

foF2 МГц Декабрь 1972г

(характеристика) (единицы) (месяц) (год)

## ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75°E

Академия Наук Нав. ССР

(институт)

Станция Алма-Ата

Долгота 76°55'E широта 43°15'N

Кем составлена Зеленковой

Кем подсчитана Милютинной

| Дни     | 00    | 01    | 02    | 03    | 04    | 05    | 06    | 07    | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1       | U3.2S | U3.4S | U3.4S | U3.5S | U3.5S | U3.9S | 3.3   | U4.3S | U6.7S | 7.0   | U7.4S | U7.2S | U7.1S | 7.0   | U7.4S | U7.3S | U6.3S | U4.5S | 3.3   | 3.7   | 3.6   | 3.2   | 3.3   | 3.1   |
| 2       | 3.0   | U3.1S | U3.3S | U3.6S | U3.7S | U3.8S | 3.9   | U4.9S | U5.8S | 5.8   | U6.5C | 7.3   | 6.3   | U6.9S | 6.6   | U7.1C | U5.6S | U4.4S | 3.6   | U3.1S | I2.8C | 2.7   | 2.9   | 3.0   |
| 3       | 3.0   | U3.2S | U3.4S | U3.3S | U3.3S | U3.2S | U3.3S | U4.1S | U6.2S | U7.0S | 7.0   | 7.0   | 7.0   | 6.4   | U6.7R | U6.0S | U4.8S | 4.0   | U4.1S | S     | U4.0S | 3.0   | 3.5   | U4.0S |
| 4       | U4.2N | U4.1S | U4.2N | U4.5S | U4.4S | U4.2S | U4.6S | U5.0S | C     | U5.9S | U7.0S | U7.3S | 6.7   | U6.2S | U7.1S | U6.3S | U5.0S | U4.4S | 2.5   | 2.8   | 2.8   | U2.7S | U3.2S | 3.4   |
| 5       | U3.4S | U3.3S | U3.5S | U3.4S | U3.5S | U3.5S | U3.5S | U4.0S | U5.7S | U5.7S | 6.5   | 7.2   | U7.0S | 5.9   | U6.4S | U6.7S | U4.5S | U3.8S | U3.3S | U3.3S | C     | C     | C     | U3.9S |
| 6       | U3.9N | U4.0S | 4.0   | U4.0N | U3.7S | 3.6   | U4.4S | U5.2S | U5.9S | U5.3S | 6.3   | 8.0   | U6.5S | U5.3S | U6.3S | U6.1S | U4.4S | S     | U4.3S | U4.0S | 3.0   | 2.8   | 3.0   | U3.2S |
| 7       | U3.2N | U3.4S | U3.2S | U3.5S | U3.5S | U3.8S | U3.7S | U4.4S | U5.4S | U5.8N | U7.7S | U7.3S | U6.7N | U6.4S | U6.7S | S     | U5.0S | U3.6S | U4.0S | U4.0S | S     | U3.1S | U3.0S | U3.4S |
| 8       | U4.1S | U3.7S | 3.7   | U3.6S | U3.7S | U3.6S | U3.7S | U4.0S | U5.0S | S     | U6.8S | 8.3   | U6.3S | U6.7S | U6.3S | S     | U4.4S | U3.6S | U3.4S | 3.2   | U3.2S | U3.0S | U3.4S | U4.0S |
| 9       | N     | U4.2S | U4.3S | U4.5S | U3.9S | U3.9S | U3.6S | U4.3S | U5.8S | U4.7S | U7.5S | U8.1S | U6.0S | U5.6S | U5.7S | 6.5   | U4.7S | U4.4S | 3.0   | 3.1   | 2.8   | 2.3   | 2.9   | 3.2   |
| 10      | 3.5   | U3.4S | U3.7S | U3.5N | U3.0S | 2.7   | 3.1   | U4.2S | U5.2S | 5.0   | U6.4S | 7.6   | 6.2   | U7.0S | U6.8S | U6.4S | U4.4N | U4.5S | U4.5S | U3.1S | 3.0   | I3.0C | 3.0N  | U3.1S |
| 11      | S     | U3.6S | U4.0N | 4.0N  | N     | U3.9N | U3.5F | U3.7S | U5.4S | U4.7S | U7.3S | 7.9   | U6.5S | U6.3S | 6.5   | U6.7S | U4.1S | 3.8   | 3.2   | U3.5S | U3.1S | 2.7   | 2.9   | U3.7S |
| 12      | 3.9   | U4.1S | U4.2S | U4.3S | U4.3S | U4.2S | 3.7   | 3.7   | S     | U6.2S | 6.6   | 6.6   | S     | U6.9S | 7.8   | U6.7S | U4.4S | 3.3   | U3.2S | U3.2S | 2.4   | 2.7   | N     | N     |
| 13      | F     | F     | F     | F     | U3.8F | U4.0N | 3.7   | U4.0S | S     | S     | U7.1S | 8.6   | U7.0S | U8.2S | U7.3S | U8.0S | U6.2S | U5.4S | U5.1S | 3.9   | 2.8   | 2.7N  | 2.8N  | U3.3S |
| 14      | U3.2S | 3.4   | 3.4   | 3.3   | 3.3   | 3.4   | U3.2S | U4.3S | U5.8S | U7.5S | 8.0   | 7.6   | I8.7C | 7.3   | U6.4S | 7.6   | U6.3S | U3.7S | 3.3   | 3.6   | 2.7   | 2.7   | U3.1S | U3.3N |
| 15      | 3.4N  | U3.6S | U3.5S | 3.5   | 3.4   | 3.2N  | 3.1   | U4.1S | U6.0S | U6.3S | 8.1   | 8.2   | U8.3S | U6.4S | U7.4S | 6.7   | U5.7S | U4.9S | U4.3S | U4.0S | U2.5R | 2.1   | 2.7   | 2.8   |
| 16      | 3.0   | 3.2   | 3.1   | I2.9C | 2.6   | 2.4   | 2.9   | 3.6   | 6.4   | 0.8   | U7.7S | U9.3S | I8.9S | U7.1S | 7.7   | 7.4   | U6.3S | U5.2S | 4.0   | 3.4   | 3.3   | 2.3   | 2.5   | 2.8   |
| 17      | 2.9   | 3.0   | 3.3   | 3.0   | 3.0   | 2.6   | 2.9   | U3.7S | U7.2S | 7.0   | 7.9   | 8.1   | I8.2C | 7.4   | 6.2   | U6.7S | U5.8S | 4.1   | U4.8S | U3.9S | 3.4   | 2.5   | 2.6   | 2.9   |
| 18      | 3.0   | 3.1   | 3.1   | 3.1   | 3.2   | 3.0   | 3.4   | U4.0S | U5.9S | S     | 8.1   | I8.2S | 7.4   | I7.4S | I7.4S | 6.3   | I6.0S | U5.8S | 3.9   | 3.4   | 3.3   | U2.3C | U3.1N | 3.2   |
| 19      | 3.3   | 3.3   | 3.4   | 3.5   | 3.7   | I3.7A | 4.1   | 4.4   | U6.0S | U6.3C | U7.6C | 8.3   | 7.2   | 7.4   | 7.2   | U7.7S | 5.9   | 3.6   | 3.1   | 3.0   | U2.7N | 2.5   | 2.5   | 2.9   |
| 20      | 3.2   | 3.3   | 3.1   | 3.2   | 3.0   | 2.8   | 2.8   | U4.4S | U5.3S | U6.6S | U7.0S | U8.8C | U8.7S | 7.2   | 8.5   | U6.5S | 6.2   | U4.3S | 2.9   | 3.3   | 2.9   | 2.3   | 2.4   | 2.8   |
| 21      | 2.8   | 3.0   | 3.2   | 3.2   | U3.4S | 3.4   | 3.4   | 3.9   | 5.9   | 6.9   | U6.3S | 7.9   | 8.5   | 7.9   | 7.9   | 7.2   | 6.8   | 3.2   | U3.9S | 3.0   | 2.6   | 2.2   | 2.2   | 2.6   |
| 22      | U2.8S | 3.0   | 3.3   | I3.3C | 3.3   | 3.2   | 2.8   | 3.3   | 5.7   | 6.7   | 6.7   | 7.4   | 8.2   | U7.8S | I7.3S | U6.5S | S     | U4.8N | 4.6   | 3.4   | 2.5   | 2.2   | 2.5   | 2.8   |
| 23      | 2.8   | 3.1   | 2.9   | 3.0   | 3.2   | 3.2   | 2.9   | 3.3   | 5.1   | 7.4   | 9.3   | 8.3   | 8.8   | 8.4   | 8.3   | 8.4   | U6.1S | U4.4S | U3.6S | U3.7S | 3.3   | 3.1   | U3.5S | 3.6   |
| 24      | 3.3   | 3.4   | U4.1F | U4.3N | U4.2F | F     | 3.0   | 3.4   | U5.9S | 6.5   | U7.4S | U9.9S | 8.0   | U7.2S | 8.0   | 8.7   | S     | U5.7S | 4.0   | 3.0   | 2.6   | 2.5   | 2.7   | 3.1   |
| 25      | 3.6   | 3.3   | 3.4   | 3.5   | U3.2S | 2.8   | 2.5   | U3.7S | I6.0S | U6.1S | U6.4S | 7.6   | 8.5   | 7.4   | U7.6S | U7.0S | U7.4S | U4.8S | 3.1   | 2.5N  | 2.8   | 2.2   | 2.3   | 2.7   |
| 26      | 2.9   | 3.1   | 3.1   | 3.2   | 2.9   | 2.9   | 3.0   | U3.4S | U5.2S | 5.9   | 7.0   | U8.1S | U9.2S | C     | U7.2S | S     | S     | S     | 3.1   | 3.4   | 2.9   | 2.1   | 2.5   | 2.7   |
| 27      | 2.9   | 3.2   | 3.1   | 3.2   | 2.9   | 3.0   | 2.9   | 3.4   | U5.6S | U5.7S | U6.7S | U7.0S | U7.1S | 6.0   | U5.9S | 7.0   | 5.1   | 3.6   | 3.6   | 2.5   | 2.6   | U2.5S | 2.3   | 2.6   |
| 28      | 3.0   | 3.0   | 3.5   | 3.7   | 3.6   | 3.2   | 3.0   | 4.0   | U5.5S | U5.5S | 8.0   | 7.4   | U6.7S | 6.0   | U6.8S | U6.6S | U5.7S | C     | 3.0   | U3.2S | U3.2S | 3.0   | 3.1   | U3.1S |
| 29      | U3.2S | 3.3   | 3.5   | 3.6   | 3.0   | 3.1   | 2.9   | U3.7S | U5.8S | U5.7S | U6.4S | 7.1   | U7.7S | U6.1R | 7.0   | 6.6   | U5.7S | 4.0   | 3.4   | U3.2S | 2.9   | 2.3   | 2.5   | 2.8   |
| 30      | 2.9   | 3.1   | 3.2   | 2.9   | 2.3   | 2.2   | 2.2   | 3.4   | U6.3S | U6.3S | 6.7   | 7.0   | 7.3   | U6.5S | U6.8S | U7.3S | U5.4S | 4.8   | 4.4   | 3.4   | 2.4   | 2.4   | 2.7   | 2.8   |
| 31      | 2.9   | 2.9   | 3.3   | 2.9   | 2.9   | 2.9   | 3.2   | 3.7   | I5.3S | U6.0S | 7.6   | 8.2   | 8.7   | 7.2   | U8.0R | 5.6   | I5.2S | U3.9S | U4.7S | 3.4   | 2.8   | 3.0   | 2.7N  | 3.0   |
| Медиана | 0.5   | 0.3   | 0.5   | 0.4   | 0.7   | 0.9   | 0.8   | 0.6   | 0.6   | 1.1   | 1.1   | 0.9   | 1.8   | 1.1   | 1.1   | 0.8   | 1.4   | 1.0   | 1.1   | 0.5   | 0.6   | 0.7   | 0.6   | 0.5   |
| Учтено  | 3.2   | 3.3   | 3.4   | 3.5   | U3.4S | 3.2   | 3.2   | U4.0S | U5.8S | U6.2S | U7.0S | 7.9   | U7.2S | U7.0S | U7.1S | U6.7S | U5.6S | U4.4S | 3.6   | 3.4   | 2.8   | 2.6   | 2.8   | 3.1   |
|         | 2.9   | 3.1   | 3.2   | 3.2   | 3.0   | 2.9   | 2.9   | 3.7   | 5.4   | 5.7   | 6.6   | 7.3   | 6.7   | 6.3   | 6.5   | 6.5   | 4.8   | 3.8   | 3.2   | 3.1   | 2.6   | 2.3   | 2.5   | 2.8   |
|         | 3.4   | 3.4   | 3.7   | 3.6   | 3.7   | 3.8   | 3.7   | 4.3   | 6.0   | 6.8   | 7.7   | 8.2   | 8.5   | 7.4   | 7.6   | 7.3   | 6.2   | 4.8   | 4.3   | 3.6   | 3.2   | 3.0   | 3.1   | 3.3   |

Пробег частоты от 1.0 МГц до 18.0 МГц 20 сек. мин.

