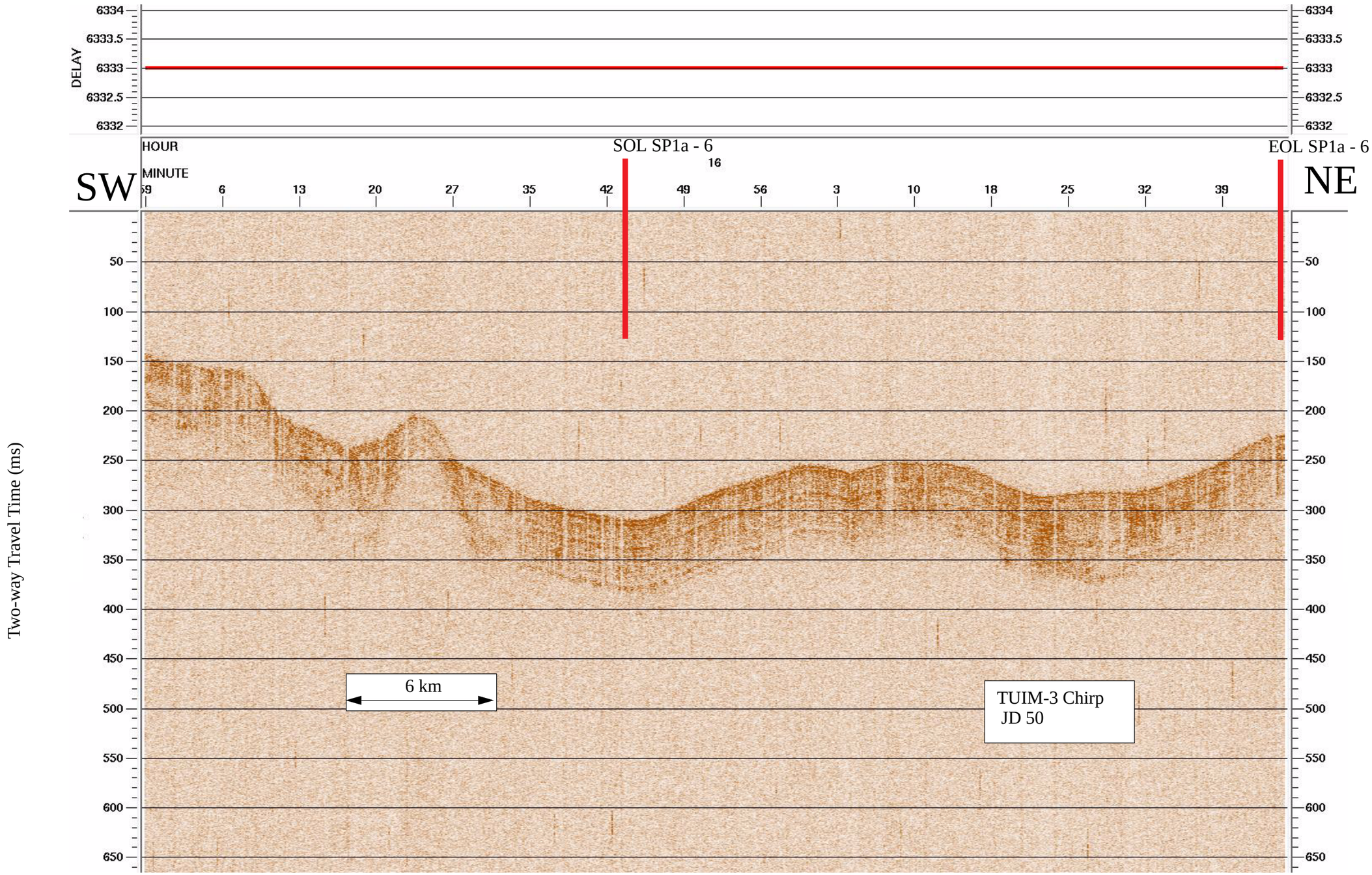
Data File SBfixavg.2005feb19.1200-1800



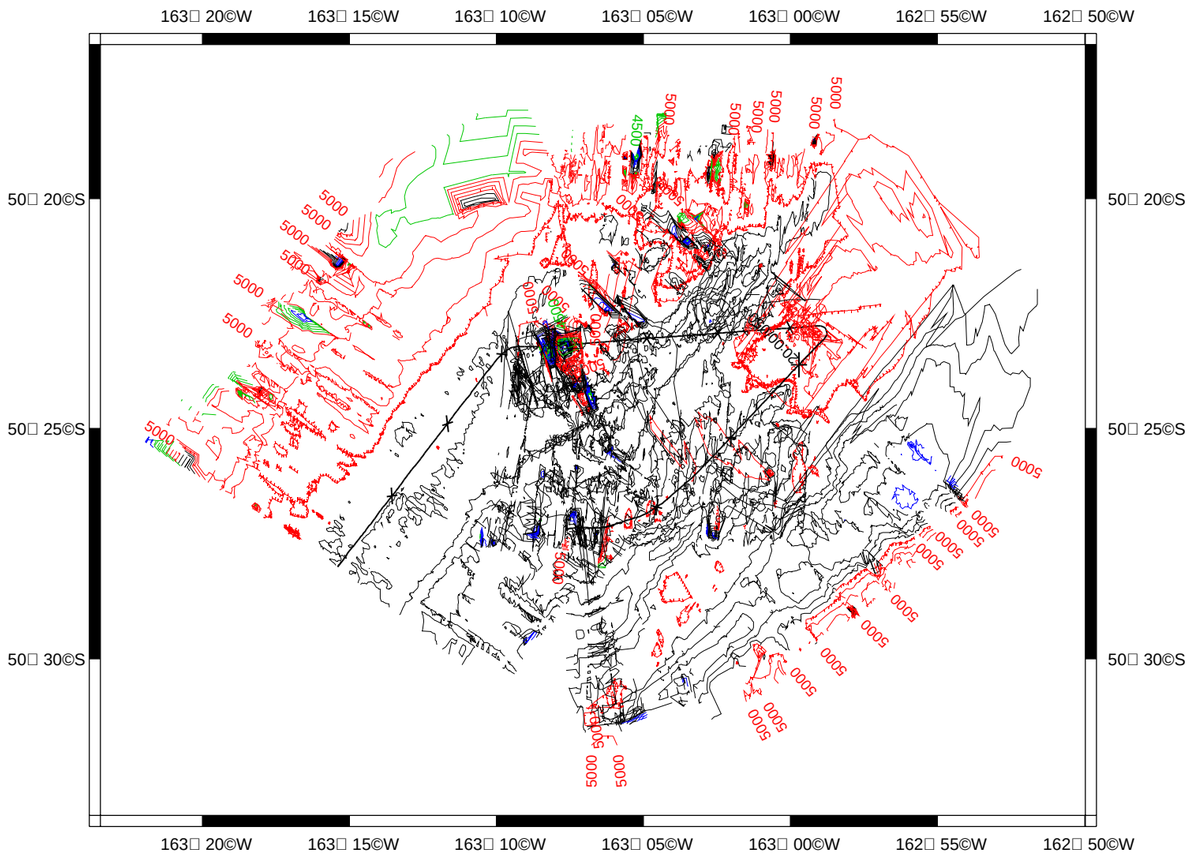

DELAY
6334
6333.5
6333
6332.5
6332
SW
NE
HOUR
MINUTE
28
35
43
50
57
4
12
11
18
26
33
40
SOL SP1a - 3
EOL SP1a - 3
TUIM-3 Chirp
JD 50
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

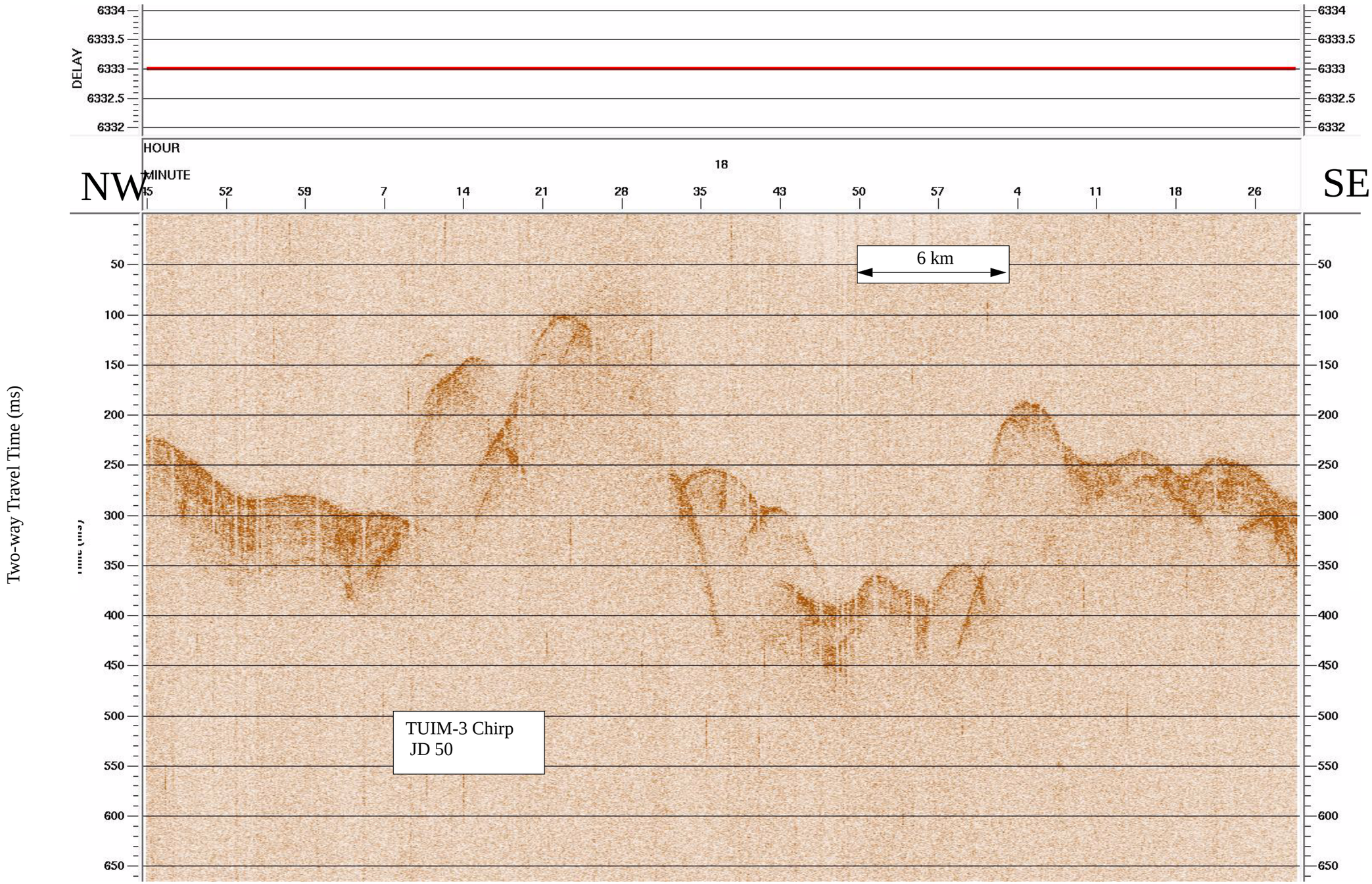

DELAY
6600
6500
6400
NW
HOUR
MINUTE
47
54
2
9
13
16
23
31
38
SOL SP1a - 4
EOL SP1a - 4
SE
6 km
TUIM-3 Chirp
JD 50
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650

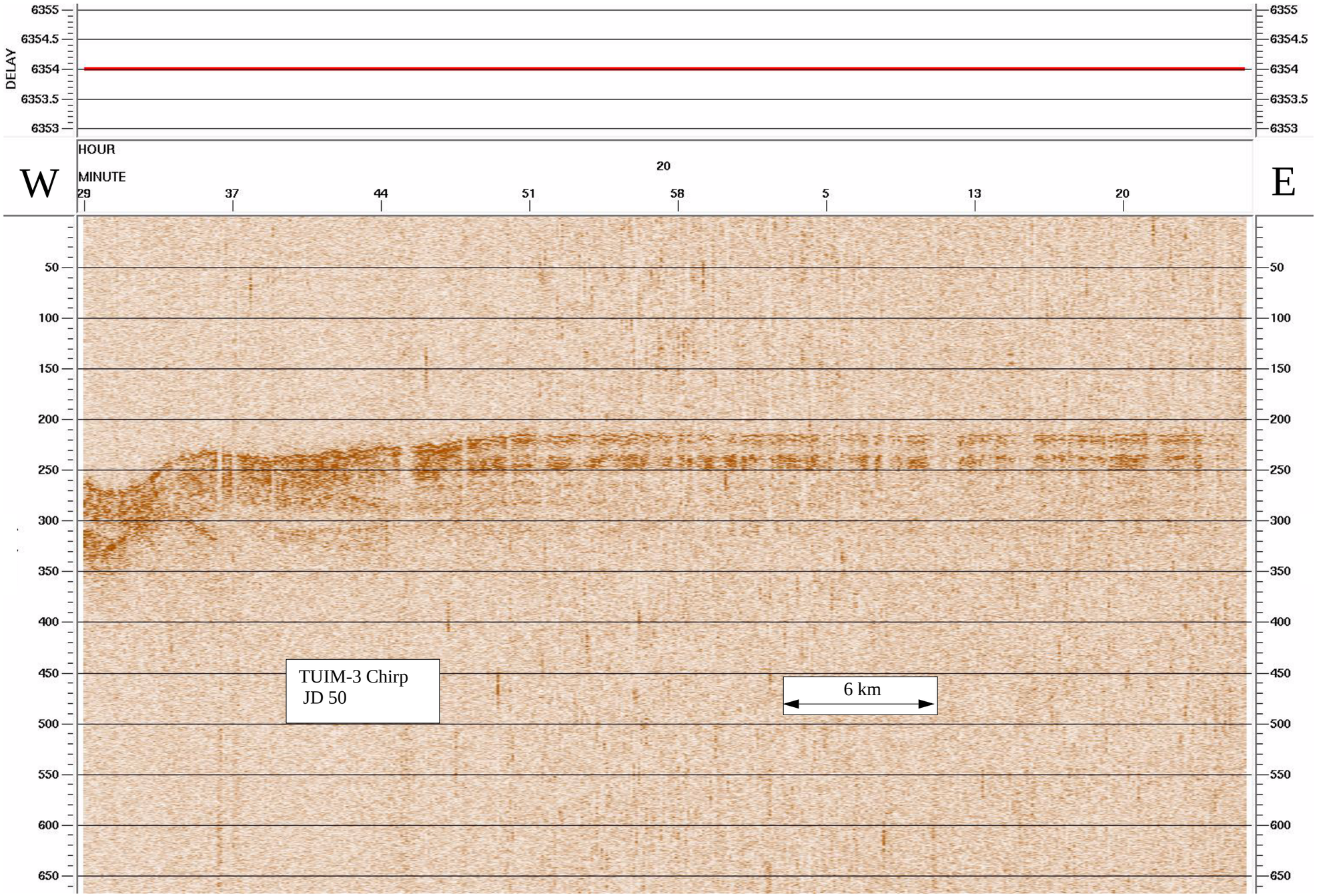

DELAY
6334
6333.5
6333
6332.5
6332
HOUR
MINUTE
14 51 58 5 12 19 27 34 41 48 55 3 10 17 24 31 38 46 53
14
NE
SW
SOL SP1a - 5
Cross of Lines 1 and 5
EOL SP1a - 5
Two-way Travel Time (ms)
50 100 150 200 250 300 350 400 450 500 550 600 650
6 km
TUIM-3 Chirp
JD 50


DELAY
6334
6333.5
6333
6332.5
6332
HOUR
MINUTE
SW
NE
SOL SP1a - 6
EOL SP1a - 6
16
59
6
13
20
27
35
42
49
56
3
10
18
25
32
39
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
6 km
TUIM-3 Chirp
JD 50

Data File SBfixavg.2005feb19.1800-2400

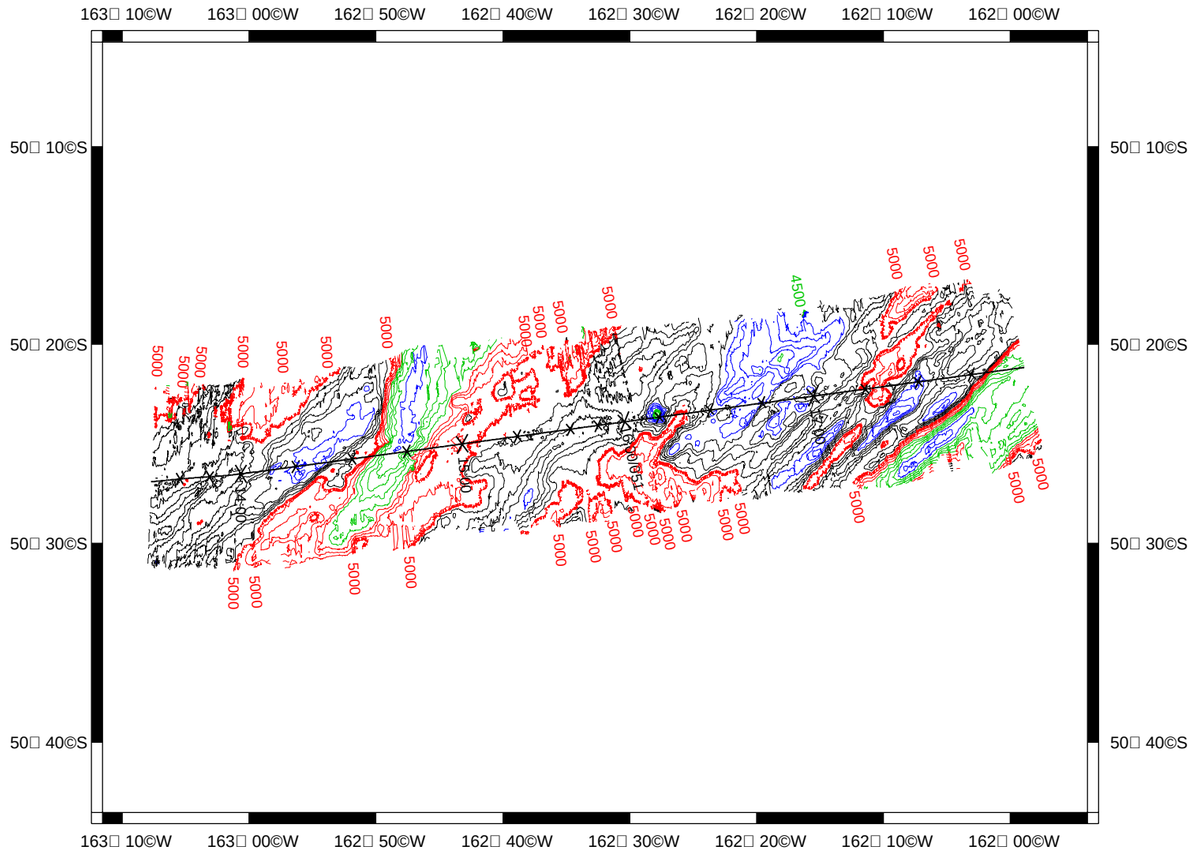


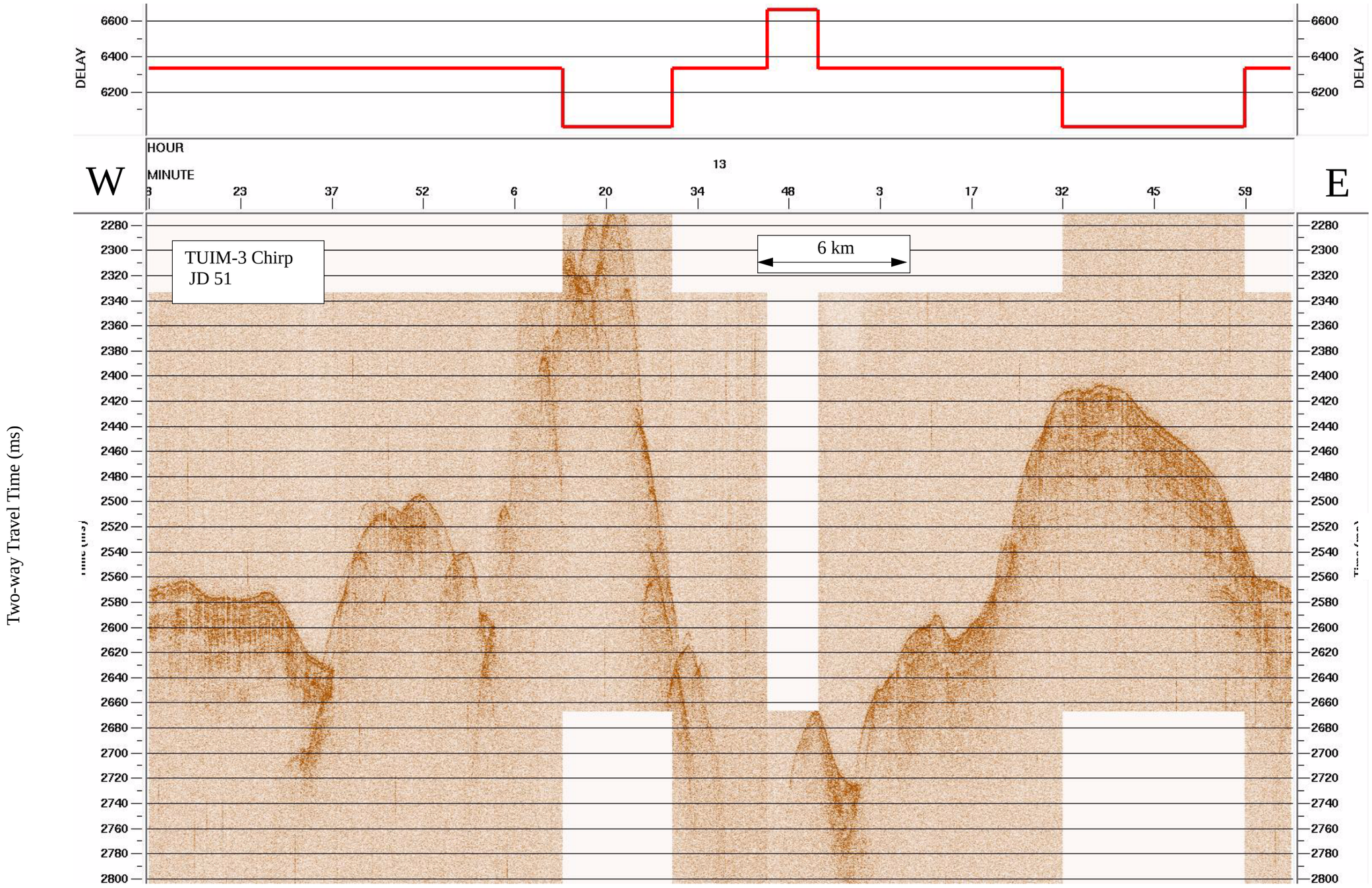

DELAY
6334
6333.5
6333
6332.5
6332
HOUR
18
MINUTE
45
52
59
7
14
21
28
35
43
50
57
4
11
18
26
NW
SE
6 km
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
TUIM-3 Chirp
JD 50

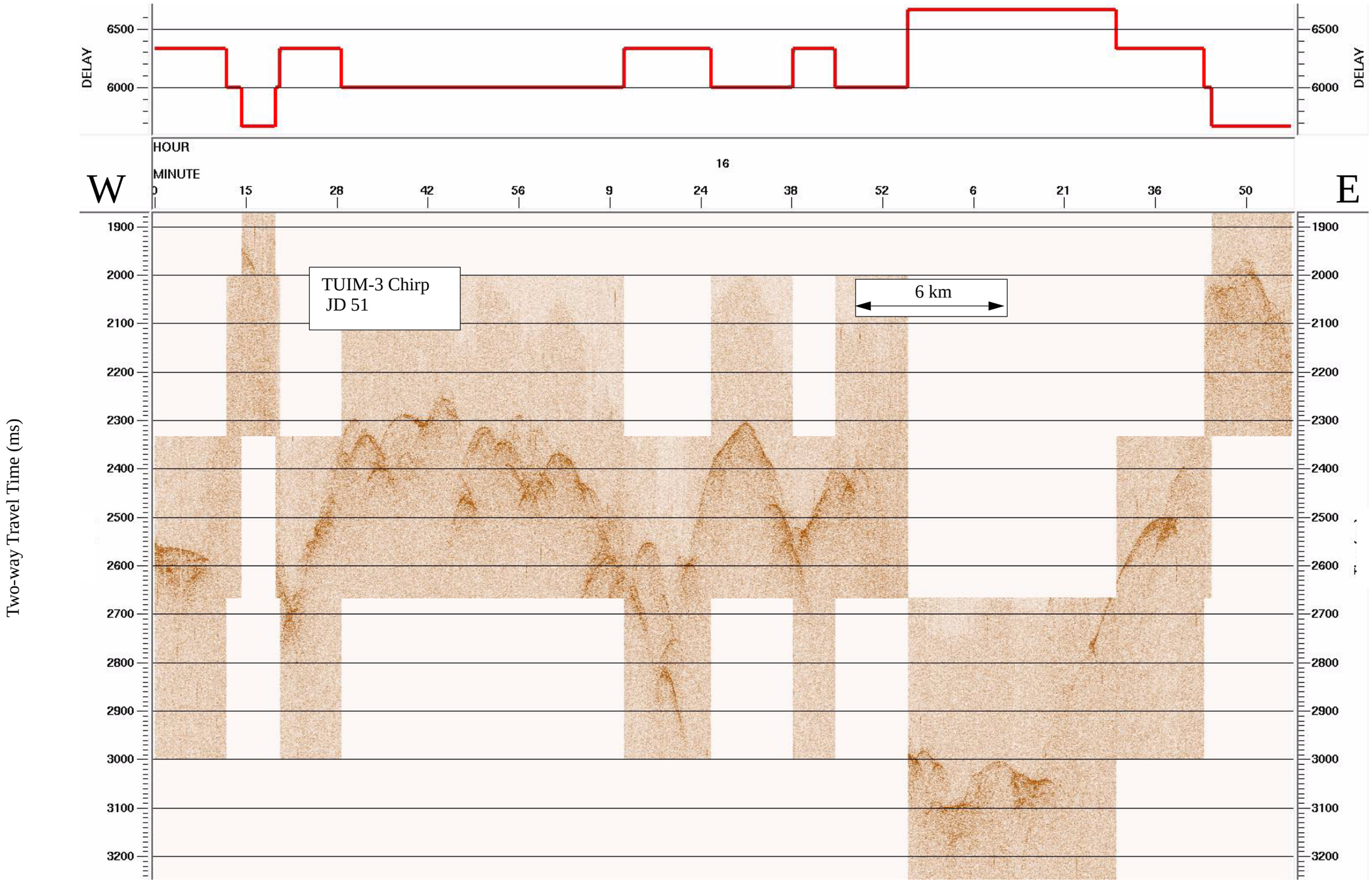

DELAY
6355
6354.5
6354
6353.5
6353
W
E
HOUR
20
MINUTE
29
37
44
51
58
5
13
20
Two-way Travel Time (ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
TUIM-3 Chirp
JD 50
6 km

Julian Day 51
20 February 2005
Knudsen Chirp Data

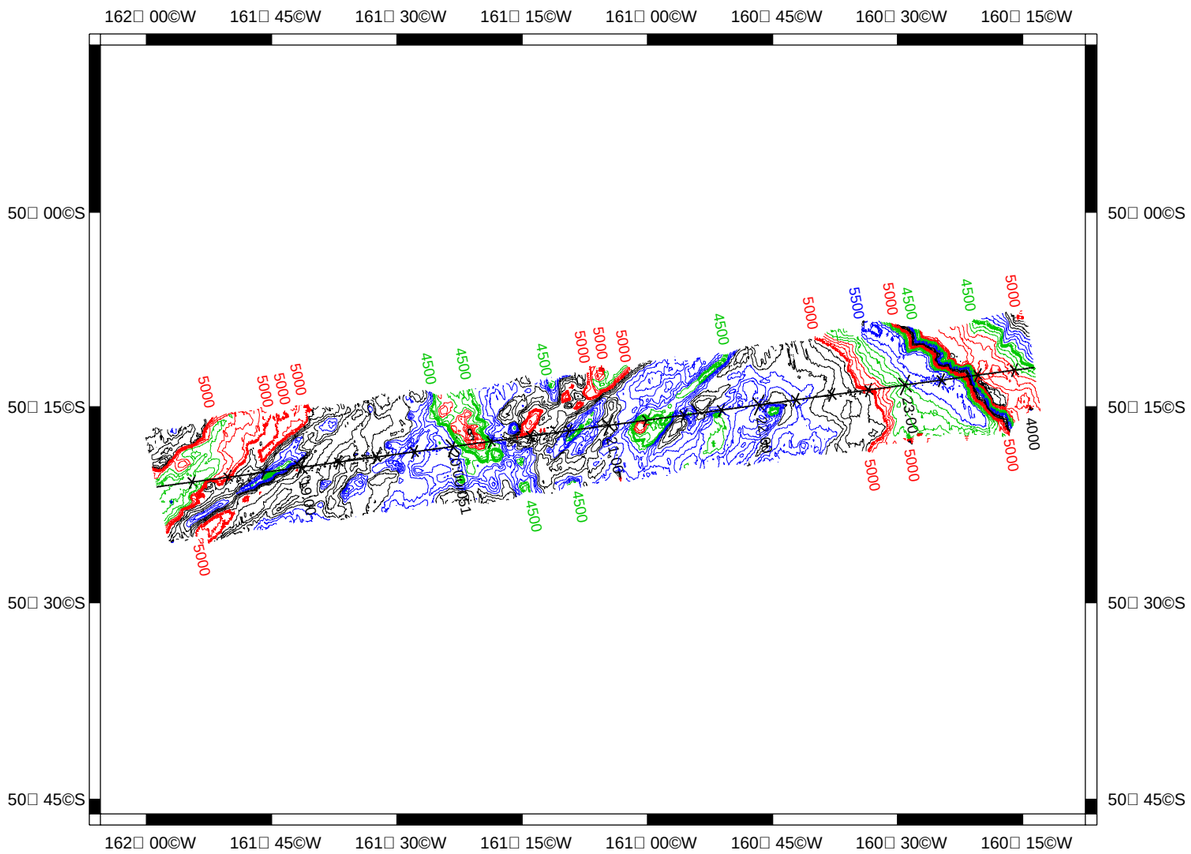
Data File SBfixavg.2005feb20.1200-1800

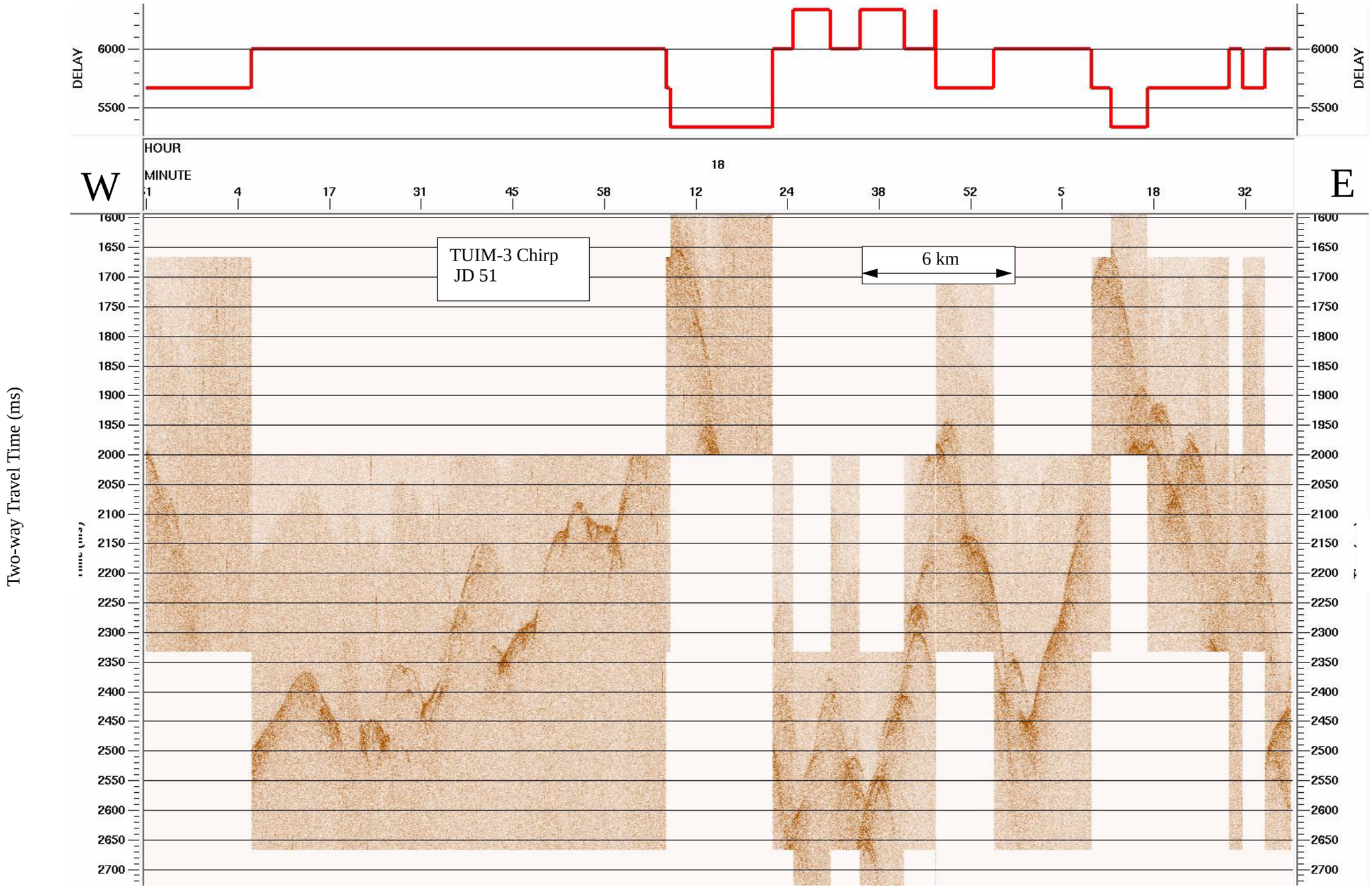


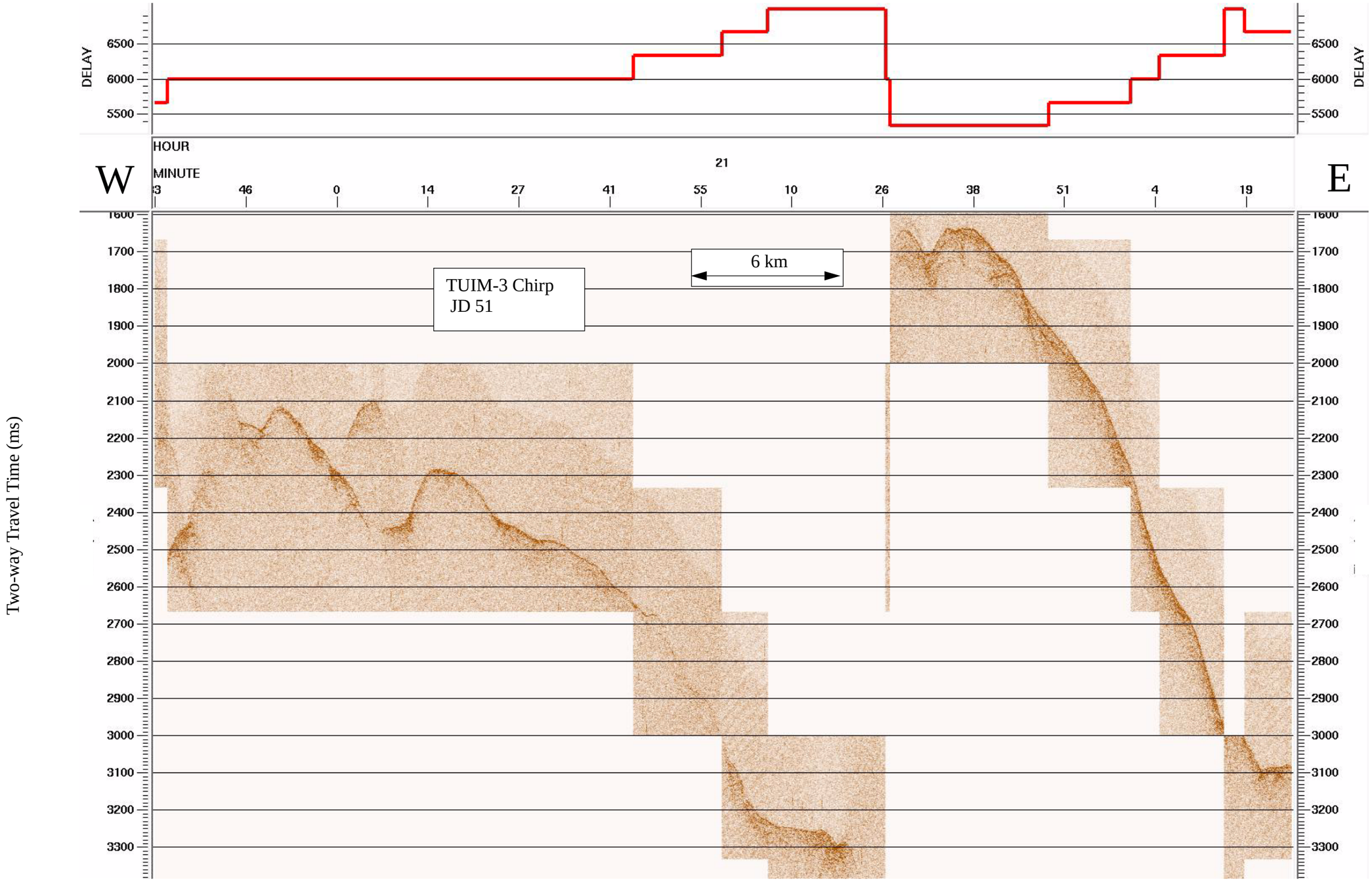

DELAY
6600
6400
6200
W
HOUR
MINUTE
13
3
23
37
52
6
20
34
48
3
17
32
45
59
E
TUIM-3 Chirp
JD 51
6 km
Two-way Travel Time (ms)
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
2620
2640
2660
2680
2700
2720
2740
2760
2780
2800


DELAY
6500
6000
HOUR
MINUTE
16
0
15
28
42
56
9
24
38
52
6
21
36
50
W
E
TUIM-3 Chirp
JD 51
6 km
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
Two-way Travel Time (ms)

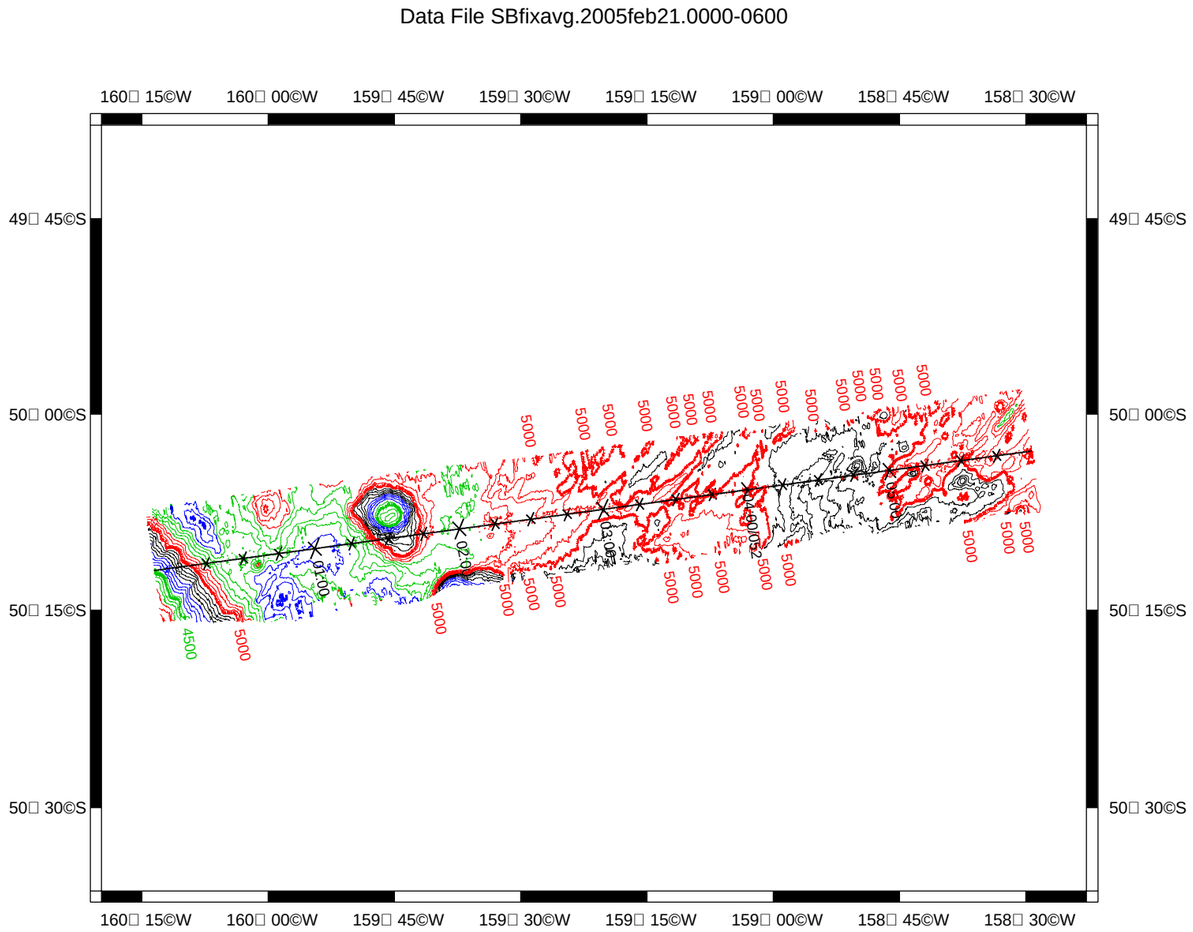
Data File SBfixavg.2005feb20.1800-2400

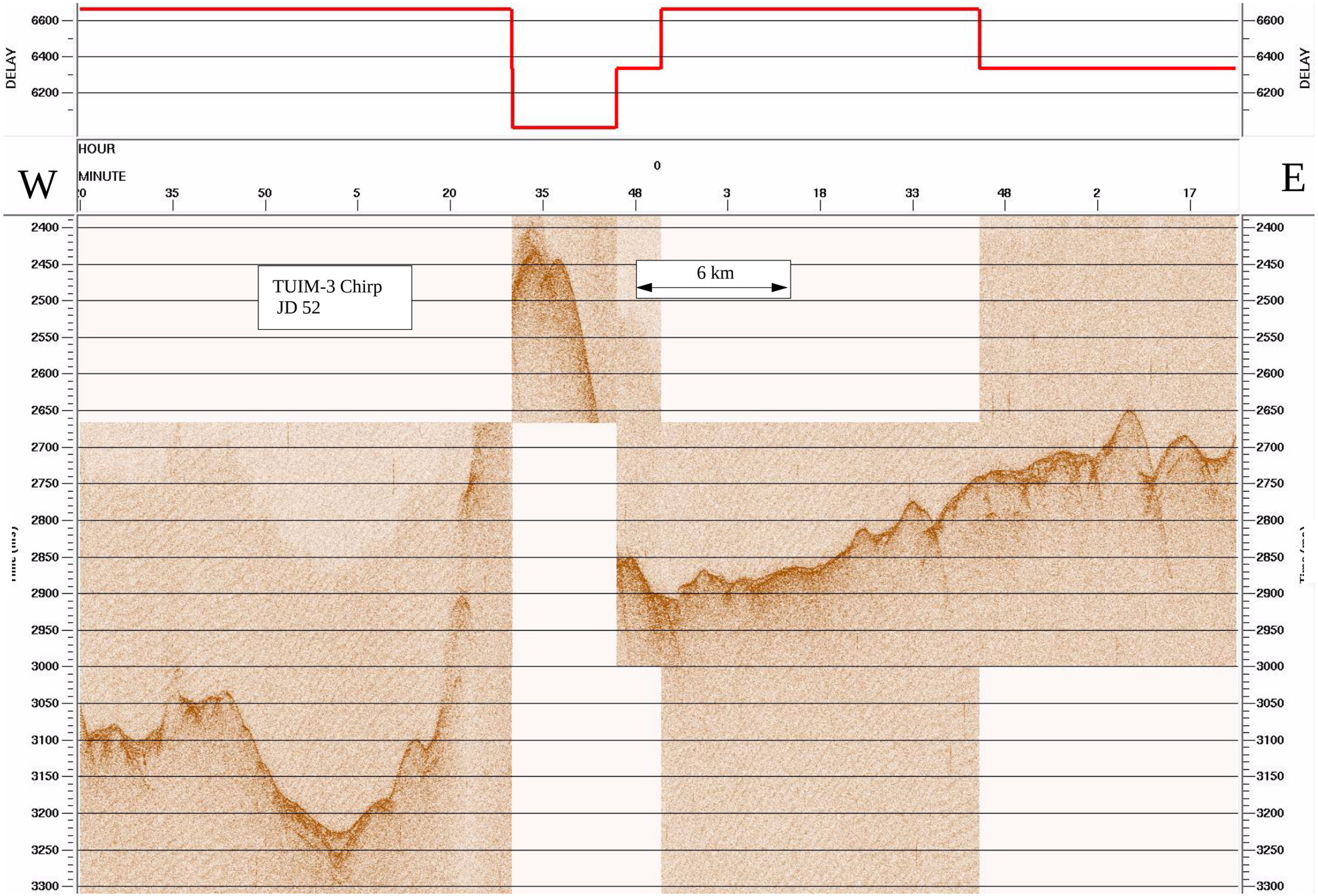


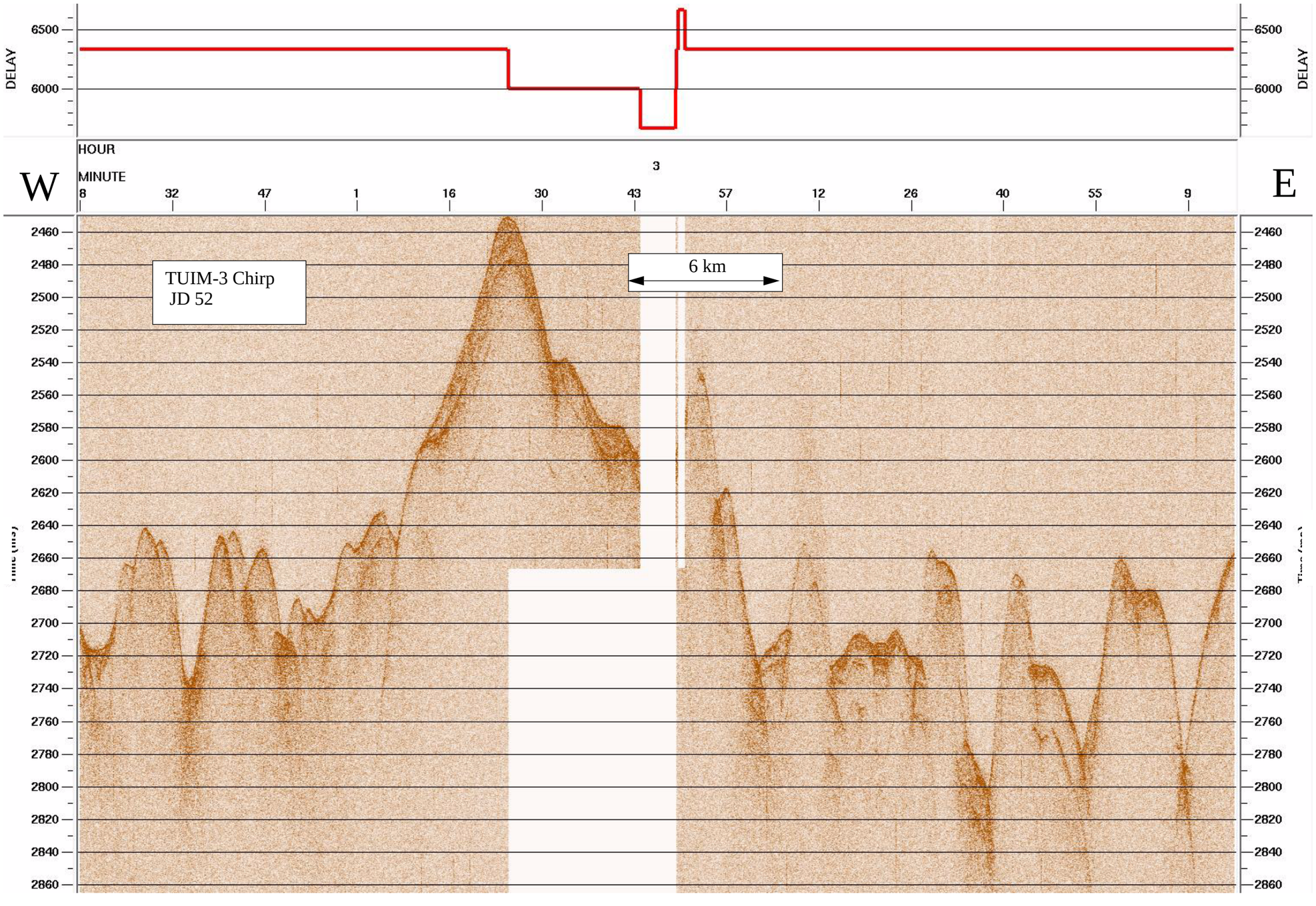

DELAY
6000
5500
W
E
HOUR
MINUTE
18
51
4
17
31
45
58
12
24
38
52
5
18
32
TUIM-3 Chirp
JD 51
6 km
Two-way Travel Time (ms)
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700

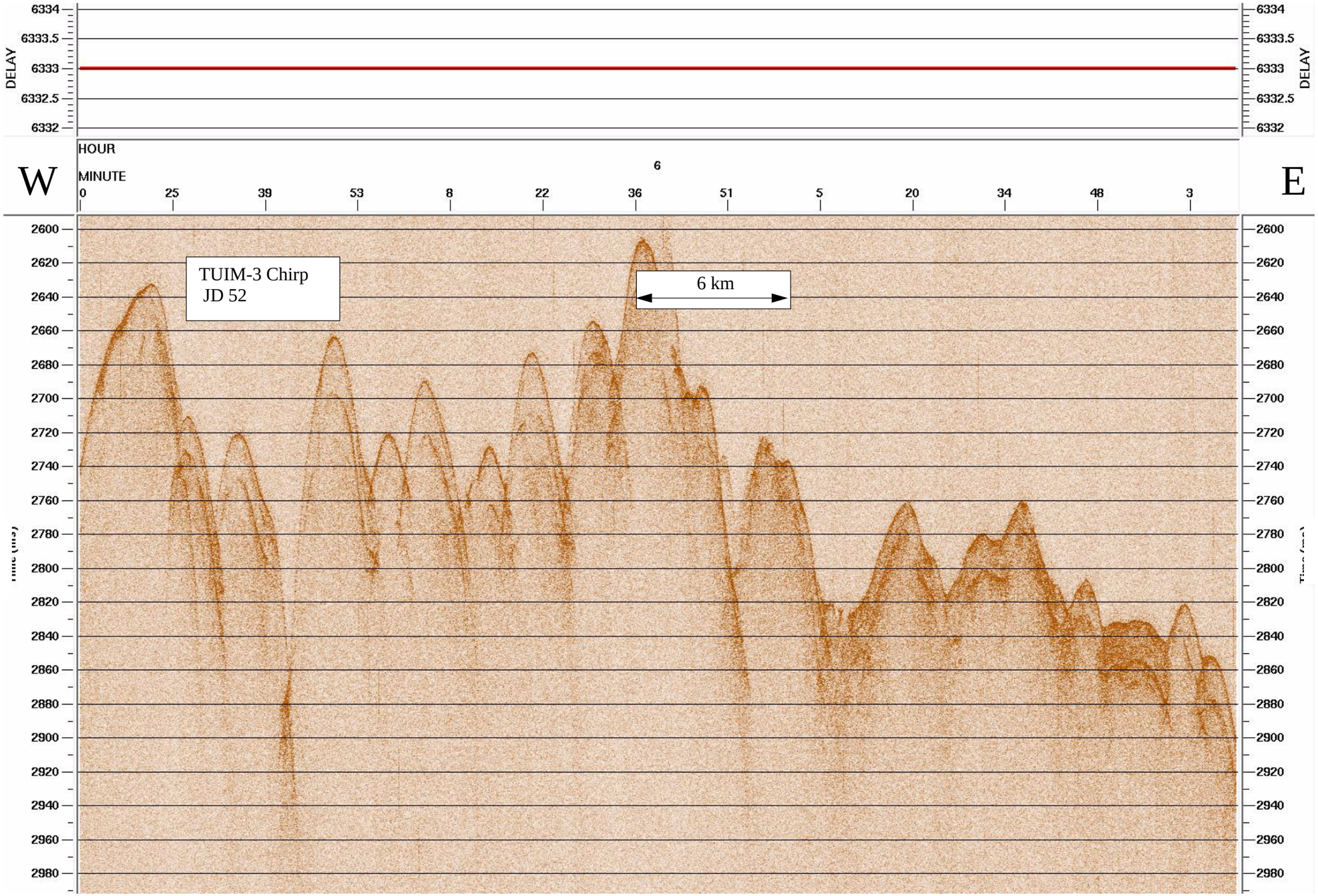

DELAY
6500
6000
5500
HOUR
21
MINUTE
43
46
0
14
27
41
55
10
26
38
51
4
19
W
E
6 km
TUIM-3 Chirp
JD 51
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
Two-way Travel Time (ms)

Julian Day 52
21 February 2005
Knudsen Chirp Data


Data File SBfixavg.2005feb21.0000-0600
160□ 15©W
160□ 00©W
159□ 45©W
159□ 30©W
159□ 15©W
159□ 00©W
158□ 45©W
158□ 30©W
49□ 45©S
50□ 00©S
50□ 15©S
50□ 30©S
5000
4500

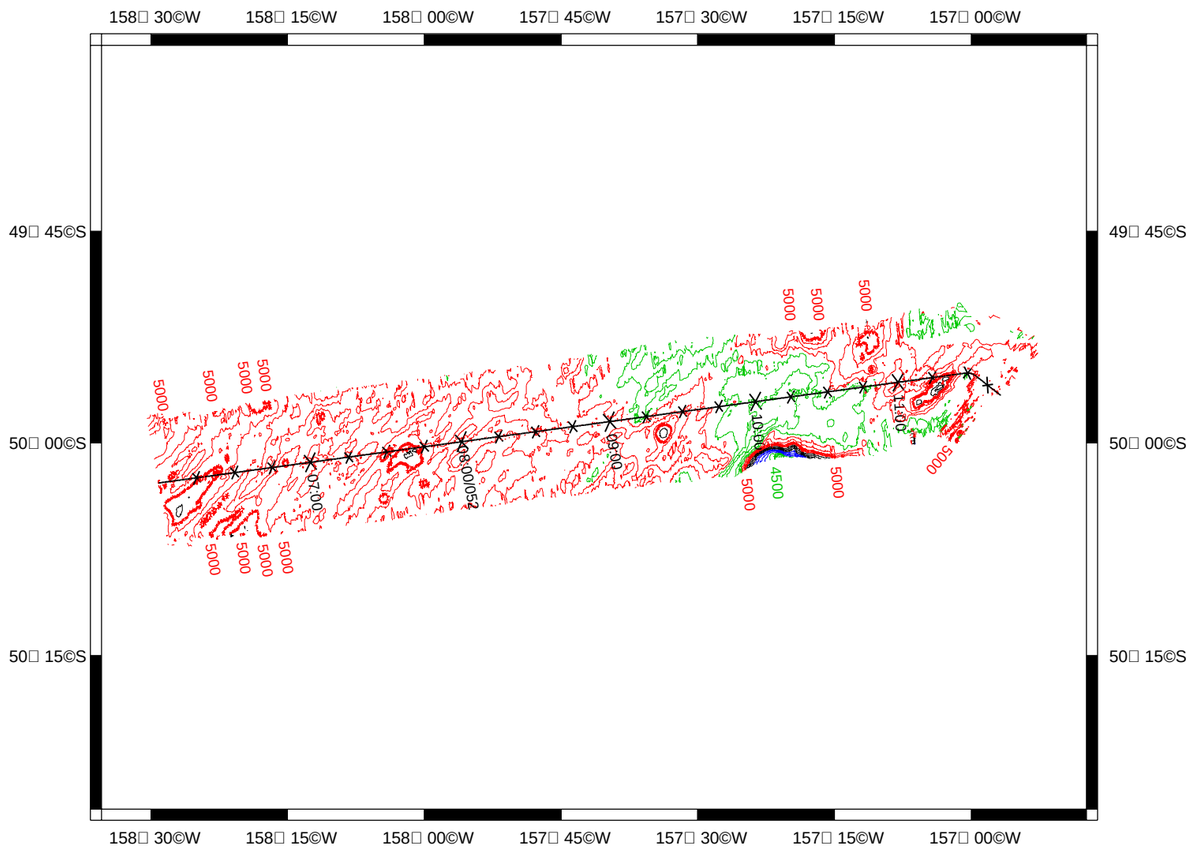

DELAY
6600
6400
6200
HOUR
MINUTE
0
W
E
20
35
50
5
20
35
48
3
18
33
48
2
17
TUIM-3 Chirp
JD 52
6 km
Two-way Travel Time (ms)
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300

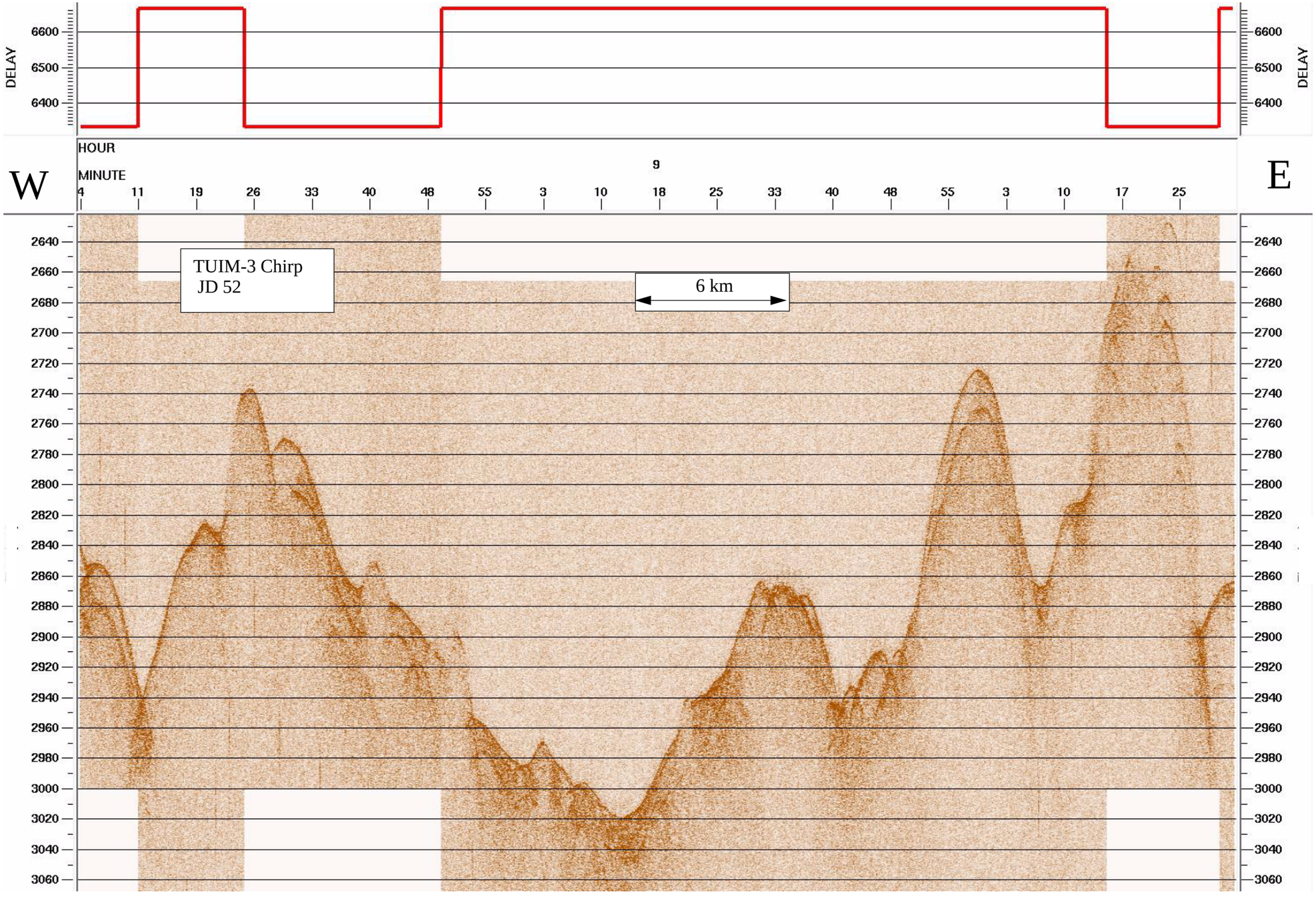

DELAY
6500
6000
HOUR
3
MINUTE
8
32
47
1
16
30
43
57
12
26
40
55
9
W
E
TUIM-3 Chirp
JD 52
6 km
Two-way Travel Time (ms)
2460
2480
2500
2520
2540
2560
2580
2600
2620
2640
2660
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860

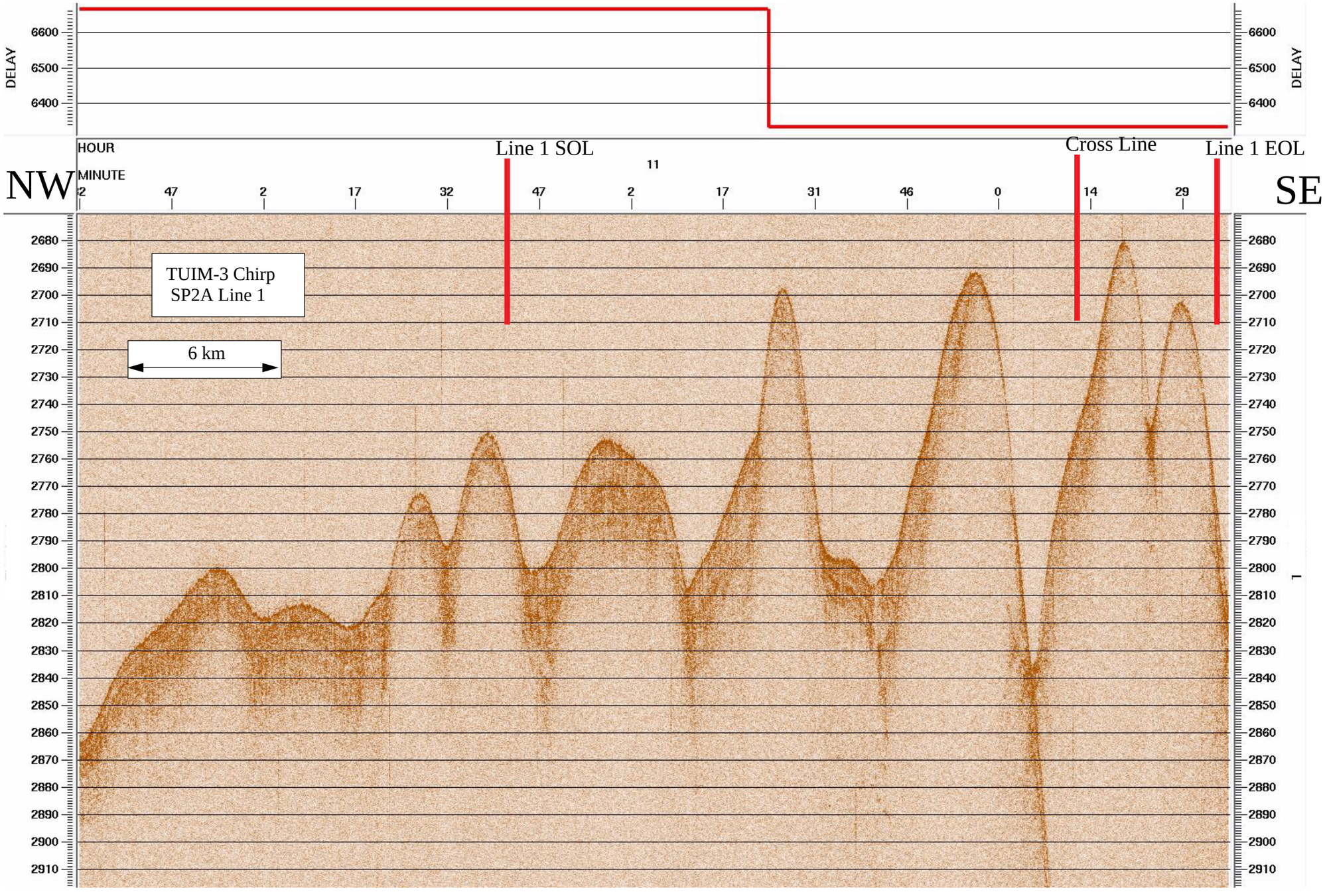


Two-way Travel Time (ms)

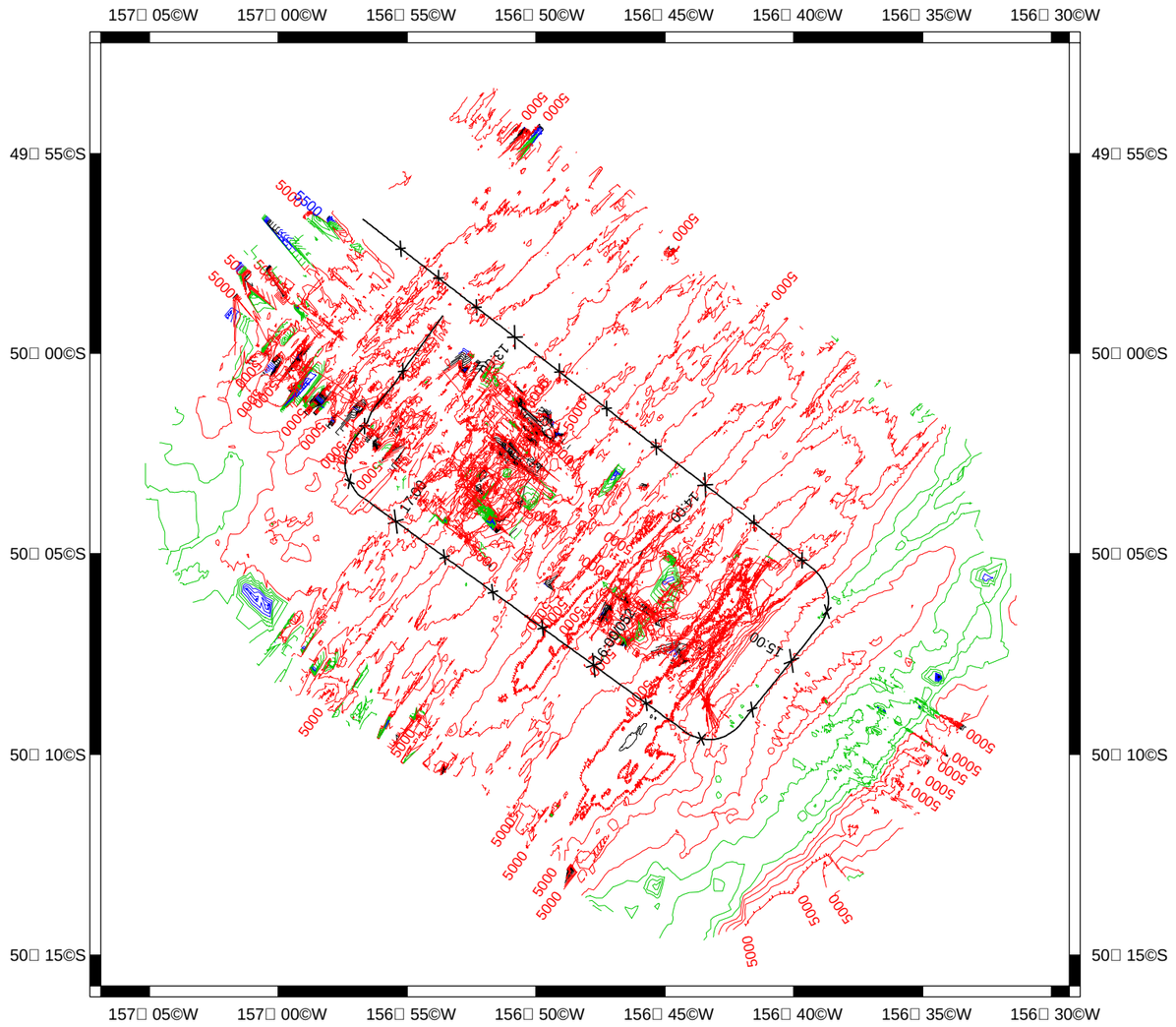
Data File SBfixavg.2005feb21.0600-1200

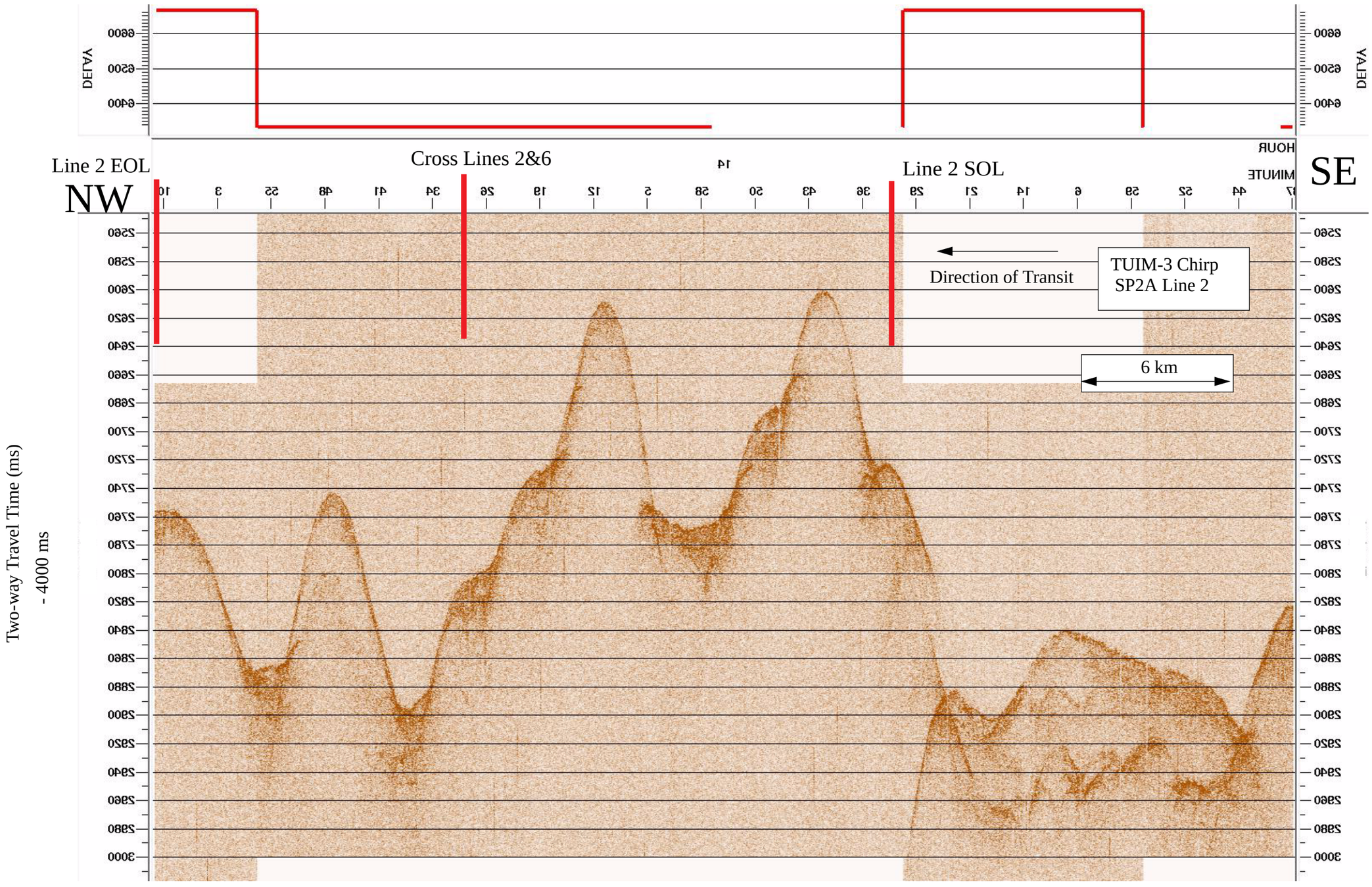


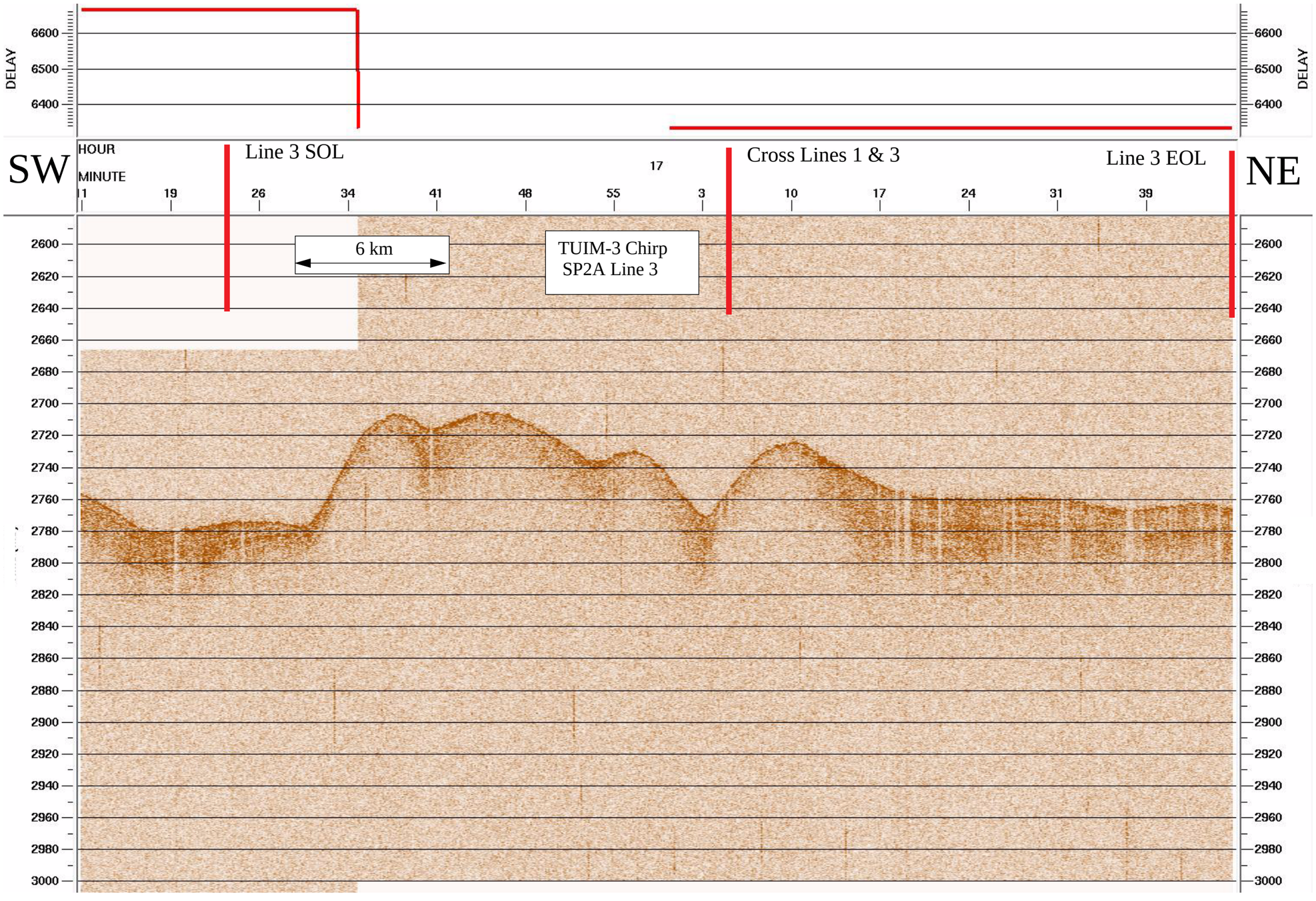

DELAY
6600
6500
6400
HOUR
MINUTE
9
4 11 19 26 33 40 48 55 3 10 18 25 33 40 48 55 3 10 17 25
W
E
TUIM-3 Chirp
JD 52
6 km
2640
2660
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
Two-way Travel Time (ms)


DELAY
6600
6500
6400
HOUR
MINUTE
11
Line 1 SOL
Cross Line
Line 1 EOL
NW
SE
TUIM-3 Chirp
SP2A Line 1
6 km
2680
2690
2700
2710
2720
2730
2740
2750
2760
2770
2780
2790
2800
2810
2820
2830
2840
2850
2860
2870
2880
2890
2900
2910
Two-way Travel Time (ms)
- 4000 ms

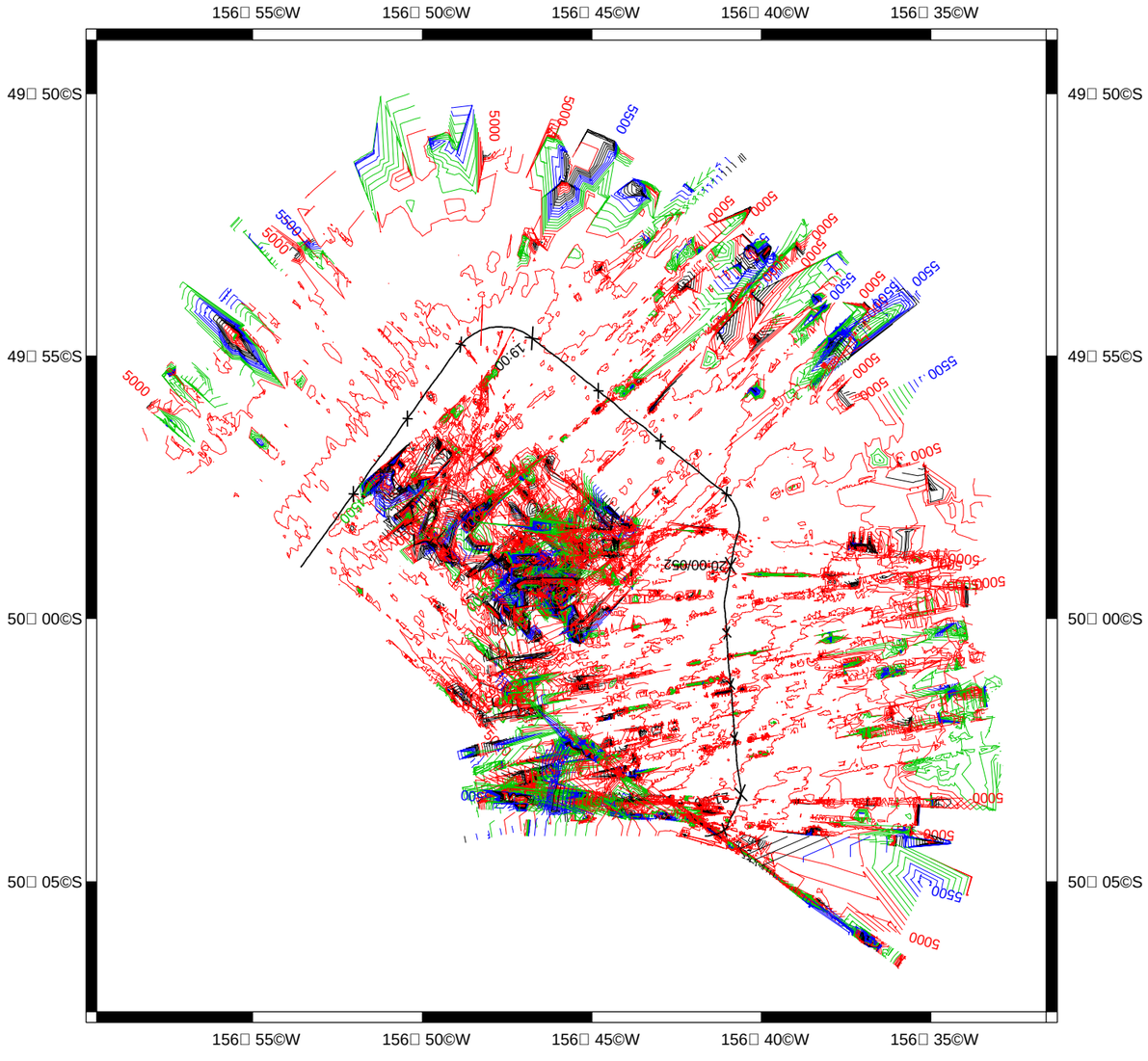
Data File SBfixavg.2005feb21.1200-1800

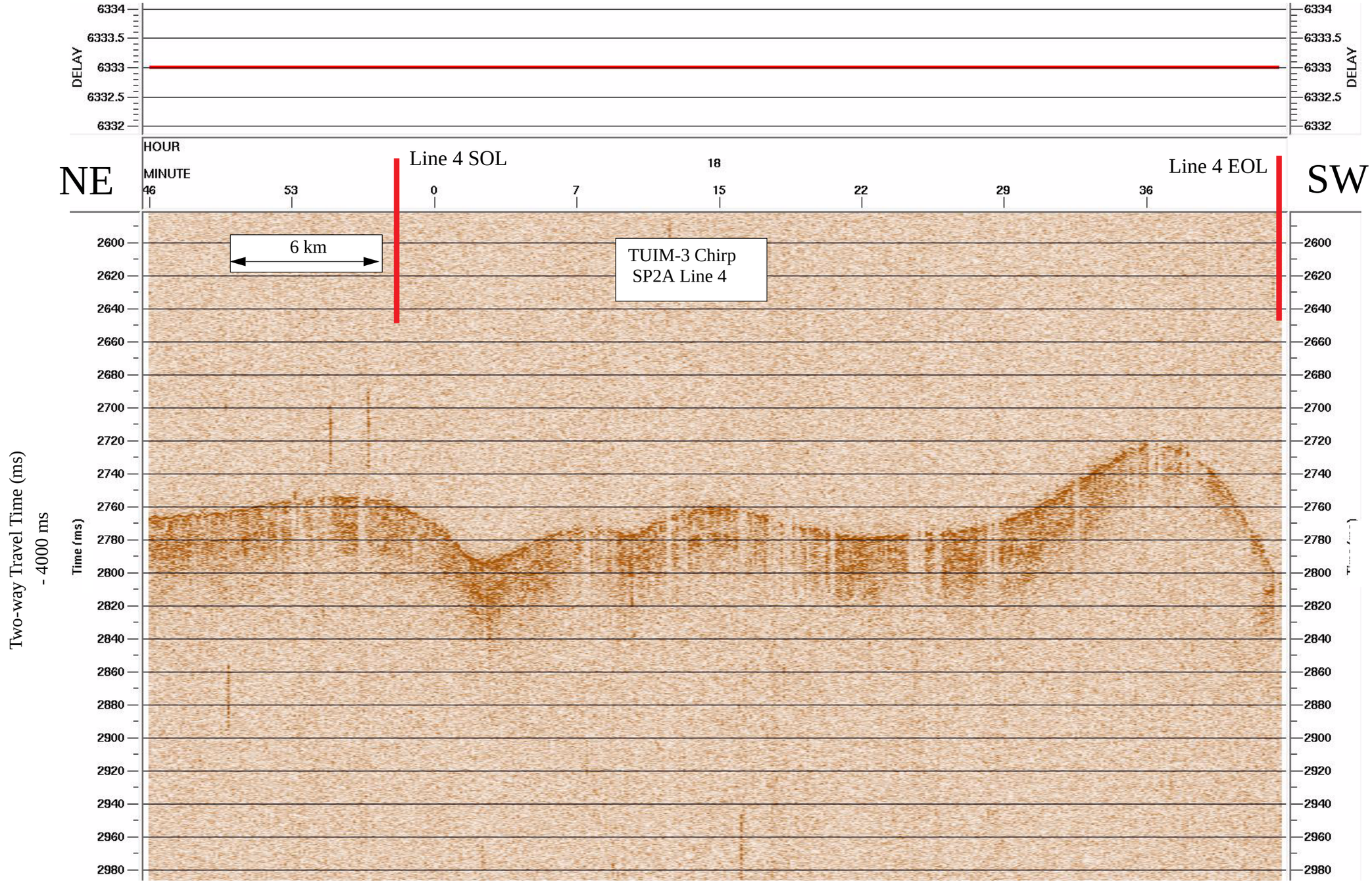


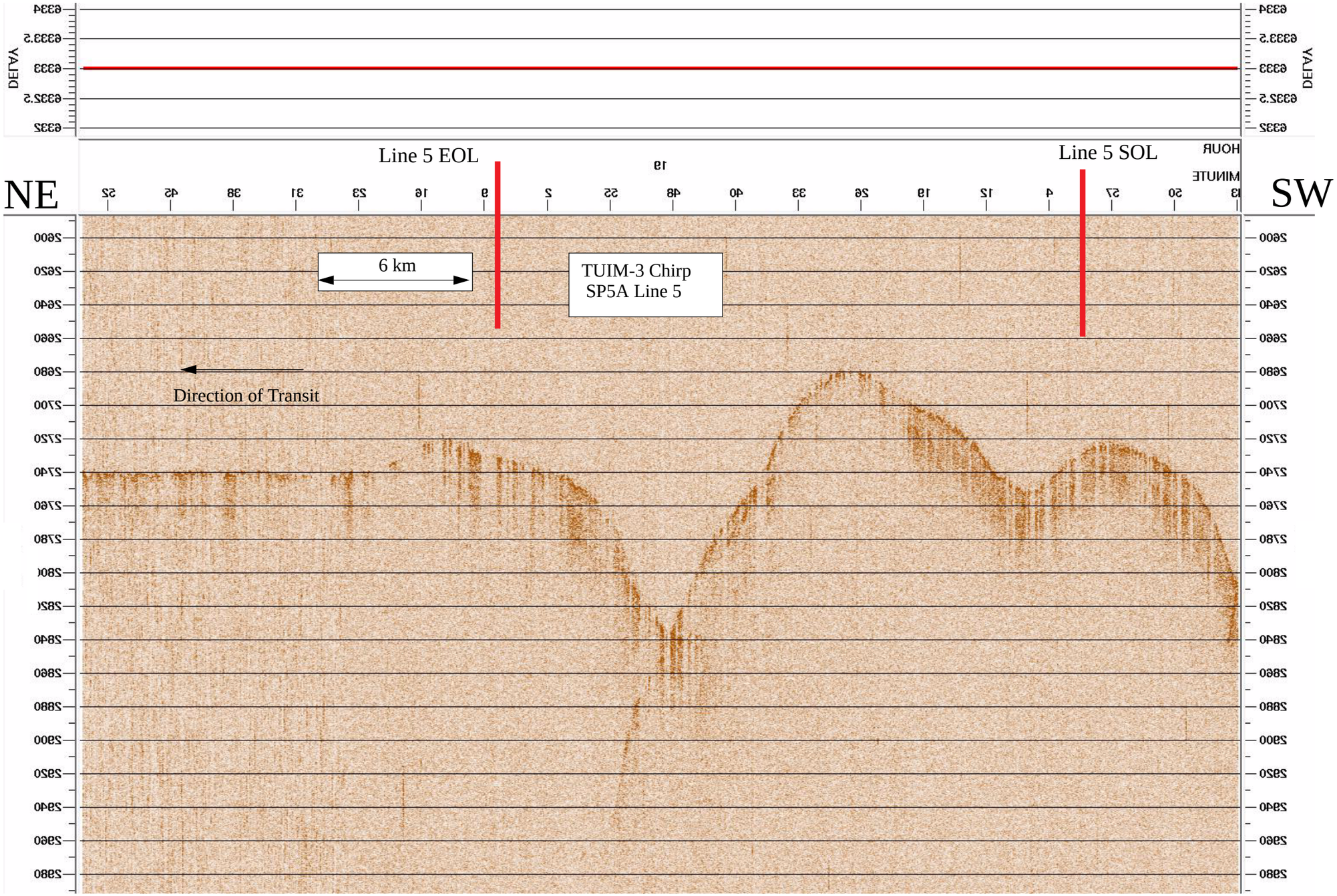

DELAY
6600
6500
6400
Line 2 EOL
NW
Cross Lines 2&6
Line 2 SOL
SE
HOUR
MINUTE
Direction of Transit
TUIM-3 Chirp
SP2A Line 2
6 km
Two-way Travel Time (ms)
- 4000 ms


DELAY
6600
6500
6400
SW
NE
HOUR
MINUTE
17
11
19
26
34
41
48
55
3
10
17
24
31
39
Line 3 SOL
Cross Lines 1 & 3
Line 3 EOL
6 km
TUIM-3 Chirp
SP2A Line 3
2600
2620
2640
2660
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
Two-way Travel Time (ms)
- 4000 ms

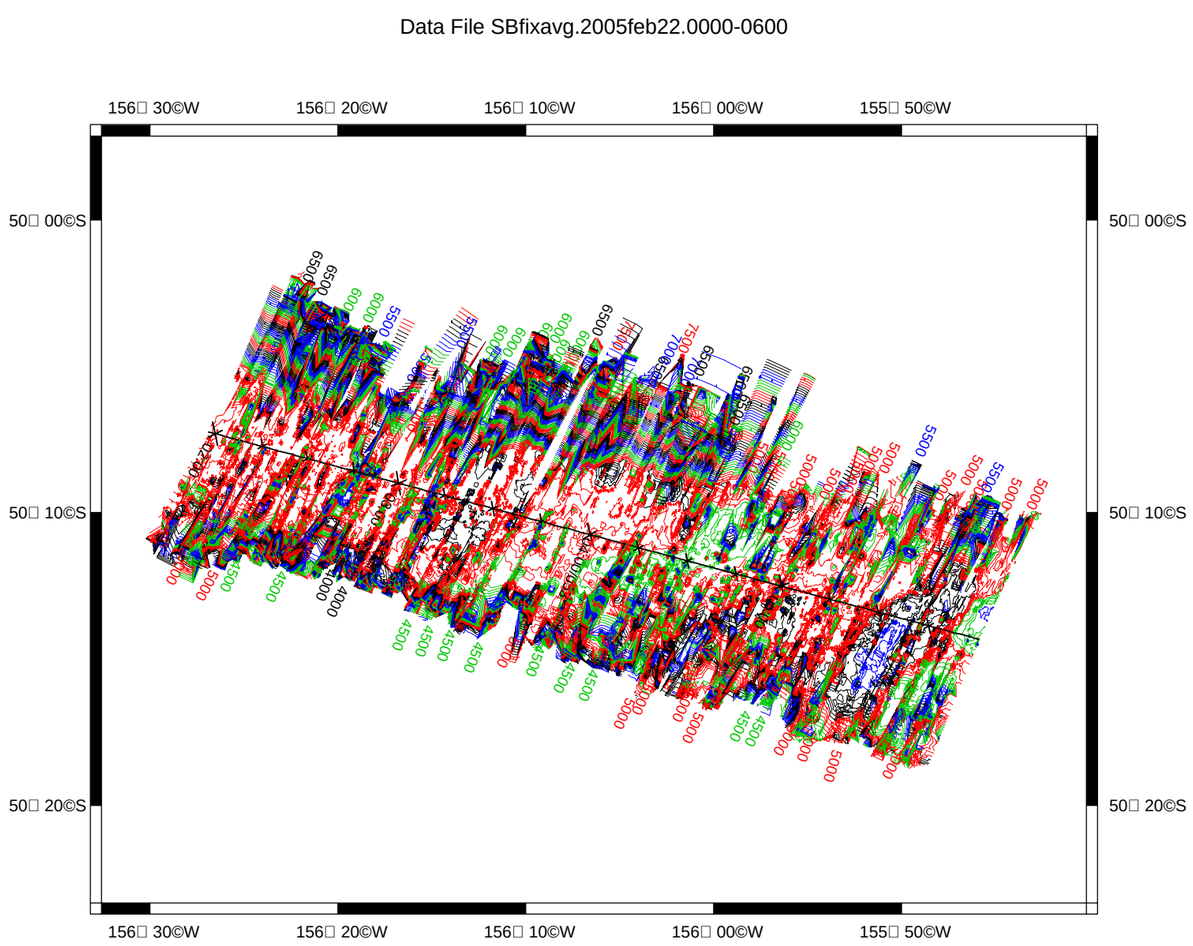
Data File SBfixavg.2005feb21.1800-2400

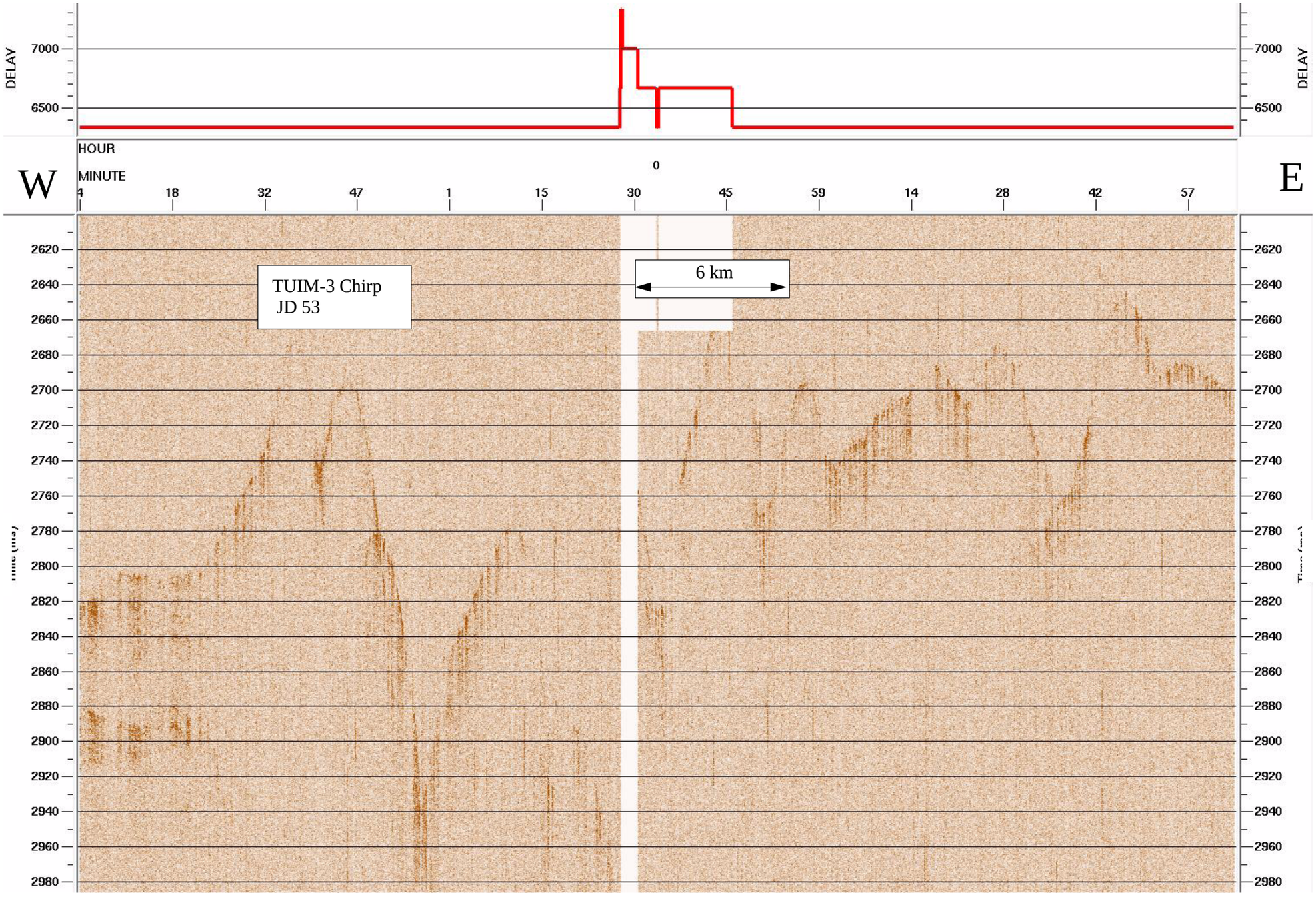


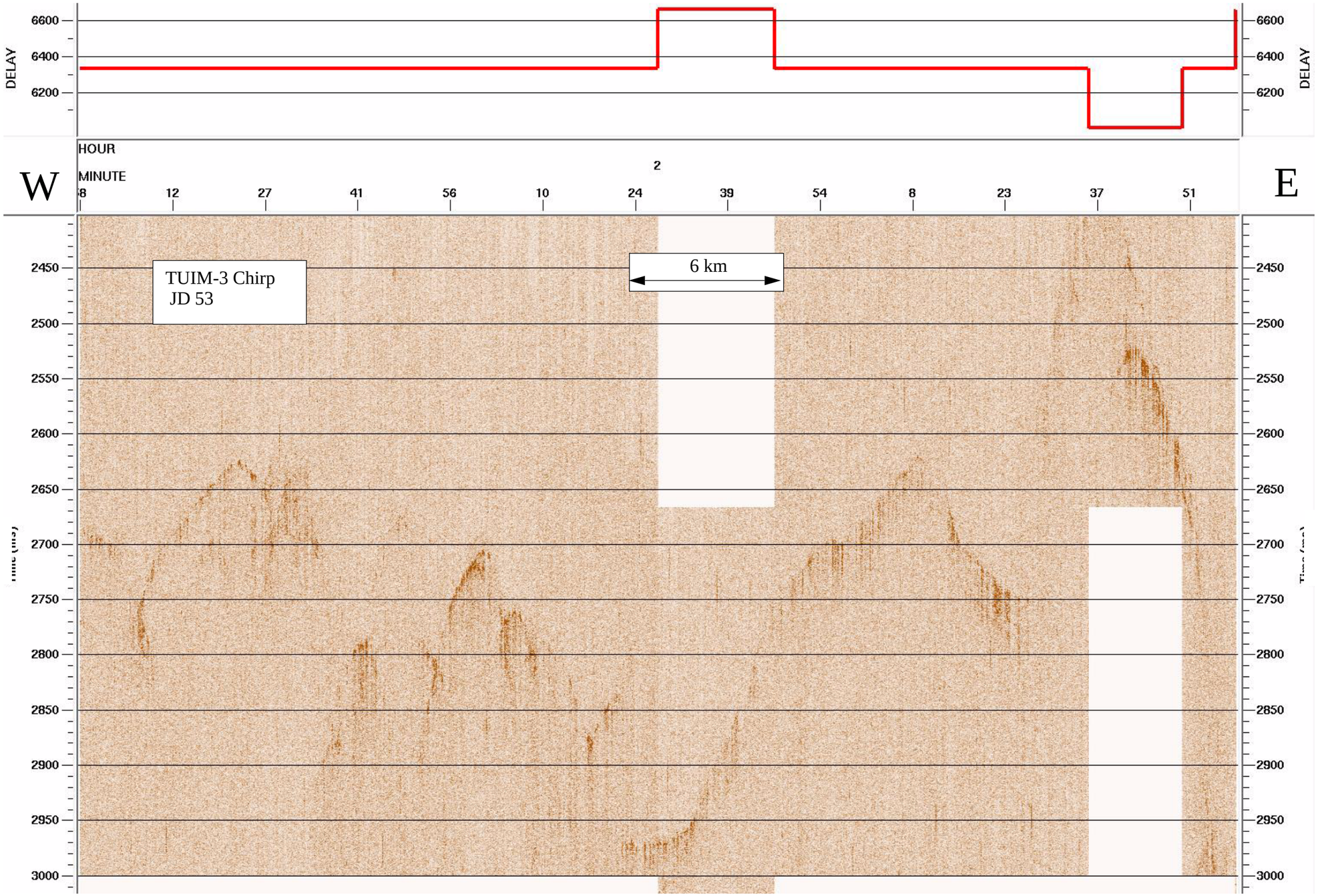

DELAY
6334
6333.5
6333
6332.5
6332
HOUR
MINUTE
46
53
0
7
18
15
22
29
36
NE
SW
Line 4 SOL
Line 4 EOL
6 km
TUIM-3 Chirp
SP2A Line 4
Time (ms)
2600
2620
2640
2660
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
Two-way Travel Time (ms)
- 4000 ms

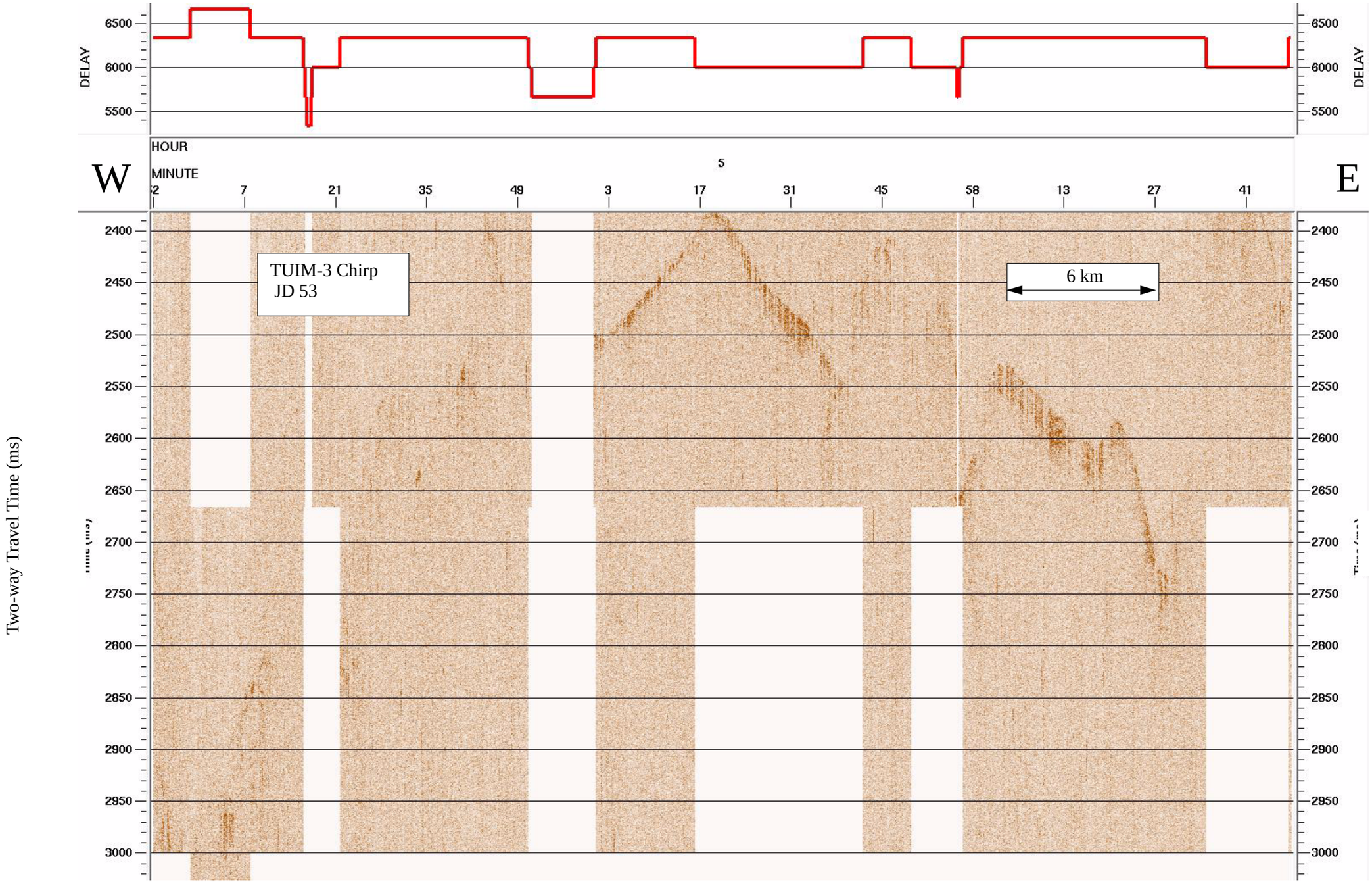

Line 5 EOL
Line 5 SOL
NE
SW
6 km
TUIM-3 Chirp
SP5A Line 5
Direction of Transit
Two-way Travel Time (ms)
- 4000 ms

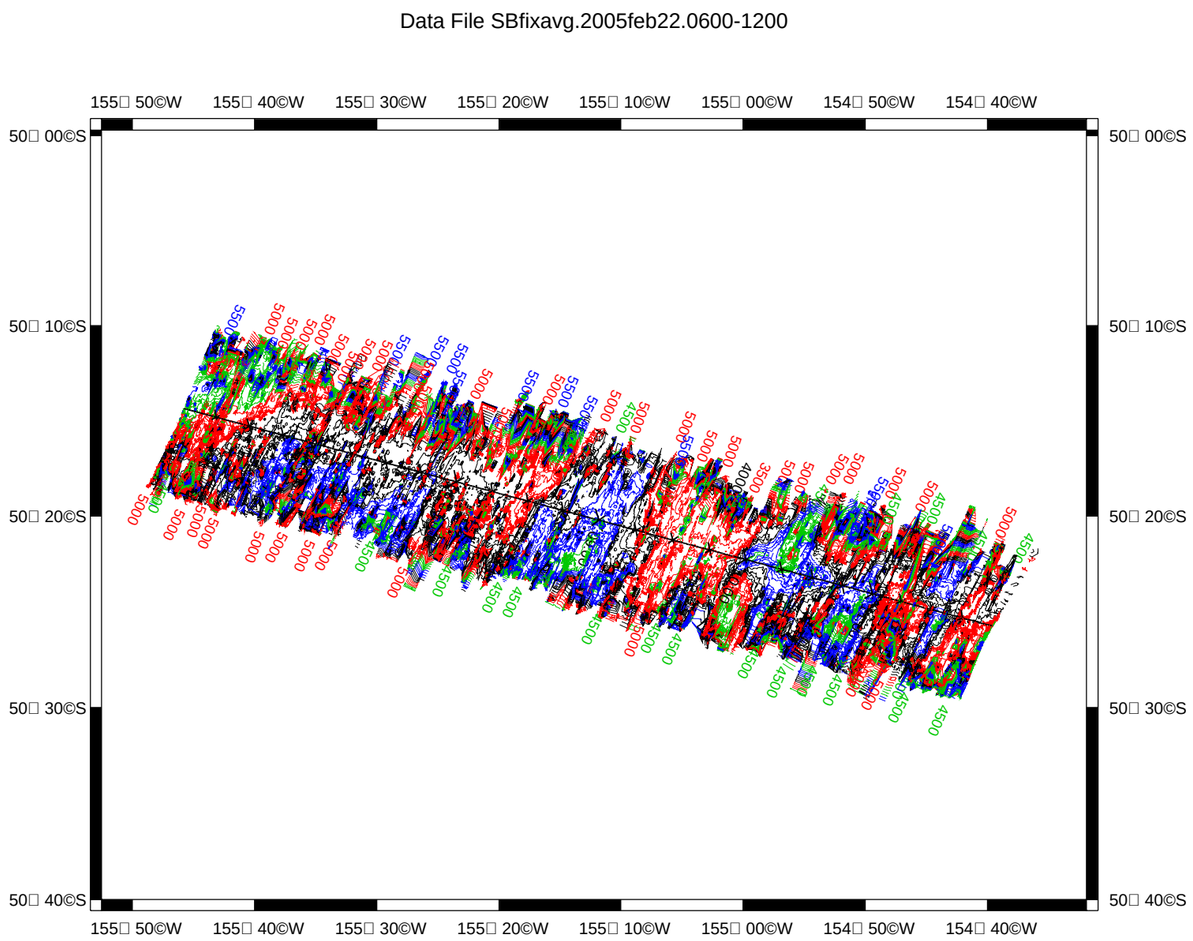
Julian Day 53
22 February 2005
Knudsen Chirp Data

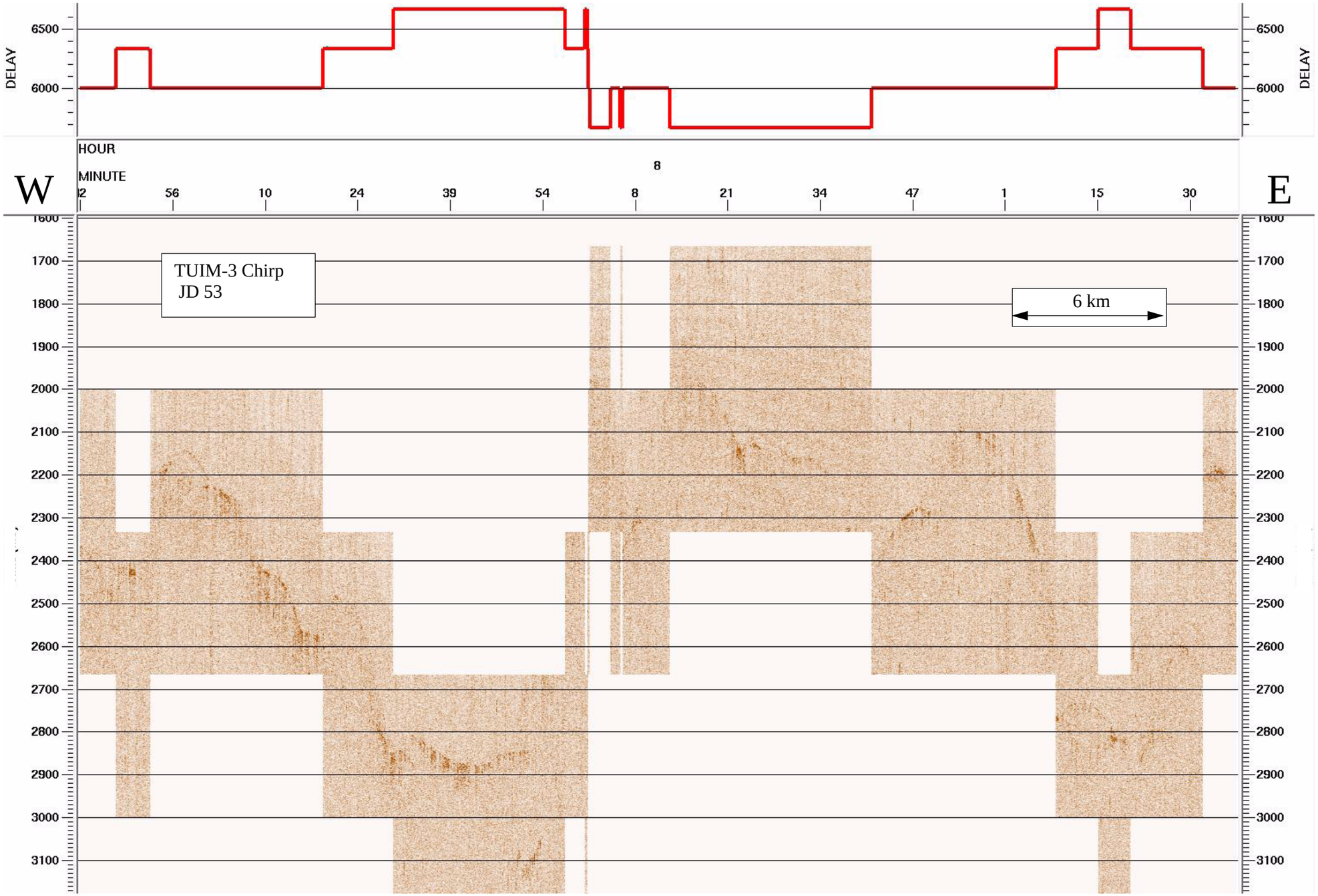

Data File SBfixavg.2005feb22.0000-0600
156□ 30©W
156□ 20©W
156□ 10©W
156□ 00©W
155□ 50©W
50□ 00©S
50□ 10©S
50□ 20©S

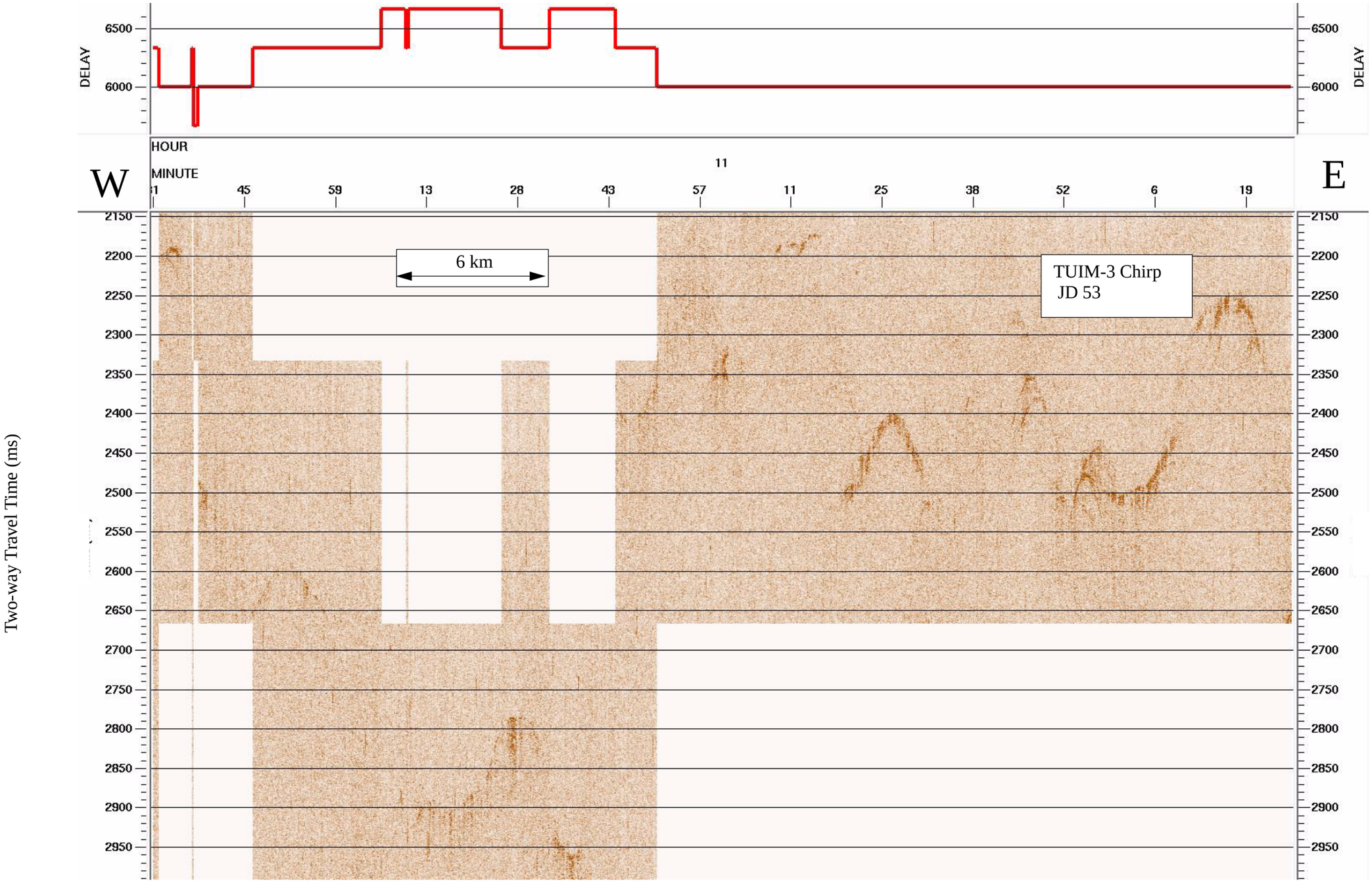

DELAY
7000
6500
W
E
HOUR
MINUTE
0
4
18
32
47
1
15
30
45
59
14
28
42
57
TUIM-3 Chirp
JD 53
6 km
2620
2640
2660
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
Two-way Travel Time (ms)


DELAY
6600
6400
6200
W
E
HOUR
MINUTE
2
8
12
27
41
56
10
24
39
54
8
23
37
51
TUIM-3 Chirp
JD 53
6 km
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
Two-way Travel Time (ms)

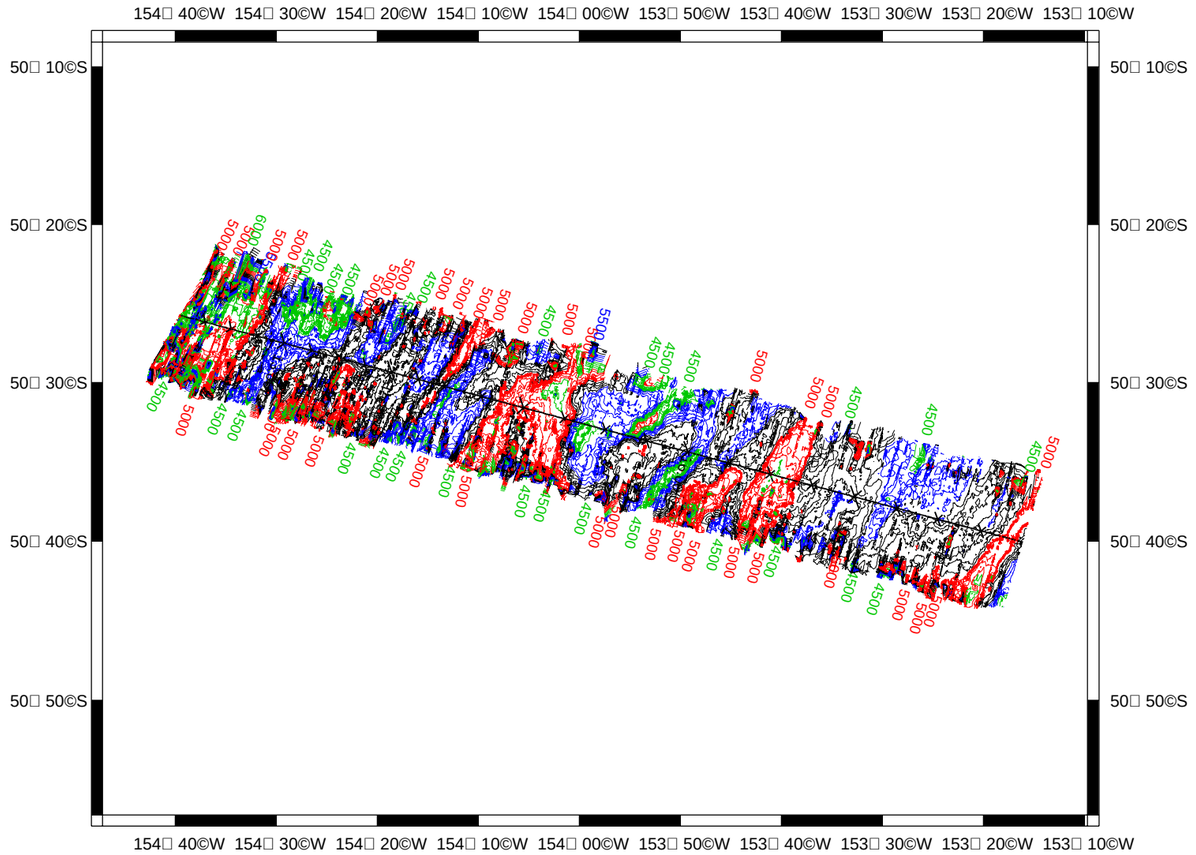

DELAY
6500
6000
5500
W
E
HOUR
MINUTE
5
2
7
21
35
49
3
17
31
45
58
13
27
41
TUIM-3 Chirp
JD 53
6 km
Two-way Travel Time (ms)
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000

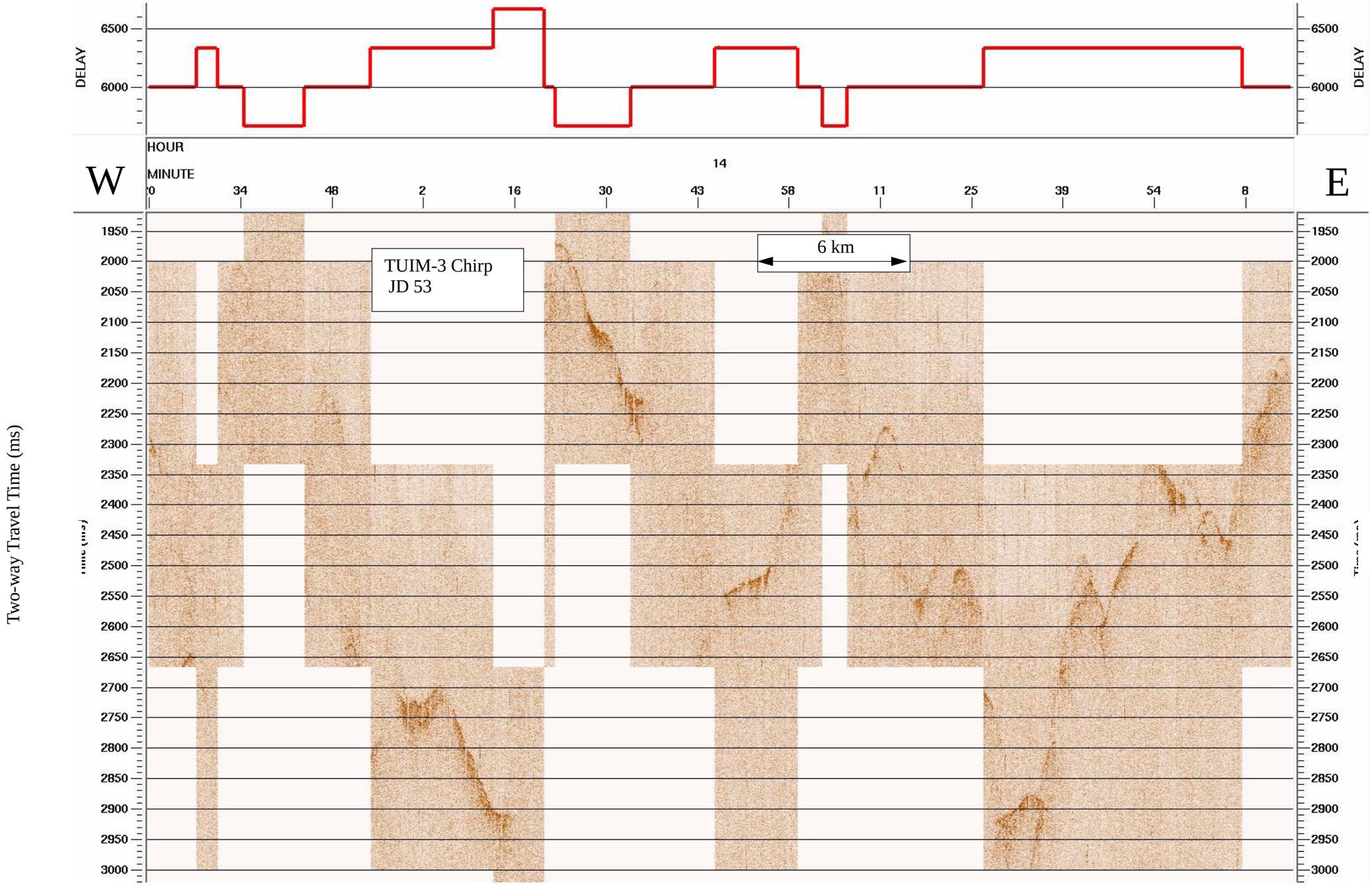

Data File SBfixavg.2005feb22.0600-1200
155□ 50©W
155□ 40©W
155□ 30©W
155□ 20©W
155□ 10©W
155□ 00©W
154□ 50©W
154□ 40©W
50□ 00©S
50□ 10©S
50□ 20©S
50□ 30©S
50□ 40©S

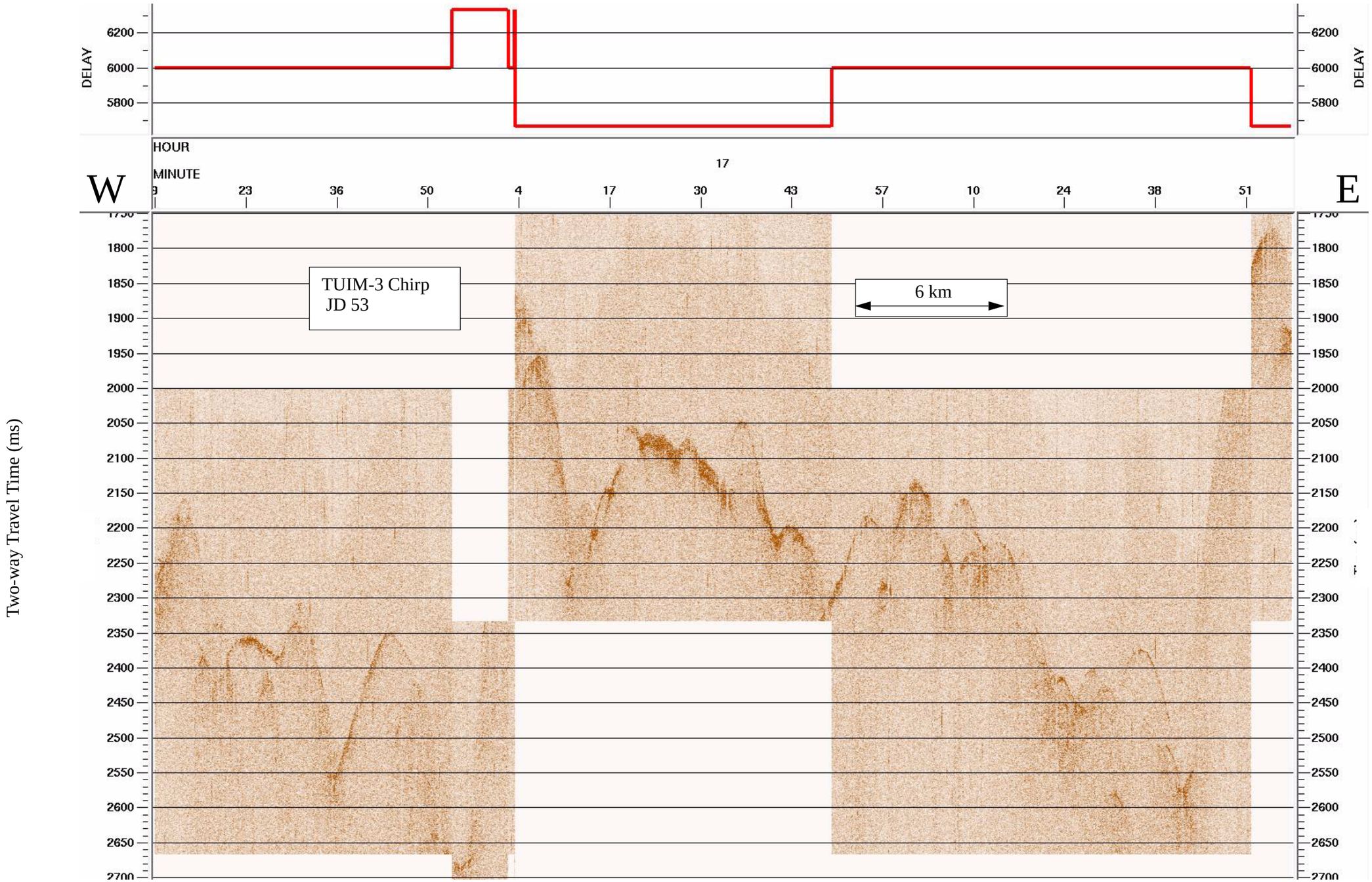

DELAY
6500
6000
HOUR
8
MINUTE
12
56
10
24
39
54
8
21
34
47
1
15
30
W
E
TUIM-3 Chirp
JD 53
6 km
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
Two-way Travel Time (ms)


DELAY
6500
6000
W
E
HOUR
MINUTE
11
41
45
59
13
28
43
57
11
25
38
52
6
19
6 km
TUIM-3 Chirp
JD 53
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Two-way Travel Time (ms)

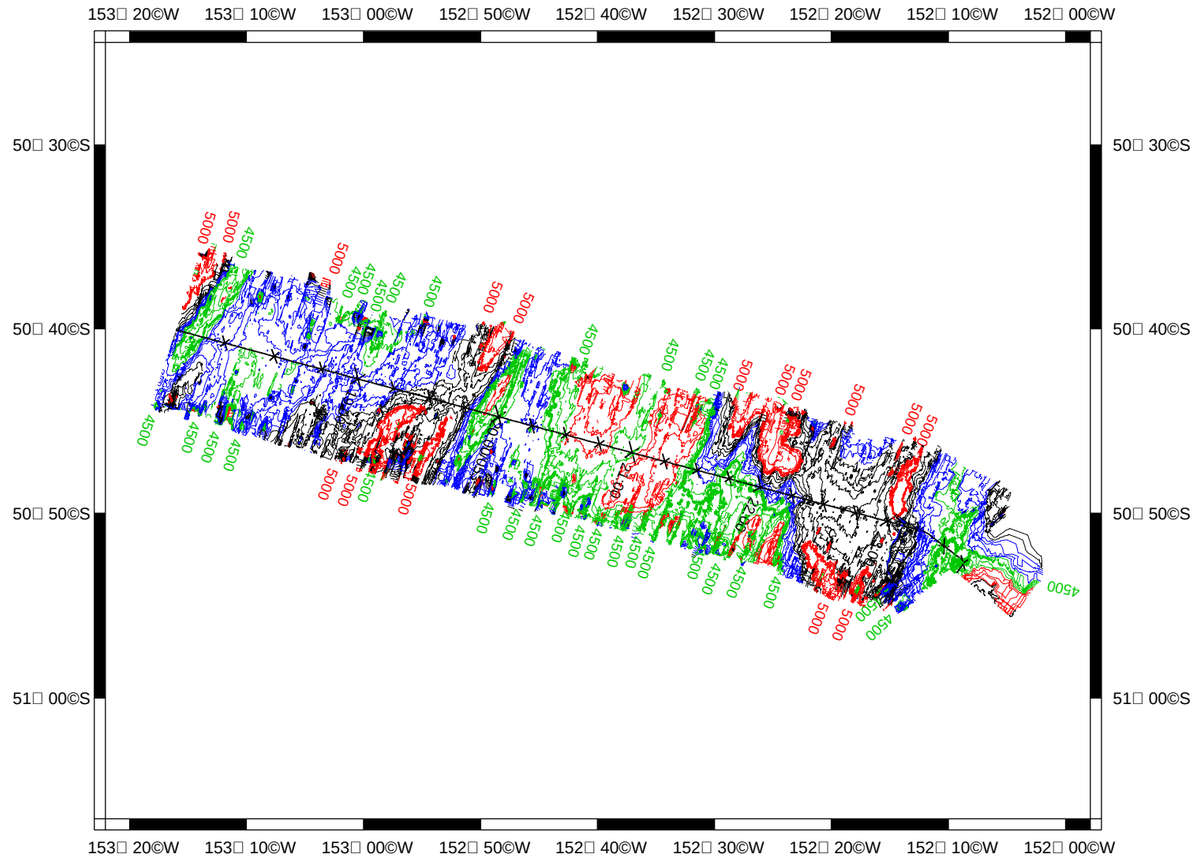
Data File SBfixavg.2005feb22.1200-1800

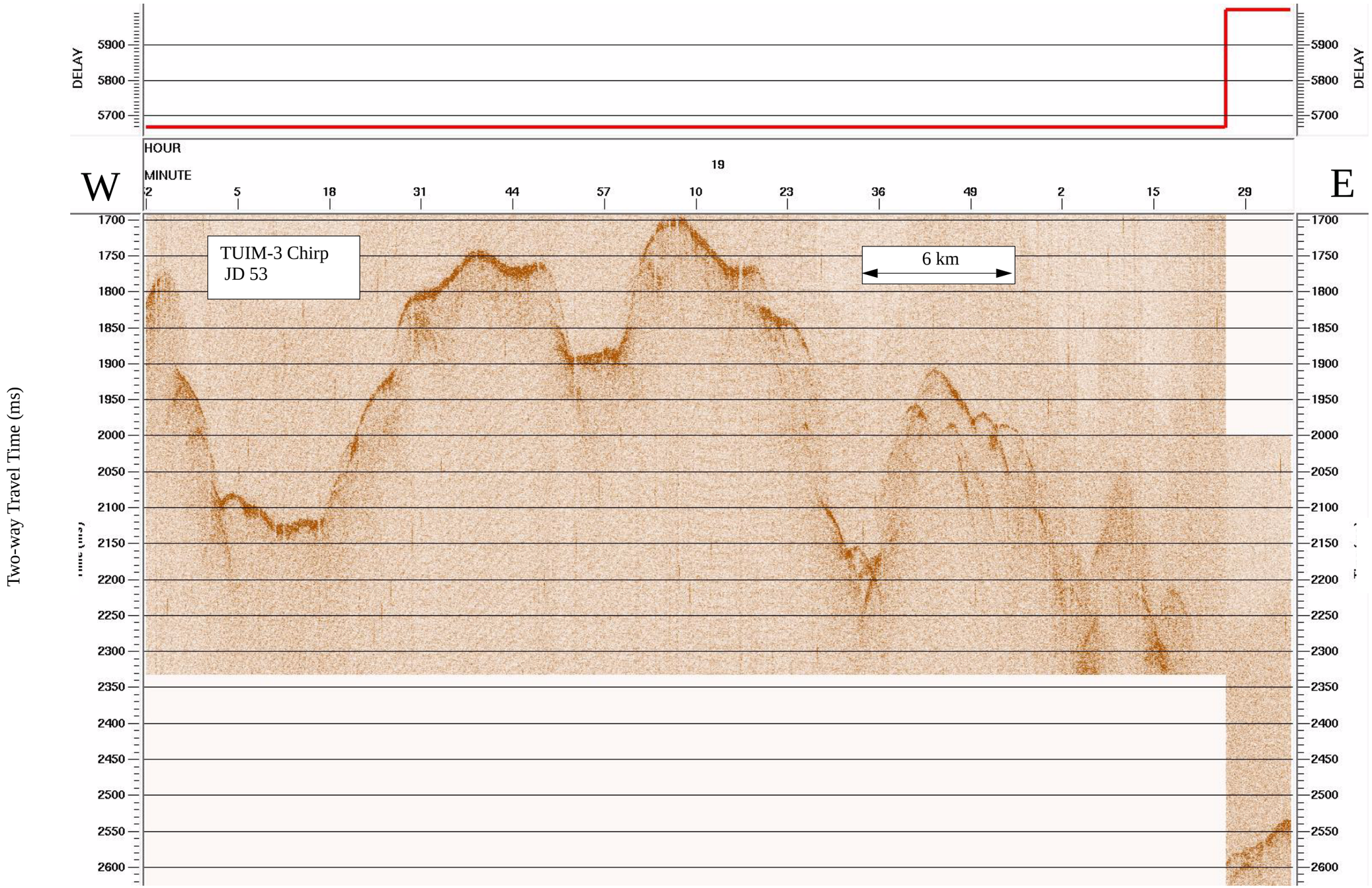


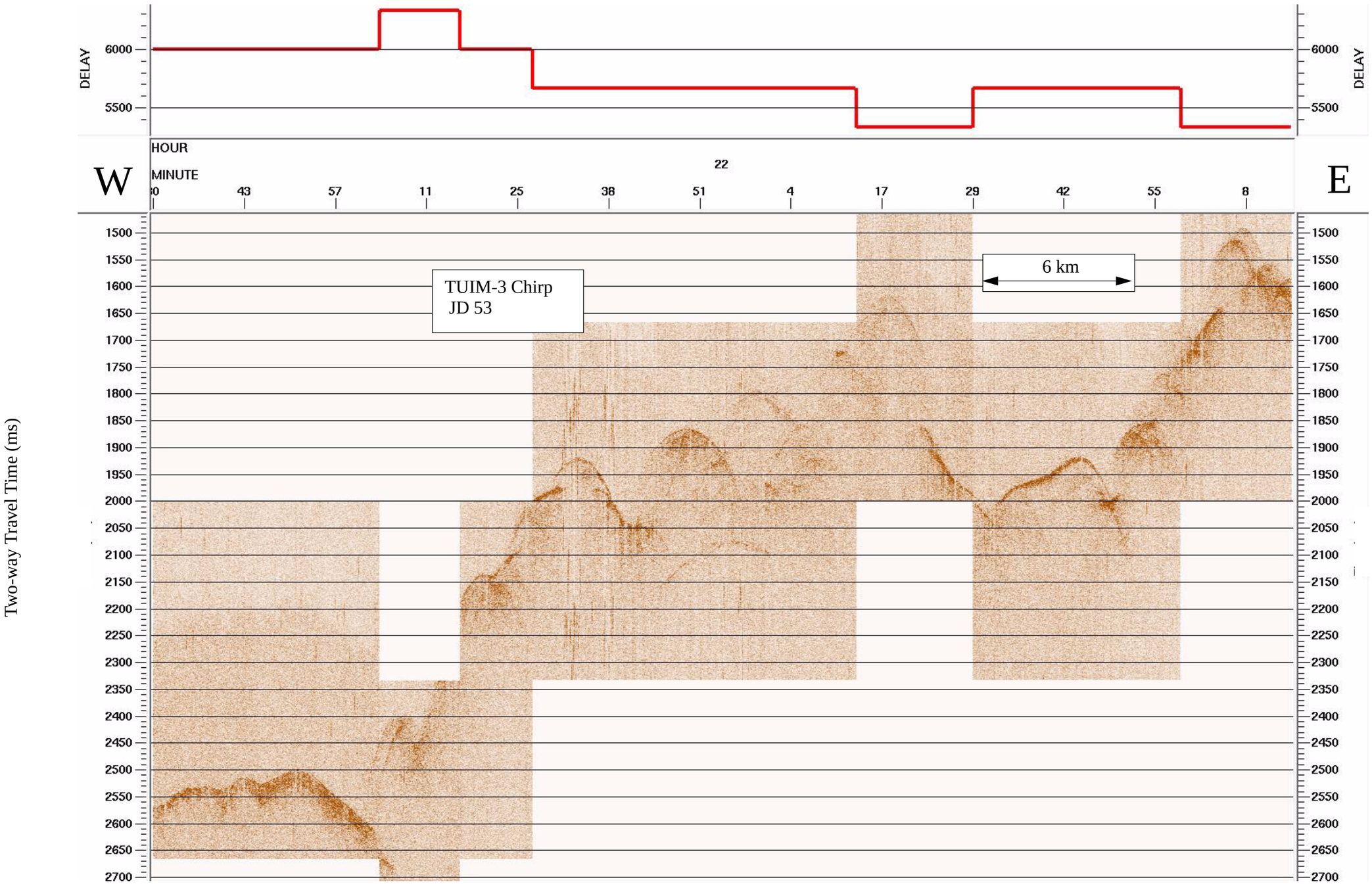

DELAY
6500
6000
W
HOUR
MINUTE
14
0
34
48
2
16
30
43
58
11
25
39
54
8
E
TUIM-3 Chirp
JD 53
6 km
Two-way Travel Time (ms)
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000


DELAY
6200
6000
5800
HOUR
MINUTE
17
9
23
36
50
4
17
30
43
57
10
24
38
51
W
E
TUIM-3 Chirp
JD 53
6 km
Two-way Travel Time (ms)
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700

Data File SBfixavg.2005feb22.1800-2400

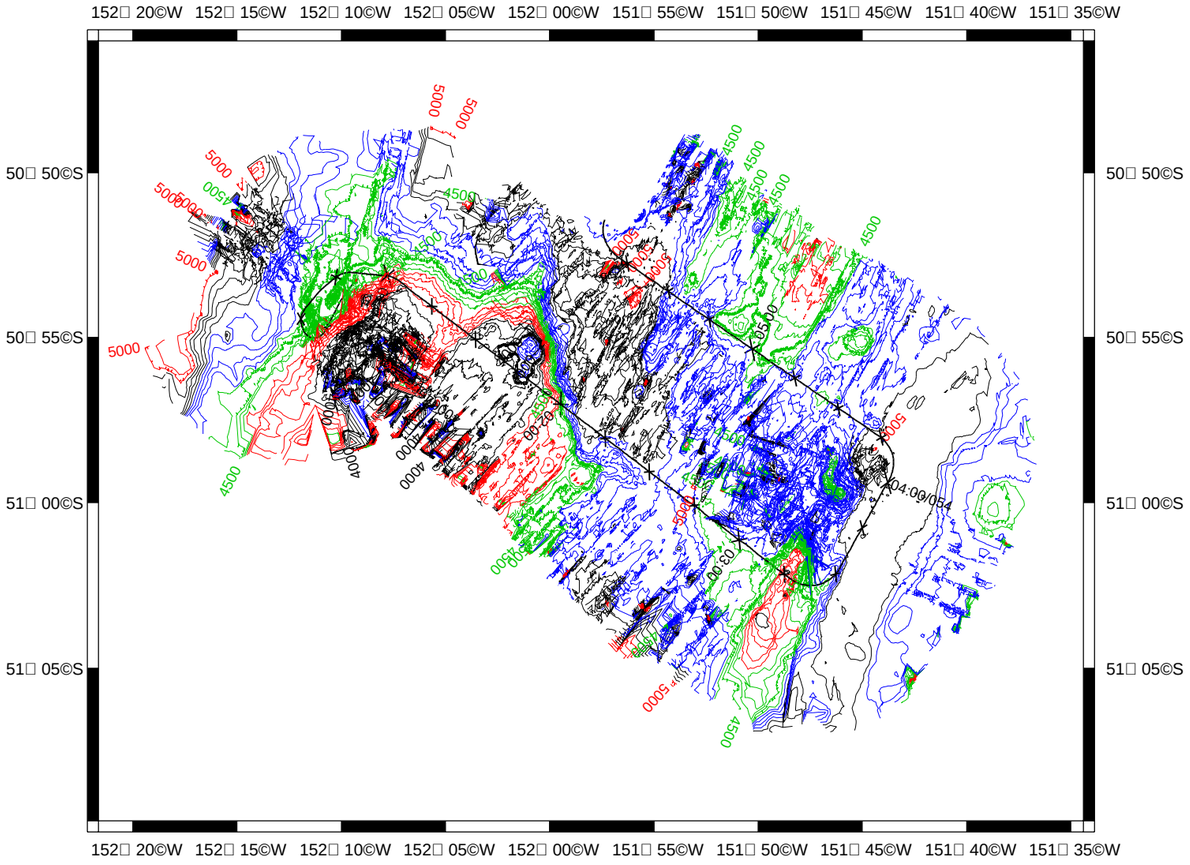


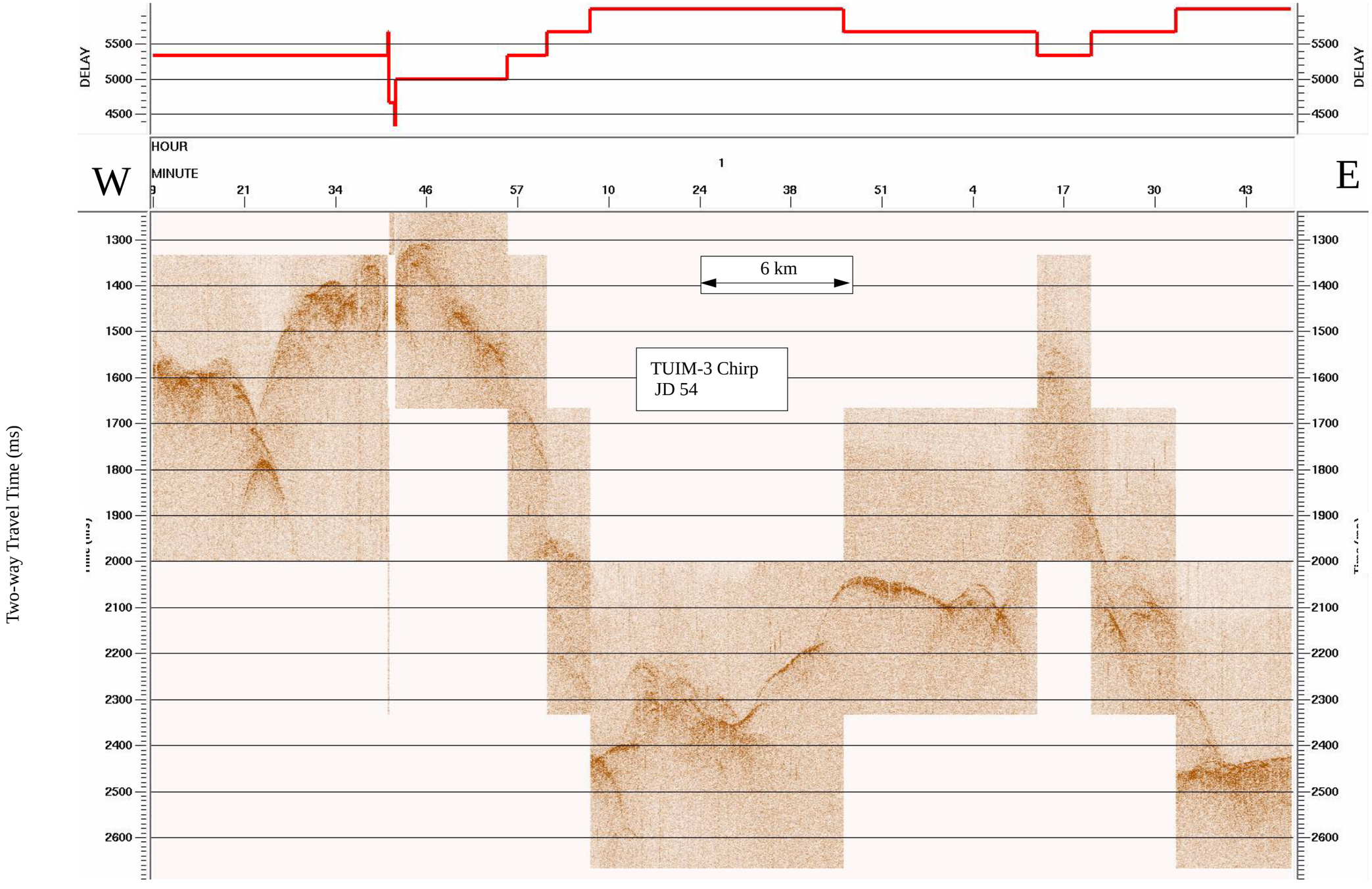

DELAY
5900
5800
5700
HOUR
19
MINUTE
2
5
18
31
44
57
10
23
36
49
2
15
29
W
E
TUIM-3 Chirp
JD 53
6 km
Two-way Travel Time (ms)
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600

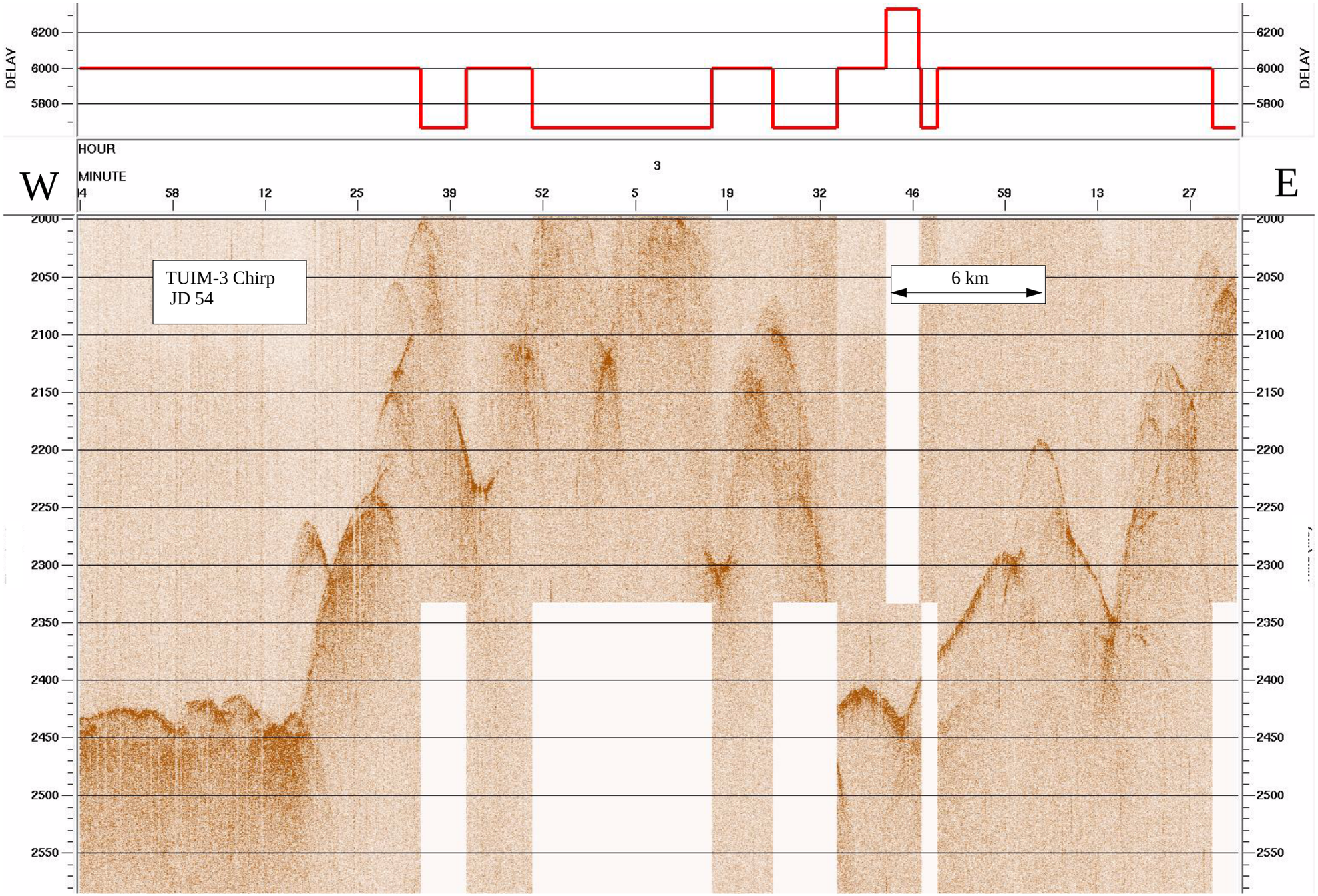

DELAY
6000
5500
W
E
HOUR
MINUTE
22
0
43
57
11
25
38
51
4
17
29
42
55
8
TUIM-3 Chirp
JD 53
6 km
Two-way Travel Time (ms)
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700

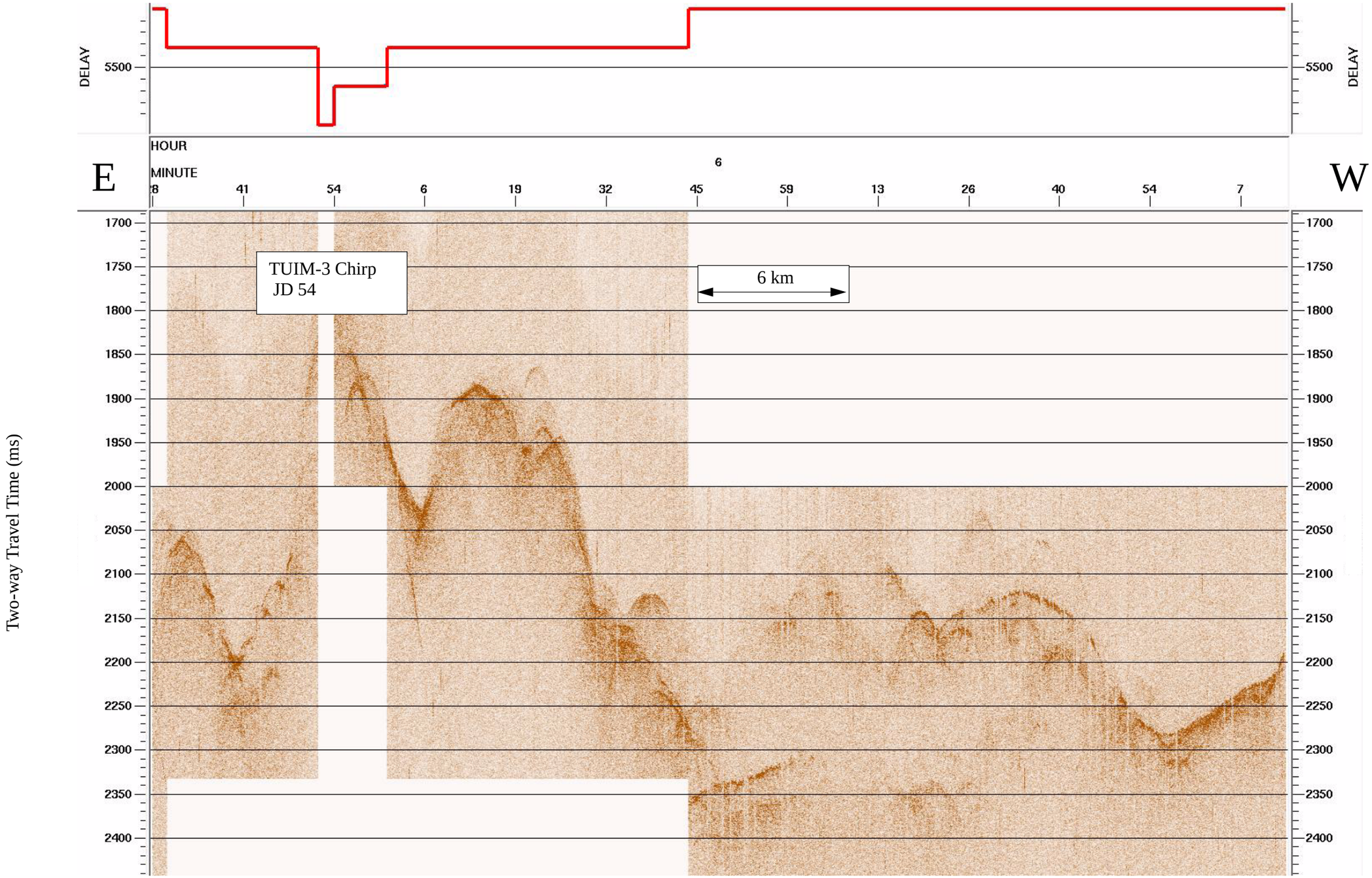
Julian Day 54
23 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb23.0000-0600

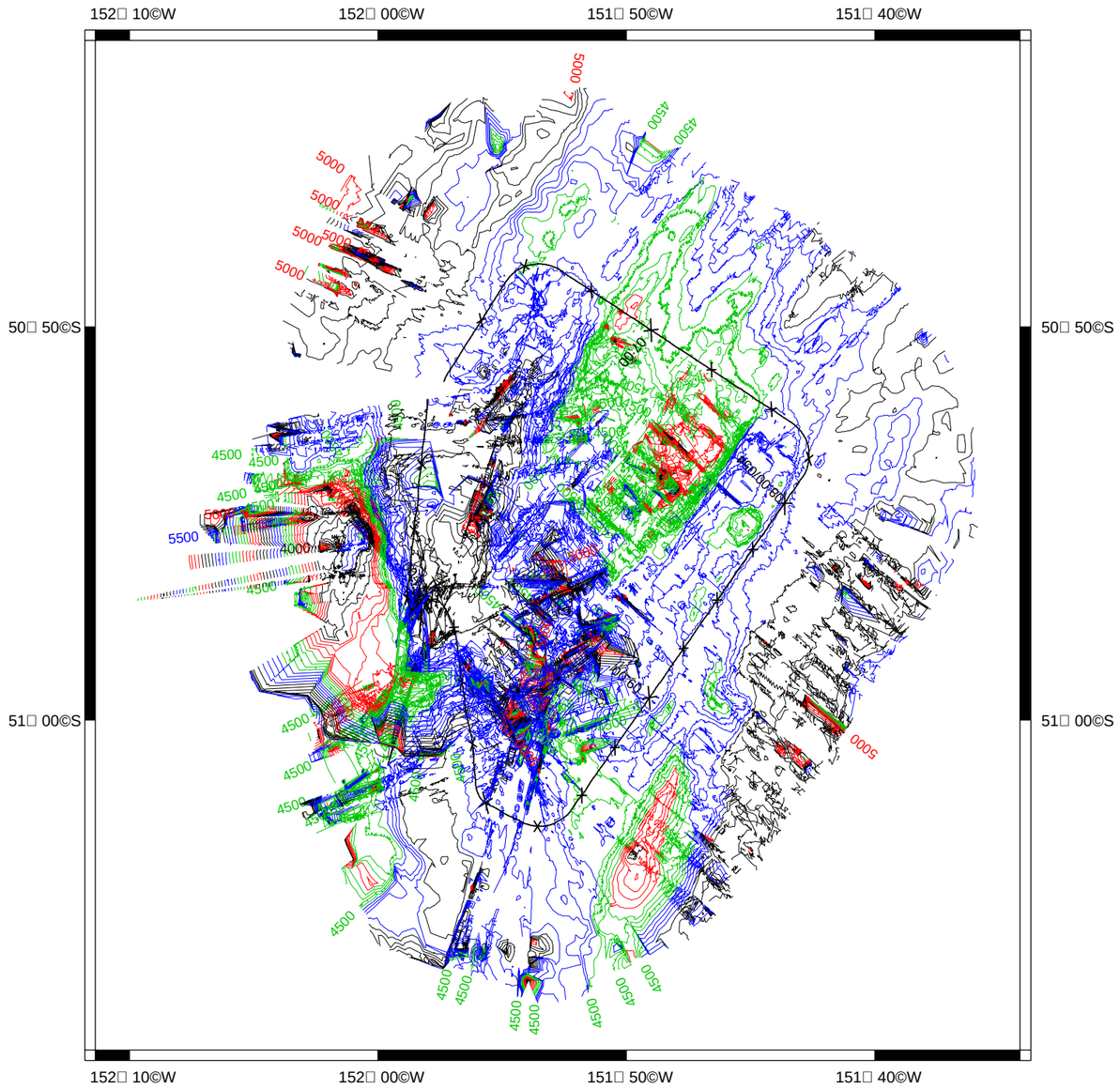


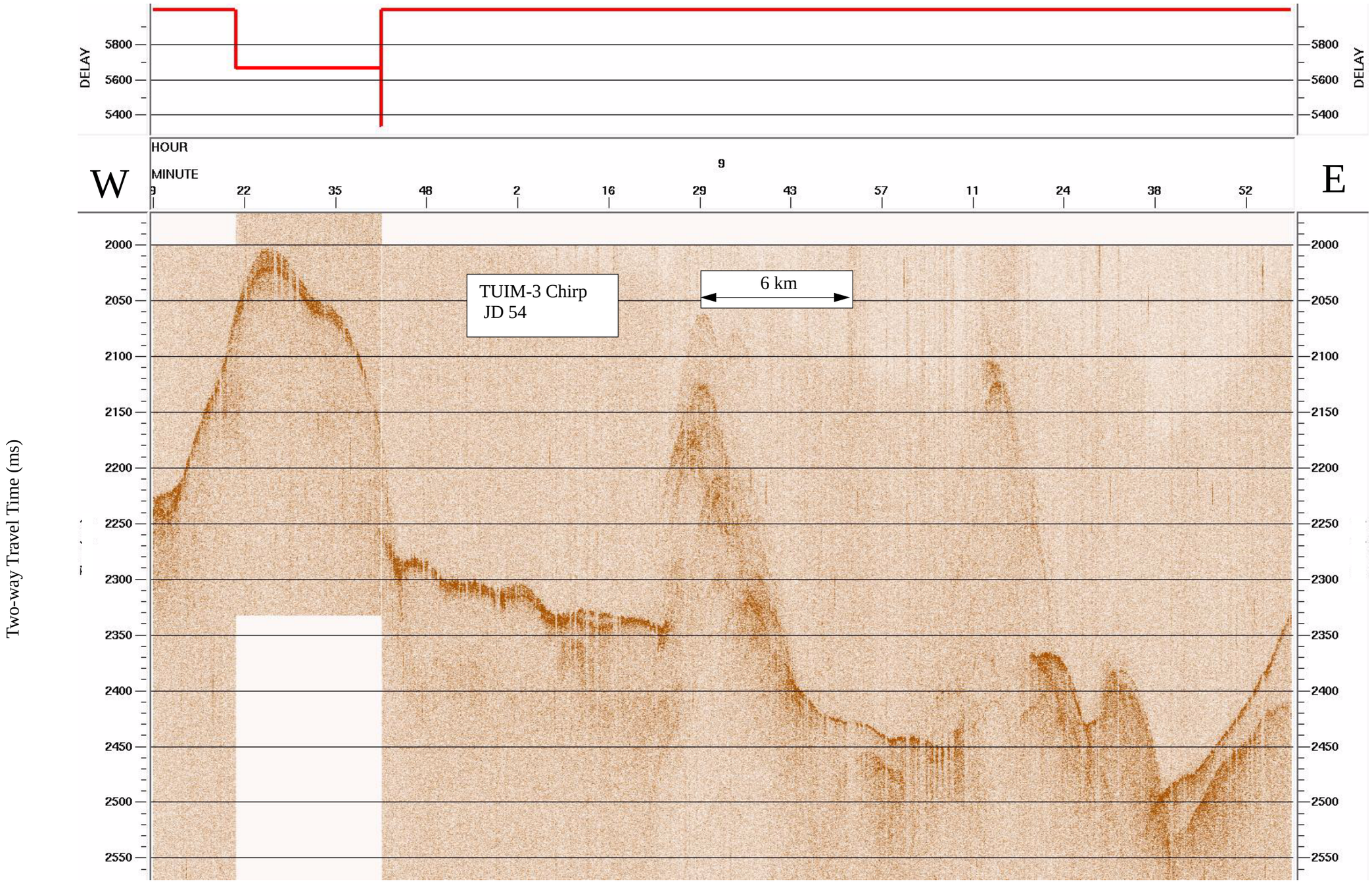

DELAY
5500
5000
4500
HOUR
MINUTE
1
9
21
34
46
57
10
24
38
51
4
17
30
43
W
E
6 km
TUIM-3 Chirp
JD 54
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
Two-way Travel Time (ms)

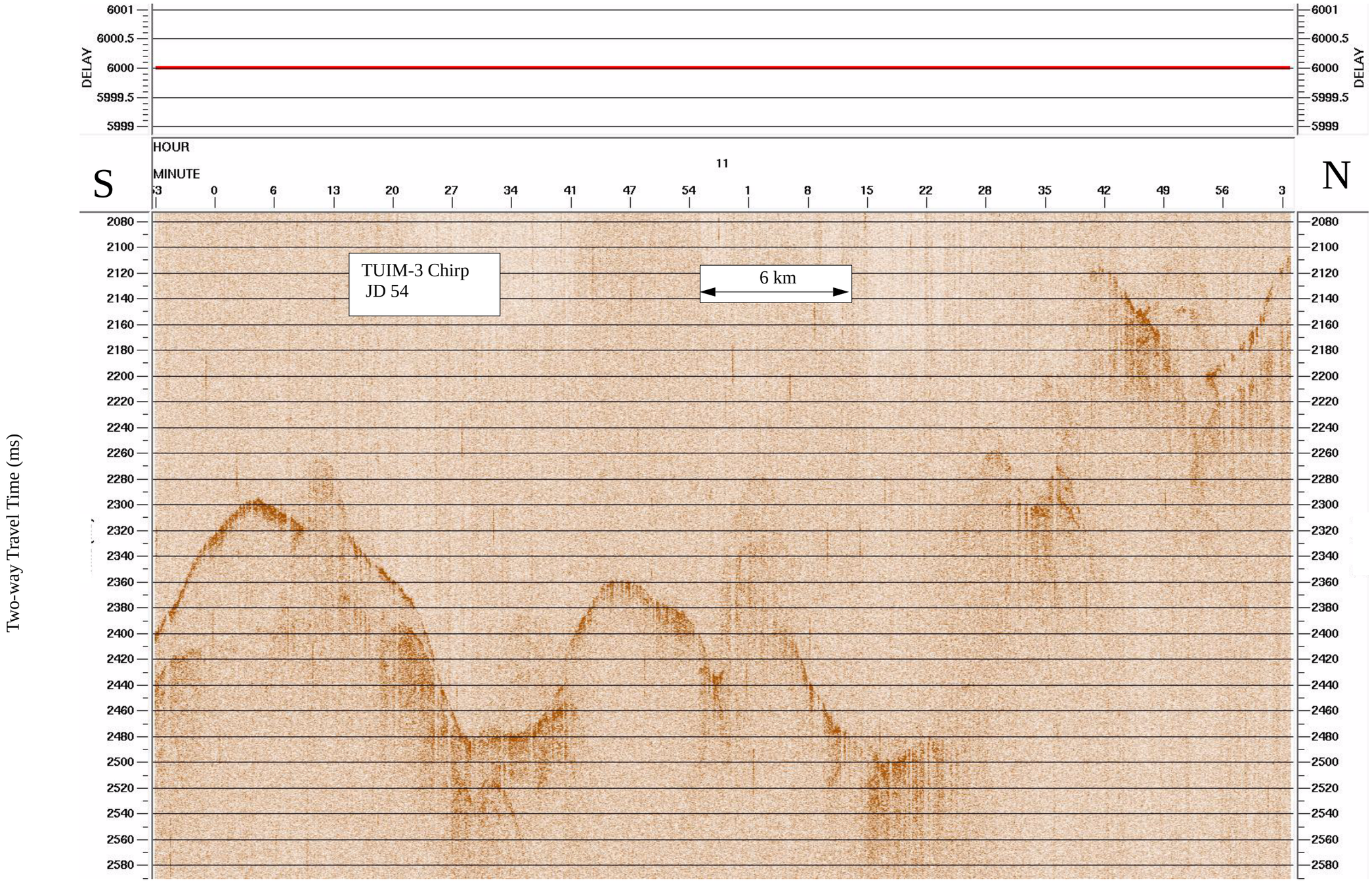

DELAY
6200
6000
5800
HOUR
3
MINUTE
14
58
12
25
39
52
5
19
32
46
59
13
27
W
E
TUIM-3 Chirp
JD 54
6 km
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
Two-way Travel Time (ms)


DELAY
5500
HOUR
MINUTE
E
W
6
8
41
54
6
19
32
45
59
13
26
40
54
7
TUIM-3 Chirp
JD 54
6 km
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
Two-way Travel Time (ms)

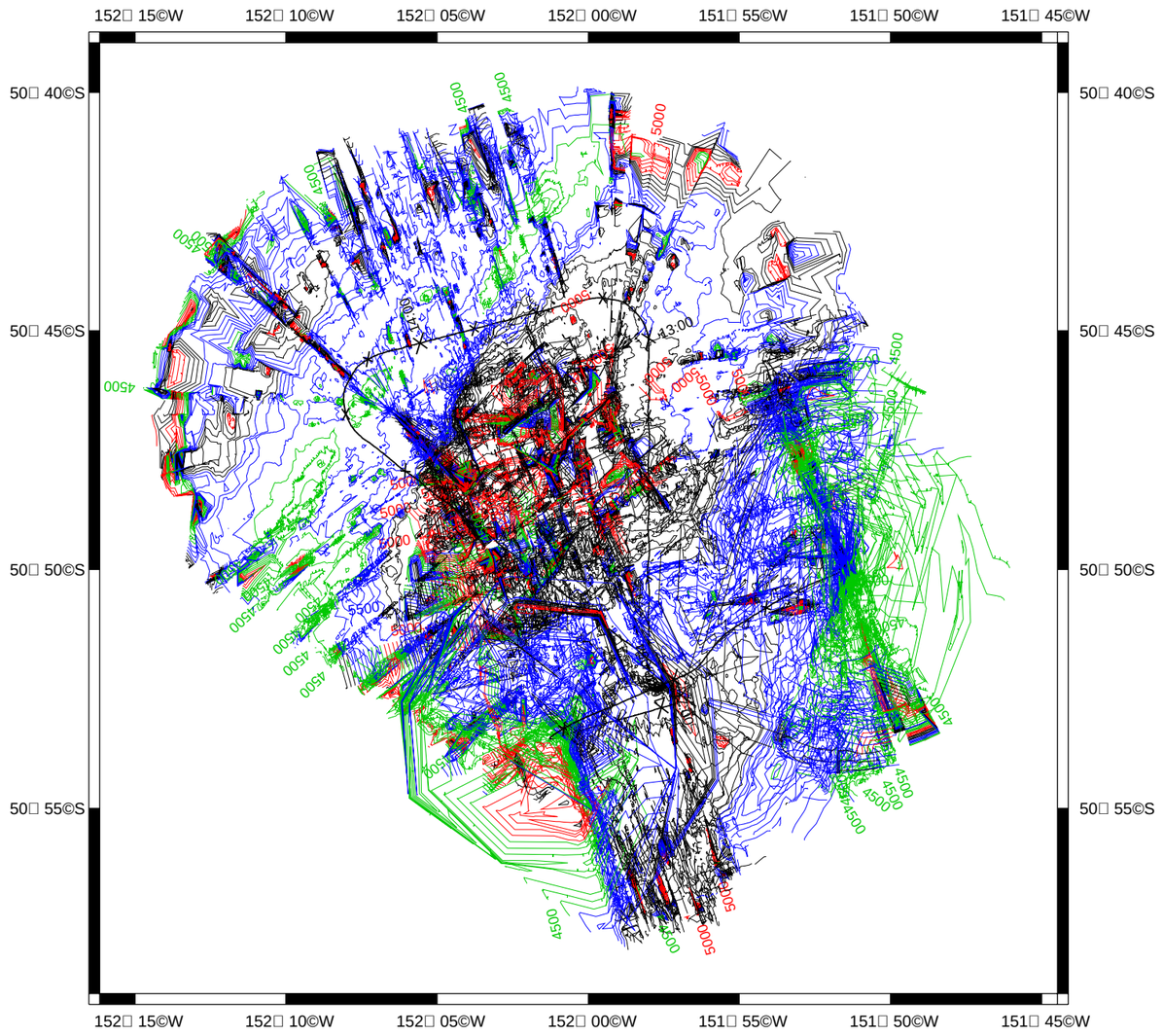
Data File SBfixavg.2005feb23.0600-1200

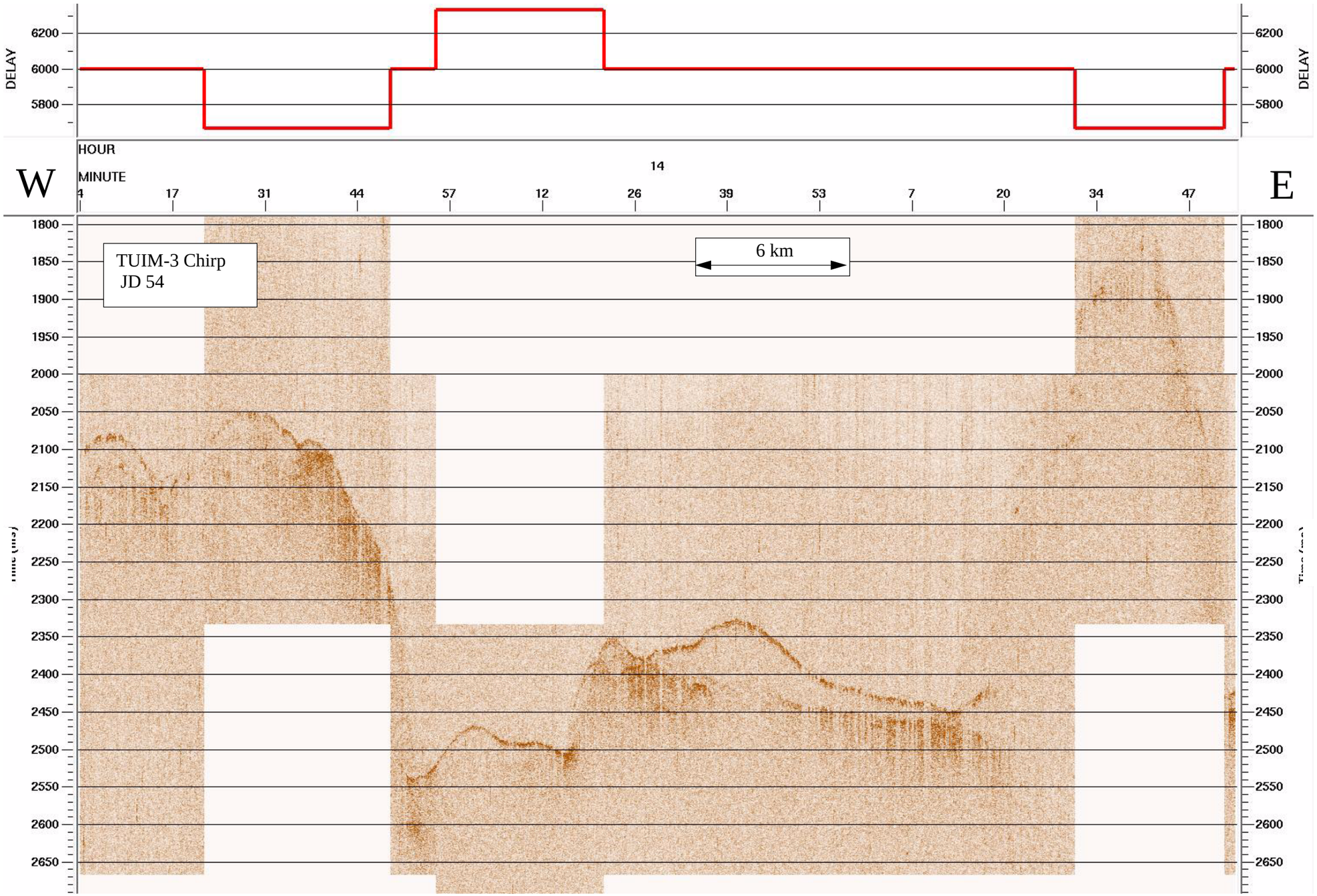


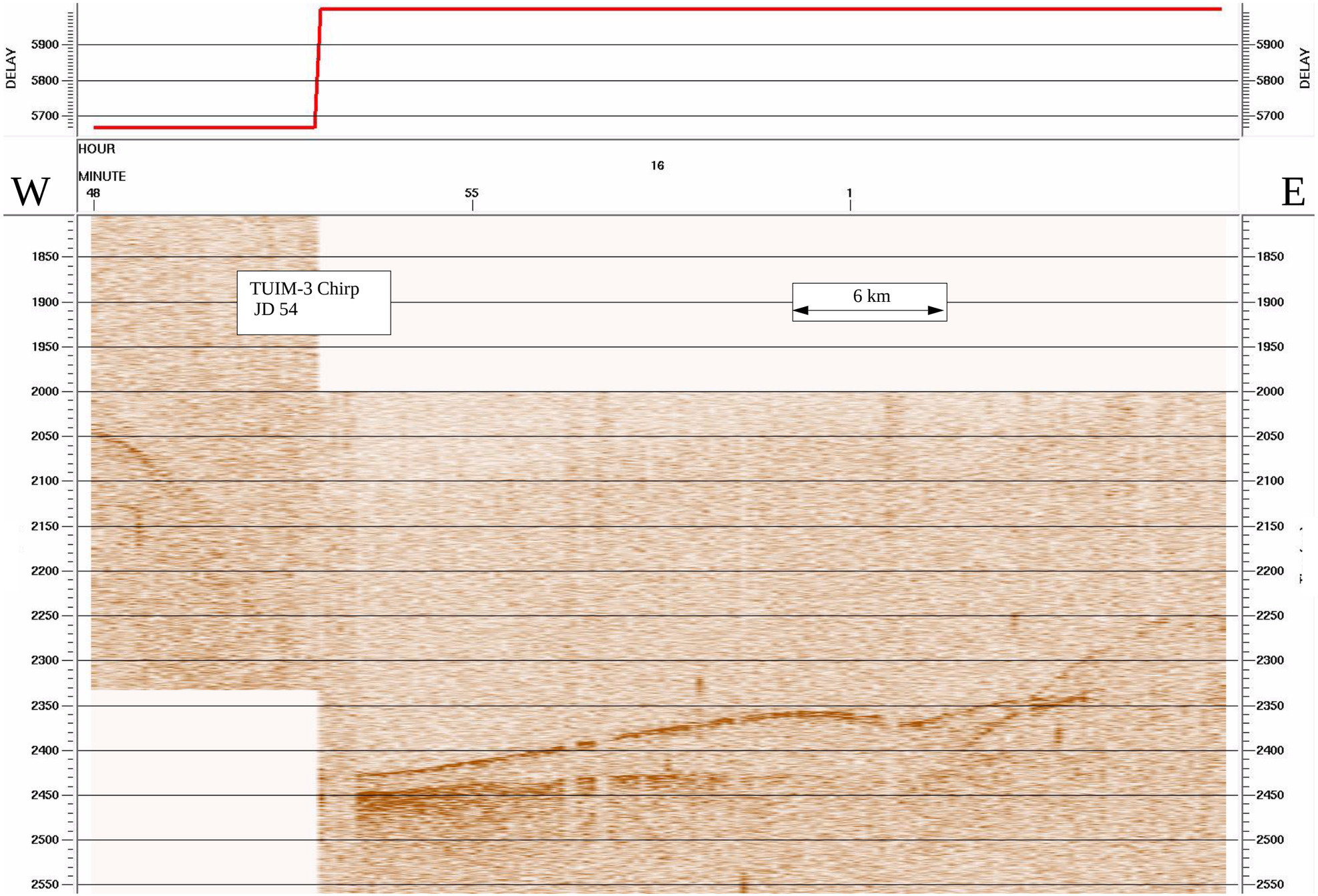

DELAY
5800
5600
5400
HOUR
MINUTE
9
W
E
22
35
48
2
16
29
43
57
11
24
38
52
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
TUIM-3 Chirp
JD 54
6 km
Two-way Travel Time (ms)


DELAY
6001
6000.5
6000
5999.5
5999
S
N
HOUR
MINUTE
11
53 0 6 13 20 27 34 41 47 54 1 8 15 22 28 35 42 49 56 3
TUIM-3 Chirp
JD 54
6 km
Two-way Travel Time (ms)
2080
2100
2120
2140
2160
2180
2200
2220
2240
2260
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580

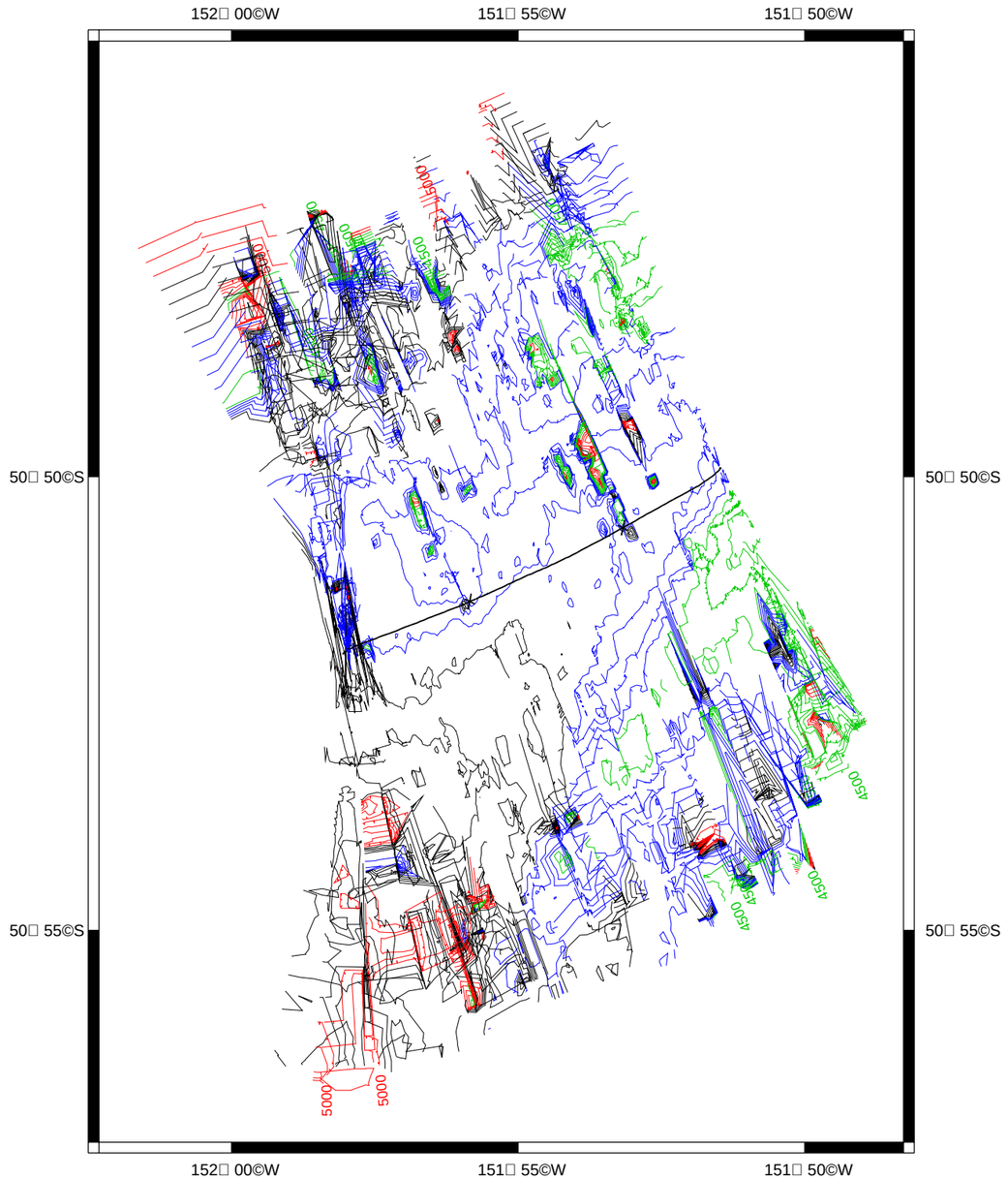
Data File SBfixavg.2005feb23.1200-1800




DELAY
6200
6000
5800
W
HOUR
MINUTE
14
4
17
31
44
57
12
26
39
53
7
20
34
47
E
TUIM-3 Chirp
JD 54
6 km
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
Two-way Travel Time (ms)

