Database
on
earthquake

1. Different Intensity Scale
2. Different Calendar
3. Origin time (local or universal)
4. catalog

1. Intensity Scales

JMA

0	1	2	3	4	5 弱	5 強	6 弱	6 強	7

MM

1	2	3	4	5	6	7	8	9	10 11 12

MSK

1	2	3	4	5	6	7	8	9	10	11 12

China / Russia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	中 国 (1957) (1980)
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	MSK (1964)
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	U.S.S.R. (1953)
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	MM (1956)
I	II	III	IV	V | VI	VII	VIII	IX	X			R-F (1883)
0	I		II	III	IV	V		VI		VII		J.M.A (1949)

2. Calendars

Gregorian or Julian or lunar

3. Origin time

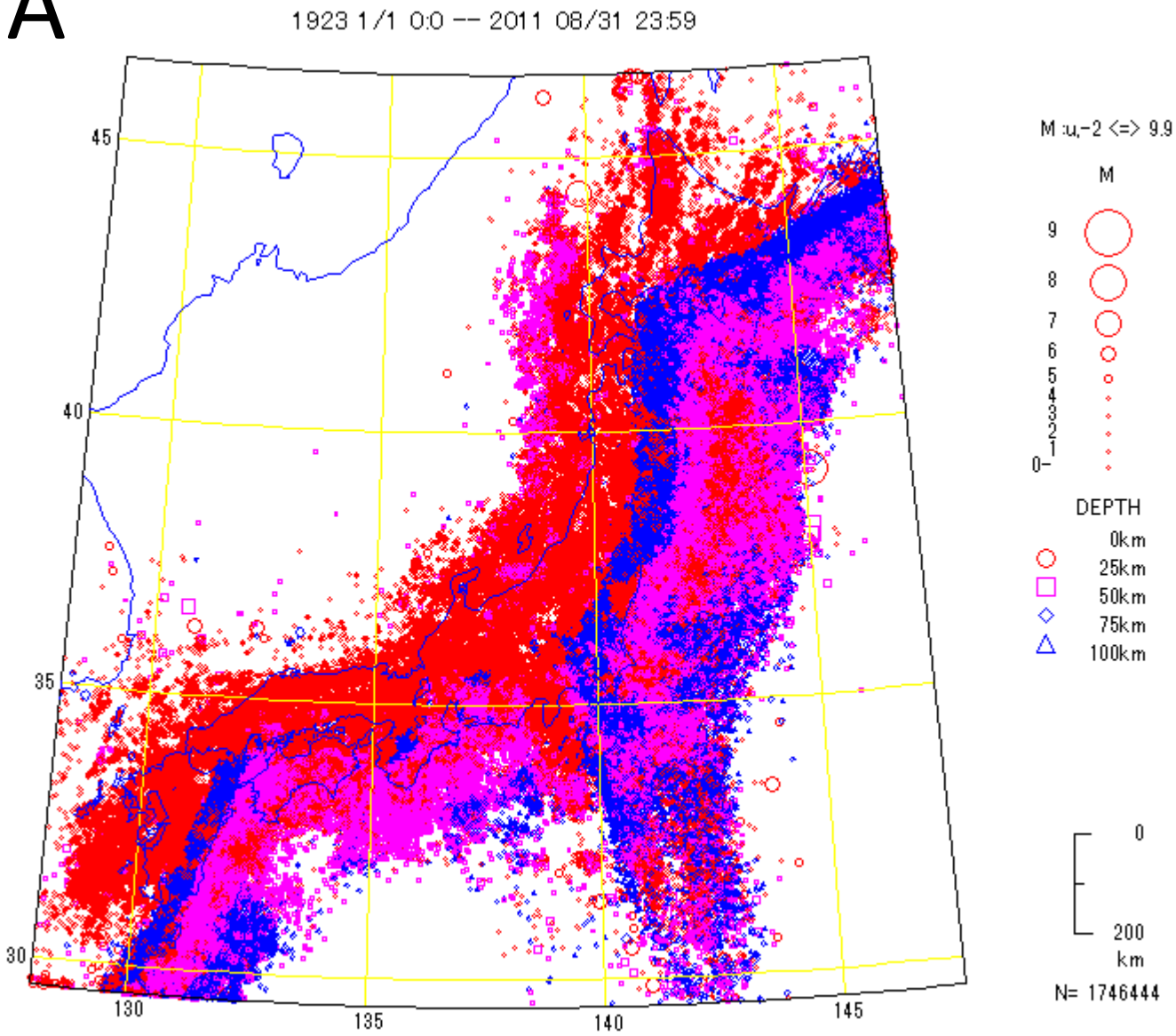
Local time is good to understand the disaster
and hostrical event was discribed on the local time..

