

621.387

...

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-

-

:

5.

1962

[1].

(USNO)

(NPL)

Telstar,

[2, 3]

5

10

± 1

$\sigma_\tau = 0,1$

(0,1)

[2]:

$$h = P_C \sqrt{\Delta f t_C} / 2 / P_\emptyset, \quad (1)$$

1.

Δf

; P_C P

; t_C

2.

σ_τ

$$\sigma_\tau = \frac{\sqrt{3}}{\pi h \Delta f}. \quad (2)$$

$\sigma_\tau \leq 0,1$

$h \Delta f \geq 5 \cdot 10^9$.

$h \geq 500$,

3.

=10

$g = P_C / P$

(),

4.

“ ”,

$g \approx 100$,

$h = 500 \quad \Delta f = 10 \quad (1)$

$t_C = 5 \cdot 10^{-6} \quad [4],$

$\sigma_f = 2 \cdot 10^{-6}$

- 0,2 ;

- 0,02 / .

0,1 .

[6, 7]

VLBJ-

(.

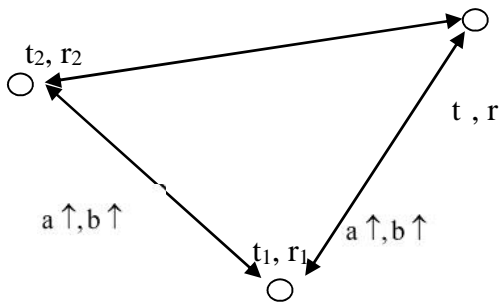
[5],

1).

1

; t_1, t_2, t_3 - ; r_1, r_2, r_3 - ; $a \uparrow, b \uparrow$ - ; $a \downarrow, b \downarrow$ - ; S_1, S_2 -

(. 1):



.1.

		()	
VLBJ	0,1	0,2	
GPS	20	<100	
Loran-C	100	1000	
	100	<100	
GMS	20	<100	
GPS (common view)	10	<100	
CS-2	2	10	
NV	10	100	

(H , >> 8)

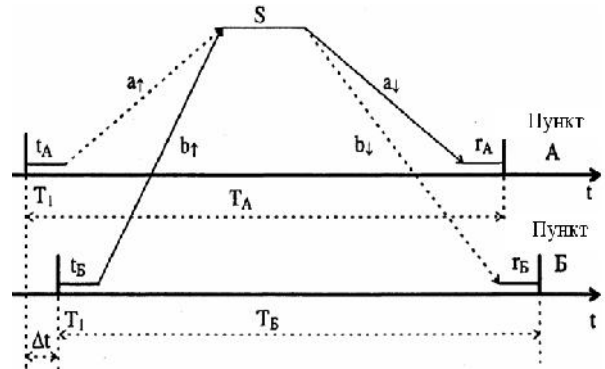
(. 2)

; Δt

; t_A, t_B -

; r_A, r_B -

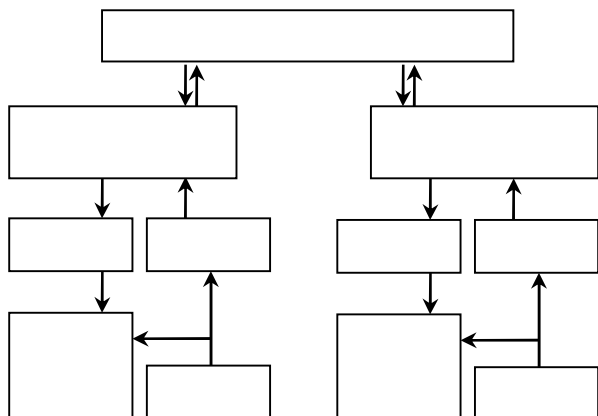
; S -



.2.

VLBJ-

[6]



. 3.

$$T_A - T ,$$

$$T_A - T ,$$

. 3

$$T_A = \Delta t + t + \uparrow + S + a \downarrow + r_A ;$$

$$T = \Delta t + t + \uparrow + S + \downarrow + r .$$

$$\Delta t = 0,5[(T_A - T) + (t_A - t) + (r - r) + (a \uparrow - a \downarrow) + (\uparrow - \downarrow)] + T_r, \quad (3)$$

$T_r -$

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30.01.2014

ANALYSIS OF REQUIREMENTS TO EXACTNESS OF SYNCHRONIZATION OF SCALES OF TIME IN A TWO-ELEMENT GROUND-SPACE RADIOINTERFEROMETER

R.V. Khrashchevskiy

Analysed requirement to exactness of synchronization of time-scales in a dvukhelementnom ground-space radiointerferometer.

Keywords: space vehicle, radiointerferometer with a base, radio engineering complex, wideband noise-type signal.