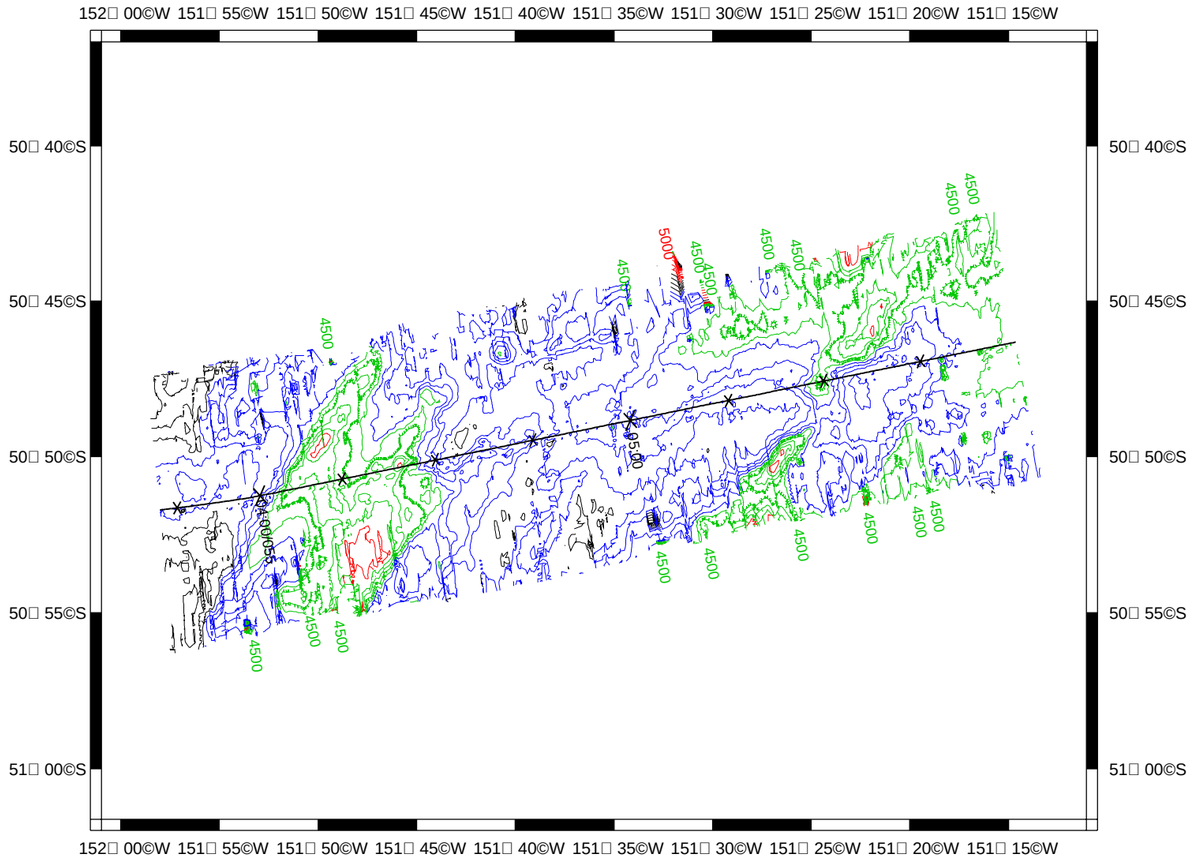

DELAY
5900
5800
5700
HOUR
16
MINUTE
48
55
1
W
E
TUIM-3 Chirp
JD 54
6 km
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
Two-way Travel Time (ms)

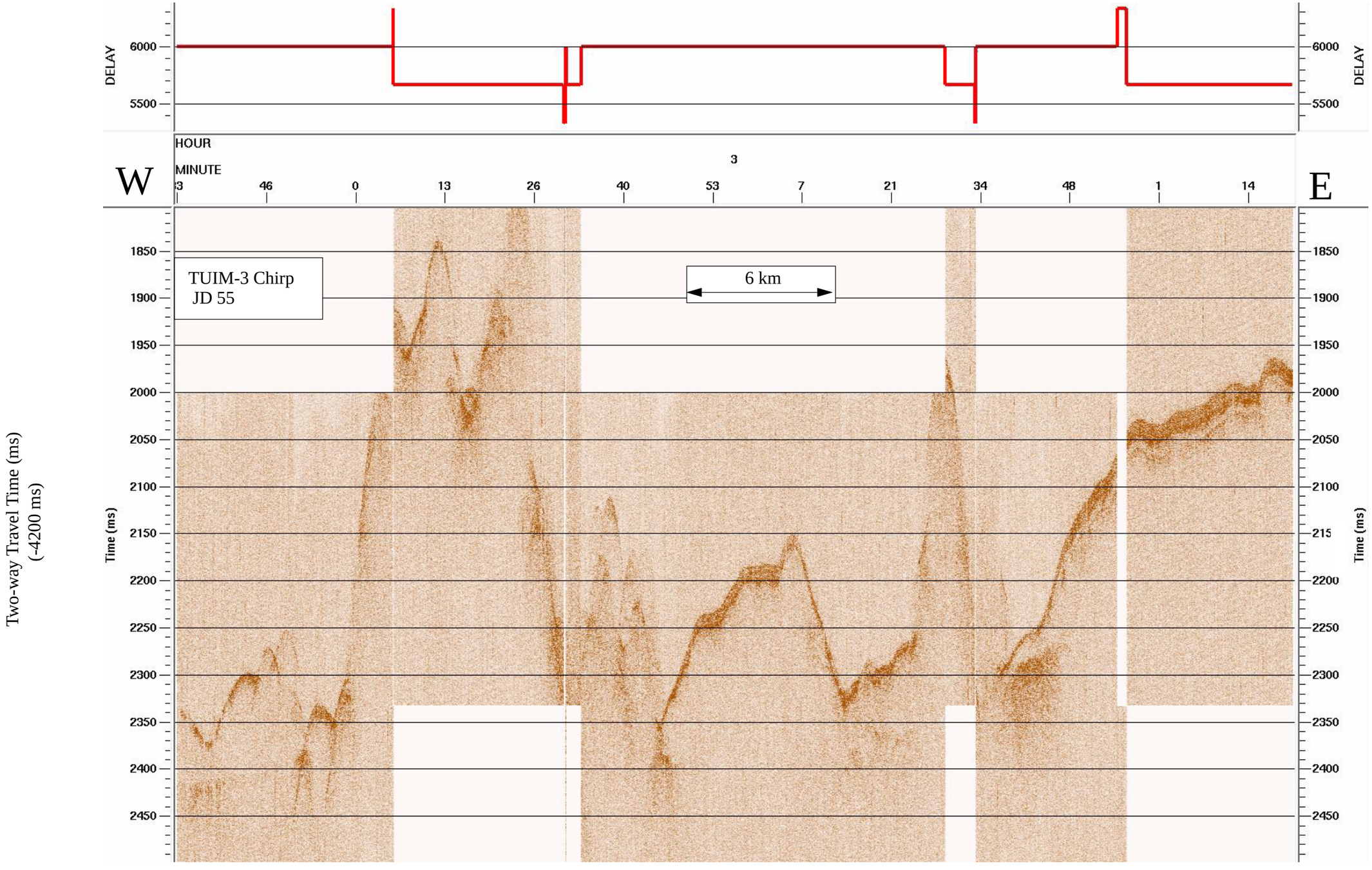
Data File SBfixavg.2005feb23.1800-2400



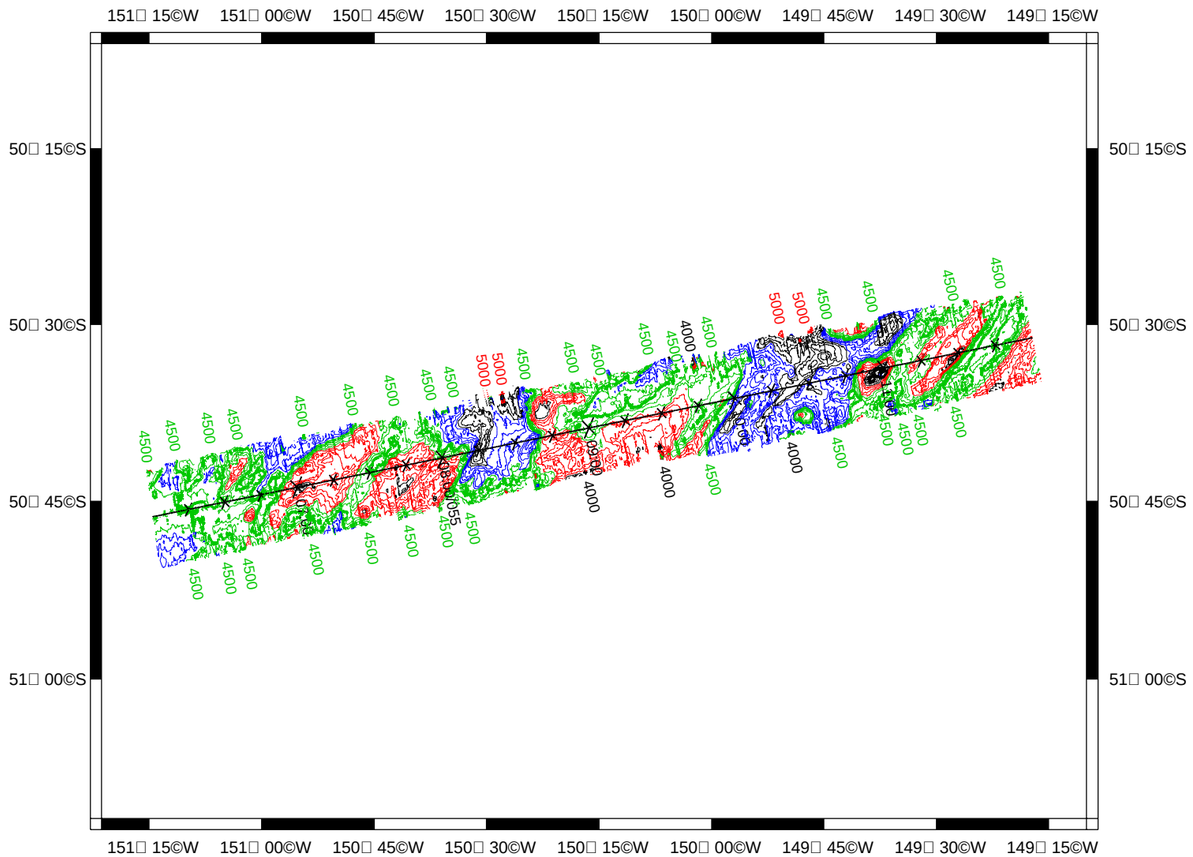
Julian Day 55
24 February 2005
Knudsen Chirp Data

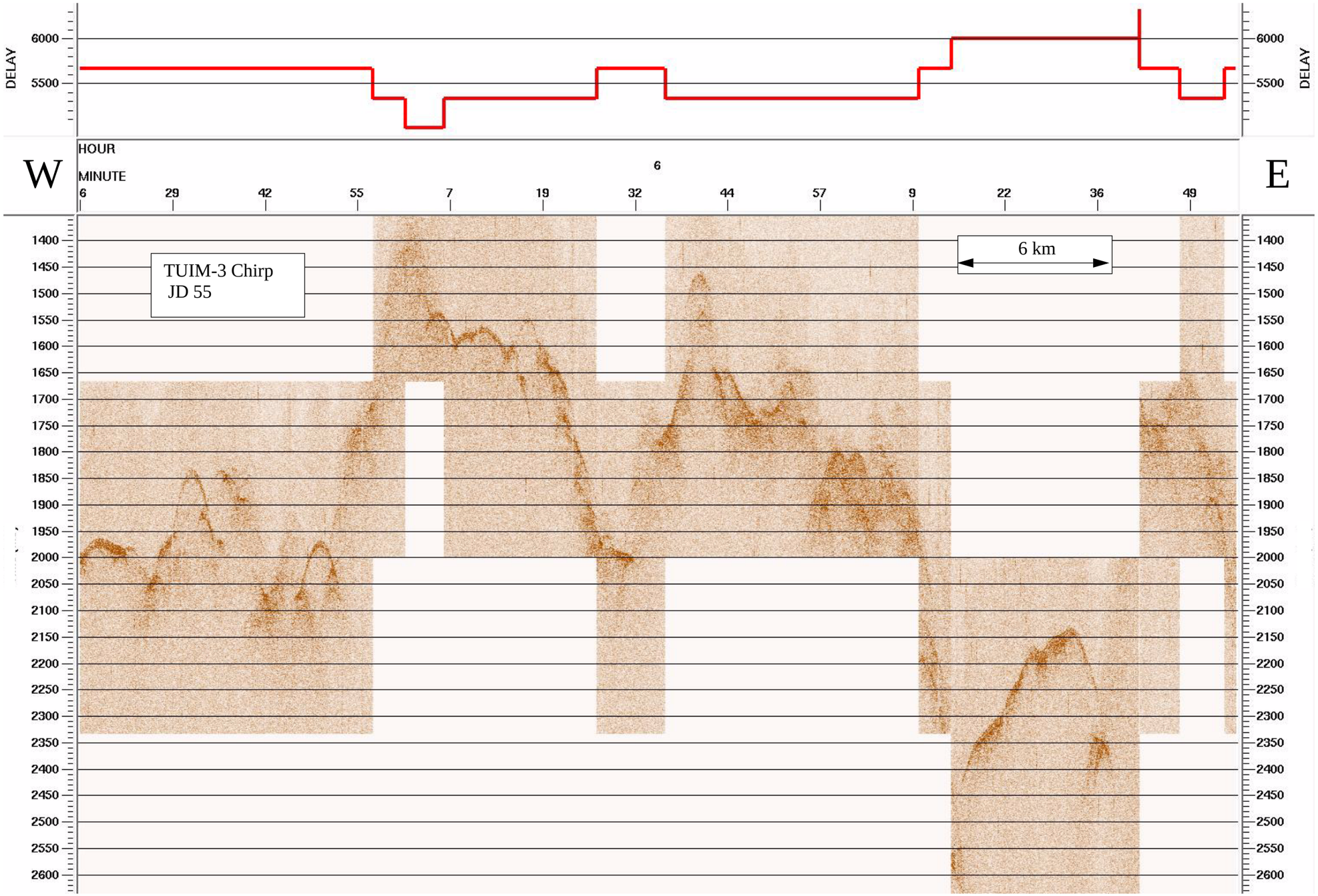
Data File SBfixavg.2005feb24.0000-0600

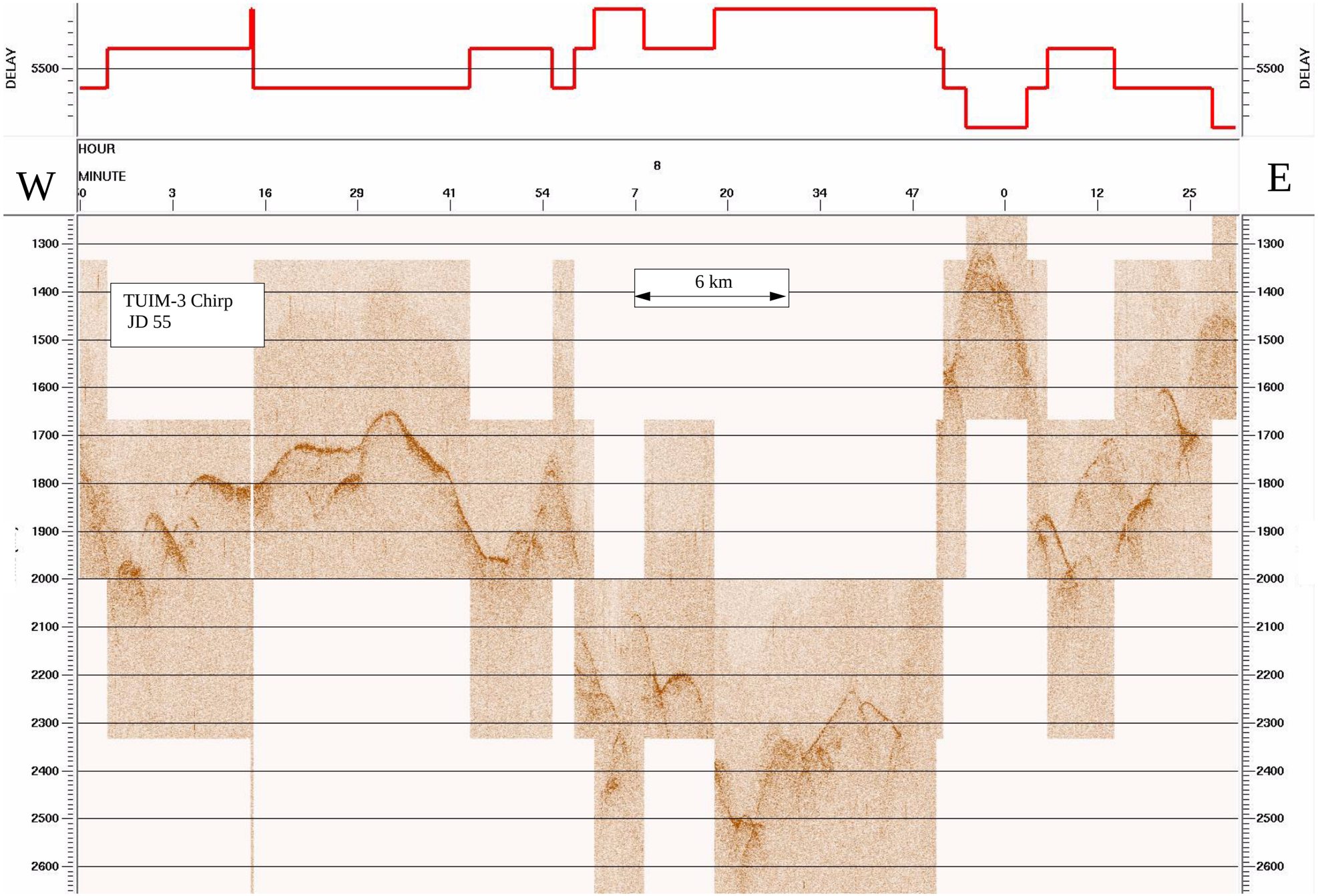



DELAY
6000
5500
W
HOUR
MINUTE
3
43
46
0
13
26
40
53
7
21
34
48
1
14
E
TUIM-3 Chirp
JD 55
6 km
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
Time (ms)
Two-way Travel Time (ms)
(-4200 ms)

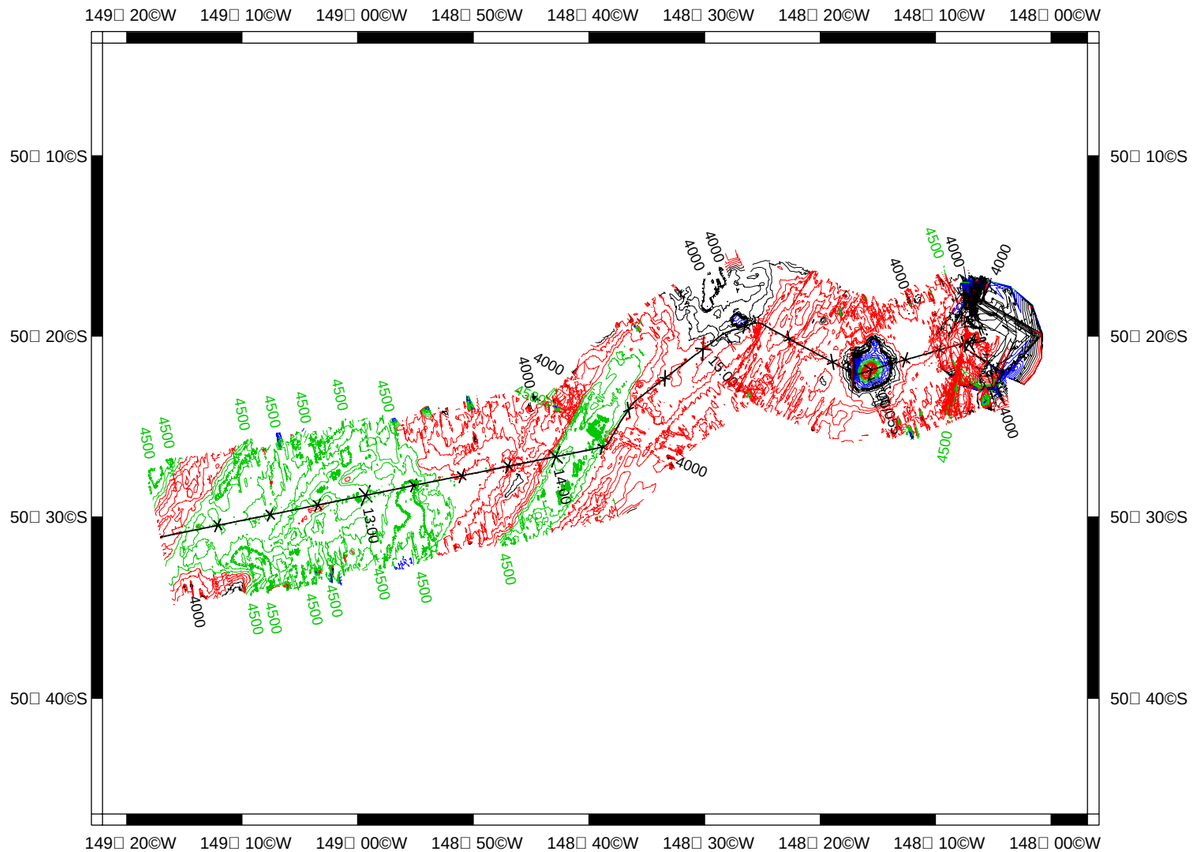
Data File SBfixavg.2005feb24.0600-1200

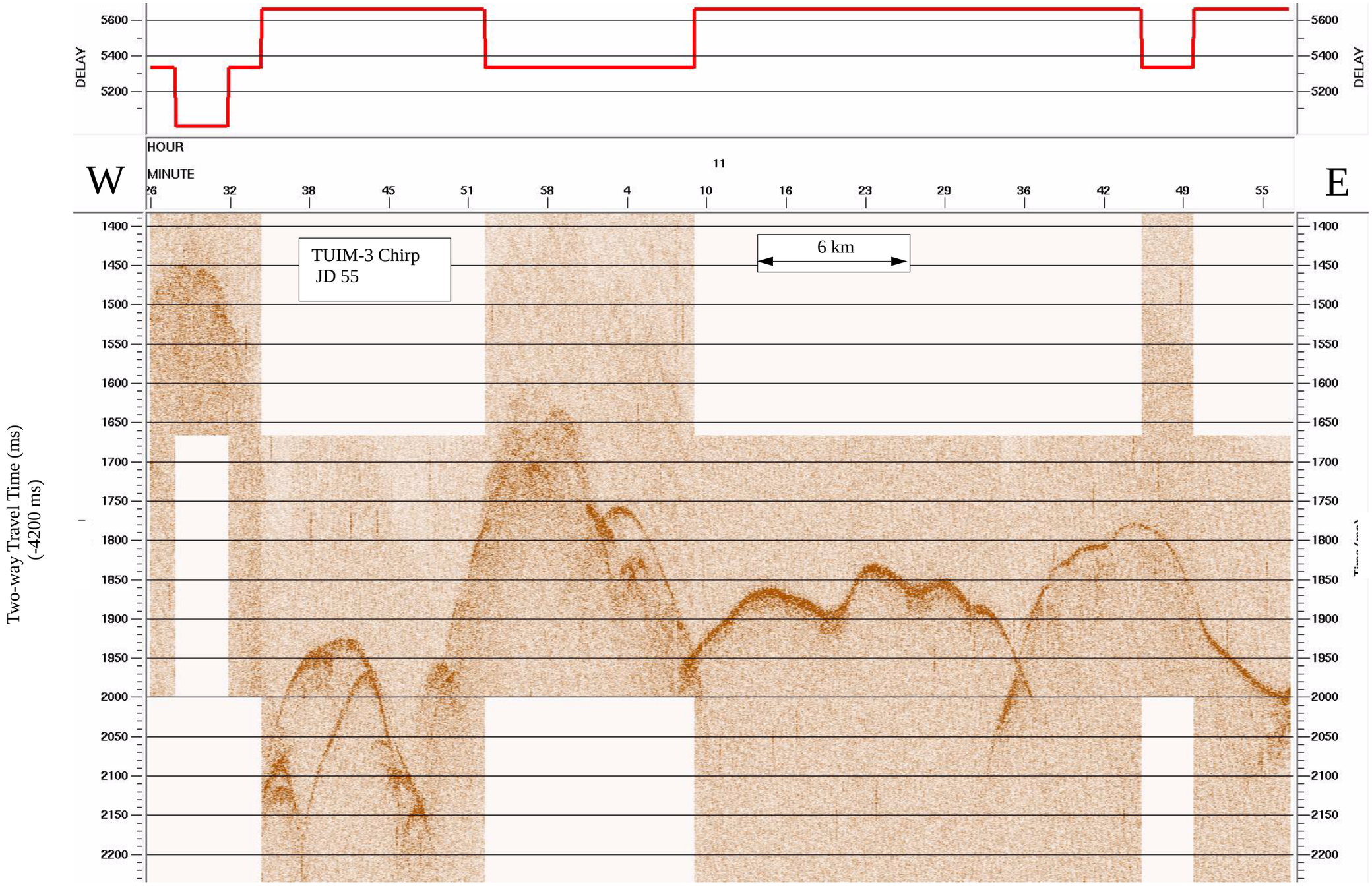


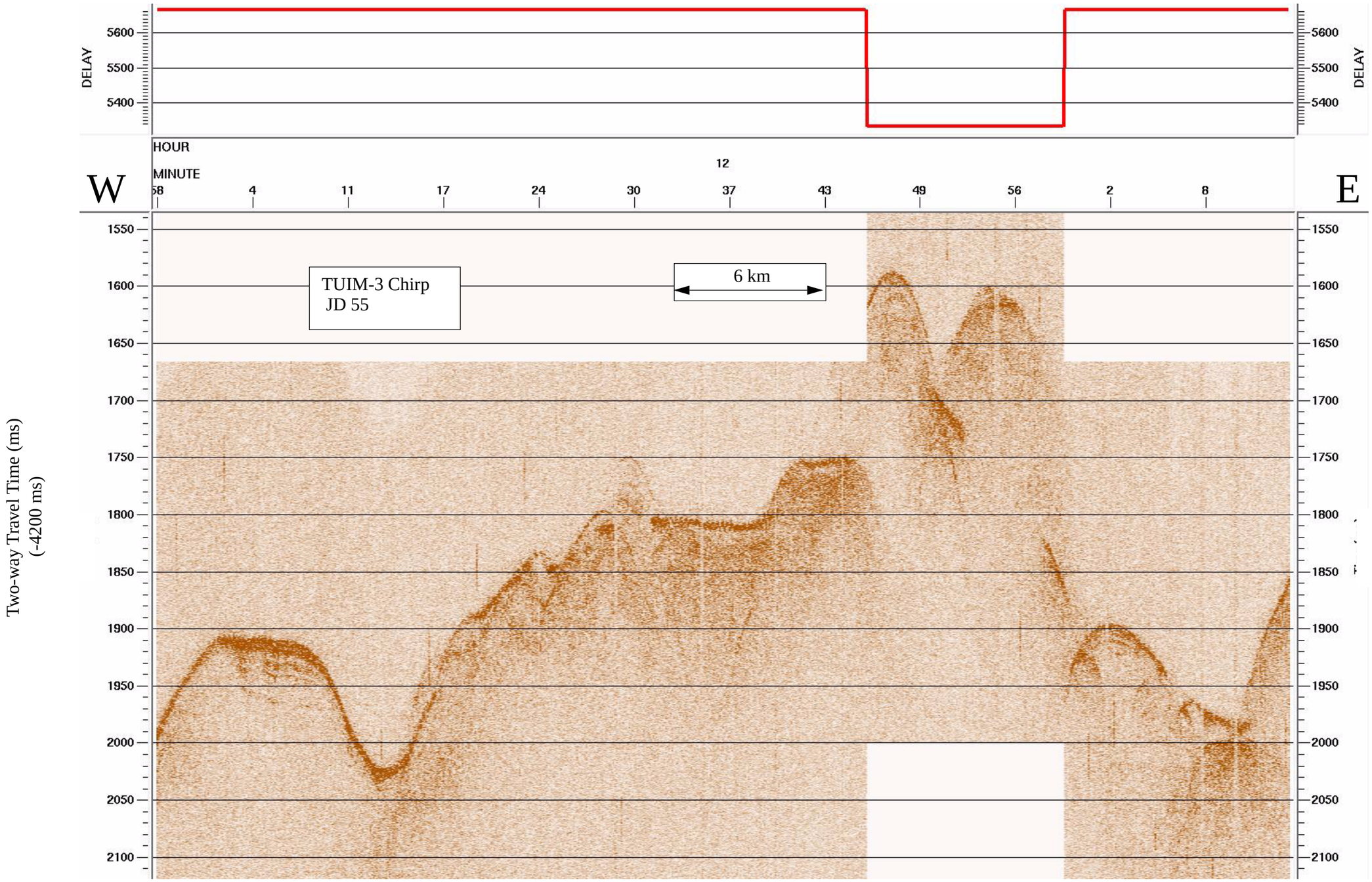

DELAY
6000
5500
W
HOUR
MINUTE
6
29
42
55
7
19
32
44
57
9
22
36
49
E
TUIM-3 Chirp
JD 55
6 km
Two-way Travel Time (ms)
(-4200 ms)
1400
1450
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
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2200
2250
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2350
2400
2450
2500
2550
2600

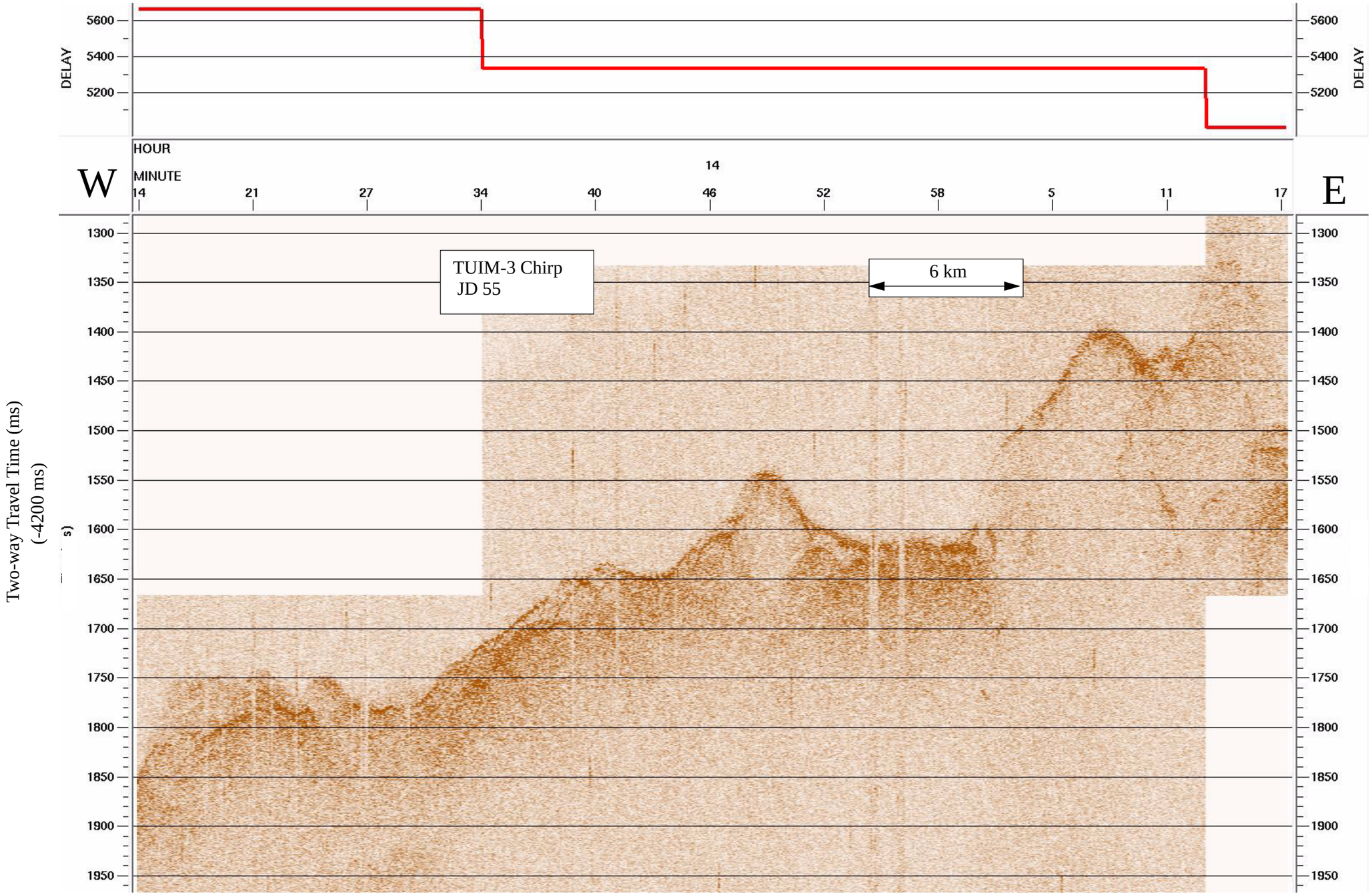

DELAY
5500
DELAY
5500
W
HOUR
8
MINUTE
0
3
16
29
41
54
7
20
34
47
0
12
25
E
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
TUIM-3 Chirp
JD 55
6 km
Two-way Travel Time (ms)
(-4200 ms)

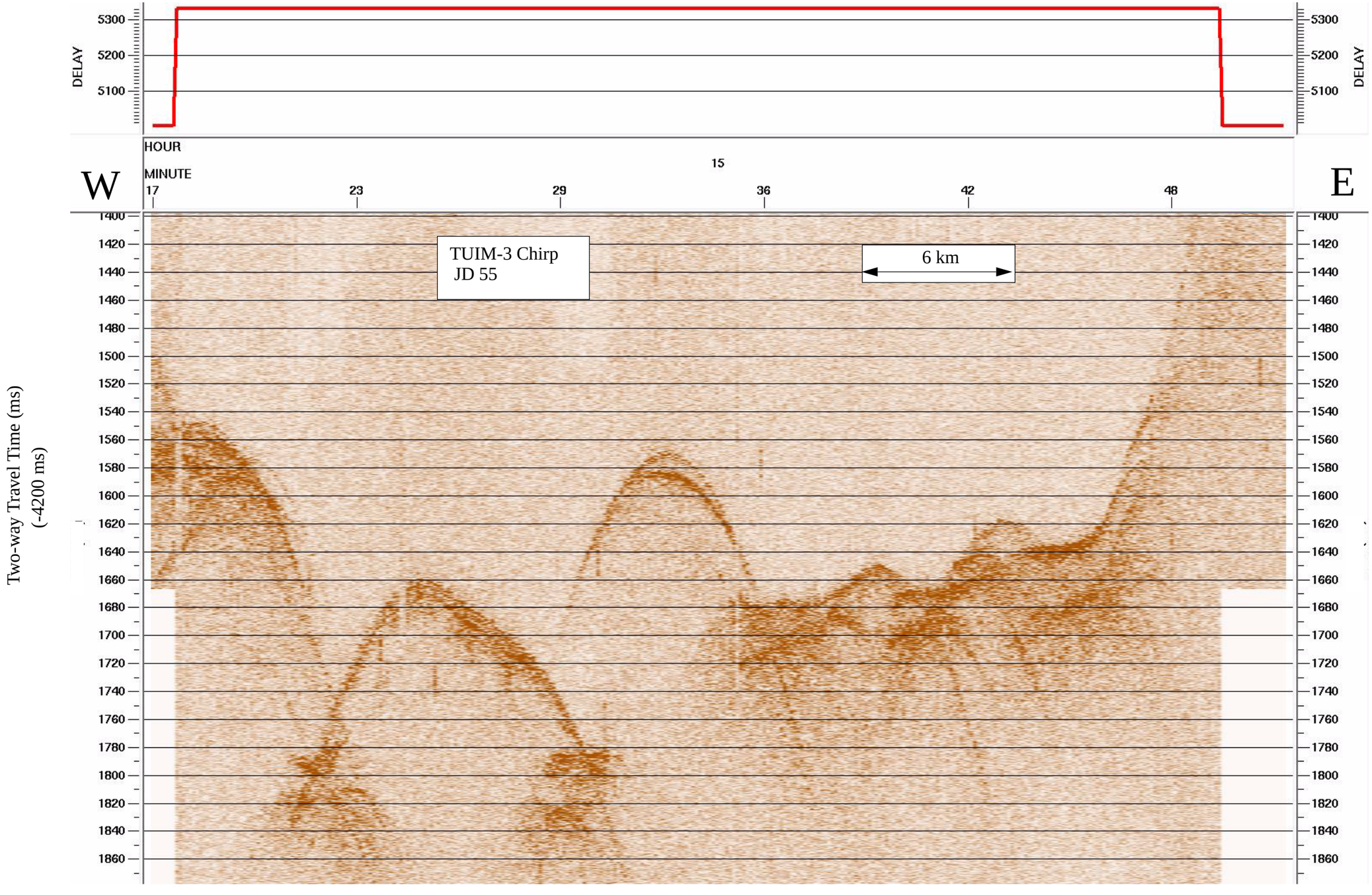
Data File SBfixavg.2005feb24.1200-1800

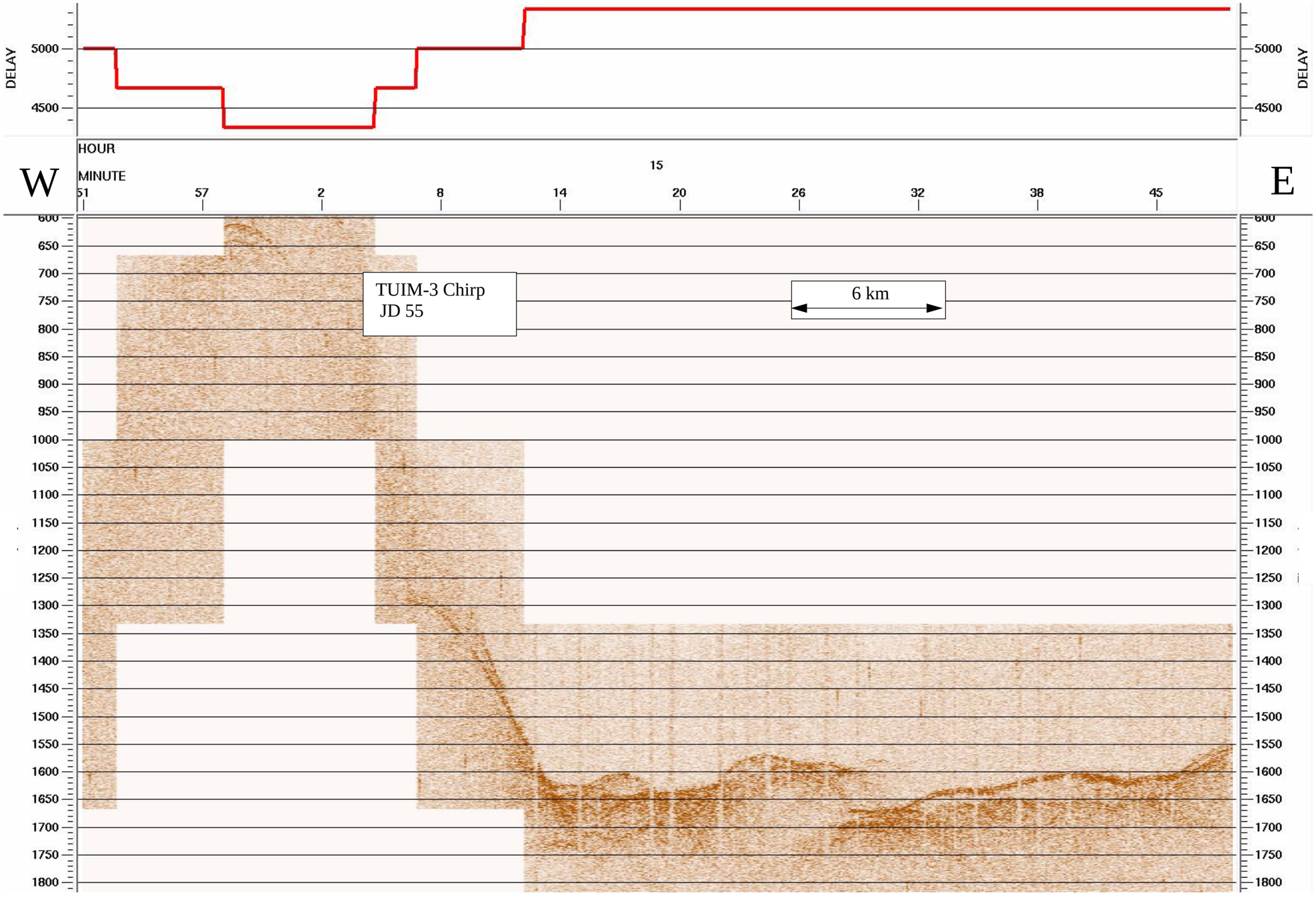



DELAY
5600
5400
5200
W
HOUR
MINUTE
11
26
32
38
45
51
58
4
10
16
23
29
36
42
49
55
E
TUIM-3 Chirp
JD 55
6 km
1400
1450
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
Two-way Travel Time (ms)
(-4200 ms)


DELAY
5600
5500
5400
HOUR
MINUTE
12
W
E
58
4
11
17
24
30
37
43
49
56
2
8
TUIM-3 Chirp
JD 55
6 km
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
Two-way Travel Time (ms)
(-4200 ms)

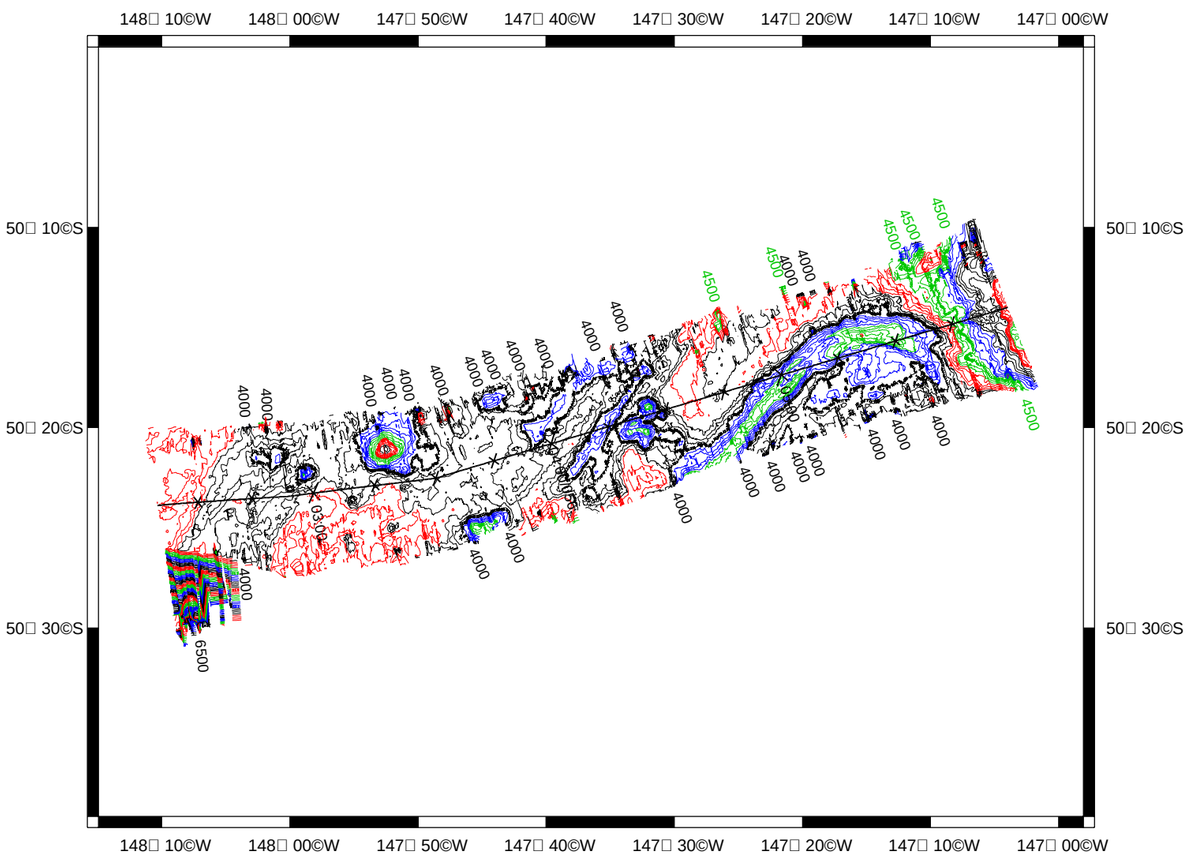

DELAY
5600
5400
5200
W
HOUR
MINUTE
14
14
21
27
34
40
46
52
58
5
11
17
E
TUIM-3 Chirp
JD 55
6 km
Two-way Travel Time (ms)
(-4200 ms)
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950

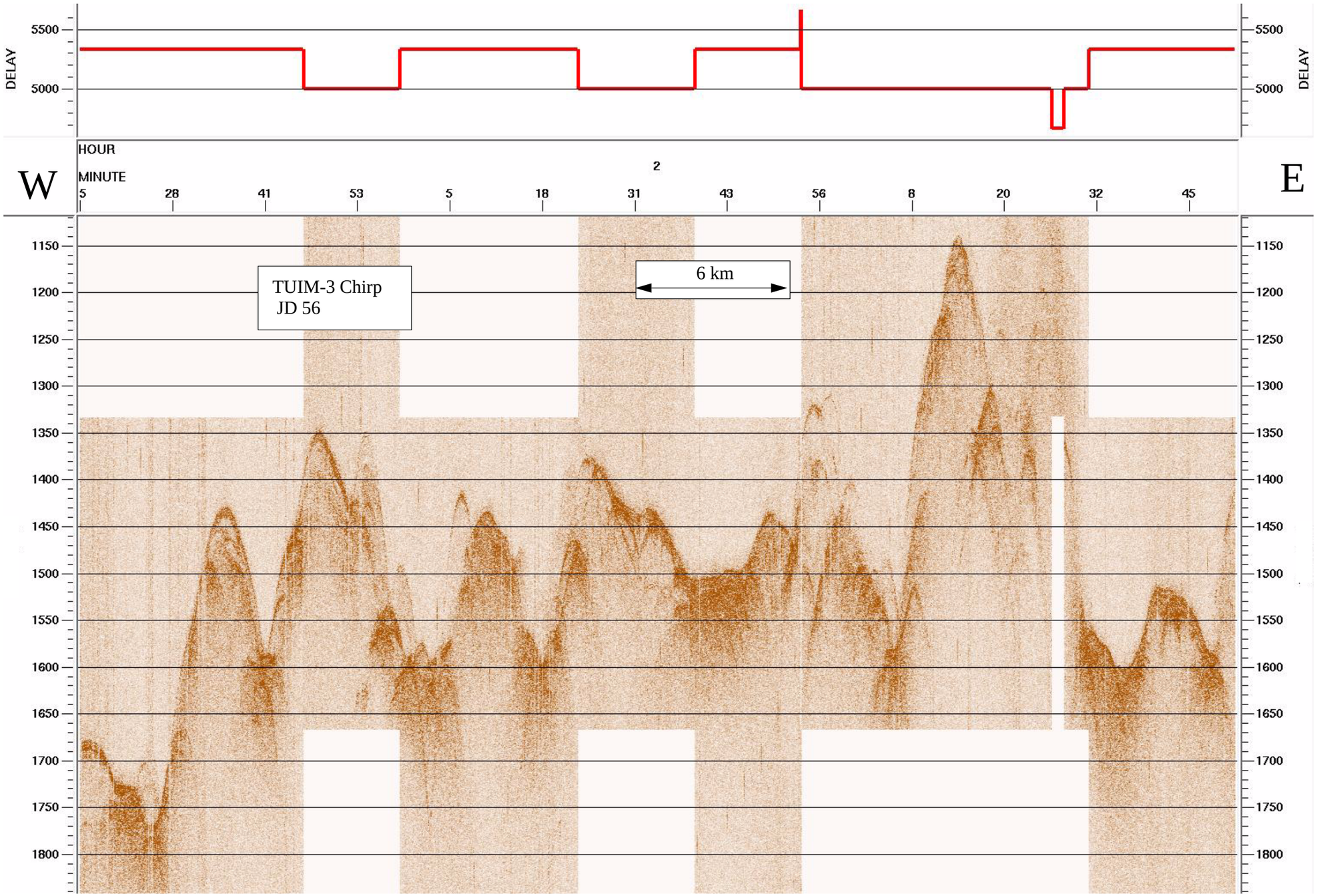

DELAY
5300
5200
5100
HOUR
MINUTE
15
17
23
29
36
42
48
W
E
TUIM-3 Chirp
JD 55
6 km
Two-way Travel Time (ms)
(-4200 ms)
1400
1420
1440
1460
1480
1500
1520
1540
1560
1580
1600
1620
1640
1660
1680
1700
1720
1740
1760
1780
1800
1820
1840
1860

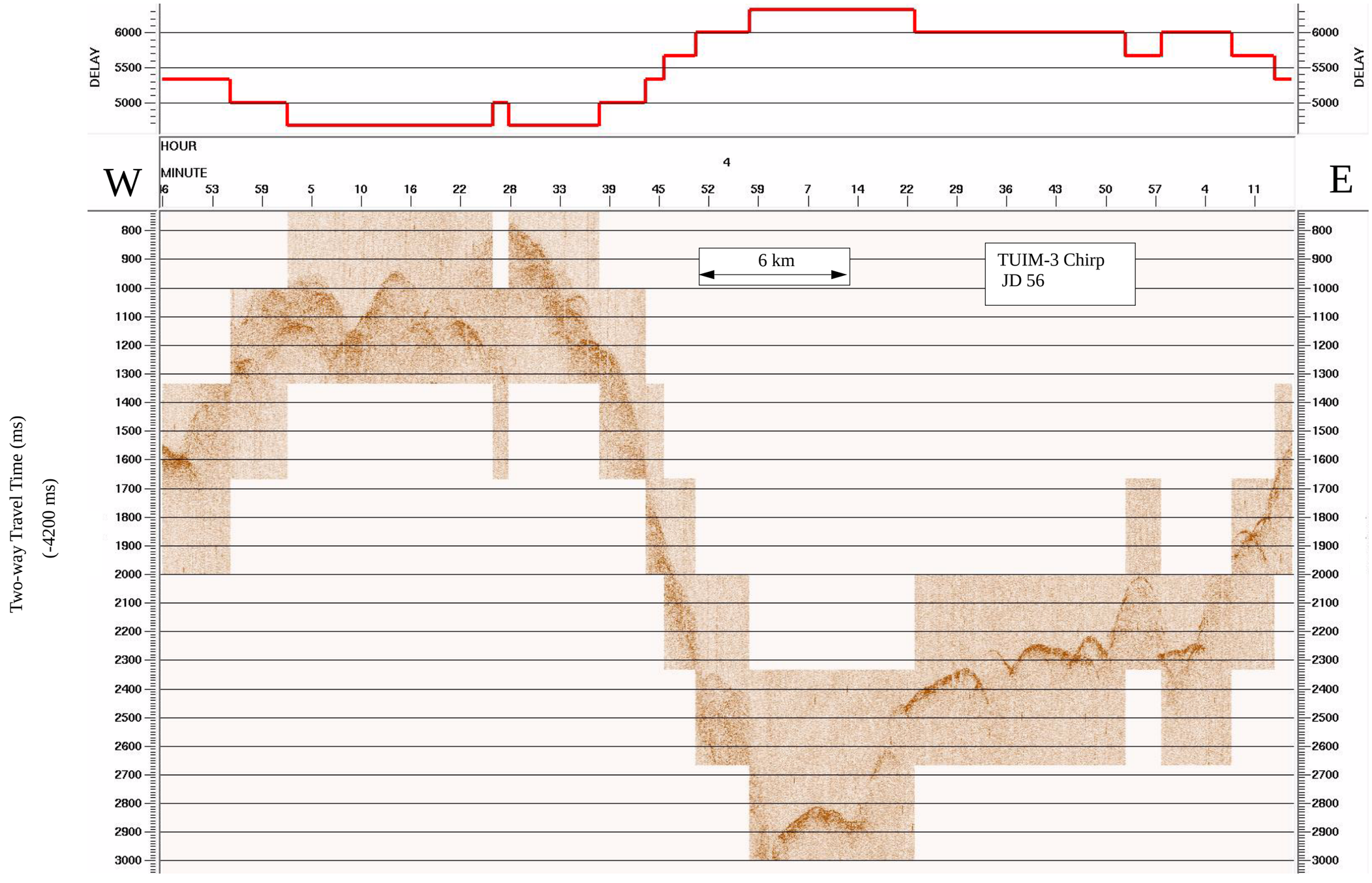

DELAY
5000
4500
HOUR
MINUTE
15
51
57
2
8
14
20
26
32
38
45
W
E
TUIM-3 Chirp
JD 55
6 km
Two-way Travel Time (ms)
(-4200 ms)
600
650
700
750
800
850
900
950
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1800

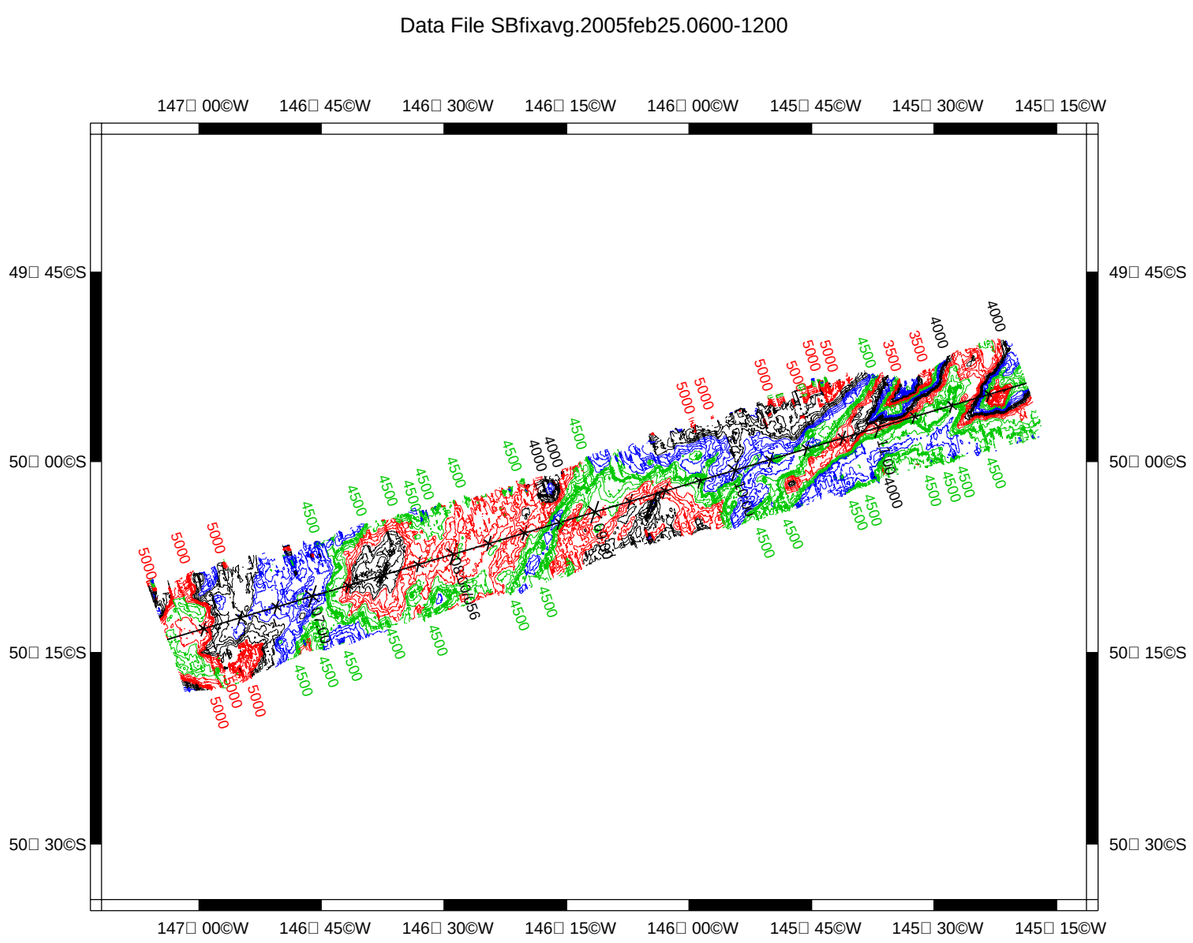
Julian Day 56
25 February 2005
Knudsen Chirp Data

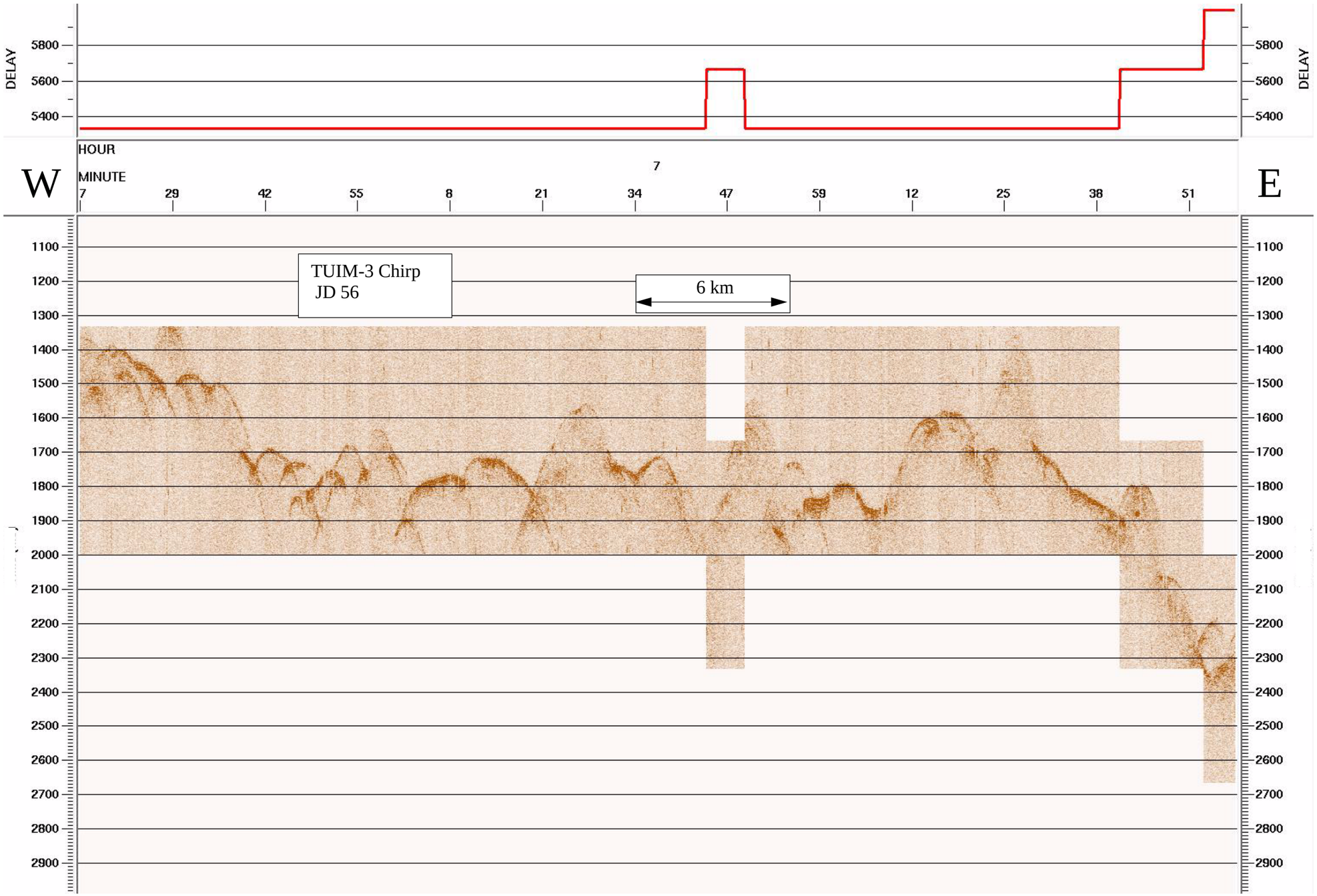
Data File SBfixavg.2005feb25.0000-0600

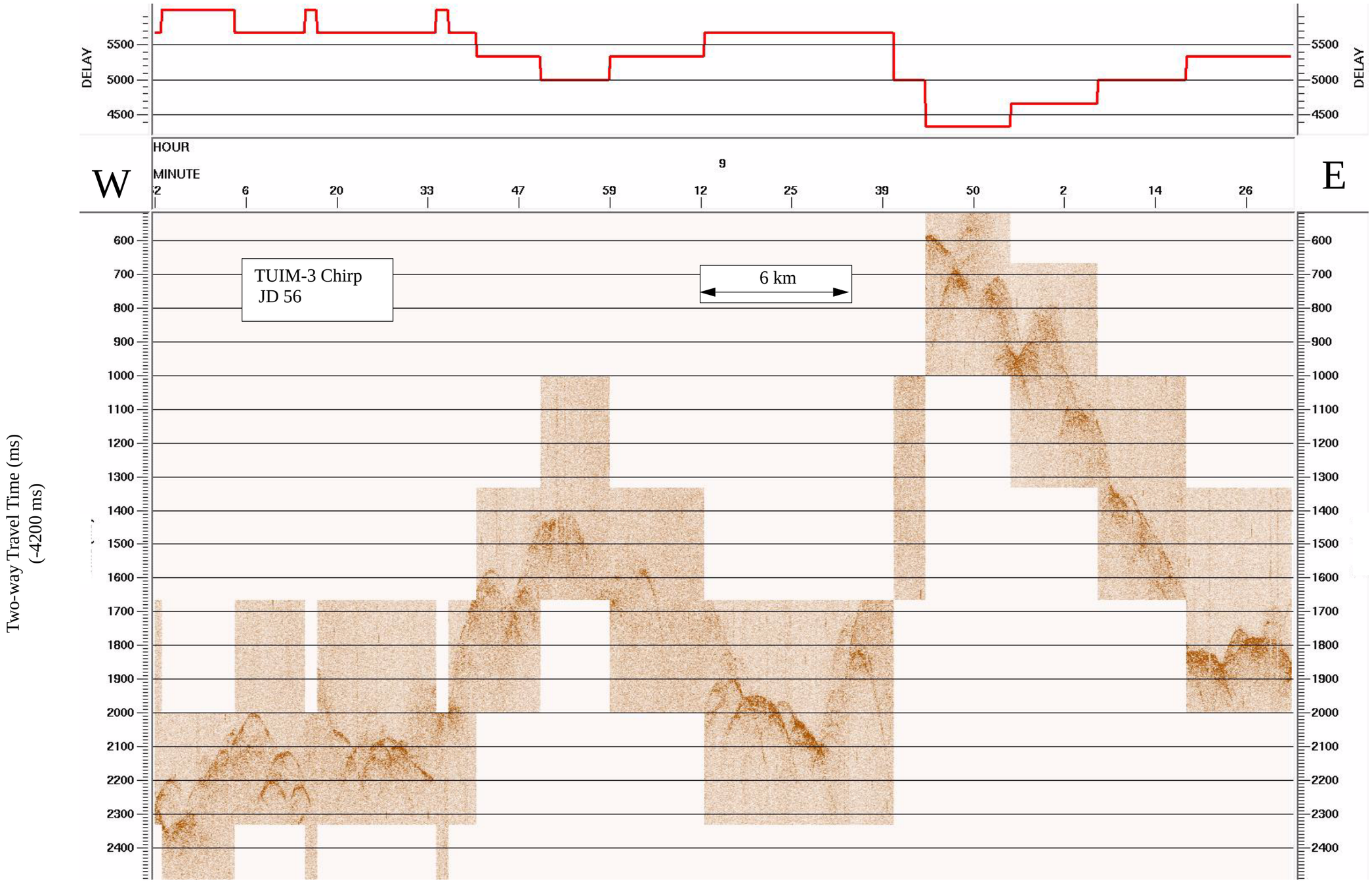


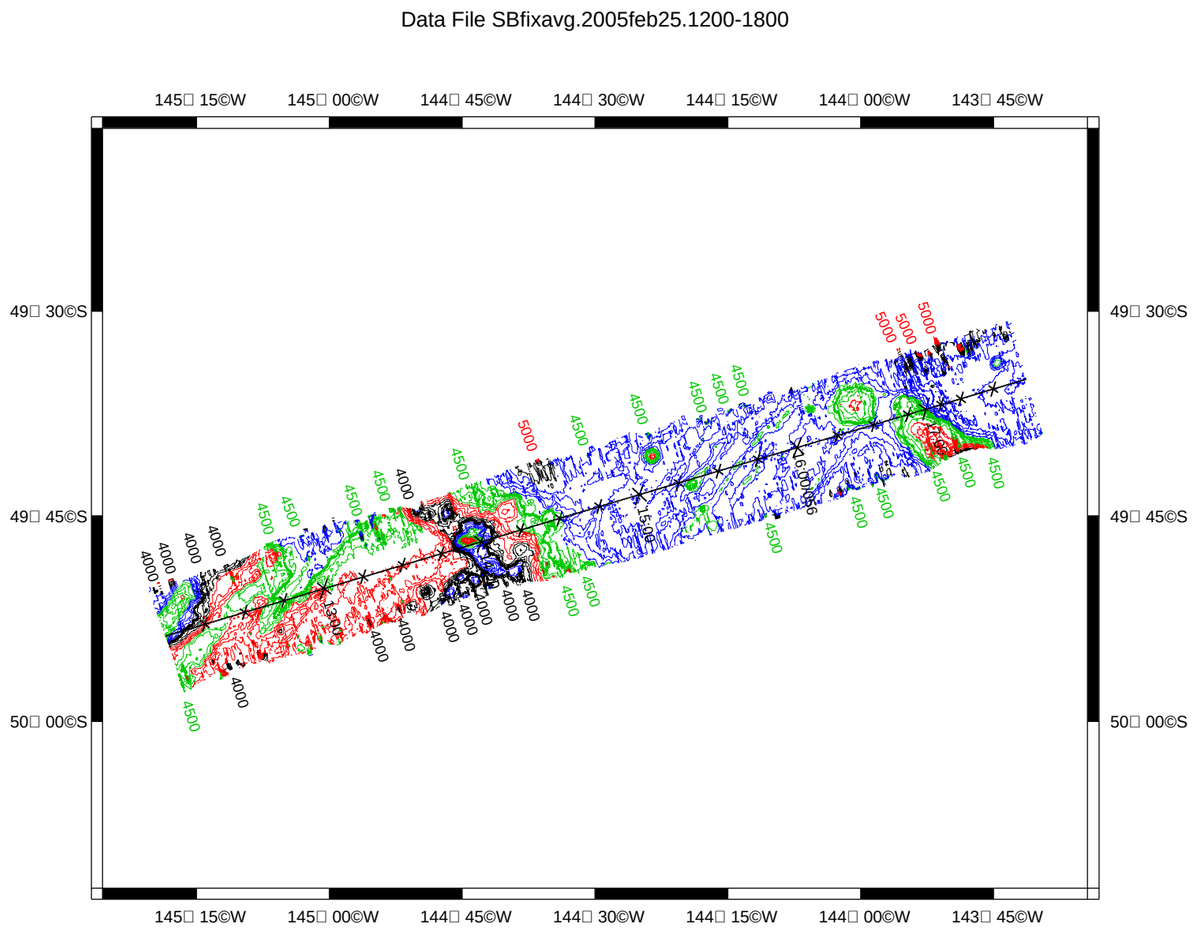

DELAY
5500
5000
HOUR
MINUTE
2
5
28
41
53
5
18
31
43
56
8
20
32
45
W
E
TUIM-3 Chirp
JD 56
6 km
Two-way Travel Time (ms)
(-4200 ms)
1150
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1800

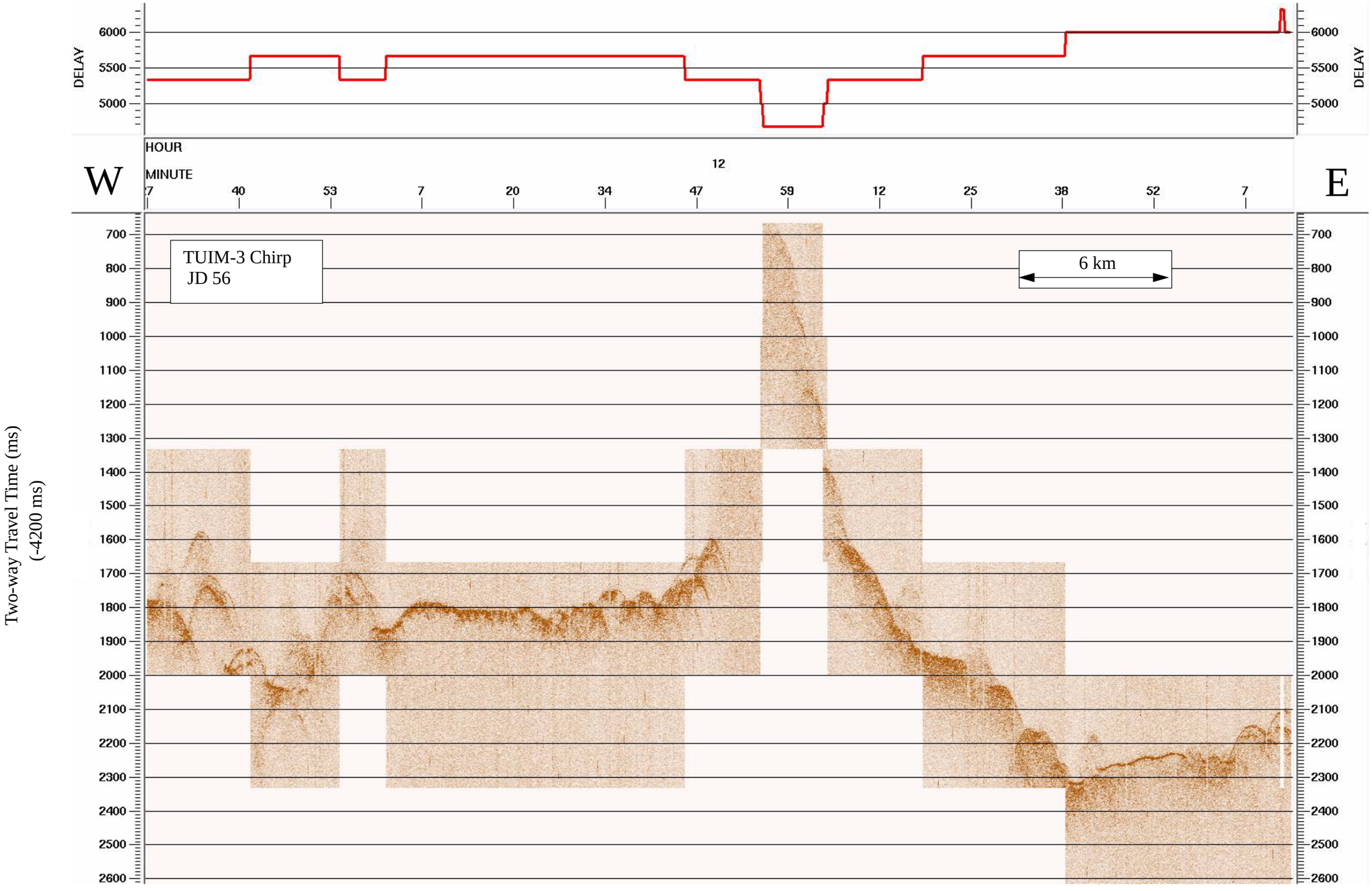

DELAY
6000
5500
5000
W
HOUR
MINUTE
4
E
6 km
TUIM-3 Chirp
JD 56
Two-way Travel Time (ms)
(-4200 ms)

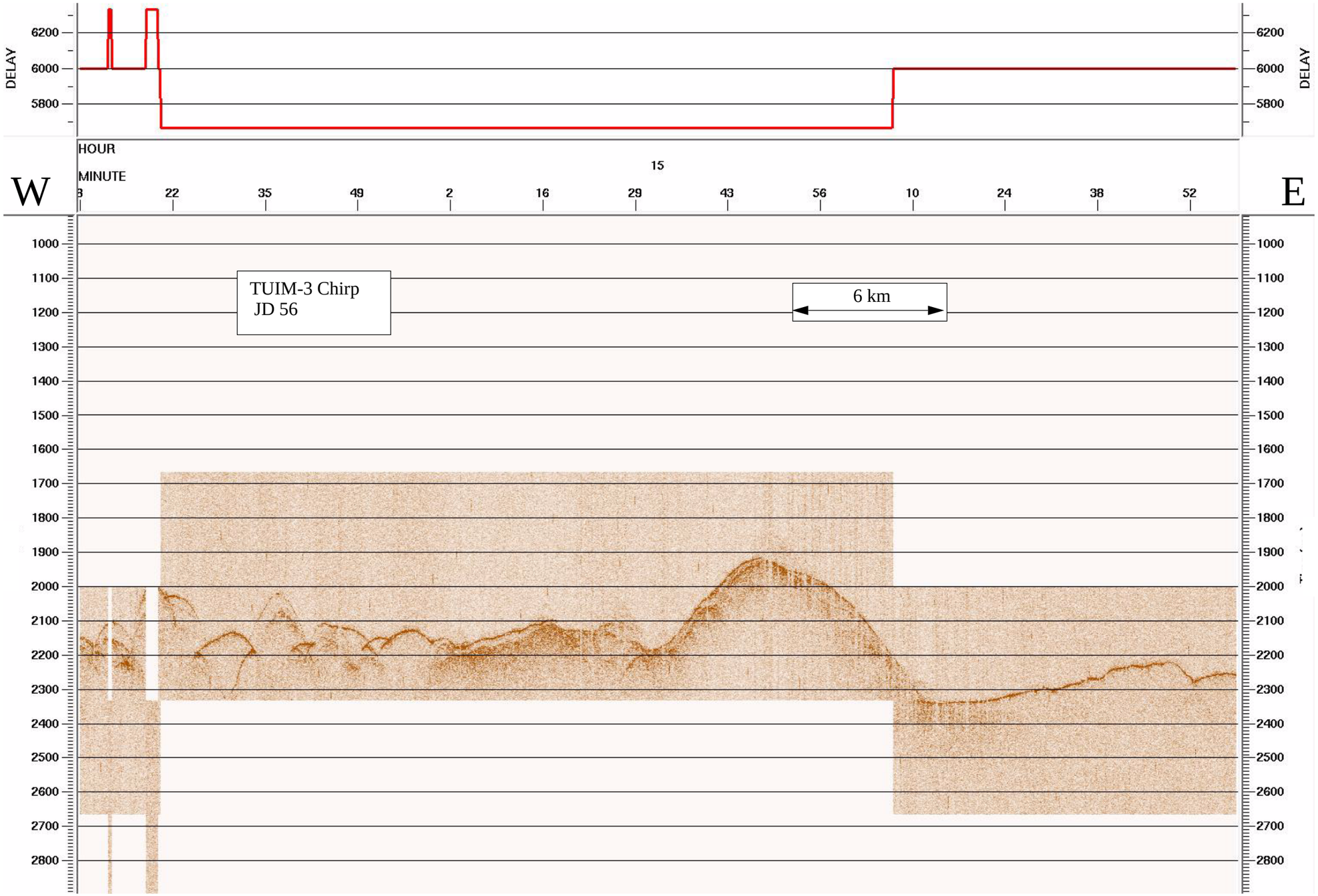

Data File SBfixavg.2005feb25.0600-1200
147□ 00©W
146□ 45©W
146□ 30©W
146□ 15©W
146□ 00©W
145□ 45©W
145□ 30©W
145□ 15©W
49□ 45©S
50□ 00©S
50□ 15©S
50□ 30©S


DELAY
5800
5600
5400
HOUR
MINUTE
7
7
29
42
55
8
21
34
47
59
12
25
38
51
W
E
TUIM-3 Chirp
JD 56
6 km
Two-way Travel Time (ms)
(-4200 ms)
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900

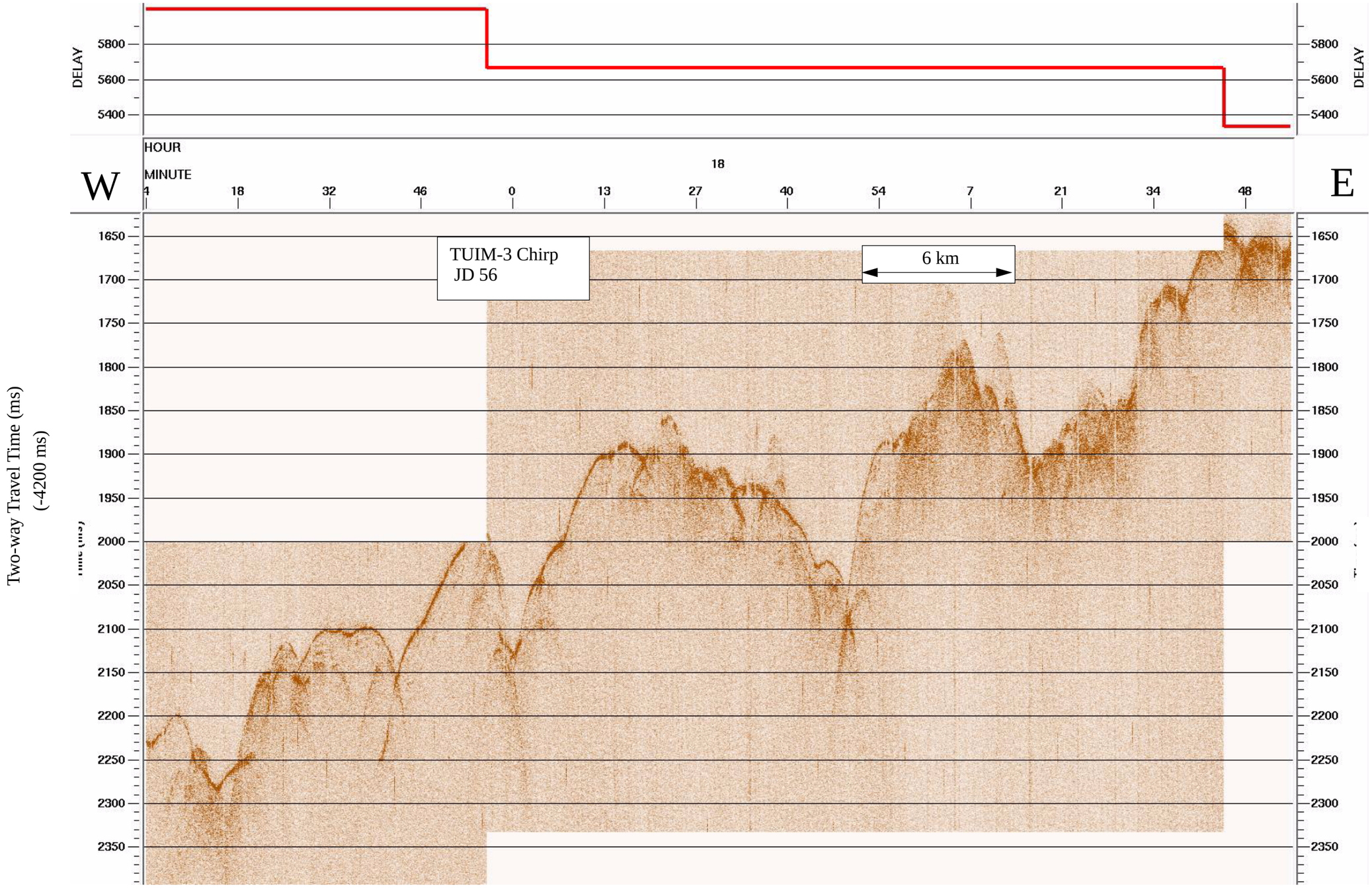

DELAY
5500
5000
4500
HOUR
MINUTE
9
W
E
2
6
20
33
47
59
12
25
39
50
2
14
26
TUIM-3 Chirp
JD 56
6 km
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
Two-way Travel Time (ms)
(-4200 ms)

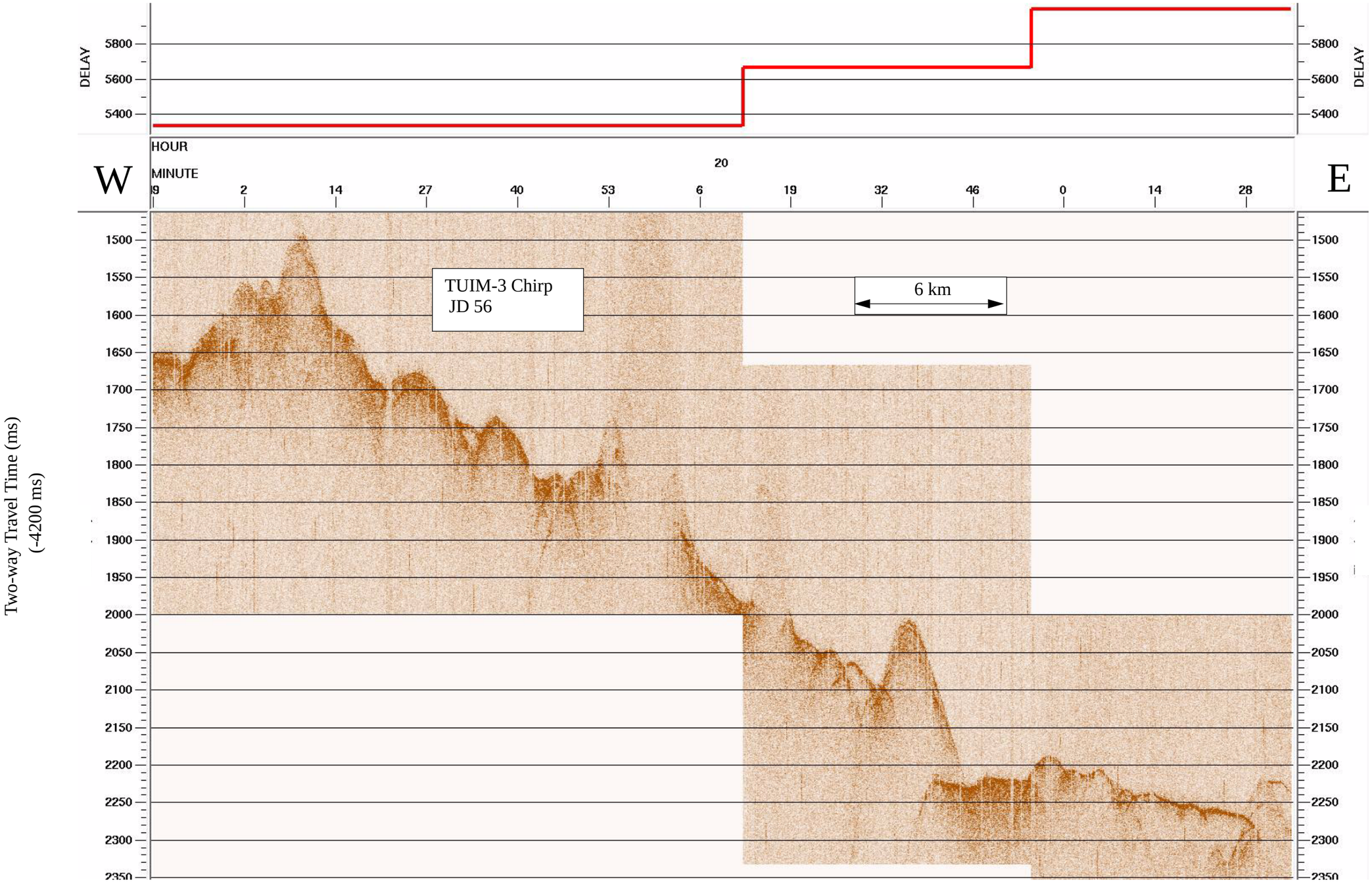

Data File SBfixavg.2005feb25.1200-1800
145□ 15©W
145□ 00©W
144□ 45©W
144□ 30©W
144□ 15©W
144□ 00©W
143□ 45©W
49□ 30©S
49□ 45©S
50□ 00©S


DELAY
6000
5500
5000
W
HOUR
MINUTE
12
7
40
53
7
20
34
47
59
12
25
38
52
7
E
TUIM-3 Chirp
JD 56
6 km
Two-way Travel Time (ms)
(-4200 ms)
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600


DELAY
6200
6000
5800
HOUR
MINUTE
15
3
22
35
49
2
16
29
43
56
10
24
38
52
W
E
TUIM-3 Chirp
JD 56
6 km
Two-way Travel Time (ms)
(-4200 ms)
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800

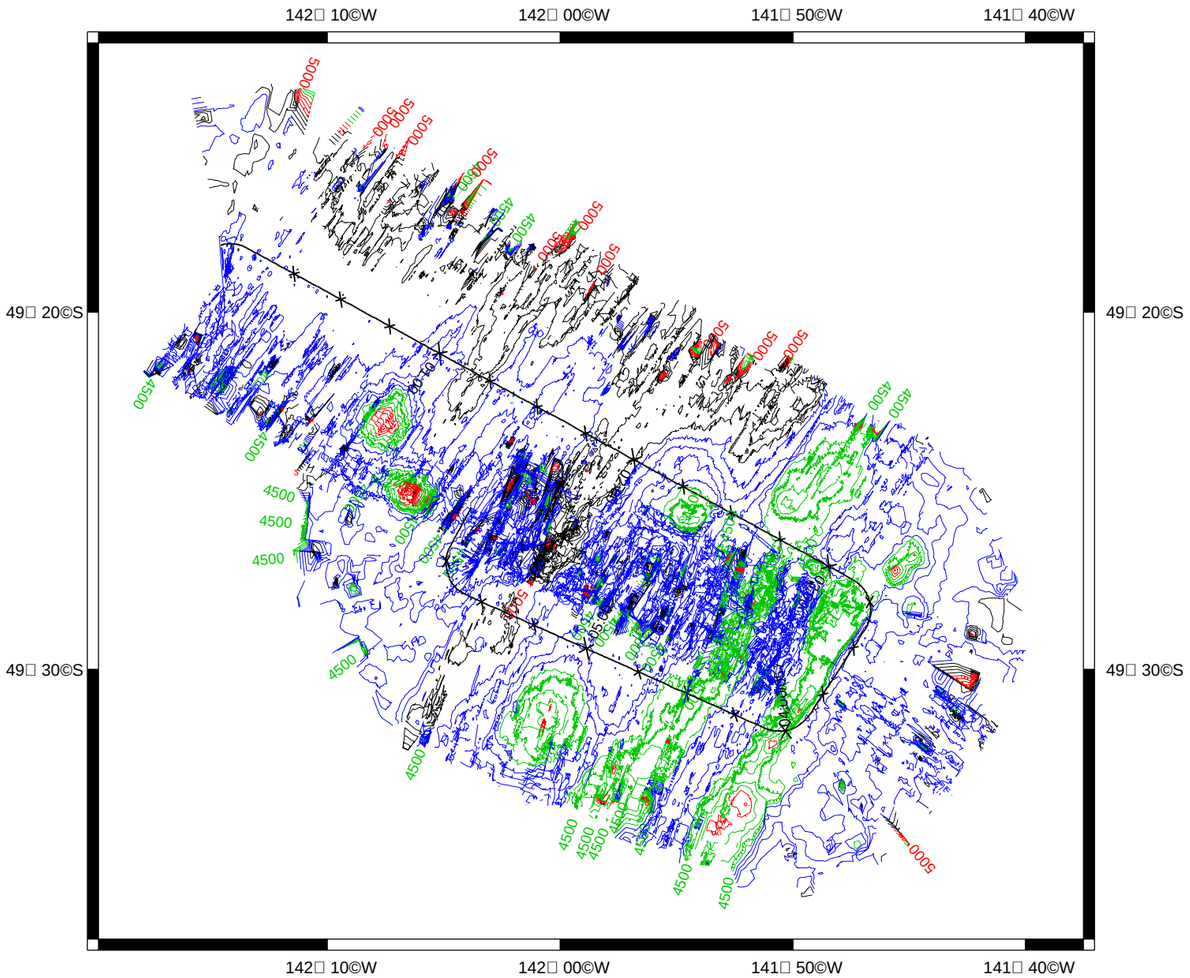
143□ 40©W 143□ 30©W 143□ 20©W 143□ 10©W 143□ 00©W 142□ 50©W 142□ 40©W 142□ 30©W 142□ 20©W 142□ 10©W
49□ 50©S
49□ 40©S
49□ 30©S
49□ 20©S
49□ 10©S
Data File SBfixavg.2005feb25.1800-2400

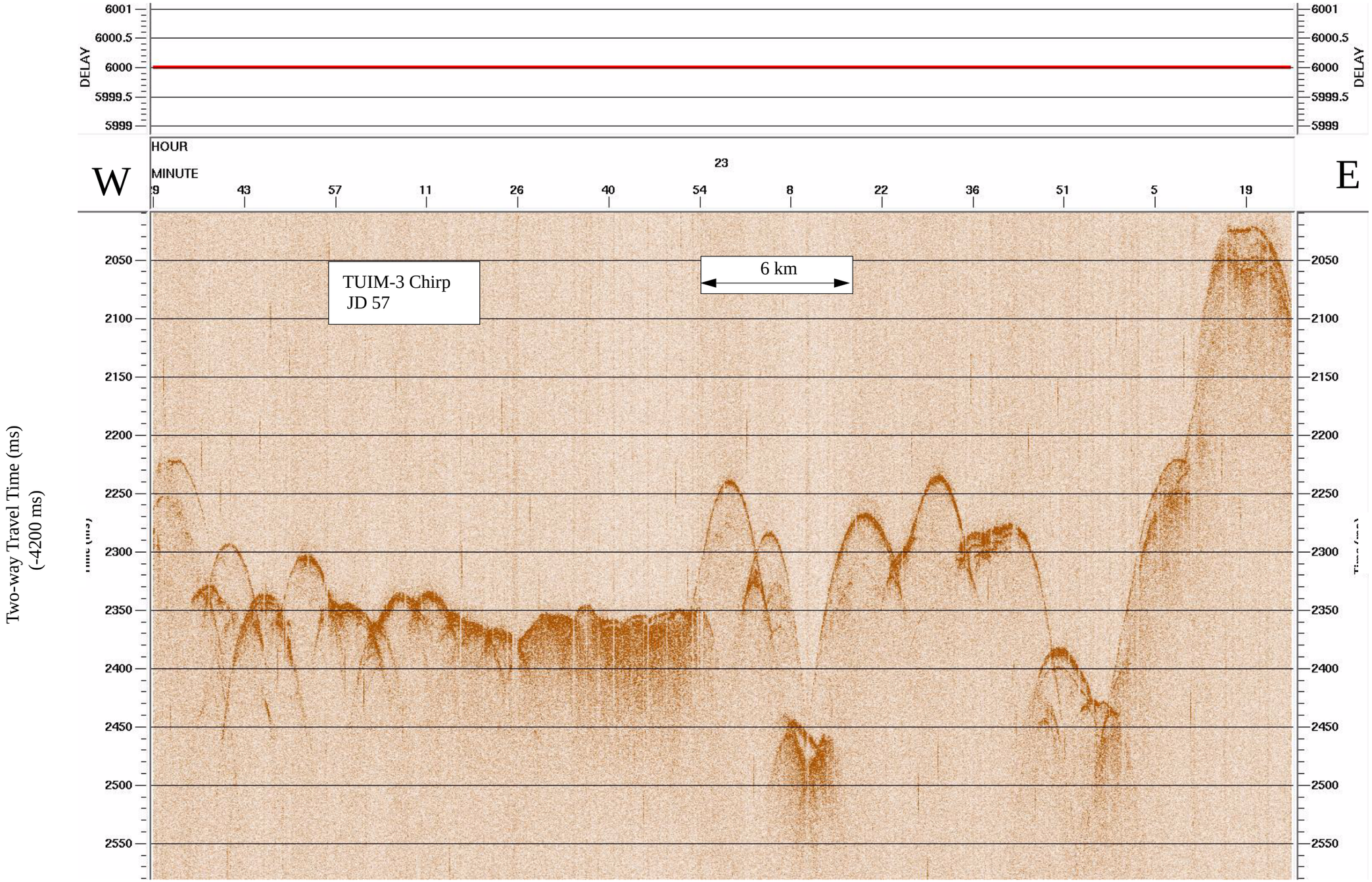

DELAY
5800
5600
5400
HOUR
MINUTE
18
4
18
32
46
0
13
27
40
54
7
21
34
48
W
E
TUIM-3 Chirp
JD 56
6 km
Two-way Travel Time (ms)
(-4200 ms)
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350

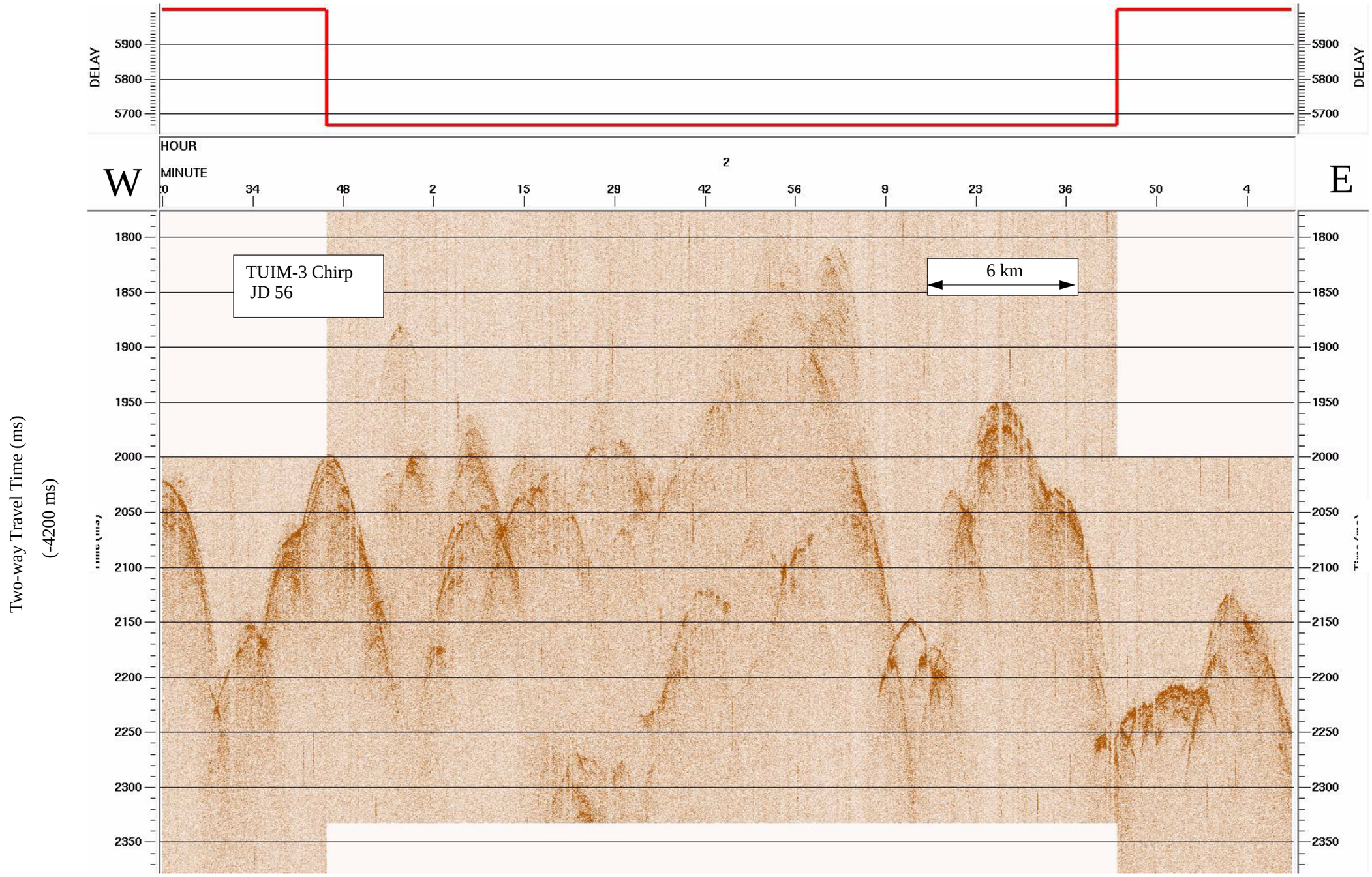

DELAY
5800
5600
5400
HOUR
MINUTE
20
W
E
9
2
14
27
40
53
6
19
32
46
0
14
28
TUIM-3 Chirp
JD 56
6 km
Two-way Travel Time (ms)
(-4200 ms)
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350

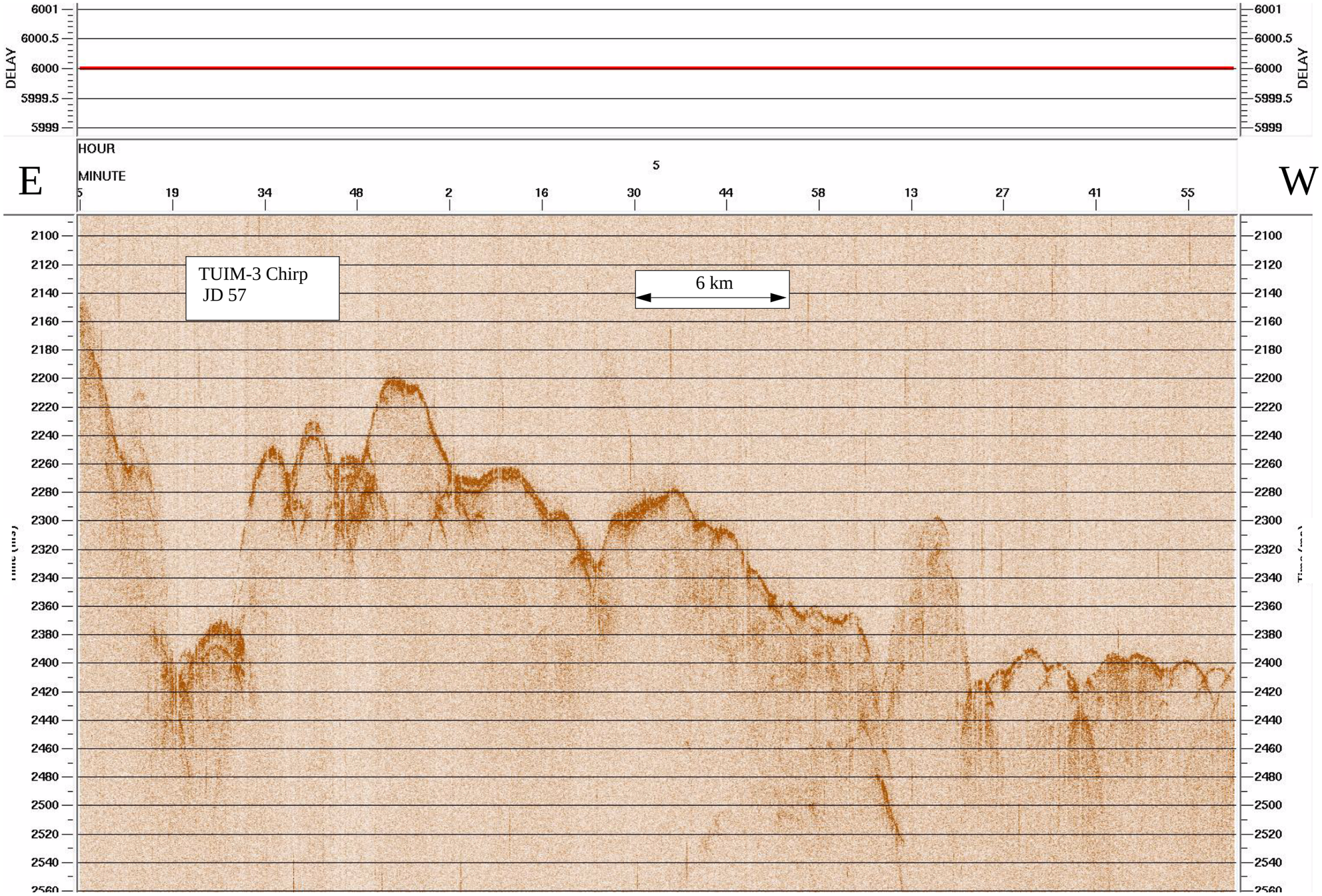
Julian Day 57
26 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb26.0000-0600

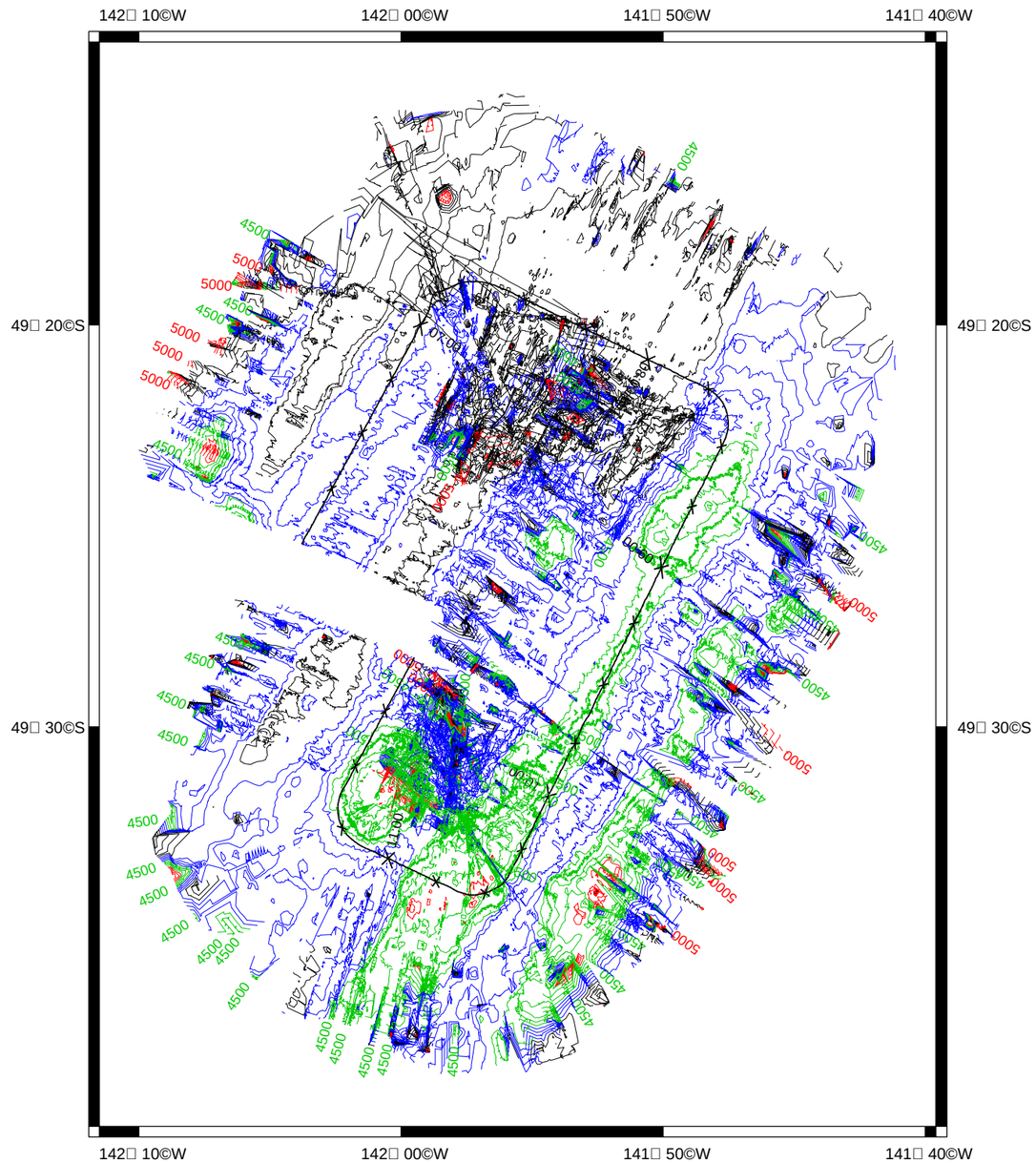


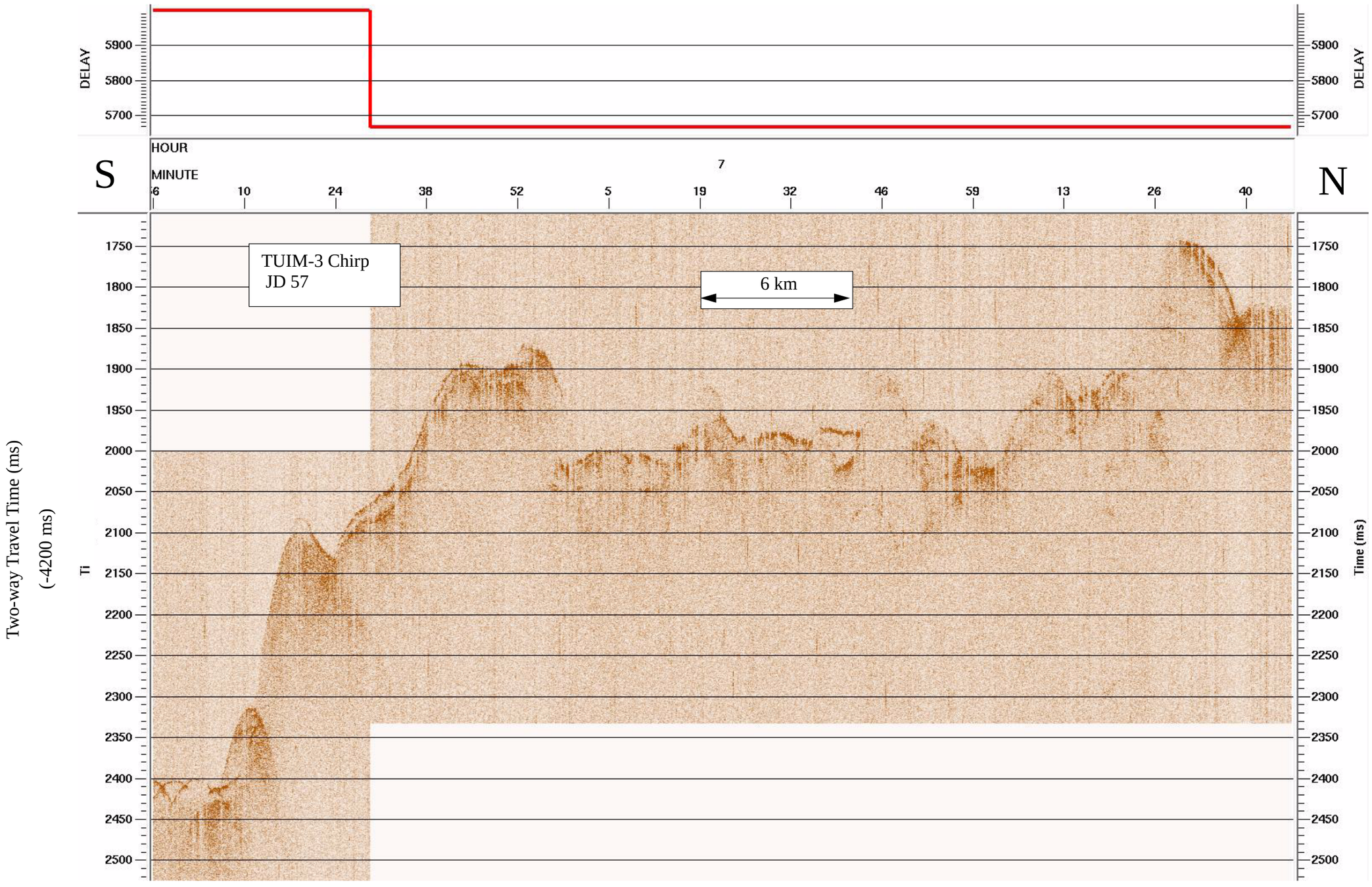

DELAY
6001
6000.5
6000
5999.5
5999
W
E
HOUR
23
MINUTE
9
43
57
11
26
40
54
8
22
36
51
5
19
TUIM-3 Chirp
JD 57
6 km
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
Two-way Travel Time (ms)
(-4200 ms)

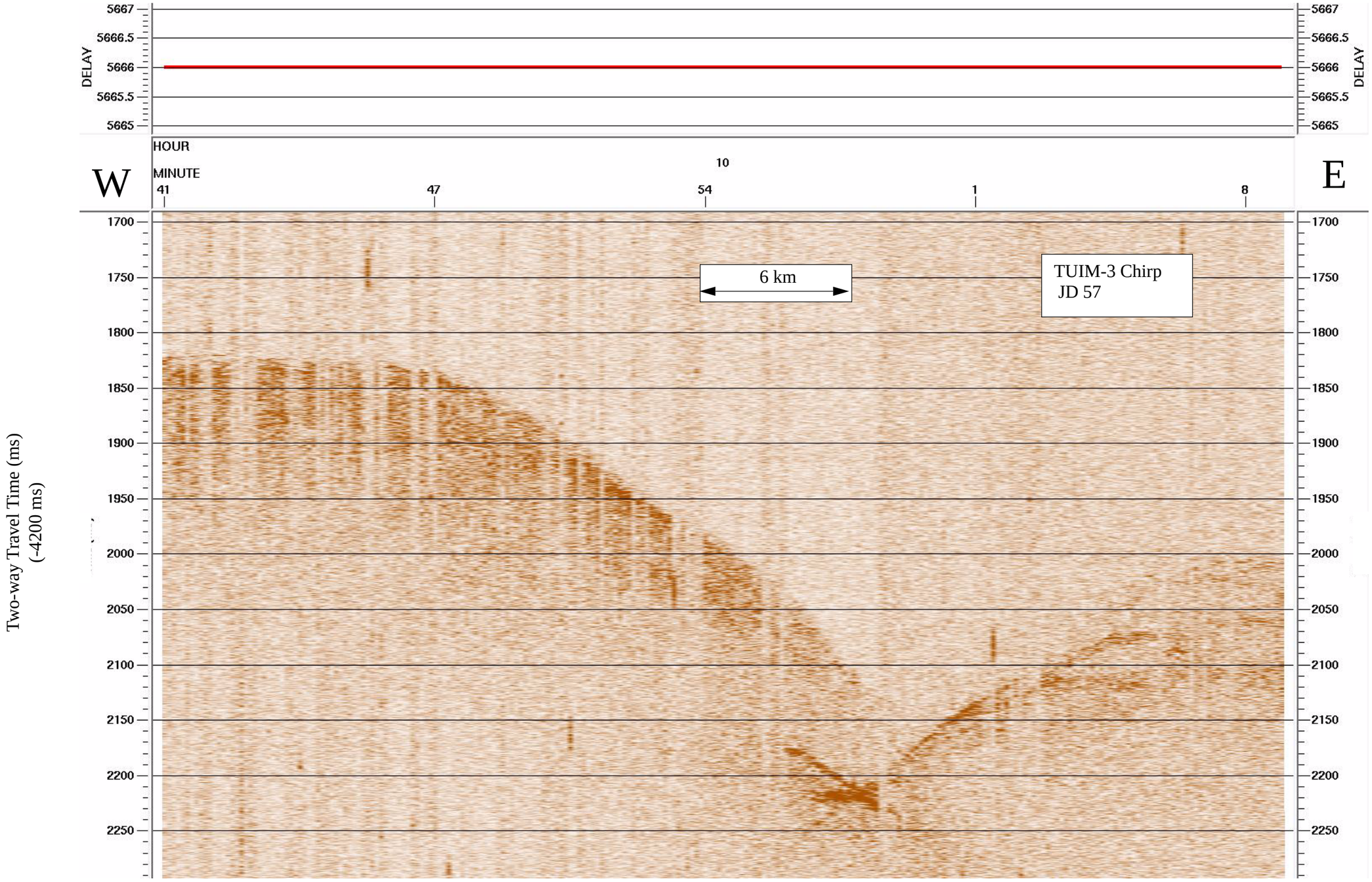

DELAY
5900
5800
5700
HOUR
MINUTE
2
0
34
48
2
15
29
42
56
9
23
36
50
4
W
E
TUIM-3 Chirp
JD 56
6 km
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
Two-way Travel Time (ms)
(-4200 ms)

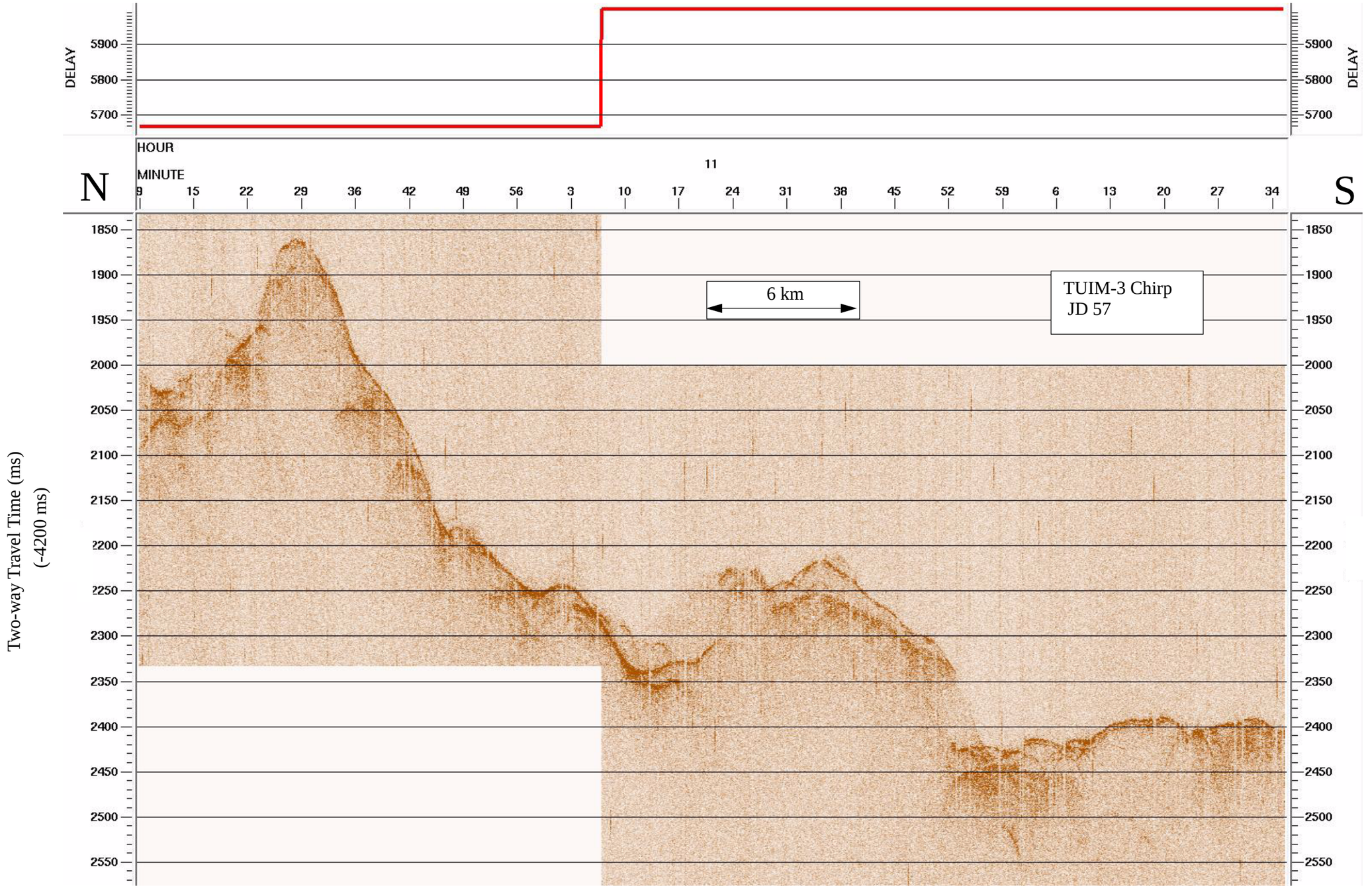

DELAY
6001
6000.5
6000
5999.5
5999
E
W
HOUR
MINUTE
5
19
34
48
2
16
30
44
58
13
27
41
55
TUIM-3 Chirp
JD 57
6 km
2100
2120
2140
2160
2180
2200
2220
2240
2260
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
Two-way Travel Time (ms)
(-4200 ms)

Data File SBfixavg.2005feb26.0600-1200

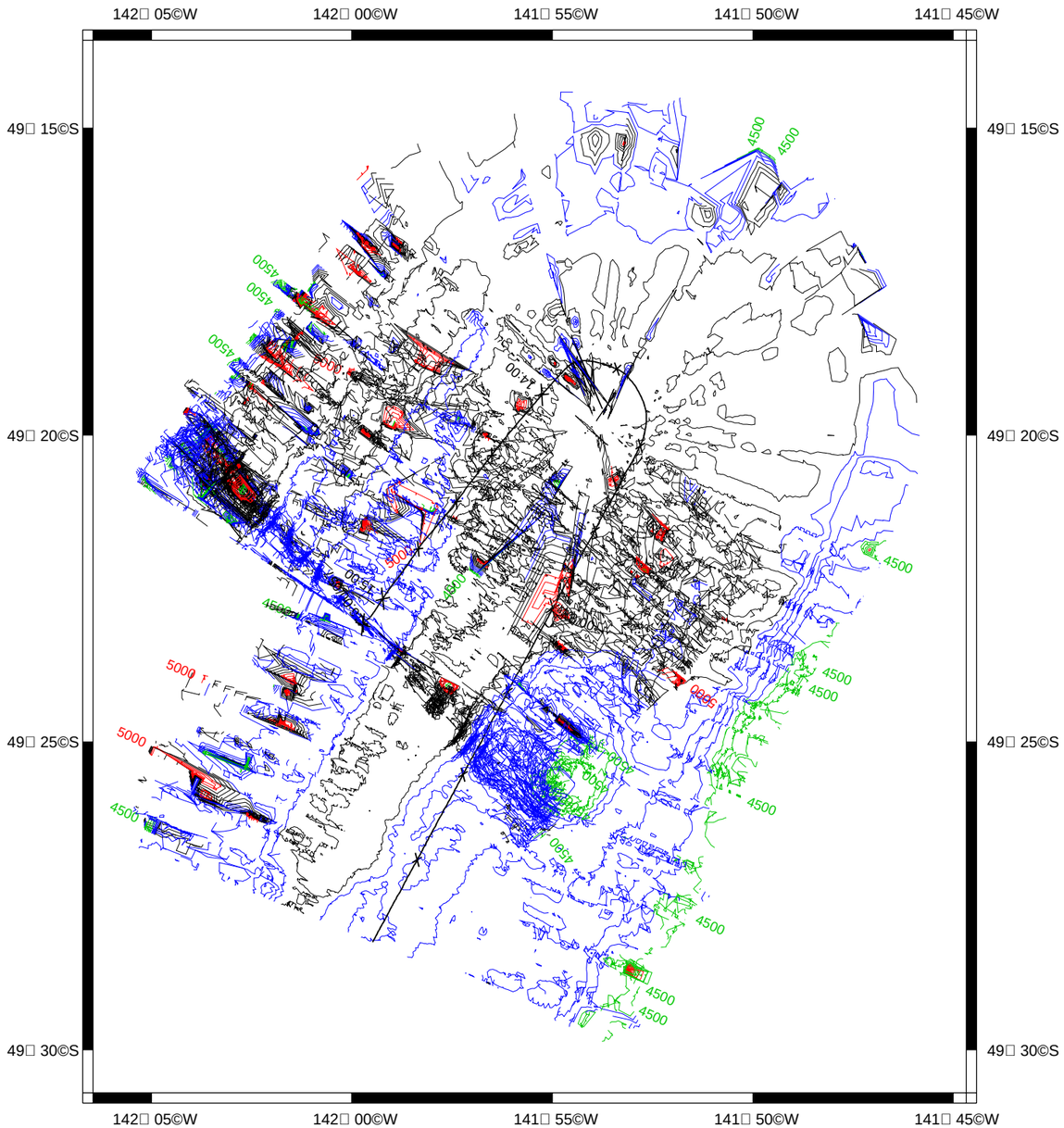


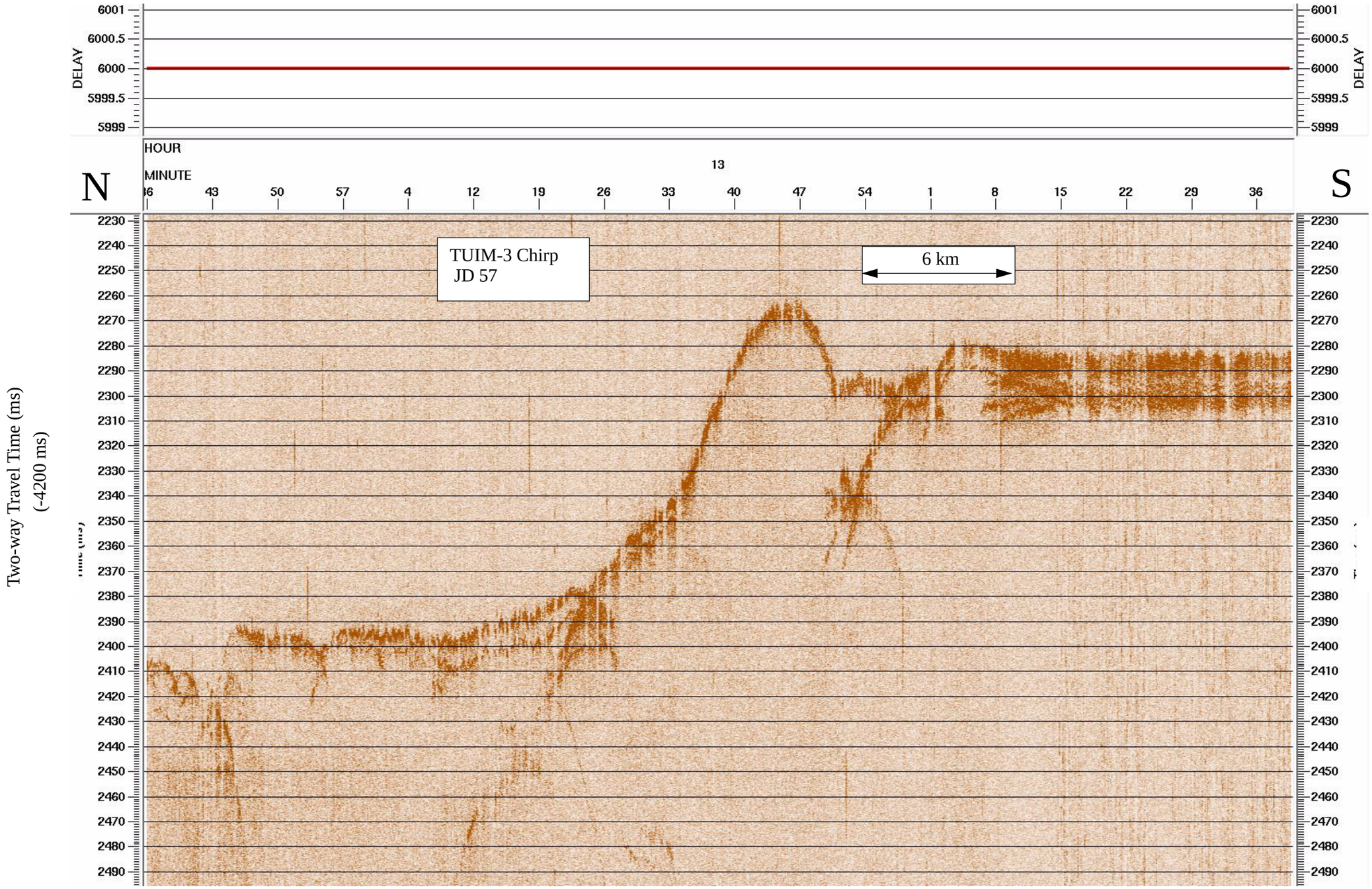

DELAY
5900
5800
5700
S
HOUR
MINUTE
7
6
10
24
38
52
5
19
32
46
59
13
26
40
N
TUIM-3 Chirp
JD 57
6 km
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
Two-way Travel Time (ms)
(-4200 ms)
Ti
Time (ms)


DELAY
5667
5666.5
5666
5665.5
5665
W
E
HOUR
MINUTE
10
41
47
54
1
8
6 km
TUIM-3 Chirp
JD 57
Two-way Travel Time (ms)
(-4200 ms)
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250


DELAY
5900
5800
5700
HOUR
MINUTE
11
9 15 22 29 36 42 49 56 3 10 17 24 31 38 45 52 59 6 13 20 27 34
N
S
6 km
TUIM-3 Chirp
JD 57
Two-way Travel Time (ms)
(-4200 ms)
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550

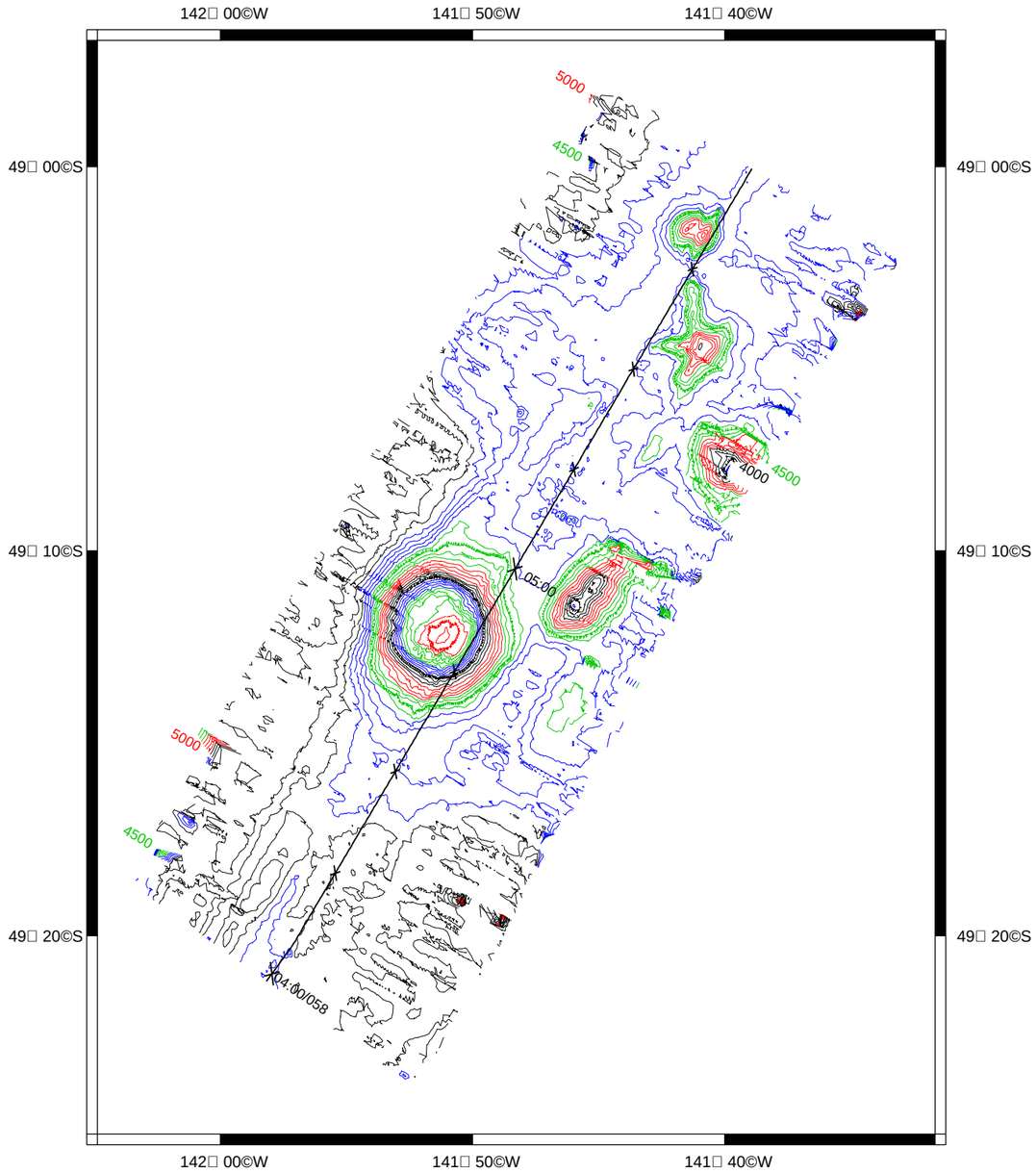
Data File SBfixavg.2005feb26.1200-1800

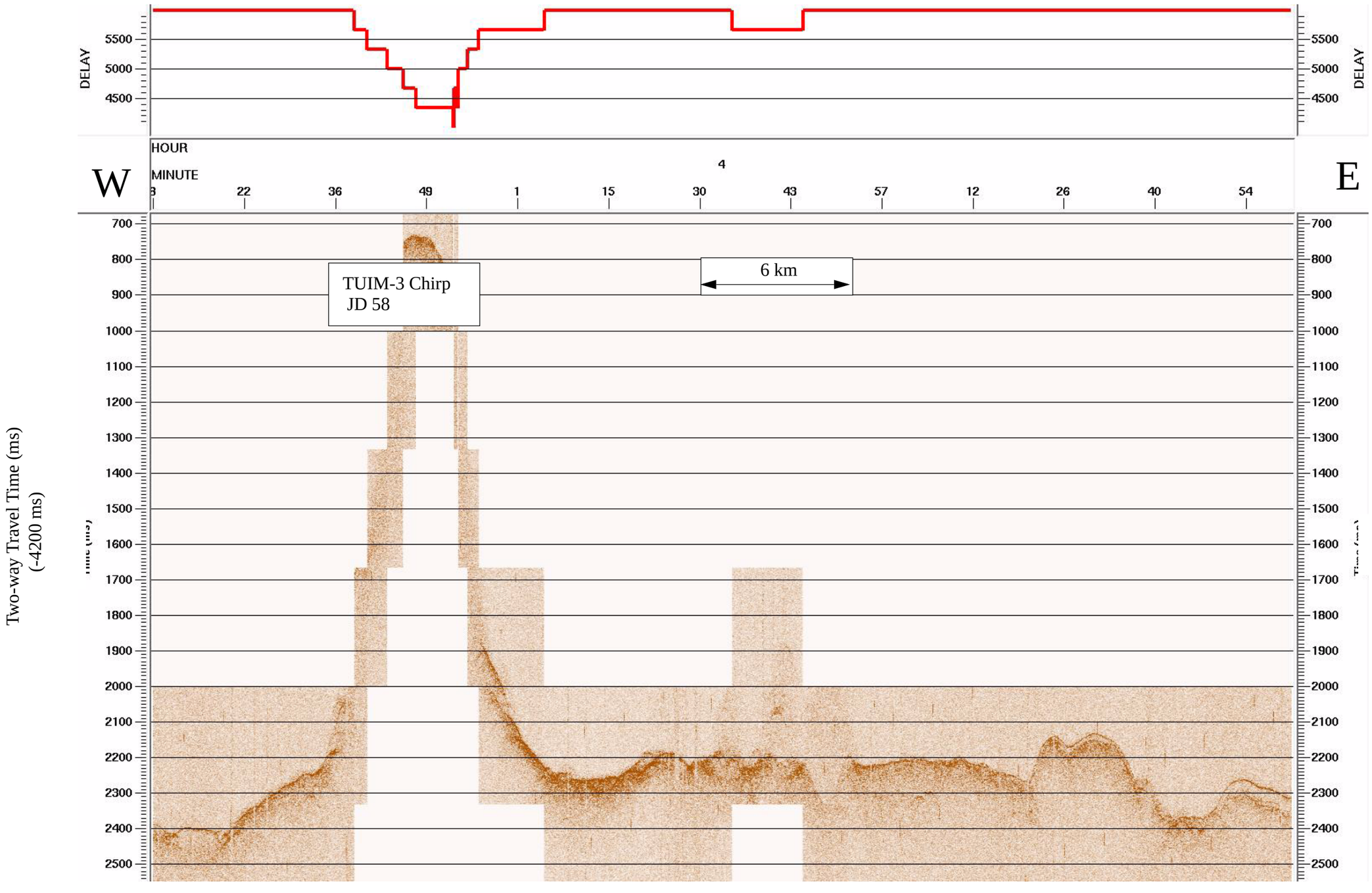


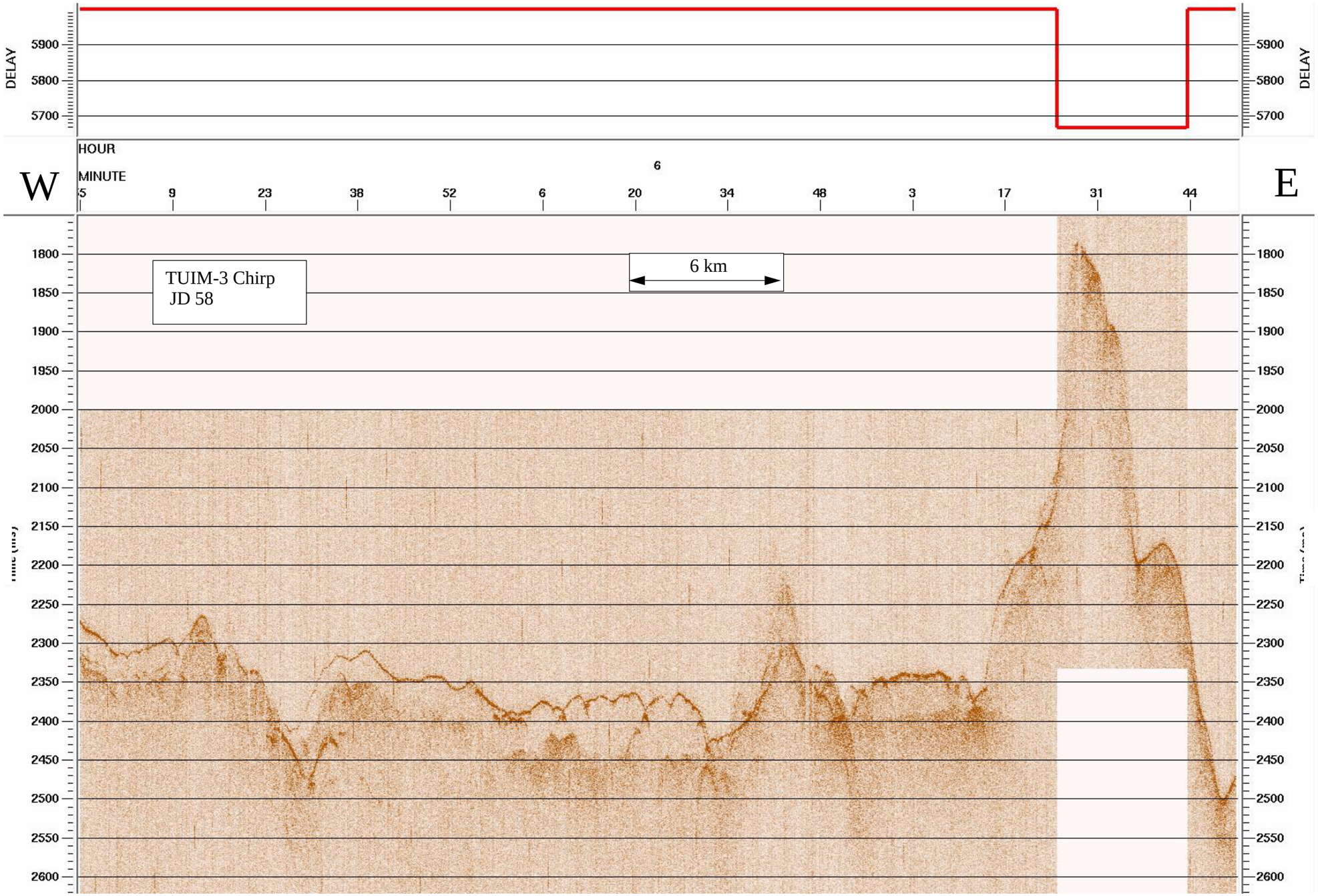

DELAY
6001
6000.5
6000
5999.5
5999
HOUR
13
MINUTE
36
43
50
57
4
12
19
26
33
40
47
54
1
8
15
22
29
36
N
S
TUIM-3 Chirp
JD 57
6 km
Two-way Travel Time (ms)
(-4200 ms)
2230
2240
2250
2260
2270
2280
2290
2300
2310
2320
2330
2340
2350
2360
2370
2380
2390
2400
2410
2420
2430
2440
2450
2460
2470
2480
2490

Julian Day 58
27 February 2005
Knudsen Chirp Data

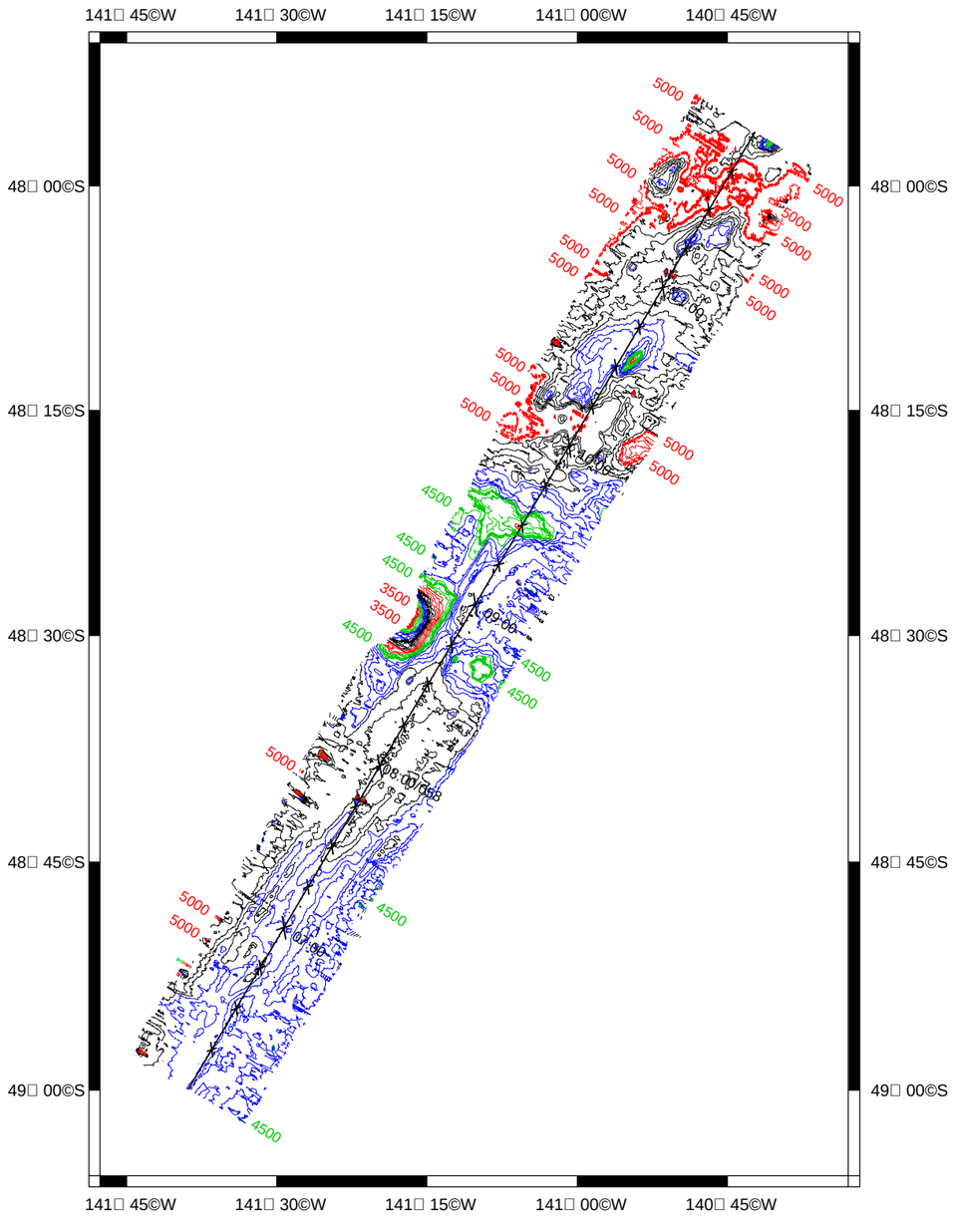
Data File SBfixavg.2005feb27.0000-0600

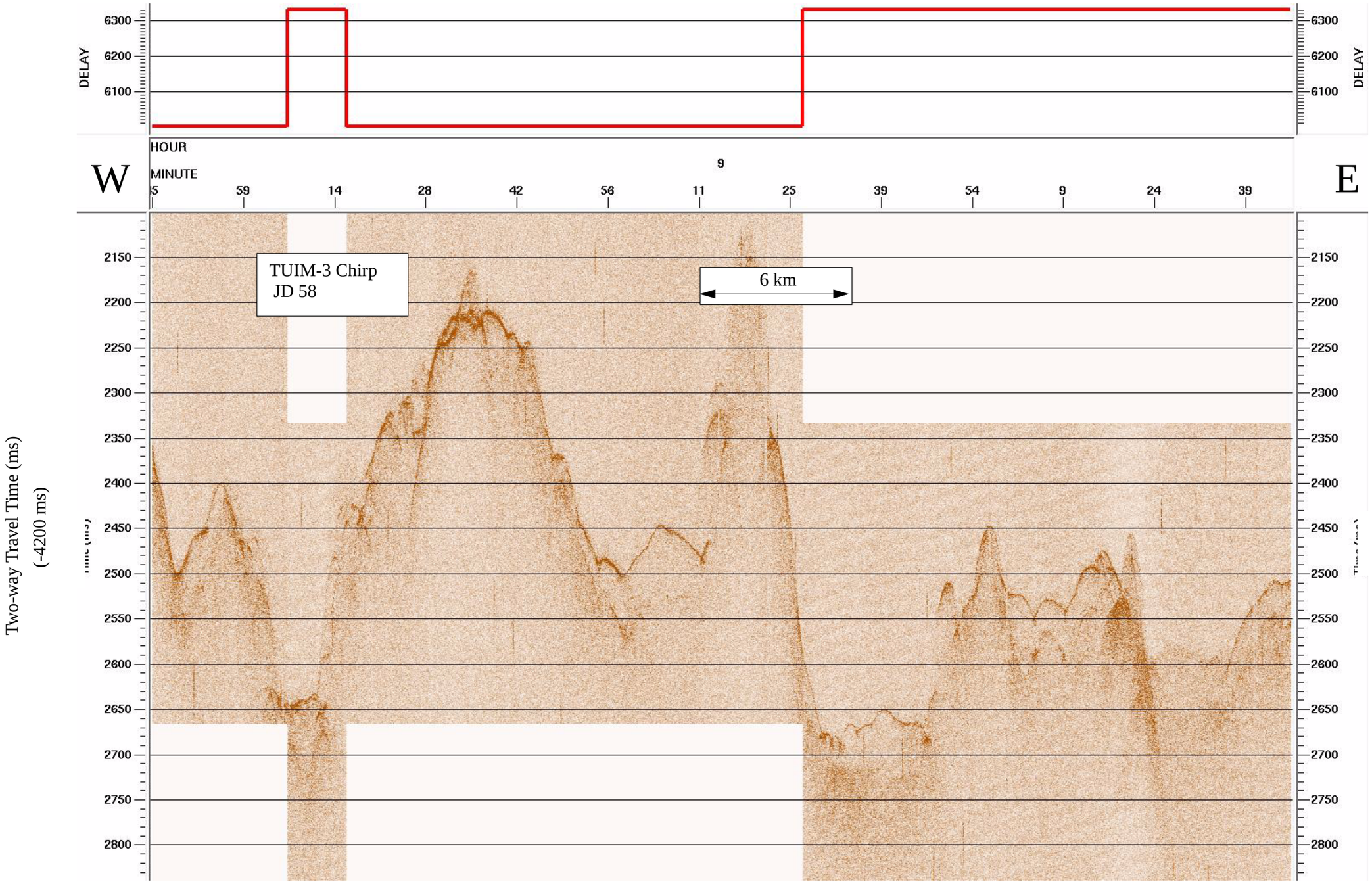


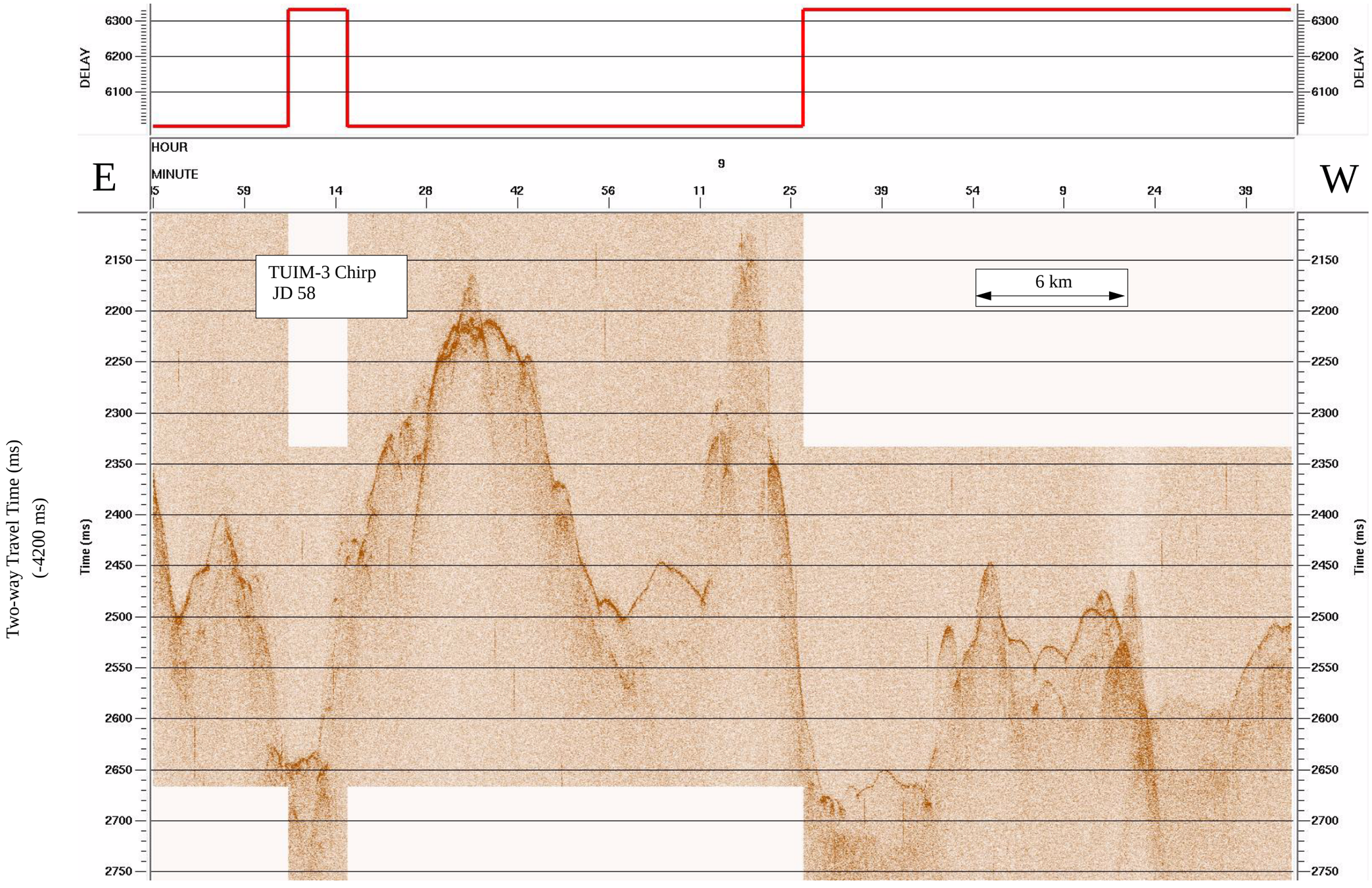

DELAY
5500
5000
4500
HOUR
MINUTE
4
3
22
36
49
1
15
30
43
57
12
26
40
54
W
E
TUIM-3 Chirp
JD 58
6 km
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
Two-way Travel Time (ms)
(-4200 ms)


DELAY
5900
5800
5700
HOUR
MINUTE
6
5
9
23
38
52
6
20
34
48
3
17
31
44
W
E
TUIM-3 Chirp
JD 58
6 km
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
Two-way Travel Time (ms)
(-4200 ms)

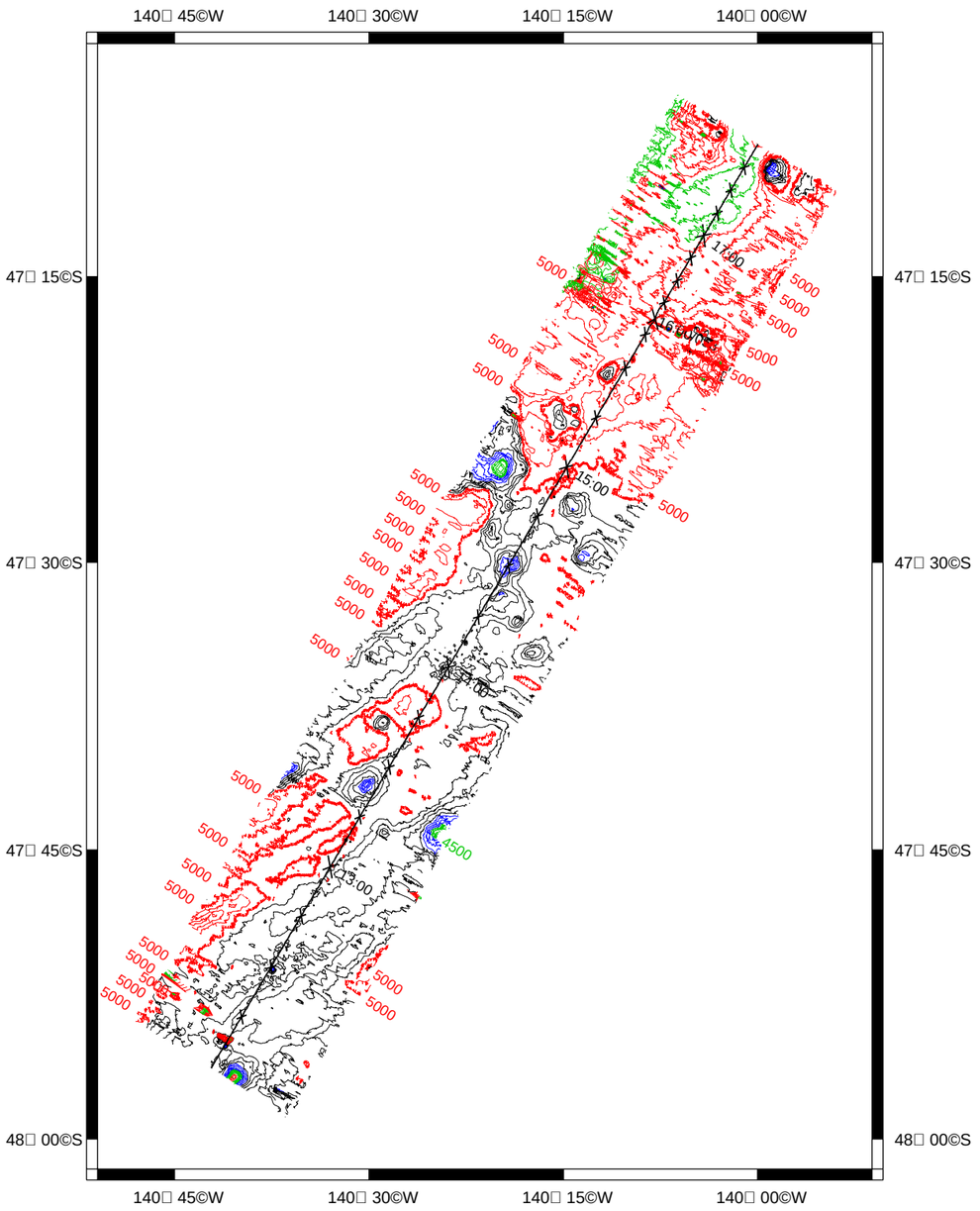
Data File SBfixavg.2005feb27.0600-1200

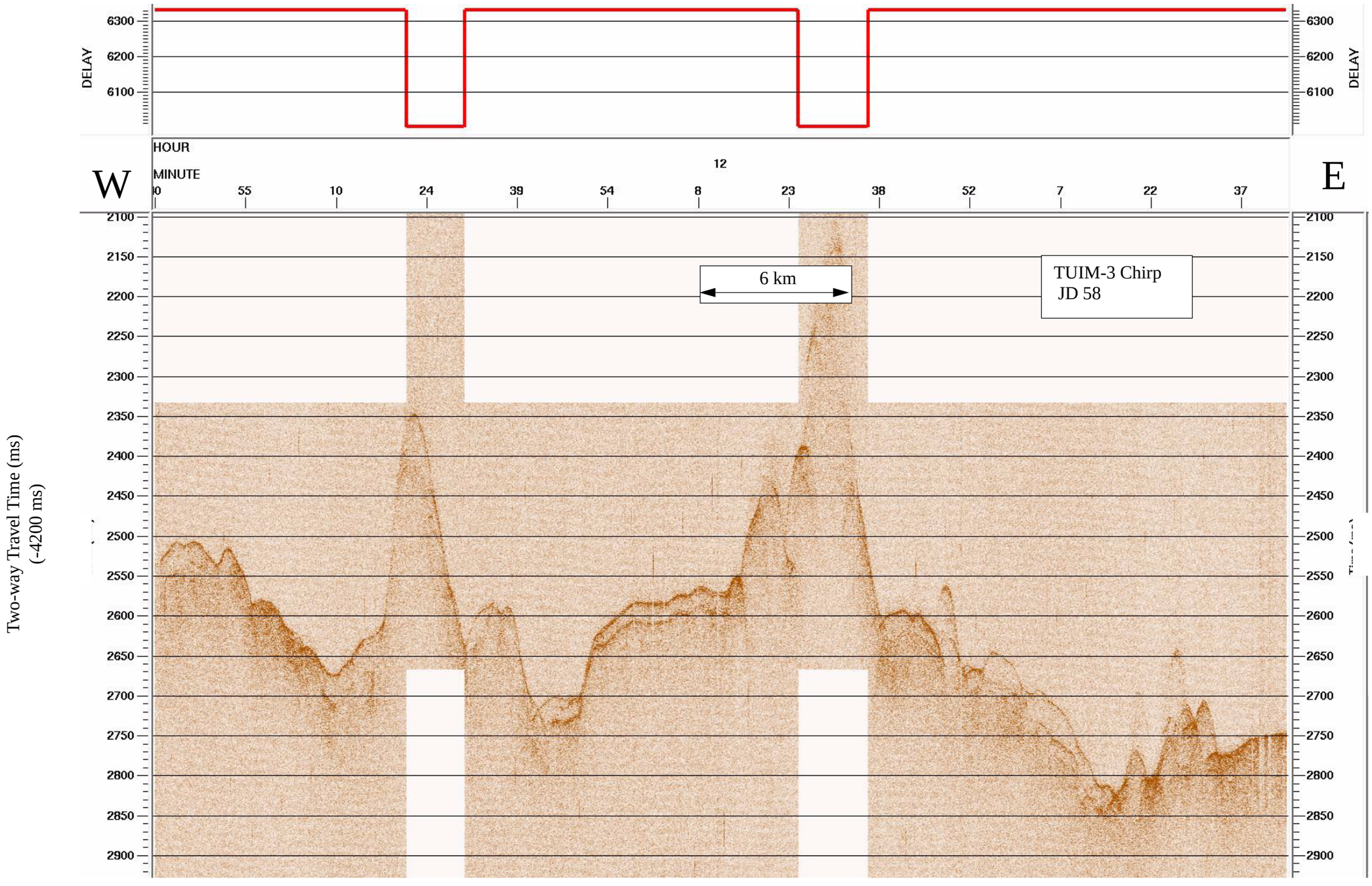


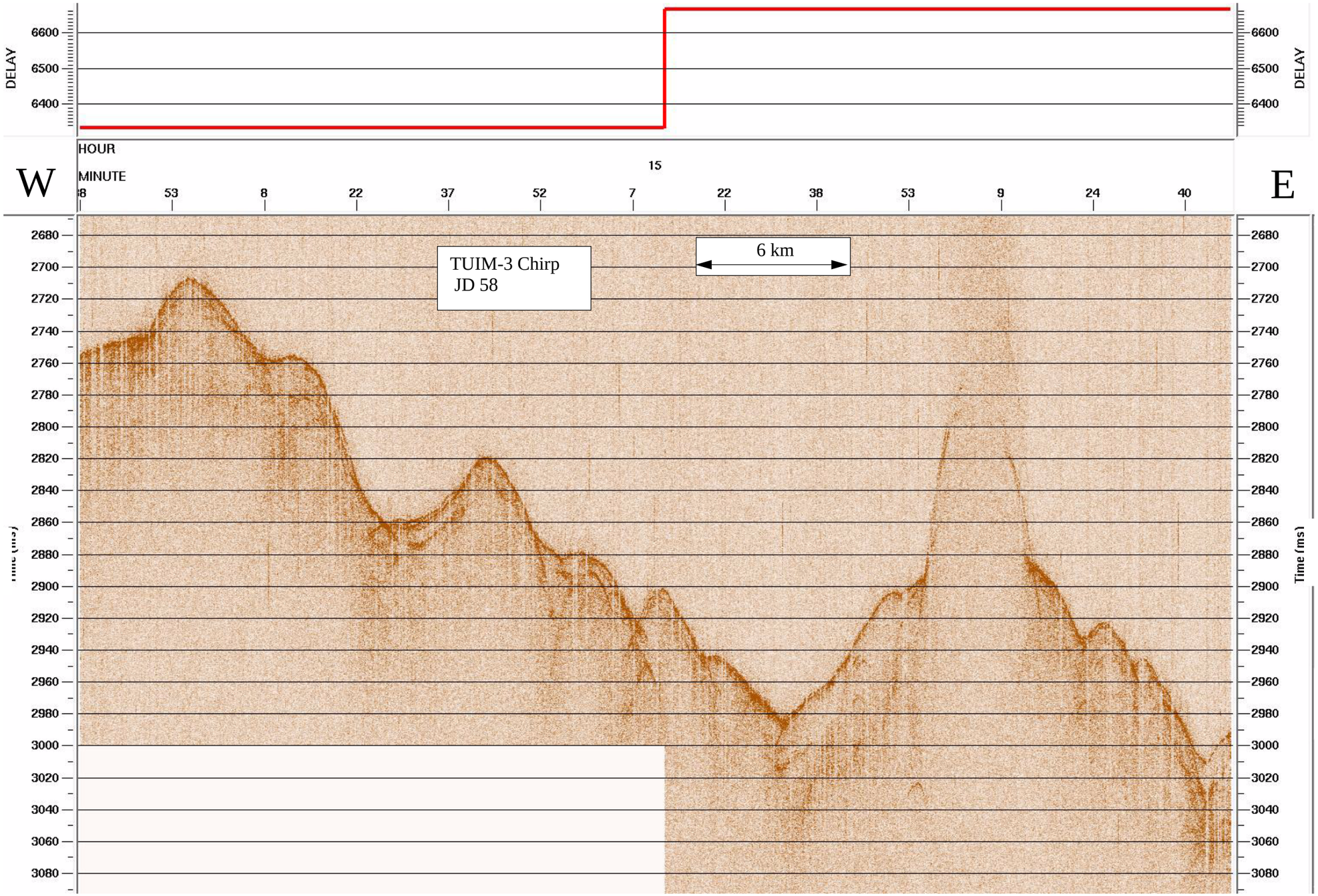

DELAY
6300
6200
6100
W
HOUR
MINUTE
9
5
59
14
28
42
56
11
25
39
54
9
24
39
E
TUIM-3 Chirp
JD 58
6 km
Two-way Travel Time (ms)
(-4200 ms)
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800


DELAY
6300
6200
6100
E
W
HOUR
MINUTE
9
5
59
14
28
42
56
11
25
39
54
9
24
39
TUIM-3 Chirp
JD 58
6 km
Time (ms)
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
Two-way Travel Time (ms)
(-4200 ms)

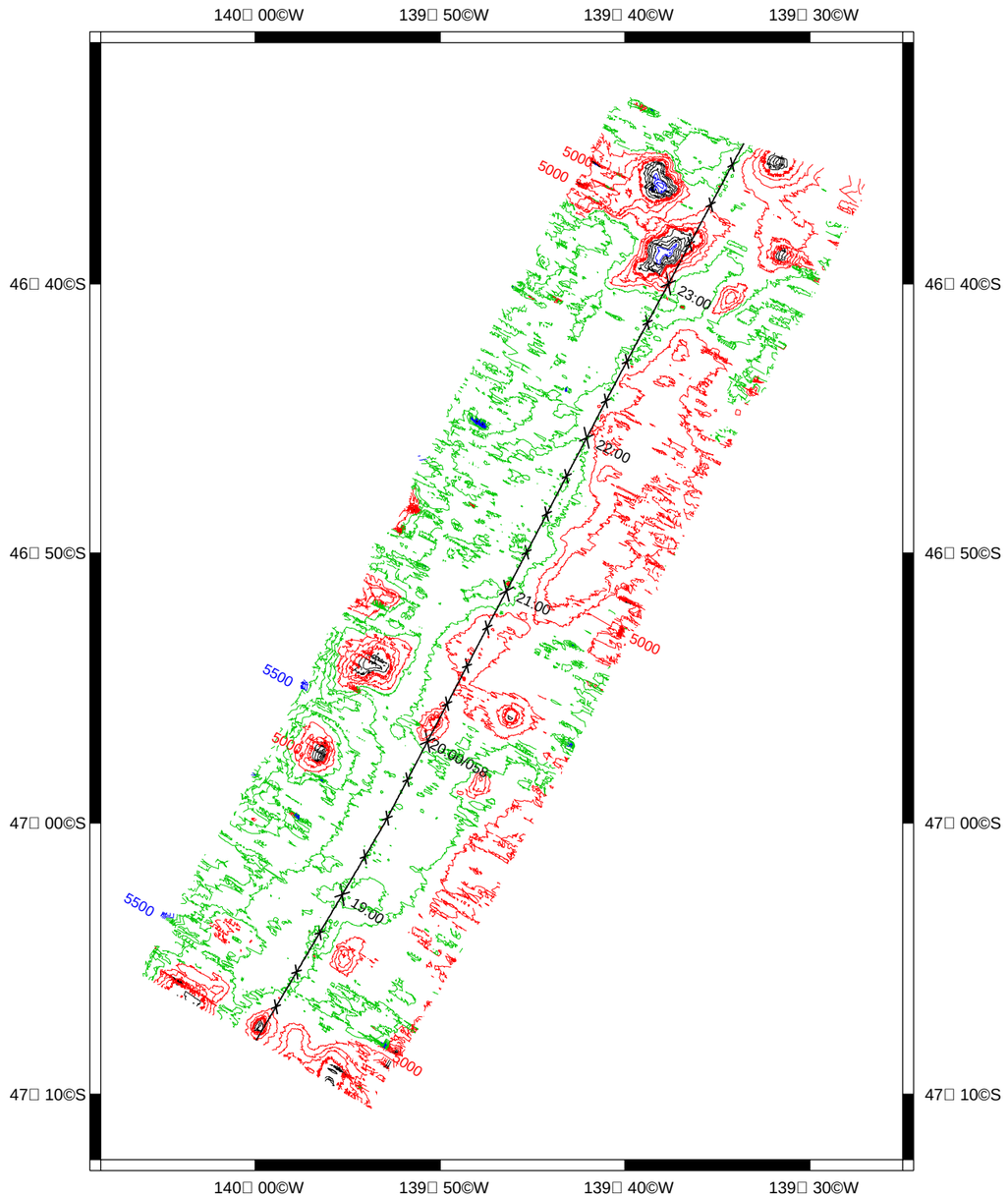
Data File SBfixavg.2005feb27.1200-1800

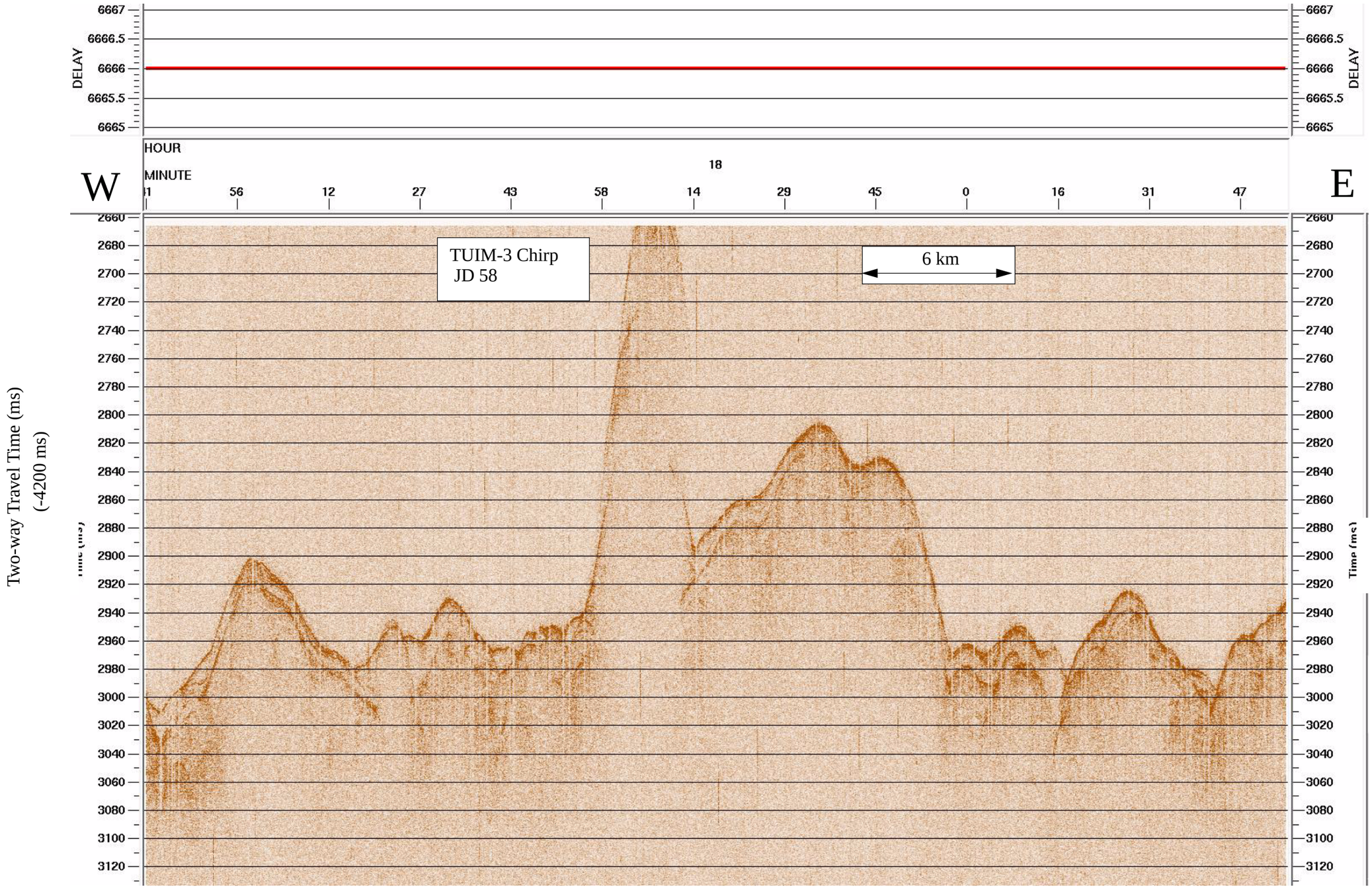


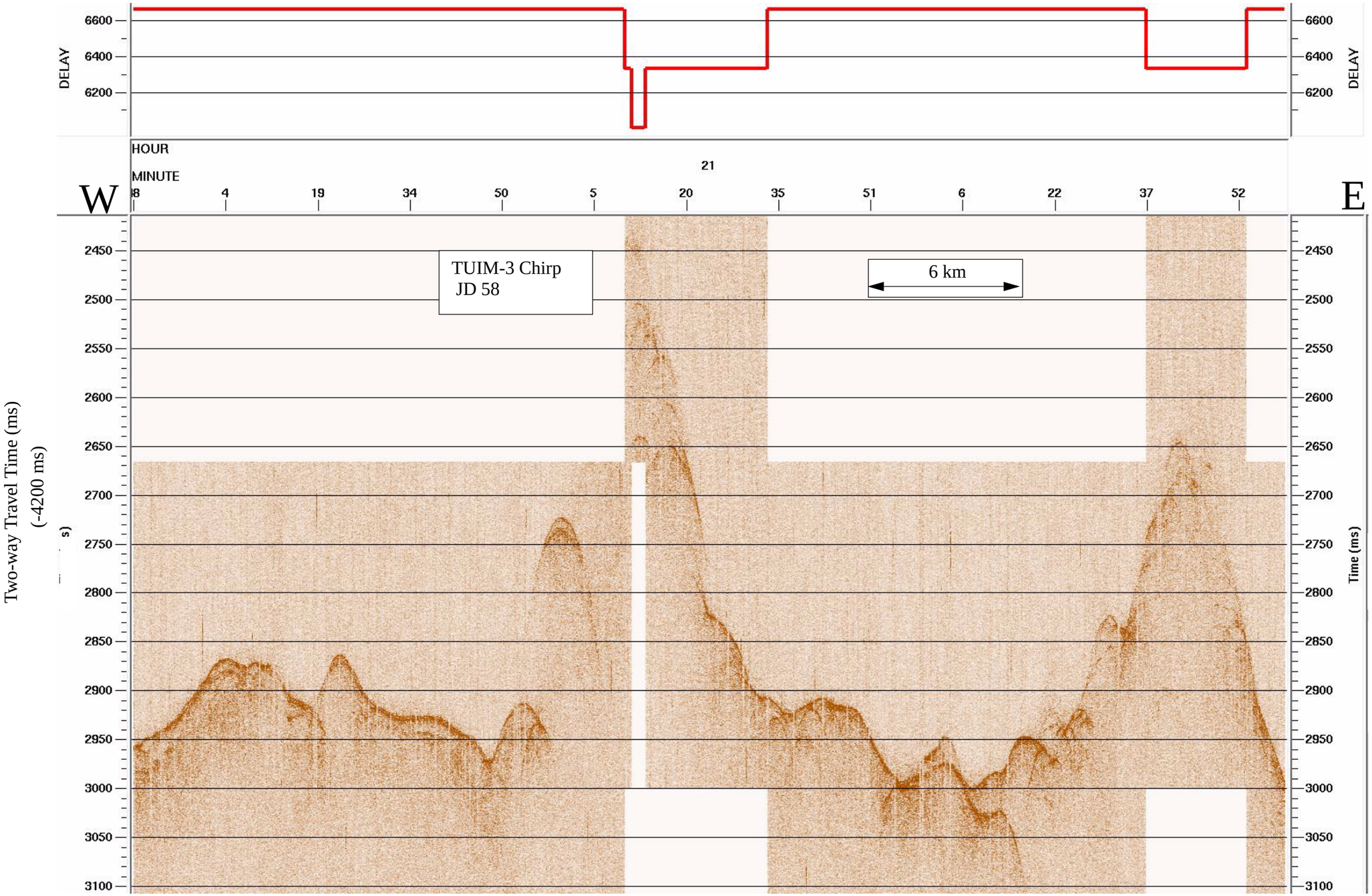

DELAY
6300
6200
6100
W
HOUR
MINUTE
0
55
10
24
39
54
8
12
23
38
52
7
22
37
E
6 km
TUIM-3 Chirp
JD 58
Two-way Travel Time (ms)
(-4200 ms)
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900


DELAY
6600
6500
6400
W
E
HOUR
MINUTE
15
8
53
8
22
37
52
7
22
38
53
9
24
40
TUIM-3 Chirp
JD 58
6 km
Two-way Travel Time (ms)
(-4200 ms)
Time (ms)
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080

Data File SBfixavg.2005feb27.1800-2400

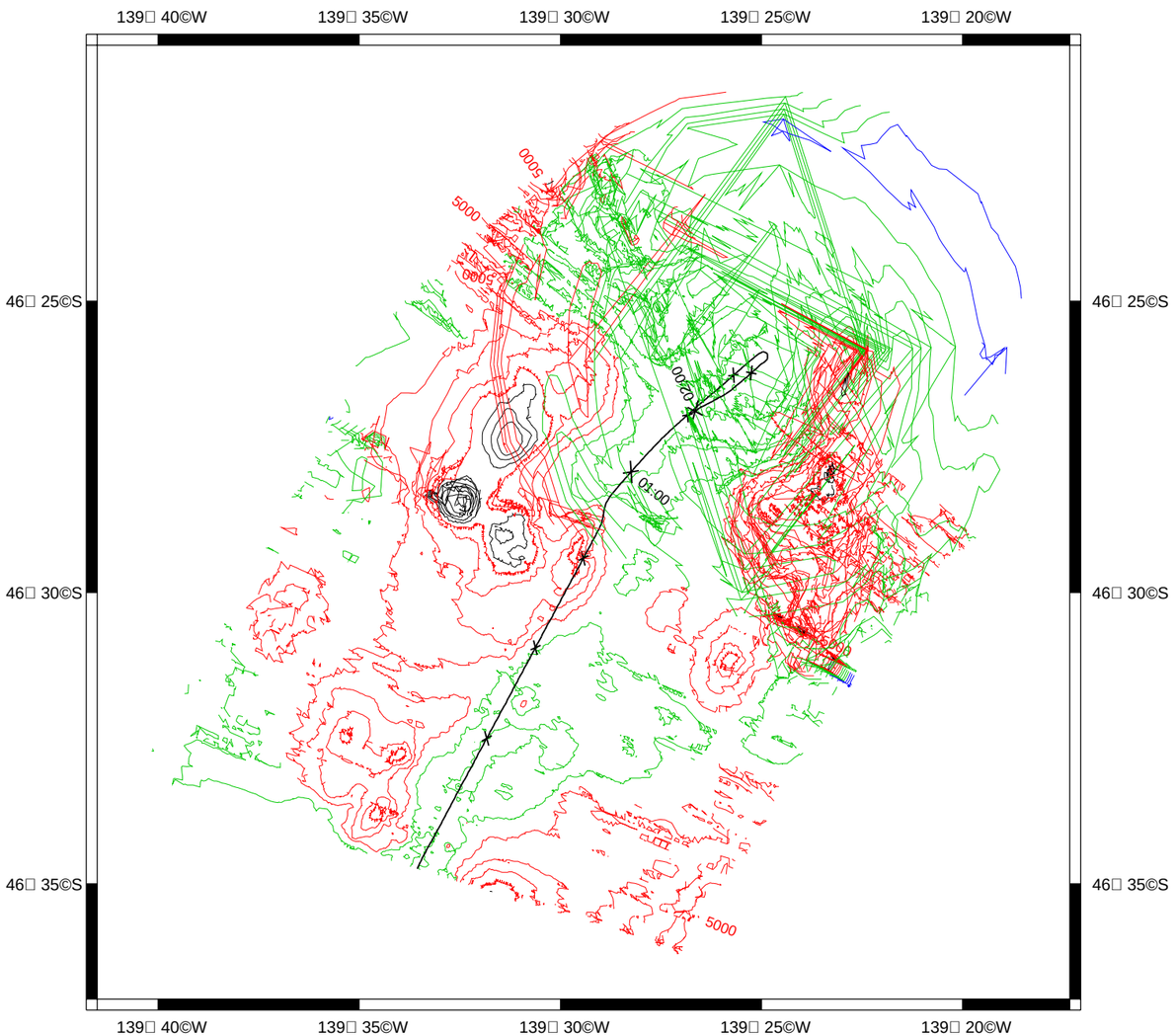


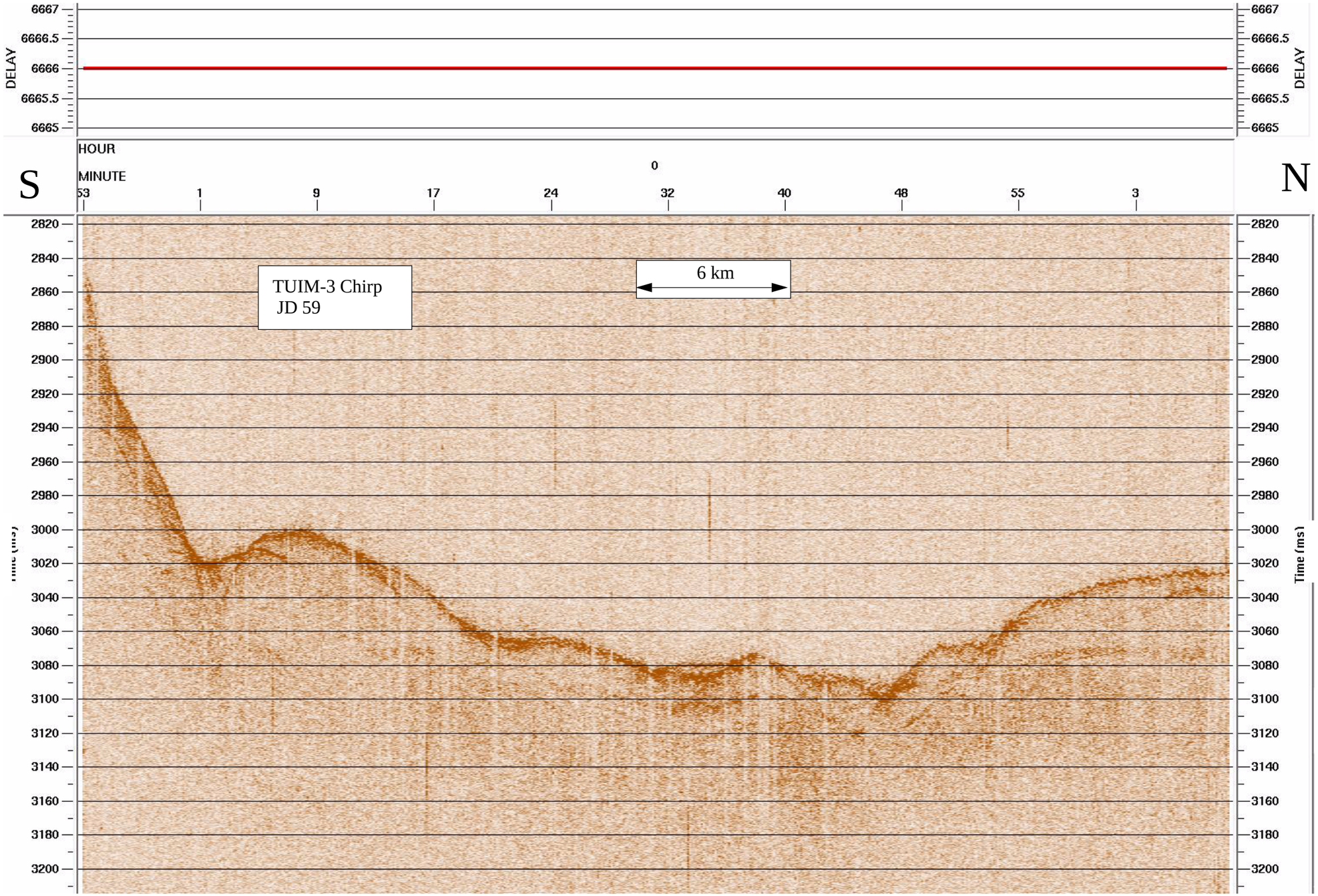

DELAY
6667
6666.5
6666
6665.5
6665
HOUR
18
MINUTE
11
56
12
27
43
58
14
29
45
0
16
31
47
W
E
TUIM-3 Chirp
JD 58
6 km
Two-way Travel Time (ms)
(-4200 ms)
2660
2680
2700
2720
2740
2760
2780
2800
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3060
3080
3100
3120