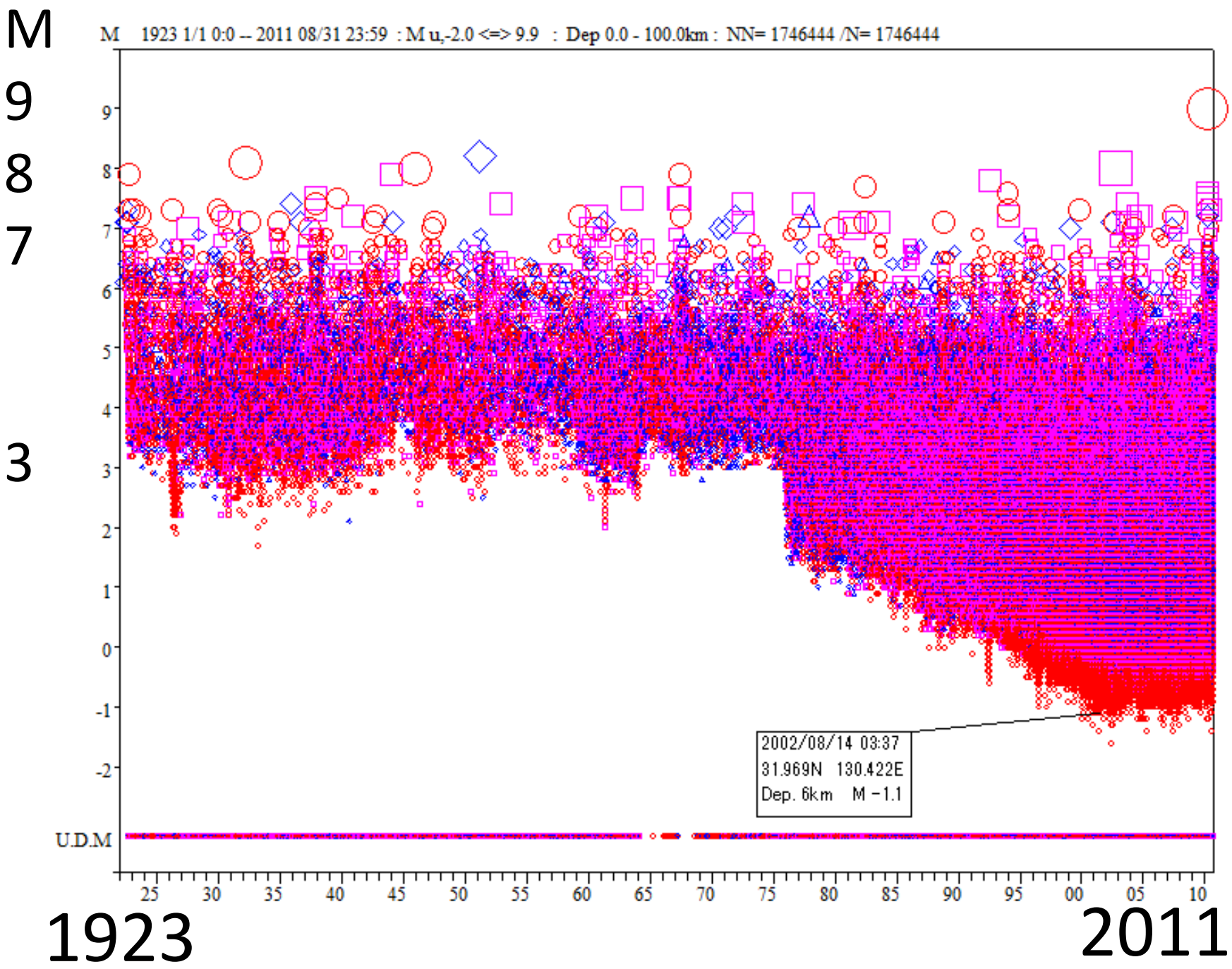
Universal time is commonly used except Japan.

