

*e-mail: podymov@coastdyn.ru tpodymova@inbox.ru*

2011

## **RESULTS OF MONITORING OF THE TAMAN PENINSULA COASTAL ZONE AT THE TIME OF ANOMALOUS NATURAL PHENOMENON**

Podymov Igor Semyonovitch, Podymova Tatiana Mikhailovna  
*P.P.Shirshov Institute of oceanology RAS, Southern branch*  
*e-mail: podymov@coastdyn.ru tpodymova@inbox.ru*

### **Abstract**

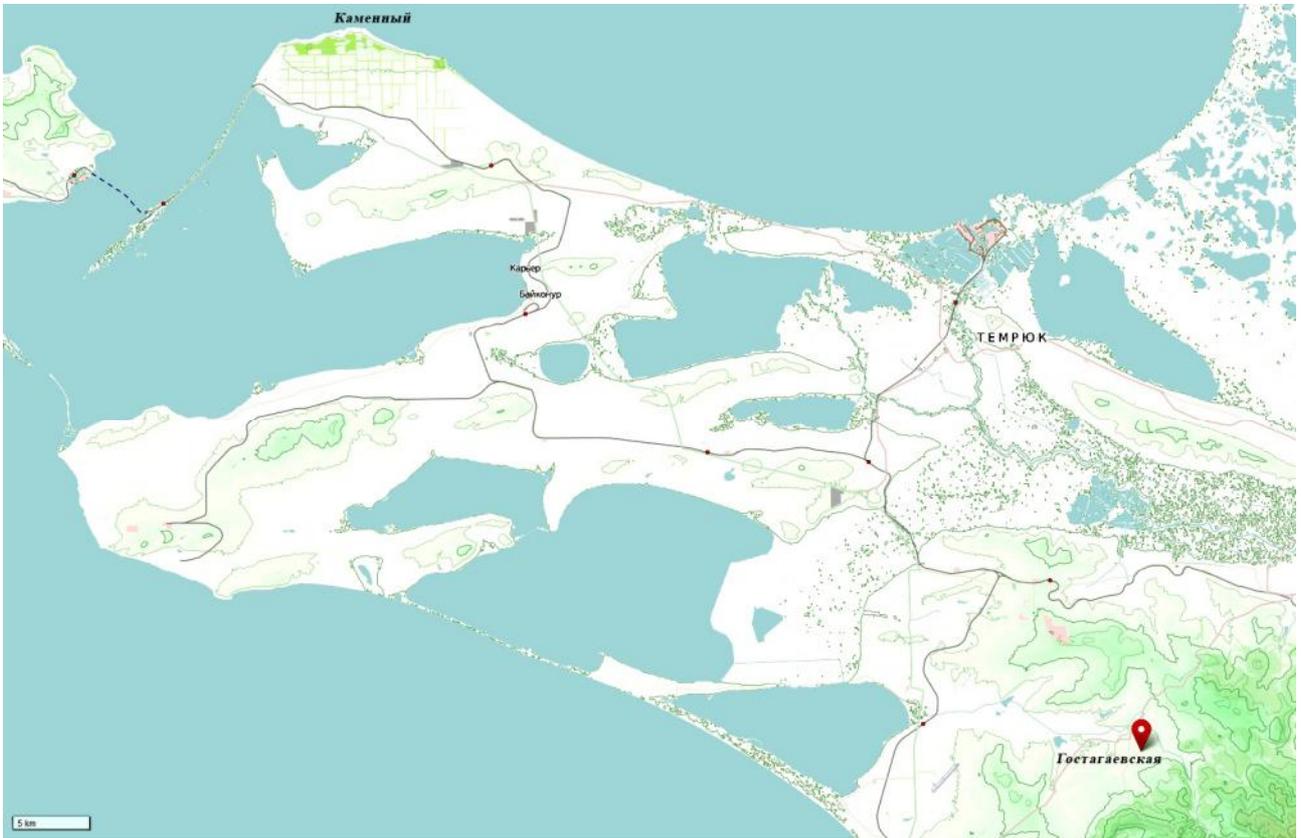
Motions of higher order tectonic plates took place in 2011 in the Taman peninsula area. More than six hectares of new land that were bottom of the Sea of Azov had emerged in one night. After two-year field studies and monitoring observations we estimated the scale of occurred events. The following parameters were calculated using the acquired materials: average vertical velocity of plate motion; time of reaction of major tectonic plates under the influence of large-scale events; time of plate subduction before the restoration of equilibrium; rate of coastline recession under the influence of natural factors during the process of equilibrium restoration; possibility of secondary movement of the higher order tectonic plates during the process of equilibrium restoration. A hypothetical causal effect model of the occurred events was proposed as a result of these experimental studies.