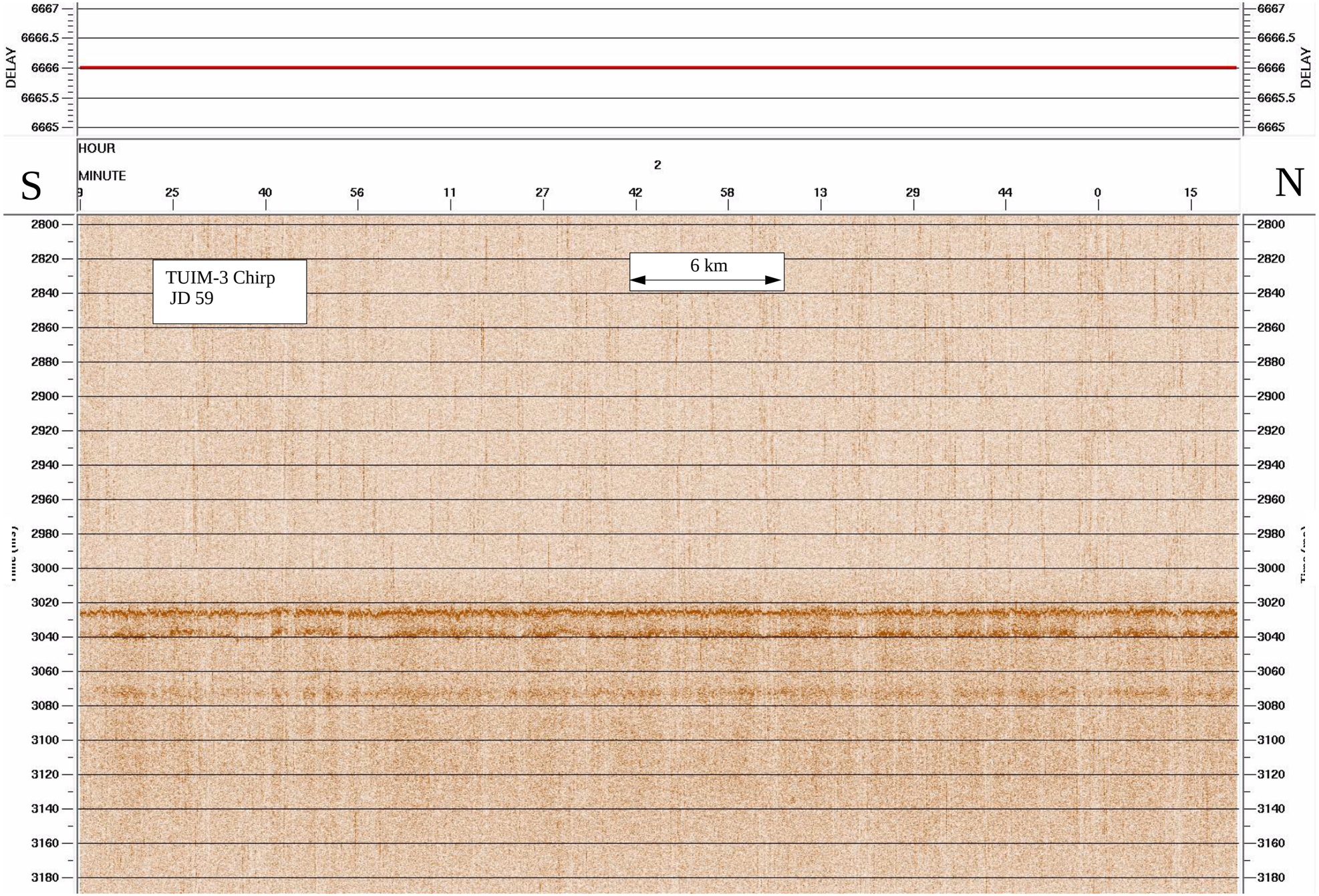

DELAY
6600
6400
6200
HOUR
21
MINUTE
18
4
19
34
50
5
20
35
51
6
22
37
52
W
E
TUIM-3 Chirp
JD 58
6 km
Two-way Travel Time (ms)
(-4200 ms)
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
Time (ms)

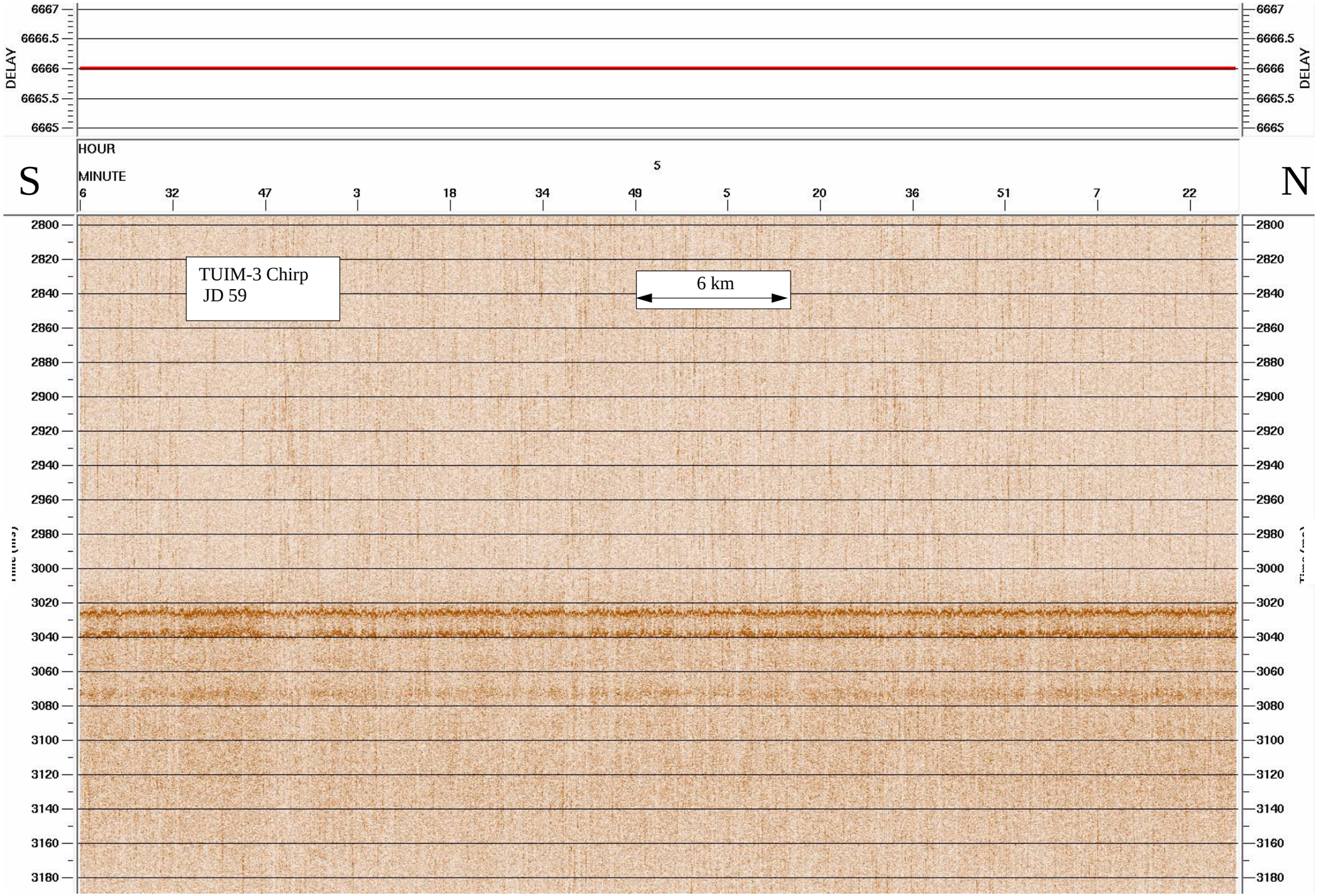
Julian Day 59
28 February 2005
Knudsen Chirp Data

Data File SBfixavg.2005feb28.0000-0600

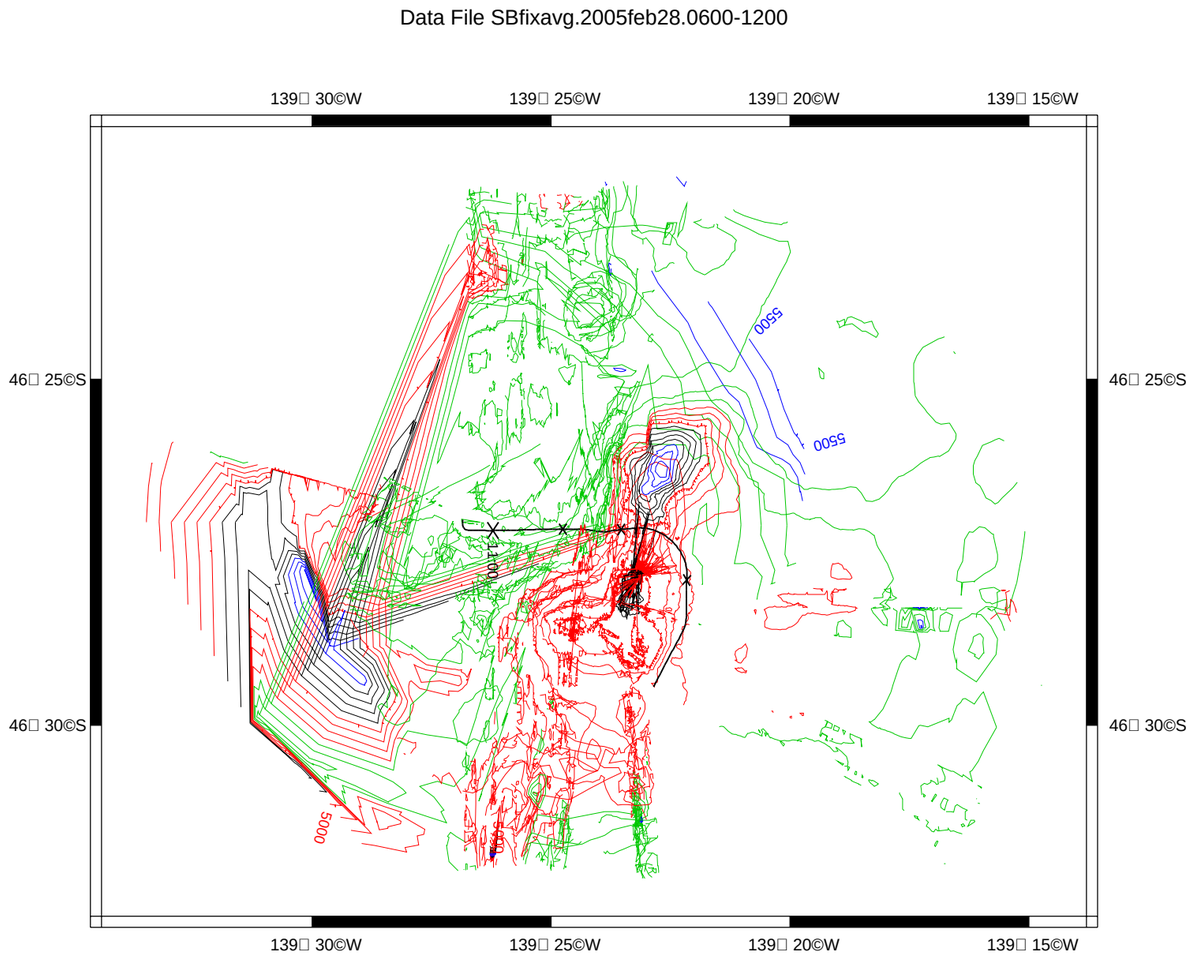


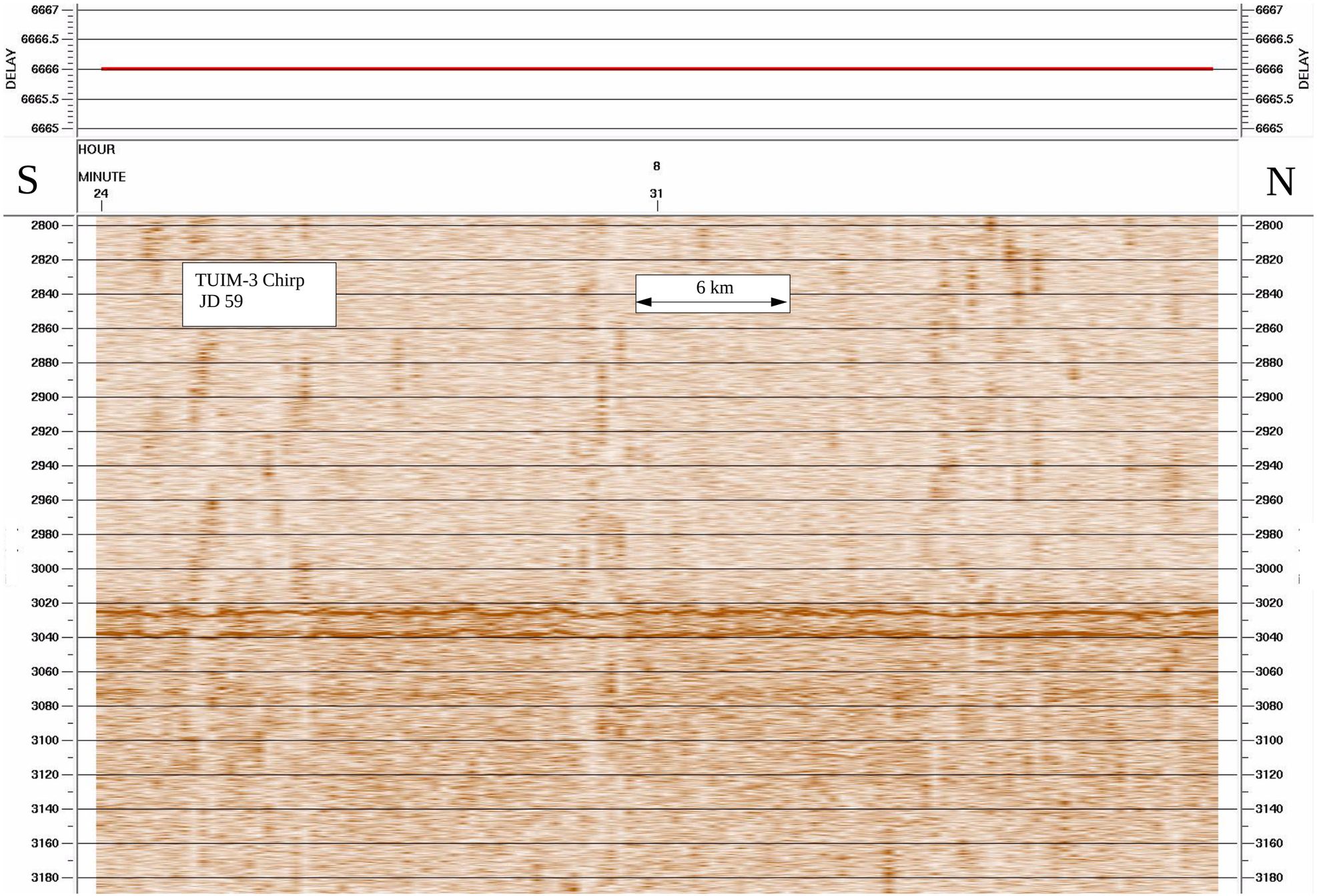

DELAY
6667
6666.5
6666
6665.5
6665
HOUR
MINUTE
0
53
1
9
17
24
32
40
48
55
3
S
N
TUIM-3 Chirp
JD 59
6 km
Two-way Travel Time (ms)
(-4200 ms)
Time (ms)
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
3140
3160
3180
3200

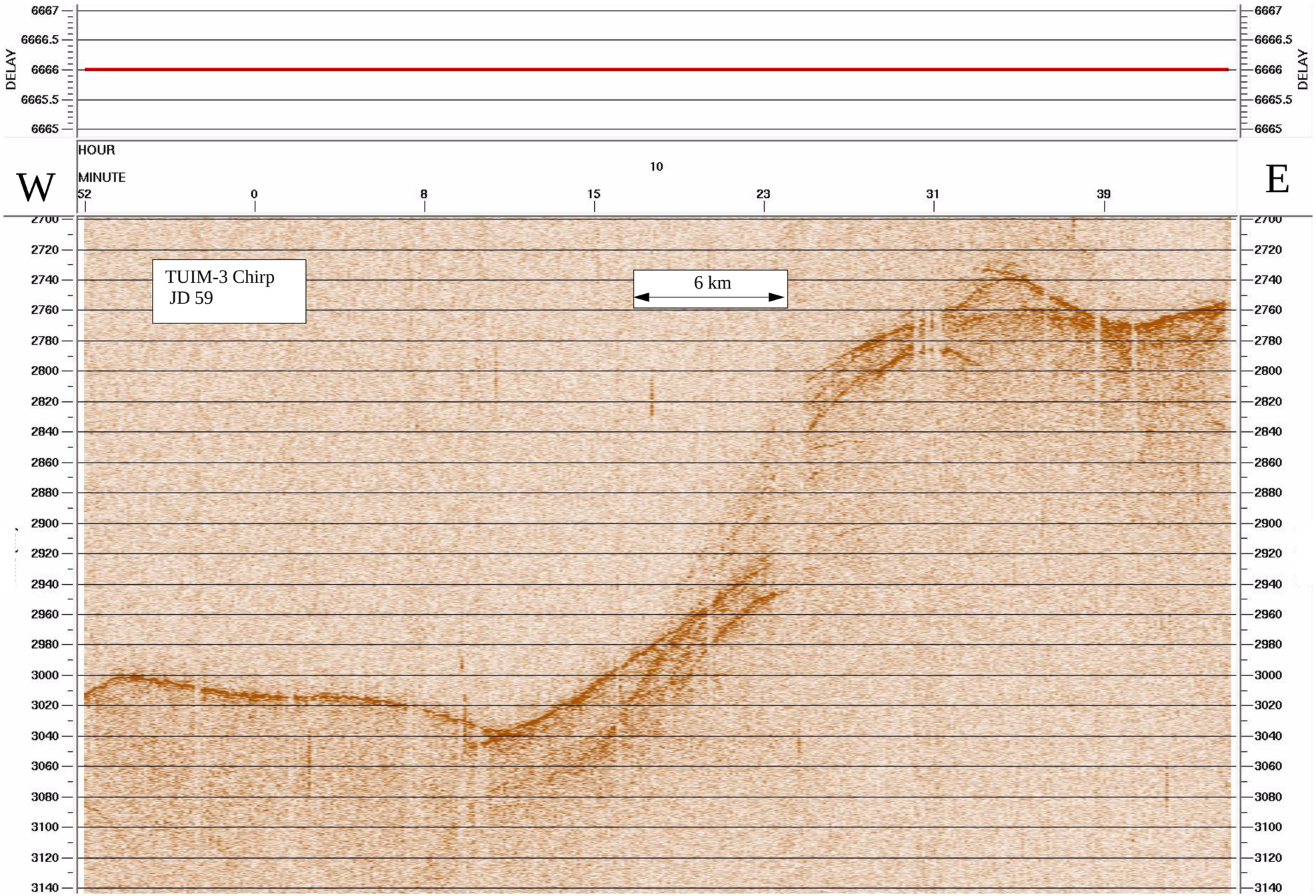

DELAY
6667
6666.5
6666
6665.5
6665
HOUR
MINUTE
2
9
25
40
56
11
27
42
58
13
29
44
0
15
S
N
TUIM-3 Chirp
JD 59
6 km
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
3140
3160
3180
Two-way Travel Time (ms)
(-4200 ms)



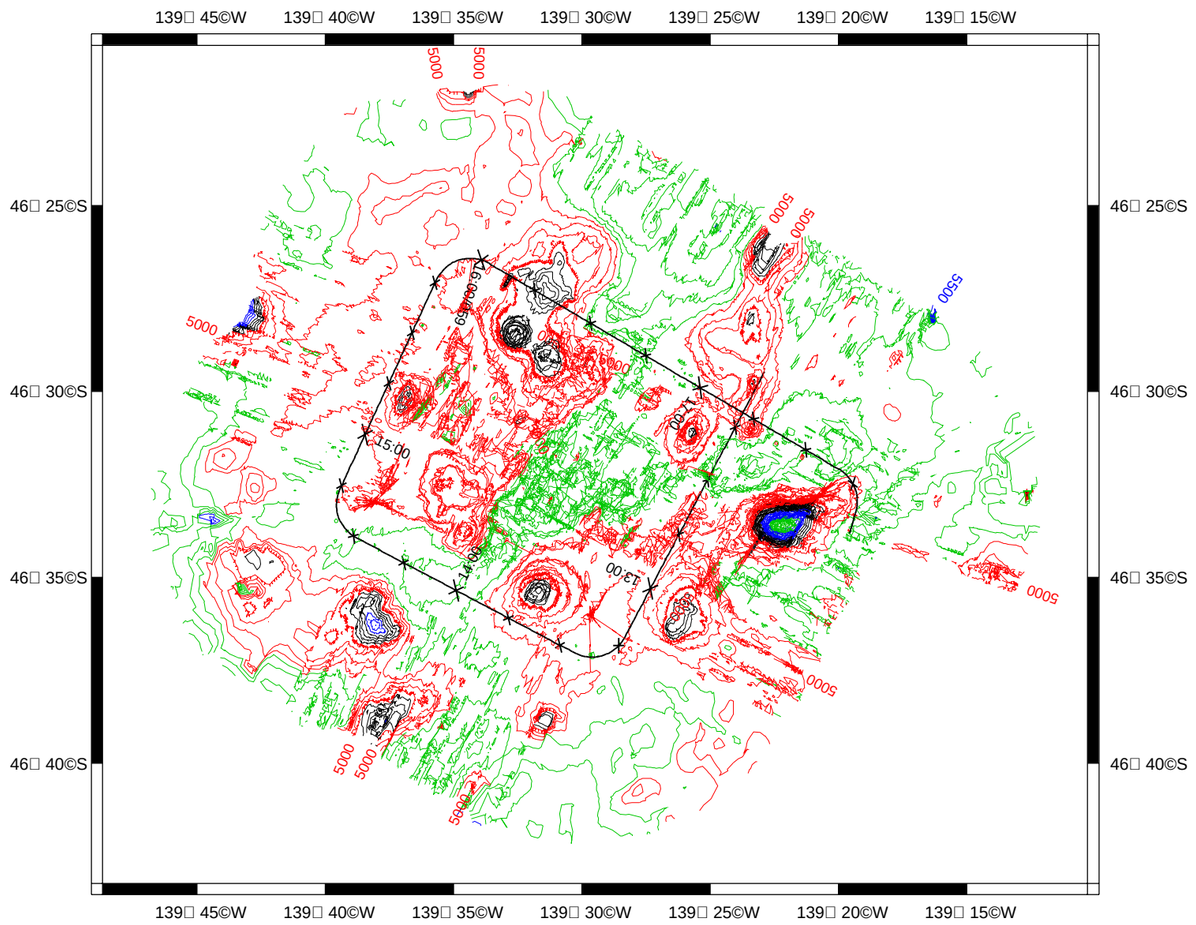
Two-way Travel Time (ms)
(-4200 ms)

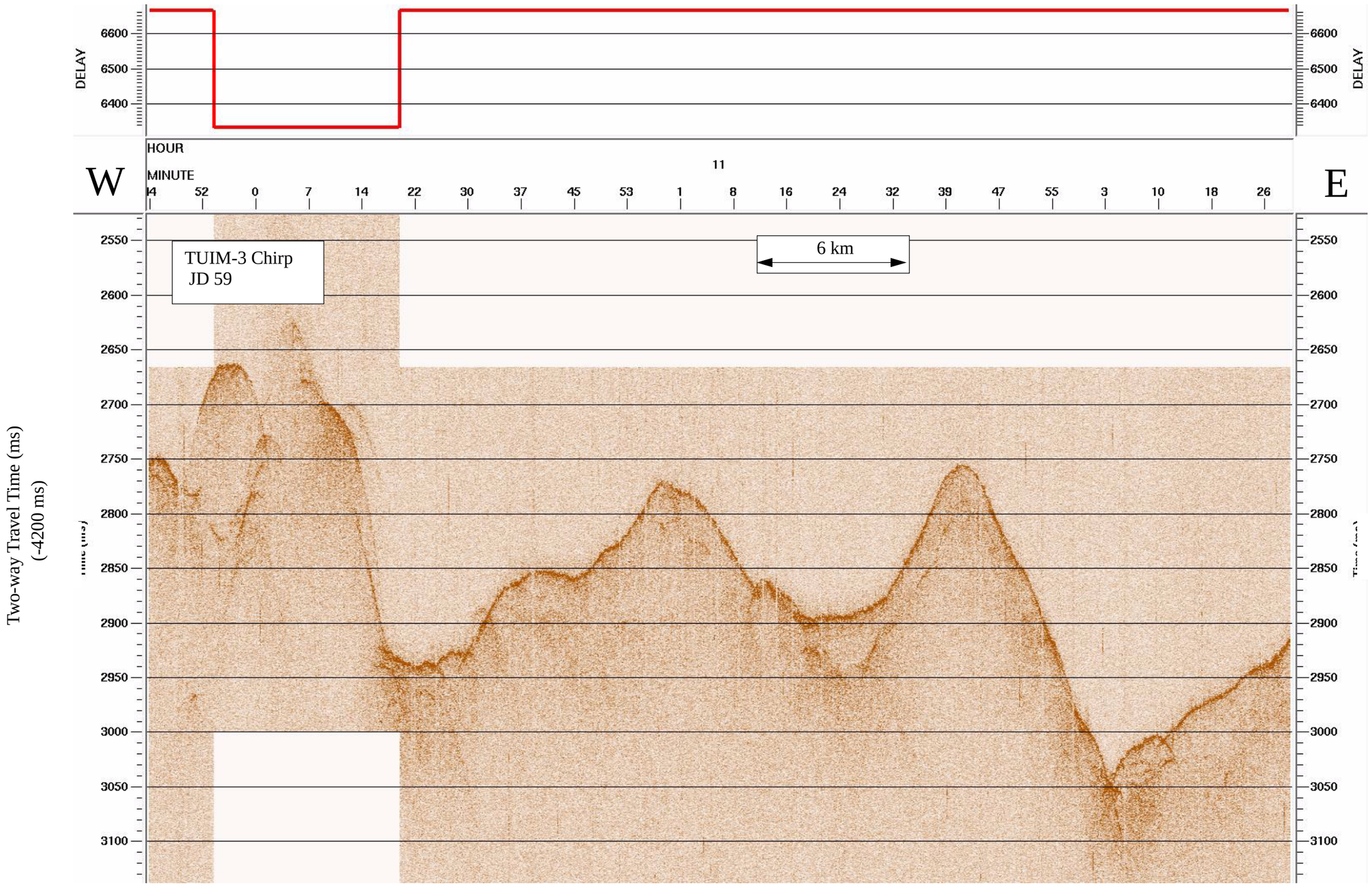

Data File SBfixavg.2005feb28.0600-1200
139□ 30©W
139□ 25©W
139□ 20©W
139□ 15©W
46□ 25©S
46□ 30©S
5500
5500
5000
5000

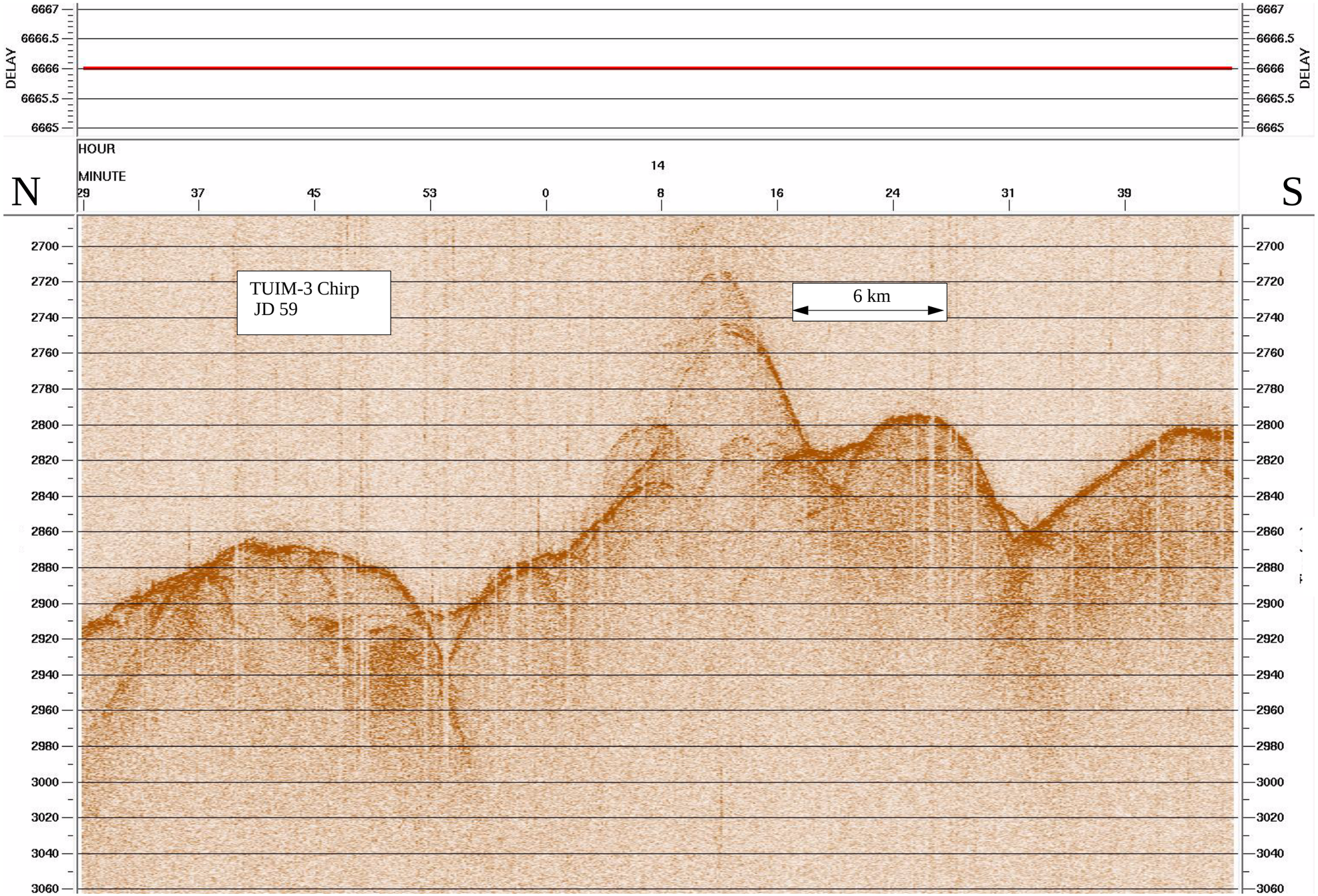

DELAY
6667
6666.5
6666
6665.5
6665
S
N
HOUR
MINUTE
24
8
31
TUIM-3 Chirp
JD 59
6 km
Two-way Travel Time (ms)
(-4200 ms)
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
3140
3160
3180

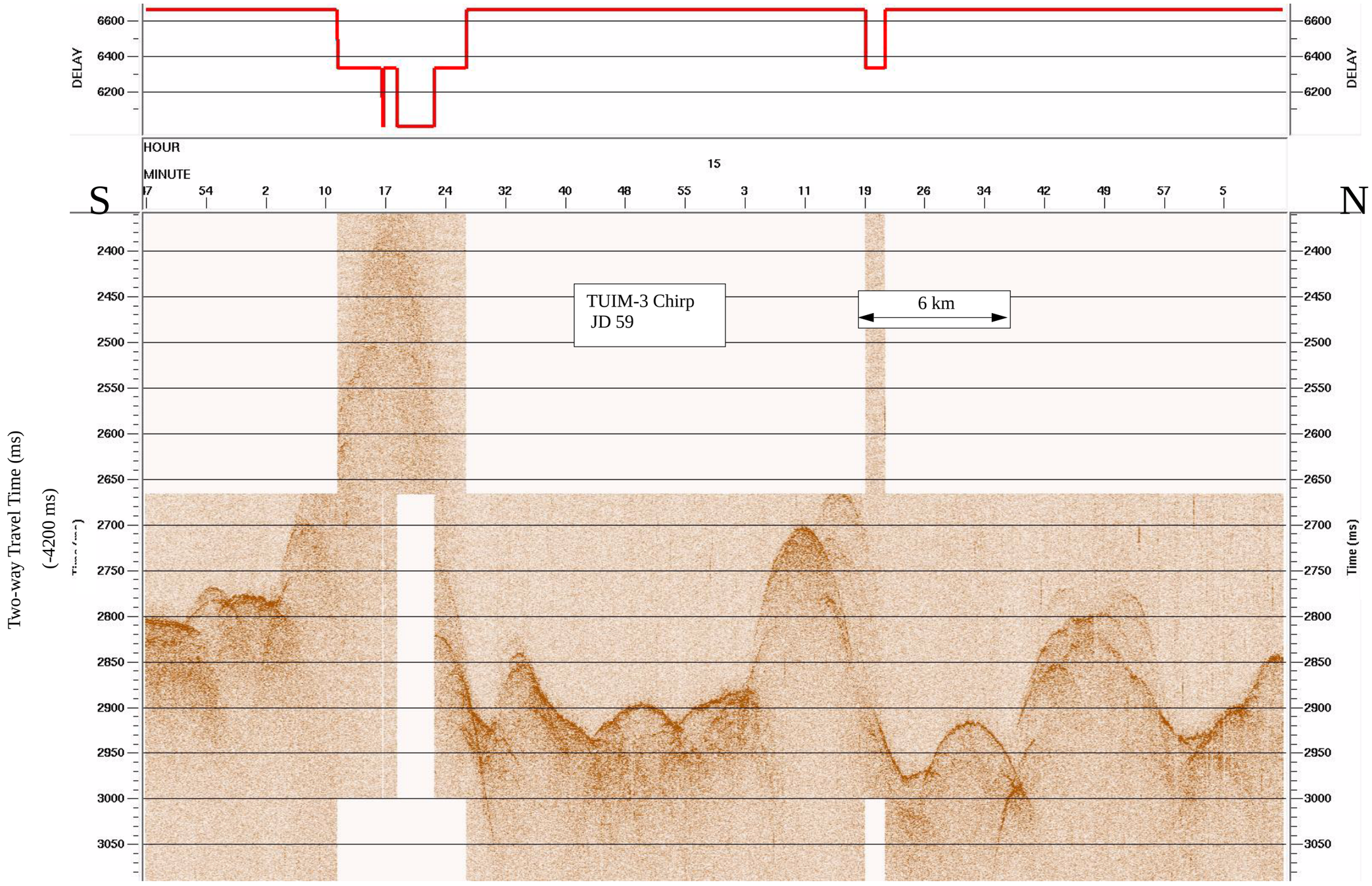

DELAY
6667
6666.5
6666
6665.5
6665
W
E
HOUR
10
MINUTE
52
0
8
15
23
31
39
TUIM-3 Chirp
JD 59
6 km
Two-way Travel Time (ms)
(-4200 ms)
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
3140

Data File SBfixavg.2005feb28.1200-1800

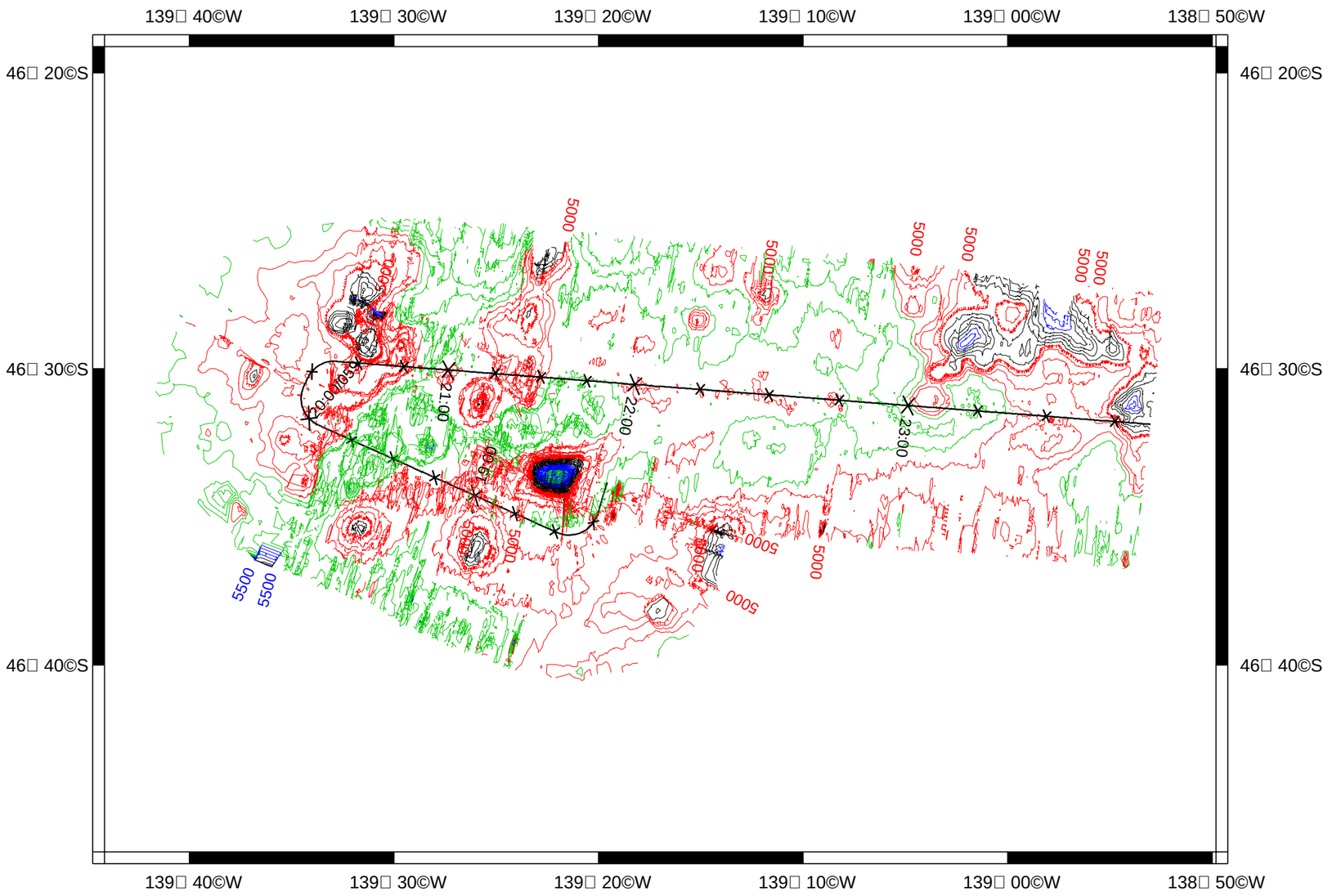


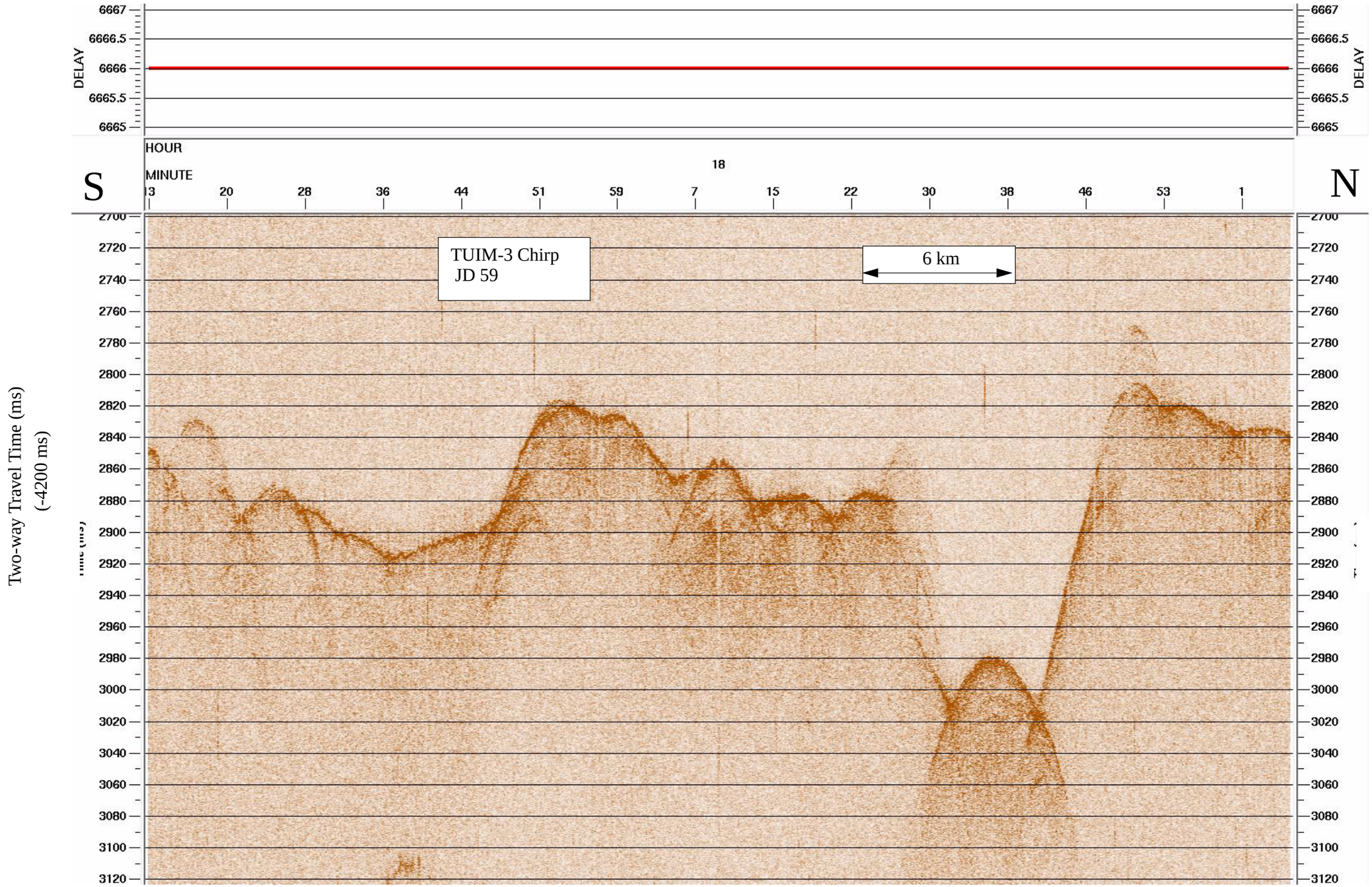

DELAY
6600
6500
6400
W
E
HOUR
11
MINUTE
14 52 0 7 14 22 30 37 45 53 1 8 16 24 32 39 47 55 3 10 18 26
TUIM-3 Chirp
JD 59
6 km
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
Two-way Travel Time (ms)
(-4200 ms)

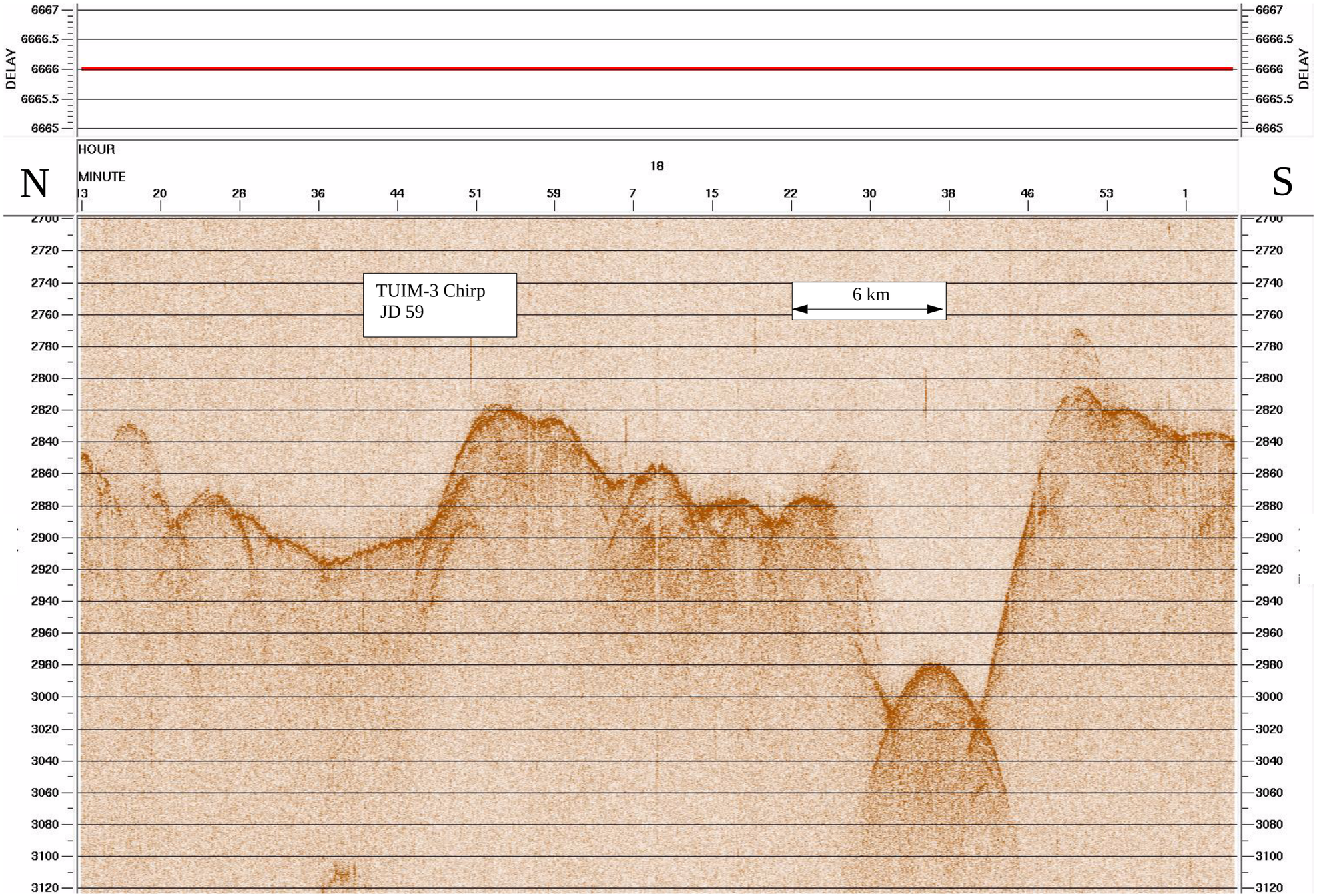

DELAY
6667
6666.5
6666
6665.5
6665
HOUR
MINUTE
14
29
37
45
53
0
8
16
24
31
39
N
S
TUIM-3 Chirp
JD 59
6 km
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
Two-way Travel Time (ms)
(-4200 ms)

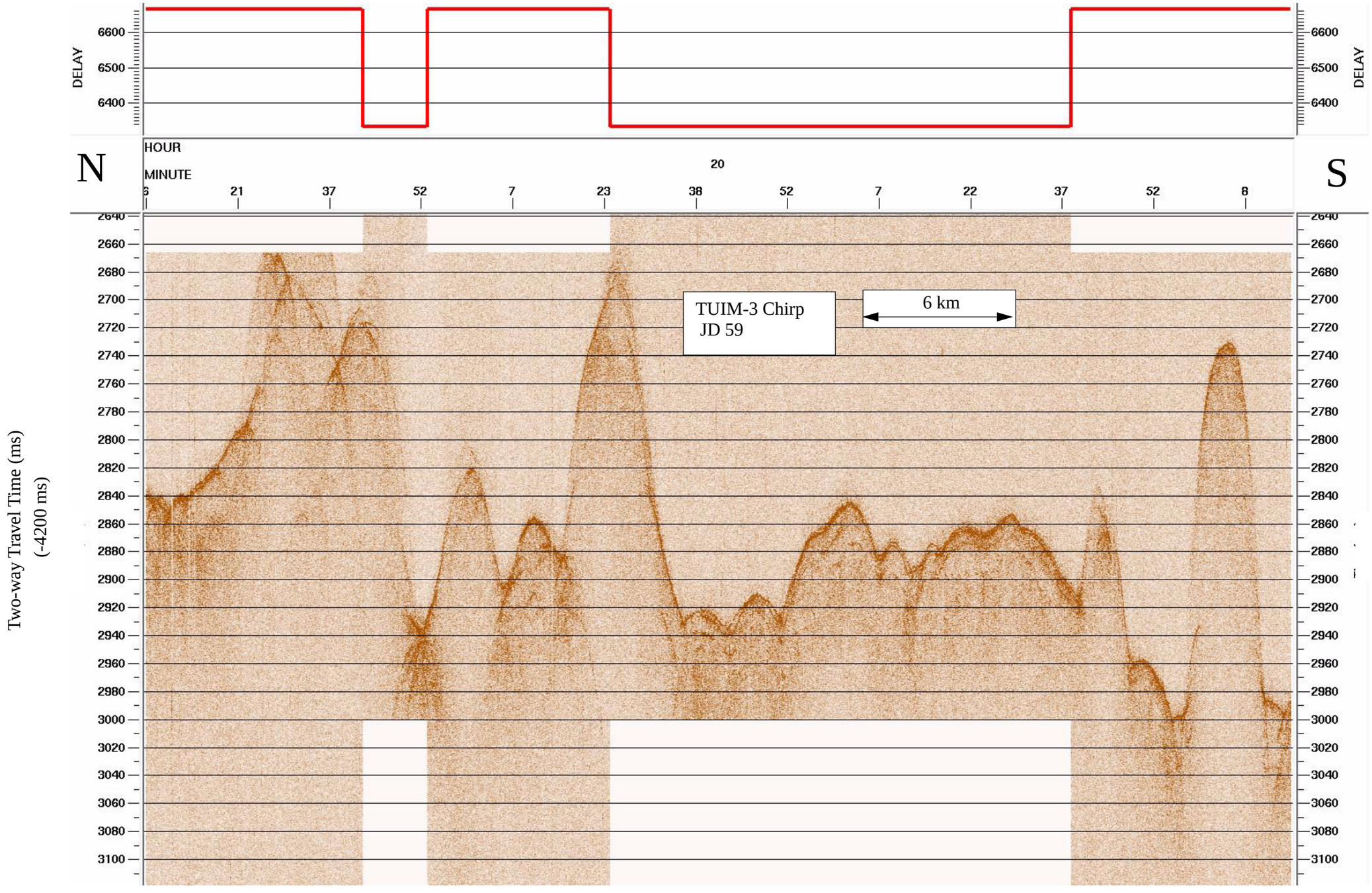

DELAY
6600
6400
6200
HOUR
MINUTE
15
17 54 2 10 17 24 32 40 48 55 3 11 19 26 34 42 49 57 5
S
N
TUIM-3 Chirp
JD 59
6 km
Two-way Travel Time (ms)
(-4200 ms)
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Time (ms)

Data File SBfixavg.2005feb28.1800-2400

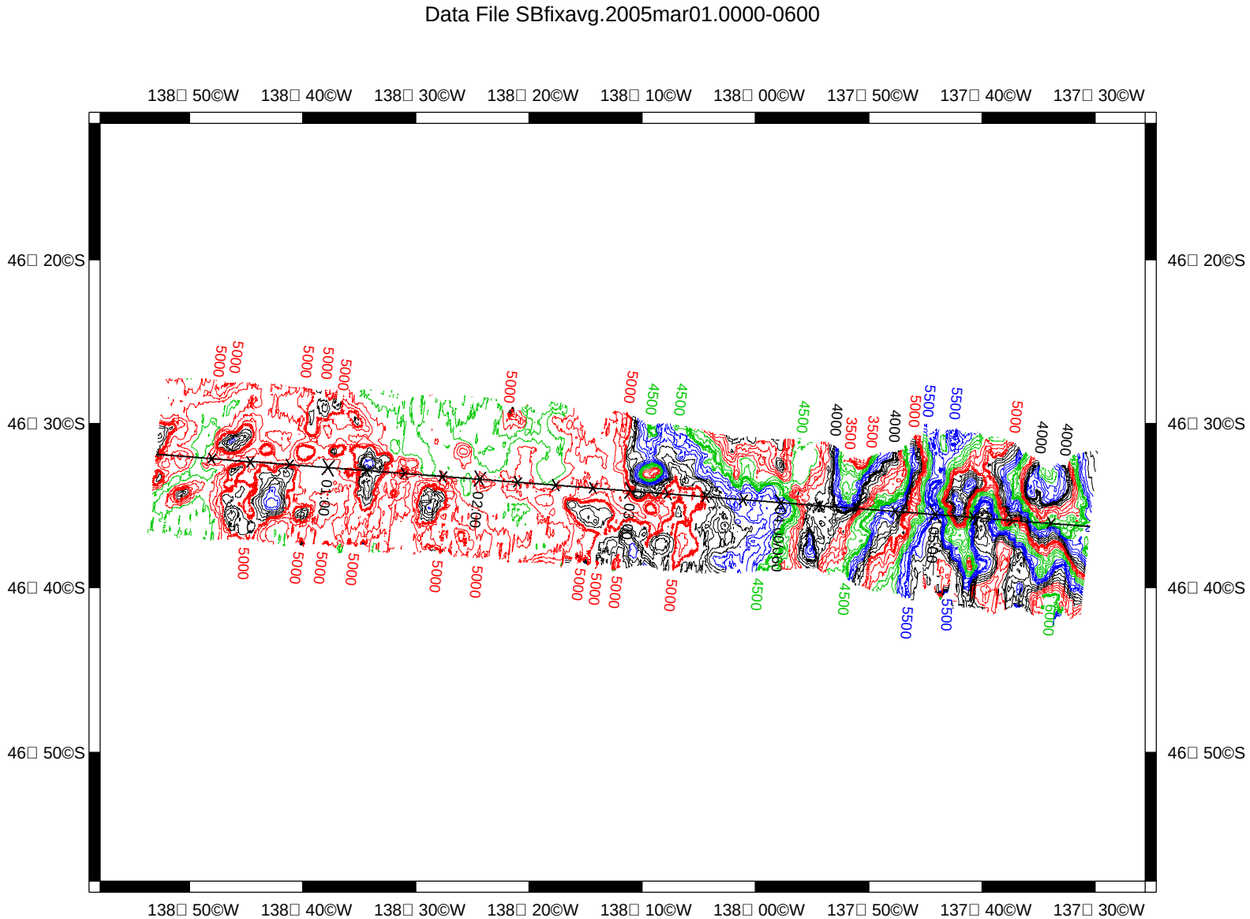


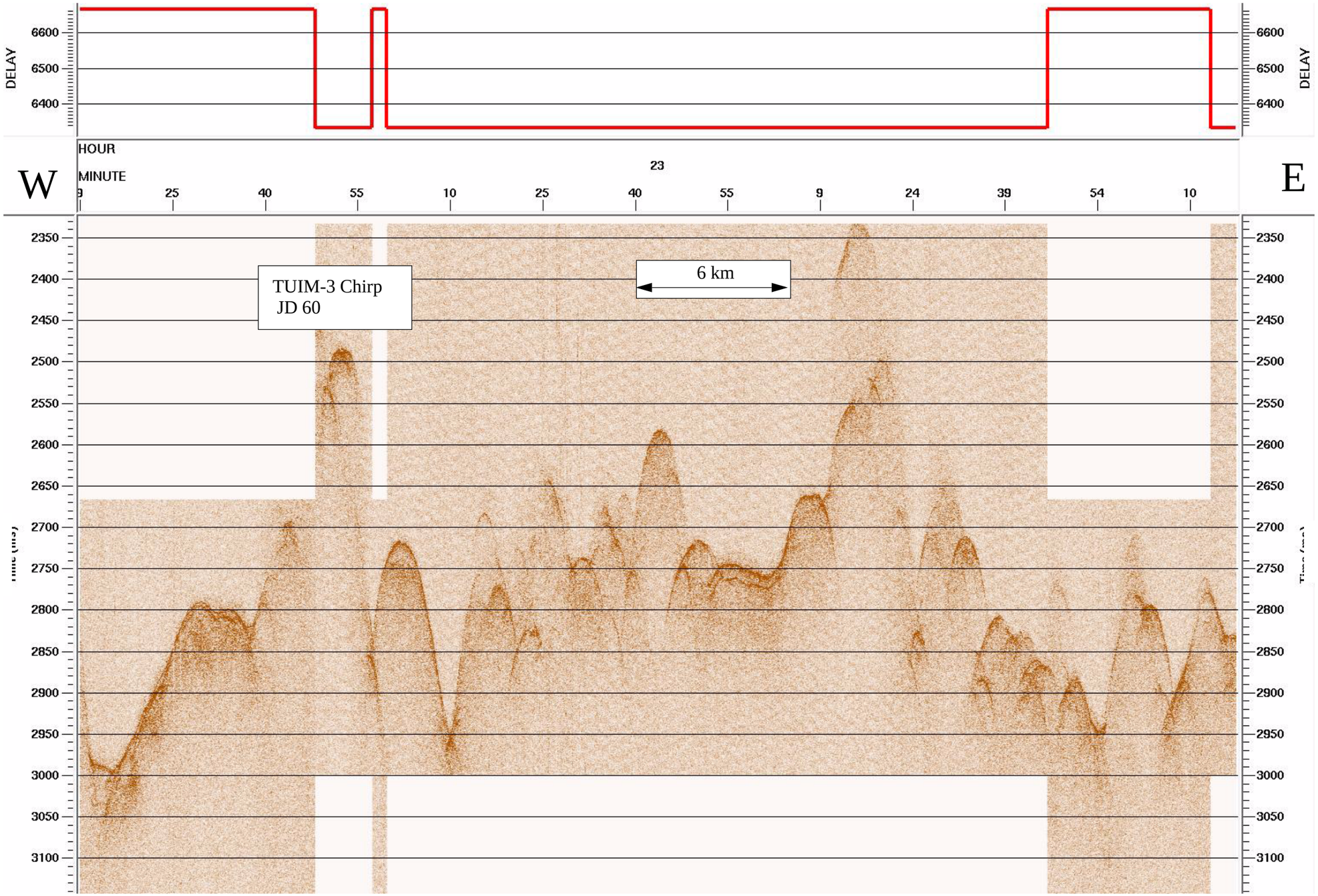

DELAY
6667
6666.5
6666
6665.5
6665
HOUR
18
MINUTE
13 20 28 36 44 51 59 7 15 22 30 38 46 53 1
S
N
TUIM-3 Chirp
JD 59
6 km
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
Two-way Travel Time (ms)
(-4200 ms)

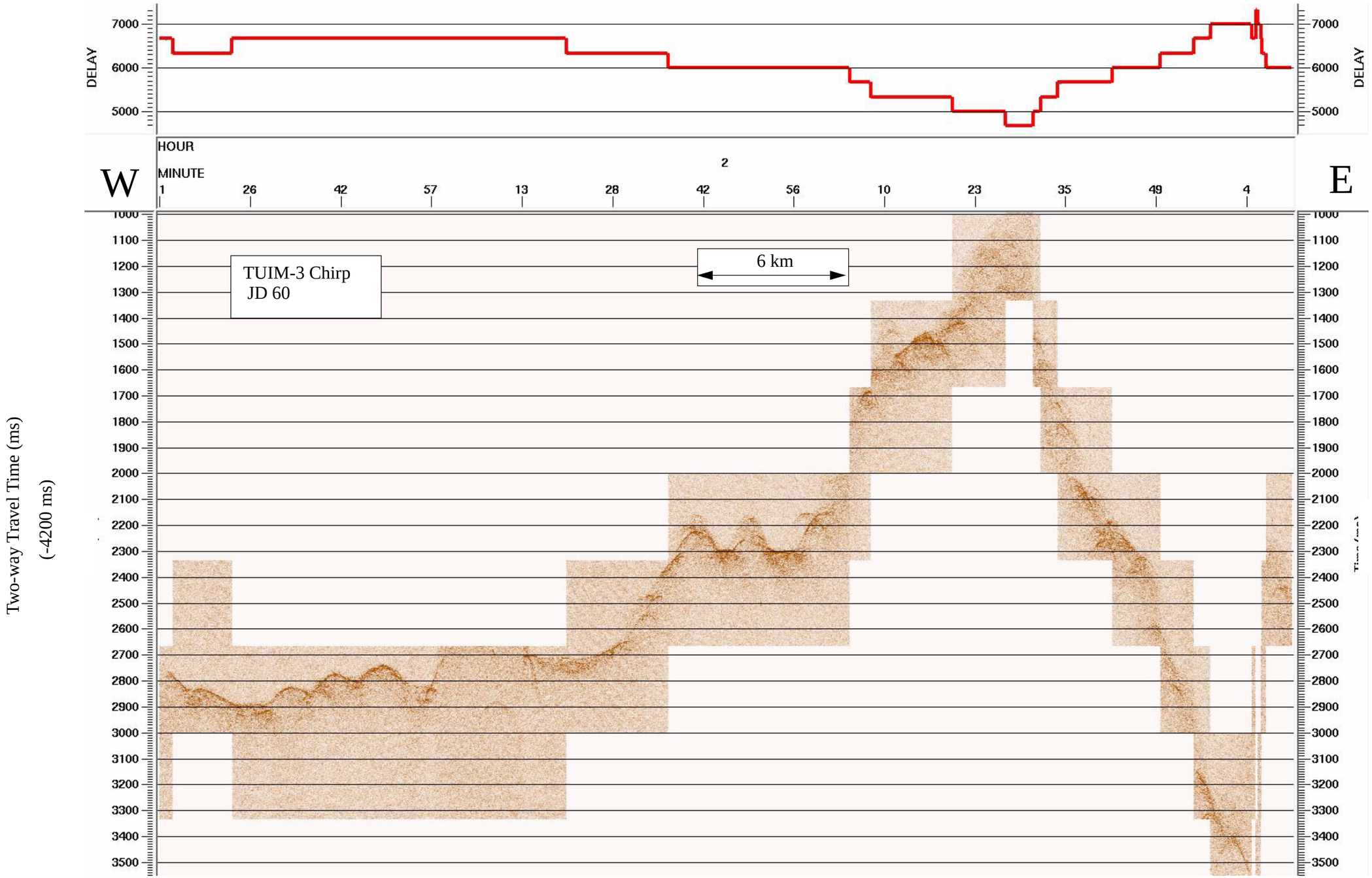

DELAY
6667
6666.5
6666
6665.5
6665
HOUR
18
MINUTE
13 20 28 36 44 51 59 7 15 22 30 38 46 53 1
N
S
TUIM-3 Chirp
JD 59
6 km
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
Two-way Travel Time (ms)
(-4200 ms)

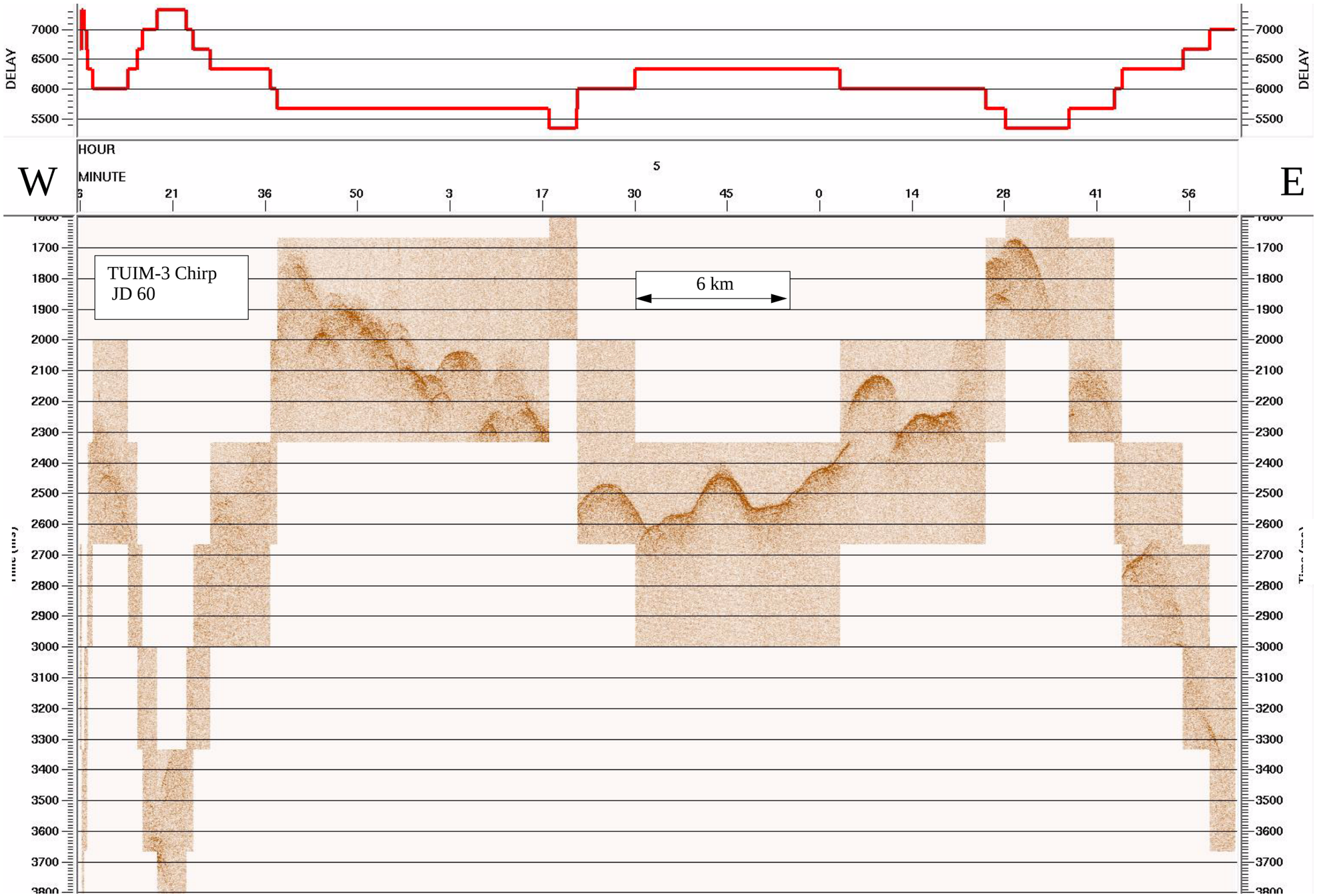

DELAY
6600
6500
6400
N
S
HOUR
MINUTE
20
6
21
37
52
7
23
38
52
7
22
37
52
8
TUIM-3 Chirp
JD 59
6 km
Two-way Travel Time (ms)
(-4200 ms)
2640
2660
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100

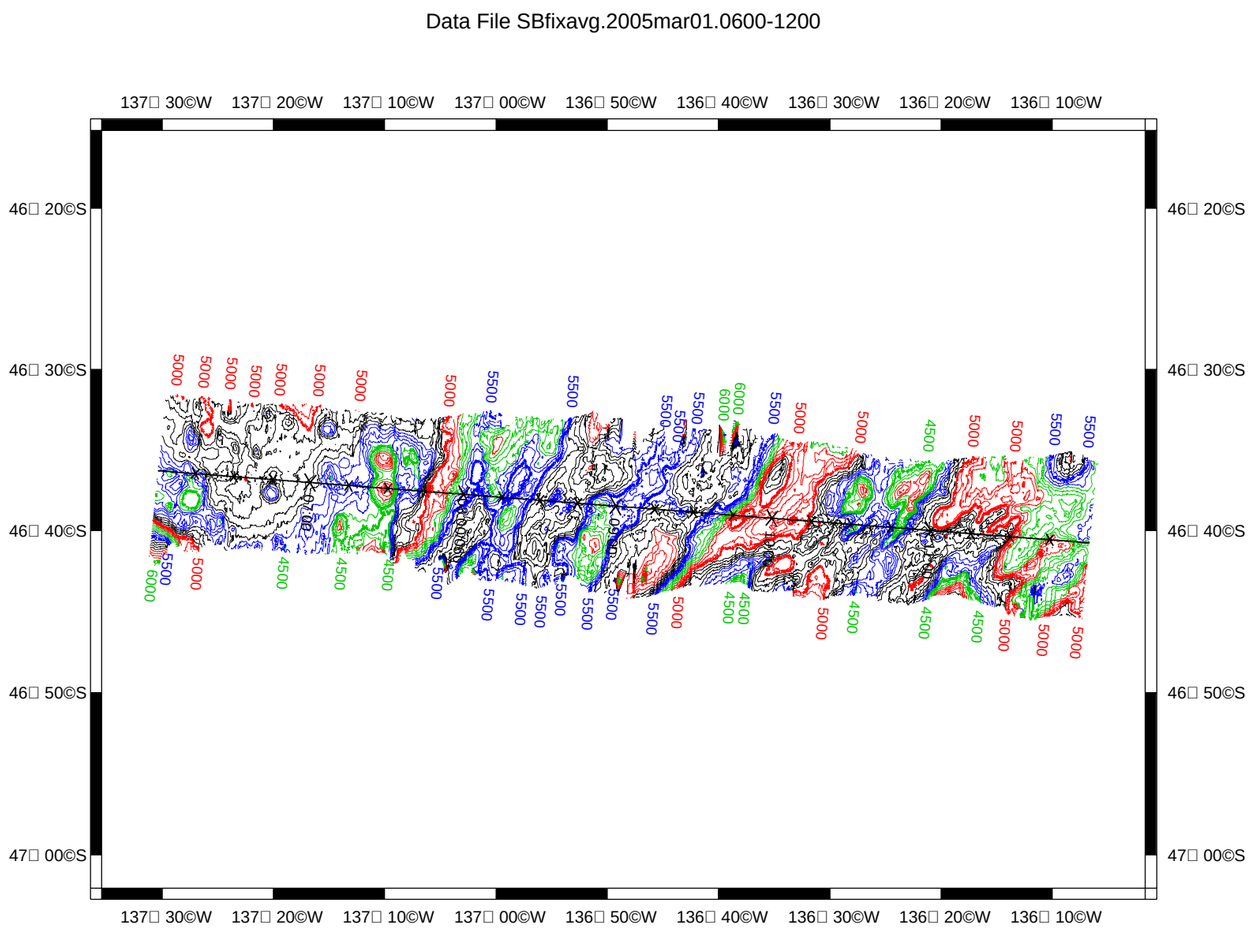
Julian Day 60
1 March 2005
Knudsen Chirp Data

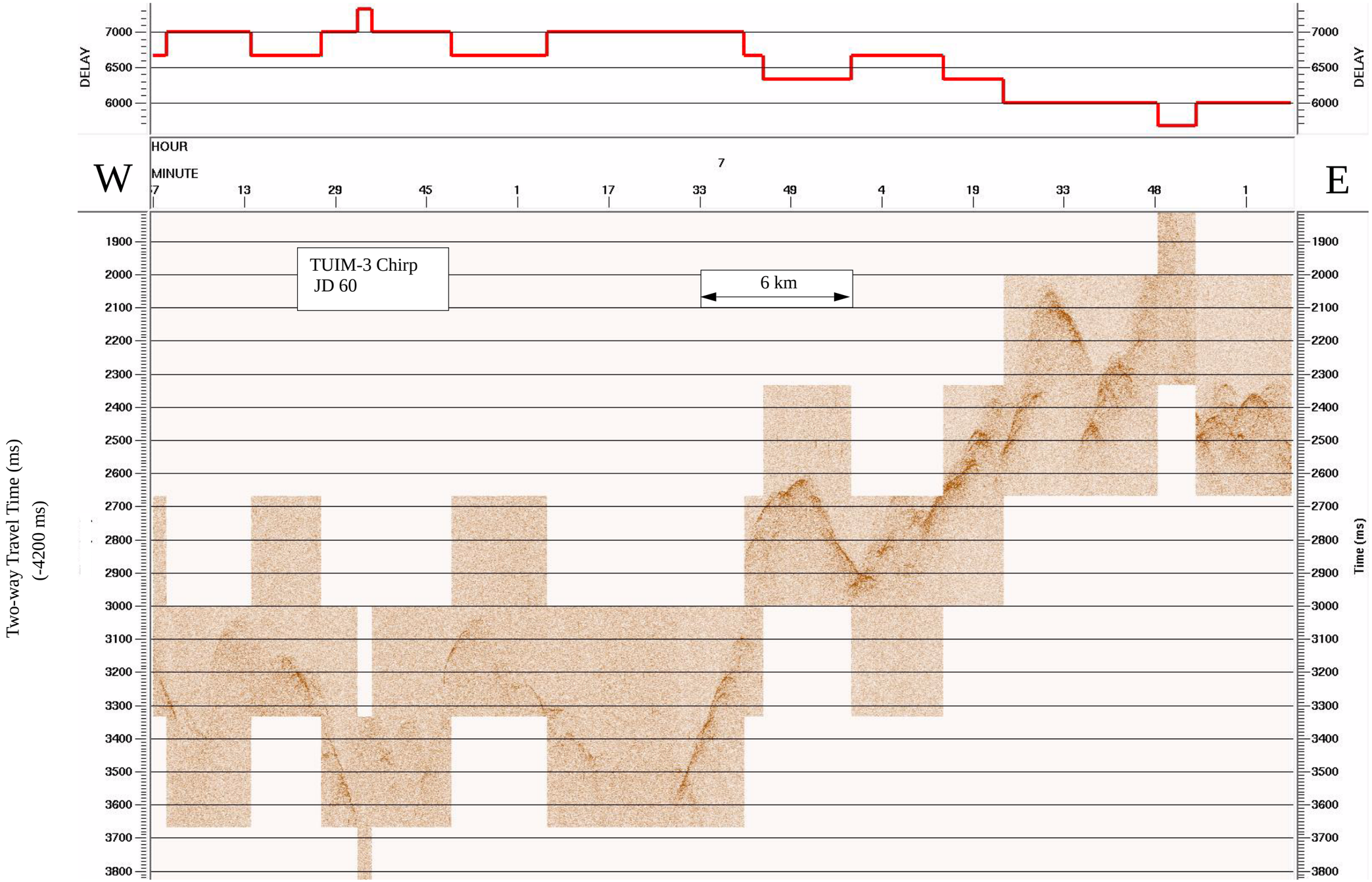

Data File SBfixavg.2005mar01.0000-0600
138□ 50©W
138□ 40©W
138□ 30©W
138□ 20©W
138□ 10©W
138□ 00©W
137□ 50©W
137□ 40©W
137□ 30©W
46□ 20©S
46□ 30©S
46□ 40©S
46□ 50©S

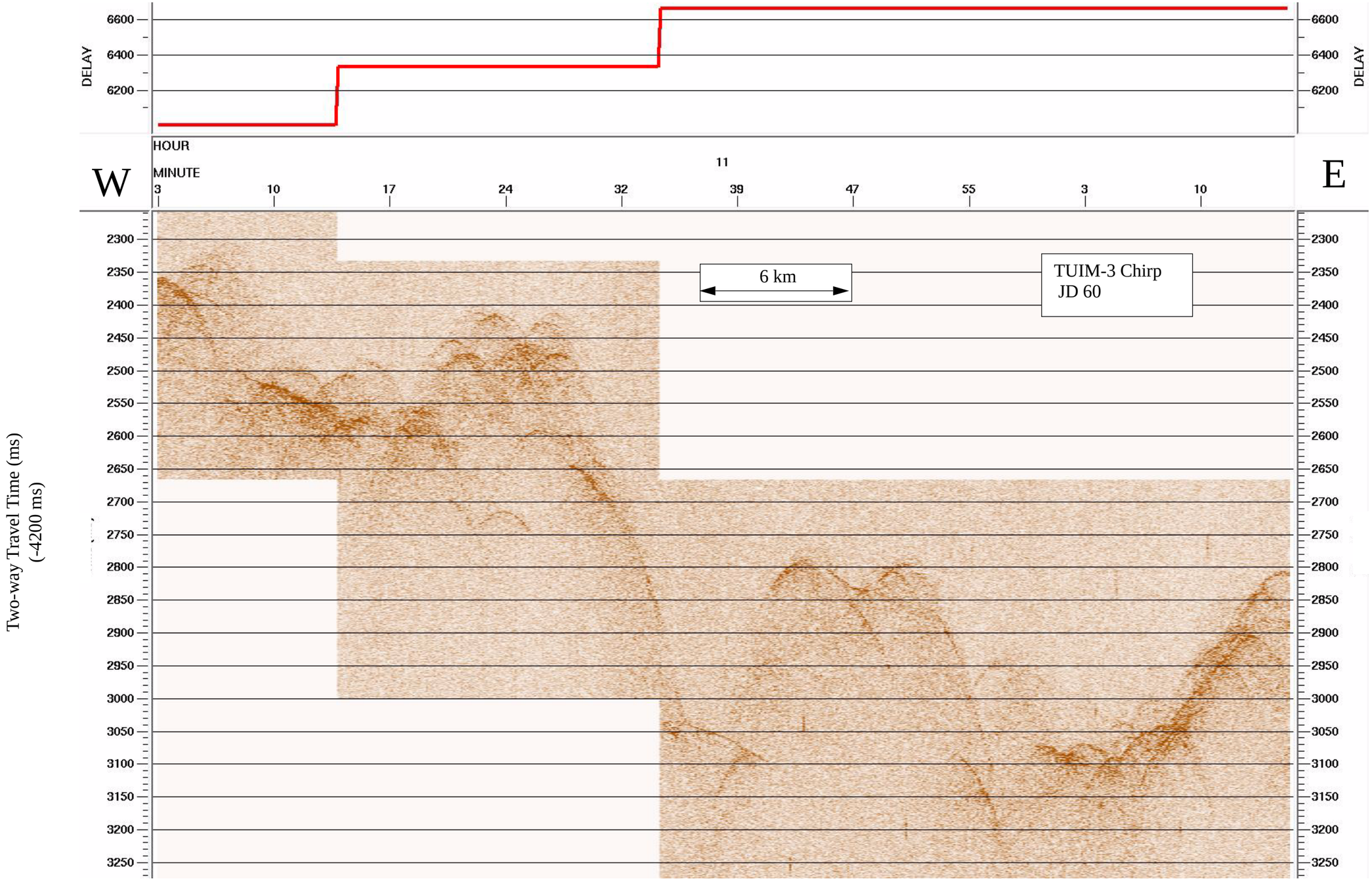

DELAY
6600
6500
6400
W
HOUR
MINUTE
23
9
25
40
55
10
25
40
55
9
24
39
54
10
E
TUIM-3 Chirp
JD 60
6 km
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
Two-way Travel Time (ms)
(-4200 ms)


DELAY
7000
6000
5000
HOUR
MINUTE
2
1
26
42
57
13
28
42
56
10
23
35
49
4
W
E
TUIM-3 Chirp
JD 60
6 km
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
Two-way Travel Time (ms)
(-4200 ms)

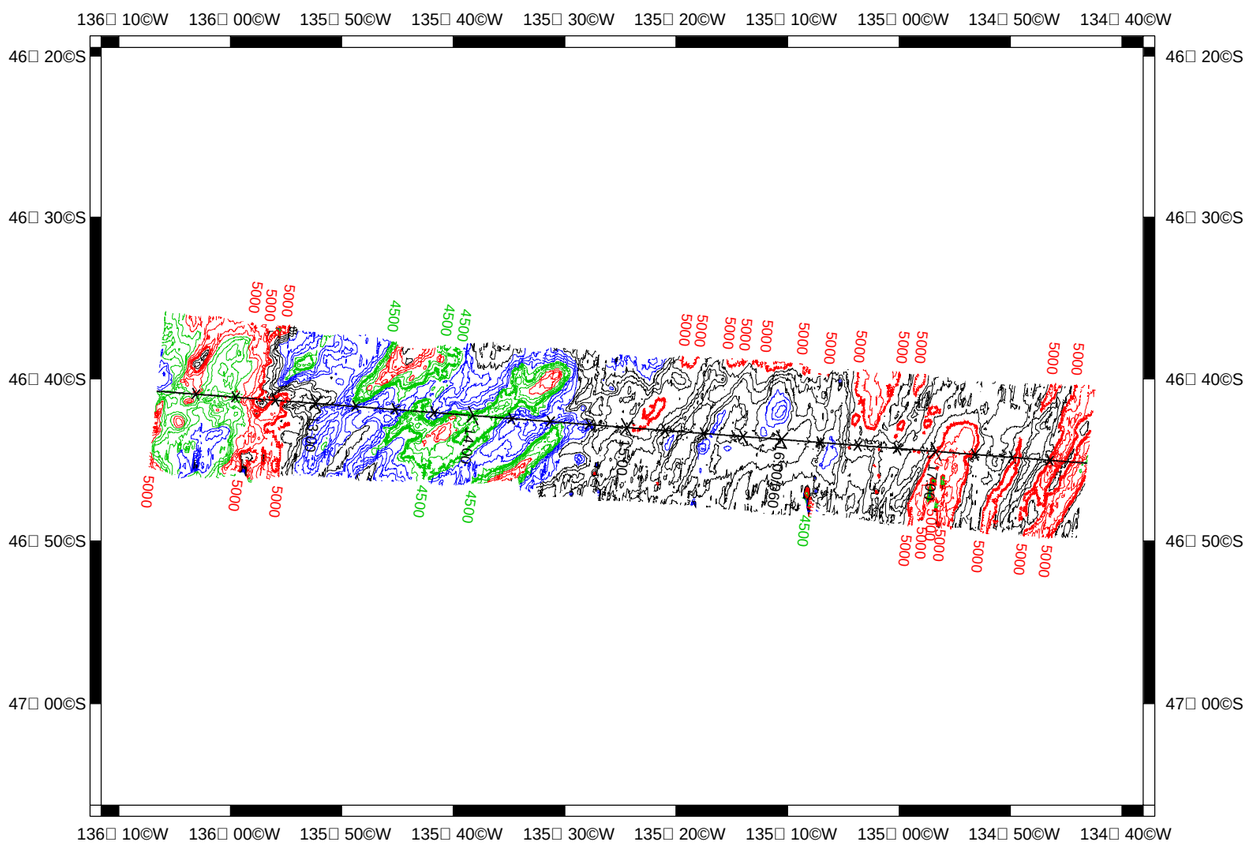

DELAY
7000
6500
6000
5500
W
HOUR
MINUTE
5
6
21
36
50
3
17
30
45
0
14
28
41
56
E
TUIM-3 Chirp
JD 60
6 km
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
Two-way Travel Time (ms)
(-4200 ms)

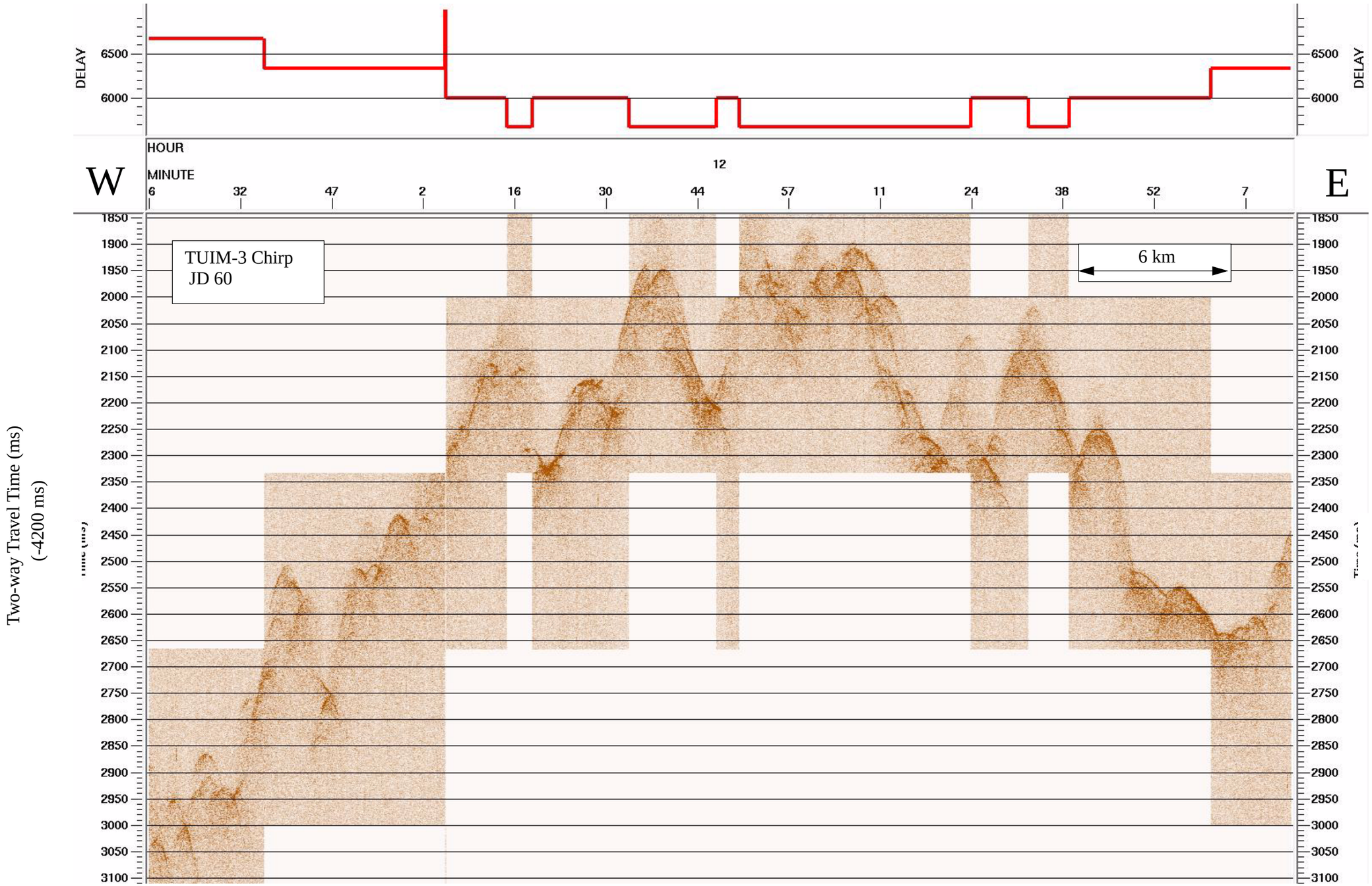

Data File SBfixavg.2005mar01.0600-1200
137□ 30©W
137□ 20©W
137□ 10©W
137□ 00©W
136□ 50©W
136□ 40©W
136□ 30©W
136□ 20©W
136□ 10©W
46□ 20©S
46□ 30©S
46□ 40©S
46□ 50©S
47□ 00©S

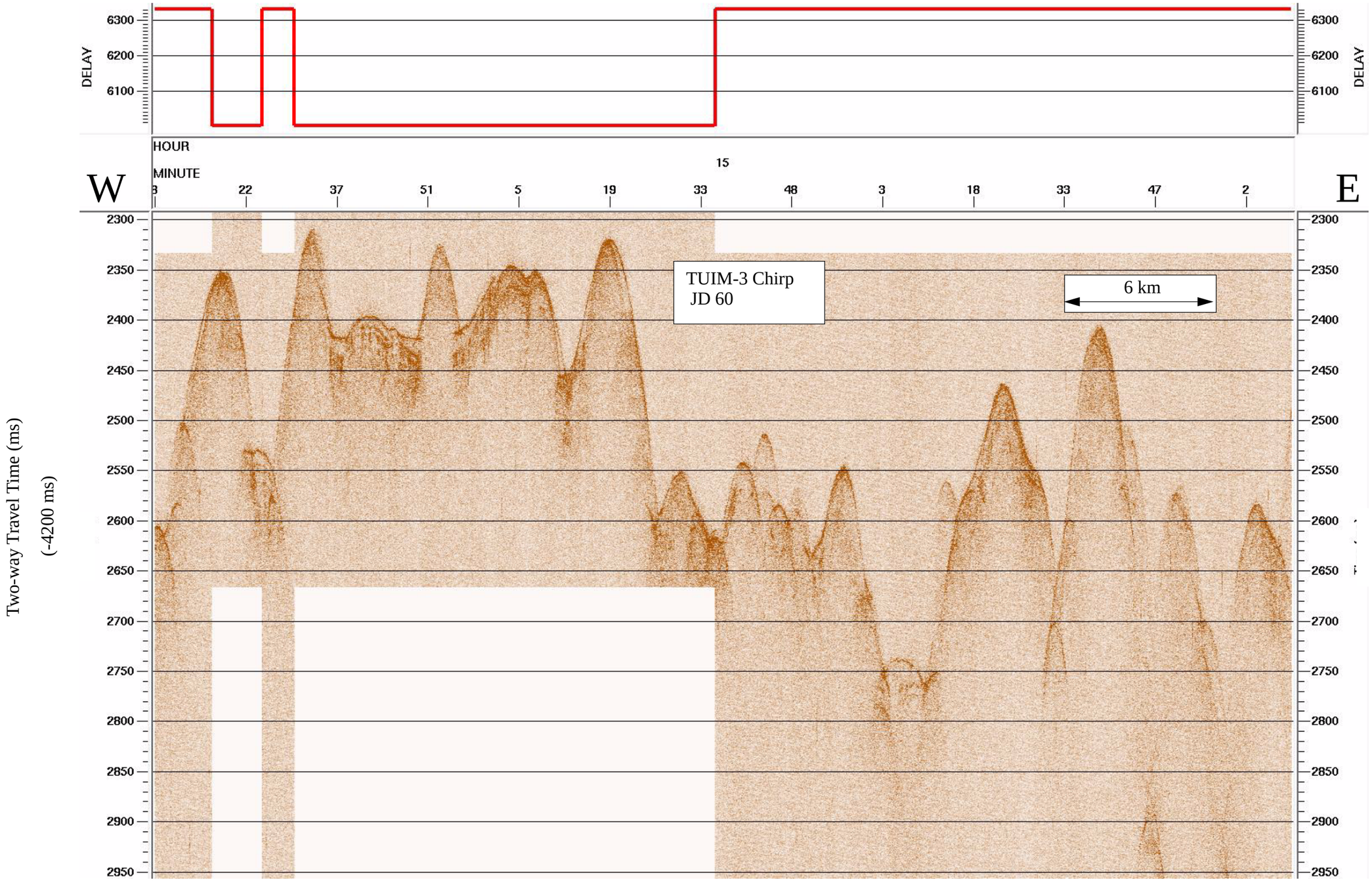

DELAY
7000
6500
6000
W
HOUR
MINUTE
7
13
29
45
1
17
33
49
4
19
33
48
1
E
TUIM-3 Chirp
JD 60
6 km
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
Two-way Travel Time (ms)
(-4200 ms)
Time (ms)

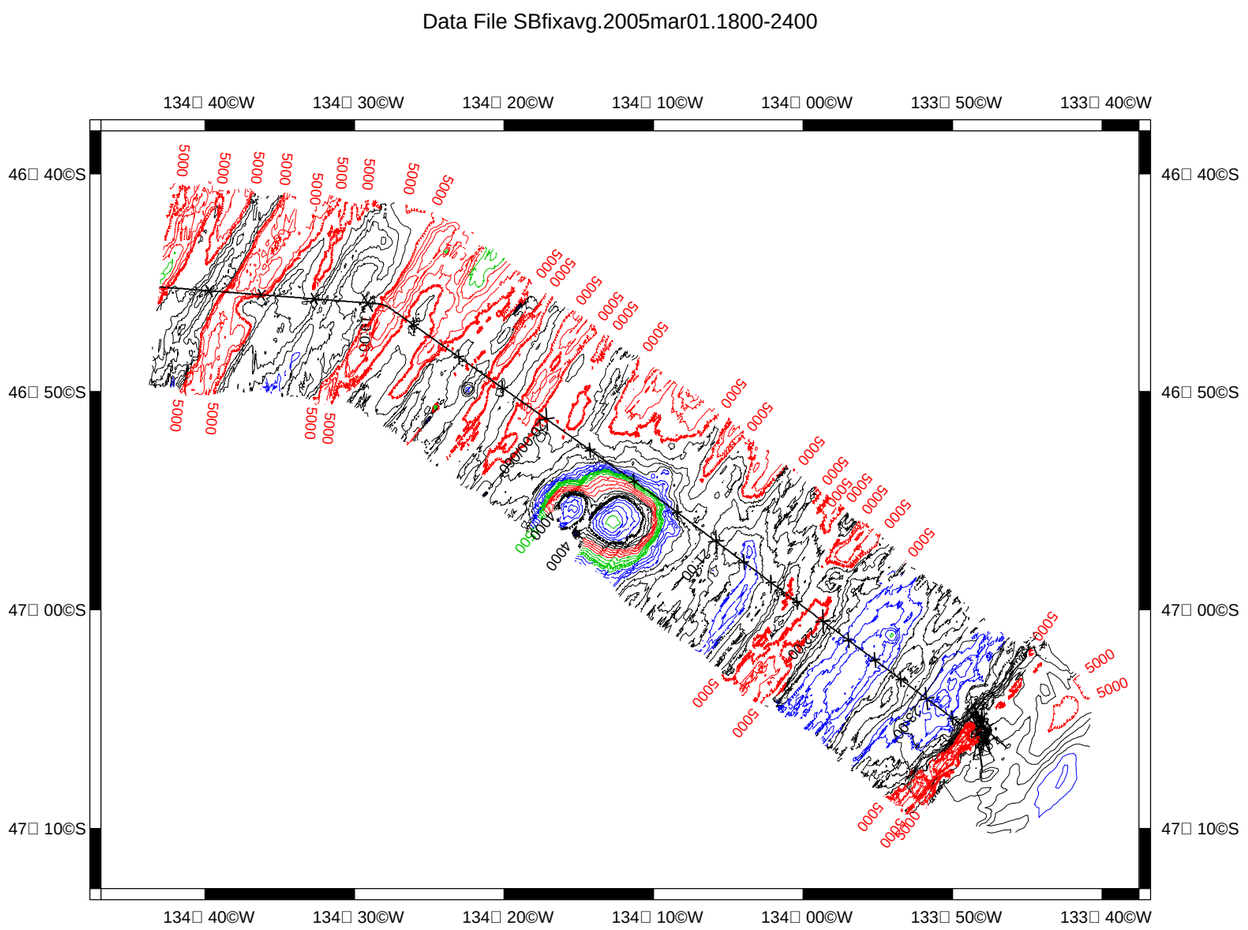

DELAY
6600
6400
6200
W
HOUR
MINUTE
11
3
10
17
24
32
39
47
55
3
10
E
6 km
TUIM-3 Chirp
JD 60
Two-way Travel Time (ms)
(-4200 ms)
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250

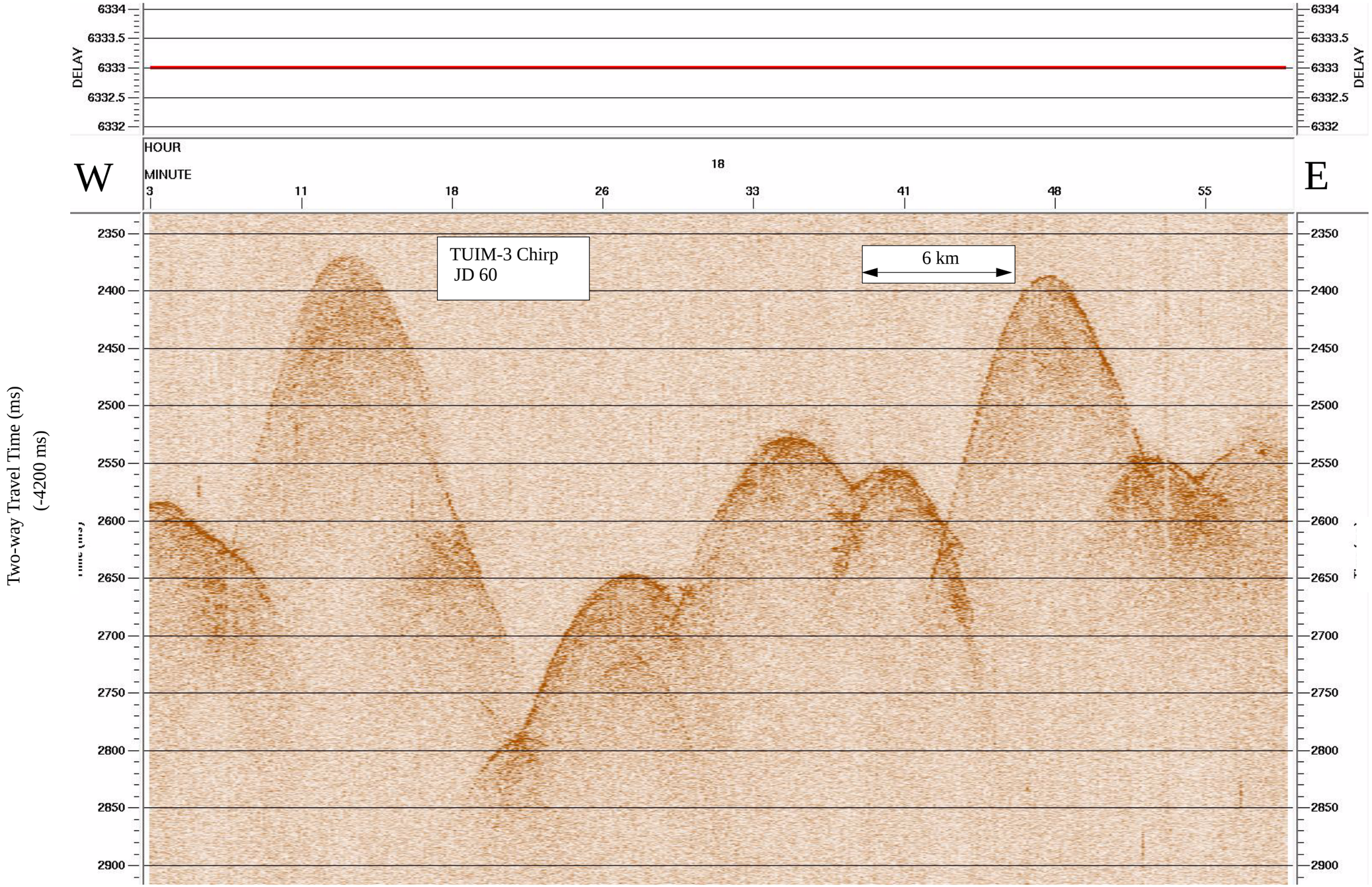
Data File SBfixavg.2005mar01.1200-1800

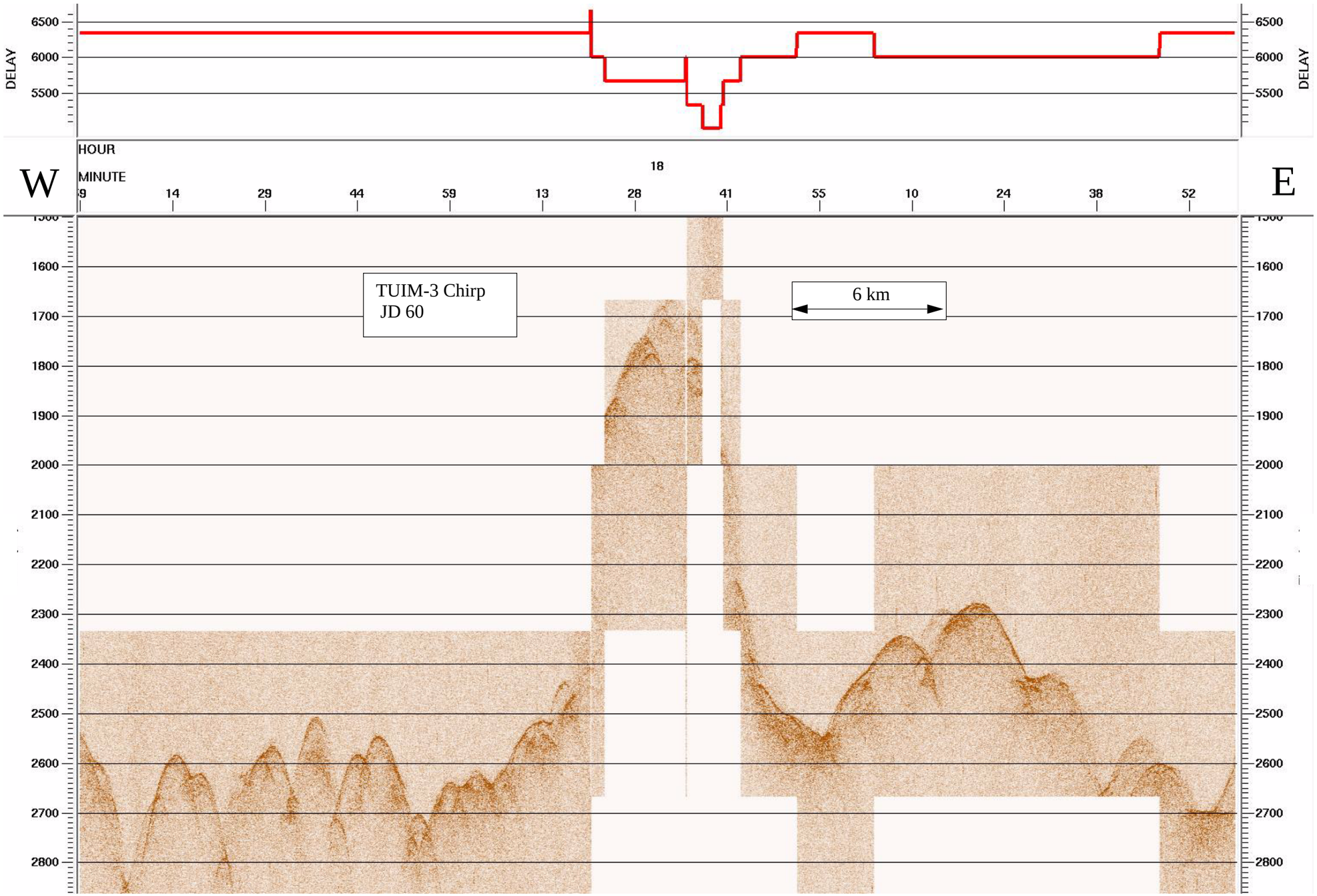


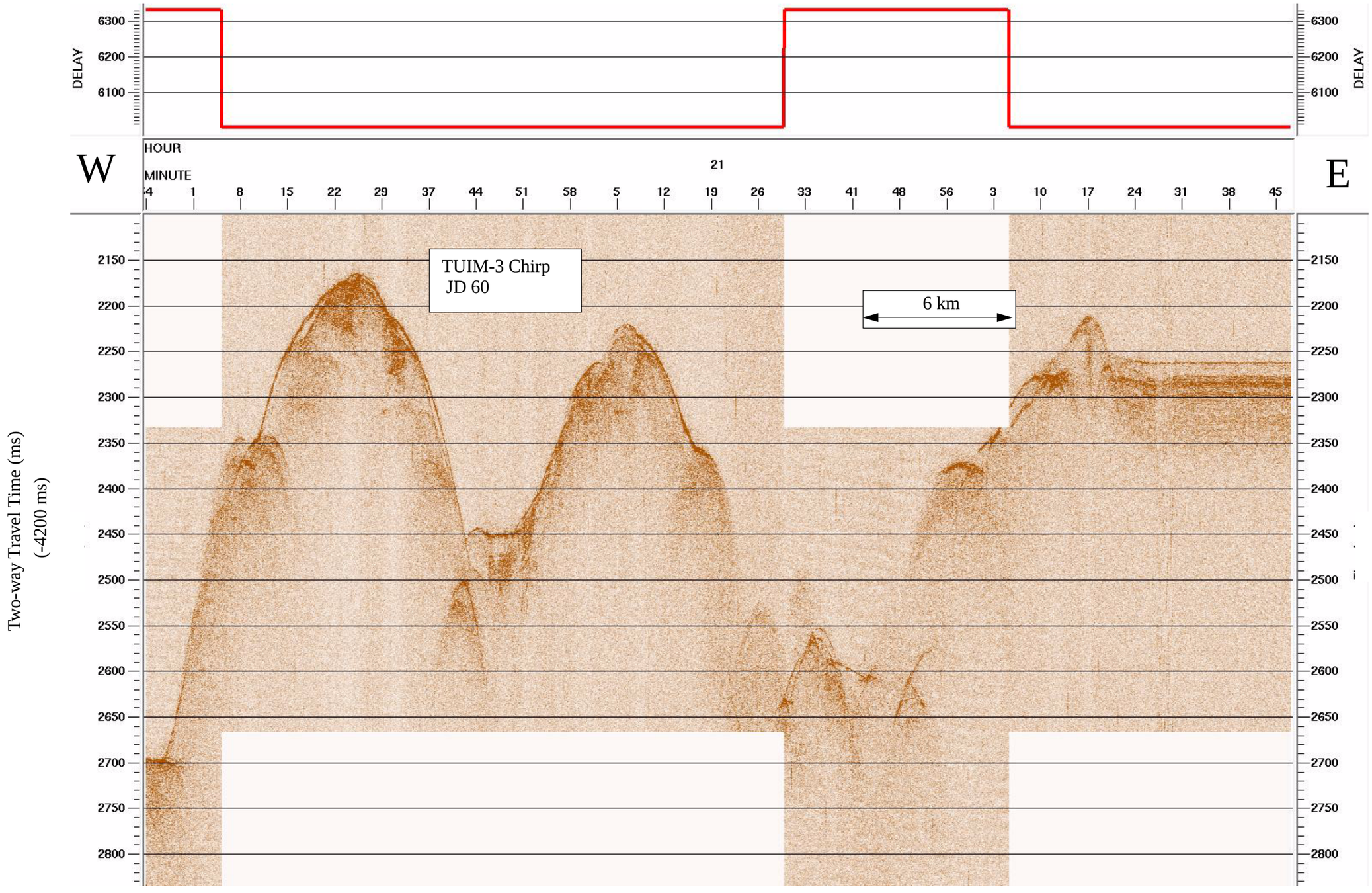

DELAY
6500
6000
HOUR
MINUTE
12
6
32
47
2
16
30
44
57
11
24
38
52
7
W
E
TUIM-3 Chirp
JD 60
6 km
Two-way Travel Time (ms)
(-4200 ms)
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100


DELAY
6300
6200
6100
HOUR
MINUTE
15
W
E
3
22
37
51
5
19
33
48
3
18
33
47
2
TUIM-3 Chirp
JD 60
6 km
Two-way Travel Time (ms)
(-4200 ms)
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950


Data File SBfixavg.2005mar01.1800-2400
134□ 40©W
134□ 30©W
134□ 20©W
134□ 10©W
134□ 00©W
133□ 50©W
133□ 40©W
46□ 40©S
46□ 50©S
47□ 00©S
47□ 10©S

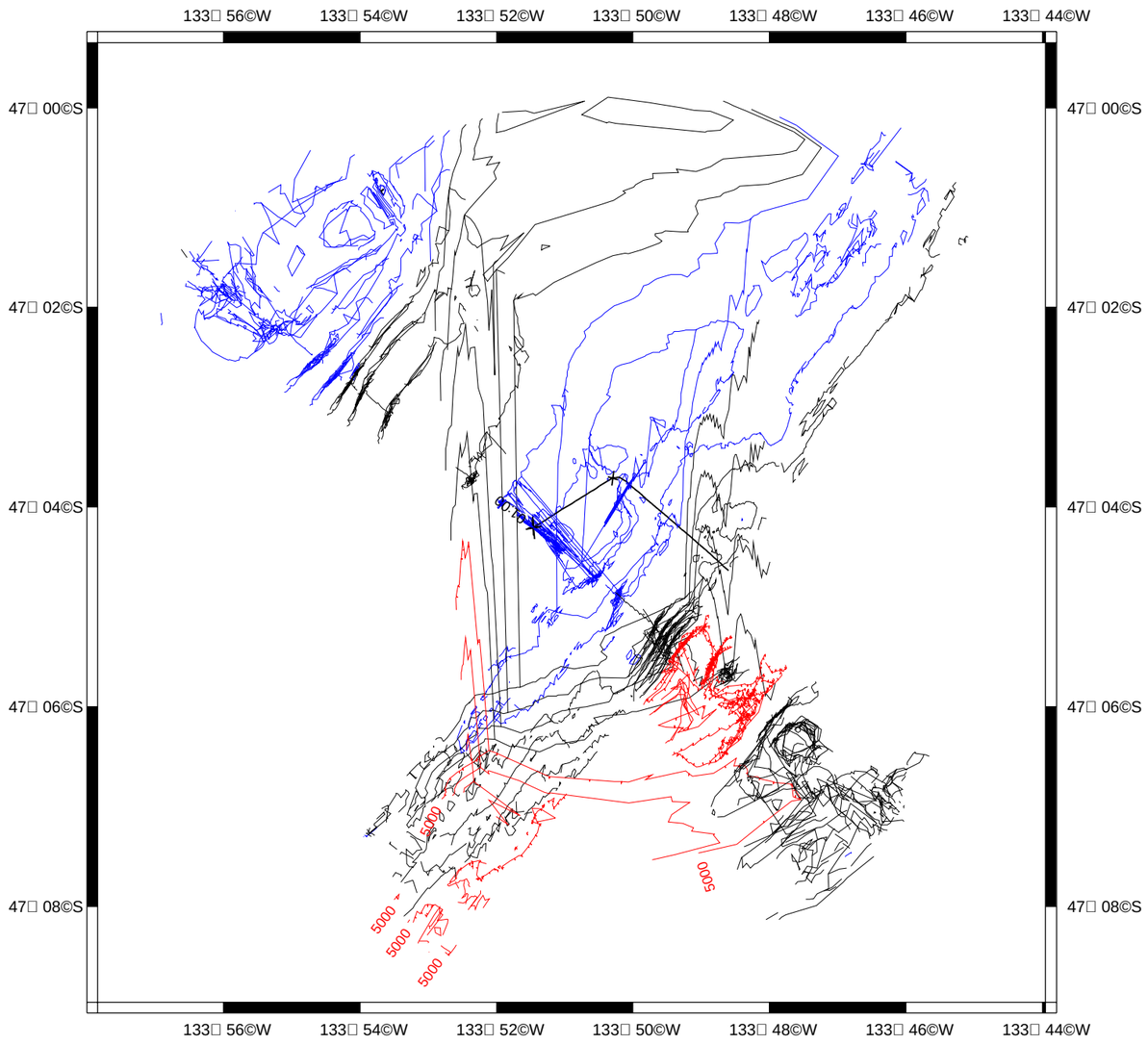

DELAY
6334
6333.5
6333
6332.5
6332
W
E
HOUR
18
MINUTE
3
11
18
26
33
41
48
55
TUIM-3 Chirp
JD 60
6 km
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
Two-way Travel Time (ms)
(-4200 ms)

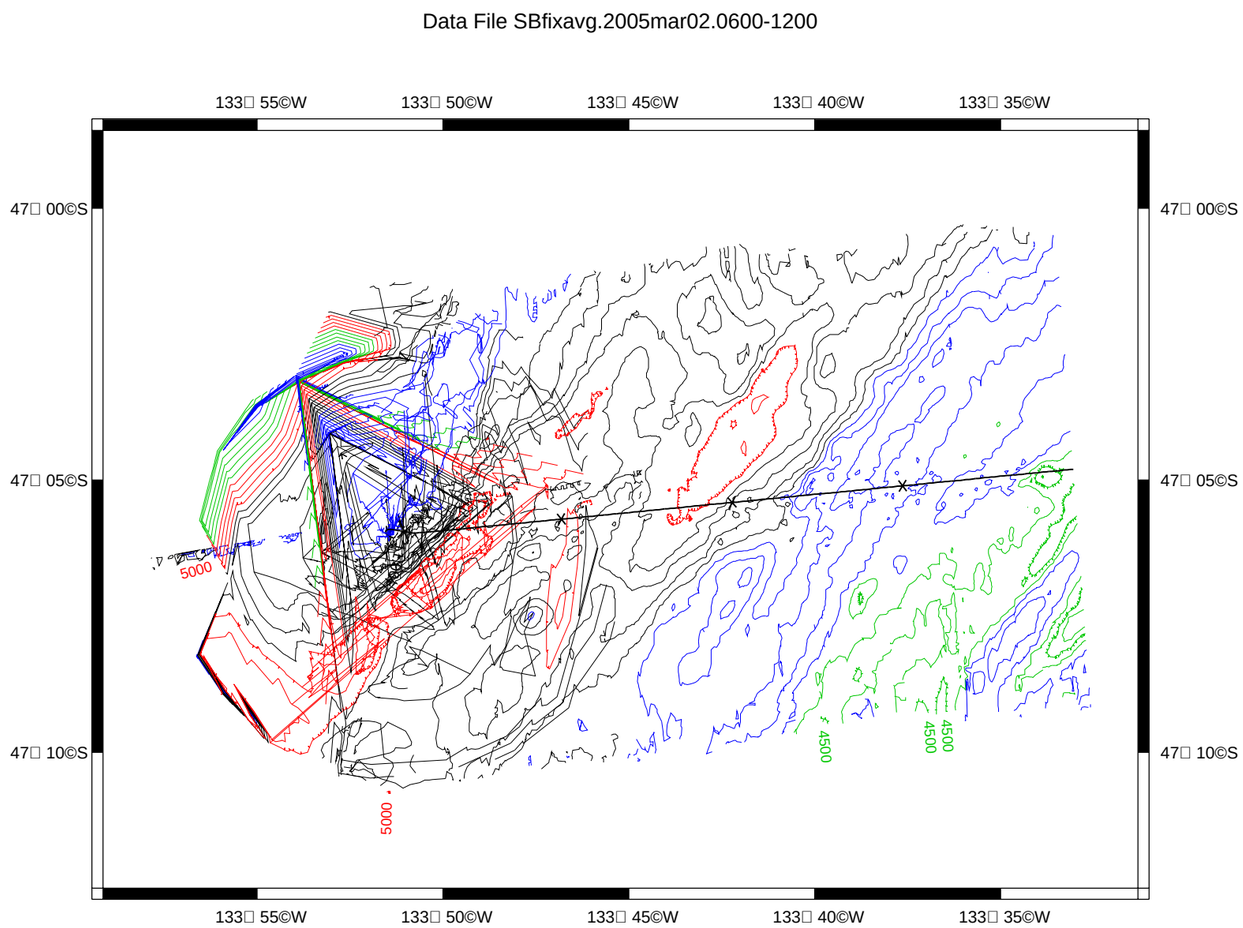

DELAY
6500
6000
5500
W
HOUR
MINUTE
18
9
14
29
44
59
13
28
41
55
10
24
38
52
E
TUIM-3 Chirp
JD 60
6 km
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
Two-way Travel Time (ms)
(-4200 ms)

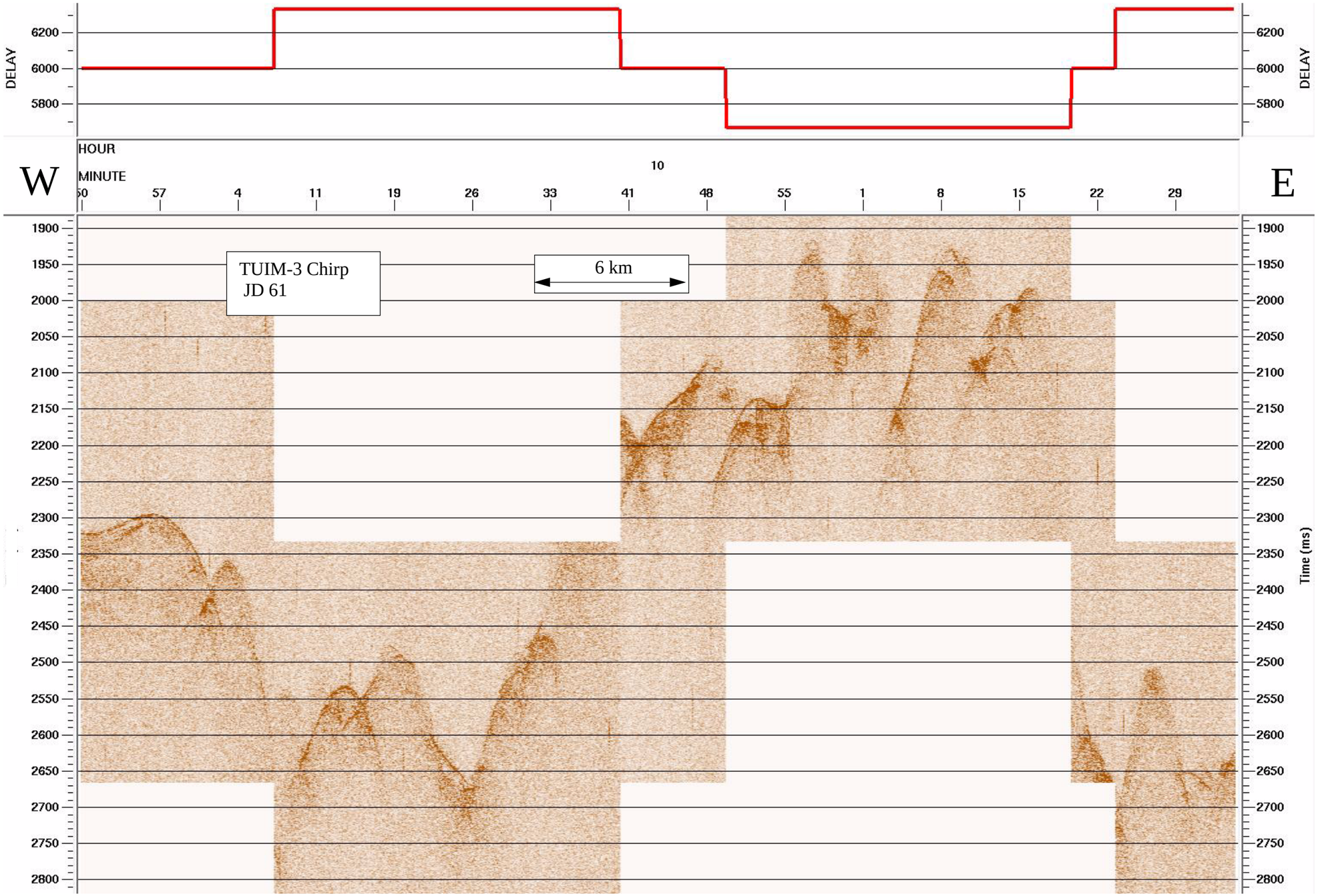

DELAY
6300
6200
6100
W
HOUR
MINUTE
21
4 1 8 15 22 29 37 44 51 58 5 12 19 26 33 41 48 56 3 10 17 24 31 38 45
E
TUIM-3 Chirp
JD 60
6 km
Two-way Travel Time (ms)
(-4200 ms)
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800

Julian Day 61
2 March 2005
Knudsen Chirp Data

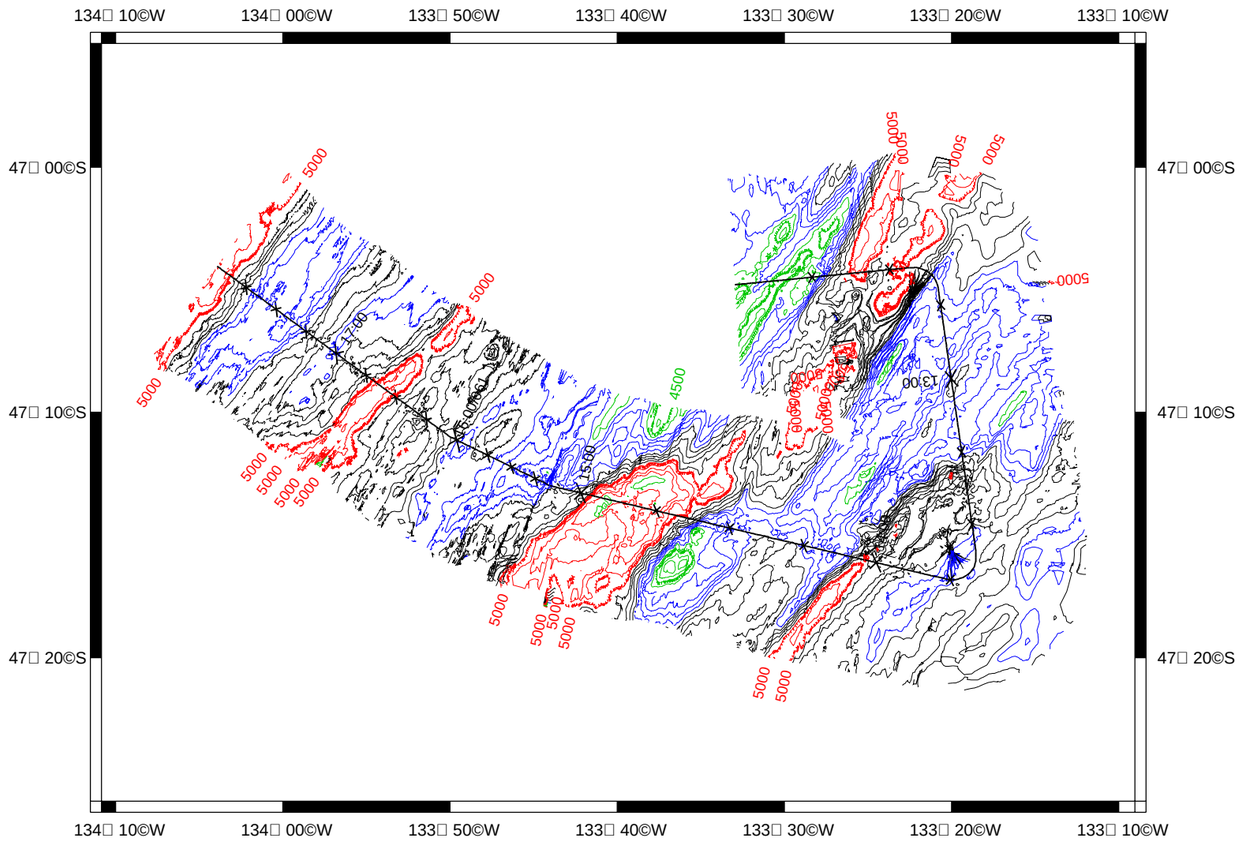
Data File SBfixavg.2005mar02.0000-0600

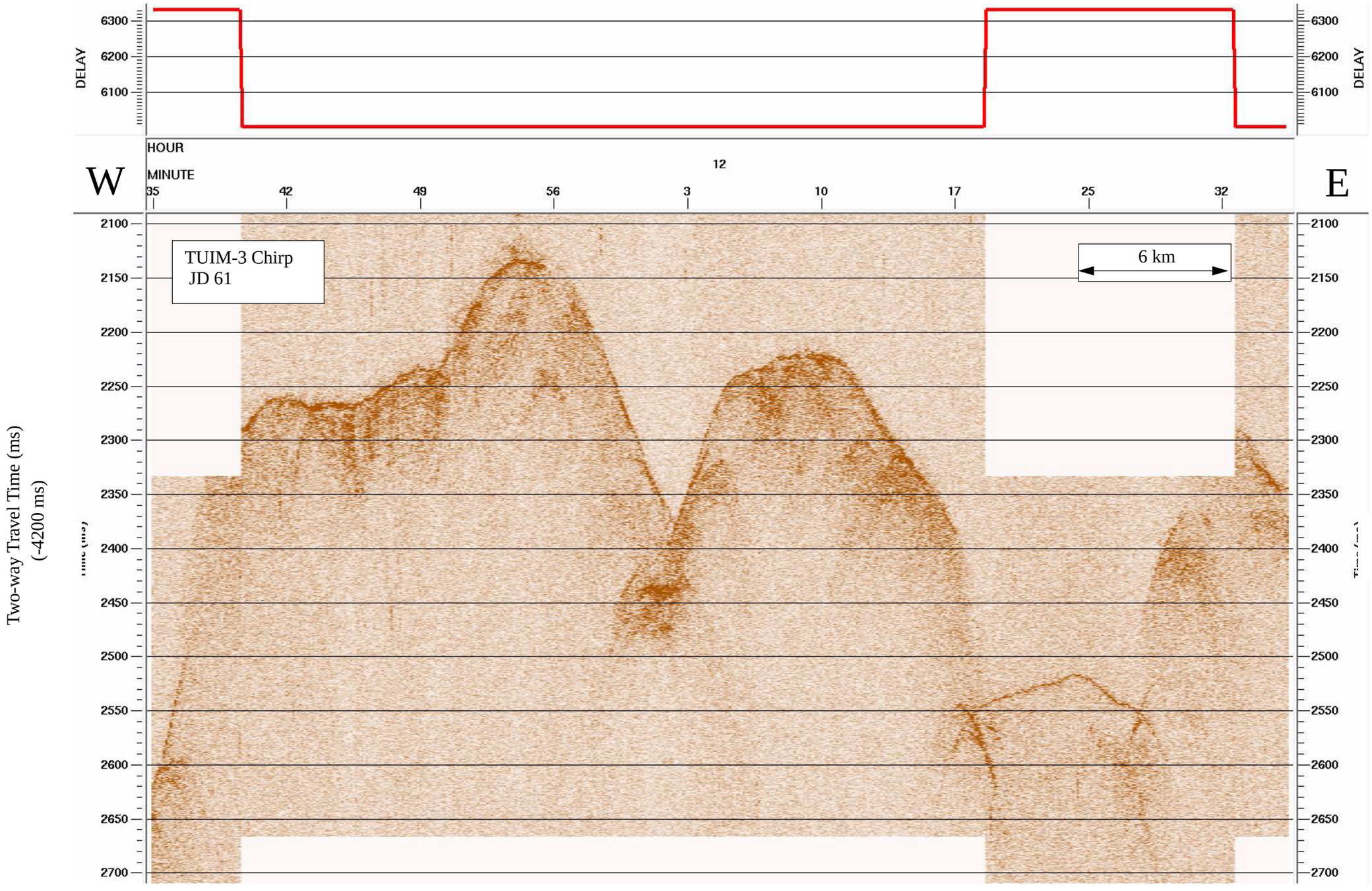


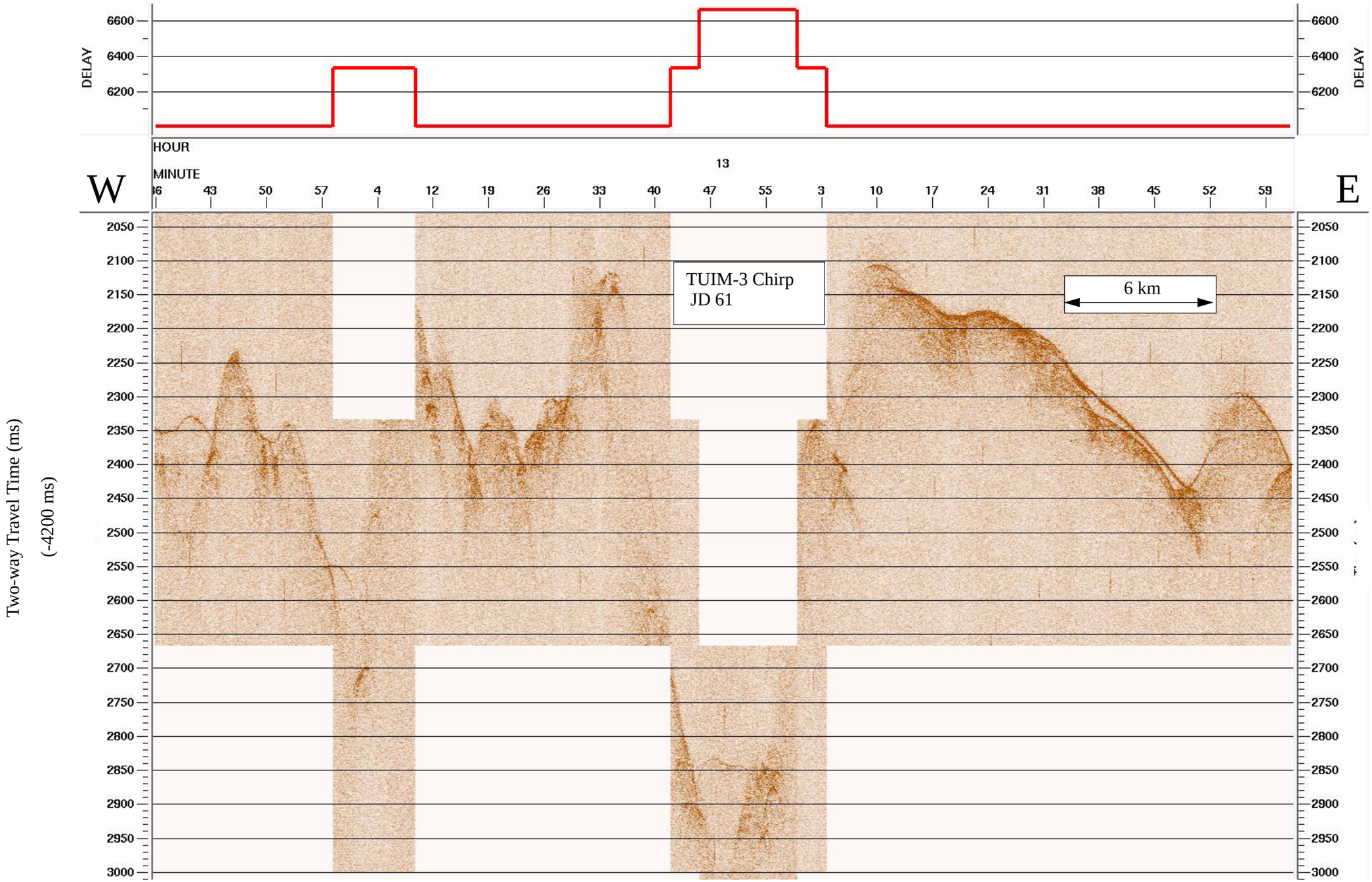

Data File SBfixavg.2005mar02.0600-1200
133□ 55©W
133□ 50©W
133□ 45©W
133□ 40©W
133□ 35©W
47□ 00©S
47□ 05©S
47□ 10©S
5000
5000
4500
4500
4500

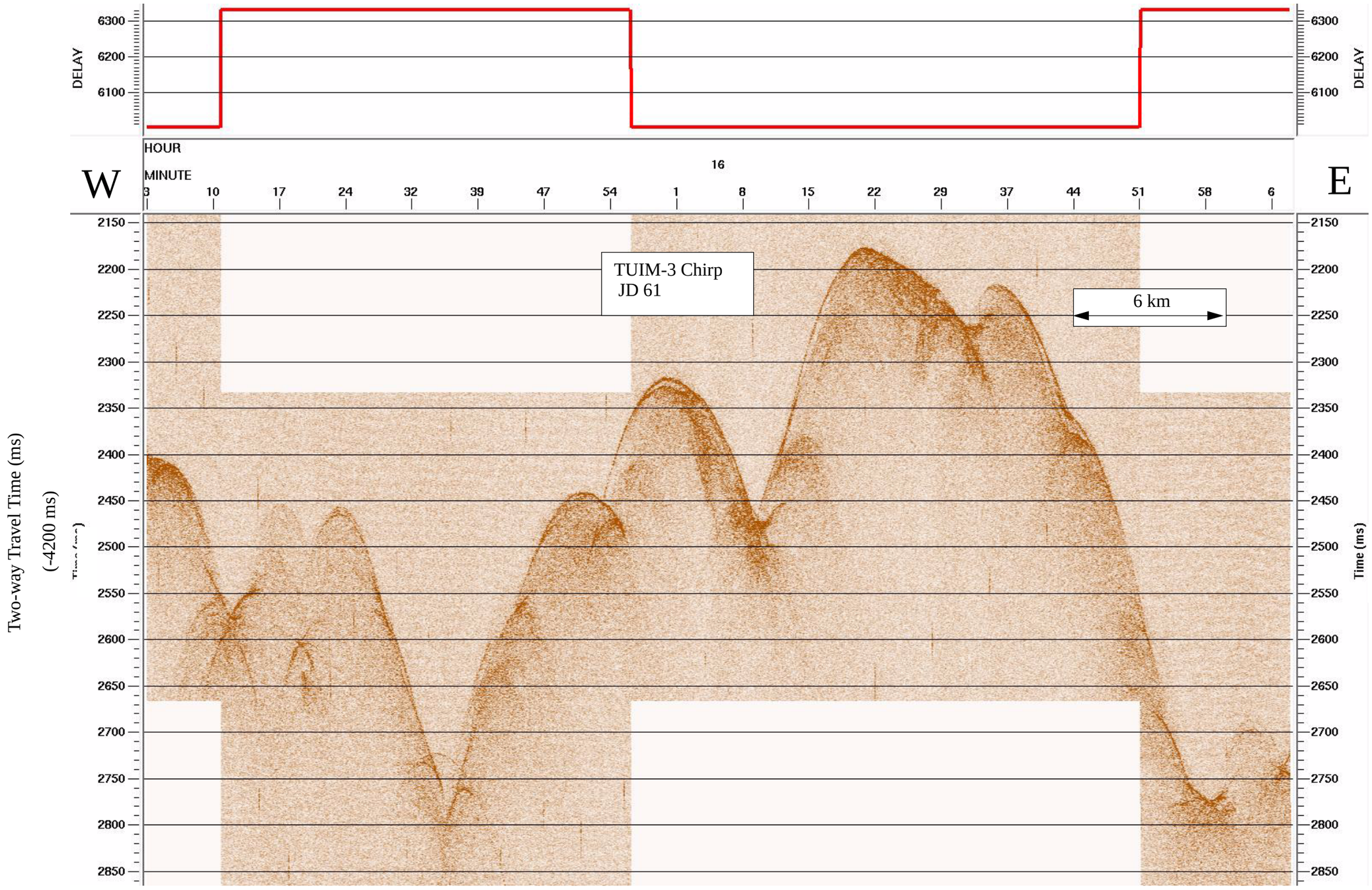

DELAY
6200
6000
5800
W
HOUR
MINUTE
10
50
57
4
11
19
26
33
41
48
55
1
8
15
22
29
E
TUIM-3 Chirp
JD 61
6 km
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
Two-way Travel Time (ms)
(-4200 ms)
Time (ms)

Data File SBfixavg.2005mar02.1200-1800

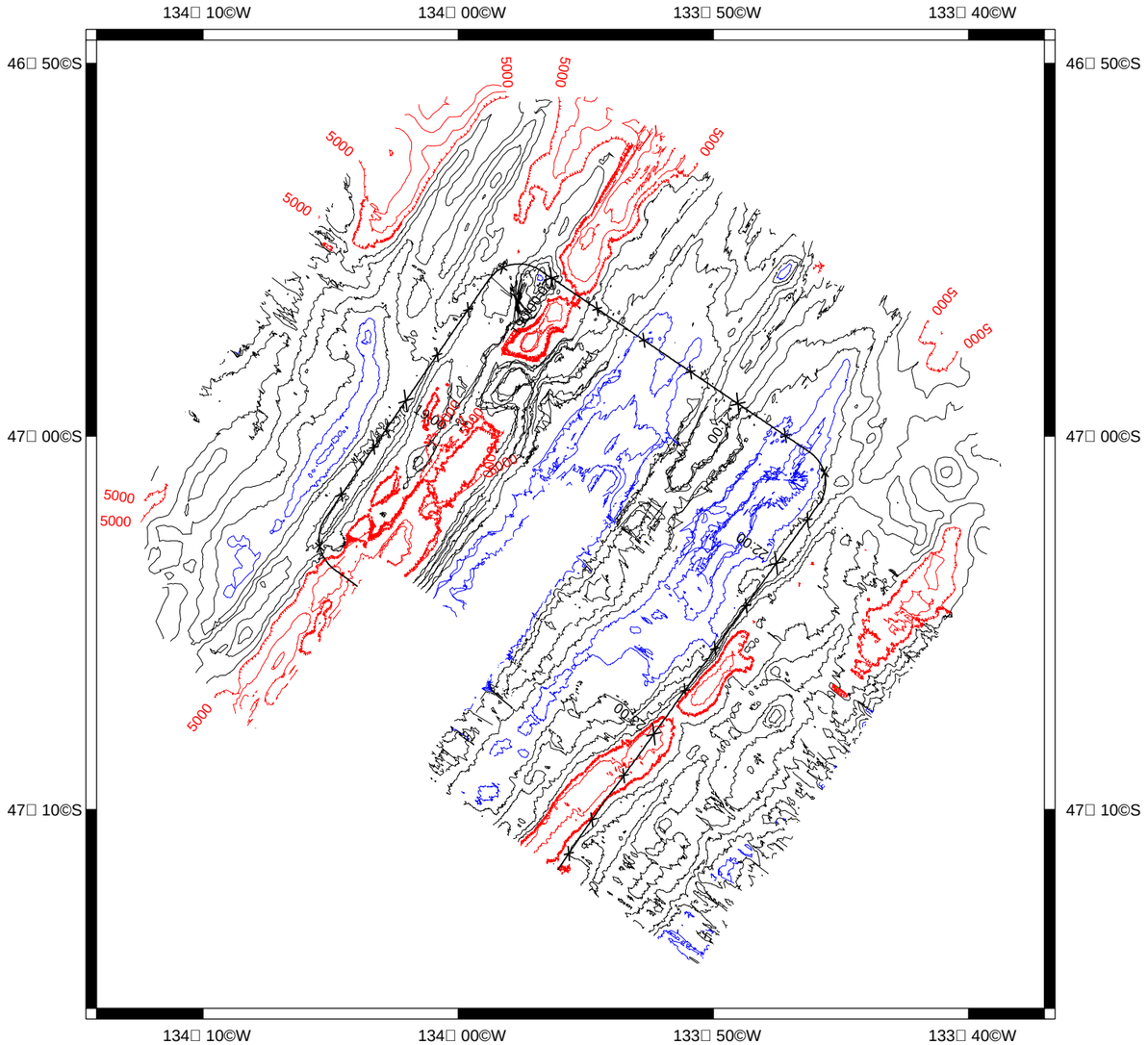


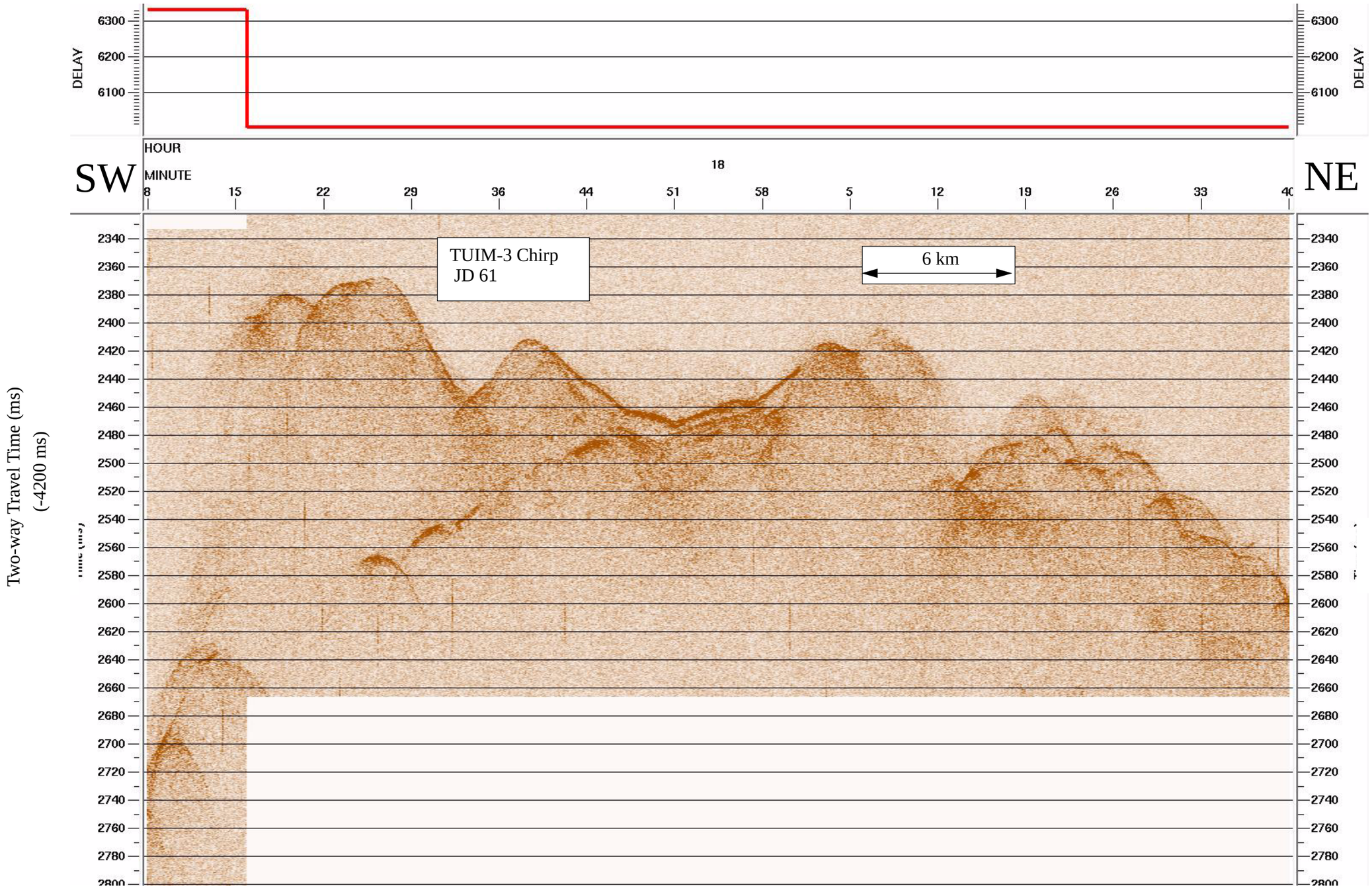

DELAY
6300
6200
6100
W
HOUR
MINUTE
12
35
42
49
56
3
10
17
25
32
E
TUIM-3 Chirp
JD 61
6 km
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
Two-way Travel Time (ms)
(-4200 ms)

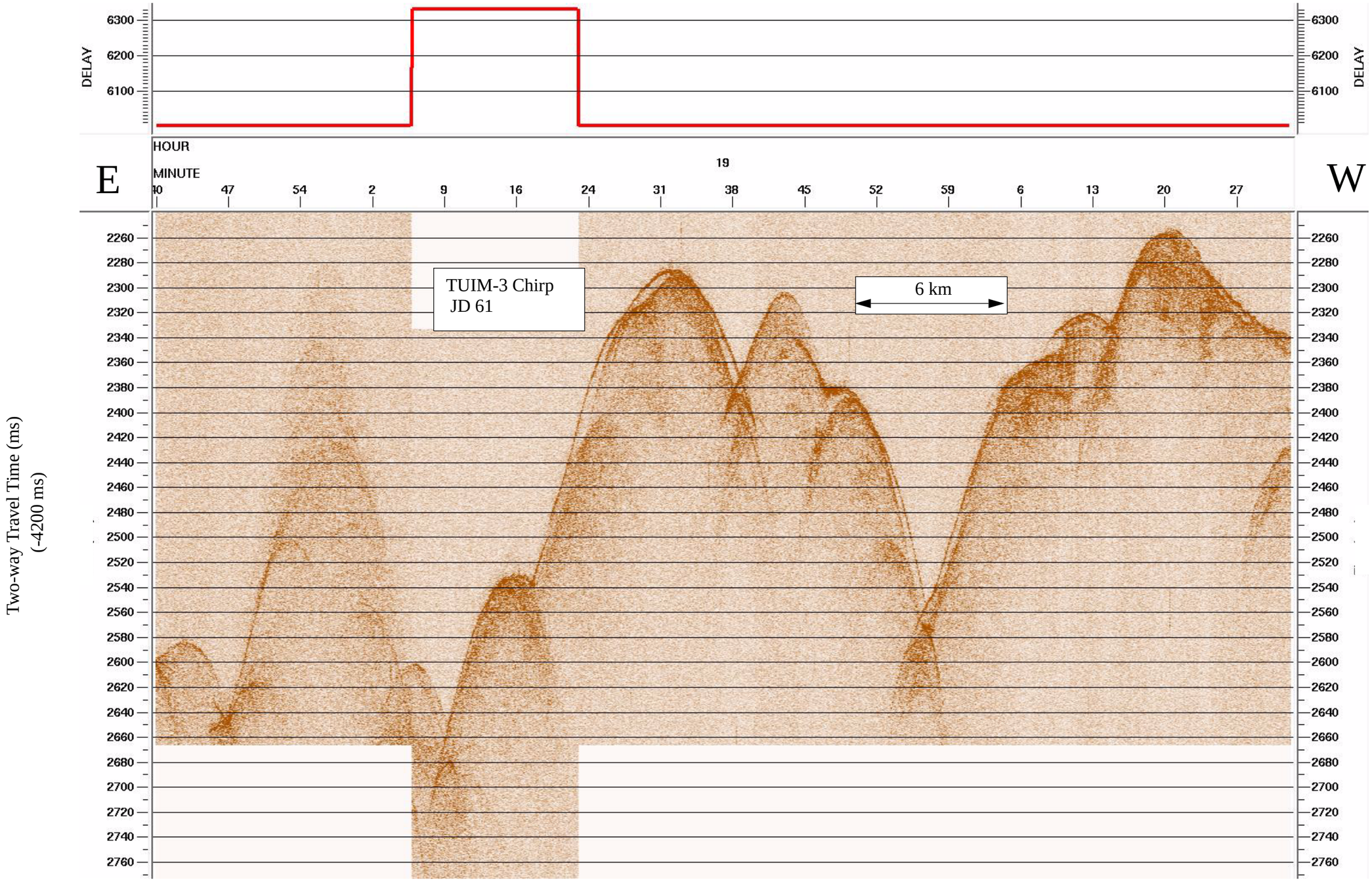

DELAY
6600
6400
6200
HOUR
MINUTE
13
W
E
16
43
50
57
4
12
19
26
33
40
47
55
3
10
17
24
31
38
45
52
59
TUIM-3 Chirp
JD 61
6 km
Two-way Travel Time (ms)
(-4200 ms)
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000

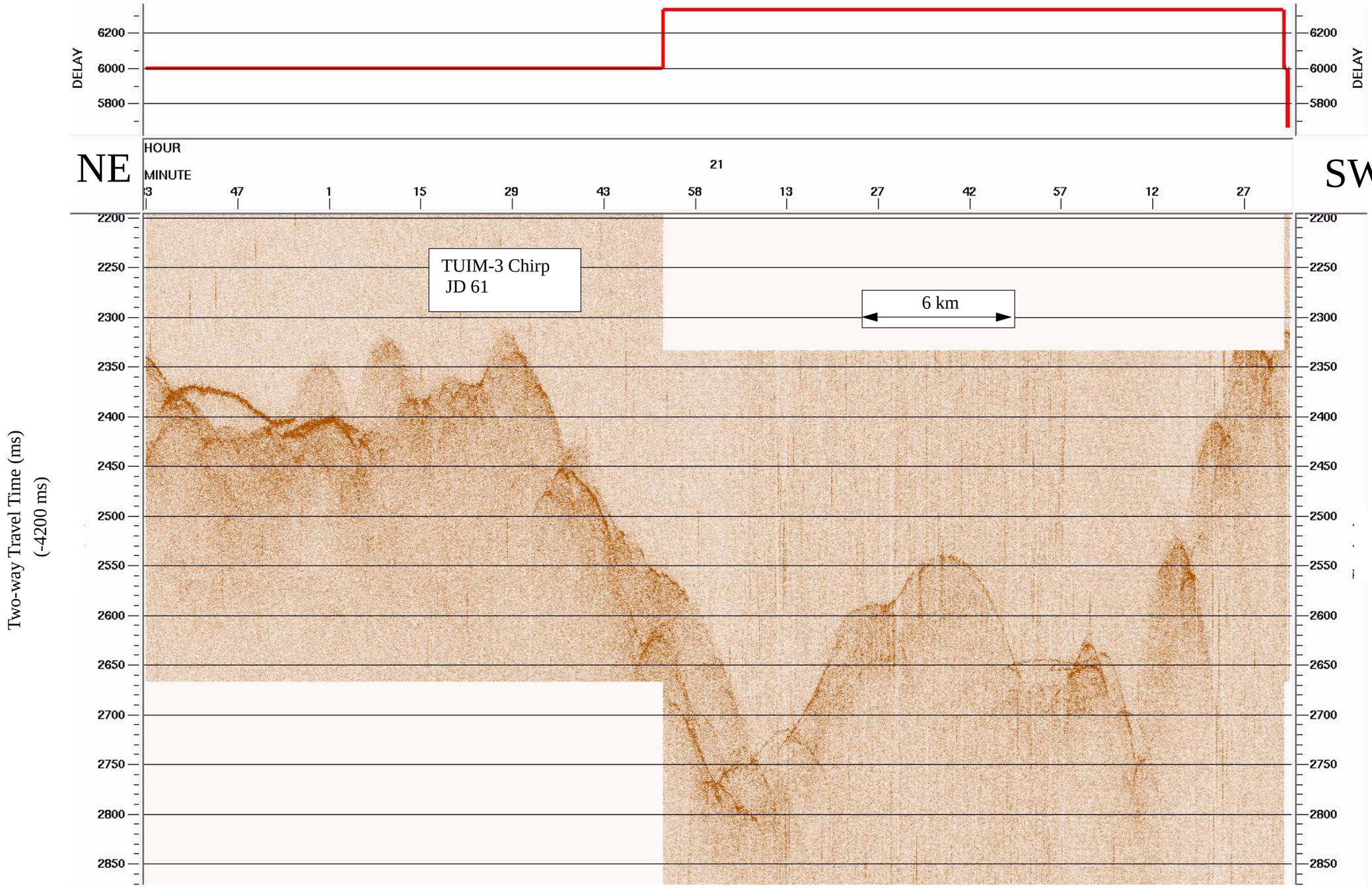

DELAY
6300
6200
6100
W
E
HOUR
16
MINUTE
3
10
17
24
32
39
47
54
1
8
15
22
29
37
44
51
58
6
TUIM-3 Chirp
JD 61
6 km
Two-way Travel Time (ms)
(-4200 ms)
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
Time (ms)

Data File SBfixavg.2005mar02.1800-2400



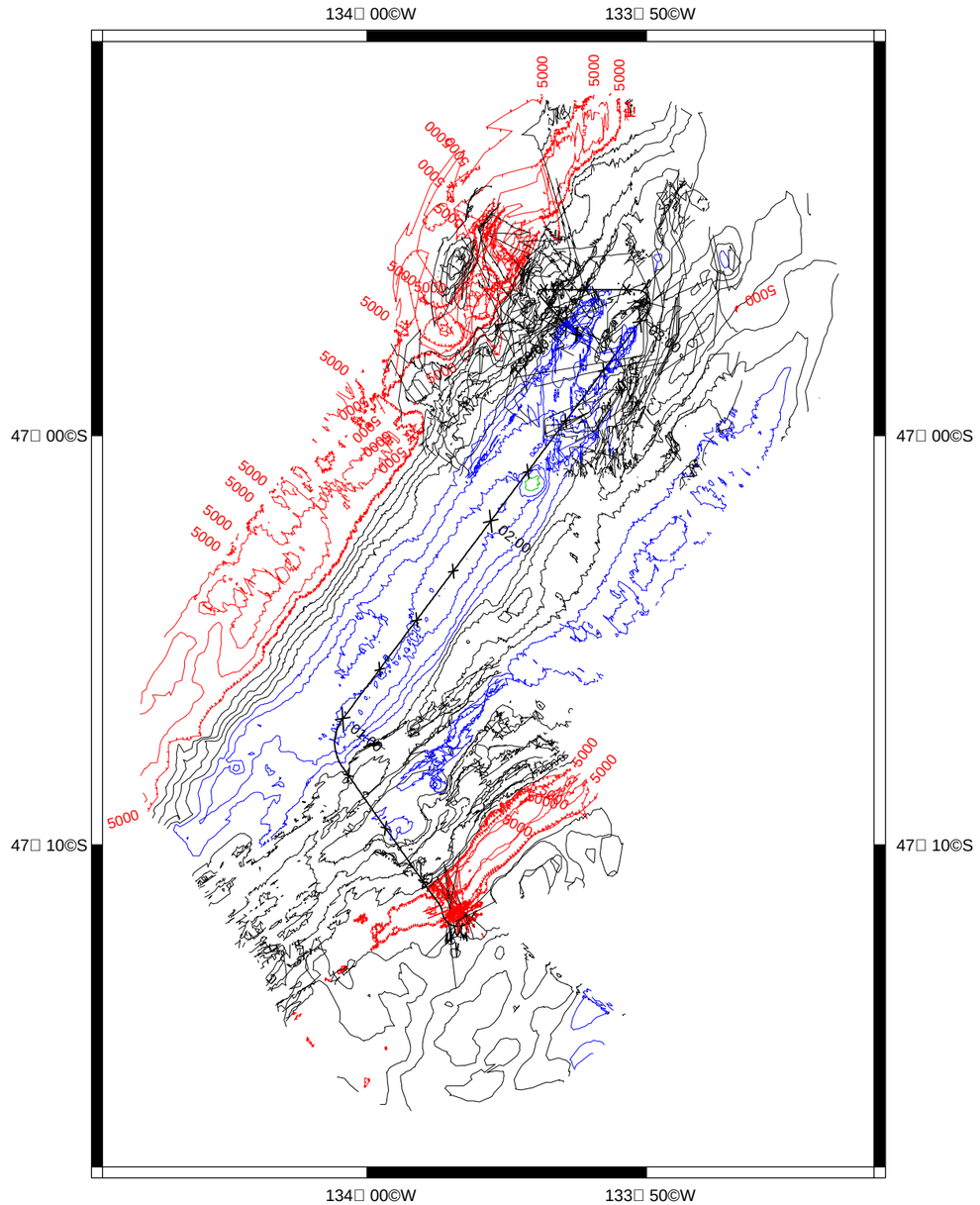

DELAY
6300
6200
6100
SW
NE
HOUR
MINUTE
18
8
15
22
29
36
44
51
58
5
12
19
26
33
40
TUIM-3 Chirp
JD 61
6 km
Two-way Travel Time (ms)
(-4200 ms)
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
2620
2640
2660
2680
2700
2720
2740
2760
2780
2800

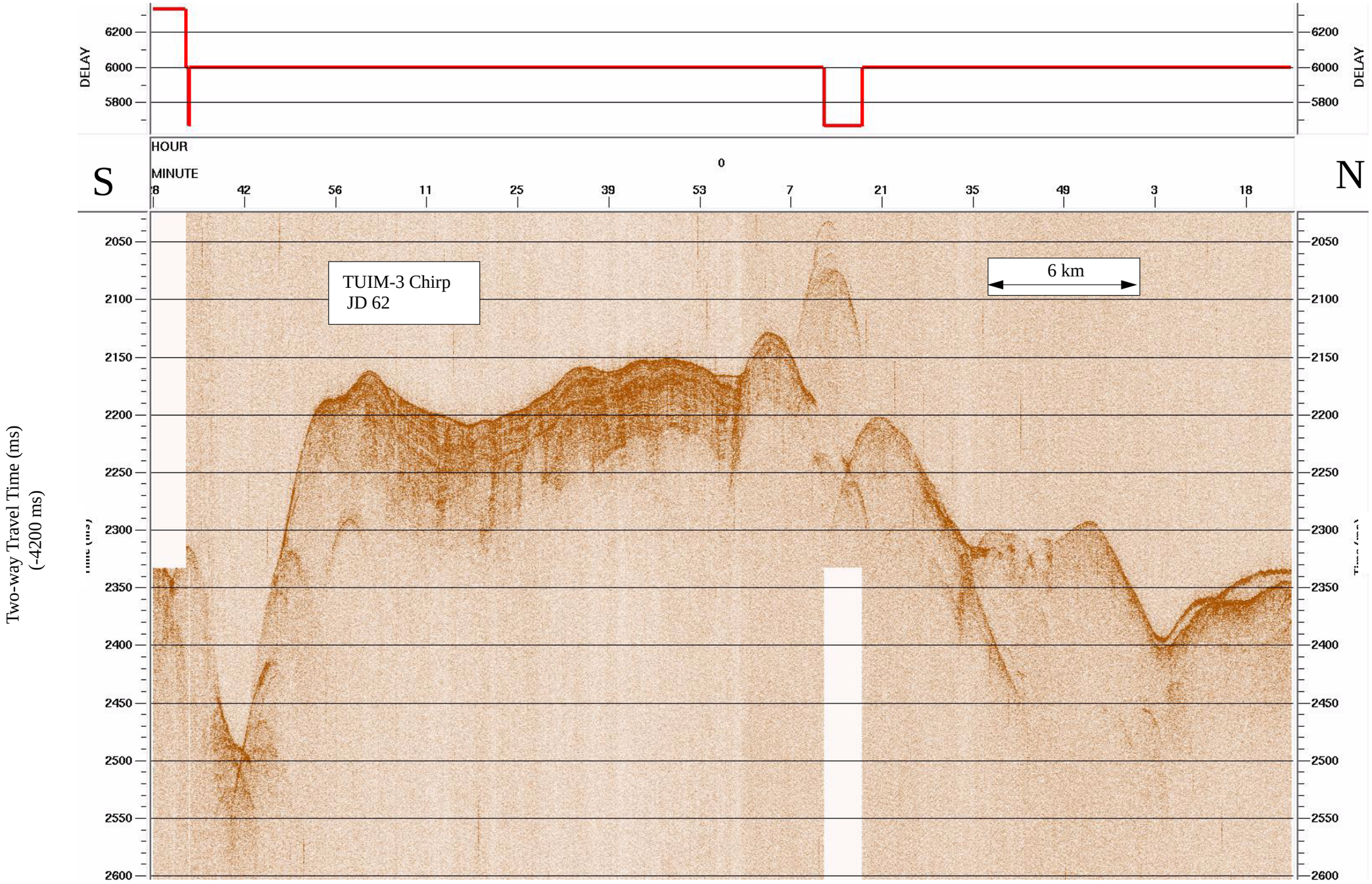

DELAY
6300
6200
6100
E
W
HOUR
19
MINUTE
40
47
54
2
9
16
24
31
38
45
52
59
6
13
20
27
TUIM-3 Chirp
JD 61
6 km
Two-way Travel Time (ms)
(-4200 ms)
2260
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
2620
2640
2660
2680
2700
2720
2740
2760

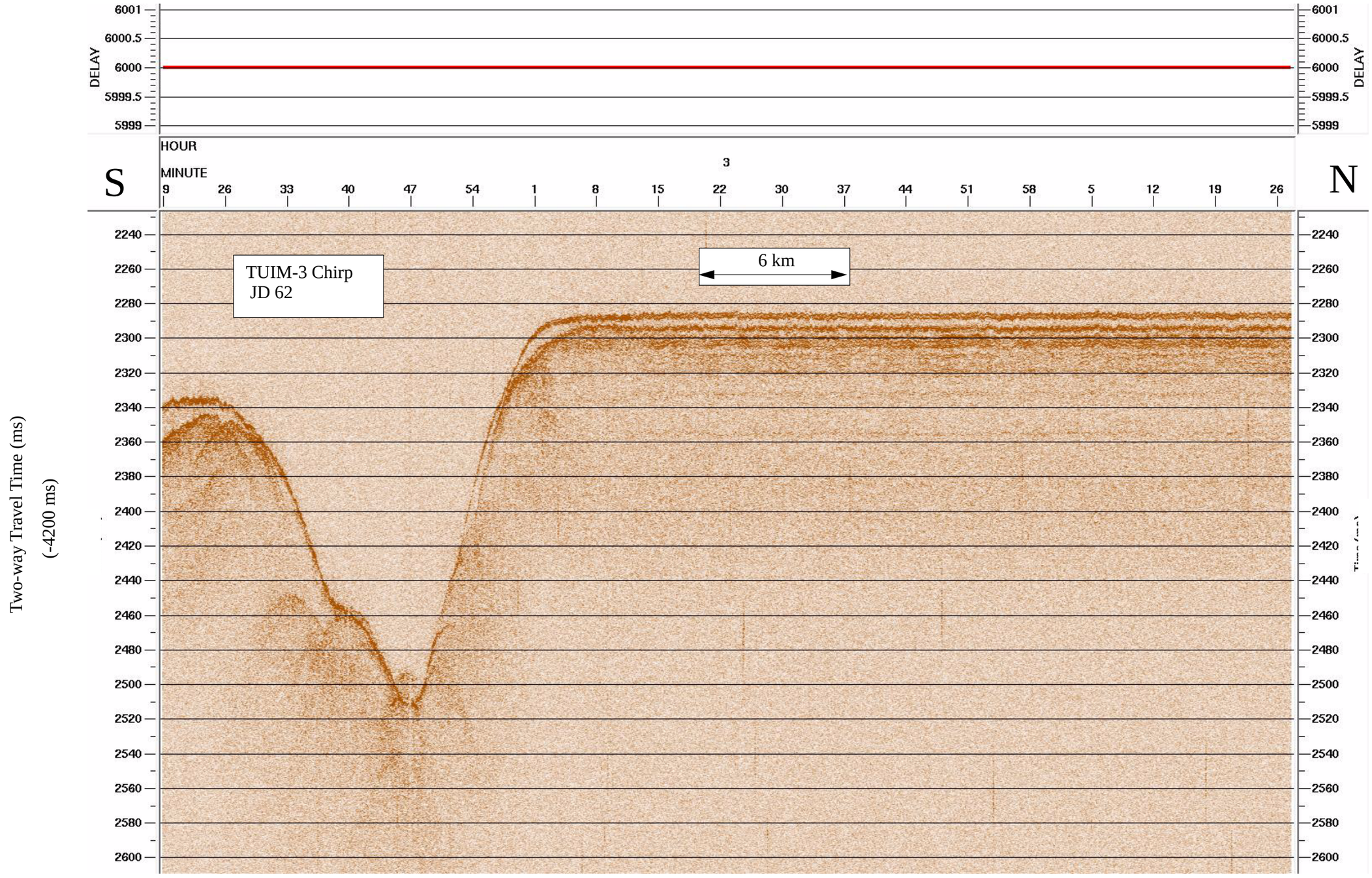

DELAY
6200
6000
5800
NE
SW
HOUR
MINUTE
21
3
47
1
15
29
43
58
13
27
42
57
12
27
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
TUIM-3 Chirp
JD 61
6 km
Two-way Travel Time (ms)
(-4200 ms)

Julian Day 62
3 March 2005
Knudsen Chirp Data

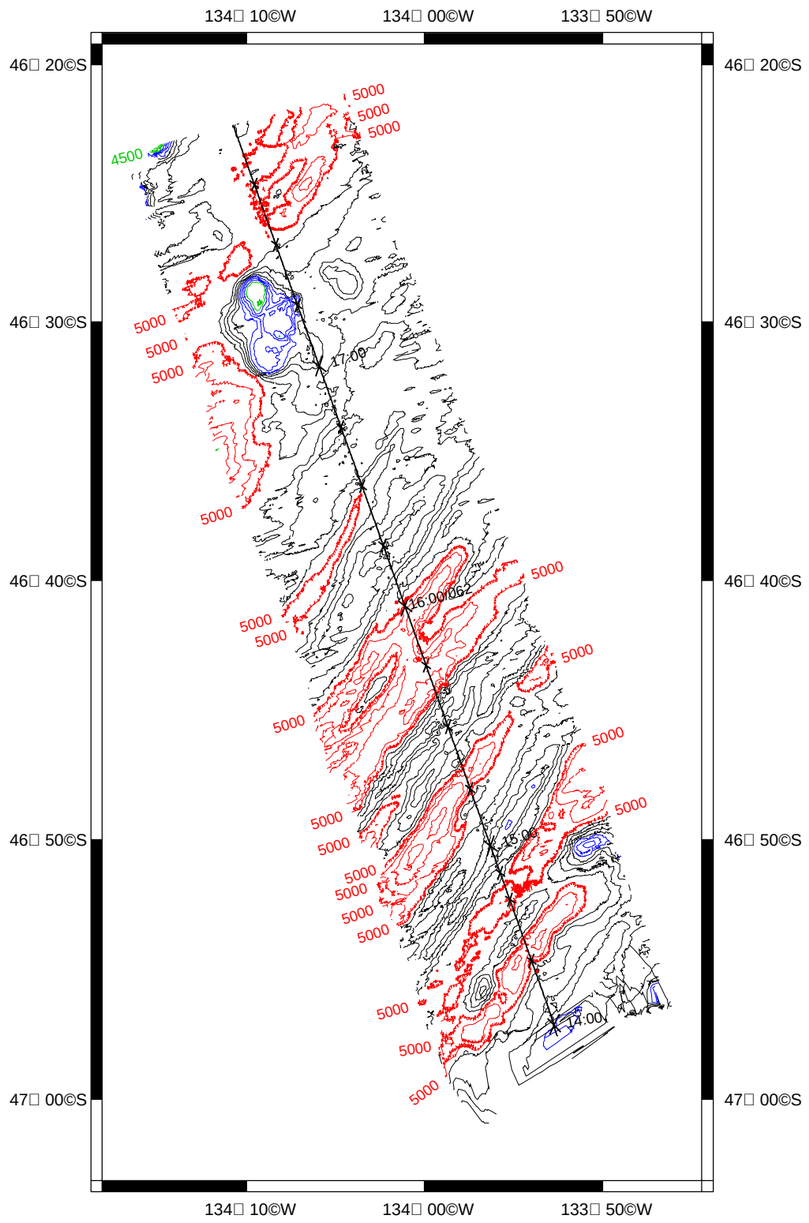
Data File SBfixavg.2005mar03.0000-0600

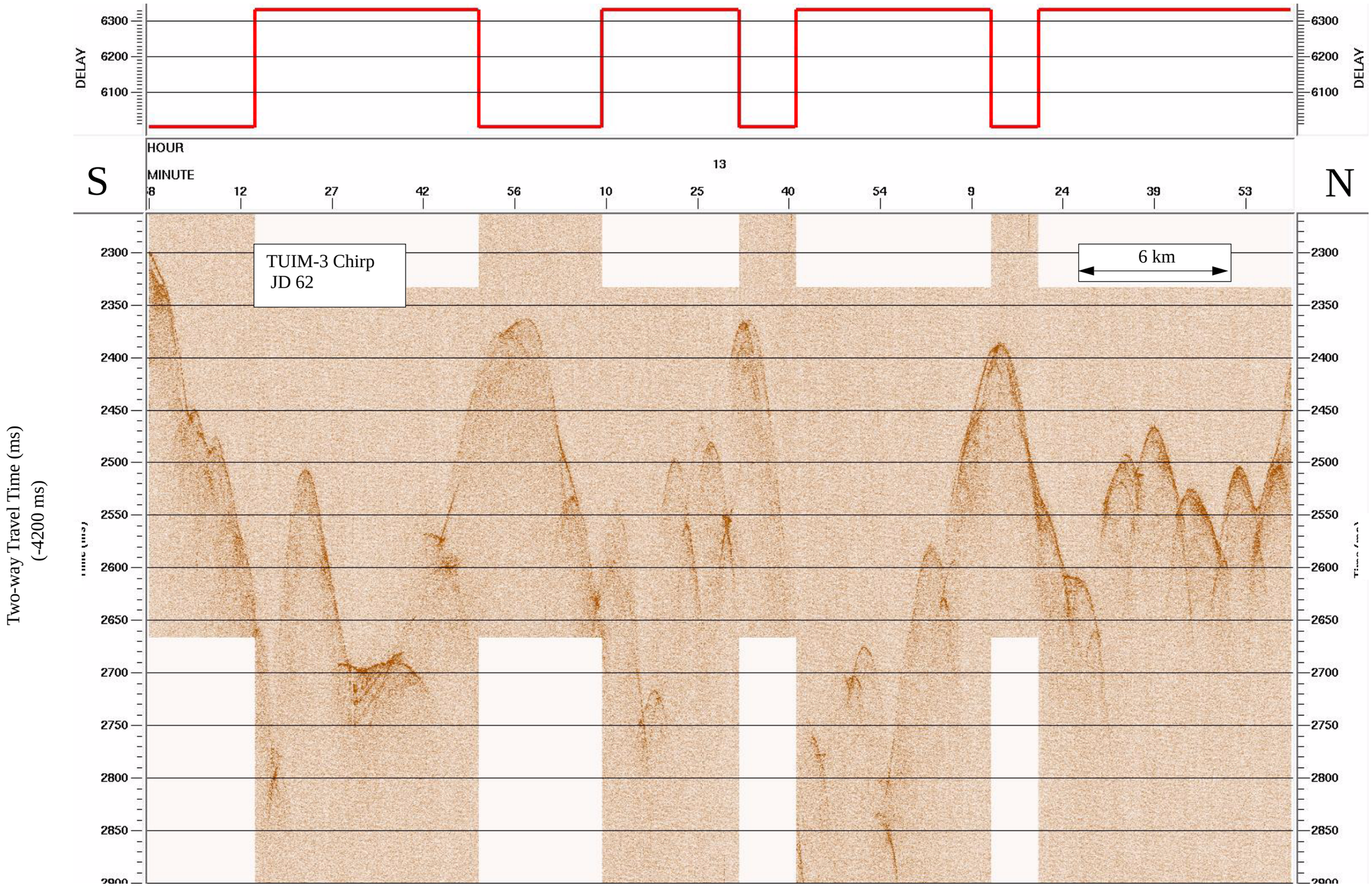


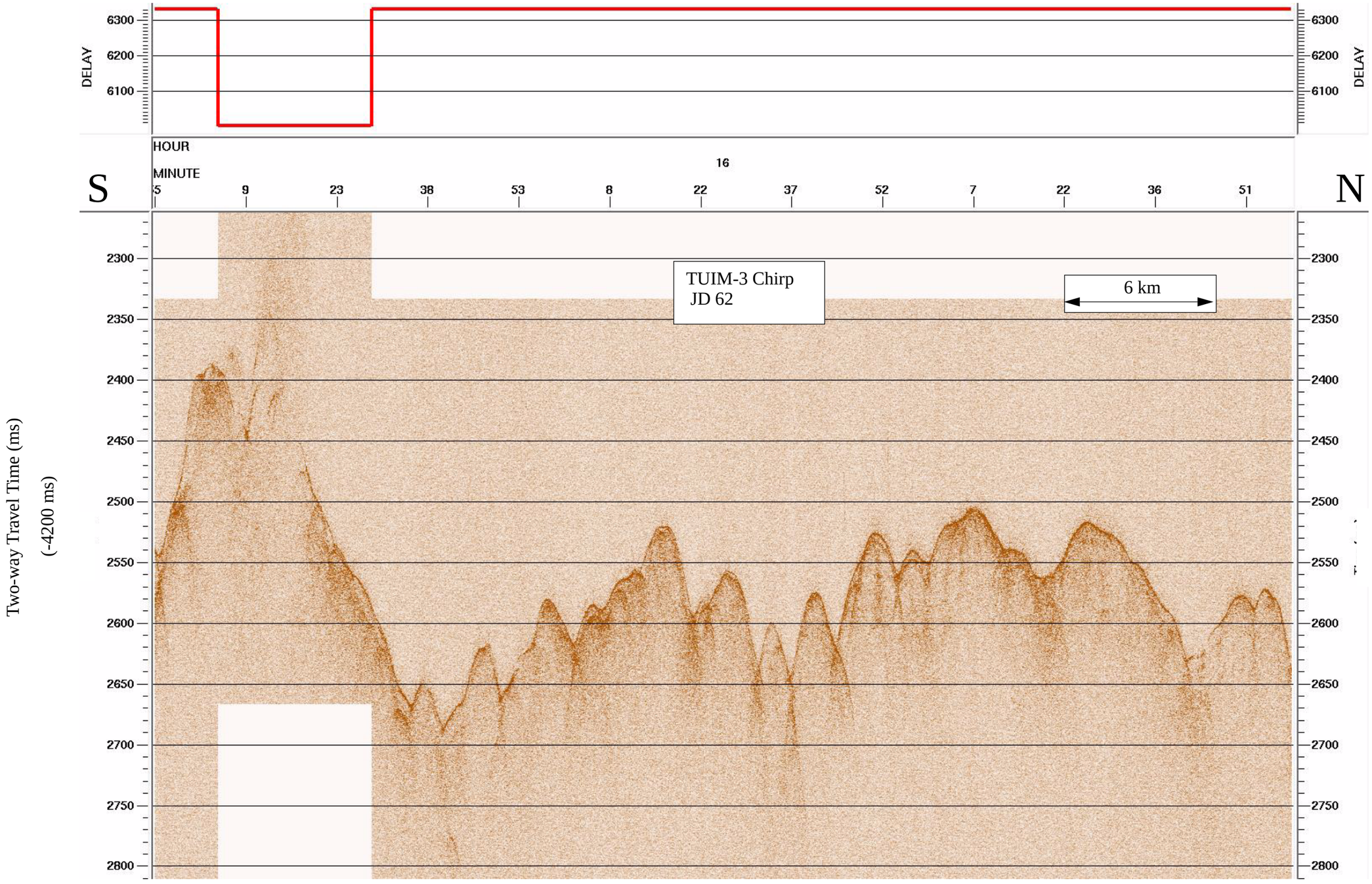

DELAY
6200
6000
5800
HOUR
MINUTE
0
S
N
8
42
56
11
25
39
53
7
21
35
49
3
18
TUIM-3 Chirp
JD 62
6 km
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
Two-way Travel Time (ms)
(-4200 ms)


DELAY
6001
6000.5
6000
5999.5
5999
HOUR
MINUTE
3
9 26 33 40 47 54 1 8 15 22 30 37 44 51 58 5 12 19 26
S
N
TUIM-3 Chirp
JD 62
6 km
2240 2260 2280 2300 2320 2340 2360 2380 2400 2420 2440 2460 2480 2500 2520 2540 2560 2580 2600
Two-way Travel Time (ms)
(-4200 ms)

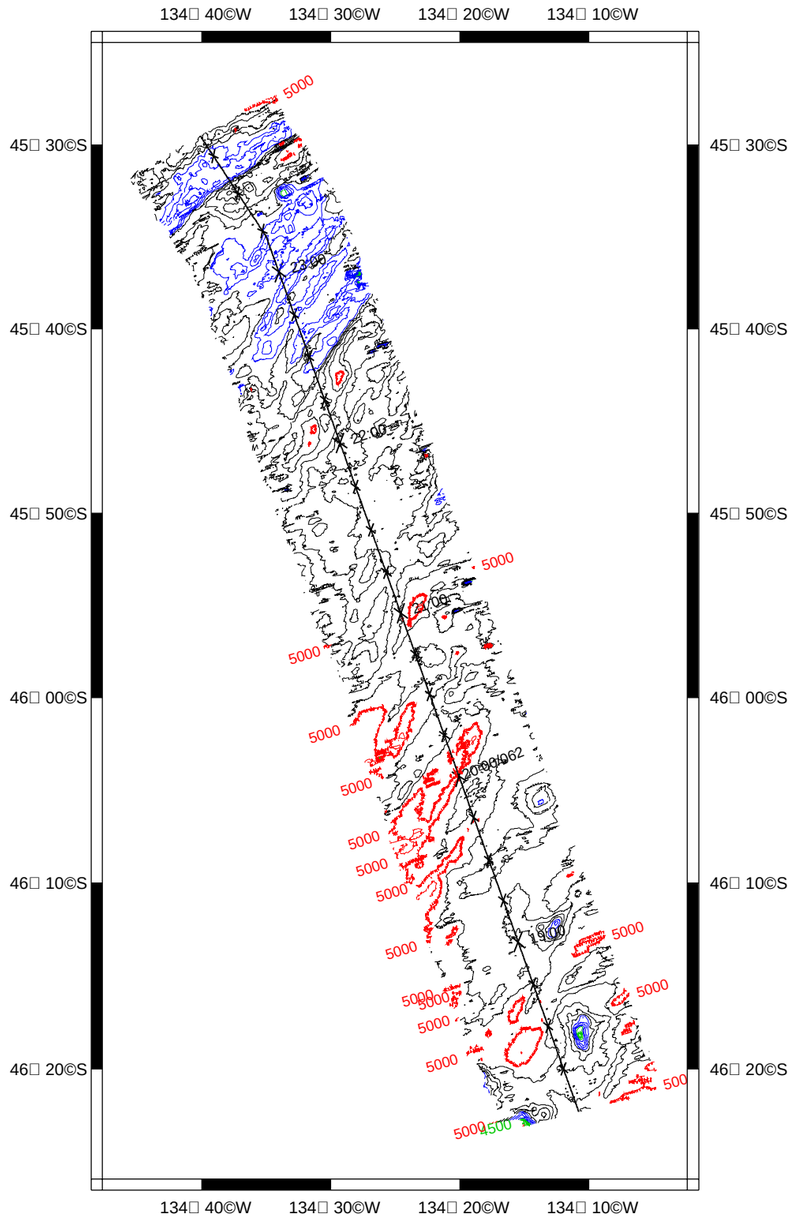
Data File SBfixavg.2005mar03.1200-1800

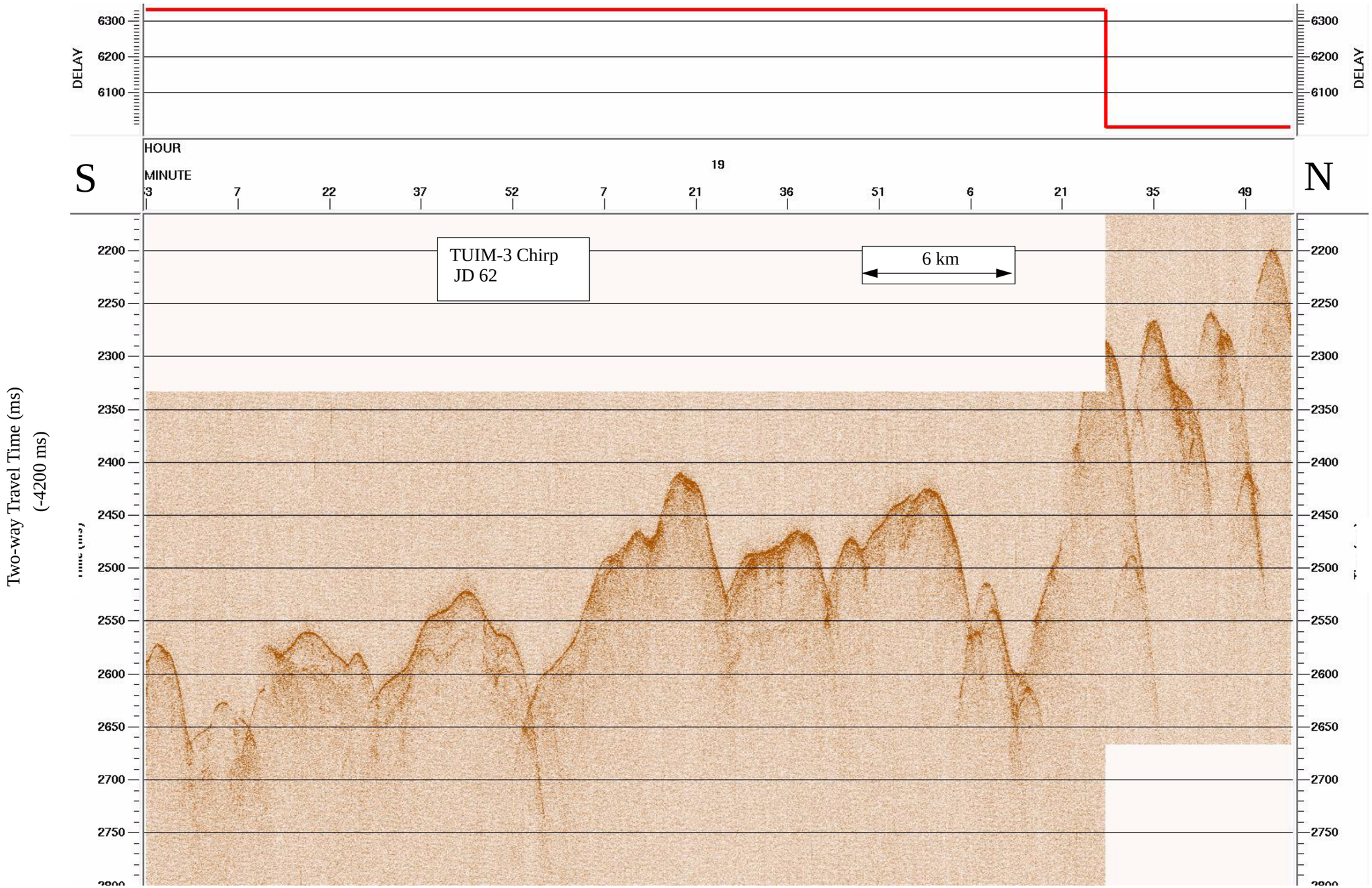


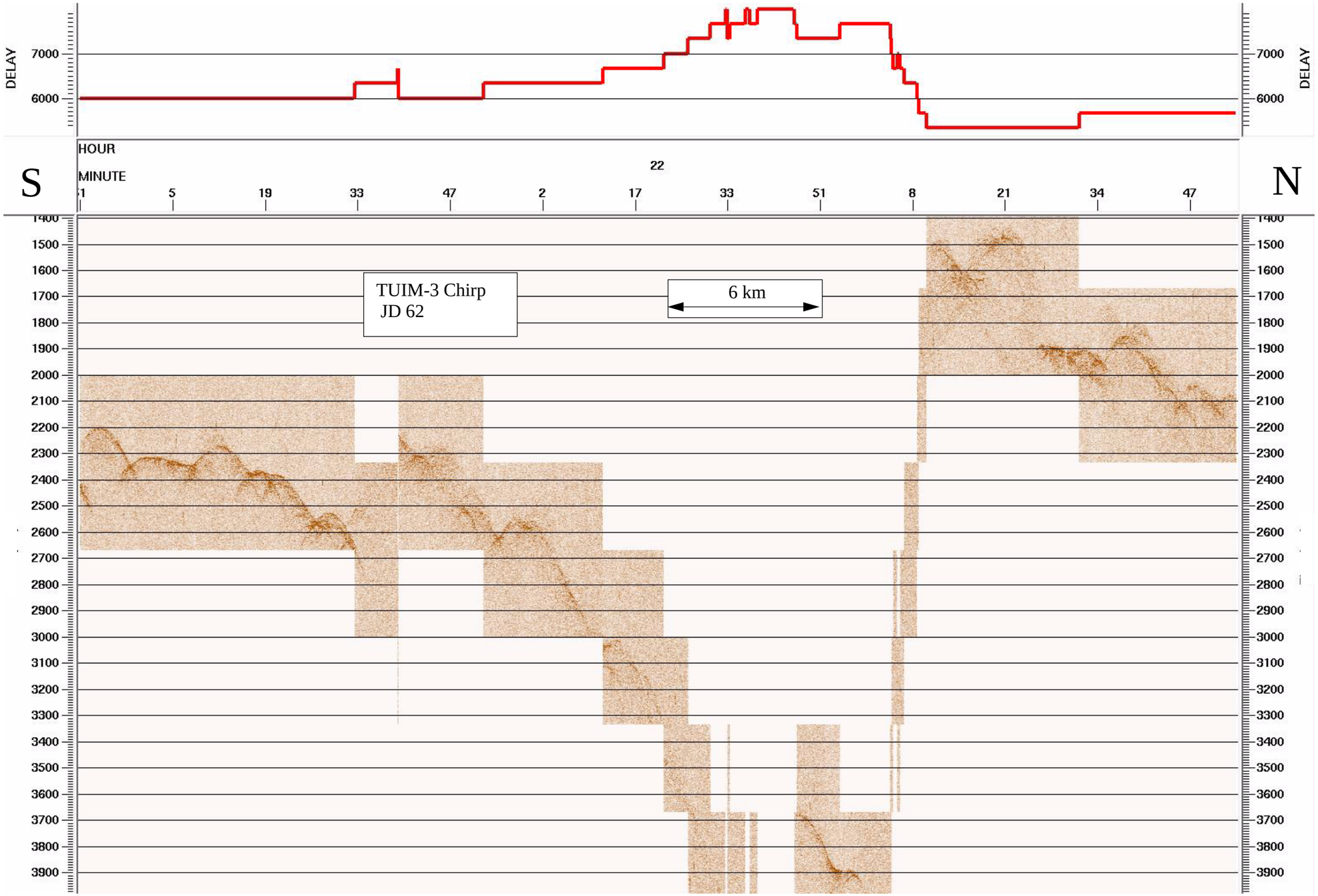

DELAY
6300
6200
6100
S
HOUR
MINUTE
13
8
12
27
42
56
10
25
40
54
9
24
39
53
N
TUIM-3 Chirp
JD 62
6 km
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
Two-way Travel Time (ms)
(-4200 ms)


