ПРИЛОЖЕНИЕ И. Способ круговых приемов

Дата: 16.07.2021

Способ круговых приемов (горизонтальные направления)

Цель	Отсчеты (КЛ/КП)	(КЛ+КП)/2	Среднее, приведенное к нулю	Среднее из приемов	d	v	V*V
1	2	3	4	5	6	7	8
Станц	ция 2130						
При	ем 1						
18062	0°00'00,0" 180°00'04,0"	0°00'02,0"	0°00'00,0"	0°00'00,0"	0	0	0,053
2131	293°59'50,0" 113°59'50,0"	293°59'50,0"	293°59'47,3"	293°59'46,8"	0	0	0,053
18062	0°00'02,0" 180°00'05,0"	0°00'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,053
a	$= -(\Sigma d)/n = 0$	Незам.КЛ =	2	Незам.КП = 1		Незам. среді	720 = 2
		Пезам.КЛ –	2	He3am.KII - 1		пезам. среді	HCC - Z
При	т ем 2						1
18062	30°10'08,0"	30°10'06,5"	0°00'00,0"	0°00'00,0"	0	-2	4,605
	210°10'05,0"						
2131	324°09'50,0" 144°09'50,0"	324°09'50,0"	293°59'42,5"	293°59'46,8"	4	2	4,605
18062	30°10'06,0" 210°10'11,0"	30°10'08,5"	0°00'00,0"	0°00'00,0"	0	-2	4,605
q	$= -(\Sigma d)/n = -2$	Незам.КЛ =	-2	Незам.КП = 6		Незам. среді	Hee = 2
При	чем 3						
18062	60°20'00,0"	60°20'00,5"	0°00'00,0"	0°00'00,0"	0	1	0,959
2131	240°20'01,0" 354°19'50,0"	354°19'50,0"	293°59'48,7"	293°59'46,8"	-2	-1	0,959
	174°19'50,0"	,	,				
18062	60°20'01,0" 240°20'03,0"	60°20'02,0"	0°00'00,0"	0°00'00,0"	0	1	0,959
q	$= -(\Sigma d)/n = 1$	Незам.КЛ =	1	Незам.КП = 2		Незам. среді	Hee = 2
При	ем 4						
18062	90°30'00,0" 270°30'04,0"	90°30'02,0"	0°00'00,0"	0°00'00,0"	0	0	0,230
2131	24°29'50,0" 204°29'50,0"	24°29'50,0"	293°59'47,8"	293°59'46,8"	-1	0	0,230
18062	90°30'01,0"	90°30'02,5"	0°00'00,0"	0°00'00,0"	0	0	0,230
	$= -(\Sigma d)/n = 0$	Незам.КЛ =	1	Незам.КП = 0		Незам. среді	
		110-ам.101 —	-	1105aivi.1011 — U		тъзам. среді	1
18062	120°40'04,0"	120°40'07,0"	0°00'00,0"	0°00'00,0"	0	-2	3,136
10002	300°40'10,0"	120 10 0/30	0 00 00,0	0 00 00,0	V		3,130
2131	54°39'50,0" 234°39'50,0"	54°39'50,0"	293°59'43,2"	293°59'46,8"	4	2	3,136
18062	120°40'03,0"	120°40'06,5"	0°00'00,0"	0°00'00,0"	0	-2	3,136

	300°40'10,0"					<u> </u>	
a	$= -(\Sigma d)/n = -2$	Незам.КЛ =	· -1	Незам.КП = 0		Незам. сред	нее = -1
	ием 6						
18062	150°49'59,0" 330°49'59,0"	150°49'59,0"	0°00'00,0"	0°00'00,0"	0	2	4,969
2131	84°49'50,0" 264°49'50,0"	84°49'50,0"	293°59'51,3"	293°59'46,8"	-4	-2	4,969
18062	150°49'58,0" 330°49'59,0"	150°49'58,5"	0°00'00,0"	0°00'00,0"	0	2	4,969
q	$= -(\Sigma d)/n = 2$	Незам.КЛ =	-1	Hезам.КП = 0		Незам. сред	нее = 0
1	пи (ошибка ед.веса) =	2		т (СКО уравн	ен. на станци	и направления) =	= 1
Стані	ция 18062						
При	ием 1						
2122	0°00'00,0" 180°00'06,0"	0°00'03,0"	0°00'00,0"	0°00'00,0"	0	-1	1,615
2130	163°36'07,0" 343°36'07,0"	163°36'07,0"	163°36'04,0"	163°36'06,5"	3	1	1,615
2122	0°00'00,0" 180°00'06,0"	0°00'03,0"	0°00'00,0"	0°00'00,0"	0	-1	1,615
q	$= -(\Sigma d)/n = -1$	Незам.КЛ =	: 0	Незам.КП = 0		Незам. сред	$ext{Hee} = 0$
При	јем 2						
2122	30°09'59,0" 210°09'58,0"	30°09'58,5"	0°00'00,0"	0°00'00,0"	0	-1	0,271
2130	193°46'02,0" 13°46'07,0"	193°46'04,5"	163°36'05,5"	163°36'06,5"	1	1	0,271
2122	30°09'59,0" 210°10'00,0"	30°09'59,5"	0°00'00,0"	0°00'00,0"	0	-1	0,271
q	$= -(\Sigma d)/n = -1$	Незам.КЛ =	: 0	Незам.КП = 2		Незам. сред	нее = 1
При	ием 3						
2122	60°19'59,0" 240°19'59,0"	60°19'59,0"	0°00'00,0"	0°00'00,0"	0	1	0,959
2130	223°56'07,0" 43°56'07,0"	223°56'07,0"	163°36'08,5"	163°36'06,5"	-2	-1	0,959
2122	60°19'58,0" 240°19'58,0"	60°19'58,0"	0°00'00,0"	0°00'00,0"	0	1	0,959
q	$= -(\Sigma d)/n = 1$	Незам.КЛ =	: -1	Незам.КП = -1		Незам. сред	нее = -1
При	ием 4						
2122	90°30'01,0" 270°30'05,0"	90°30'03,0"	0°00'00,0"	0°00'00,0"	0	-1	1,313
2130	254°06'07,0" 74°06'07,0"	254°06'07,0"	163°36'04,3"	163°36'06,5"	2	1	1,313
2122	90°30'00,0" 270°30'05,0"	90°30'02,5"	0°00'00,0"	0°00'00,0"	0	-1	1,313
q	$=$ -(Σd)/ n = -1	Незам.КЛ =	-1	Незам.КП = 0		Незам. сред	нее = -1
При	лем 5						
2122	120°39'57,0"	120°39'59,0"	0°00'00,0"	0°00'00,0"	0	1	0,365

