

IV. IONOSPHERE

The following tables give the values of mean ionospheric absorption at oblique incidence (A3) for certain zenith distances of the Sun (z) expressed in decibels (dB). The sky wave of the transmitter Československo ($f=272$ kc/s) has been recorded since January 1967. The geographical coordinates of the reflection point are $48,4^{\circ}\text{N}$, $17,1^{\circ}\text{E}$. Individual values have been determined by taking the average of 20 minute intervals, centered on the times of ground sunset (SS) and ground sunrise (SR) in the reflection point, as well as the average of the period ranging from $z = 100^{\circ}$ to 23 00 GMT (Night).

Since the location of transmitter Československo has unfavourably been changed, the absorption measurement at 272 kc/s and the publication of data are suspended from April 1975.

The tables were compiled by F. MÁRCZ. The equipment and the method have been described in the paper by P. BENCZE and F. MÁRCZ: „Atmosphärisch-elektrische und ionosphärische Messungen im Observatorium bei Nagycenk”. Observatoriumsberichte des Geophysikalischen Forschungslaboratoriums der Ungarischen Akademie der Wissenschaften vom Jahre 1966, Sopron, 1967.

Mean Ionospheric Absorption L' (dB) at Oblique Incidence (A3)
f = 272 kc/s

January			
Date of the night	SS	Night	SR
1/ 2	31,0	26,6	40,5
2/ 3	33,2	24,2	44,0
3/ 4	34,5	27,8	28,5
4/ 5	36,1	30,1	38,0
5/ 6	33,2	30,1	x
6/ 7	33,2	27,2	30,1
7/ 8	32,0	x	x
8/ 9	27,8	25,6	31,0
9/10	32,0	24,2	27,2
10/11	22,7	x	27,8
11/12	27,8	x	30,1
12/13	36,1	23,1	x
13/14	32,0	24,2	23,4
14/15	31,0	27,2	34,5
15/16	36,1	23,8	x
16/17	34,5	22,7	32,0
17/18	38,0	24,2	26,6
18/19	32,0	22,4	x
19/20	30,1	20,9	x
20/21	32,0	18,4	29,3
21/22	36,1	23,4	27,8
22/23	x	x	x
23/24	32,0	25,1	26,1
24/25	x	x	x
25/26	x	x	x
26/27	x	x	x
27/28	48,0	27,2	23,4
28/29	x	x	x
29/30	50,0	24,2	26,1
30/31	34,5	24,2	27,8
31/ 1	40,5	19,9	26,6
Median values	33,2	24,2	28,2

February

Date of the night	SS	Night	SR
1/ 2	33,2	17,5	22,4
2/ 3	34,5	18,7	22,4
3/ 4	40,5	22,4	26,1
4/ 5	x	x	x
5/ 6	50,0	22,1	x
6/ 7	27,8	19,1	31,0
7/ 8	19,7	22,7	20,2
8/ 9	24,2	19,7	22,1
9/10	x	x	x
10/11	31,0	25,6	33,2
11/12	34,5	24,2	28,5
12/13	36,1	19,7	32,0
13/14	36,1	19,3	25,1
14/15	24,2	22,4	36,1
15/16	50,0	22,1	26,6
16/17	36,1	21,8	44,0
17/18	36,1	23,4	27,2
18/19	40,5	27,8	32,0
19/20	38,0	26,1	36,1
20/21	38,0	24,6	32,0
21/22	44,0	23,8	28,5
22/23	40,5	29,3	32,0
23/24	38,0	26,6	32,0
24/25	33,2	26,1	28,5
25/26	31,0	22,7	29,3
26/27	31,0	23,1	34,5
27/28	36,1	24,2	31,0
28/ 1	33,2	25,1	32,0
Median values	36,1	22,9	31,0

March			
Date of the night	SS	Night	SR
1/ 2	36,1	25,6	33,2
2/ 3	33,2	23,1	29,3
3/ 4	40,5	22,4	x
4/ 5	32,0	25,1	28,5
5/ 6	33,2	24,2	30,1
6/ 7	36,1	26,6	27,2
7/ 8	29,3	x	30,1
8/ 9	30,1	22,4	28,5
9/10	29,3	21,2	33,2
10/11	33,2	26,1	32,0
11/12	29,3	23,4	27,8
12/13	34,5	25,6	31,0
13/14	26,6	26,6	33,2
14/15	36,1	25,1	36,1
15/16	38,0	x	38,0
16/17	36,1	22,7	26,1
17/18	34,5	21,5	40,5
18/19	50,0	24,2	32,0
19/20	28,5	22,4	36,1
20/21	25,1	21,8	29,3
21/22	27,2	21,2	24,2
22/23	28,5	x	29,3
23/24	31,0	23,8	30,1
24/25	33,2	23,1	33,2
25/26	36,1	x	x
26/27	40,5	20,9	30,1
27/28	33,2	22,4	29,3
28/29	x	x	x
29/30	x	x	x
30/31	x	x	x
31/ 1	x	x	x
Median values	33,2	23,1	30,1