DELAY
6300
6200
6100
HOUR
MINUTE
16
S
N
5
9
23
38
53
8
22
37
52
7
22
36
51
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
TUIM-3 Chirp
JD 62
6 km
Two-way Travel Time (ms)
(-4200 ms)

Data File SBfixavg.2005mar03.1800-2400

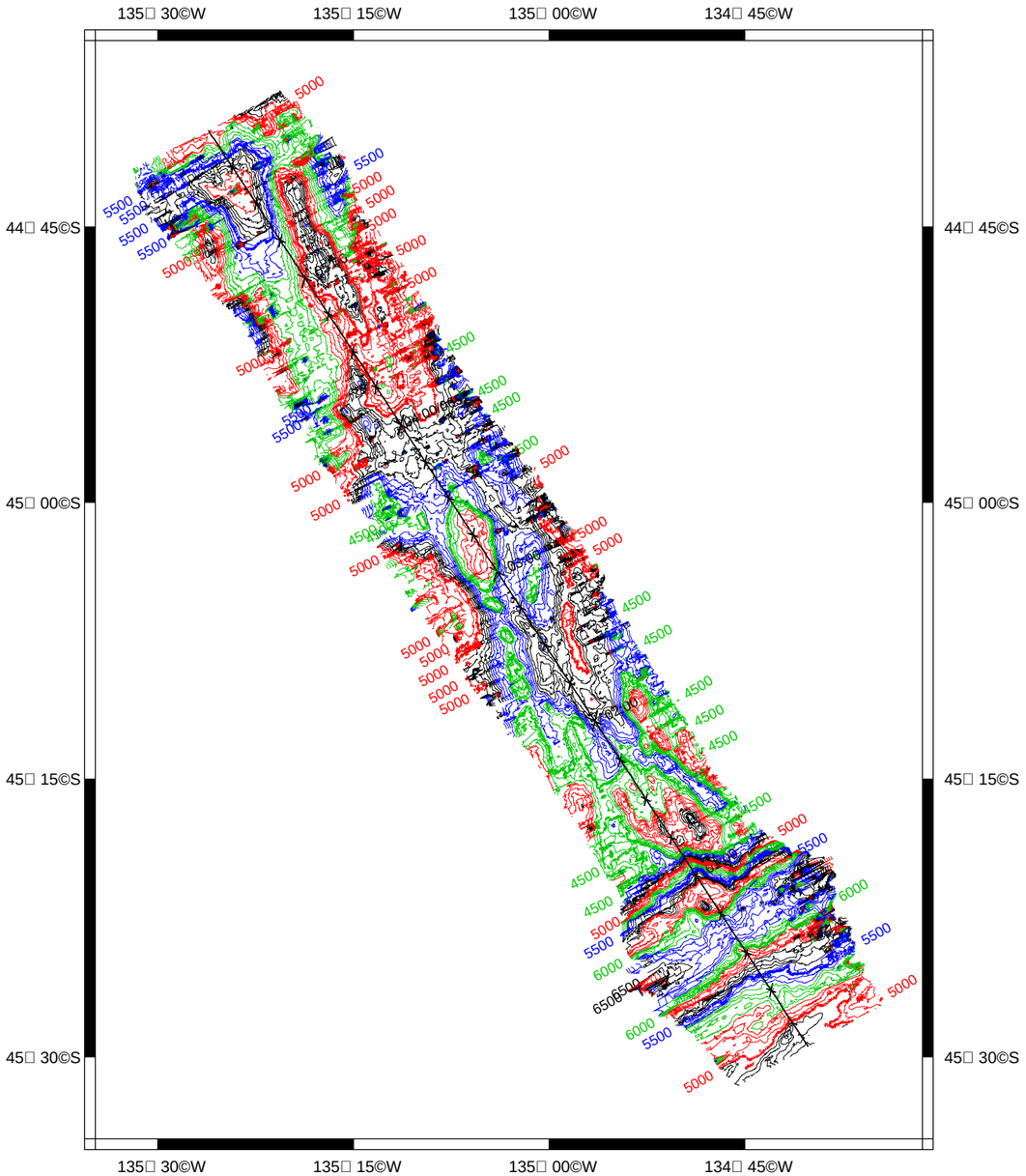


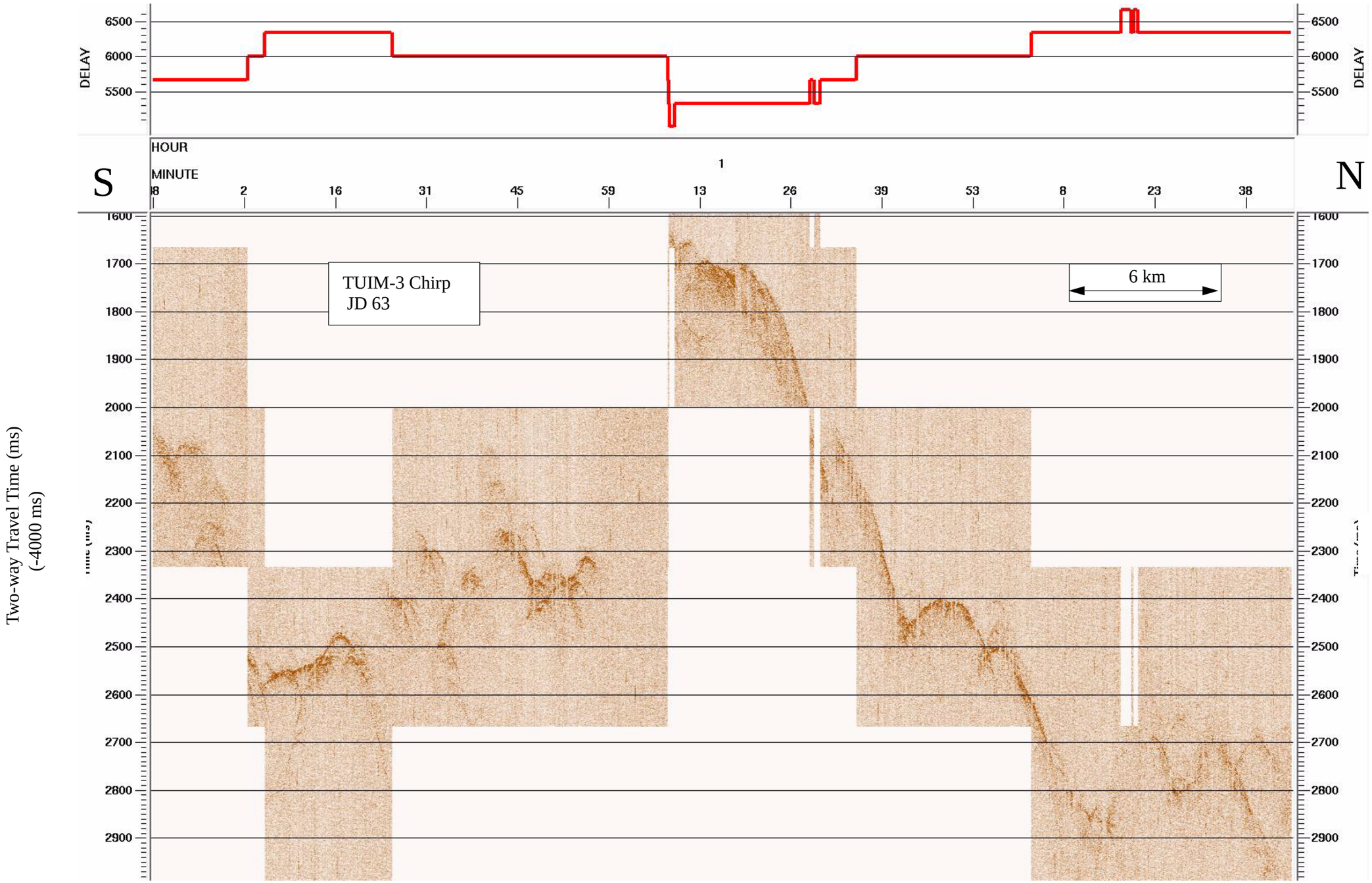

DELAY
6300
6200
6100
S
N
HOUR
MINUTE
19
3
7
22
37
52
7
21
36
51
6
21
35
49
TUIM-3 Chirp
JD 62
6 km
Two-way Travel Time (ms)
(-4200 ms)
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750

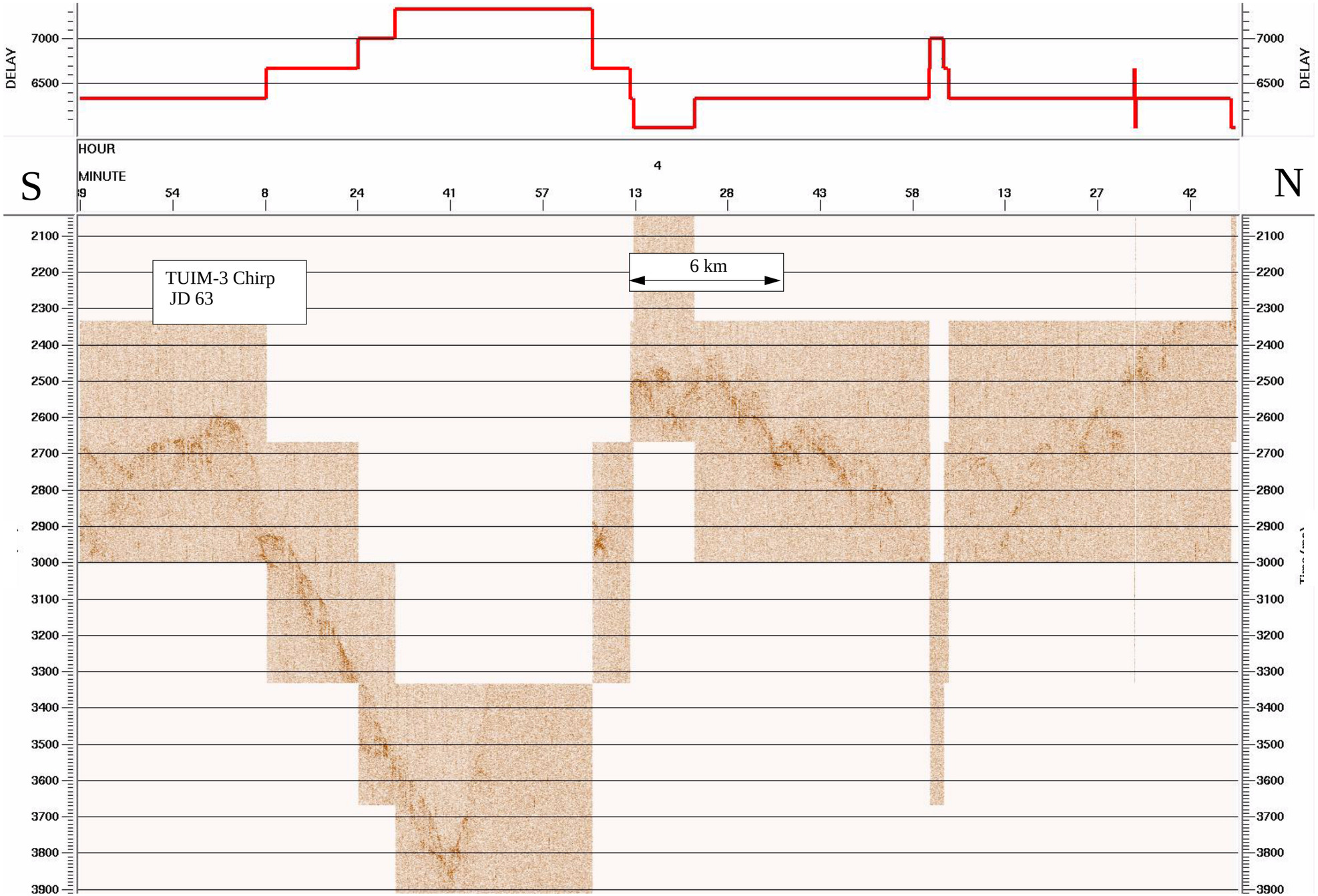

DELAY
7000
6000
HOUR
22
MINUTE
51
5
19
33
47
2
17
33
51
8
21
34
47
S
N
TUIM-3 Chirp
JD 62
6 km
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
Two-way Travel Time (ms)
(-4200 ms)

Julian Day 63
4 March 2005
Knudsen Chirp Data

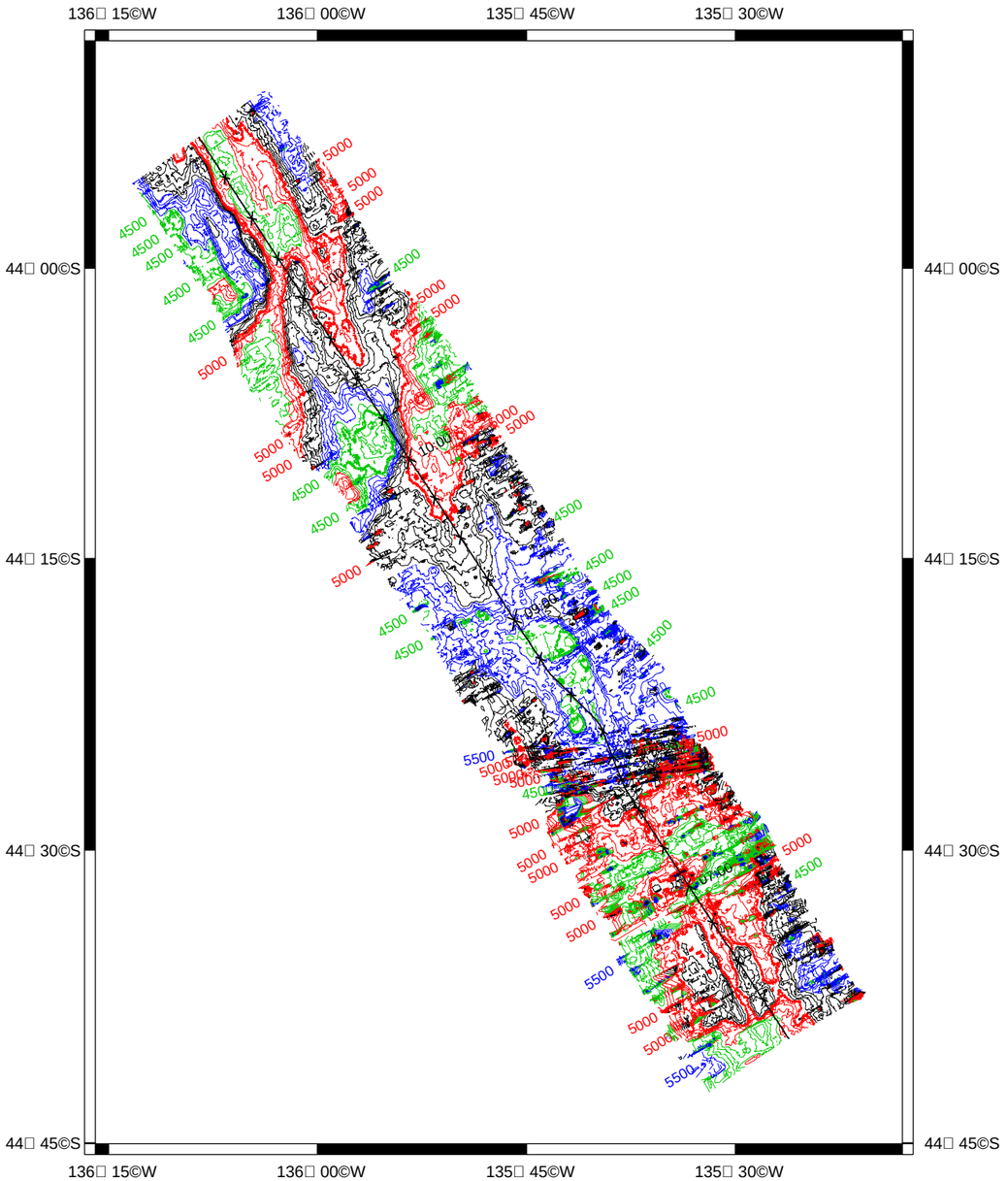
Data File SBfixavg.2005mar04.0000-0600

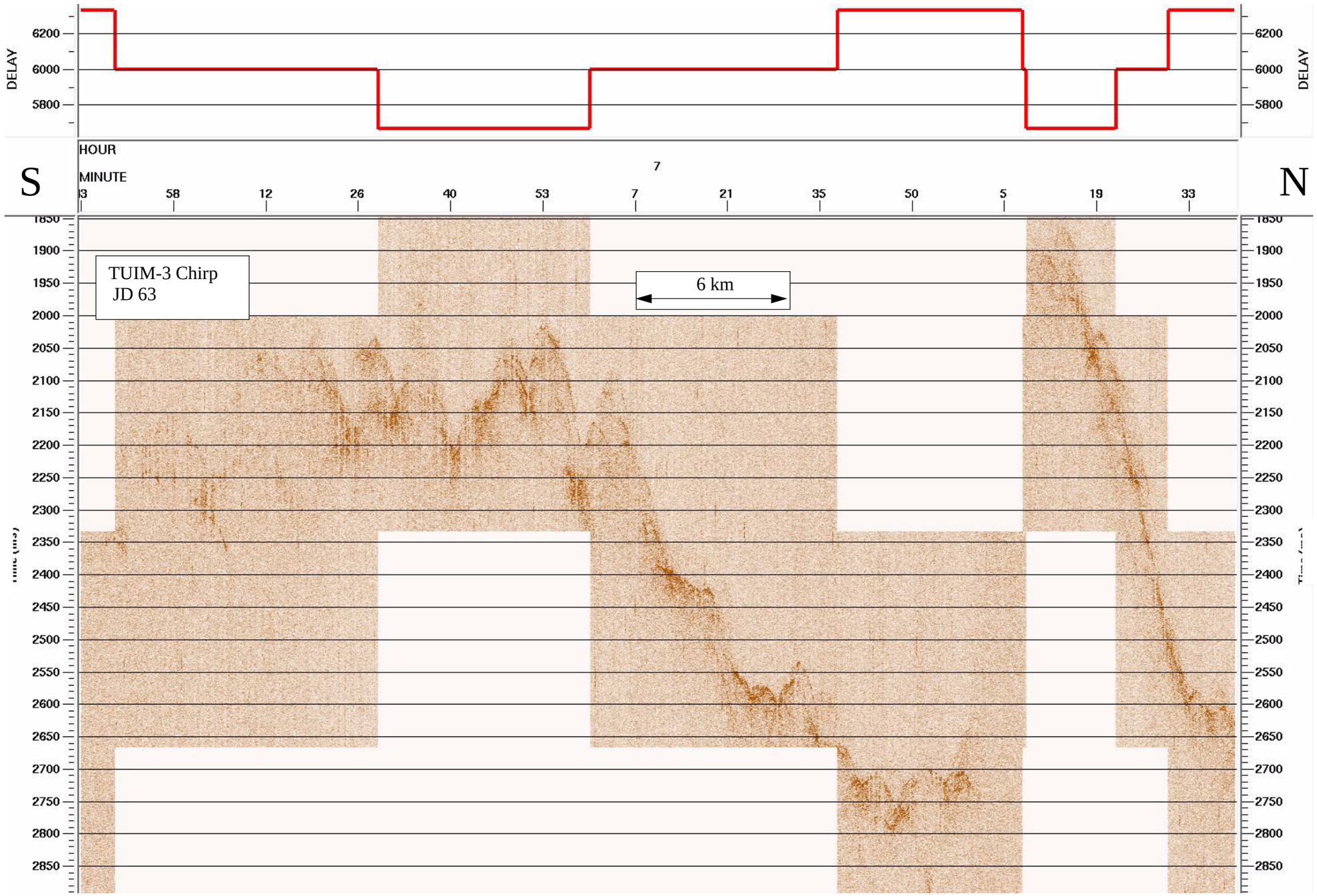


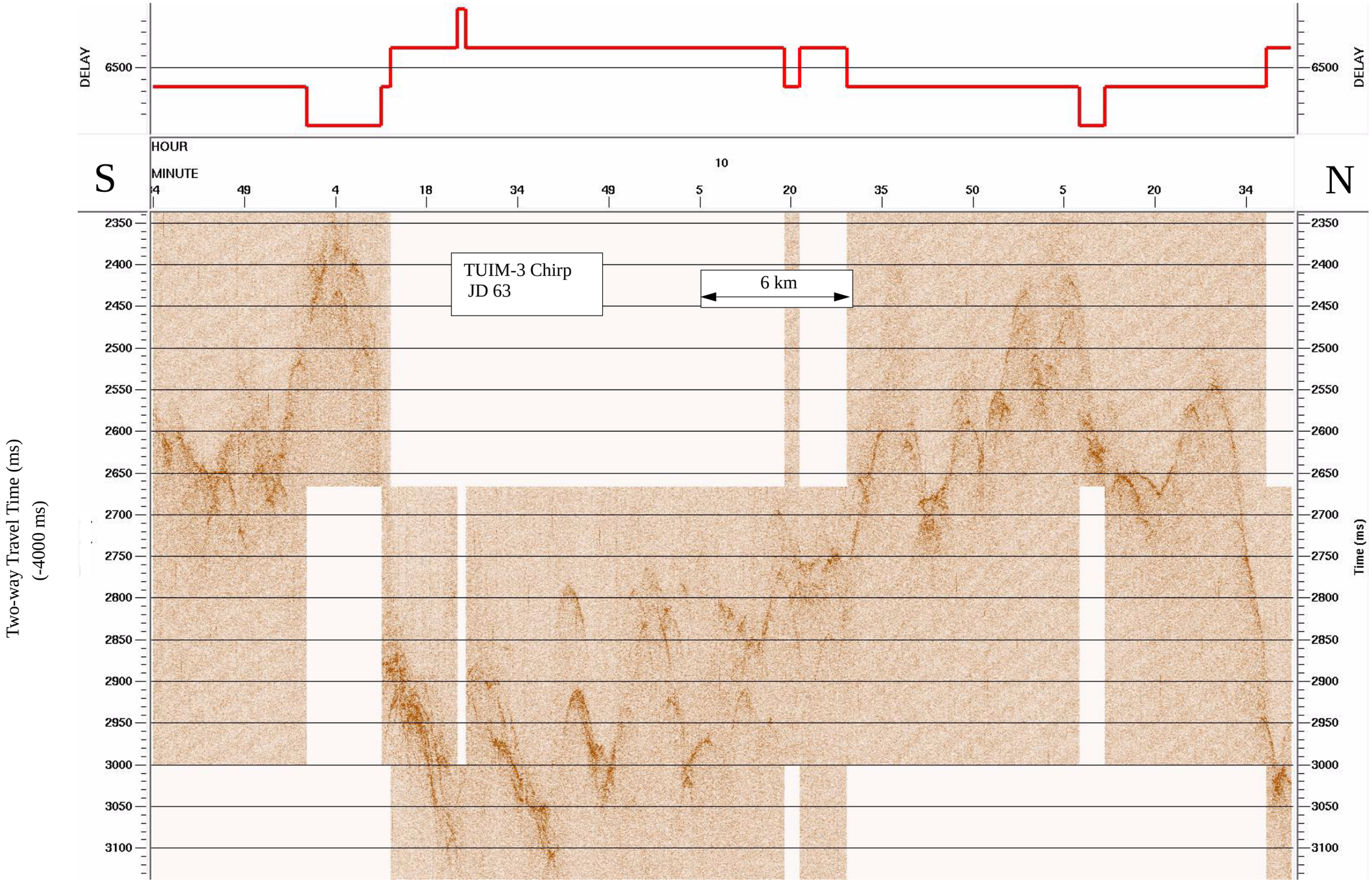

DELAY
6500
6000
5500
HOUR
MINUTE
S
N
1
8
2
16
31
45
59
13
26
39
53
8
23
38
TUIM-3 Chirp
JD 63
6 km
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
Two-way Travel Time (ms)
(-4000 ms)


DELAY
7000
6500
HOUR
MINUTE
4
S
N
9
54
8
24
41
57
13
28
43
58
13
27
42
TUIM-3 Chirp
JD 63
6 km
Two-way Travel Time (ms)
(-4000 ms)
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900

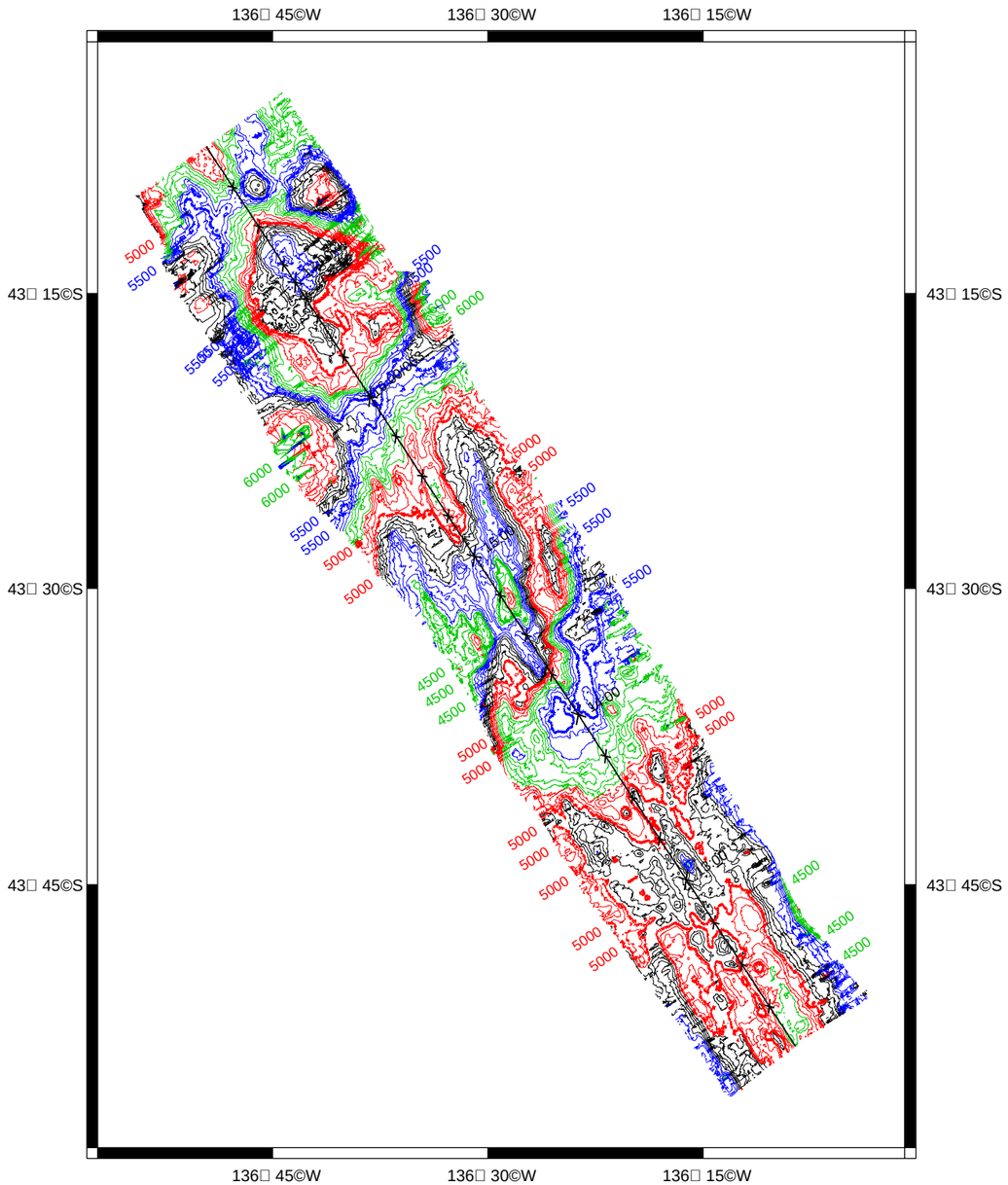
Data File SBfixavg.2005mar04.0600-1200

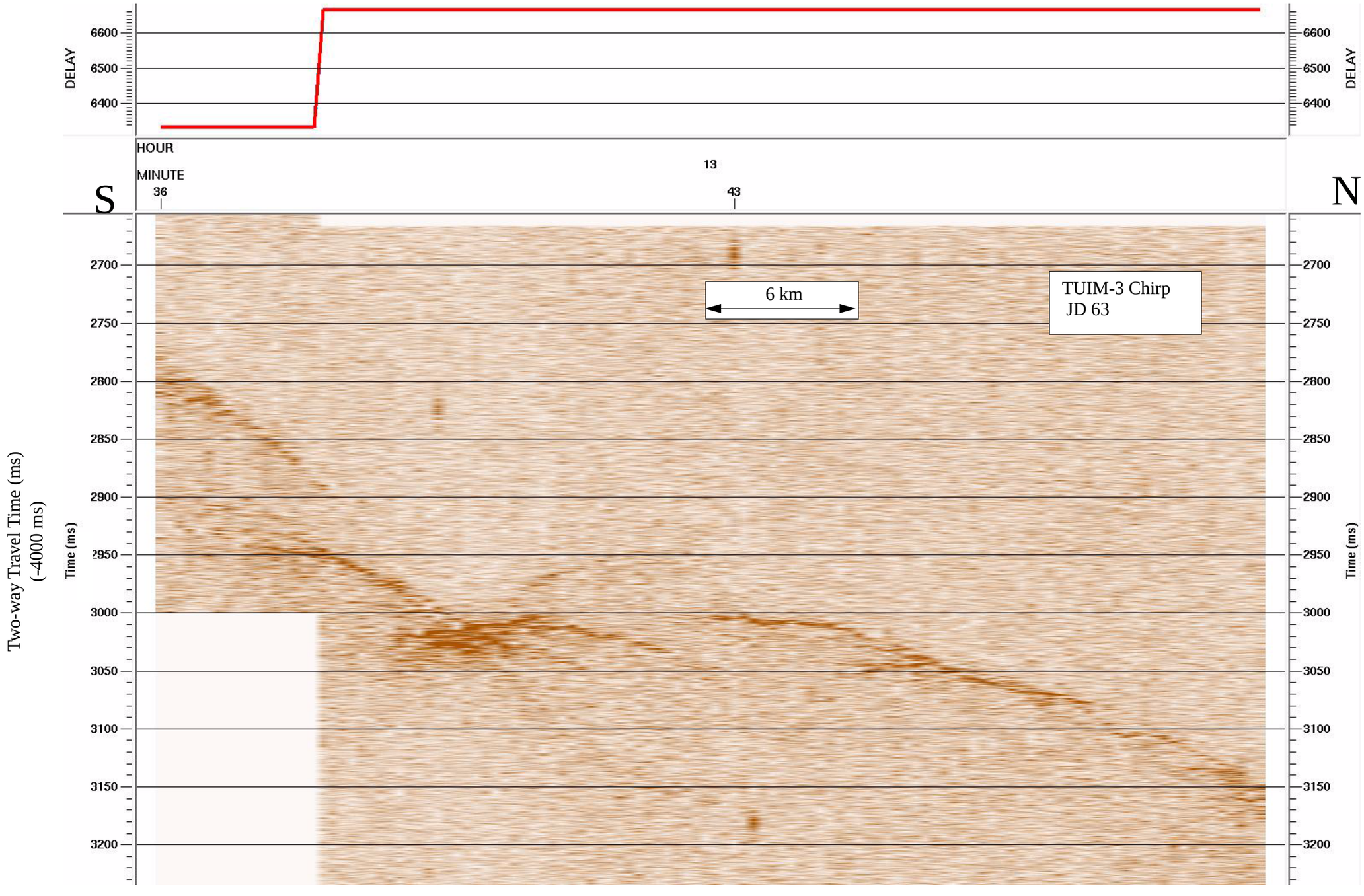


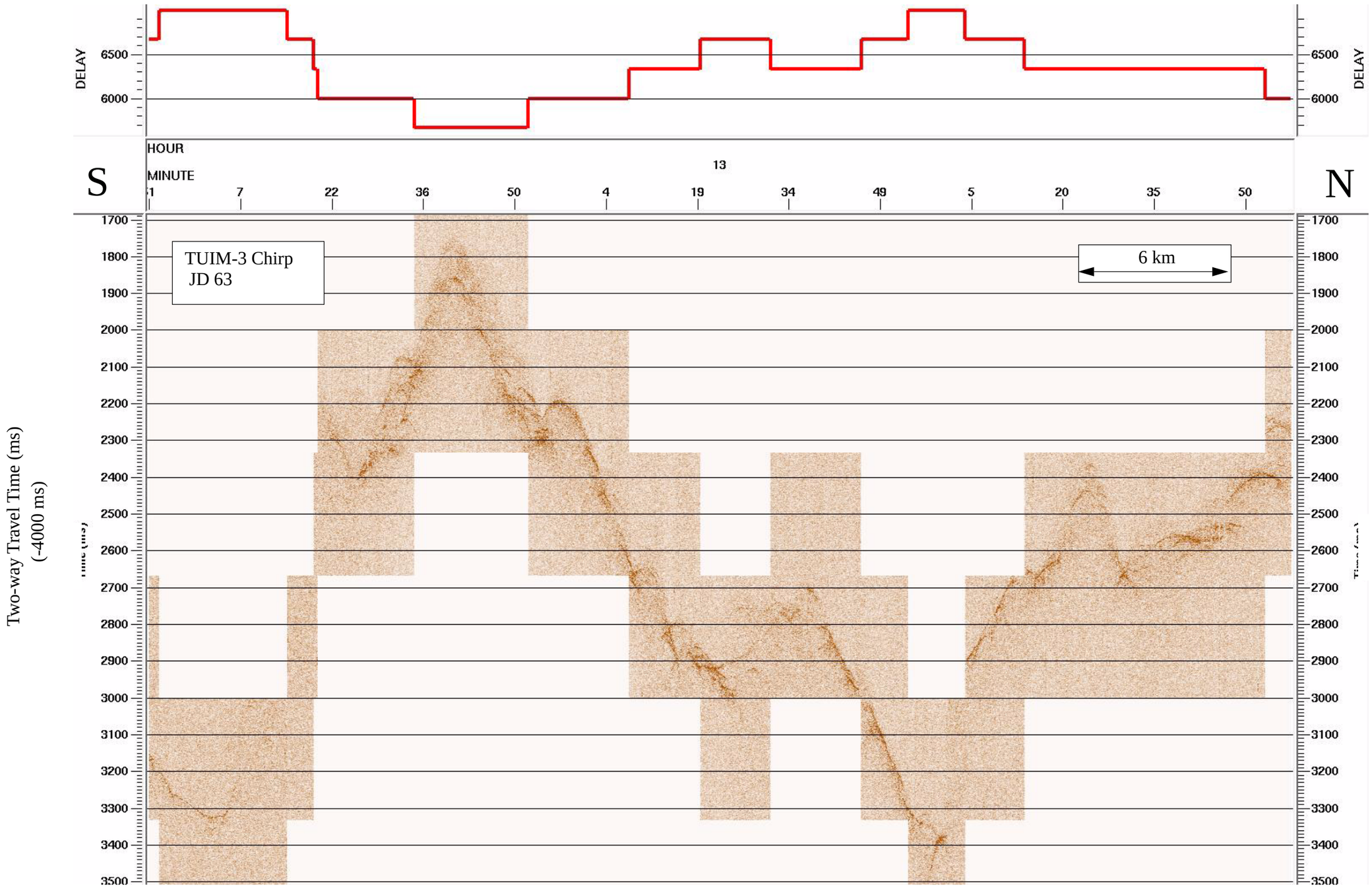

DELAY
6200
6000
5800
S
N
HOUR
7
MINUTE
3
58
12
26
40
53
7
21
35
50
5
19
33
TUIM-3 Chirp
JD 63
6 km
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
Two-way Travel Time (ms)
(-4000 ms)

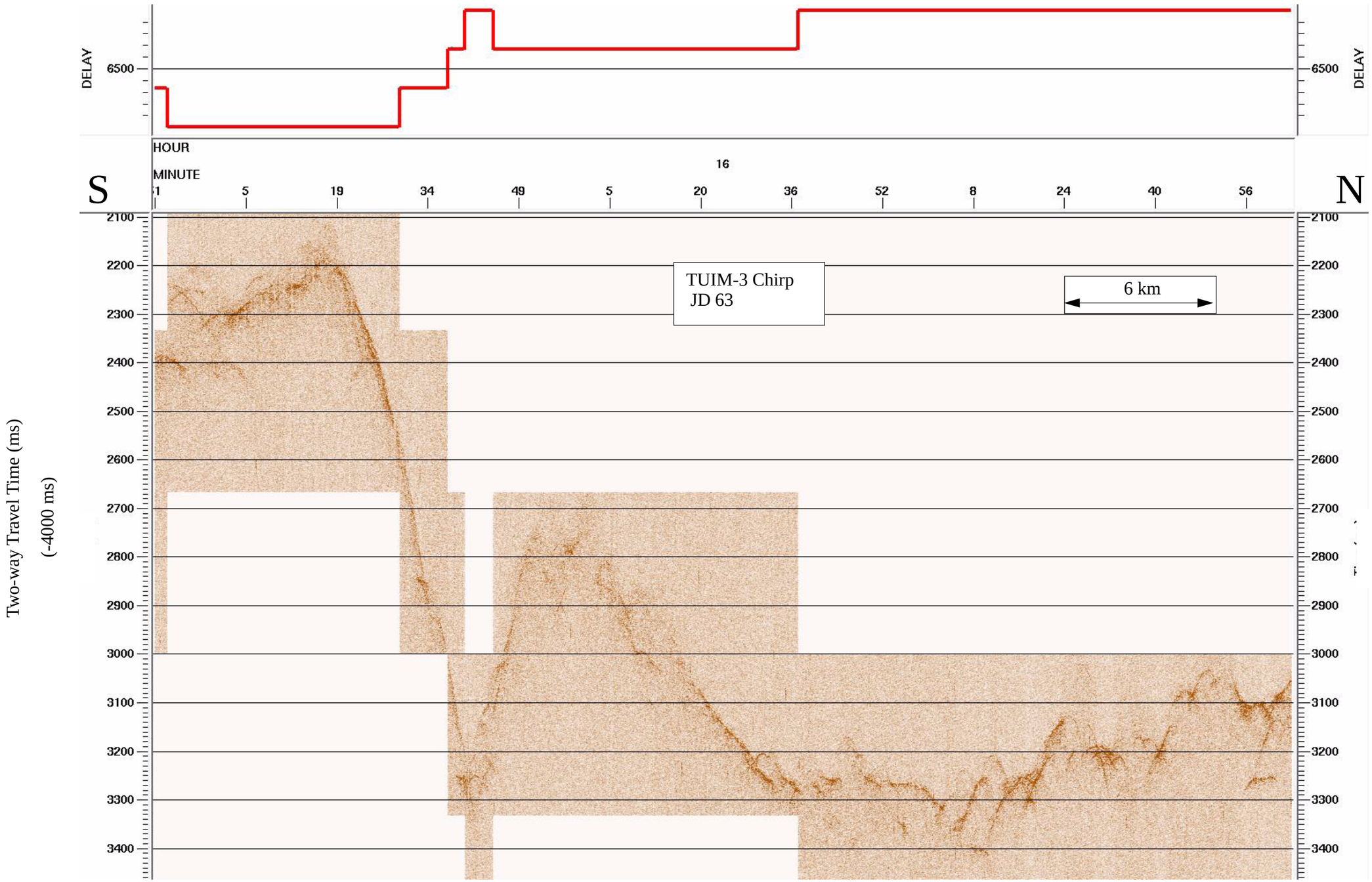

DELAY
6500
S
HOUR
MINUTE
10
4
49
4
18
34
49
5
20
35
50
5
20
34
N
TUIM-3 Chirp
JD 63
6 km
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)

Data File SBfixavg.2005mar04.1200-1800

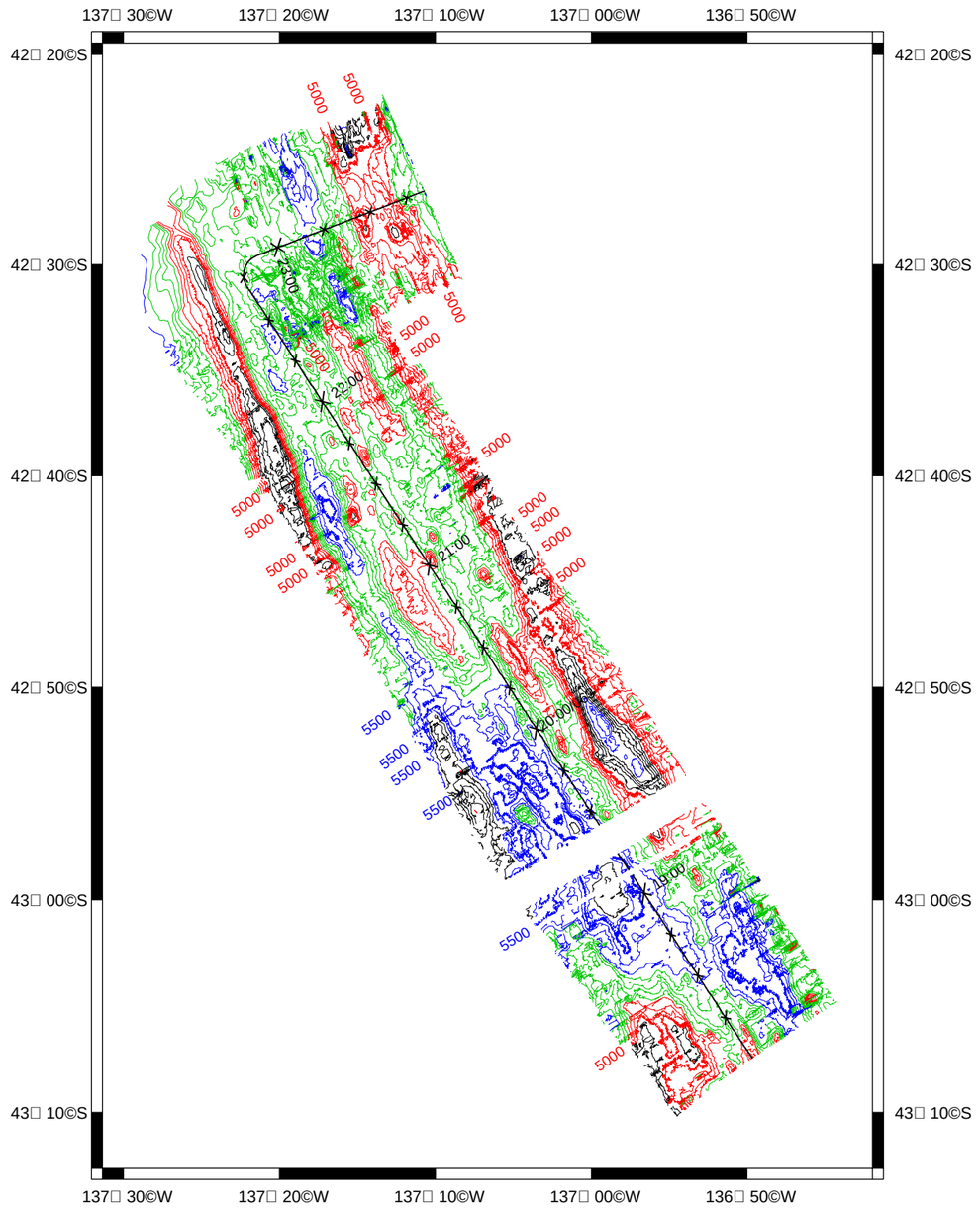


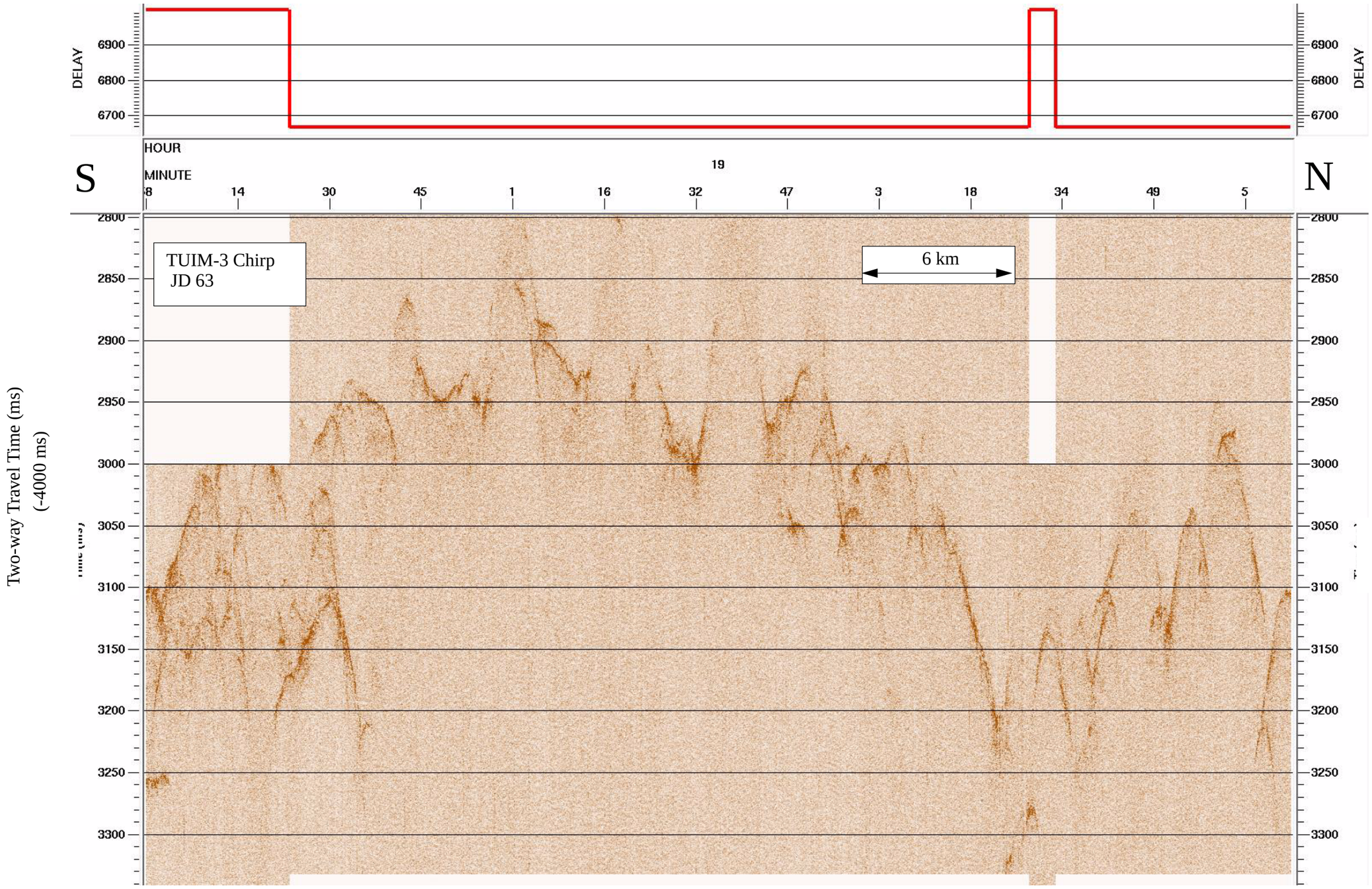

DELAY
6600
6500
6400
HOUR
MINUTE
36
13
43
S
N
6 km
TUIM-3 Chirp
JD 63
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200

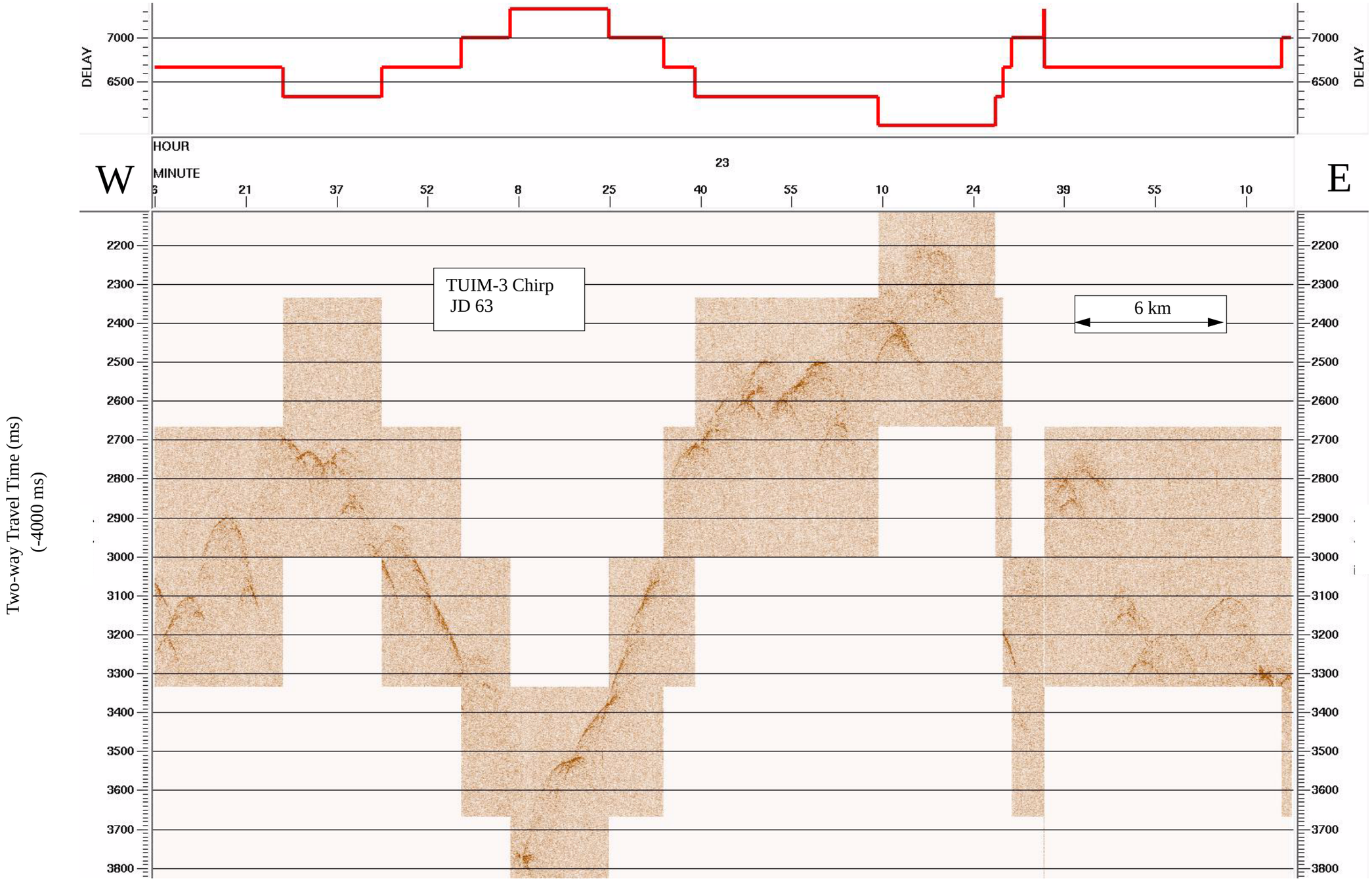

DELAY
6500
6000
S
HOUR
MINUTE
13
51
7
22
36
50
4
19
34
49
5
20
35
50
N
TUIM-3 Chirp
JD 63
6 km
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6500
HOUR
MINUTE
16
S
N
TUIM-3 Chirp
JD 63
6 km
Two-way Travel Time (ms)
(-4000 ms)
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400

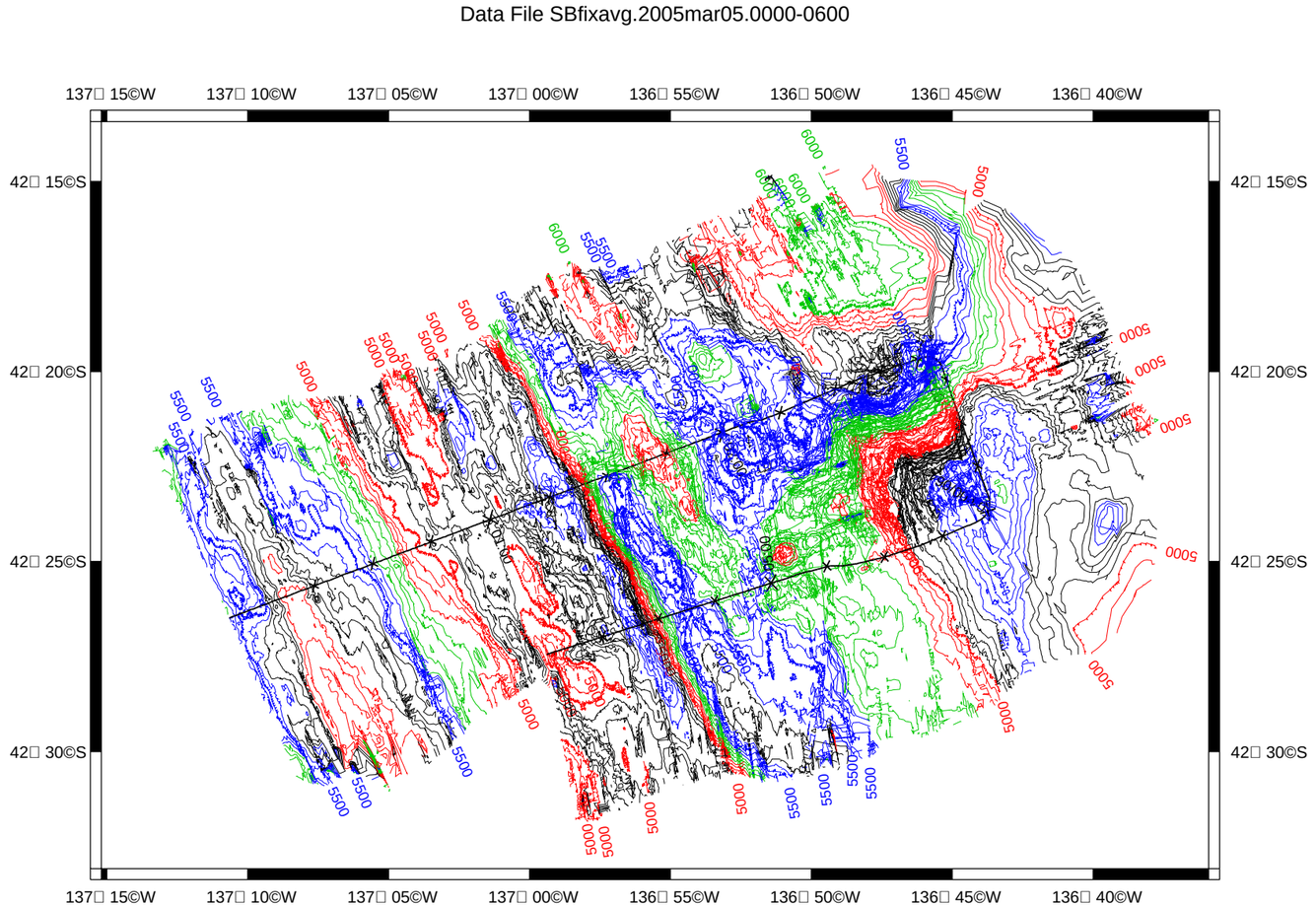
Data File SBfixavg.2005mar04.1800-2400

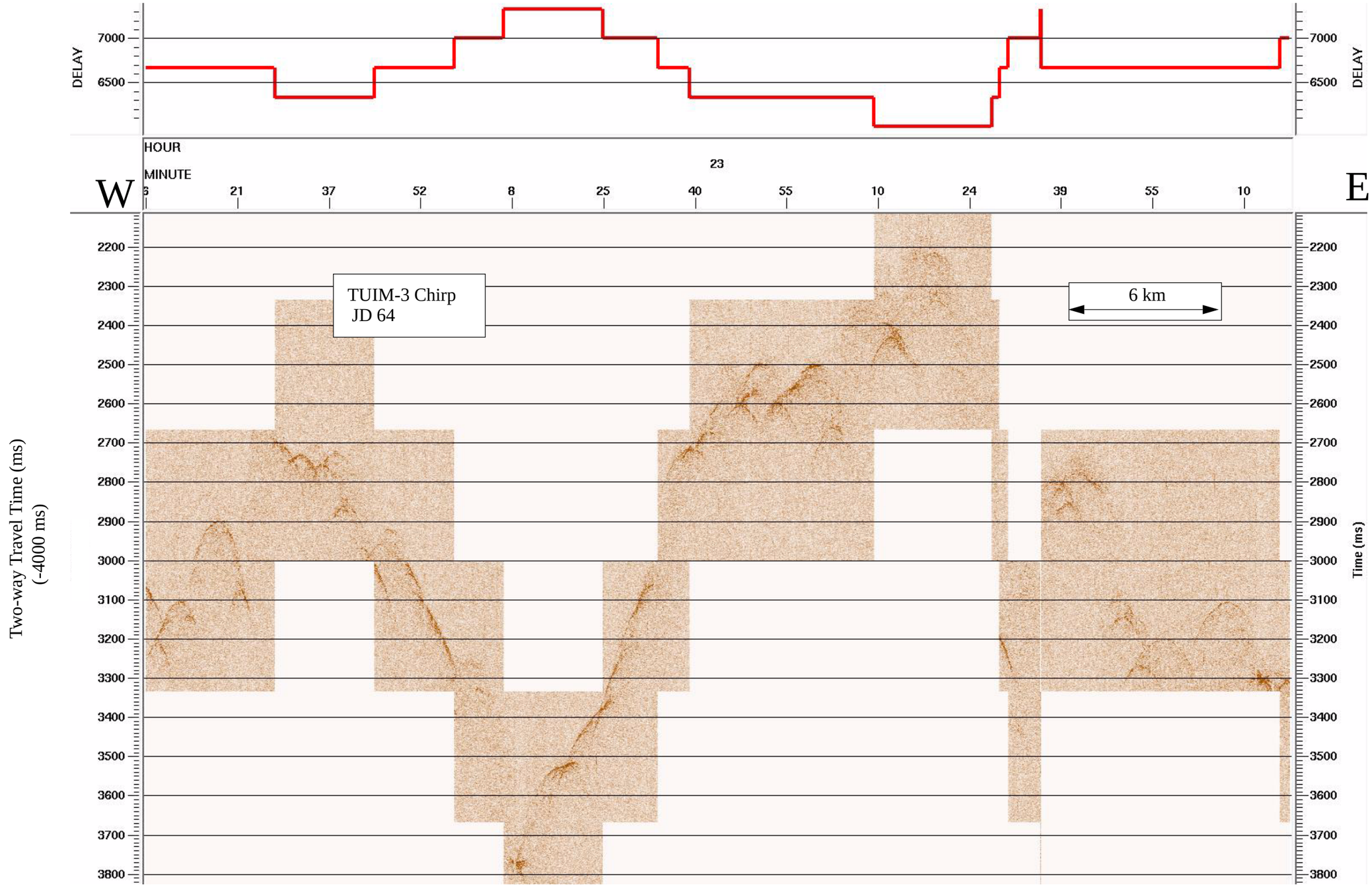


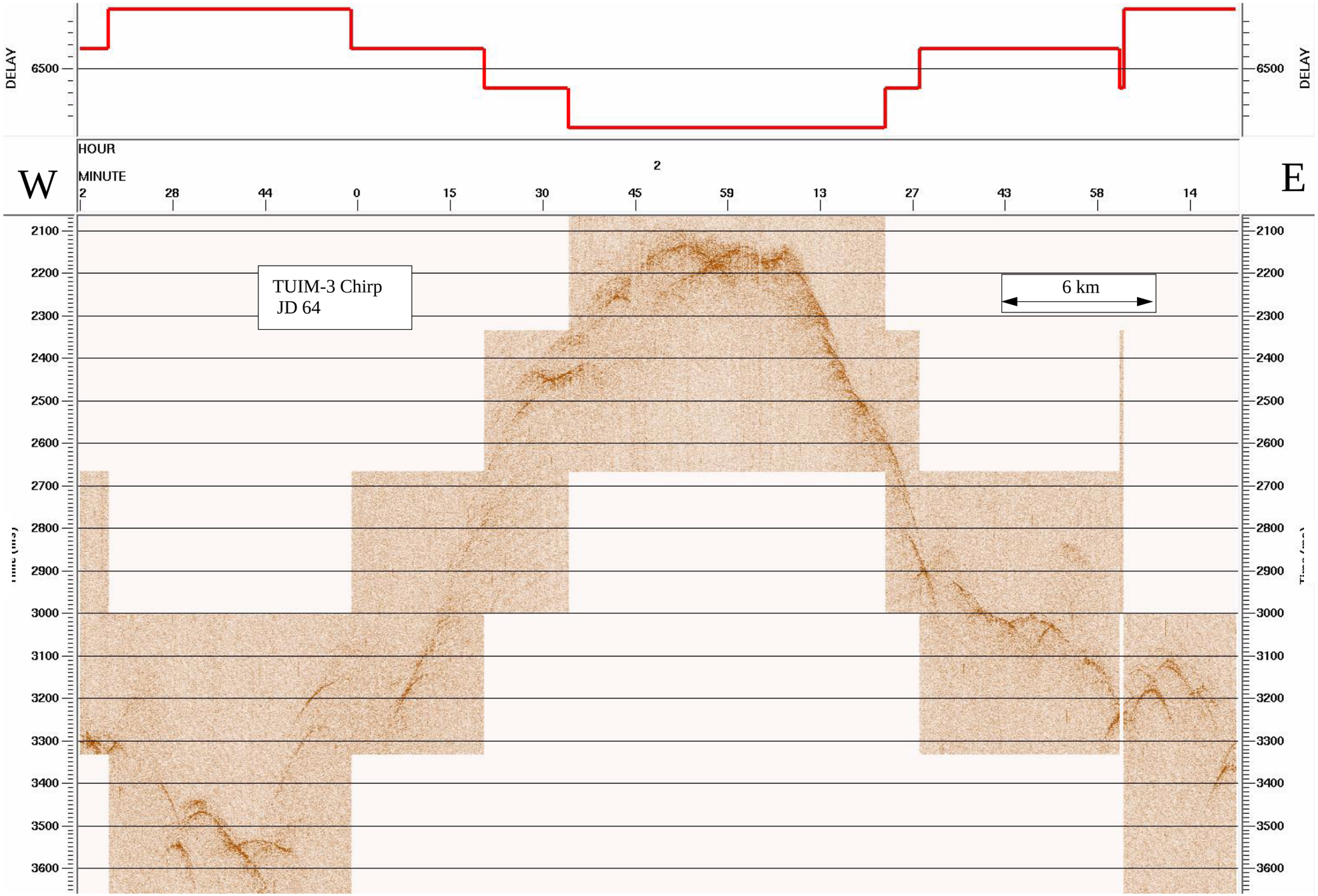

DELAY
6900
6800
6700
S
N
HOUR
19
MINUTE
8
14
30
45
1
16
32
47
3
18
34
49
5
TUIM-3 Chirp
JD 63
6 km
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
Two-way Travel Time (ms)
(-4000 ms)

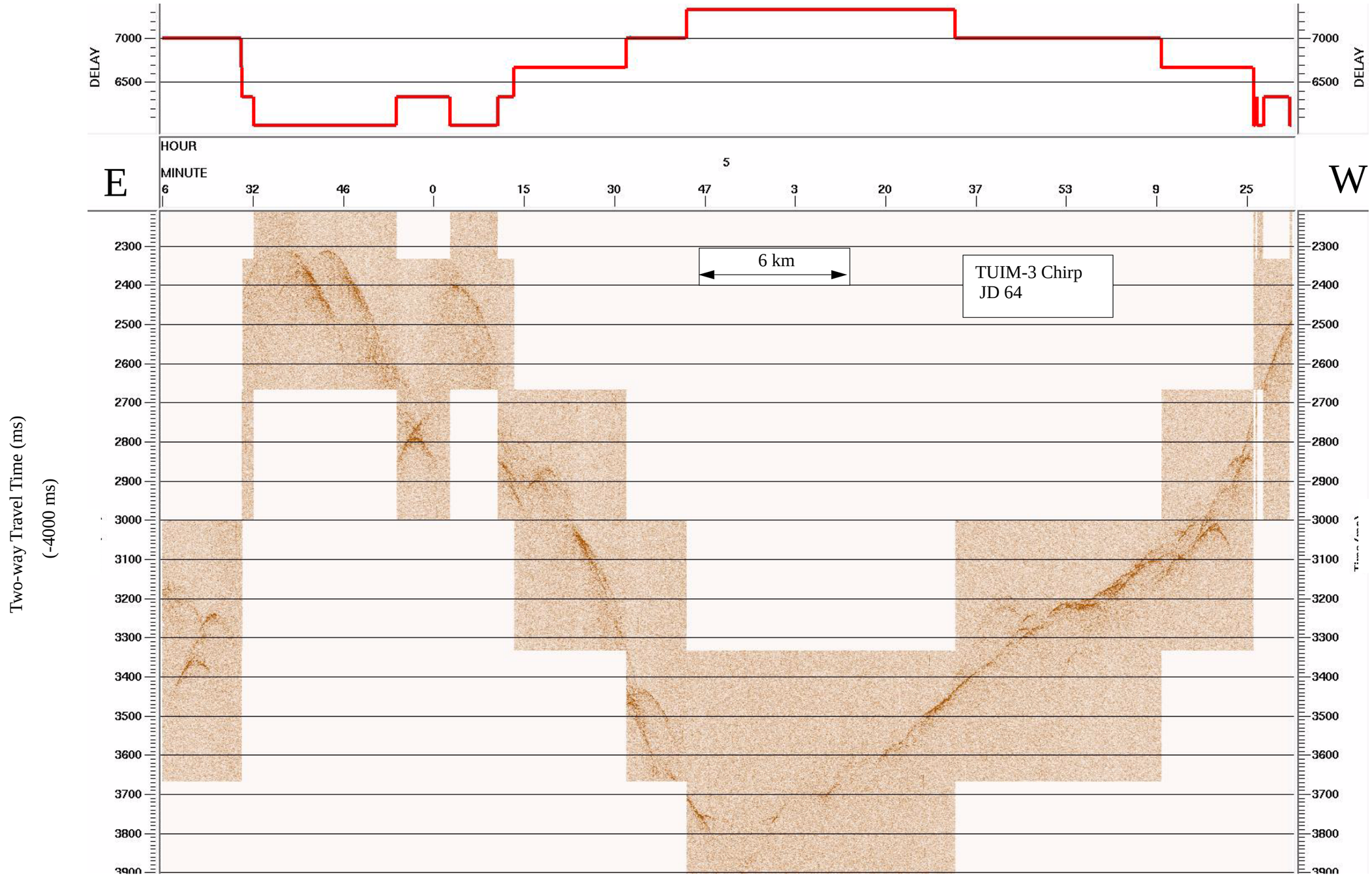

DELAY
7000
6500
W
HOUR
MINUTE
23
6
21
37
52
8
25
40
55
10
24
39
55
10
E
TUIM-3 Chirp
JD 63
6 km
Two-way Travel Time (ms)
(-4000 ms)
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800

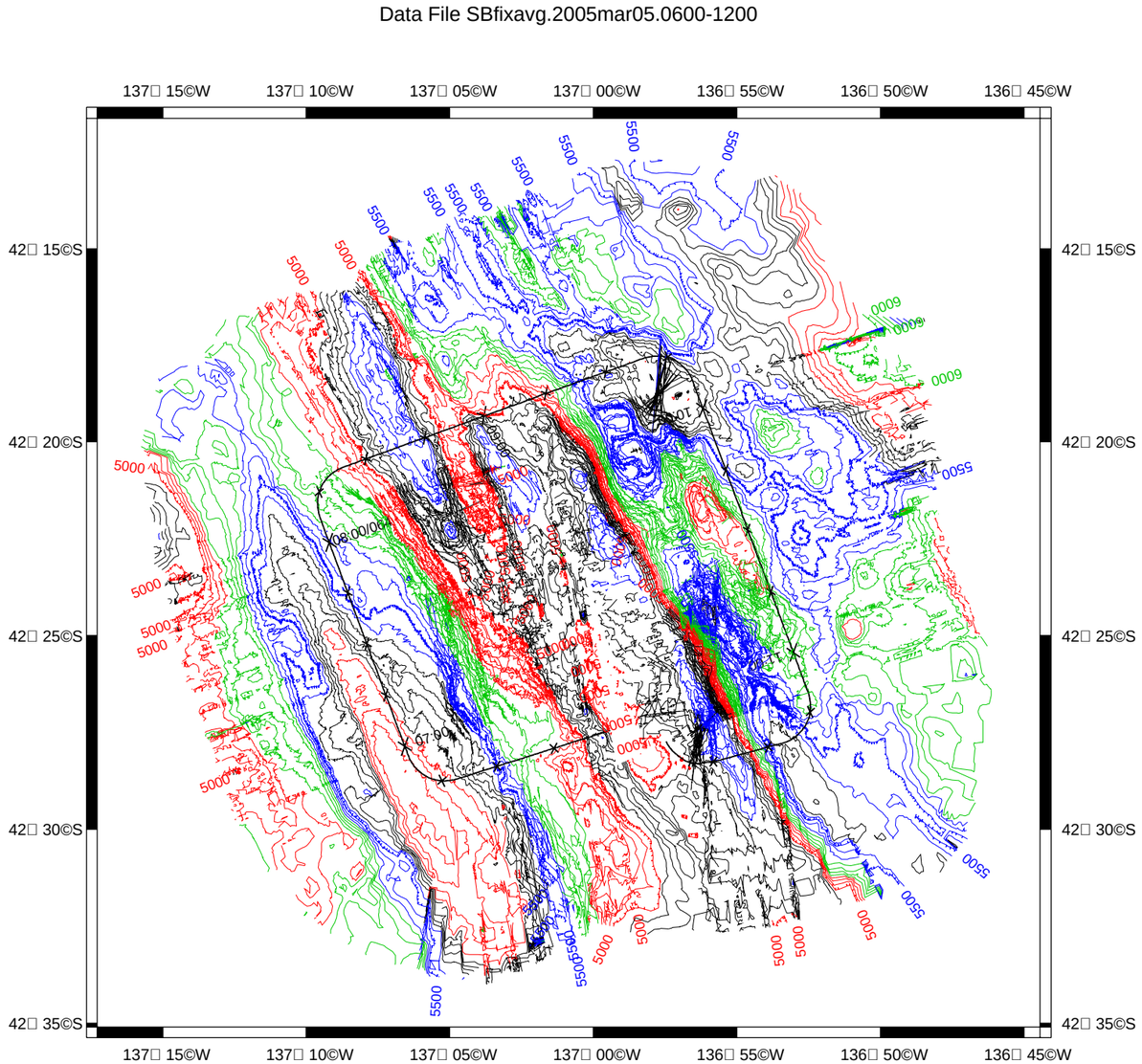
Julian Day 64
5 March 2005
Knudsen Chirp Data

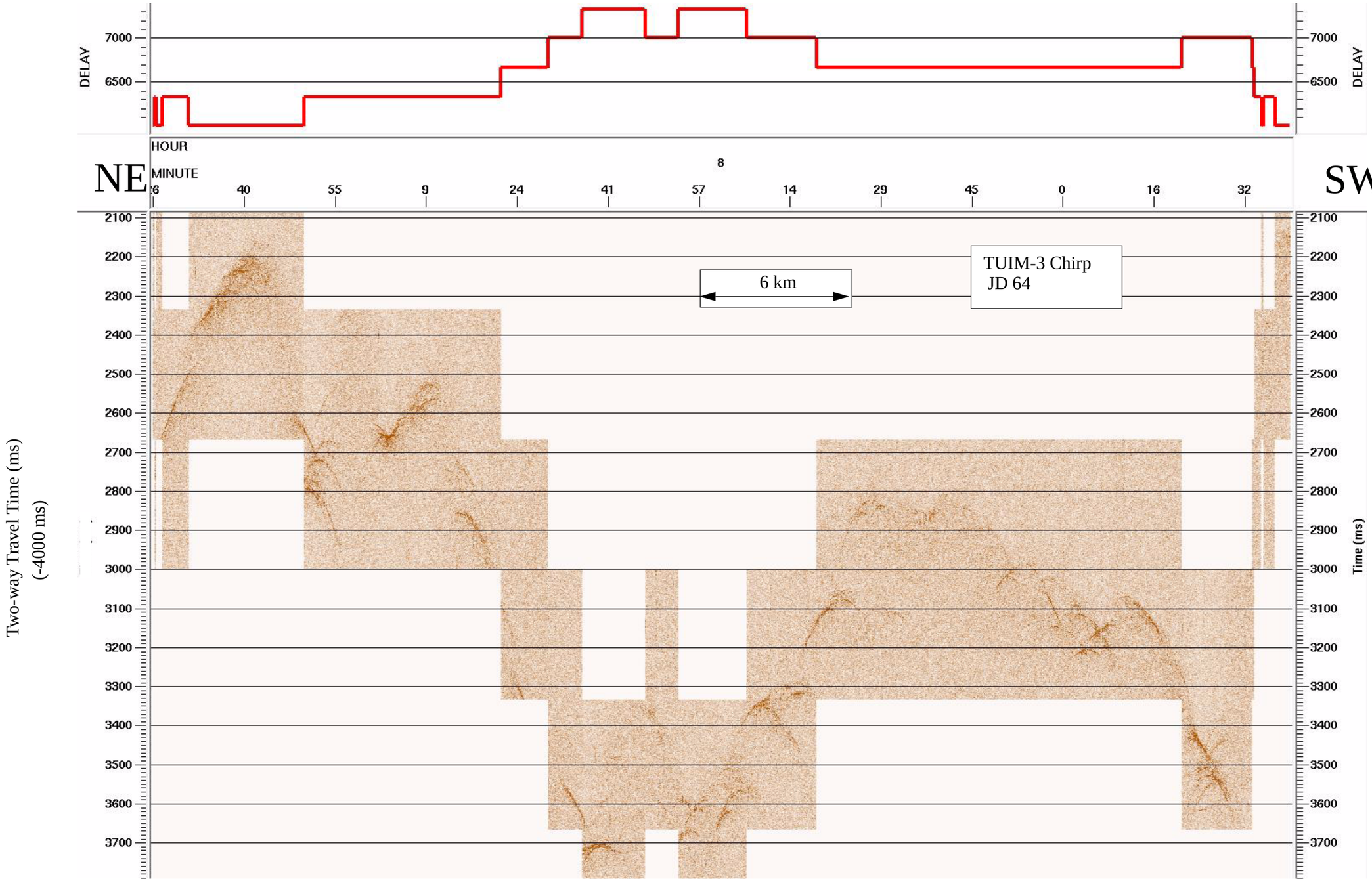

Data File SBfixavg.2005mar05.0000-0600
137□ 15©W
137□ 10©W
137□ 05©W
137□ 00©W
136□ 55©W
136□ 50©W
136□ 45©W
136□ 40©W
42□ 15©S
42□ 20©S
42□ 25©S
42□ 30©S

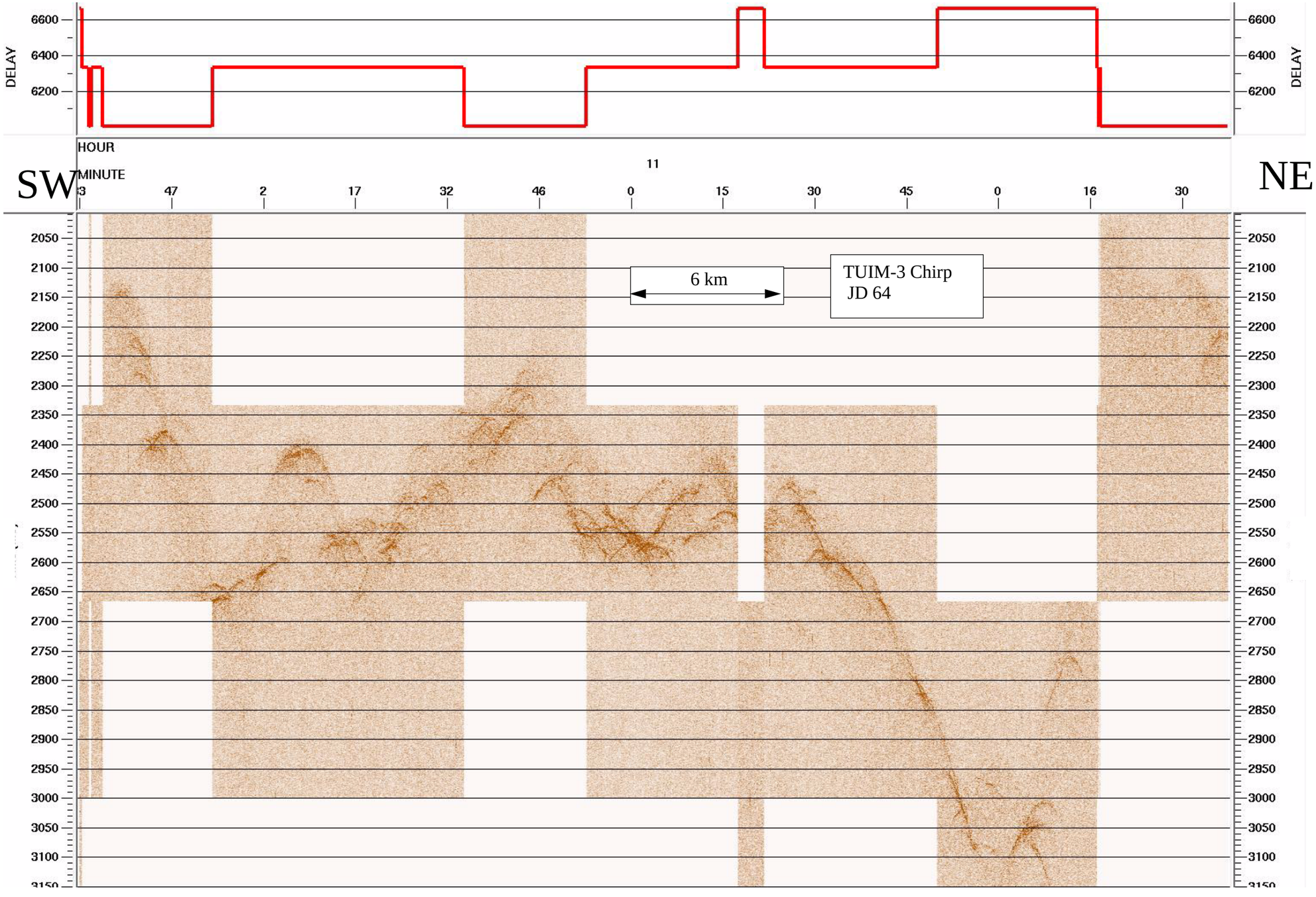

DELAY
7000
6500
HOUR
MINUTE
23
6
21
37
52
8
25
40
55
10
24
39
55
10
W
E
TUIM-3 Chirp
JD 64
6 km
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6500
HOUR
MINUTE
2
28
44
0
15
30
45
59
13
27
43
58
14
W
E
TUIM-3 Chirp
JD 64
6 km
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
Two-way Travel Time (ms)
(-4000 ms)

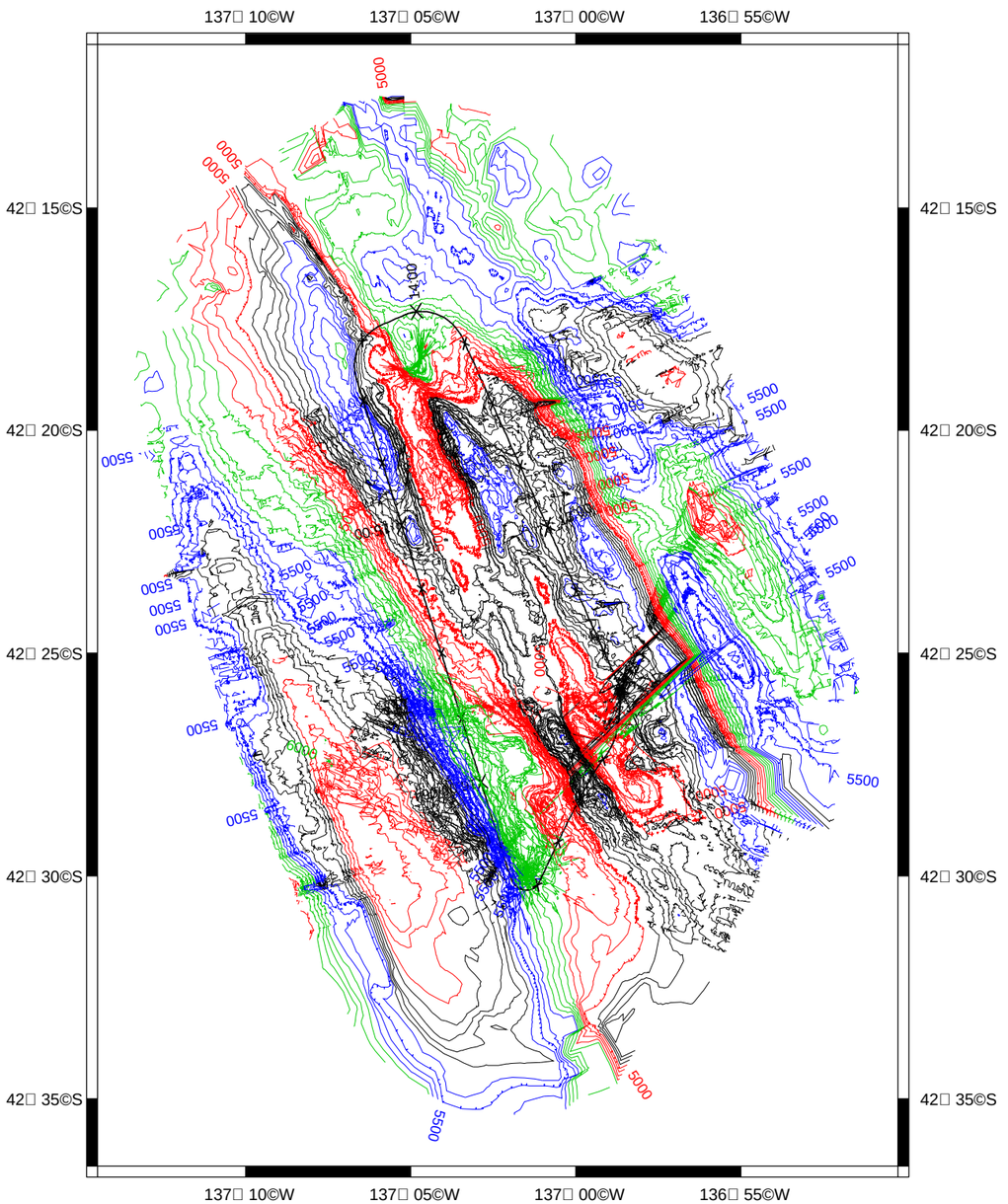

DELAY
7000
6500
HOUR
MINUTE
5
6
32
46
0
15
30
47
3
20
37
53
9
25
E
W
6 km
TUIM-3 Chirp
JD 64
Two-way Travel Time (ms)
(-4000 ms)
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900

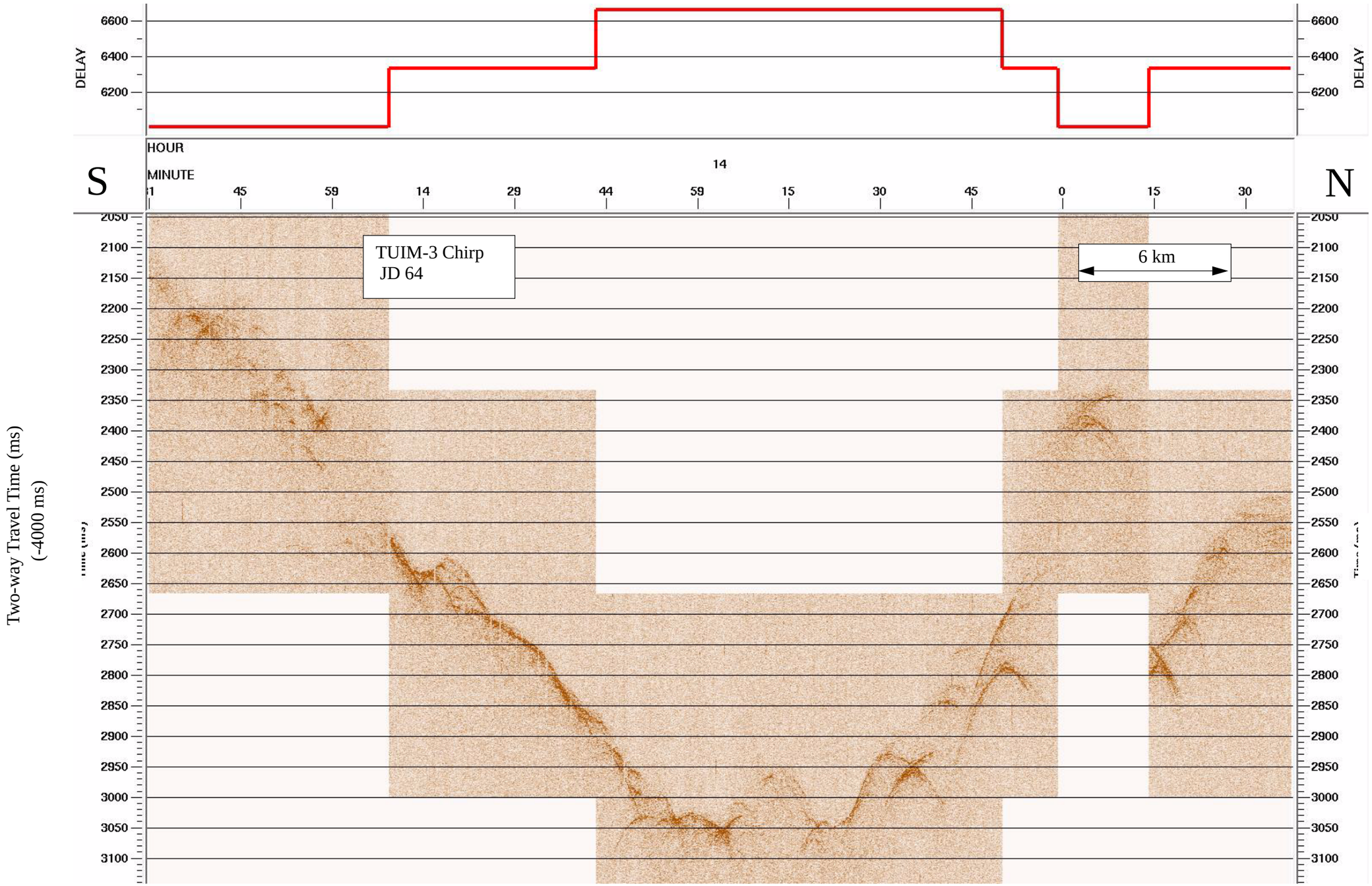

Data File SBfixavg.2005mar05.0600-1200
137□ 15©W
137□ 10©W
137□ 05©W
137□ 00©W
136□ 55©W
136□ 50©W
136□ 45©W
42□ 15©S
42□ 20©S
42□ 25©S
42□ 30©S
42□ 35©S
08:00/06
07:00/06
5000
5500
6000

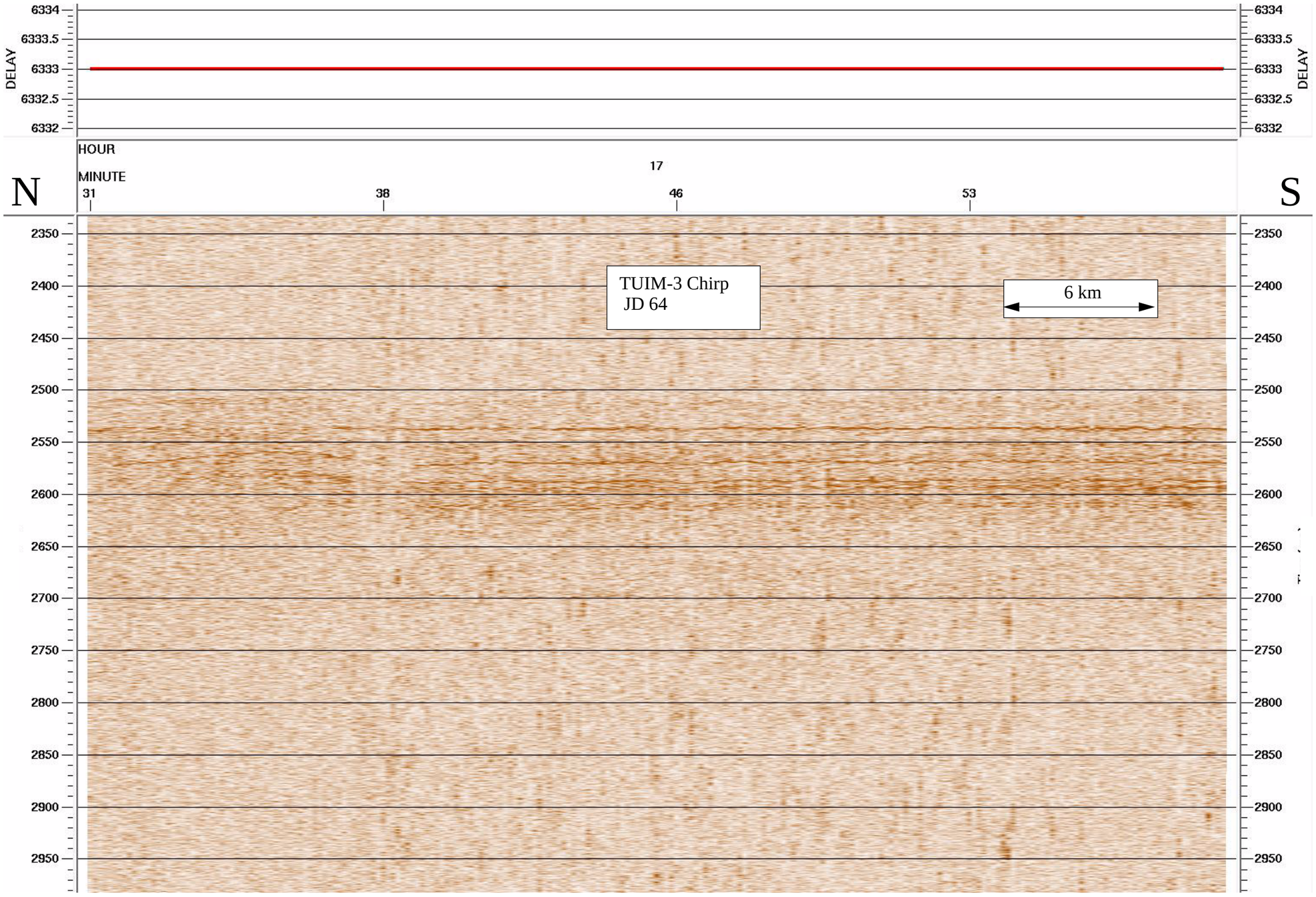

DELAY
7000
6500
HOUR
MINUTE
8
6
40
55
9
24
41
57
14
29
45
0
16
32
NE
SW
6 km
TUIM-3 Chirp
JD 64
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6600
6400
6200
HOUR
MINUTE
11
3
47
2
17
32
46
0
15
30
45
0
16
30
SW
NE
6 km
TUIM-3 Chirp
JD 64
Two-way Travel Time (ms)
(-4000 ms)
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100

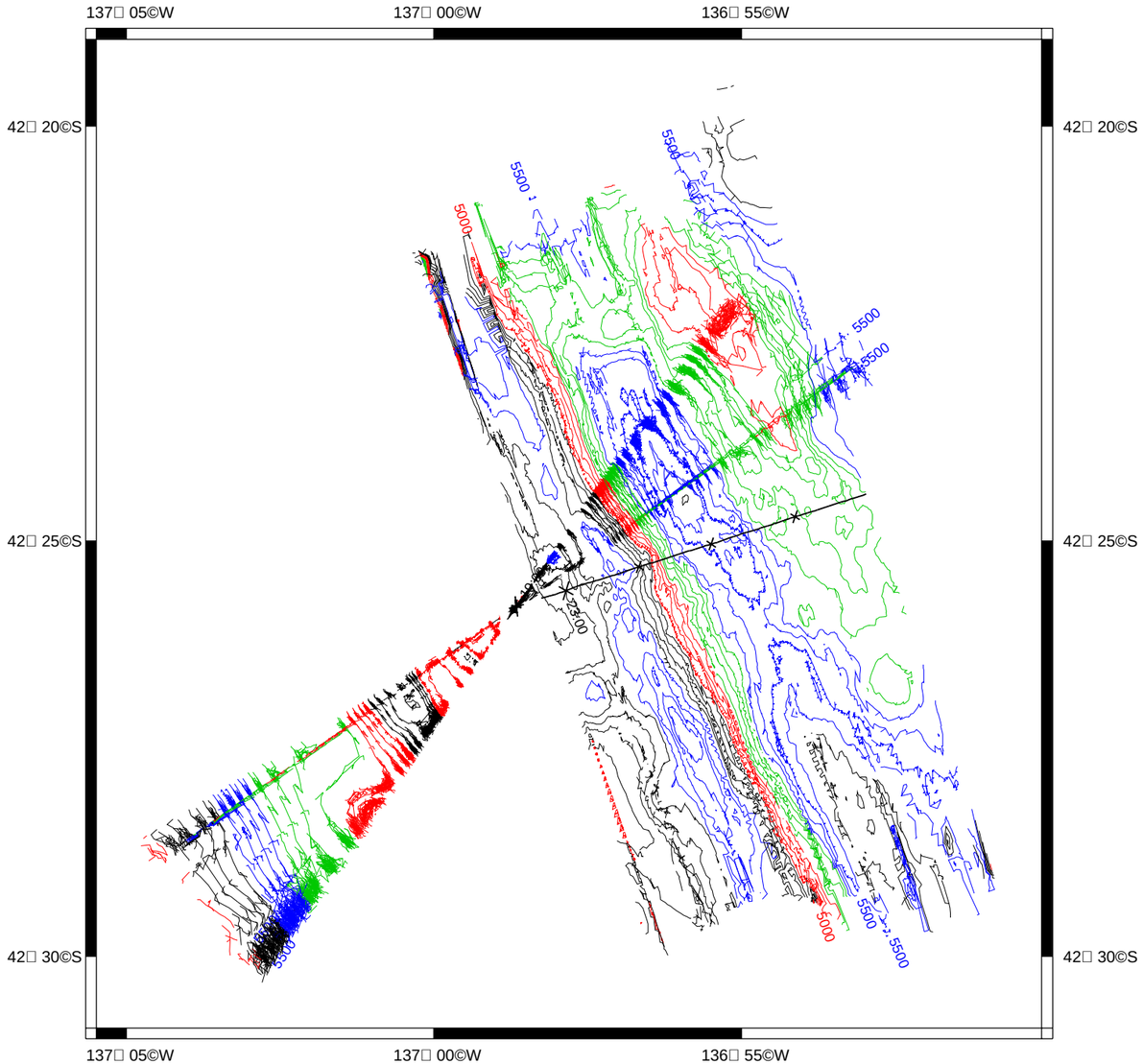
Data File SBfixavg.2005mar05.1200-1800

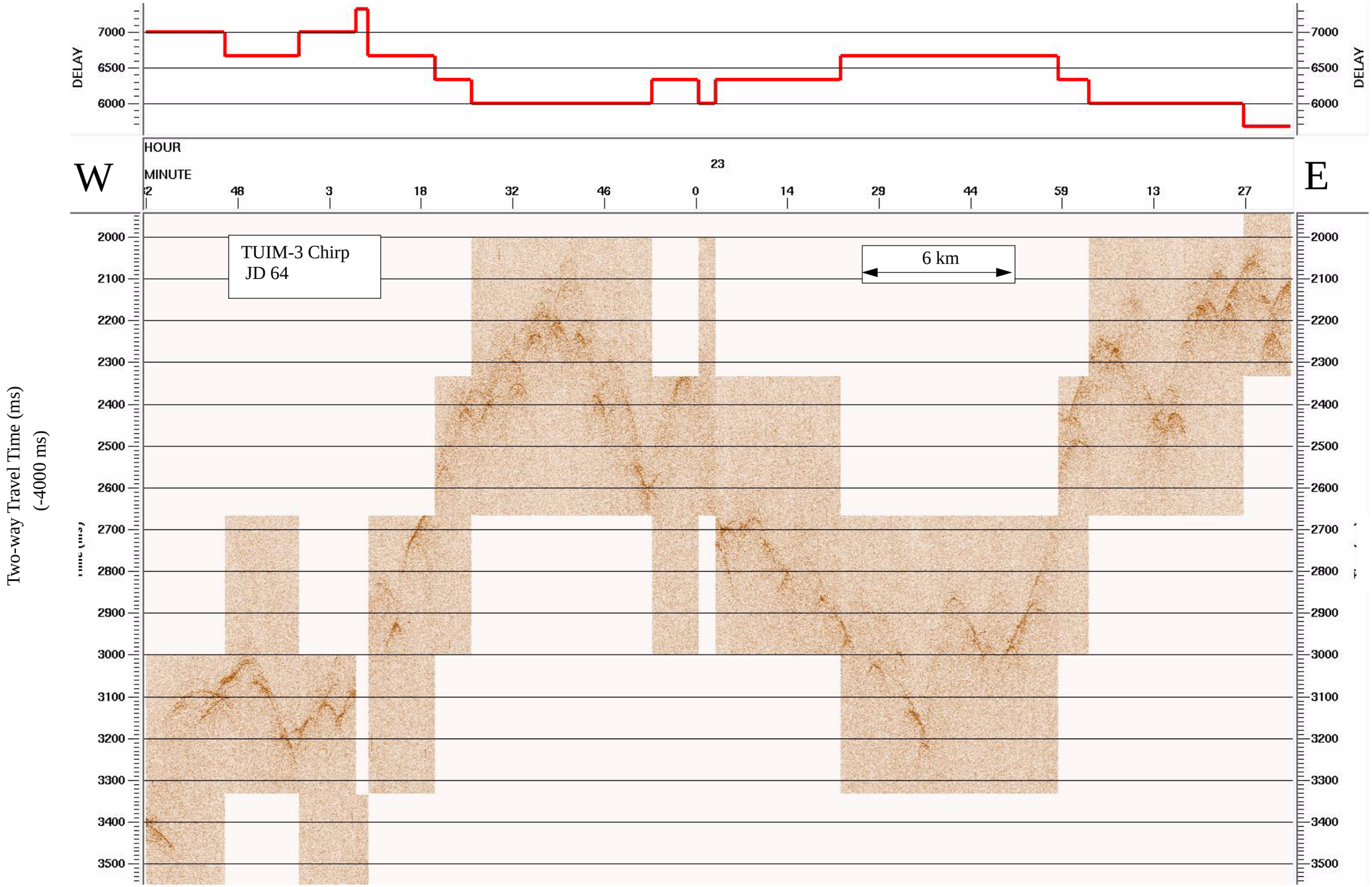



DELAY
6600
6400
6200
HOUR
MINUTE
14
S
N
TUIM-3 Chirp
JD 64
6 km
Two-way Travel Time (ms)
(-4000 ms)
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100

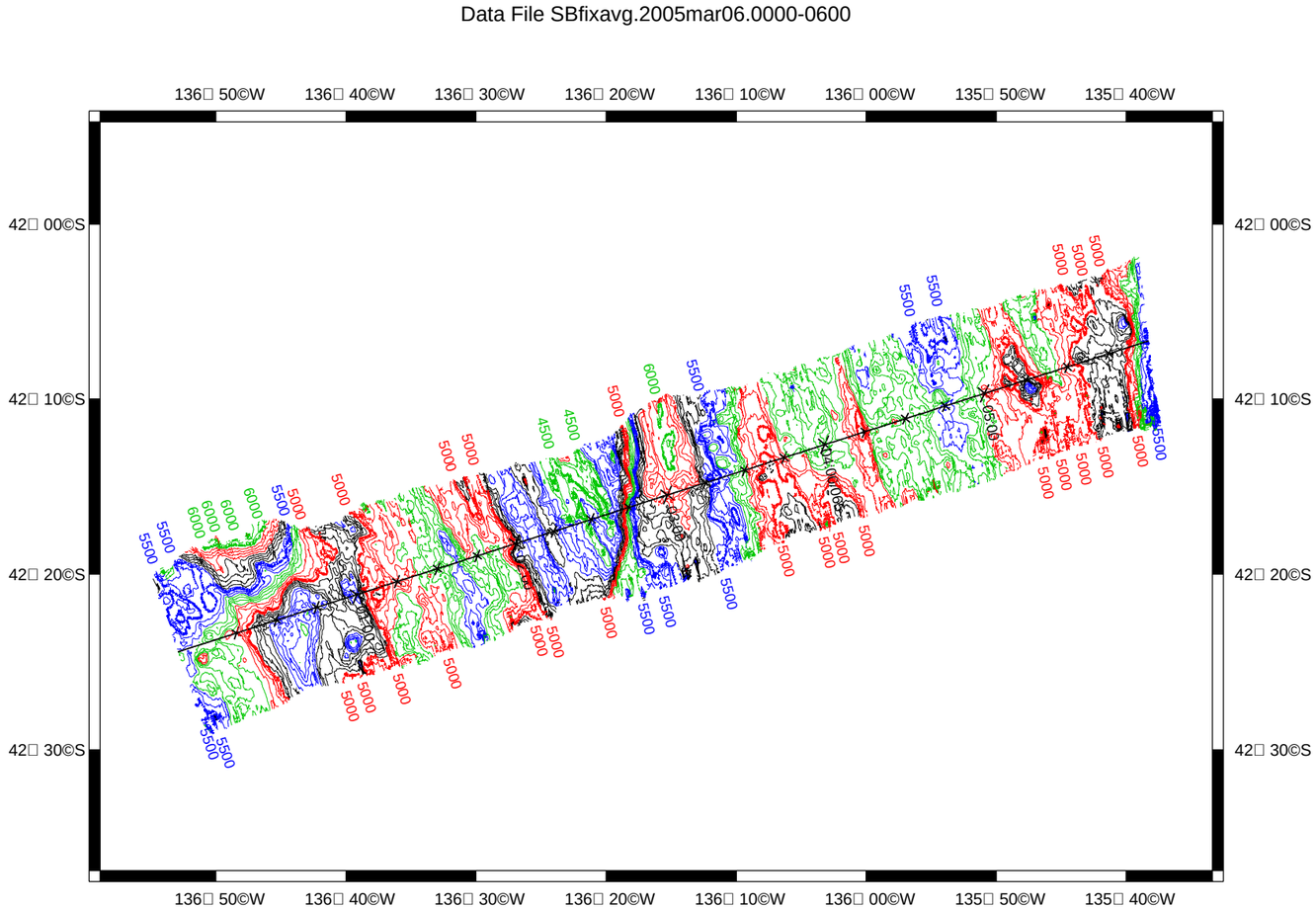

DELAY
6334
6333.5
6333
6332.5
6332
HOUR
17
MINUTE
31
38
46
53
N
S
TUIM-3 Chirp
JD 64
6 km
Two-way Travel Time (ms)
(-4000 ms)
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950

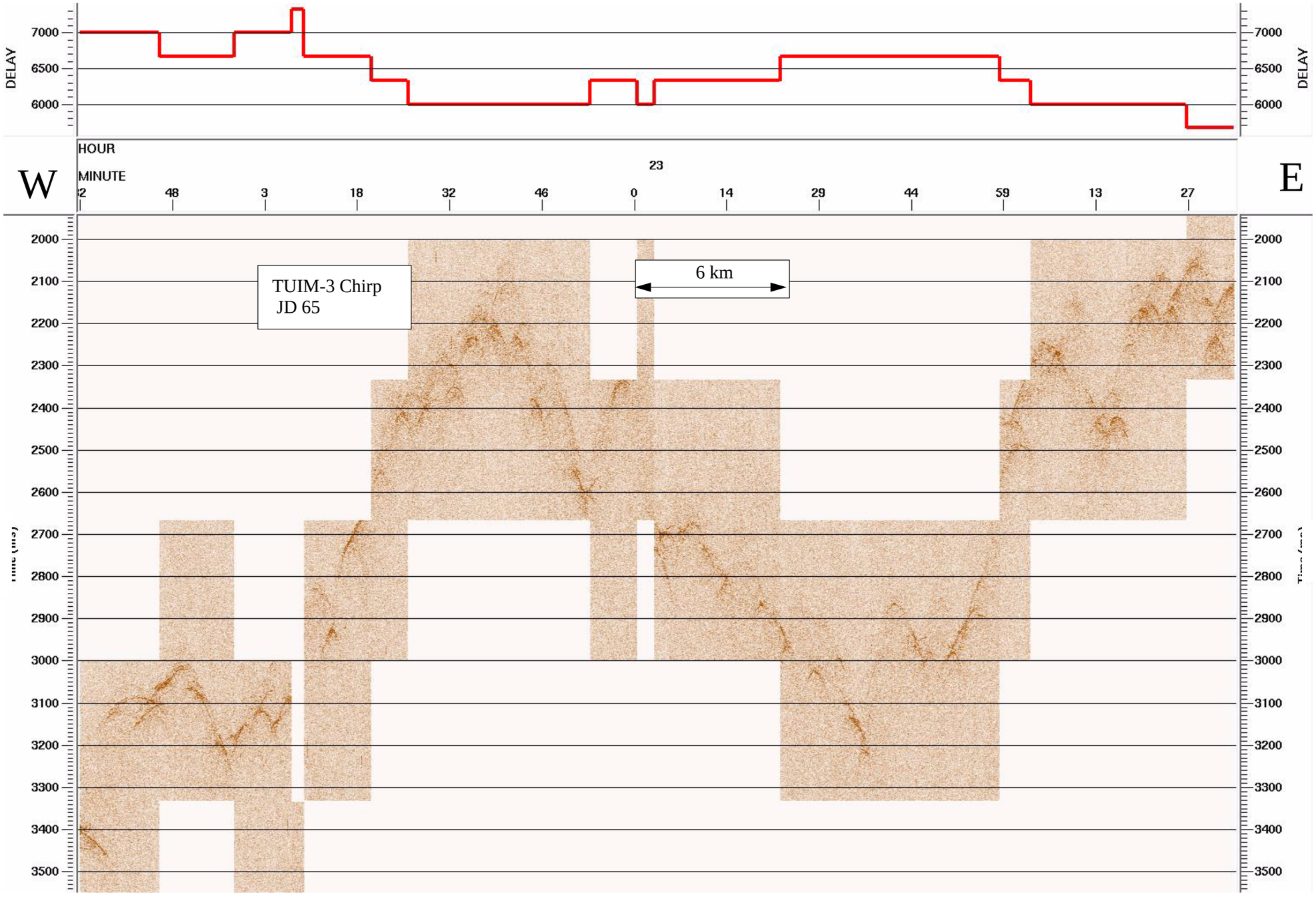
Data File SBfixavg.2005mar05.1800-2400

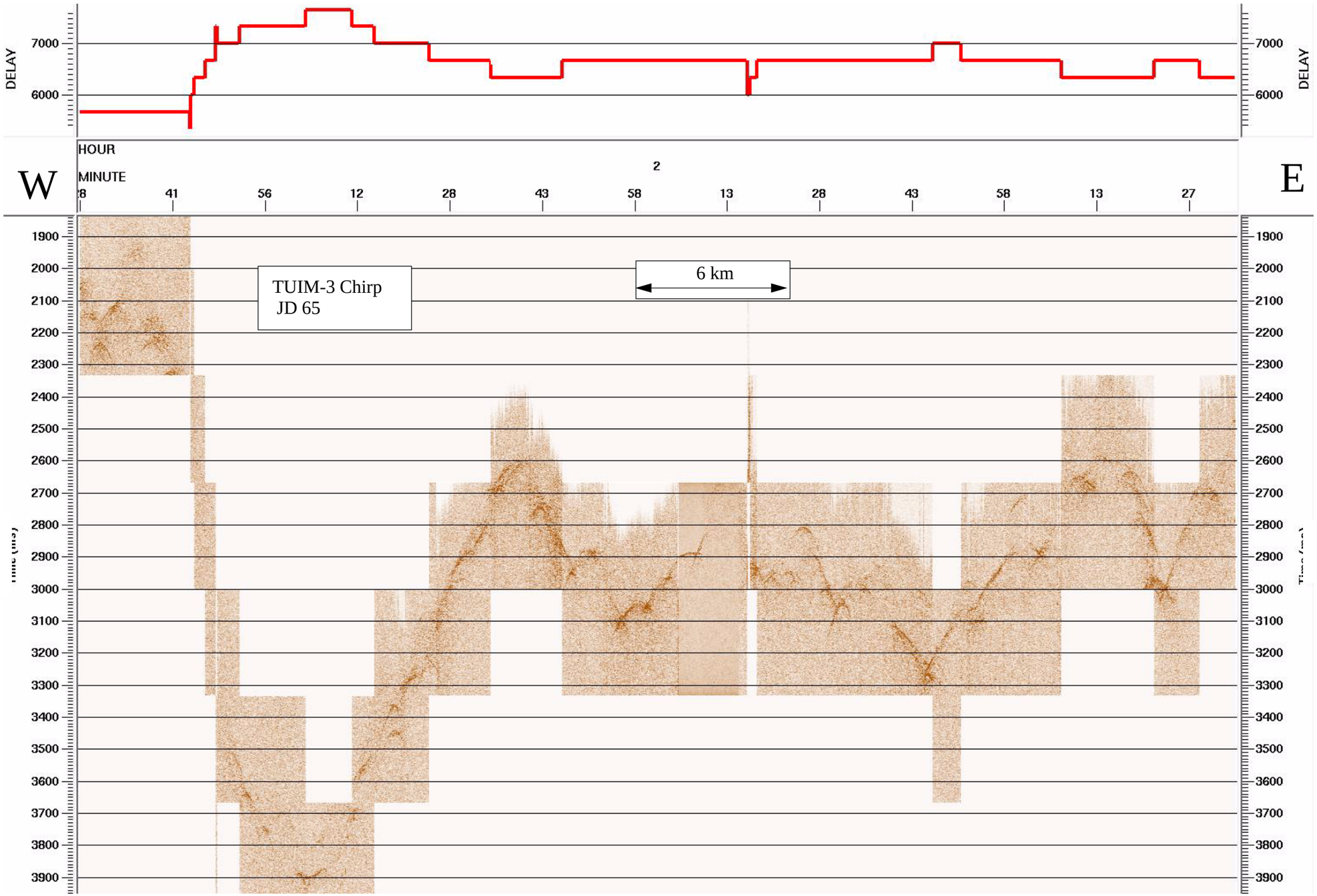


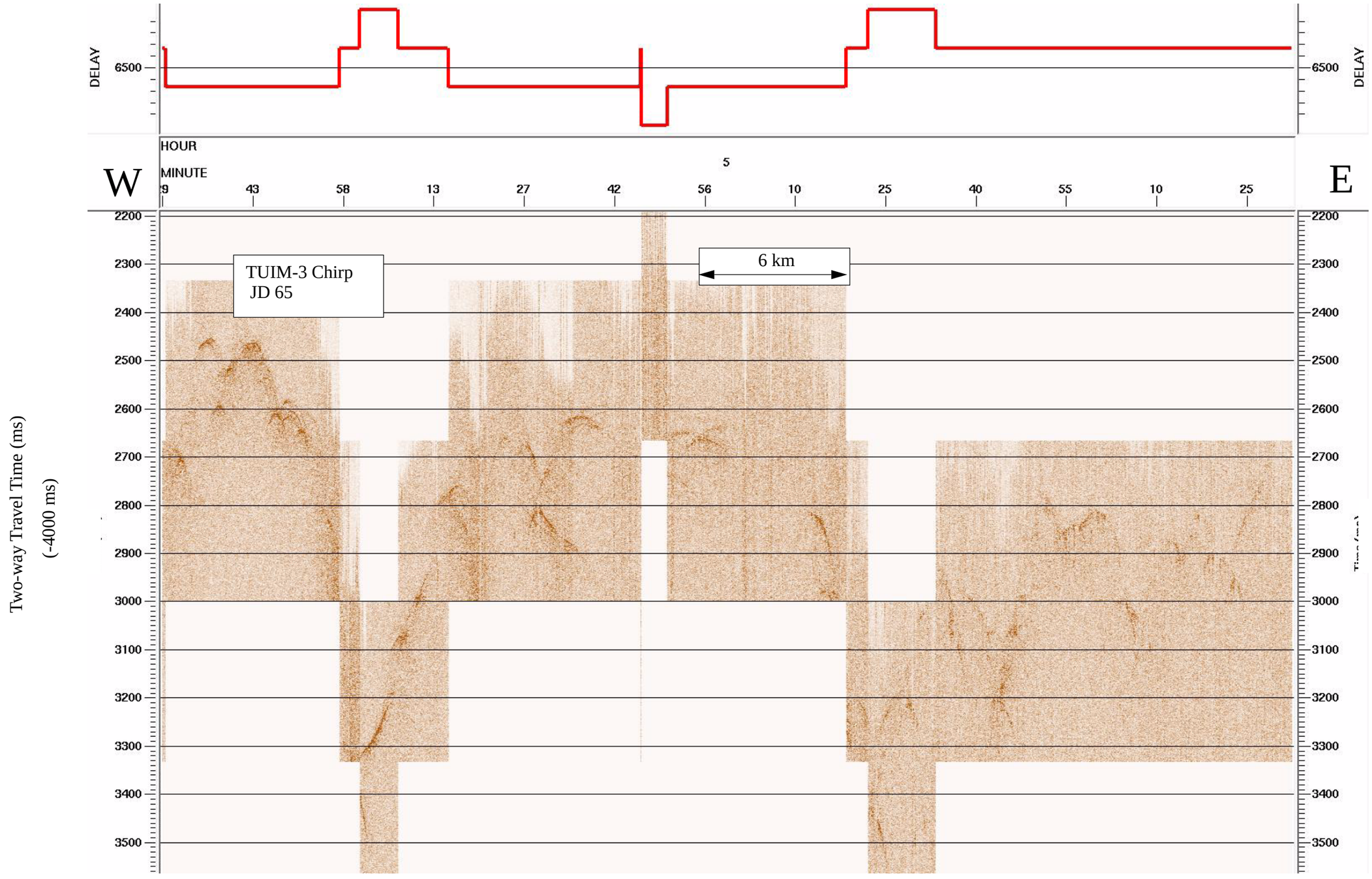

DELAY
7000
6500
6000
W
HOUR
MINUTE
23
2
48
3
18
32
46
0
14
29
44
59
13
27
E
TUIM-3 Chirp
JD 64
6 km
Two-way Travel Time (ms)
(-4000 ms)
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500

Julian Day 65
6 March 2005
Knudsen Chirp Data

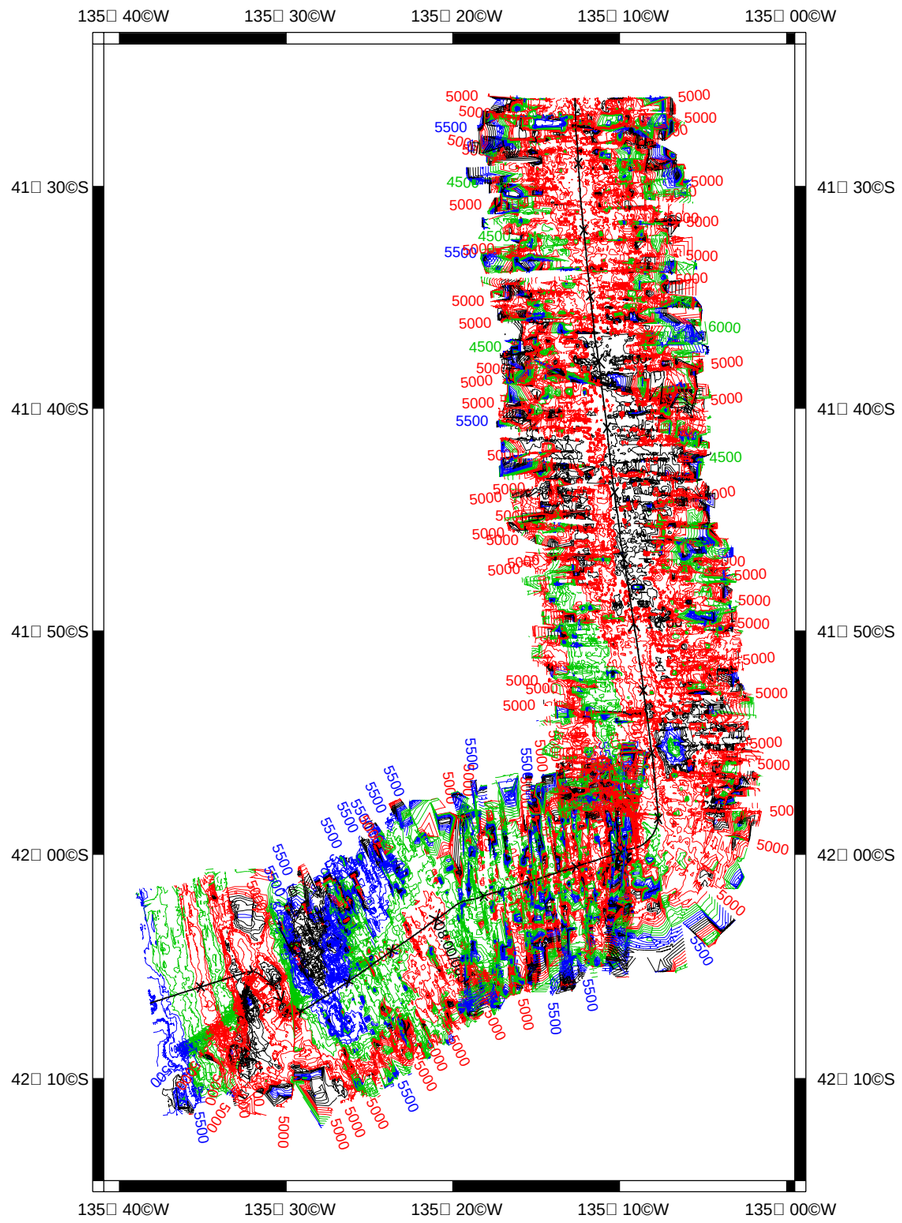

Data File SBfixavg.2005mar06.0000-0600
136□ 50©W
136□ 40©W
136□ 30©W
136□ 20©W
136□ 10©W
136□ 00©W
135□ 50©W
135□ 40©W
42□ 00©S
42□ 10©S
42□ 20©S
42□ 30©S

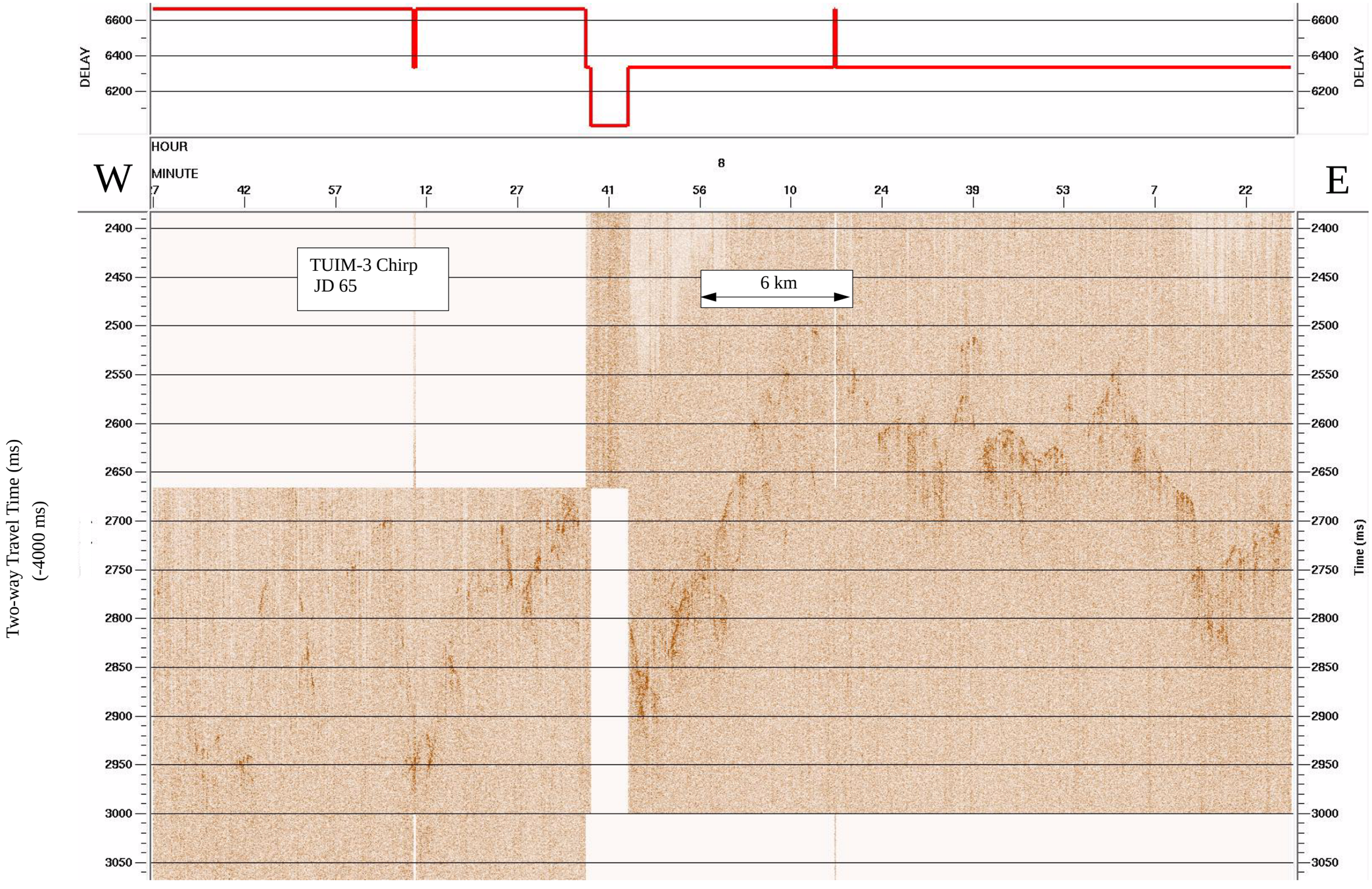

DELAY
7000
6500
6000
W
HOUR
MINUTE
23
2
48
3
18
32
46
0
14
29
44
59
13
27
E
TUIM-3 Chirp
JD 65
6 km
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
Two-way Travel Time (ms)
(-4000 ms)

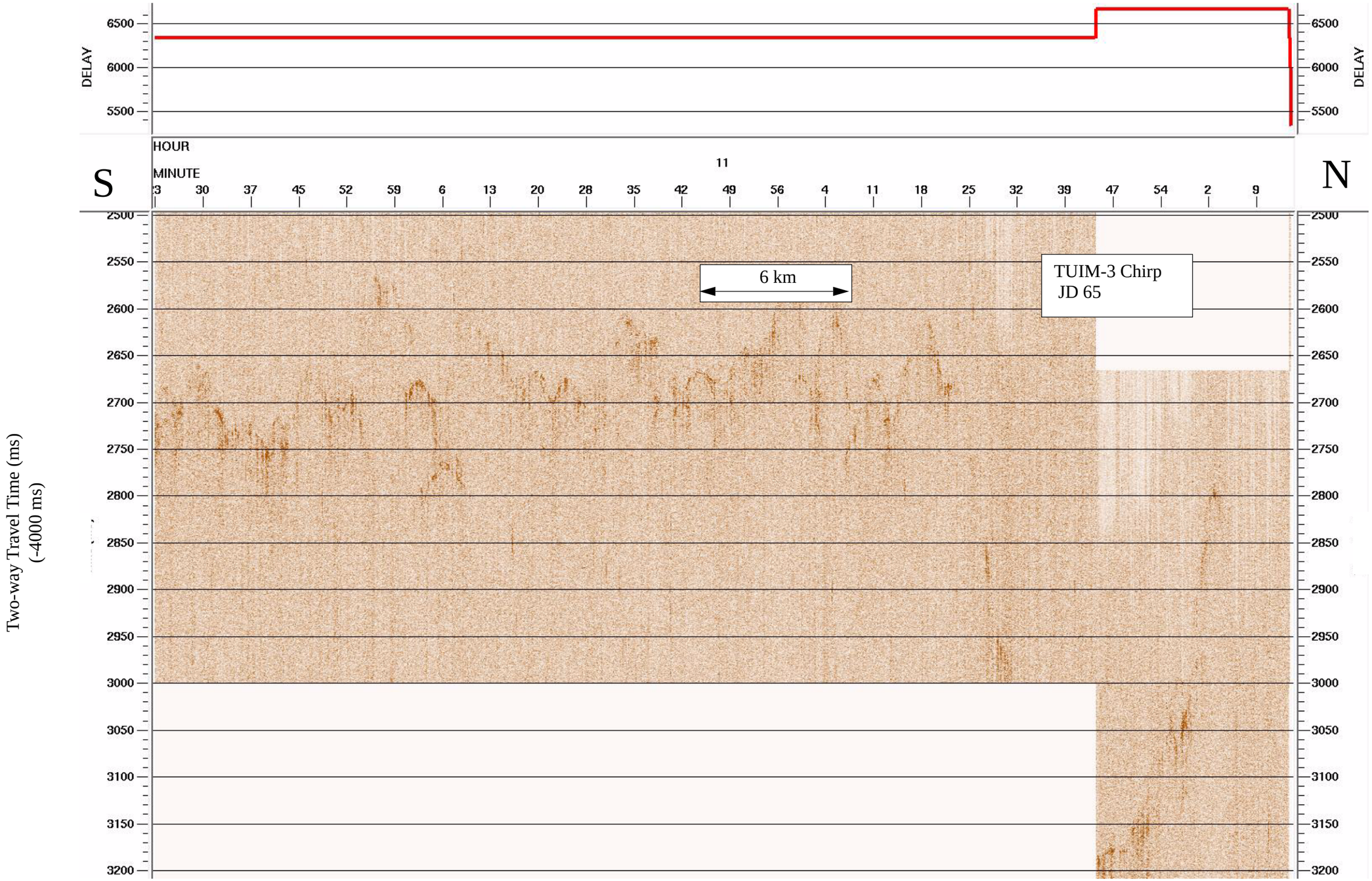

DELAY
7000
6000
W
HOUR
MINUTE
2
41
56
12
28
43
58
13
28
43
58
13
27
E
TUIM-3 Chirp
JD 65
6 km
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6500
HOUR
MINUTE
W
E
5
9
43
58
13
27
42
56
10
25
40
55
10
25
TUIM-3 Chirp
JD 65
6 km
Two-way Travel Time (ms)
(-4000 ms)
2200
2300
2400
2500
2600
2700
2800
2900
3000
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3200
3300
3400
3500

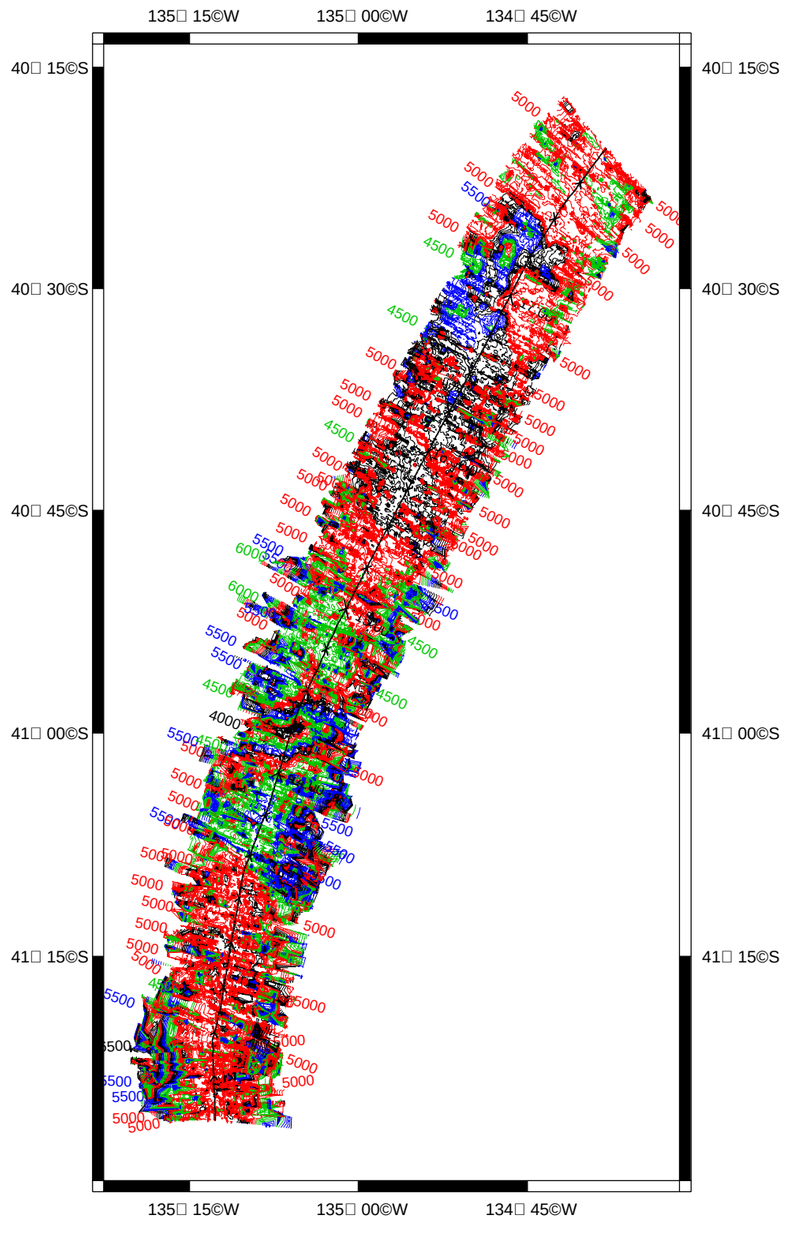
Data File SBfixavg.2005mar06.0600-1200

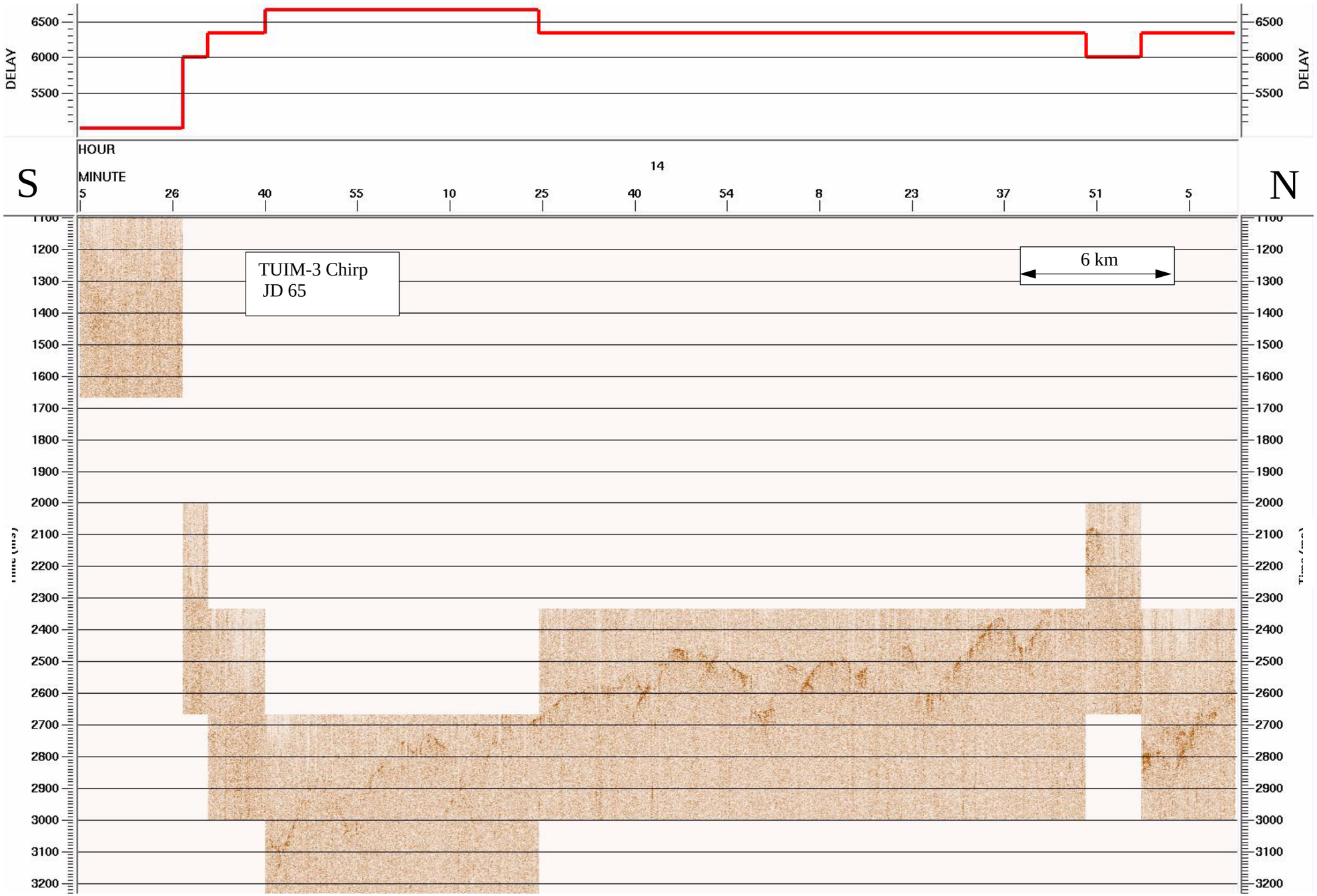


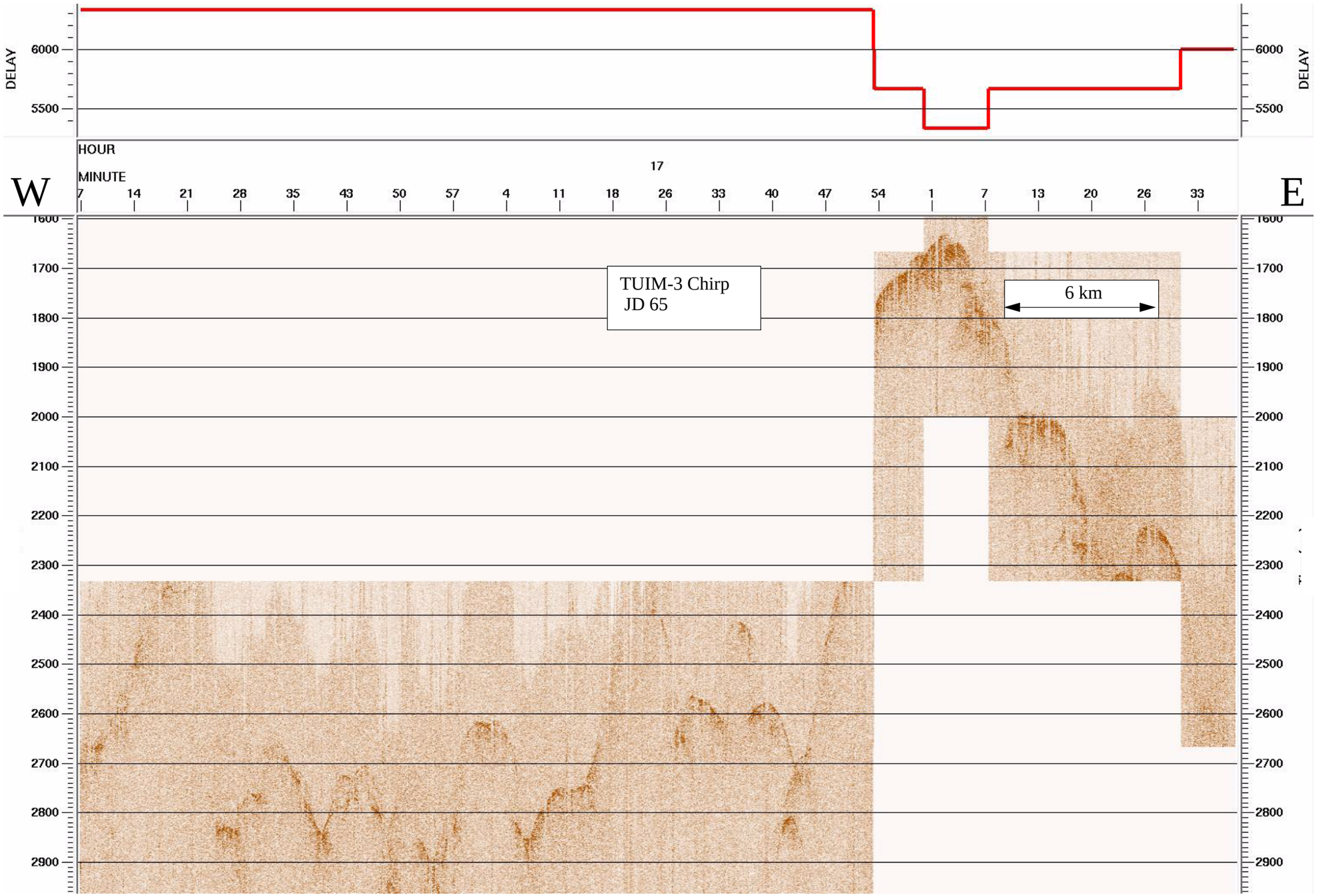

DELAY
6600
6400
6200
W
HOUR
MINUTE
8
27
42
57
12
27
41
56
10
24
39
53
7
22
E
TUIM-3 Chirp
JD 65
6 km
Two-way Travel Time (ms)
(-4000 ms)
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Time (ms)


DELAY
6500
6000
5500
S
N
HOUR
MINUTE
11
3 30 37 45 52 59 6 13 20 28 35 42 49 56 4 11 18 25 32 39 47 54 2 9
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
6 km
TUIM-3 Chirp
JD 65
Two-way Travel Time (ms)
(-4000 ms)

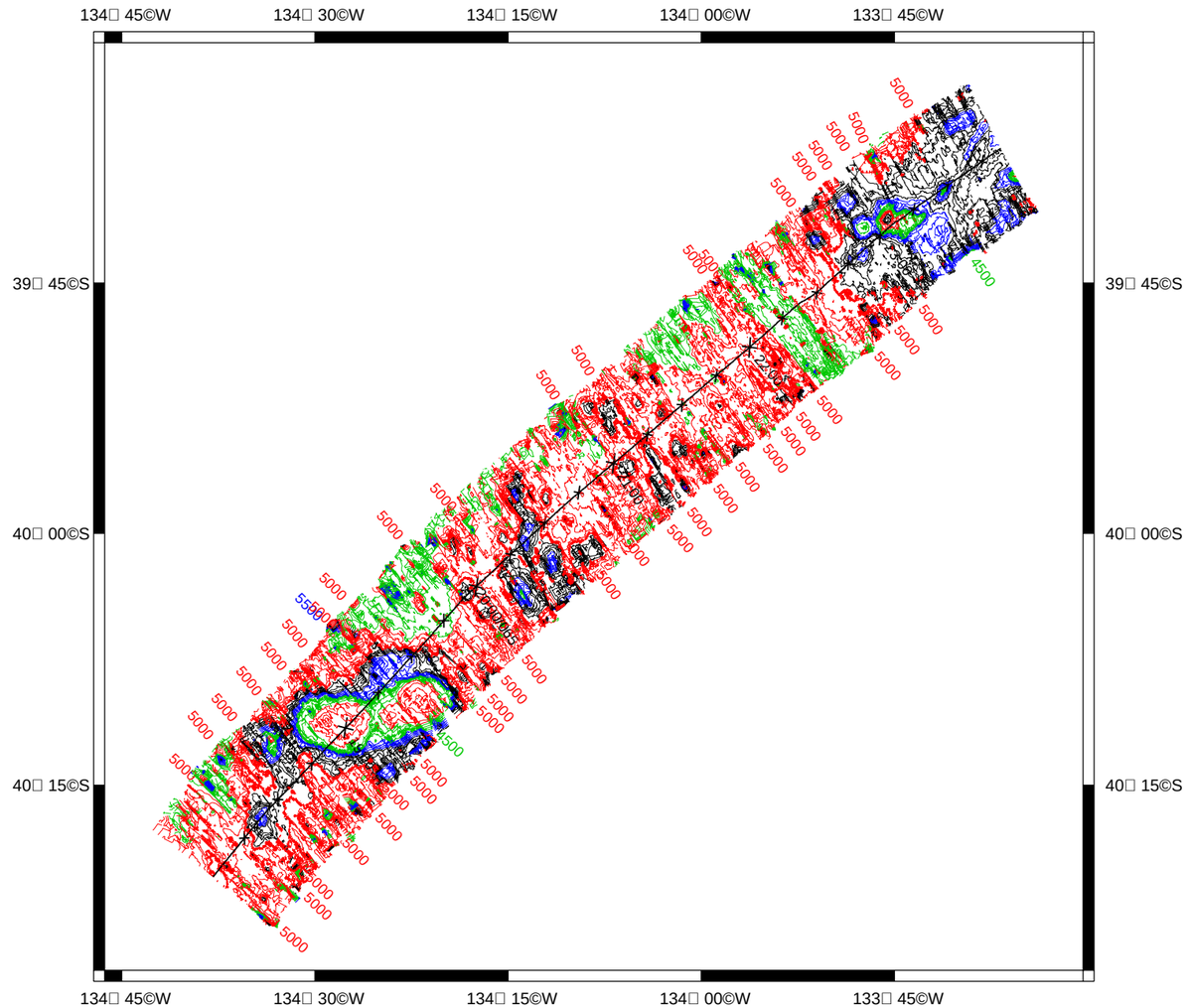
Data File SBfixavg.2005mar06.1200-1800

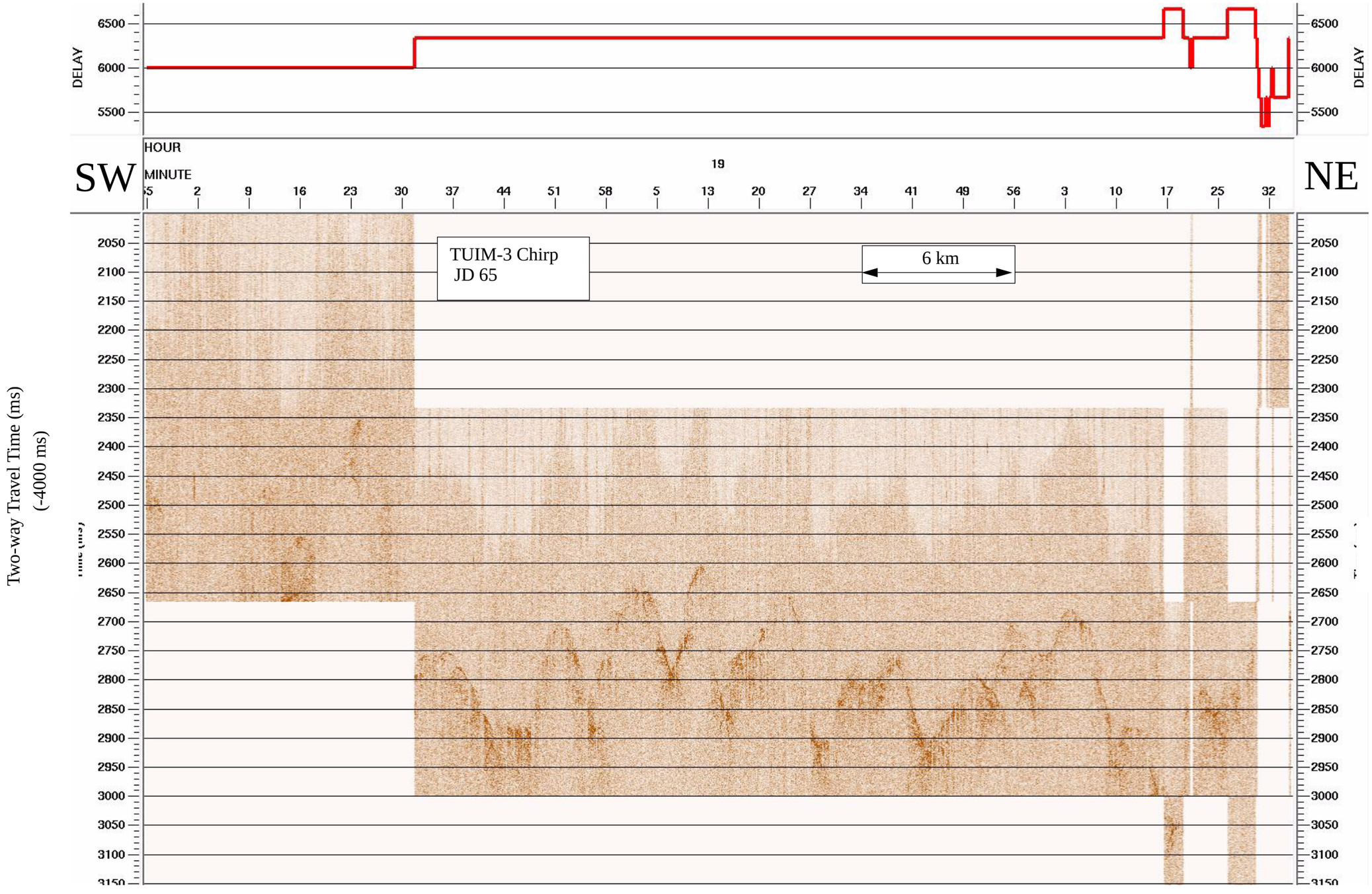


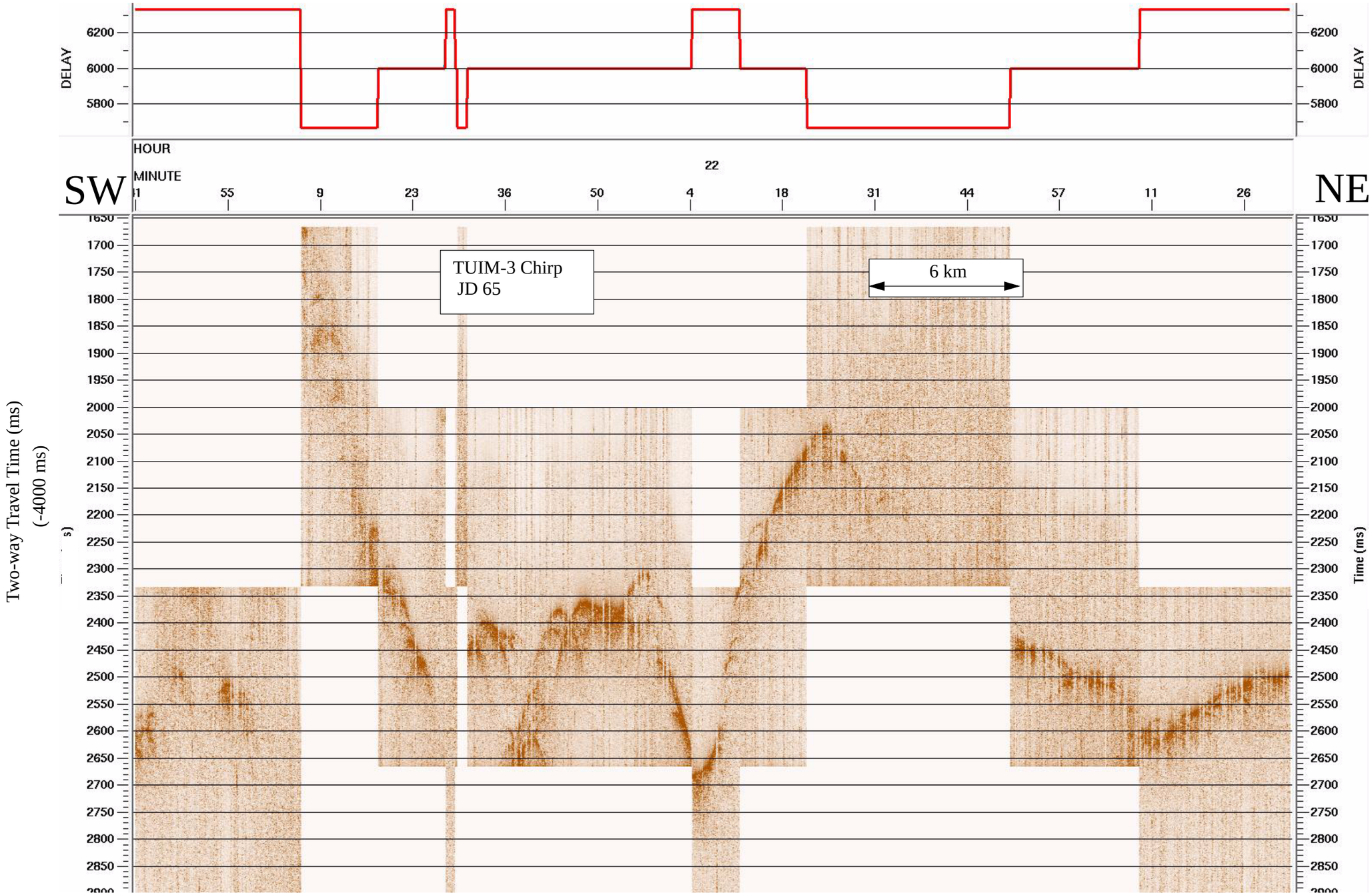

DELAY
6500
6000
5500
HOUR
14
MINUTE
5
26
40
55
10
25
40
54
8
23
37
51
5
S
N
TUIM-3 Chirp
JD 65
6 km
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6000
5500
HOUR
MINUTE
17
7 14 21 28 35 43 50 57 4 11 18 26 33 40 47 54 1 7 13 20 26 33
W
E
TUIM-3 Chirp
JD 65
6 km
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
Two-way Travel Time (ms)
(-4000 ms)

Data File SBfixavg.2005mar06.1800-2400

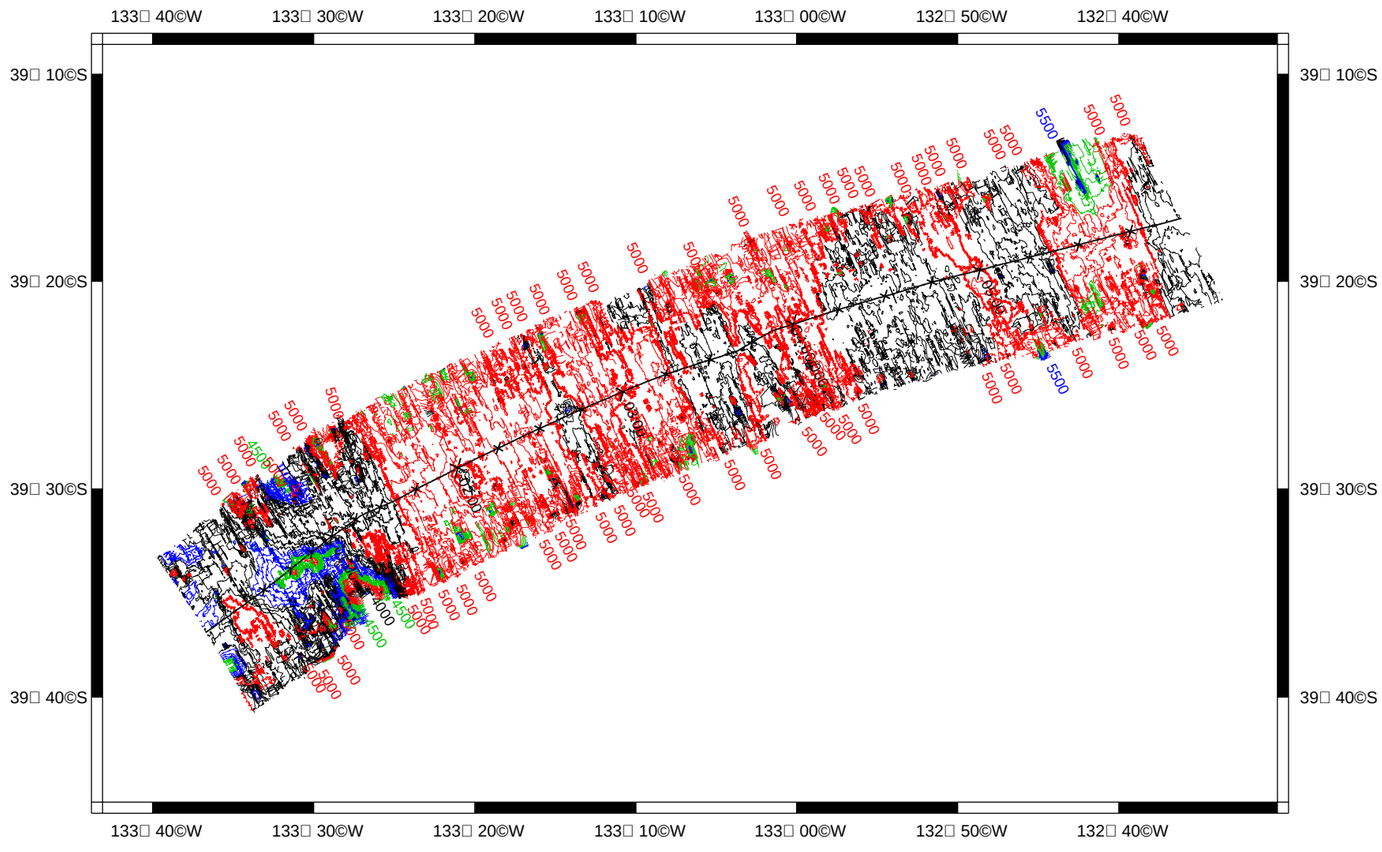


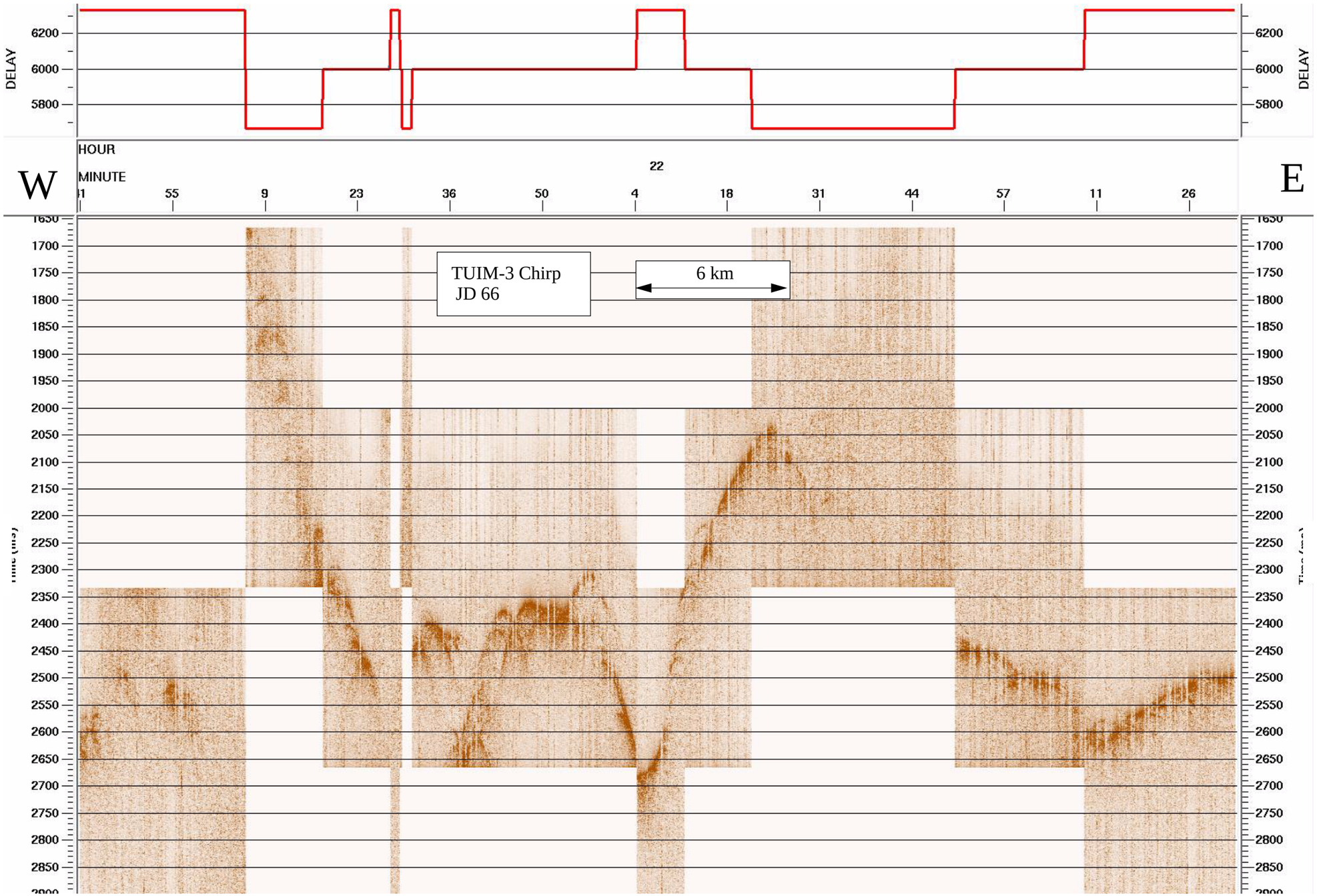

DELAY
6500
6000
5500
SW
NE
HOUR
19
MINUTE
55
2
9
16
23
30
37
44
51
58
5
13
20
27
34
41
49
56
3
10
17
25
32
TUIM-3 Chirp
JD 65
6 km
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
Two-way Travel Time (ms)
(-4000 ms)

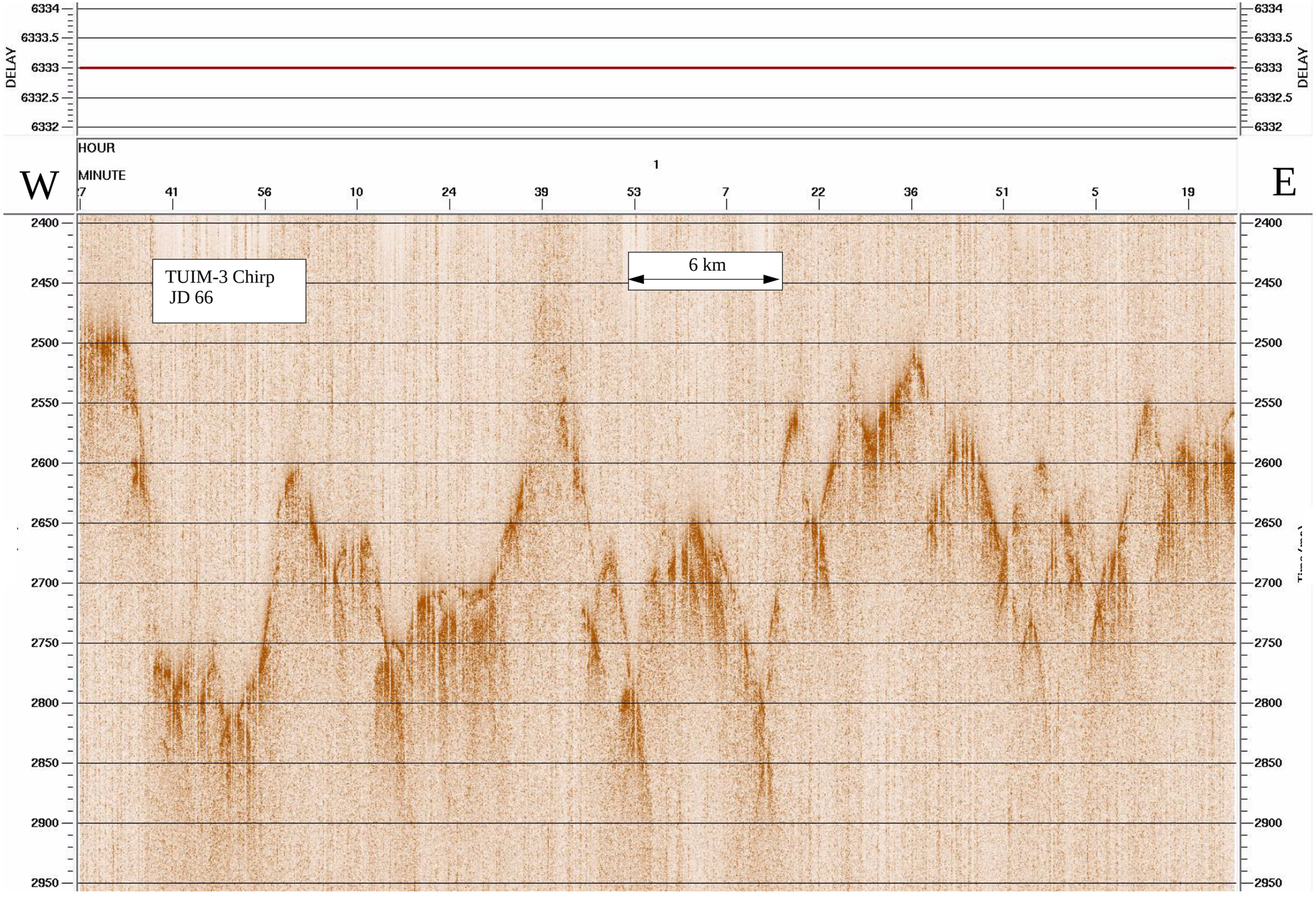

DELAY
6200
6000
5800
HOUR
22
MINUTE
11
55
9
23
36
50
4
18
31
44
57
11
26
SW
NE
TUIM-3 Chirp
JD 65
6 km
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850

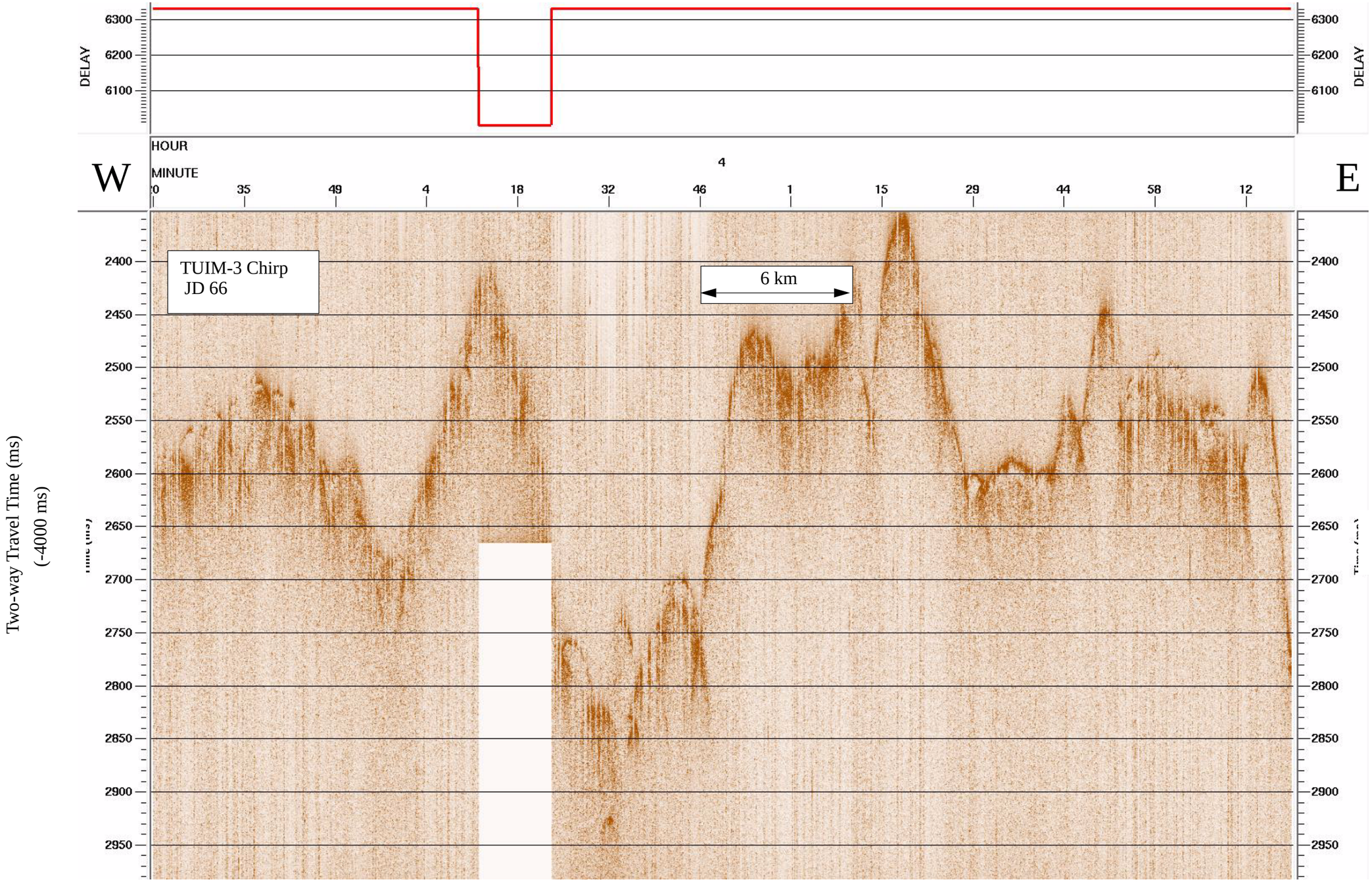
Julian Day 66
7 March 2005
Knudsen Chirp Data

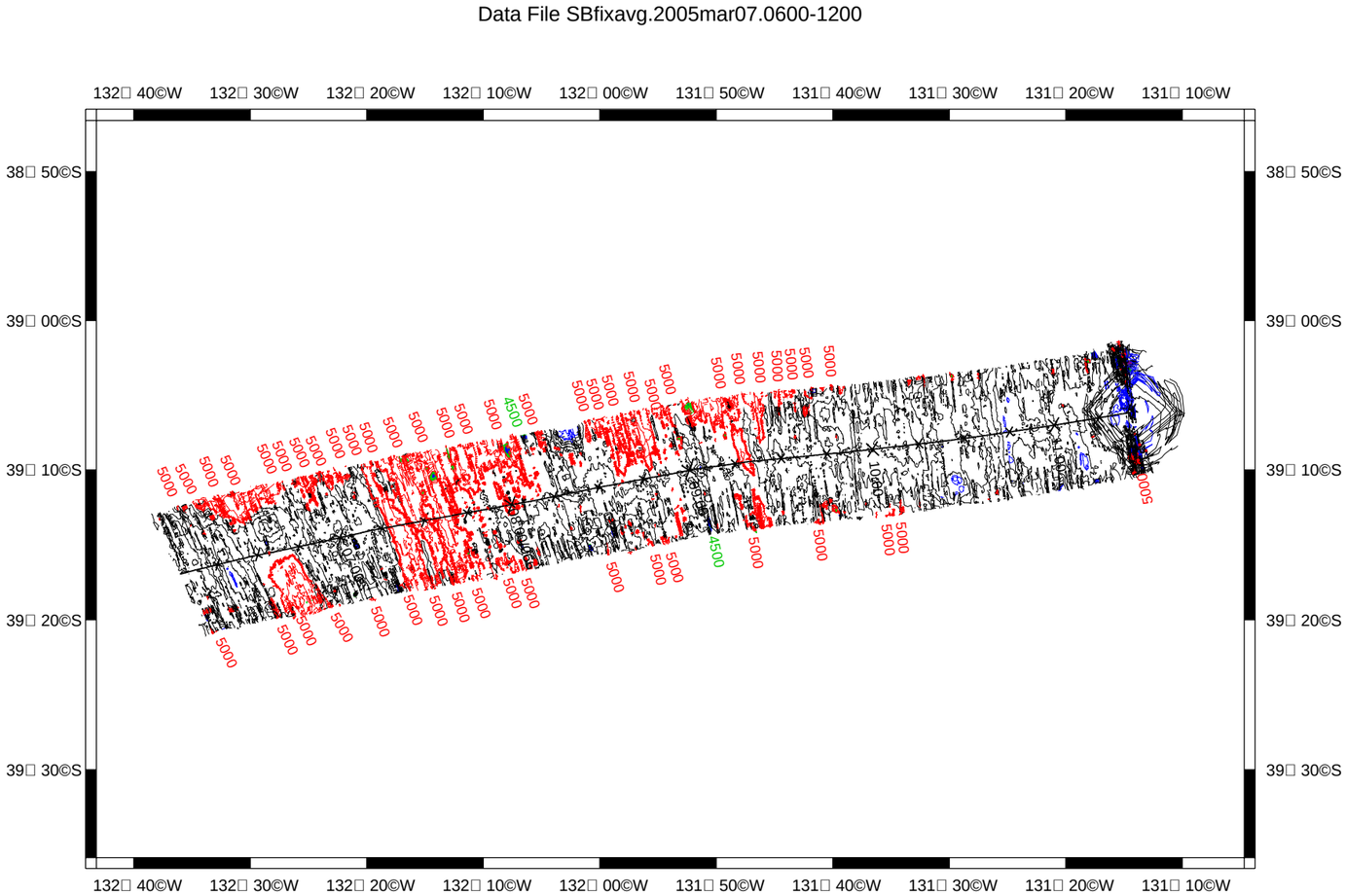
Data File SBfixavg.2005mar07.0000-0600

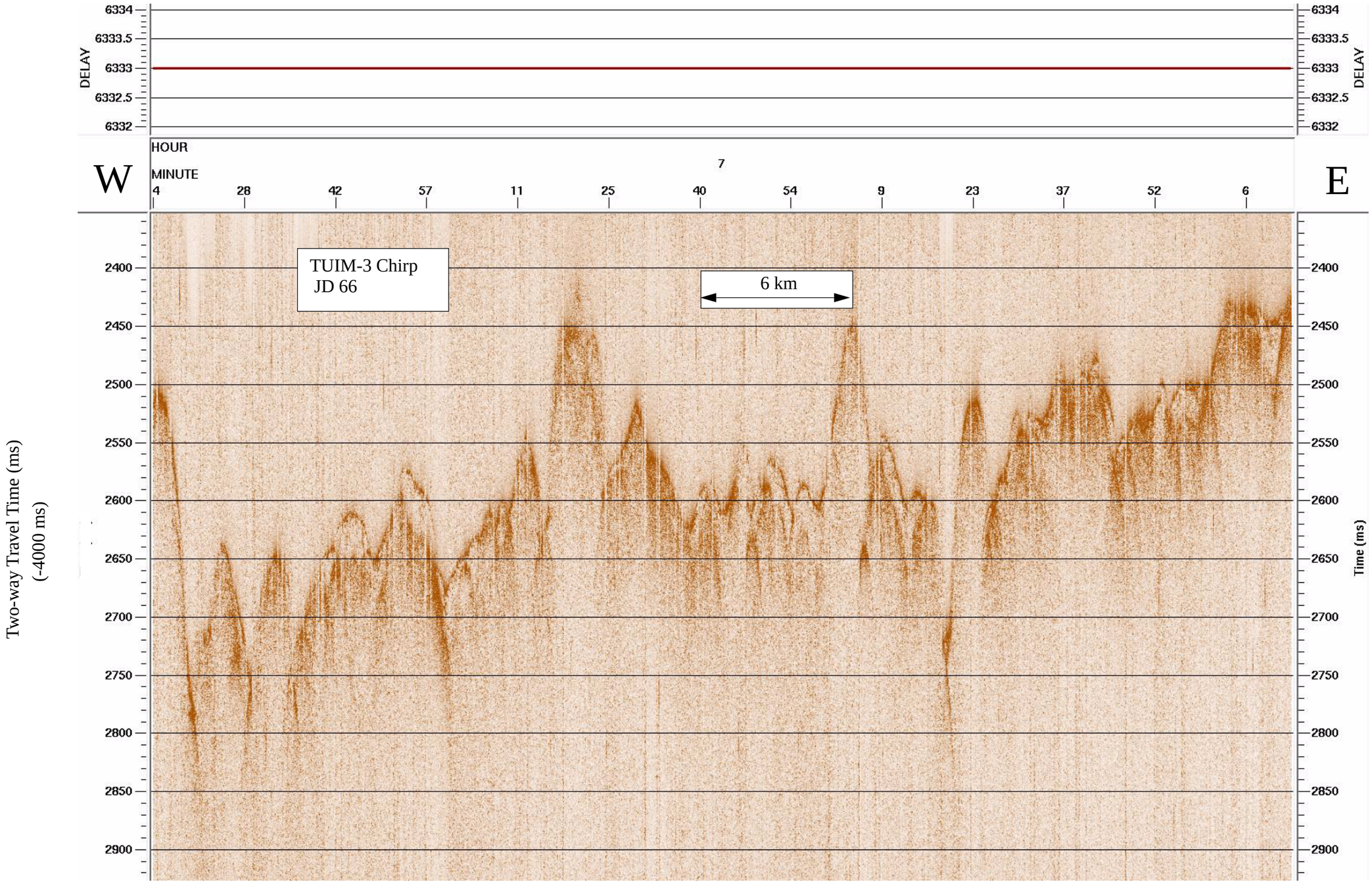


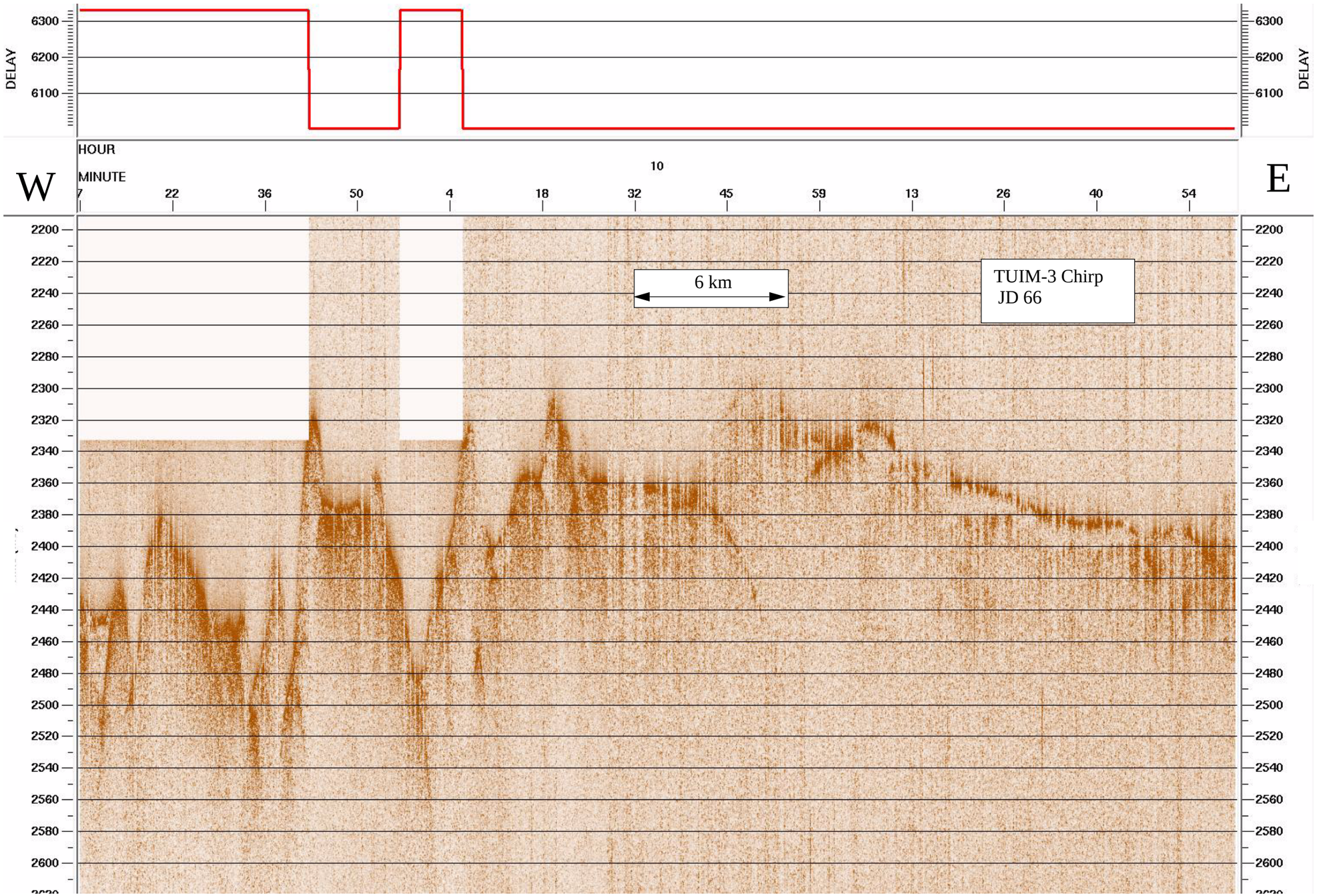

DELAY
6200
6000
5800
HOUR
MINUTE
22
11
55
9
23
36
50
4
18
31
44
57
11
26
W
E
TUIM-3 Chirp
JD 66
6 km
Two-way Travel Time (ms)
(-4000 ms)
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850