		-		-		1		
	300°40'01,0"							
2130	284°16'07,0" 104°16'07,0"	284°16'07,0"	163°36'07,7"	163°36'06,5"	-1	-1	0,365	
2122	120°39'57,0" 300°40'02,0"	120°39'59,5"	0°00'00,0"	0°00'00,0"	0	1	0,365	
q	$q = -(\Sigma d)/n = 1$	Незам.КЛ =	0	Незам.КП = 1		Незам. средн	ee = 0	
Пр	ием 6							
2122	150°49'57,0" 330°50'00,0"	150°49'58,5"	0°00'00,0"	0°00'00,0"	0	1	1,834	
2130	314°26'07,0" 134°26'07,0"	314°26'07,0"	163°36'09,3"	163°36'06,5"	-3	-1	1,834	
2122	150°49'56,0" 330°49'58,0"	150°49'57,0"	0°00'00,0"	0°00'00,0"	0	1	1,834	
q	$q = -(\Sigma d)/n = 1$	Незам.КЛ =	-1	Незам.КП = -2		Незам. средн	Hee = -1	
	ти (ошибка ед.веса) =	2		m (СКО уравнен. на станции направления) = 1				
Стан	ция 2122						1	
Прі	ием 1							
2123	0°00'00,0" 180°00'02,0"	0°00'01,0"	0°00'00,0"	0°00'00,0"	0	-1	0,293	
18062	282°49'40,0" 102°49'38,0"	282°49'39,0"	282°49'37,5"	282°49'38,6"	1	1	0,293	
2123	0°00'02,0" 180°00'02,0"	0°00'02,0"	0°00'00,0"	0°00'00,0"	0	-1	0,293	
q	$q = -(\Sigma d)/n = -1$	Незам.КЛ =	2	Незам.КП = 0	1	Незам. средн	Hee = 1	
Пр	ием 2							
2123	30°09'56,0" 210°09'57,0"	30°09'56,5"	0°00'00,0"	0°00'00,0"	0	2	3,361	
18062	312°59'40,0" 132°59'38,0"	312°59'39,0"	282°49'42,3"	282°49'38,6"	-4	-2	3,361	
2123	30°09'56,0" 210°09'58,0"	30°09'57,0"	0°00'00,0"	0°00'00,0"	0	2	3,361	
q	$q = -(\Sigma d)/n = 2$	Незам.КЛ =	0	Незам.КП = 1		Незам. средн	ee = 0	
Прі	ием 3							
2123	60°20'00,0" 240°19'57,0"	60°19'58,5"	0°00'00,0"	0°00'00,0"	0	0	0,002	
18062	343°09'40,0" 163°09'38,0"	343°09'39,0"	282°49'38,5"	282°49'38,6"	0	0	0,002	
2123	60°20'02,0" 240°20'03,0"	60°20'02,5"	0°00'00,0"	0°00'00,0"	0	0	0,002	
q	$\mathbf{q} = -(\Sigma \mathbf{d})/\mathbf{n} = 0$	Незам.КЛ =	2	Незам.КП = 6	•	Незам. средн	Hee = 4	
При	ием 4							
2123	90°30'03,0" 270°30'05,0"	90°30'04,0"	0°00'00,0"	0°00'00,0"	0	-1	0,840	
18062	13°19'40,0" 193°19'38,0"	13°19′39,0"	282°49'36,8"	282°49'38,6"	2	1	0,840	
			1	1	1	1		
2123	90°30'00,0" 270°30'01,0"	90°30'00,5"	0°00'00,0"	0°00'00,0"	0	-1	0,840	

4 5

1 2 3 4 5 6	7	8

q	$= -(\Sigma d)/n = -1$	Незам.КЛ =	-3	Незам.КП = -4		Незам. средн	ee = -3
При	ием 5						
	120°40'04,0"				_		
2123	300°40'06,0"	120°40'05,0"	0°00'00,0"	0°00'00,0"	0	-1	0,627
10062	43°29'40,0"	42020120 011	202040127 011	292040129 (11	2	1	0.627
18062	223°29'38,0"	43°29'39,0"	282°49'37,0"	282°49'38,6"	2	1	0,627
2123	120°39'58,0"	120°39'59,0"	0°00'00.0"	0°00'00,0"	0	-1	0,627
2123	300°40'00,0"	120 39 39,0	0 00 00,0	0 00 00,0	Ü	-1	0,027
q	$= -(\Sigma d)/n = -1$	Незам.КЛ =	-6	Незам.КП = -6		Незам. средн	ee = -6
При	ием 6						
2123	150°49'57,0"	150°50'00,0"	0°00'00,0"	0°00'00,0"	0	0	0,210
2123	330°50'03,0"	150~50~00,0~	0-00-00,0	0-00-00,0	Ü	U	0,210
18062	73°39'40,0"	73°39'39,0"	282°49'39,5"	282°49'38,6"	-1	0	0,210
18002	253°39'38,0"	73 39 39,0	202 49 39,3	202 49 30,0	-1	Ü	0,210
2123	150°49'58,0"	150°49'59,0"	0°00'00,0"	0°00'00,0"	0	0	0,210
2123	330°50'00,0"	150 47 57,0	0 00 00,0	0 00 00,0	U	Ů.	0,210
$q = -(\Sigma d)/n = 0$		H езам. $K\Pi = 1$ H езам. $K\Pi =$		Незам.КП = -3	Незам. среднее = -1		
1	ти (ошибка ед.веса) =	1		т (СКО уравн	нен. на станции і	направления) =	1
Стані	ция 2123						
При	ием 1						
	359°59'59,0"						
2131	179°59'59,0"	359°59'59,0"	0°00'00,0"	0°00'00,0"	0	0	0,016
	266°06'43,0"			2 5 5 2 2 4 4 2 11		_	
2122	86°06'43,0"	266°06'43,0"	266°06'44,5"	266°06'44,2"	0	0	0,016
2121	359°59'57,0"	250050150 011	0000100 011	0000100 011	0	0	0.016
2131	179°59'59,0"	359°59'58,0"	0°00'00,0"	0°00'00,0"	0	0	0,016
2117	359°59'59,0"	0°00'01,5"	0°00'00,0"	0°00'00,0"	0	0	0,035
2117	180°00'04,0"	0 0001,3	0 00 00,0	0 00 00,0	U	Ü	0,033
2131	271°56'17,0"	271°56'20,5"	271°56'18,5"	271°56'18,1"	0	0	0,035
2131	91°56'24,0"	271 30 20,3	271 30 10,3	271 30 10,1		Ŭ	0,033
2117	0°00'00,0"	0°00'02,5"	0°00'00.0"	0°00'00,0"	0	0	0,035
	180°00'05,0"	,		ŕ			*,****
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	-1	Незам.КП = -1		Незам. средн	ee = -1
При	ием 2						
2131	302°06'16,0"	302°06'19,0"	271°56'17,0"	271°56'18,1"	1	1	0,316
	122°06'22,0"	302 00 17,0	2,1 3017,0	2.1 30 10,1	•	•	0,510
2117	30°10'01,0"	30°10'02,5"	0°00'00,0"	0°00'00,0"	0	-1	0,316
	210°10'04,0"	, .			-		
2131	30°09'53,0"	30°09'53,0"	0°00'00,0"	0°00'00,0"	0	3	6,891
	210°09'53,0"		,				
2122	296°16'43,0"	296°16'43,0"	266°06'49,5"	266°06'44,2"	-5	-3	6,891
	116°16'43,0"						
2131	30°09'54,0"	30°09'54,0"	0°00'00,0"	0°00'00,0"	0	3	6,891
	210°09'54,0"						
2117	30°09'59,0" 210°10'04,0"	30°10'01,5"	0°00'00,0"	0°00'00,0"	0	-1	0,316
а	1	Незам КП =	-2	Незам КП = О		Незам спеши	ee = -1
	$210^{\circ}10'04,0"$ = -(\(\Sigma d\)/n = -1	Незам.КЛ =	ŕ	Незам.КП = 0	0	Незам. средн	

