

foF2 МГц Ноябрь 1972г.

(характеристики) (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 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       | 30    | 30    | 30    | 32    | U38S  | U28S  | 31    | 59    | U8.6R | 10.5  | U10.8R | U13.2R |        | R      | U12.7R | U9.8S | U9.3S | 8.9   | U9.9S | 8.8   | 7.8   | U6.3S | U4.9N | U3.7R | U3.2S |       |       |     |       |     |
| 2       | 3.5   | U3.8S | 4.3   | 2.9   | 2.7   | 2.7   | 3.5   | I7.0R | U9.2R | 10.8  | 11.4   | U12.5S | 11.4   | U10.2S | 10.3   | I9.1S | U8.1S | U8.1S | 8.4   | U7.8S | 5.9   | U5.3S | U3.8S | 3.4   |       |       |       |     |       |     |
| 3       | 3.6   | 4.0   | 4.0   | U4.2S | 4.4   | I3.4S | U3.7S | U7.2S |       | R     |        | R      | 11.4   | I11.8S | U11.7S | 11.4  | U9.9S | U9.0S | 9.0   | U8.7S | U5.3S | 4.0   | I3.2S | I3.0A | 2.9   | U3.1S |       |     |       |     |
| 4       | 3.3   | 3.1   | 3.0   | U3.1S | 3.3   | 3.3   | 3.3   | U5.9S | U7.3S | 8.0   | 8.1    | U10.1C | 10.6   | 10.7   | 8.6    | 7.9   | U6.9S | U5.5S | 5.1   | U4.5S | 4.2   | 3.4   | 3.0   | 3.1   |       |       |       |     |       |     |
| 5       | 3.1   | 3.3   | 3.5   | U3.6S | 4.0   | 3.8   | 3.4   | I6.4R |       | R     | 8.8    | U7.7R  | U10.1R | 10.9   | U9.3R  | 9.5   | 9.0   | 7.2   | U5.4S | U4.6S | U3.9S | 3.0   | 3.0   | 3.1   | 3.1   |       |       |     |       |     |
| 6       | 3.0   | I3.0A | 3.1   | U3.3S | U3.6S | U3.8S | U3.7S | U6.7S | U7.5S | U7.7S | U8.3R  | U9.8S  | 10.3   | 7.8    | U8.7R  | U8.2R | U7.3S | U4.7S | U5.2R | U4.6S | 3.2   | 3.0   | U3.3F | 3.6   |       |       |       |     |       |     |
| 7       | 3.5F  | 3.7   | U3.7F | 3.7   | 3.6F  | U3.6S | U3.7S | U7.0S | U6.8S | 8.4   | 9.0    | 9.8    | 10.6   | U9.0S  | 8.3    | 7.9   | 7.3   | U7.2S | U4.7S | 2.8   | 2.7   | 3.0   | U3.2S | 3.5   |       |       |       |     |       |     |
| 8       | U3.7S | 3.6   | 3.5   | 3.7   | 3.6   | U3.9S | 3.2   | U5.6S | 6.4   | 7.5   | U9.7S  | 10.0   | 10.9   | 7.5    | 7.9    | 7.0   | 7.4   | U5.2S | U4.1S | U4.1S | U3.5S | U3.6S | U3.8S | U3.9S |       |       |       |     |       |     |
| 9       | 4.3   | U4.7S | 4.4   | 4.5   | U4.9S | U4.1S | 3.5   | 5.6   | U7.2R | 8.6   | 8.2    | U9.1S  | U10.8S | 9.3    | U9.3S  | 8.8   |       | S     |       | S     | U4.2S | U3.9S | U3.2S | U3.4S | U3.6S |       |       |     |       |     |
| 10      | U3.7S | U3.9S | U3.9S | 4.0   | U4.0S |       | S     | 3.3F  |       | S     | U6.7S  | U7.4S  | I8.3C  | 8.8    |        | C     |       | C     | I8.2C | U7.5C |       | S     |       | S     | U4.4S | 3.3   | 2.7G  | 2.5 | 3.1   | 3.6 |