Станция автоматическая

(ручная, автоматическая)

foF1 МГц Декабрь 1972 г.  
(характеристика) (единицы) (месяц) (год)

Станция Алма-Ата  
Долгота 76°55' E широта 43°15' N

МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД

ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75° E

Академия Наук Каз. ССР  
(институт)

Кем составлена Зеленковой

Кем подсчитана Милутиной

| Дни     | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13  | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|
| 1       |    |    |    |    |    |    |    |    |    |    | L  |    | L  |     |    |    |    |    |    |    |    |    |    |    |
| 2       |    |    |    |    |    |    |    |    |    |    |    | L  | L  |     |    |    |    |    |    |    |    |    |    |    |
| 3       |    |    |    |    |    |    |    |    |    |    | L  | L  | L  | L   |    |    |    |    |    |    |    |    |    |    |
| 4       |    |    |    |    |    |    |    |    |    | L  | L  | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 5       |    |    |    |    |    |    |    |    |    |    |    | L  | L  | L   |    | L  |    |    |    |    |    |    |    |    |
| 6       |    |    |    |    |    |    |    |    |    |    |    | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 7       |    |    |    |    |    |    |    |    |    |    | L  | L  |    | L   |    |    |    |    |    |    |    |    |    |    |
| 8       |    |    |    |    |    |    |    |    |    |    |    | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 9       |    |    |    |    |    |    |    |    |    |    |    | L  | L  |     | L  |    |    |    |    |    |    |    |    |    |
| 10      |    |    |    |    |    |    |    |    |    |    | L  | L  | L  |     | L  |    |    |    |    |    |    |    |    |    |
| 11      |    |    |    |    |    |    |    |    |    |    | L  | L  | L  | L   | L  | L  |    |    |    |    |    |    |    |    |
| 12      |    |    |    |    |    |    |    |    |    |    | L  |    |    |     | L  |    |    |    |    |    |    |    |    |    |
| 13      |    |    |    |    |    |    |    |    | L  |    | L  | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 14      |    |    |    |    |    |    |    |    |    | L  | L  |    | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 15      |    |    |    |    |    |    |    |    |    |    | L  | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 16      |    |    |    |    |    |    |    |    |    | C  |    | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 17      |    |    |    |    |    |    |    |    |    |    | L  | L  | 36 | 3.6 |    |    |    |    |    |    |    |    |    |    |
| 18      |    |    |    |    |    |    |    |    |    |    |    | 39 | R  |     | L  |    |    |    |    |    |    |    |    |    |
| 19      |    |    |    |    |    |    |    |    |    | L  |    | L  | L  |     |    |    |    |    |    |    |    |    |    |    |
| 20      |    |    |    |    |    |    |    |    |    |    |    | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 21      |    |    |    |    |    |    |    |    |    |    |    | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 22      |    |    |    |    |    |    |    |    |    |    |    | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 23      |    |    |    |    |    |    |    |    |    | L  | L  | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 24      |    |    |    |    |    |    |    |    |    |    | L  | L  | L  | L   | L  |    |    |    |    |    |    |    |    |    |
| 25      |    |    |    |    |    |    |    |    |    |    |    | L  |    | L   |    |    |    |    |    |    |    |    |    |    |
| 26      |    |    |    |    |    |    |    |    |    |    | L  | L  | L  | C   | L  |    |    |    |    |    |    |    |    |    |
| 27      |    |    |    |    |    |    |    |    |    |    |    | L  | 39 | L   | L  |    |    |    |    |    |    |    |    |    |
| 28      |    |    |    |    |    |    |    |    |    |    | L  | L  | L  | L   | L  | L  |    | C  |    |    |    |    |    |    |
| 29      |    |    |    |    |    |    |    |    |    |    |    | L  | L  | L   | L  | L  |    |    |    |    |    |    |    |    |
| 30      |    |    |    |    |    |    |    |    |    | L  | L  | L  | L  | L   |    |    |    |    |    |    |    |    |    |    |
| 31      |    |    |    |    |    |    |    |    |    | L  | 32 | 39 | 40 | L   | L  |    |    |    |    |    |    |    |    |    |
| Медиана |    |    |    |    |    |    |    |    |    |    | 32 | 39 | 39 | 36  |    |    |    |    |    |    |    |    |    |    |
| Учтено  |    |    |    |    |    |    |    |    |    |    | 1  | 2  | 3  | 1   |    |    |    |    |    |    |    |    |    |    |

Пробег частоты от 10 МГц до 18.0 МГц 20 сек. мин.

Станция автоматическая  
(ручная, автоматическая)

foE МГц Декабрь 1972г.  
(характеристика) (единицы) (месяц) (год)

МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД

АКАДЕМИЯ НАУК КАЗ. ССР  
(институт)

Станция Алма-Ата

ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Зеленковой

Долгота 76°55'E широта 43°15'N

поясное время 75°E

Кем подсчитана Зеленковой

| Дни     | 00 | 01 | 02    | 03    | 04    | 05    | 06 | 07    | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16     | 17     | 18     | 19    | 20    | 21 | 22 | 23 |  |  |
|---------|----|----|-------|-------|-------|-------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|----|----|----|--|--|
| 1       |    |    |       |       |       | A     | A  | A     | A     | U250R | 275   | 295   | A     | A     | A     | A     | A      | A      | A      |       |       |    |    |    |  |  |
| 2       |    |    |       |       | E     | A     | E  | A     | I200A | I250A | 275   | A     | A     | A     | U270R | A     | A      | A      | A      | A     | C     |    |    |    |  |  |
| 3       |    |    |       |       | E140B | E     | A  | A     | 210   | 250   | A     | A     | A     | A     | A     | A     | A      | A      | A      | A     |       |    |    |    |  |  |
| 4       |    |    |       |       |       | E     | E  | E140B | 175   | 240   | A     | A     | A     | 270   | A     | A     | A      | A      | AE150S | E150S | E140S |    |    |    |  |  |
| 5       |    |    |       |       | E130S | E     | E  | E     | 200   | 240   | A     | A     | A     | A     | A     | A     | A      | AE140S | E140S  | A     |       |    |    |    |  |  |
| 6       |    |    |       |       | E150B | E     | A  | A     | 185   | 235   | 265   | I275A | 280   | I275A | I260A | I210A | E140S  | E140S  | E130S  |       |       |    |    |    |  |  |
| 7       |    |    |       |       |       | A     | E  | A     | 200   | 240   | I270A | A     | A     | A     | A     | A     | A      | E150S  | E      |       |       |    |    |    |  |  |
| 8       |    |    |       |       |       | E     | E  | E140B | 180   | 230   | A     | A     | A     | A     | A     | A     | A      | AE150S | E170B  |       |       |    |    |    |  |  |
| 9       |    |    |       |       |       | E     | E  | E     | 180   | 240   | A     | A     | A     | 280   | A     | A     | A      | AE150B | E      | A     |       |    |    |    |  |  |
| 10      |    |    |       | E150B | E     | E     | E  | E140B | 180   | 220   | A     | A     | A     | A     | A     | A     | A      | AE150S | A      |       |       | C  |    |    |  |  |
| 11      |    |    |       |       |       | E     | E  | E130B | 170   | 240   | A     | A     | 290   | I285R | 250H  |       | AE150B | E120B  | E      | E     |       |    |    |    |  |  |
| 12      |    |    |       |       |       | A     | A  | E140B | 200   | A     | A     | 300   | A     | A     | A     | A     | A      | A      | E140S  | E140S |       |    |    |    |  |  |
| 13      |    |    |       |       |       | E     | A  | E140B | 160   | 215   | U285R | A     | A     | A     | A     | A     | A      | A      | A      | A     |       |    |    |    |  |  |
| 14      |    |    |       |       | E     | E     | E  | A     | I180A | I250A | 275   | 275   | 280   | A     | A     | A     | A      | E      | E      | E     |       |    |    |    |  |  |
| 15      |    |    |       |       |       | A     | A  | E140B | A     | I230A | I270A | A     | A     | A     | 275H  | A     | A      | AE150B | E140B  |       |       |    |    |    |  |  |
| 16      |    |    |       |       | E     | E     | E  | E     | A     | C     | 280   | 290   | 290   | 290   | 260   | 220   | A      | A      | E150S  |       |       |    |    |    |  |  |
| 17      |    | E  |       | E     | E     |       | A  | A     | A     | A     | 275   | 300   | I300C | A     | A     | A     | AE160B | E150B  | E140S  | E     | E150S |    |    |    |  |  |
| 18      |    | E  | E150B |       | E     | E     | E  | E     | A     | U210A | 280   | 300   | I300R | 300   | U280R | 230   | A      | E120B  | E      | E     |       |    |    | E  |  |  |
| 19      |    |    | E     | E     |       |       | E  | E     | 200   | 235   | I270A | 295   | 300   | 295   | 280   | 215   | E140B  | E      | E      |       |       | E  |    |    |  |  |
| 20      |    |    |       | E     |       | E     | E  | A     | E     | 230   | I260A | 290   | 300   | 300   | A     | U240A | A      | A      | E      |       |       |    |    |    |  |  |
| 21      |    |    |       |       |       | A     | E  | A     | R     | 230   | 280   | I300A | 300   | 290   | 275   | U230A | A      | A      | E150B  | A     |       |    |    |    |  |  |
| 22      |    |    |       |       | E     |       | A  | A     | 170   | 215   | I265R | 290   | 300   | A     | A     | A     | A      | AE130B | E130B  |       |       |    |    |    |  |  |
| 23      |    |    |       |       | E     | E     | E  | E120B | 190   | 230   | A     | A     | A     | A     | A     | A     | A      | A      | A      |       |       |    |    |    |  |  |
| 24      |    |    |       |       |       |       | E  | A     | A     | A     | A     | A     | 290   | 275   | A     | A     | A      | E      | E130B  |       |       |    |    |    |  |  |
| 25      |    |    |       | E     |       |       | A  | E120B | 190   | U230A | A     | I280A | 300   | U285A | A     | U230A | E190B  | E170B  | E      |       |       |    |    |    |  |  |
| 26      |    |    |       |       |       | E     | E  | E     | A     | A     | A     | A     | 300   | I295C | 275   | E280S | A      | E130B  | E150S  |       |       |    |    |    |  |  |
| 27      |    |    |       |       |       |       | E  | E120B | R     | 240   | 270   | A     | A     | 290   | 280   | 270   | A      | E160B  | E      | E     |       |    |    |    |  |  |
| 28      |    |    |       |       |       |       | E  | 140   | 200   | 235   | 265   | A     | A     | A     | A     | 240   | A      | C      | E140S  |       |       |    |    |    |  |  |
| 29      |    |    |       |       |       | E     | E  | E     | E140B | 215   | 250   | 275   | 285   | 275   | I260A | 225   | E170C  | E      | E      |       | E150S |    |    | E  |  |  |
| 30      |    | E  | E     | E     |       | E150B | E  | E140B | 180   | I230A | 275   | 285   | 290   | 285   | I270A | 225   | A      | E130B  | E      |       | E     |    |    |    |  |  |
| 31      |    |    |       |       |       | E     | E  | E     | E150B | 220   | 260   | 290   | 300   | 300   | U280A | U230A | A      | A      | E150S  |       |       |    |    |    |  |  |
| Медиана |    | E  | E     | E     | E     | E     | E  | E120B | 180   | 230   | 270   | 290   | 300   | 290   | 275   | 230   | E155B  | E140B  | E130S  | E     | E145S | E  |    | E  |  |  |
| Учтено  |    | 3  | 3     | 6     | 11    | 18    | 22 | 20    | 22    | 26    | 19    | 15    | 16    | 16    | 13    | 13    | 6      | 19     | 25     | 7     | 4     | 1  |    | 2  |  |  |

Пробег частоты от 1.0 МГц до 18.0 МГц 20 сек. мин.

Станция автоматическая  
(ручная, автоматическая)

foEs МГц Декабрь 1972г.  
(характеристика) (единицы) (месяц) (год)Станция Алма-Ата  
Долгота 76°55'E широта 43°15'N

## ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75°EАкадемия Наук Каз. ССР  
(институт)Кем составлена ЗеленовойКем подсчитана Еголаевой