Пр	ием 3						
2131	60°19'56,0"	60°19'58,0"	0°00'00,0"	0°00'00,0"	0	0	0,000
2131	240°20'00,0"	00 19 38,0	0 00 00,0	0 00 00,0	U	U	0,000
2122	326°26'43,0"	326°26'43,0"	266°06'44,2"	266°06'44,2"	0	0	0,000
	146°26'43,0"						
2117	60°20'02,0" 240°20'00,0"	60°20'01,0"	0°00'00,0"	0°00'00,0"	0	0	0,004
	332°16'22,0"						
2131	152°16'20,0"	332°16'21,0"	271°56'18,0"	271°56'18,1"	0	0	0,004
2117	60°20'04,0"	(0020105 011	000000 011	000000 011	0	0	0.004
2117	240°20'06,0"	60°20'05,0"	0°00'00,0"	0°00'00,0"	0	0	0,004
2131	60°19'59,0"	60°19'59,5"	0°00'00,0"	0°00'00,0"	0	0	0,000
	240°20'00,0"		·			,	.,
Ç	$q = -(\Sigma d)/n = 0$	Незам.КЛ =	: 3	Незам.КП = 0		Незам. средн	ee = 1
Пр	ием 4						
2117	90°30'02,0"	90°30'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,035
	270°30'05,0"	,	,	,			
2122	356°36'43,0"	356°36'43,0"	266°06'41,3"	266°06'44,2"	3	1	2,250
	176°36'43,0" 90°29'59,0"						
2131	270°30'05,0"	90°30'02,0"	0°00'00,0"	0°00'00,0"	0	-1	2,250
	90°30'00,0"						
2131	270°30'03,0"	90°30'01,5"	0°00'00,0"	0°00'00,0"	0	-1	2,250
2117	90°30'00,0"	00020102 011	000000 011	000000 011	0	0	0.025
2117	270°30'04,0"	90°30'02,0"	0°00'00,0"	0°00'00,0"	0	0	0,035
2131	2°26'20,0"	2°26'20,5"	271°56'17,8"	271°56'18,1"	0	0	0,035
	182°26'21,0"	,					·
Ç	$q = -(\Sigma d)/n = 0$	Незам.КЛ =	: -2	Незам.КП = -1		Незам. средн	ee = -1
Пр	ием 5		T			T	1
2131	120°39'58,0"	120°39'58,5"	0°00'00,0"	0°00'00,0"	0	0	0,062
	300°39'59,0"	,	,	,			
2117	120°40'03,0" 300°40'05,0"	120°40'04,0"	0°00'00,0"	0°00'00,0"	0	0	0,035
	26°46'43,0"						
2122	206°46'43,0"	26°46'43,0"	266°06'43,8"	266°06'44,2"	0	0	0,062
	120°39'56,0"				_	_	
2131	300°40'04,0"	120°40'00,0"	0°00'00,0"	0°00'00,0"	0	0	0,062
2131	32°36'19,0"	32°36'19,5"	271°56'17,8"	271°56'18,1"	0	0	0,035
2131	212°36'20,0"	32 30 19,3	2/1 3017,8	2/1 30 18,1	U	U	0,033
2117	120°39'59,0"	120°39'59,5"	0°00'00,0"	0°00'00,0"	0	0	0,035
	300°40'00,0"	,		ŕ			Í
	$q = -(\Sigma d)/n = 0$	Незам.КЛ =	: -4	Незам.КП = -5		Незам. средн	ee = -4
Пр	ием 6		T			1	1
2131	150°50'01,0"	150°50'00,5"	0°00'00,0"	0°00'00,0"	0	-1	1,000
	330°50'00,0"	,	,	,			·
2122	56°56'43,0" 236°56'43,0"	56°56'43,0"	266°06'42,3"	266°06'44,2"	2	1	1,000
2117	150°49'58,0"	150°50'00,5"	0°00'00,0"	0°00'00,0"	0	1	0,660
/	100 77 50,0	150 50 00,5	0 00 00,0	0 00 00,0		1 *	0,000