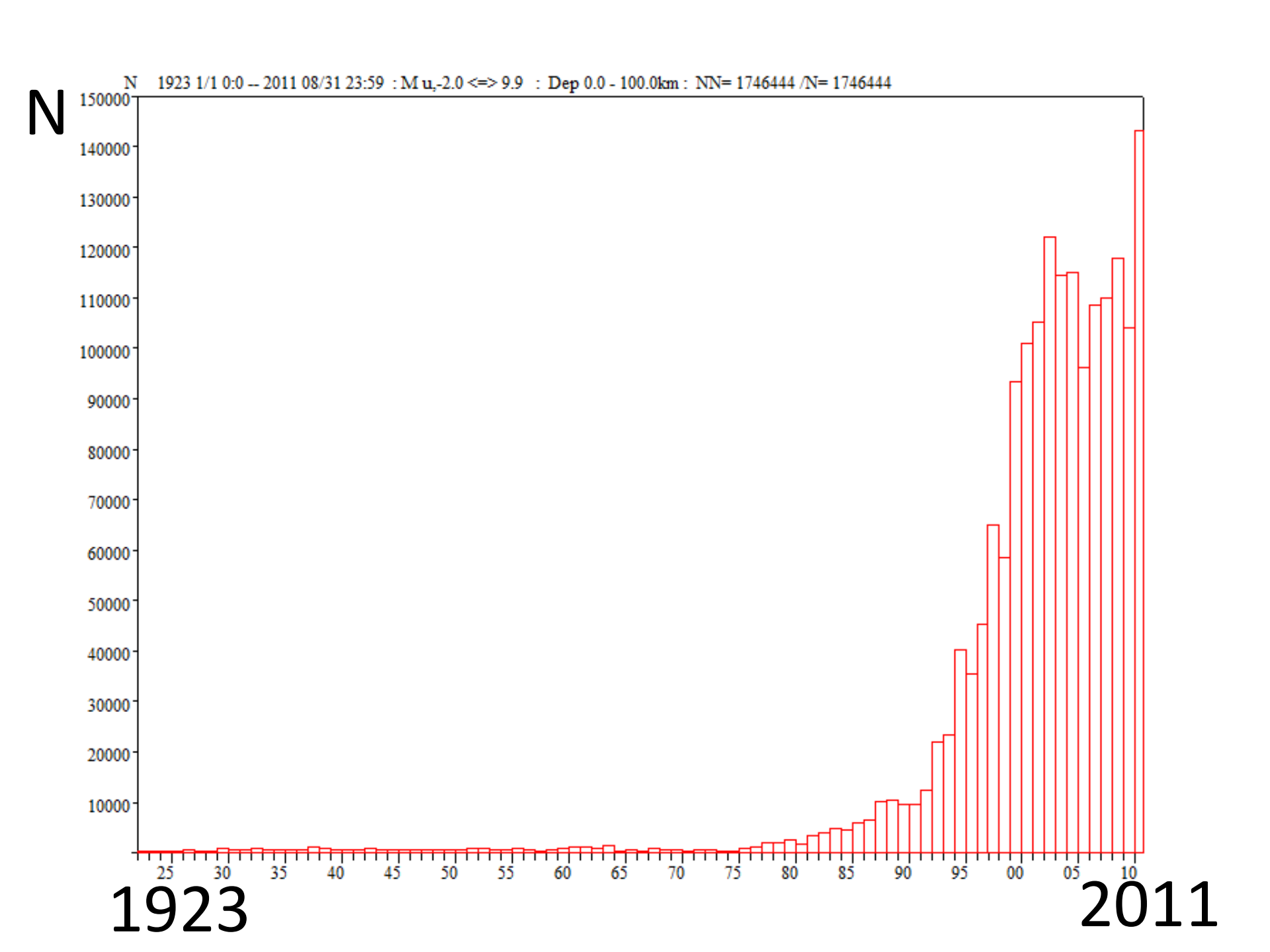
4. Earthquake catalogs

a) Different magnitude
b) Homegenity in time and space
c) Miss locations

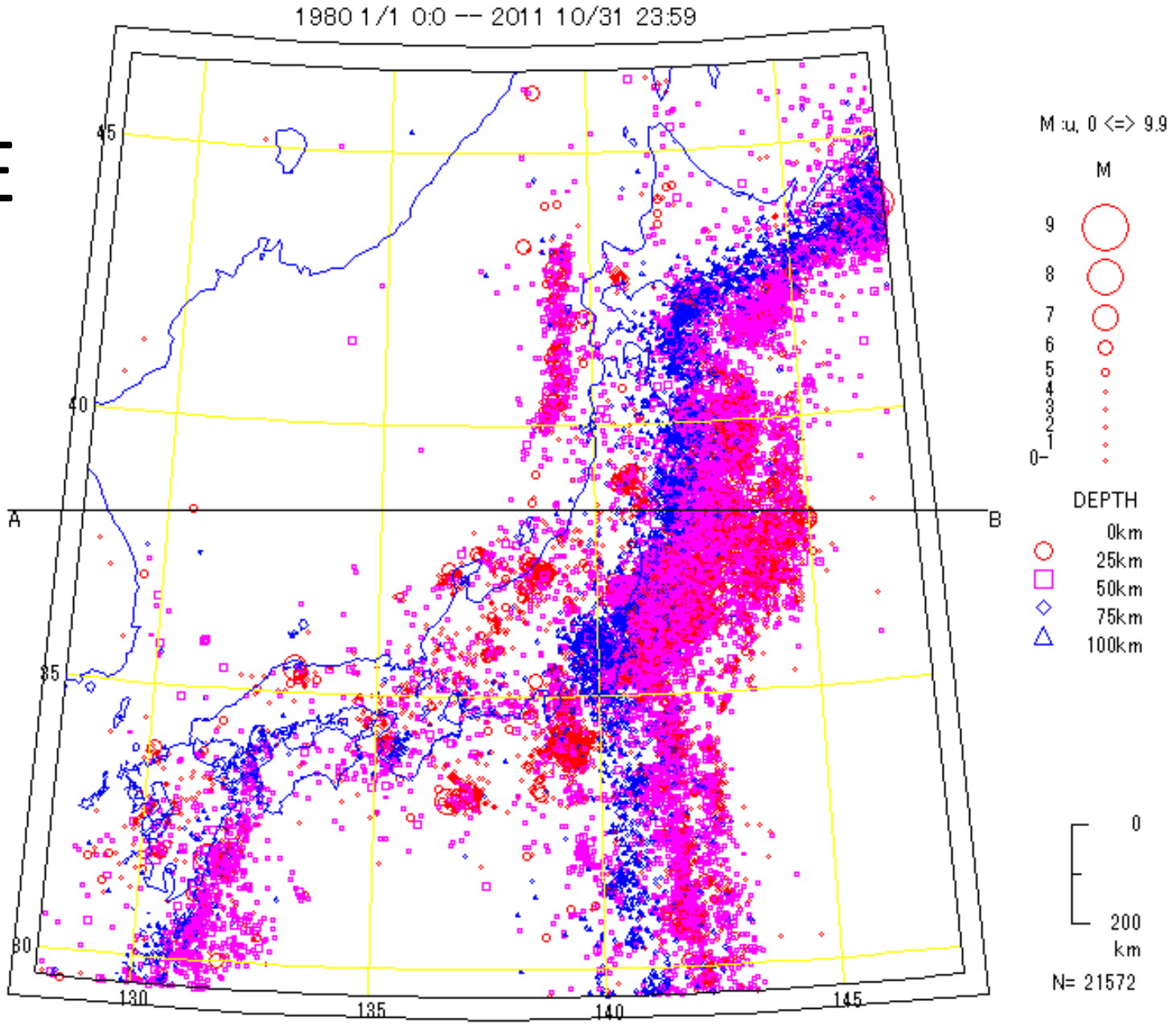
JMA