| 11      | U3.6S | U4.0S | 4.0   | 4.1   | U4.2S | U4.1S | 3.0   | U5.4S | 6.5   | 7.2   | 7.3    | I9.1C  | 9.4    | U6.8S  | 7.0    | U7.3S | U7.0S | U4.9S | U5.1S | 4.7   | U4.2S | I3.5S | U3.8S | U3.7S |       |       |       |     |       |     |
| 12      | U4.3S | 4.3   | 4.3   | I4.2C | 4.2   | I4.3S | U4.2S | 5.9   | U7.9S | U7.4C | 7.3    | 8.3    | 7.7    | 7.4    | 8.0    | 8.0   | U7.4S | U4.6S | U4.3S | U4.2S | U3.6S | 2.8   | U3.3S | 3.7   |       |       |       |     |       |     |
| 13      | 3.7   | 3.5   | 3.5   | 3.9   | U4.2S | U4.3S | U4.2S | U6.1C | U7.0S | U7.6S | U6.3C  | U7.4C  | 8.2    | 7.0    | 6.6    | U7.0S |       | S     |       | A     |       | A     | U3.6S | U3.3S | I2.9S | U3.2C |       | C   |       |     |
| 14      | U3.9S | U4.1S | U4.3S | 4.3   | 4.2   | U3.4S | I3.6S | U5.1S |       | S     | U7.1S  | 5.3    | 8.5    | 7.9    | U6.9S  |       | S     |       | S     |       | S     | 3.9   | U3.6S | 3.5   |       | S     | S     |     |       |     |
| 15      | 4.2   | U4.6S | U4.3S | U4.2S | U3.9S |       | S     | U3.9C |       | C     | U8.2S  | U7.0S  | 6.9    | U7.4S  | 8.2    | U8.1S | 6.9   | U7.1S | U5.7S | 4.4   | U4.3S | U3.6S | 3.0   | U3.4S | U3.5S | 3.5   |       |     |       |     |
| 16      | 4.0   | 4.3   | U3.8S | 4.0   | 3.9   | U3.6S | 3.4   |       | S     | U8.9S |        | S      | 8.9    | U9.3S  | 9.1    | 8.7   | U8.9S | U8.2S |       | S     |       | S     | 4.0   | 3.7   | 3.0   | 3.0   | U3.4S | 3.3 |       |     |
| 17      | 3.6   | U3.3S | U3.5S | 3.6   | 3.4   | U3.4S | 3.5   | U6.0S |       | S     |        | S      | U8.3S  | 8.6    | U9.1S  | 7.9   | U7.6S | U8.1S |       | S     | U5.3S | U4.6S | U3.7N | U3.4N |       | S     | U3.3S | 3.4 |       |     |
| 18      | U3.4S | U3.7S | U3.9S | U3.8S | U3.7S | U3.9S | U4.0S | U6.2S | I7.9S | 8.7   | 8.1    | U9.2S  | 9.0    | 8.0    | U7.4S  | U7.8S | U6.2S |       | C     | U4.6S | U3.1S | U3.3S | 2.7   | 3.0   | 2.9   |       |       |     |       |     |
| 19      | 3.3   | 3.4   | 3.4   | 3.4   | 3.6   | 2.8   | U3.2S | U5.8S | U7.7S | U8.1S | 8.2    | 8.4    | 8.8    | 7.9    | U7.8S  | 8.5   | U6.7S |       | S     |       | S     | 3.2   | U2.8S | 2.7   | 2.9   | U3.3S |       |     |       |     |
| 20      | 3.6   | 3.6   | U3.7S |       | C     | U4.0S | U3.9S | U4.1S | U6.3S | U6.7R | U8.0R  | U7.7S  | I9.0C  | 9.0    | U7.5S  | U7.9S | 8.0   | U7.0S | U6.8S |       | S     | U3.7S | U3.7S | U3.1S | U3.1S | U3.1S |       |     |       |     |