ı		3		<u> </u>	l 0	ı	0
T	■	[T	T		T
	330°50'03,0"						
2131	62°46'22,0"	62°46'20,5"	271°56'19,8"	271°56'18,1"	-2	-1	0,660
	242°46'19,0"						
2131	150°49'58,0"	150°50'01,0"	0°00'00,0"	0°00'00,0"	0	-1	1,000
	330°50'04,0"						
2117	150°49'58,0"	150°50'01,0"	0°00'00,0"	0°00'00,0"	0	1	0,660
	330°50'04,0"						
	$= -(\Sigma d)/n = 1$	Незам.КЛ =	0	Незам.КП = 1		Незам. средн	I
:	ти (ошибка ед.веса) =	1		т (СКО урав	нен. на станции	направления) =	0
Стані	ция 2131						
Прі	ием 1						
2110	0°00'00,0"	0000101 011	000000 011	000000 0!!	0	1	1.660
2119	180°00'02,0"	0°00'01,0"	0°00'00,0"	0°00'00,0"	0	1	1,668
0320	271°16'06,0"	271°16'07,0"	271°16'06,0"	271916102 411	-3	-1	1 660
0320	91°16′08,0"	2/1 100/,0	2/1 10 00,0	271°16'03,4"	-3	-1	1,668
2119	0°00'00,0"	0°00'01,0"	0°00'00,0"	0°00'00,0"	0	1	1,668
2119	180°00'02,0"	0 00 01,0	0 00 00,0	0 00 00,0	Ů.	1	1,000
2130	0°00'03,0"	0°00'05,0"	0°00'00,0"	0°00'00,0"	0	0	0,016
2130	180°00'07,0"	0 00 05,0	0 00 00,0	0 00 00,0	Ŭ	Ü	0,010
2123	0°00'04,0"	0°00'05,0"	0°00'00,0"	0°00'00,0"	0	-2	2,507
	180°00'06,0"	0 00 00,0	0 00 00,0	0 00 00,0	Ů	_	2,507
2123	0°00'00,0"	0°00'03,0"	0°00'00,0"	0°00'00,0"	0	-2	2,507
	180°00'06,0"					_	_,
2119	266°39'40,0"	266°39'40,5"	266°39'36,5"	266°39'39,7"	3	2	2,507
	86°39'41,0"	, .		,			,
2130	0°00'02,0"	0°00'03,0"	0°00'00,0"	0°00'00,0"	0	0	0,016
	180°00'04,0"	·					
2123	253°27'38,0"	253°27'38,0"	253°27'34,0"	253°27'33,8"	0	0	0,016
	73°27'38,0"						
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	1	Незам.КП = 3		Незам. средн	ee = 2
Прі	ием 2	<u></u>		T	T	T	T
2119	296°49'40,0"	296°49'41,0"	266°39'42,0"	266°39'39,7"	-2	-1	1,361
	116°49'42,0"	, , ,	,,,	,			,
2119	30°09'58,0"	30°10'01,0"	0°00'00,0"	0°00'00,0"	0	-1	0,340
	210°10'04,0"						
0320	301°26'00,0"	301°26'04,0"	271°16'02,3"	271°16'03,4"	1	1	0,340
	121°26'08,0"						
2123	30°09'58,0"	30°09'59,0"	0°00'00,0"	0°00'00,0"	0	1	1,361
	210°10'00,0"						
2123	30°09'59,0"	30°09'59,0"	0°00'00,0"	0°00'00,0"	0	1	1,361
	210°09'59,0"						
2119	30°10'00,0"	30°10'02,5"	0°00'00,0"	0°00'00,0"	0	-1	0,340
	210°10'05,0" 30°10'00,0"						
2130	210°10'06,0"	30°10'03,0"	0°00'00,0"	0°00'00,0"	0	0	0,063
	283°37'38,0"						
2123	103°37'38,0"	283°37'38,0"	253°27'34,3"	253°27'33,8"	-1	0	0,063
2130	30°10'03,0"	30°10'04,5"	0°00'00,0"	0°00'00,0"	0	0	0,063
		•	•	•	•	•	•

1 2 3 4 5 6 7 8

	210°10'06,0"						
($q = -(\Sigma d)/n = 0$	Незам.КЛ =	: 3	Незам.КП = 0		Незам. средн	ree = 1
Пр	ием 3						
2123	313°47'38,0" 133°47'38,0"	313°47'38,0"	253°27'32,3"	253°27'33,8"	1	1	0,562
2130	60°20'08,0" 240°20'02,0"	60°20'05,0"	0°00'00,0"	0°00'00,0"	0	-1	0,562
2119	60°20'04,0" 240°20'03,0"	60°20'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,002
0320	331°36'04,0" 151°36'07,0"	331°36'05,5"	271°16'03,5"	271°16'03,4"	0	0	0,002
2119	60°20'00,0" 240°20'01,0"	60°20'00,5"	0°00'00,0"	0°00'00,0"	0	0	0,002
2123	60°20'02,0" 240°20'00,0"	60°20'01,0"	0°00'00,0"	0°00'00,0"	0	-1	1,460
2119	326°59'40,0" 146°59'37,0"	326°59'38,5"	266°39'37,3"	266°39'39,7"	2	1	1,460
2123	60°20'04,0" 240°19'59,0"	60°20'01,5"	0°00'00,0"	0°00'00,0"	0	-1	1,460
2130	60°20'05,0" 240°20'08,0"	60°20'06,5"	0°00'00,0"	0°00'00,0"	0	-1	0,562
C	$q = -(\Sigma d)/n = -1$	Незам.КЛ =	: 3	Незам.КП = -6		Незам. средн	ee = -1
Пр	ием 4						
2130	90°30'04,0" 270°30'04,0"	90°30'04,0"	0°00'00,0"	0°00'00,0"	0	0	0,063
2123	343°57'38,0" 163°57'38,0"	343°57'38,0"	253°27'33,3"	253°27'33,8"	1	0	0,063
2130	90°30'04,0" 270°30'07,0"	90°30'05,5"	0°00'00,0"	0°00'00,0"	0	0	0,063
2123	90°30'03,0" 270°30'03,0"	90°30'03,0"	0°00'00,0"	0°00'00,0"	0	2	2,377
2119	357°09'41,0" 177°09'49,0"	357°09'45,0"	266°39'42,8"	266°39'39,7"	-3	-2	2,377
2123	90°30'00,0" 270°30'03,0"	90°30'01,5"	0°00'00,0"	0°00'00,0"	0	2	2,377
2119	90°30'03,0" 270°30'00,0"	90°30'01,5"	0°00'00,0"	0°00'00,0"	0	0	0,043
0320	1°46'04,0" 181°46'07,0"	1°46'05,5"	271°16'03,0"	271°16'03,4"	0	0	0,043
2119	90°30'02,0" 270°30'05,0"	90°30'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,043
($q = -(\Sigma d)/n = 0$	Незам.КЛ =	-1	Незам.КП = 5		Незам. средн	ee = 2
Пр	ием 5	r	1	1		T	1
2119	27°19'37,0" 207°19'40,0"	27°19'38,5"	266°39'37,5"	266°39'39,7"	2	1	1,174
2123	120°40'00,0" 300°40'02,0"	120°40'01,0"	0°00'00,0"	0°00'00,0"	0	-1	1,174
2123	120°40'02,0"	120°40'01,0"	0°00'00,0"	0°00'00,0"	0	-1	1,174