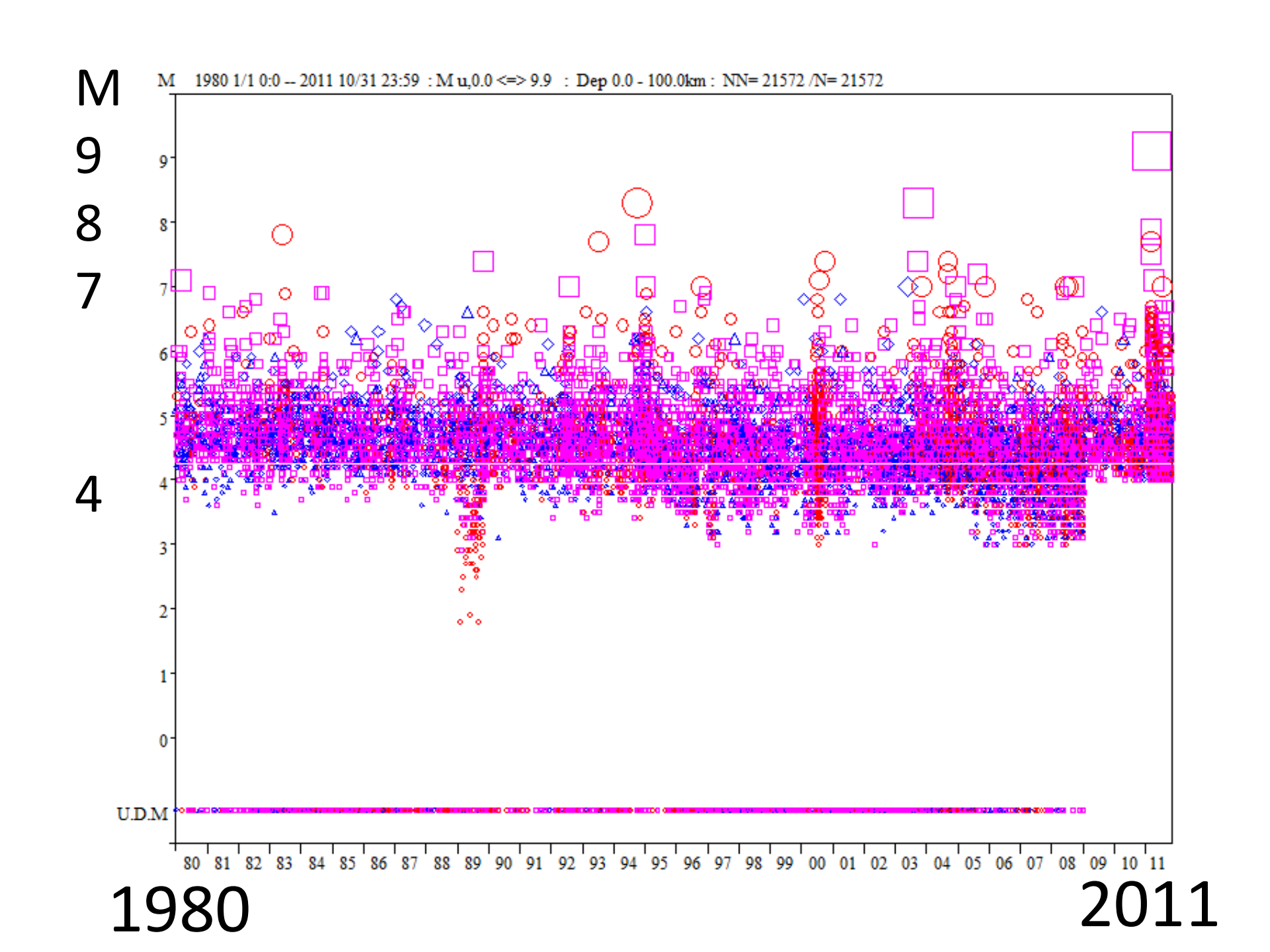

1923 1/1 0:0 -- 2011 08/31 23:59
45
40
35
30
130
135
140
145
M :u,-2 <=> 9.9
M
9
8
7
6
5
4
3
2
1
0
DEPTH
0km
25km
50km
75km
100km
0
200
km
N= 1746444