| Дни     | 00    | 01    | 02    | 03    | 04    | 05    | 06    | 07    | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1       | E1.5S | 2.2   | 72.3X | E1.4S | E     | 1.4   | 72.3X | 72.4X | 2.2   | 6     | 72.3X | 2.0   | 3.1   | 3.2   | 3.1   | 3.0   | 2.1   | 72.5X | 72.7H | 1.4   | 72.6X | 73.3X | 72.5X | E     |
| 2       | E     | E1.5B | E     | 1.3   | 6     | 72.2X | 6     | 2.0   | 2.0   | 2.5   | 6     | 3.2   | 3.0   | 3.1   | 2.7   | 2.4   | 1.7   | 72.3X | 72.5X | 73.0X | C     | 1.5   | 72.0X | 1.5   |
| 3       | 1.5   | 2.1   | E1.4B | E1.4S | 6     | 6     | 72.5X | 1.5   | 6     | 6     | 2.8   | 3.0   | 3.1   | 3.0   | 74.1X | 2.9   | 73.0X | 73.8X | 74.9X | 73.3X | 73.5X | 72.8X | 73.0X | 72.4X |
| 4       | 2.1   | 72.3X | 71.5X | E1.5B | E     | 6     | 6     | 6     | 6     | 2.5   | 74.2X | 73.1X | 3.0   | 72.8X | 73.3X | 74.3X | 73.2X | 72.7X | 6     | 6     | 6     | 72.1X | E1.5S | E1.5S |
| 5       | E1.4S | E1.4S | E1.4B | E1.5S | 6     | 6     | 6     | 6     | 72.6X | 2.0   | 3.2   | 3.2   | 3.0   | 3.0   | 3.2   | 2.5   | 2.1   | 2.2   | 6     | 72.5X | C     | C     | C     | 72.3X |
| 6       | E1.4S | E1.5B | E1.5B | E1.4B | 6     | 6     | 72.0X | 1.5   | 6     | 6     | 6     | 3.1   | 6     | 3.0   | 2.9   | 2.4   | 6     | 6     | 6     | E1.4S | 72.5X | 72.3X | 72.1X | E1.4S |
| 7       | E1.4S | E1.5B | E1.5B | E1.5B | E1.3B | 72.0X | 6     | 71.6X | 6     | 6     | 2.7   | 3.1   | 3.1   | 3.2   | 3.1   | 2.4   | 1.6   | 6     | 6     | 72.7X | E1.4S | E1.4S | 72.3X | E1.5S |
| 8       | E1.5S | E1.4S | E1.4B | E1.4S | E     | 6     | 6     | 6     | 6     | 6     | 3.2   | 3.5   | 3.1   | 3.5   | 2.9H  | 2.7   | 2.3   | 6     | 6     | E1.4S | E     | E1.5S | E1.7B | E1.5B |
| 9       | E1.4S | E1.4B | E     | E     | E     | 6     | 6     | 6     | 6     | 2.9   | 3.1   | 3.1   | 3.0   | 3.0   | 2.7   | 2.4   | 2.1   | 6     | 72.2X | 72.6X | E     | 72.8X | E1.4S | 72.3X |
| 10      | 1.5   | 71.9X | 72.5X | 2.1   | 2.1   | 6     | 6     | 6     | 6     | 2.9   | 3.2   | 3.2   | 3.2   | 3.0   | 3.3   | 72.5X | 72.3X | 6     | 72.1X | 72.2X | E1.7S | C     | E1.5S | E1.5B |
| 11      | E     | E     | E     | E     | E     | 6     | 6     | 6     | 6     | 6     | 3.0   | 3.0   | 6     | 6     | 6     | 2.7   | 6     | 6     | 6     | 6     | 1.3   | 72.7X | 71.6X | 72.1X |
| 12      | 73.0X | E     | E1.4B | E     | E     | 72.5X | 72.5X | 6     | 2.5   | 2.9   | 2.9   | 6     | 73.5X | 3.3   | 3.2   | 2.8   | 2.1   | 72.1X | 6     | 2.1   | E1.4S | E1.4S | E1.4S | E1.3S |
| 13      | E     | E     | E     | 71.9X | E     | 6     | 72.2X | 6     | 6     | 3.0   | 2.8   | 73.2X | 73.3X | 73.3X | 73.0X | 73.3X | 2.0   | 2.0   | 72.5X | 72.3X | 72.4X | 73.2X | E     | E1.7B |
| 14      | 71.9X | E1.5B | E     | 1.5   | 1.3   | 6     | 6     | 72.0X | 2.2   | 2.5   | 2.5   | 6     | 6     | 3.1   | 3.0   | 2.5   | 2.0   | 6     | 6     | 6     | 72.5X | E1.4S | E1.4S | 73.0X |
| 15      | E     | 71.8X | 71.5X | E1.5B | E     | 72.0X | 72.4X | 6     | 72.3X | 2.3   | 3.0   | 3.2   | 3.1   | 3.0   | 6     | 2.5   | 1.7   | 6     | 6     | E1.5S | E1.4S | E1.5S | E1.5S | E1.4S |
| 16      | E     | E1.5B | E     | C     | 6     | 6     | 6     | 6     | 2.0   | 6     | 74.3X | 73.4X | 6     | 2.0   | 6     | 6     | 1.3   | 2.3   | 6     | E     | 2.0   | 72.3X | E1.3S | E     |
| 17      | E     | 6     | E     | 6     | 6     | E     | 1.3   | 72.3X | 2.2   | 73.3X | 3.1   | 3.1   | C     | 3.0   | 2.9   | 2.5   | 6     | 6     | 6     | 6     | E1.5S | E1.4S | E1.6S |       |
| 18      | E1.5B | 6     | 6     | E1.5B | 2.0   | 6     | 6     | 6     | 1.6   | 2.6   | 3.7   | 3.8   | 6     | 3.4   | 6     | 2.6   | 2.9   | 6     | 6     | 6     | 72.3X | E1.4B | E1.5B | 6     |
| 19      | E     | E     | 6     | 6     | 1.5   | 74.4X | 6     | 6     | 73.3X | 6     | 3.0   | 6     | 6     | 3.1   | 6     | 2.4   | 6     | 6     | 6     | E1.3B | E1.4S | 6     | E1.5S | E     |
| 20      | E     | E     | E     | 6     | 2.3   | 72.6X | 2.1   | 1.3   | 6     | 6     | 3.2   | 3.1   | 3.0   | 3.3   | 3.4   | 2.7   | 72.9X | 2.0   | 6     | 73.5X | 73.3X | 2.0   | 72.4X | 1.5   |
| 21      | E1.3B | E     | E     | E     | E     | 1.3   | 6     | 72.3X | 1.3   | 6     | 6     | 3.1   | 6     | 3.1   | 3.0   | 2.6   | 72.8X | 2.2   | 6     | 2.0   | 1.7   | 73.3X | 3.1   | 72.8X |
| 22      | 72.6X | E1.5S | E     | C     | 6     | 73.2X | 73.3X | 2.4   | 6     | 6     | 6     | 3.2   | 3.4   | 3.8   | 3.0   | 3.0   | 2.0   | 6     | 6     | 2.0   | 72.4X | E     | 72.9X | 73.3X |
| 23      | 72.8X | E1.5B | E1.6B | E1.2B | 6     | 6     | 6     | 6     | 2.3   | 6     | 2.9   | 3.1   | 3.5   | 3.0   | 73.0X | 2.1   | 2.6   | 72.3X | 74.0X | 73.4X | 72.6X | 73.3X | E     | 72.9X |
| 24      | 73.5X | 72.5X | E1.2B | E     | 1.9   | E1.2B | 2.0   | 73.3X | 72.0X | 72.8X | 3.0   | 3.0   | 3.2   | 73.3X | 2.9   | 73.7H | 2.0   | 6     | 6     | 1.4   | E1.5B | E     | E     | 74.2X |
| 25      | 1.7   | 72.3X | 2.3   | 6     | E     | E1.5B | 72.3X | 6     | 2.5   | 2.8   | 2.9   | 3.0   | 3.6   | 3.6   | 2.7   | 2.4   | 6     | 6     | 6     | E1.4B | E     | E1.5B | E     | E     |
| 26      | E     | E     | E     | E     | E     | 6     | 6     | 6     | 2.1   | 2.7   | 74.3X | 3.0   | 6     | C     | 3.1   | S     | 1.6   | 6     | 6     | E     | E1.5B | E1.5B | E     | E     |
| 27      | E1.5S | E     | E     | E1.6B | E     | E     | 6     | 6     | 2.2   | 6     | 2.9   | 3.0   | 3.1   | 6     | 6     | 6     | 2.2   | 6     | 6     | 6     | E     | E     | E     | E     |
| 28      | E     | E     | E     | 3.0   | E     | E     | 6     | 6     | 6     | 6     | 3.1   | 74.4X | 74.6X | 3.2   | 3.0   | 2.1   | 2.2   | C     | 6     | E1.3S | 72.7X | E1.4S | 1.4   | E1.5S |
| 29      | E1.6S | E1.3S | E1.4S | E1.5S | E     | 6     | 6     | 6     | 6     | 6     | 3.0   | 3.2   | 3.0   | 3.4   | 2.9   | 2.1   | 6     | 6     | 6     | E1.5S | 6     | E     | E1.3S | 6     |
| 30      | E     | 6     | 6     | 6     | E     | 6     | 6     | 6     | 6     | 2.7   | 2.9   | 3.0   | 3.0   | 3.2   | 2.9   | 74.3X | 72.4X | 6     | 6     | 1.5   | 6     | 2.5   | 73.7X | 72.3X |
| 31      | E1.5S | E1.4S | E     | E     | E     | 6     | 6     | 6     | 6     | 3.0   | 6     | 2.5   | 6     | 6     | 3.0   | 2.4   | 1.9   | 72.2X | 6     | 72.3X | E     | 72.3X | E1.5S | E1.5B |
|         | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | 0.5   | 0.2   | -     | 0.3   | 0.4   | 0.4   | 0.7   | -     | -     | -     | -     | D1.2  | D0.8  | -     |
| Медиана | E1.4S | E1.4B | G     | E1.4B | E     | G     | G     | G     | 1.3   | 2.0   | 3.0   | 3.1   | 3.0   | 3.1   | 3.0   | 2.5   | 2.0   | G     | G     | U1.4  | E1.4S | E1.5S | E1.5S | E1.5S |
| Учено   | 31    | 31    | 31    | 29    | 31    | 31    | 31    | 31    | 31    | 31    | 31    | 31    | 30    | 30    | 31    | 30    | 31    | 30    | 31    | 31    | 29    | 29    | 30    | 31    |
|         | E     | E     | E     | E     | E     | G     | G     | G     | G     | G     | 2.7   | 3.0   | G     | 3.0   | 2.7   | 2.4   | 1.6   | G     | G     | G     | G     | E1.4  | E1.3  | G     |
|         | E1.6  | E1.5  | E1.5  | E1.5  | G     | 1.4   | 2.1   | 1.6   | 2.2   | 2.8   | 3.2   | 3.2   | G     | 3.3   | 3.1   | 2.8   | 2.3   | G     | G     | G     | G     | 2.4   | 2.6   | 2.1   |

Пробег частоты от 1.0 МГц до 18.0 МГц 20 сек. мин.Станция автоматическая  
(ручная, автоматическая)

f<sub>o</sub>E<sub>s</sub> МГц Декабрь 1972г.

АКАДЕМИЯ НАУК КАЗ. ССР

Станция АЛМА-АТА  
Долгота 76°55'E широта 43°15'N

## ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75°EКем составлена Зеленковой  
Кем подсчитана Милютиной

| Дни     | 00    | 01    | 02    | 03    | 04    | 05    | 06  | 07  | 08   | 09   | 10   | 11   | 12   | 13   | 14   | 15   | 16  | 17  | 18  | 19    | 20    | 21    | 22    | 23    |
|---------|-------|-------|-------|-------|-------|-------|-----|-----|------|------|------|------|------|------|------|------|-----|-----|-----|-------|-------|-------|-------|-------|
| 1       | E1.5S | E1.4S | 1.5   | E1.4S | E     | 1.4   | 2.0 | 1.7 | 1.8  | 6    | 2.26 | 2.06 | 3.1  | 3.2  | 2.9  | 3.0  | 2.0 | 1.5 | 2.2 | 1.4   | 1.5   | 1.7   | 1.7   | E     |
| 2       | E     | E1.5B | E     | 1.3   | 6     | 1.3   | 6   | 1.4 | 2.0  | 2.5  | 6    | 3.2  | 3.0  | 3.1  | 2.56 | 2.4  | 1.7 | 1.9 | 2.5 | 2.0   | C     | 1.5   | 1.5   | 1.5   |
| 3       | 1.5   | E1.4S | E1.4B | E1.4S | 6     | 6     | 1.5 | 1.5 | 6    | 6    | 2.8  | 3.0  | 3.0  | 2.9  | 4.0  | 2.5  | 2.4 | 2.7 | 2.4 | 1.5   | 1.5   | 2.2   | 2.1   | 1.7   |
| 4       | 1.7   | 1.5   | 1.5   | E1.5B | E     | 6     | 6   | 6   | 6    | 2.06 | 3.0  | 3.0  | 3.0  | 2.36 | 3.0  | 3.0  | 2.7 | 1.8 | 6   | 6     | 6     | E1.5S | E1.5S | E1.5S |
| 5       | E1.4S | E1.4S | E1.4B | E1.5S | 6     | 6     | 6   | 6   | 1.76 | 1.86 | 3.2  | 3.2  | 3.0  | 3.0  | 2.9  | 2.5  | 1.8 | 6   | 6   | 1.5   | C     | C     | C     | 1.6   |
| 6       | E1.4S | E1.5B | E1.5B | E1.4B | 6     | 6     | 1.3 | 1.4 | 6    | 6    | 6    | 3.1  | 6    | 3.0  | 2.9  | 2.4  | 6   | 6   | 6   | E1.4S | 1.5   | 1.7   | 1.5   | E1.4S |
| 7       | E1.4S | E1.5B | E1.5B | E1.5B | E1.3B | 1.3   | 6   | 1.4 | 6    | 6    | 2.7  | 3.0  | 3.0  | 3.0  | 3.0  | 2.4  | 1.6 | 6   | 6   | 1.5   | E1.4S | E1.4S | 1.5   | E1.5S |
| 8       | E1.5S | E1.4S | E1.4B | E1.4S | E     | 6     | 6   | 6   | 6    | 6    | 3.2  | 3.4  | 3.0  | 3.2  | 2.7  | 2.7  | 1.8 | 6   | 6   | E1.4S | E     | E1.5S | E1.7B | E1.5B |
| 9       | E1.4S | E1.4B | E     | E     | E     | 6     | 6   | 6   | 6    | 2.8  | 3.1  | 3.1  | 3.0  | 6    | 2.7  | 2.4  | 1.8 | 6   | 6   | 1.7   | E     | 1.5   | E1.4S | 1.5   |
| 10      | 1.5   | 1.7   | 1.5   | 6     | 6     | 6     | 6   | 6   | 6    | 2.9  | 3.0  | 3.2  | 3.1  | 3.0  | 2.9  | 2.3  | 1.7 | 6   | 1.6 | 1.5   | E1.7S | C     | E1.5S | E1.5B |
| 11      | E     | E     | E     | E     | E     | 6     | 6   | 6   | 6    | 6    | 3.0  | 3.0  | 6    | 6    | 6    | 2.7  | 6   | 6   | 6   | 6     | 1.3   | 1.5   | 1.6   | 1.5   |
| 12      | E     | E     | E1.4B | E     | E     | 1.3   | 1.6 | 6   | 2.5  | 2.9  | 2.9  | 6    | 3.0  | 3.3  | 2.9  | 2.8  | 2.0 | 1.5 | 6   | 6     | E1.4S | E1.4S | E1.4S | E1.3S |
| 13      | E     | E     | E     | 1.7   | E     | 6     | 1.5 | 6   | 6    | 3.0  | 2.16 | 3.2  | 3.1  | 3.2  | 3.0  | 2.9  | 2.0 | 1.7 | 1.5 | 1.5   | 1.7   | 1.7   | E     | E1.7B |
| 14      | 1.5   | E1.5B | E     | 1.5   | 6     | 6     | 6   | 1.5 | 2.0  | 2.5  | 2.46 | 6    | 6    | 3.1  | 2.9  | 2.5  | 1.8 | 6   | 6   | 6     | 1.6   | E1.4S | E1.4S | 1.8   |
| 15      | E     | 1.7   | 1.5   | E1.5B | E     | 1.8   | 1.6 | 6   | 1.8  | 2.3  | 3.0  | 3.2  | 3.1  | 3.0  | 6    | 2.5  | 1.7 | 6   | 6   | E1.5S | E1.4S | E1.5S | E1.5S | E1.4S |
| 16      | E     | E1.5B | E     | C     | 6     | 6     | 6   | 6   | 2.0  | 6    | 3.0  | 2.66 | 6    | 2.06 | 6    | 6    | 1.3 | 1.3 | 6   | E     | 1.5   | 1.5   | E1.3S | E     |
| 17      | E     | 6     | E     | 6     | 6     | E     | 1.3 | 1.3 | 2.1  | 3.0  | 2.26 | 1.86 | C    | 3.0  | 2.8  | 2.4  | 6   | 6   | 6   | 6     | 6     | E1.5S | E1.4S | E1.6S |
| 18      | E1.5B | 6     | 6     | E1.5B | 6     | 6     | 6   | 6   | 1.6  | 2.5  | 2.36 | 2.16 | 6    | 3.4  | 6    | 2.6  | 2.3 | 6   | 6   | 6     | E     | E1.4B | E1.5B | 6     |
| 19      | E     | E     | 6     | 6     | 1.3   | A     | 6   | 6   | 6    | 6    | 2.8  | 6    | 6    | 3.1  | 6    | 2.4  | 6   | 6   | 6   | E1.3B | E1.4S | 6     | E1.5S | E     |
| 20      | E     | E     | E     | 6     | 1.7   | 6     | 6   | 1.3 | 6    | 6    | 2.7  | 3.1  | 2.06 | 3.1  | 3.3  | 2.7  | 2.7 | 1.3 | 6   | 1.3   | 1.6   | 1.2   | 1.8   | 1.3   |
| 21      | E1.3B | E     | E     | E     | E     | 1.2   | 6   | 1.9 | 1.36 | 6    | 6    | 3.1  | 6    | 3.0  | 3.0  | 2.5  | 1.9 | 1.7 | 6   | 6     | E     | 1.2   | 1.4   | 1.6   |
| 22      | 1.5   | E1.5S | E     | C     | 6     | 2.0   | 1.6 | 1.3 | 6    | 6    | 6    | 3.1  | 3.3  | 3.2  | 3.0  | 2.7  | 2.0 | 6   | 6   | 1.4   | 1.9   | E     | 1.5   | 1.8   |
| 23      | 1.7   | E1.5B | E1.6B | E1.2B | 6     | 6     | 6   | 6   | 2.3  | 6    | 2.8  | 3.0  | 3.1  | 3.0  | 2.8  | 2.0  | 2.0 | 1.4 | 1.3 | 2.5   | 1.4   | 1.3   | E     | 1.5   |
| 24      | 1.7   | 1.9   | E1.2B | E     | 1.4   | E1.2B | 6   | 2.0 | 1.9  | 2.5  | 2.6  | 3.0  | 2.06 | 1.86 | 2.7  | 3.0  | 2.0 | 6   | 6   | 1.4   | E1.5B | E     | E     | 2.0   |
| 25      | 1.5   | 1.4   | 1.3   | 6     | E     | E1.5B | 1.4 | 6   | 2.3  | 2.6  | 2.9  | 2.9  | 3.2  | 3.0  | 2.7  | 2.4  | 6   | 6   | 6   | E1.4B | E     | E1.5B | E     | E     |
| 26      | E     | E     | E     | E     | E     | 6     | 6   | 6   | 2.1  | 2.7  | 3.2  | 3.0  | 6    | C    | 2.9  | S    | 1.6 | 6   | 6   | E     | E1.5B | E1.5S | E     | E     |
| 27      | E1.5S | E     | E     | E1.6B | E     | E     | 6   | 6   | 1.46 | 6    | 2.8  | 3.0  | 3.1  | 6    | 6    | 6    | 2.0 | 6   | 6   | 6     | E     | E     | E     | E     |
| 28      | E     | E     | E     | 2.7   | E     | E     | 6   | 6   | 6    | 6    | 3.0  | 4.0  | 3.9  | 3.1  | 2.8  | 2.06 | 2.0 | C   | 6   | E1.3S | 1.6   | E1.4S | 1.4   | E1.5S |
| 29      | E1.6S | E1.3S | E1.4S | E1.5S | E     | 6     | 6   | 6   | 6    | 6    | 3.0  | 3.1  | 3.0  | 3.4  | 2.8  | 6    | 6   | 6   | 6   | E1.5S | 6     | E     | E1.3S | 6     |
| 30      | E     | 6     | 6     | 6     | E     | 6     | 6   | 6   | 6    | 2.5  | 2.9  | 3.0  | 3.0  | 2.76 | 2.9  | 2.5  | 1.7 | 6   | 6   | 1.5   | 6     | 1.6   | 1.7   | 1.8   |
| 31      | E1.5S | E1.4S | E     | E     | E     | 6     | 6   | 6   | 6    | 1.96 | 6    | 2.46 | 6    | 6    | 3.0  | 2.4  | 1.8 | 1.9 | 6   | 1.5   | E     | 1.7   | E1.5S | E1.5B |
| Медиана | E1.4S | E1.4S | 6     | E1.3  | E     | 6     | 6   | 6   | 6    | 1.86 | 2.8  | 3.0  | 3.0  | 3.0  | 2.9  | 2.5  | 1.8 | 6   | 6   | E1.4S | E1.4S | E1.5  | E1.5S | E1.5S |
| Учено   | 31    | 31    | 31    | 29    | 31    | 31    | 31  | 31  | 31   | 31   | 31   | 31   | 30   | 30   | 31   | 30   | 31  | 30  | 31  | 31    | 29    | 29    | 30    | 31    |