	300°40'00,0"						
2130	120°40'01,0"	120940102 511	0°00'00,0"	0°00'00,0"	0	0	0,016
2130	300°40'06,0"	120°40'03,5"	0 00 00,0	0 00 00,0	U	U	0,010
2123	14°07'38,0"	14°07'38,0"	253°27'33,5"	253°27'33,8"	0	0	0,016
2123	194°07'38,0"	14 0/ 36,0	233 27 33,3	233 27 33,8	U	U	0,010
2130	120°40'03,0"	120°40'05,5"	0°00'00,0"	0°00'00,0"	0	0	0,016
2130	300°40'08,0"	120 40 03,3	0 00 00,0	0 00 00,0	Ů	Ü	0,010
2119	120°40'01,0"	120°40'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,043
211)	300°40'06,0"	120 40 03,3	0 00 00,0	0 00 00,0	Ŭ	Ü	0,043
0320	31°56'05,0"	31°56'06,5"	271°16'03,0"	271°16'03,4"	0	0	0,043
0320	211°56'08,0"	31 30 00,3	271 10 03,0	271 10 03,1	Ů	Ŭ	0,015
2119	120°40'03,0"	120°40'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,043
211)	300°40'04,0"	120 10 03,3	0 00 00,0	0 00 00,0	Ů	Ŭ	0,015
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	2	Hезам.К $\Pi = -2$		Незам. средн	ee = 0
При	ем 6						
2120	150°50'03,0"	150050102.011	0000100 011	0000100 011	_		0.550
2130	330°50'03,0"	150°50'03,0"	0°00'00,0"	0°00'00,0"	0	1	0,563
2122	44°17'38,0"	44015120.01	252225125.211	252025122 011			0.550
2123	224°17'38,0"	44°17'38,0"	253°27'35,3"	253°27'33,8"	-2	-1	0,563
2120	150°50'03,0"	150050102 511	0000100 011	0000100 011	0	1	0.562
2130	330°50'02,0"	150°50'02,5"	0°00'00,0"	0°00'00,0"	0	1	0,563
2110	150°50'03,0"	150050102 511	000000 011	000000 011	0	0	0.111
2119	330°50'02,0"	150°50'02,5"	0°00'00,0"	0°00'00,0"	0	0	0,111
0320	62°06'07,0"	62°06'05,5"	271°16'02,8"	271°16'03,4"	1	0	0,111
0320	242°06'04,0"	02 00 03,3	271 10 02,8	2/1 10 05,4	1	U	0,111
2123	150°50'02,0"	150°50'00,5"	0°00'00,0"	0°00'00,0"	0	1	1,361
2123	330°49'59,0"	130 30 00,3	0 00 00,0	0 00 00,0	Ŭ	1	1,501
2119	57°29'40,0"	57°29'41,0"	266°39'42,0"	266°39'39,7"	-2	-1	1,361
2117	237°29'42,0"	37 29 11,0	200 37 12,0	200 37 37,7	-	•	1,501
2123	150°49'57,0"	150°49'57,5"	0°00'00,0"	0°00'00,0"	0	1	1,361
	330°49'58,0"		0 00 00,0	0 00 00,0	Ů	-	1,501
2119	150°50'03,0"	150°50'03,0"	0°00'00,0"	0°00'00,0"	0	0	0,111
	330°50'03,0"				-		·
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	0	Незам.КП = 1		Незам. средн	ee = 1
n	пи (ошибка ед.веса) =	1		т (СКО урави	нен. на станции і	направления) =	0
Станц	ия 2119						
При	ем 1						
	0°00'02,0"						
2131	180°00'00,0"	0°00'01,0"	0°00'00,0"	0°00'00,0"	0	0	0,035
	288°16'40,0"						
2117	108°16'40,0"	288°16'40,0"	288°16'38,7"	288°16'39,1"	0	0	0,035
212:	0°00'00,0"	000001	00000000000	0000000000			0.05
2131	180°00'03,0"	0°00'01,5"	0°00'00,0"	0°00'00,0"	0	0	0,035
2121	267°11'06,0"	0.65011100 00	265211125 511	2/2011/2011	-	_	Z 0.46
2131	87°11'00,0"	267°11'03,0"	267°11'03,5"	267°11'08,1"	5	2	5,348
10070	0°00'00,0"	250050150 5"	0000100 00	0000100 00	^	_	Z 0.46
18058	179°59'59,0"	359°59'59,5"	0°00'00,0"	0°00'00,0"	0	-2	5,348
18058	0°00'01,0"	359°59'59,5"	0°00'00,0"	0°00'00,0"	0	-2	5,348

1 2 3 4 5 6 7	7 8

q	$= -(\Sigma d)/n = -2$	Незам.КЛ =	= 1	Незам.КП = -1		Незам. сред	Hee = 0
	ием 2					* '	-
	30°09'55,0"						
18058	210°09'53,0"	30°09'54,0"	0°00'00,0"	0°00'00,0"	0	0	0,035
2117	318°26'39,0"	210026140 011	200016127 211	200017120 111	2	1	0,879
2117	138°26'41,0"	318°26'40,0"	288°16'37,3"	288°16'39,1"	2	1	0,879
2131	30°10'06,0"	30°10'04,0"	0°00'00,0"	0°00'00,0"	0	-1	0,879
2131	210°10'02,0"	30 10 04,0	0 00 00,0	0 00 00,0		1	0,077
2131	30°10'06,0"	30°10'01,5"	0°00'00,0"	0°00'00,0"	0	-1	0,879
	210°09'57,0"	,	,	ŕ			
18058	30°09'56,0"	30°09'55,5"	0°00'00,0"	0°00'00,0"	0	0	0,035
	210°09'55,0"						
2131	297°21'01,0"	297°21'02,5"	267°11'07,8"	267°11'08,1"	0	0	0,035
	117°21'04,0"	11 157					
	$= -(\Sigma d)/n = 0$	Незам.КЛ =	= 1	Незам.КП = 2		Незам. сред	Hee = 2
Прі	ием 3			· '			
18058	60°19'46,0"	60°19'48,0"	0°00'00,0"	0°00'00,0"	0	3	8,629
	240°19'50,0"		,				
2131	60°20'03,0"	60°19'59,5"	0°00'00,0"	0°00'00,0"	0	1	1,723
	240°19'56,0"						
2131	327°31'00,0"	327°31'01,5"	267°11'14,0"	267°11'08,1"	-6	-3	8,629
	147°31'03,0" 60°19'59,0"						
2131	240°19'57,0"	60°19'58,0"	0°00'00,0"	0°00'00,0"	0	1	1,723
	348°36'39,0"						
2117	168°36'42,0"	348°36'40,5"	288°16'41,8"	288°16'39,1"	-3	-1	1,723
	60°19'46,0"						
18058	240°19'48,0"	60°19'47,0"	0°00'00,0"	0°00'00,0"	0	3	8,629
a	$= -(\Sigma d)/n = 3$	Незам.КЛ =	= 0	Незам.КП = 2		Незам. сред	Hee = 1
	ием 4					1 /-	•
1171	90°29'49,0"						
18058	270°29'48,0"	90°29'48,5"	0°00'00,0"	0°00'00,0"	0	-1	0,473
	90°29'49,0"						
18058	270°29'49,0"	90°29'49,0"	0°00'00,0"	0°00'00,0"	0	-1	0,473
	357°40'52,0"						
2131	177°40'59,0"	357°40'55,5"	267°11'06,8"	267°11'08,1"	1	1	0,473
2121	90°29'56,0"	0000000 511	0000100 011	0900100 011	0	1	1 700
2131	270°30'05,0"	90°30'00,5"	0°00'00,0"	0°00'00,0"	0	1	1,723
2117	18°46'43,0"	18°46'42,0"	288°16'41,8"	288°16'39,1"	-3	-1	1,723
211/	198°46'41,0"	10 70 72,0	200 1041,0	200 10 37,1	- 5	-1	1,723
2131	90°29'57,0"	90°30'00,0"	0°00'00,0"	0°00'00,0"	0	1	1,723
	270°30'03,0"	20 00,0	0 00 00,0	0 00 00,0		•	1,723
q	$= -(\Sigma d)/n = 1$	Незам.КЛ =	= -1	Незам.КП = 2	езам.КП = 2 Незам. среднее = 0		
Прі	ием 5						
19059	120°39'49,0"	120020140 511	0000100 011	000000 011	0	1	1 700
18058	300°39'50,0"	120°39'49,5"	0°00'00,0"	0°00'00,0"	0	1	1,723
2131	27°50'59,0"	27°51'00,0"	267°11'10,8"	267°11'08,1"	-3	-1	1,723