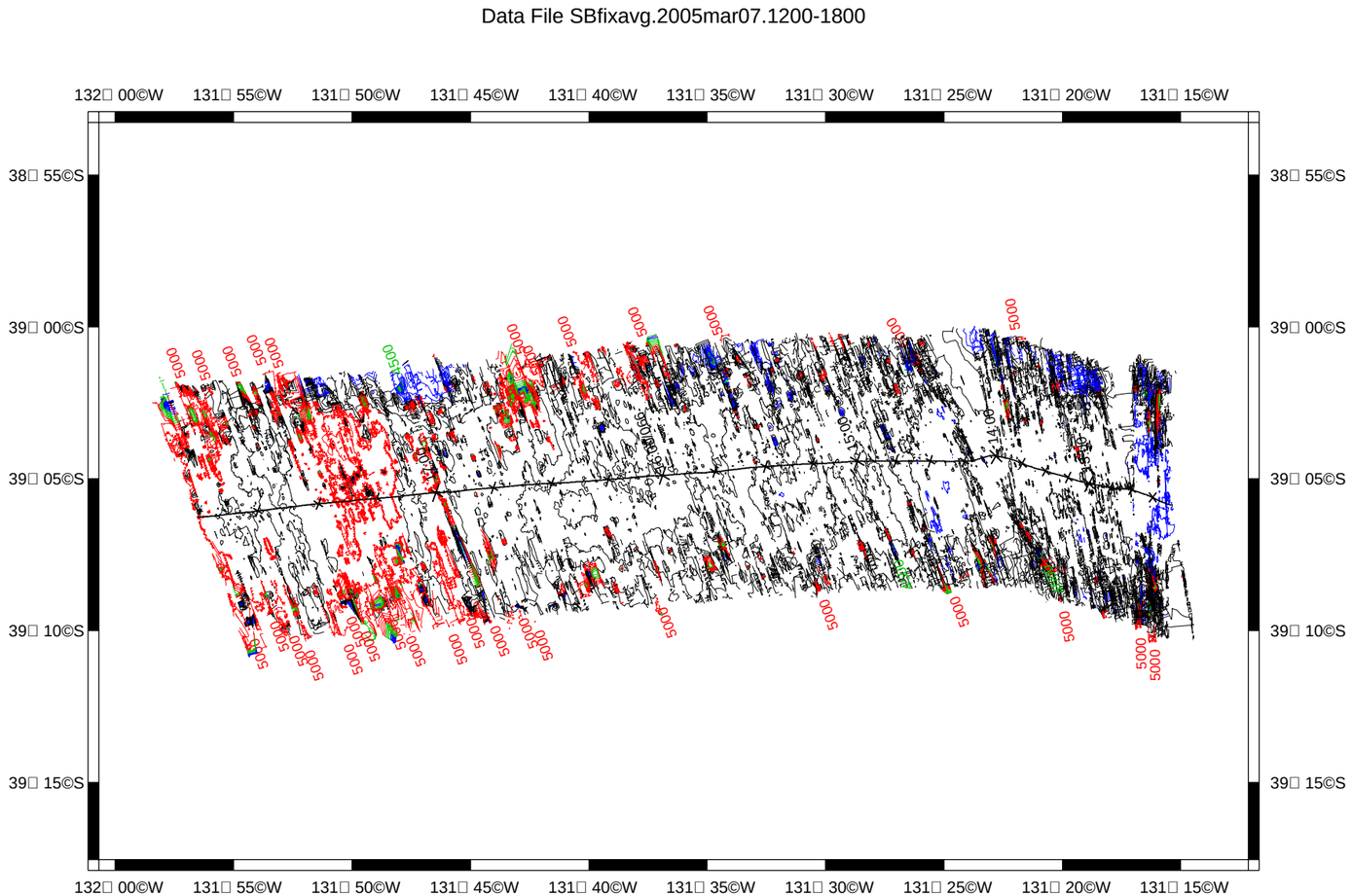

DELAY
6334
6333.5
6333
6332.5
6332
HOUR
MINUTE
1
7
41
56
10
24
39
53
7
22
36
51
5
19
W
E
TUIM-3 Chirp
JD 66
6 km
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Two-way Travel Time (ms)
(-4000 ms)

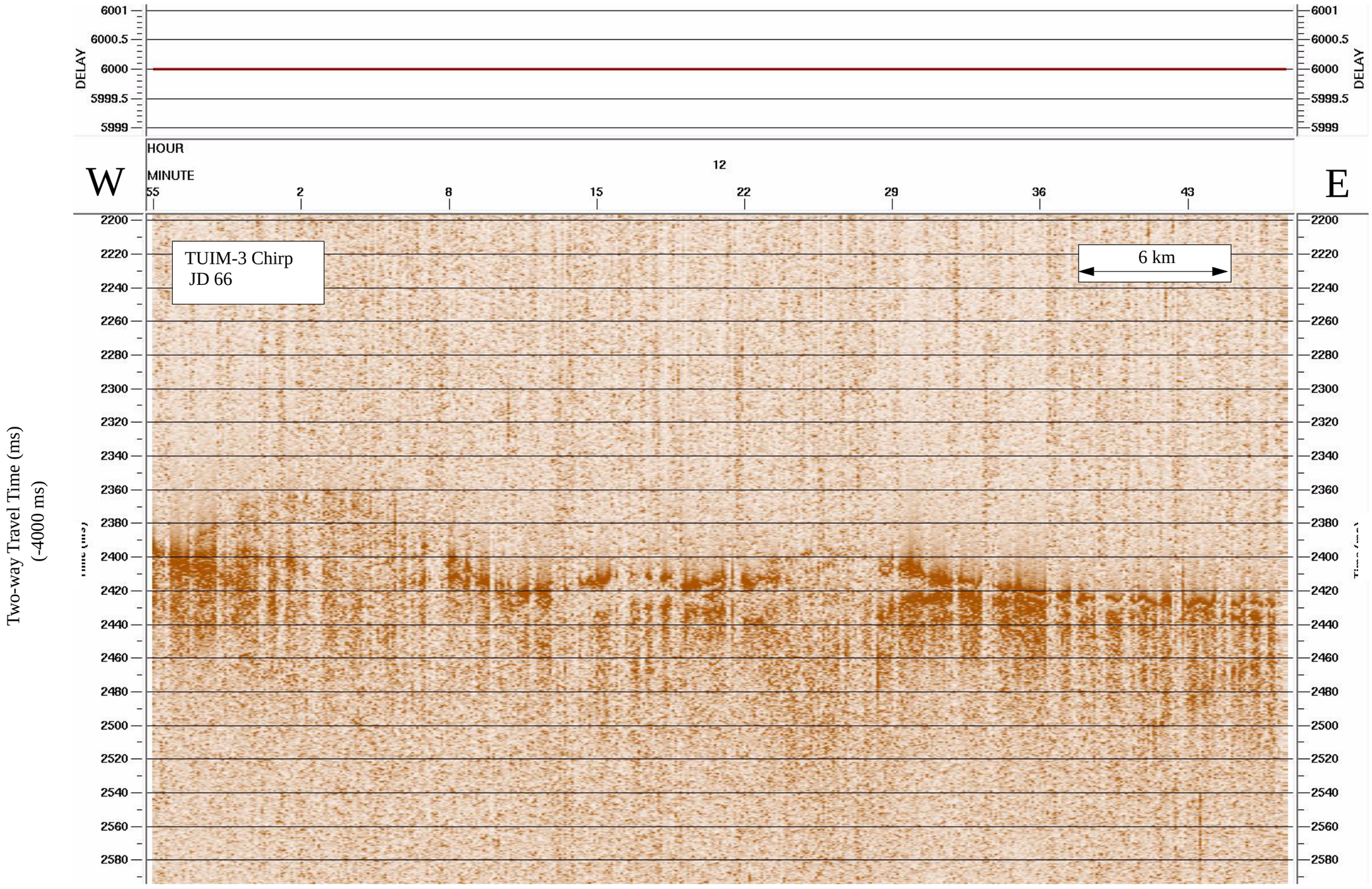

DELAY
6300
6200
6100
W
E
HOUR
4
MINUTE
0
35
49
4
18
32
46
1
15
29
44
58
12
TUIM-3 Chirp
JD 66
6 km
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2450
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Two-way Travel Time (ms)
(-4000 ms)

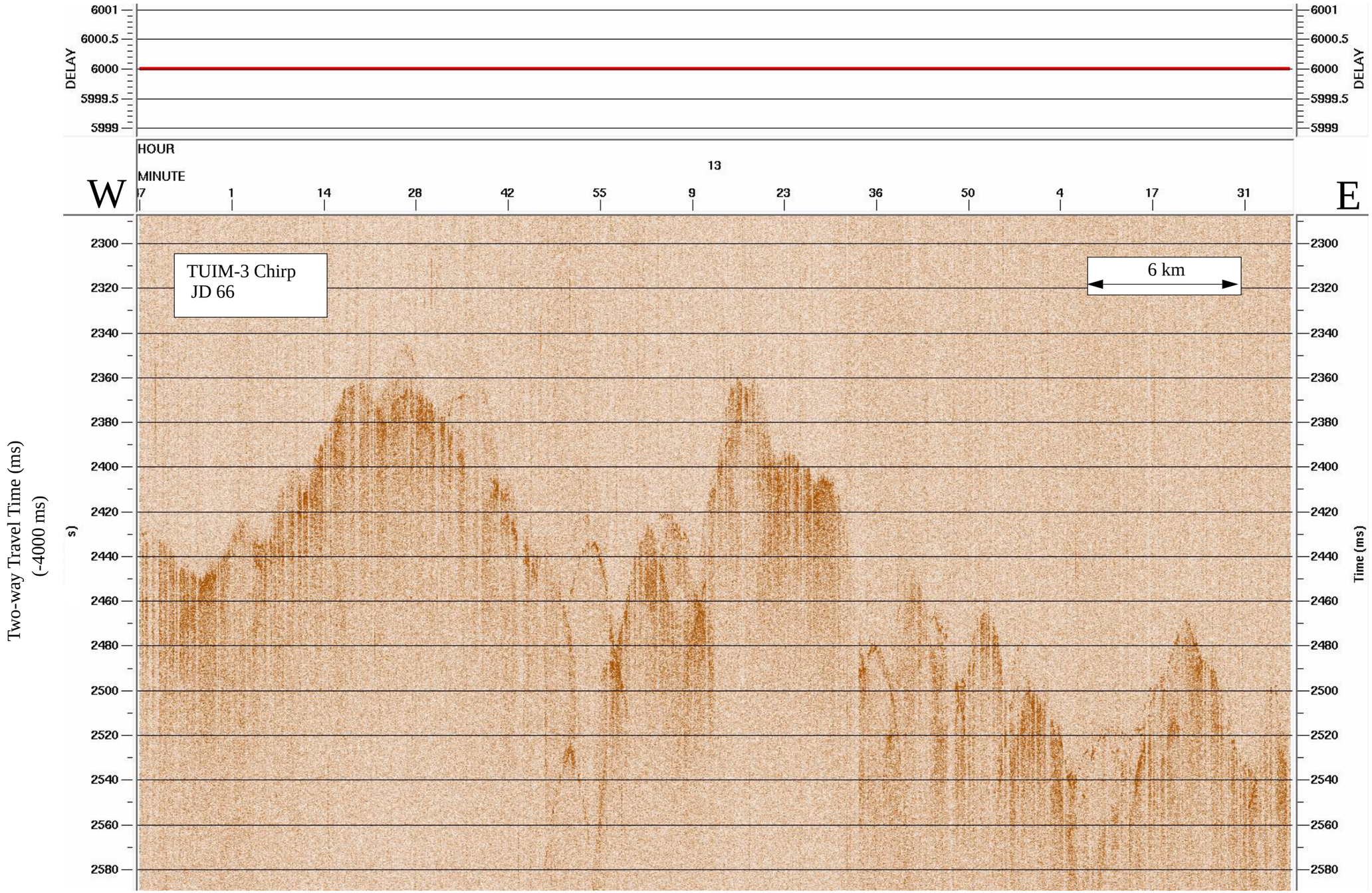

Data File SBfixavg.2005mar07.0600-1200
132□ 40©W
132□ 30©W
132□ 20©W
132□ 10©W
132□ 00©W
131□ 50©W
131□ 40©W
131□ 30©W
131□ 20©W
131□ 10©W
38□ 50©S
39□ 00©S
39□ 10©S
39□ 20©S
39□ 30©S

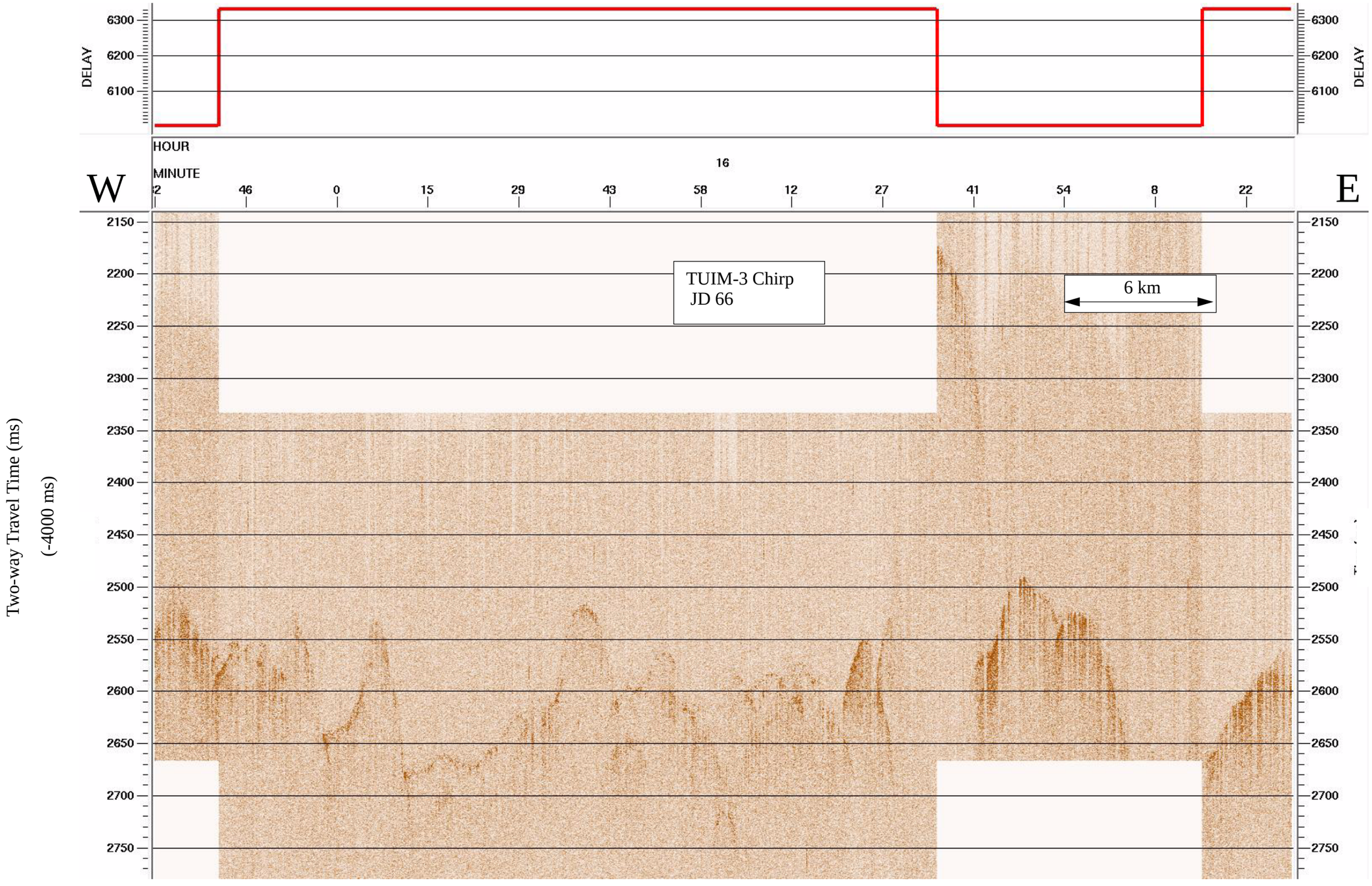

DELAY
6334
6333.5
6333
6332.5
6332
W
E
HOUR
MINUTE
7
4
28
42
57
11
25
40
54
9
23
37
52
6
TUIM-3 Chirp
JD 66
6 km
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6300
6200
6100
W
E
HOUR
MINUTE
10
7
22
36
50
4
18
32
45
59
13
26
40
54
6 km
TUIM-3 Chirp
JD 66
2200
2220
2240
2260
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
Two-way Travel Time (ms)
(-4000 ms)

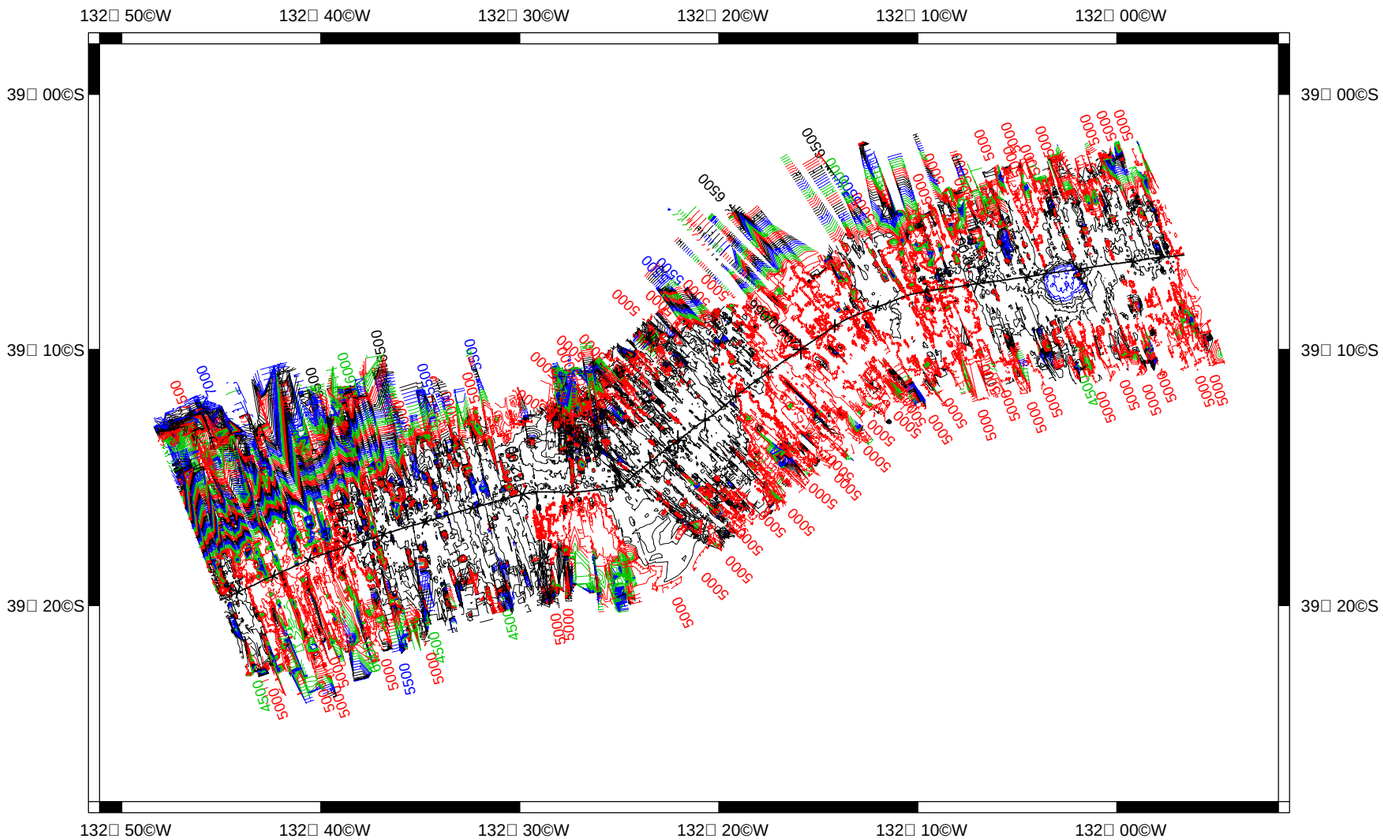

Data File SBfixavg.2005mar07.1200-1800
132□ 00©W
131□ 55©W
131□ 50©W
131□ 45©W
131□ 40©W
131□ 35©W
131□ 30©W
131□ 25©W
131□ 20©W
131□ 15©W
38□ 55©S
39□ 00©S
39□ 05©S
39□ 10©S
39□ 15©S

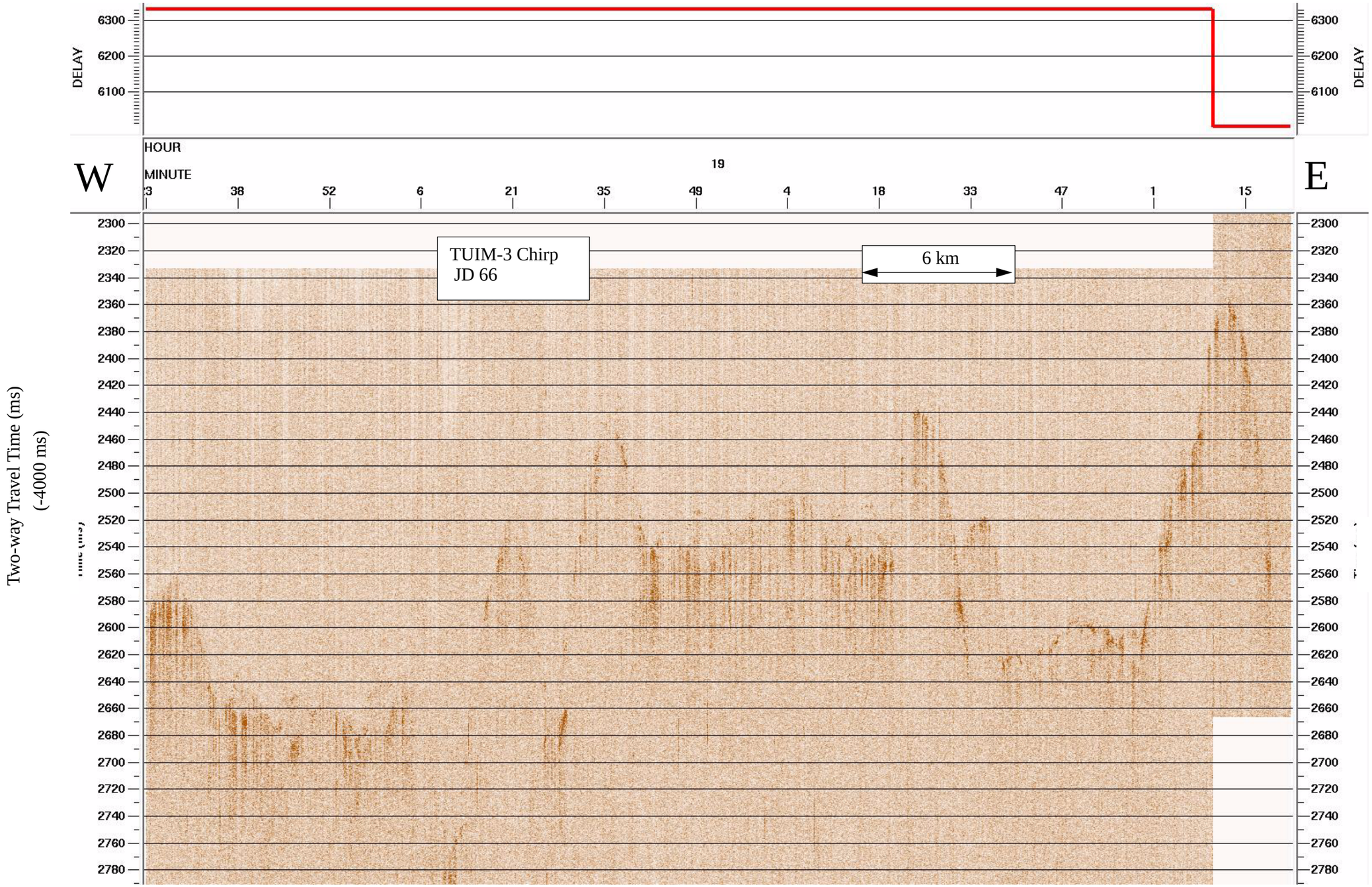

DELAY
6001
6000.5
6000
5999.5
5999
W
E
HOUR
12
MINUTE
55
2
8
15
22
29
36
43
TUIM-3 Chirp
JD 66
6 km
2200
2220
2240
2260
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
Two-way Travel Time (ms)
(-4000 ms)

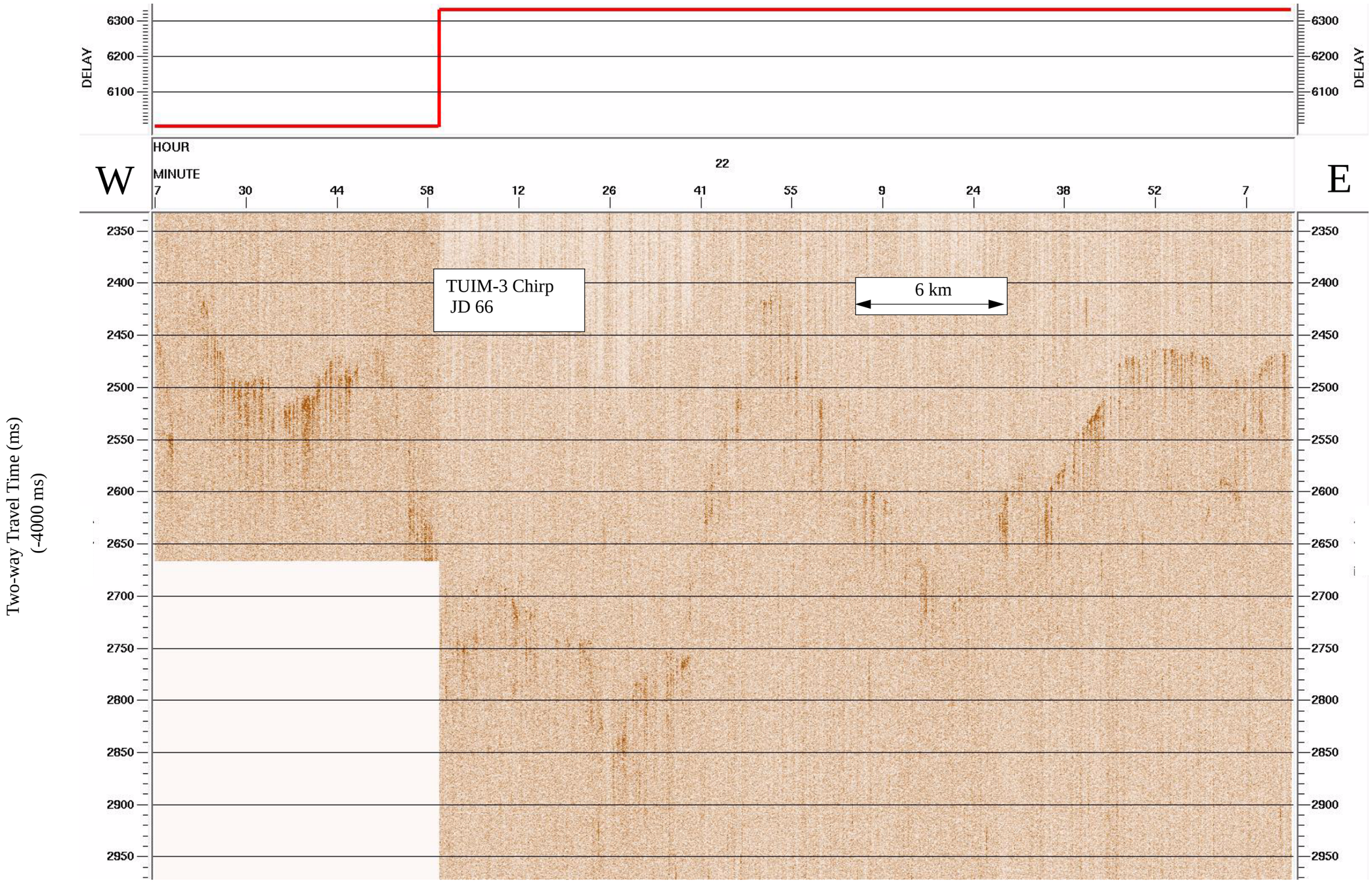

DELAY
6001
6000.5
6000
5999.5
5999
HOUR
13
MINUTE
17
1
14
28
42
55
9
23
36
50
4
17
31
W
E
TUIM-3 Chirp
JD 66
6 km
Two-way Travel Time (ms)
(-4000 ms)
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
Time (ms)


DELAY
6300
6200
6100
HOUR
MINUTE
16
W
E
2 46 0 15 29 43 58 12 27 41 54 8 22
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
TUIM-3 Chirp
JD 66
6 km
Two-way Travel Time (ms)
(-4000 ms)

Data File SBfixavg.2005mar07.1800-2400

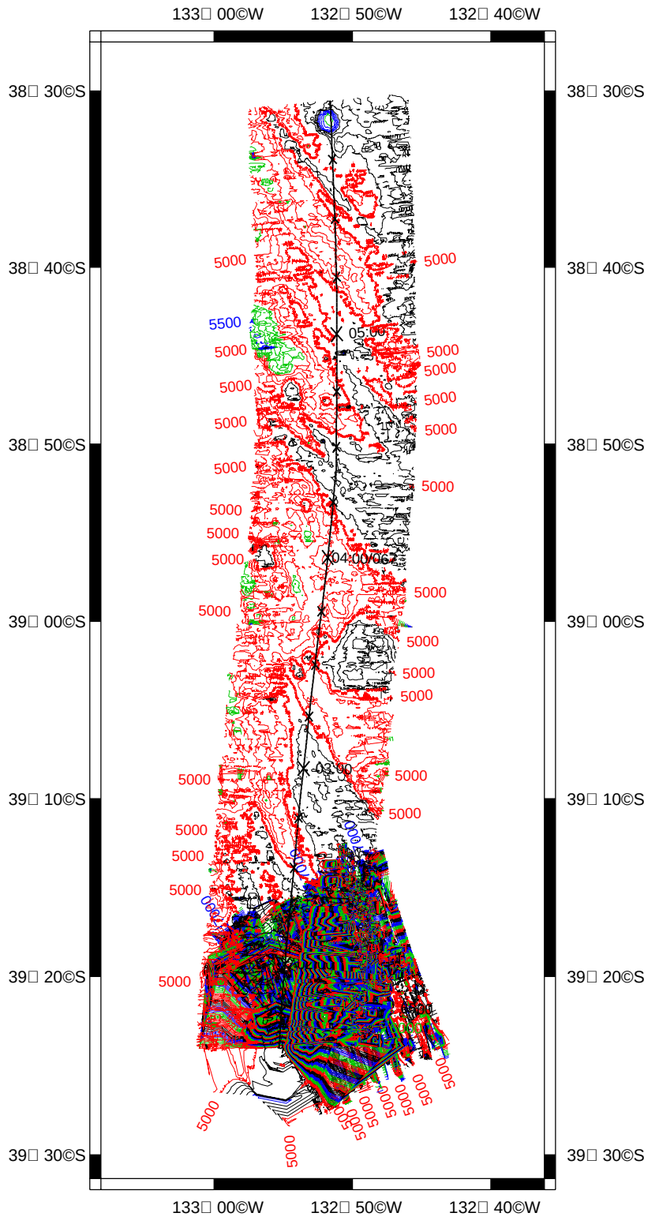


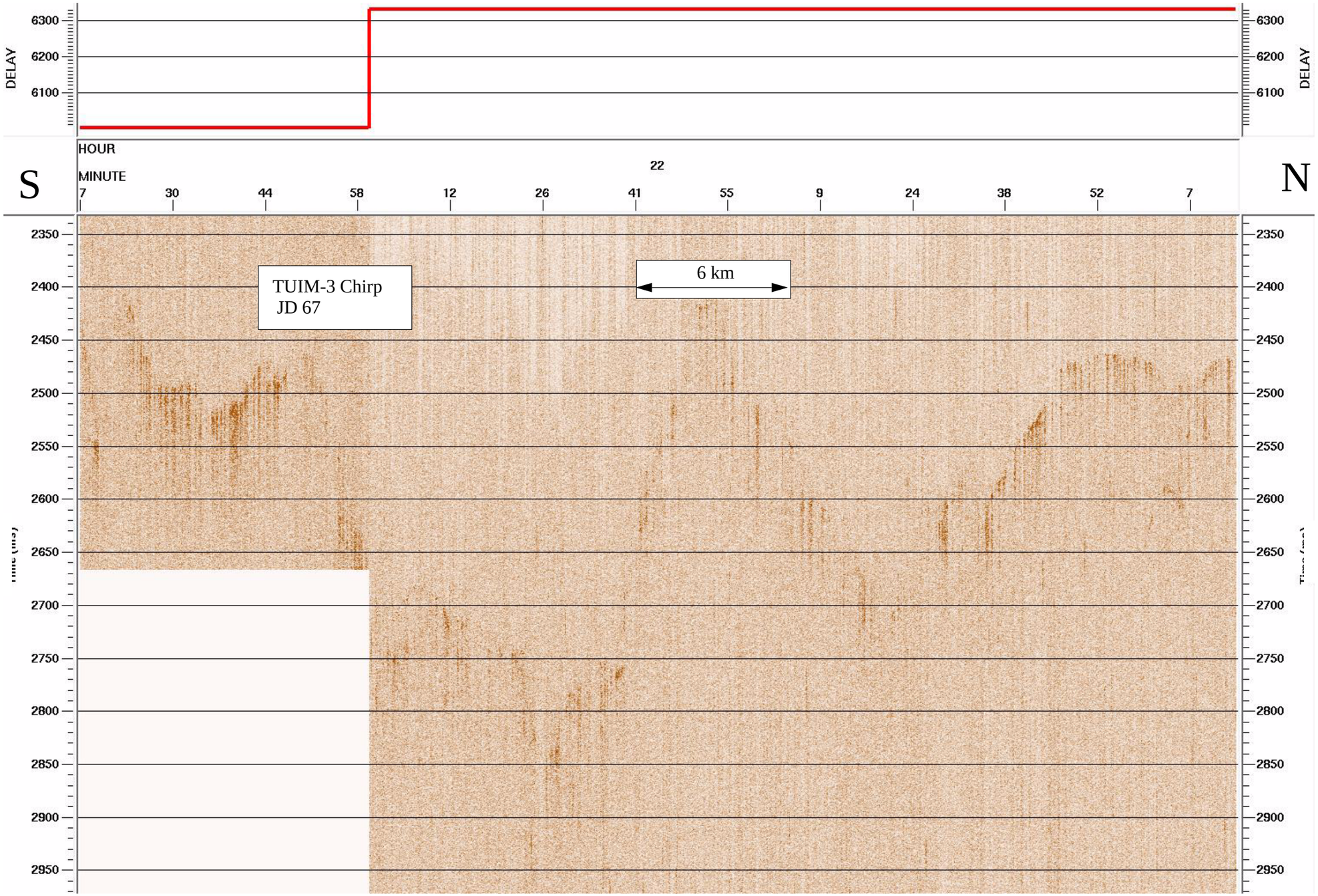

DELAY
6300
6200
6100
W
E
HOUR
19
MINUTE
3
38
52
6
21
35
49
4
18
33
47
1
15
TUIM-3 Chirp
JD 66
6 km
Two-way Travel Time (ms)
(-4000 ms)
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
2620
2640
2660
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2720
2740
2760
2780

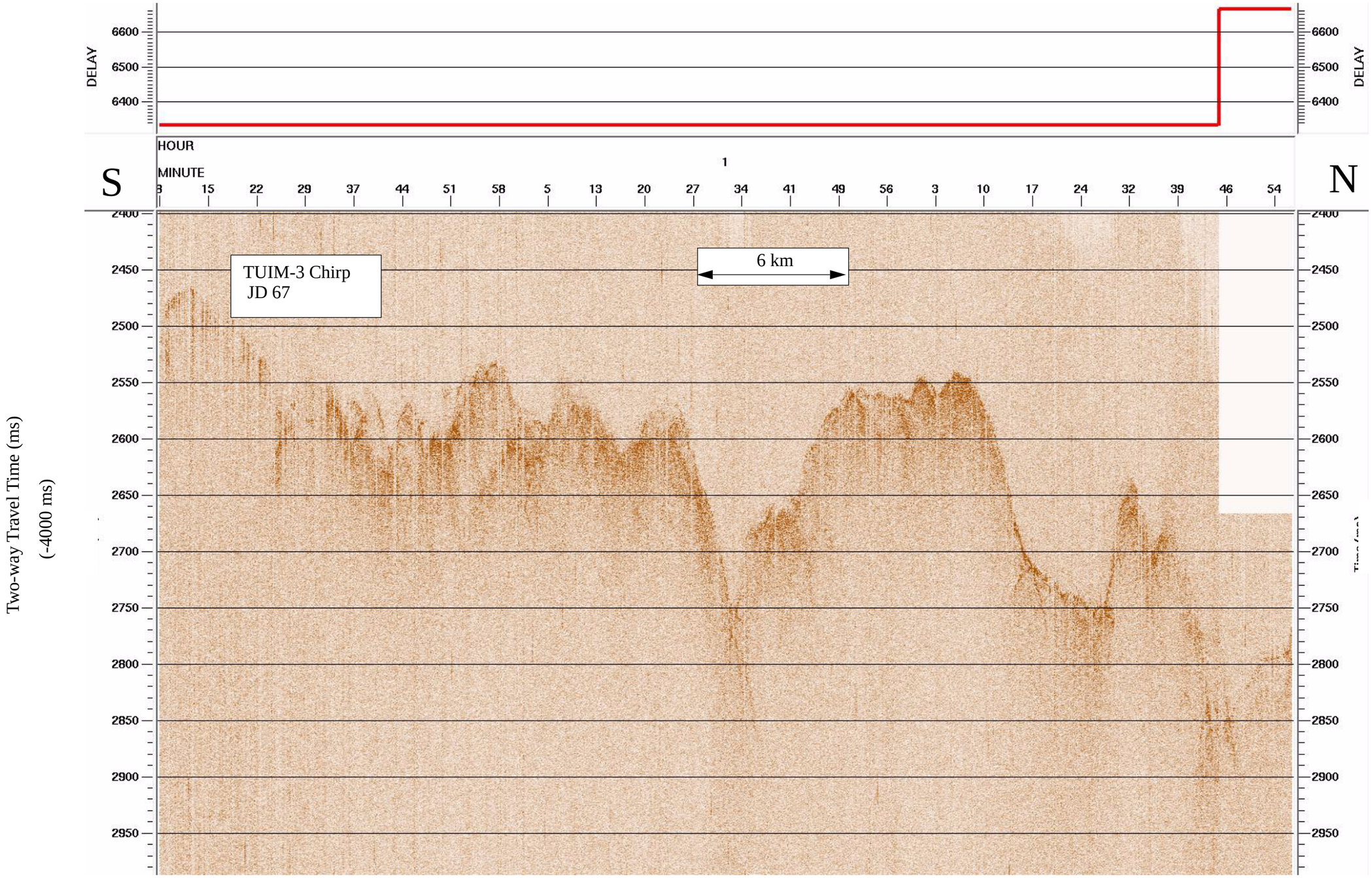

DELAY
6300
6200
6100
W
HOUR
MINUTE
22
7
30
44
58
12
26
41
55
9
24
38
52
7
E
TUIM-3 Chirp
JD 66
6 km
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Two-way Travel Time (ms)
(-4000 ms)

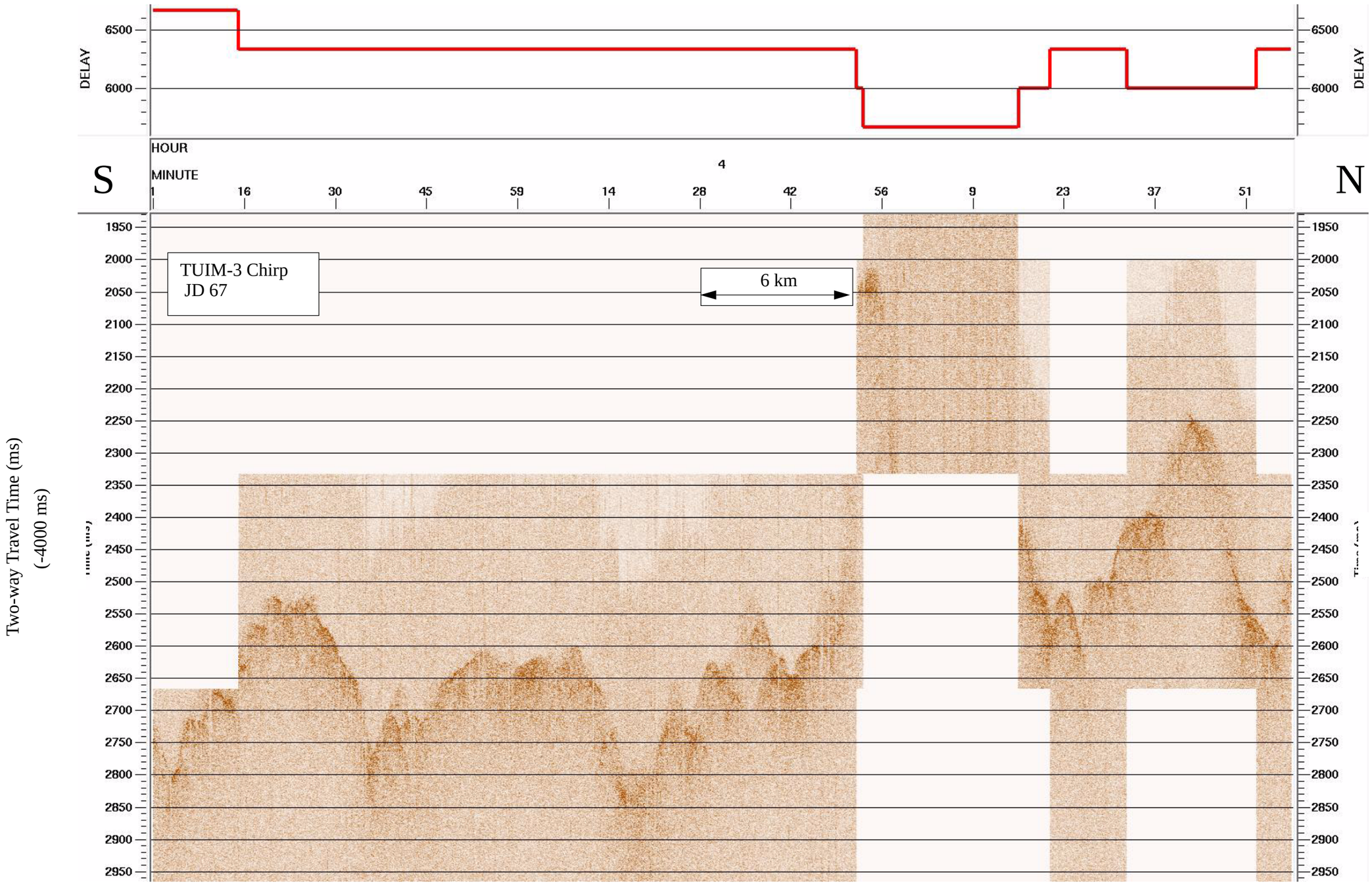
Julian Day 67
8 March 2005
Knudsen Chirp Data

Data File SBfixavg.2005mar08.0000-0600

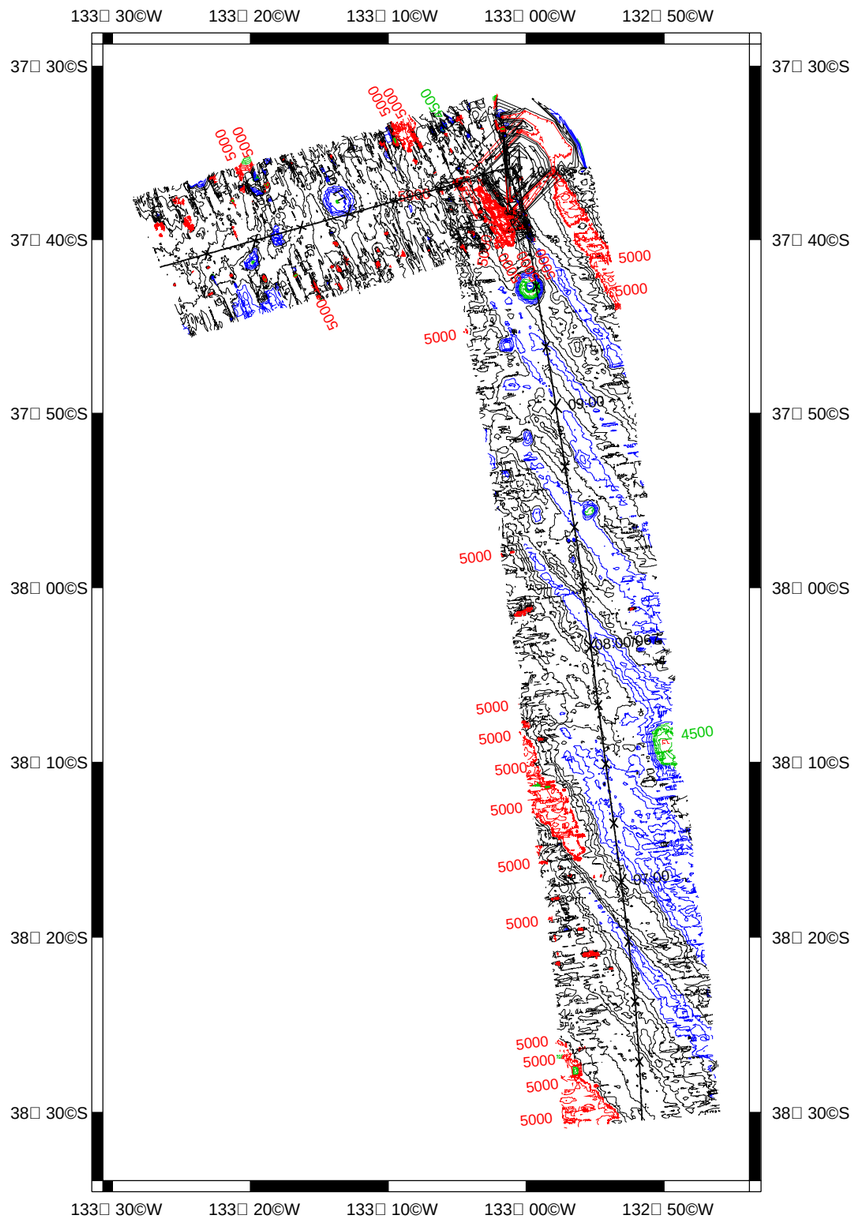


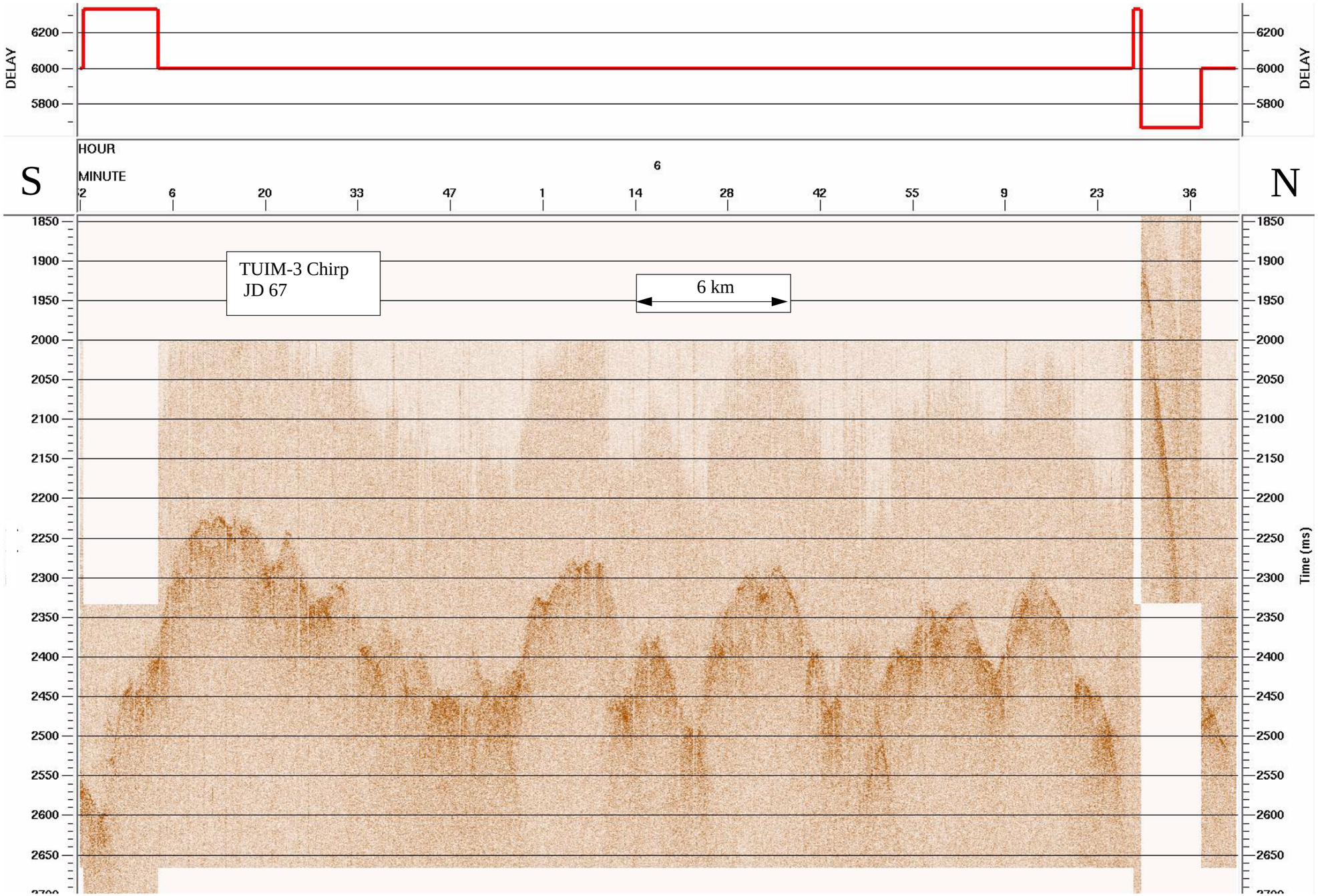

DELAY
6300
6200
6100
HOUR
22
MINUTE
7
30
44
58
12
26
41
55
9
24
38
52
7
S
N
TUIM-3 Chirp
JD 67
6 km
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Two-way Travel Time (ms)
(-4000 ms)

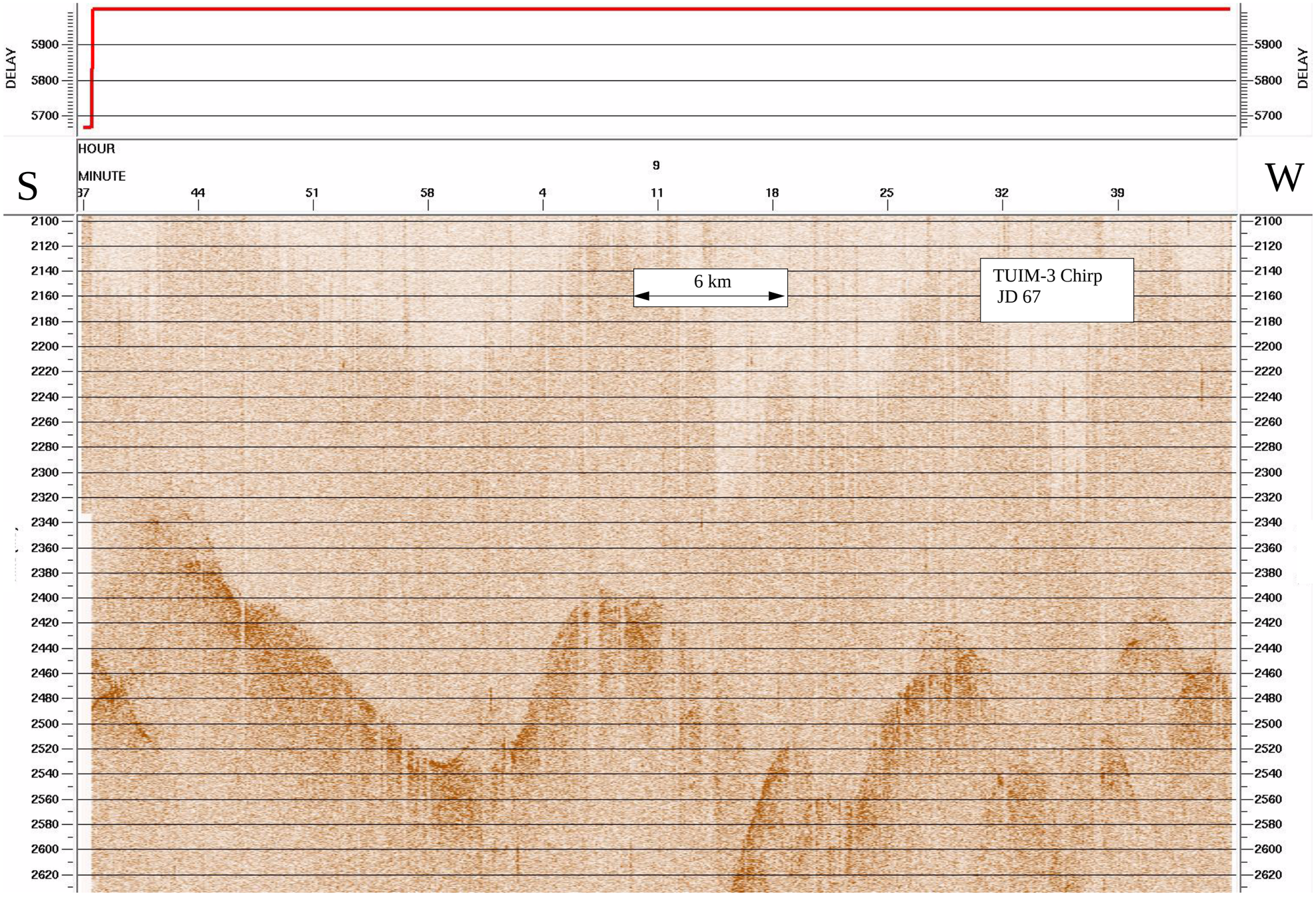

DELAY
6600
6500
6400
HOUR
MINUTE
1
3 15 22 29 37 44 51 58 5 13 20 27 34 41 49 56 3 10 17 24 32 39 46 54
S
N
TUIM-3 Chirp
JD 67
6 km
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6500
6000
HOUR
MINUTE
4
1
16
30
45
59
14
28
42
56
9
23
37
51
S
N
TUIM-3 Chirp
JD 67
6 km
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Two-way Travel Time (ms)
(-4000 ms)

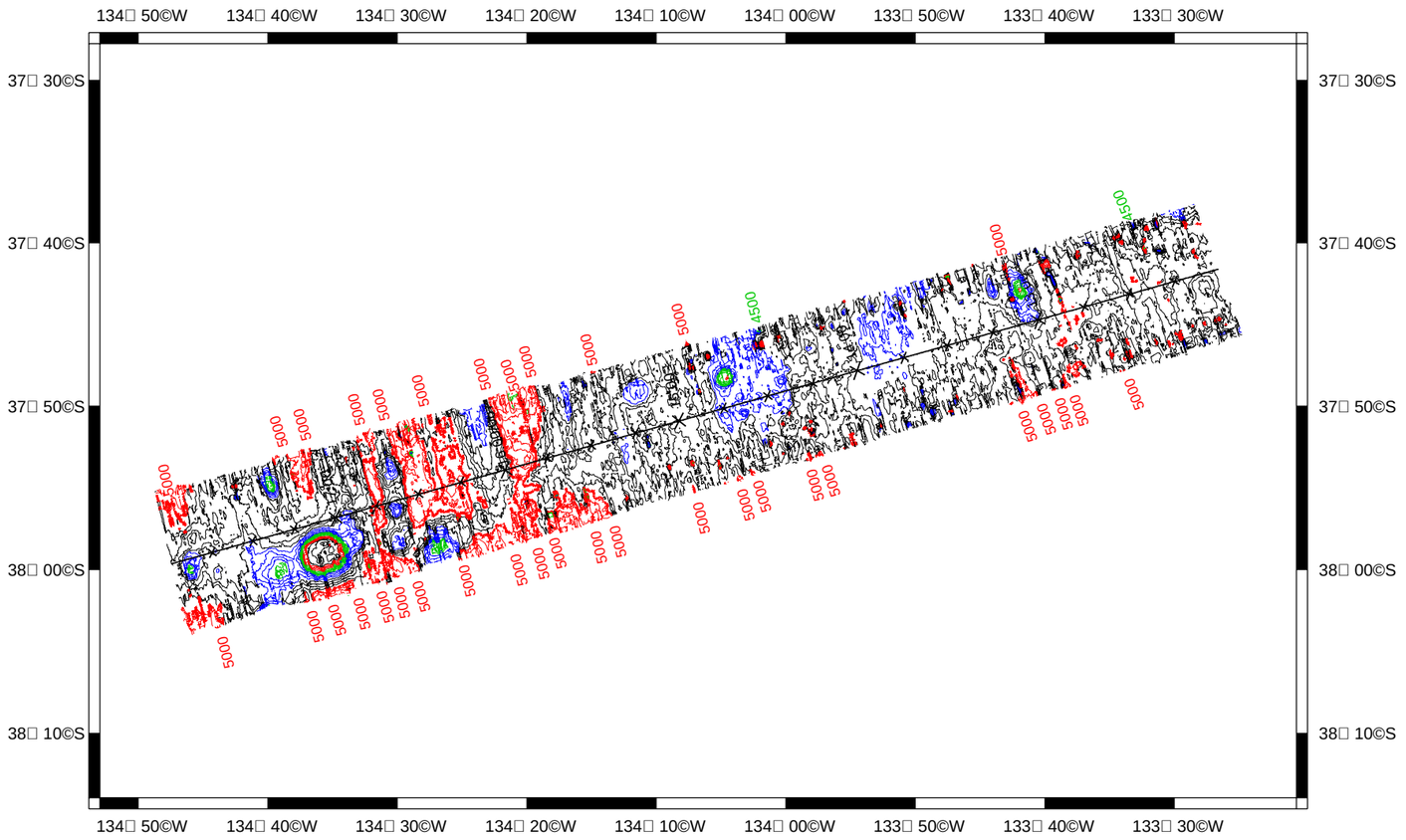
Data File SBfixavg.2005mar08.0600-1200

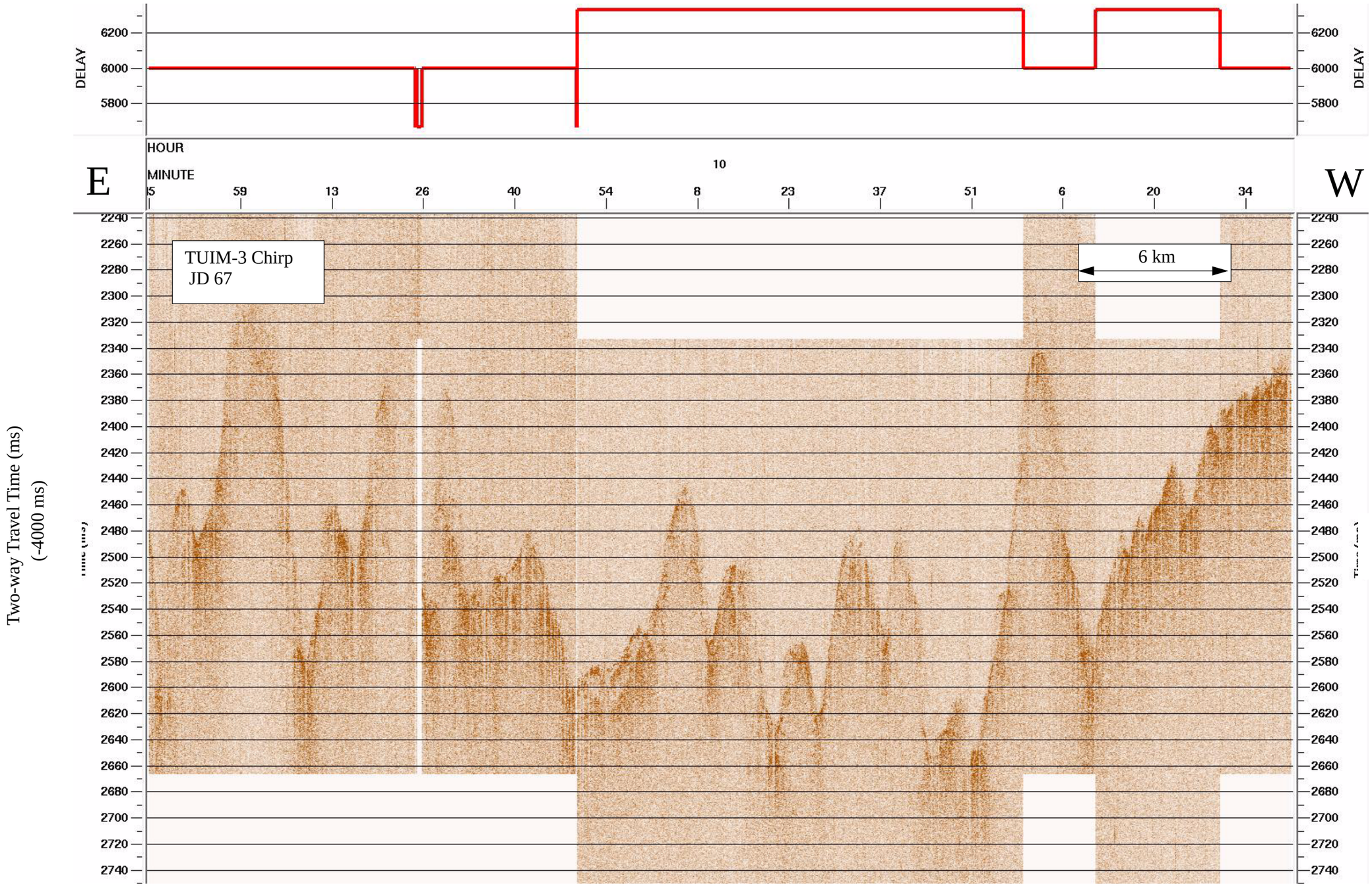


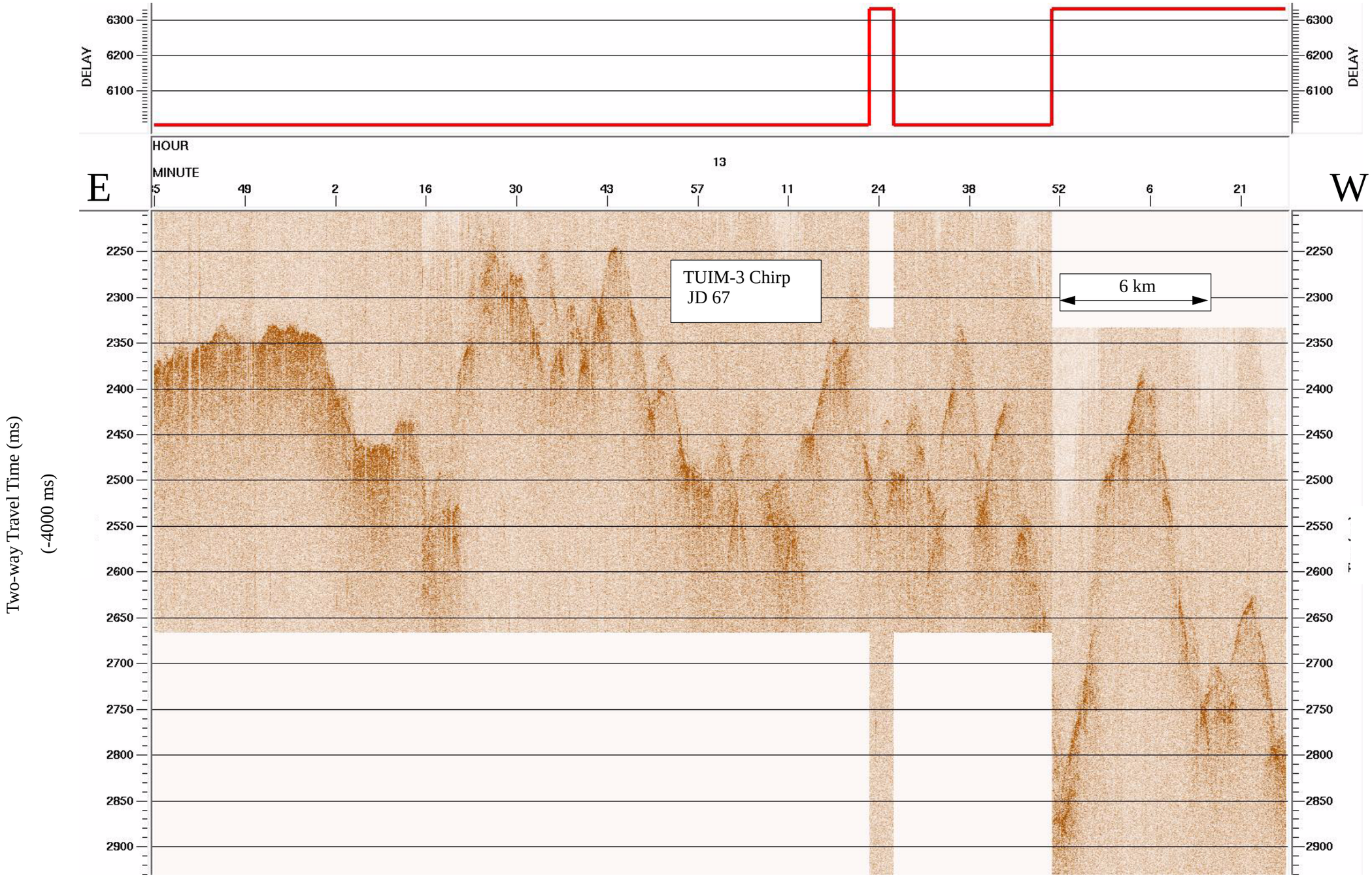

DELAY
6200
6000
5800
S
HOUR
MINUTE
6
2
6
20
33
47
1
14
28
42
55
9
23
36
N
TUIM-3 Chirp
JD 67
6 km
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)

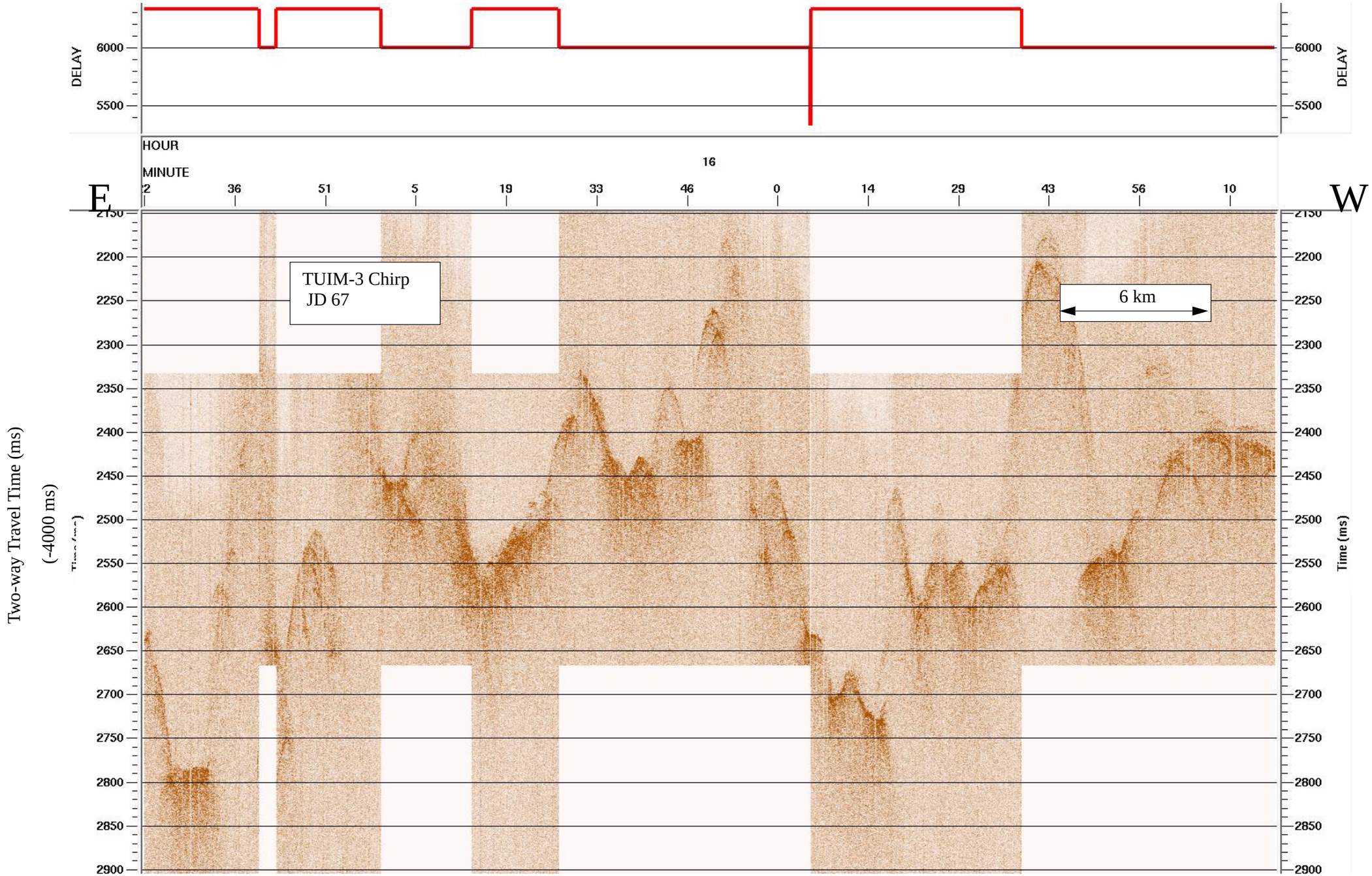

DELAY
5900
5800
5700
HOUR
MINUTE
9
37
44
51
58
4
11
18
25
32
39
S
W
6 km
TUIM-3 Chirp
JD 67
Two-way Travel Time (ms)
(-4000 ms)
2100
2120
2140
2160
2180
2200
2220
2240
2260
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
2620

Data File SBfixavg.2005mar08.1200-1800

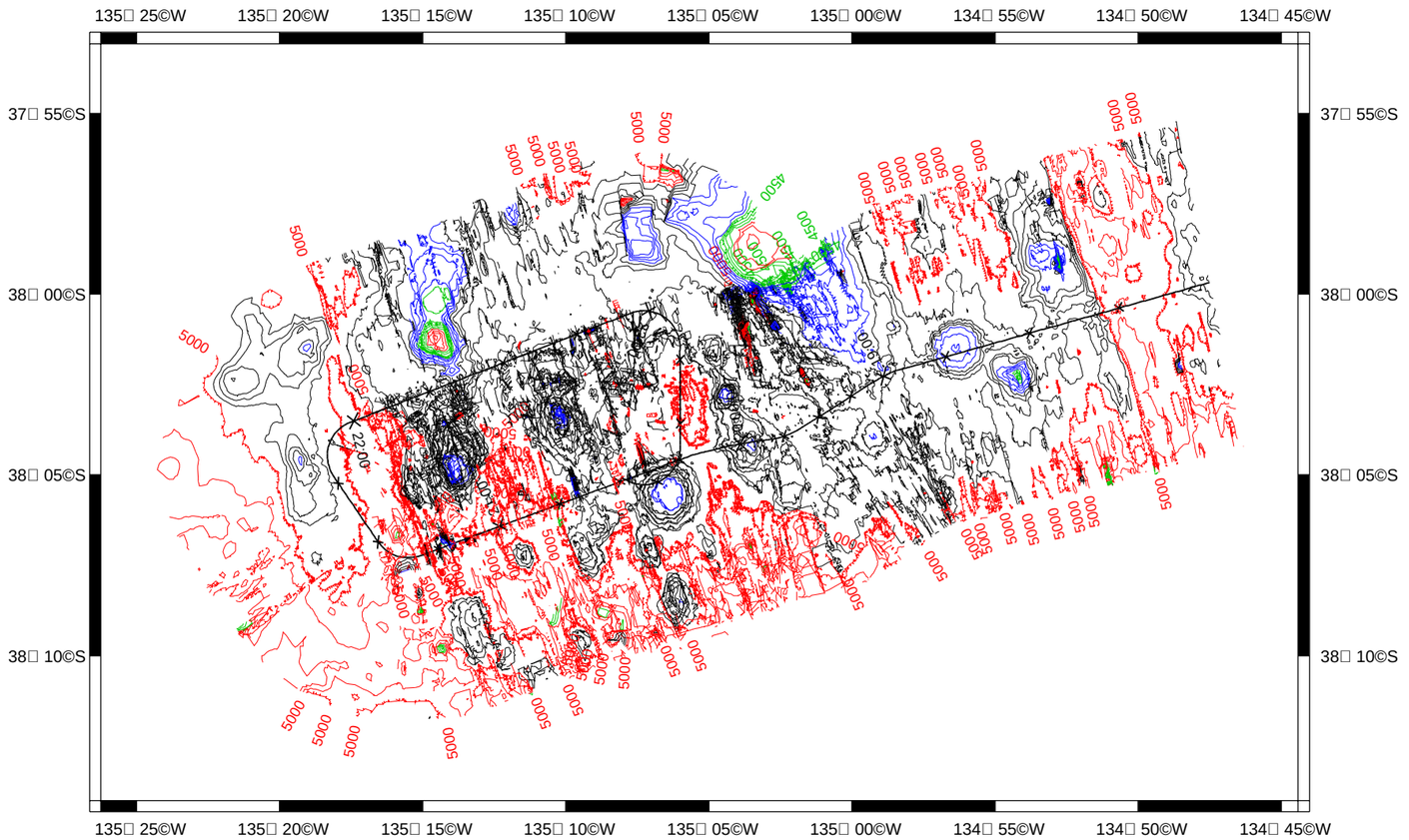


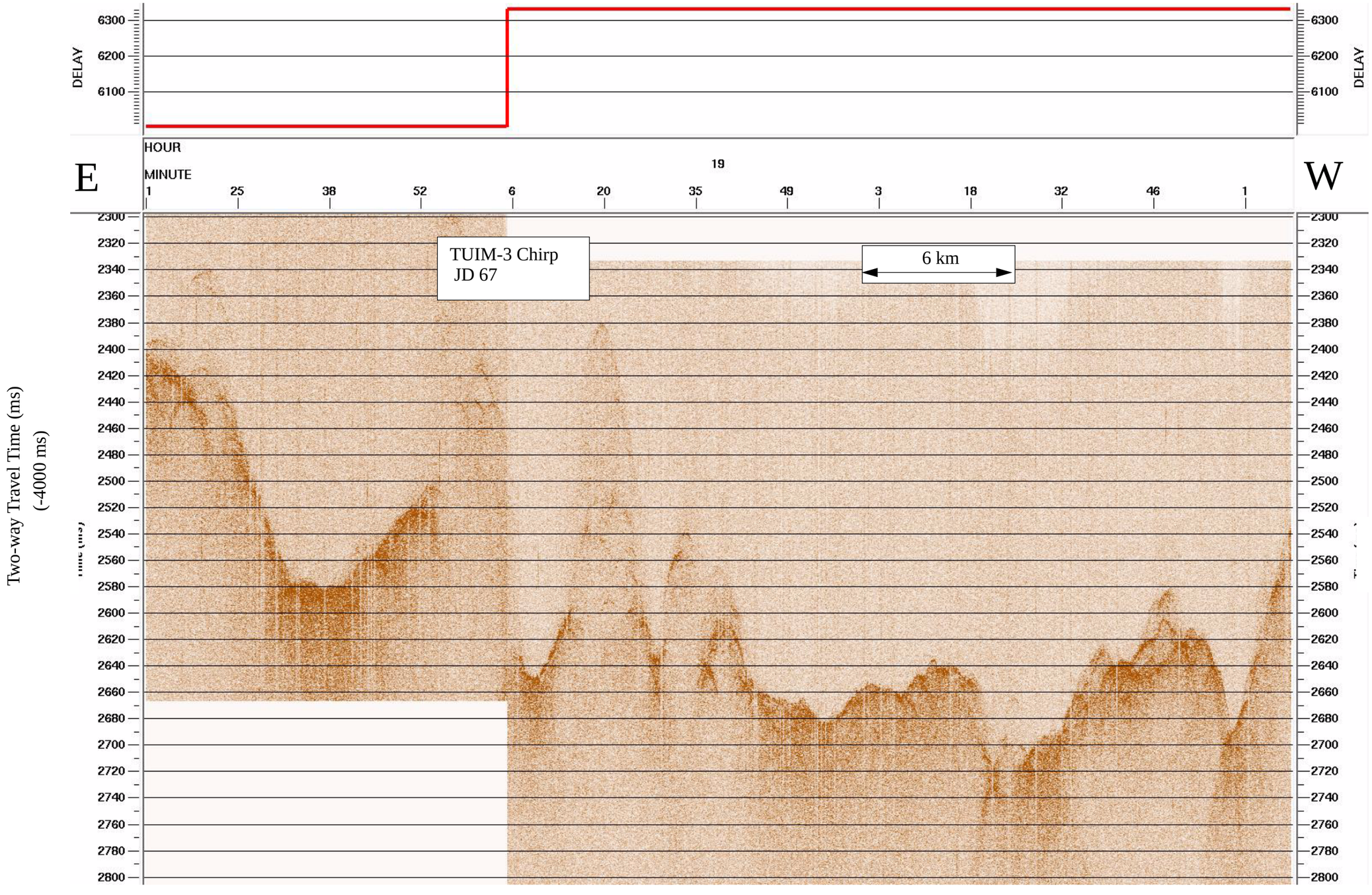

DELAY
6200
6000
5800
HOUR
MINUTE
10
5
59
13
26
40
54
8
23
37
51
6
20
34
E
W
TUIM-3 Chirp
JD 67
6 km
Two-way Travel Time (ms)
(-4000 ms)
2240
2260
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
2620
2640
2660
2680
2700
2720
2740

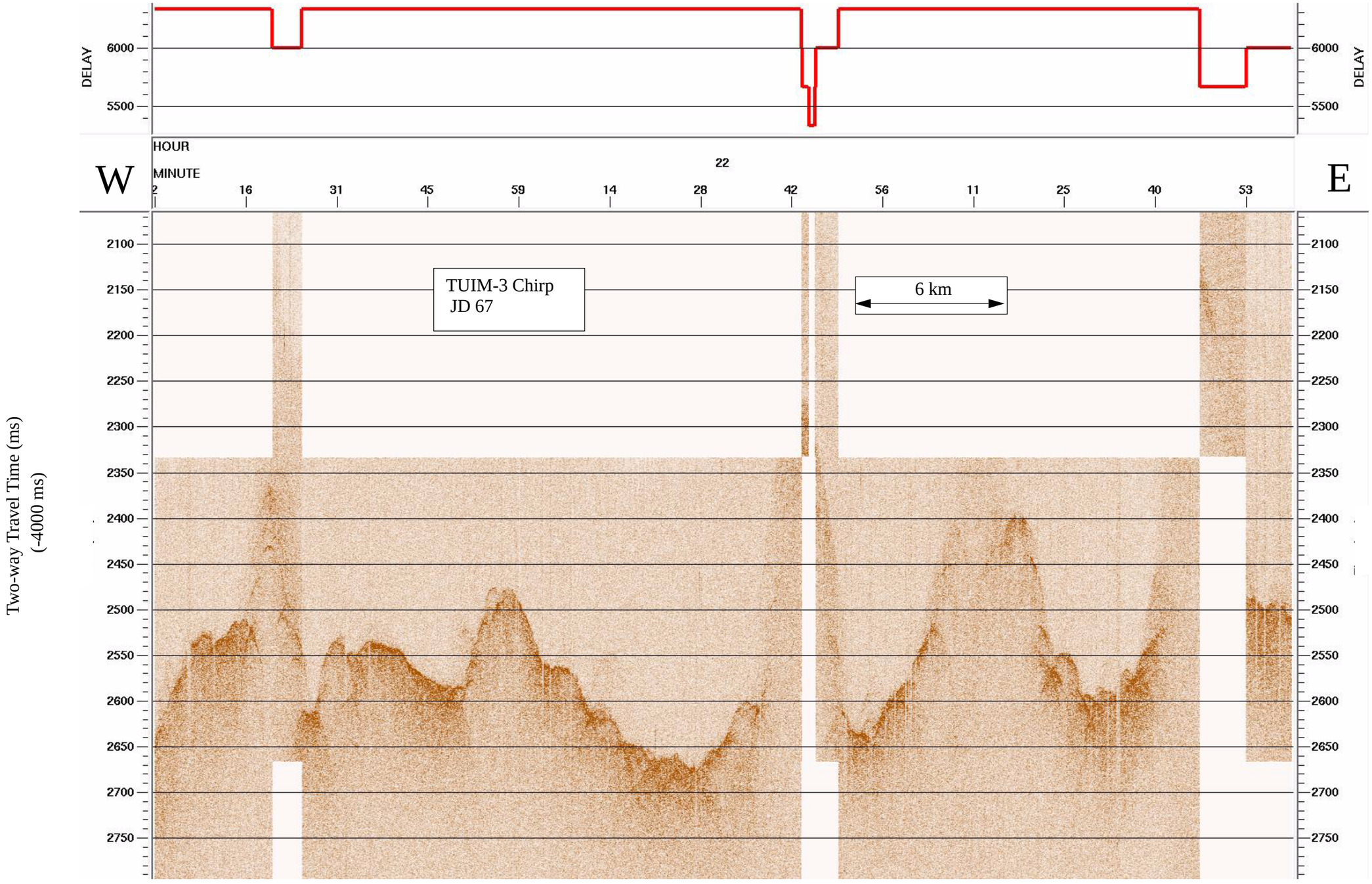

DELAY
6300
6200
6100
HOUR
13
MINUTE
E
W
5
49
2
16
30
43
57
11
24
38
52
6
21
TUIM-3 Chirp
JD 67
6 km
Two-way Travel Time (ms)
(-4000 ms)
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900


DELAY
6000
5500
HOUR
16
MINUTE
2
36
51
5
19
33
46
0
14
29
43
56
10
E
W
TUIM-3 Chirp
JD 67
6 km
Two-way Travel Time (ms)
(-4000 ms)
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
Time (ms)

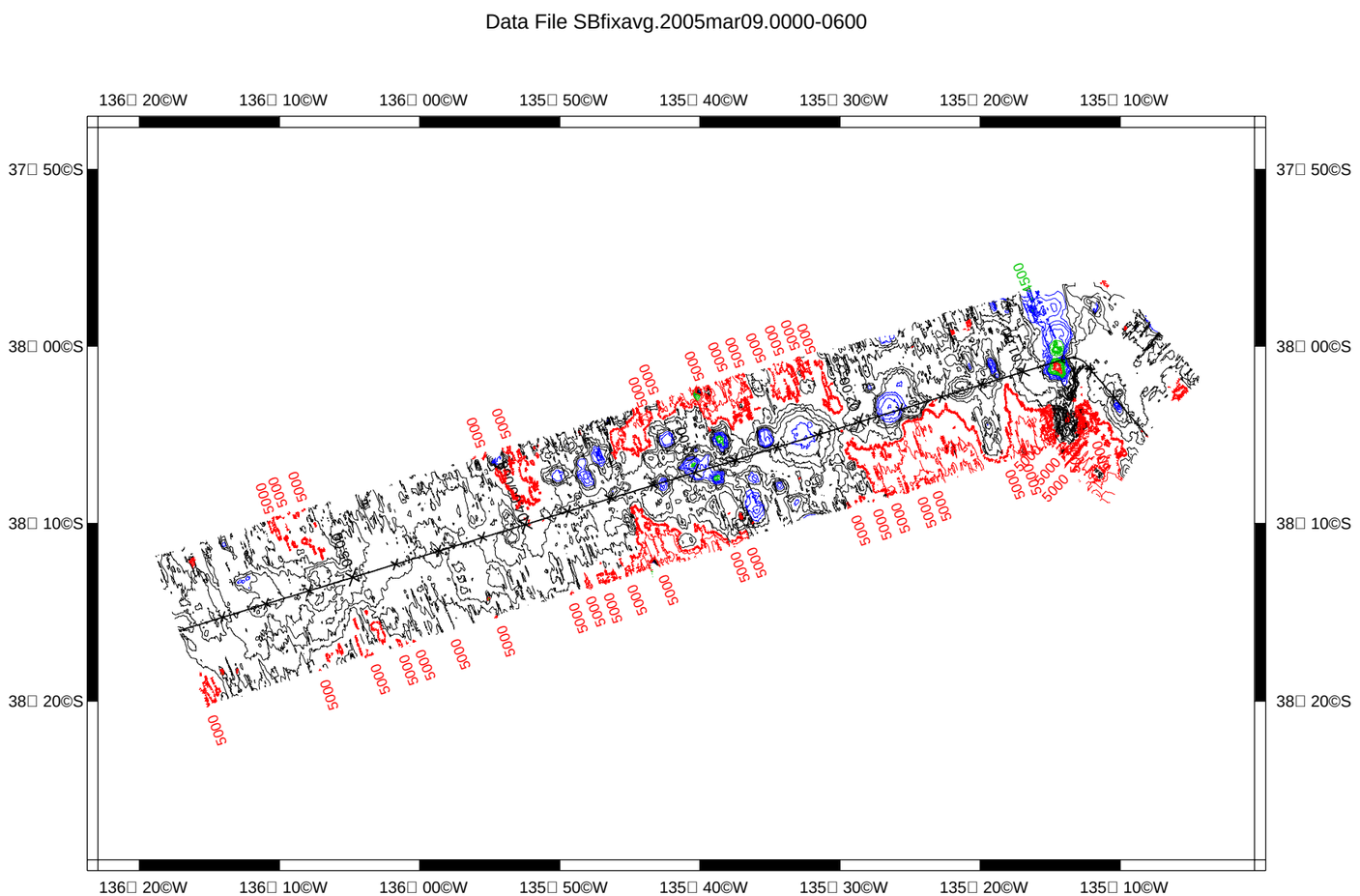
Data File SBfixavg.2005mar08.1800-2400

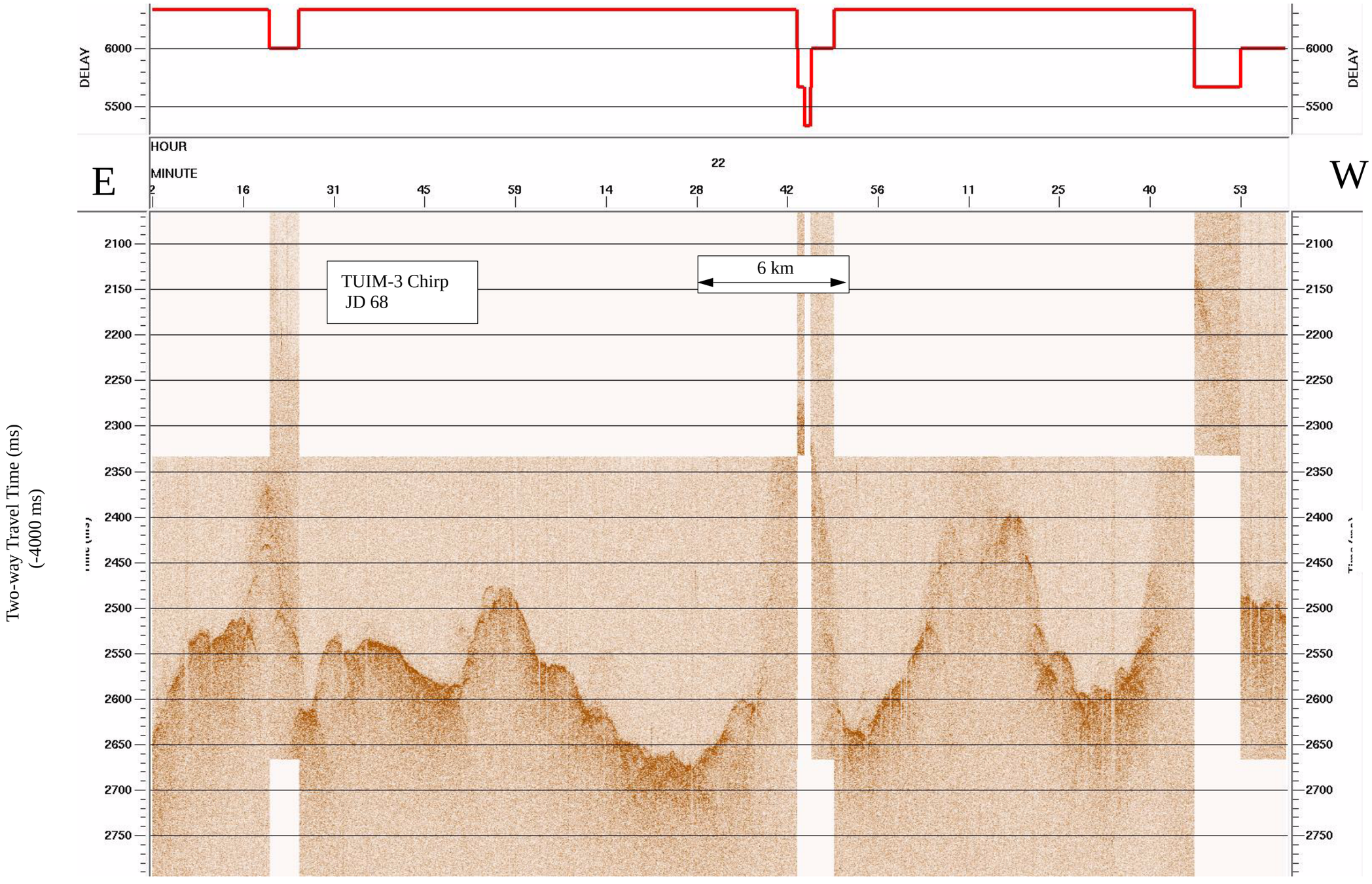


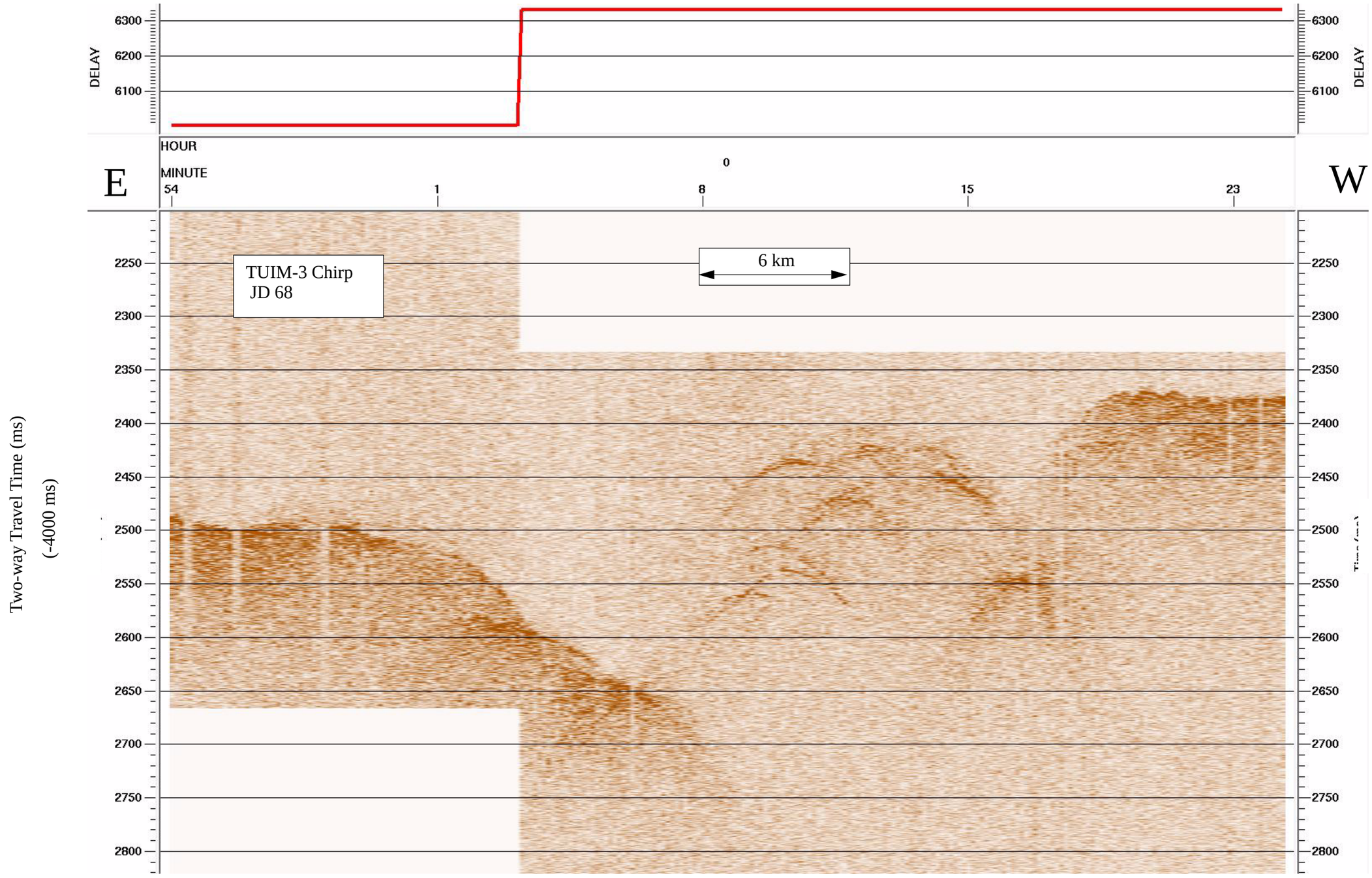

DELAY
6300
6200
6100
E
W
HOUR
MINUTE
19
1
25
38
52
6
20
35
49
3
18
32
46
1
TUIM-3 Chirp
JD 67
6 km
Two-way Travel Time (ms)
(-4000 ms)
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
2620
2640
2660
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2720
2740
2760
2780
2800

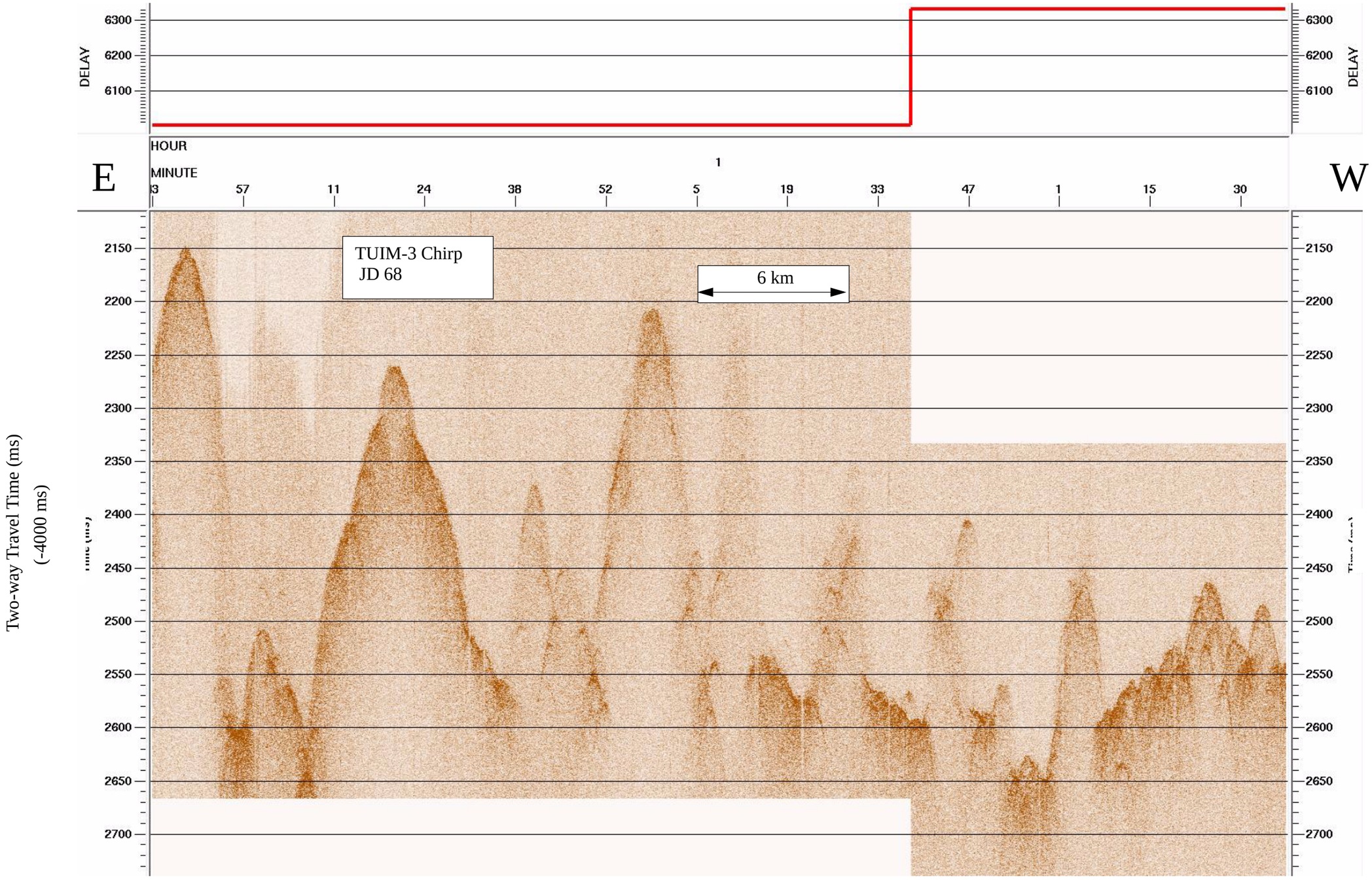

DELAY
6000
5500
HOUR
MINUTE
22
2
16
31
45
59
14
28
42
56
11
25
40
53
W
E
TUIM-3 Chirp
JD 67
6 km
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
Two-way Travel Time (ms)
(-4000 ms)

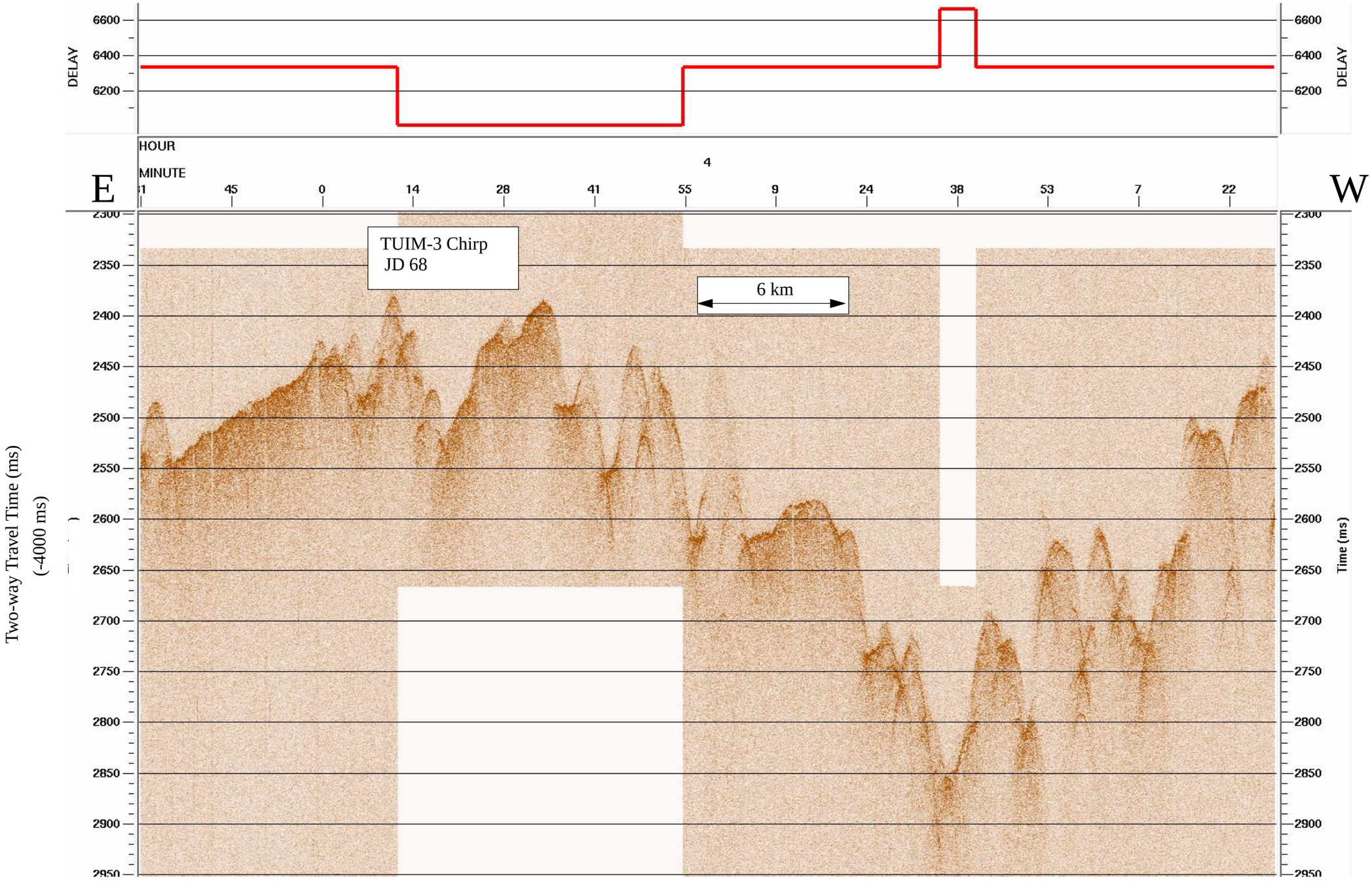
Julian Day 68
9 March 2005
Knudsen Chirp Data


Data File SBfixavg.2005mar09.0000-0600
136□ 20©W
136□ 10©W
136□ 00©W
135□ 50©W
135□ 40©W
135□ 30©W
135□ 20©W
135□ 10©W
37□ 50©S
38□ 00©S
38□ 10©S
38□ 20©S

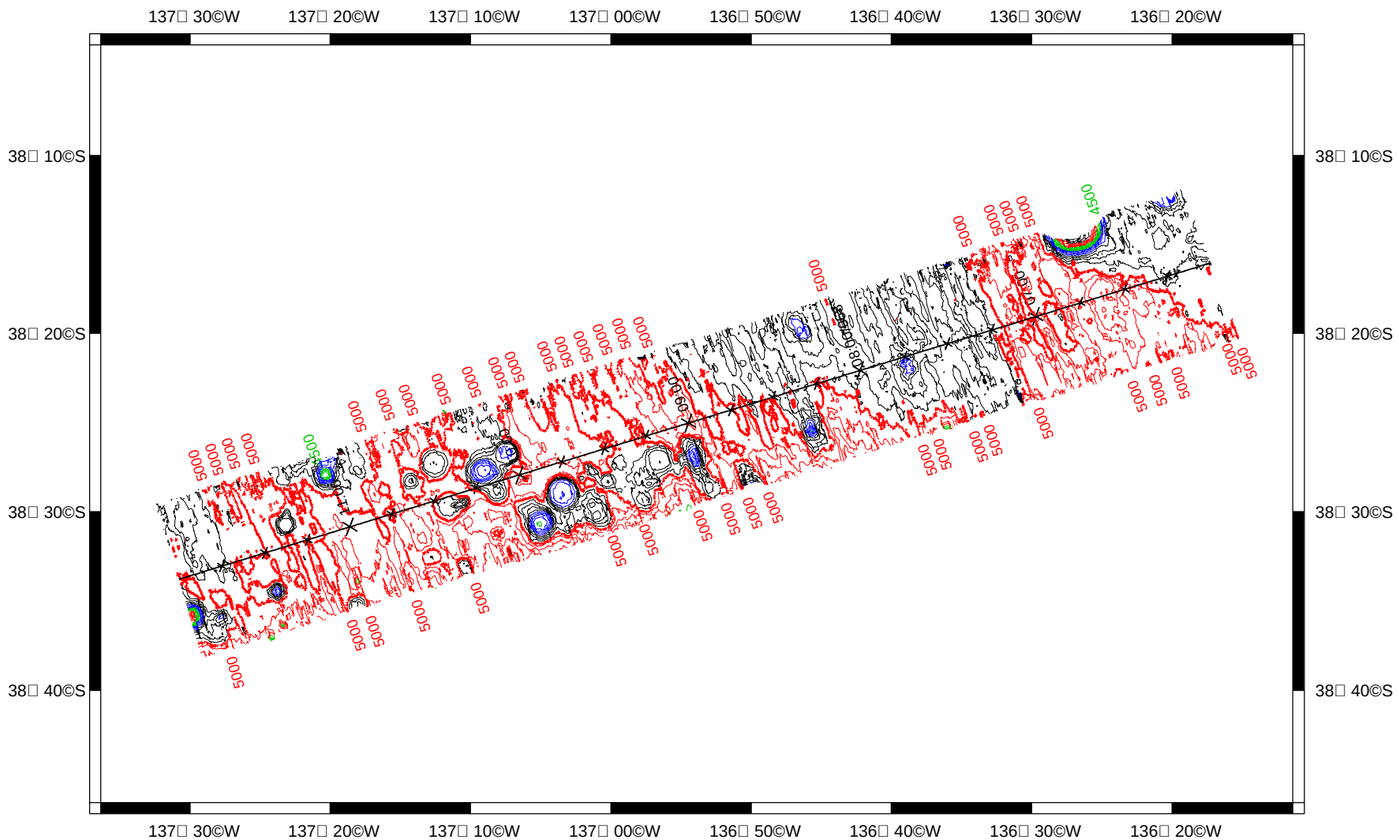

DELAY
6000
5500
HOUR
MINUTE
22
2
16
31
45
59
14
28
42
56
11
25
40
53
E
W
TUIM-3 Chirp
JD 68
6 km
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
Two-way Travel Time (ms)
(-4000 ms)

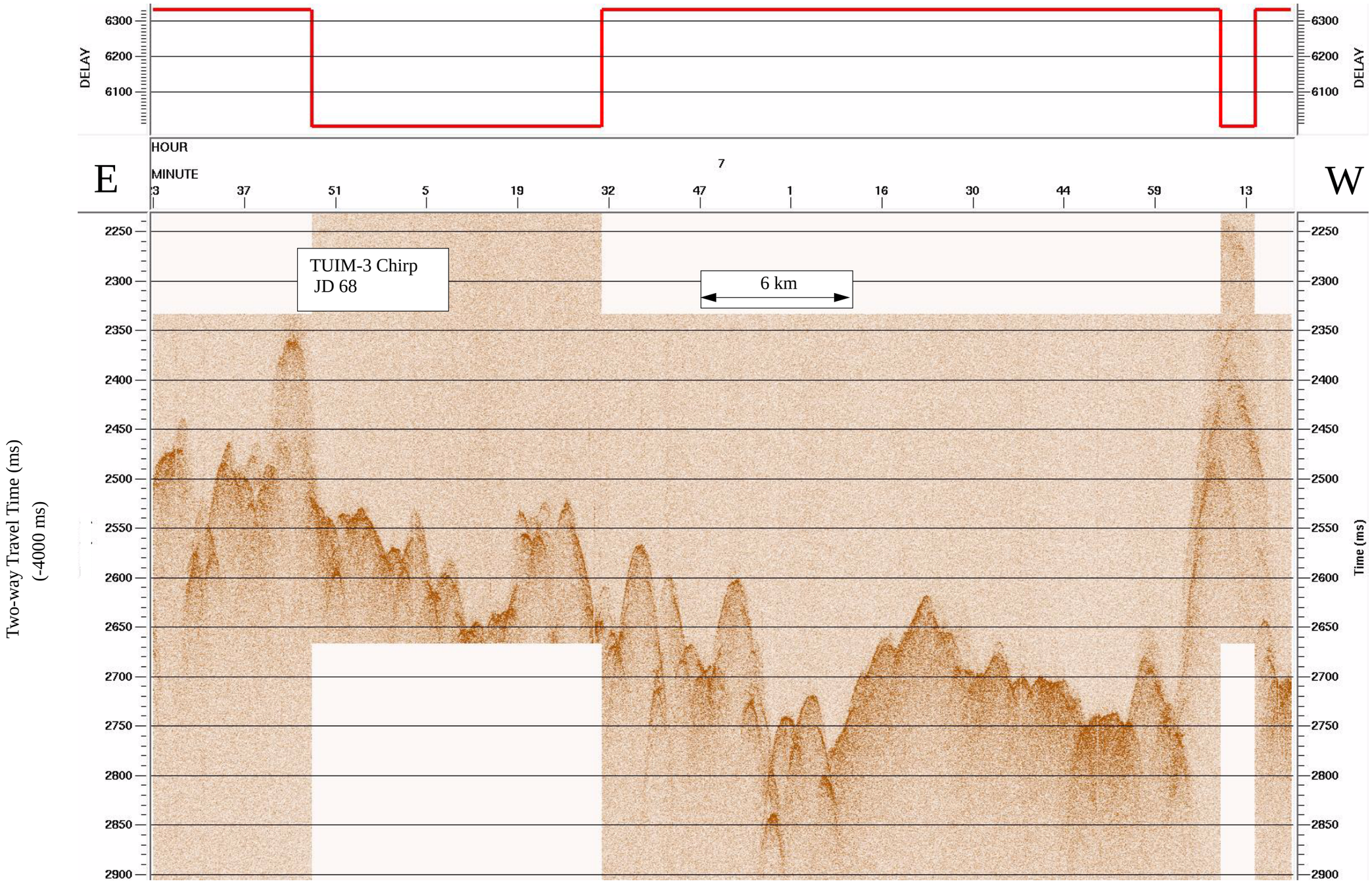

DELAY
6300
6200
6100
HOUR
MINUTE
E
W
54
1
0
8
15
23
TUIM-3 Chirp
JD 68
6 km
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
Two-way Travel Time (ms)
(-4000 ms)

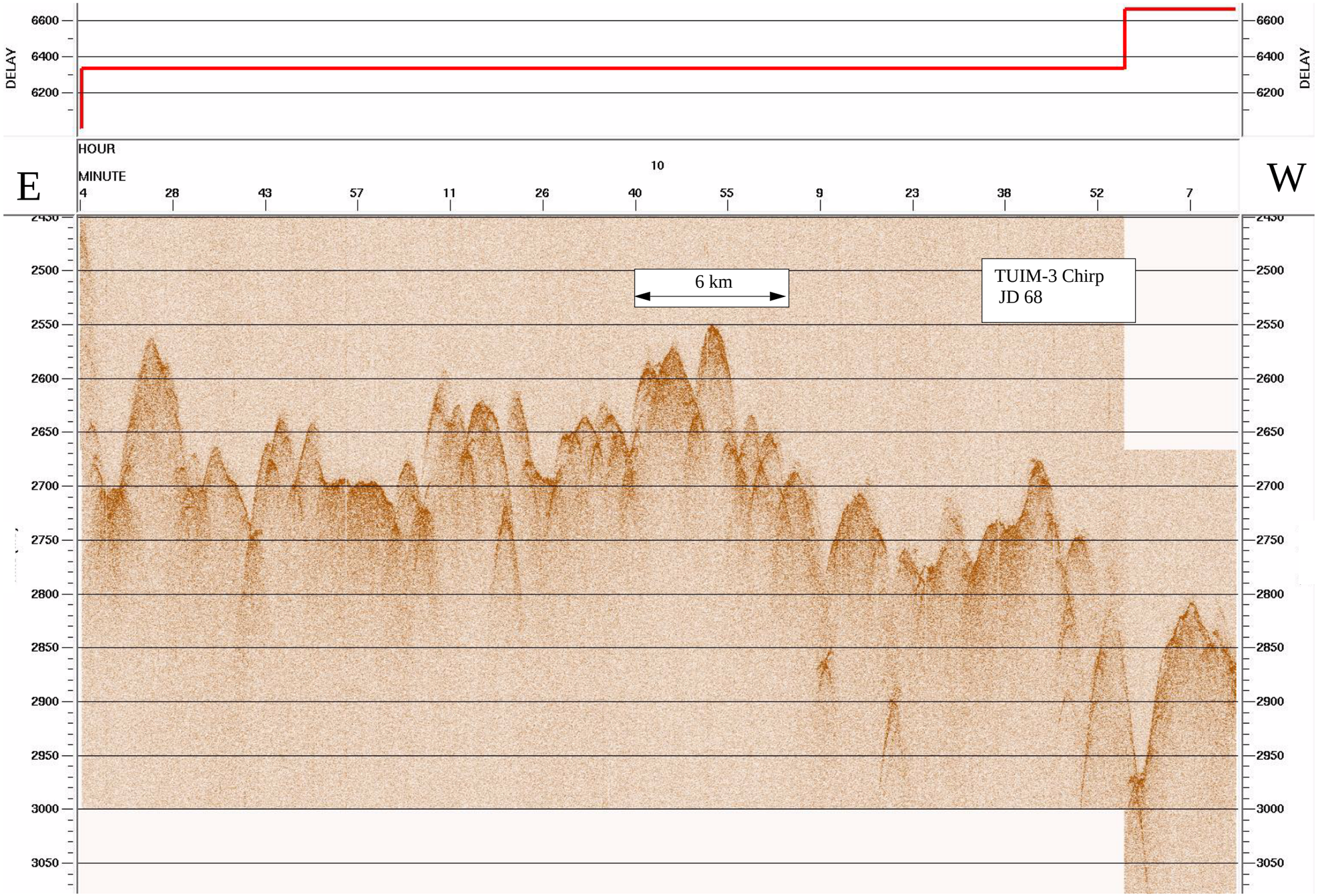

DELAY
6300
6200
6100
E
W
HOUR
MINUTE
1
3
57
11
24
38
52
5
19
33
47
1
15
30
TUIM-3 Chirp
JD 68
6 km
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6600
6400
6200
HOUR
MINUTE
4
E
W
41
45
0
14
28
41
55
9
24
38
53
7
22
TUIM-3 Chirp
JD 68
6 km
Two-way Travel Time (ms)
(-4000 ms)
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Time (ms)

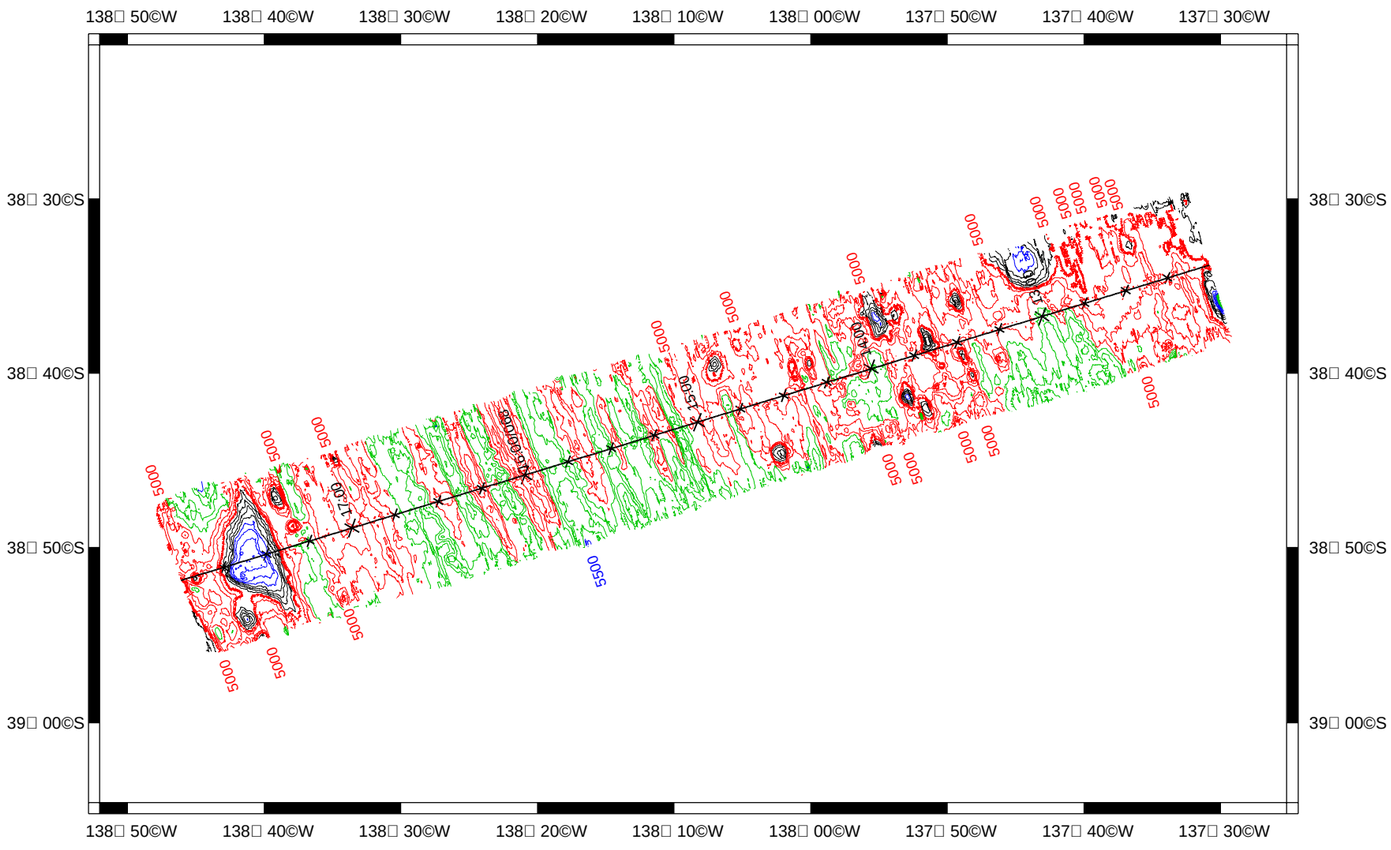
Data File SBfixavg.2005mar09.0600-1200

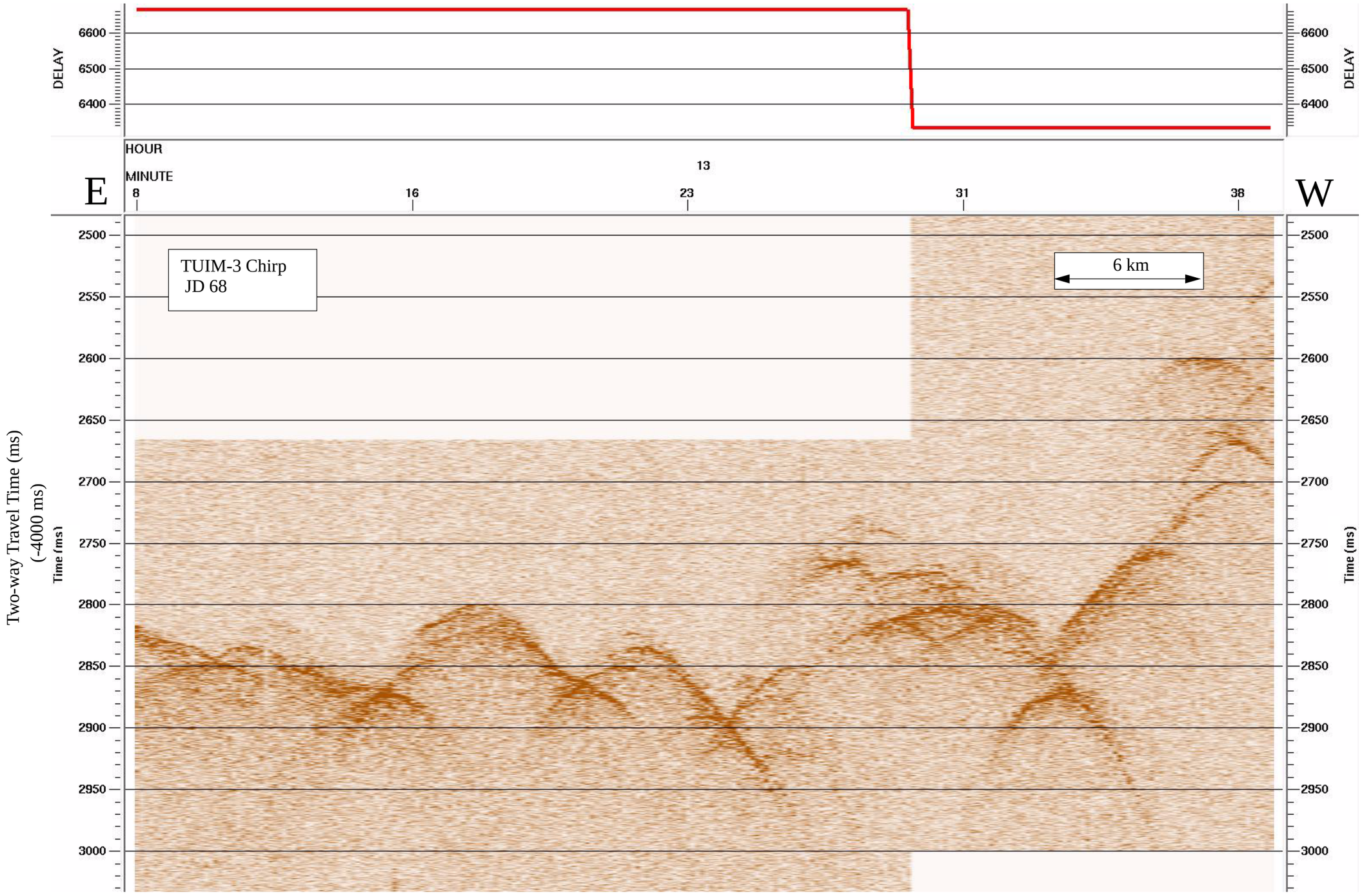


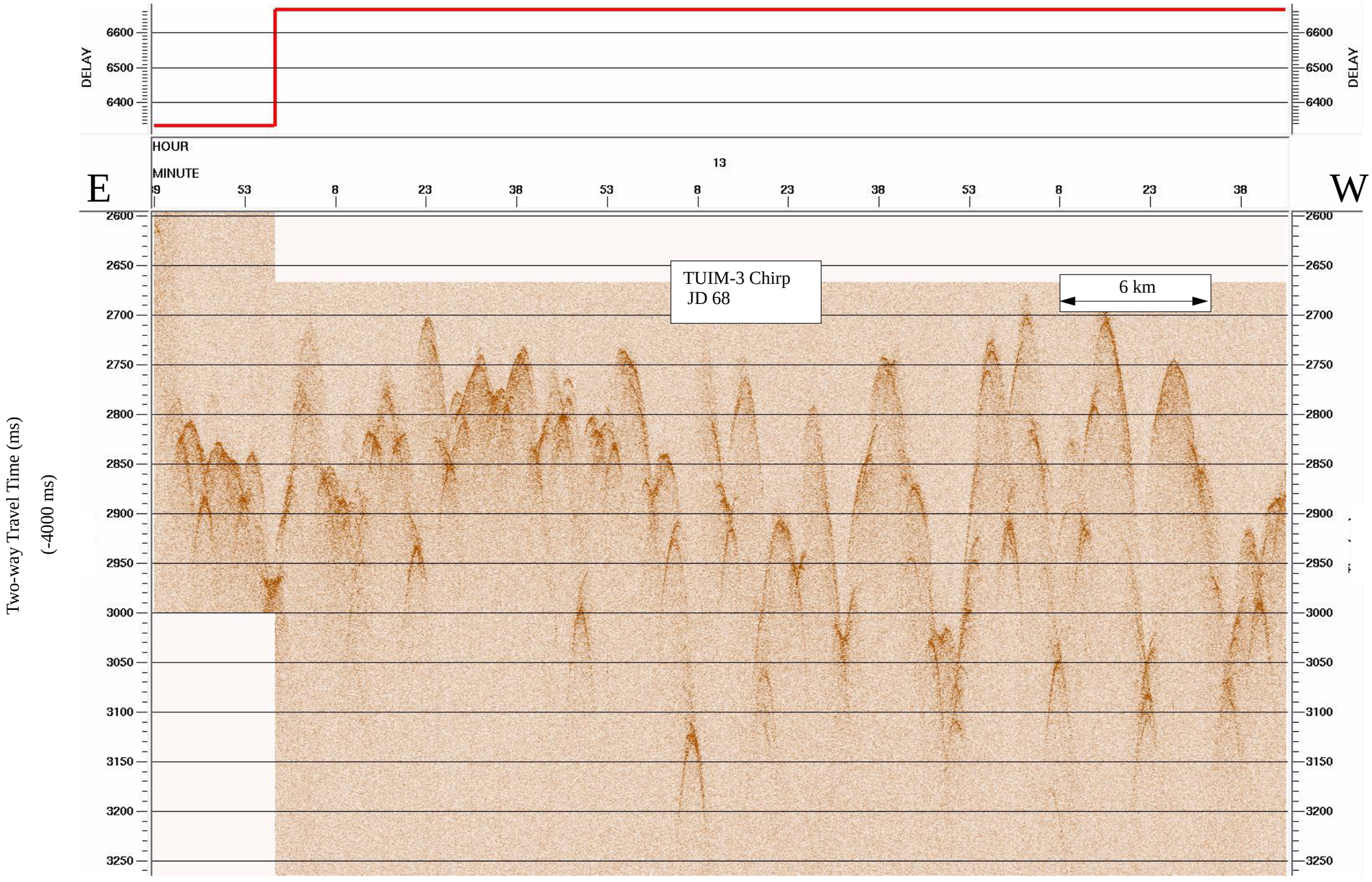

DELAY
6300
6200
6100
E
W
HOUR
7
MINUTE
3
37
51
5
19
32
47
1
16
30
44
59
13
TUIM-3 Chirp
JD 68
6 km
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6600
6400
6200
HOUR
MINUTE
10
4
28
43
57
11
26
40
55
9
23
38
52
7
E
W
6 km
TUIM-3 Chirp
JD 68
Two-way Travel Time (ms)
(-4000 ms)
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050

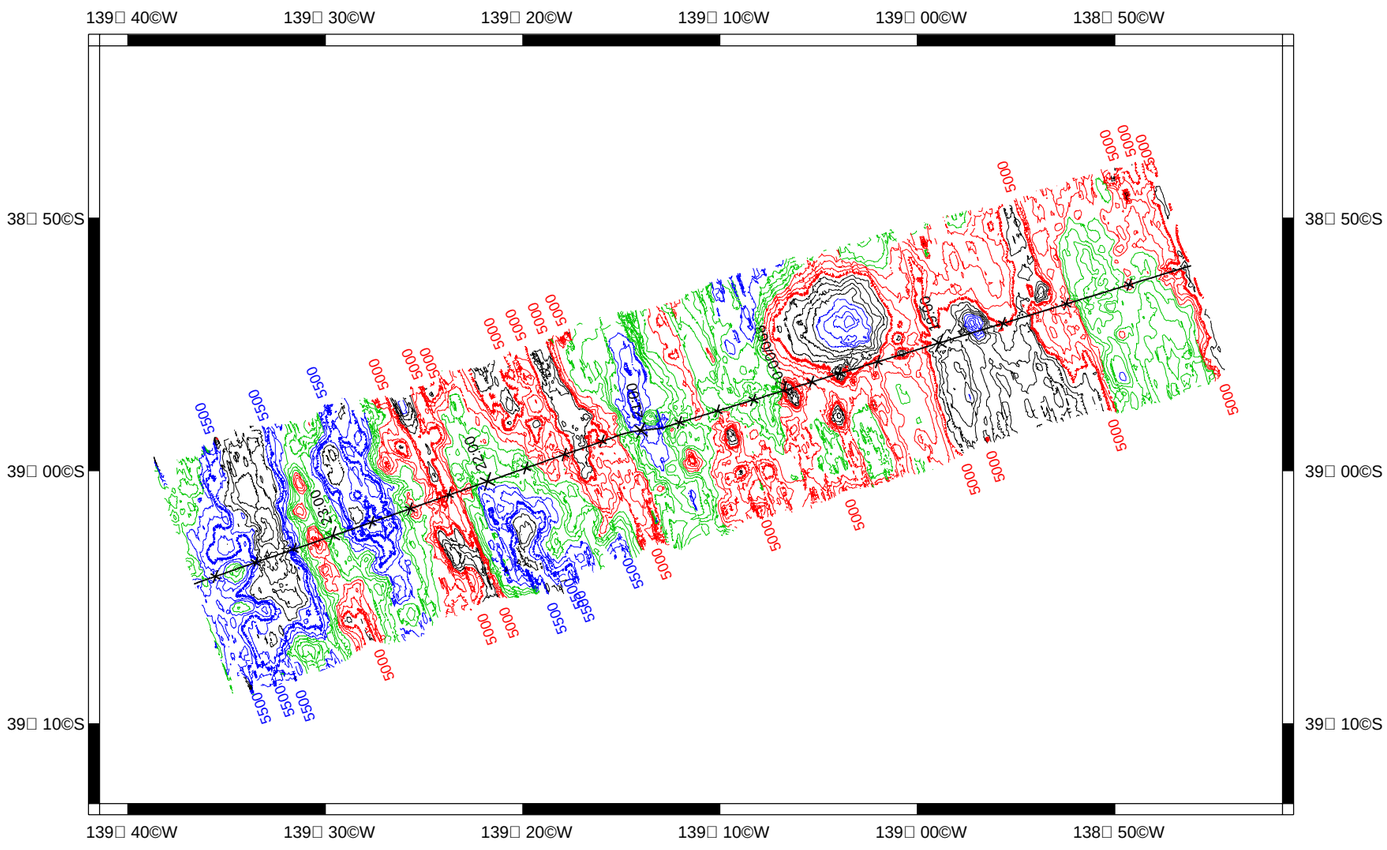
Data File SBfixavg.2005mar09.1200-1800

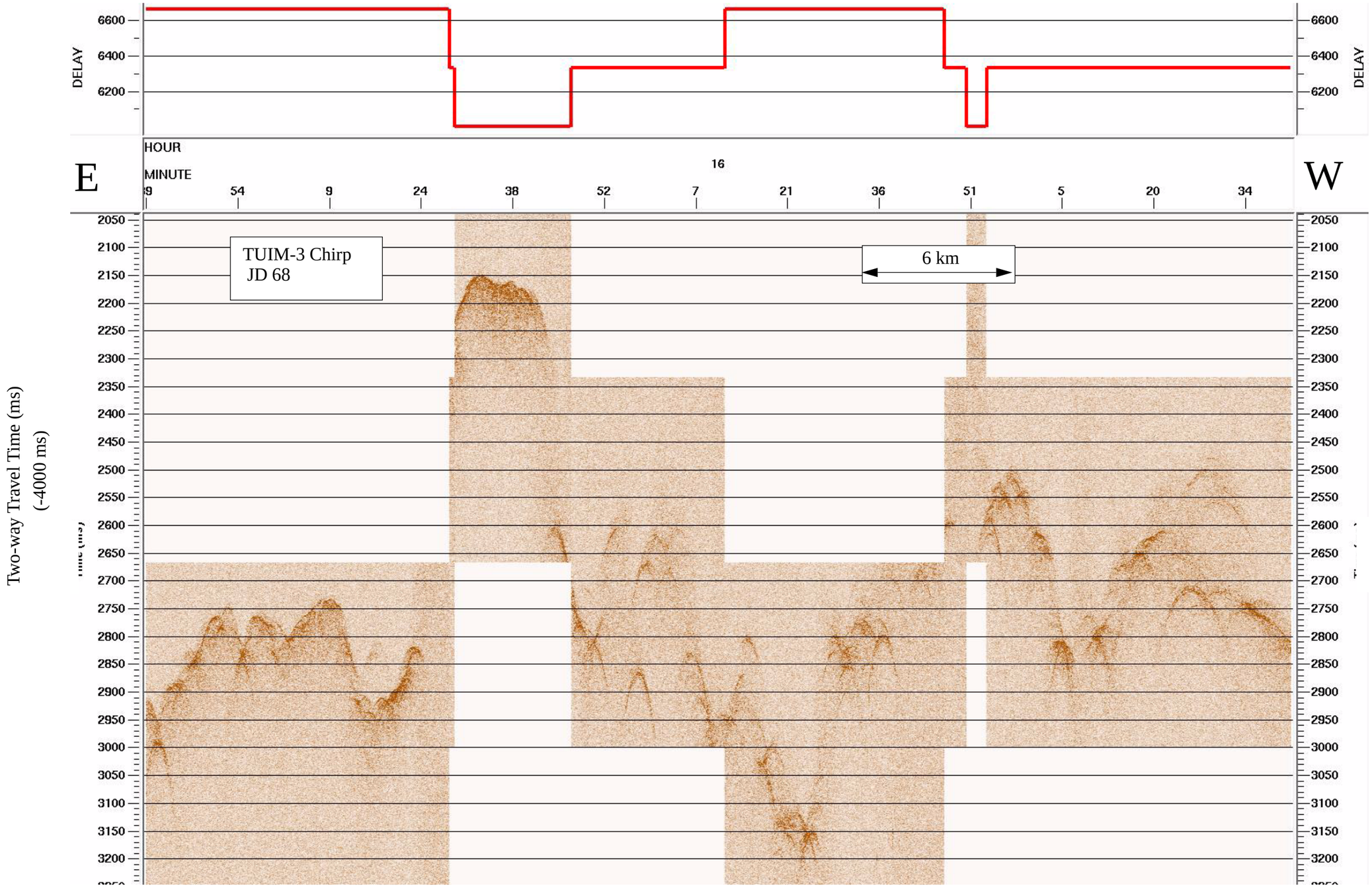


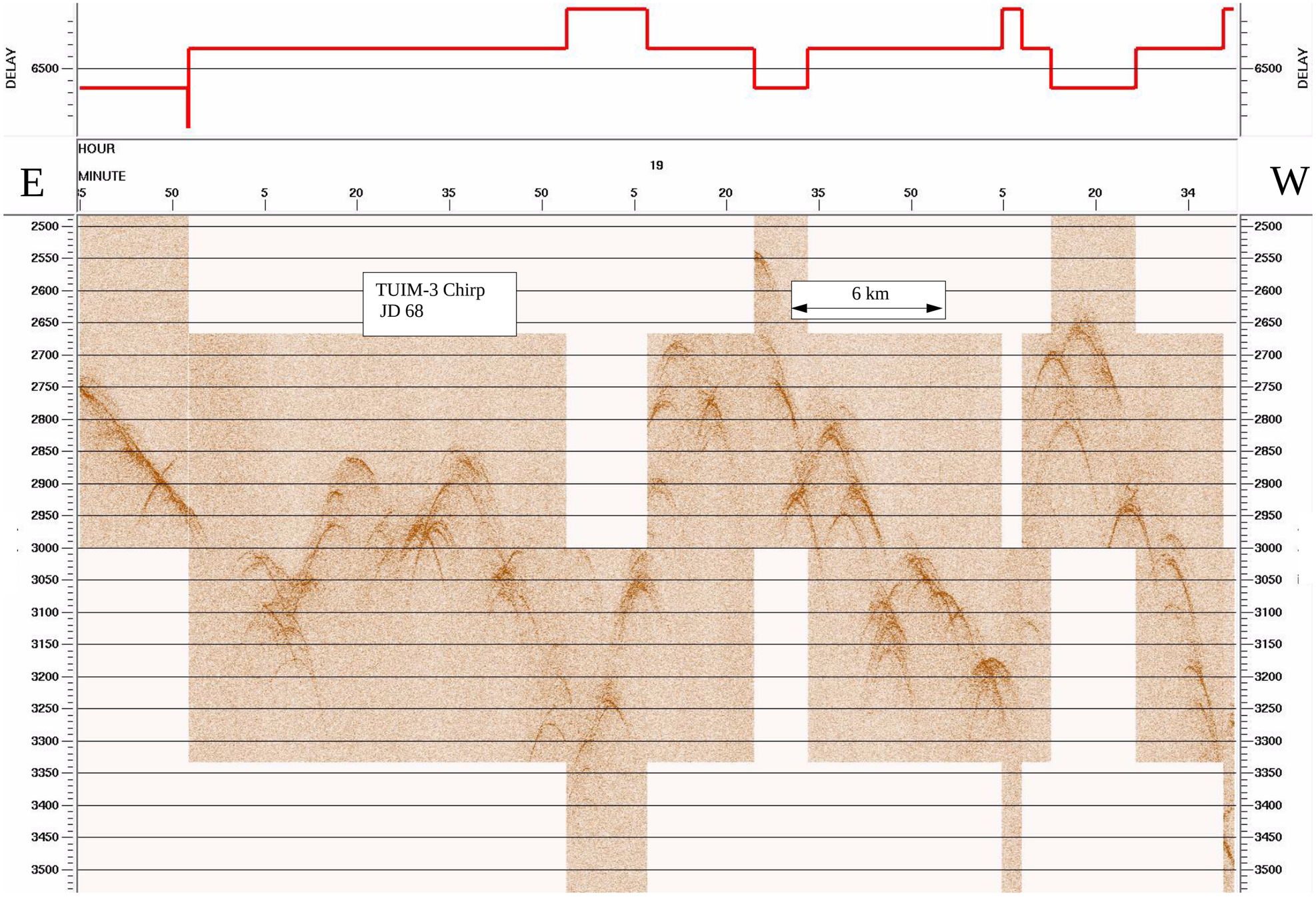

DELAY
6600
6500
6400
HOUR
MINUTE
13
E
W
8
16
23
31
38
TUIM-3 Chirp
JD 68
6 km
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
Time (ms)
Two-way Travel Time (ms)
(-4000 ms)

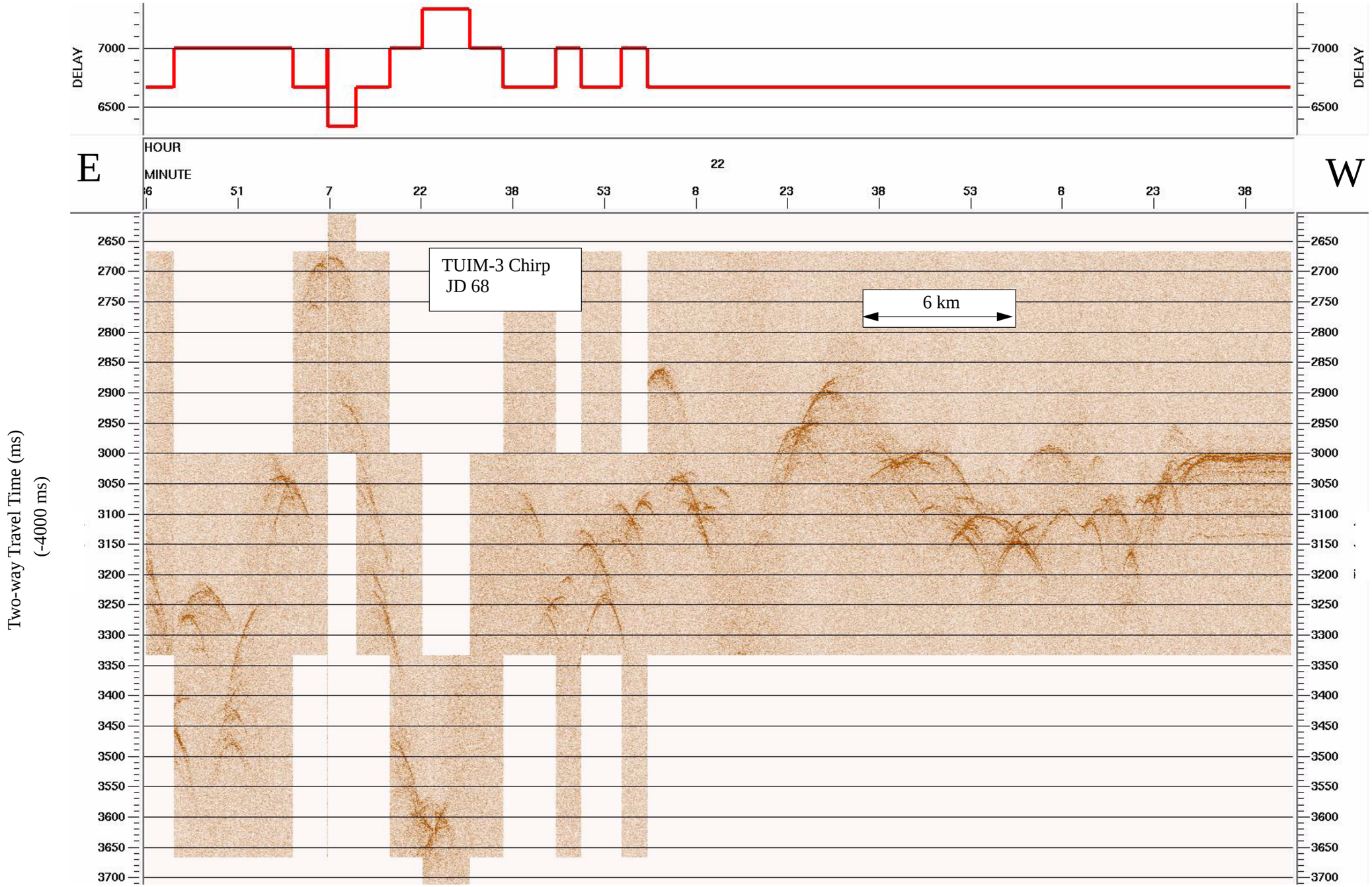

DELAY
6600
6500
6400
HOUR
MINUTE
13
9
53
8
23
38
53
8
23
38
53
8
23
38
E
W
TUIM-3 Chirp
JD 68
6 km
Two-way Travel Time (ms)
(-4000 ms)
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250

Data File SBfixavg.2005mar09.1800-2400



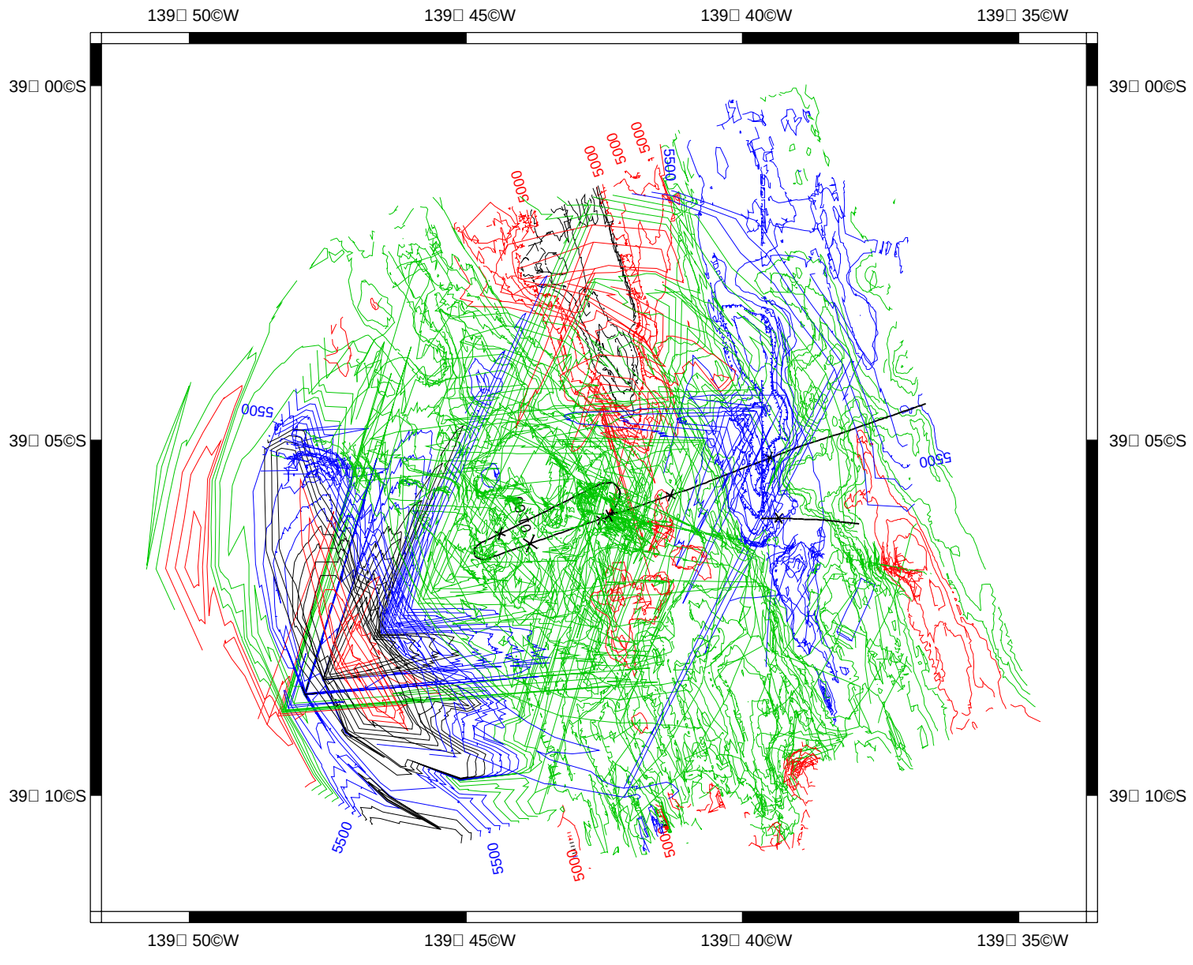

DELAY
6600
6400
6200
E
W
HOUR
16
MINUTE
54
9
24
38
52
7
21
36
51
5
20
34
TUIM-3 Chirp
JD 68
6 km
Two-way Travel Time (ms)
(-4000 ms)
2050
2100
2150
2200
2250
2300
2350
2400
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3000
3050
3100
3150
3200

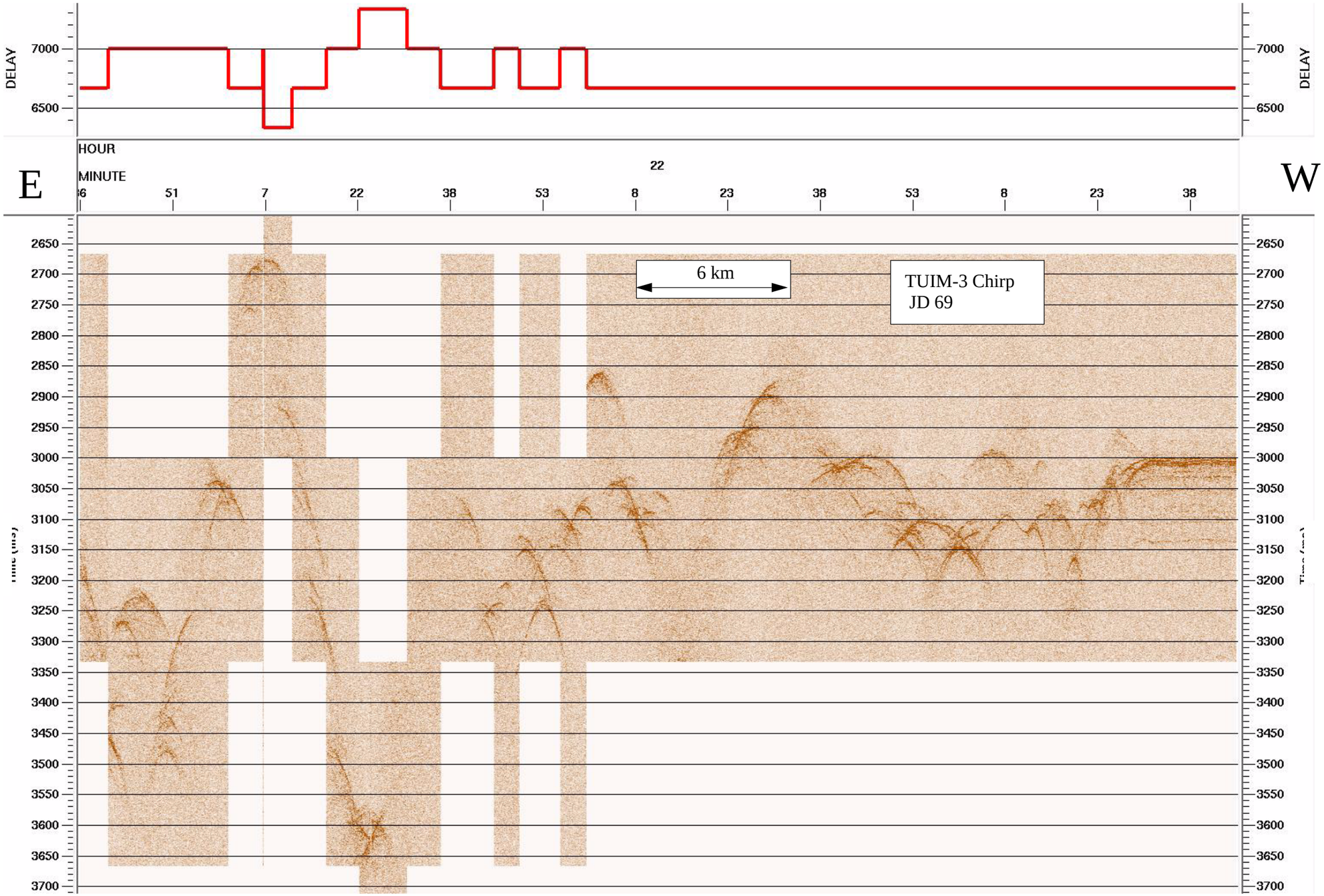

DELAY
6500
DELAY
6500
E
W
HOUR
19
MINUTE
5
50
5
20
35
50
5
20
35
50
5
20
34
TUIM-3 Chirp
JD 68
6 km
Two-way Travel Time (ms)
(-4000 ms)
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500

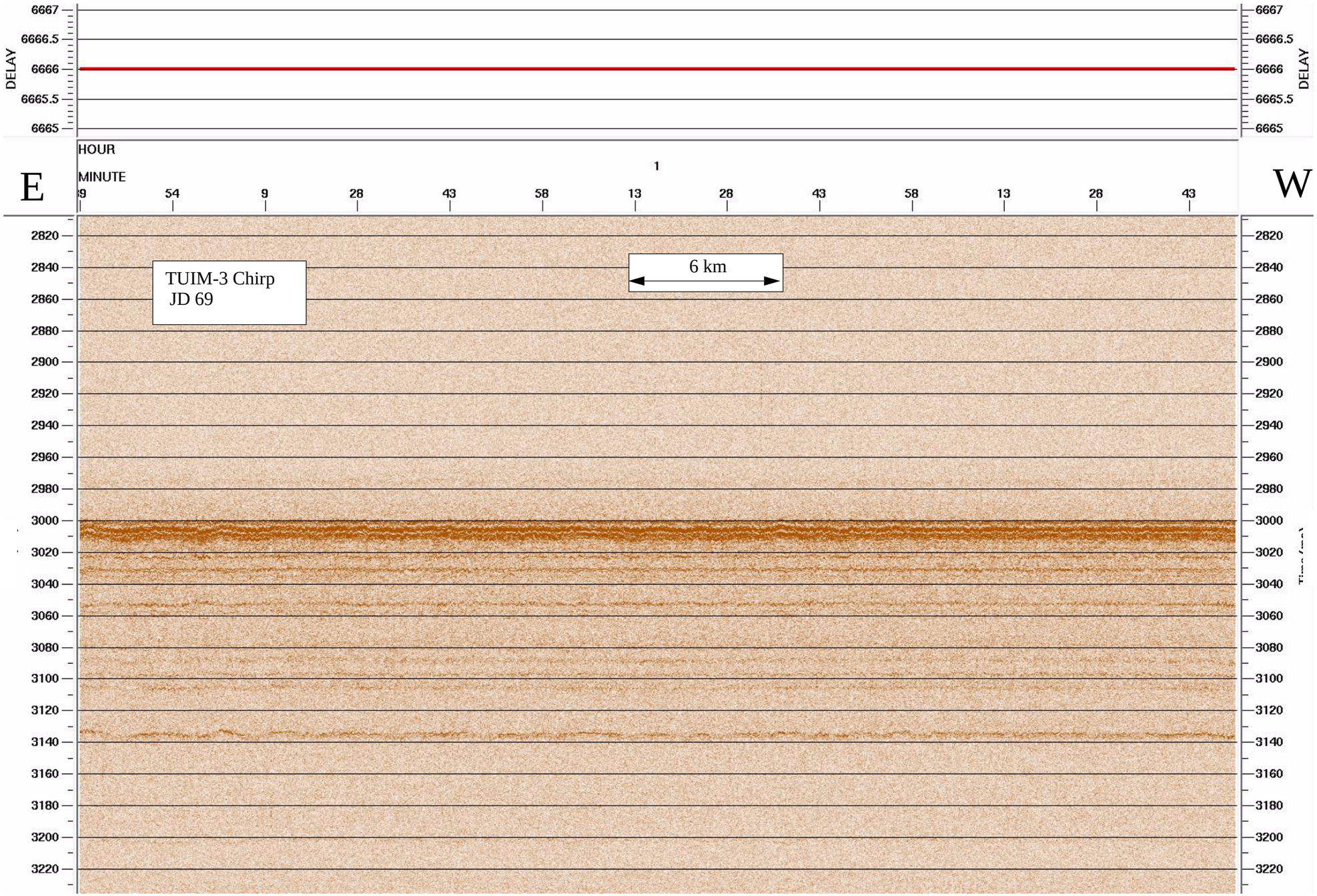

DELAY
7000
6500
E
W
HOUR
MINUTE
22
6
51
7
22
38
53
8
23
38
53
8
23
38
TUIM-3 Chirp
JD 68
6 km
Two-way Travel Time (ms)
(-4000 ms)
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700

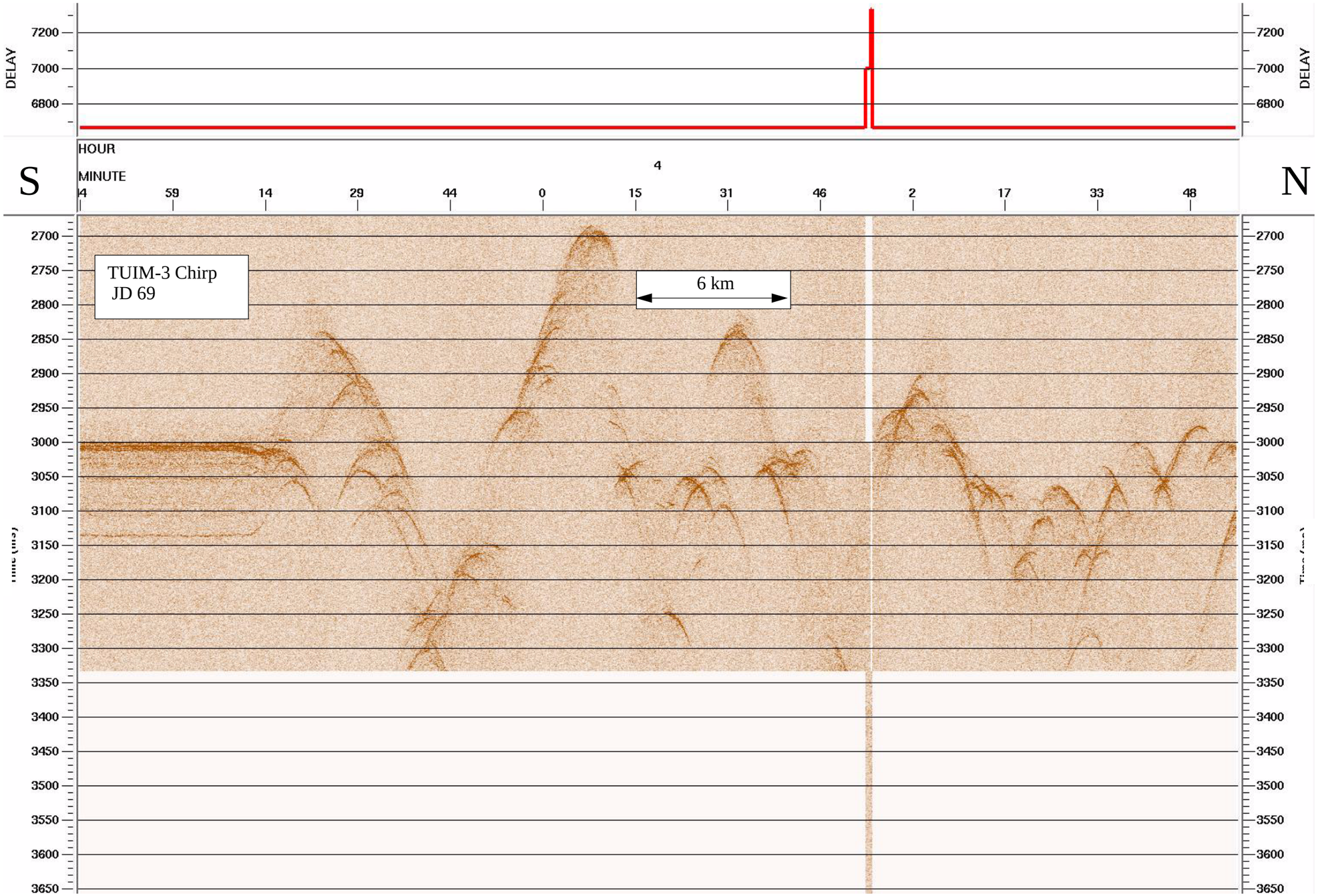
Julian Day 69
10 March 2005
Knudsen Chirp Data

Data File SBfixavg.2005mar10.0000-0600

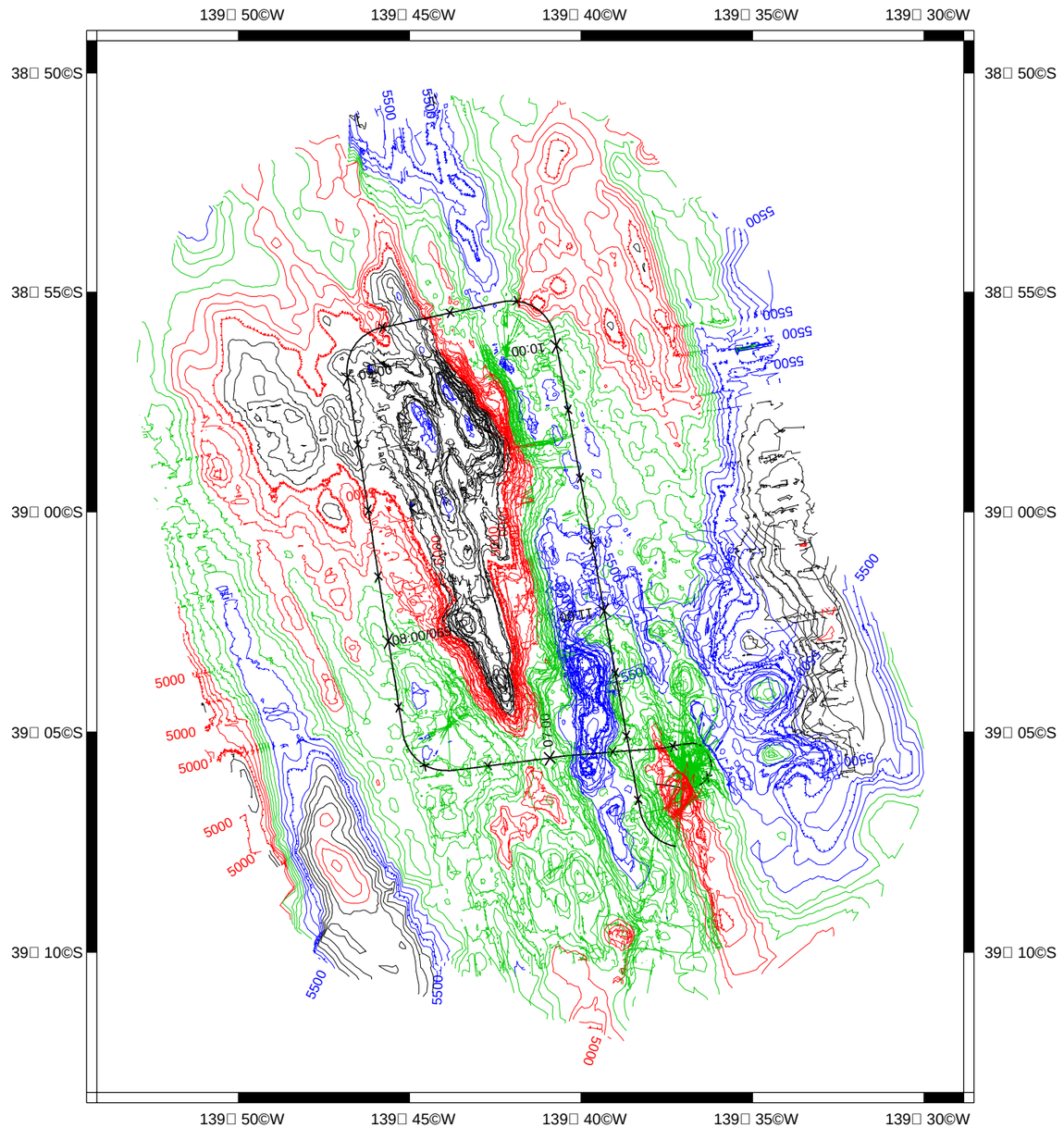


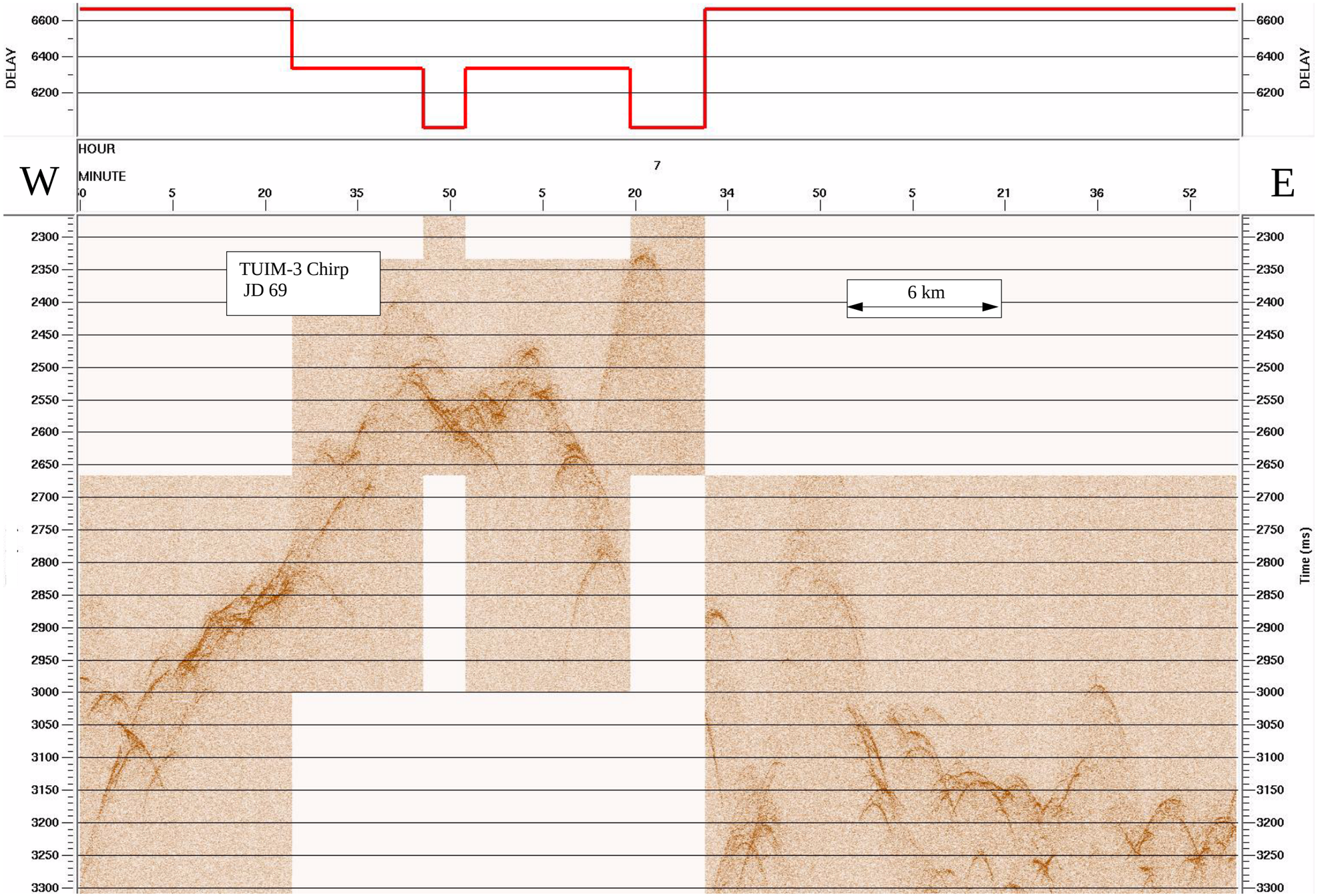

DELAY
7000
6500
HOUR
MINUTE
22
E
W
51
7
22
38
53
8
23
38
53
8
23
38
6 km
TUIM-3 Chirp
JD 69
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700
Two-way Travel Time (ms)
(-4000 ms)

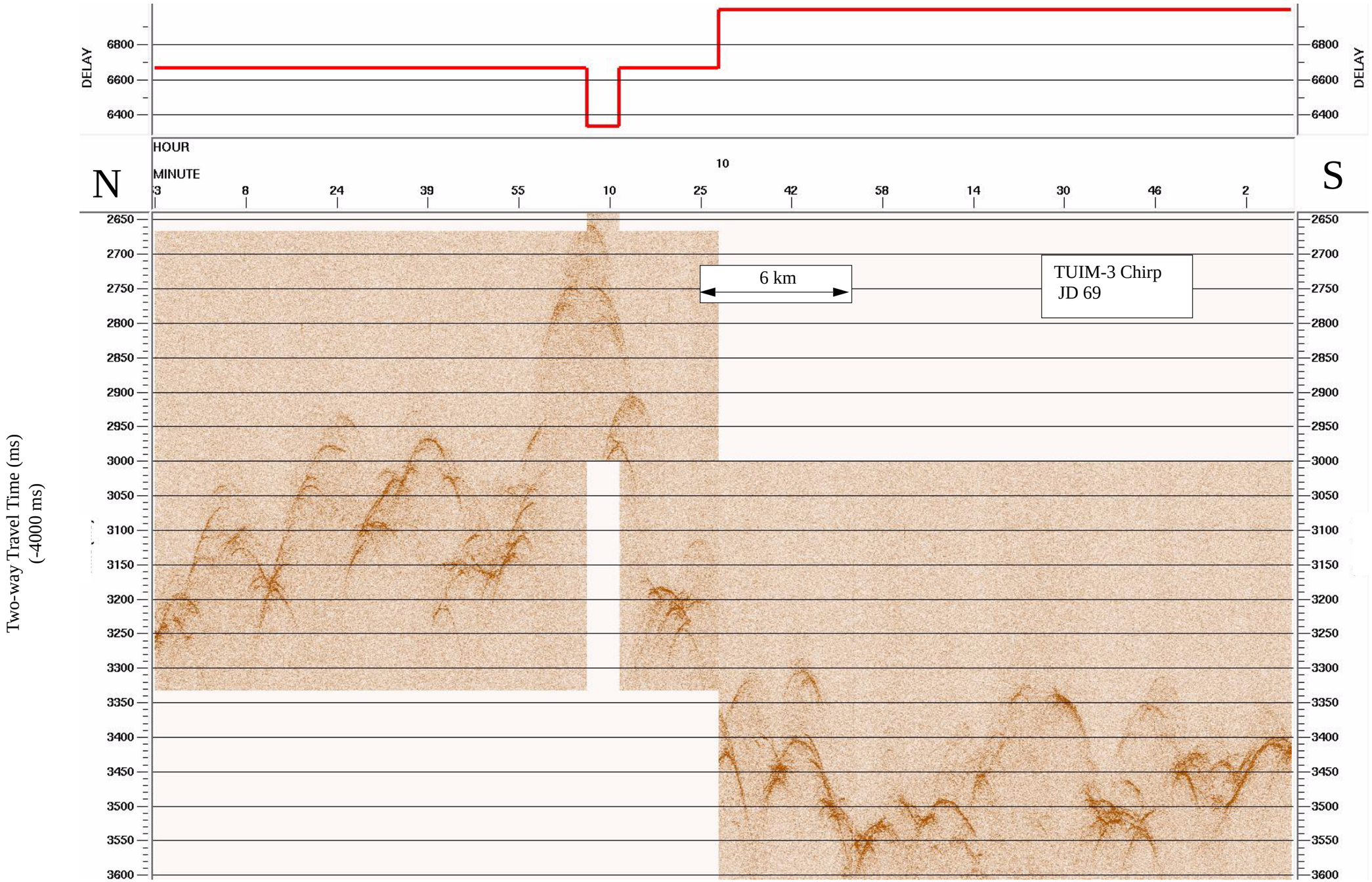

DELAY
6667
6666.5
6666
6665.5
6665
HOUR
MINUTE
1
9
54
9
28
43
58
13
28
43
58
13
28
43
E
W
TUIM-3 Chirp
JD 69
6 km
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
3140
3160
3180
3200
3220
Two-way Travel Time (ms)
(-4000 ms)


DELAY
7200
7000
6800
S
N
HOUR
4
MINUTE
4
59
14
29
44
0
15
31
46
2
17
33
48
TUIM-3 Chirp
JD 69
6 km
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
Two-way Travel Time (ms)
(-4000 ms)

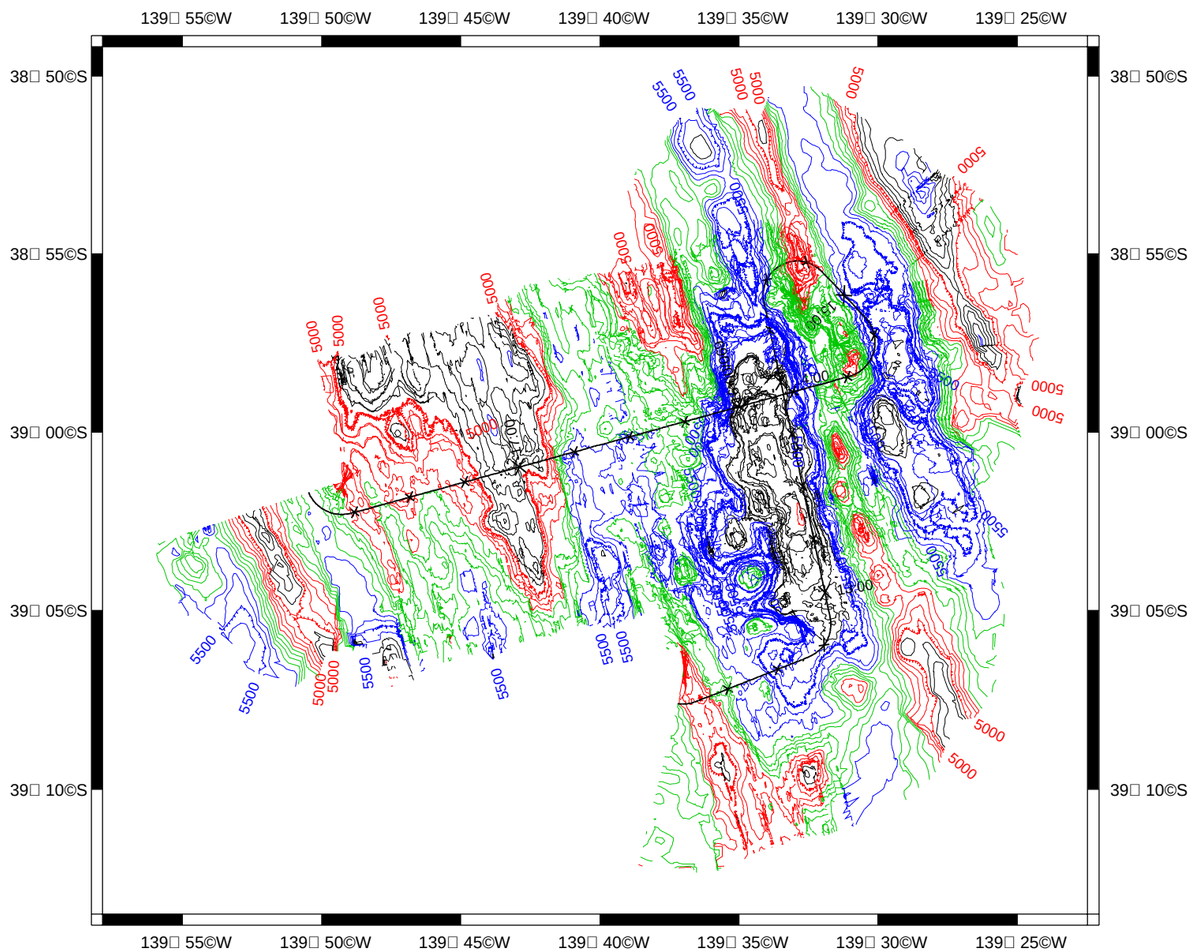
Data File SBfixavg.2005mar10.0600-1200

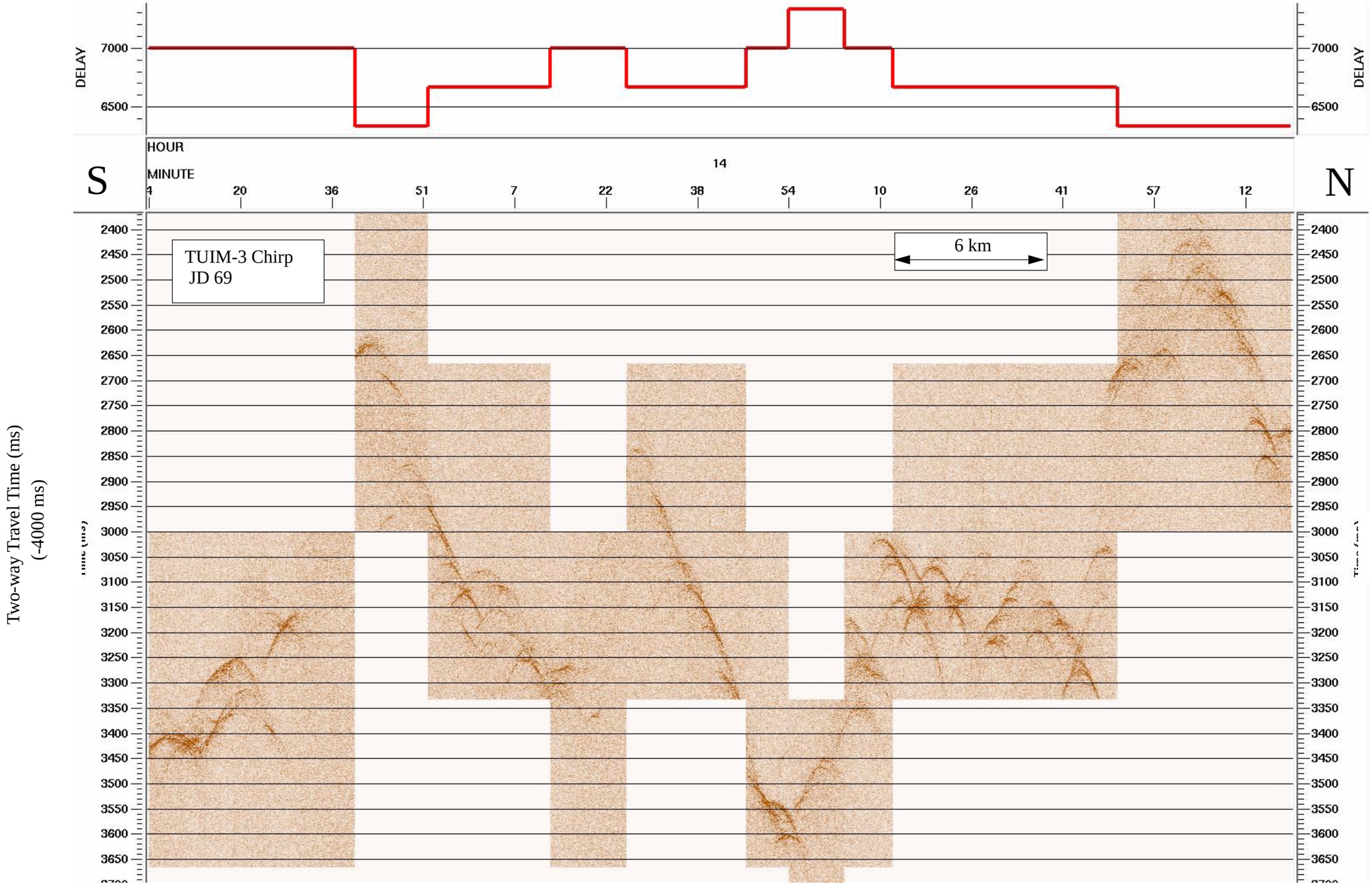


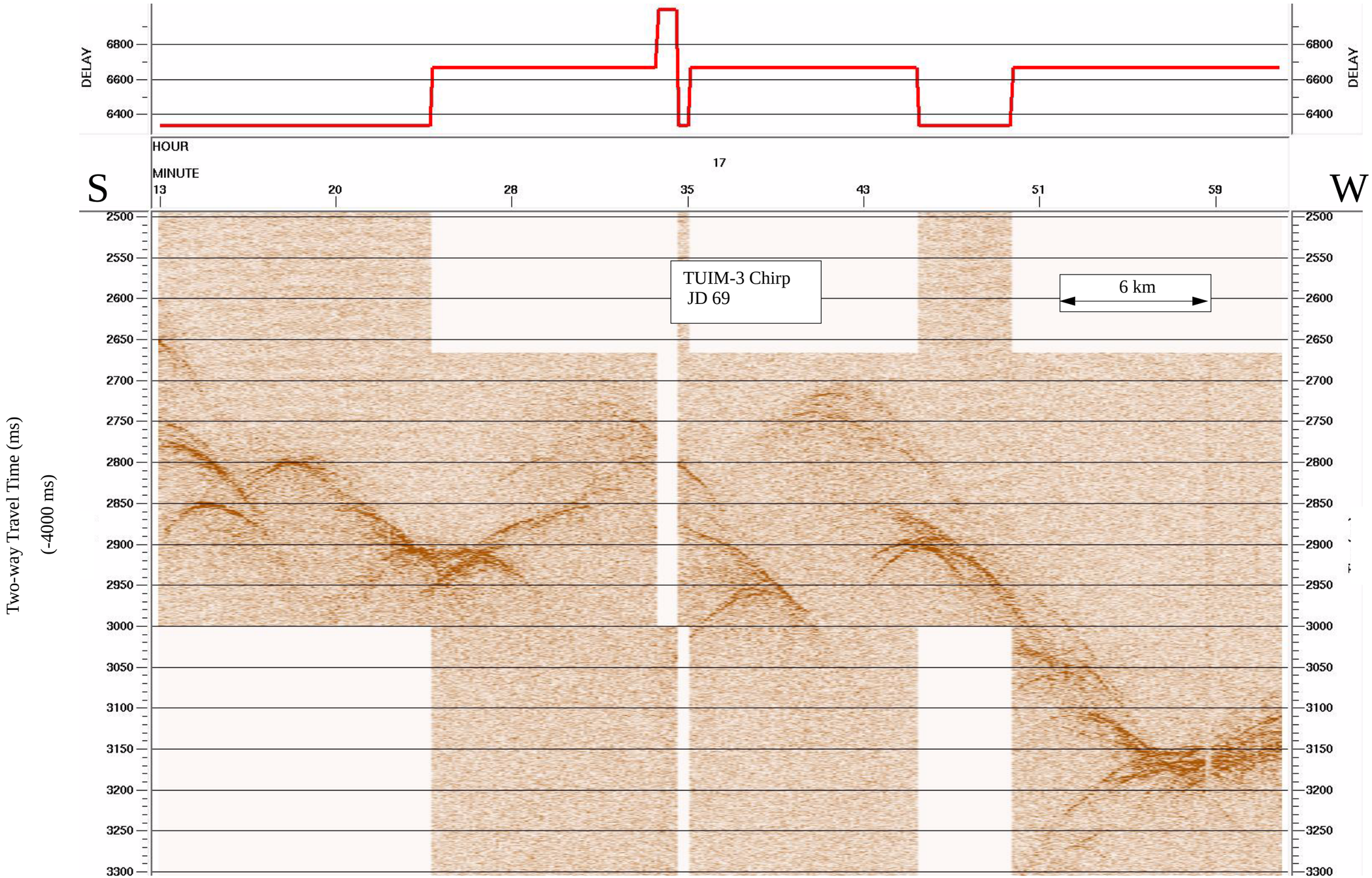

DELAY
6600
6400
6200
W
HOUR
MINUTE
7
0
5
20
35
50
5
20
34
50
5
21
36
52
E
TUIM-3 Chirp
JD 69
6 km
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6800
6600
6400
HOUR
MINUTE
10
N
S
3
8
24
39
55
10
25
42
58
14
30
46
2
6 km
TUIM-3 Chirp
JD 69
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600
Two-way Travel Time (ms)
(-4000 ms)