Пробег частоты от 1.0 МГц до 18.0 МГц 20 сек. мин.Станция автоматическая  
(ручная, автоматическая)



fmin МГц Декабрь 1972г.

Академия Наук Каз. ССР

Станция Алма-Ата  
Долгота 76°55' E широта 43°15' N

## ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75° E

Кем составлена Зеленковой  
Кем подсчитана Зеленковой

| Дни     | 00    | 01    | 02    | 03    | 04    | 05  | 06  | 07  | 08  | 09  | 10  | 11  | 12  | 13  | 14  | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    |  |  |
|---------|-------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| 1       | E1.5S | E1.4S | 1.0   | E1.4S | 1.0   | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | 1.3 | 1.6 | 1.5 | 1.4 | 1.8 | 1.5   | 1.4   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| 2       | 1.0   | 1.5   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.3 | 1.5 | 1.7 | 1.5 | 1.4 | 1.6 | 1.4 | 1.5   | 1.3   | 1.0   | 1.0   | 1.0   | C     | 1.0   | 1.0   | 1.0   |  |  |
| 3       | 1.0   | E1.4S | 1.4   | E1.4S | 1.4   | 1.0 | 1.0 | 1.0 | 1.3 | 1.4 | 1.5 | 1.5 | 1.7 | 1.6 | 1.6 | 1.5   | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| 4       | 1.0   | 1.0   | 1.0   | 1.5   | 1.0   | 1.0 | 1.0 | 1.4 | 1.0 | 1.3 | 1.4 | 1.6 | 1.6 | 1.4 | 1.4 | 1.5   | E1.4S | 1.0   | E1.5S | E1.5S | E1.4S | E1.5S | E1.5S | E1.5S |  |  |
| 5       | E1.4S | E1.4S | 1.4   | E1.5S | E1.3S | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 | 1.5 | 1.5 | 1.4 | 1.4 | 1.5   | 1.4   | E1.4S | E1.4S | 1.0   | C     | C     | C     | 1.0   |  |  |
| 6       | E1.4S | 1.5   | 1.5   | 1.4   | 1.5   | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.3 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5   | E1.4S | E1.4S | E1.3S | E1.4S | 1.0   | 1.0   | 1.0   | E1.4S |  |  |
| 7       | E1.4S | 1.5   | 1.5   | 1.5   | 1.3   | 1.0 | 1.0 | 1.0 | 1.0 | 1.4 | 1.4 | 1.5 | 1.5 | 1.6 | 1.8 | 1.3   | 1.0   | E1.5S | 1.0   | 1.0   | E1.4S | E1.4S | 1.0   | E1.5S |  |  |
| 8       | E1.5S | E1.4S | 1.4   | E1.4S | 1.0   | 1.0 | 1.0 | 1.4 | 1.0 | 1.0 | 1.4 | 1.5 | 1.6 | 1.6 | 1.5 | 1.5   | E1.4S | E1.5S | 1.7   | E1.4S | 1.0   | E1.5S | 1.7   | 1.5   |  |  |
| 9       | E1.4S | 1.4   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.0 | 1.6 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.4   | E1.3S | 1.5   | 1.0   | 1.0   | 1.0   | 1.0   | E1.4S | 1.0   |  |  |
| 10      | 1.0   | 1.0   | 1.0   | 1.5   | 1.0   | 1.0 | 1.0 | 1.4 | 1.0 | 1.0 | 1.4 | 1.4 | 1.4 | 1.5 | 1.4 | 1.0   | 1.0   | E1.5S | 1.0   | 1.0   | E1.7S | C     | E1.5S | 1.5   |  |  |
| 11      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.3 | 1.0 | 1.3 | 1.4 | 1.4 | 1.5 | 1.4 | 1.3 | 1.4   | 1.5   | 1.2   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| 12      | 1.0   | 1.0   | 1.4   | 1.0   | 1.0   | 1.0 | 1.0 | 1.4 | 1.0 | 1.3 | 1.4 | 1.3 | 1.4 | 1.5 | 1.3 | 1.4   | 1.0   | 1.0   | E1.4S | E1.4S | E1.4S | E1.4S | E1.4S | E1.3S |  |  |
| 13      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.4 | 1.0 | 1.4 | 1.3 | 1.4 | 1.6 | 1.3 | 1.5 | 1.4   | 1.2   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.7   |  |  |
| 14      | 1.0   | 1.5   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.4 | 1.4 | 1.4 | 1.5 | 1.4 | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | E1.4S | E1.4S | 1.0   |  |  |
| 15      | 1.0   | 1.0   | 1.0   | 1.5   | 1.0   | 1.0 | 1.0 | 1.4 | 1.2 | 1.4 | 1.4 | 1.5 | 1.8 | 1.4 | 1.4 | 1.5   | 1.3   | 1.5   | 1.4   | E1.5S | E1.4S | E1.5S | E1.5S | E1.4S |  |  |
| 16      | 1.0   | 1.5   | 1.0   | C     | 1.0   | 1.0 | 1.0 | 1.0 | 1.2 | 1.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5   | 1.0   | 1.0   | E1.5S | 1.0   | 1.0   | 1.0   | E1.3S | 1.0   |  |  |
| 17      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.5 | 1.3 | 1.4 | 1.5 | C   | 1.5 | 1.8 | 1.3   | 1.6   | 1.5   | E1.4S | 1.0   | E1.5S | E1.5S | E1.4S | E1.6S |  |  |
| 18      | 1.5   | 1.0   | 1.5   | 1.5   | 1.0   | 1.0 | 1.0 | 1.0 | 1.4 | 1.4 | 1.0 | 1.3 | 1.9 | 1.7 | 1.5 | 1.3   | 1.2   | 1.2   | 1.0   | 1.0   | 1.0   | 1.4   | 1.5   | 1.0   |  |  |
| 19      | 1.0   | 1.5   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.4 | 1.4 | 1.6 | 1.5 | 1.5 | 1.6 | 1.6 | 1.4   | 1.4   | 1.0   | 1.0   | 1.3   | E1.4S | 1.0   | E1.5S | 1.0   |  |  |
| 20      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.2 | 1.3 | 1.3 | 1.4 | 1.4 | 1.3 | 1.4 | 1.4   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| 21      | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.4 | 1.4 | 1.2 | 1.3 | 1.4 | 1.3   | 1.0   | 1.0   | 1.5   | 1.0   | 1.0   | 1.0   | 1.0   | E1.4S |  |  |
| 22      | 1.0   | E1.5S | 1.0   | C     | 1.0   | 1.0 | 1.0 | 1.0 | 1.2 | 1.5 | 1.3 | 1.3 | 1.7 | 1.6 | 1.5 | 1.7   | 1.0   | 1.3   | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| 23      | 1.0   | 1.5   | 1.6   | 1.2   | 1.0   | 1.0 | 1.0 | 1.2 | 1.2 | 1.3 | 1.4 | 1.3 | 1.6 | 1.6 | 1.5 | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| 24      | 1.0   | 1.0   | 1.6   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.2 | 1.3 | 1.0 | 1.0 | 1.0 | 1.3 | 1.5 | 1.4   | 1.3   | 1.0   | 1.3   | 1.0   | 1.5   | 1.0   | 1.0   | 1.0   |  |  |
| 25      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.5 | 1.0 | 1.2 | 1.4 | 1.7 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 1.8   | 1.9   | 1.7   | 1.0   | 1.4   | 1.0   | 1.5   | 1.0   | 1.0   |  |  |
| 26      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.5 | 1.6 | 1.5 | 1.8 | 1.7 | C   | 1.7 | E2.8S | 1.0   | 1.3   | E1.5S | 1.0   | 1.5   | E1.5S | 1.0   | 1.0   |  |  |
| 27      | E1.5S | 1.0   | 1.0   | 1.6   | 1.0   | 1.0 | 1.0 | 1.2 | 1.0 | 1.3 | 1.5 | 1.6 | 1.6 | 1.8 | 1.6 | 1.5   | 1.6   | 1.6   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| 28      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.5 | 1.4 | 1.4 | 1.6 | 1.7 | 1.6 | 1.7 | 1.4   | 1.0   | C     | E1.4S | E1.3S | 1.0   | E1.0S | 1.0   | E1.5S |  |  |
| 29      | E1.6S | E1.3S | E1.4S | E1.5S | 1.0   | 1.0 | 1.0 | 1.0 | 1.4 | 1.5 | 1.5 | 1.4 | 1.4 | 1.7 | 1.6 | 1.4   | E1.7C | 1.0   | 1.0   | E1.5S | E1.5S | 1.0   | E1.8S | 1.0   |  |  |
| 30      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.5 | 1.0 | 1.4 | 1.0 | 1.4 | 1.5 | 1.4 | 1.7 | 1.4 | 1.6 | 1.4   | 1.0   | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| 31      | E1.5S | E1.4S | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.5 | 1.7 | 1.7 | 1.5 | 1.8 | 1.4 | 1.8 | 1.5   | 1.0   | 1.0   | E1.5S | 1.0   | 1.0   | E1.4S | E1.5S | 1.5   |  |  |
| Медiana | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.2 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.4   | 11.1  | 11.0  | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |  |  |
| Учено   | 31    | 31    | 31    | 29    | 31    | 31  | 31  | 31  | 31  | 31  | 31  | 31  | 30  | 30  | 31  | 31    | 31    | 30    | 31    | 31    | 29    | 29    | 30    | 31    |  |  |

Пробег частоты от 1.0 МГц до 18.0 МГц 20 сек. мин.

Станция автоматическая  
(ручная, автоматическая)

(M3000)F2 Декабрь 1972г.  
(характеристика) (единицы) (месяц) (год)Академия Наук Каз. ССР  
(институт)Станция Алма-Ата  
Долгота 76°55'E широта 43°15'NИОНОСФЕРНЫЕ ДАННЫЕ  
поясное время 75°EКем составлена Зеленковой  
Кем подсчитана Милютинной