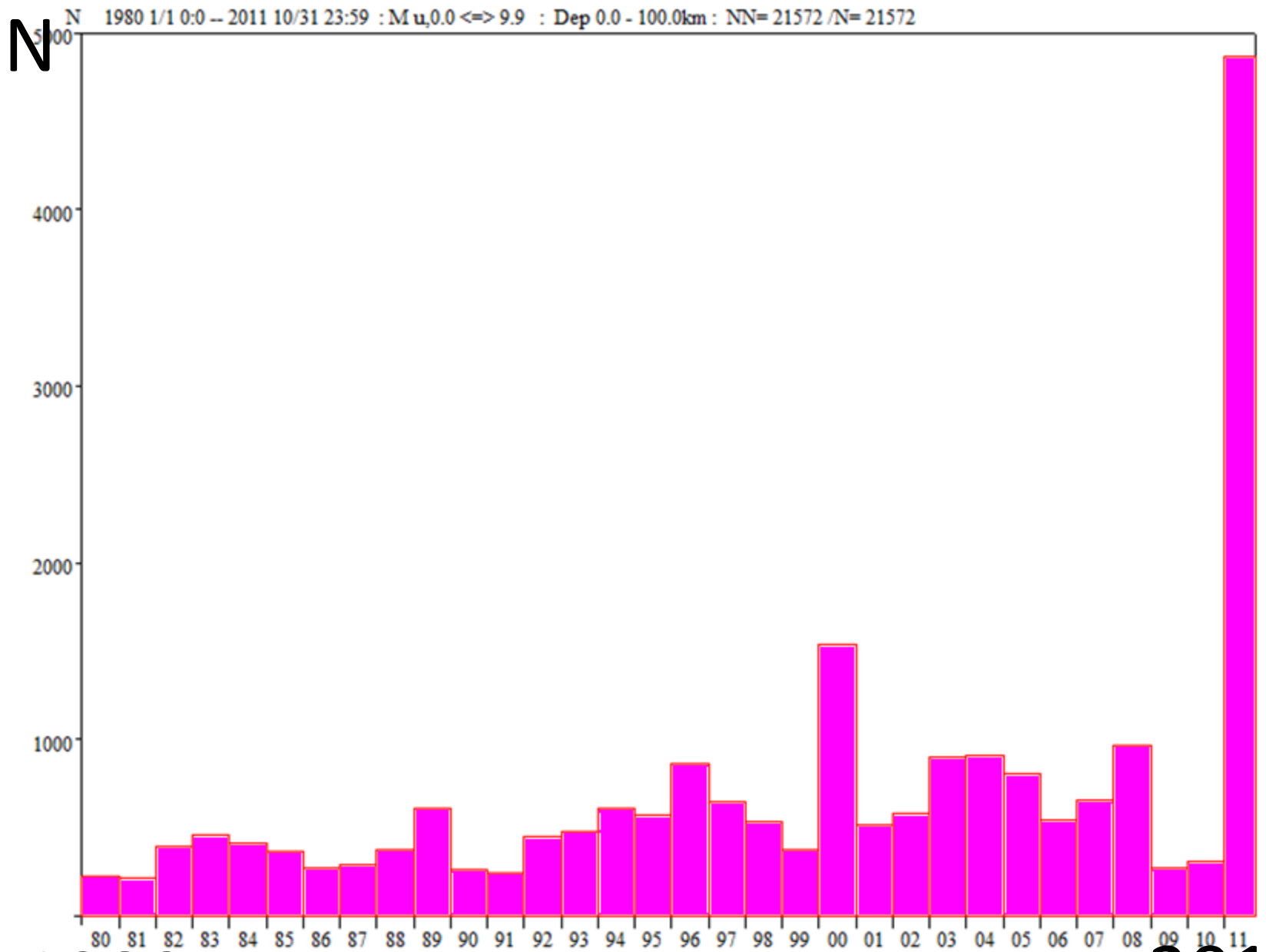

M
9
8
7
3
M 1923 1/1 0:0 -- 2011 08/31 23:59 : M u,-2.0 <=> 9.9 : Dep 0.0 - 100.0km : NN= 1746444 /N= 1746444
9
8
7
6
5
4
3
2
1
0
-1
-2
U.D.M
2002/08/14 03:37
31.969N 130.422E
Dep. 6km M -1.1
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
00
05
10
1923
2011


N
N 1923 1/1 0:0 -- 2011 08/31 23:59 : M u,-2.0 <=> 9.9 : Dep 0.0 - 100.0km : NN= 1746444 /N= 1746444
150000
140000
130000
120000
110000
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 00 05 10
1923
2011

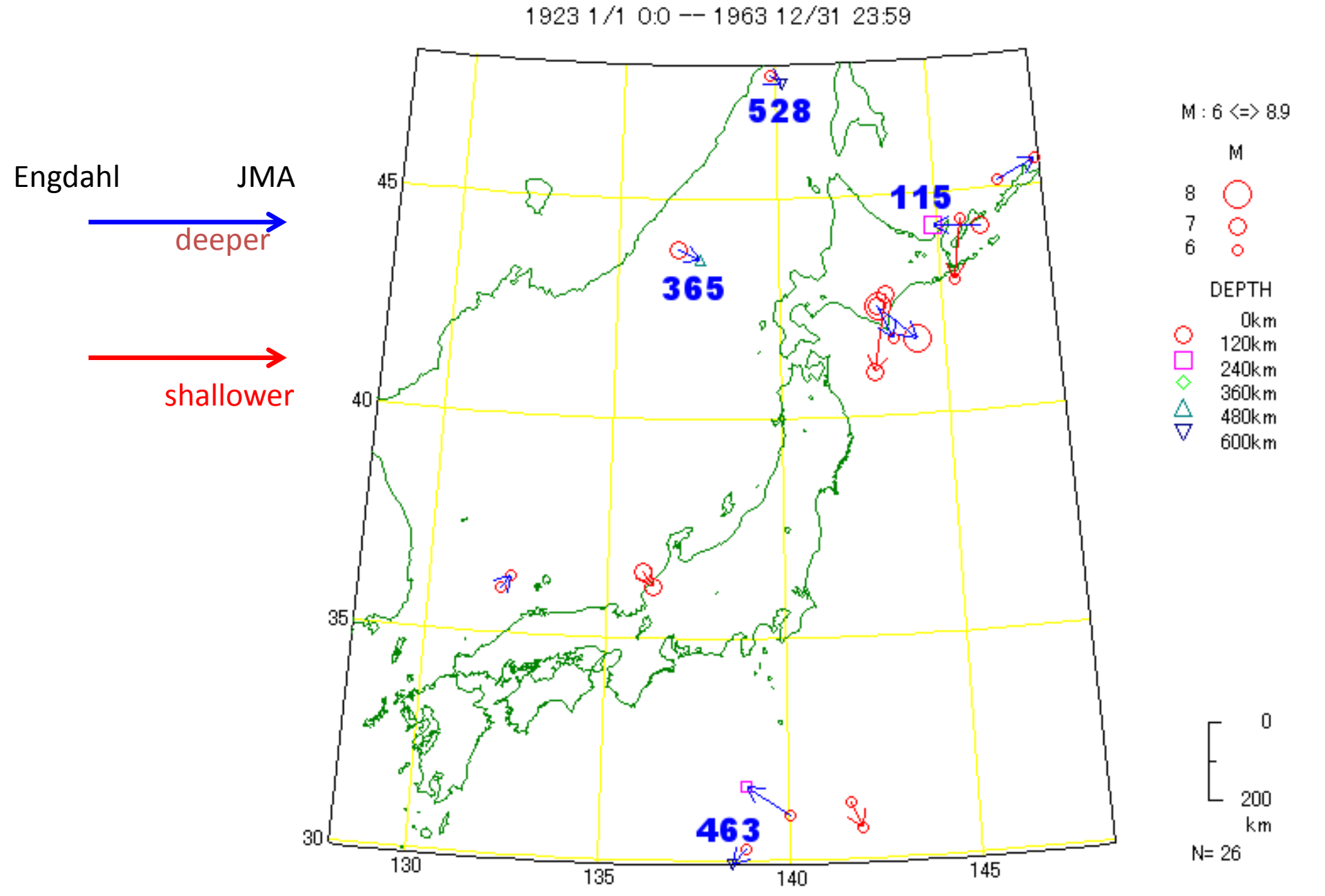
PDE


1980 1/1 0:0 -- 2011 10/31 23:59
M :u, 0 <=> 9.9
M
9
8
7
6
5
4
3
2
1
0
DEPTH
0km
25km
50km
75km
100km
A
B
45
40
35
30
130
135
140
145
0
200
km
N= 21572