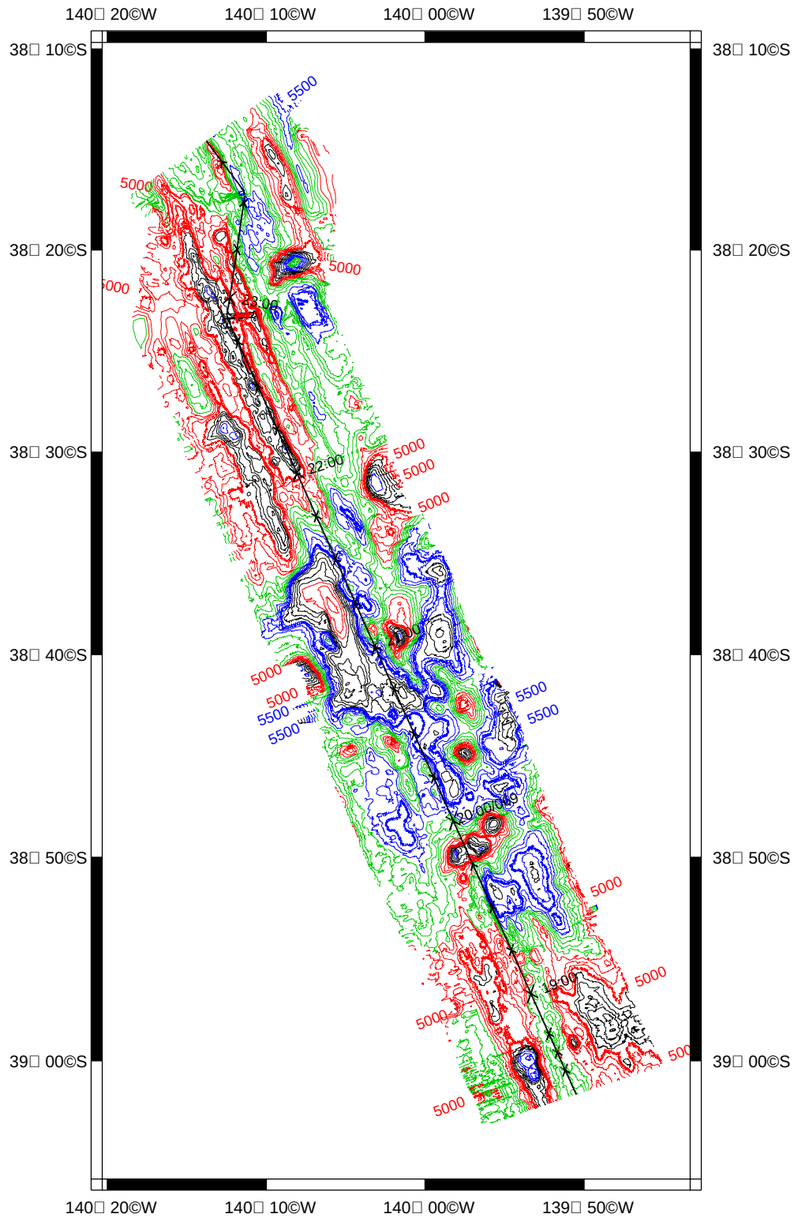
Data File SBfixavg.2005mar10.1200-1800

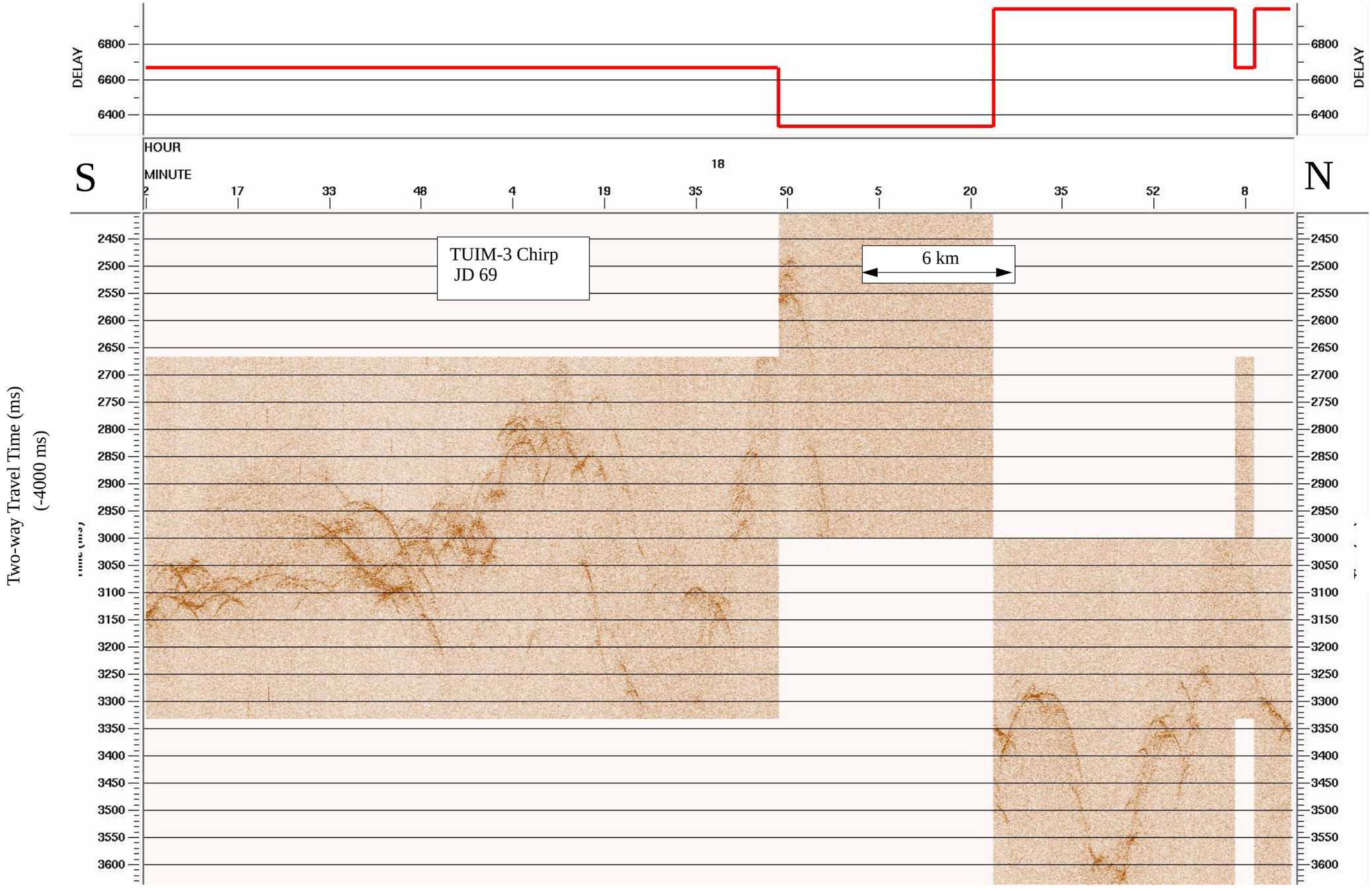


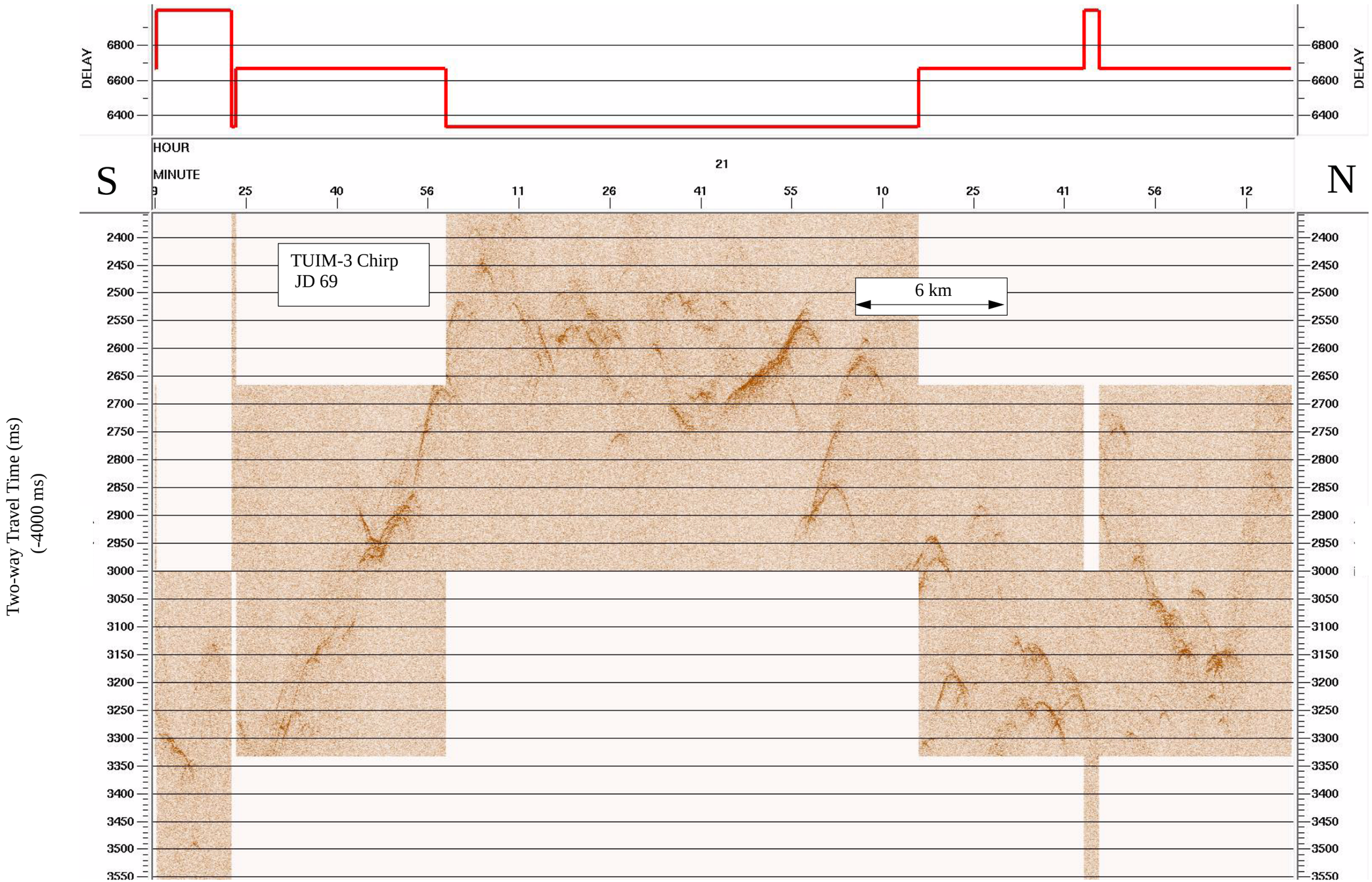

DELAY
7000
6500
HOUR
14
MINUTE
4
20
36
51
7
22
38
54
10
26
41
57
12
S
N
TUIM-3 Chirp
JD 69
6 km
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6800
6600
6400
HOUR
17
MINUTE
13
20
28
35
43
51
59
S
W
TUIM-3 Chirp
JD 69
6 km
Two-way Travel Time (ms)
(-4000 ms)
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300

Data File SBfixavg.2005mar10.1800-2400

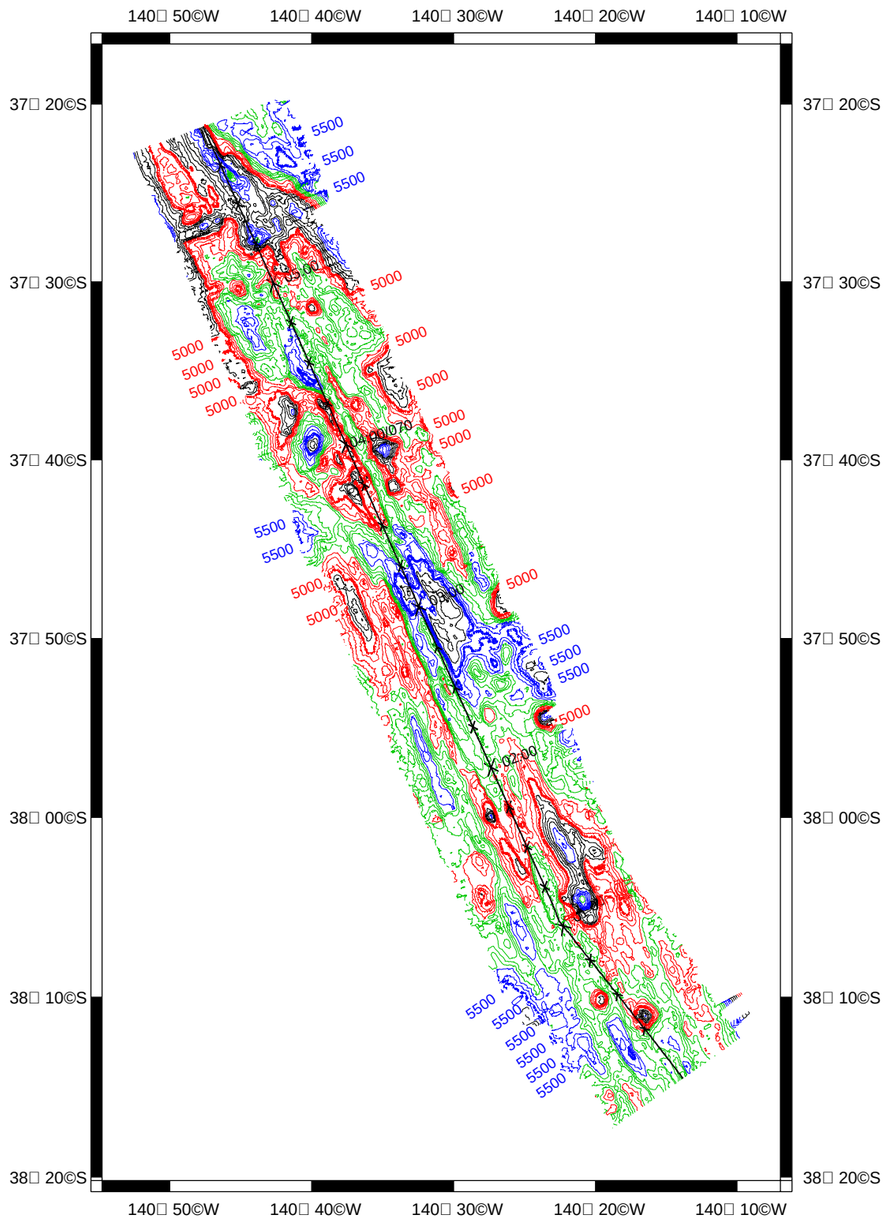


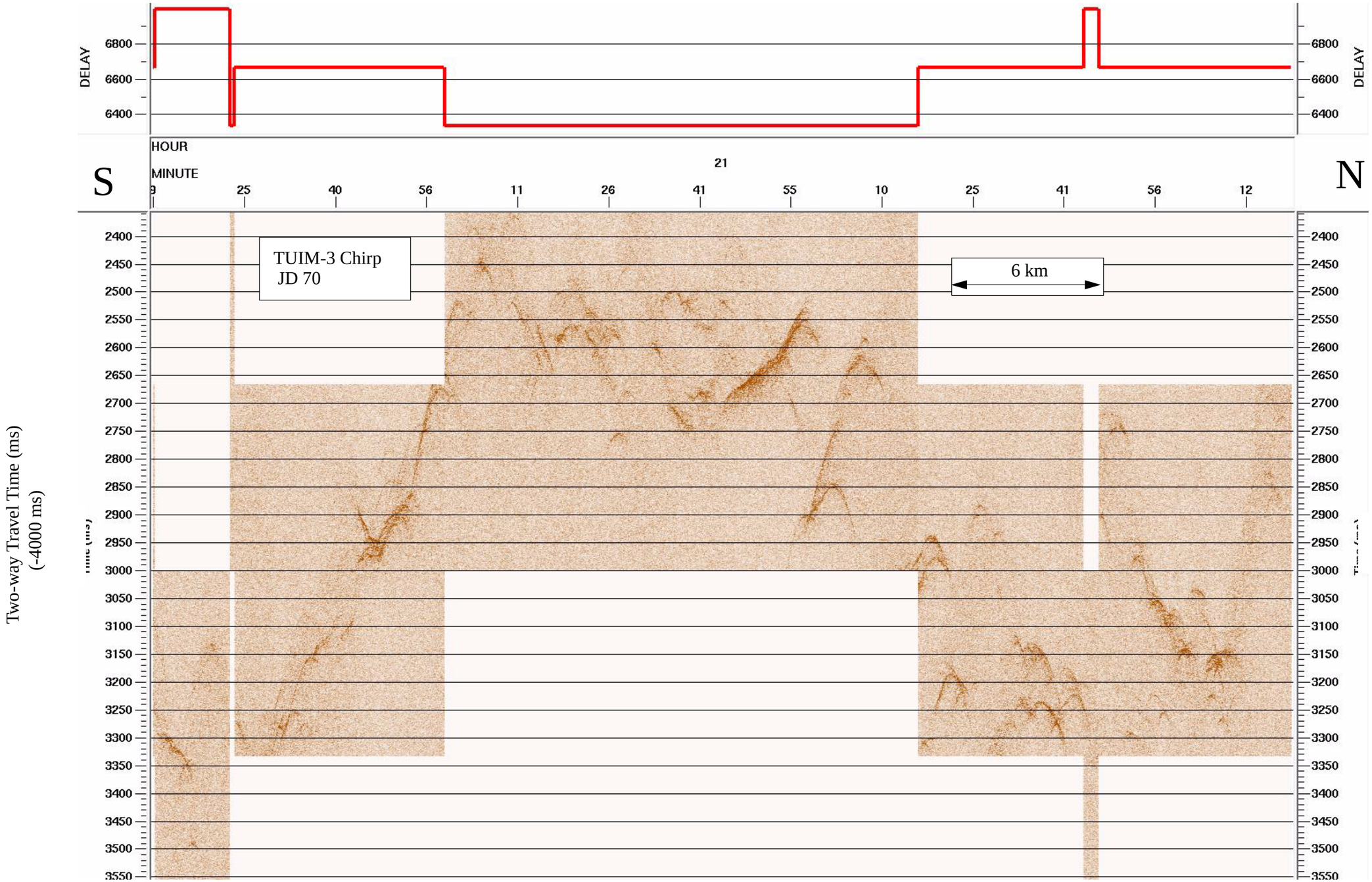

DELAY
6800
6600
6400
HOUR
MINUTE
18
2
17
33
48
4
19
35
50
5
20
35
52
8
S
N
TUIM-3 Chirp
JD 69
6 km
Two-way Travel Time (ms)
(-4000 ms)
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600

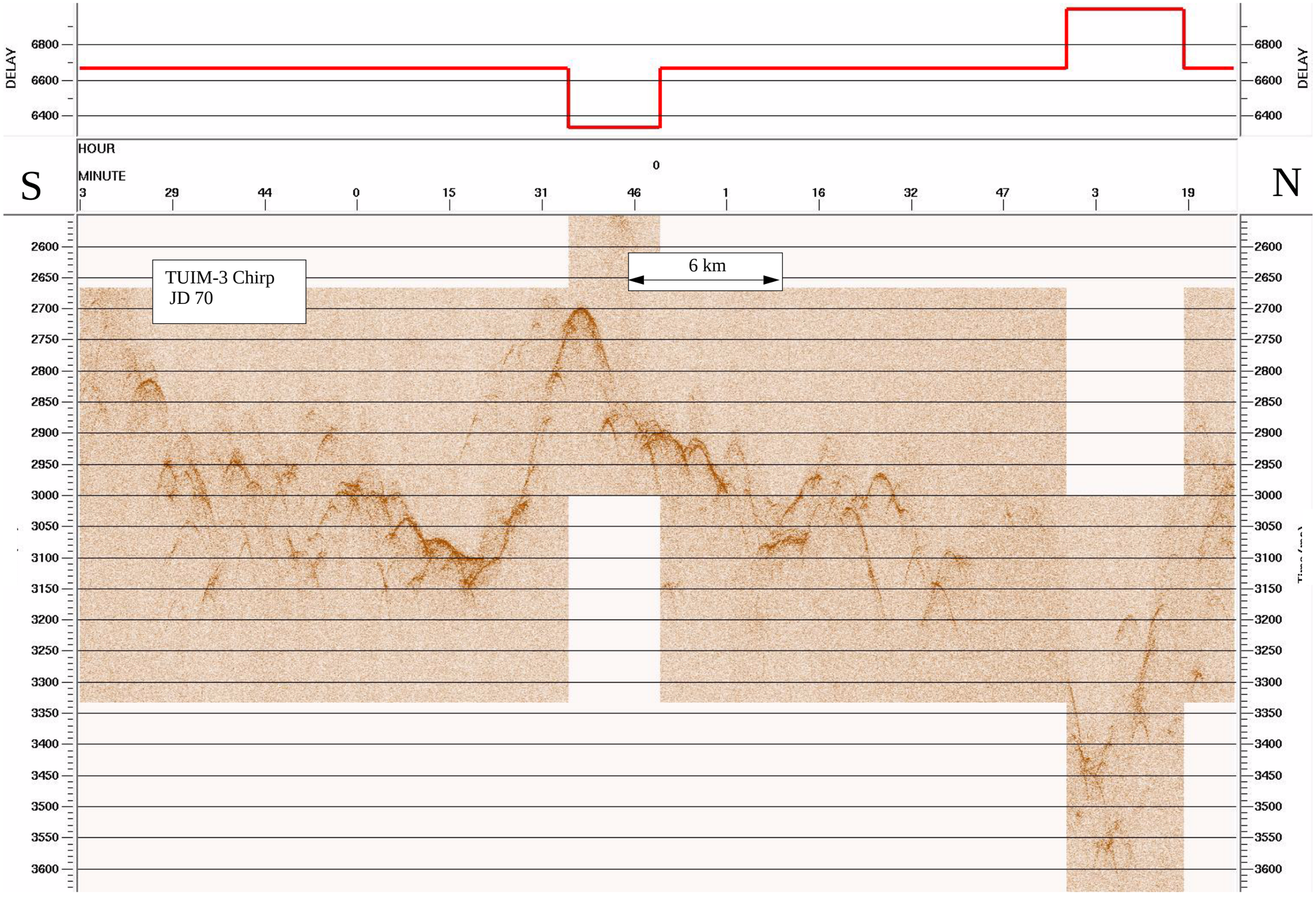

DELAY
6800
6600
6400
HOUR
MINUTE
21
S
N
9
25
40
56
11
26
41
55
10
25
41
56
12
TUIM-3 Chirp
JD 69
6 km
Two-way Travel Time (ms)
(-4000 ms)
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
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3300
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3400
3450
3500
3550

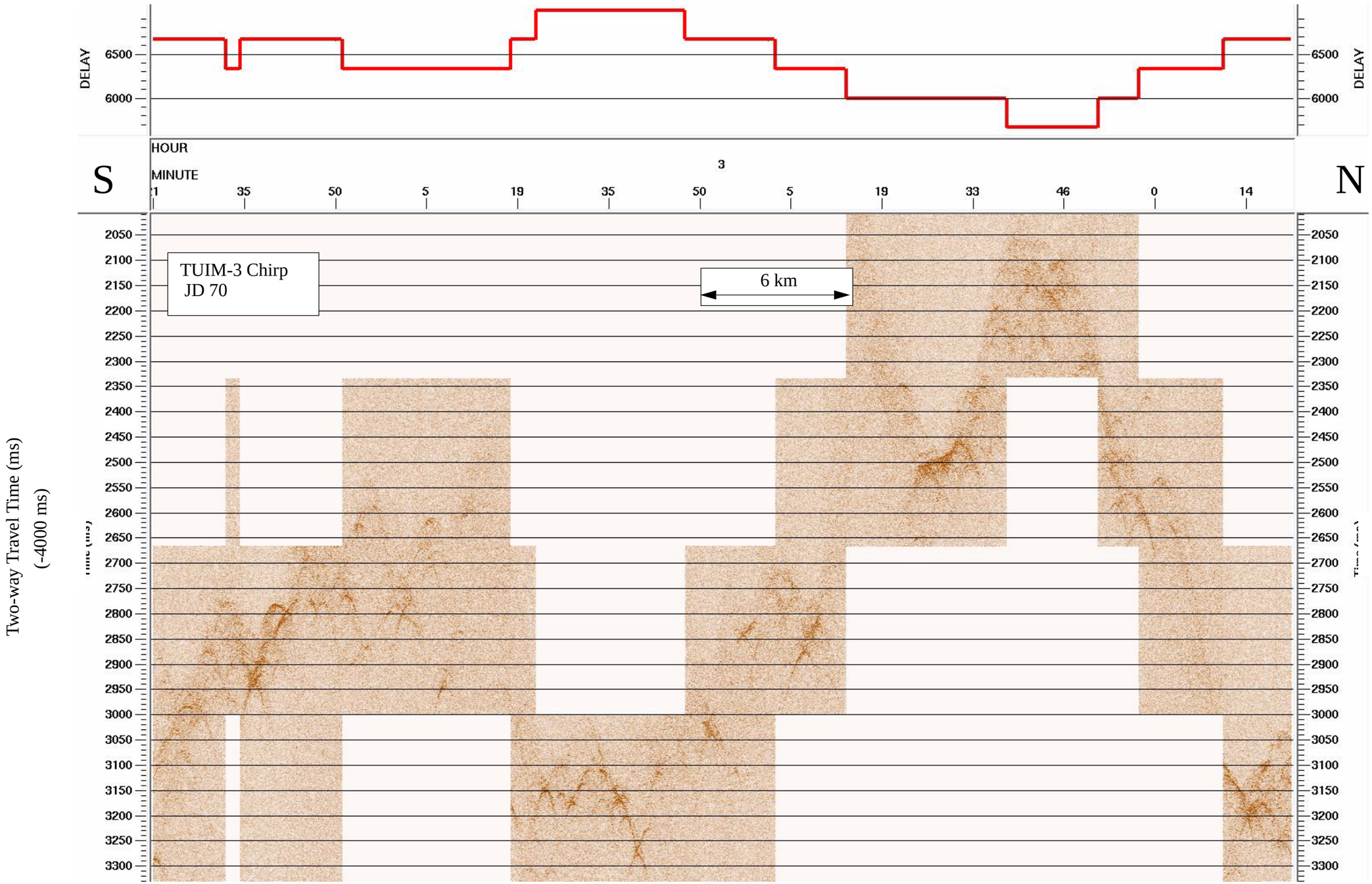
Julian Day 70
11 March 2005
Knudsen Chirp Data

Data File SBfixavg.2005mar11.0000-0600

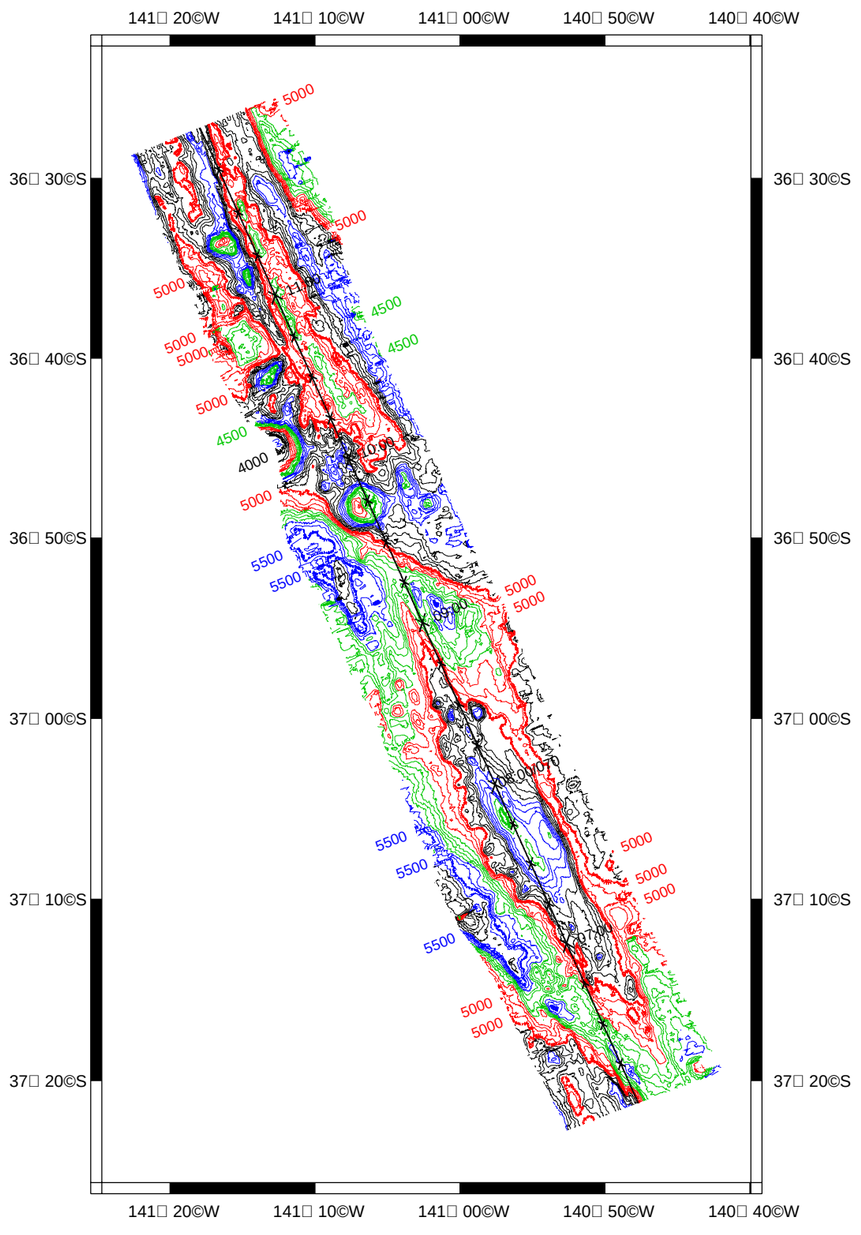


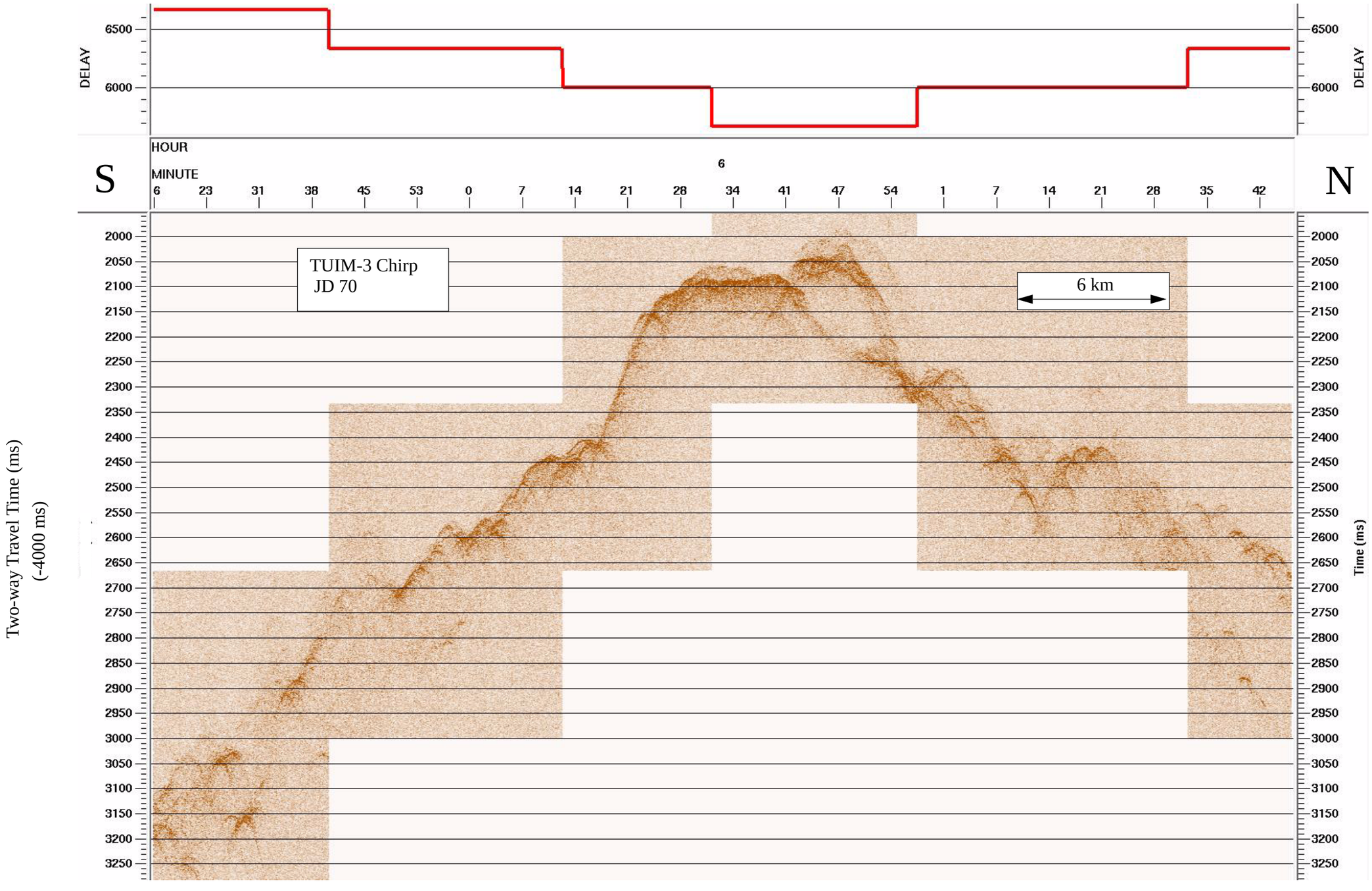

DELAY
6800
6600
6400
HOUR
MINUTE
21
9
25
40
56
11
26
41
55
10
25
41
56
12
S
N
TUIM-3 Chirp
JD 70
6 km
Two-way Travel Time (ms)
(-4000 ms)
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550

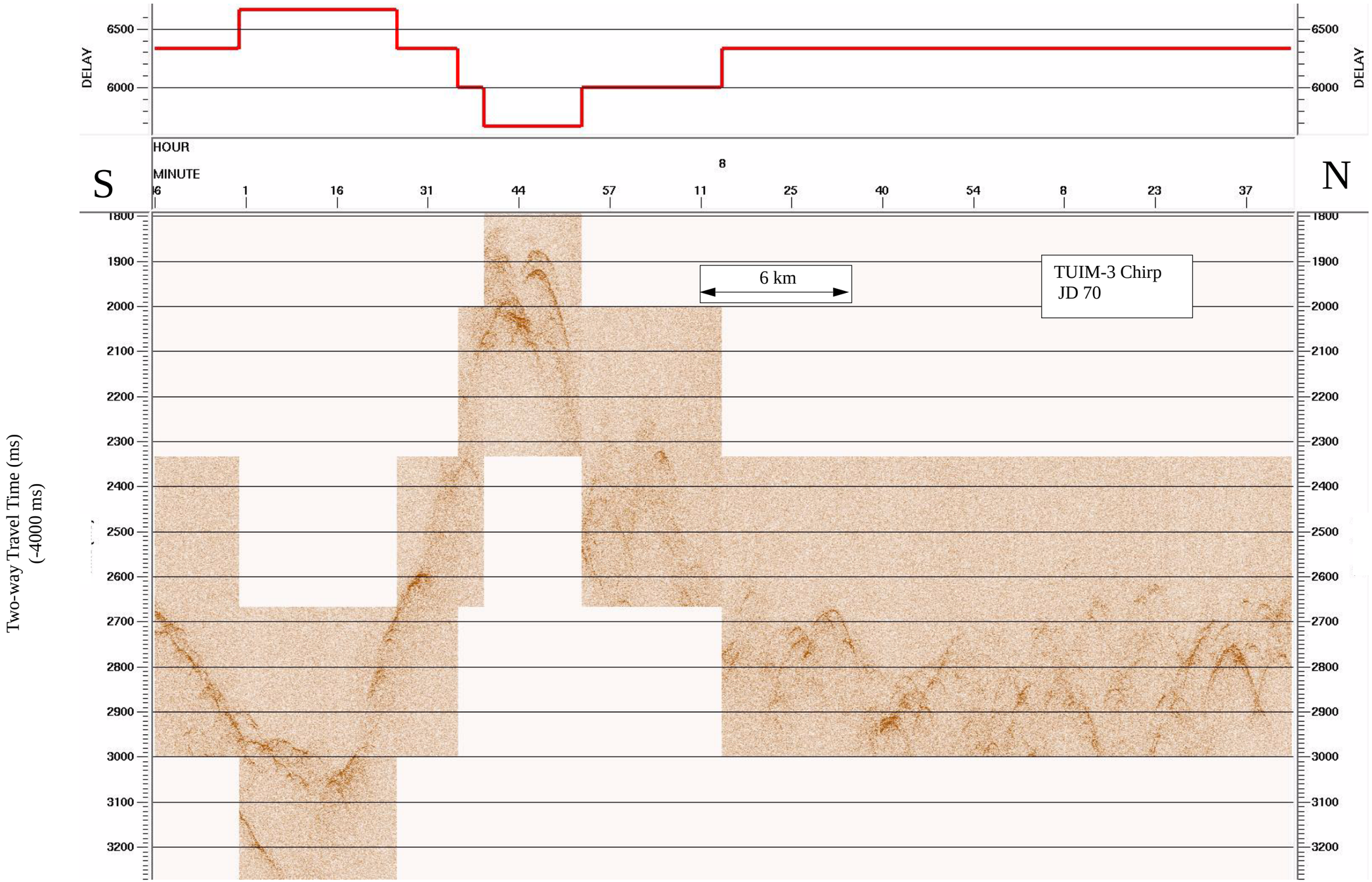

DELAY
6800
6600
6400
HOUR
MINUTE
S
N
0
3
29
44
0
15
31
46
1
16
32
47
3
19
TUIM-3 Chirp
JD 70
6 km
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6500
6000
HOUR
3
MINUTE
21
35
50
5
19
35
50
5
19
33
46
0
14
S
N
TUIM-3 Chirp
JD 70
6 km
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
Two-way Travel Time (ms)
(-4000 ms)

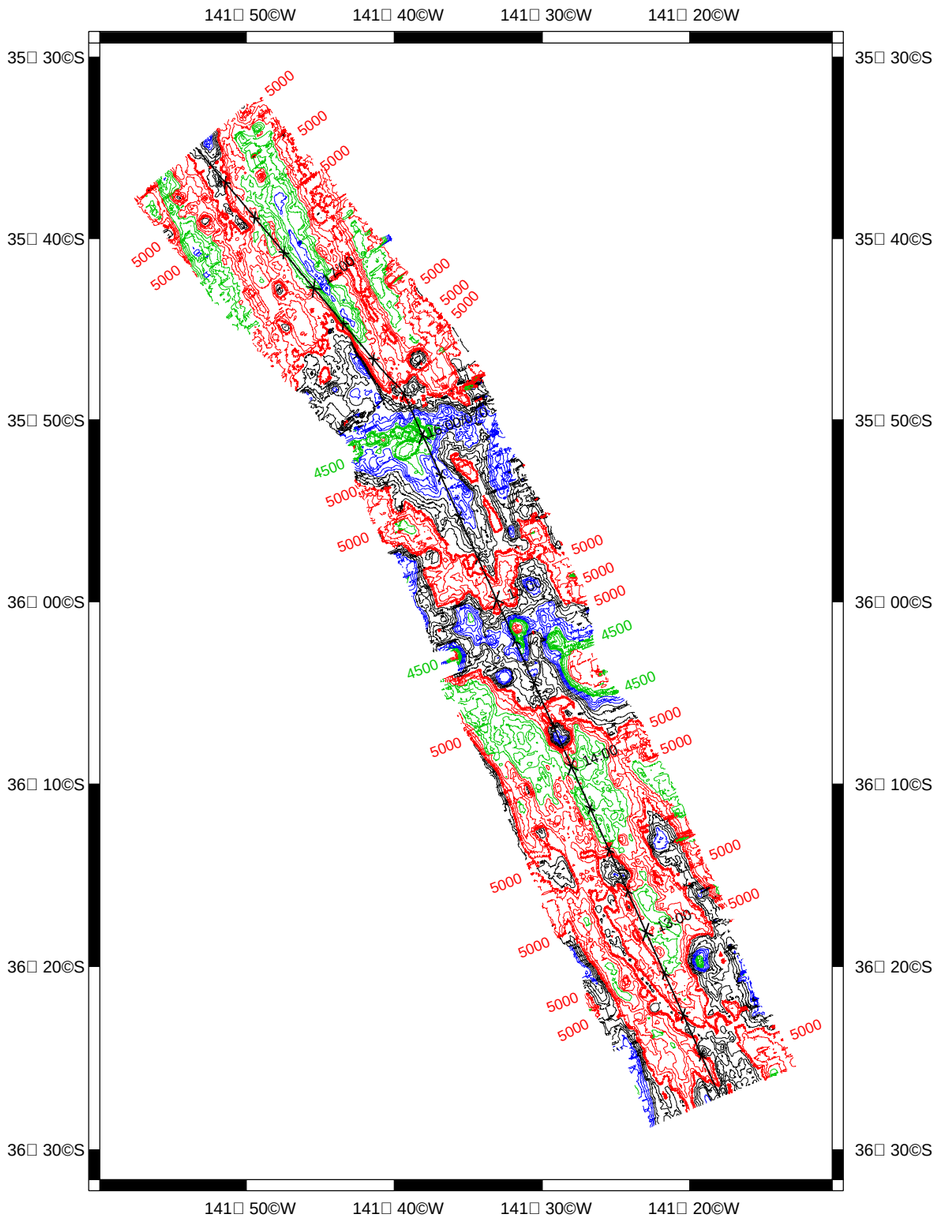
Data File SBfixavg.2005mar11.0600-1200

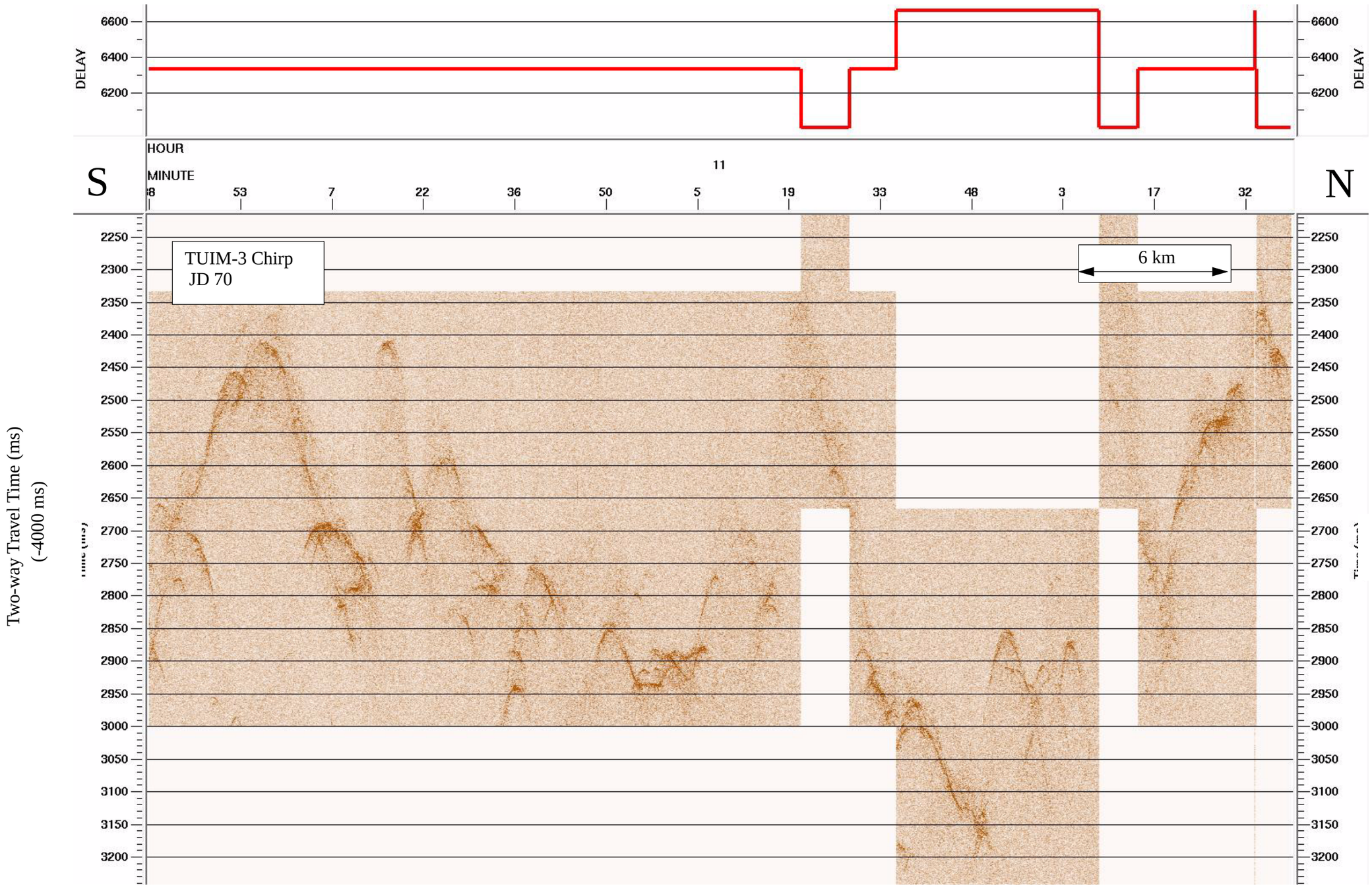


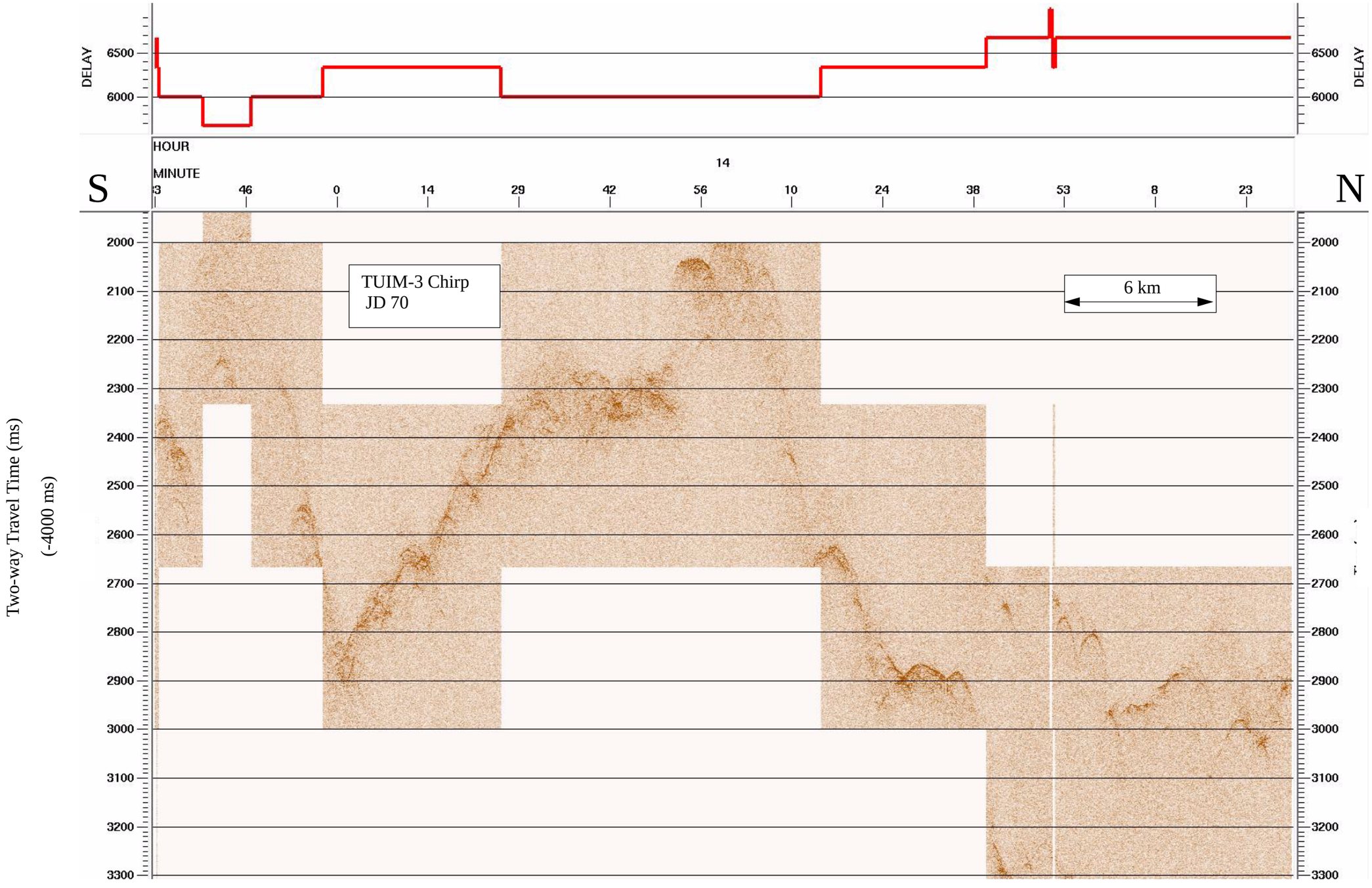

DELAY
6500
6000
HOUR
6
MINUTE
6 23 31 38 45 53 0 7 14 21 28 34 41 47 54 1 7 14 21 28 35 42
S
N
TUIM-3 Chirp
JD 70
6 km
2000 2050 2100 2150 2200 2250 2300 2350 2400 2450 2500 2550 2600 2650 2700 2750 2800 2850 2900 2950 3000 3050 3100 3150 3200 3250
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6500
6000
S
N
HOUR
MINUTE
8
16
1
16
31
44
57
11
25
40
54
8
23
37
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
6 km
TUIM-3 Chirp
JD 70
Two-way Travel Time (ms)
(-4000 ms)

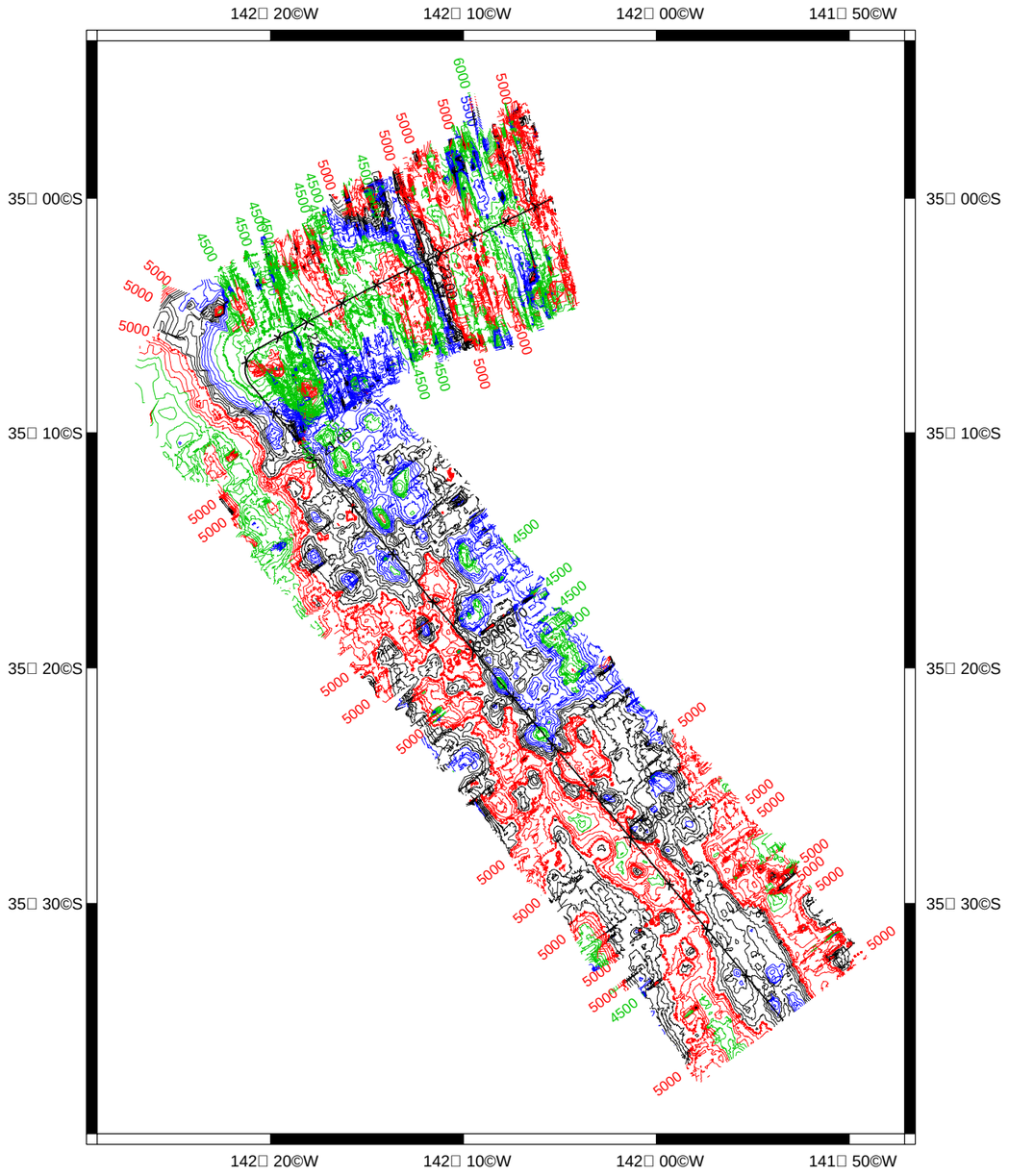
Data File SBfixavg.2005mar11.1200-1800

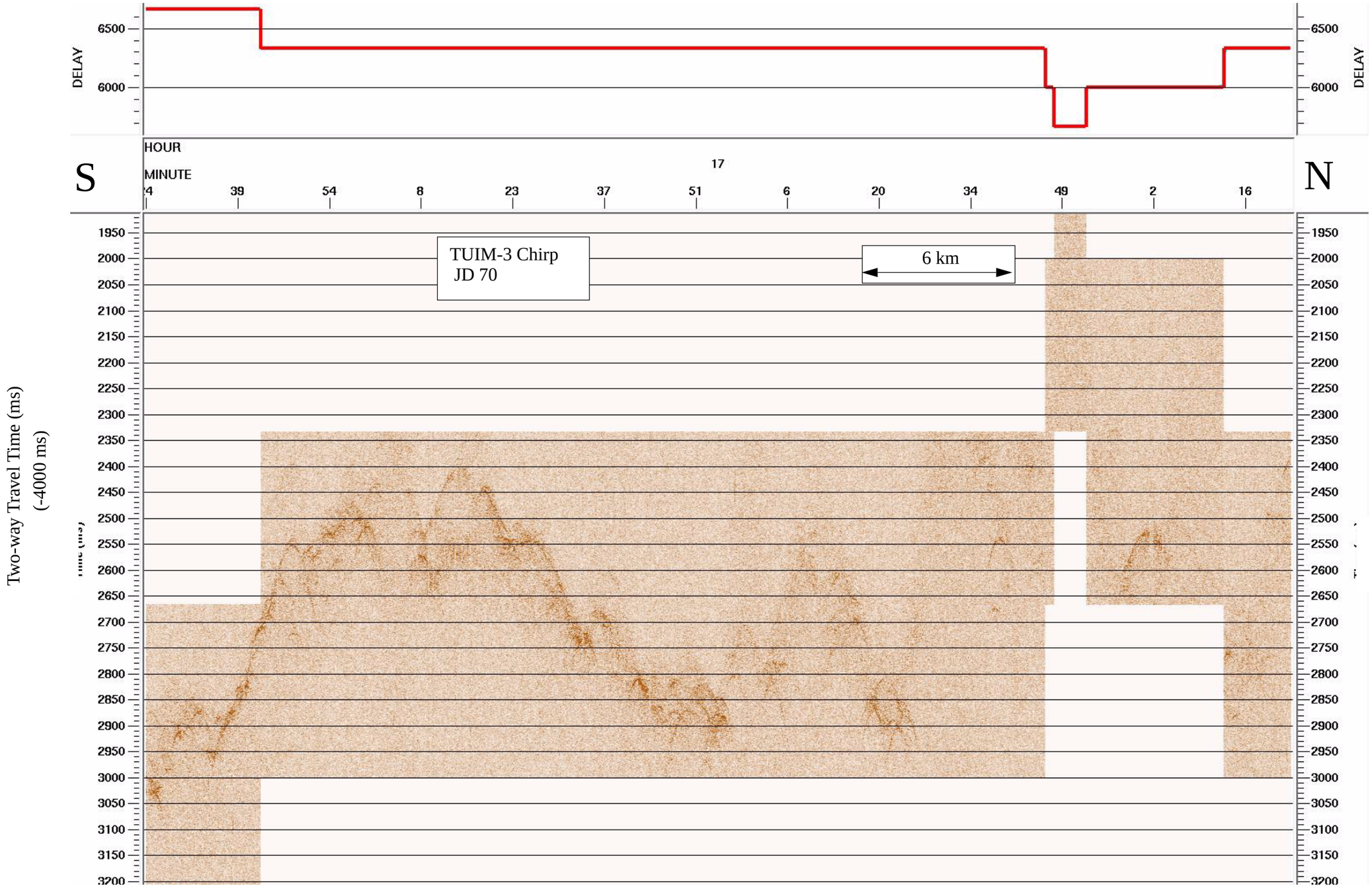


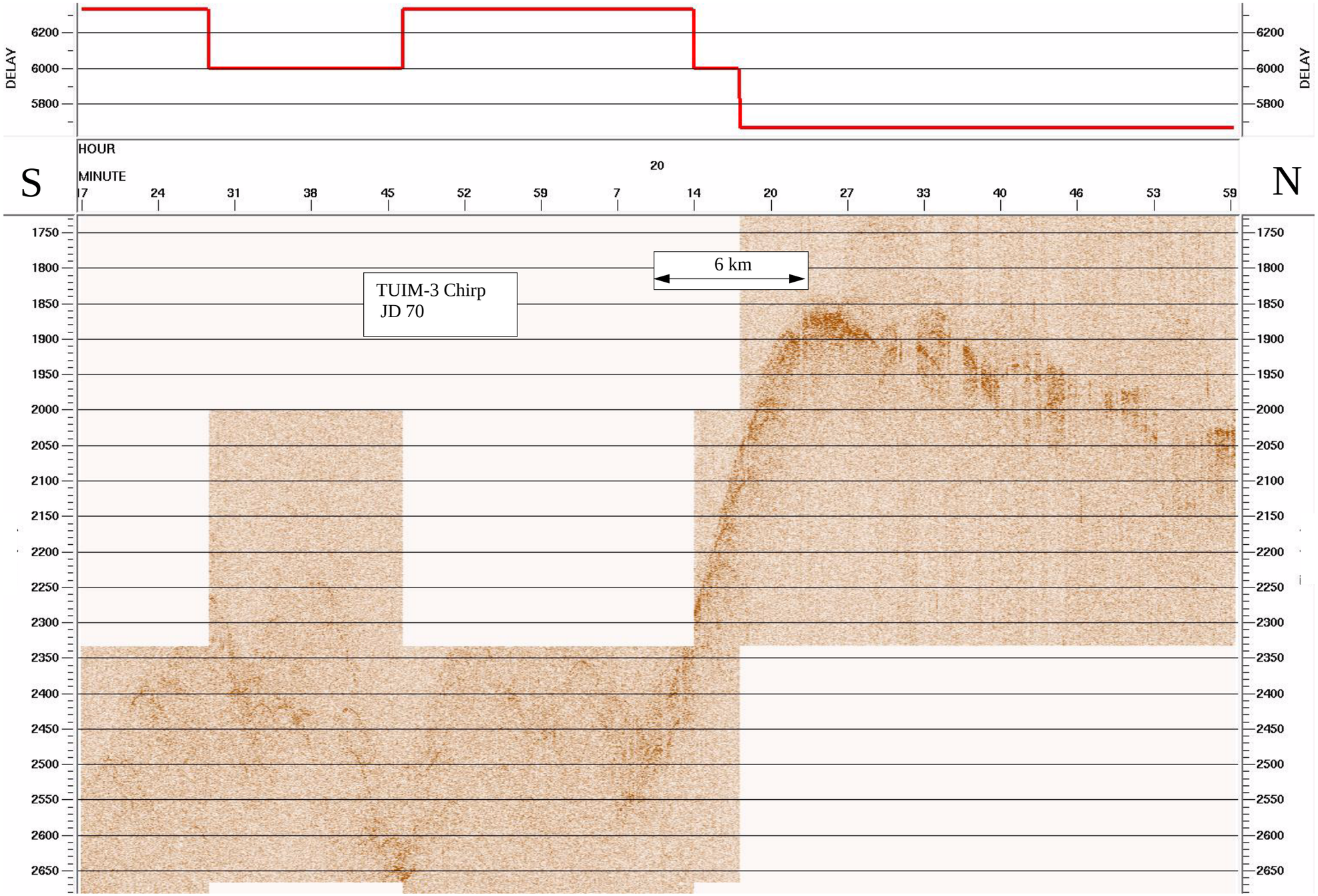

DELAY
6600
6400
6200
S
N
HOUR
MINUTE
11
8
53
7
22
36
50
5
19
33
48
3
17
32
TUIM-3 Chirp
JD 70
6 km
Two-way Travel Time (ms)
(-4000 ms)
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200

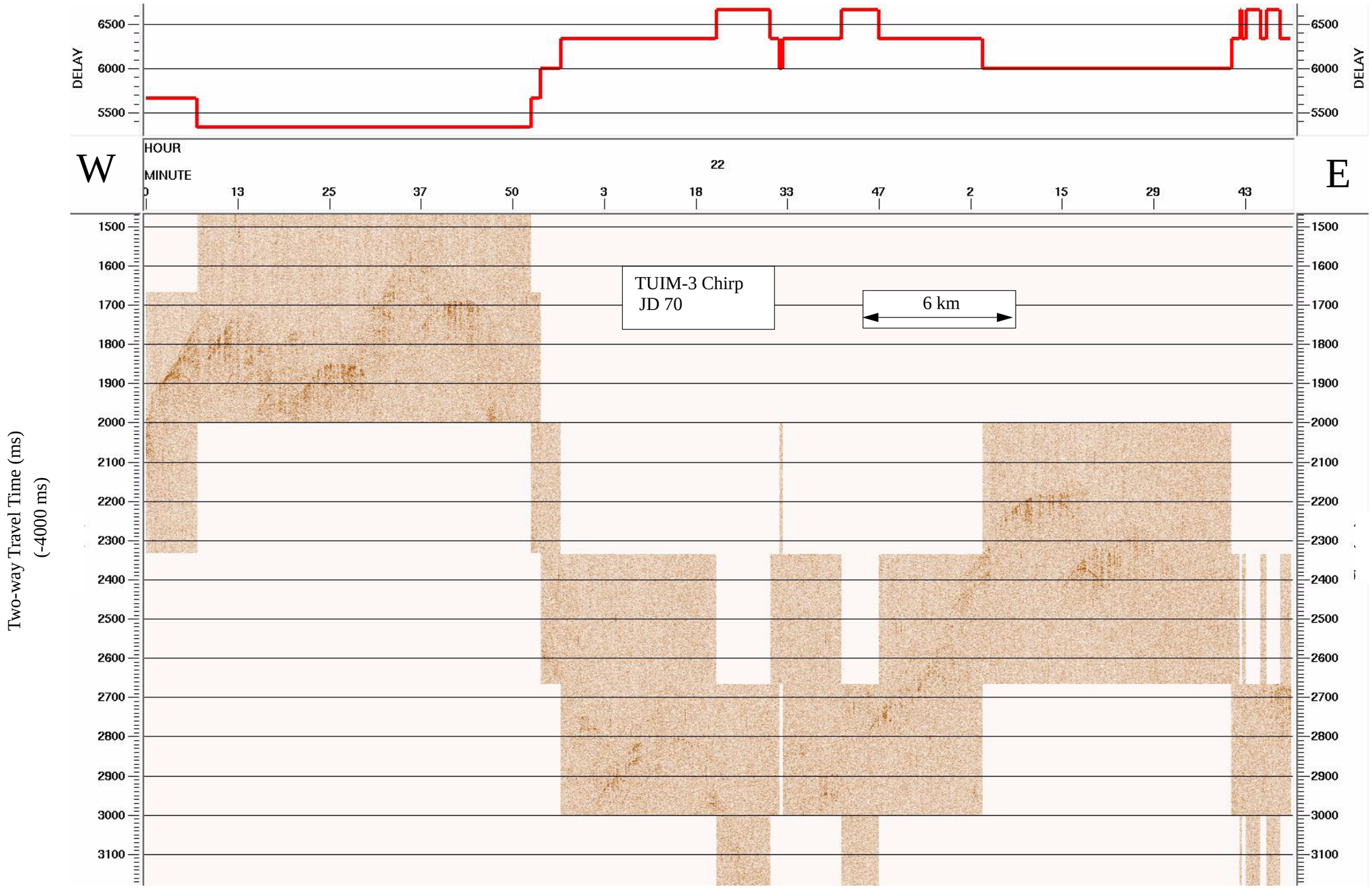

DELAY
6500
6000
HOUR
MINUTE
14
S
N
3
46
0
14
29
42
56
10
24
38
53
8
23
TUIM-3 Chirp
JD 70
6 km
Two-way Travel Time (ms)
(-4000 ms)
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300

Data File SBfixavg.2005mar11.1800-2400

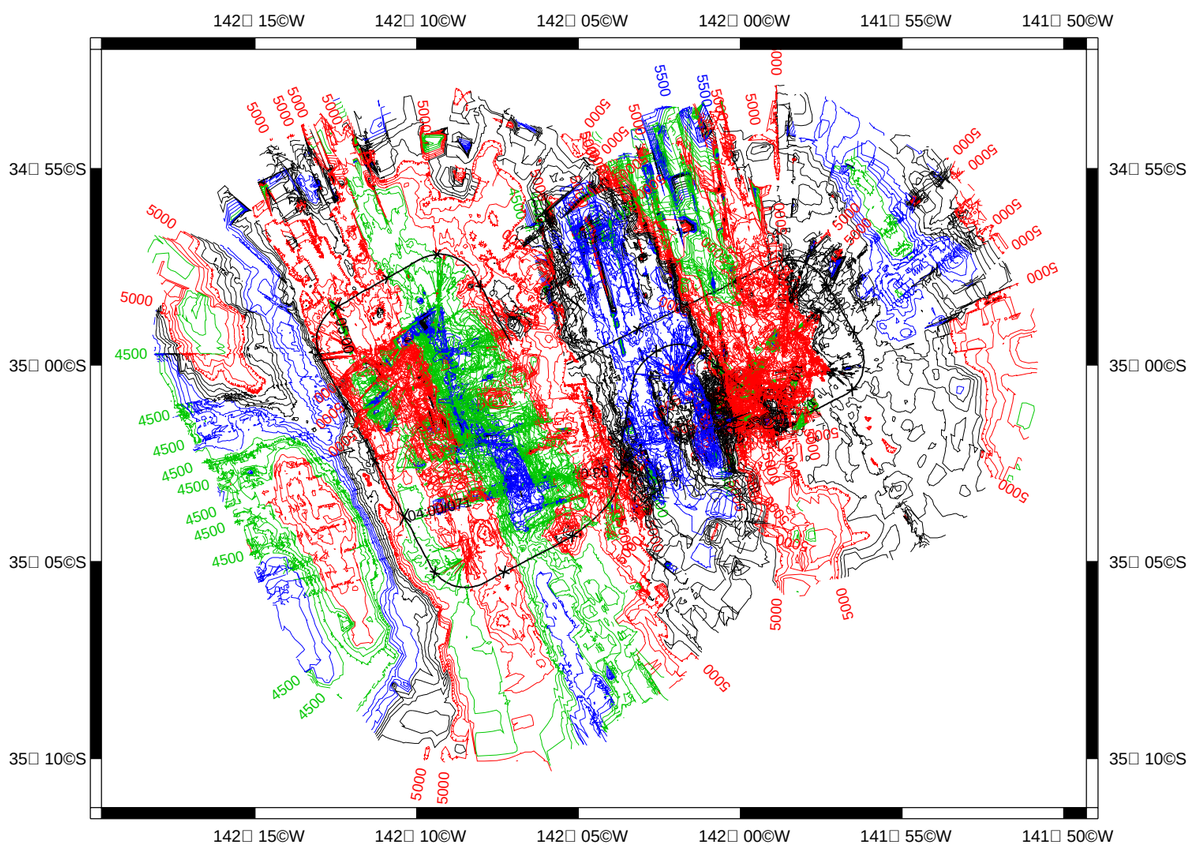


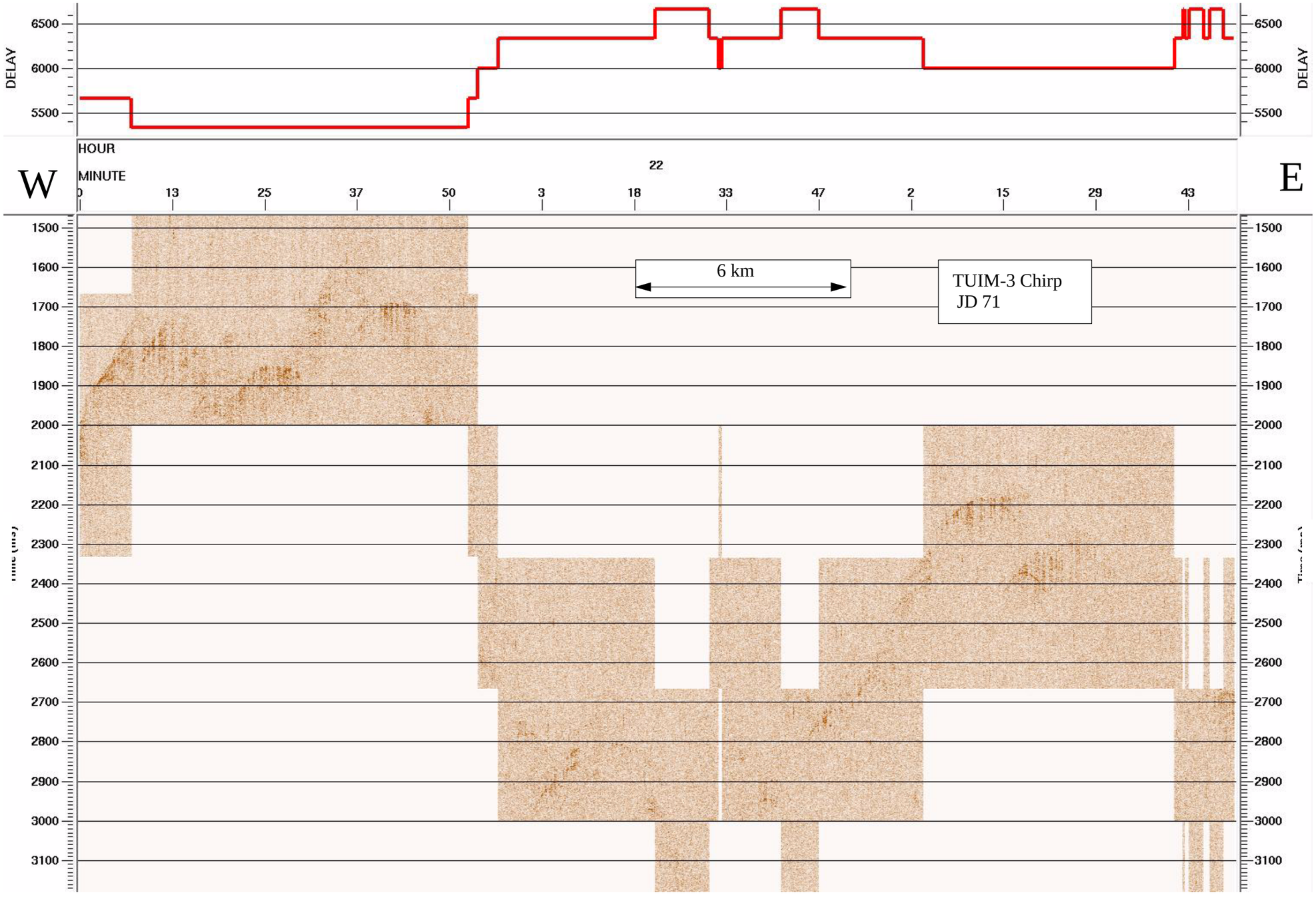

DELAY
6500
6000
S
N
HOUR
17
MINUTE
4
39
54
8
23
37
51
6
20
34
49
2
16
TUIM-3 Chirp
JD 70
6 km
Two-way Travel Time (ms)
(-4000 ms)
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200

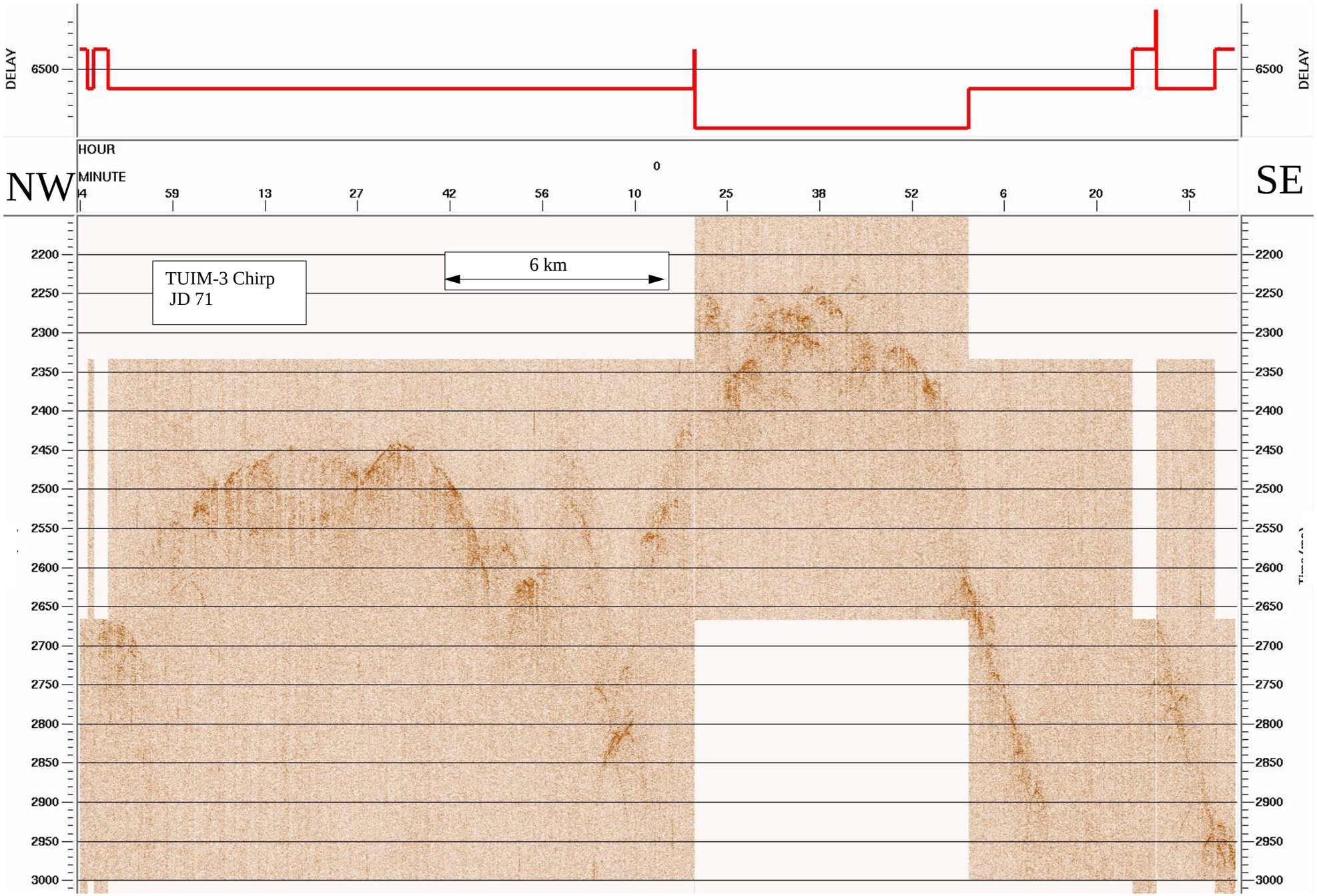

DELAY
6200
6000
5800
HOUR
MINUTE
20
17
24
31
38
45
52
59
7
14
20
27
33
40
46
53
59
S
N
6 km
TUIM-3 Chirp
JD 70
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
Two-way Travel Time (ms)
(-4000 ms)

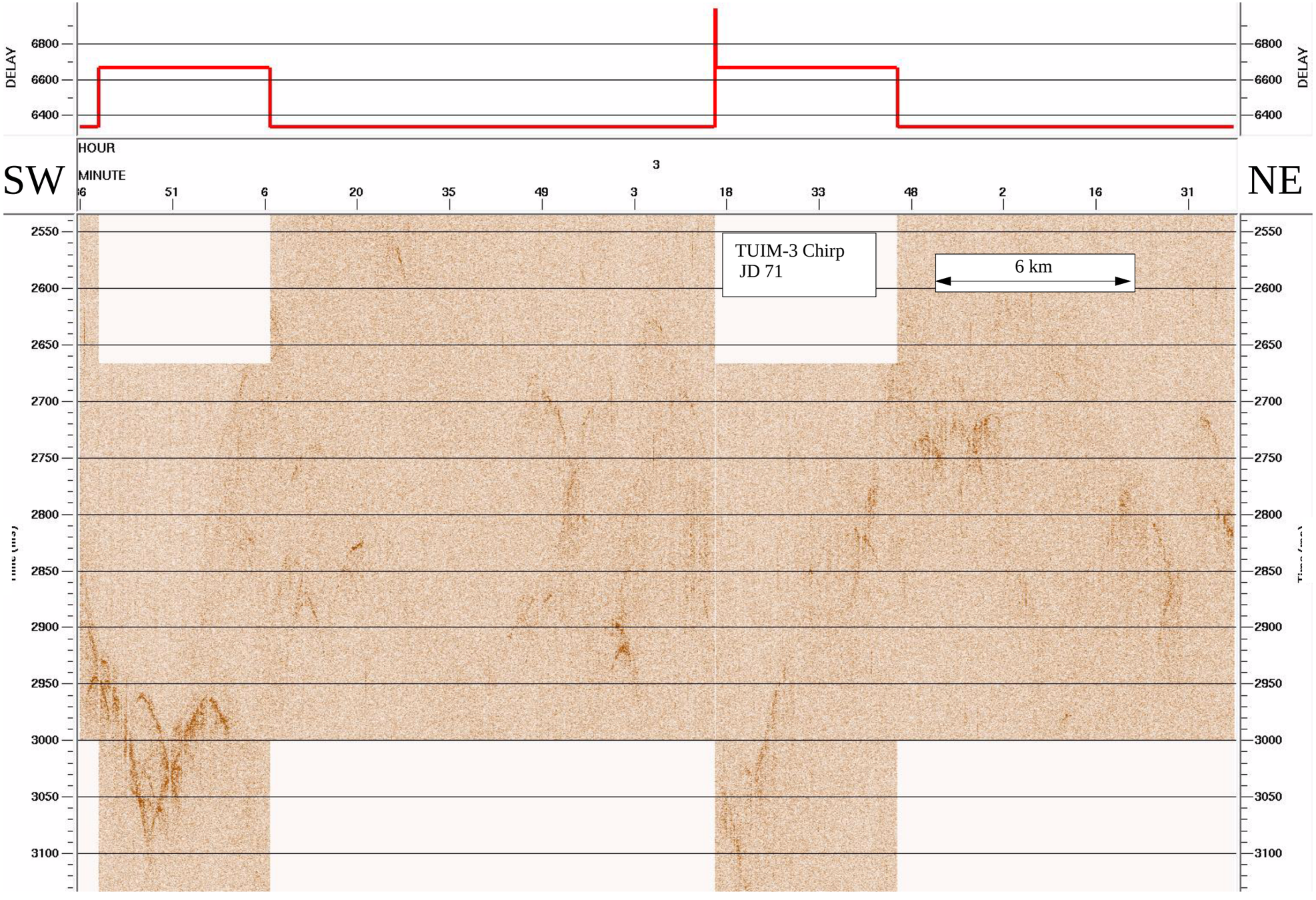

DELAY
6500
6000
5500
W
HOUR
MINUTE
22
0
13
25
37
50
3
18
33
47
2
15
29
43
E
TUIM-3 Chirp
JD 70
6 km
Two-way Travel Time (ms)
(-4000 ms)
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100

Julian Day 71
12 March 2005
Knudsen Chirp Data

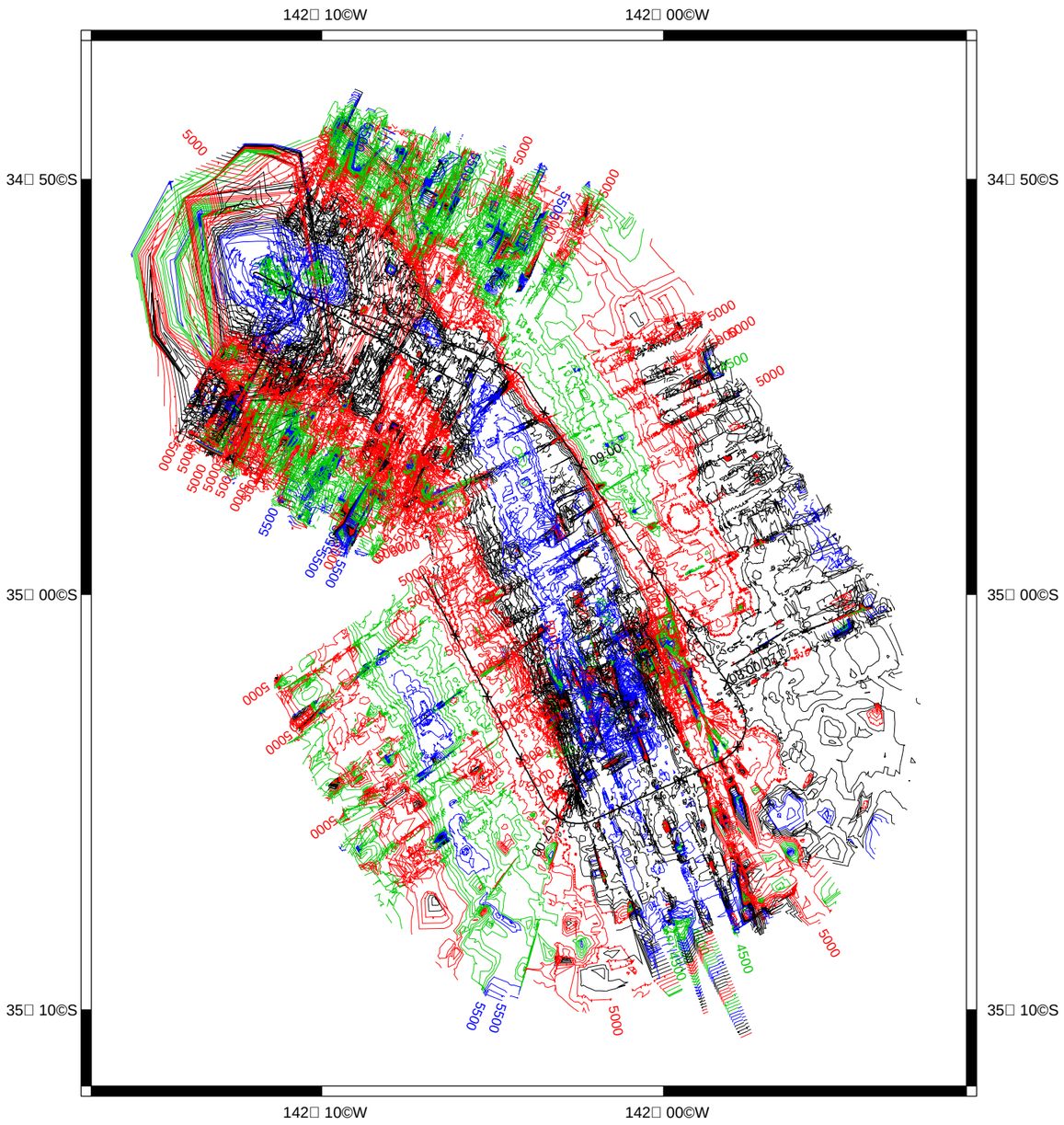

Data File SBfixavg.2005mar12.0000-0600
142□ 15©W
142□ 10©W
142□ 05©W
142□ 00©W
141□ 55©W
141□ 50©W
34□ 55©S
35□ 00©S
35□ 05©S
35□ 10©S

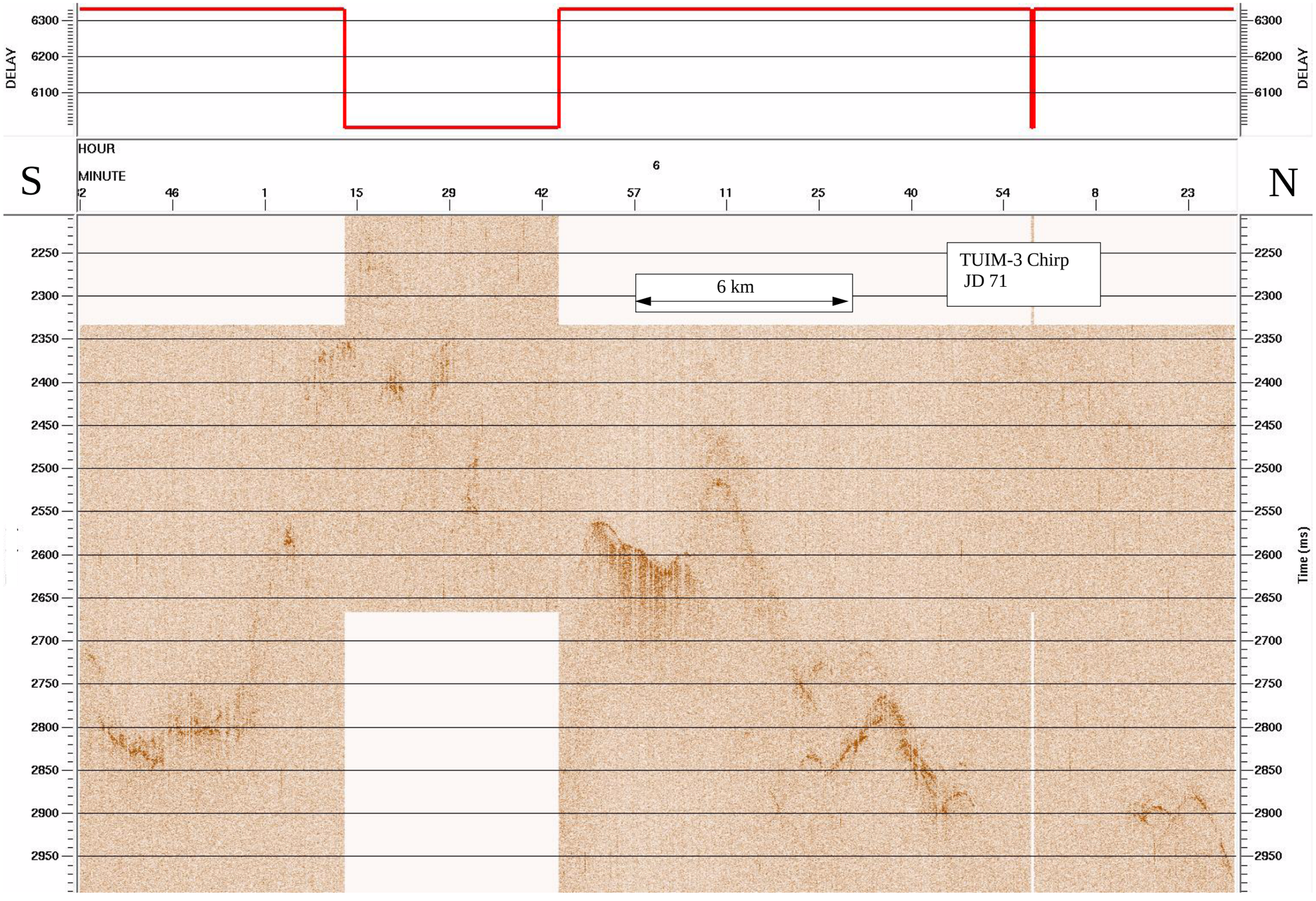

DELAY
6500
6000
5500
W
E
HOUR
MINUTE
22
0
13
25
37
50
3
18
33
47
2
15
29
43
6 km
TUIM-3 Chirp
JD 71
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
Two-way Travel Time (ms)
(-4000 ms)

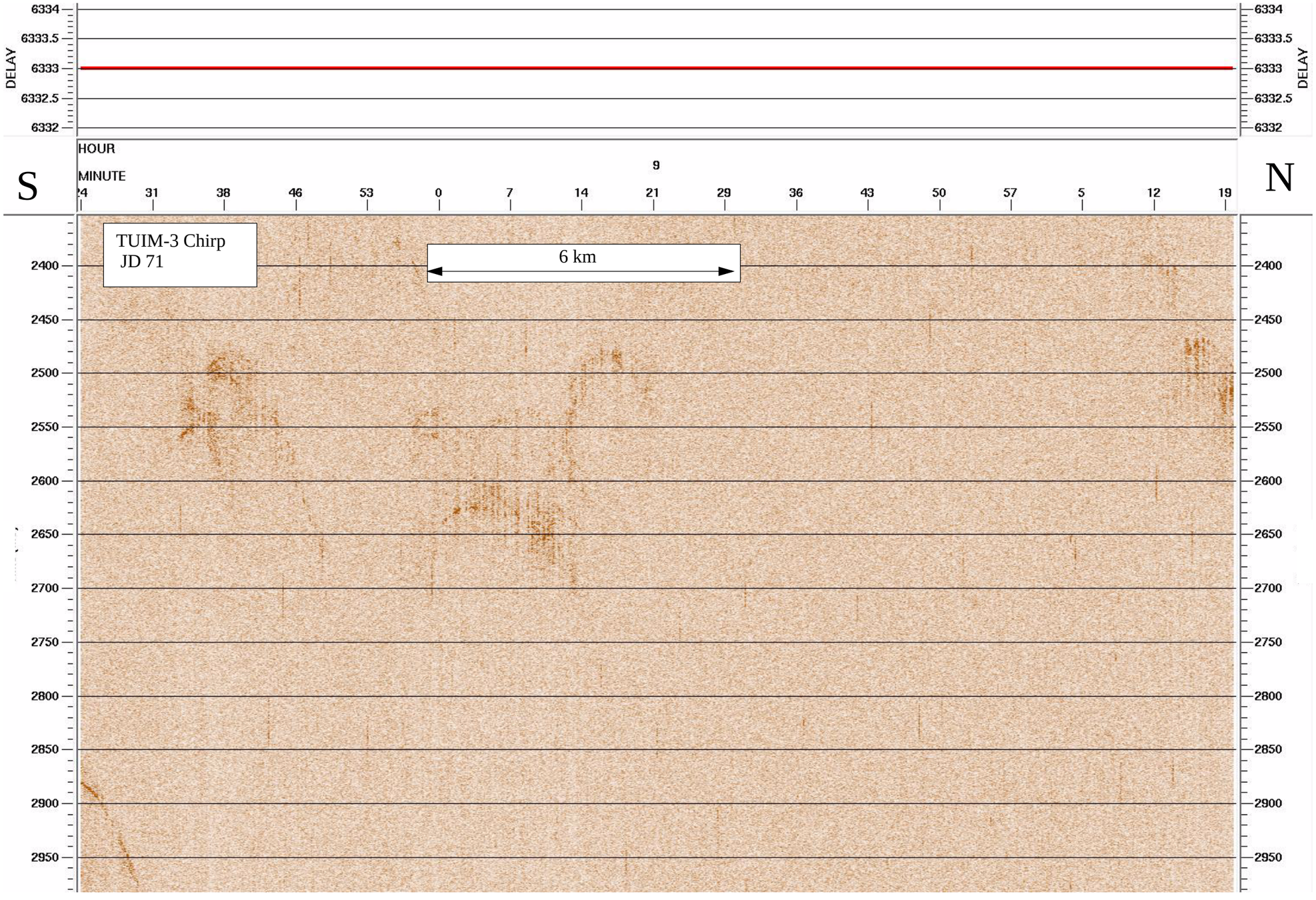

DELAY
6500
HOUR
MINUTE
0
14
59
13
27
42
56
10
25
38
52
6
20
35
NW
SE
TUIM-3 Chirp
JD 71
6 km
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6800
6600
6400
HOUR
3
MINUTE
SW
NE
51
6
20
35
49
3
18
33
48
2
16
31
TUIM-3 Chirp
JD 71
6 km
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
Two-way Travel Time (ms)
(-4000 ms)

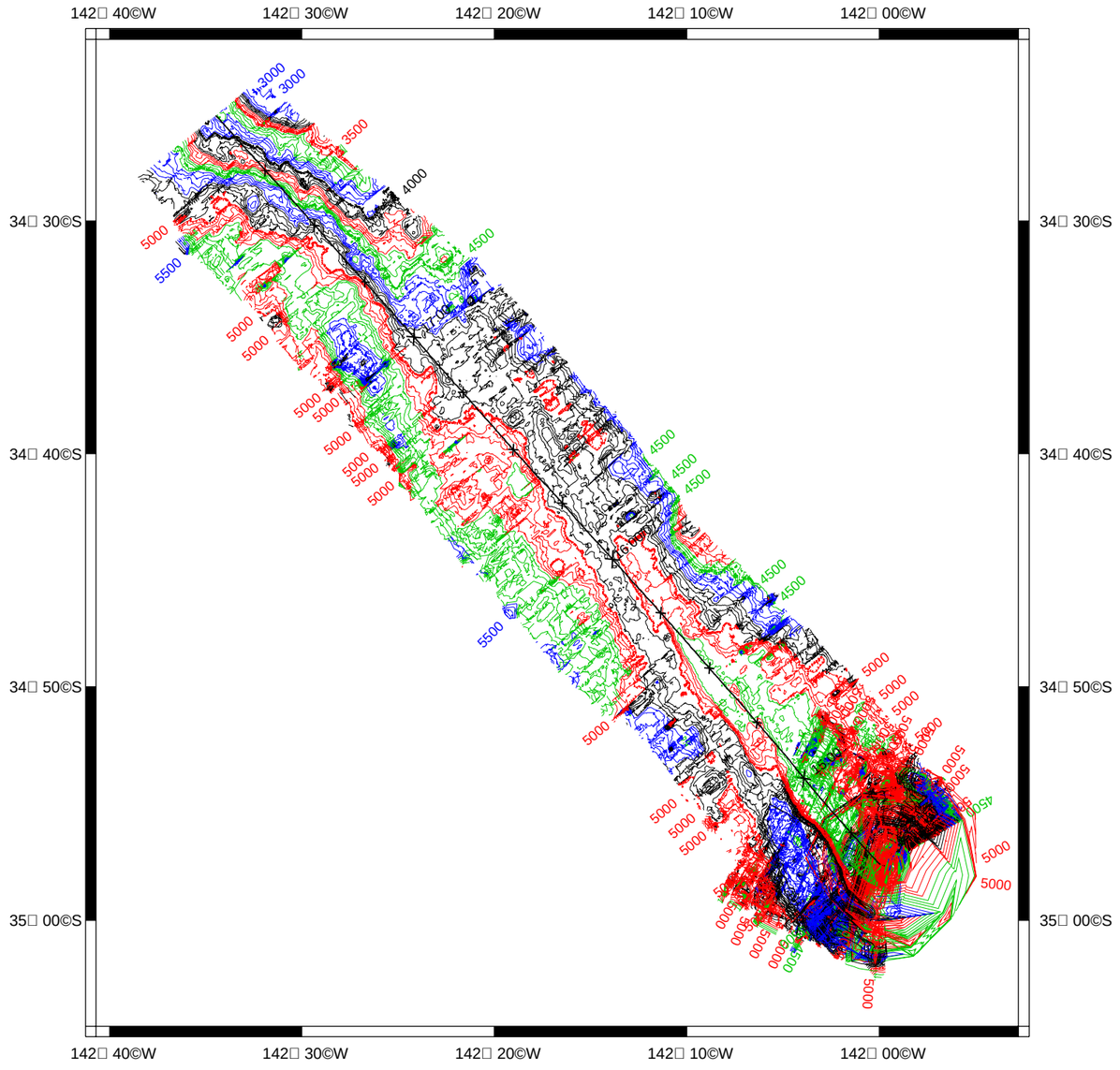
Data File SBfixavg.2005mar12.0600-1200

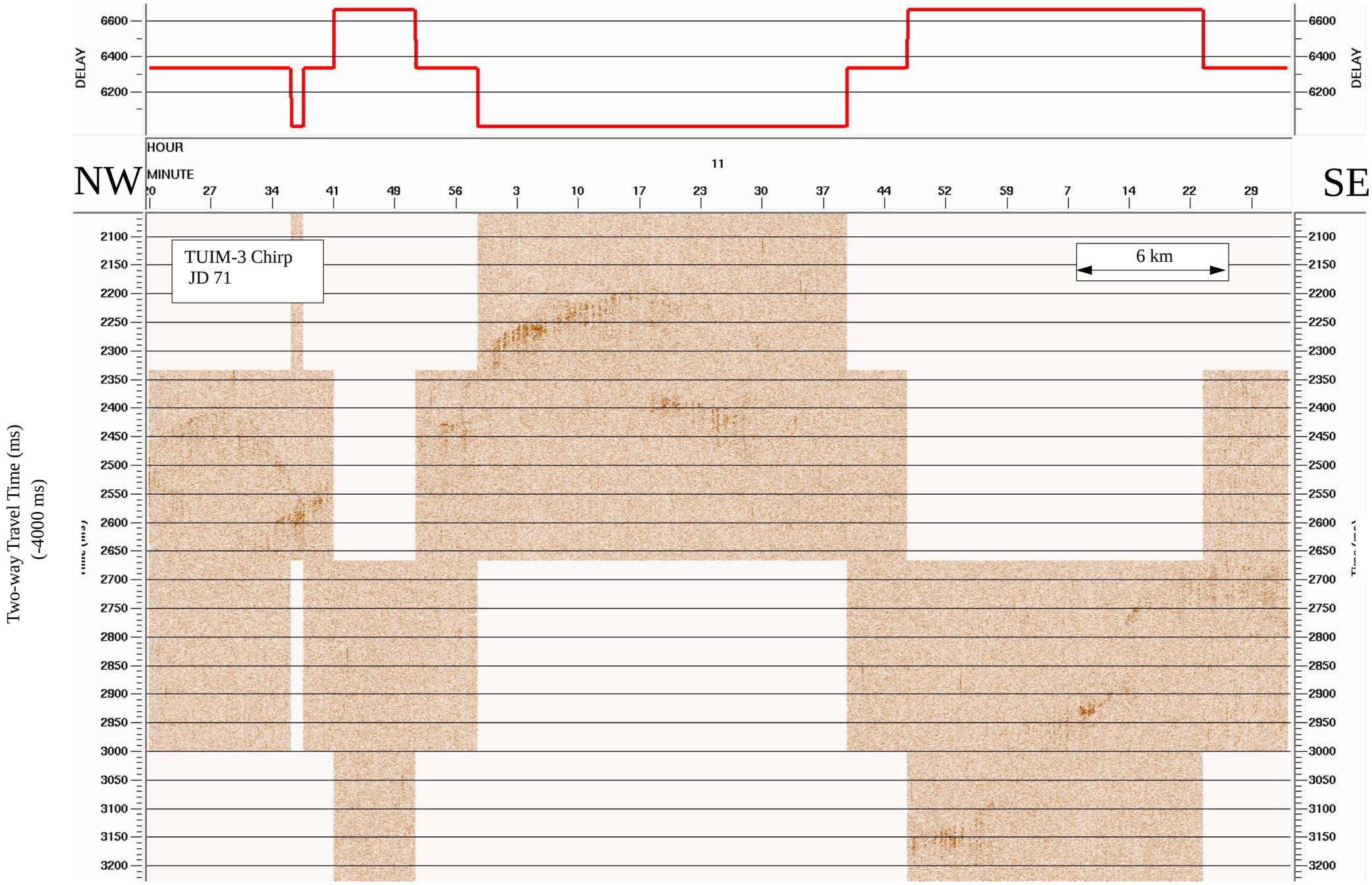


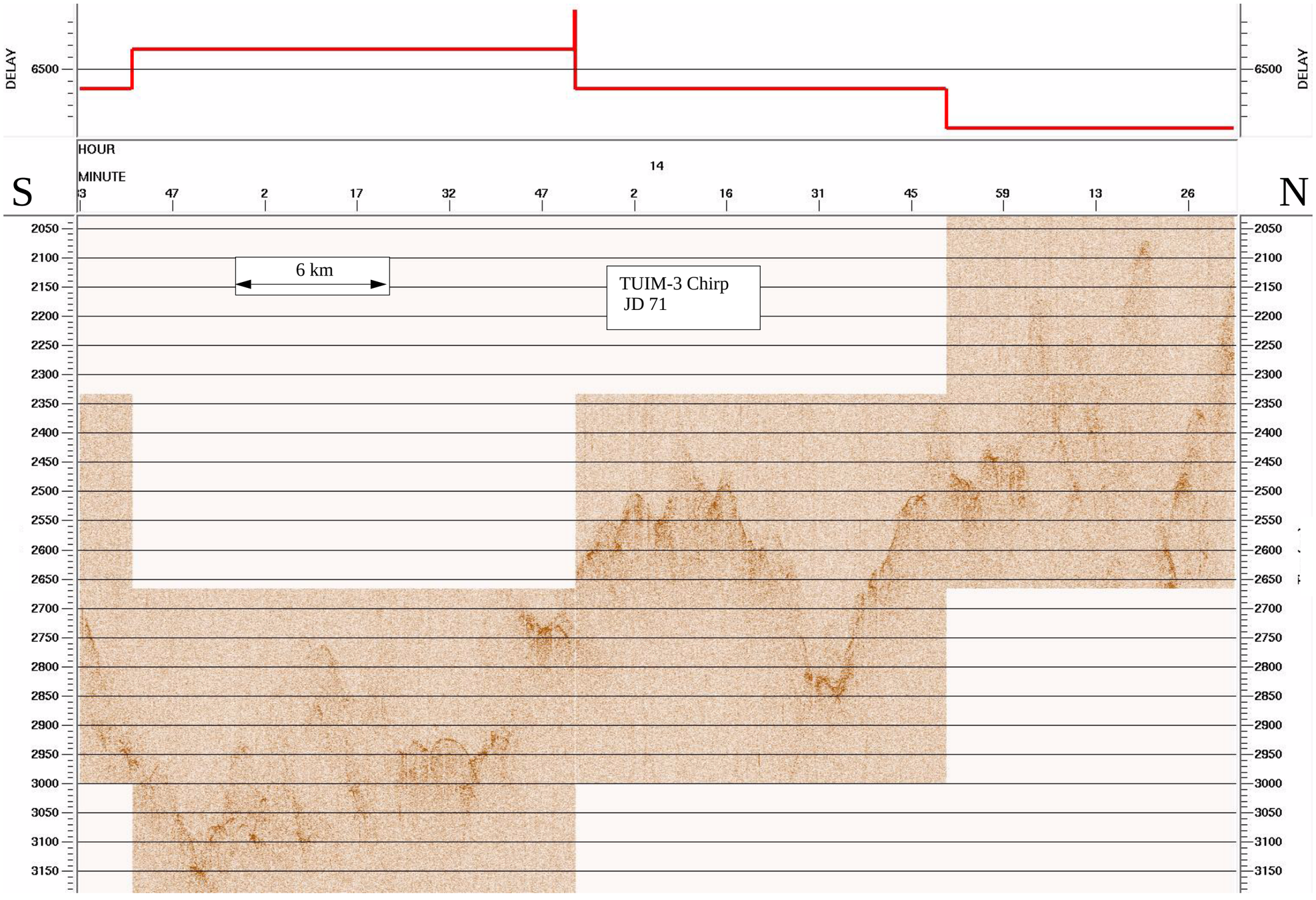

DELAY
6300
6200
6100
S
N
HOUR
6
MINUTE
2
46
1
15
29
42
57
11
25
40
54
8
23
TUIM-3 Chirp
JD 71
6 km
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6334
6333.5
6333
6332.5
6332
HOUR
MINUTE
9
24
31
38
46
53
0
7
14
21
29
36
43
50
57
5
12
19
S
N
TUIM-3 Chirp
JD 71
6 km
Two-way Travel Time (ms)
(-4000 ms)
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950

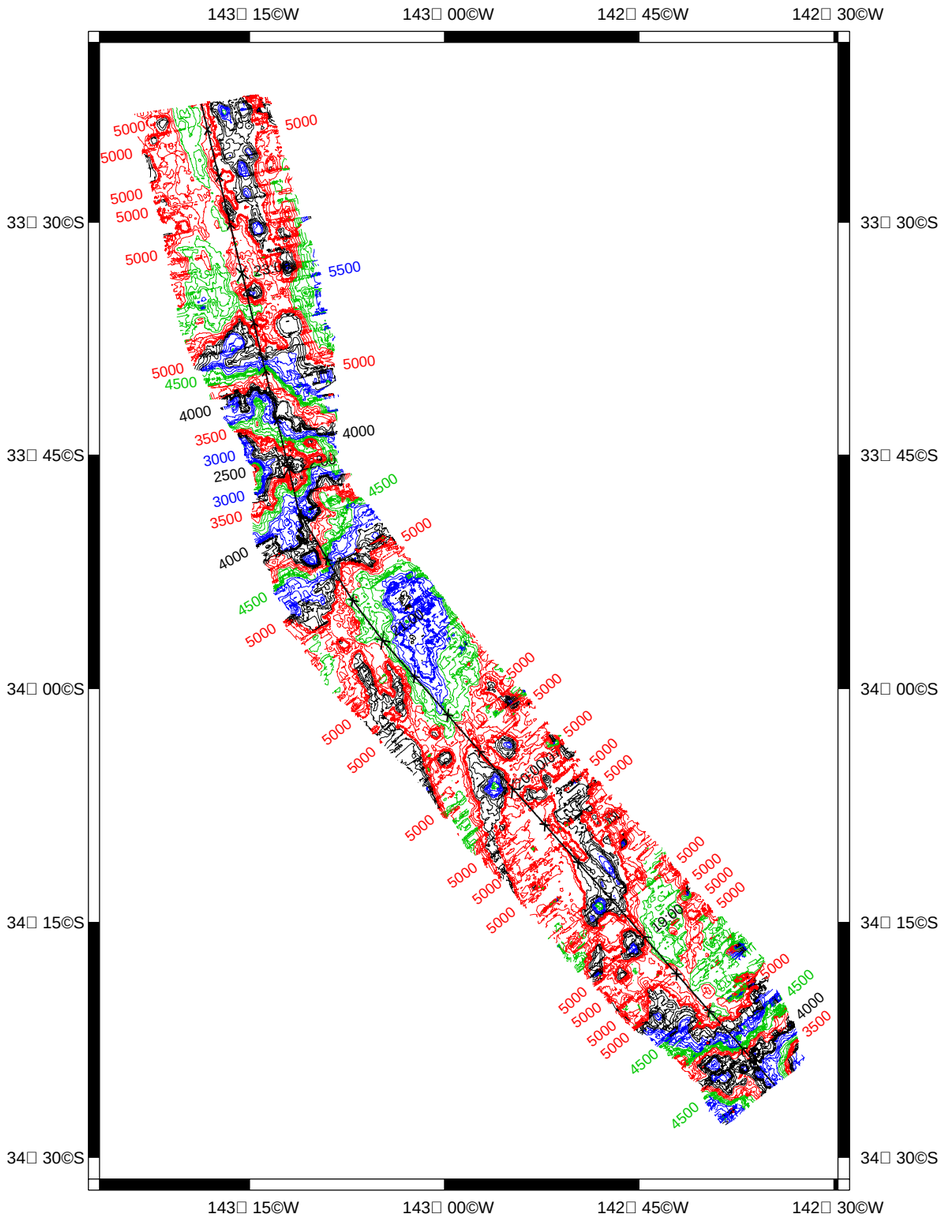
Data File SBfixavg.2005mar12.1200-1800

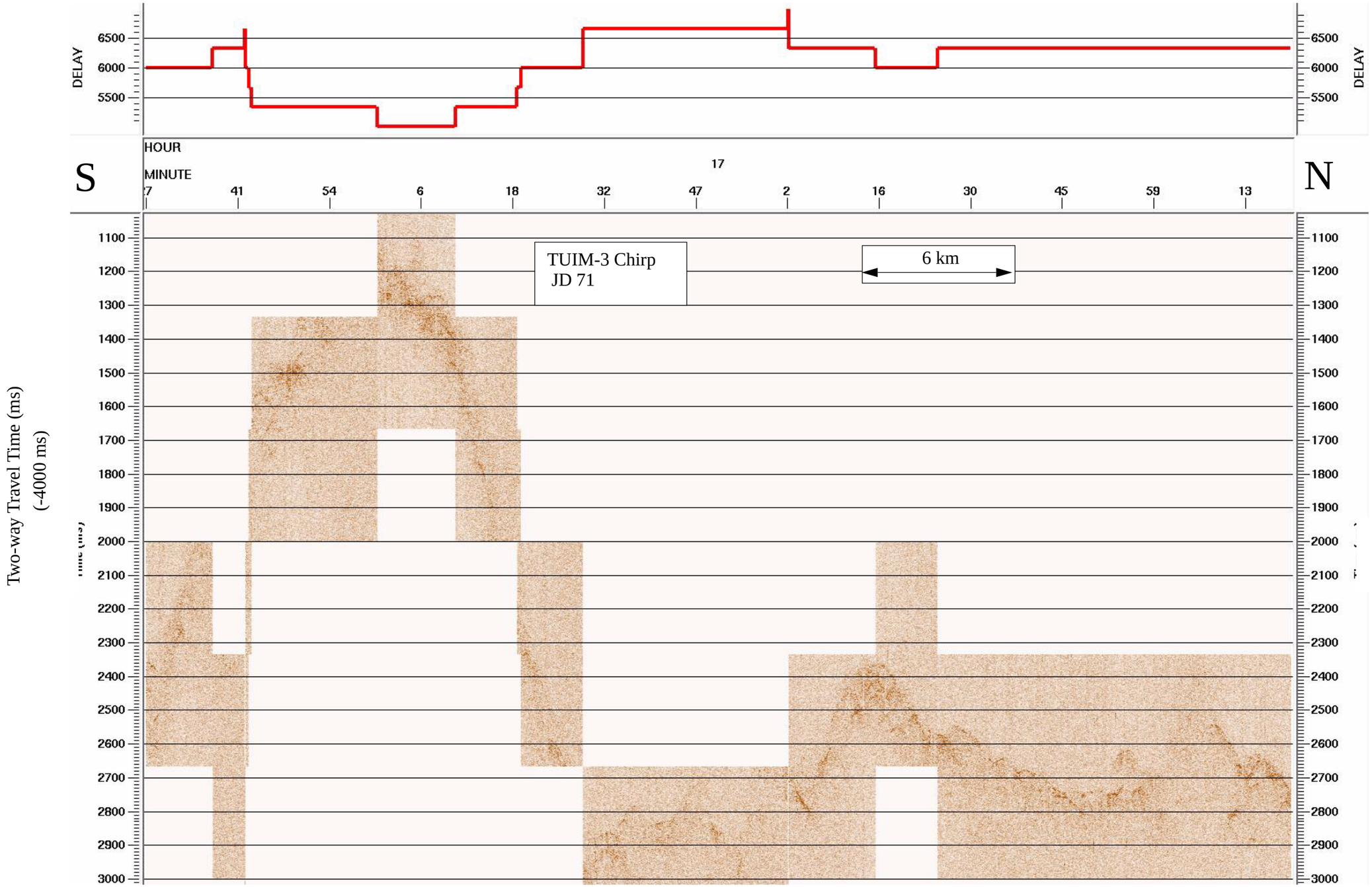


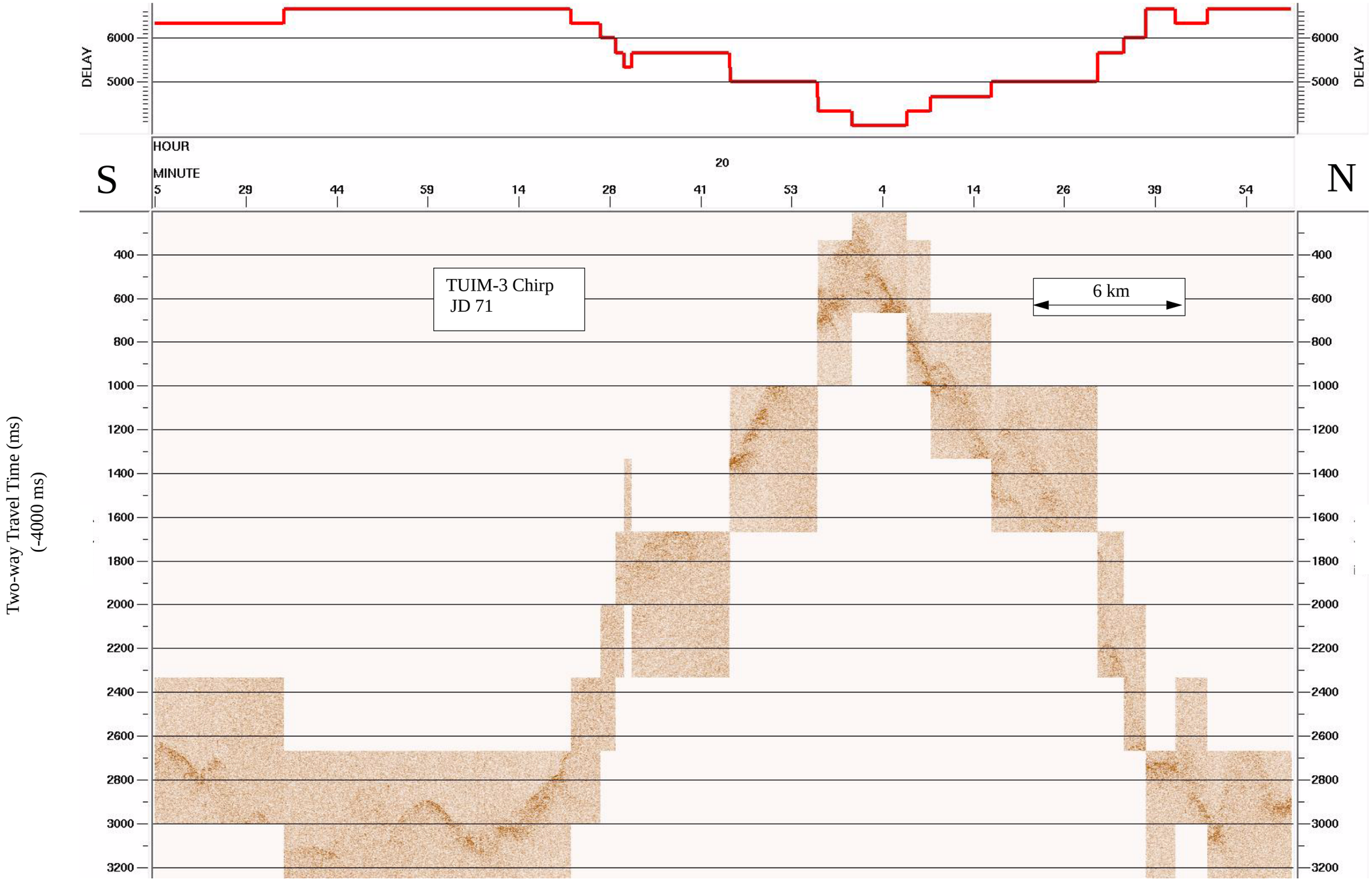

DELAY
6600
6400
6200
HOUR
11
MINUTE
20
27
34
41
49
56
3
10
17
23
30
37
44
52
59
7
14
22
29
NW
SE
TUIM-3 Chirp
JD 71
6 km
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
Two-way Travel Time (ms)
(-4000 ms)

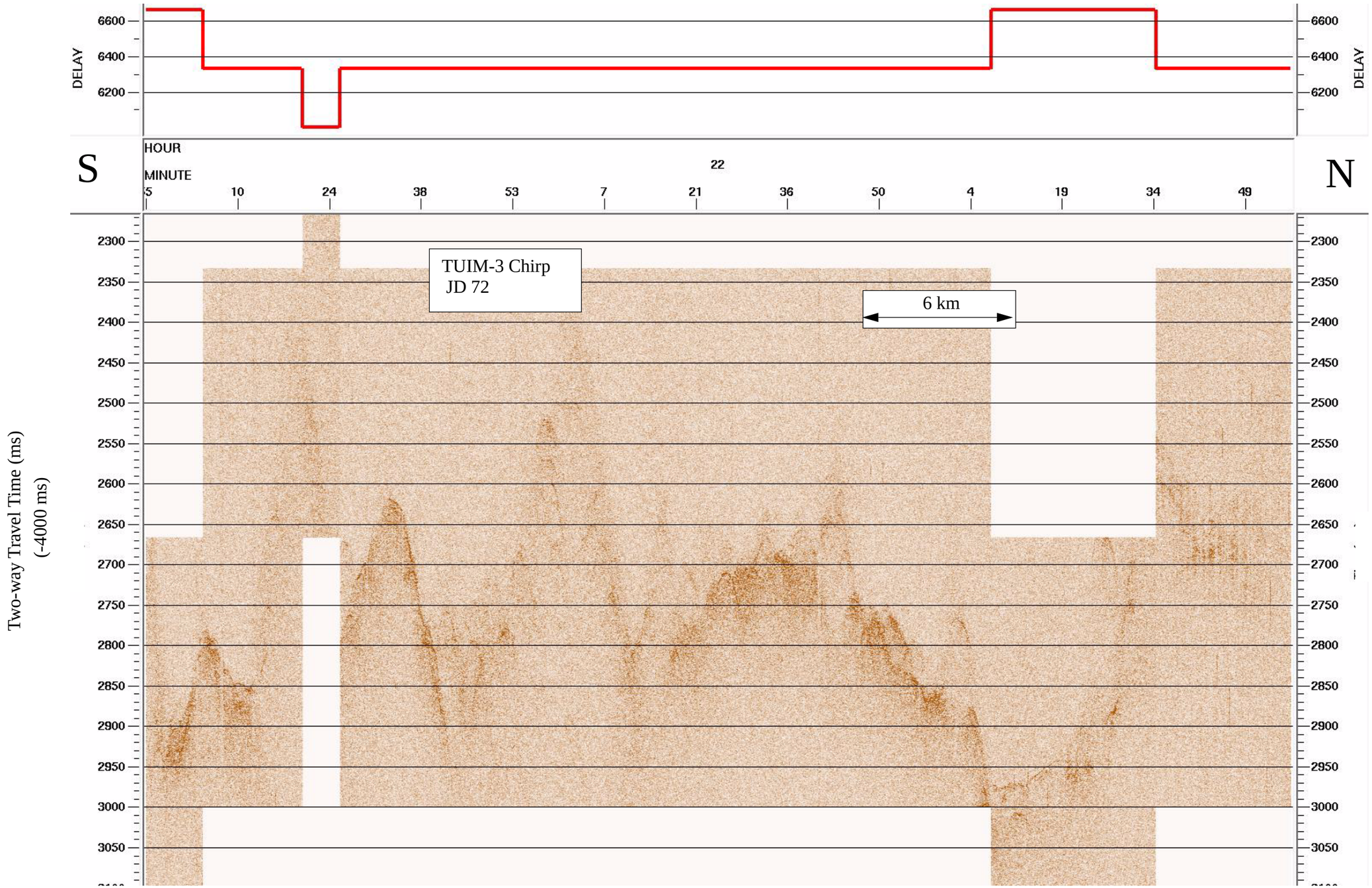

DELAY
6500
HOUR
MINUTE
14
3
47
2
17
32
47
2
16
31
45
59
13
26
S
N
6 km
TUIM-3 Chirp
JD 71
Two-way Travel Time (ms)
(-4000 ms)
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150

Data File SBfixavg.2005mar12.1800-2400



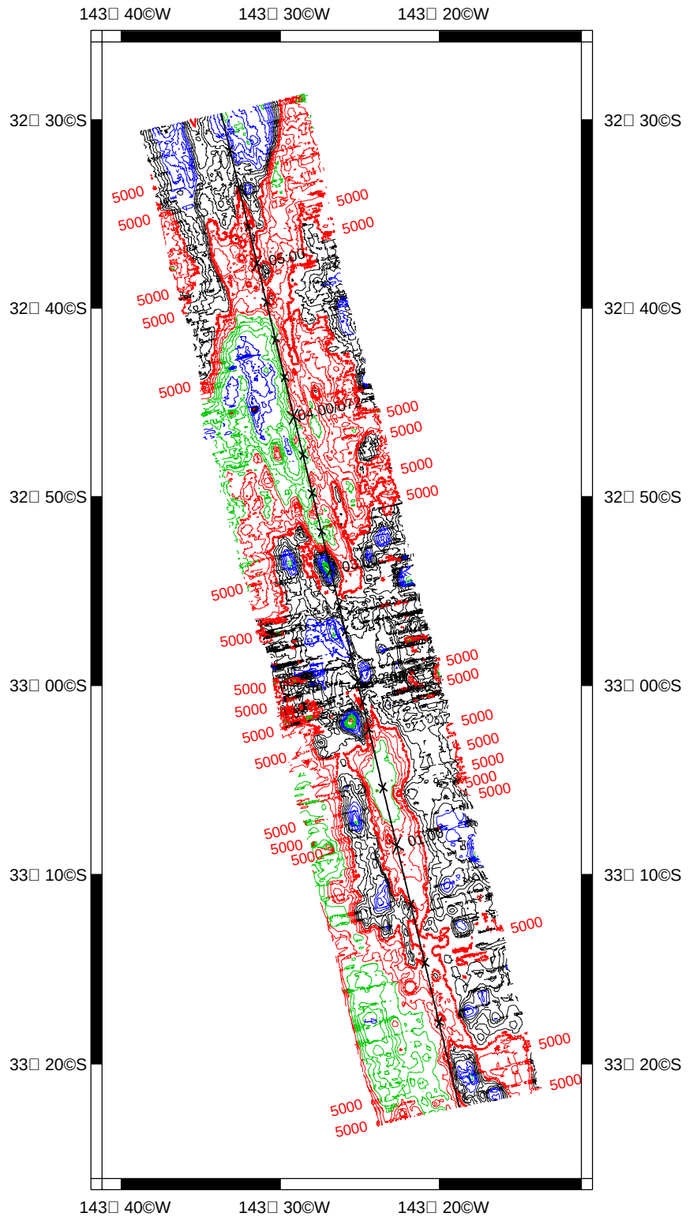

DELAY
6500
6000
5500
S
HOUR
MINUTE
17
7
41
54
6
18
32
47
2
16
30
45
59
13
N
TUIM-3 Chirp
JD 71
6 km
Two-way Travel Time (ms)
(-4000 ms)
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000

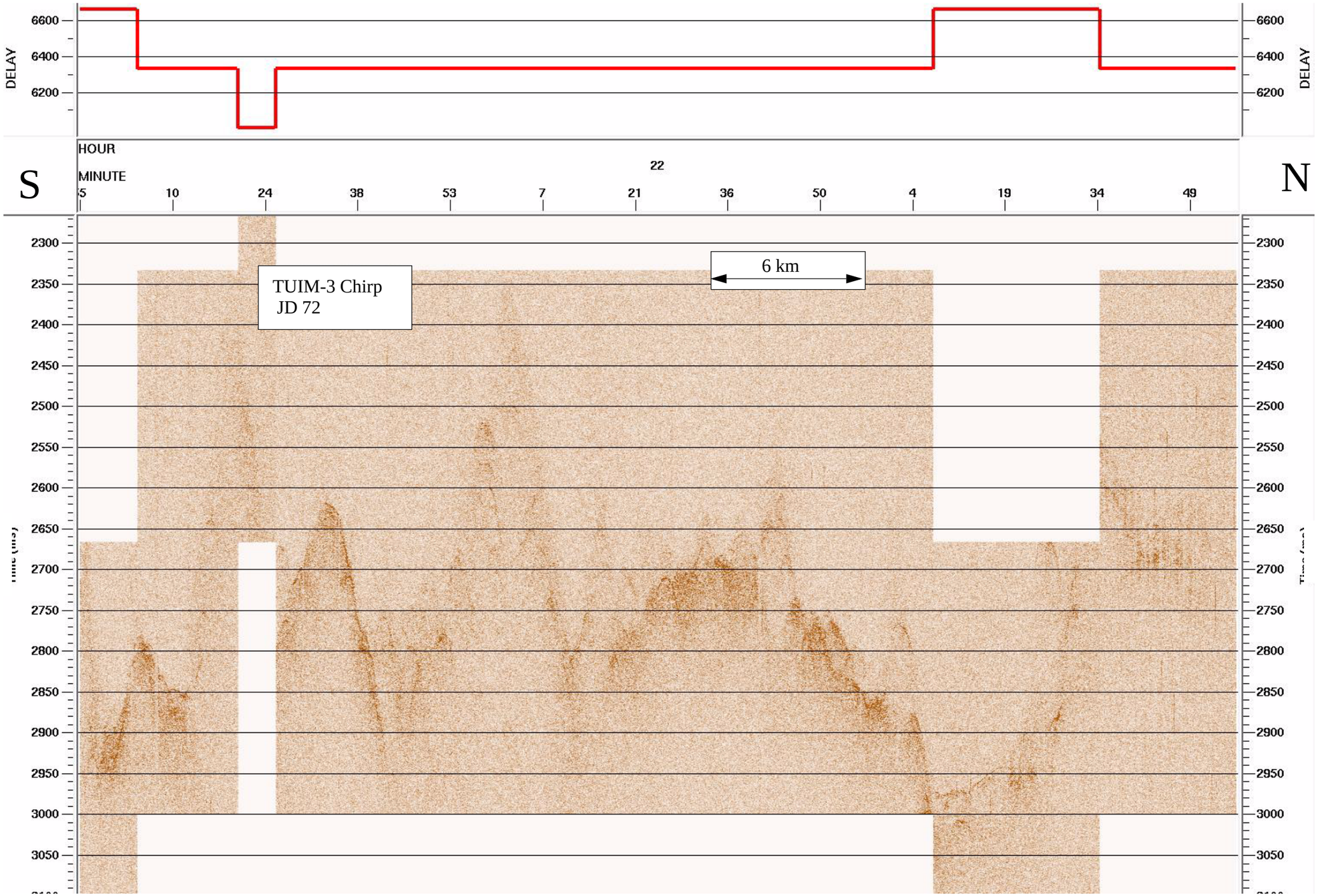

DELAY
6000
5000
HOUR
20
MINUTE
5
29
44
59
14
28
41
53
4
14
26
39
54
S
N
TUIM-3 Chirp
JD 71
6 km
Two-way Travel Time (ms)
(-4000 ms)
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200

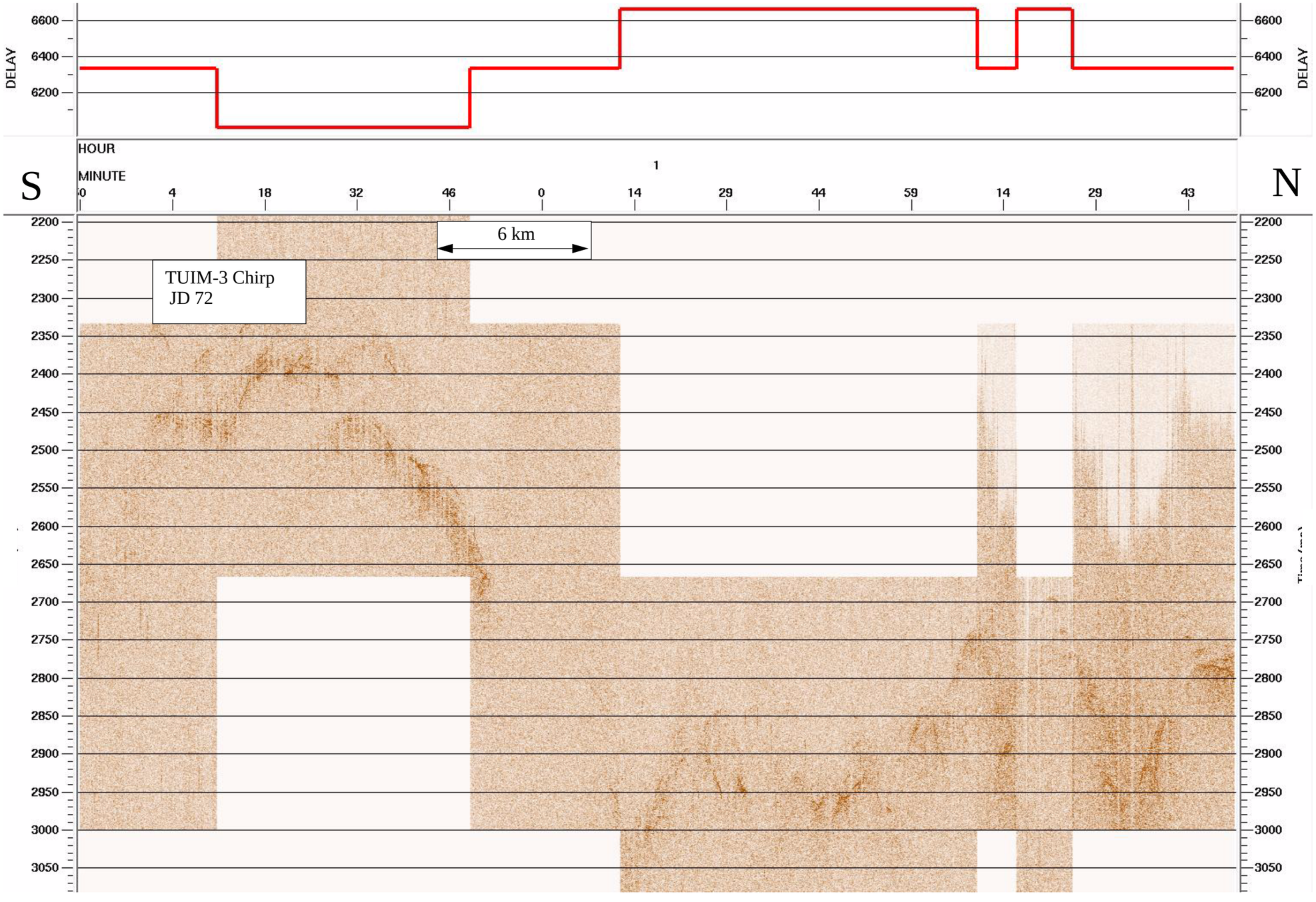

DELAY
6600
6400
6200
S
HOUR
MINUTE
22
5
10
24
38
53
7
21
36
50
4
19
34
49
N
TUIM-3 Chirp
JD 72
6 km
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Two-way Travel Time (ms)
(-4000 ms)

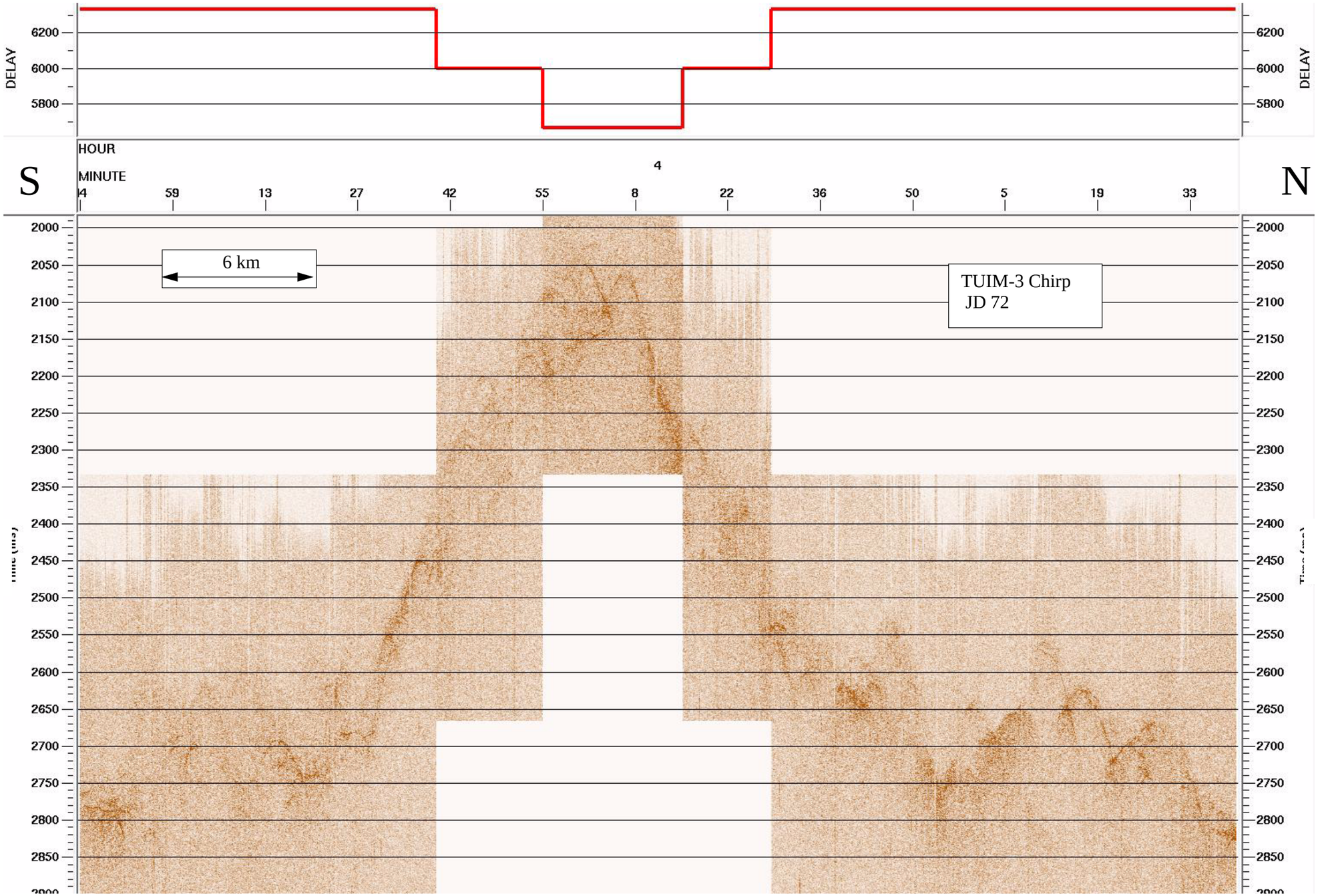
Julian Day 72
13 March 2005
Knudsen Chirp Data

Data File SBfixavg.2005mar13.0000-0600

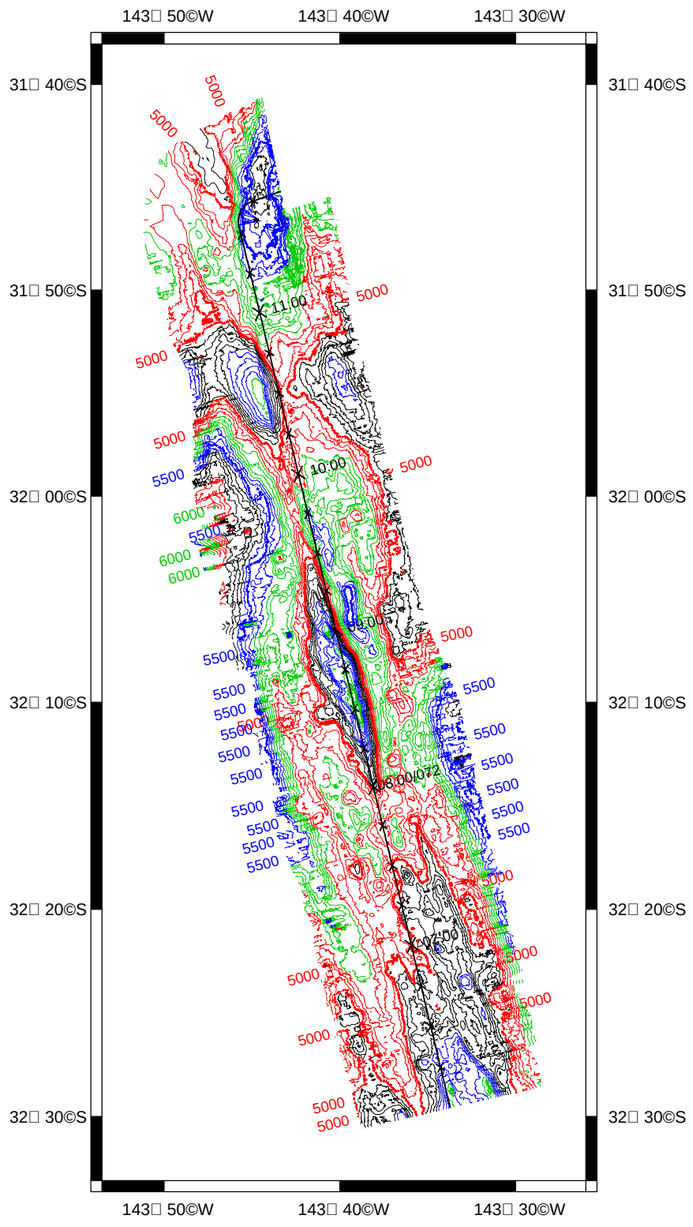


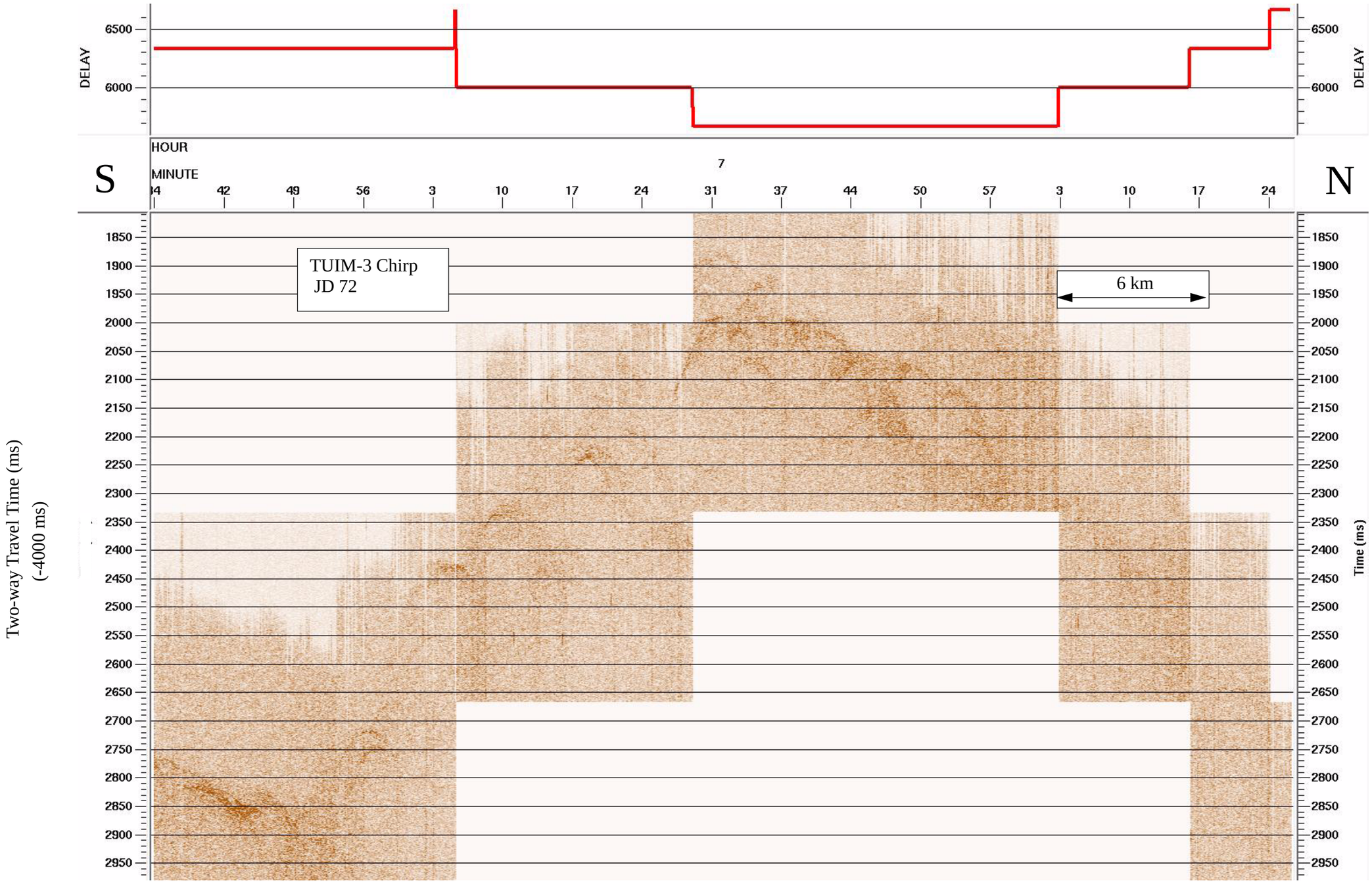

DELAY
6600
6400
6200
HOUR
22
MINUTE
55
10
24
38
53
7
21
36
50
4
19
34
49
S
N
TUIM-3 Chirp
JD 72
6 km
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Two-way Travel Time (ms)
(-4000 ms)

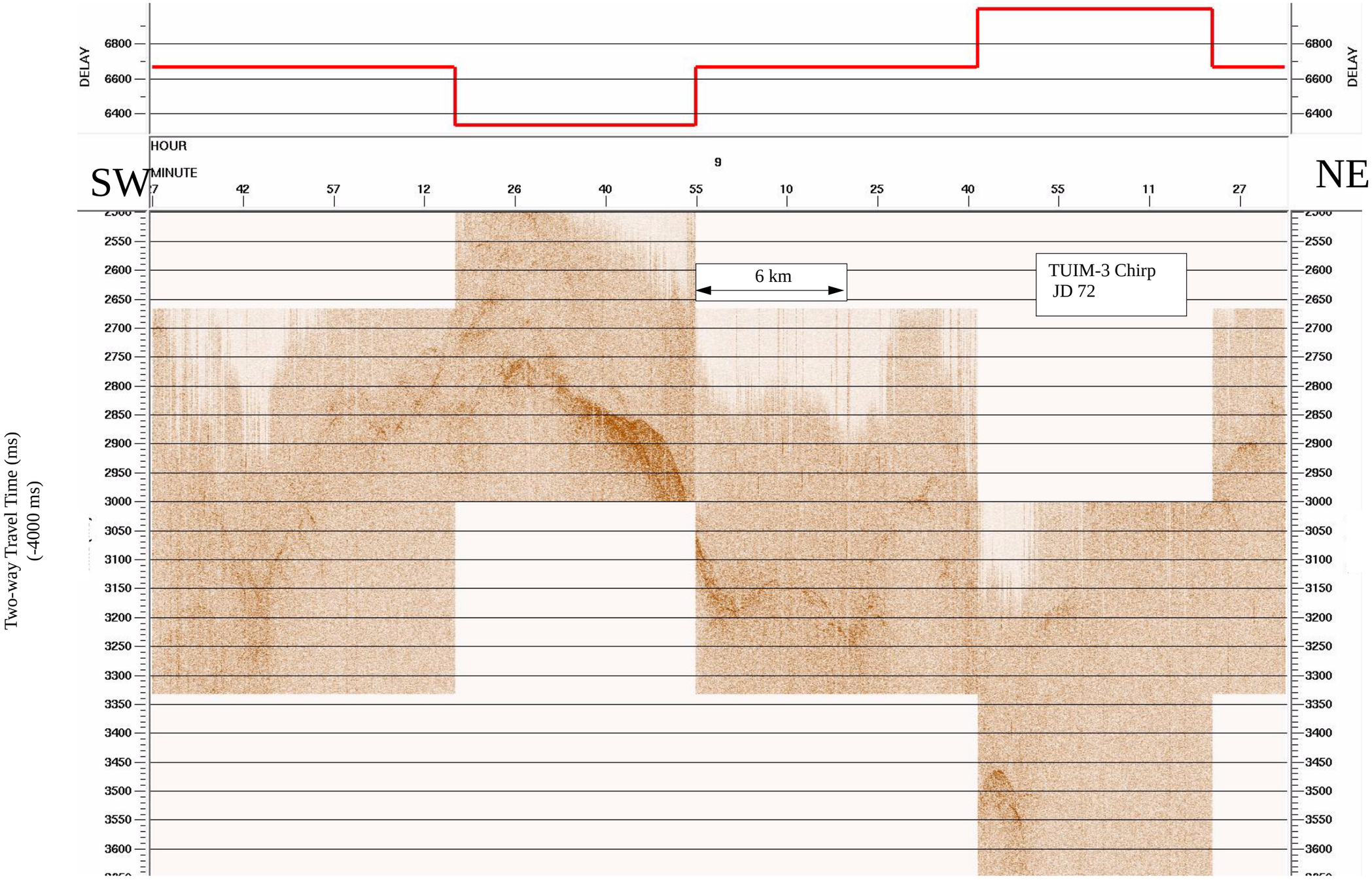

DELAY
6600
6400
6200
HOUR
MINUTE
1
S
N
0
4
18
32
46
0
14
29
44
59
14
29
43
6 km
TUIM-3 Chirp
JD 72
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6200
6000
5800
HOUR
MINUTE
4
14
59
13
27
42
55
8
22
36
50
5
19
33
S
N
6 km
TUIM-3 Chirp
JD 72
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
Two-way Travel Time (ms)
(-4000 ms)

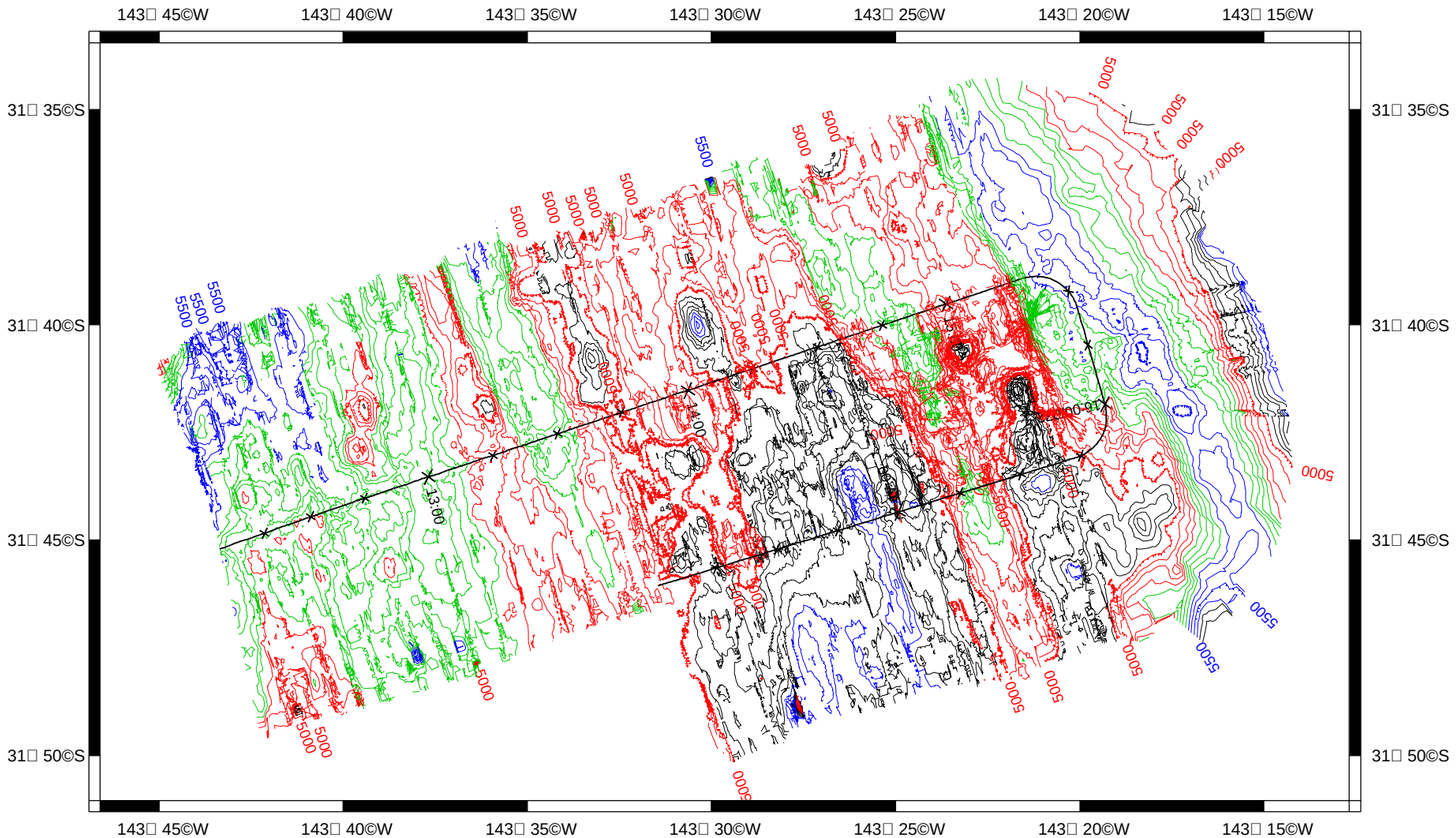
Data File SBfixavg.2005mar13.0600-1200

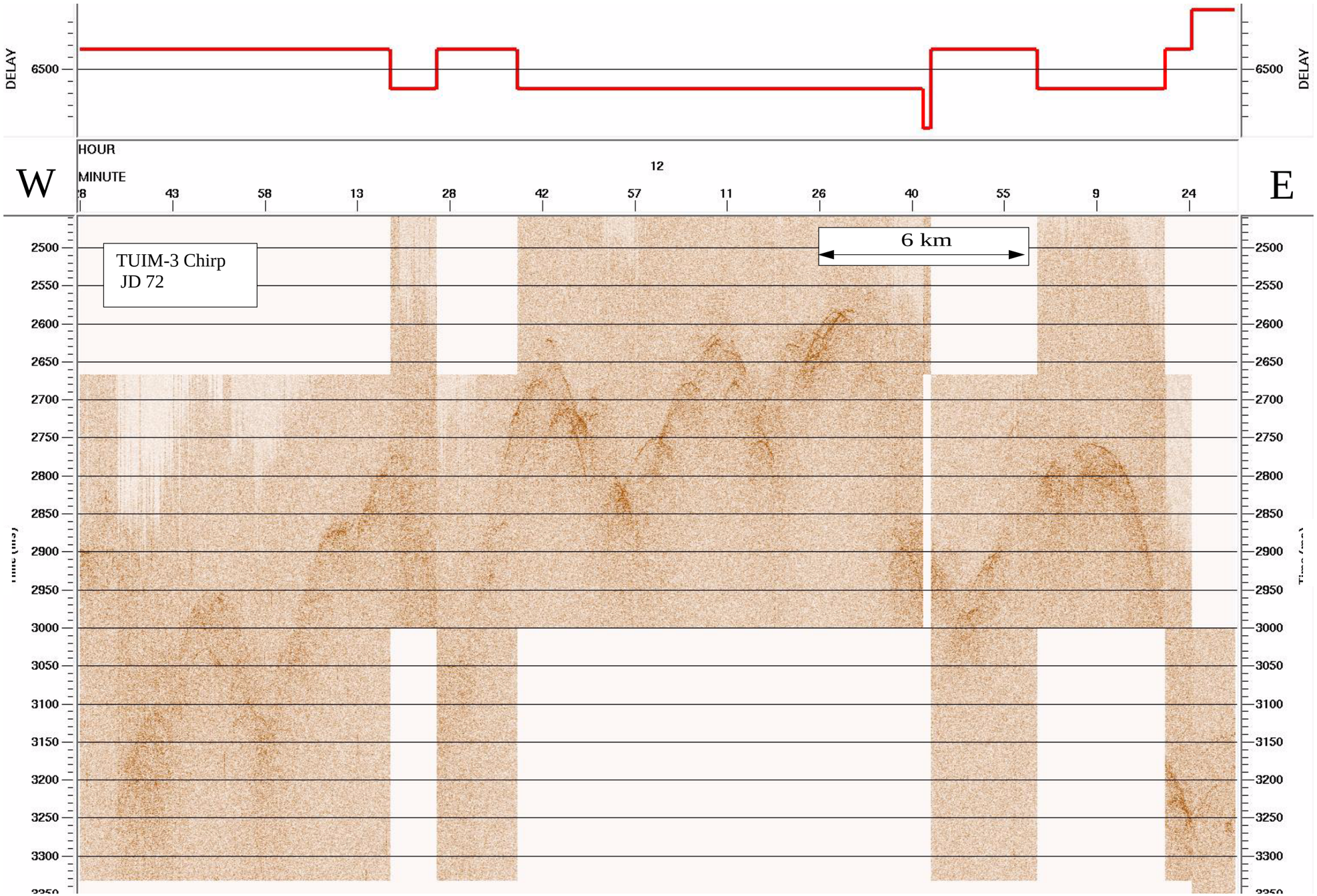


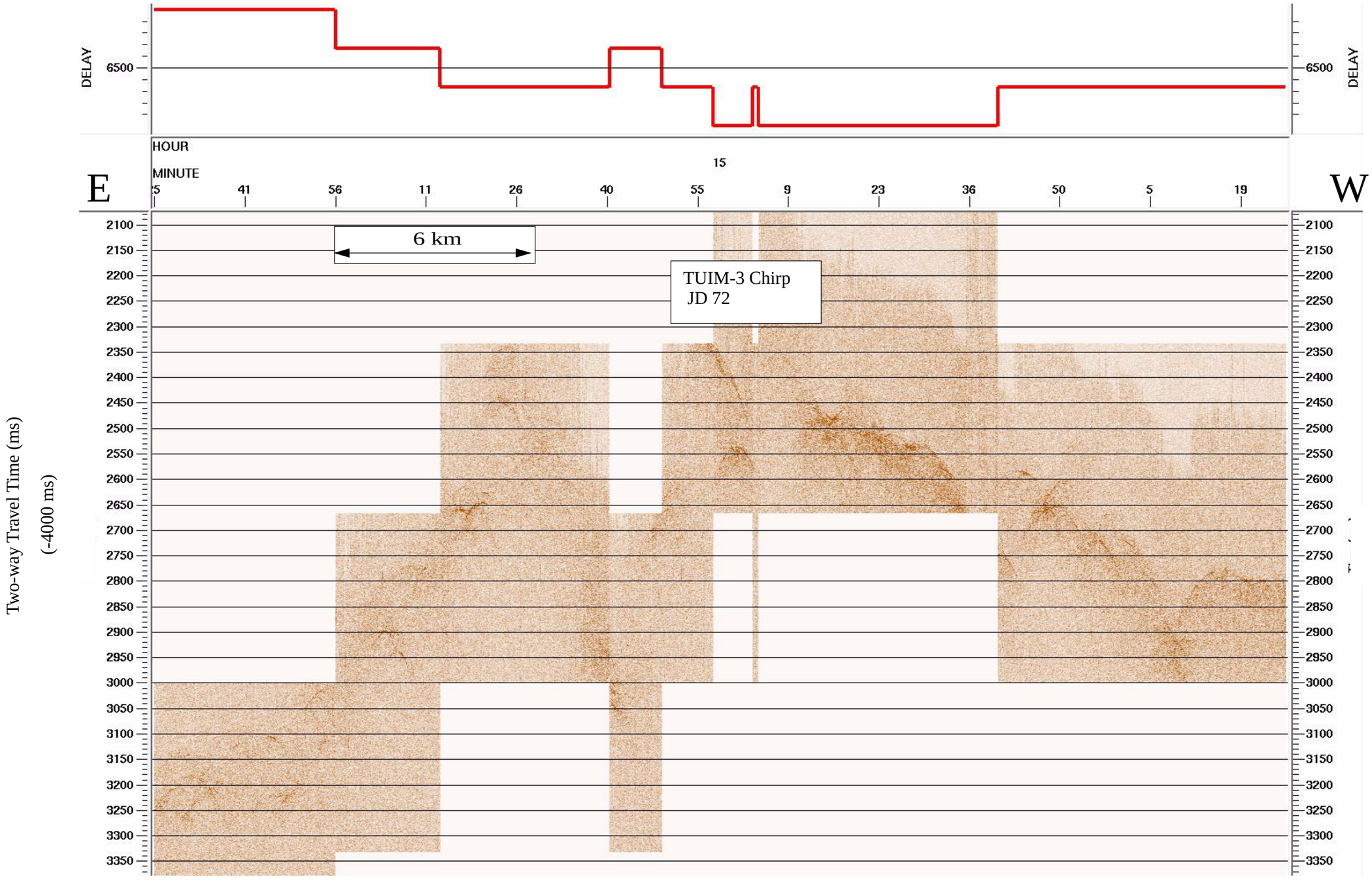

DELAY
6500
6000
HOUR
7
MINUTE
14
42
49
56
3
10
17
24
31
37
44
50
57
3
10
17
24
S
N
TUIM-3 Chirp
JD 72
6 km
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6800
6600
6400
HOUR
9
MINUTE
7
42
57
12
26
40
55
10
25
40
55
11
27
SW
NE
6 km
TUIM-3 Chirp
JD 72
Two-way Travel Time (ms)
(-4000 ms)
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600

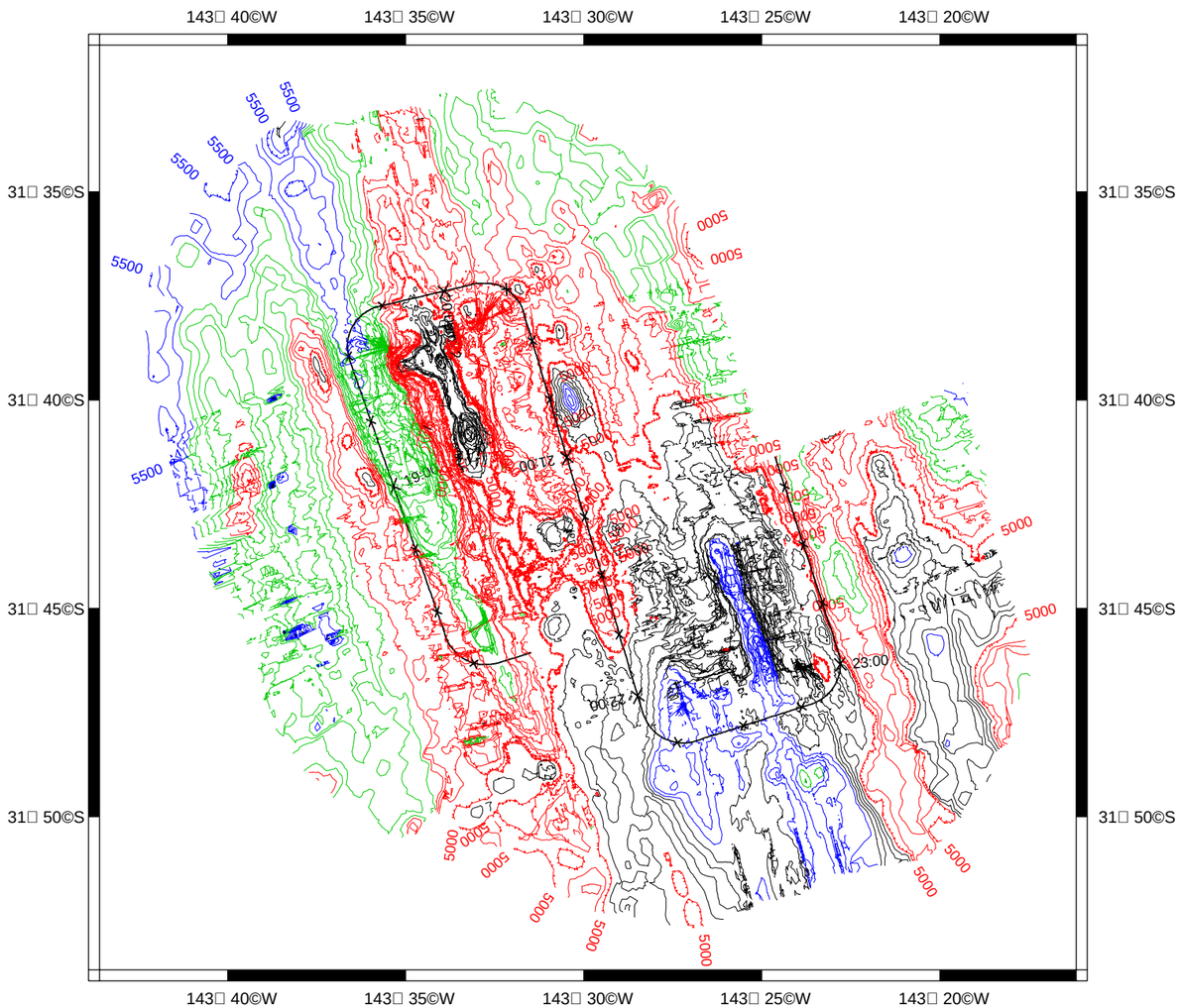
Data File SBfixavg.2005mar13.1200-1800

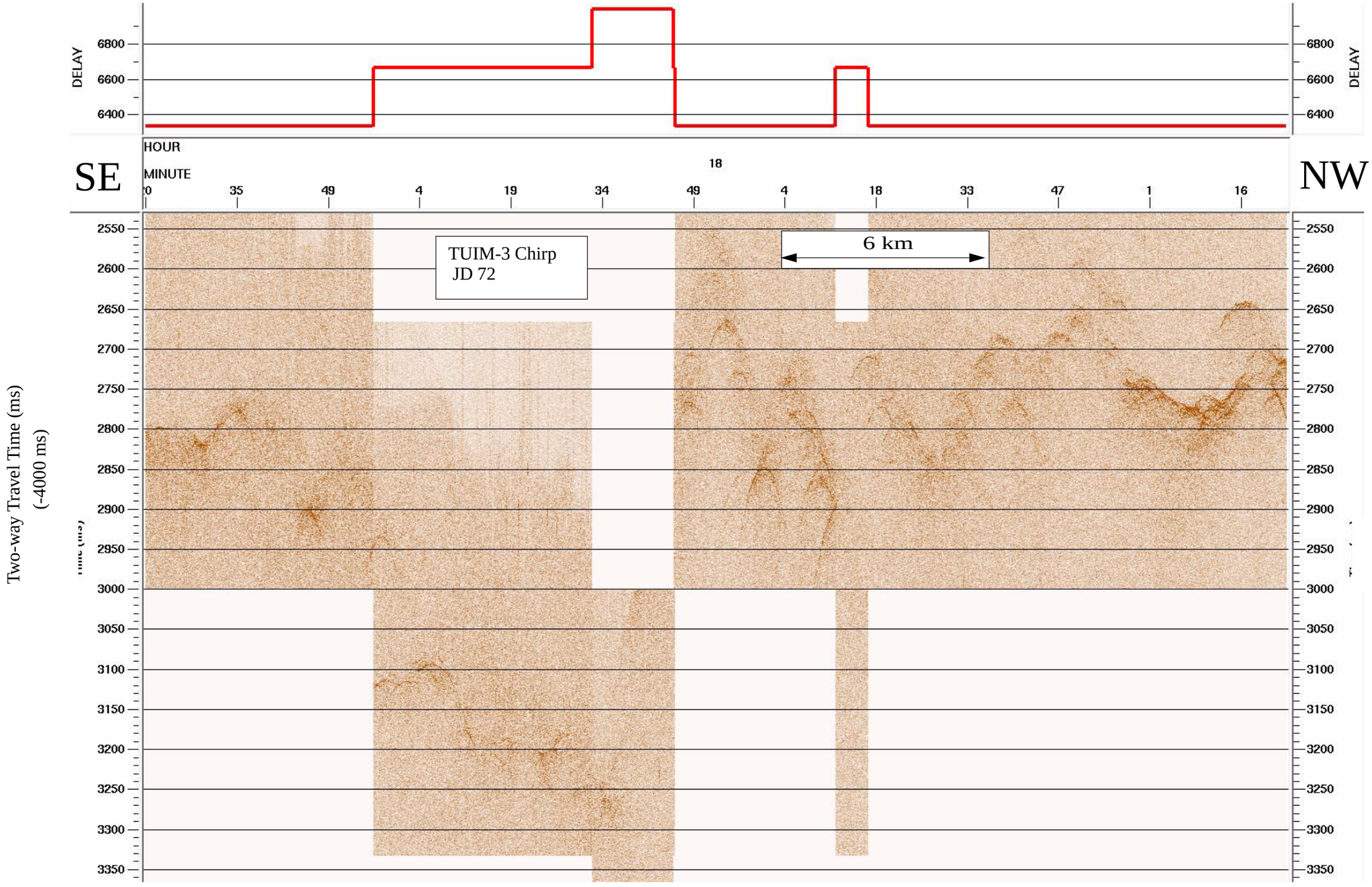


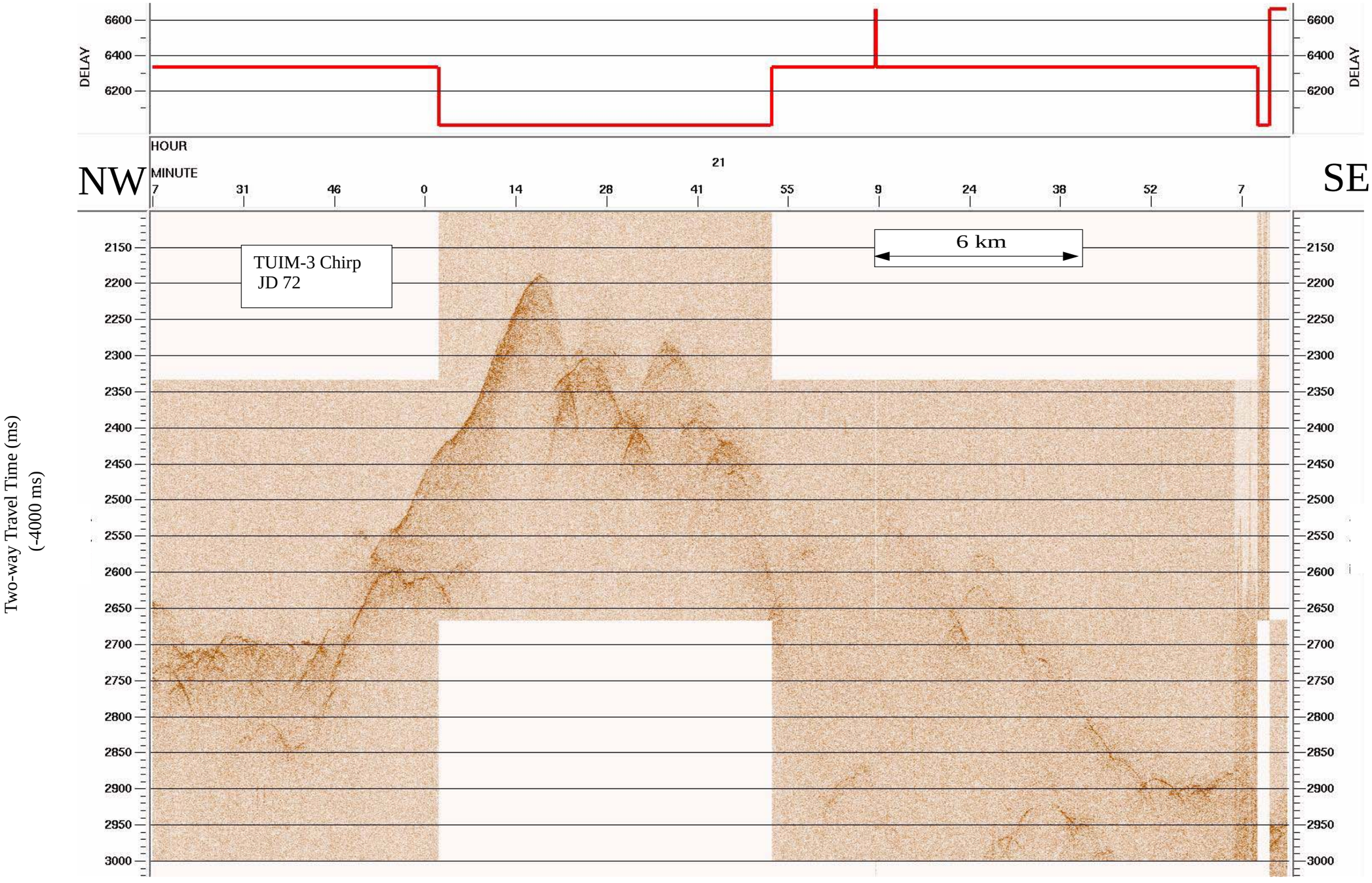

DELAY
6500
HOUR
MINUTE
12
W
E
8
43
58
13
28
42
57
11
26
40
55
9
24
6 km
TUIM-3 Chirp
JD 72
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6500
DELAY
6500
HOUR
MINUTE
15
E
W
5
41
56
11
26
40
55
9
23
36
50
5
19
6 km
TUIM-3 Chirp
JD 72
Two-way Travel Time (ms)
(-4000 ms)
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350

Data File SBfixavg.2005mar13.1800-2400

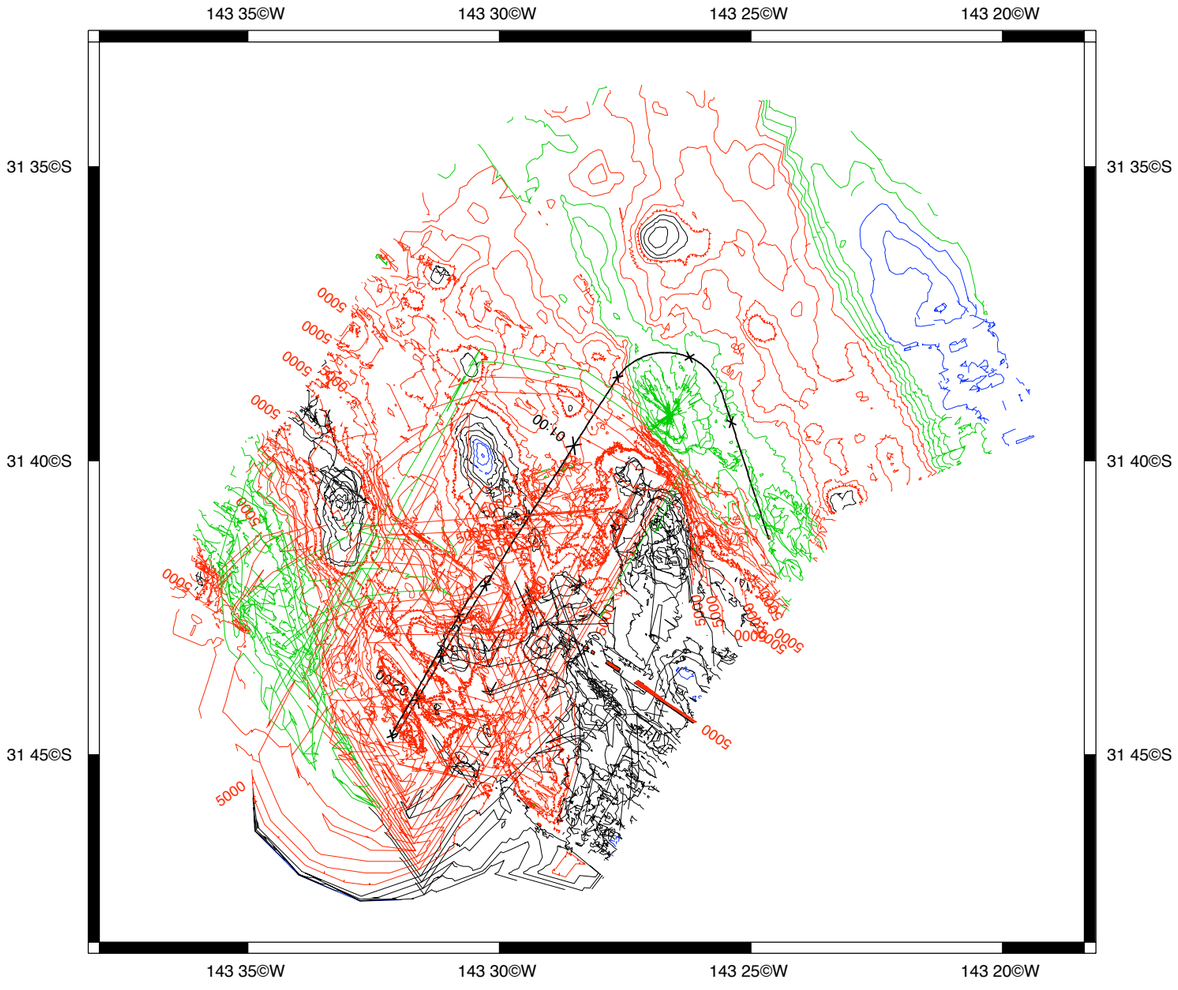


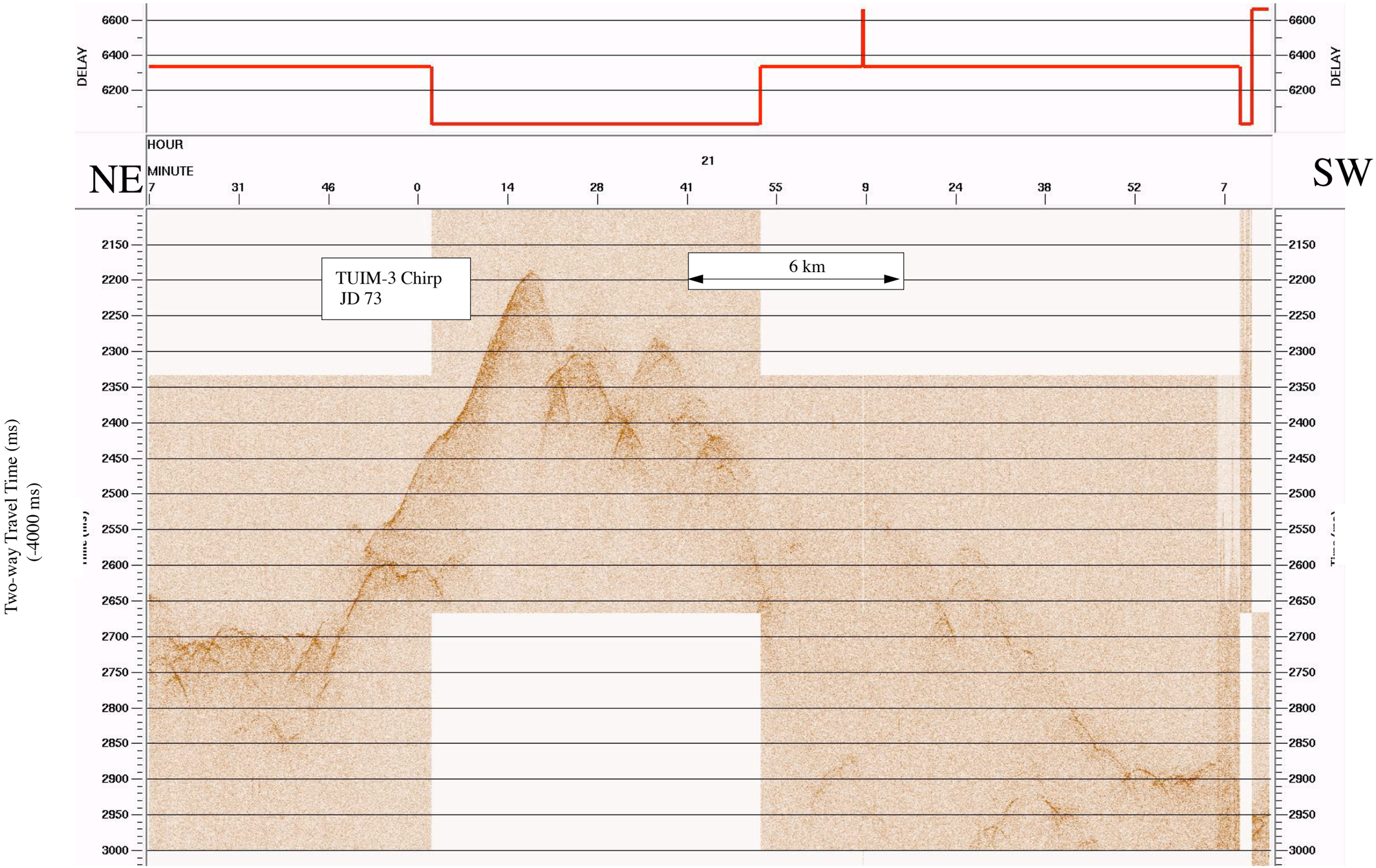

DELAY
6800
6600
6400
SE
NW
HOUR
18
MINUTE
0
35
49
4
19
34
49
4
18
33
47
1
16
TUIM-3 Chirp
JD 72
6 km
Two-way Travel Time (ms)
(-4000 ms)
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350

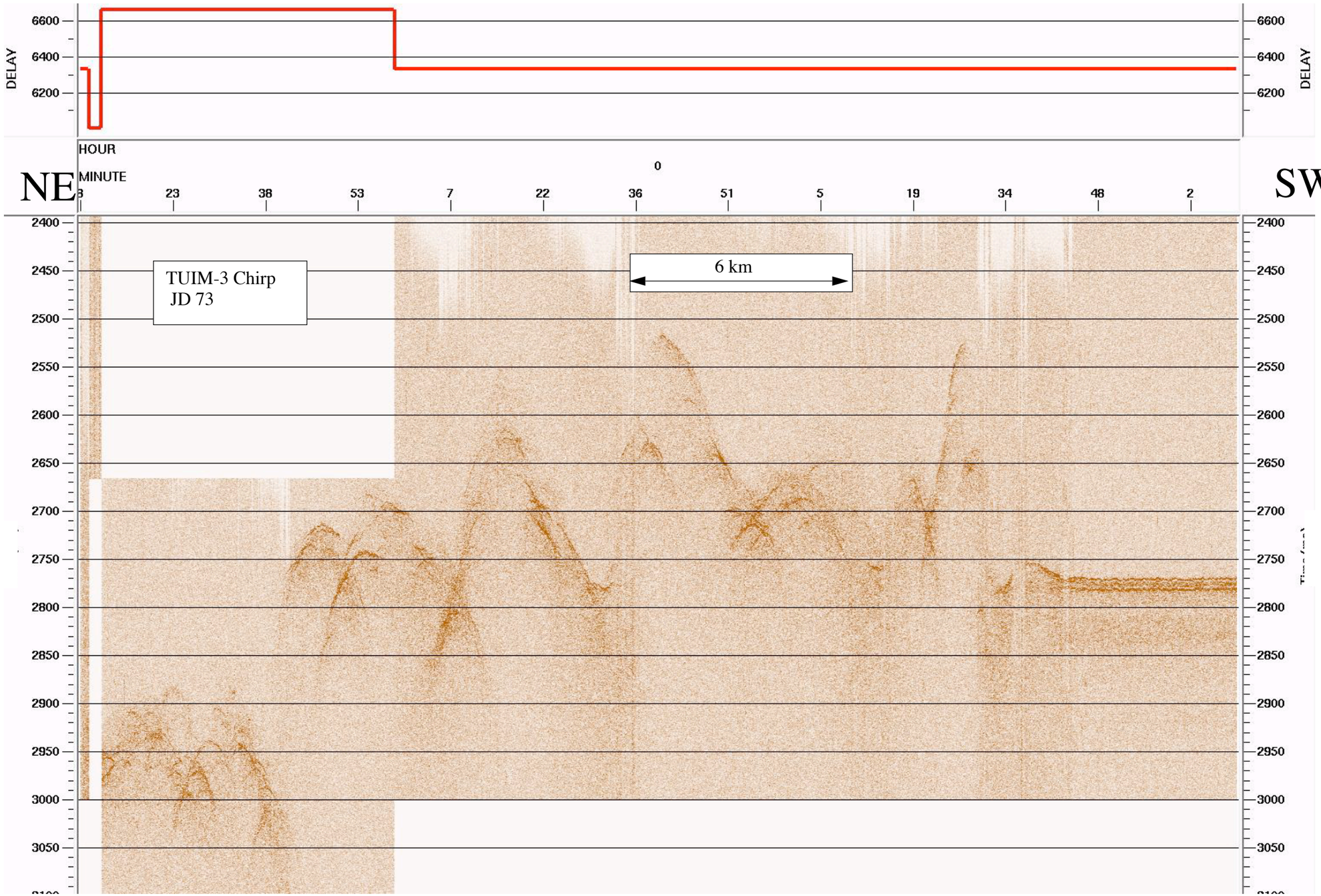

DELAY
6600
6400
6200
HOUR
21
MINUTE
7
31
46
0
14
28
41
55
9
24
38
52
7
NW
SE
TUIM-3 Chirp
JD 72
6 km
Two-way Travel Time (ms)
(-4000 ms)
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
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2800
2850
2900
2950
3000