11 2011 .  
,  
1- 20 [1].  
29 30 2011  
6 [2], [3].

( .1).  
- 2011 2-3  
( . ).

11 2012 , 20-50 ,  
4,8

( .1).



. 1.

2011  
2012

[4].

. 2 – . 6



. 2. , 2005 .



. 3. , 2011 .



. 4. , 2011 .



. 5. , 2012 .



. 6. , 2012 .

. 2 . 3

. 4

1 2011 .

( . 5)

:

, 1 .

( . 6)

. . . ,

.

,

, .

,

1-

( . 7).

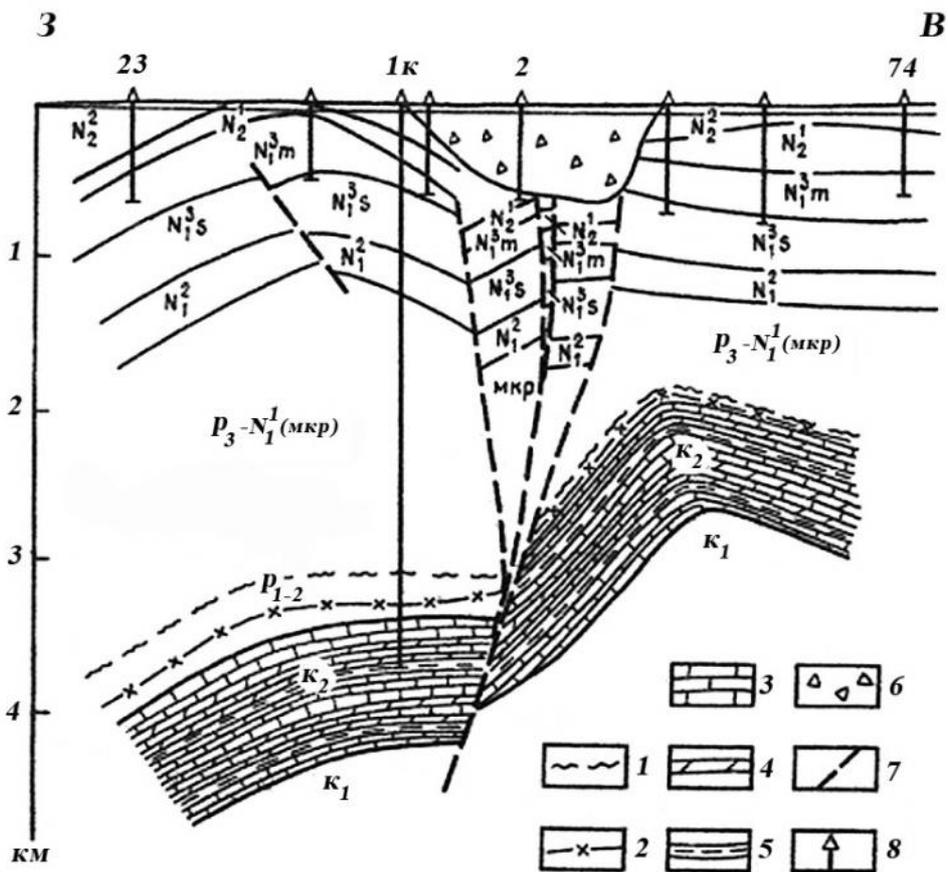


.7.

1 2 -

[5]

.8.



.8.

: 1 -

; 2 -

; 3 -

; 4 -

; 5 -

; 6 -

; 7 -

;

8 -

;

-

.

4

( .7). - ,

( . 8)

( .9– .10).



. 9. )  
; ) ,2011 .

)  
: )



. 10. , 2011 .

2011

3 .

,

- ,

- .

- .

, . .

,

( . 4 - . 6).