| Дни     | 00    | 01    | 02    | 03    | 04    | 05    | 06    | 07    | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1       | U280S | U280S | U280S | U300S | U300S | U330S | 325   | U325S | U350S | 350   | U340S | U350S | U345S | 335   | U340S | U340S | U360S | U340S | 330   | 325   | 340   | 310   | 330   | 310   |
| 2       | 300   | U280S | U285S | U290S | U295S | U305S | 330   | U340S | U360S | 350   | U350C | 345   | 330   | U350S | 350   | U340C | U355S | U325S | 340   | U330S | C     | 325   | 305   | 285   |
| 3       | 280   | U280S | U280S | U305S | U305S | U310S | U320S | U340S | U360S | U355S | 340   | 350   | 345   | 340   | U345R | U350S | U340S | 310   | U340S | S     | U380S | 285   | 290   | U280S |
| 4       | U300N | U285S | U290N | U285S | U290S | U295S | U350S | U345S | C     | U345S | U340S | U340S | 350   | U340S | U340S | U350S | U350S | U340S | 305   | 340   | 305   | U290S | U285S | 295   |
| 5       | U305S | U295S | U300S | U295S | U300S | U330S | U330S | U335S | U360S | U350S | 350   | 340   | U340S | 350   | U340S | U350S | U350S | U315S | U350S | U335S | C     | C     | C     | U305S |
| 6       | U310N | U305S | 305   | U300N | U330S | 305   | U325S | U335S | U360S | U350S | 340   | 340   | U340S | U350S | U350S | U350S | U390S | S     | U340S | U345S | 350   | 345   | 285   | U300S |
| 7       | U305N | U305S | U295S | U320S | U300S | U305S | U325S | U350S | U360S | U325N | U340S | U350S | U360N | U340S | U345S | S     | U355S | U310S | U330S | U325S | S     | U330S | U300S | U300S |
| 8       | U310S | U305S | 300   | U305S | U305S | U305S | U330S | U340S | U380S | S     | U340S | 345   | U350S | U340S | U340S | S     | U350S | U330S | U340S | 330   | U340S | U290S | U300S | U300S |
| 9       | N     | U305S | U300S | U320S | U315S | U310S | U310S | U335S | U380S | U360S | U330S | U350S | U380S | U350S | U345S | 350   | U380S | U340S | 340   | 305   | 360   | 325   | 280   | 280   |
| 10      | 305   | U295S | U310S | U300N | U290S | 305   | 315   | U340S | U380S | 390   | U320S | 350   | 340   | U340S | U350S | U350S | U335N | U330S | U350S | U340S | 370   | C     | 290N  | U285S |
| 11      | S     | U305S | U295N | 300N  | N     | U320N | U365F | U340S | U375S | U390S | U335S | 340   | U350S | U350S | 340   | U370S | U380S | 325   | 305   | U370S | U355S | 305   | 305   | U285S |
| 12      | 280   | U290S | U280S | U300S | U305S | U330S | 330   | 345   | S     | U380S | 370   | 350   | S     | U310S | 350   | U335S | U350S | 350   | U310S | U340S | 350   | 315   | N     | N     |
| 13      | F     | F     | F     | F     | U330F | U340N | 335   | U325S | S     | S     | U340S | 330   | U310S | U375S | U330S | U350S | U340S | U355S | U340S | 345   | 340   | 290N  | 285N  | U300S |
| 14      | U260S | 275   | 280   | 280   | 260   | 310   | U305S | U350S | U365S | U350S | 340   | 330   | C     | 350   | U360S | 340   | U330S | U335S | 320   | 310   | 360   | 295   | U280S | U305N |
| 15      | 280N  | U295S | U290S | 290   | 285   | 295N  | 305   | U325S | U375S | U350S | 350   | 340   | U355S | U350S | U310S | 355   | U385S | U330S | U320S | U310S | U340R | 240   | 280   | 285   |
| 16      | 270   | 280   | 275   | C     | 255   | 265   | 325   | 345   | 340   | 345   | U305S | U340S | S     | U340S | 320   | 340   | U325S | U330S | 315   | 330   | 345   | 305   | 280   | 295   |
| 17      | 280   | 260   | 280   | 300   | 315   | 300   | 295   | U260S | U360S | 345   | 340   | 335   | C     | 360   | 345   | U330S | U345S | 310   | U330S | U320S | 345   | 325   | 280   | 275   |
| 18      | 290   | 280   | 300   | 290   | 305   | 315   | 310   | U340S | U345S | S     | 320   | S     | 330   | S     | S     | 340   | S     | U340S | 340   | 335   | 345   | U345C | U295N | 265   |
| 19      | 280   | 280   | 280   | 290   | 295   | A     | 310   | 335   | U370S | U345C | U330C | 340   | 335   | 340   | 340   | U330S | 375   | 365   | 330   | 330   | U310N | 305   | 280   | 275   |
| 20      | 285   | 280   | 275   | 295   | 320   | 320   | 295   | U330S | U340S | U345S | U360S | U345C | U340S | 335   | 325   | U365S | 315   | U310S | 365   | 325   | 330   | 300   | 280   | 280   |
| 21      | 295   | 280   | 280   | 285   | U300S | 320   | 340   | 340   | 345   | 340   | U370S | 325   | 335   | 355   | 330   | 335   | 345   | 345   | U335S | 345   | 340   | 330   | 265   | 270   |
| 22      | U260S | 280   | 285   | C     | 300   | 320   | 345   | 340   | 345   | 360   | U365S | 340   | 305   | U325S | S     | U320S | S     | U345N | 340   | 370   | 305   | 310   | 270   | 280   |
| 23      | 265   | 280   | 260   | 280   | 280   | 265   | 330   | 340   | 330   | 330   | 330   | 330   | 325   | 330   | 340   | 335   | U315S | U310S | U315S | U335S | 315   | 280   | U265S | 300   |
| 24      | 315   | 285   | U275F | U305N | U295F | F     | 340   | 325   | U335S | 365   | U325S | U345S | 345   | U300S | 325   | 360   | S     | U350S | 305   | 335   | 340   | 340   | 270   | 290   |
| 25      | 305   | 300   | 305   | 315   | U340S | 295   | 310   | U310S | S     | U350S | U305S | 335   | 340   | 340   | U335S | U340S | U330S | U340S | 310   | 310N  | 330   | 310   | 310   | 280   |
| 26      | 280   | 285   | 285   | 305   | 280   | 300   | 320   | U325S | U340S | 365   | 335   | U335S | U335S | C     | U330S | S     | S     | S     | 330   | 340   | 360   | 280   | 280   | 270   |
| 27      | 290   | 285   | 300   | 305   | 295   | 305   | 330   | 310   | U330S | U350S | U300S | U340S | U370S | 345   | U340S | 325   | 340   | 350   | 320   | 365   | 305   | U320S | 280   | 280   |
| 28      | 305   | 280   | 295   | 310   | 290   | 300   | 315   | 305   | U345S | U365S | 340   | 315   | U340S | 355   | U310S | U345S | U345S | C     | 310   | U310S | U335S | 325   | 295   | U280S |
| 29      | U280S | 290   | 290   | 305   | 305   | 340   | 310   | U325S | U345S | U345S | U340S | 315   | U360S | U340R | 325   | 360   | U355S | 335   | 330   | U305S | 330   | 285   | 280   | 280   |
| 30      | 280   | 300   | 305   | 310   | 310   | 270   | 285   | 320   | U365S | U340S | 345   | 320   | 345   | U340S | U310S | U340S | U345S | 320   | 300   | 340   | 340   | 280   | 280   | 300   |
| 31      | 305   | 275   | 295   | 295   | 275   | 295   | 320   | 345   | S     | U340S | 310   | 330   | 345   | 345   | U315R | 365   | S     | U320S | U340S | 340   | 340   | 340   | 280N  | 280   |
| Медiana | 2.90  | 2.85  | 2.90  | 3.00  | U300S | 3.05  | 3.25  | U335S | U360S | U350S | U340S | 3.40  | U340S | U340S | U340S | U340S | U350S | U330S | 3.30  | 3.35  | 3.40  | 3.10  | 2.80  | 2.85  |
| Учено   | 28    | 30    | 30    | 28    | 30    | 29    | 31    | 31    | 26    | 28    | 31    | 30    | 27    | 29    | 29    | 28    | 26    | 28    | 31    | 30    | 28    | 29    | 29    | 30    |
|         | 280   | 280   | 280   | 290   | 290   | 300   | 310   | 325   | 345   | 345   | 330   | 330   | 335   | 340   | 325   | 340   | 340   | 320   | 315   | 325   | 330   | 290   | 290   | 280   |
|         | 305   | 295   | 300   | 305   | 305   | 320   | 330   | 340   | 365   | 360   | 345   | 345   | 350   | 350   | 345   | 350   | 355   | 340   | 340   | 340   | 350   | 325   | 295   | 3.00  |

Пробег частоты от 1.0 Мгц до 18.0 Мгц 20сек. мм.

Станция автоматическая  
(ручная, автоматическая)

(М3000)F1 Декабрь 1972г.  
(характеристика) (единицы) (месяц) (год)

Академия Наук Каз ССР  
(институт)

Станция Алма-Ата  
Долгота 76°55'E широта 43°15'N

ИОНОСФЕРНЫЕ ДАННЫЕ  
поясное время 75°E

Кем составлена Зеленковой  
Кем подсчитана Милютинной

| Дни     | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10   | 11   | 12   | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |  |  |
|---------|----|----|----|----|----|----|----|----|----|----|------|------|------|----|----|----|----|----|----|----|----|----|----|----|--|--|
| 1       |    |    |    |    |    |    |    |    |    |    | L    |      | L    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 2       |    |    |    |    |    |    |    |    |    |    |      | L    | L    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 3       |    |    |    |    |    |    |    |    |    |    | L    | L    | L    | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 4       |    |    |    |    |    |    |    |    |    | L  | L    | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 5       |    |    |    |    |    |    |    |    |    |    |      | L    | L    | L  |    | L  |    |    |    |    |    |    |    |    |  |  |
| 6       |    |    |    |    |    |    |    |    |    |    |      | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 7       |    |    |    |    |    |    |    |    |    |    | L    | L    |      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 8       |    |    |    |    |    |    |    |    |    |    |      | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 9       |    |    |    |    |    |    |    |    |    |    |      | L    | L    |    | L  |    |    |    |    |    |    |    |    |    |  |  |
| 10      |    |    |    |    |    |    |    |    |    |    | L    | L    | L    |    | L  |    |    |    |    |    |    |    |    |    |  |  |
| 11      |    |    |    |    |    |    |    |    |    |    | L    | L    | L    | L  | L  | L  |    |    |    |    |    |    |    |    |  |  |
| 12      |    |    |    |    |    |    |    |    |    |    | L    |      |      |    | L  |    |    |    |    |    |    |    |    |    |  |  |
| 13      |    |    |    |    |    |    |    |    | L  | L  | L    | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 14      |    |    |    |    |    |    |    |    |    | L  | L    |      | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 15      |    |    |    |    |    |    |    |    |    |    | L    | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 16      |    |    |    |    |    |    |    |    |    | C  |      | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 17      |    |    |    |    |    |    |    |    |    |    | L    | L    | C    | A  |    |    |    |    |    |    |    |    |    |    |  |  |
| 18      |    |    |    |    |    |    |    |    |    |    |      | 360  | R    |    | L  |    |    |    |    |    |    |    |    |    |  |  |
| 19      |    |    |    |    |    |    |    |    |    | L  |      | L    | L    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 20      |    |    |    |    |    |    |    |    |    |    |      | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 21      |    |    |    |    |    |    |    |    |    |    |      | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 22      |    |    |    |    |    |    |    |    |    |    |      | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 23      |    |    |    |    |    |    |    |    |    | L  | L    | L    | L    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 24      |    |    |    |    |    |    |    |    |    |    | L    | L    | L    | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 25      |    |    |    |    |    |    |    |    |    |    |      | L    |      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 26      |    |    |    |    |    |    |    |    |    |    | L    | L    | L    | C  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 27      |    |    |    |    |    |    |    |    |    |    |      | L    | A    | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 28      |    |    |    |    |    |    |    |    |    |    | L    | L    | L    | L  | L  | L  |    |    | C  |    |    |    |    |    |  |  |
| 29      |    |    |    |    |    |    |    |    |    |    |      | L    | L    | L  | L  | L  |    |    |    |    |    |    |    |    |  |  |
| 30      |    |    |    |    |    |    |    |    |    | L  | L    | L    | L    | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 31      |    |    |    |    |    |    |    |    |    | L  | 4.00 | 3.90 | 3.70 | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| Медиана |    |    |    |    |    |    |    |    |    |    | 4.00 | 3.75 | 3.70 |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Учено   |    |    |    |    |    |    |    |    |    |    | 1    | 2    | 1    |    |    |    |    |    |    |    |    |    |    |    |  |  |



R'F КМ Декабрь 1972г.  
(характеристика) (единицы) (месяц) (год)

Станция АЛМА-АТА

Долгота 76°55'E широта 43°15'N

## ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75°E

Академия Наук Каз. ССР  
(институт)

Кем составлена Зеленковой

Кем подсчитана Милютинкой

| Дни     | 00    | 01    | 02    | 03    | 04    | 05    | 06    | 07    | 08  | 09  | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    |  |  |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| 1       | E290S | E290S | E290A | E265S | E250E | E210A | E240A | 215   | 205 | 205 | 190   | 215   | 210   | 225   | 230   | 210   | 200   | E205A | E240A | E240A | E215A | E240A | E240A | E220E |  |  |
| 2       | E220E | E295B | E265E | E265A | E250E | E240A | E210E | 200   | 200 | 200 | 190   | 220   | 200   | 220   | 210   | 225   | 200   | 240   | E240A | E240A | C     | E240A | E260A | E270A |  |  |
| 3       | E290A | E290S | E295B | E250S | E245B | E220E | E240A | 220   | 200 | 200 | 205   | 210   | 210   | 200   | 220   | 200   | 200   | E260A | E220A | E235A | E195A | E290A | E295A | E295A |  |  |
| 4       | E255A | E255A | E270A | E270B | E250E | E250E | E215E | 205   | 195 | 190 | 215   | 205   | 205   | 205   | 225   | 210   | E200A | E215A | E190S | E225S | E245S | E250S | E250S | E260S |  |  |
| 5       | E240S | E250S | E255B | E255S | E250S | E240E | E205E | 220   | 205 | 200 | 220   | 205   | 200   | 200   | 210   | E225B | 195   | E205S | E200S | E220A | C     | C     | C     | E240A |  |  |
| 6       | E215S | E210B | E240B | E240B | E205B | E240E | E240A | 210   | 205 | 195 | 215   | 240   | 195   | 200   | 205   | 205   | 190   | 250   | E210S | E205S | E200A | E225A | E260A | E250S |  |  |
| 7       | E245S | E250B | E250B | E250B | E245B | E245A | E220E | 220   | 205 | 190 | 240   | E240B | 195   | 205   | 230   | 200   | 205   | 240   | E200E | E240A | E205S | E200S | E245A | E250S |  |  |
| 8       | E245S | E240S | E250B | E255S | E230E | E240E | E220E | 210   | 200 | 180 | 230   | E225A | 200   | 210   | 200   | 200   | 200   | 220   | E220B | E220S | E220E | E270S | E265B | E245B |  |  |
| 9       | E250S | E250B | E240E | E215E | E210E | E230E | E210E | 205   | 195 | 205 | 200   | E220B | 200   | 190   | 210   | 210   | 200   | E205B | 205   | E240A | E195E | E220A | E290S | E290A |  |  |
| 10      | E255A | E260A | E240A | E210B | E210E | E250E | E210E | 205   | 195 | 200 | 200   | E225B | 205   | 200   | 225   | 210   | 200   | 205   | E205A | E200A | E200S | C     | E295S | E270B |  |  |
| 11      | E245E | E245E | E260E | E250E | E245E | E225E | E200E | E200B | 200 | 195 | 225   | 220   | 200   | 205   | 195   | E205B | 190   | 220   | 220   | E200E | E200A | E220A | E225A | E265A |  |  |
| 12      | E255E | E250E | E260B | E245E | E235E | E220A | E210A | 200   | 210 | 200 | 205   | 210   | 200   | 225   | E230B | 235   | 195   | 195   | E220S | E200S | E230S | E240S | E260S | E255S |  |  |
| 13      | E255E | E255E | E260E | E250A | E250E | E245E | E210A | 240   | 200 | 205 | 235   | 240   | 205   | 205   | 240   | 220   | 210   | 200   | 225   | E200A | E225A | E290A | E275E | E265B |  |  |
| 14      | E330A | E305B | E290E | E300A | E315E | E265E | E210E | 200   | 200 | 215 | 205   | 215   | 205   | 220   | 205   | 230   | 200   | 195   | E225E | E240E | E205A | E270S | E290S | E290A |  |  |
| 15      | E260E | E265A | E260A | E270B | E260E | E255A | E255A | 230   | 200 | 200 | 225   | 235   | 215   | 200   | 210   | 210   | 200   | E205B | E210B | E245S | E210S | E390S | E295S | E285S |  |  |
| 16      | E295E | E295B | E290E | C     | E325E | E300E | E245E | 200   | 220 | 220 | 205   | 225   | 195   | 200   | 200   | 215   | 200   | 200   | E215S | E195E | E205A | E270A | E300S | E255E |  |  |
| 17      | E265E | E305E | E280E | E215E | E240E | E225E | E255E | 250   | 200 | 200 | 215   | 200   | E205C | E200A | 200   | 200   | 205   | 200   | E215S | E220E | E210S | E220S | E300S | E290S |  |  |
| 18      | E275B | E280E | E255B | E270B | E245E | E225E | 225   | 200   | 205 | 200 | 210   | 200   | E210A | 220   | 205   | 205   | 215   | E205B | E200E | E205E | E200E | E200B | E295B | E295E |  |  |
| 19      | E270E | E285B | E255E | E250E | E250A | A     | E240E | 205   | 200 | 200 | 205   | 220   | 200   | 200   | 220   | 220   | 200   | E190E | E220E | E205B | E215S | E210E | E300S | E295E |  |  |
| 20      | E285E | E255E | E290E | E250E | E245A | E230E | E245E | 220   | 200 | 200 | 200   | E235B | 200   | 205   | E205A | 200   | 200   | 205   | E195E | E215A | E215A | E245A | E350A | E285A |  |  |
| 21      | E270B | E275E | E265E | E255E | E250E | E205A | E205E | E200A | 200 | 200 | 200   | E205A | 200   | E240B | 220   | 215   | 200   | E195A | E215B | E200E | E205E | E205A | E300A | E300A |  |  |
| 22      | E295A | E295S | E260E | C     | E250E | E245A | E215A | 205   | 200 | 200 | 205   | 225   | 215   | E235B | E210A | 250   | 210   | E225B | E200B | E200A | E260A | E250E | E330A | E305A |  |  |
| 23      | E300A | E295B | E340B | E300B | E255E | E225E | E230E | 200   | 210 | 215 | 215   | 200   | 210   | 215   | 225   | 225   | 200   | 200   | E225A | E245A | E245A | E260A | E265E | E250A |  |  |
| 24      | E235A | E295A | E295B | E250E | E260A | E200B | E205E | 245   | 210 | 200 | E225B | E220B | E215B | 190   | 235   | 205   | 200   | 200   | E205B | E225A | E200B | E215E | E295E | E295A |  |  |
| 25      | E250A | E250A | E245A | E240E | E200E | E270B | E265A | 215   | 200 | 205 | 200   | 190   | 215   | 225   | 215   | 210   | 225   | 205   | E200E | E250B | E200E | E260B | E295E | E285E |  |  |
| 26      | E290E | E265E | E250E | E245E | E250E | E245E | E210E | E205E | 215 | 205 | 230   | 210   | 205   | E200B | 210   | 210   | 205   | E195B | E220S | E200E | E200B | E300S | E250E | E280E |  |  |
| 27      | E295S | E255E | E245E | E245B | E240E | E240E | E205E | 220   | 205 | 205 | 210   | E220B | E205A | 210   | 205   | 230   | 200   | 210   | E245E | E200E | E250E | E225E | E300E | E300E |  |  |
| 28      | E250E | E250E | E245E | E245A | E250E | E225E | 220   | 205   | 200 | 190 | 205   | E200A | E200A | 200   | 195   | E210B | 200   | E230C | E255S | E245S | E220A | E220S | E255A | E245S |  |  |
| 29      | E290S | E250S | E255S | E240S | E200E | E210E | E245E | E240E | 195 | 200 | 220   | 205   | E215B | E205A | 200   | E215B | 200   | 200   | E220E | E225S | E225S | E240E | E250S | E265E |  |  |
| 30      | E255E | E275E | E235E | E235E | E205E | E320B | E285E | 235   | 200 | 200 | 210   | E220B | 210   | 200   | 230   | 225   | 200   | 210   | E200E | E205A | E205E | E310A | E300A | E295A |  |  |
| 31      | E250S | E295S | E250E | E255E | E290E | E250E | E220E | 205   | 210 | 200 | 200   | 200   | 200   | E220B | E230B | 200   | 220   | E220A | E205S | E220A | E200E | E230A | E275S | E295B |  |  |
| Медiana | E290E | E265E | E260E | E250E | E250E | E240E | E220E | 205   | 200 | 200 | 210   | E210  | E200  | E200  | 210   | 210   | E200  | E200  | E215S | E220A | E205A | E240A | E290A | E280A |  |  |
| Учено   | 31    | 31    | 31    | 29    | 31    | 30    | 31    | 31    | 31  | 31  | 31    | 31    | 31    | 31    | 31    | 31    | 31    | 31    | 31    | 31    | 29    | 29    | 30    | 31    |  |  |
|         | E250  | E250  | E250  | E240  | E235  | E225  | E210  | 200   | 200 | 200 | 200   | 205   | 200   | 200   | 205   | 200   | 200   | 200   | E200  | E200  | E200  | E220  | E260  | E255  |  |  |
|         | E290  | E295  | E280  | E260  | E250  | E250  | E240  | 220   | 205 | 205 | 220   | 220   | 210   | 215   | 225   | 220   | 215   | 215   | E220  | E240  | E220  | E270  | E300  | E295  |  |  |

Пробег частоты от 1.0 Мгц до 18.0 Мгц 20сек. мин.

Станция автоматическая  
(ручная, автоматическая)

R'F2 КМ Декабрь 1972г.  
(характеристика) (единицы) (месяц) (год)

МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД

Академия Наук Каз. ССР  
(институт)

Станция АЛМА-АТА  
Долгота 76°55'E широта 43°15'N

ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75°E

Кем составлена Зеленковой  
Кем подсчитана Милютинной

| Дни     | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07  | 08  | 09  | 10  | 11  | 12  | 13  | 14  | 15  | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |  |  |
|---------|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|--|--|
| 1       |    |    |    |    |    |    |    |     |     |     | 215 |     | 240 |     |     |     |    |    |    |    |    |    |    |    |  |  |
| 2       |    |    |    |    |    |    |    |     |     |     |     | 225 | 210 |     |     |     |    |    |    |    |    |    |    |    |  |  |
| 3       |    |    |    |    |    |    |    |     |     |     | 240 | 215 | 215 | 240 |     |     |    |    |    |    |    |    |    |    |  |  |
| 4       |    |    |    |    |    |    |    |     |     | L   | 240 | 230 | 205 | 235 | 225 |     |    |    |    |    |    |    |    |    |  |  |
| 5       |    |    |    |    |    |    |    |     |     |     |     | 235 | 240 | 205 |     | 220 |    |    |    |    |    |    |    |    |  |  |
| 6       |    |    |    |    |    |    |    |     |     |     |     | 240 | 240 | 225 | 230 |     |    |    |    |    |    |    |    |    |  |  |
| 7       |    |    |    |    |    |    |    |     |     |     | 250 | 215 |     | 235 |     |     |    |    |    |    |    |    |    |    |  |  |
| 8       |    |    |    |    |    |    |    |     |     |     |     | 235 | 220 | 210 | 250 |     |    |    |    |    |    |    |    |    |  |  |
| 9       |    |    |    |    |    |    |    |     |     |     |     | 215 | 200 |     | 220 |     |    |    |    |    |    |    |    |    |  |  |
| 10      |    |    |    |    |    |    |    |     |     |     | 255 | 220 | 220 |     | 225 |     |    |    |    |    |    |    |    |    |  |  |
| 11      |    |    |    |    |    |    |    |     |     |     | 240 | 225 | 210 | 210 | 240 | 200 |    |    |    |    |    |    |    |    |  |  |
| 12      |    |    |    |    |    |    |    |     |     |     | 205 |     |     |     | 220 |     |    |    |    |    |    |    |    |    |  |  |
| 13      |    |    |    |    |    |    |    | 220 |     |     | 235 | 250 | 240 | 205 | 240 |     |    |    |    |    |    |    |    |    |  |  |
| 14      |    |    |    |    |    |    |    |     | 220 |     | 240 |     | 240 | 220 | 205 |     |    |    |    |    |    |    |    |    |  |  |
| 15      |    |    |    |    |    |    |    |     |     |     | 225 | 235 | 215 | 210 | 225 |     |    |    |    |    |    |    |    |    |  |  |
| 16      |    |    |    |    |    |    |    |     | 220 |     |     | 230 | 240 | 210 | 250 |     |    |    |    |    |    |    |    |    |  |  |
| 17      |    |    |    |    |    |    |    |     |     |     | 220 | 225 | 210 | 210 |     |     |    |    |    |    |    |    |    |    |  |  |
| 18      |    |    |    |    |    |    |    |     |     |     |     | 235 | 230 |     | 250 |     |    |    |    |    |    |    |    |    |  |  |
| 19      |    |    |    |    |    |    |    |     | 200 |     |     | 225 | 225 |     |     |     |    |    |    |    |    |    |    |    |  |  |
| 20      |    |    |    |    |    |    |    |     |     |     |     | 220 | 235 | 210 | 245 |     |    |    |    |    |    |    |    |    |  |  |
| 21      |    |    |    |    |    |    |    |     |     |     |     | 230 | 245 | 225 | 245 |     |    |    |    |    |    |    |    |    |  |  |
| 22      |    |    |    |    |    |    |    |     |     |     |     | 235 | 245 | 230 | 220 |     |    |    |    |    |    |    |    |    |  |  |
| 23      |    |    |    |    |    |    |    |     | 230 | 225 | 220 | 245 | 220 | 225 |     |     |    |    |    |    |    |    |    |    |  |  |
| 24      |    |    |    |    |    |    |    |     |     |     | 215 | 215 | 200 | L   |     |     |    |    |    |    |    |    |    |    |  |  |
| 25      |    |    |    |    |    |    |    |     |     |     |     | 215 |     | 230 |     |     |    |    |    |    |    |    |    |    |  |  |
| 26      |    |    |    |    |    |    |    |     |     |     | 235 | 220 | 245 | 215 | 230 |     |    |    |    |    |    |    |    |    |  |  |
| 27      |    |    |    |    |    |    |    |     |     |     |     | 215 | 210 | 220 | 220 |     |    |    |    |    |    |    |    |    |  |  |
| 28      |    |    |    |    |    |    |    |     |     |     | 230 | 265 | 235 | 205 | 225 | 205 |    |    |    |    |    |    |    |    |  |  |
| 29      |    |    |    |    |    |    |    |     |     |     |     | 255 | 205 | 240 | 235 | 205 |    |    |    |    |    |    |    |    |  |  |
| 30      |    |    |    |    |    |    |    |     | 225 | 215 | 215 | 220 | 220 |     |     |     |    |    |    |    |    |    |    |    |  |  |
| 31      |    |    |    |    |    |    |    |     | 230 | 215 | 235 | 225 | 215 | 215 |     |     |    |    |    |    |    |    |    |    |  |  |
| Медиана |    |    |    |    |    |    |    | 220 | 220 | 230 | 225 | 225 | 220 | 225 | 205 |     |    |    |    |    |    |    |    |    |  |  |
| Учтено  |    |    |    |    |    |    |    | 1   | 6   | 17  | 28  | 28  | 23  | 21  | 4   |     |    |    |    |    |    |    |    |    |  |  |
|         |    |    |    |    |    |    |    |     | 220 | 215 | 220 | 210 | 210 | 220 |     |     |    |    |    |    |    |    |    |    |  |  |
|         |    |    |    |    |    |    |    |     | 230 | 240 | 235 | 240 | 230 | 240 |     |     |    |    |    |    |    |    |    |    |  |  |

Пробег частоты от 1.0 Мгц до 18.0 Мгц 20сек. мин.

Станция автоматическая  
(ручная, автоматическая)

R'E КМ Декабрь 1972 г.

Академия Наук Каз. ССР  
(институт)

(характеристика) (единицы) (месяц) (год)

Станция Алма-Ата

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Зеленковой

Долгота 76°55'E широта 43°15'N

поясное время 75°E

Кем подсчитана Егорова

| Дни     | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07  | 08      | 09    | 10    | 11   | 12    | 13    | 14    | 15      | 16      | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---------|----|----|----|----|----|----|----|-----|---------|-------|-------|------|-------|-------|-------|---------|---------|----|----|----|----|----|----|----|
| 1       |    |    |    |    | A  | A  | A  | A   | 95      | A     | A     | A    | A     | A     | A     | A       | B       | A  | A  |    |    |    |    |    |
| 2       |    |    |    |    | E  | A  | E  | A   | 100 A   | 100   | 100   | 100  | 100 A | 100   | 100 A | 100     | E 110 B | A  | A  | A  | C  |    |    |    |
| 3       |    |    |    |    | B  | E  | A  | A   | 100     | 100   | 100 A | 95 A | 95    | 100   | 100   | 100     | B       | A  | A  | A  |    |    |    |    |
| 4       |    |    |    |    |    | E  | E  | B   | 105     | A     | A     | A    | 100   | A     | A     | A       | A       | A  | S  | S  | S  |    |    |    |
| 5       |    |    |    |    | S  | E  | E  | E   | A       | 100 A | 100   | 100  | 100   | 100   | 100   | 100     | B       | S  | S  | A  |    |    |    |    |
| 6       |    |    |    |    | B  | E  | A  | A   | 105     | 95    | 100   | 95 A | 95    | 95    | 100   | 105     | S       | S  | S  |    |    |    |    |    |
| 7       |    |    |    |    |    | A  | E  | A   | 100     | 100   | 100   | 100  | 100   | 100   | 100   | 100     | E       | S  | E  |    |    |    |    |    |
| 8       |    |    |    |    |    | E  | E  | B   | 105     | 100   | 100   | 100  | 100 A | 100   | 100   | 105     | S       | S  | B  |    |    |    |    |    |
| 9       |    |    |    |    |    | E  | E  | E   | 105     | 100   | A     | A    | 100   | 100 A | 100   | 105     | S       | B  | E  | A  |    |    |    |    |
| 10      |    |    |    | B  | E  | E  | E  | B   | 105     | 100 A | 100   | 100  | 100   | 100   | 100   | 100     | E       | S  | A  |    |    | C  |    |    |
| 11      |    |    |    |    |    | E  | E  | B   | 100     | 100   | 100   | 100  | 100   | 100   | 100 H | 105     | B       | B  | E  | E  |    |    |    |    |
| 12      |    |    |    |    |    | A  | A  | B   | 105     | 100   | 100   | 100  | 100   | 100   | 100   | 105     | A       | A  | S  | S  |    |    |    |    |
| 13      |    |    |    |    |    | E  | A  | B   | 100     | 100   | A     | A    | 100   | 100   | 100   | 100     | A       | A  | A  | A  |    |    |    |    |
| 14      |    |    |    |    | E  | E  | E  | A   | 100 A   | 100   | 100 A | 100  | 100   | 100 A | 100   | 100     | E       | E  | E  | E  |    |    |    |    |
| 15      |    |    |    |    |    | A  | A  | B   | A       | A     | A     | A    | A     | 95    | 95 H  | 105     | B       | B  | B  |    |    |    |    |    |
| 16      |    |    |    |    | E  | E  | E  | E   | A       | 100   | 95 A  | 95 A | 95    | 100 A | 100   | 105     | A       | A  | S  |    |    |    |    |    |
| 17      |    | E  |    | E  | E  |    | A  | A   | 90      | A     | A     | 95 A | 95 C  | 100   | 100   | A       | B       | B  | S  | E  | S  |    |    |    |
| 18      |    | E  | B  |    | E  | E  | E  | E   | 100 A   | 100   | A     | A    | 100   | 100   | 100   | 105     | A       | B  | E  | E  |    |    | E  |    |
| 19      |    |    | E  | E  |    |    | E  | E   | 115 B   | 100   | 100 A | 100  | 100   | 100   | 100   | 100     | B       | E  | E  |    |    | E  |    |    |
| 20      |    |    |    | E  | E  | E  | A  | E   | 100     | 100   | 100   | 95 A | 100 A | 100   | 100   |         | A       | A  | E  |    |    |    |    |    |
| 21      |    |    |    |    | A  | E  | A  | A   | 100     | 95    | 95    | 95   | 95    | 100   | 100   |         | A       | A  | B  | A  |    |    |    |    |
| 22      |    |    |    |    | E  |    | A  | 100 | E 110 B | 100   | 100   | 100  | 100   | 100   | 100   | 100     |         | B  | B  |    |    |    |    |    |
| 23      |    |    |    |    | E  | E  | E  | B   | 105     | 100   | 100   | 100  | 100   | 100   | 100   | A       | A       | A  | A  |    |    |    |    |    |
| 24      |    |    |    |    |    |    | E  | A   | A       | 100   | 100   | A    | A     | A     | 100   | A       | A       | E  | B  |    |    |    |    |    |
| 25      |    |    |    | E  |    |    | A  | B   | E 125 B | 105   | 100   | 100  | 105   | 105   | 105 A | E 115 B | B       | B  | E  |    |    |    |    |    |
| 26      |    |    |    |    |    | E  | E  | E   | B       | 100   | 100   | 100  | 100   | 100 C | 100   | S       | A       | B  | S  |    |    |    |    |    |
| 27      |    |    |    |    |    |    | E  | B   | A       | 95    | 100   | 100  | 100   | 100   | 100   | 100     | B       | B  | E  | E  |    |    |    |    |
| 28      |    |    |    |    |    |    | E  | E   | E 120 B | 100   | 100   | 100  | 100   | 100   | 100   | A       | A       | C  | S  |    |    |    |    |    |
| 29      |    |    |    |    |    | E  | E  | E   | B       | 100   | 100   | 95   | 95    | 100   | 100   | B       | C       | E  | E  |    | S  |    | E  |    |
| 30      |    | E  | E  | E  |    | B  | E  | B   | 105     | 100   | 100   | 100  | 100   | 100 A | 100   | A       | A       | B  | E  |    | E  |    |    |    |
| 31      |    |    |    |    | E  | E  | E  | B   | 100 A   | 100   | 100 A | 95   | 95    | 100   | 105   |         | A       | A  | S  |    |    |    |    |    |
| Медиана |    | E  | E  | E  | E  | E  | E  | E   | 100     | 100   | 100   | 100  | 100   | 100   | 100   | 100     | E       | E  | E  | E  | E  | E  |    |    |
| Учено   |    | 3  | 2  | 5  | 8  | 17 | 22 | 10  | 20      | 28    | 24    | 24   | 28    | 28    | 29    | 22      | 5       | 4  | 11 | 5  | 1  | 1  |    |    |