	T	1	1	T	T	T	<u> </u>	
	207°51'01,0"							
18058	120°39'49,0"	120°39'49,0"	0°00'00,0"	0°00'00,0"	0	1	1,723	
10030	300°39'49,0"	120 39 49,0	0 00 00,0	0-00-00,0*	Ü	1	1,723	
2131	120°40'03,0"	120040100 511	0°00'00,0"	0°00'00,0"	0	1	0.660	
2131	300°39'58,0"	- 120°40'00,5"	0 00 00,0	0 00 00,0	0	-1	0,660	
	120°40'00,0"	120020150 511	0000100 011	0000100 011			0.550	
2131	300°39'59,0"	- 120°39'59,5"	0°00'00,0"	0°00'00,0"	0	-1	0,660	
	48°56'35,0"							
2117	228°56'40,0"	- 48°56'37,5"	288°16'37,5"	288°16'39,1"	2	1	0,660	
a	$= -(\Sigma d)/n = -1$	Незам.КЛ =	-3	Незам.КП = 1	L	Незам. средн	ee = -1	
	ем 6	11000101		110000011111 1		ттомын ороды		
При	1		1	1	I	1	<u> </u>	
18058	150°49'57,0"	150°50'01,5"	0°00'00,0"	0°00'00,0"	0	-1	1,129	
	330°50'06,0"							
2131	58°01'05,0"	58°01'07,5"	267°11'06,0"	267°11'08,1"	2	1	1,129	
	238°01'10,0"		ŕ	ŕ			,	
2131	150°50'02,0"	150°50'03,0"	0°00'00.0"	0°00'00,0"	0	-1	0,473	
2131	330°50'04,0"	150 50 05,0	0 00 00,0	0 00 00,0	Ŭ	1	0,475	
2117	79°06'40,0"	79°06'41,0"	288°16'37,8"	288°16'39,1"	1	1	0,473	
2117	259°06'42,0"	79 00 41,0	288 1037,8	288 10 39,1	1	1	0,473	
2121	150°50'06,0"	1.500.50102.511	0000100 011	0000100 011				
2131	330°50'01,0"	150°50'03,5"	0°00'00,0"	0°00'00,0"	0	-1	0,473	
	150°49'58,0"							
18058	330°50'05,0"	150°50'01,5"	0°00'00,0"	0°00'00,0"	0	-1	1,129	
a	$= -(\Sigma d)/n = -1$	Незам.КЛ =	_1	Незам.КП = 1		Незам. средн	ee = 0	
			-1					
	пи (ошибка ед.веса) =	3		т (СКО ураві	нен. на станции	направления) =	1	
Стани	ция 2117							
При	ем 1							
	0°00'00,0"				_	_		
2119	180°00'02,0"	0°00'01,0"	0°00'00,0"	0°00'00,0"	0	0	0,000	
	253°07'20,0"			252007115.011	_			
2123	73°07'19,0"	253°07'19,5"	253°07'15,8"	253°07'15,8"	0	0	0,000	
	0°00'04,0"							
2119	180°00'09,0"	0°00'06,5"	0°00'00,0"	0°00'00,0"	0	0	0,000	
	$= -(\Sigma d)/n = 0$	Незам.КЛ =	4	Незам.КП = 7		Hanar anarri	22 - 5	
		Пезам.КЛ —	4	Пезам.КП — /		Незам. средн	<u> </u>	
При	ем 2	1	1	ı	T	T	T	
2123	283°17'17,0"	283°17'19,0"	253°07'15,5"	253°07'15,8"	0	0	0,021	
	103°17'21,0"	200 17 15,0	200 07 10,0	233 07 13,0		U	0,021	
2119	30°10'04,0"	30°10'03,5"	0°00'00,0"	0°00'00,0"	0	0	0.021	
	210°10'03,0"	30 1003,3	0 00 00,0	0 00 00,0			0,021	
2116	30°10'02,0"	20010102 5"	0000100 011	000000 0"			0.001	
2119	210°10'05,0"	30°10'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,021	
$q = -(\Sigma d)/n = 0$		Незам.КЛ =	Незам.КЛ = 2		Незам.КП = -2 Незам. с		реднее = 0	
	чем 3					1.1		
при	1				T	1	<u> </u>	
2119	60°20'00,0"	60°20'03,0"	0°00'00,0"	0°00'00,0"	0	0	0,230	
	240°20'06,0"		-					
2123	313°27'20,0"	313°27'20,5"	253°07'16,8"	253°07'15,8"	-1	0	0,230	
	133°27'21,0"					1		