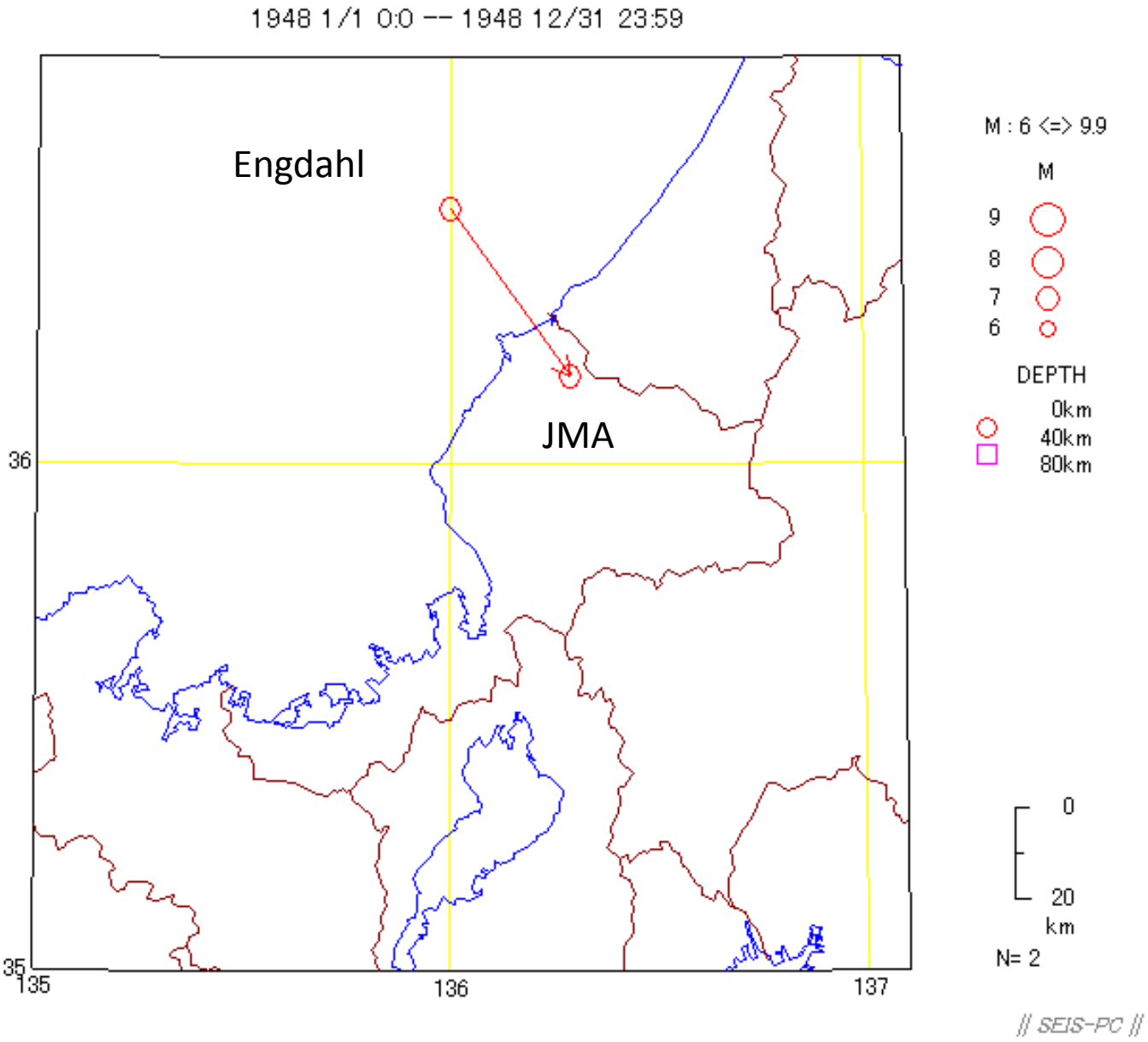

M 1980 1/1 0:0 -- 2011 10/31 23:59 : M u,0.0 <=> 9.9 : Dep 0.0 - 100.0km : NN= 21572 /N= 21572
M
9
8
7
4
9
8
7
6
5
4
3
2
1
0
U.D.M
80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11
1980
2011


N
N 1980 1/1 0:0 -- 2011 10/31 23:59 : M u,0.0 <=> 9.9 : Dep 0.0 - 100.0km : NN= 21572 /N= 21572
5000
4000
3000
2000
1000
80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11
1980
2011