Пробег частоты от 1.0 Мгц до 18.0 Мгц 20 сек. мин.

Станция автоматическая  
(ручная, автоматическая)

R'Es КМ Декабрь 1972г.  
(характеристика) (единицы) (месяц) (год)

МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД

АКАДЕМИЯ НАУК Каз. ССР  
(институт)

Станция АЛМА-АТА  
Долгота 76°55'E широта 43°15'N

ИОНОСФЕРНЫЕ ДАННЫЕ  
поясное время 75°E

Кем составлена Зеленковой  
Кем подсчитана Еголаевой

| Дни     | 00  | 01  | 02  | 03  | 04  | 05  | 06  | 07  | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  |  |  |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| 1       | S   | 95  | 100 | S   | E   | 100 | 100 | 100 | 100   | ⊗     | 95    | 95    | E165⊗ | E140⊗ | E120⊗ | 105   | 100 | 95  | 95H | 95  | 100 | 100 | 95  | E   |  |  |
| 2       | E   | B   | E   | 100 | ⊗   | 100 | ⊗   | 100 | E165⊗ | 105   | ⊗     | E150⊗ | E155⊗ | E150⊗ | 100   | E145⊗ | 110 | 100 | 100 | 100 | C   | 100 | 100 | 100 |  |  |
| 3       | 95  | 95  | B   | S   | ⊗   | ⊗   | 100 | 100 | ⊗     | ⊗     | E150⊗ | E160⊗ | E145⊗ | E125⊗ | 105   | 105   | 100 | 100 | 100 | 100 | 100 | 95  | 95  | 95  |  |  |
| 4       | 95  | 90  | 90  | B   | E   | ⊗   | ⊗   | ⊗   | ⊗     | 100   | 100   | 95    | E150⊗ | 90    | 90    | 90    | 90  | 100 | ⊗   | ⊗   | ⊗   | 100 | S   | S   |  |  |
| 5       | S   | S   | B   | S   | ⊗   | ⊗   | ⊗   | ⊗   | 100   | 95    | E160⊗ | E145⊗ | E145⊗ | E145⊗ | 125   | E150⊗ | 115 | 95  | ⊗   | 100 | C   | C   | C   | 100 |  |  |
| 6       | S   | B   | B   | B   | ⊗   | ⊗   | 100 | 100 | ⊗     | ⊗     | ⊗     | E155⊗ | ⊗     | E195⊗ | 140   | E140⊗ | ⊗   | ⊗   | ⊗   | S   | 100 | 100 | 95  | S   |  |  |
| 7       | S   | B   | B   | B   | B   | 100 | ⊗   | 100 | ⊗     | ⊗     | 100   | E145⊗ | E140⊗ | 110   | 105   | E125⊗ | 105 | ⊗   | ⊗   | 100 | S   | S   | 100 | S   |  |  |
| 8       | S   | S   | B   | S   | E   | ⊗   | ⊗   | ⊗   | ⊗     | ⊗     | E150⊗ | E130⊗ | E145⊗ | 115   | 105H  | 115   | 105 | 105 | ⊗   | ⊗   | S   | E   | S   | B   |  |  |
| 9       | S   | B   | E   | E   | E   | ⊗   | ⊗   | ⊗   | ⊗     | E170⊗ | E165⊗ | E150⊗ | E180⊗ | 95    | E155⊗ | 140   | 105 | ⊗   | 105 | 100 | E   | 100 | S   | 95  |  |  |
| 10      | 95  | 95  | 95  | 105 | 95  | ⊗   | ⊗   | ⊗   | ⊗     | E190⊗ | 155   | E150⊗ | E130⊗ | E190⊗ | 105   | 105   | 100 | ⊗   | 105 | 105 | S   | C   | S   | B   |  |  |
| 11      | E   | E   | E   | E   | E   | ⊗   | ⊗   | ⊗   | ⊗     | ⊗     | E155⊗ | E170⊗ | ⊗     | ⊗     | ⊗     | E135⊗ | ⊗   | ⊗   | ⊗   | ⊗   | 100 | 100 | 100 | 100 |  |  |
| 12      | 90  | E   | B   | E   | E   | 100 | 100 | ⊗   | E190⊗ | 100   | E155⊗ | ⊗     | 105   | E145⊗ | 100   | 120   | 105 | 95  | ⊗   | 95  | S   | S   | S   | S   |  |  |
| 13      | E   | E   | E   | 105 | E   | ⊗   | 100 | ⊗   | ⊗     | E150⊗ | 95    | 105   | 110   | 100   | E115⊗ | 100   | 100 | 135 | 110 | 110 | 110 | 105 | E   | B   |  |  |
| 14      | 95  | B   | E   | 105 | 95  | ⊗   | ⊗   | 100 | E135⊗ | 100   | 100   | ⊗     | ⊗     | E150⊗ | E115⊗ | 110   | 105 | ⊗   | ⊗   | ⊗   | 100 | S   | S   | 95  |  |  |
| 15      | E   | 95  | 100 | B   | E   | 100 | 100 | ⊗   | 105   | 100   | E195⊗ | E150⊗ | E150⊗ | E145⊗ | ⊗     | 110   | 105 | ⊗   | ⊗   | S   | S   | S   | S   | S   |  |  |
| 16      | E   | B   | E   | C   | ⊗   | ⊗   | ⊗   | ⊗   | 100   | ⊗     | 95    | 95    | ⊗     | 90    | ⊗     | ⊗     | 95  | 85  | ⊗   | E   | 100 | 100 | S   | E   |  |  |
| 17      | E   | ⊗   | E   | ⊗   | ⊗   | E   | 100 | 100 | 100   | 95    | 95    | 90    | C     | 105   | 100   | E150⊗ | ⊗   | ⊗   | ⊗   | ⊗   | ⊗   | S   | S   | S   |  |  |
| 18      | B   | ⊗   | ⊗   | B   | 100 | ⊗   | ⊗   | ⊗   | 100   | E145⊗ | 95    | 95    | ⊗     | E150⊗ | ⊗     | E130⊗ | 100 | ⊗   | ⊗   | ⊗   | 90  | B   | B   | ⊗   |  |  |
| 19      | E   | E   | ⊗   | ⊗   | 100 | 100 | ⊗   | ⊗   | 85    | ⊗     | 100   | ⊗     | ⊗     | E120⊗ | ⊗     | E145⊗ | ⊗   | ⊗   | ⊗   | B   | S   | ⊗   | S   | E   |  |  |
| 20      | E   | E   | E   | ⊗   | 100 | 100 | 100 | 100 | ⊗     | ⊗     | 100   | E140⊗ | 90    | 110   | 105   | E125⊗ | 100 | 100 | ⊗   | 100 | 100 | 100 | 95  | 95  |  |  |
| 21      | B   | E   | E   | E   | E   | 100 | ⊗   | 100 | 100   | ⊗     | ⊗     | 100   | ⊗     | E155⊗ | E140⊗ | E120⊗ | 90  | 90  | ⊗   | 100 | 100 | 100 | 100 | 105 |  |  |
| 22      | 100 | S   | E   | C   | ⊗   | 100 | 100 | 100 | ⊗     | ⊗     | ⊗     | E150⊗ | E125⊗ | 105   | 100   | 100   | 100 | ⊗   | ⊗   | 100 | 100 | E   | 100 | 100 |  |  |
| 23      | 100 | B   | B   | B   | ⊗   | ⊗   | ⊗   | ⊗   | E150⊗ | ⊗     | 110   | 90    | 100   | 100   | 100   | 100   | 100 | 100 | 100 | 100 | 95  | 100 | E   | 100 |  |  |
| 24      | 100 | 100 | B   | E   | 100 | B   | 105 | 100 | 100   | 100   | 100   | 100   | 85    | 85    | 100   | 90H   | 95  | ⊗   | ⊗   | 95  | B   | E   | E   | 100 |  |  |
| 25      | 105 | 95  | 95  | ⊗   | E   | B   | 100 | ⊗   | E120⊗ | E135⊗ | 110   | 105   | E125⊗ | 115   | 100   | E135⊗ | ⊗   | ⊗   | ⊗   | B   | E   | B   | E   | E   |  |  |
| 26      | E   | E   | E   | E   | E   | ⊗   | ⊗   | ⊗   | E120⊗ | 110   | 100   | 105   | ⊗     | C     | E155⊗ | S     | 90  | ⊗   | ⊗   | E   | B   | S   | E   | E   |  |  |
| 27      | S   | E   | E   | B   | E   | E   | ⊗   | ⊗   | 105   | ⊗     | 115   | 100   | 100   | ⊗     | ⊗     | ⊗     | 100 | ⊗   | ⊗   | ⊗   | E   | E   | E   | E   |  |  |
| 28      | E   | E   | E   | 100 | E   | E   | ⊗   | ⊗   | ⊗     | ⊗     | E145⊗ | 100   | 100   | 100   | 100   | 100   | 100 | C   | ⊗   | S   | 100 | S   | 100 | S   |  |  |
| 29      | S   | S   | S   | S   | E   | ⊗   | ⊗   | ⊗   | ⊗     | ⊗     | E155⊗ | E150⊗ | E140⊗ | 110   | 110   | 100   | ⊗   | ⊗   | ⊗   | S   | ⊗   | E   | S   | ⊗   |  |  |
| 30      | E   | ⊗   | ⊗   | ⊗   | E   | ⊗   | ⊗   | ⊗   | ⊗     | 110   | E150⊗ | E150⊗ | E165⊗ | E150⊗ | E150⊗ | 95    | 95  | ⊗   | ⊗   | 100 | ⊗   | 100 | 100 | 90  |  |  |
| 31      | S   | S   | E   | E   | E   | ⊗   | ⊗   | ⊗   | ⊗     | 100   | ⊗     | 100   | ⊗     | ⊗     | E175⊗ | 125   | 105 | 100 | ⊗   | 100 | E   | 105 | S   | B   |  |  |
| Медиана | 95  | 95  | 95  | 105 | 100 | 100 | 100 | 100 | 100   | 100   | 1100  | 1120  | E140⊗ | 1100  | 1100  | 1110  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |  |  |
| Учтено  | 9   | 7   | 5   | 5   | 6   | 9   | 11  | 11  | 16    | 16    | 26    | 28    | 21    | 27    | 25    | 28    | 25  | 13  | 7   | 16  | 13  | 14  | 11  | 12  |  |  |

Пробег частоты от 10 Мгц до 18.0 Мгц 20 сек мин.