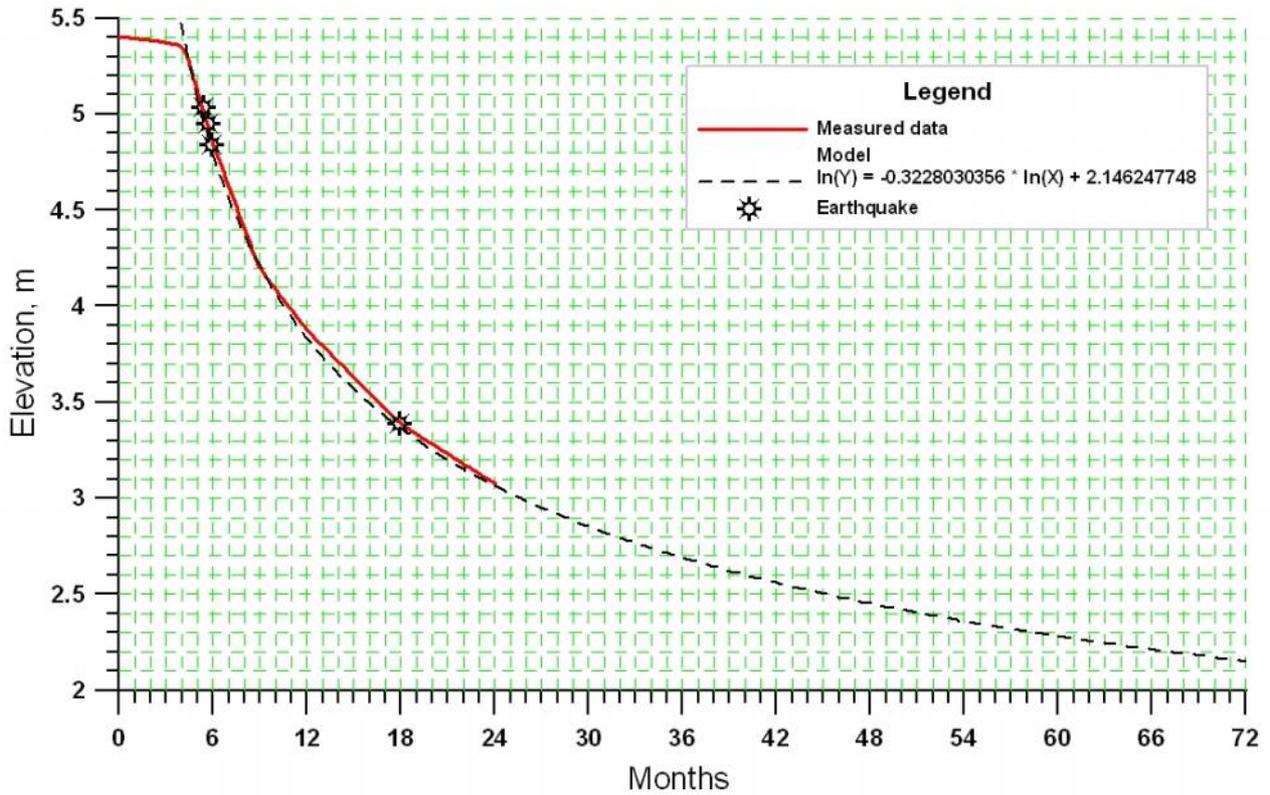
11 2012 ,

10-15 -

10  
2011

[4].

( . 11).



. 11.

: - ;  
- .  
4-  
: 3 / .  
20 - 25 / .  
3 .

$$\ln(Y) = -0.3228030356 \ln(X) + 2.146247748$$

Y - ; X - , .

( )

37 .

2-

( , , . .)

10 – 15 . 2014

« »

:

- 1,5 .
- 1 / .
- ( )
- 3 ( . 11).  
4 10 .

–

–

, « »

, 12-05-00946 11-05-02100.

1. . . . . 20 .  
<http://www.utro.ru/articles/2011/03/14/961936.shtml>
2. . . . . « » , 39/798 (26.09.2011).  
<http://www.itogi.ru/paradox/2011/39/170147.html>
3. : .  
<http://belregnews.ru/2012/05/superzemlya-v-azovskom-more-v-odnochase-voznik-novyj-poluostrov/>
4. . . . .  
 « — , , » . :  
 — , 2012, .1. . 387-290.
5. . . . .  
 « » , 5, 1992. .: