Tables d'interpolation de Ah'

H' = minutes et secondes de H convertis en degrés pour le calcul d'Ah local.

Exemple

H = 15 h 43 min 15 sec

=> H' = 43 min 15 sec

=> Ah' 10° 48,8'

minutes de H	pages
< 10 min	1
< 20 min	2
< 30 min	3
< 40 min	4
< 50 min	5
< 60 min	6

minutes

sec.	0	1	2	3	4	5	6	7	8	9	10
0	0°00'	0°15'	0°30'	0°45'	1°00'	1°15'	1°30'	1°45'	2°00'	2°15'	2°30'
1	0°00'	0°15'	0°30'	0°45'	1°00'	1°15'	1°30'	1°45'	2°00'	2°15'	2°30'
2	0°01'	0°16'	0°31'	0°46'	1°00'	1°16'	1°31'	1°46'	2°00'	2°16'	2°31'
3	0°01'	0°16'	0°31'	0°46'	1°01'	1°16'	1°31'	1°46'	2°01'	2°16'	2°31'
4	0°01'	0°16'	0°31'	0°46'	1°01'	1°16'	1°31'	1°46'	2°01'	2°16'	2°31'
5	0°01'	0°16'	0°31'	0°46'	1°01'	1°16'	1°31'	1°46'	2°01'	2°16'	2°31'
6	0°02'	0°17'	0°32'	0°47'	1°01'	1°17'	1°32'	1°47'	2°02'	2°17'	2°32'
7	0°02'	0°17'	0°32'	0°47'	1°02'	1°17'	1°32'	1°47'	2°02'	2°17'	2°32'
8	0°02'	0°17'	0°32'	0°47'	1°02'	1°17'	1°32'	1°47'	2°02'	2°17'	2°32'
9	0°02'	0°17'	0°32'	0°47'	1°02'	1°17'	1°32'	1°47'	2°02'	2°17'	2°32'
10	0°03'	0°18'	0°33'	0°48'	1°03'	1°18'	1°33'	1°48'	2°02'	2°18'	2°33'
11	0°03'	0°18'	0°33'	0°48'	1°03'	1°18'	1°33'	1°48'	2°03'	2°18'	2°33'
12	0°03'	0°18'	0°33'	0°48'	1°03'	1°18'	1°33'	1°48'	2°03'	2°18'	2°33'
13	0°03'	0°18'	0°33'	0°48'	1°03'	1°18'	1°33'	1°48'	2°03'	2°18'	2°33'
14	0°04'	0°19'	0°34'	0°49'	1°04'	1°19'	1°34'	1°49'	2°03'	2°19'	2°34'
15	0°04'	0°19'	0°34'	0°49'	1°04'	1°19'	1°34'	1°49'	2°04'	2°19'	2°34'
16	0°04'	0°19'	0°34'	0°49'	1°04'	1°19'	1°34'	1°49'	2°04'	2°19'	2°34'
17	0°04'	0°19'	0°34'	0°49'	1°04'	1°19'	1°34'	1°49'	2°04'	2°19'	2°34'
18	0°05'	0°20'	0°35'	0°50'	1°04'	1°20'	1°35'	1°50'	2°05'	2°20'	2°35'
19	0°05'	0°20'	0°35'	0°50'	1°05'	1°20'	1°35'	1°50'	2°05'	2°20'	2°35'
20	0°05'	0°20'	0°35'	0°50'	1°05'	1°20'	1°35'	1°50'	2°05'	2°20'	2°35'
21	0°05'	0°20'	0°35'	0°50'	1°05'	1°20'	1°35'	1°50'	2°05'	2°20'	2°35'
22	0°06'	0°21'	0°36'	0°51'	1°05'	1°21'	1°36'	1°51'	2°06'	2°21'	2°36'
23	0°06'	0°21'	0°36'	0°51'	1°06'	1°21'	1°36'	1°51'	2°06'	2°21'	2°36'
24	0°06'	0°21'	0°36'	0°51'	1°06'	1°21'	1°36'	1°51'	2°06'	2°21'	2°36'
25	0°06'	0°21'	0°36'	0°51'	1°06'	1°21'	1°36'	1°51'	2°06'	2°21'	2°36'
26	0°07'	0°22'	0°37'	0°52'	1°07'	1°22'	1°37'	1°52'	2°07'	2°22'	2°37'
27	0°07'	0°22'	0°37'	0°52'	1°07'	1°22'	1°37'	1°52'	2°07'	2°22'	2°37'
28	0°07'	0°22'	0°37'	0°52'	1°07'	1°22'	1°37'	1°52'	2°07'	2°22'	2°37'
29	0°07'	0°22'	0°37'	0°52'	1°07'	1°22'	1°37'	1°52'	2°07'	2°22'	2°37'
30	0°08'	0°23'	0°38'	0°53'	1°08'	1°23'	1°38'	1°53'	2°08'	2°23'	2°38'
31	0°08'	0°23'	0°38'	0°53'	1°08'	1°23'	1°38'	1°53'	2°08'	2°23'	2°38'
32	0°08'	0°23'	0°38'	0°53'	1°08'	1°23'	1°38'	1°53'	2°08'	2°23'	2°38'
33	0°08'	0°23'	0°38'	0°53'	1°08'	1°23'	1°38'	1°53'	2°08'	2°23'	2°38'
34	0°09'	0°24'	0°39'	0°54'	1°09'	1°24'	1°39'	1°54'	2°08'	2°24'	2°39'
35	0°09'	0°24'	0°39'	0°54'	1°09'	1°24'	1°39'	1°54'	2°09'	2°24'	2°39'
36	0°09'	0°24'	0°39'	0°54'	1°09'	1°24'	1°39'	1°54'	2°09'	2°24'	2°39'
37	0°09'	0°24'	0°39'	0°54'	1°09'	1°24'	1°39'	1°54'	2°09'	2°24'	2°39'
38	0°10'	0°25'	0°40'	0°55'	1°09'	1°25'	1°40'	1°55'	2°10'	2°25'	2°40'
39	0°10'	0°25'	0°40'	0°55'	1°10'	1°25'	1°40'	1°55'	2°10'	2°25'	2°40'
40	0°10'	0°25'	0°40'	0°55'	1°10'	1°25'	1°40'	1°55'	2°10'	2°25'	2°40'
41	0°10'	0°25'	0°40'	0°55'	1°10'	1°25'	1°40'	1°55'	2°10'	2°25'	2°40'
42	0°11'	0°26'	0°41'	0°56'	1°11'	1°26'	1°41'	1°56'	2°11'	2°26'	2°41'
43	0°11'	0°26'	0°41'	0°56'	1°11'	1°26'	1°41'	1°56'	2°11'	2°26'	2°41'
44	0°11'	0°26'	0°41'	0°56'	1°11'	1°26'	1°41'	1°56'	2°11'	2°26'	2°41'
45	0°11'	0°26'	0°41'	0°56'	1°11'	1°26'	1°41'	1°56'	2°11'	2°26'	2°41'
46	0°12'	0°27'	0°42'	0°57'	1°12'	1°27'	1°42'	1°57'	2°12'	2°27'	2°42'
47	0°12'	0°27'	0°42'	0°57'	1°12'	1°27'	1°42'	1°57'	2°12'	2°27'	2°42'
48	0°12'	0°27'	0°42'	0°57'	1°12'	1°27'	1°42'	1°57'	2°12'	2°27'	2°42'
49	0°12'	0°27'	0°42'	0°57'	1°12'	1°27'	1°42'	1°57'	2°12'	2°27'	2°42'
50	0°13'	0°28'	0°43'	0°58'	1°13'	1°28'	1°43'	1°58'	2°13'	2°28'	2°43'
51	0°13'	0°28'	0°43'	0°58'	1°13'	1°28'	1°43'	1°58'	2°13'	2°28'	2°43'
52	0°13'	0°28'	0°43'	0°58'	1°13'	1°28'	1°43'	1°58'	2°13'	2°28'	2°43'
53	0°13'	0°28'	0°43'	0°58'	1°13'	1°28'	1°43'	1°58'	2°13'	2°28'	2°43'
54	0°14'	0°29'	0°44'	0°59'	1°14'	1°29'	1°44'	1°59'	2°14'	2°29'	2°44'
55	0°14'	0°29'	0°44'	0°59'	1°14'	1°29'	1°44'	1°59'	2°14'	2°29'	2°44'
56	0°14'	0°29'	0°44'	0°59'	1°14'	1°29'	1°44'	1°59'	2°14'	2°29'	2°44'
57	0°14'	0°29'	0°44'	0°59'	1°14'	1°29'	1°44'	1°59'	2°14'	2°29'	2°44'
58	0°15'	0°30'	0°45'	0°60'	1°15'	1°30'	1°45'	1°60'	2°15'	2°30'	2°45'
59	0°15'	0°30'	0°45'	0°60'	1°15'	1°30'	1°45'	1°60'	2°15'	2°30'	2°45'

sec.	11	12	13	14	15	16	17	18	19	20
0	2°45'	3°00'	3°15'	3°30'	3°45'	4°00'	4°15'	4°30'	4°45'	5°00'
1	2°45'	3°00'	3°15'	3°30'	3°45'	4°00'	4°15'	4°30'	4°45'	5°00'
2	2°46'	3°00'	3°16'	3°31'	3°46'	4°01'	4°16'	4°31'	4°46'	5°01'
3	2°46'	3°01'	3°16'	3°31'	3°46'	4°01'	4°16'	4°31'	4°46'	5°01'
4	2°46'	3°01'	3°16'	3°31'	3°46'	4°01'	4°16'	4°31'	4°46'	5°01'
5	2°46'	3°01'	3°16'	3°31'	3°46'	4°01'	4°16'	4°31'	4°46'	5°01'
6	2°47'	3°01'	3°17'	3°32'	3°47'	4°01'	4°17'	4°32'	4°47'	5°02'
7	2°47'	3°02'	3°17'	3°32'	3°47'	4°02'	4°17'	4°32'	4°47'	5°02'
8	2°47'	3°02'	3°17'	3°32'	3°47'	4°02'	4°17'	4°32'	4°47'	5°02'
9	2°47'	3°02'	3°17'	3°32'	3°47'	4°02'	4°17'	4°32'	4°47'	5°02'
10	2°48'	3°02'	3°18'	3°33'	3°48'	4°02'	4°18'	4°33'	4°48'	5°03'
11	2°48'	3°03'	3°18'	3°33'	3°48'	4°03'	4°18'	4°33'	4°48'	5°03'
12	2°48'	3°03'	3°18'	3°33'	3°48'	4°03'	4°18'	4°33'	4°48'	5°03'
13	2°48'	3°03'	3°18'	3°33'	3°48'	4°03'	4°18'	4°33'	4°48'	5°03'
14	2°49'	3°04'	3°19'	3°34'	3°49'	4°04'	4°19'	4°34'	4°49'	5°03'
15	2°49'	3°04'	3°19'	3°34'	3°49'	4°04'	4°19'	4°34'	4°49'	5°04'
16	2°49'	3°04'	3°19'	3°34'	3°49'	4°04'	4°19'	4°34'	4°49'	5°04'
17	2°49'	3°04'	3°19'	3°34'	3°49'	4°04'	4°19'	4°34'	4°49'	5°04'
18	2°50'	3°04'	3°20'	3°35'	3°50'	4°05'	4°20'	4°35'	4°50'	5°05'
19	2°50'	3°05'	3°20'	3°35'	3°50'	4°05'	4°20'	4°35'	4°50'	5°05'
20	2°50'	3°05'	3°20'	3°35'	3°50'	4°05'	4°20'	4°35'	4°50'	5°05'
21	2°50'	3°05'	3°20'	3°35'	3°50'	4°05'	4°20'	4°35'	4°50'	5°05'
22	2°51'	3°06'	3°21'	3°36'	3°51'	4°06'	4°21'	4°36'	4°51'	5°06'
23	2°51'	3°06'	3°21'	3°36'	3°51'	4°06'	4°21'	4°36'	4°51'	5°06'
24	2°51'	3°06'	3°21'	3°36'	3°51'	4°06'	4°21'	4°36'	4°51'	5°06'
25	2°51'	3°06'	3°21'	3°36'	3°51'	4°06'	4°21'	4°36'	4°51'	5°06'
26	2°52'	3°07'	3°22'	3°37'	3°52'	4°07'	4°22'	4°37'	4°52'	5°07'
27	2°52'	3°07'	3°22'	3°37'	3°52'	4°07'	4°22'	4°37'	4°52'	5°07'
28	2°52'	3°07'	3°22'	3°37'	3°52'	4°07'	4°22'	4°37'	4°52'	5°07'
29	2°52'	3°07'	3°22'	3°37'	3°52'	4°07'	4°22'	4°37'	4°52'	5°07'
30	2°53'	3°08'	3°23'	3°38'	3°53'	4°08'	4°23'	4°38'	4°53'	5°08'
31	2°53'	3°08'	3°23'	3°38'	3°53'	4°08'	4°23'	4°38'	4°53'	5°08'
32	2°53'	3°08'	3°23'	3°38'	3°53'	4°08'	4°23'	4°38'	4°53'	5°08'
33	2°53'	3°08'	3°23'	3°38'	3°53'	4°08'	4°23'	4°38'	4°53'	5°08'
34	2°54'	3°08'	3°24'	3°39'	3°54'	4°08'	4°24'	4°39'	4°54'	5°08'
35	2°54'	3°09'	3°24'	3°39'	3°54'	4°09'	4°24'	4°39'	4°54'	5°09'
36	2°54'	3°09'	3°24'	3°39'	3°54'	4°09'	4°24'	4°39'	4°54'	5°09'
37	2°54'	3°09'	3°24'	3°39'	3°54'	4°09'	4°24'	4°39'	4°54'	5°09'
38	2°55'	3°09'	3°25'	3°40'	3°55'	4°09'	4°25'	4°40'	4°55'	5°09'
39	2°55'	3°10'	3°25'	3°40'	3°55'	4°10'	4°25'	4°40'	4°55'	5°10'
40	2°55'	3°10'	3°25'	3°40'	3°55'	4°10'	4°25'	4°40'	4°55'	5°10'
41	2°55'	3°10'	3°25'	3°40'	3°55'	4°10'	4°25'	4°40'	4°55'	5°10'
42	2°56'	3°11'	3°26'	3°41'	3°56'	4°11'	4°26'	4°41'	4°56'	5°11'
43	2°56'	3°11'	3°26'	3°41'	3°56'	4°11'	4°26'	4°41'	4°56'	5°11'
44	2°56'	3°11'	3°26'	3°41'	3°56'	4°11'	4°26'	4°41'	4°56'	5°11'
45	2°56'	3°11'	3°26'	3°41'	3°56'	4°11'	4°26'	4°41'	4°56'	5°11'
46	2°57'	3°12'	3°27'	3°42'	3°57'	4°12'	4°27'	4°42'	4°57'	5°12'
47	2°57'	3°12'	3°27'	3°42'	3°57'	4°12'	4°27'	4°42'	4°57'	5°12'
48	2°57'	3°12'	3°27'	3°42'	3°57'	4°12'	4°27'	4°42'	4°57'	5°12'
49	2°57'	3°12'	3°27'	3°42'	3°57'	4°12'	4°27'	4°42'	4°57'	5°12'
50	2°58'	3°13'	3°28'	3°43'	3°58'	4°13'	4°28'	4°43'	4°58'	5°13'
51	2°58'	3°13'	3°28'	3°43'	3°58'	4°13'	4°28'	4°43'	4°58'	5°13'
52	2°58'	3°13'	3°28'	3°43'	3°58'	4°13'	4°28'	4°43'	4°58'	5°13'
53	2°58'	3°13'	3°28'	3°43'	3°58'	4°13'	4°28'	4°43'	4°58'	5°13'
54	2°59'	3°14'	3°29'	3°44'	3°59'	4°14'	4°29'	4°44'	4°59'	5°14'
55	2°59'	3°14'	3°29'	3°44'	3°59'	4°14'	4°29'	4°44'	4°59'	5°14'
56	2°59'	3°14'	3°29'	3°44'	3°59'	4°14'	4°29'	4°44'	4°59'	5°14'
57	2°59'	3°14'	3°29'	3°44'	3°59'	4°14'	4°29'	4°44'	4°59'	5°14'
58	2°60'	3°15'	3°30'	3°45'	3°60'	4°15'	4°30'	4°45'	4°60'	5°15'
59	2°60'	3°15'	3°30'	3°45'	3°60'	4°15'	4°30'	4°45'	4°60'	5°15'

sec.	21	22	23	24	25	26	27	28	29	30
0	5°15'	5°30'	5°45'	6°00'	6°15'	6°30'	6°45'	7°00'	7°15'	7°30'
1	5°15'	5°30'	5°45'	6°00'	6°15'	6°30'	6°45'	7°00'	7°15'	7°30'
2	5°16'	5°31'	5°46'	6°00'	6°16'	6°31'	6°46'	7°00'	7°16'	7°31'
3	5°16'	5°31'	5°46'	6°01'	6°16'	6°31'	6°46'	7°01'	7°16'	7°31'
4	5°16'	5°31'	5°46'	6°01'	6°16'	6°31'	6°46'	7°01'	7°16'	7°31'
5	5°16'	5°31'	5°46'	6°01'	6°16'	6°31'	6°46'	7°01'	7°16'	7°31'
6	5°17'	5°32'	5°47'	6°02'	6°17'	6°32'	6°47'	7°01'	7°17'	7°32'
7	5°17'	5°32'	5°47'	6°02'	6°17'	6°32'	6°47'	7°02'	7°17'	7°32'
8	5°17'	5°32'	5°47'	6°02'	6°17'	6°32'	6°47'	7°02'	7°17'	7°32'
9	5°17'	5°32'	5°47'	6°02'	6°17'	6°32'	6°47'	7°02'	7°17'	7°32'
10	5°18'	5°33'	5°48'	6°03'	6°18'	6°33'	6°48'	7°03'	7°18'	7°33'
11	5°18'	5°33'	5°48'	6°03'	6°18'	6°33'	6°48'	7°03'	7°18'	7°33'
12	5°18'	5°33'	5°48'	6°03'	6°18'	6°33'	6°48'	7°03'	7°18'	7°33'
13	5°18'	5°33'	5°48'	6°03'	6°18'	6°33'	6°48'	7°03'	7°18'	7°33'
14	5°19'	5°34'	5°49'	6°04'	6°19'	6°34'	6°49'	7°04'	7°19'	7°34'
15	5°19'	5°34'	5°49'	6°04'	6°19'	6°34'	6°49'	7°04'	7°19'	7°34'
16	5°19'	5°34'	5°49'	6°04'	6°19'	6°34'	6°49'	7°04'	7°19'	7°34'
17	5°19'	5°34'	5°49'	6°04'	6°19'	6°34'	6°49'	7°04'	7°19'	7°34'
18	5°20'	5°35'	5°50'	6°05'	6°20'	6°35'	6°50'	7°05'	7°20'	7°35'
19	5°20'	5°35'	5°50'	6°05'	6°20'	6°35'	6°50'	7°05'	7°20'	7°35'
20	5°20'	5°35'	5°50'	6°05'	6°20'	6°35'	6°50'	7°05'	7°20'	7°35'
21	5°20'	5°35'	5°50'	6°05'	6°20'	6°35'	6°50'	7°05'	7°20'	7°35'
22	5°21'	5°36'	5°51'	6°06'	6°21'	6°36'	6°51'	7°06'	7°21'	7°36'
23	5°21'	5°36'	5°51'	6°06'	6°21'	6°36'	6°51'	7°06'	7°21'	7°36'
24	5°21'	5°36'	5°51'	6°06'	6°21'	6°36'	6°51'	7°06'	7°21'	7°36'
25	5°21'	5°36'	5°51'	6°06'	6°21'	6°36'	6°51'	7°06'	7°21'	7°36'
26	5°22'	5°37'	5°52'	6°07'	6°22'	6°37'	6°52'	7°07'	7°22'	7°37'
27	5°22'	5°37'	5°52'	6°07'	6°22'	6°37'	6°52'	7°07'	7°22'	7°37'
28	5°22'	5°37'	5°52'	6°07'	6°22'	6°37'	6°52'	7°07'	7°22'	7°37'
29	5°22'	5°37'	5°52'	6°07'	6°22'	6°37'	6°52'	7°07'	7°22'	7°37'
30	5°23'	5°38'	5°53'	6°08'	6°23'	6°38'	6°53'	7°08'	7°23'	7°38'
31	5°23'	5°38'	5°53'	6°08'	6°23'	6°38'	6°53'	7°08'	7°23'	7°38'
32	5°23'	5°38'	5°53'	6°08'	6°23'	6°38'	6°53'	7°08'	7°23'	7°38'
33	5°23'	5°38'	5°53'	6°08'	6°23'	6°38'	6°53'	7°08'	7°23'	7°38'
34	5°24'	5°39'	5°54'	6°08'	6°24'	6°39'	6°54'	7°08'	7°24'	7°39'
35	5°24'	5°39'	5°54'	6°09'	6°24'	6°39'	6°54'	7°09'	7°24'	7°39'
36	5°24'	5°39'	5°54'	6°09'	6°24'	6°39'	6°54'	7°09'	7°24'	7°39'
37	5°24'	5°39'	5°54'	6°09'	6°24'	6°39'	6°54'	7°09'	7°24'	7°39'
38	5°25'	5°40'	5°55'	6°09'	6°25'	6°40'	6°55'	7°09'	7°25'	7°40'
39	5°25'	5°40'	5°55'	6°10'	6°25'	6°40'	6°55'	7°10'	7°25'	7°40'
40	5°25'	5°40'	5°55'	6°10'	6°25'	6°40'	6°55'	7°10'	7°25'	7°40'
41	5°25'	5°40'	5°55'	6°10'	6°25'	6°40'	6°55'	7°10'	7°25'	7°40'
42	5°26'	5°41'	5°56'	6°11'	6°26'	6°41'	6°56'	7°11'	7°26'	7°41'
43	5°26'	5°41'	5°56'	6°11'	6°26'	6°41'	6°56'	7°11'	7°26'	7°41'
44	5°26'	5°41'	5°56'	6°11'	6°26'	6°41'	6°56'	7°11'	7°26'	7°41'
45	5°26'	5°41'	5°56'	6°11'	6°26'	6°41'	6°56'	7°11'	7°26'	7°41'
46	5°27'	5°42'	5°57'	6°12'	6°27'	6°42'	6°57'	7°12'	7°27'	7°42'
47	5°27'	5°42'	5°57'	6°12'	6°27'	6°42'	6°57'	7°12'	7°27'	7°42'
48	5°27'	5°42'	5°57'	6°12'	6°27'	6°42'	6°57'	7°12'	7°27'	7°42'
49	5°27'	5°42'	5°57'	6°12'	6°27'	6°42'	6°57'	7°12'	7°27'	7°42'
50	5°28'	5°43'	5°58'	6°13'	6°28'	6°43'	6°58'	7°13'	7°28'	7°43'
51	5°28'	5°43'	5°58'	6°13'	6°28'	6°43'	6°58'	7°13'	7°28'	7°43'
52	5°28'	5°43'	5°58'	6°13'	6°28'	6°43'	6°58'	7°13'	7°28'	7°43'
53	5°28'	5°43'	5°58'	6°13'	6°28'	6°43'	6°58'	7°13'	7°28'	7°43'
54	5°29'	5°44'	5°59'	6°14'	6°29'	6°44'	6°59'	7°14'	7°29'	7°44'
55	5°29'	5°44'	5°59'	6°14'	6°29'	6°44'	6°59'	7°14'	7°29'	7°44'
56	5°29'	5°44'	5°59'	6°14'	6°29'	6°44'	6°59'	7°14'	7°29'	7°44'
57	5°29'	5°44'	5°59'	6°14'	6°29'	6°44'	6°59'	7°14'	7°29'	7°44'
58	5°30'	5°45'	5°60'	6°15'	6°30'	6°45'	6°60'	7°15'	7°30'	7°45'
59	5°30'	5°45'	5°60'	6°15'	6°30'	6°45'	6°60'	7°15'	7°30'	7°45'

sec.	31	32	33	34	35	36	37	38	39	40
0	7°45'	8°00'	8°15'	8°30'	8°45'	9°00'	9°15'	9°30'	9°45'	10°00'
1	7°45'	8°00'	8°15'	8°30'	8°45'	9°00'	9°15'	9°30'	9°45'	10°00'
2	7°46'	8°00'	8°16'	8°31'	8°46'	9°00'	9°16'	9°31'	9°46'	10°01'
3	7°46'	8°01'	8°16'	8°31'	8°46'	9°01'	9°16'	9°31'	9°46'	10°01'
4	7°46'	8°01'	8°16'	8°31'	8°46'	9°01'	9°16'	9°31'	9°46'	10°01'
5	7°46'	8°01'	8°16'	8°31'	8°46'	9°01'	9°16'	9°31'	9°46'	10°01'
6	7°47'	8°02'	8°17'	8°32'	8°47'	9°02'	9°17'	9°32'	9°47'	10°02'
7	7°47'	8°02'	8°17'	8°32'	8°47'	9°02'	9°17'	9°32'	9°47'	10°02'
8	7°47'	8°02'	8°17'	8°32'	8°47'	9°02'	9°17'	9°32'	9°47'	10°02'
9	7°47'	8°02'	8°17'	8°32'	8°47'	9°02'	9°17'	9°32'	9°47'	10°02'
10	7°48'	8°02'	8°18'	8°33'	8°48'	9°02'	9°18'	9°33'	9°48'	10°02'
11	7°48'	8°03'	8°18'	8°33'	8°48'	9°03'	9°18'	9°33'	9°48'	10°03'
12	7°48'	8°03'	8°18'	8°33'	8°48'	9°03'	9°18'	9°33'	9°48'	10°03'
13	7°48'	8°03'	8°18'	8°33'	8°48'	9°03'	9°18'	9°33'	9°48'	10°03'
14	7°49'	8°04'	8°19'	8°34'	8°49'	9°04'	9°19'	9°34'	9°49'	10°04'
15	7°49'	8°04'	8°19'	8°34'	8°49'	9°04'	9°19'	9°34'	9°49'	10°04'
16	7°49'	8°04'	8°19'	8°34'	8°49'	9°04'	9°19'	9°34'	9°49'	10°04'
17	7°49'	8°04'	8°19'	8°34'	8°49'	9°04'	9°19'	9°34'	9°49'	10°04'
18	7°50'	8°04'	8°20'	8°35'	8°50'	9°04'	9°20'	9°35'	9°50'	10°04'
19	7°50'	8°05'	8°20'	8°35'	8°50'	9°05'	9°20'	9°35'	9°50'	10°05'
20	7°50'	8°05'	8°20'	8°35'	8°50'	9°05'	9°20'	9°35'	9°50'	10°05'
21	7°50'	8°05'	8°20'	8°35'	8°50'	9°05'	9°20'	9°35'	9°50'	10°05'
22	7°51'	8°05'	8°21'	8°36'	8°51'	9°06'	9°21'	9°36'	9°51'	10°06'
23	7°51'	8°06'	8°21'	8°36'	8°51'	9°06'	9°21'	9°36'	9°51'	10°06'
24	7°51'	8°06'	8°21'	8°36'	8°51'	9°06'	9°21'	9°36'	9°51'	10°06'
25	7°51'	8°06'	8°21'	8°36'	8°51'	9°06'	9°21'	9°36'	9°51'	10°06'
26	7°52'	8°07'	8°22'	8°37'	8°52'	9°06'	9°22'	9°37'	9°52'	10°06'
27	7°52'	8°07'	8°22'	8°37'	8°52'	9°07'	9°22'	9°37'	9°52'	10°07'
28	7°52'	8°07'	8°22'	8°37'	8°52'	9°07'	9°22'	9°37'	9°52'	10°07'
29	7°52'	8°07'	8°22'	8°37'	8°52'	9°07'	9°22'	9°37'	9°52'	10°07'
30	7°53'	8°08'	8°23'	8°38'	8°53'	9°08'	9°23'	9°38'	9°53'	10°08'
31	7°53'	8°08'	8°23'	8°38'	8°53'	9°08'	9°23'	9°38'	9°53'	10°08'
32	7°53'	8°08'	8°23'	8°38'	8°53'	9°08'	9°23'	9°38'	9°53'	10°08'
33	7°53'	8°08'	8°23'	8°38'	8°53'	9°08'	9°23'	9°38'	9°53'	10°08'
34	7°54'	8°09'	8°24'	8°39'	8°54'	9°09'	9°24'	9°39'	9°54'	10°08'
35	7°54'	8°09'	8°24'	8°39'	8°54'	9°09'	9°24'	9°39'	9°54'	10°09'
36	7°54'	8°09'	8°24'	8°39'	8°54'	9°09'	9°24'	9°39'	9°54'	10°09'
37	7°54'	8°09'	8°24'	8°39'	8°54'	9°09'	9°24'	9°39'	9°54'	10°09'
38	7°55'	8°09'	8°25'	8°40'	8°55'	9°09'	9°25'	9°40'	9°55'	10°09'
39	7°55'	8°10'	8°25'	8°40'	8°55'	9°10'	9°25'	9°40'	9°55'	10°10'
40	7°55'	8°10'	8°25'	8°40'	8°55'	9°10'	9°25'	9°40'	9°55'	10°10'
41	7°55'	8°10'	8°25'	8°40'	8°55'	9°10'	9°25'	9°40'	9°55'	10°10'
42	7°56'	8°11'	8°26'	8°41'	8°56'	9°11'	9°26'	9°41'	9°56'	10°11'
43	7°56'	8°11'	8°26'	8°41'	8°56'	9°11'	9°26'	9°41'	9°56'	10°11'
44	7°56'	8°11'	8°26'	8°41'	8°56'	9°11'	9°26'	9°41'	9°56'	10°11'
45	7°56'	8°11'	8°26'	8°41'	8°56'	9°11'	9°26'	9°41'	9°56'	10°11'
46	7°57'	8°12'	8°27'	8°42'	8°57'	9°12'	9°27'	9°42'	9°57'	10°12'
47	7°57'	8°12'	8°27'	8°42'	8°57'	9°12'	9°27'	9°42'	9°57'	10°12'
48	7°57'	8°12'	8°27'	8°42'	8°57'	9°12'	9°27'	9°42'	9°57'	10°12'
49	7°57'	8°12'	8°27'	8°42'	8°57'	9°12'	9°27'	9°42'	9°57'	10°12'
50	7°58'	8°13'	8°28'	8°43'	8°58'	9°13'	9°28'	9°43'	9°58'	10°13'
51	7°58'	8°13'	8°28'	8°43'	8°58'	9°13'	9°28'	9°43'	9°58'	10°13'
52	7°58'	8°13'	8°28'	8°43'	8°58'	9°13'	9°28'	9°43'	9°58'	10°13'
53	7°58'	8°13'	8°28'	8°43'	8°58'	9°13'	9°28'	9°43'	9°58'	10°13'
54	7°59'	8°14'	8°29'	8°44'	8°59'	9°14'	9°29'	9°44'	9°59'	10°14'
55	7°59'	8°14'	8°29'	8°44'	8°59'	9°14'	9°29'	9°44'	9°59'	10°14'
56	7°59'	8°14'	8°29'	8°44'	8°59'	9°14'	9°29'	9°44'	9°59'	10°14'
57	7°59'	8°14'	8°29'	8°44'	8°59'	9°14'	9°29'	9°44'	9°59'	10°14'
58	7°60'	8°15'	8°30'	8°45'	8°60'	9°15'	9°30'	9°45'	9°60'	10°15'
59	7°60'	8°15'	8°30'	8°45'	8°60'	9°15'	9°30'	9°45'	9°60'	10°15'

sec.	41	42	43	44	45	46	47	48	49	50
0	10°15'	10°30'	10°45'	11°00'	11°15'	11°30'	11°45'	12°00'	12°15'	12°30'
1	10°15'	10°30'	10°45'	11°00'	11°15'	11°30'	11°45'	12°00'	12°15'	12°30'
2	10°16'	10°31'	10°46'	11°01'	11°16'	11°31'	11°46'	12°00'	12°16'	12°31'
3	10°16'	10°31'	10°46'	11°01'	11°16'	11°31'	11°46'	12°01'	12°16'	12°31'
4	10°16'	10°31'	10°46'	11°01'	11°16'	11°31'	11°46'	12°01'	12°16'	12°31'
5	10°16'	10°31'	10°46'	11°01'	11°16'	11°31'	11°46'	12°01'	12°16'	12°31'
6	10°17'	10°32'	10°47'	11°02'	11°17'	11°32'	11°47'	12°02'	12°17'	12°32'
7	10°17'	10°32'	10°47'	11°02'	11°17'	11°32'	11°47'	12°02'	12°17'	12°32'
8	10°17'	10°32'	10°47'	11°02'	11°17'	11°32'	11°47'	12°02'	12°17'	12°32'
9	10°17'	10°32'	10°47'	11°02'	11°17'	11°32'	11°47'	12°02'	12°17'	12°32'
10	10°18'	10°33'	10°48'	11°03'	11°18'	11°33'	11°48'	12°03'	12°18'	12°33'
11	10°18'	10°33'	10°48'	11°03'	11°18'	11°33'	11°48'	12°03'	12°18'	12°33'
12	10°18'	10°33'	10°48'	11°03'	11°18'	11°33'	11°48'	12°03'	12°18'	12°33'
13	10°18'	10°33'	10°48'	11°03'	11°18'	11°33'	11°48'	12°03'	12°18'	12°33'
14	10°19'	10°34'	10°48'	11°04'	11°19'	11°34'	11°49'	12°04'	12°19'	12°34'
15	10°19'	10°34'	10°49'	11°04'	11°19'	11°34'	11°49'	12°04'	12°19'	12°34'
16	10°19'	10°34'	10°49'	11°04'	11°19'	11°34'	11°49'	12°04'	12°19'	12°34'
17	10°19'	10°34'	10°49'	11°04'	11°19'	11°34'	11°49'	12°04'	12°19'	12°34'
18	10°20'	10°35'	10°50'	11°04'	11°20'	11°35'	11°50'	12°05'	12°20'	12°35'
19	10°20'	10°35'	10°50'	11°05'	11°20'	11°35'	11°50'	12°05'	12°20'	12°35'
20	10°20'	10°35'	10°50'	11°05'	11°20'	11°35'	11°50'	12°05'	12°20'	12°35'
21	10°20'	10°35'	10°50'	11°05'	11°20'	11°35'	11°50'	12°05'	12°20'	12°35'
22	10°21'	10°36'	10°51'	11°06'	11°21'	11°36'	11°50'	12°06'	12°21'	12°36'
23	10°21'	10°36'	10°51'	11°06'	11°21'	11°36'	11°51'	12°06'	12°21'	12°36'
24	10°21'	10°36'	10°51'	11°06'	11°21'	11°36'	11°51'	12°06'	12°21'	12°36'
25	10°21'	10°36'	10°51'	11°06'	11°21'	11°36'	11°51'	12°06'	12°21'	12°36'
26	10°22'	10°37'	10°52'	11°06'	11°22'	11°37'	11°52'	12°06'	12°22'	12°37'
27	10°22'	10°37'	10°52'	11°07'	11°22'	11°37'	11°52'	12°07'	12°22'	12°37'
28	10°22'	10°37'	10°52'	11°07'	11°22'	11°37'	11°52'	12°07'	12°22'	12°37'
29	10°22'	10°37'	10°52'	11°07'	11°22'	11°37'	11°52'	12°07'	12°22'	12°37'
30	10°23'	10°38'	10°53'	11°08'	11°23'	11°38'	11°53'	12°08'	12°23'	12°38'
31	10°23'	10°38'	10°53'	11°08'	11°23'	11°38'	11°53'	12°08'	12°23'	12°38'
32	10°23'	10°38'	10°53'	11°08'	11°23'	11°38'	11°53'	12°08'	12°23'	12°38'
33	10°23'	10°38'	10°53'	11°08'	11°23'	11°38'	11°53'	12°08'	12°23'	12°38'
34	10°24'	10°39'	10°54'	11°08'	11°24'	11°39'	11°54'	12°08'	12°24'	12°39'
35	10°24'	10°39'	10°54'	11°09'	11°24'	11°39'	11°54'	12°09'	12°24'	12°39'
36	10°24'	10°39'	10°54'	11°09'	11°24'	11°39'	11°54'	12°09'	12°24'	12°39'
37	10°24'	10°39'	10°54'	11°09'	11°24'	11°39'	11°54'	12°09'	12°24'	12°39'
38	10°25'	10°40'	10°55'	11°09'	11°25'	11°40'	11°55'	12°09'	12°25'	12°40'
39	10°25'	10°40'	10°55'	11°10'	11°25'	11°40'	11°55'	12°10'	12°25'	12°40'
40	10°25'	10°40'	10°55'	11°10'	11°25'	11°40'	11°55'	12°10'	12°25'	12°40'
41	10°25'	10°40'	10°55'	11°10'	11°25'	11°40'	11°55'	12°10'	12°25'	12°40'
42	10°26'	10°41'	10°56'	11°11'	11°26'	11°41'	11°56'	12°11'	12°26'	12°41'
43	10°26'	10°41'	10°56'	11°11'	11°26'	11°41'	11°56'	12°11'	12°26'	12°41'
44	10°26'	10°41'	10°56'	11°11'	11°26'	11°41'	11°56'	12°11'	12°26'	12°41'
45	10°26'	10°41'	10°56'	11°11'	11°26'	11°41'	11°56'	12°11'	12°26'	12°41'
46	10°27'	10°42'	10°57'	11°12'	11°27'	11°42'	11°57'	12°12'	12°27'	12°42'
47	10°27'	10°42'	10°57'	11°12'	11°27'	11°42'	11°57'	12°12'	12°27'	12°42'
48	10°27'	10°42'	10°57'	11°12'	11°27'	11°42'	11°57'	12°12'	12°27'	12°42'
49	10°27'	10°42'	10°57'	11°12'	11°27'	11°42'	11°57'	12°12'	12°27'	12°42'
50	10°28'	10°43'	10°58'	11°13'	11°28'	11°43'	11°58'	12°13'	12°28'	12°43'
51	10°28'	10°43'	10°58'	11°13'	11°28'	11°43'	11°58'	12°13'	12°28'	12°43'
52	10°28'	10°43'	10°58'	11°13'	11°28'	11°43'	11°58'	12°13'	12°28'	12°43'
53	10°28'	10°43'	10°58'	11°13'	11°28'	11°43'	11°58'	12°13'	12°28'	12°43'
54	10°29'	10°44'	10°59'	11°14'	11°29'	11°44'	11°59'	12°14'	12°29'	12°44'
55	10°29'	10°44'	10°59'	11°14'	11°29'	11°44'	11°59'	12°14'	12°29'	12°44'
56	10°29'	10°44'	10°59'	11°14'	11°29'	11°44'	11°59'	12°14'	12°29'	12°44'
57	10°29'	10°44'	10°59'	11°14'	11°29'	11°44'	11°59'	12°14'	12°29'	12°44'
58	10°30'	10°45'	10°60'	11°15'	11°30'	11°45'	11°60'	12°15'	12°30'	12°45'
59	10°30'	10°45'	10°60'	11°15'	11°30'	11°45'	11°60'	12°15'	12°30'	12°45'

sec.	51	52	53	54	55	56	57	58	59
0	12°45'	13°00'	13°15'	13°30'	13°45'	14°00'	14°15'	14°30'	14°45'
1	12°45'	13°00'	13°15'	13°30'	13°45'	14°00'	14°15'	14°30'	14°45'
2	12°46'	13°00'	13°16'	13°31'	13°46'	14°00'	14°16'	14°31'	14°46'
3	12°46'	13°01'	13°16'	13°31'	13°46'	14°01'	14°16'	14°31'	14°46'
4	12°46'	13°01'	13°16'	13°31'	13°46'	14°01'	14°16'	14°31'	14°46'
5	12°46'	13°01'	13°16'	13°31'	13°46'	14°01'	14°16'	14°31'	14°46'
6	12°47'	13°01'	13°17'	13°32'	13°47'	14°02'	14°17'	14°32'	14°47'
7	12°47'	13°02'	13°17'	13°32'	13°47'	14°02'	14°17'	14°32'	14°47'
8	12°47'	13°02'	13°17'	13°32'	13°47'	14°02'	14°17'	14°32'	14°47'
9	12°47'	13°02'	13°17'	13°32'	13°47'	14°02'	14°17'	14°32'	14°47'
10	12°48'	13°03'	13°18'	13°33'	13°48'	14°02'	14°18'	14°33'	14°48'
11	12°48'	13°03'	13°18'	13°33'	13°48'	14°03'	14°18'	14°33'	14°48'
12	12°48'	13°03'	13°18'	13°33'	13°48'	14°03'	14°18'	14°33'	14°48'
13	12°48'	13°03'	13°18'	13°33'	13°48'	14°03'	14°18'	14°33'	14°48'
14	12°49'	13°04'	13°19'	13°34'	13°49'	14°04'	14°19'	14°33'	14°49'
15	12°49'	13°04'	13°19'	13°34'	13°49'	14°04'	14°19'	14°34'	14°49'
16	12°49'	13°04'	13°19'	13°34'	13°49'	14°04'	14°19'	14°34'	14°49'
17	12°49'	13°04'	13°19'	13°34'	13°49'	14°04'	14°19'	14°34'	14°49'
18	12°50'	13°05'	13°20'	13°35'	13°50'	14°05'	14°20'	14°35'	14°50'
19	12°50'	13°05'	13°20'	13°35'	13°50'	14°05'	14°20'	14°35'	14°50'
20	12°50'	13°05'	13°20'	13°35'	13°50'	14°05'	14°20'	14°35'	14°50'
21	12°50'	13°05'	13°20'	13°35'	13°50'	14°05'	14°20'	14°35'	14°50'
22	12°51'	13°06'	13°21'	13°36'	13°51'	14°06'	14°21'	14°36'	14°51'
23	12°51'	13°06'	13°21'	13°36'	13°51'	14°06'	14°21'	14°36'	14°51'
24	12°51'	13°06'	13°21'	13°36'	13°51'	14°06'	14°21'	14°36'	14°51'
25	12°51'	13°06'	13°21'	13°36'	13°51'	14°06'	14°21'	14°36'	14°51'
26	12°52'	13°07'	13°22'	13°37'	13°52'	14°07'	14°22'	14°37'	14°52'
27	12°52'	13°07'	13°22'	13°37'	13°52'	14°07'	14°22'	14°37'	14°52'
28	12°52'	13°07'	13°22'	13°37'	13°52'	14°07'	14°22'	14°37'	14°52'
29	12°52'	13°07'	13°22'	13°37'	13°52'	14°07'	14°22'	14°37'	14°52'
30	12°53'	13°08'	13°23'	13°38'	13°53'	14°08'	14°23'	14°38'	14°53'
31	12°53'	13°08'	13°23'	13°38'	13°53'	14°08'	14°23'	14°38'	14°53'
32	12°53'	13°08'	13°23'	13°38'	13°53'	14°08'	14°23'	14°38'	14°53'
33	12°53'	13°08'	13°23'	13°38'	13°53'	14°08'	14°23'	14°38'	14°53'
34	12°54'	13°08'	13°24'	13°39'	13°54'	14°09'	14°24'	14°39'	14°54'
35	12°54'	13°09'	13°24'	13°39'	13°54'	14°09'	14°24'	14°39'	14°54'
36	12°54'	13°09'	13°24'	13°39'	13°54'	14°09'	14°24'	14°39'	14°54'
37	12°54'	13°09'	13°24'	13°39'	13°54'	14°09'	14°24'	14°39'	14°54'
38	12°55'	13°09'	13°25'	13°40'	13°55'	14°09'	14°25'	14°40'	14°55'
39	12°55'	13°10'	13°25'	13°40'	13°55'	14°10'	14°25'	14°40'	14°55'
40	12°55'	13°10'	13°25'	13°40'	13°55'	14°10'	14°25'	14°40'	14°55'
41	12°55'	13°10'	13°25'	13°40'	13°55'	14°10'	14°25'	14°40'	14°55'
42	12°56'	13°11'	13°26'	13°41'	13°56'	14°11'	14°26'	14°41'	14°56'
43	12°56'	13°11'	13°26'	13°41'	13°56'	14°11'	14°26'	14°41'	14°56'
44	12°56'	13°11'	13°26'	13°41'	13°56'	14°11'	14°26'	14°41'	14°56'
45	12°56'	13°11'	13°26'	13°41'	13°56'	14°11'	14°26'	14°41'	14°56'
46	12°57'	13°12'	13°27'	13°42'	13°57'	14°12'	14°27'	14°42'	14°57'
47	12°57'	13°12'	13°27'	13°42'	13°57'	14°12'	14°27'	14°42'	14°57'
48	12°57'	13°12'	13°27'	13°42'	13°57'	14°12'	14°27'	14°42'	14°57'
49	12°57'	13°12'	13°27'	13°42'	13°57'	14°12'	14°27'	14°42'	14°57'
50	12°58'	13°13'	13°28'	13°43'	13°58'	14°13'	14°28'	14°43'	14°58'
51	12°58'	13°13'	13°28'	13°43'	13°58'	14°13'	14°28'	14°43'	14°58'
52	12°58'	13°13'	13°28'	13°43'	13°58'	14°13'	14°28'	14°43'	14°58'
53	12°58'	13°13'	13°28'	13°43'	13°58'	14°13'	14°28'	14°43'	14°58'
54	12°59'	13°14'	13°29'	13°44'	13°59'	14°14'	14°29'	14°44'	14°59'
55	12°59'	13°14'	13°29'	13°44'	13°59'	14°14'	14°29'	14°44'	14°59'
56	12°59'	13°14'	13°29'	13°44'	13°59'	14°14'	14°29'	14°44'	14°59'
57	12°59'	13°14'	13°29'	13°44'	13°59'	14°14'	14°29'	14°44'	14°59'
58	12°60'	13°15'	13°30'	13°45'	13°60'	14°15'	14°30'	14°45'	14°60'
59	12°60'	13°15'	13°30'	13°45'	13°60'	14°15'	14°30'	14°45'	14°60'