Станция автоматическая  
(ручная, автоматическая)



КрF2 КМ Декабрь 1972г.  
(характеристика) (единицы) (месяц) (год)

МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД

АКАДЕМИЯ НАУК Каз. ССР  
(институт)

Станция Алма-Ата  
Долгота 76°55'E широта 43°15'N

ИОНОСФЕРНЫЕ ДАННЫЕ  
поясное время 75°E

Кем составлена Зеленковой  
Кем подсчитана Милютиной

| Дни     | 00    | 01    | 02    | 03    | 04    | 05    | 06    | 07    | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1       | U350S | U350S | U350S | U310S | U305S | U265S | 270   | U270S | U240S | 240   | U250S | U240S | U245S | 255   | U250S | U250S | U230S | U250S | 260   | 270   | 250   | 290   | 260   | 290   |
| 2       | 310   | U350S | U340S | U325S | U315S | U300S | 265   | U250S | U230S | 240   | U240C | 245   | 265   | U240S | 240   | U250C | U235S | U270S | 250   | U260S | C     | 270   | 300   | 340   |
| 3       | 350   | U350S | U345S | U300S | U300S | U290S | U275S | U250S | U230S | U235S | 250   | 240   | 245   | 250   | U245R | U240S | U250S | 295   | U250S | S     | U210S | 340   | 325   | U345S |
| 4       | U305N | U340S | U325N | U340S | U330S | U320S | U240S | U245S | C     | U245S | U250S | U250S | 240   | U250S | U250S | U240S | U240S | U250S | 300   | 250   | 300   | U325S | U340S | 315   |
| 5       | U300S | U315S | U305S | U315S | U305S | U265S | U260S | U255S | U230S | U240S | 240   | 250   | U250S | 240   | U250S | U240S | U240S | U285S | U240S | U255S | C     | C     | C     | U300S |
| 6       | U290N | U300S | 300   | U310N | U260S | 300   | U270S | U255S | U230S | U240S | 250   | 250   | U250S | U240S | U240S | U240S | U200S | S     | U250S | U245S | 240   | 245   | 340   | U305S |
| 7       | U300N | U300S | U315S | U275S | U305S | U300S | U270S | U240S | U230S | U270N | U250S | U240S | U230N | U250S | U245S | S     | U235S | U290S | U260S | U270S | S     | U260S | U310S | U305S |
| 8       | U290S | U300S | 310   | U300S | U300S | U300S | U260S | U250S | U210S | S     | U250S | 245   | U240S | U250S | U250S | S     | U240S | U265S | U250S | 260   | U250S | U325S | U305S | U305S |
| 9       | N     | U300S | U310S | U275S | U280S | U290S | U295S | U255S | U210S | U230S | U265S | U240S | U210S | U240S | U245S | 240   | U210S | U250S | 250   | 300   | 230   | 270   | 350   | 345   |
| 10      | 300   | U315S | U295S | U305N | U330S | 300   | 280   | U250S | U210S | 200   | U275S | 240   | 250   | U250S | U240S | U240S | U255N | U260S | U240S | U250S | 220   | C     | 325N  | U340S |
| 11      | S     | U300S | U320N | 310N  | N     | U275N | U235F | U250S | U215S | U200S | U255S | 250   | U240S | U240S | 250   | U220S | U210S | 270   | 300   | U220S | U235S | 300   | 300   | U340S |
| 12      | 345   | U330S | U345S | U305S | U300S | U265S | 265   | 245   | S     | U210S | 220   | 240   | S     | U290S | 240   | U255S | U240S | 240   | U295S | U250S | 240   | 280   | N     | N     |
| 13      | F     | F     | F     | F     | U260F | U250N | 255   | U270S | S     | S     | U250S | 260   | U290S | U215S | U260S | U240S | U250S | U235S | U250S | 245   | 250   | 325N  | 340N  | U310S |
| 14      | U395S | 360   | 350   | 355   | 395   | 290   | U300S | U240S | U225S | U240S | 250   | 260   | C     | 240   | U230S | 250   | U265S | U255S | 275   | 295   | 230   | 320   | U350S | U300N |
| 15      | 345N  | U315S | U325S | 325   | 340   | 315N  | 300   | U270S | U215S | U240S | 240   | 260   | U235S | U240S | U290S | 235   | U205S | U265S | U275S | U290S | U250R | 450   | 350   | 340   |
| 16      | 366   | 350   | 360   | C     | 405   | 375   | 270   | 245   | 250   | 245   | U300S | U250S | S     | U250S | 275   | 250   | U270S | U265S | 280   | 260   | 245   | 300   | 350   | 315   |
| 17      | 345   | 390   | 350   | 305   | 280   | 310   | 320   | U295S | U230S | 245   | 250   | 255   | C     | 230   | 245   | U260S | U245S | 290   | U260S | U275S | 245   | 270   | 355   | 360   |
| 18      | 330   | 350   | 310   | 325   | 300   | 285   | 290   | U250S | U245S | S     | 275   | S     | 265   | S     | S     | 250   | S     | U250S | 250   | 255   | 245   | U245C | U320N | 380   |
| 19      | 345   | 345   | 345   | 325   | 320   | A     | 295   | 255   | U220S | U245C | U260C | 250   | 255   | 250   | 250   | U260S | 215   | 225   | 260   | 260   | U295N | 300   | 355   | 360   |
| 20      | 340   | 345   | 360   | 320   | 275   | 275   | 315   | U260S | U250S | U245S | U230S | U245C | U250S | 255   | 270   | U225S | 285   | U295S | 225   | 270   | 260   | 305   | 355   | 350   |
| 21      | 315   | 350   | 350   | 340   | U305S | 275   | 250   | 250   | 245   | 250   | U220S | 270   | 255   | 235   | 265   | 255   | 245   | 245   | U255S | 245   | 250   | 265   | 375   | 370   |
| 22      | U330S | 350   | 340   | C     | 310   | 275   | 245   | 250   | 245   | 230   | U225S | 250   | 300   | U255S | S     | U275S | S     | U245N | 250   | 220   | 300   | 295   | 370   | 350   |
| 23      | 380   | 350   | 395   | 355   | 345   | 275   | 265   | 250   | 260   | 260   | 260   | 265   | 270   | 260   | 250   | 255   | U285S | U290S | U280S | U255S | 280   | 350   | U380S | 305   |
| 24      | 280   | 335   | U360F | U300N | U320F | F     | 250   | 270   | U255S | 225   | U270S | U245S | 245   | U305S | 270   | 230   | S     | U240S | 300   | 255   | 250   | 250   | 365   | 325   |
| 25      | 300   | 305   | 300   | 280   | U250S | 315   | 295   | U295S | S     | U240S | U300S | 255   | 250   | 250   | U255S | U250S | U265S | U250S | 295   | 295N  | 265   | 295   | 295   | 350   |
| 26      | 345   | 340   | 340   | 300   | 350   | 310   | 275   | U270S | U250S | 225   | 255   | U255S | U255S | C     | U260S | S     | S     | S     | 265   | 250   | 230   | 350   | 350   | 370   |
| 27      | 330   | 335   | 310   | 300   | 315   | 300   | 265   | 295   | U260S | U240S | U305S | U250S | U220S | 245   | U250S | 270   | 250   | 240   | 275   | 225   | 300   | U275S | 345   | 350   |
| 28      | 300   | 350   | 315   | 290   | 325   | 305   | 280   | 300   | U245S | U225S | 250   | 285   | U250S | 235   | U290S | U245S | U245S | C     | 295   | U290S | U255S | 270   | 320   | U345S |
| 29      | U345S | 325   | 325   | 300   | 300   | 250   | 295   | U270S | U245S | U245S | U250S | 280   | U230S | U250R | 270   | 230   | U235S | 255   | 265   | U300S | 265   | 340   | 345   | 345   |
| 30      | 345   | 305   | 300   | 295   | 295   | 365   | 340   | 275   | U225S | U250S | 245   | 275   | 245   | U250S | U290S | U250S | U245S | 275   | 305   | 250   | 250   | 350   | 345   | 310   |
| 31      | 300   | 360   | 315   | 320   | 360   | 315   | 275   | 245   | S     | U250S | 295   | 265   | 245   | 245   | U280R | 225   | S     | U305S | U250S | 250   | 250   | 250   | 345N  | 350   |
| Медиана | 45    | 35    | 40    | 25    | 30    | 35    | 30    | 20    | 20    | 15    | 20    | 15    | 15    | 10    | 25    | 10    | 15    | 30    | 30    | 20    | 20    | 55    | 30    | 40    |
| Учено   | 330   | 340   | 325   | 310   | U305S | 300   | 275   | U255S | U230S | U240S | U250S | 250   | U250S | U250S | U250S | U250S | U240S | U260S | 260   | 255   | 250   | 295   | 345   | 340   |
|         | 28    | 30    | 30    | 28    | 30    | 29    | 31    | 31    | 26    | 28    | 31    | 30    | 27    | 29    | 29    | 28    | 26    | 28    | 31    | 30    | 28    | 29    | 29    | 30    |
|         | 300   | 315   | 310   | 300   | 300   | 275   | 265   | 250   | 225   | 230   | 245   | 245   | 240   | 240   | 245   | 240   | 235   | 250   | 250   | 250   | 240   | 270   | 320   | 310   |
|         | 345   | 350   | 350   | 325   | 330   | 310   | 295   | 270   | 245   | 245   | 265   | 260   | 255   | 250   | 270   | 250   | 250   | 280   | 280   | 270   | 260   | 325   | 350   | 350   |

Пробег частоты от 1.0 Мгц до 18.0 Мгц 20 сек. мм.

Станция автоматическая  
(ручная, автоматическая)



Типы Es Декабрь 1972г.

(характеристика) (единицы) (месяц) (год)

Станция Алма-Ата

Долгота 76°55'E широта 43°15'N

## ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75°E

АКАДЕМИЯ НАУК КАЗ. ССР

(ИНСТИТУТ)

Кем составлена Зеленковой

Кем подсчитана

| Дни     | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08   | 09   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17 | 18 | 19 | 20 | 21 | 22 | 23 |  |  |
|---------|----|----|----|----|----|----|----|----|------|------|------|------|------|------|------|------|------|----|----|----|----|----|----|----|--|--|
| 1       |    | f1 | f1 |    |    | l1 | l3 | l3 | l1   |      | l1   | l1   | h1l1 | h1l1 | c1l1 | c2l1 | c2   | l1 | l2 | f1 | f1 | f2 | f1 |    |  |  |
| 2       |    |    |    | f1 |    | l2 |    | l1 | h1l1 | c1   |      | h1   | h1l1 | h1c1 | l1   | c1   | c1   | l2 | l2 | l2 |    | f1 | f1 | f1 |  |  |
| 3       | f1 | f1 |    |    |    |    | l1 | l1 |      |      | h1l1 | h1l1 | h1c1 | c1   | c3   | c2   | c3   | l3 | l2 | l2 | f1 | f2 | f2 | f1 |  |  |
| 4       | f1 | f1 | f1 |    |    |    |    |    |      | l2   | l2   | l2   | h1   | l2   | l2   | l2   | l3   | l2 |    |    |    | f1 |    |    |  |  |
| 5       |    |    |    |    |    |    |    |    | l2   | l1   | h1c1 | c2   | c1   | c1   | c2   | c1   | c2   | l1 |    | l1 |    |    |    | f1 |  |  |
| 6       |    |    |    |    |    |    | l1 | l1 |      |      |      | h1l1 |      | h1   | c1   | c1   |      |    |    |    | f1 | f2 | f1 |    |  |  |
| 7       |    |    |    |    |    | l1 |    | l1 |      |      | c1   | c1   | c1   | c1   | c1   | h2c1 | c1   |    |    | f1 |    | f2 |    |    |  |  |
| 8       |    |    |    |    |    |    |    |    |      |      | c1   | c1   | c1l1 | c1   | c2   | c2   | c1   |    |    |    |    |    |    |    |  |  |
| 9       |    |    |    |    |    |    |    |    |      | h1   | h1l2 | h2l1 | h1l1 | l1   | h1   | c1   | c2   |    | l1 | l2 |    | f2 |    | f1 |  |  |
| 10      | f1 | f1 | f1 | l1 | l1 |    |    |    |      | h1l1 | c1   | c1   | c1   | h1   | c1   | c3   | c2   |    | l1 | f1 |    |    |    |    |  |  |
| 11      | f1 |    |    |    |    |    |    |    |      |      | c1   | h1   |      |      |      | c3   |      |    |    |    | f1 | f2 | f1 | f1 |  |  |
| 12      | f1 |    |    |    |    | l2 | l2 |    | h1   | c1h1 | h1c1 |      | c1   | c1   | c1   | c2   | c2l1 | l2 |    | l1 |    |    |    |    |  |  |
| 13      |    |    |    | f1 |    |    | l1 |    |      | c1   | l2   | c2l1 | c1   | c1h1 | c2   | c2   | l2   | c2 | l1 | l2 | f2 | f2 |    |    |  |  |
| 14      | f1 |    |    | f1 | l1 |    |    | l1 | c2l1 | c2   | l1   |      |      | h1l1 | c2   | c1   | c1   |    |    |    | f2 |    |    | f1 |  |  |
| 15      |    | f1 | f1 |    |    | l2 | l2 |    | l2   | l2   | h1l2 | h1l1 | h1l1 | h1   |      | c1   | c1   |    |    |    |    |    |    |    |  |  |
| 16      |    |    |    |    |    |    |    | l1 | l1   |      | l2   | l2   |      | l1   |      | l1   | l1   | l1 |    |    | f1 | f1 |    |    |  |  |
| 17      |    |    |    |    |    |    | l1 | l1 | c1   | l2   | l2   | l1   |      | c1   | c1   | h1l1 |      |    |    |    |    |    |    |    |  |  |
| 18      |    |    |    |    | f1 |    |    |    | l1   | h1   | l2   | l2   |      | h1   |      | c1   | l1   |    |    |    | f1 |    |    |    |  |  |
| 19      |    |    |    |    | f1 | f2 |    |    | l1   |      | l1   |      |      | c1   |      | h1   |      |    |    |    |    |    |    |    |  |  |
| 20      |    |    |    |    | f2 | l1 | l1 | l1 |      |      | c1   | h1   | l1   | c1l1 | c1   | c1   | l2   | l1 |    | f2 | f1 | f1 | f2 | f1 |  |  |
| 21      |    |    |    |    |    | l1 |    | l1 | l1   |      |      | c1   |      | h1   | h1   | c1   | l1   | l1 |    | l1 | f1 | f2 | f1 | f2 |  |  |
| 22      | f1 |    |    |    |    | f3 | l2 | c1 |      |      |      | h1c1 | c1   | c2   | c1   | c2   | c1   |    |    | f1 | f2 |    | f2 | f2 |  |  |
| 23      | f1 |    |    |    |    |    |    |    | h1   |      | c1l1 | c1l1 | c1   | c1   | c1   | l1   | l1   | l1 | l2 | f2 | f1 | f1 |    | f1 |  |  |
| 24      | f1 | f1 |    |    | f2 |    | l1 | l2 | l1   | c1   | c1l1 | c1l1 | l1   | l1   | c1   | l2   | l1   |    |    | f1 |    |    |    | f2 |  |  |
| 25      | f1 | f1 | f1 |    |    |    | l1 |    | c1   | c1   | c1   | c1   | c1   | c1   | l1   | c1   |      |    |    |    |    |    |    |    |  |  |
| 26      |    |    |    |    |    |    |    |    | c1   | c1   | c1   | c1   |      |      | h1   |      | l1   |    |    |    |    |    |    |    |  |  |
| 27      |    |    |    |    |    |    |    |    | l1   |      | c1   | c1   | c1   |      |      |      | c1   |    |    |    |    |    |    |    |  |  |
| 28      |    |    |    | f1 |    |    |    |    |      |      | h1   | c1   | c2   | c2   | c2   | l2   | l1   |    |    |    | f1 |    | f1 |    |  |  |
| 29      |    |    |    |    |    |    |    |    |      |      | h1   | h1   | h1   | c1   | c1   | c1   |      |    |    |    |    |    |    |    |  |  |
| 30      |    |    |    |    |    |    |    |    |      | c1   | h1   | h1   | h1   | h1l1 | h1l1 | l1c1 | l1   |    |    | f1 |    | f3 | f2 | f2 |  |  |
| 31      |    |    |    |    |    |    |    |    |      | l1   |      | l1   |      |      | h1   | c1   | c1l1 | l1 |    | f1 |    | f1 |    |    |  |  |
| Медиана |    |    |    |    |    |    |    |    |      |      |      |      |      |      |      |      |      |    |    |    |    |    |    |    |  |  |
| Учтено  |    |    |    |    |    |    |    |    |      |      |      |      |      |      |      |      |      |    |    |    |    |    |    |    |  |  |

Пробег частоты от 1.0 Мгц до 18.0 Мгц 20 сек. мин.

Станция автоматическая

(ручная, автоматическая)