

:

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[21],

(.1).

(intertidal bars),

(subtidal bars),

10

1

(ridge-and-runnel topography). C

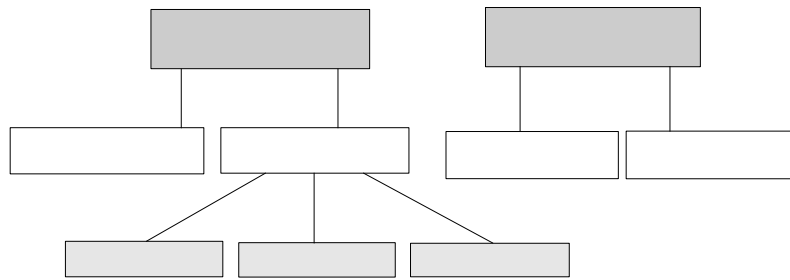
(multiple-bar systems).

0.005 0.03.

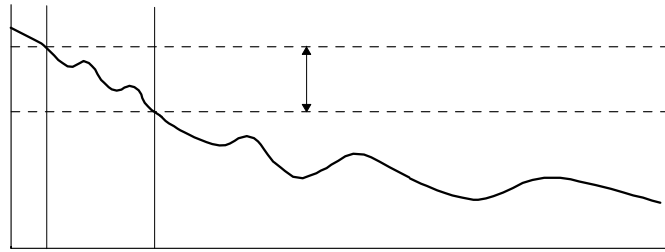
(.1).

1<sup>-1</sup>.

( )



( )



.1.

( )-

. ( )-

[21];

: 1)

(two-dimensional longshore bar),

; 2)

(three-dimensional longshore bar)

10<sup>2</sup>-10<sup>3</sup> 3)

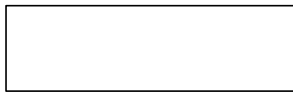
(shore-attached bar),  
( )

$$\Omega = H_b / (w_s T), \quad H_b -$$

, T - w<sub>s</sub> -

Ω, . . .

bars),  
 $10^4$  (multiple shore-parallel  
 $10^{-1}$ ),  
 $10^2$ ,  $10^{-1}$   
[4].  
(transverse bars),  
[1],  
[17]  
[6]  
[3]



.2.

[8, 15].

[2]

$10^{-2}$

[7, 9].

[14].

1 ),

(3 ).

[18, 19]

0.33),

$h_c > 0.33$ .

0.33).

$H_s$

$h_c$

$0.33 (H_s / h_c <$

$H_s /$

[16]

$(H_{rms} / h_c \approx$

[13],

( ) ( - ).

$$(H_{rms} / h_c \approx 0.3-0.4)$$

$$(\bar{H} / h_c \approx 0.3-0.4, H_s / h_c \approx 0.5-0.6),$$

.3.



$$H_{rms}/h_c < 0.3$$

$$H_{rms}/h_c = 0.3-0.4$$

$$\bar{H}/h_c = 0.3-0.4$$

$$H_s/h_c > 0.6$$

.3.

( [13])

. [10]

( 0.8 2.4 ).

[11]

( )

0.2  $8-10^{-1}$ ,  $^{-1}$ .

[19, 21].

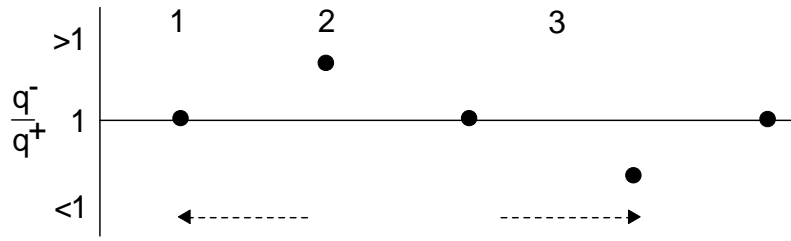
1-2 ,

4-6 ,

5-7

[19]

,  $q^-$



.4.

[21])

1 ( .4)

,  $q^- / q^+ = 1$  ( $q^- / q^+ = 1$ ).

,  $q^-$  ,  $q^+$

2

$q^- / q^+ > 1$  ( .4).

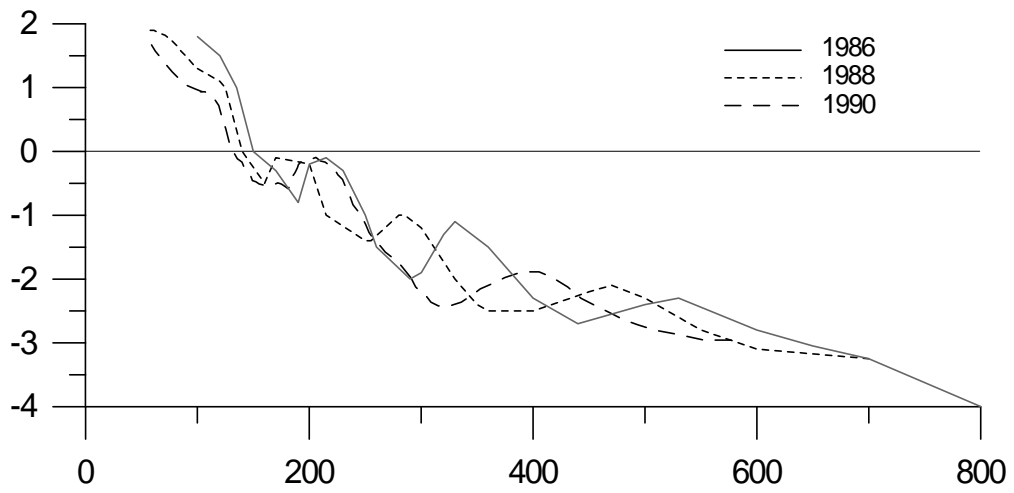
3

( $q^- / q^+ < 1$ , .4).

$$H_s / h_c \leq 0.33.$$

2, 3, 8

[5]  
(.5).



.5.

[5]

30- (1969-1998)  
20-30 -1  
8  
50-60 3 -1  
6-7.5 3 -1 -1





7

( ) ,

3) : 1) , 2)

$$\bar{H} / h_c \approx 0.3-0.4 \quad H_s / h_c \approx 0.5-0.6.$$

( )

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2. // . 2004. . 44. 4. . 625-631.
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