2119	60°20'05,0" 240°20'04,0"	60°20'04,5"	0°00'00,0"	0°00'00,0"	0	0	0,230
q	$q = -(\Sigma d)/n = 0$ Незам.КЛ = 5			Незам.КП = -2		Незам. средн	ee = 1
При	ием 4						
2123	343°37'18,0" 163°37'21,0"	343°37'19,5"	253°07'15,3"	253°07'15,8"	1	0	0,073
2119	90°30'05,0" 270°30'05,0"	90°30'05,0"	0°00'00,0"	0°00'00,0"	0	0	0,073
2119	90°30'04,0" 270°30'03,0"	90°30'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,073
a	$= -(\Sigma d)/n = 0$	Незам.КЛ =	· -1	Незам.КП = -2		Незам. средн	ee = -1
	ием 5	11034201				ттозам ороди	
При	120°40'02,0"						
2119	300°40'05,0"	120°40'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,073
2123	13°47'18,0" 193°47'19,0"	13°47'18,5"	253°07'15,3"	253°07'15,8"	1	0	0,073
2119	120°40'00,0" 300°40'06,0"	120°40'03,0"	0°00'00,0"	0°00'00,0"	0	0	0,073
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	: 2	Незам.КП = -1		Незам. средн	ee = 1
При	ием б						
2119	150°50'05,0" 330°50'03,0"	150°50'04,0"	0°00'00,0"	0°00'00,0"	0	0	0,053
2123	43°57'19,0" 223°57'21,0"	43°57'20,0"	253°07'16,2"	253°07'15,8"	0	0	0,053
2119	150°50'03,0" 330°50'04,0"	150°50'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,053
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	: 2	Hезам.КП = -1		Незам. средн	ee = 0
	пи (ошибка ед.веса) =	0		т (СКО уравн	ен. на станиии	направления) =	
	ция 0320	-		()1	<u> </u>	1 /	1
	ием 1						
При	0°00'00,0"		1	1			1
2131	180°00'00,0"	0°00'00,0"	0°00'00,0"	0°00'00,0"	0	1	0,918
18032	264°59'48,0" 84°59'46,0"	264°59'47,0"	264°59'46,8"	264°59'44,8"	-2	-1	0,918
2131	0°00'01,0" 180°00'00,0"	0°00'00,5"	0°00'00,0"	0°00'00,0"	0	1	0,918
q	$=$ - $(\Sigma d)/n = 1$	Незам.КЛ =	: 1	Незам.КП = 0		Незам. средн	ee = 1
При	ием 2						
18032	295°09'47,0" 115°09'43,0"	295°09'45,0"	264°59'45,0"	264°59'44,8"	0	0	0,007
2131	30°10'02,0" 210°10'00,0"	30°10'01,0"	0°00'00,0"	0°00'00,0"	0	0	0,007
2131	30°10'01,0" 210°09'57,0"	30°09'59,0"	0°00'00,0"	0°00'00,0"	0	0	0,007
u	$= -(\Sigma d)/n = 0$	Незам.КЛ =	: 1	Незам.КП = 3		Незам. средн	ee = 2
при	ием 3						

2131	60°19'59,0"	60°19'58,0"	0°00'00,0"	0°00'00,0"	0	-1	0,444	
2131	240°19'57,0"	00 17 30,0						
18032	325°19'46,0" 145°19'39,0"	325°19'42,5"	264°59'43,5"	264°59'44,8"	1	1	0,444	
2131	60°20'01,0"	60°20'00,0"	0°00'00,0"	0°00'00,0"	0	-1	0,444	
	$240^{\circ}19'59,0"$ = -(\(\Sigma d\)/n = -1	Незам.КЛ =	2	Незам.КП = 2		Незам. средн	2 2	
		He3am.KJI –	2	Hesam.KII – 2		пезам. средн	<u>ce – 2</u>	
При	10.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		T					
2131	270°29'58,0"	90°29'59,5"	0°00'00,0"	0°00'00,0"	0	-1	0,444	
19022	355°29'48,0"	255°20142.0"	264050142 511	264950144 911	1	1	0.444	
18032	175°29'38,0"	355°29'43,0"	264°59'43,5"	264°59'44,8"	1	1	0,444	
2131	90°30'02,0"	90°29'59,5"	0°00'00,0"	0°00'00,0"	0	-1	0,444	
	270°29'57,0"		1				0	
	$= -(\Sigma d)/n = -1$	Незам.КЛ =	1	Незам.КП = -1		Незам. средн	ee = 0	
При	<i>ием 5</i> ¬ г		T	1		T	T	
18032	25°39'48,0" 205°39'38,0"	25°39'43,0"	264°59'46,0"	264°59'44,8"	-1	-1	0,340	
2131	120°39'57,0"	120°39'57,0"	0°00'00,0"	0°00'00,0"	0	1	0,340	
	300°39'57,0"	120 05 07,0			-			
2131	120°39'57,0" 300°39'57,0"	120°39'57,0"	0°00'00,0"	0°00'00,0"	0	1	0,340	
$q = -(\Sigma d)/n = 1$		Незам.КЛ = 0		Незам.КП = 0	Незам. среднее = 0			
При	ием 6							
2131	150°49'58,0" 330°49'59,0"	150°49'58,5"	0°00'00,0"	0°00'00,0"	0	0	0,085	
2121	150°50'00,0"	150040150 011	0200100 011	000000 011	0	0	0.005	
2131	330°49'56,0"	150°49'58,0"	0°00'00,0"	0°00'00,0"	0	0	0,085	
18032	55°49'45,0" 235°49'40,0"	55°49'42,5"	264°59'44,3"	264°59'44,8"	1	0	0,085	
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	Незам.КЛ = 2 Н		Незам.КП = -3		ee = -1	
1	ти (ошибка ед.веса) =	1		m (СКО уравнен. на ста		анции направления) = 0		
	ция 18032			, J1	· · · · · · · · · · · · · · · · · · ·	,		
	ием 1							
	0°00'00,0"							
0320	180°00'01,0"	0°00'00,5"	0°00'00,0"	0°00'00,0"	0	1	0,532	
18058	157°06'50,0" 337°06'53,0"	157°06'51,5"	157°06'50,0"	157°06'48,5"	-1	-1	0,532	
0320	0°00'00,0"	0°00'02,5"	0°00'00,0"	0°00'00,0"	0	1	0,532	
_	180°00'05,0"	ПКП —	0	Незам.КП = 4		11	2	
	$= -(\Sigma d)/n = 1$	Незам.КЛ =	0	незам.КП = 4		Незам. средн	ee = 2	
При	<i>1ем</i> 2			<u> </u>				
0320	30°10'03,0" 210°10'08,0"	30°10'05,5"	0°00'00,0"	0°00'00,0"	0	-1	0,271	
0320	30°10'01,0" 210°10'08,0"	30°10'04,5"	0°00'00,0"	0°00'00,0"	0	-1	0,271	
18058	187°16'50,0"	187°16'52,5"	157°06'47,5"	157°06'48,5"	1	1	0,271	