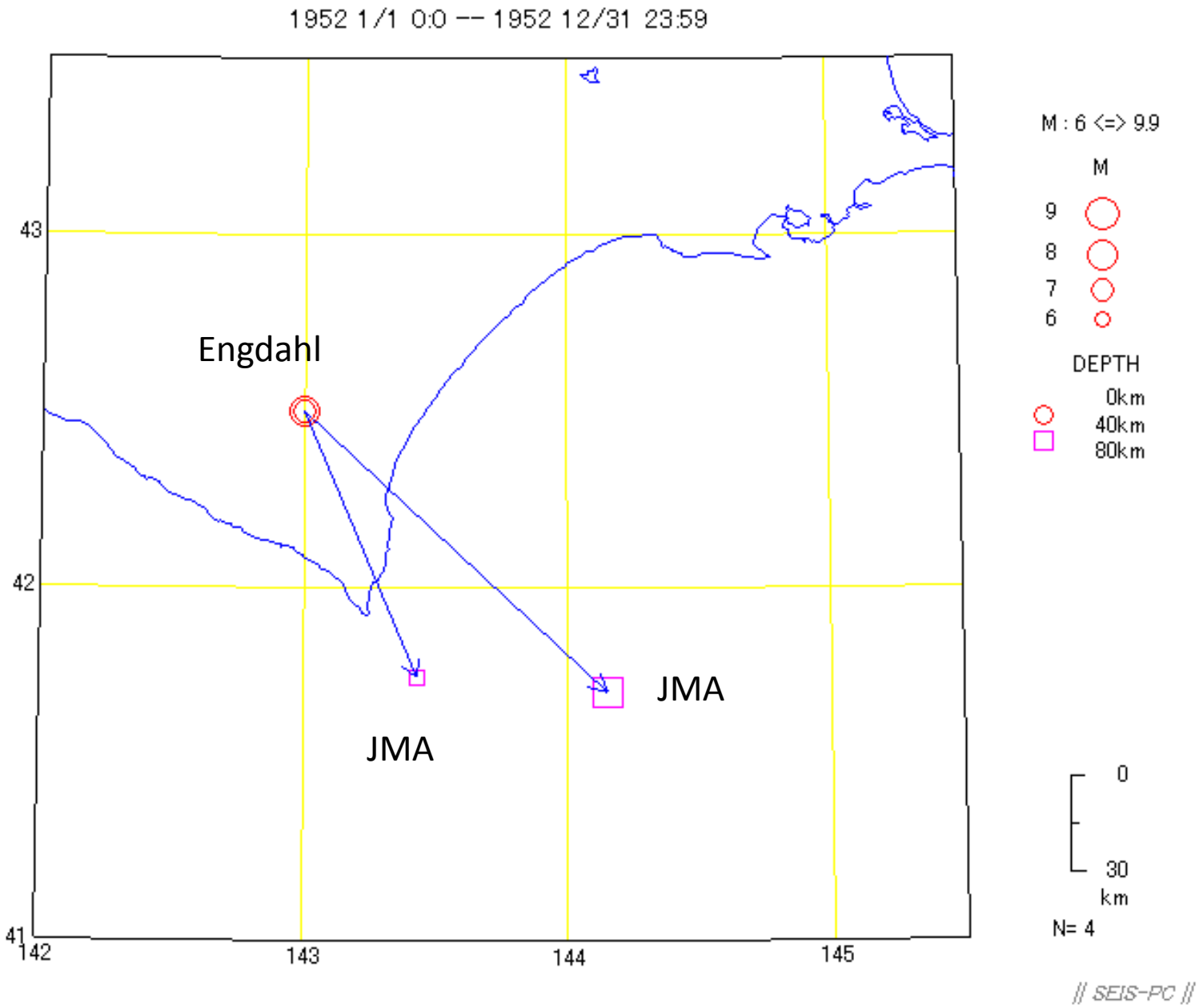
Difference of the hypocenters from Engdahl's to JMA's



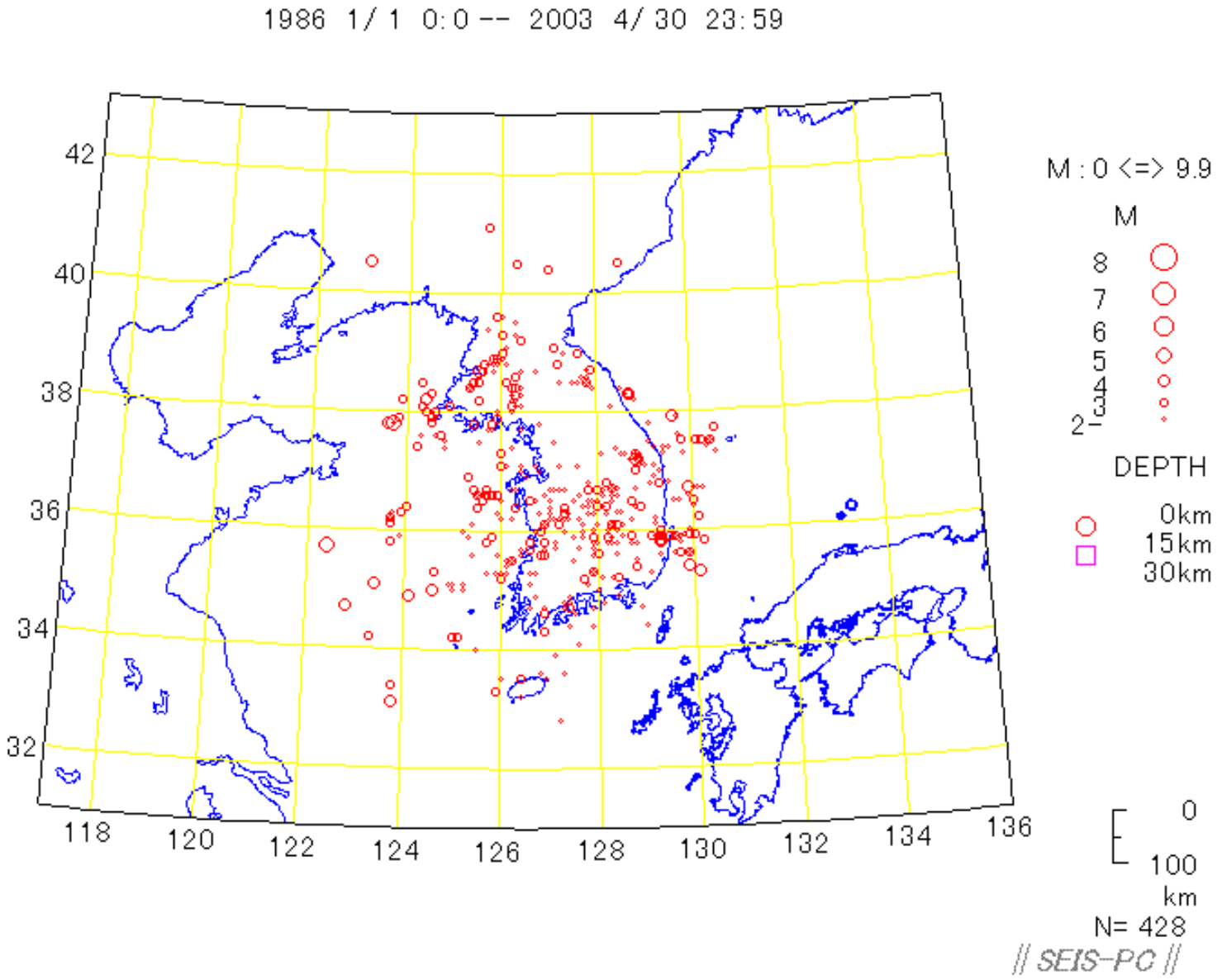
1948 Fukui earthquake M7.1



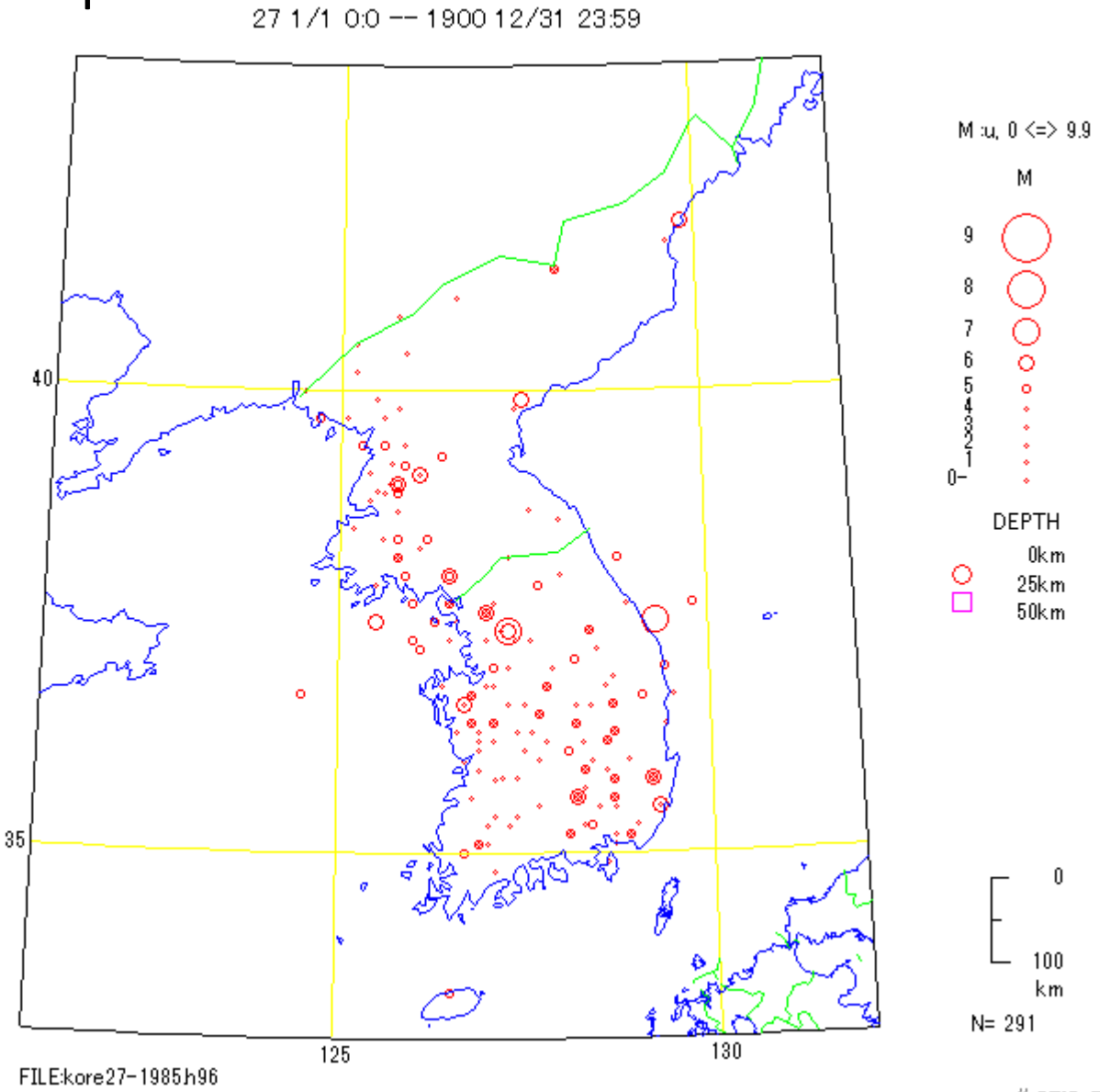
1952 Tokachi-oki earthquake M8.2



Seismicity by KMA : 1986-2003 April



The epicenters of historical events : 27-1900



Historical events were easily determined in the land!

Data after Li(2001)