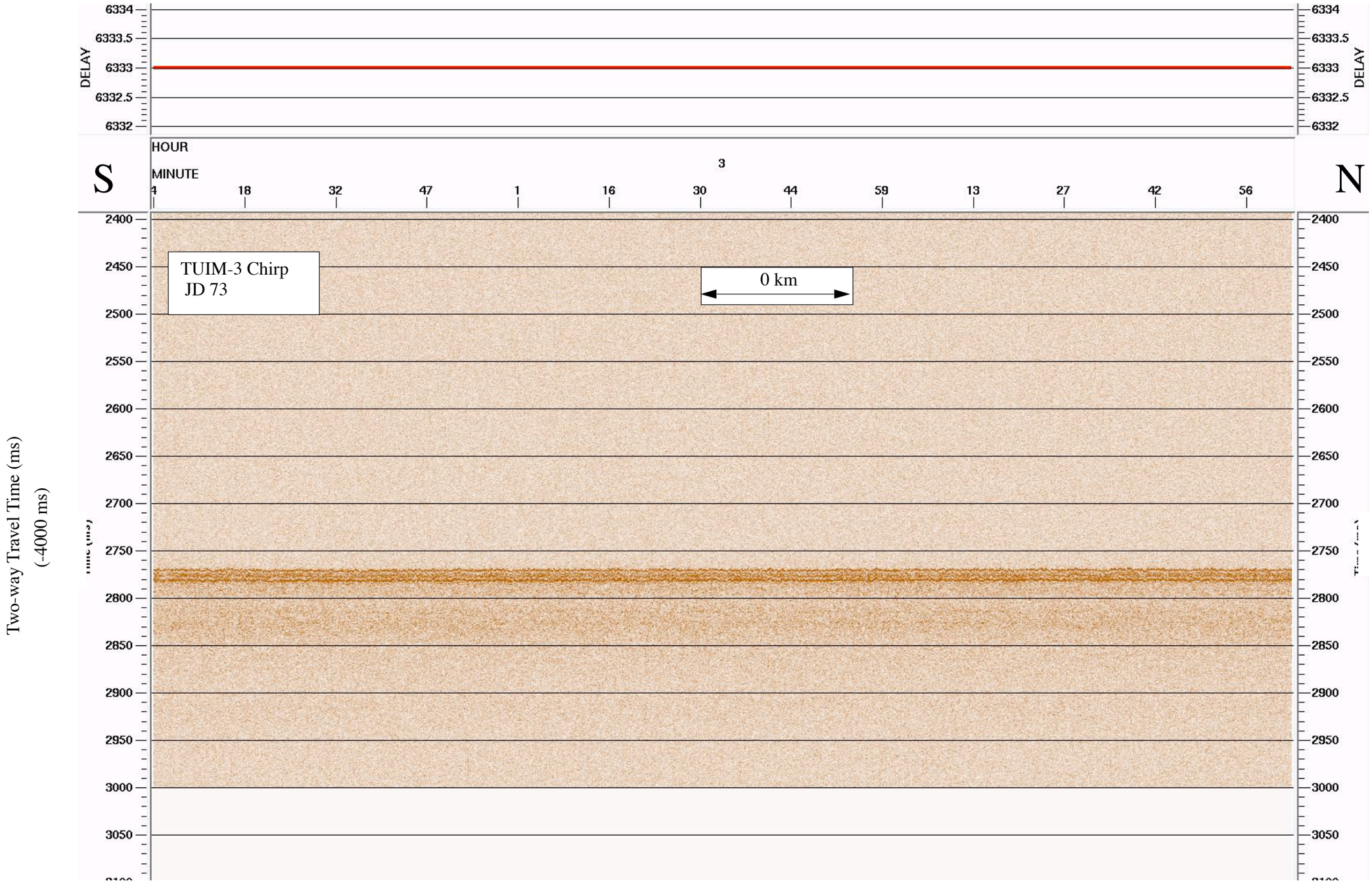
Julian Day 73
14 March 2005
Knudsen Chirp Data

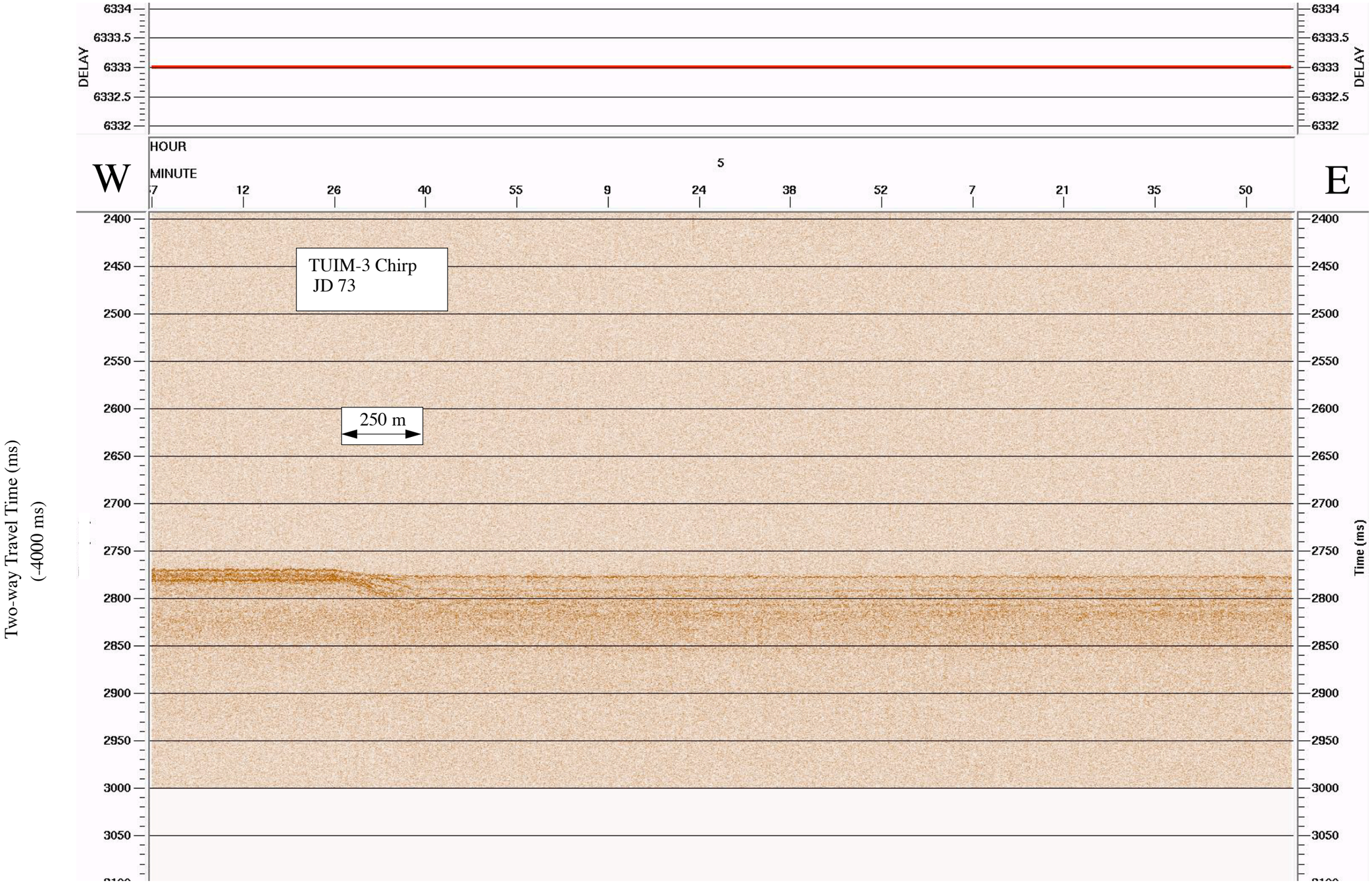
Data File SBfixavg.2005mar14.0000-0600

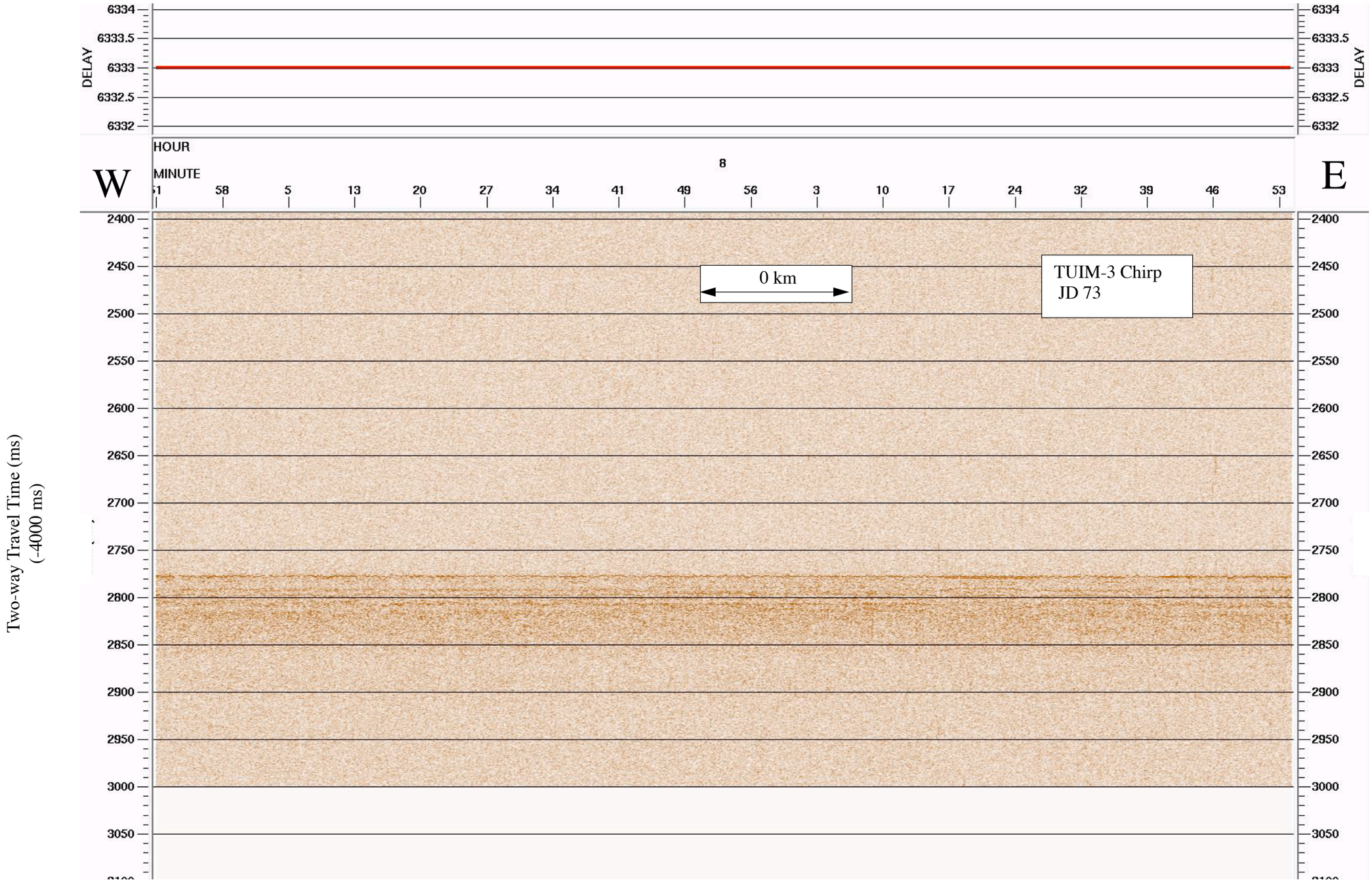



DELAY
6600
6400
6200
HOUR
21
MINUTE
7
31
46
0
14
28
41
55
9
24
38
52
7
NE
SW
TUIM-3 Chirp
JD 73
6 km
Two-way Travel Time (ms)
(-4000 ms)
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
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2800
2850
2900
2950
3000

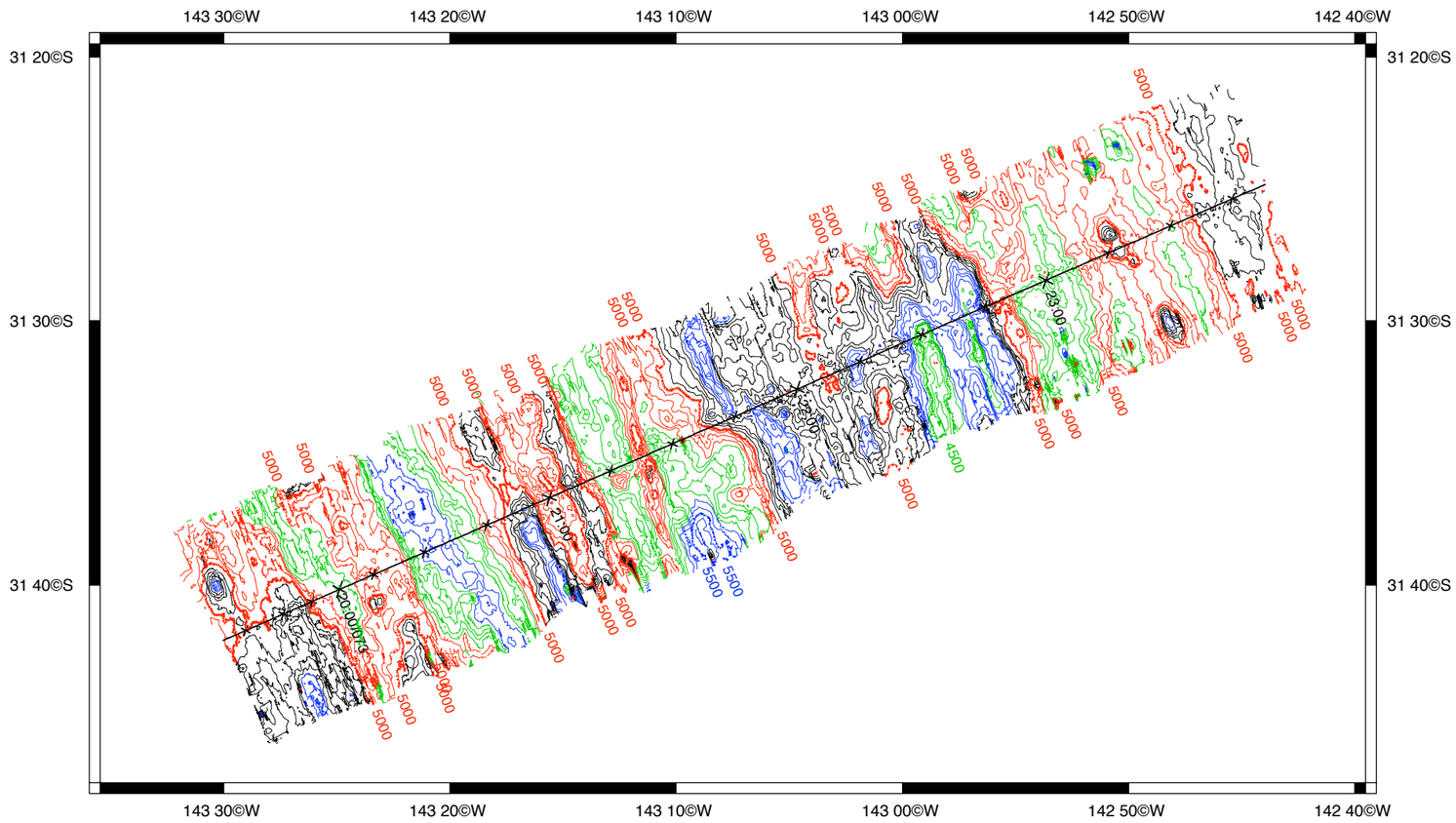

DELAY
6600
6400
6200
HOUR
MINUTE
0
3
23
38
53
7
22
36
51
5
19
34
48
2
NE
SW
TUIM-3 Chirp
JD 73
6 km
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Two-way Travel Time (ms)
(-4000 ms)

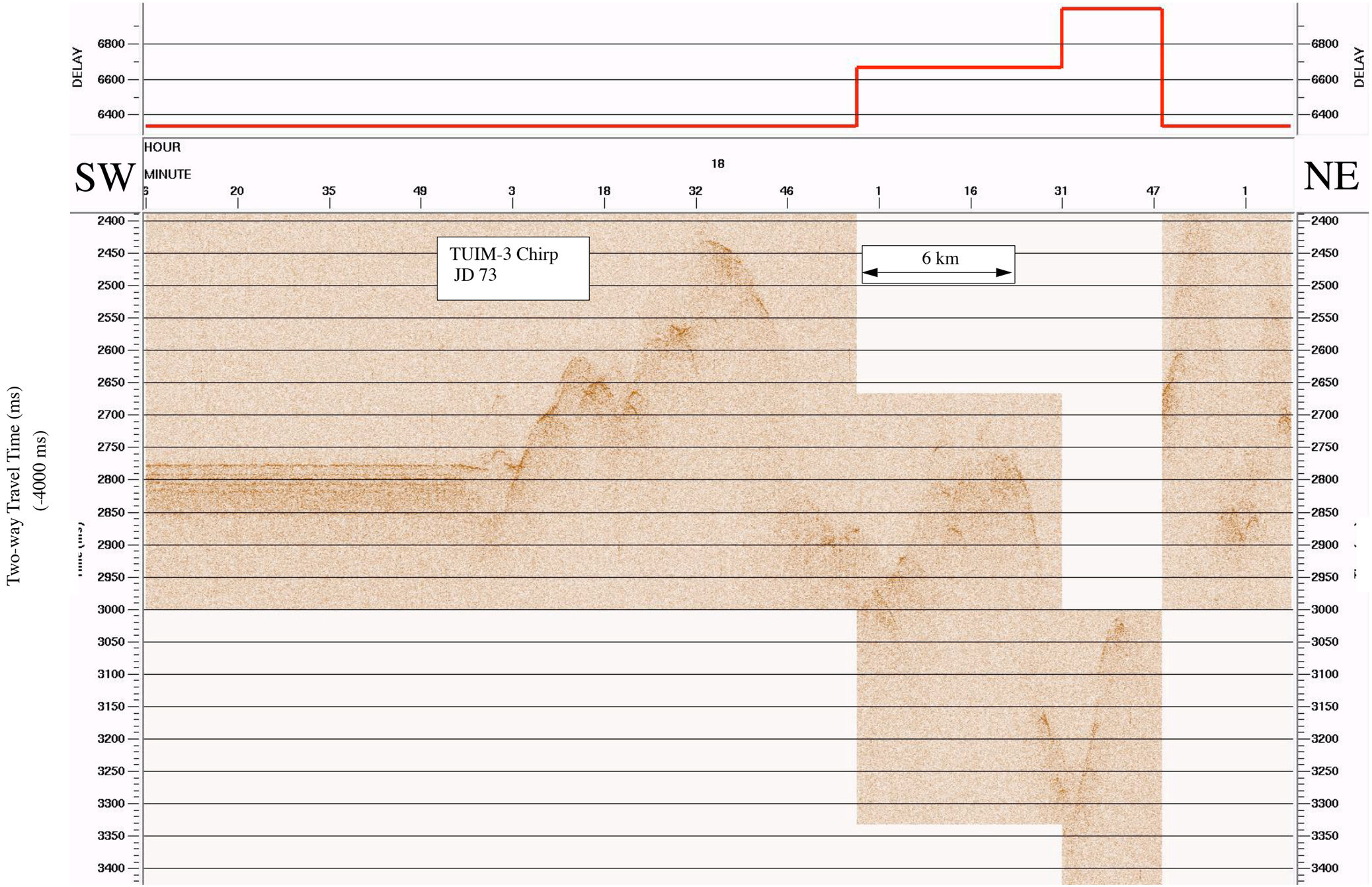

DELAY
6334
6333.5
6333
6332.5
6332
S
N
HOUR
3
MINUTE
4
18
32
47
1
16
30
44
59
13
27
42
56
TUIM-3 Chirp
JD 73
0 km
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Two-way Travel Time (ms)
(-4000 ms)

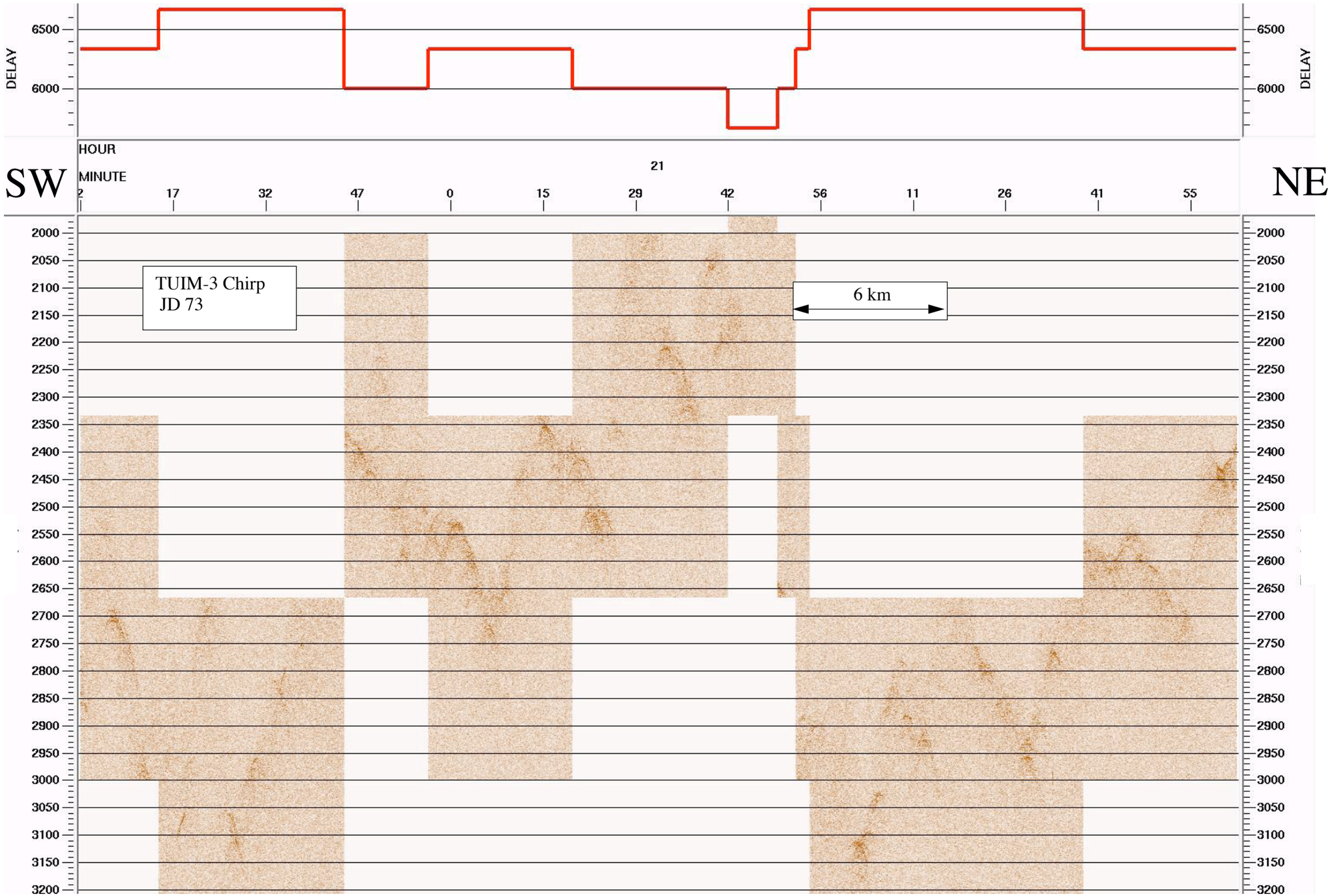

DELAY
6334
6333.5
6333
6332.5
6332
W
E
HOUR
MINUTE
5
7
12
26
40
55
9
24
38
52
7
21
35
50
TUIM-3 Chirp
JD 73
250 m
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)

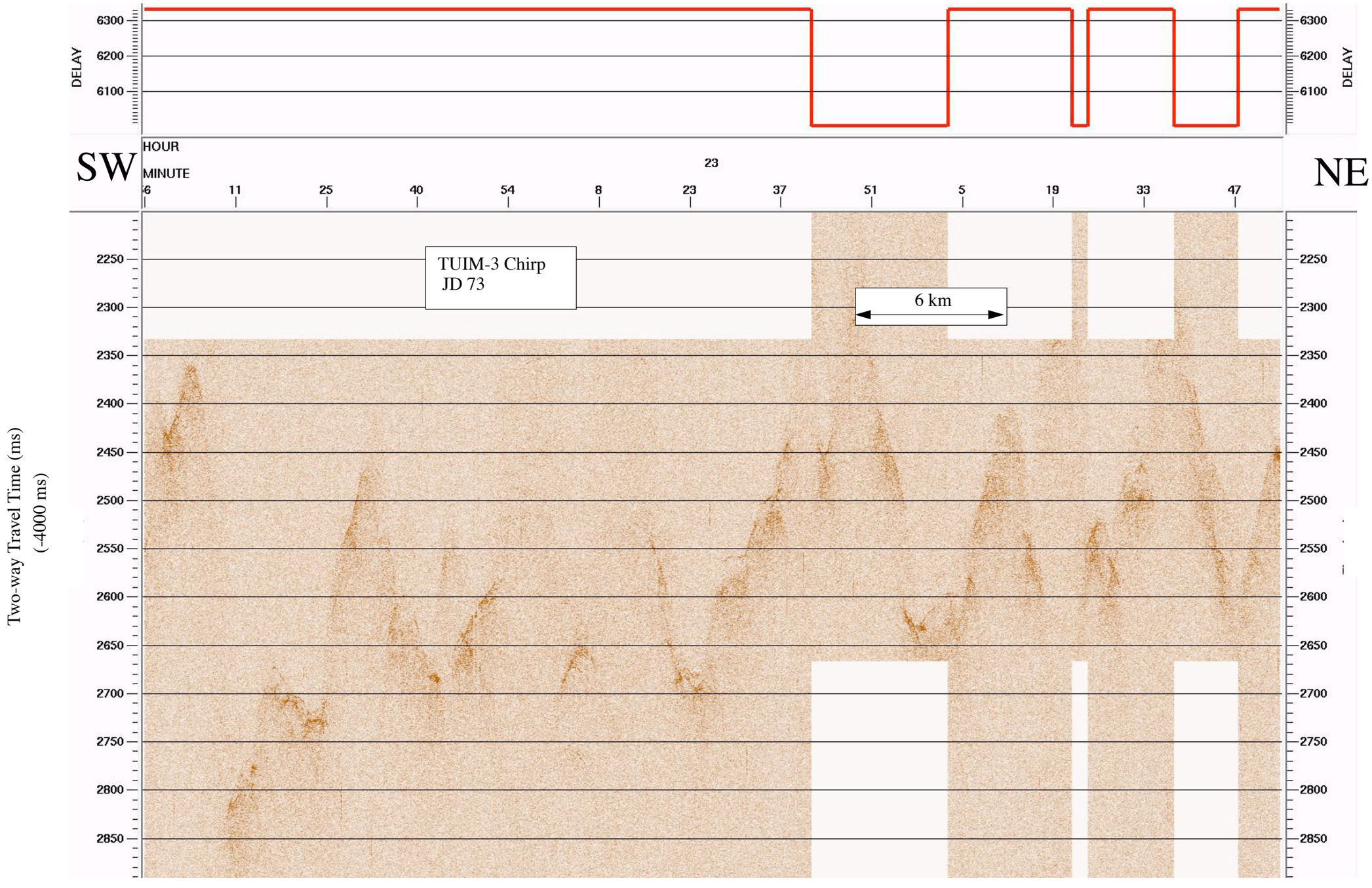

DELAY
6334
6333.5
6333
6332.5
6332
W
E
HOUR
8
MINUTE
51
58
5
13
20
27
34
41
49
56
3
10
17
24
32
39
46
53
0 km
TUIM-3 Chirp
JD 73
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
Two-way Travel Time (ms)
(-4000 ms)

Data File SBfixavg.2005mar14.1800-2400

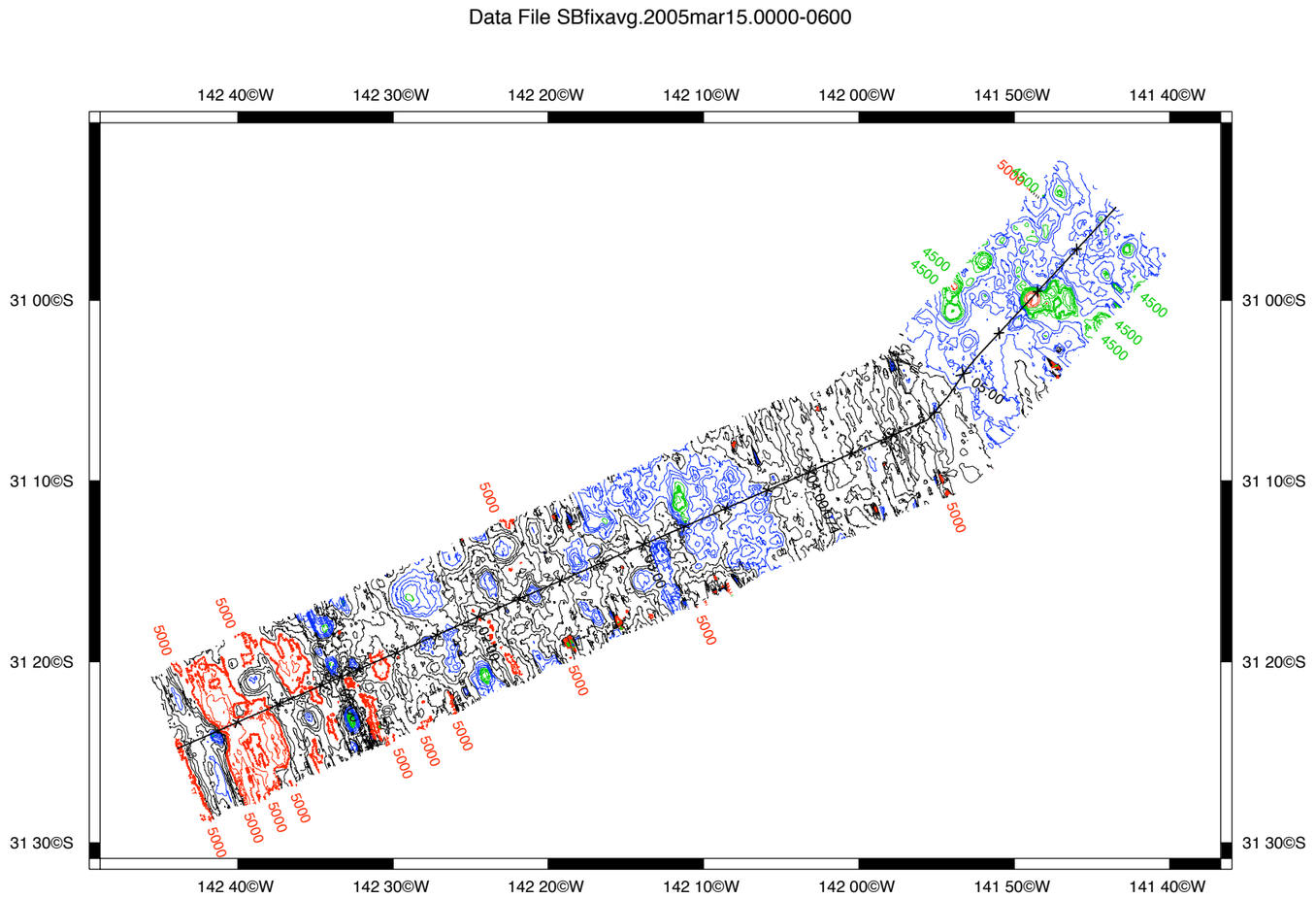


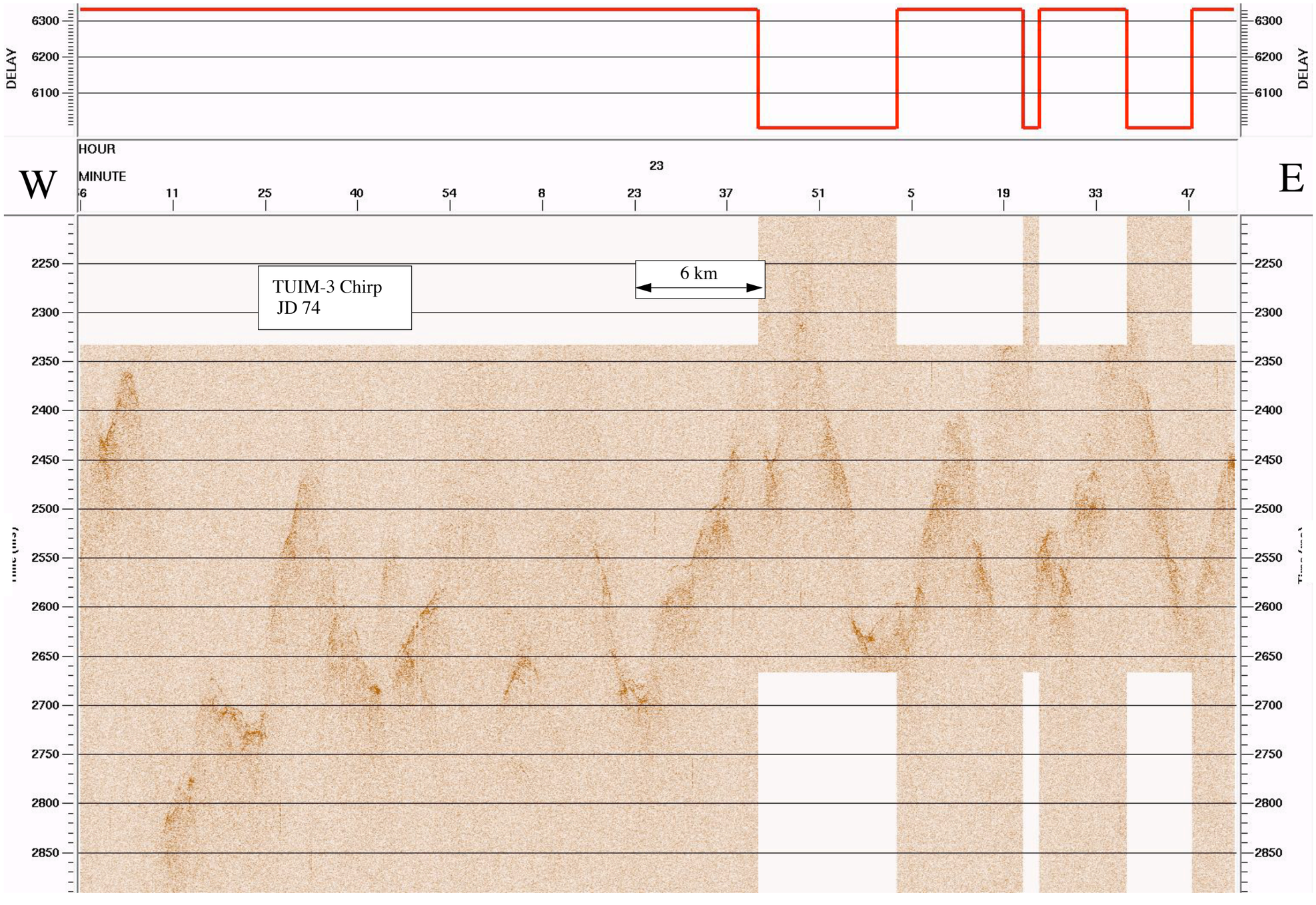

DELAY
6800
6600
6400
SW
NE
HOUR
18
MINUTE
6
20
35
49
3
18
32
46
1
16
31
47
1
TUIM-3 Chirp
JD 73
6 km
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
Two-way Travel Time (ms)
(-4000 ms)

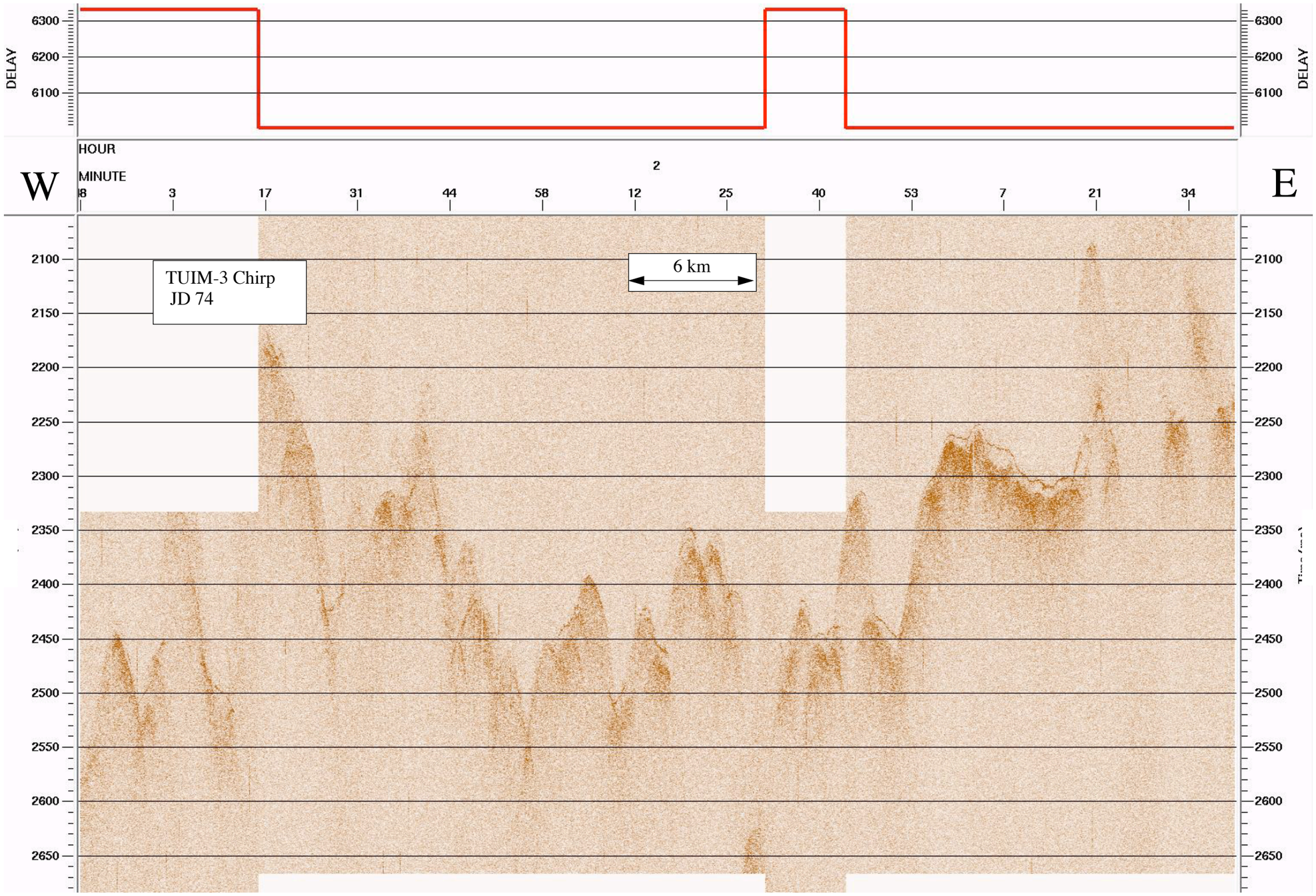

DELAY
6500
6000
SW
HOUR
21
MINUTE
2
17
32
47
0
15
29
42
56
11
26
41
55
NE
TUIM-3 Chirp
JD 73
6 km
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
Two-way Travel Time (ms)
(-4000 ms)

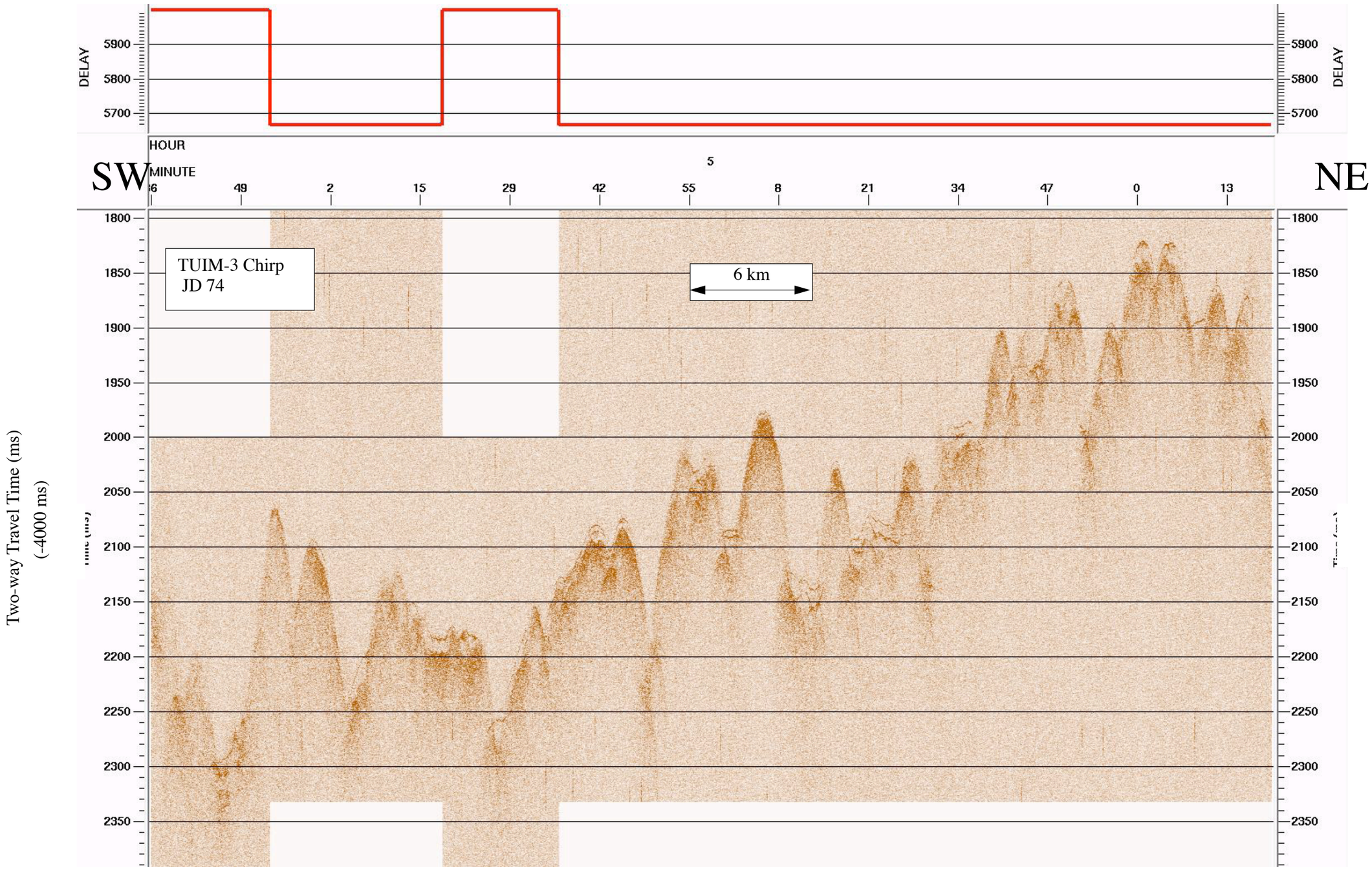

DELAY
6300
6200
6100
SW
NE
HOUR
MINUTE
23
6
11
25
40
54
8
23
37
51
5
19
33
47
TUIM-3 Chirp
JD 73
6 km
Two-way Travel Time (ms)
(-4000 ms)
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850

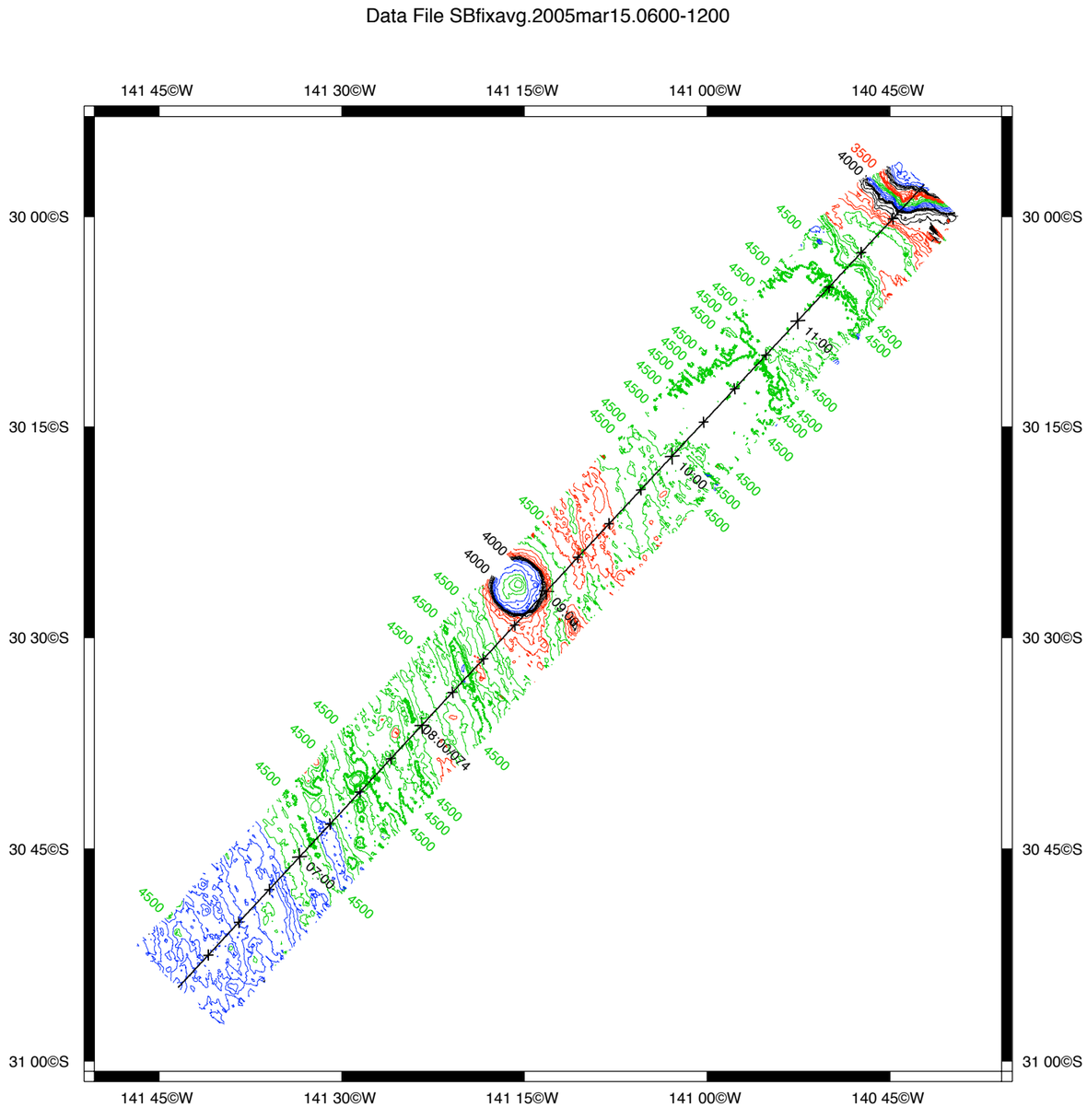
Julian Day 74
15 March 2005
Knudsen Chirp Data

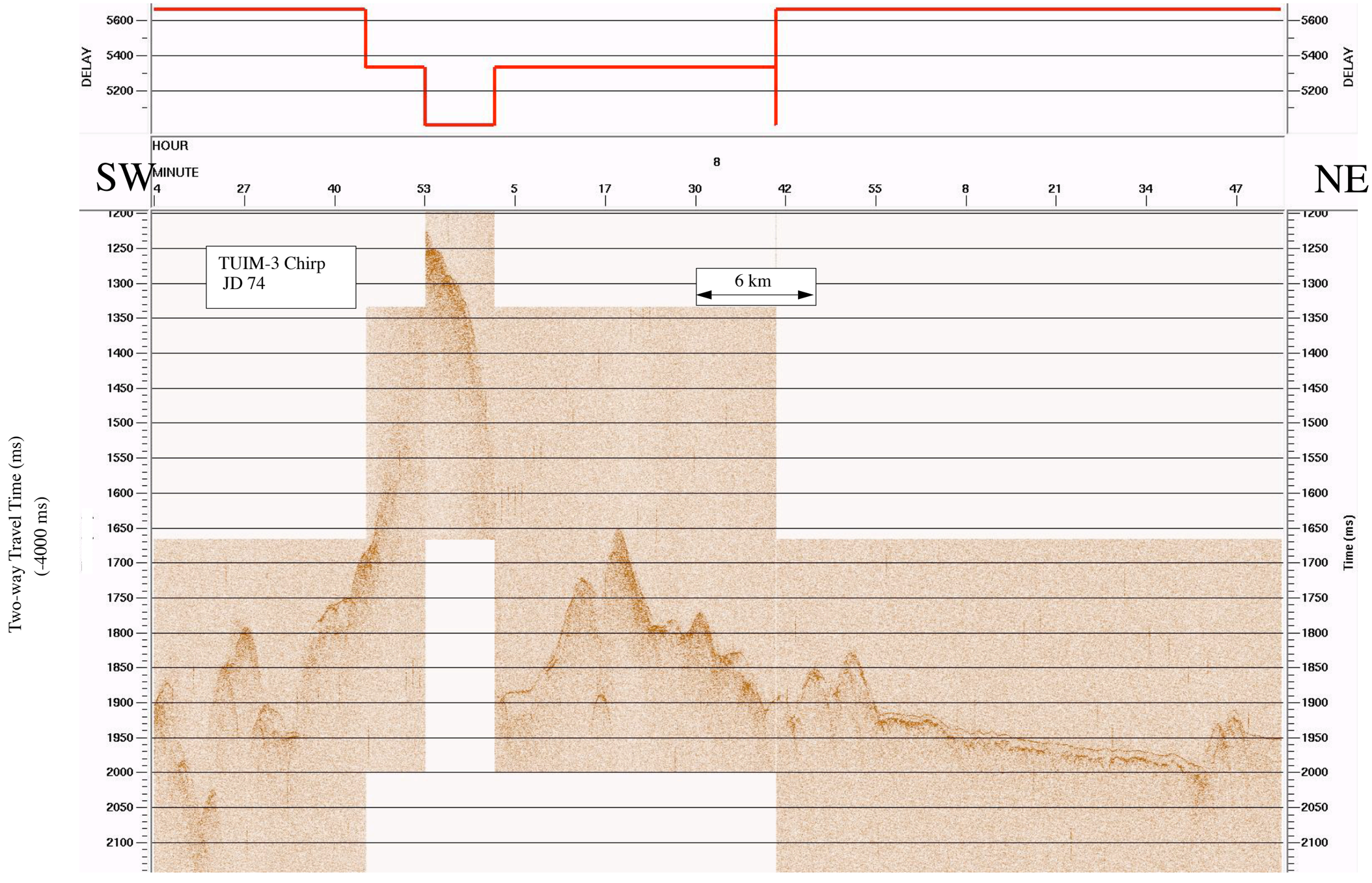

Data File SBfixavg.2005mar15.0000-0600
142 40©W
142 30©W
142 20©W
142 10©W
142 00©W
141 50©W
141 40©W
31 00©S
31 10©S
31 20©S
31 30©S
4500
5000
0500

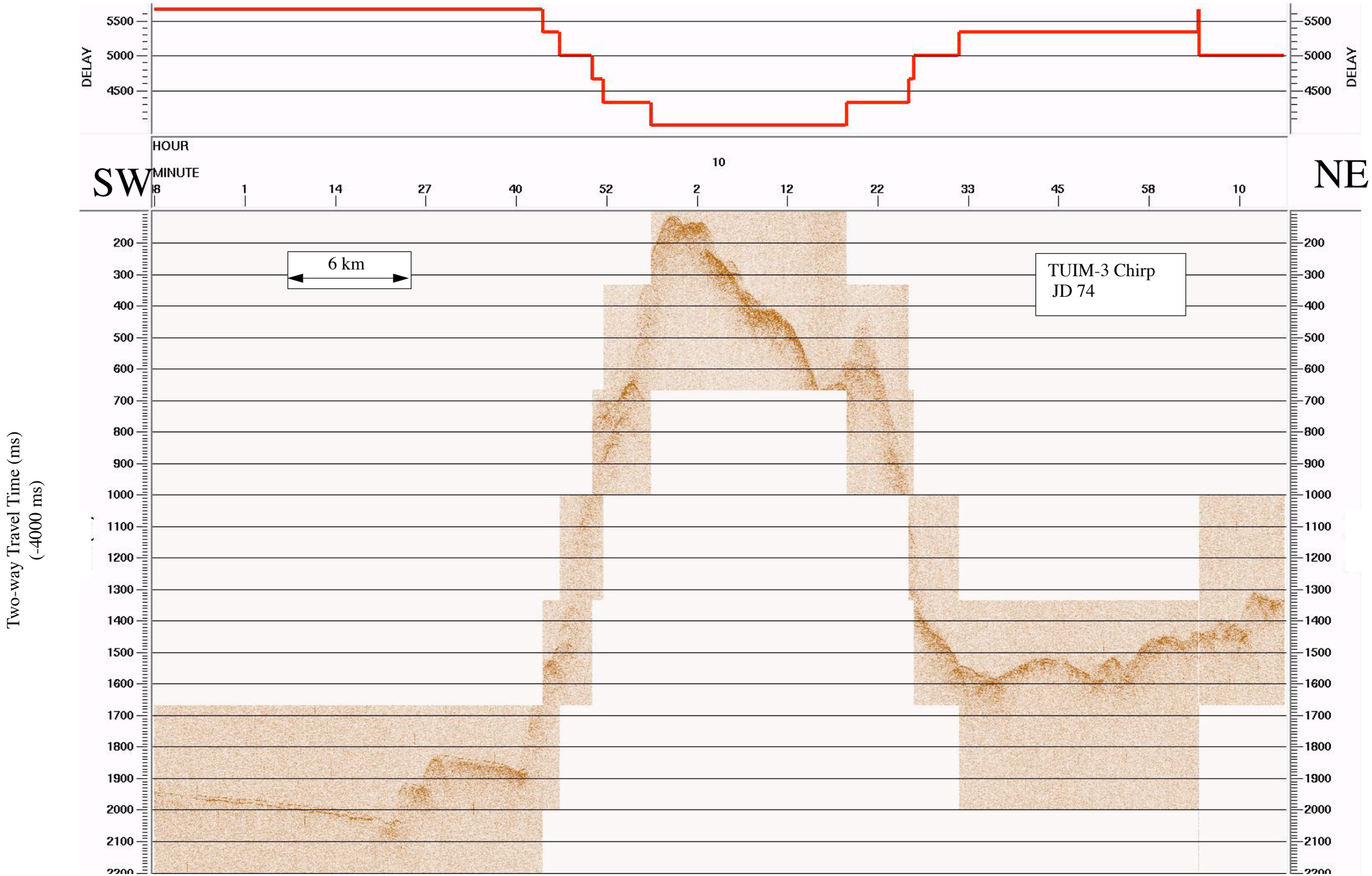

DELAY
6300
6200
6100
W
HOUR
MINUTE
23
6
11
25
40
54
8
23
37
51
5
19
33
47
E
TUIM-3 Chirp
JD 74
6 km
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
Two-way Travel Time (ms)
(-4000 ms)

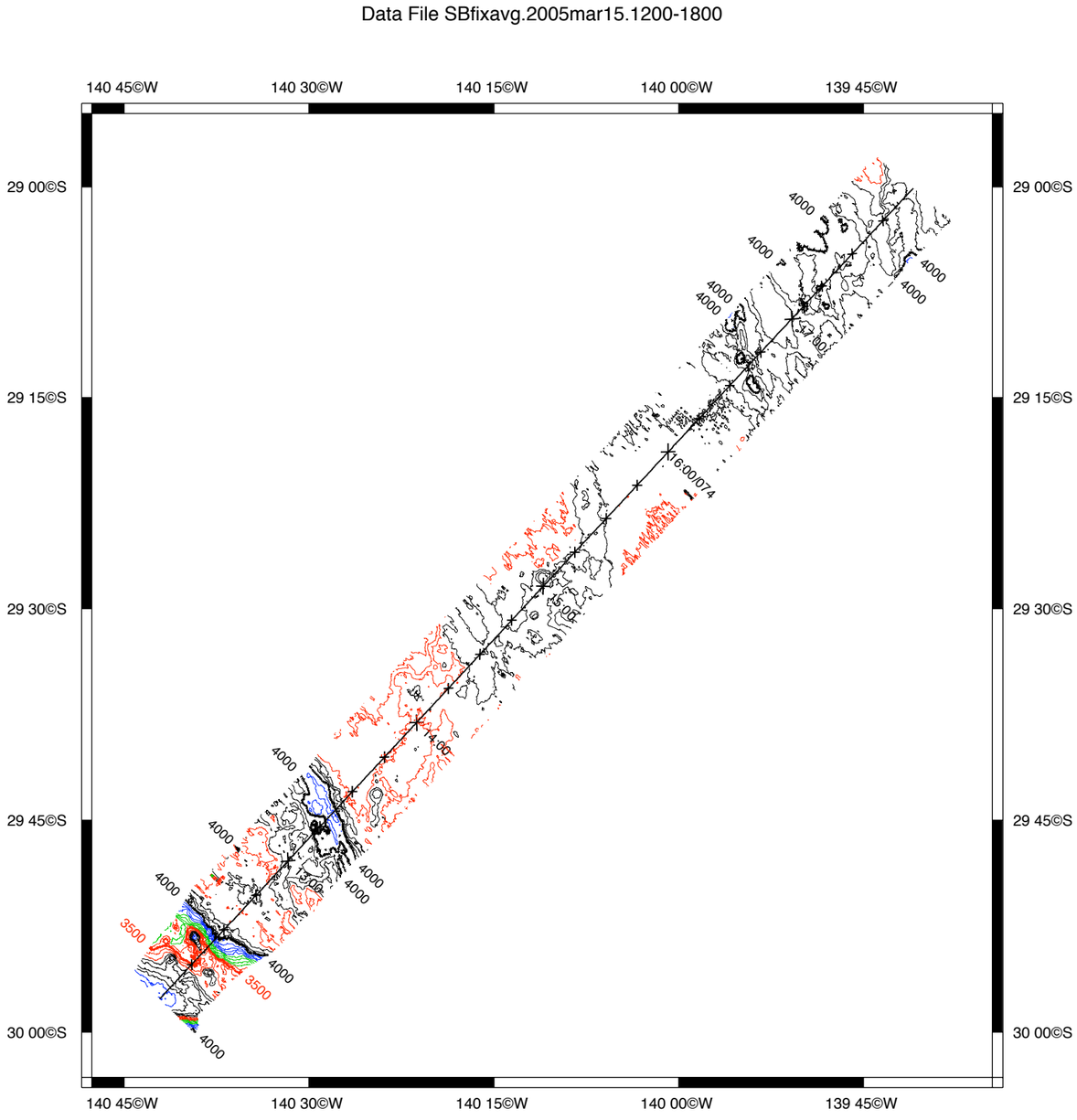

DELAY
6300
6200
6100
HOUR
MINUTE
2
W
E
18
3
17
31
44
58
12
25
40
53
7
21
34
TUIM-3 Chirp
JD 74
6 km
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
Two-way Travel Time (ms)
(-4000 ms)

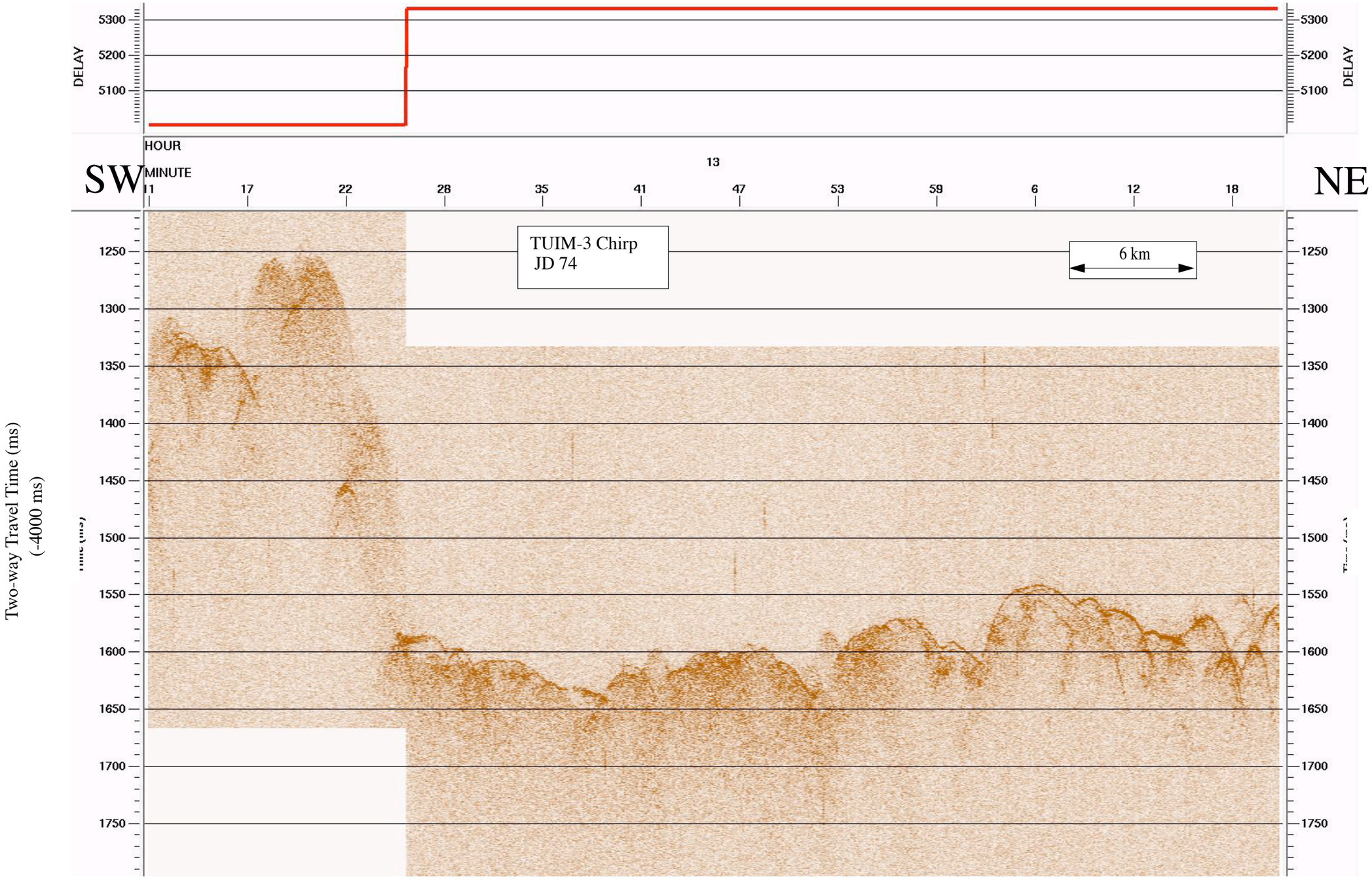

DELAY
5900
5800
5700
HOUR
5
MINUTE
46
49
2
15
29
42
55
8
21
34
47
0
13
SW
NE
TUIM-3 Chirp
JD 74
6 km
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
Two-way Travel Time (ms)
(-4000 ms)

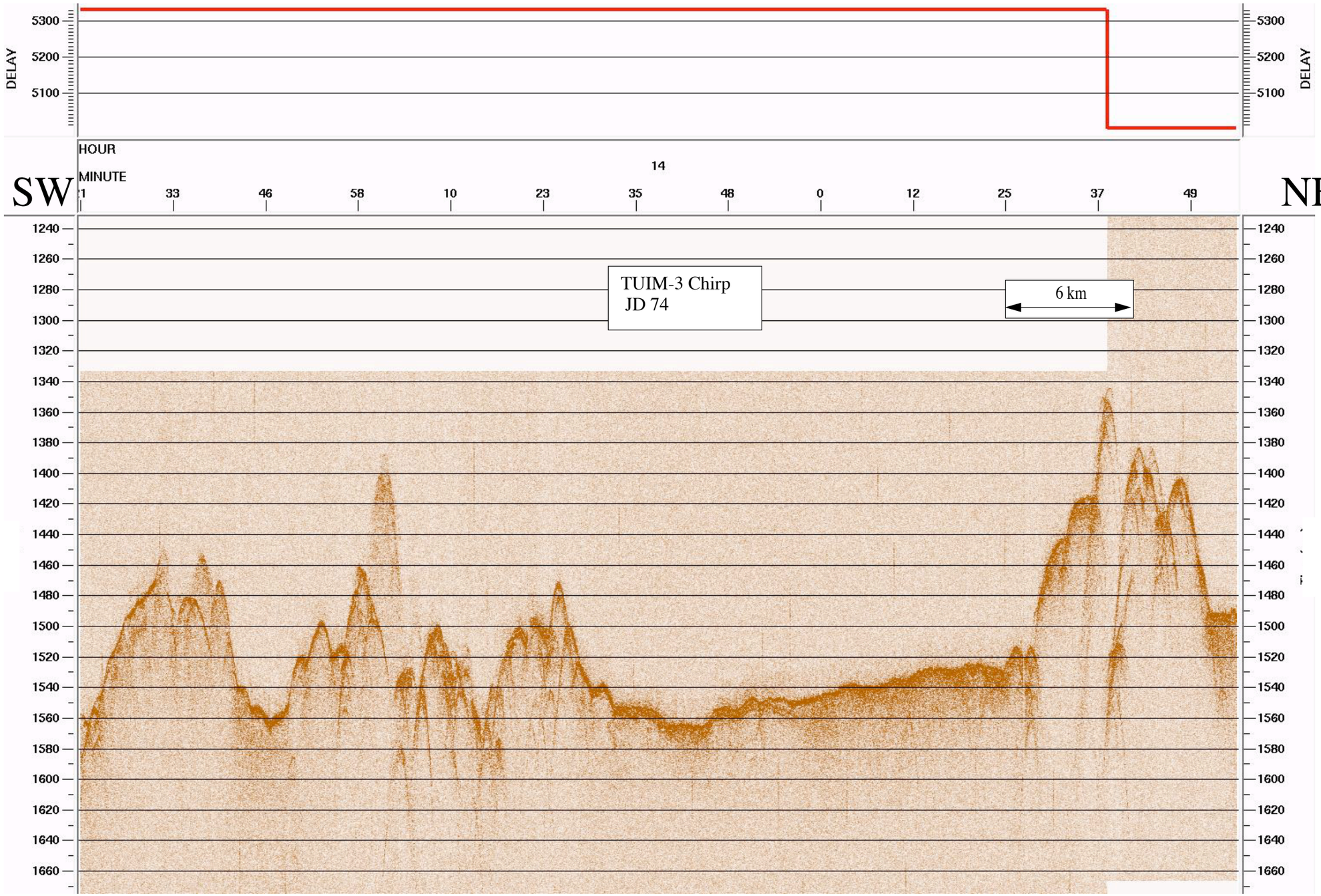

Data File SBfixavg.2005mar15.0600-1200
141 45©W
141 30©W
141 15©W
141 00©W
140 45©W
30 00©S
30 15©S
30 30©S
30 45©S
31 00©S
3500
4000
4500
11:00
10:00
09:00
08:00
07:00

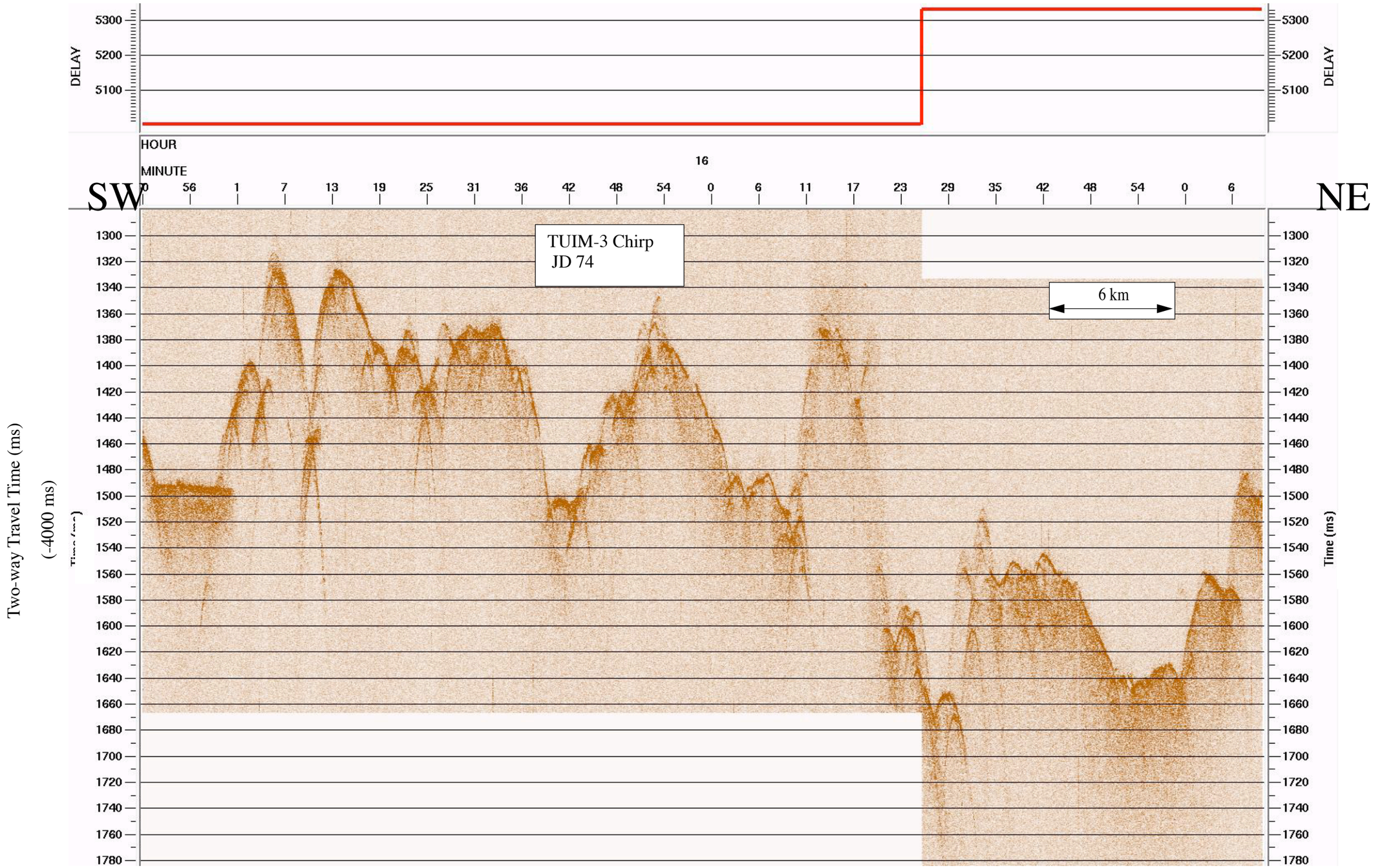

DELAY
5600
5400
5200
HOUR
8
MINUTE
4
27
40
53
5
17
30
42
55
8
21
34
47
SW
NE
TUIM-3 Chirp
JD 74
6 km
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100


DELAY
5500
5000
4500
HOUR
MINUTE
10
SW
NE
6 km
TUIM-3 Chirp
JD 74
Two-way Travel Time (ms)
(-4000 ms)

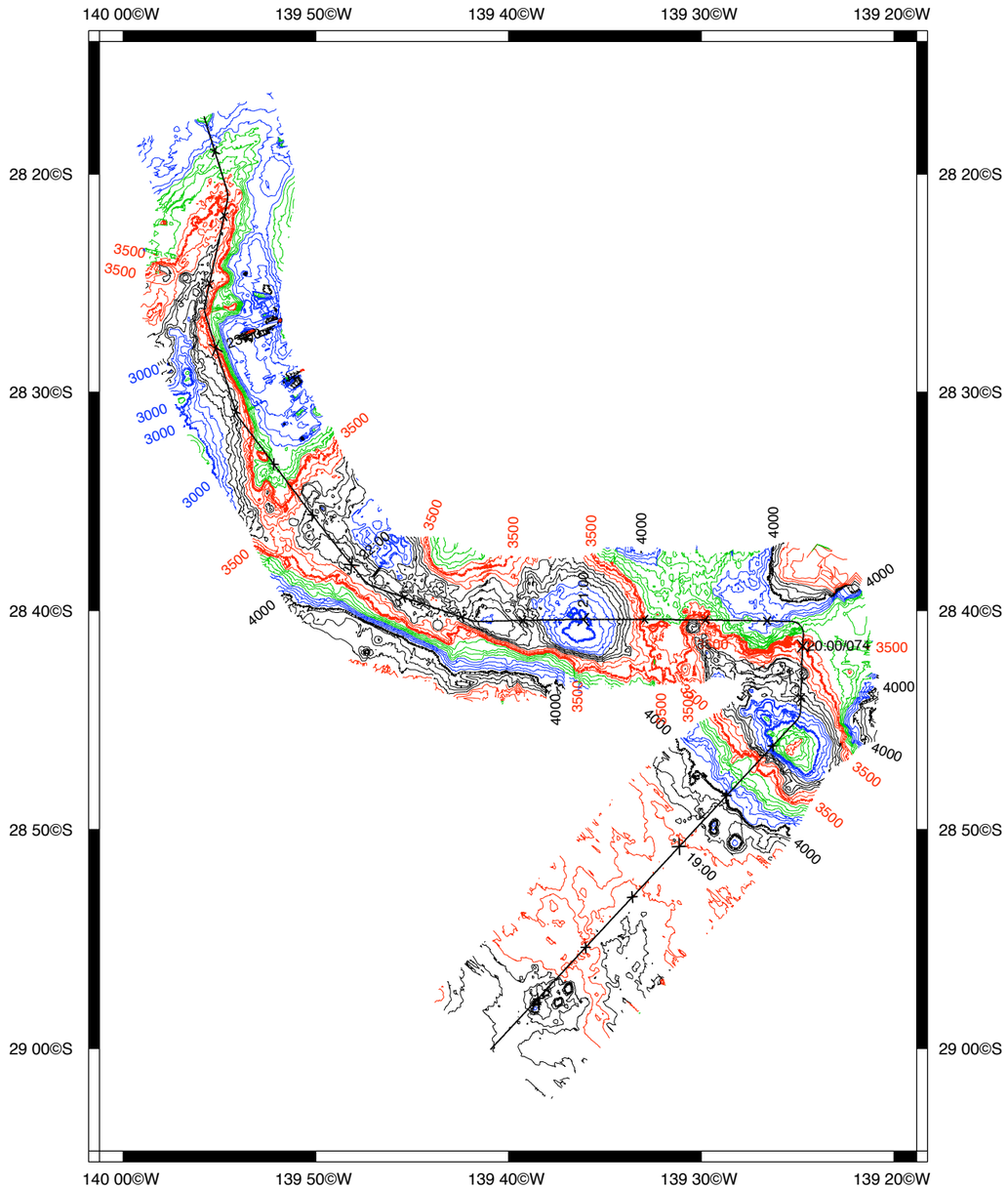

Data File SBfixavg.2005mar15.1200-1800
140 45©W
140 30©W
140 15©W
140 00©W
139 45©W
29 00©S
29 15©S
29 30©S
29 45©S
30 00©S
4000
3500
16:00/074
14:00

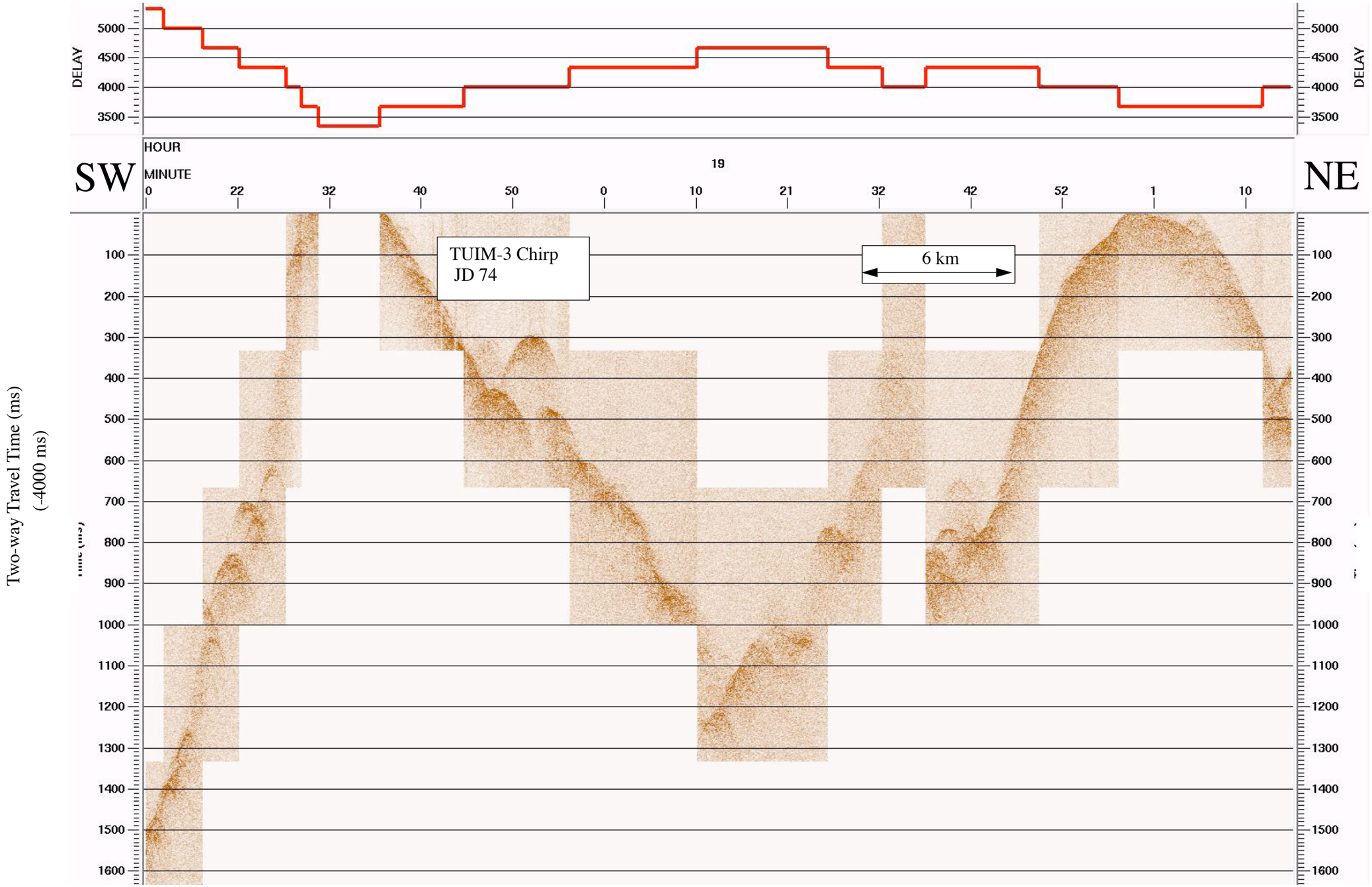

DELAY
5300
5200
5100
HOUR
13
MINUTE
11
17
22
28
35
41
47
53
59
6
12
18
SW
NE
TUIM-3 Chirp
JD 74
6 km
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
Two-way Travel Time (ms)
(-4000 ms)

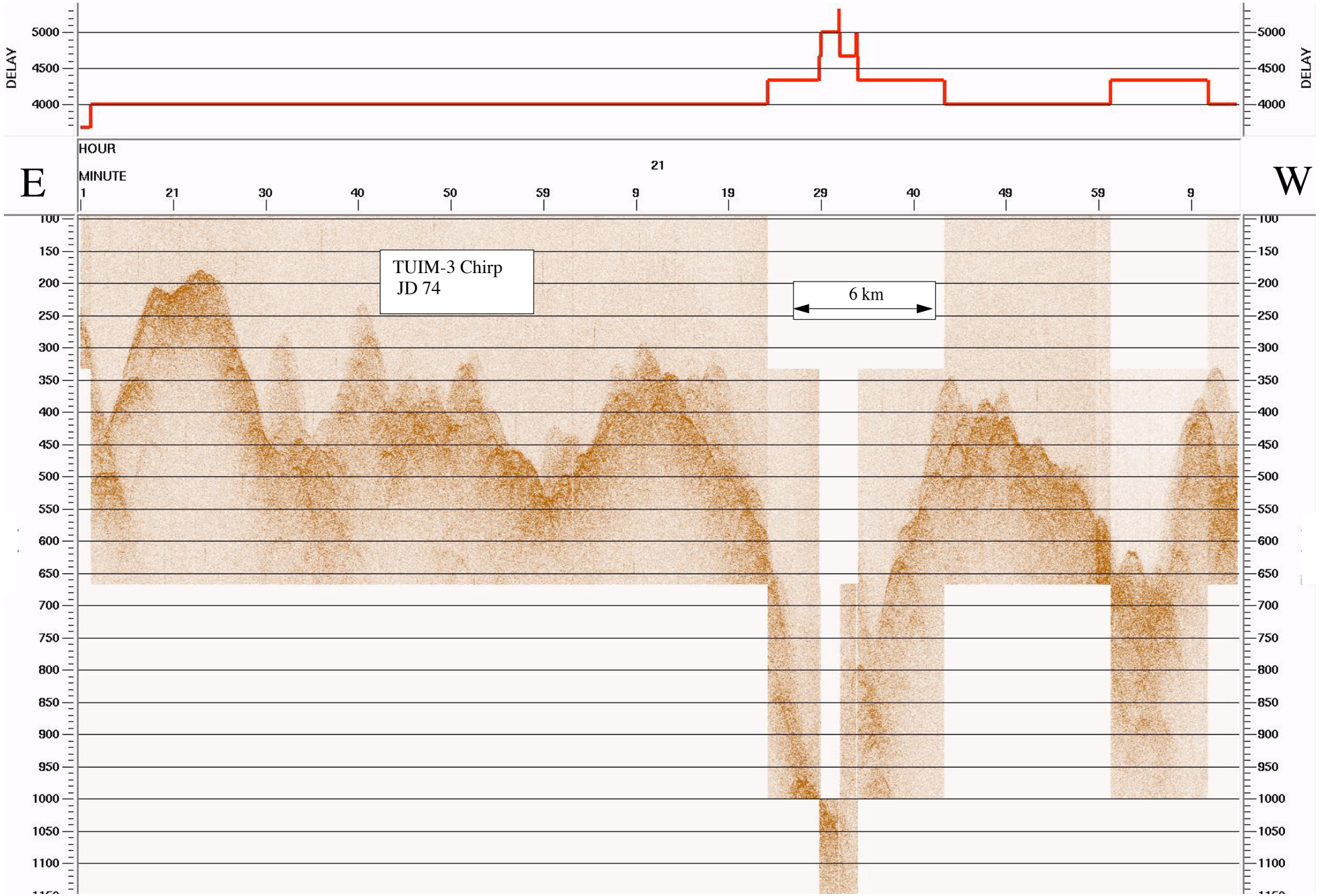

DELAY
5300
5200
5100
HOUR
14
MINUTE
21
33
46
58
10
23
35
48
0
12
25
37
49
SW
NE
TUIM-3 Chirp
JD 74
6 km
1240
1260
1280
1300
1320
1340
1360
1380
1400
1420
1440
1460
1480
1500
1520
1540
1560
1580
1600
1620
1640
1660
Two-way Travel Time (ms)
(-4000 ms)

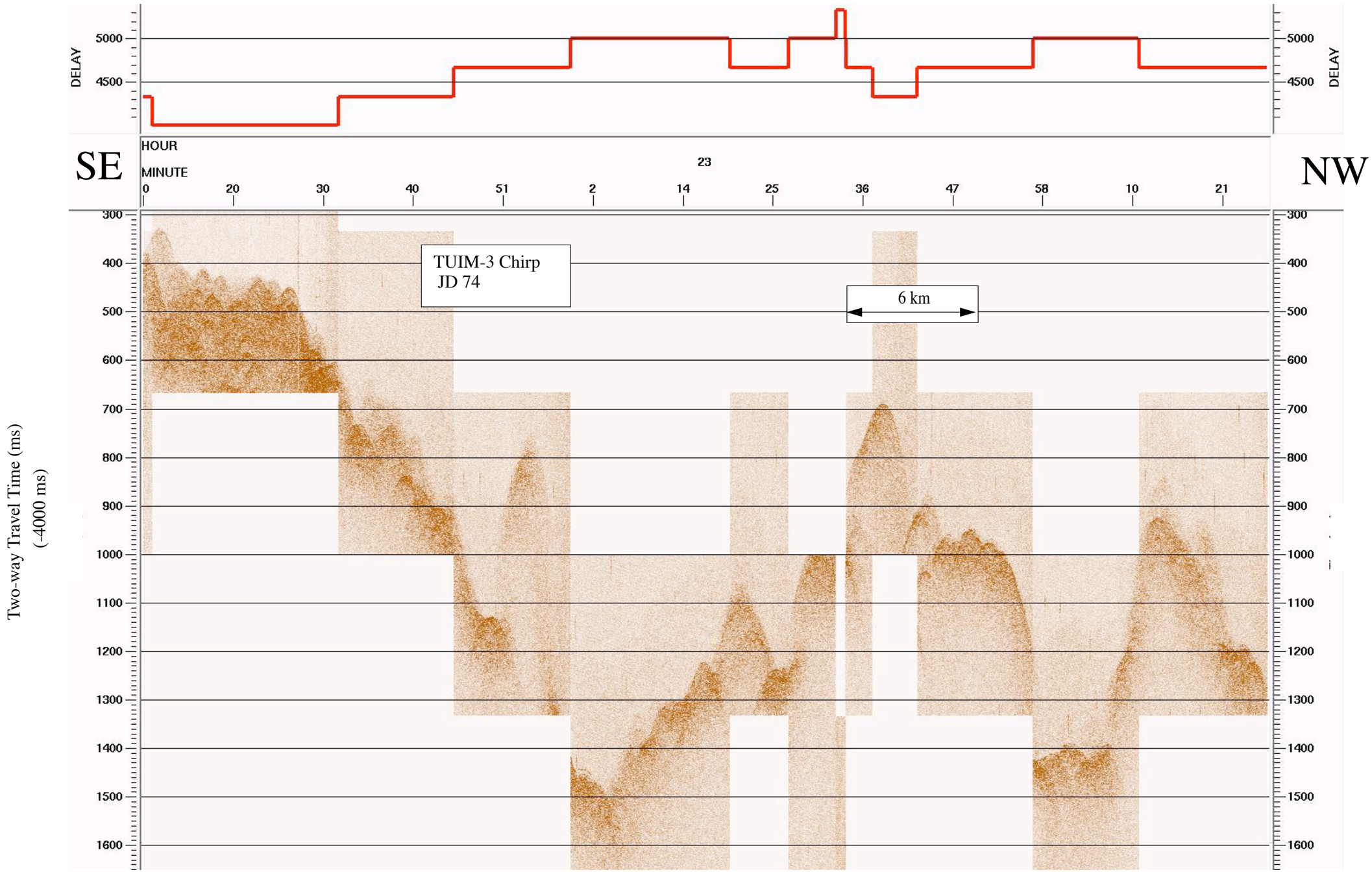

DELAY
5300
5200
5100
HOUR
16
MINUTE
SW
NE
TUIM-3 Chirp
JD 74
6 km
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)

Data File SBfixavg.2005mar15.1800-2400



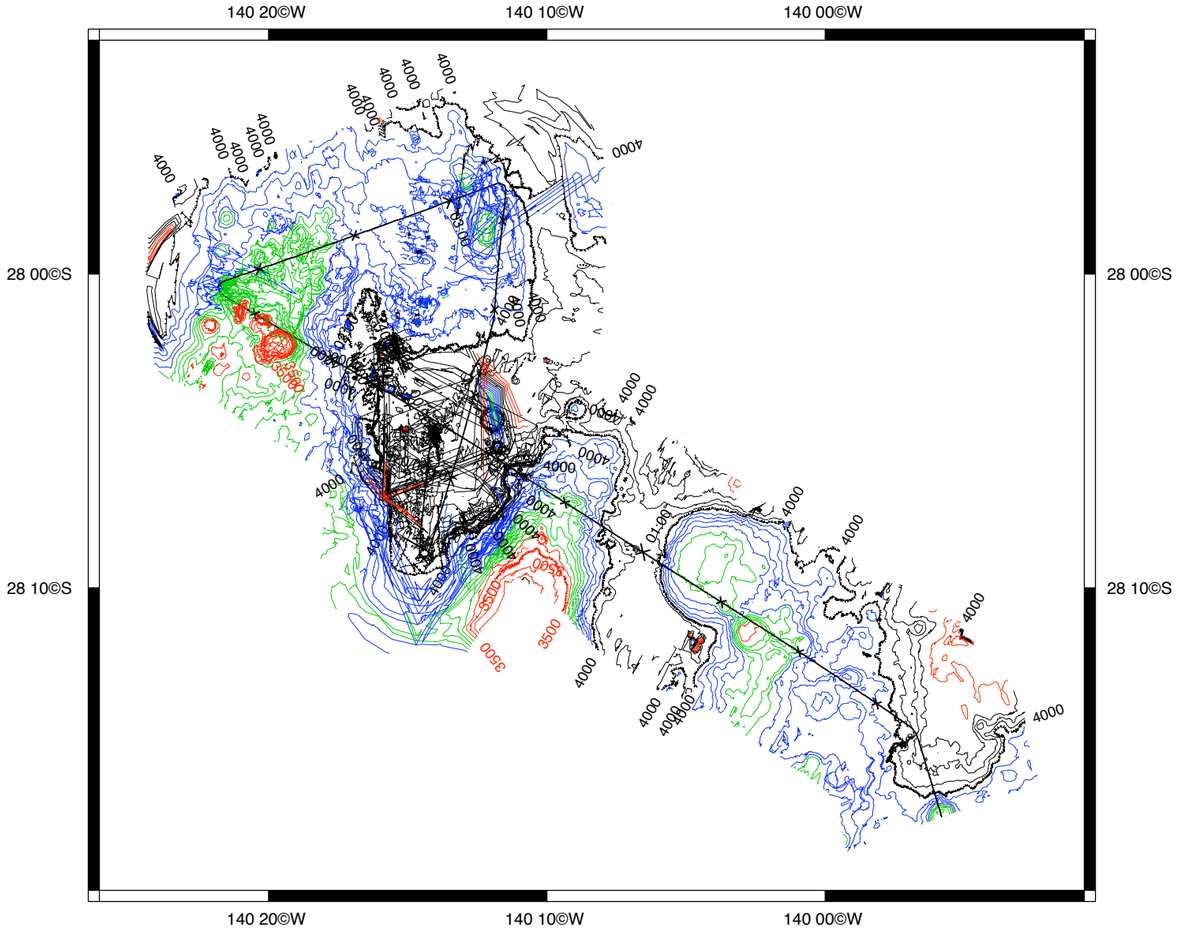

DELAY
5000
4500
4000
3500
SW
NE
HOUR
MINUTE
19
0
22
32
40
50
0
10
21
32
42
52
1
10
TUIM-3 Chirp
JD 74
6 km
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
Two-way Travel Time (ms)
(-4000 ms)

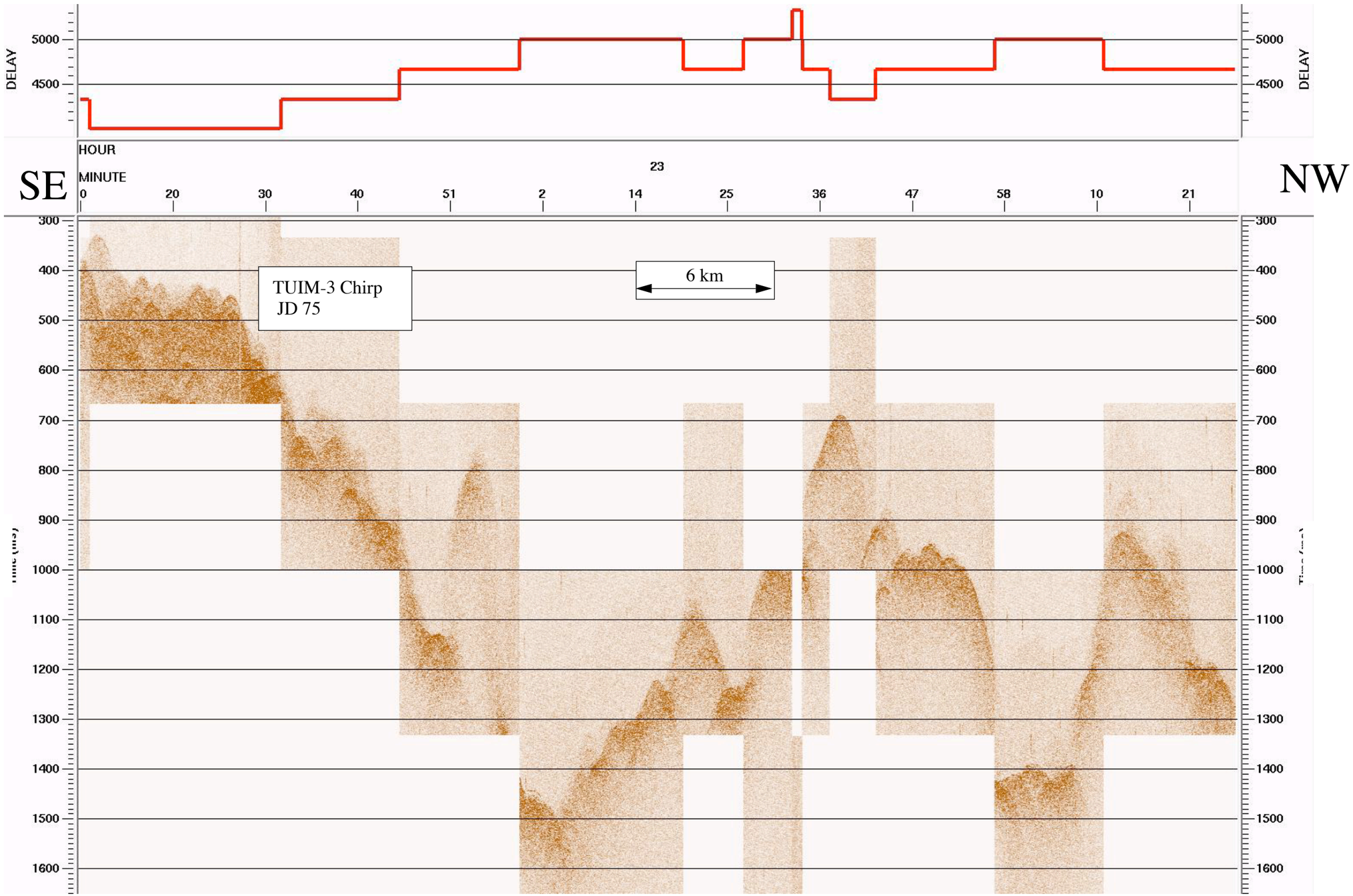

DELAY
5000
4500
4000
HOUR
MINUTE
21
1
21
30
40
50
59
9
19
29
40
49
59
9
E
W
TUIM-3 Chirp
JD 74
6 km
Two-way Travel Time (ms)
(-4000 ms)
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050
1100

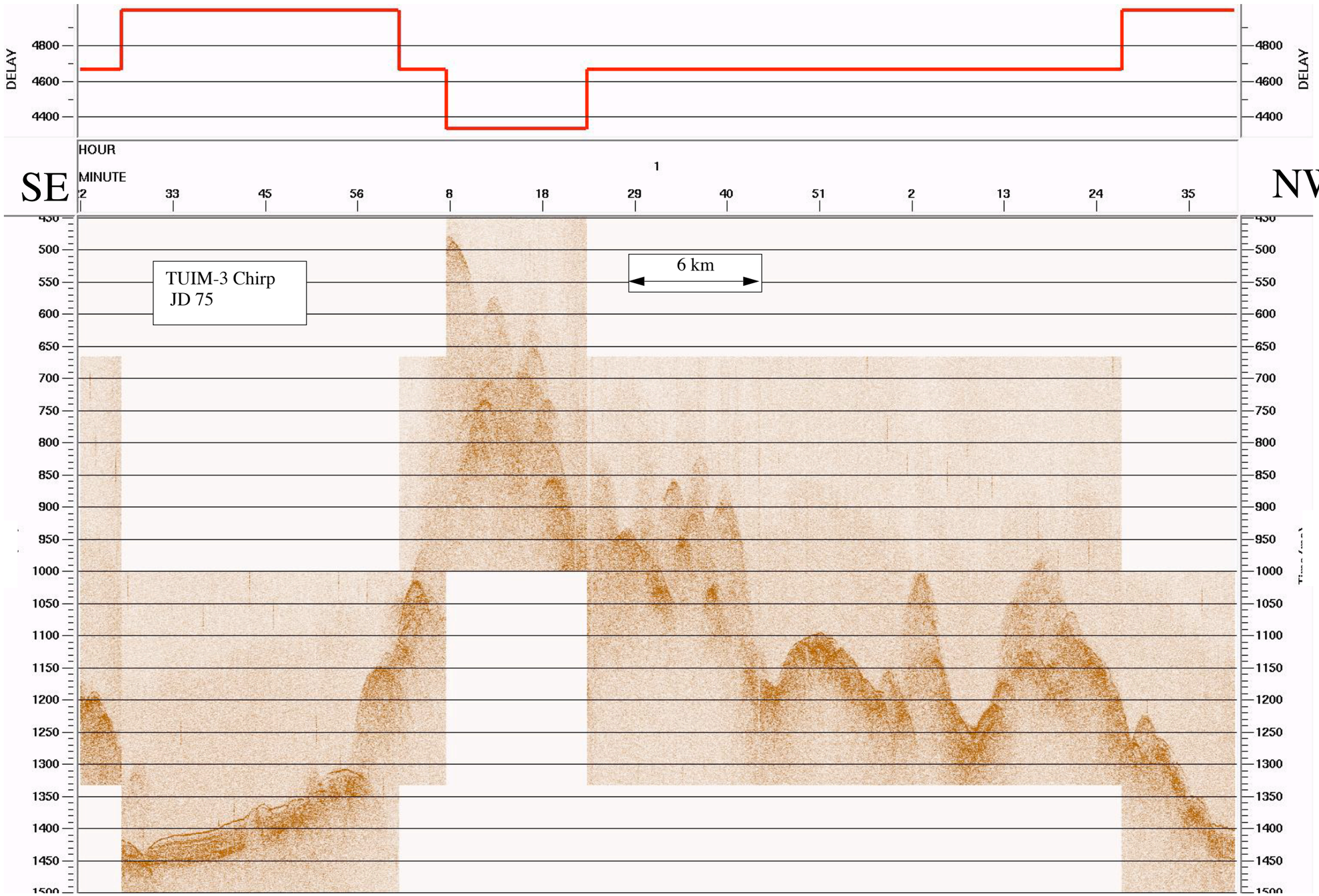

DELAY
5000
4500
SE
NW
HOUR
23
MINUTE
0
20
30
40
51
2
14
25
36
47
58
10
21
TUIM-3 Chirp
JD 74
6 km
Two-way Travel Time (ms)
(-4000 ms)
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600

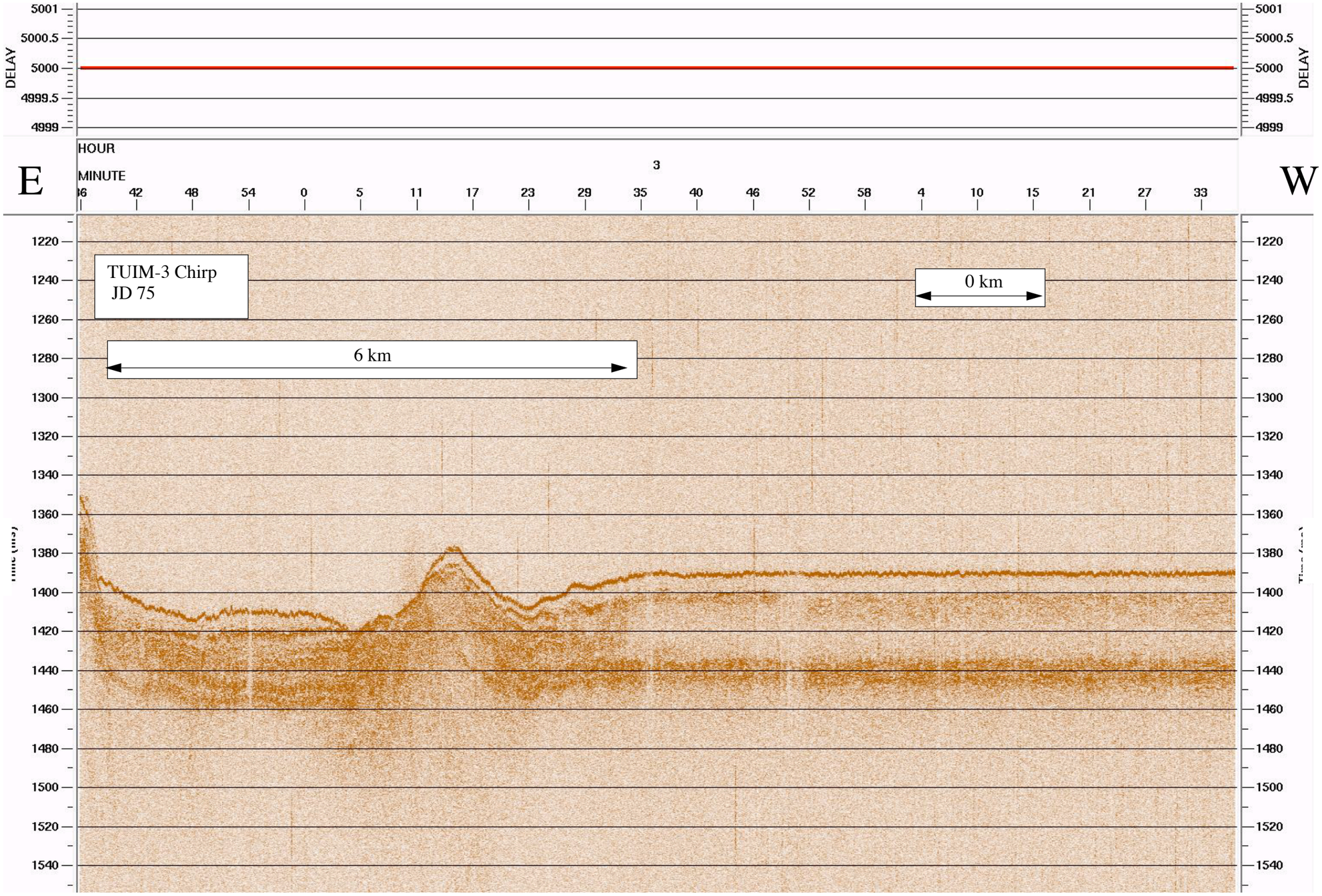
Julian Day 75
16 March 2005
Knudsen Chirp Data

Data File SBfixavg.2005mar16.0000-0600

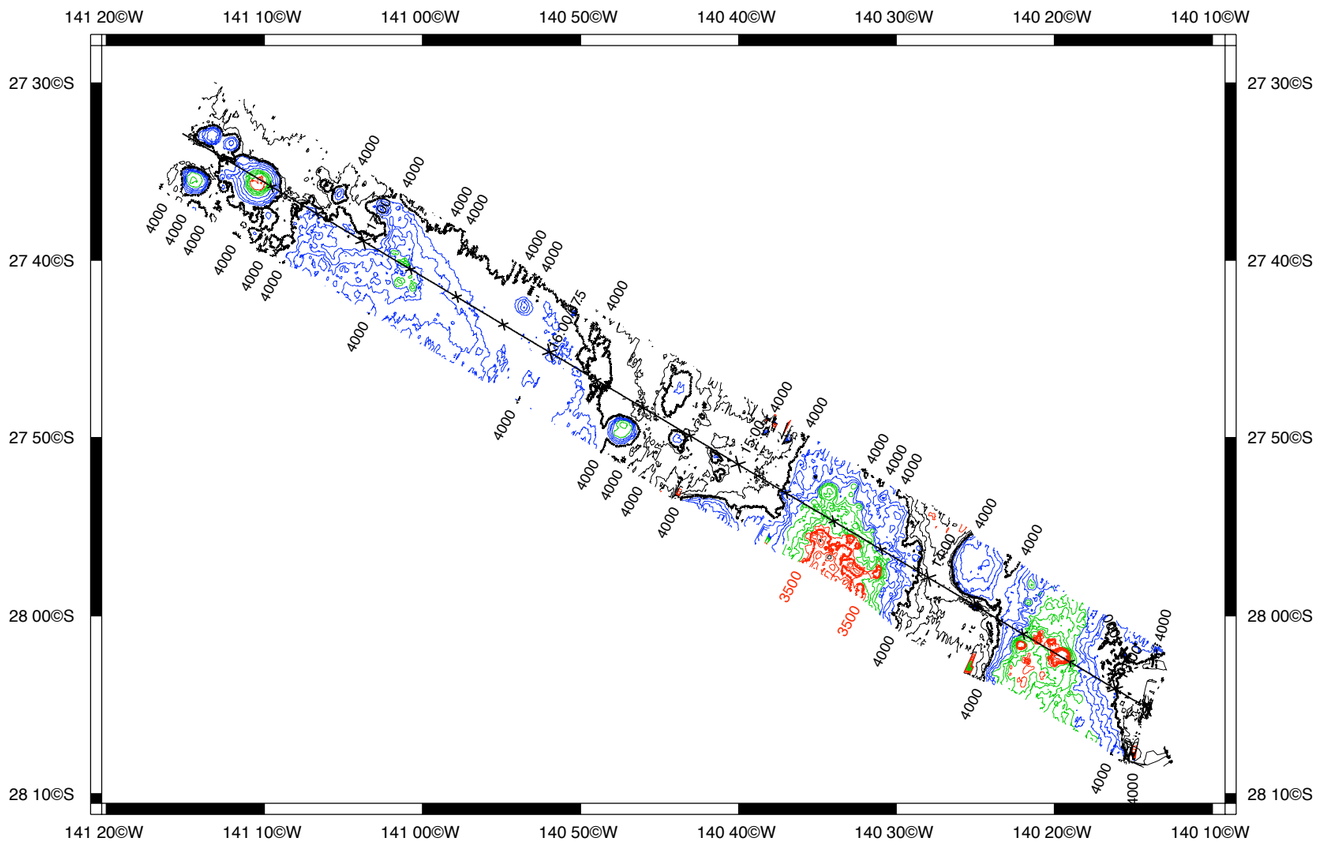


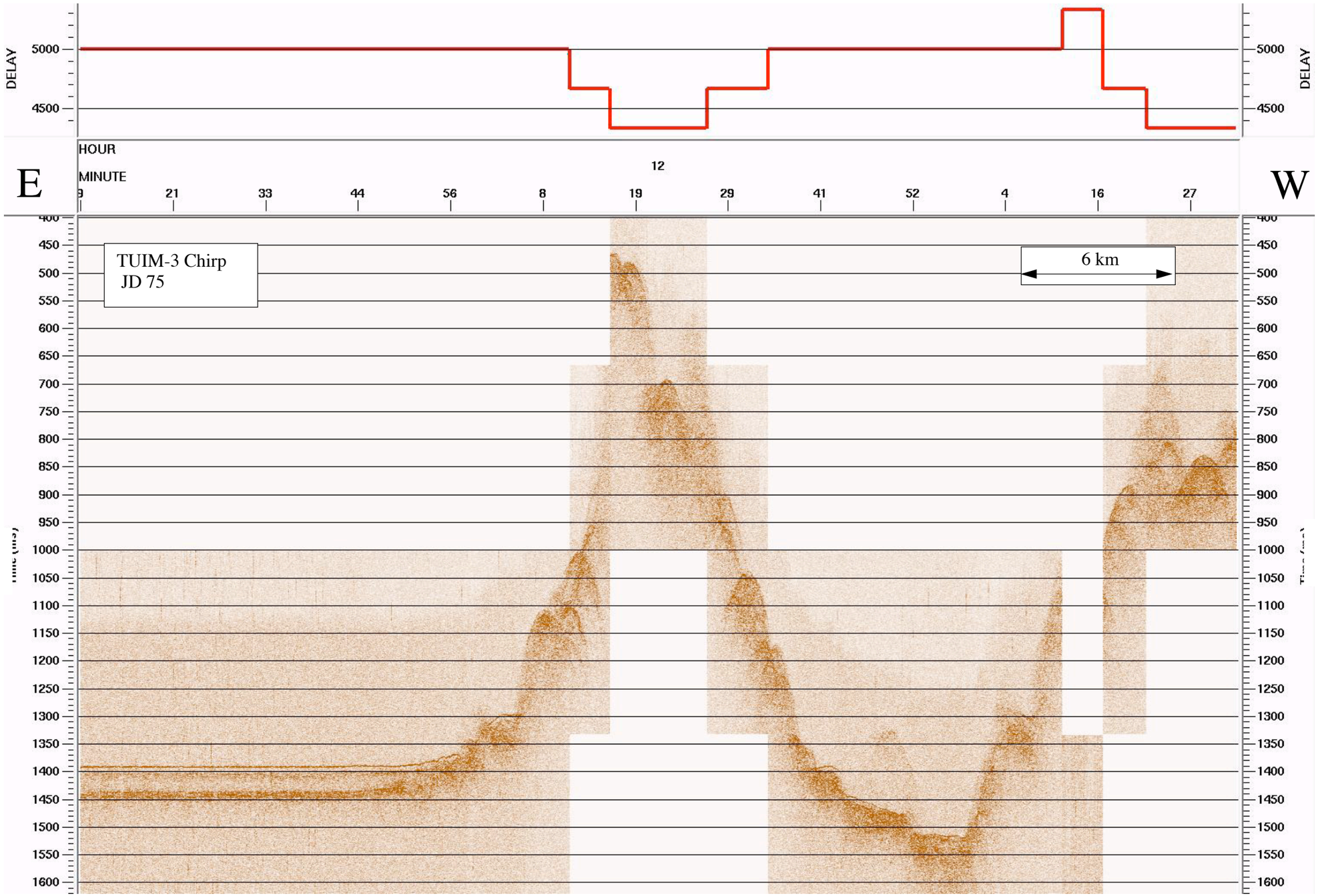

DELAY
5000
4500
HOUR
MINUTE
23
0
20
30
40
51
2
14
25
36
47
58
10
21
SE
NW
TUIM-3 Chirp
JD 75
6 km
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
Two-way Travel Time (ms)
(-4000 ms)

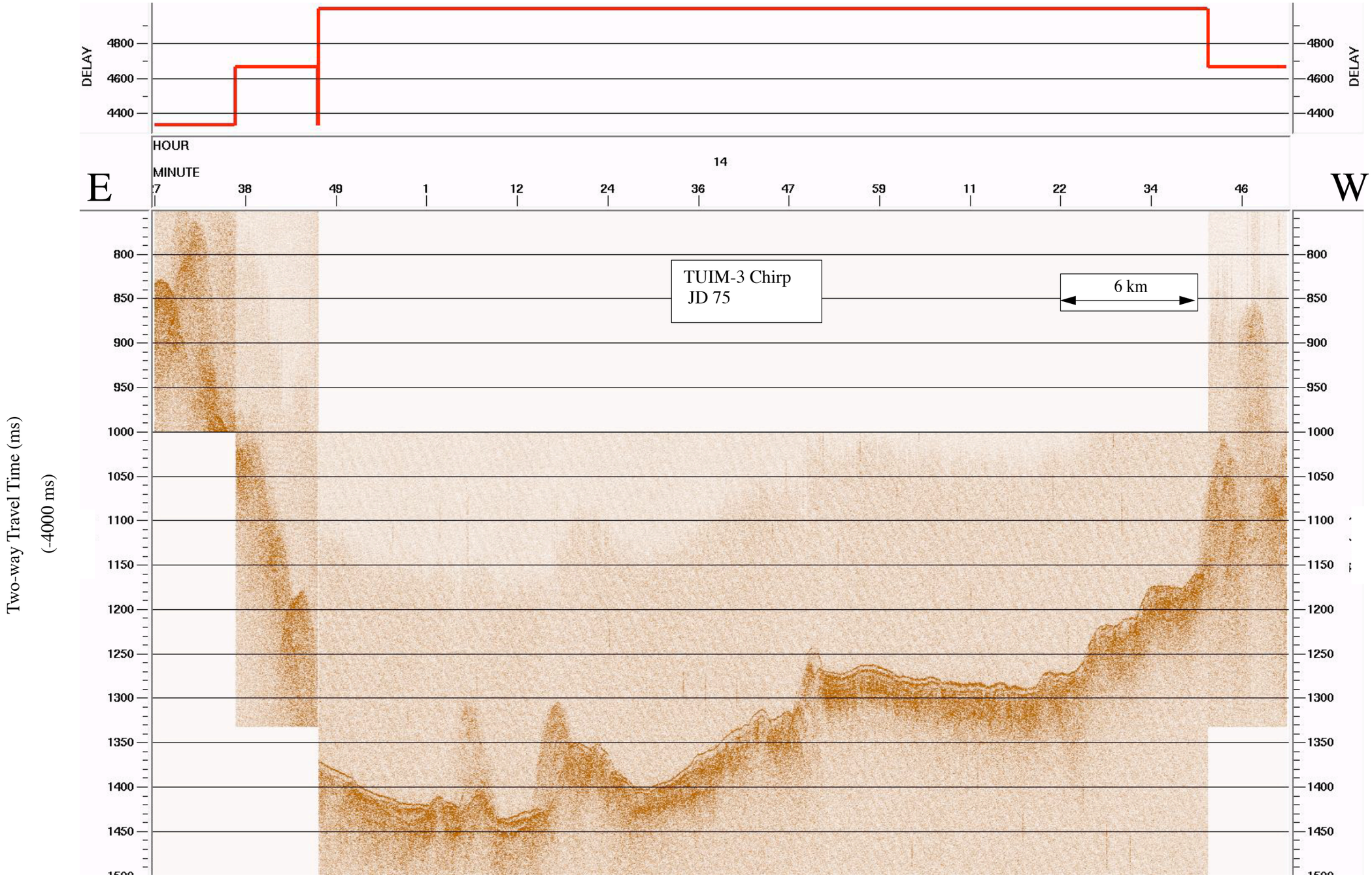

DELAY
4800
4600
4400
HOUR
MINUTE
1
2
33
45
56
8
18
29
40
51
2
13
24
35
SE
NW
TUIM-3 Chirp
JD 75
6 km
Two-way Travel Time (ms)
(-4000 ms)
500
550
600
650
700
750
800
850
900
950
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450

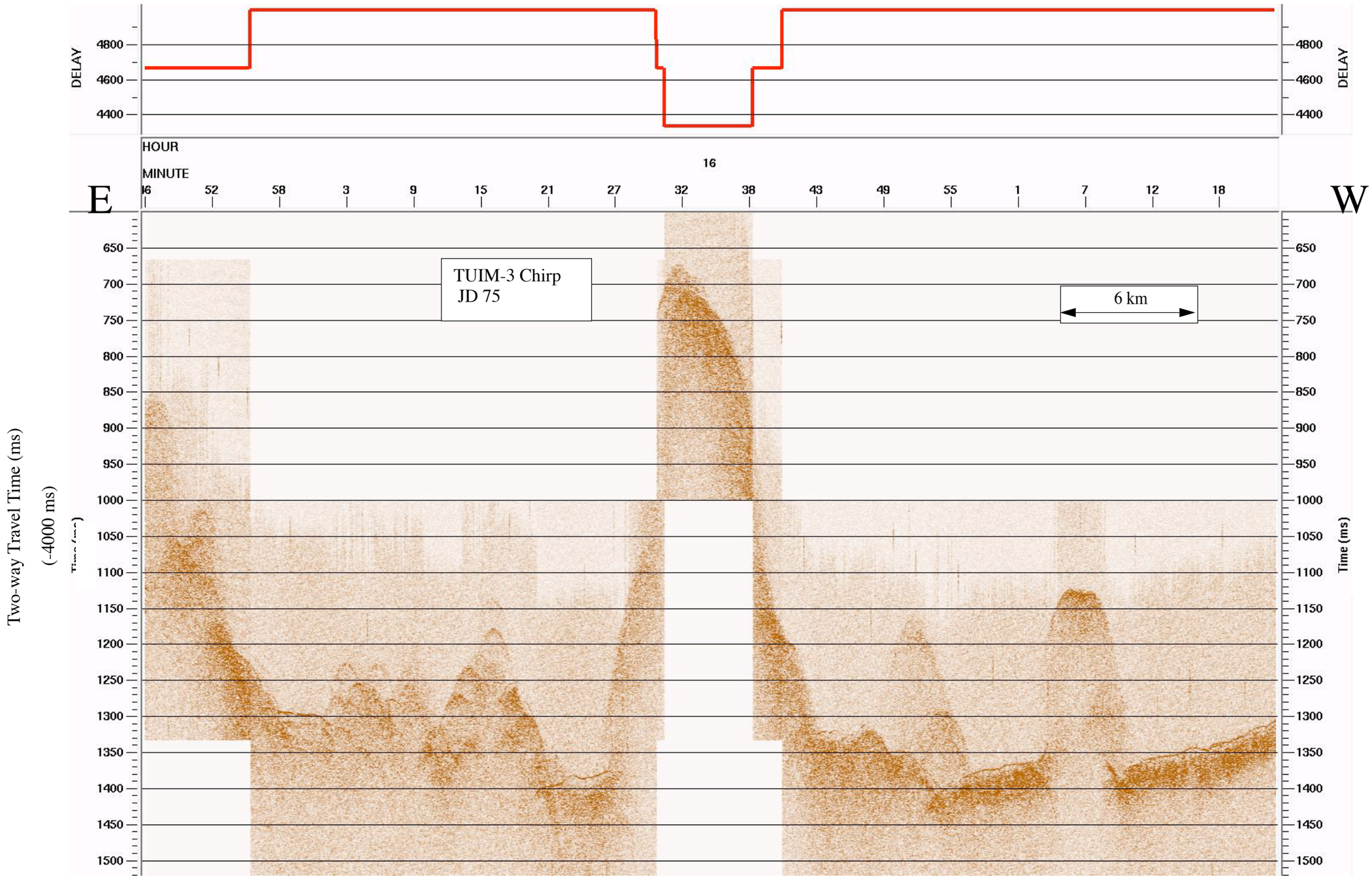

DELAY
5001
5000.5
5000
4999.5
4999
HOUR
MINUTE
3
E
W
TUIM-3 Chirp
JD 75
0 km
6 km
Two-way Travel Time (ms)
(-4000 ms)

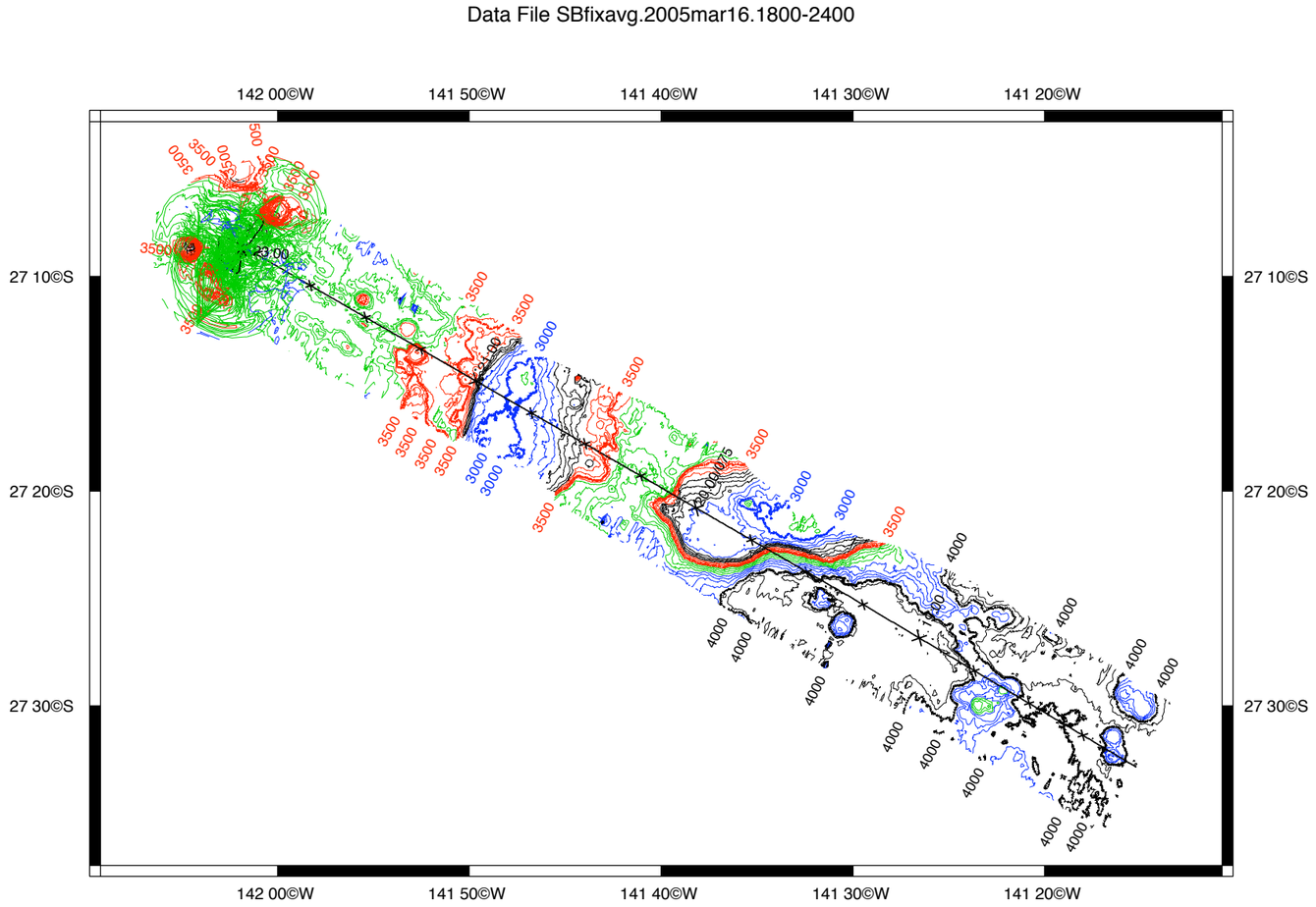
Data File SBfixavg.2005mar16.1200-1800

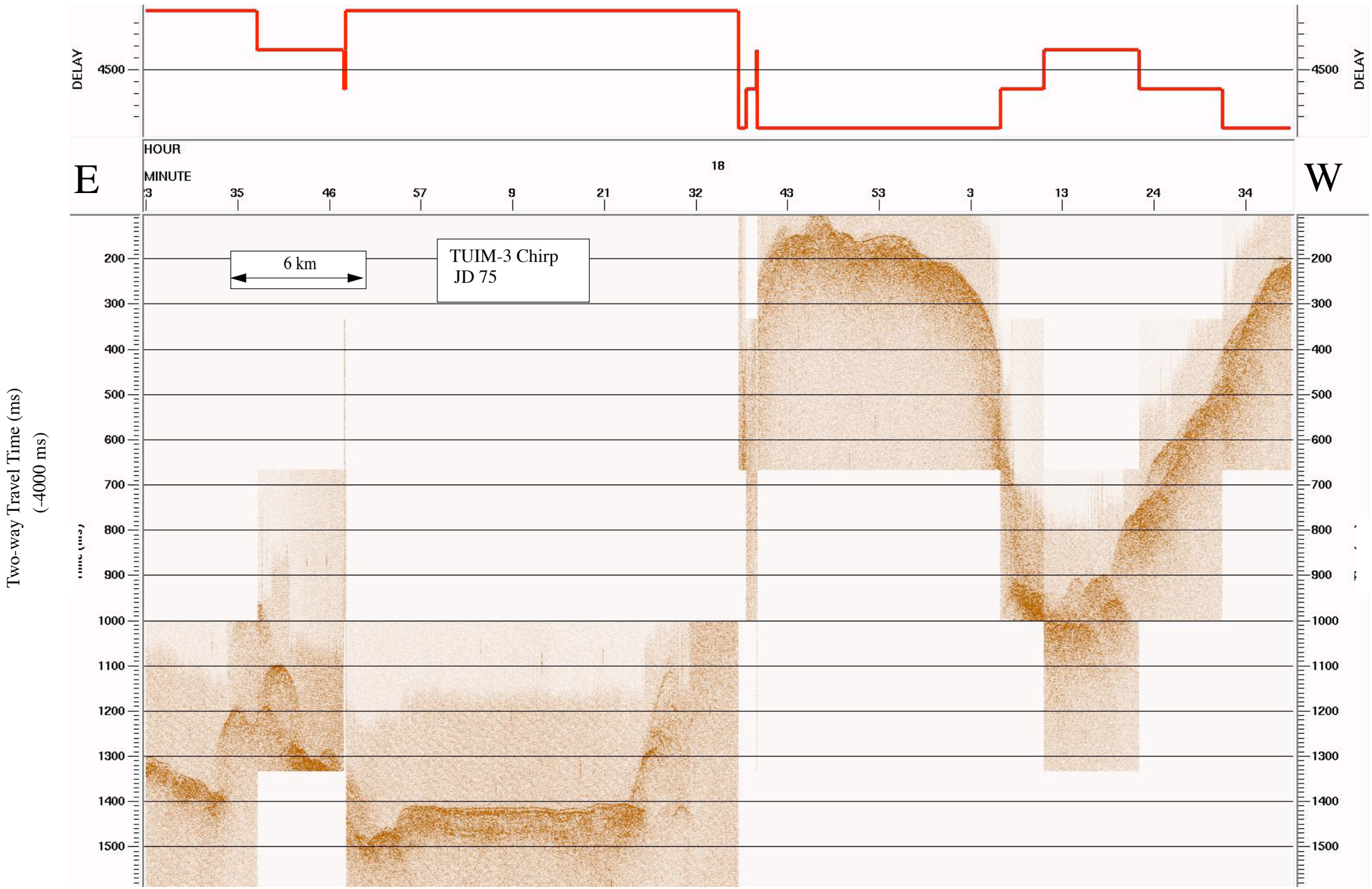


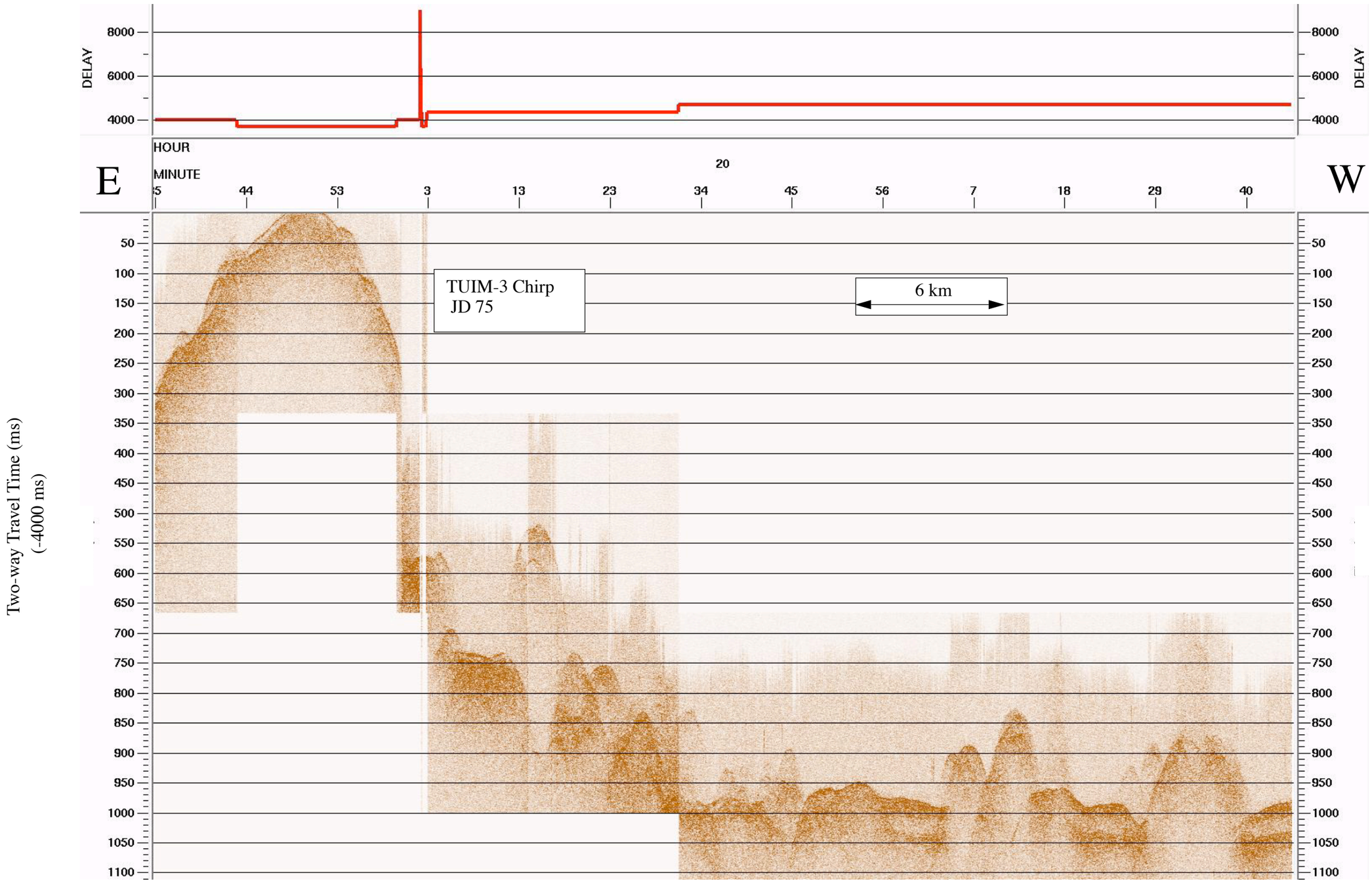

DELAY
5000
4500
HOUR
MINUTE
12
9
21
33
44
56
8
19
29
41
52
4
16
27
E
W
TUIM-3 Chirp
JD 75
6 km
Two-way Travel Time (ms)
(-4000 ms)


DELAY
4800
4600
4400
HOUR
14
MINUTE
E
W
38
49
1
12
24
36
47
59
11
22
34
46
TUIM-3 Chirp
JD 75
6 km
800
850
900
950
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
Two-way Travel Time (ms)
(-4000 ms)

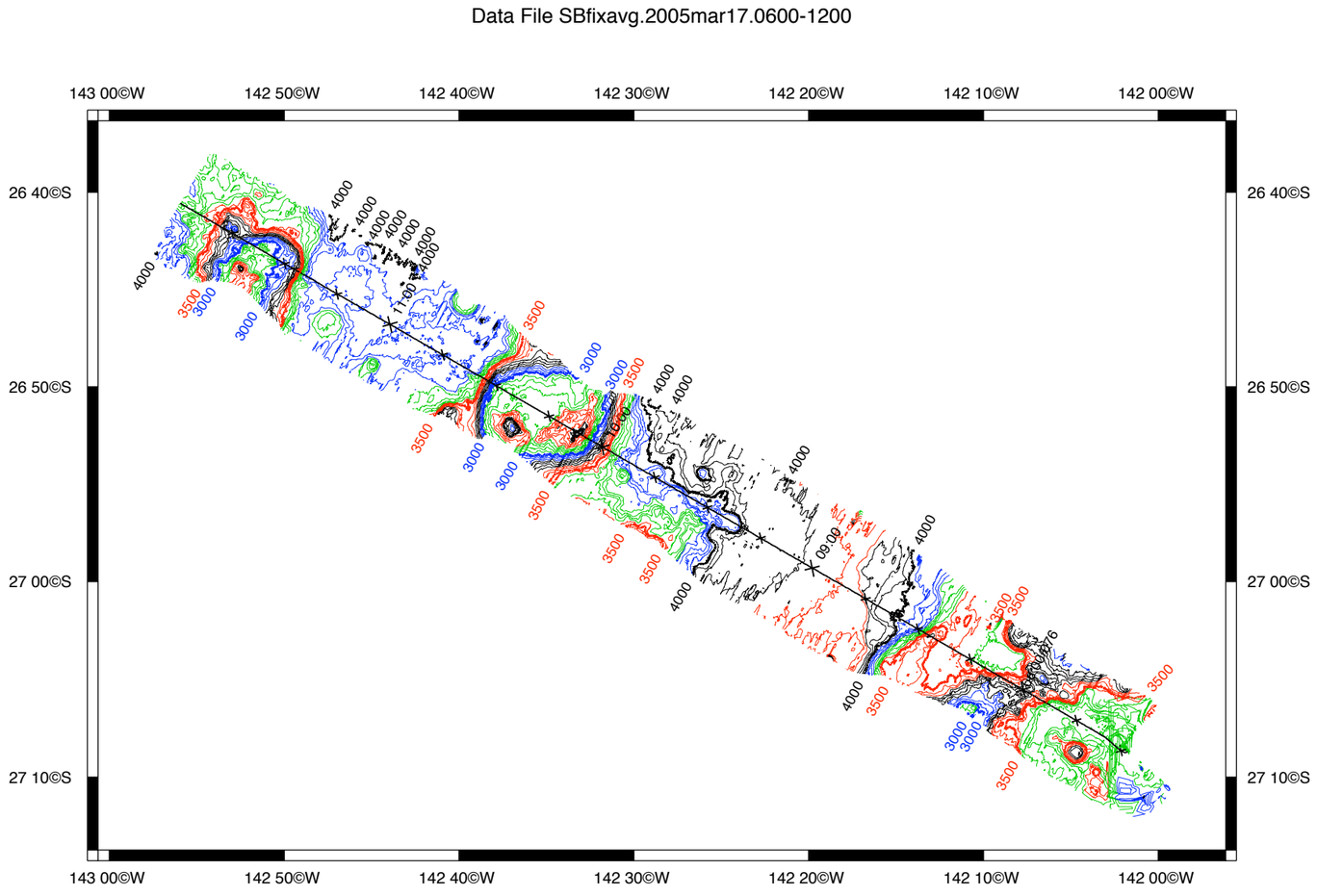

DELAY
4800
4600
4400
HOUR
16
MINUTE
46
52
58
3
9
15
21
27
32
38
43
49
55
1
7
12
18
E
W
TUIM-3 Chirp
JD 75
6 km
650
700
750
800
850
900
950
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500
Time (ms)
Two-way Travel Time (ms)
(-4000 ms)

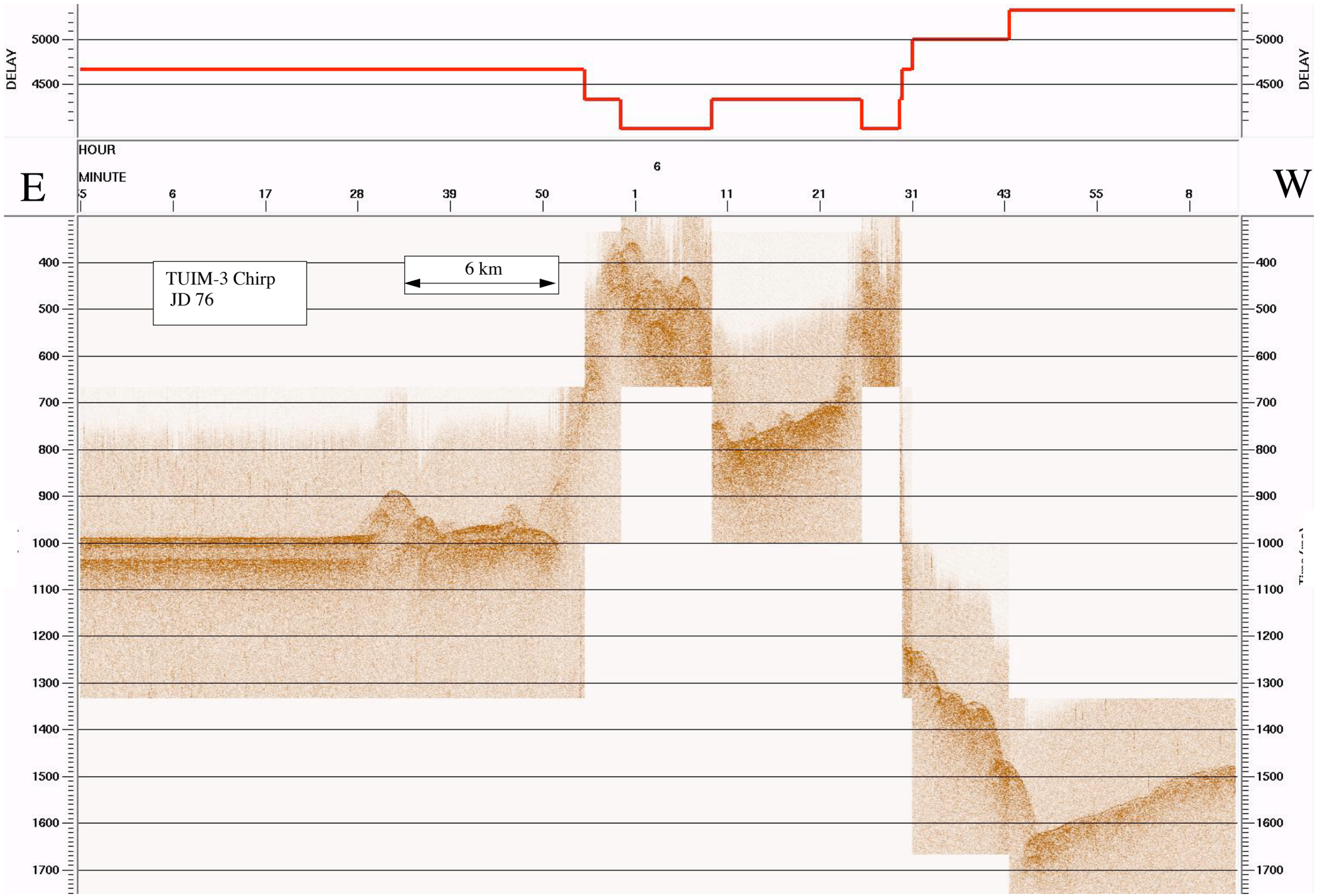

Data File SBfixavg.2005mar16.1800-2400
142 00©W
141 50©W
141 40©W
141 30©W
141 20©W
27 10©S
27 20©S
27 30©S
23:00
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
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17:00
18:00
19:00
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21:00
22:00
3500
3000
4000

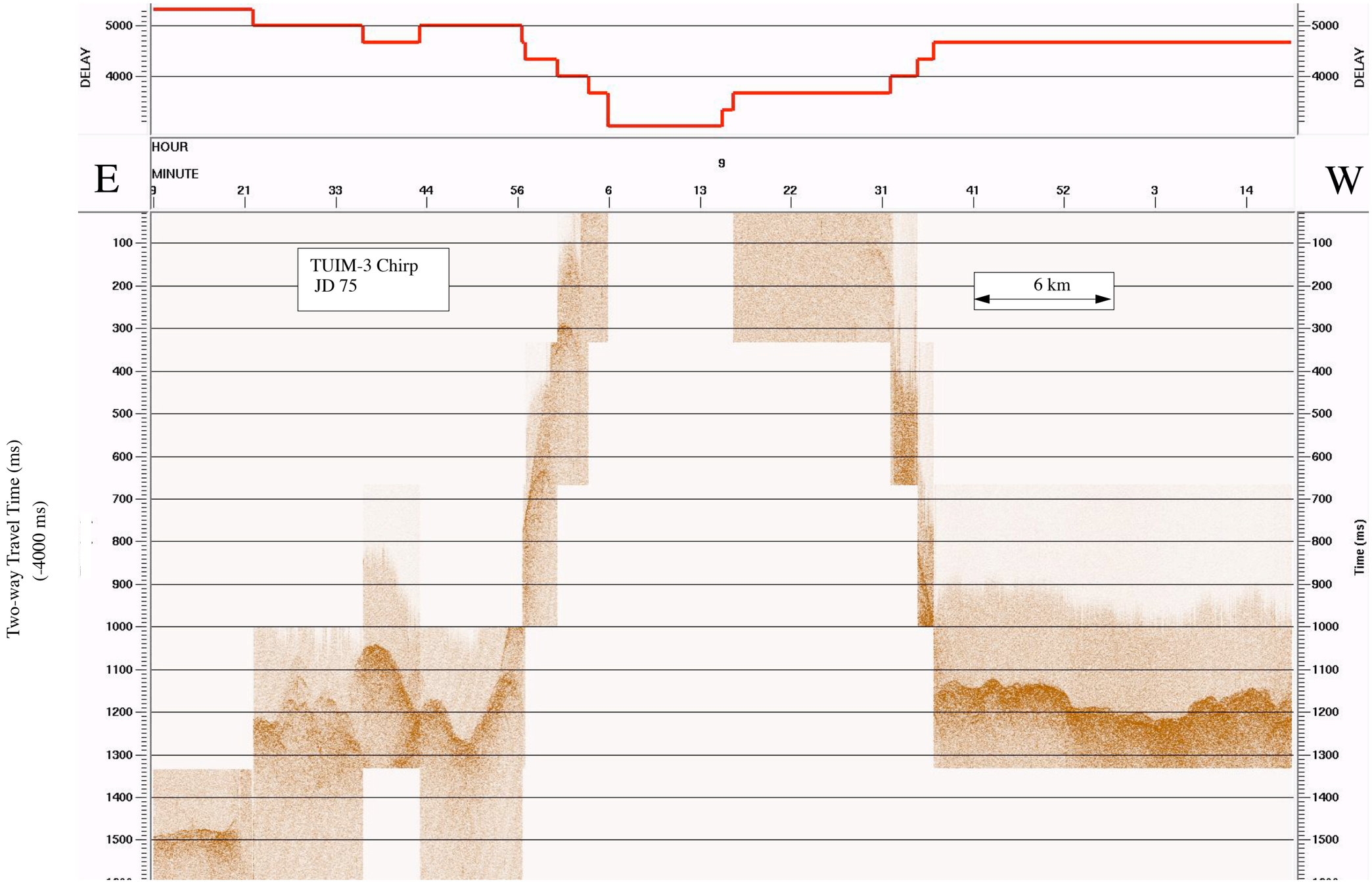

DELAY
4500
DELAY
4500
E
W
HOUR
18
MINUTE
3
35
46
57
9
21
32
43
53
3
13
24
34
6 km
TUIM-3 Chirp
JD 75
Two-way Travel Time (ms)
(-4000 ms)
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500

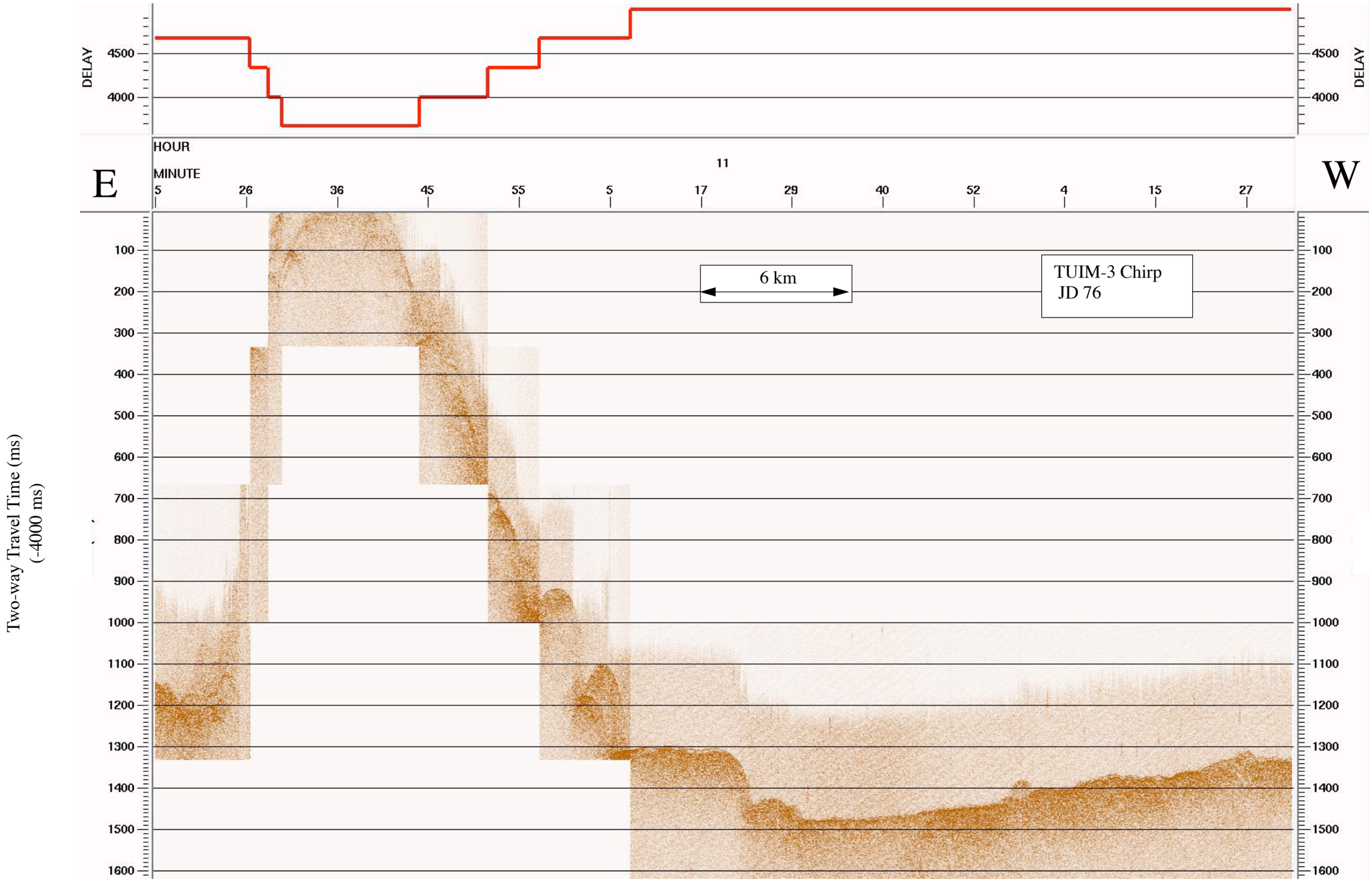

DELAY
8000
6000
4000
HOUR
MINUTE
20
5
44
53
3
13
23
34
45
56
7
18
29
40
E
W
TUIM-3 Chirp
JD 75
6 km
Two-way Travel Time (ms)
(-4000 ms)
50
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050
1100

Julian Day 76
17 March 2005
Knudsen Chirp Data

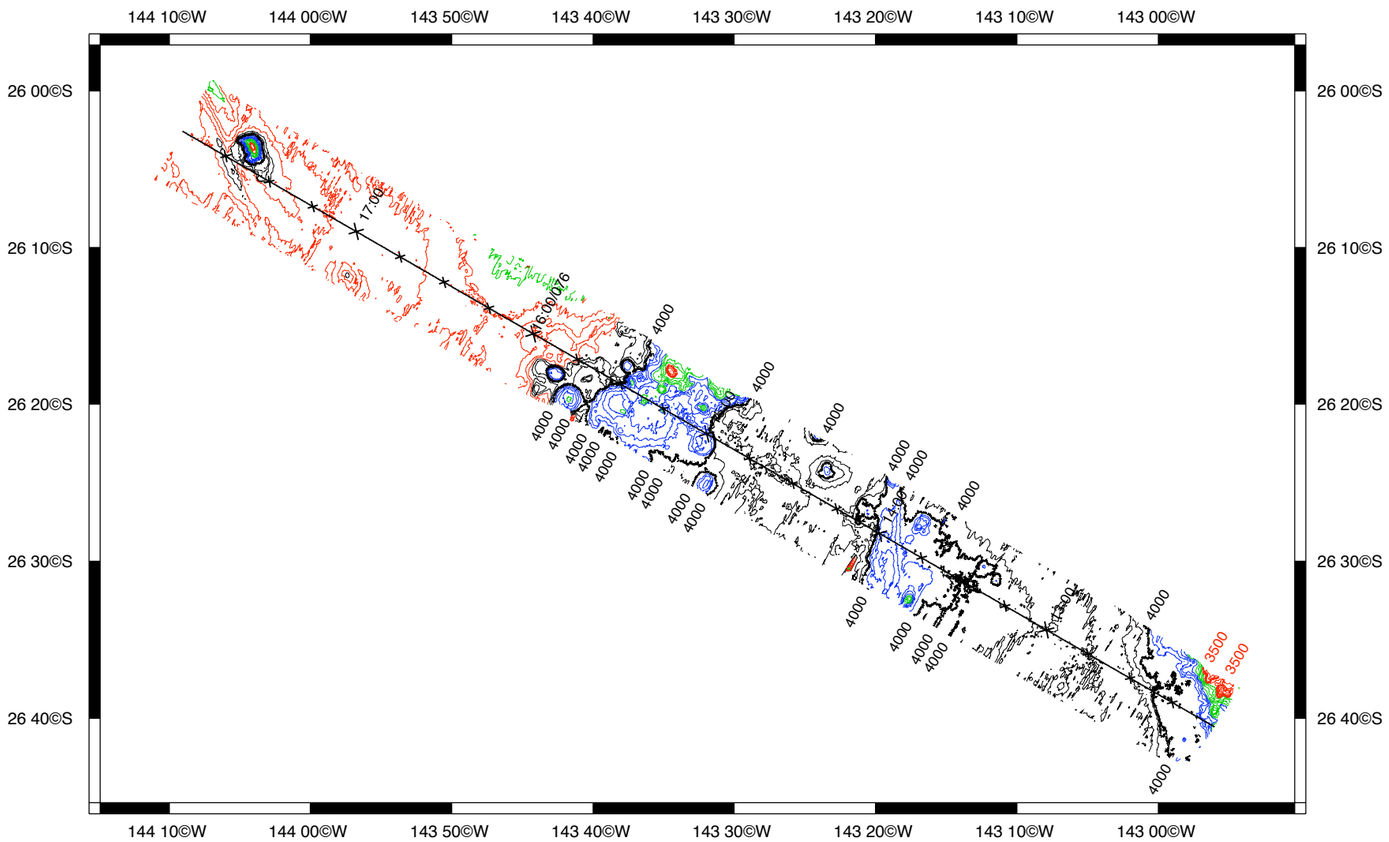

Data File SBfixavg.2005mar17.0600-1200
143 00©W
142 50©W
142 40©W
142 30©W
142 20©W
142 10©W
142 00©W
26 40©S
26 50©S
27 00©S
27 10©S
11:00
09:00
07:00

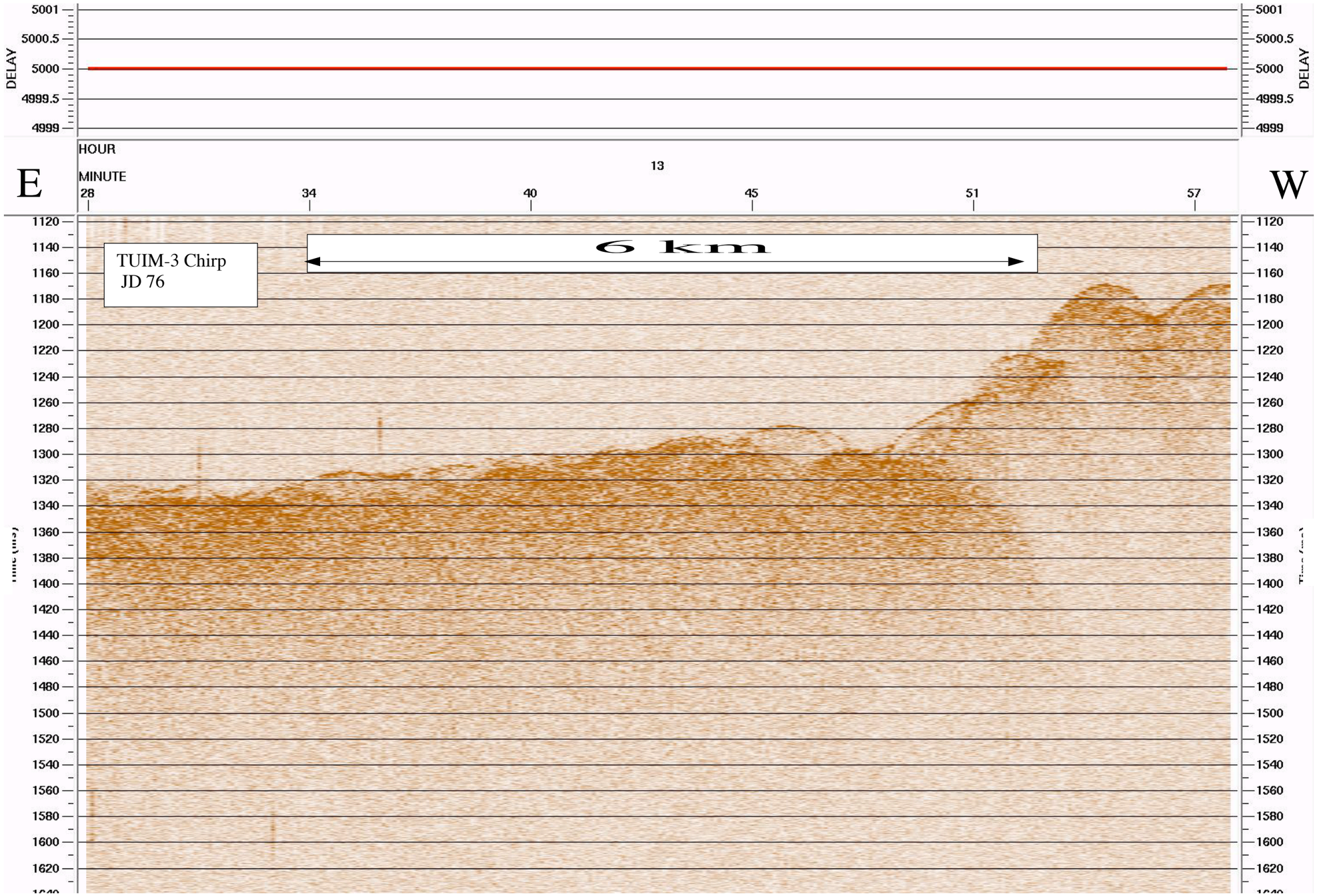

DELAY
5000
4500
HOUR
MINUTE
6
E
W
5
6
17
28
39
50
1
11
21
31
43
55
8
TUIM-3 Chirp
JD 76
6 km
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
Two-way Travel Time (ms)
(-4000 ms)


DELAY
5000
4000
HOUR
MINUTE
9
9
21
33
44
56
6
13
22
31
41
52
3
14
E
W
TUIM-3 Chirp
JD 75
6 km
Two-way Travel Time (ms)
(-4000 ms)
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
Time (ms)

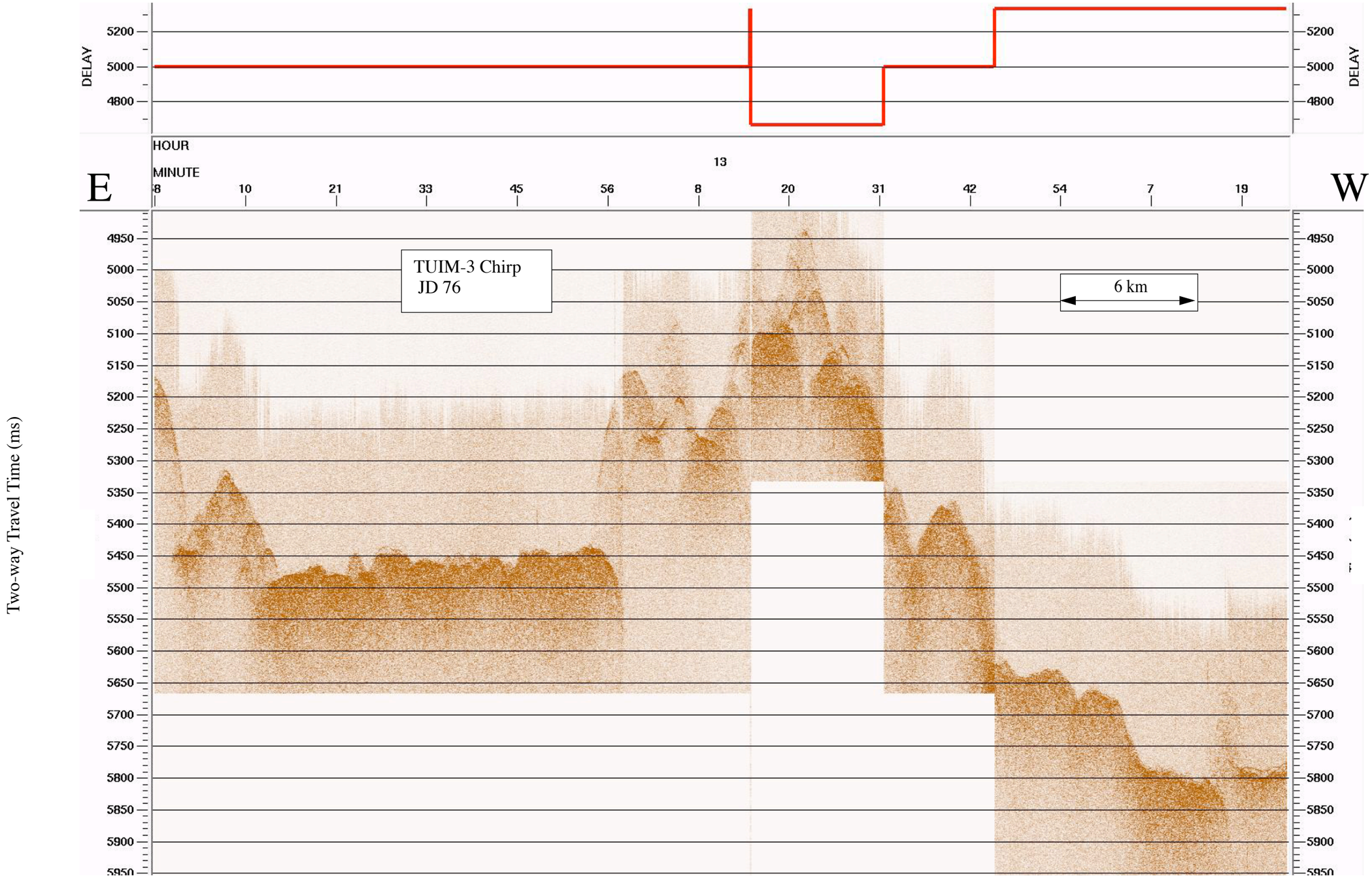

DELAY
4500
4000
HOUR
MINUTE
11
5
26
36
45
55
5
17
29
40
52
4
15
27
E
W
6 km
TUIM-3 Chirp
JD 76
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
Two-way Travel Time (ms)
(-4000 ms)

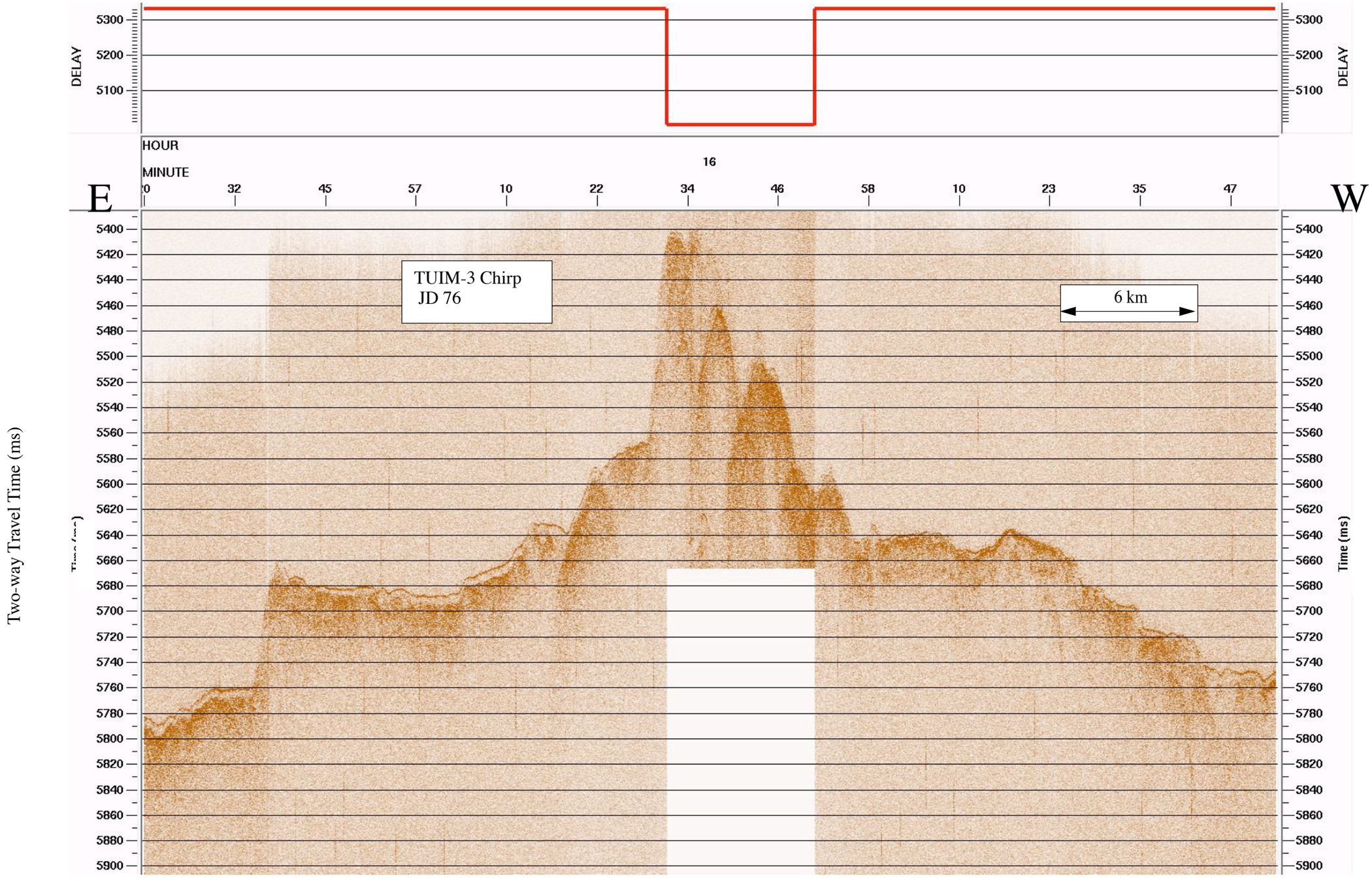
Data File SBfixavg.2005mar17.1200-1800

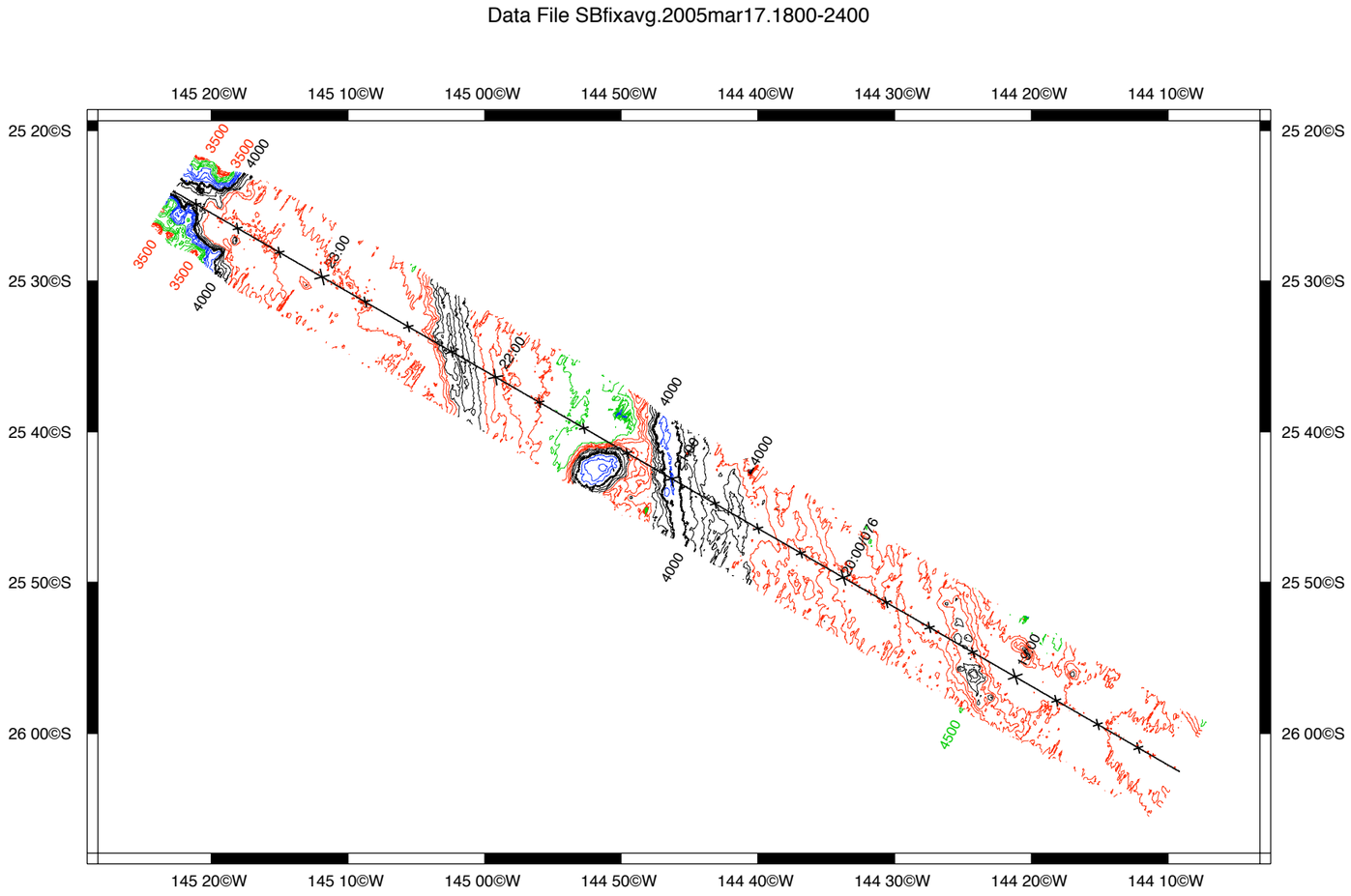


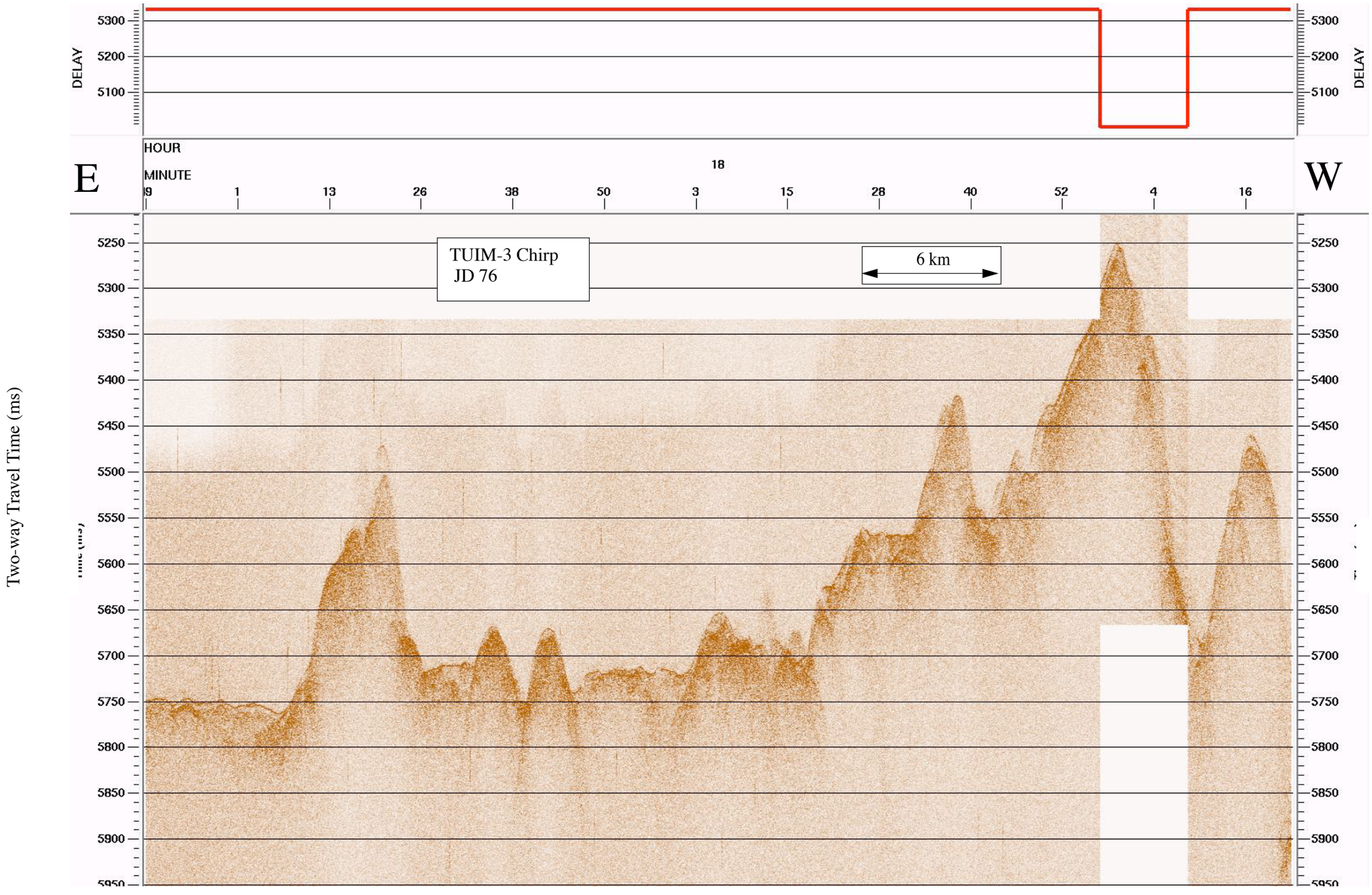


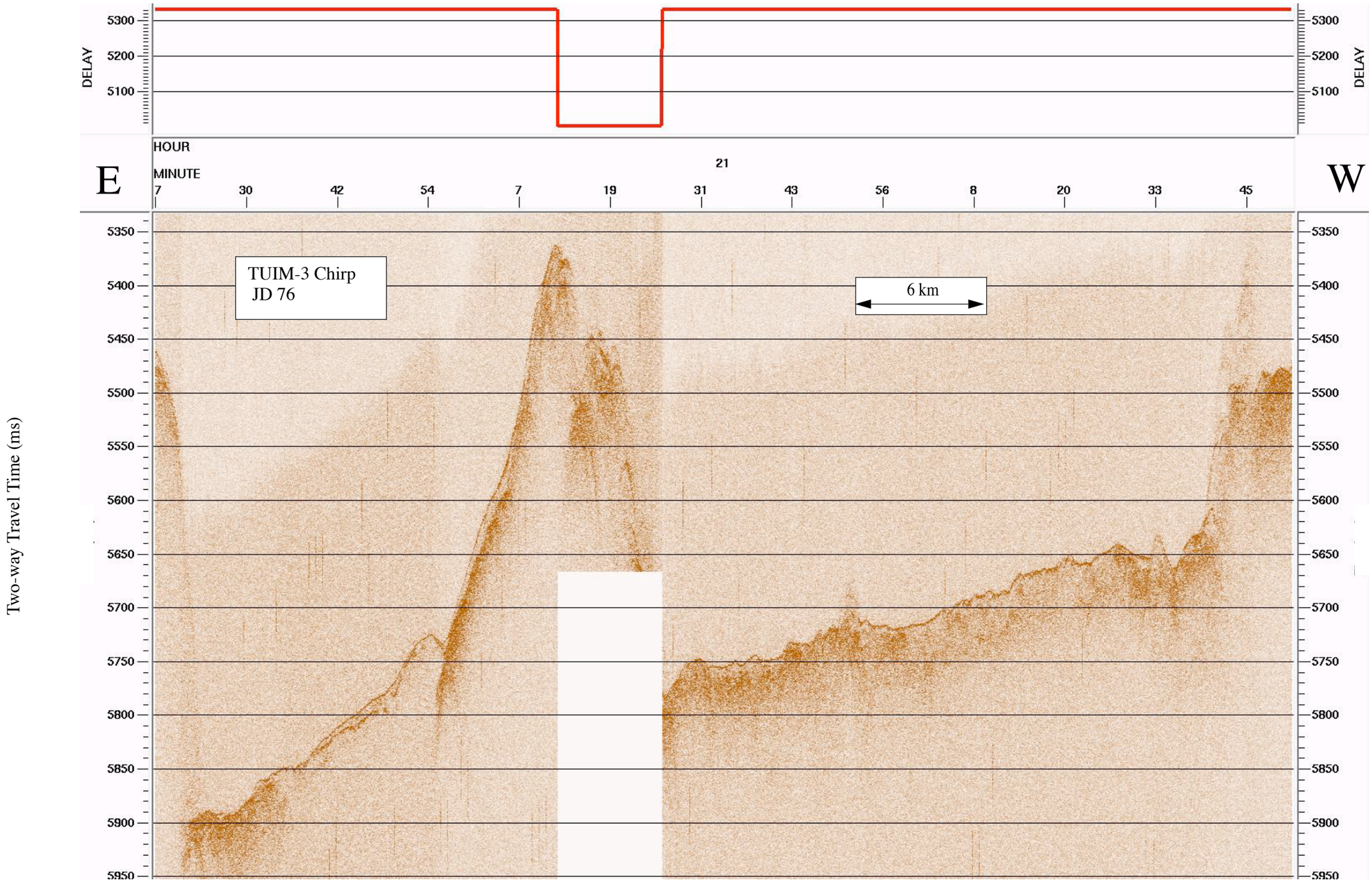
Two-way Travel Time (ms)
(-4000 ms)

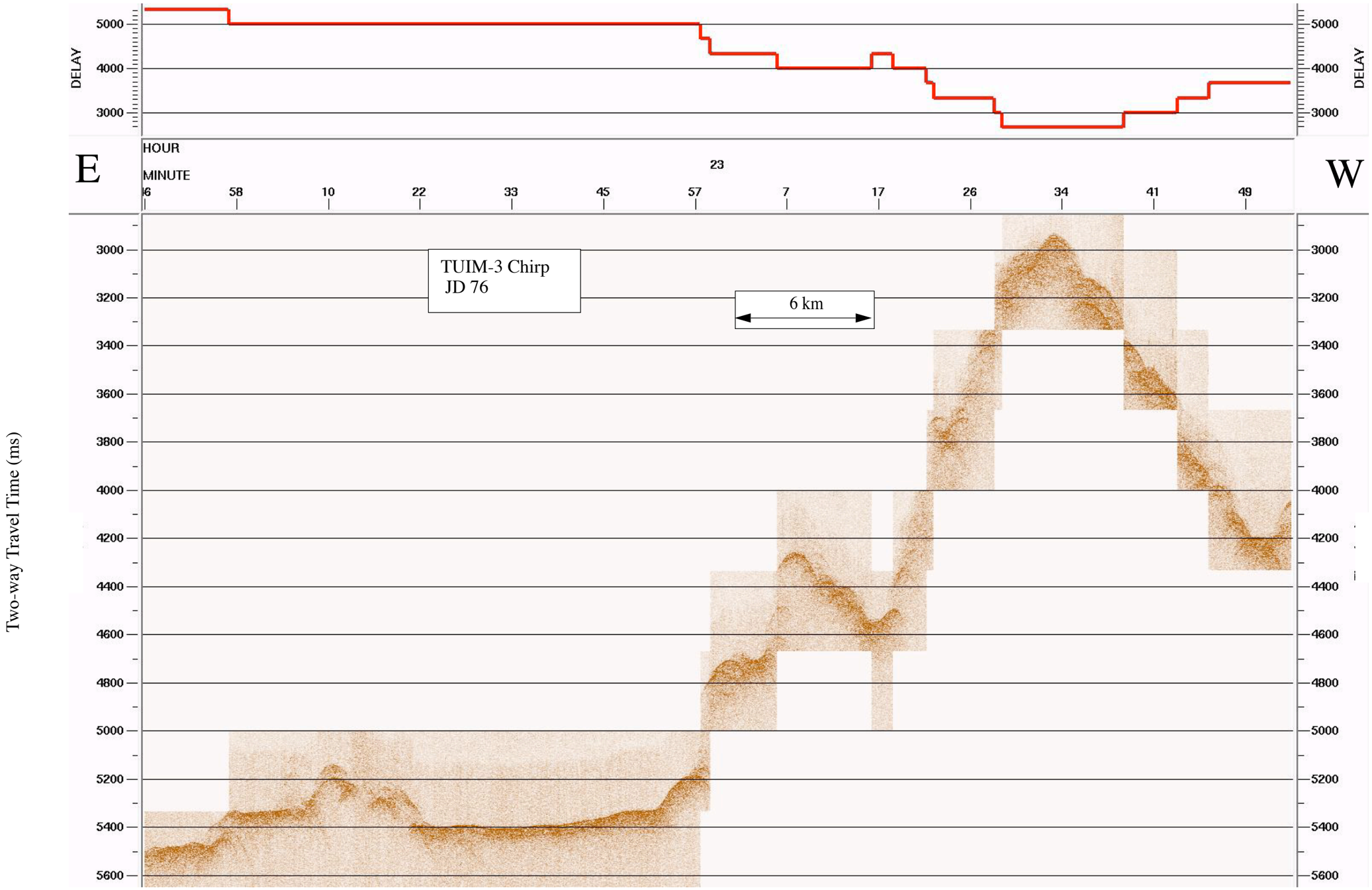

DELAY
5200
5000
4800
HOUR
MINUTE
13
E
W
8
10
21
33
45
56
8
20
31
42
54
7
19
TUIM-3 Chirp
JD 76
6 km
Two-way Travel Time (ms)
4950
5000
5050
5100
5150
5200
5250
5300
5350
5400
5450
5500
5550
5600
5650
5700
5750
5800
5850
5900
5950


DELAY
5300
5200
5100
HOUR
16
MINUTE
20
32
45
57
10
22
34
46
58
10
23
35
47
E
W
TUIM-3 Chirp
JD 76
6 km
5400
5420
5440
5460
5480
5500
5520
5540
5560
5580
5600
5620
5640
5660
5680
5700
5720
5740
5760
5780
5800
5820
5840
5860
5880
5900
Time (ms)
Two-way Travel Time (ms)