	7°16'55,0"							
$q = -(\Sigma d)/n = -1$		Незам.КЛ = 2		Незам.КП = 0	Незам.КП = 0 Незам. среднее		нее = 1	
При	ием 3							
18058	217°26'50,0" 37°26'52,0"	217°26'51,0"	157°06'47,5"	157°06'48,5"	1	1	0,271	
0320	60°20'02,0" 240°20'05,0"	60°20'03,5"	0°00'00,0"	0°00'00,0"	0	-1	0,271	
0320	60°20'00,0" 240°20'07,0"	60°20'03,5"	0°00'00,0"	0°00'00,0"	0	-1	0,271	
q	$= -(\Sigma d)/n = -1$	Незам.КЛ =	Iезам.КЛ = -2 Незам.КП = 2 Незам.			Незам. сред	Hee = 0	
При	ием 4							
0320	90°29'59,0" 270°30'05,0"	90°30'02,0"	0°00'00,0"	0°00'00,0"	0	1	0,365	
0320	90°30'01,0" 270°30'06,0"	90°30'03,5"	0°00'00,0"	0°00'00,0"	0	1	0,365	
18058	247°36'49,0" 67°36'56,0"	247°36'52,5"	157°06'49,8"	157°06'48,5"	-1	-1	0,365	
q	$= -(\Sigma d)/n = 1$	Незам.КЛ =	2	Незам.КП = 1		Незам. сред	нее = 2	
При	ием 5							
0320	120°40'01,0" 300°40'03,0"	120°40'02,0"	0°00'00,0"	0°00'00,0"	0	0	0,125	
0320	120°40'00,0" 300°40'01,0"	120°40'00,5"	0°00'00,0"	0°00'00,0"	0	0	0,125	
18058	277°46'51,0" 97°46'50,0"	277°46'50,5"	157°06'49,2"	157°06'48,5"	-1	0	0,125	
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	-1	Незам.КП = -2		Незам. сред	нее = -2	
При	ием 6							
0320	150°50'02,0" 330°50'03,0"	150°50'02,5"	0°00'00,0"	0°00'00,0"	0	-1	0,417	
18058	307°56'48,0" 127°56'52,0"	307°56'50,0"	157°06'47,2"	157°06'48,5"	1	1	0,417	
0320	150°50'02,0" 330°50'04,0"	150°50'03,0"	0°00'00,0"	0°00'00,0"	0	-1	0,417	
q	$= -(\Sigma d)/n = -1$	Незам.КЛ =	0	Незам.КП = -1	Незам.КП = -1 Незам. среднее = -1			
mu (ошибка ед.веса) = 1		1		m (СКО уравн	ен. на станци	и направления) =	= 0	
Стані	ция 18058							
При	ием 1							
18032	0°00'02,0" 180°00'01,0"	0°00'01,5"	0°00'00,0"	0°00'00,0"	0	0	0,011	
18032	0°00'00,0" 180°00'03,0"	0°00'01,5"	0°00'00,0"	0°00'00,0"	0	0	0,011	
2119	299°26'12,0" 119°26'13,0"	299°26'12,5"	299°26'11,0"	299°26'11,2"	0	0	0,011	
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	2	Незам.КП = -2		Незам. сред	Hee = 0	
При	ием 2							
18032	30°10'00,0"	30°10'03,5"	0°00'00,0"	0°00'00,0"	0	-1	1,511	

4 5

1	2	3	4	5	6	7	8	
	210°10'07,0"							
2119	329°36'14,0" 149°36'11,0"	329°36'12,5"	299°26'08,8"	299°26'11,2"	2	1	1,511	
18032	30°10'01,0" 210°10'07,0"	30°10'04,0"	0°00'00,0"	0°00'00,0"	0	-1	1,511	
q	$= -(\Sigma d)/n = -1$	Незам.КЛ =	-1	Незам.КП = 0		Незам. среді	Hee = -1	
	ием 3					*		
18032	60°20'02,0" 240°20'02,0"	60°20'02,0"	0°00'00,0"	0°00'00,0"	0	2	2,313	
2119	359°46'18,0" 179°46'16,0"	359°46'17,0"	299°26'14,3"	299°26'11,2"	-3	-2	2,313	
18032	60°20'03,0" 240°20'04,0"	60°20'03,5"	0°00'00,0"	0°00'00,0"	0	2	2,313	
q	$= -(\Sigma d)/n = 2$	Незам.КЛ =	-1	Незам.КП = -2		Незам. среднее = -1		
	ием 4							
18032	90°30'05,0" 270°30'03,0"	90°30'04,0"	0°00'00,0"	0°00'00,0"	0	0	0,073	
2119	29°56'15,0" 209°56'17,0"	29°56'16,0"	299°26'11,8"	299°26'11,2"	-1	0	0,073	
18032	90°30'04,0" 270°30'05,0"	90°30'04,5"	0°00'00,0"	0°00'00,0"	0	0	0,073	
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	1	Незам.КП = -2		Незам. сред	Hee = 0	
При	ием 5							
18032	120°40'01,0" 300°40'00,0"	120°40'00,5"	0°00'00,0"	0°00'00,0"	0	0	0,053	
18032	120°40'00,0" 300°40'02,0"	120°40'01,0"	0°00'00,0"	0°00'00,0"	0	0	0,053	
2119	60°06'12,0" 240°06'11,0"	60°06'11,5"	299°26'10,8"	299°26'11,2"	0	0	0,053	
q	$= -(\Sigma d)/n = 0$	Незам.КЛ =	Незам.К $\Pi = -1$ Незам.К $\Pi = 2$		Незам. среднее = 0			
При	ием 6							
18032	150°50'03,0" 330°50'04,0"	150°50'03,5"	0°00'00,0"	0°00'00,0"	0	0	0,053	
2119	90°16'14,0" 270°16'15,0"	90°16'14,5"	299°26'10,8"	299°26'11,2"	0	0	0,053	
18032	150°50'06,0" 330°50'02,0"	150°50'04,0"	0°00'00,0"	0°00'00,0"	0	0	0,053	
q	$q = -(\Sigma d)/n = 0$ Незам.КЛ = -3		-3	Незам.КП = 2 Незам. среднее = 0			Hee = 0	
	mu (ошибка ед.веса) = 1			m (СКО уравнен. на станции направления) = 1				
				()F.		1	1 .	