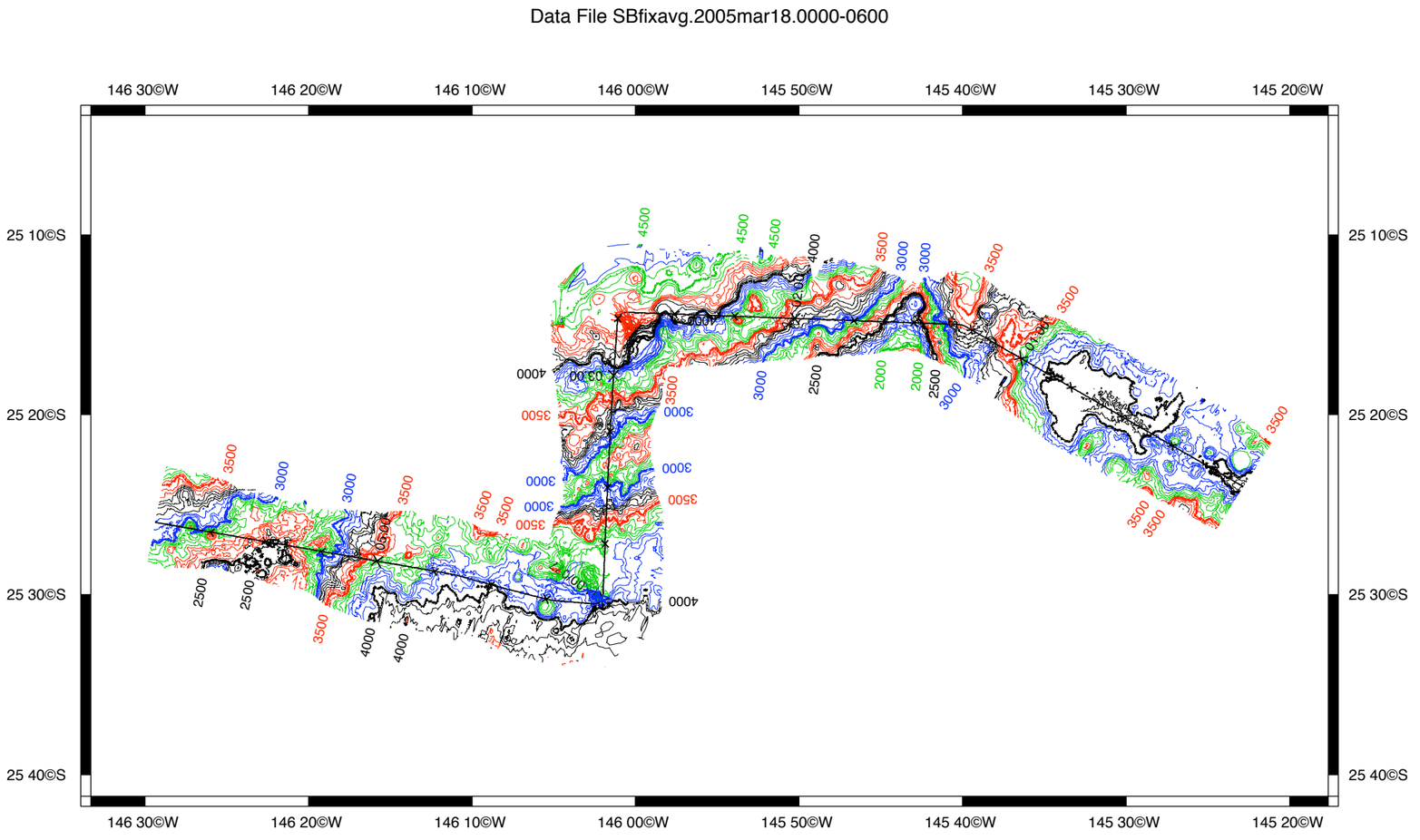

Data File SBfixavg.2005mar17.1800-2400
145 20©W
145 10©W
145 00©W
144 50©W
144 40©W
144 30©W
144 20©W
144 10©W
25 20©S
25 30©S
25 40©S
25 50©S
26 00©S
3500
4000
4500

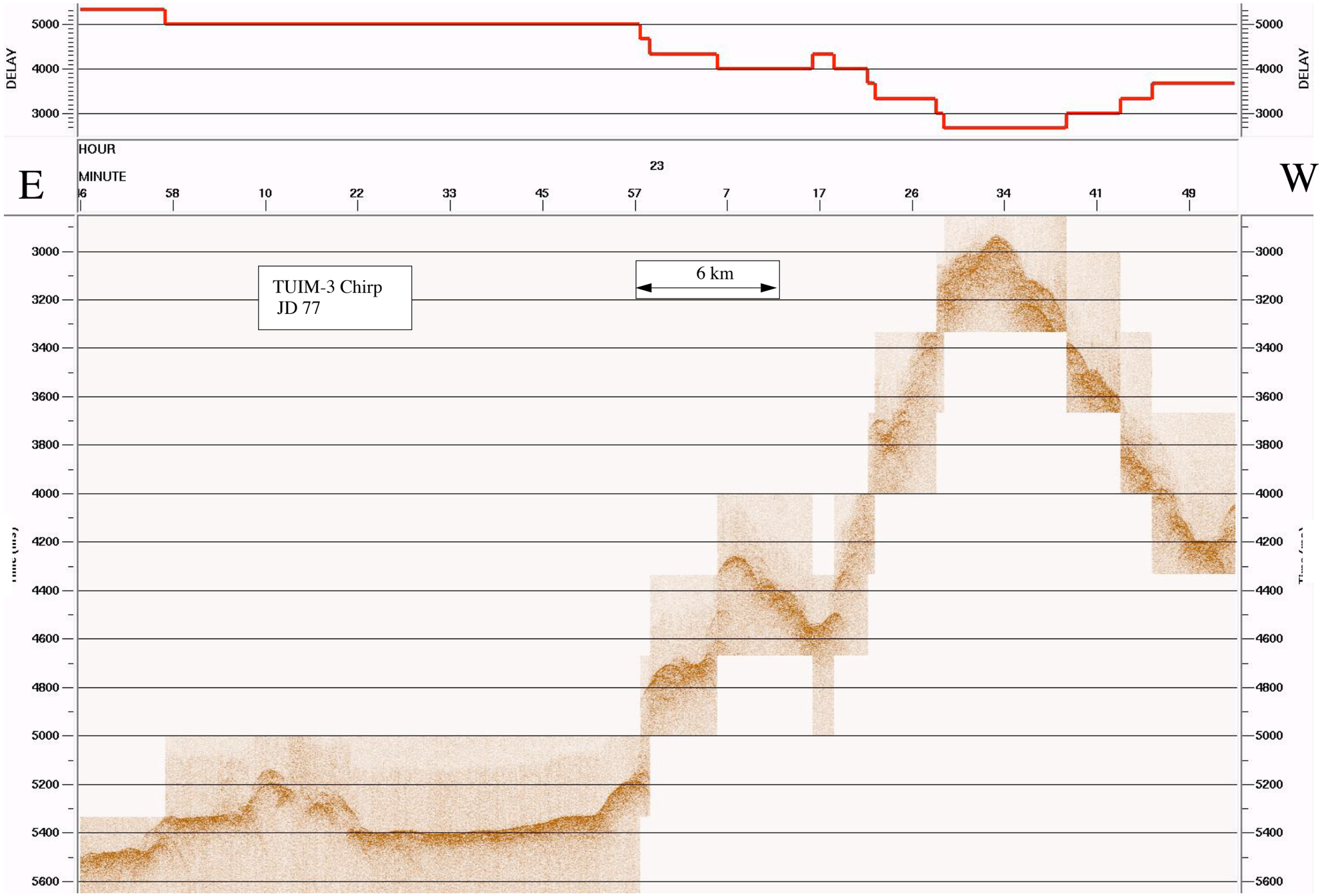

DELAY
5300
5200
5100
E
W
HOUR
18
MINUTE
9
1
13
26
38
50
3
15
28
40
52
4
16
TUIM-3 Chirp
JD 76
6 km
Two-way Travel Time (ms)
5250
5300
5350
5400
5450
5500
5550
5600
5650
5700
5750
5800
5850
5900
5950

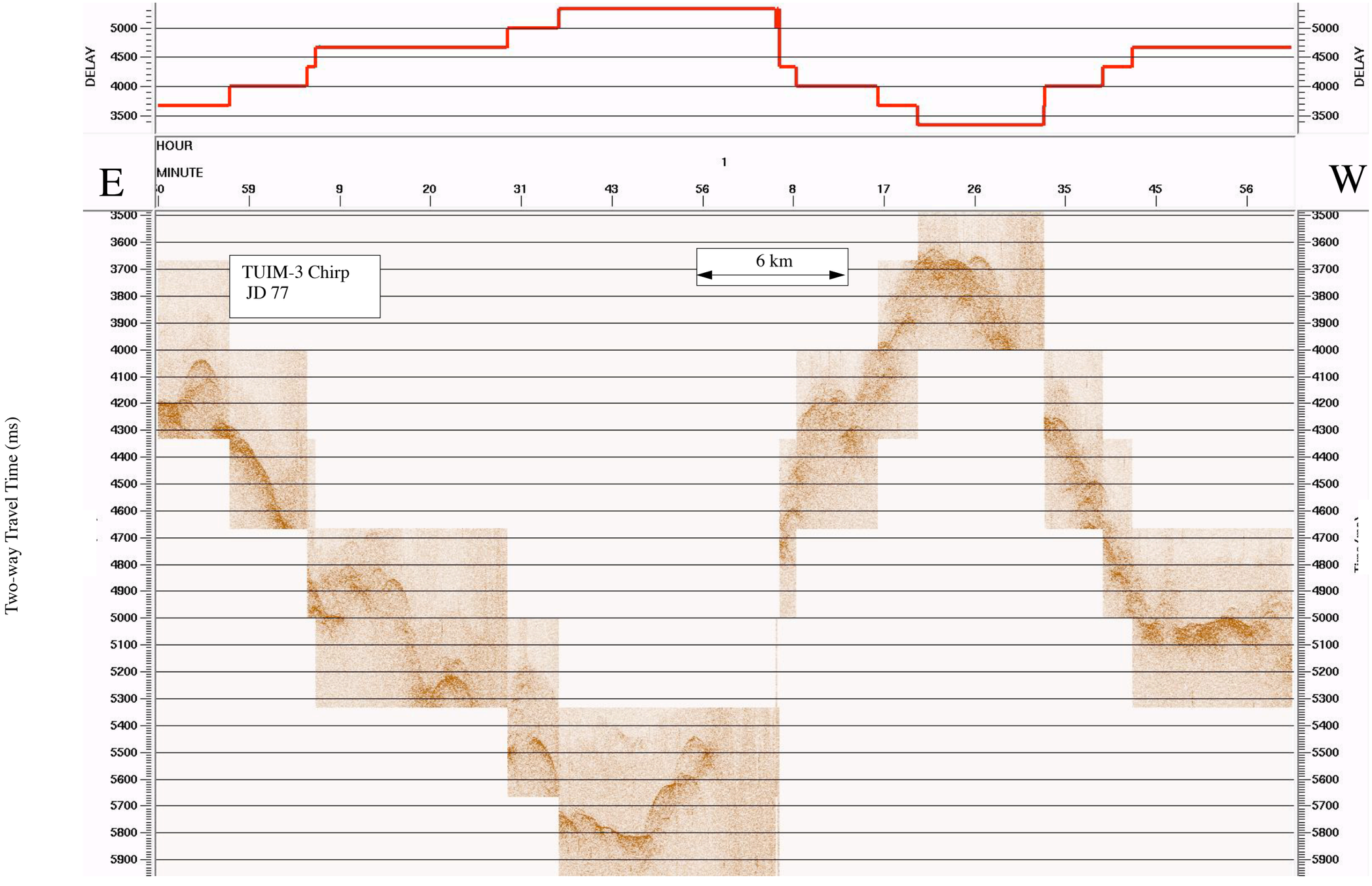

DELAY
5300
5200
5100
HOUR
21
MINUTE
7
30
42
54
7
19
31
43
56
8
20
33
45
E
W
TUIM-3 Chirp
JD 76
6 km
Two-way Travel Time (ms)
5350
5400
5450
5500
5550
5600
5650
5700
5750
5800
5850
5900
5950

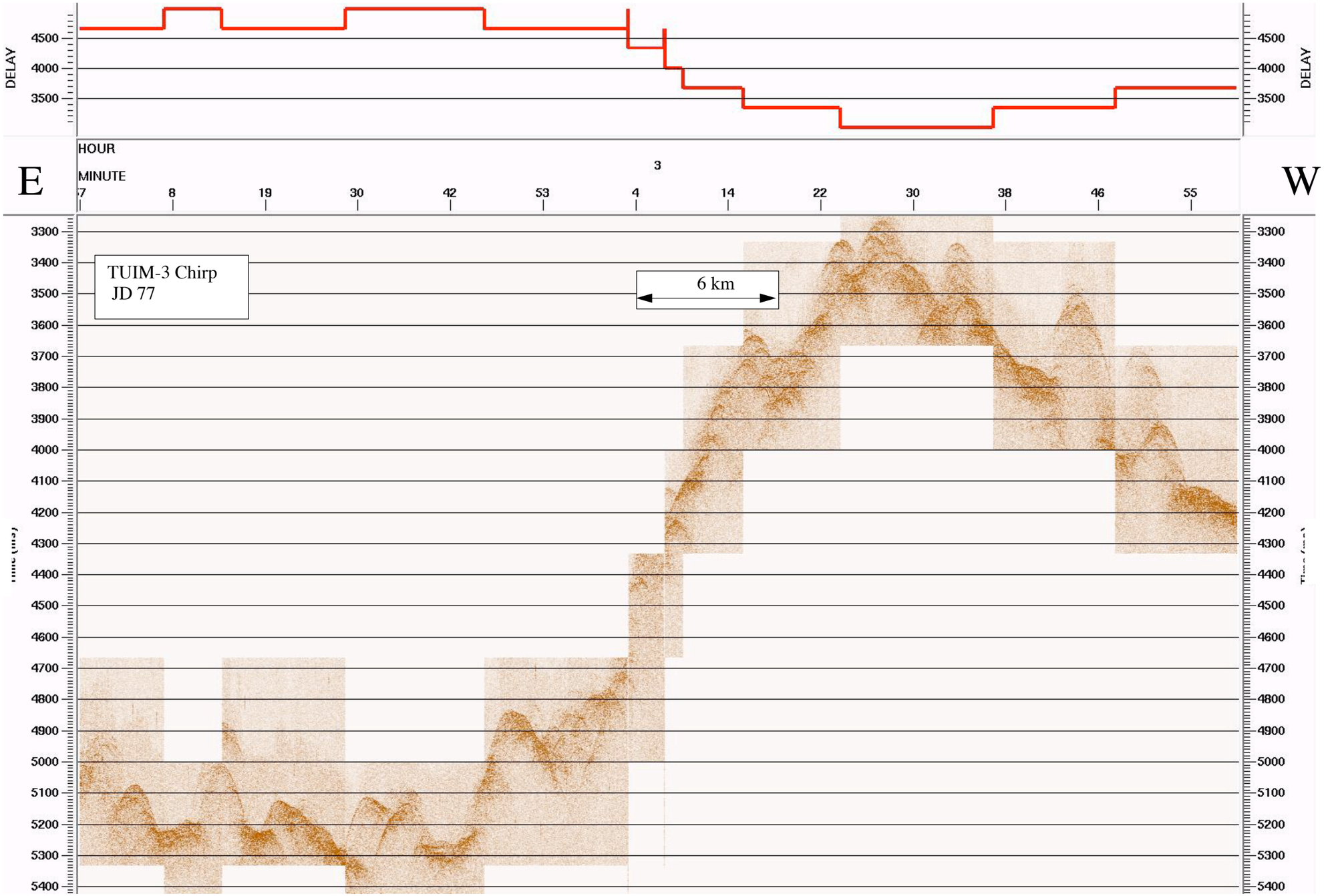

DELAY
5000
4000
3000
E
HOUR
MINUTE
23
46
58
10
22
33
45
57
7
17
26
34
41
49
W
TUIM-3 Chirp
JD 76
6 km
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
Two-way Travel Time (ms)

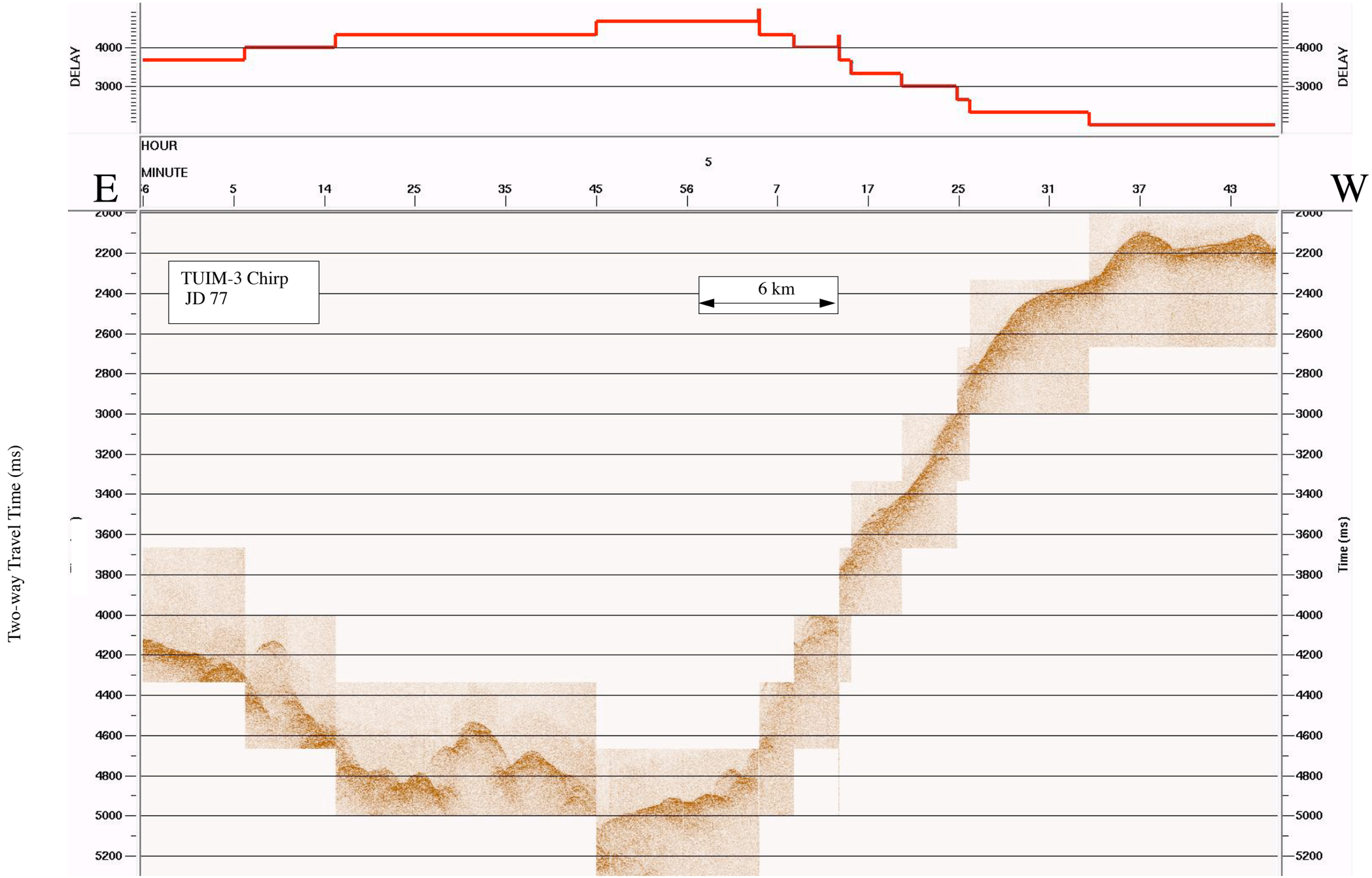
Julian Day 77
18 March 2005
Knudsen Chirp Data

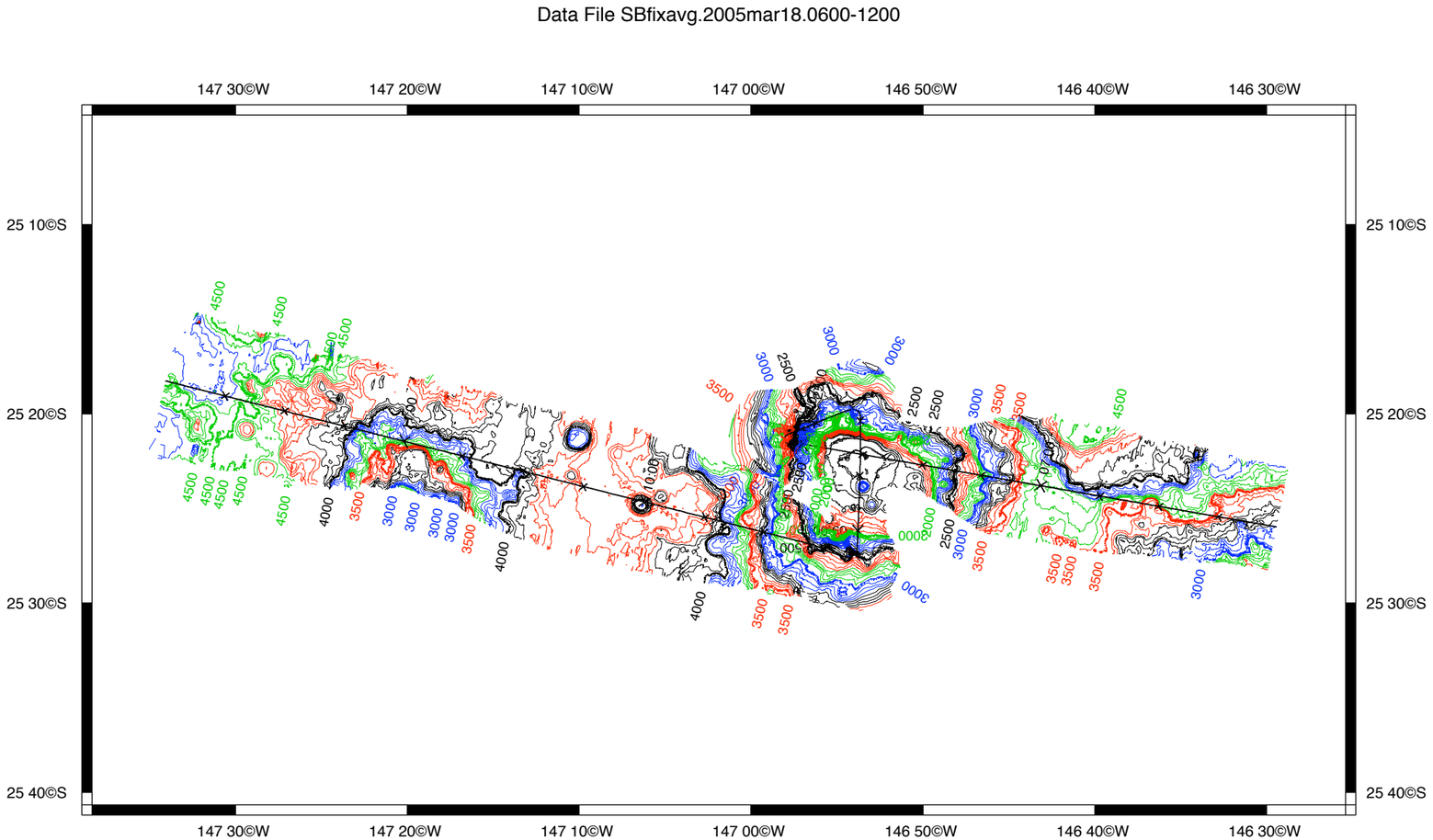

Data File SBfixavg.2005mar18.0000-0600
146 30©W
146 20©W
146 10©W
146 00©W
145 50©W
145 40©W
145 30©W
145 20©W
25 10©S
25 20©S
25 30©S
25 40©S

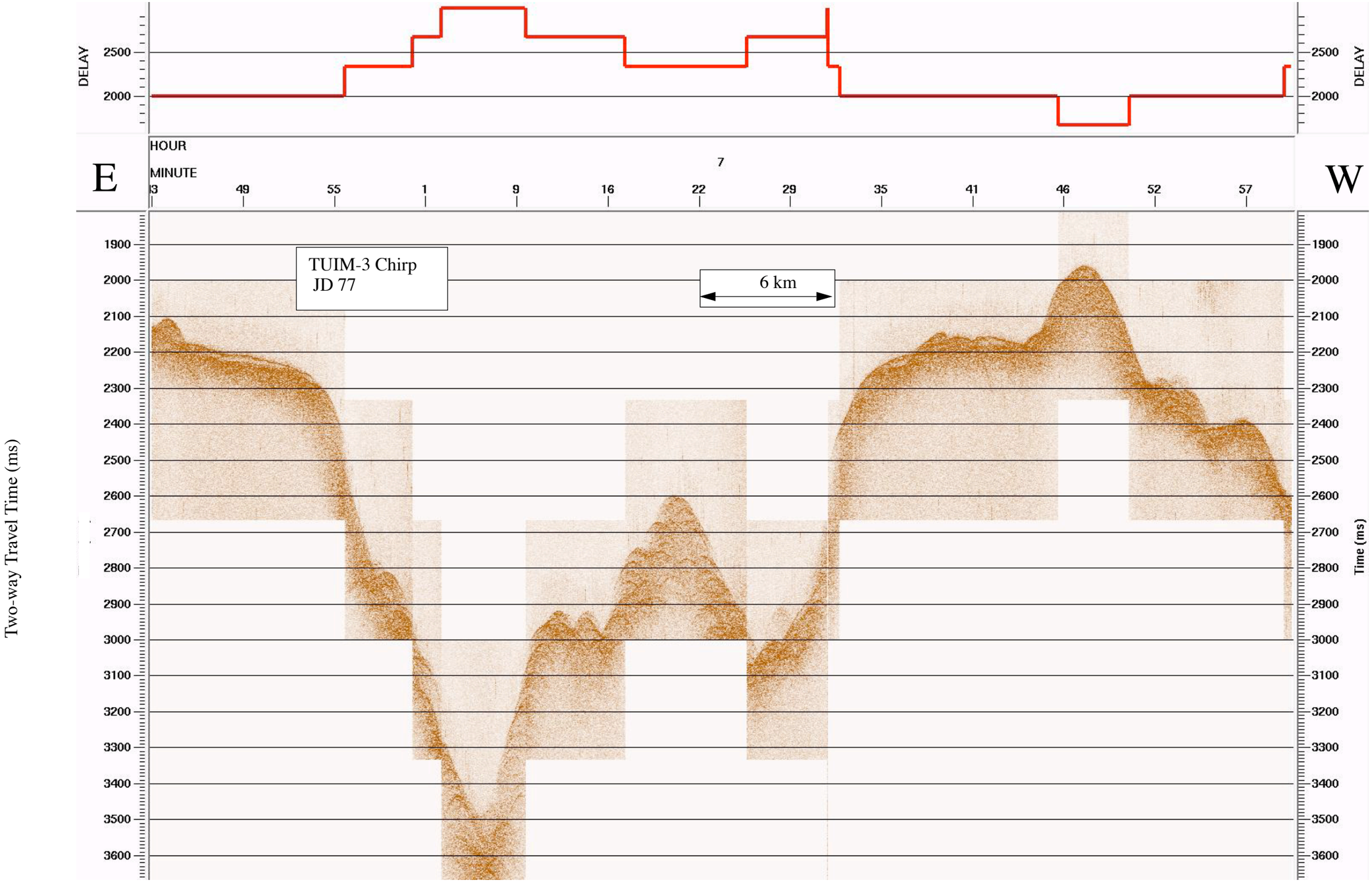

DELAY
5000
4000
3000
HOUR
MINUTE
23
6
58
10
22
33
45
57
7
17
26
34
41
49
E
W
TUIM-3 Chirp
JD 77
6 km
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
Two-way Travel Time (ms)

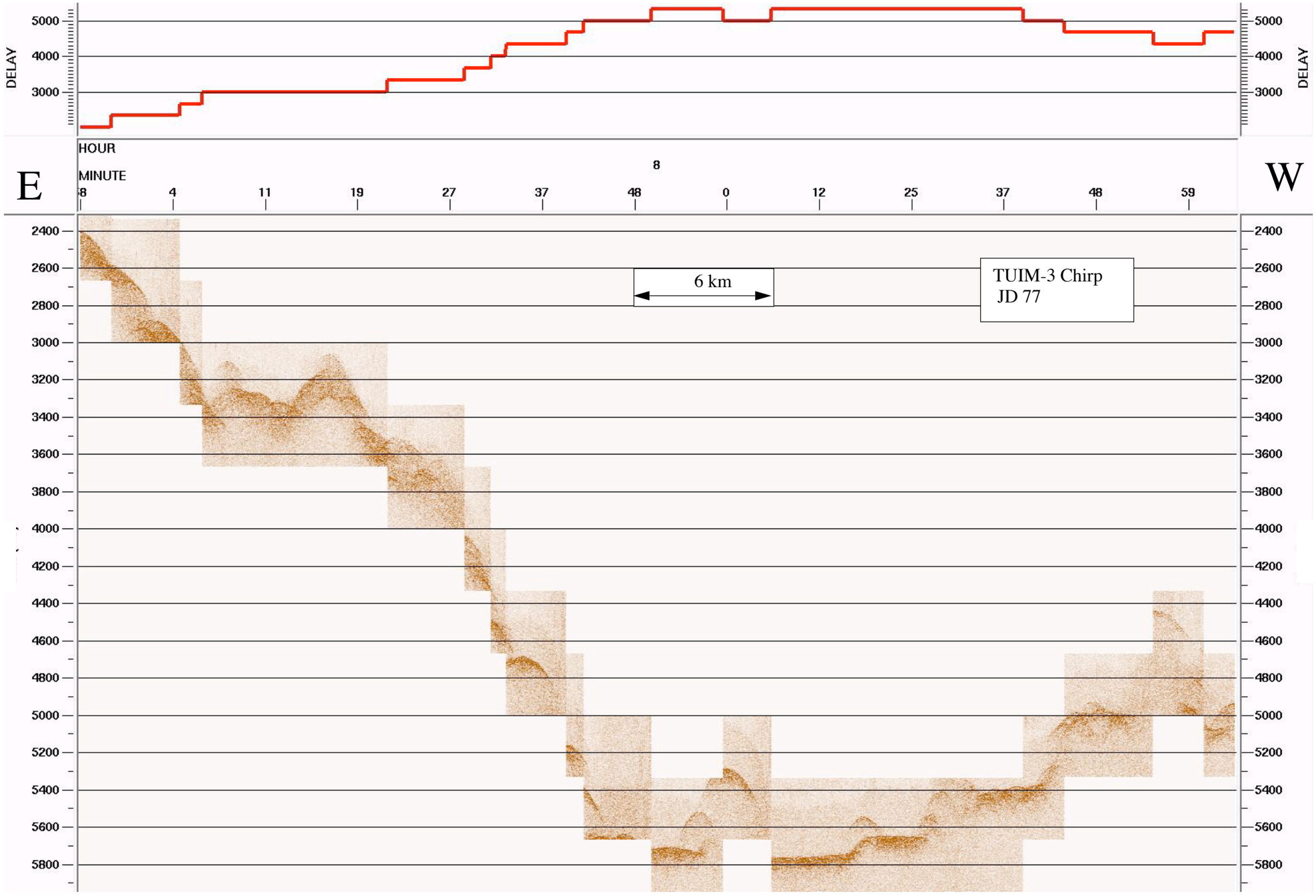

DELAY
5000
4500
4000
3500
HOUR
MINUTE
E
W
1
0
59
9
20
31
43
56
8
17
26
35
45
56
TUIM-3 Chirp
JD 77
6 km
Two-way Travel Time (ms)
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
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5100
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5600
5700
5800
5900

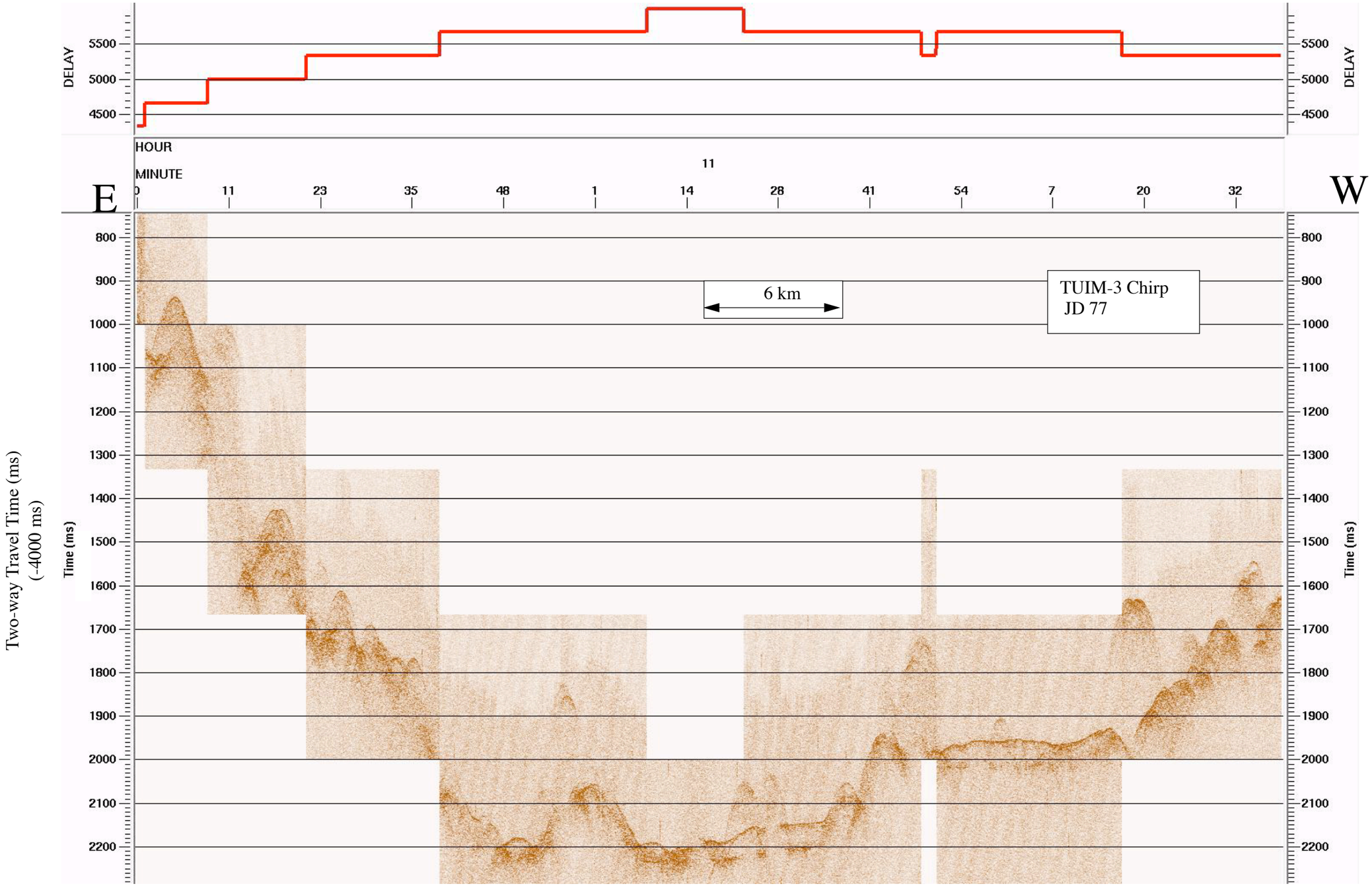

DELAY
4500
4000
3500
HOUR
MINUTE
3
7
8
19
30
42
53
4
14
22
30
38
46
55
E
W
TUIM-3 Chirp
JD 77
6 km
3300
3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
Two-way Travel Time (ms)

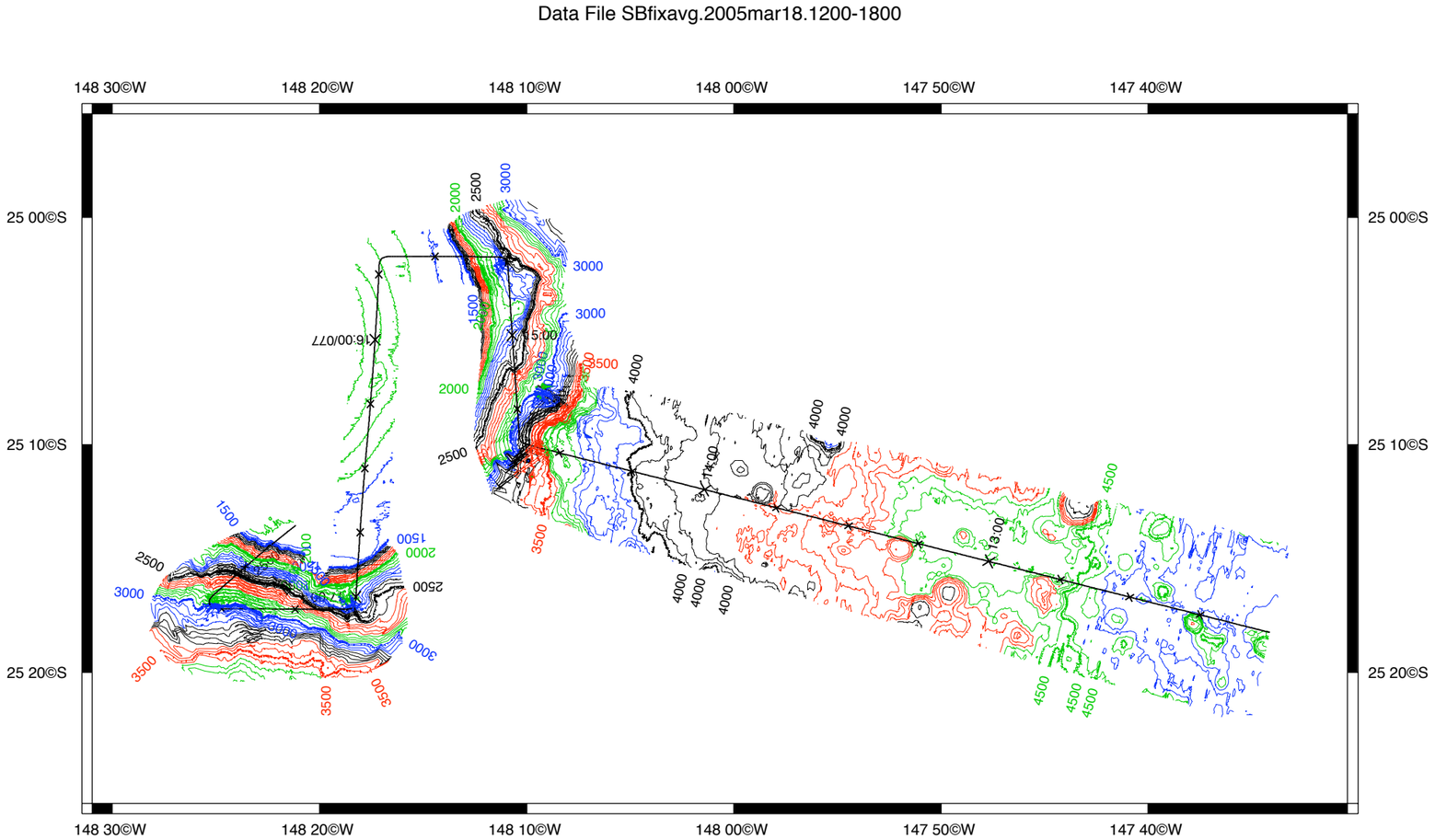

DELAY
4000
3000
HOUR
5
MINUTE
56
5
14
25
35
45
56
7
17
25
31
37
43
E
W
TUIM-3 Chirp
JD 77
6 km
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
5200
Two-way Travel Time (ms)
Time (ms)

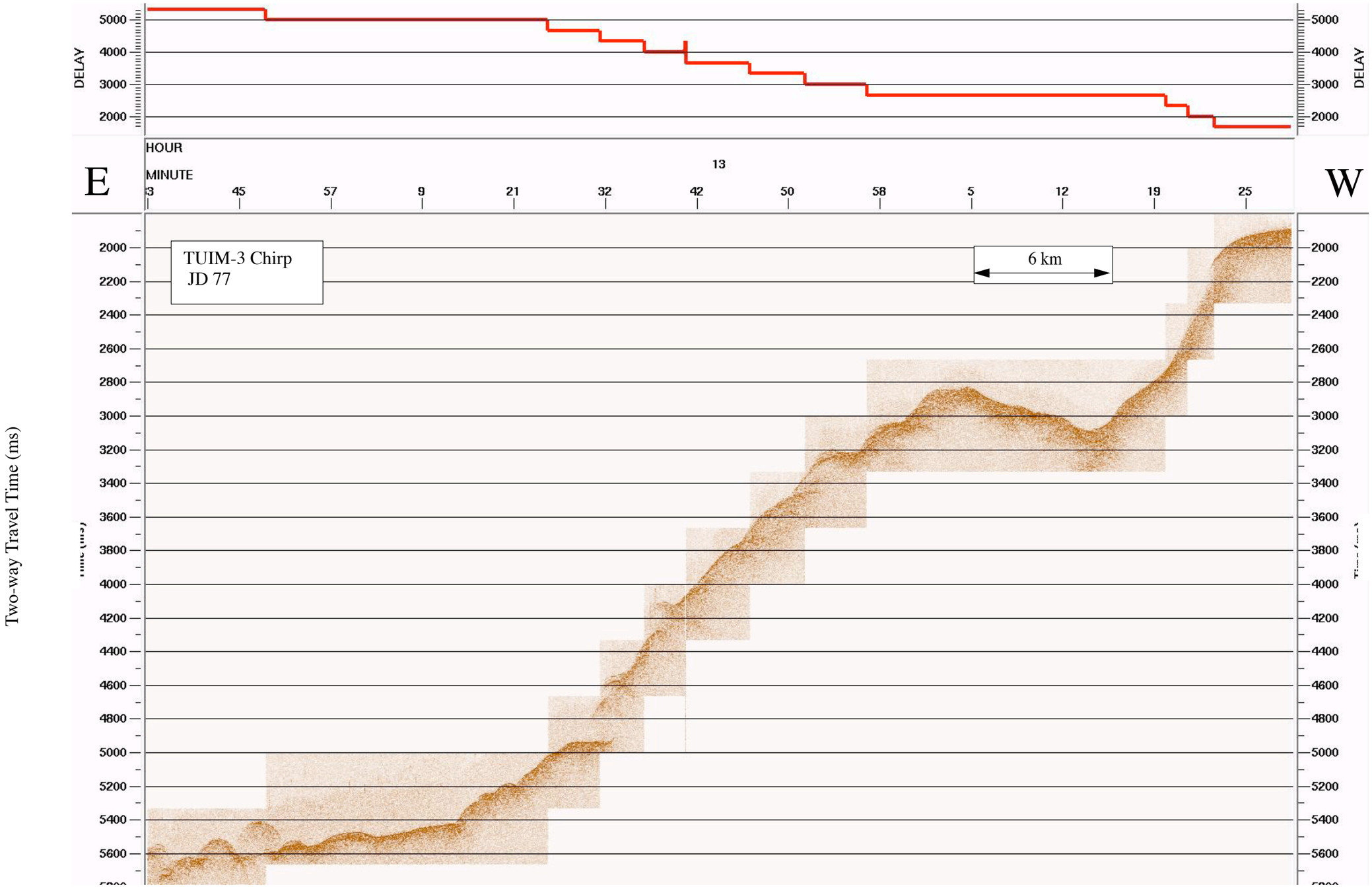

Data File SBfixavg.2005mar18.0600-1200
147 30©W
147 20©W
147 10©W
147 00©W
146 50©W
146 40©W
146 30©W
25 10©S
25 20©S
25 30©S
25 40©S

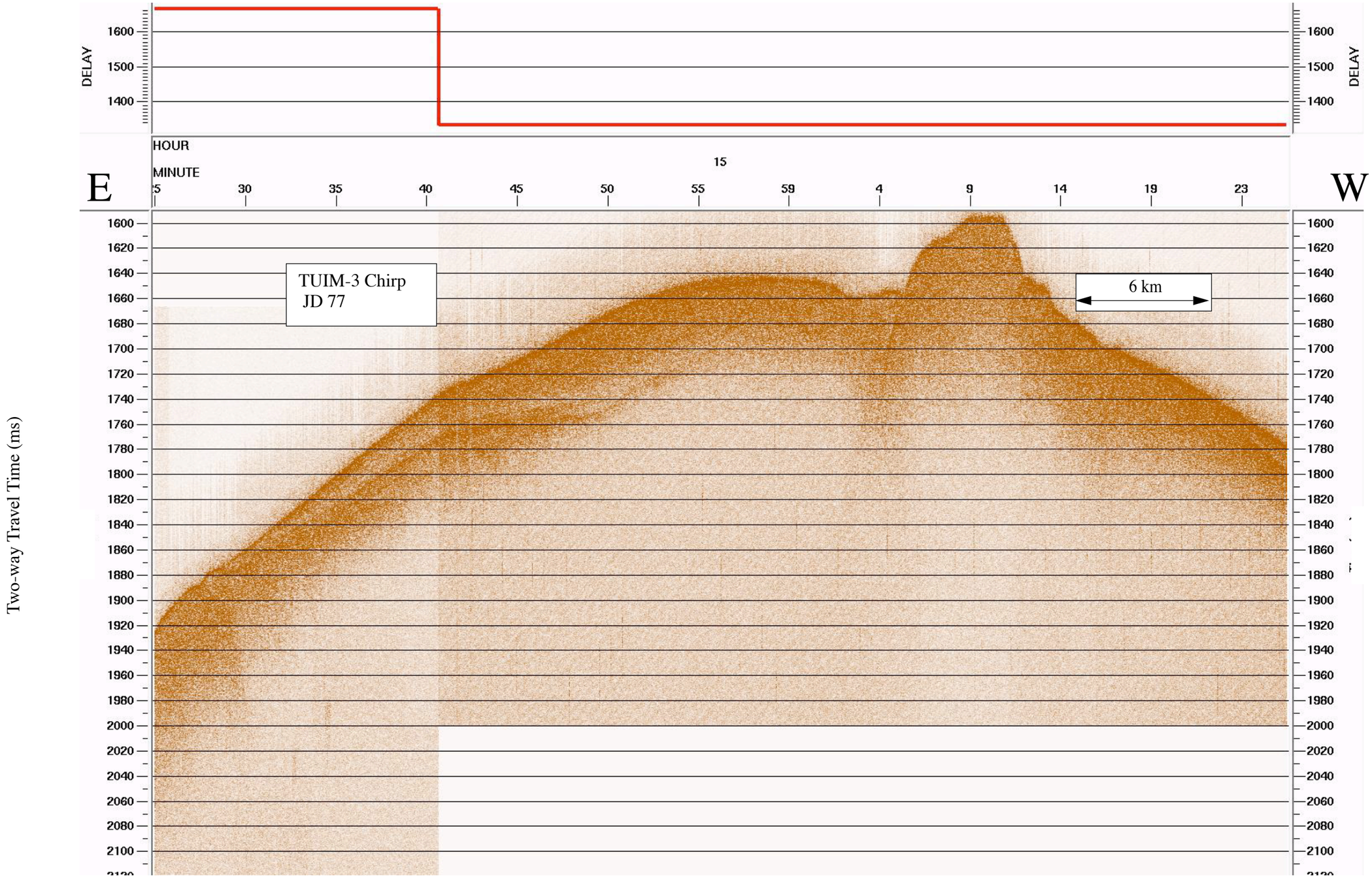

DELAY
2500
2000
E
HOUR
MINUTE
7
3
49
55
1
9
16
22
29
35
41
46
52
57
W
TUIM-3 Chirp
JD 77
6 km
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
Two-way Travel Time (ms)
Time (ms)

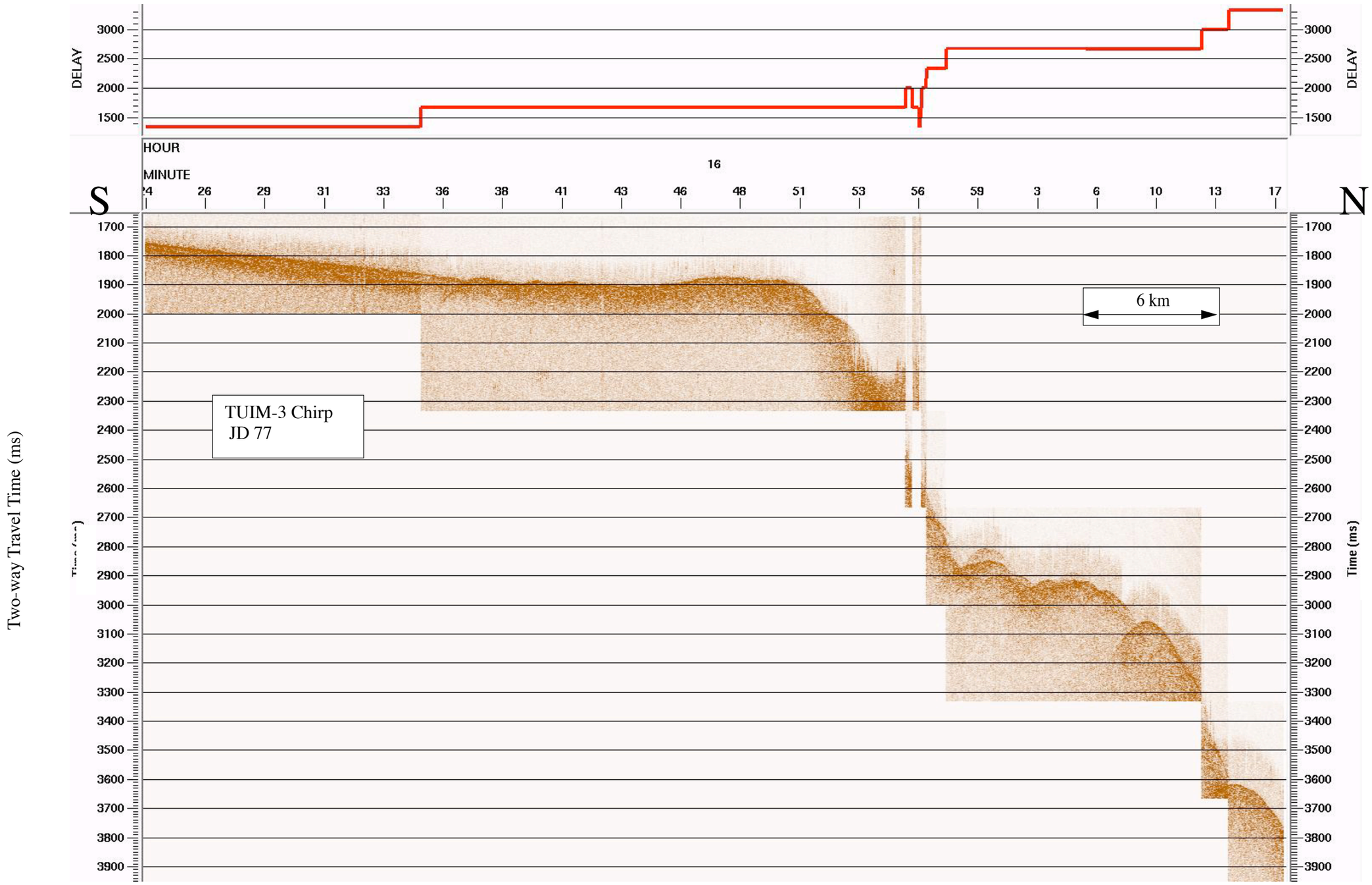

DELAY
5000
4000
3000
E
W
HOUR
MINUTE
8
4
11
19
27
37
48
0
12
25
37
48
59
6 km
TUIM-3 Chirp
JD 77
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
Two-way Travel Time (ms)


DELAY
5500
5000
4500
HOUR
MINUTE
11
0
11
23
35
48
1
14
28
41
54
7
20
32
E
W
6 km
TUIM-3 Chirp
JD 77
Time (ms)
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
Two-way Travel Time (ms)
(-4000 ms)

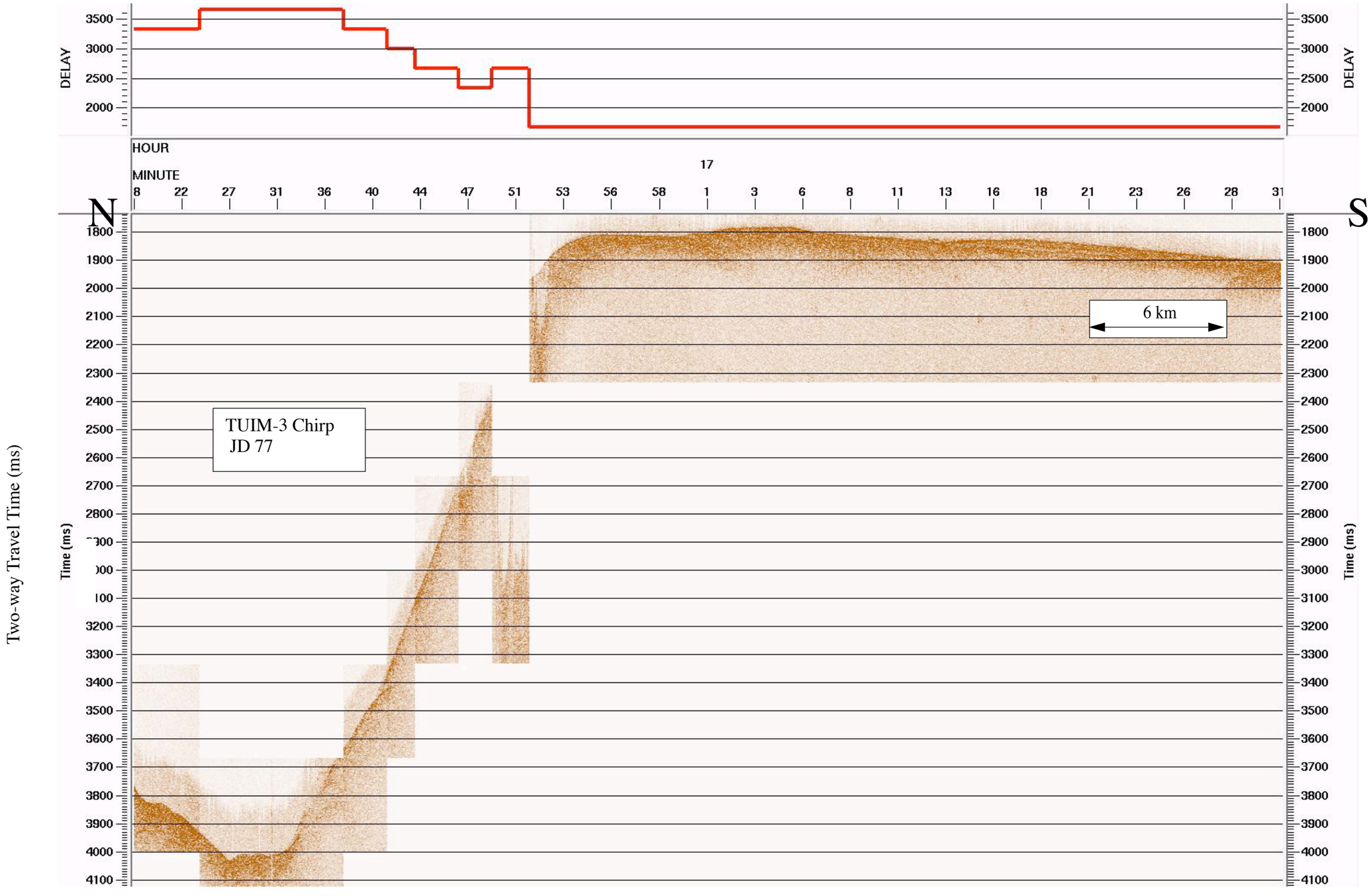

Data File SBfixavg.2005mar18.1200-1800
148 30©W
148 20©W
148 10©W
148 00©W
147 50©W
147 40©W
25 00©S
25 10©S
25 20©S
16:00/077
15:00
13:00


DELAY
5000
4000
3000
2000
E
HOUR
13
MINUTE
3
45
57
9
21
32
42
50
58
5
12
19
25
W
TUIM-3 Chirp
JD 77
6 km
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
Two-way Travel Time (ms)


DELAY
1600
1500
1400
HOUR
MINUTE
15
5
30
35
40
45
50
55
59
4
9
14
19
23
E
W
TUIM-3 Chirp
JD 77
6 km
Two-way Travel Time (ms)
1600
1620
1640
1660
1680
1700
1720
1740
1760
1780
1800
1820
1840
1860
1880
1900
1920
1940
1960
1980
2000
2020
2040
2060
2080
2100



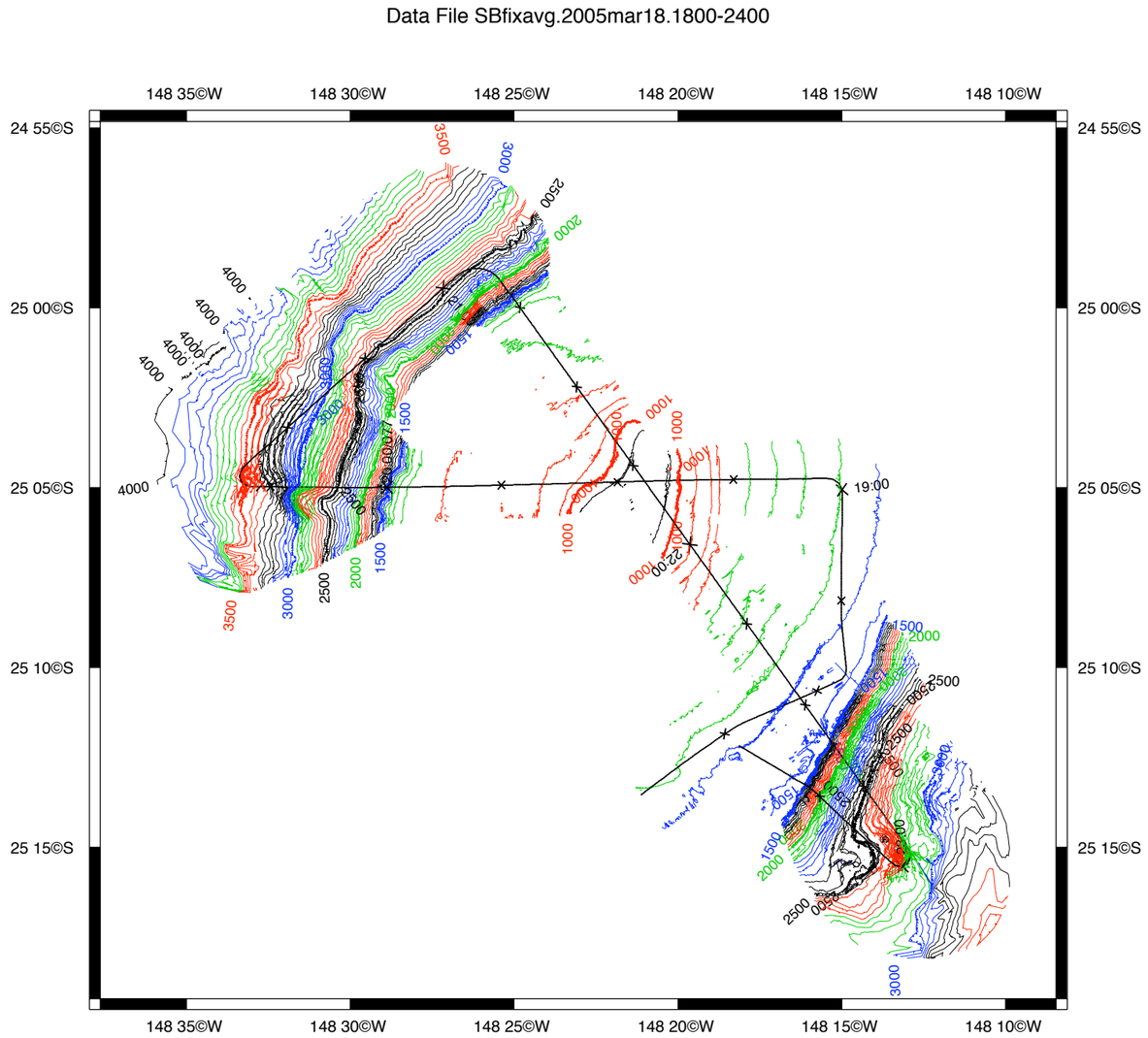
Two-way Travel Time (ms)

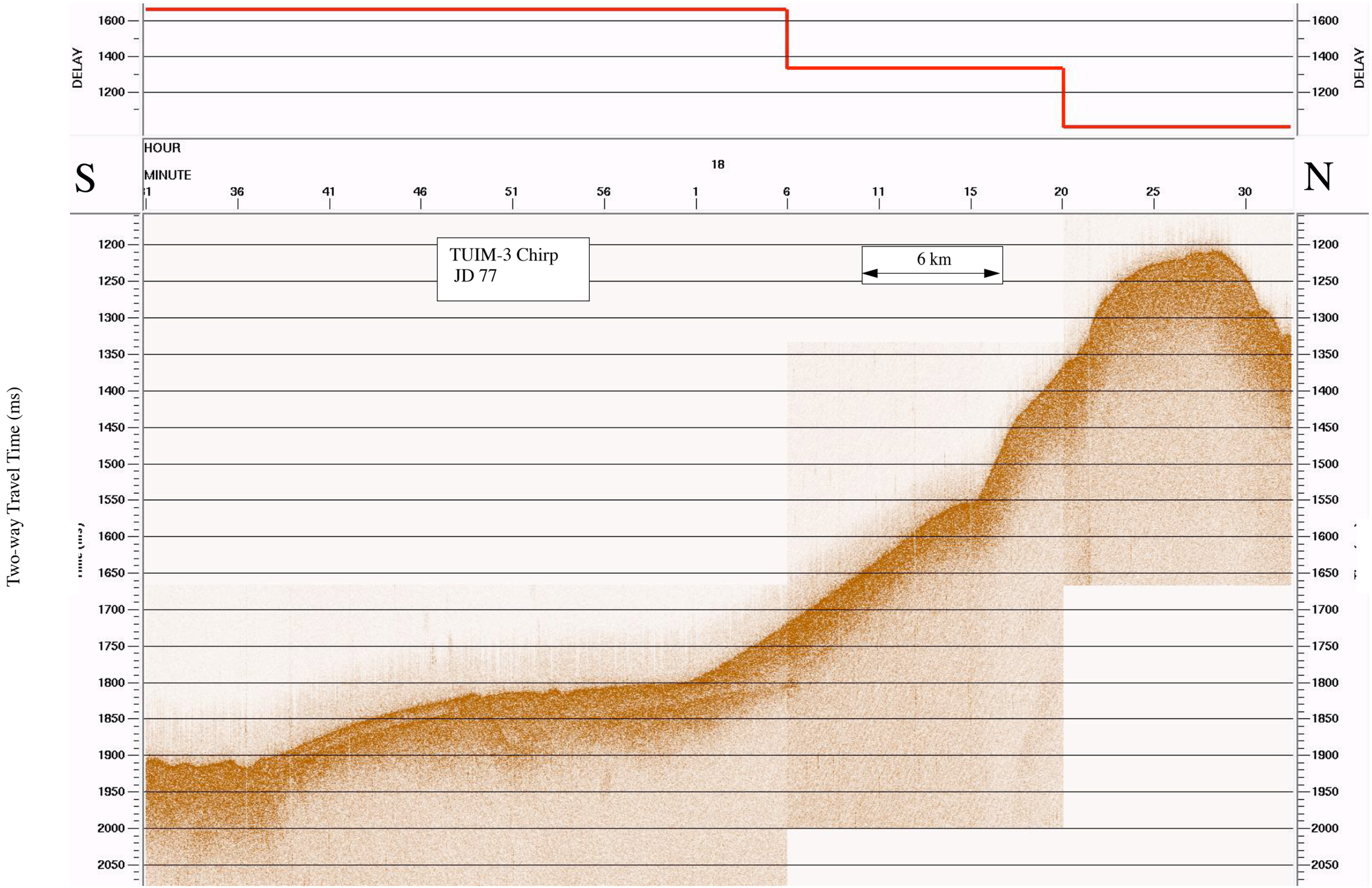


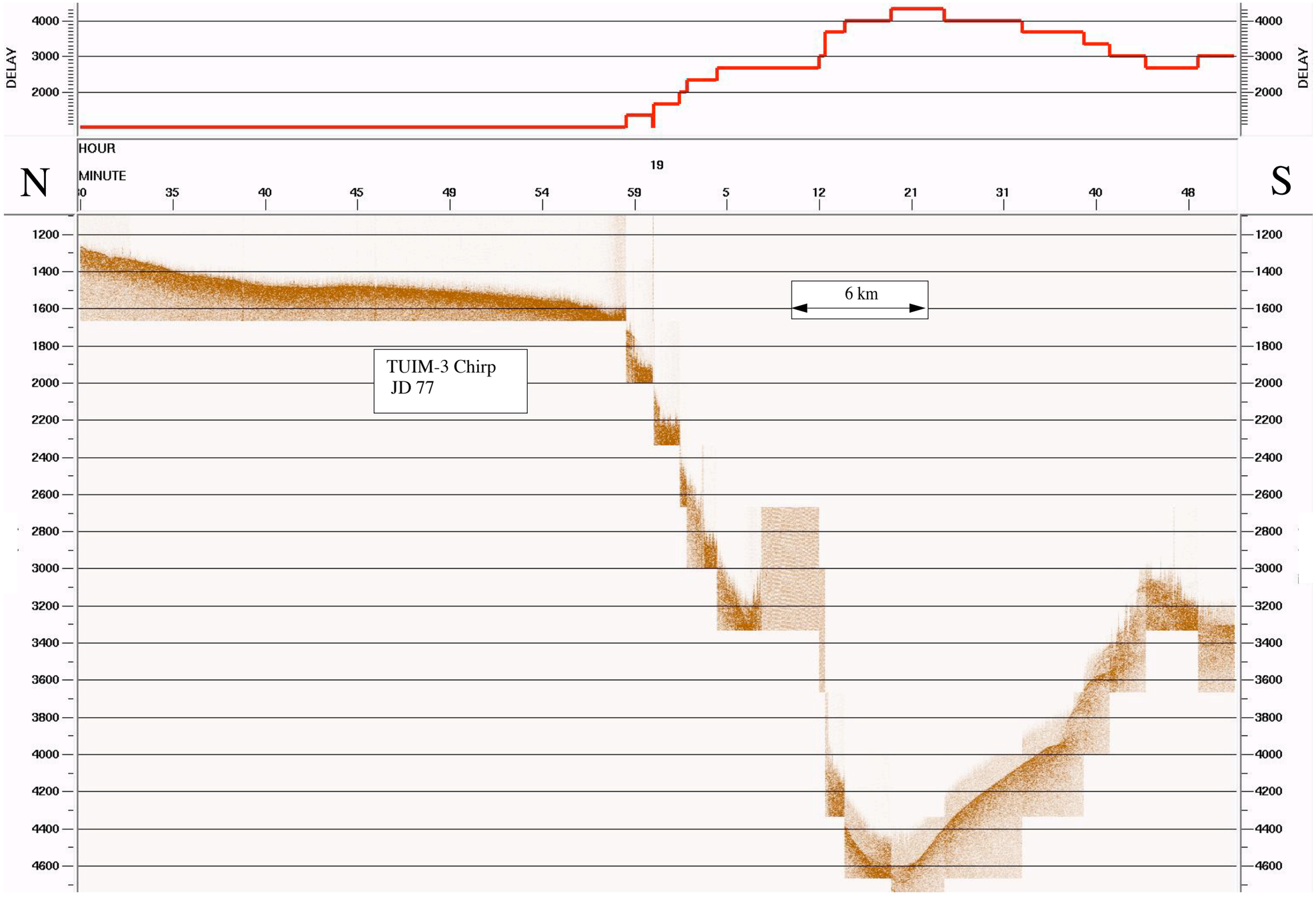
Two-way Travel Time (ms)

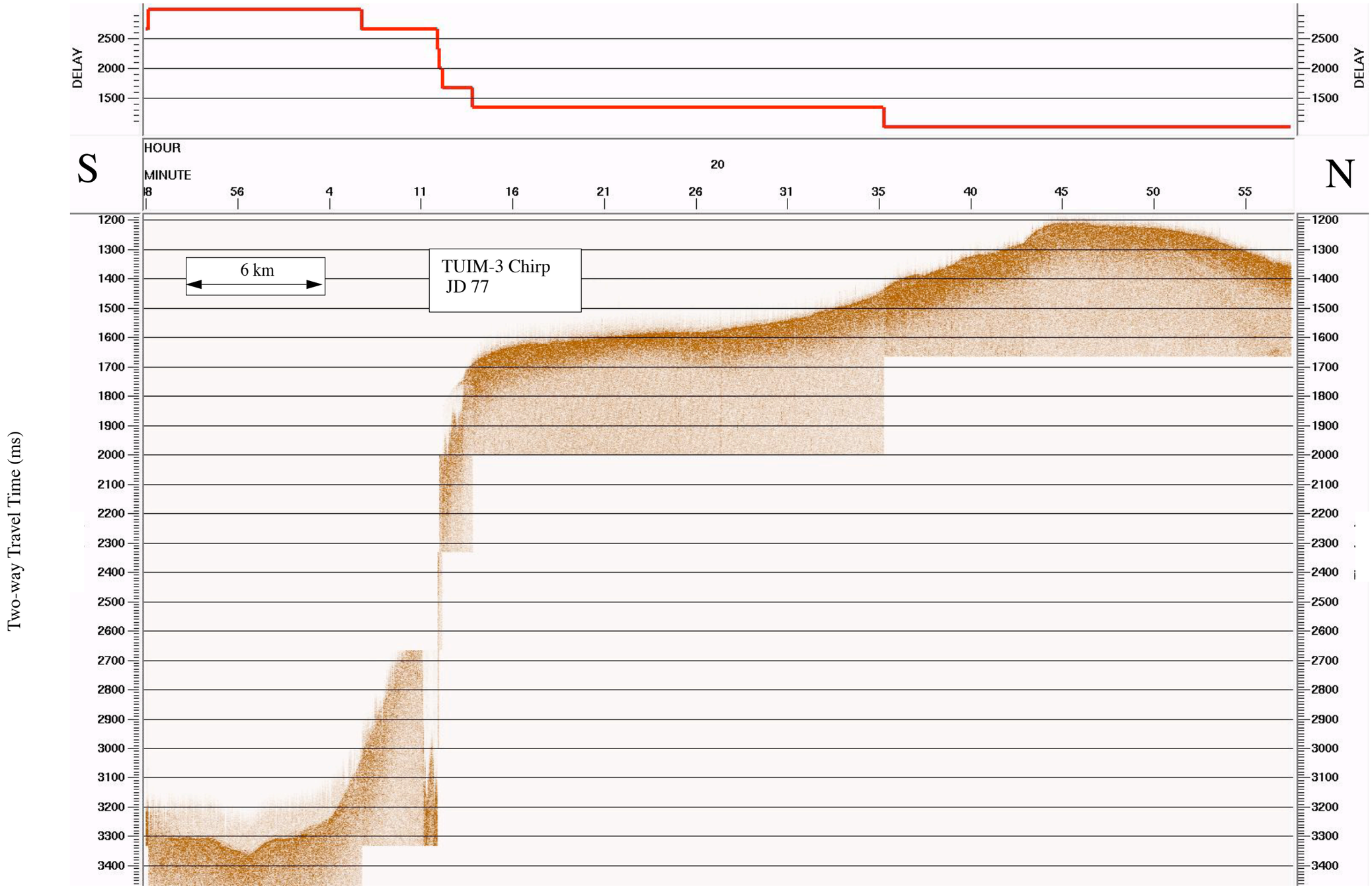
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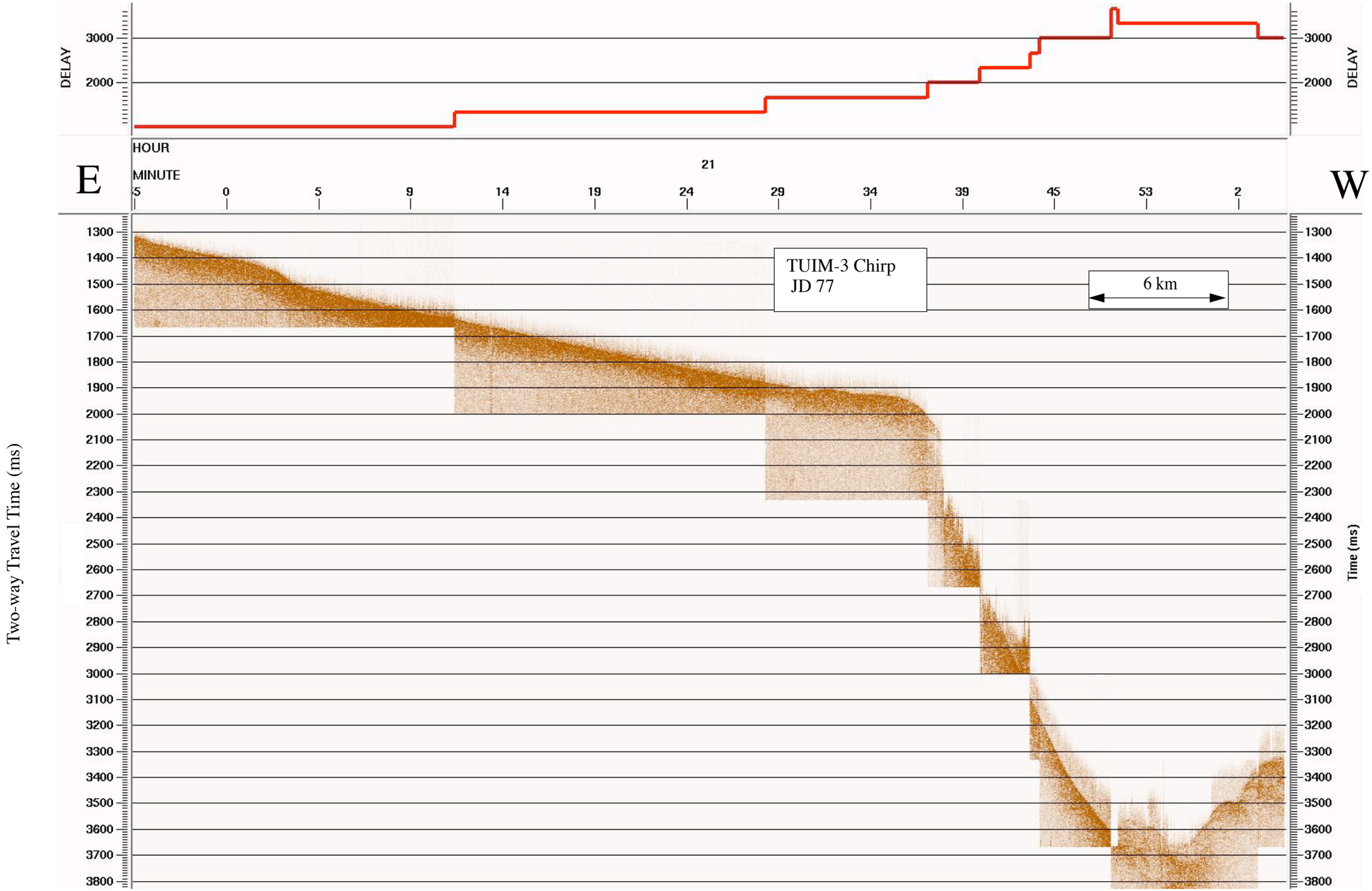
there is no spoon

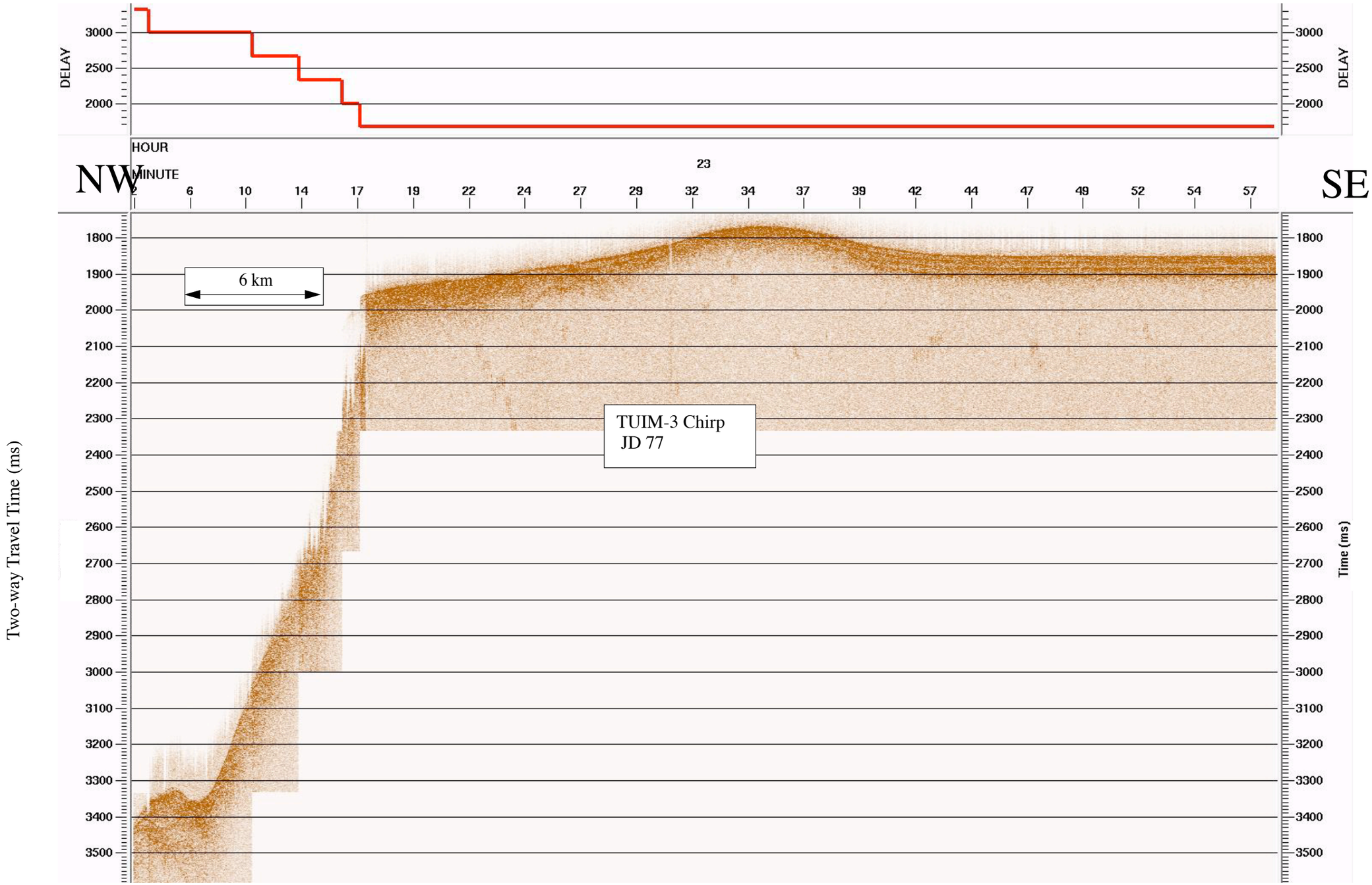

Data File SBfixavg.2005mar18.1800-2400
148 35©W
148 30©W
148 25©W
148 20©W
148 15©W
148 10©W
24 55©S
25 00©S
25 05©S
25 10©S
25 15©S
19:00
22:00


DELAY
1600
1400
1200
S
N
HOUR
18
MINUTE
31
36
41
46
51
56
1
6
11
15
20
25
30
TUIM-3 Chirp
JD 77
6 km
Two-way Travel Time (ms)
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050


DELAY
4000
3000
2000
N
HOUR
19
MINUTE
30
35
40
45
49
54
59
5
12
21
31
40
48
S
6 km
TUIM-3 Chirp
JD 77
Two-way Travel Time (ms)
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600

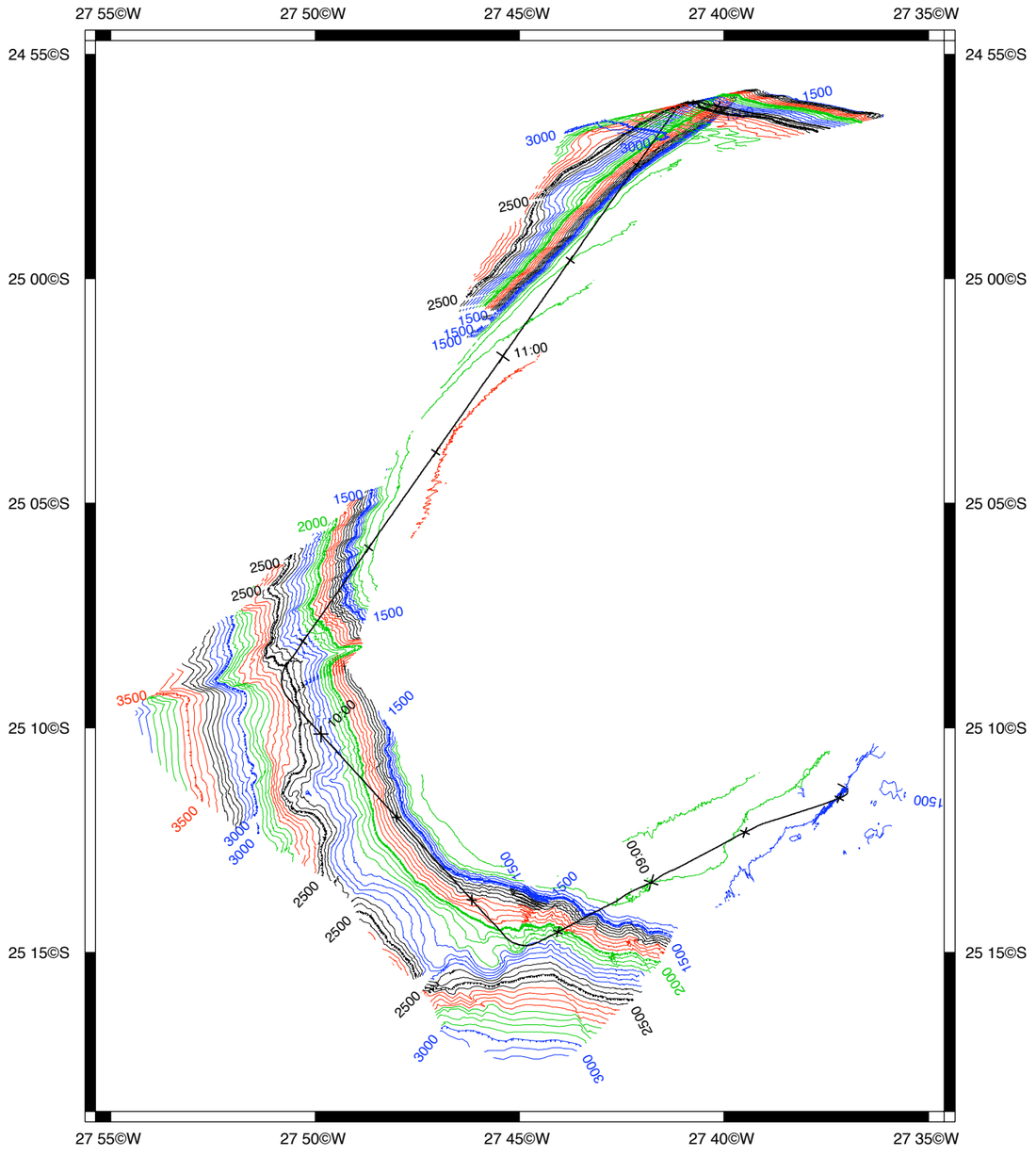

DELAY
2500
2000
1500
S
HOUR
MINUTE
20
8
56
4
11
16
21
26
31
35
40
45
50
55
N
6 km
TUIM-3 Chirp
JD 77
Two-way Travel Time (ms)
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400

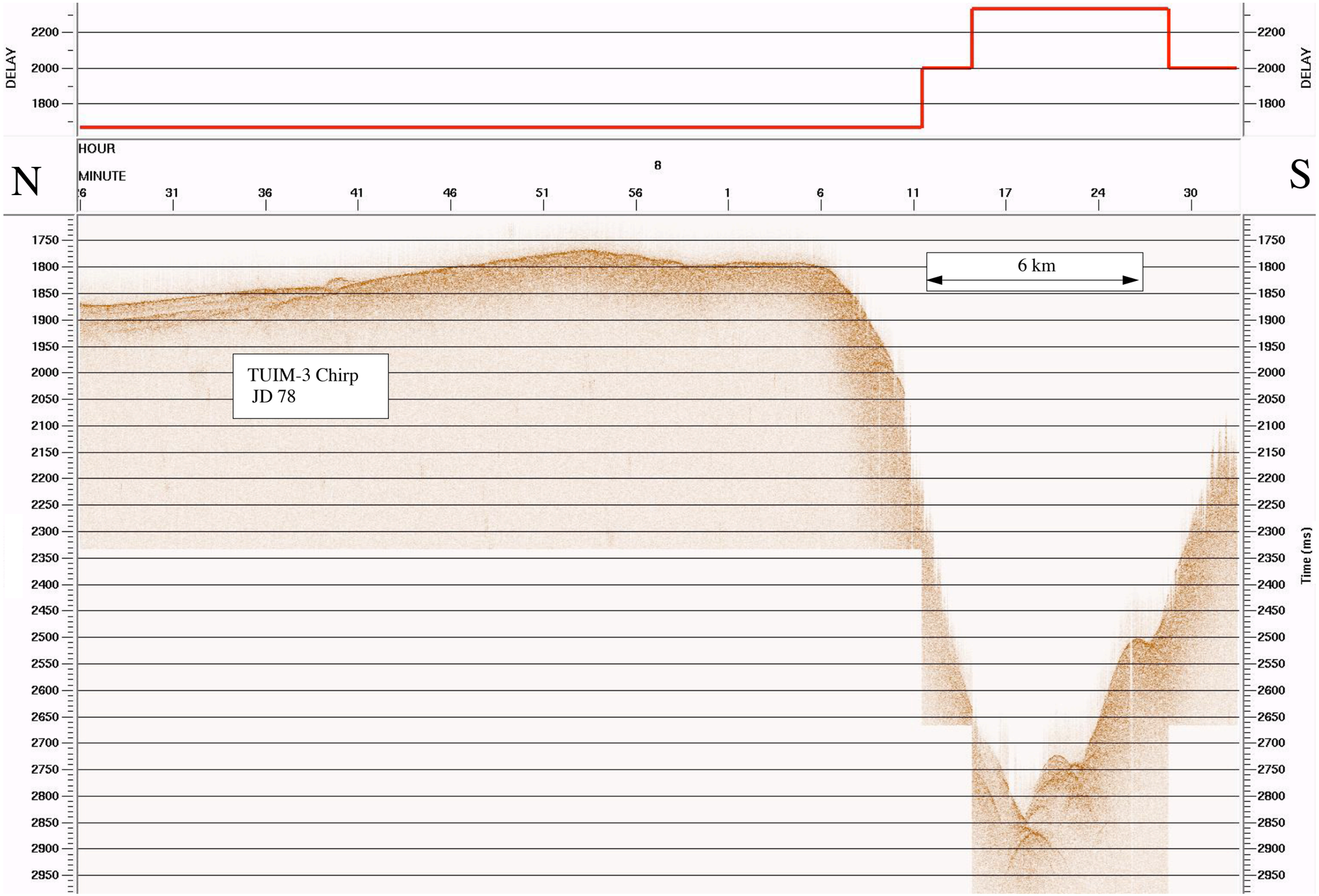

DELAY
3000
2000
HOUR
MINUTE
21
5
0
5
9
14
19
24
29
34
39
45
53
2
E
W
TUIM-3 Chirp
JD 77
6 km
Two-way Travel Time (ms)
Time (ms)
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800

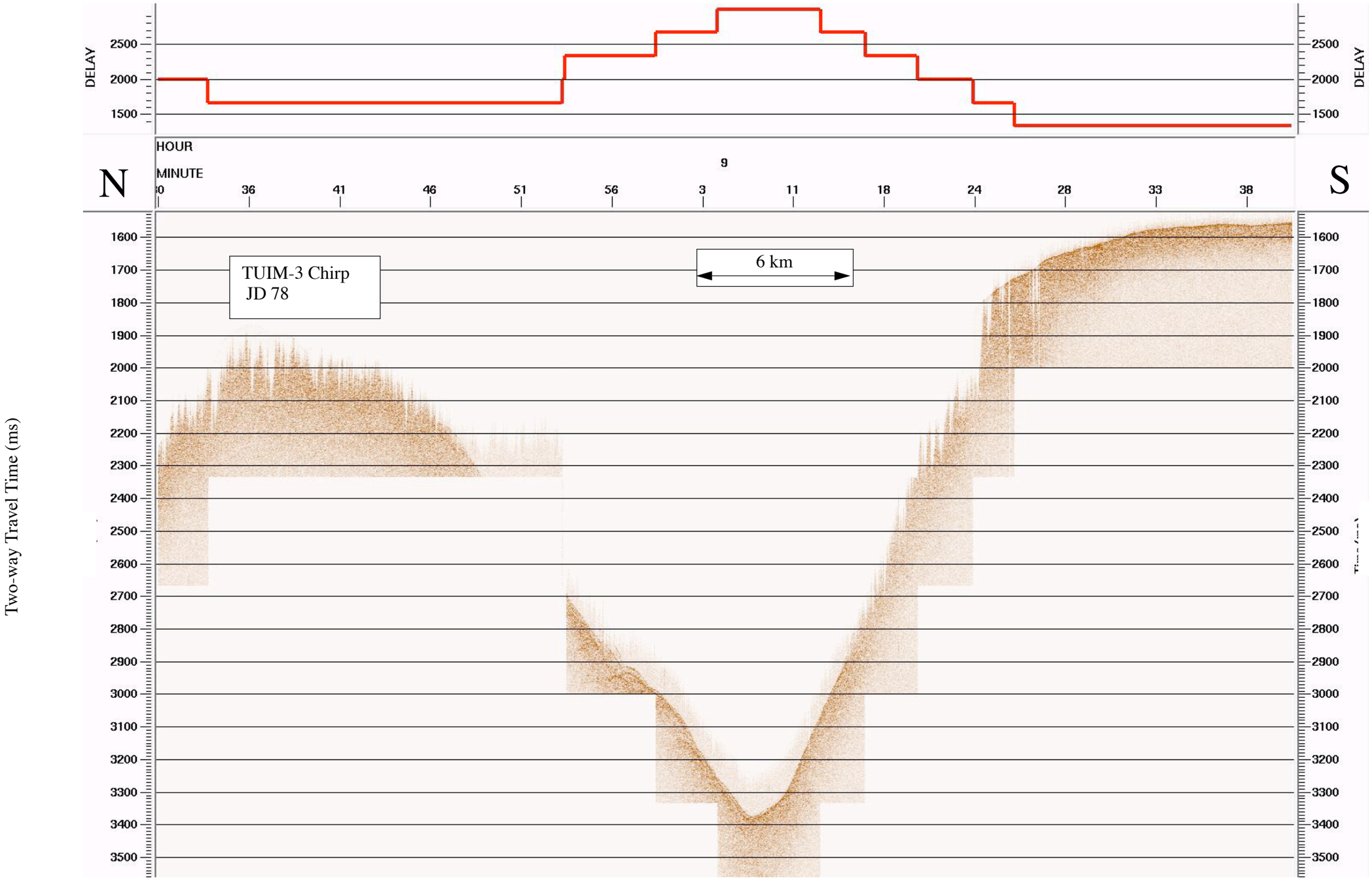

DELAY
3000
2500
2000
HOUR
MINUTE
23
2
6
10
14
17
19
22
24
27
29
32
34
37
39
42
44
47
49
52
54
57
NW
SE
6 km
TUIM-3 Chirp
JD 77
Two-way Travel Time (ms)
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
Time (ms)

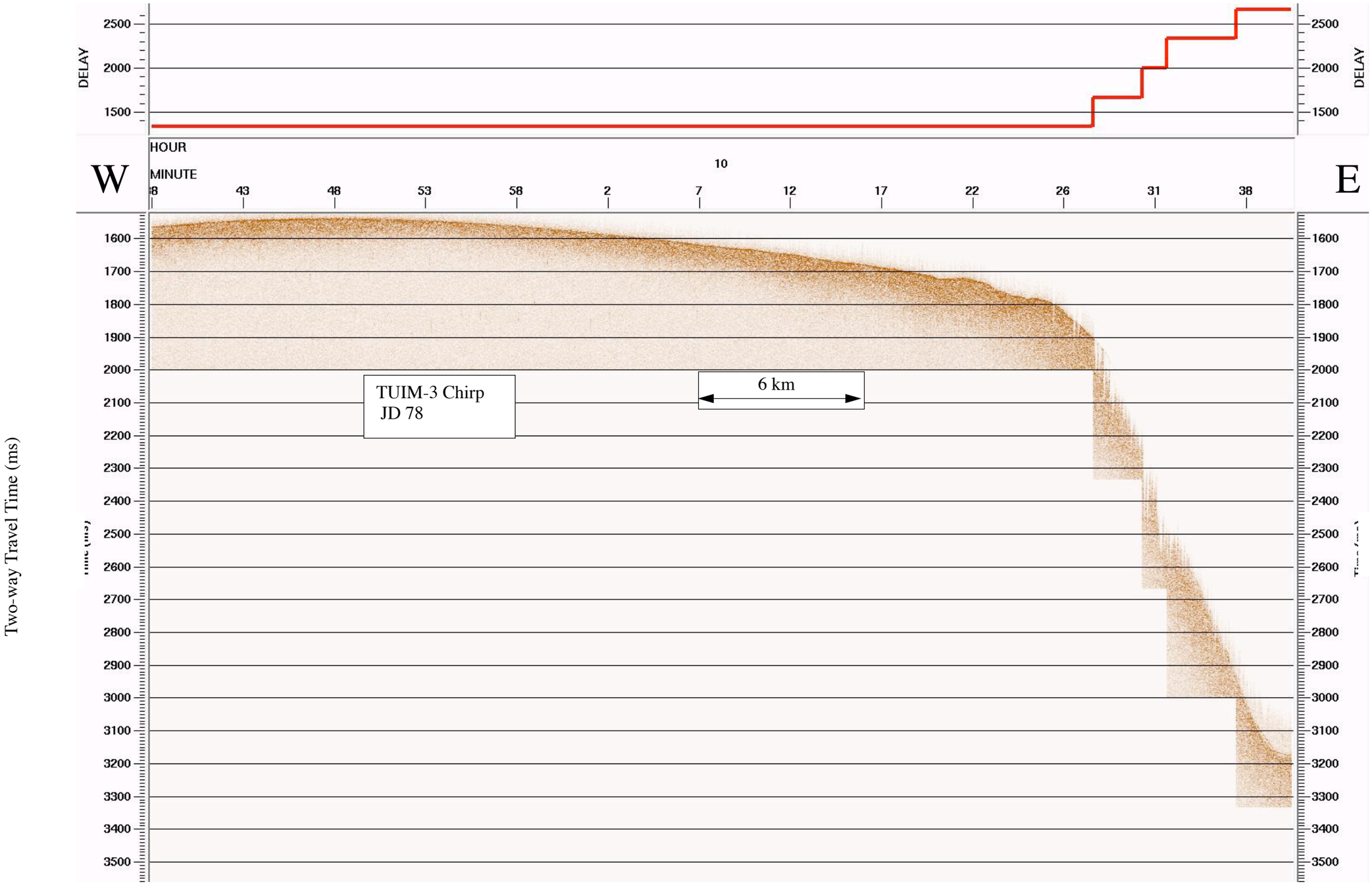
Julian Day 78
19 March 2005
Knudsen Chirp Data

Data File SBfixavg.2005mar19.0600-1200

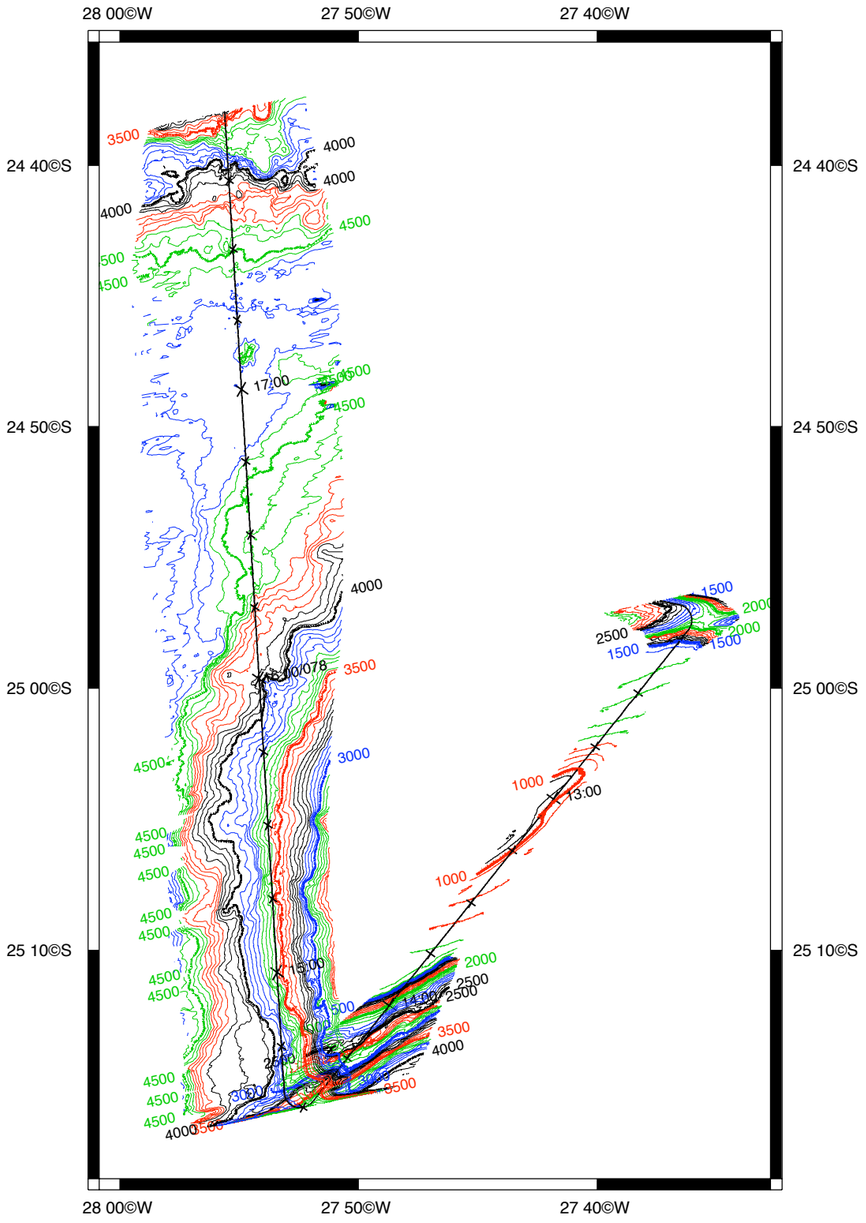


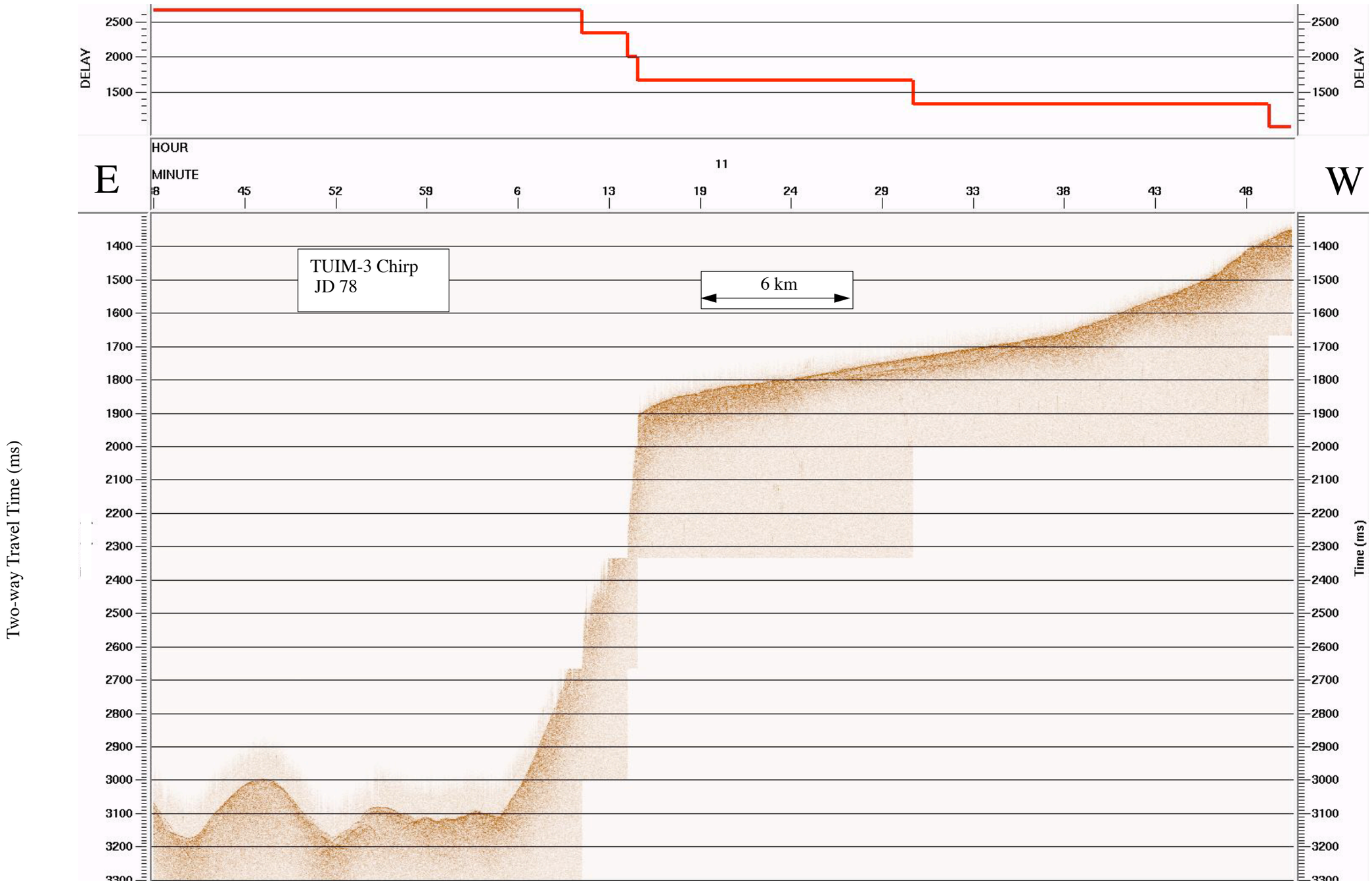

DELAY
2200
2000
1800
HOUR
8
MINUTE
6
31
36
41
46
51
56
1
6
11
17
24
30
N
S
6 km
TUIM-3 Chirp
JD 78
Two-way Travel Time (ms)
Time (ms)
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950

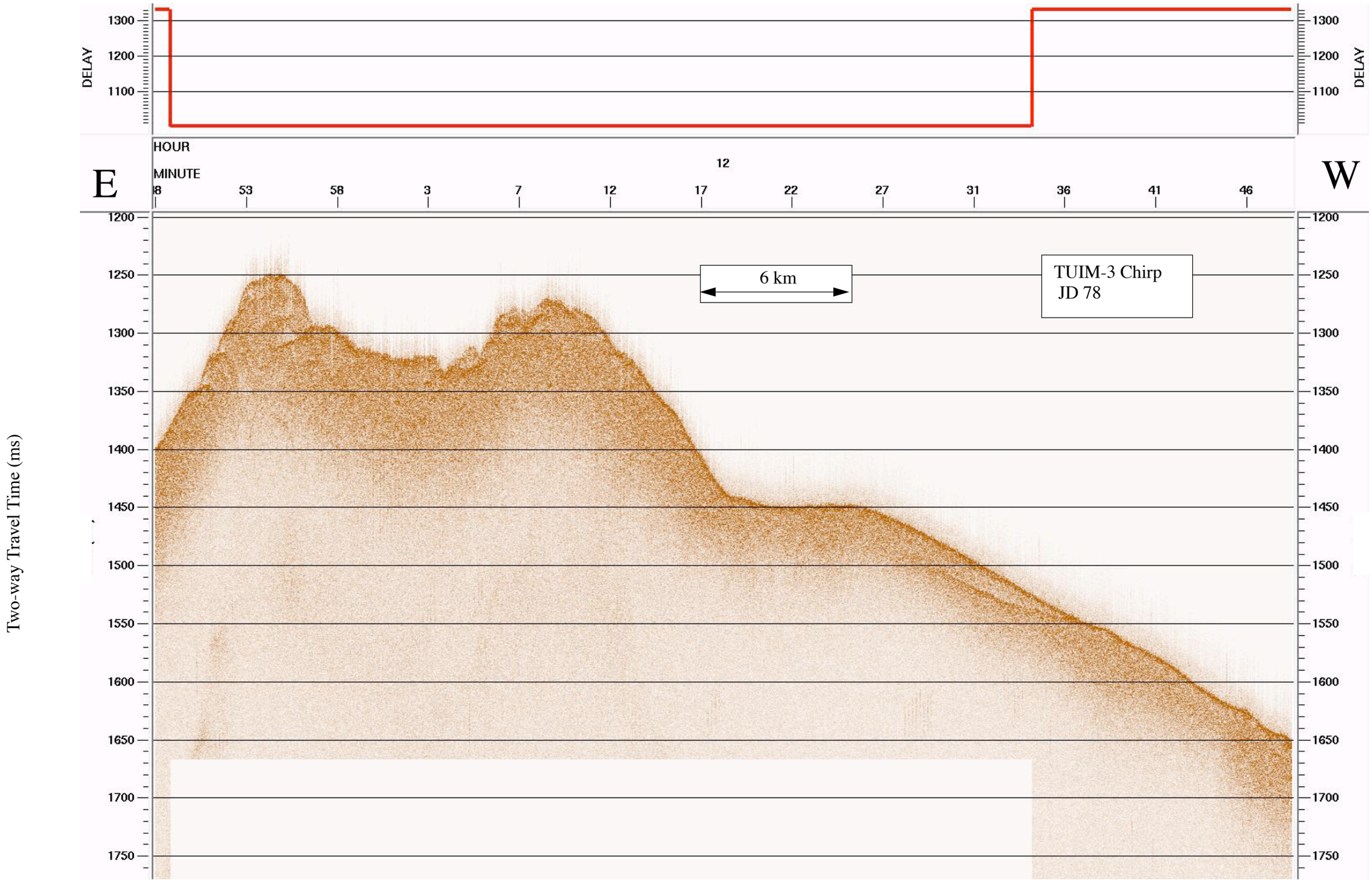

DELAY
2500
2000
1500
N
HOUR
MINUTE
9
30
36
41
46
51
56
3
11
18
24
28
33
38
S
TUIM-3 Chirp
JD 78
6 km
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
Two-way Travel Time (ms)

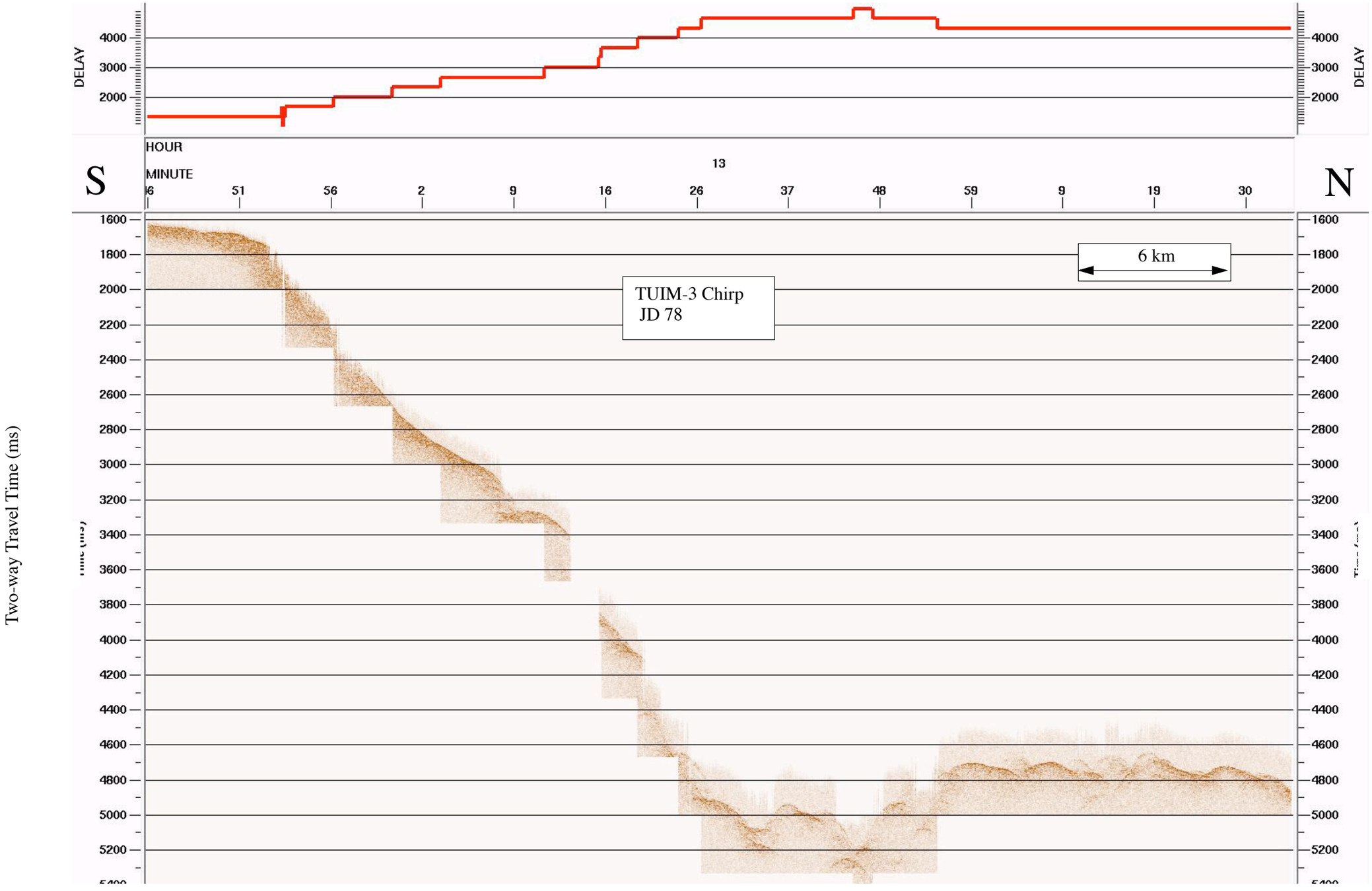

DELAY
2500
2000
1500
W
HOUR
MINUTE
10
43
48
53
58
2
7
12
17
22
26
31
38
E
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
TUIM-3 Chirp
JD 78
6 km
Two-way Travel Time (ms)

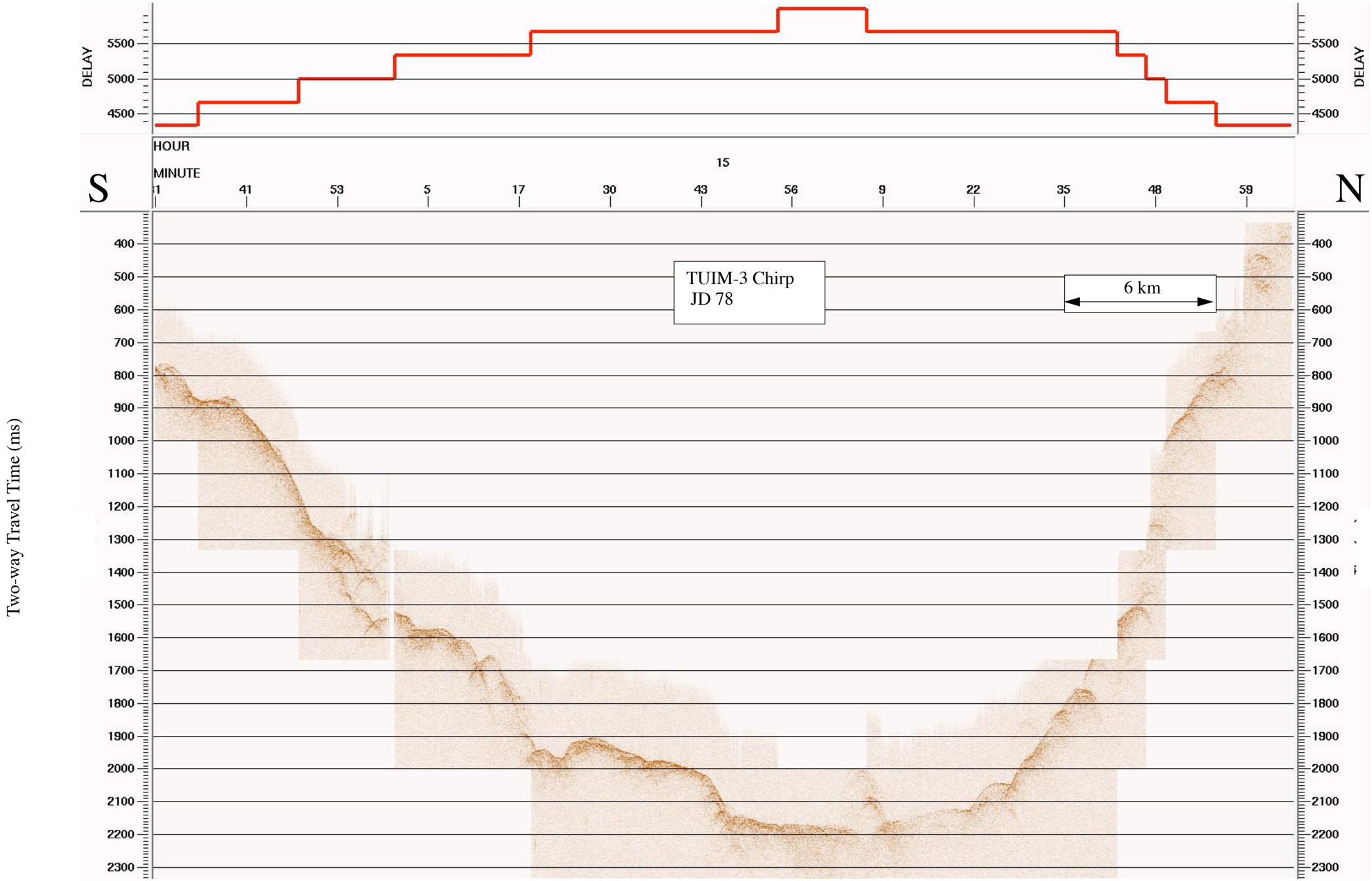
Data File SBfixavg.2005mar19.1200-1800



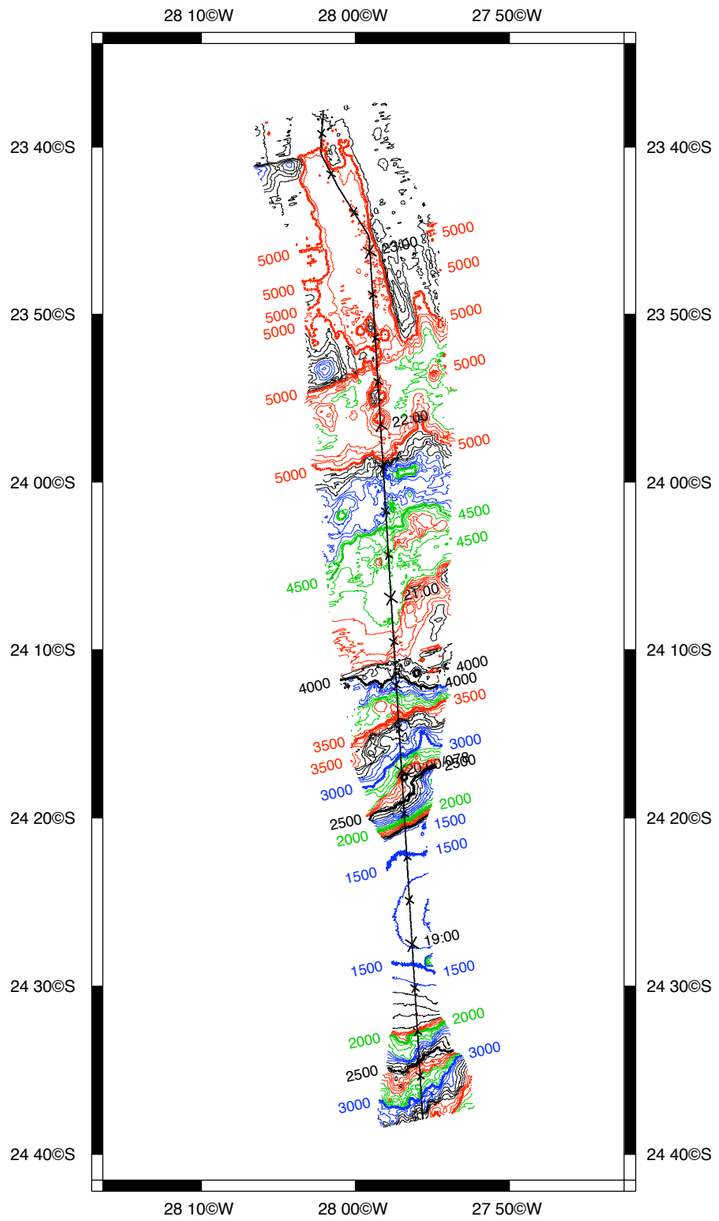

DELAY
2500
2000
1500
E
HOUR
MINUTE
11
45
52
59
6
13
19
24
29
33
38
43
48
W
TUIM-3 Chirp
JD 78
6 km
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
Two-way Travel Time (ms)
Time (ms)

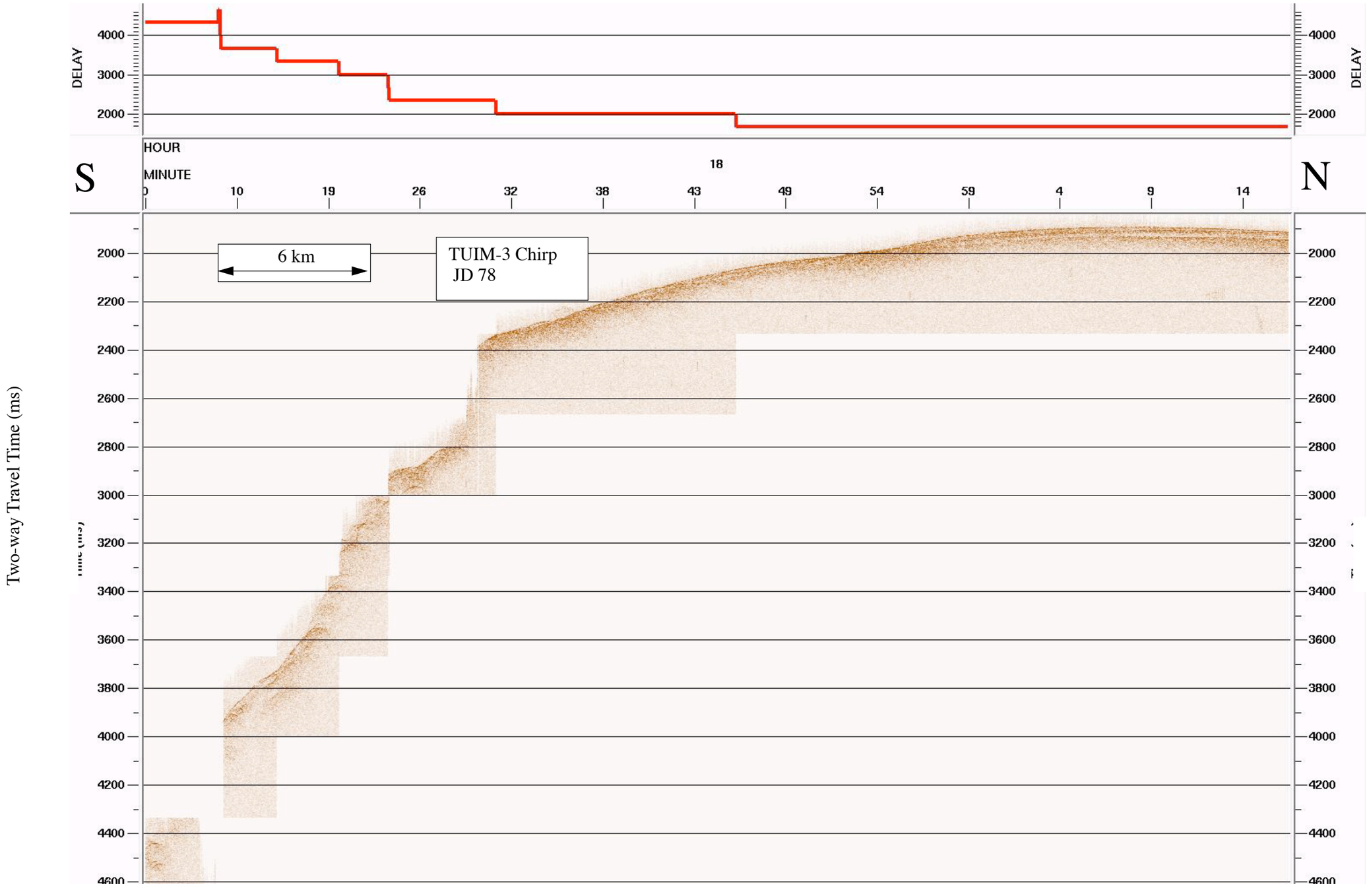

DELAY
1300
1200
1100
HOUR
MINUTE
12
E
W
18
53
58
3
7
12
17
22
27
31
36
41
46
6 km
TUIM-3 Chirp
JD 78
Two-way Travel Time (ms)
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750

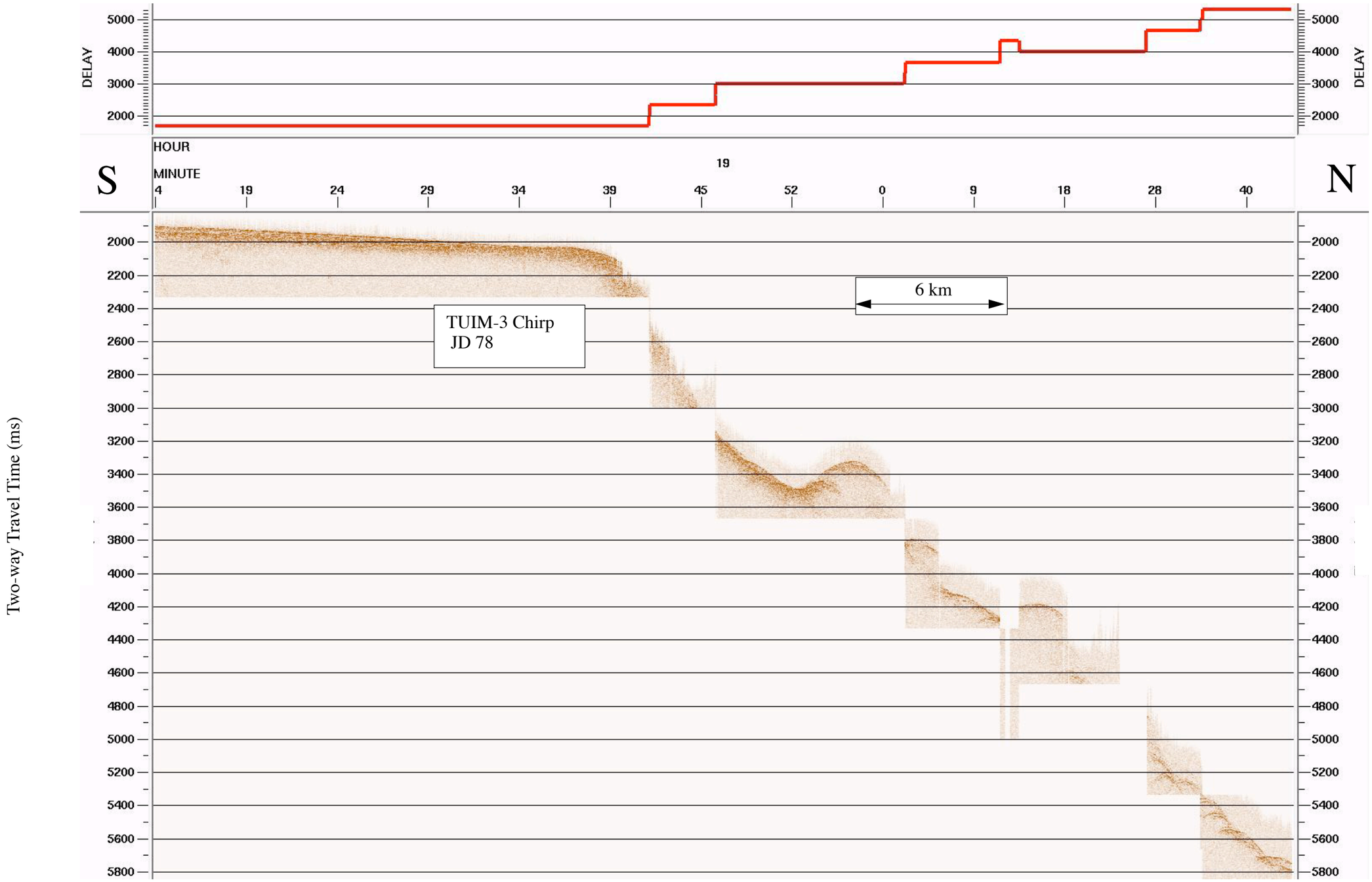

DELAY
4000
3000
2000
S
HOUR
13
MINUTE
46
51
56
2
9
16
26
37
48
59
9
19
30
N
1600
1800
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
5200
6 km
TUIM-3 Chirp
JD 78
Two-way Travel Time (ms)

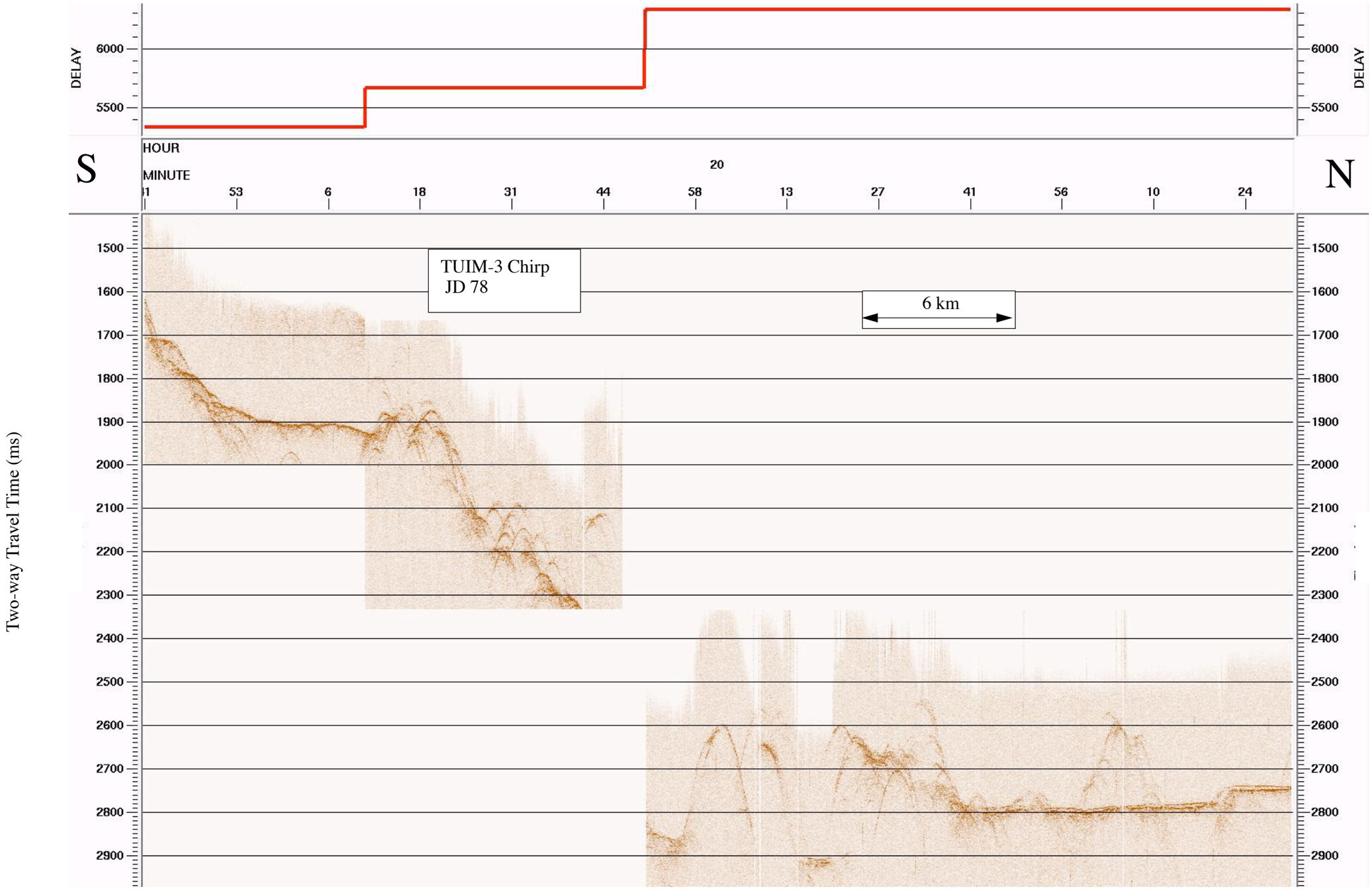

DELAY
5500
5000
4500
HOUR
MINUTE
15
S
N
41
53
5
17
30
43
56
9
22
35
48
59
TUIM-3 Chirp
JD 78
6 km
Two-way Travel Time (ms)
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300

Data File SBfixavg.2005mar19.1800-2400



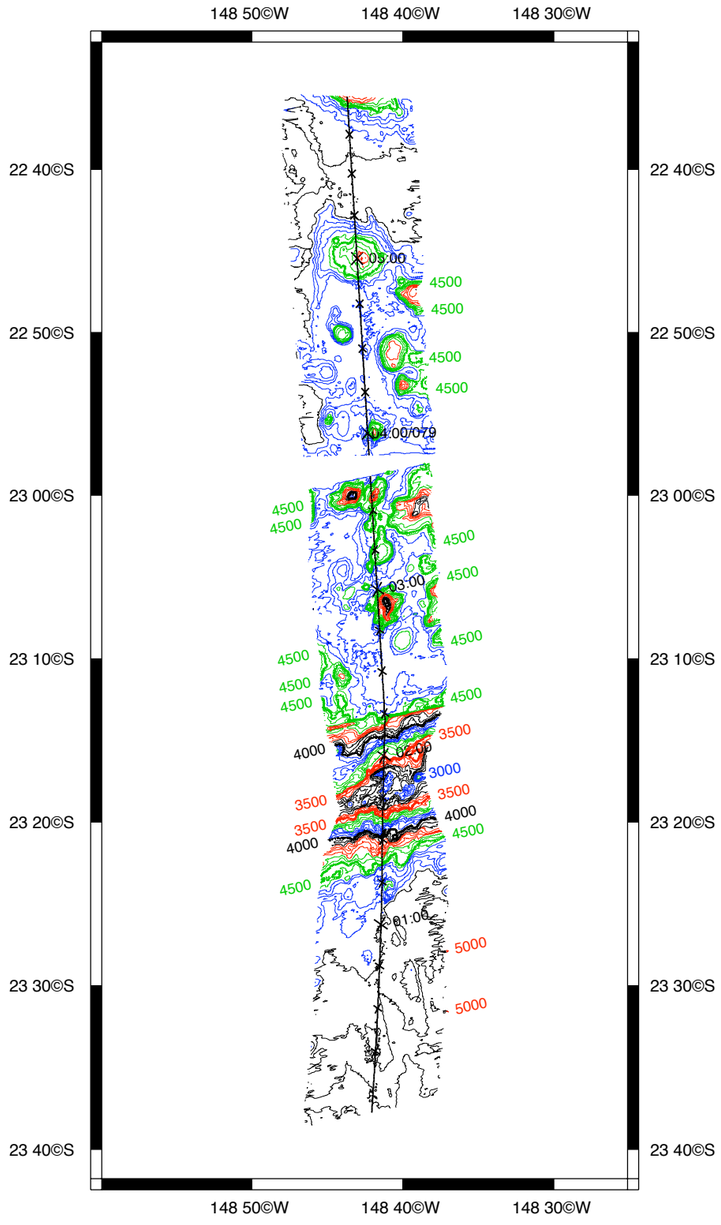

DELAY
4000
3000
2000
S
HOUR
MINUTE
18
0
10
19
26
32
38
43
49
54
59
4
9
14
N
6 km
TUIM-3 Chirp
JD 78
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
Two-way Travel Time (ms)

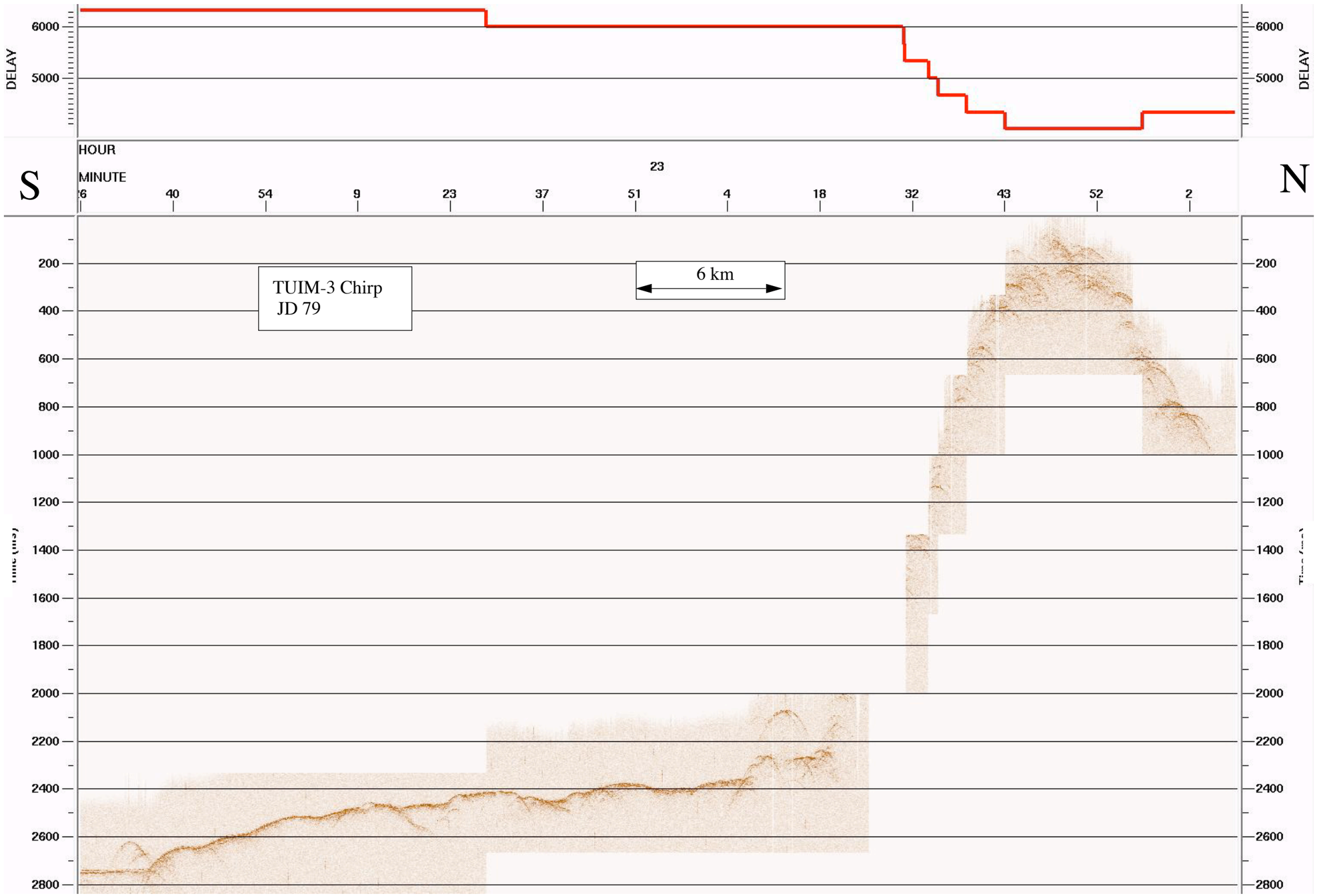

DELAY
5000
4000
3000
2000
S
HOUR
MINUTE
19
4
19
24
29
34
39
45
52
0
9
18
28
40
N
TUIM-3 Chirp
JD 78
6 km
Two-way Travel Time (ms)
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
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4800
5000
5200
5400
5600
5800

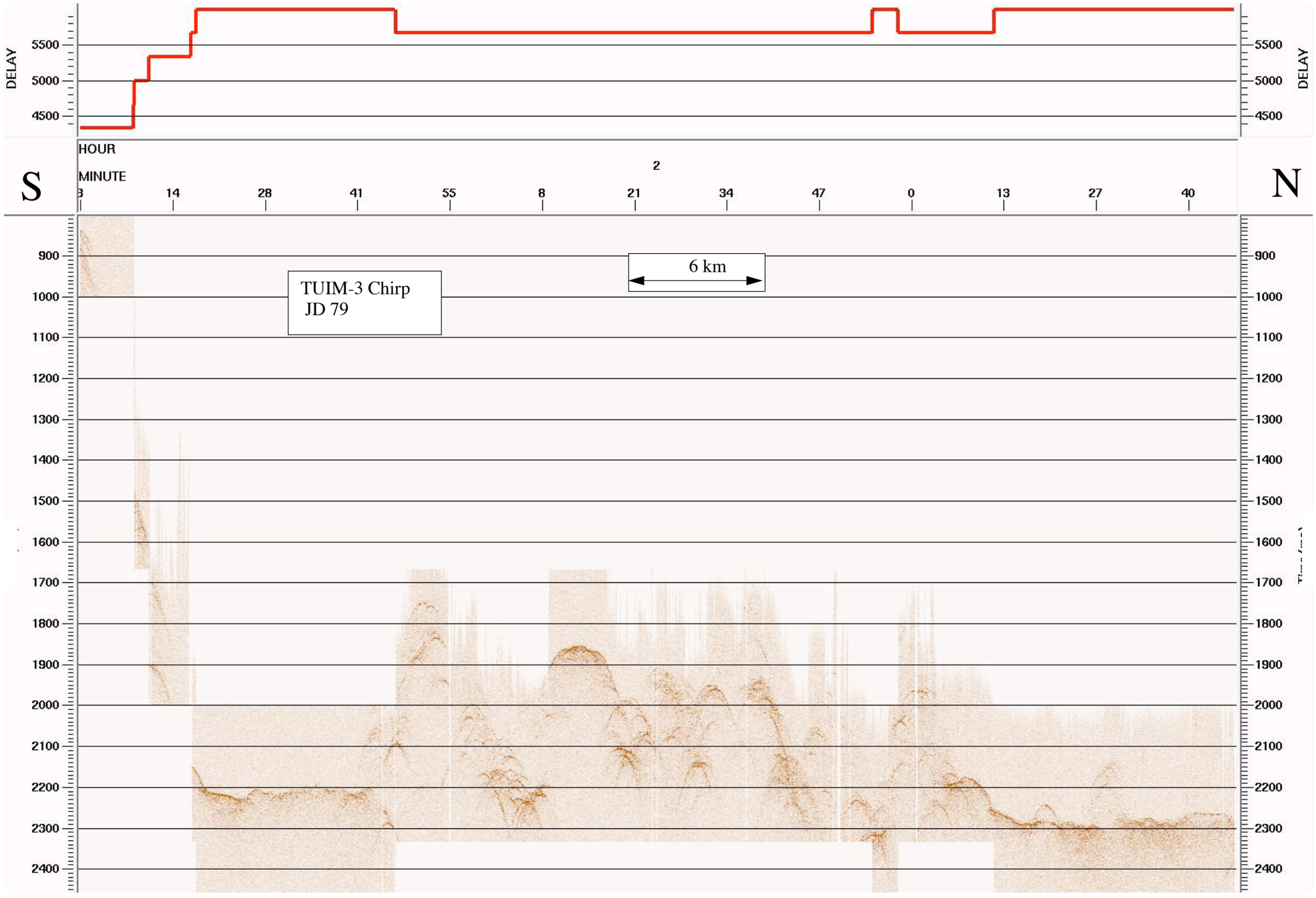

DELAY
6000
5500
S
HOUR
MINUTE
20
1
53
6
18
31
44
58
13
27
41
56
10
24
N
TUIM-3 Chirp
JD 78
6 km
Two-way Travel Time (ms)
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900

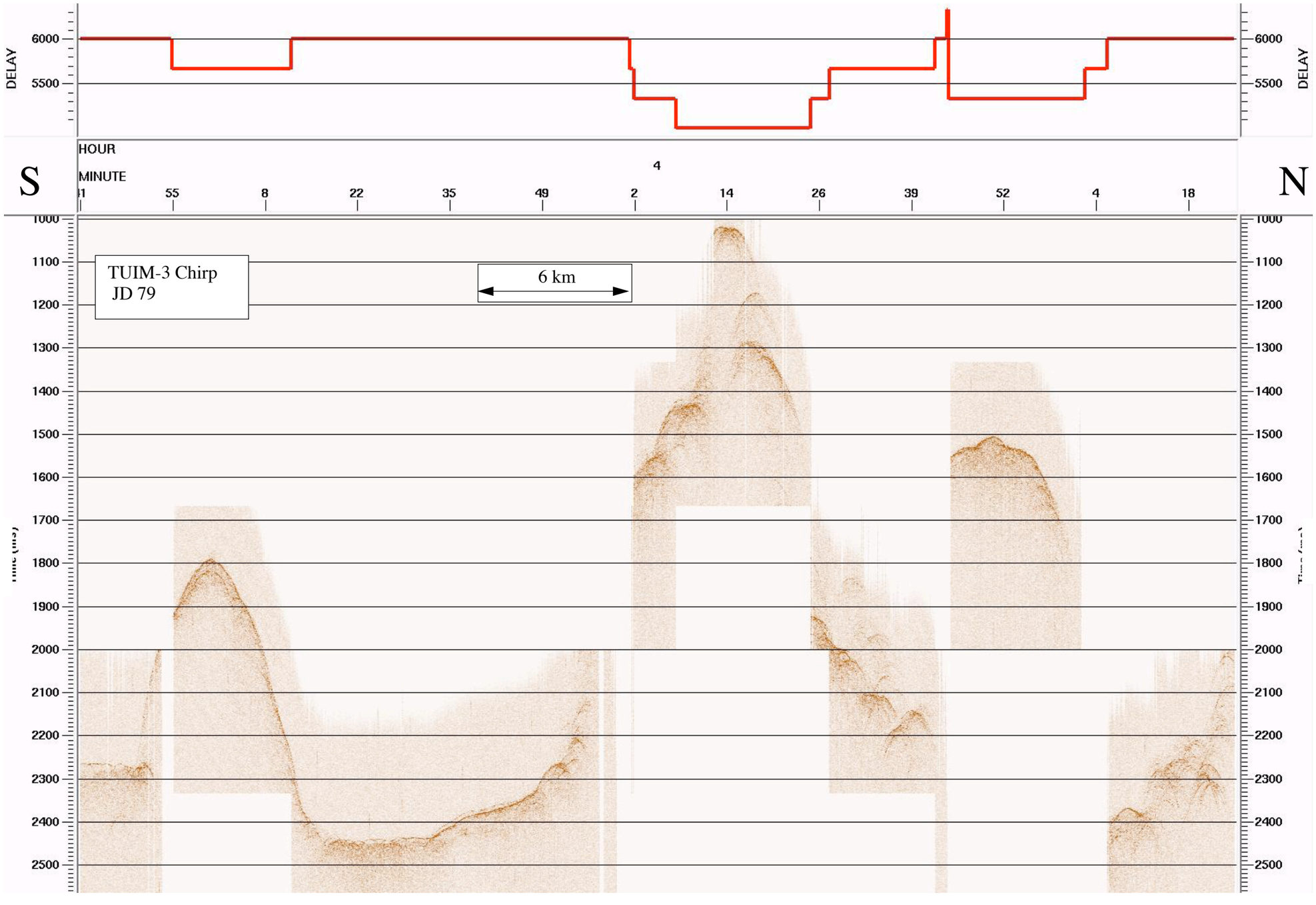
Julian Day 79
20 March 2005
Knudsen Chirp Data

Data File SBfixavg.2005mar20.0000-0600



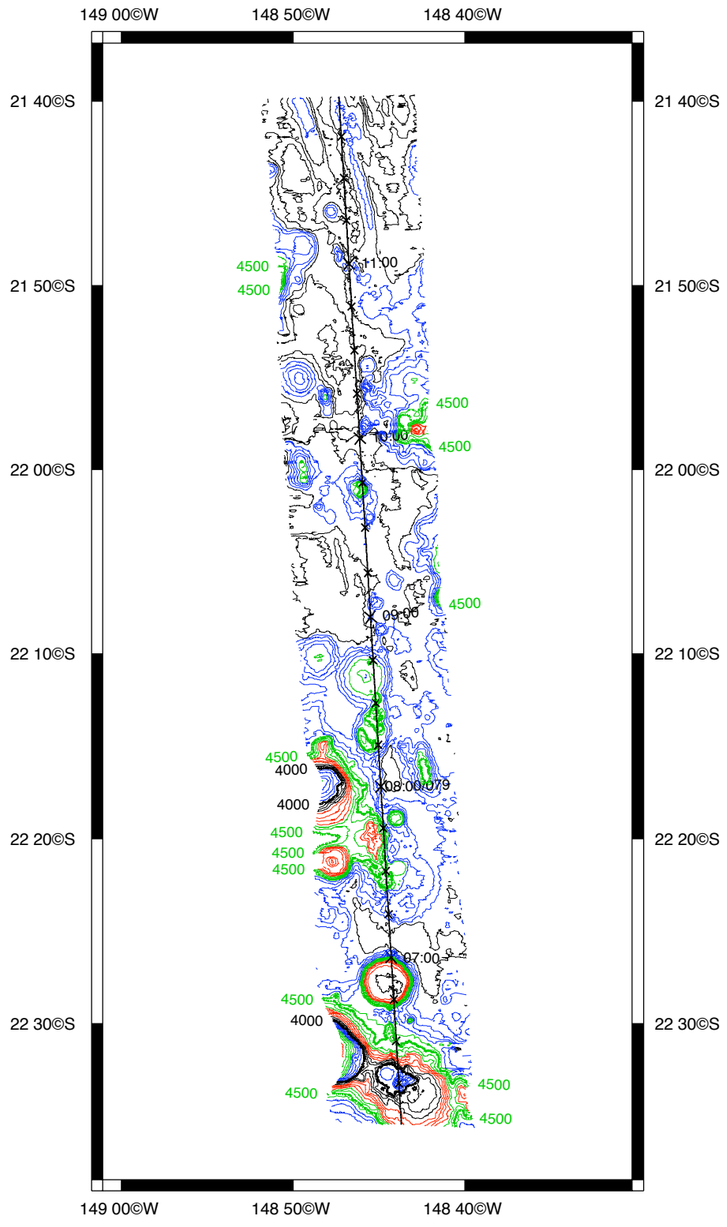

DELAY
6000
5000
HOUR
23
MINUTE
6
40
54
9
23
37
51
4
18
32
43
52
2
S
N
TUIM-3 Chirp
JD 79
6 km
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
Two-way Travel Time (ms)
(-4000 ms)

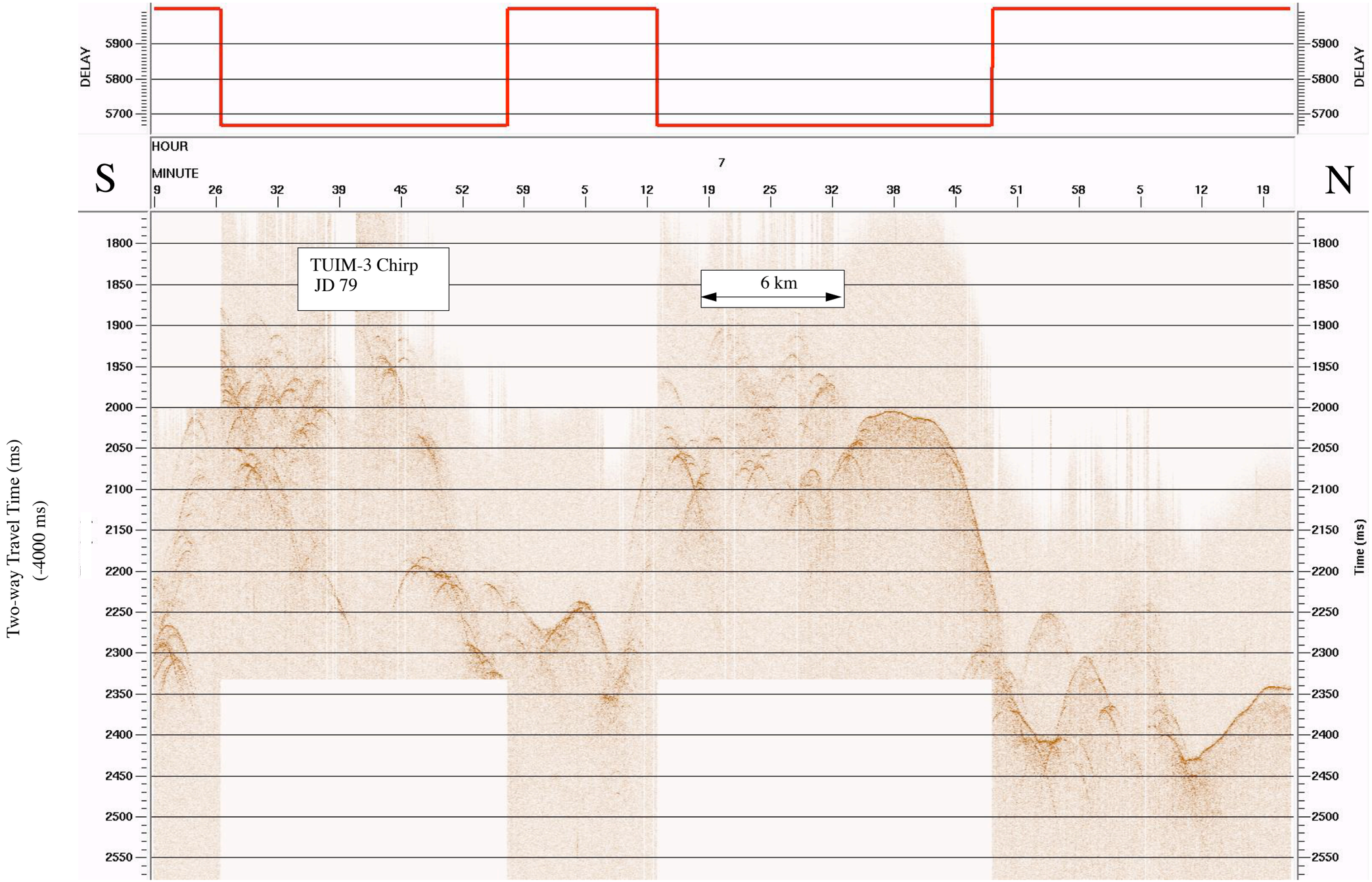

DELAY
5500
5000
4500
HOUR
MINUTE
2
S
N
3
14
28
41
55
8
21
34
47
0
13
27
40
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
TUIM-3 Chirp
JD 79
6 km
Two-way Travel Time (ms)
(-4000 ms)

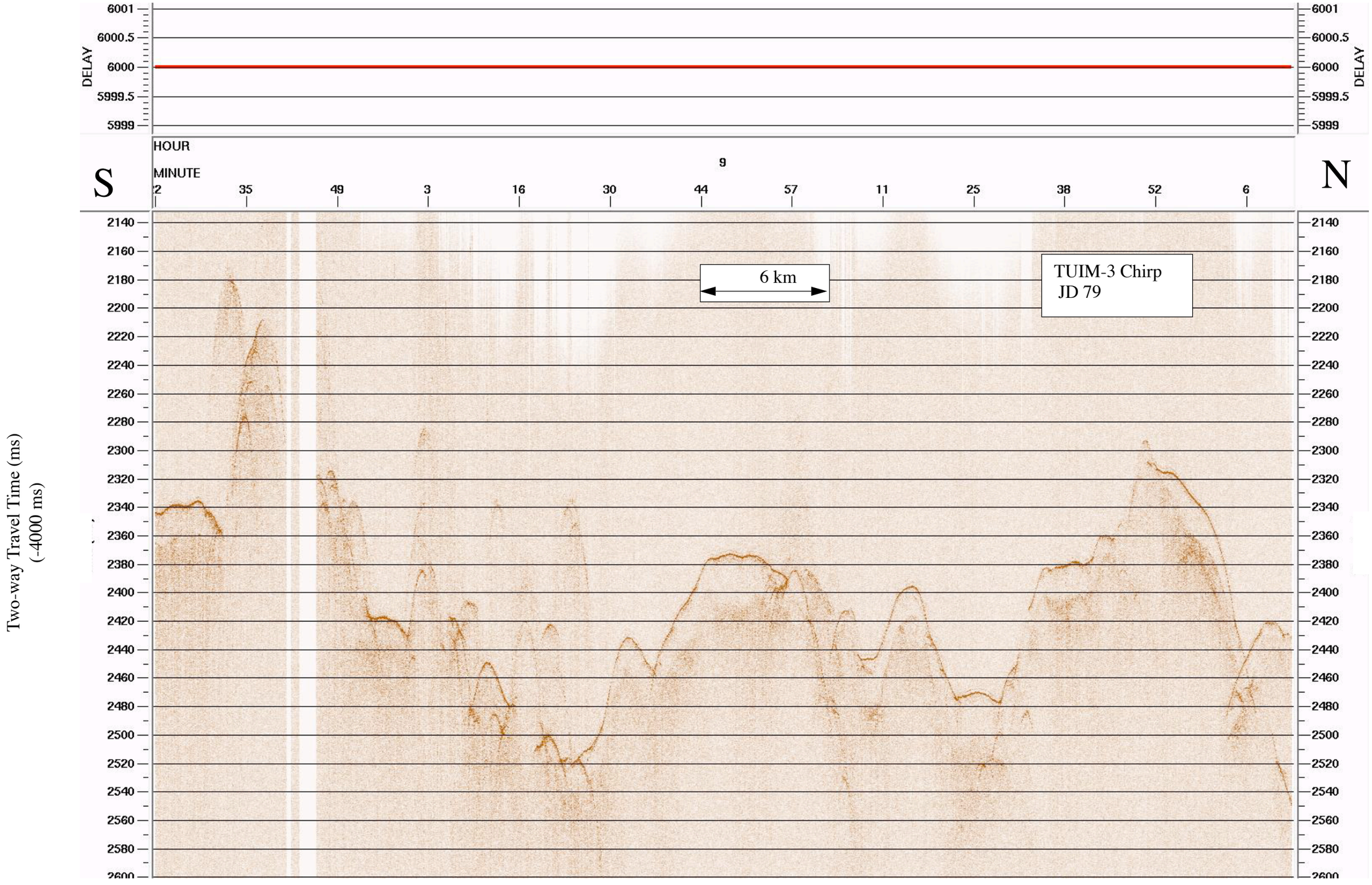


Two-way Travel Time (ms)
(-4000 ms)

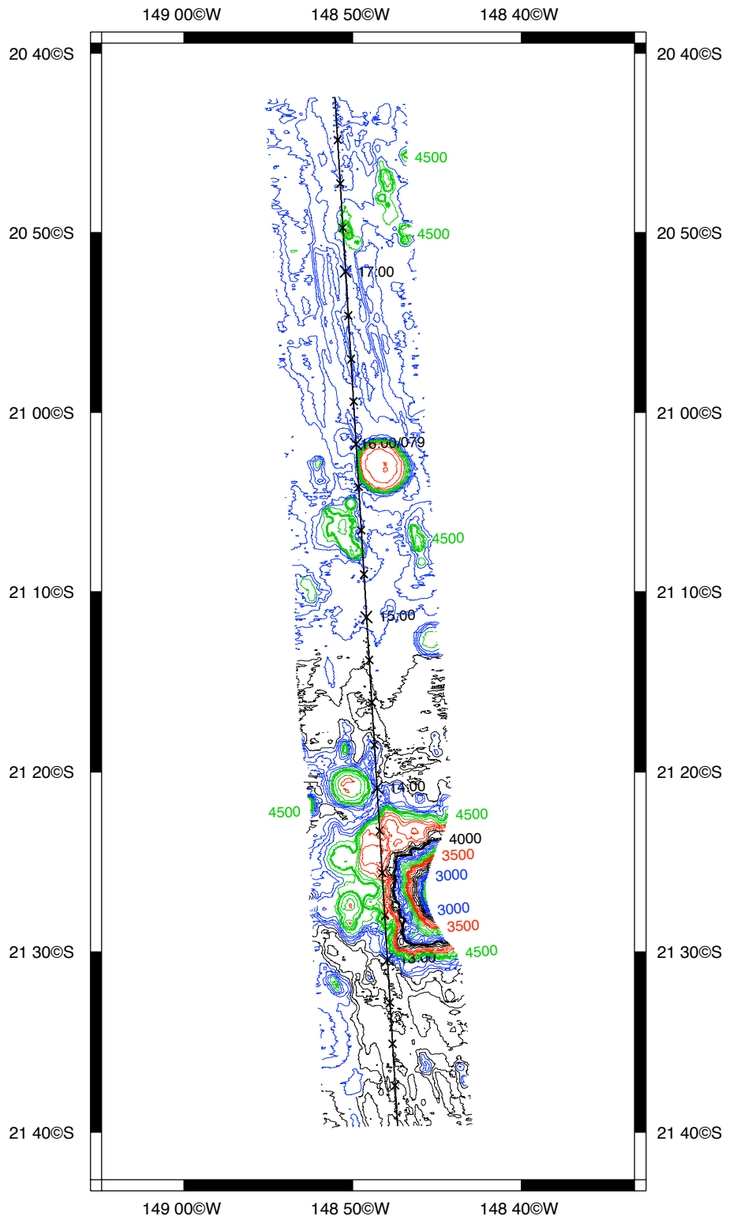
Data File SBfixavg.2005mar20.0600-1200

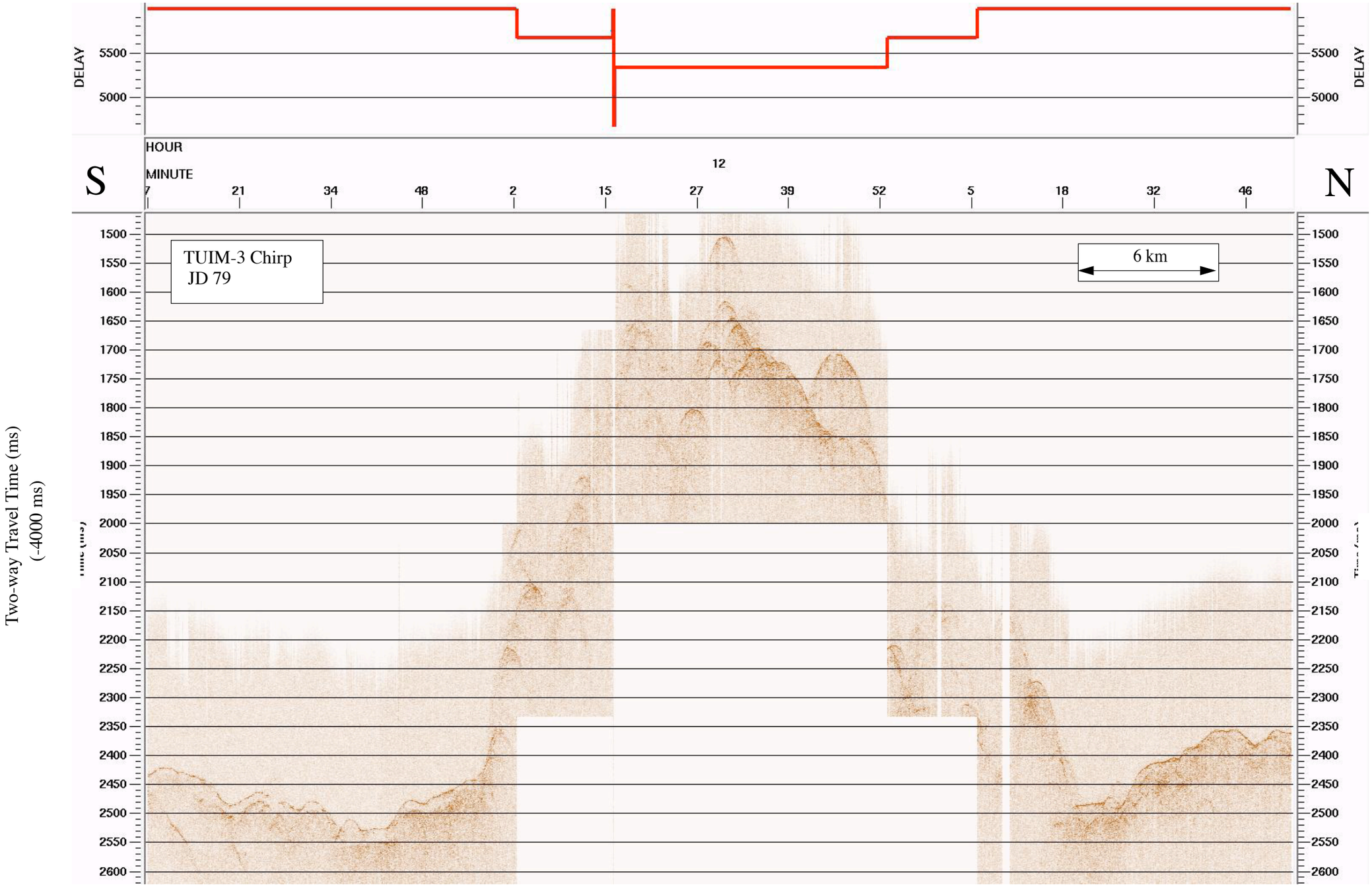


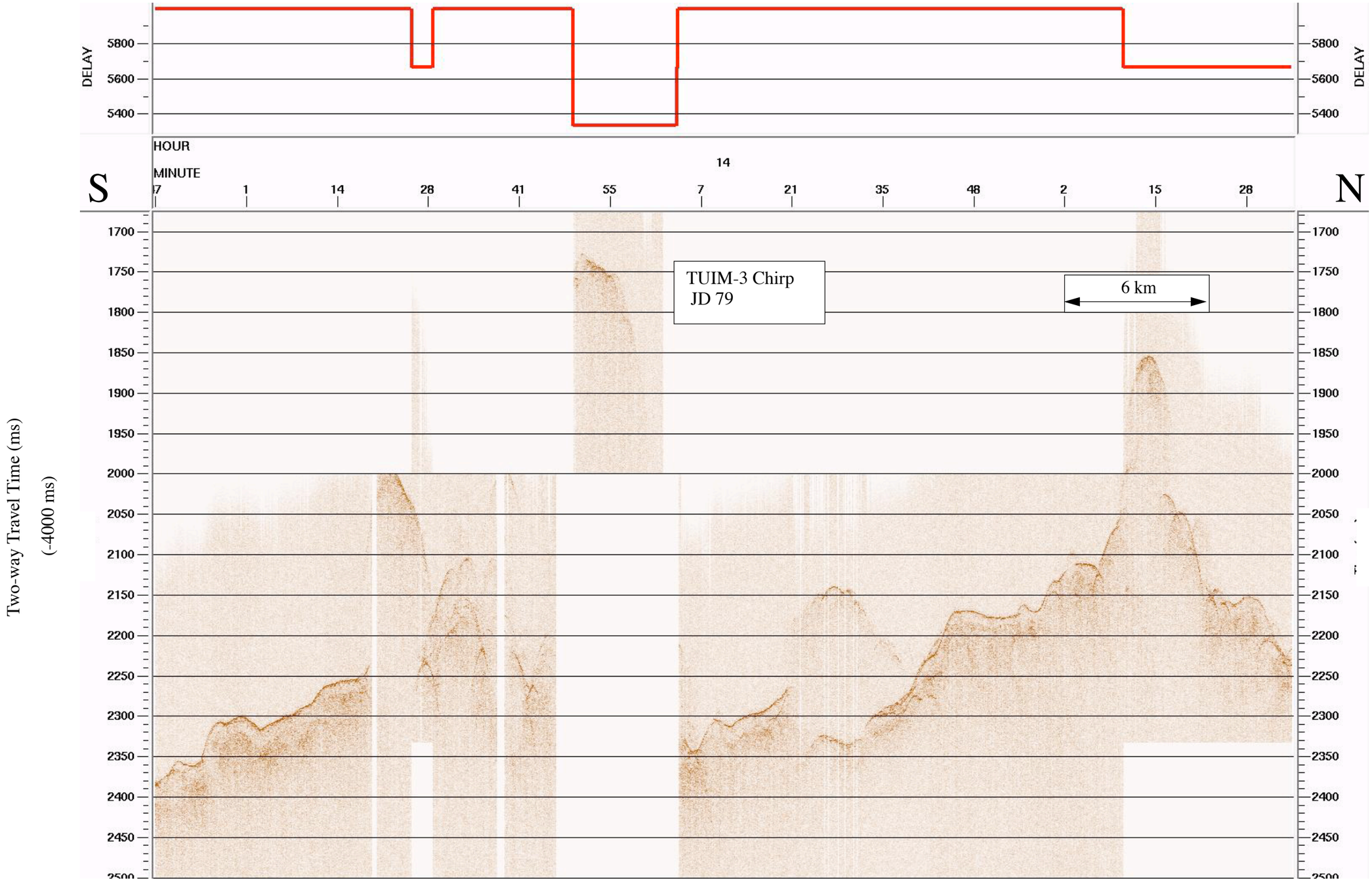

DELAY
5900
5800
5700
S
HOUR
MINUTE
7
9 26 32 39 45 52 59 5 12 19 25 32 38 45 51 58 5 12 19
N
TUIM-3 Chirp
JD 79
6 km
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
Two-way Travel Time (ms)
(-4000 ms)
Time (ms)


DELAY
6001
6000.5
6000
5999.5
5999
HOUR
MINUTE
9
2
35
49
3
16
30
44
57
11
25
38
52
6
S
N
6 km
TUIM-3 Chirp
JD 79
2140
2160
2180
2200
2220
2240
2260
2280
2300
2320
2340
2360
2380
2400
2420
2440
2460
2480
2500
2520
2540
2560
2580
2600
Two-way Travel Time (ms)
(-4000 ms)

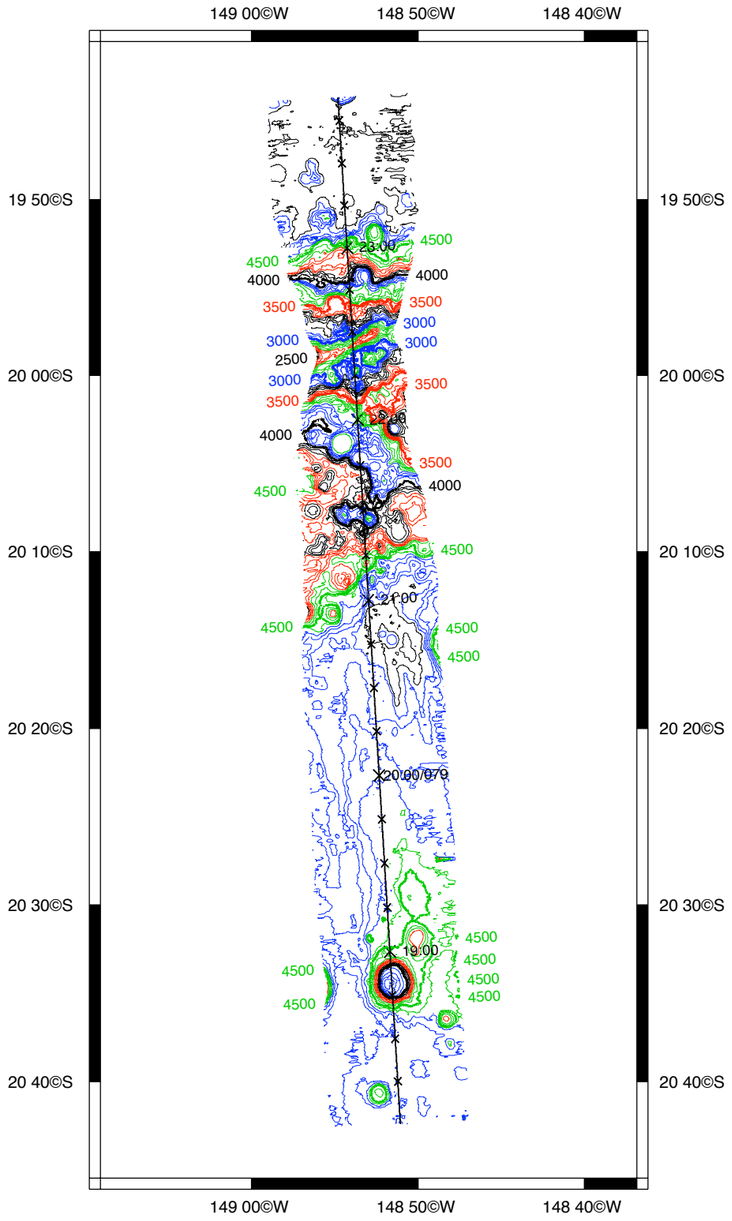
Data File SBfixavg.2005mar20.1200-1800

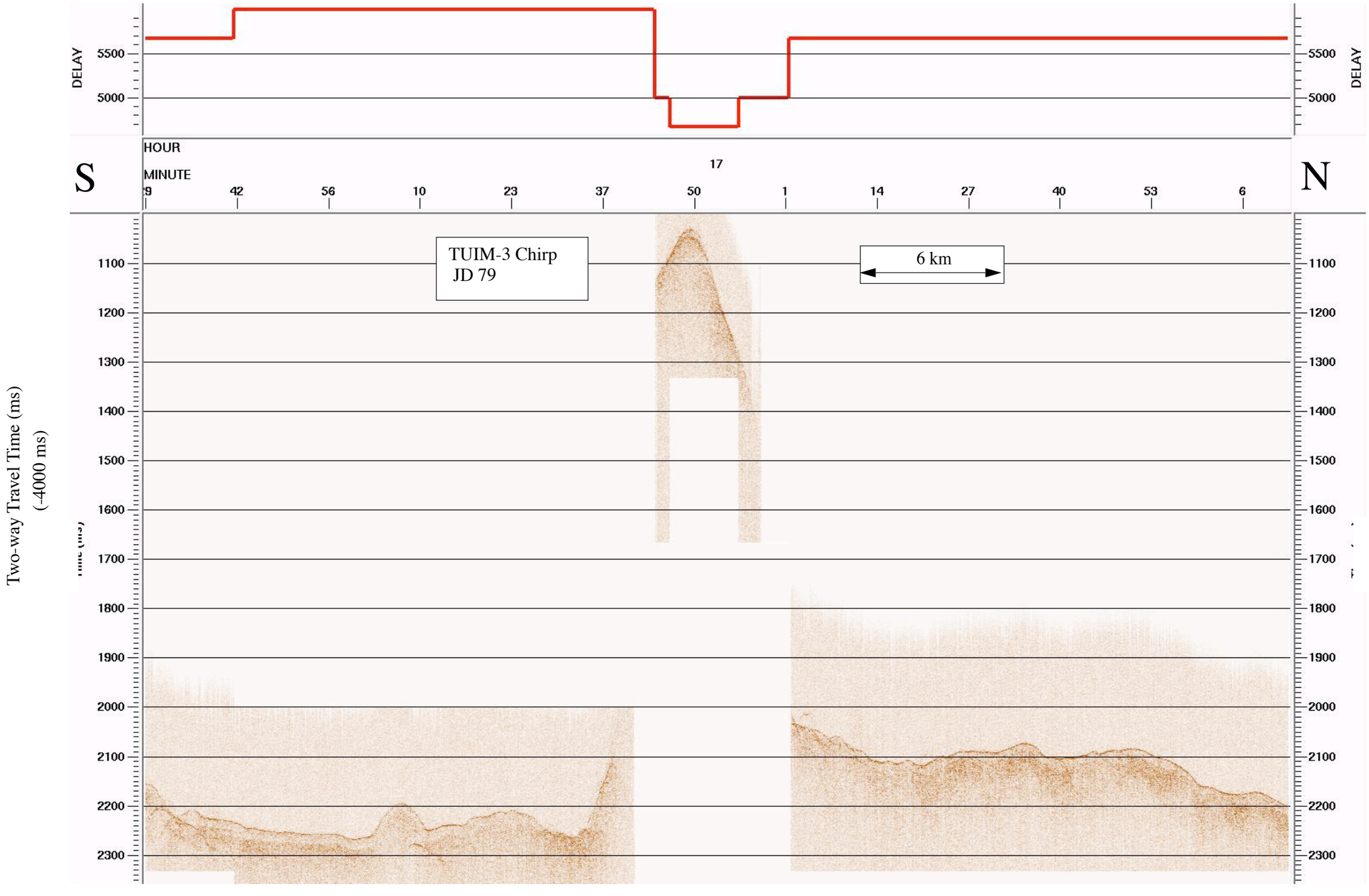


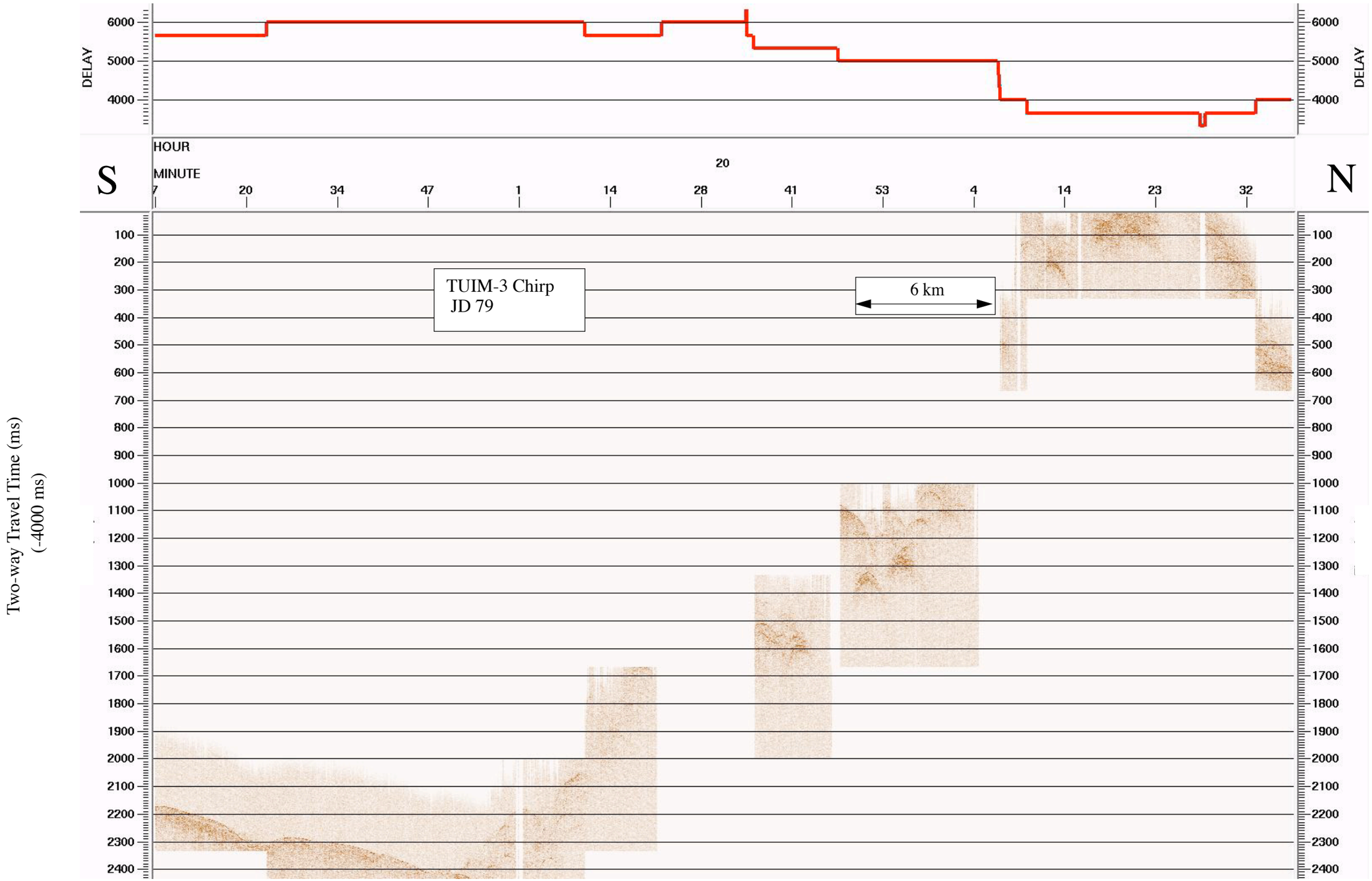

DELAY
5500
5000
HOUR
MINUTE
12
7
21
34
48
2
15
27
39
52
5
18
32
46
S
N
TUIM-3 Chirp
JD 79
6 km
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
Two-way Travel Time (ms)
(-4000 ms)

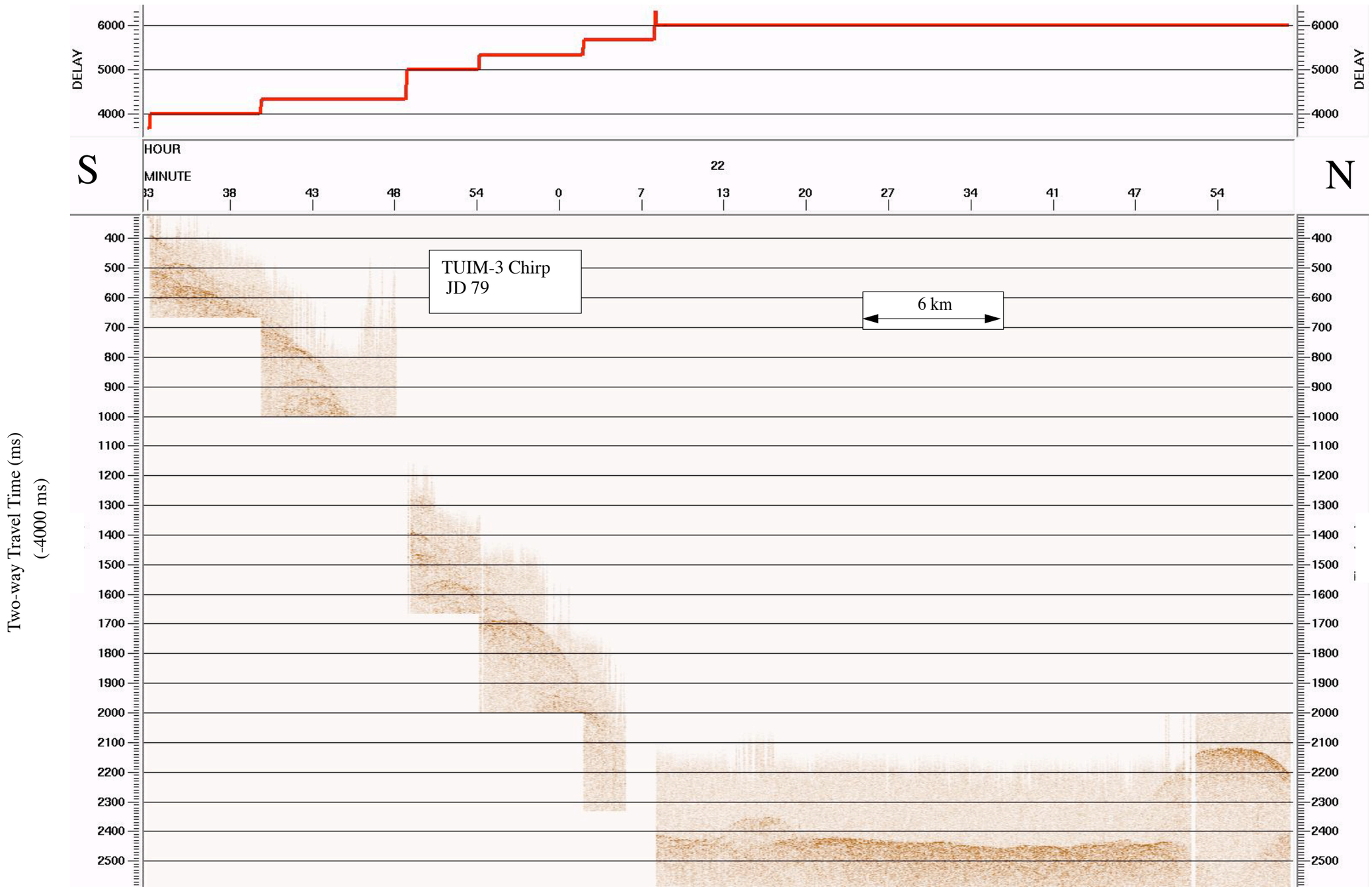

DELAY
5800
5600
5400
HOUR
14
MINUTE
47
1
14
28
41
55
7
21
35
48
2
15
28
S
N
TUIM-3 Chirp
JD 79
6 km
1700
1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500
Two-way Travel Time (ms)
(-4000 ms)

Data File SBfixavg.2005mar20.1800-2400




DELAY
5500
5000
S
HOUR
MINUTE
17
9
42
56
10
23
37
50
1
14
27
40
53
6
N
TUIM-3 Chirp
JD 79
6 km
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
Two-way Travel Time (ms)
(-4000 ms)


DELAY
6000
5000
4000
HOUR
MINUTE
20
7
20
34
47
1
14
28
41
53
4
14
23
32
S
N
TUIM-3 Chirp
JD 79
6 km
Two-way Travel Time (ms)
(-4000 ms)
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400


DELAY
6000
5000
4000
S
HOUR
MINUTE
33
38
43
48
54
0
7
22
13
20
27
34
41
47
54
N
TUIM-3 Chirp
JD 79
6 km
Two-way Travel Time (ms)
(-4000 ms)
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500