| 21      | U3.5S | U3.2S | U3.2S | 3.0   | U3.2N | U3.4S | 3.0   | U5.2S | U6.9S | U8.1S | U9.4C  | I9.3C  | U8.8R  | 7.8    | 8.3    |       | S     | U7.4S | U5.8S | U4.5S | U3.7S | 2.9   | 2.8   | U3.5S | U3.7S |       |       |     |       |     |
| 22      | U4.0S | U4.1S | U4.3S | U4.4S | U4.6S | U4.0S | U3.8F | U5.3S | U7.3S | U8.0S | U8.3S  | 8.6    | 8.1    | U9.1S  | U7.8S  | U7.5S | U6.0S |       | S     | U4.1S | U3.9S |       | S     | 2.8   | U3.2S | U3.2S |       |     |       |     |
| 23      |       | C     | 3.0   | U3.0S | U3.2S | U3.1S | 2.5   | 2.6   | U5.0S | U7.0S | U9.1S  | I9.8S  | U9.8S  | 8.9    | I8.6S  | U8.2S | U7.8S | U6.2S | I6.0S |       | S     | 3.4   | 2.5   | U2.8S | 2.9   | 3.0   |       |     |       |     |
| 24      | U3.1S | U3.2S | U3.2S | 3.3   | 3.3   | U3.1S | U3.3S | U5.0S |       | S     | U9.0C  | I9.0R  | U9.0S  | I8.9R  | 9.0    | 8.2   | U8.0S | I7.3S |       | S     | U3.8S | U3.7S | U3.3S | U3.3N | U3.7S | U4.1S |       |     |       |     |
| 25      | U4.3S | U4.6S | U5.0S | U4.8S | U4.4S | U4.5S |       | S     | U6.1S | U7.3S | U7.8S  | 8.9    | 8.7    | 9.0    | U8.4R  | 8.0   | I8.8C |       | S     |       | S     | U4.4S | U4.0S | U3.9S | U3.3S | U3.3S | 3.3   |     |       |     |
| 26      | U3.6S | U3.6S | U4.1S | U3.8S | U4.0S | U4.8S |       | S     |       | S     | U7.3S  | 7.6    | 7.4    | U9.2S  | U8.0S  | U7.9S |       | R     |       | S     | 6.5   | U6.3S |       | S     | U5.1S | 3.0   |       | S   | U3.5N | S   |
| 27      |       | S     | S     | U4.3S | U4.1N | U4.0S |       | S     | U3.6S |       | S      |        | S      | U7.9S  | U7.4S  | 7.9   | 8.8   | U8.0S | U7.4S | U8.2S | U7.3S | U5.7S | 4.0   | 2.9   | 2.9   | 2.8   | 2.6   | 2.7 |       |     |
| 28      | U2.7S | 3.0   | U3.2S | U3.3S | 3.7   | 3.2   | 3.0N  |       | S     | U6.7S | 7.0    | U7.7R  | I7.2R  | 8.3    | 7.7    | U7.5S | 8.0   | U7.3S | U4.4S | 4.1   | U4.1S | U3.3S | 3.0   | 2.8   | 2.8   | U3.1S |       |     |       |     |
| 29      | 3.1N  | U3.2S | 3.2   | 3.2   | U3.3S | U3.3S | U3.2S | U4.9S | 6.7   | 8.0   | U7.3N  | U8.1S  | 8.6    | U7.5S  | U7.5S  | U8.1S |       | S     |       | S     | U4.2S | U3.7S | 2.7   | 2.3   | 2.4   | 2.7N  |       |     |       |     |
| 30      | 2.8   | 2.9   | 2.9   | U3.3S | U3.2S | U3.3S | U3.4S | U4.3S |       | S     |        | S      | U7.3S  | U7.8S  | U8.3S  | U6.7S | 6.5   | U8.1R | U5.6S | U4.4S | U3.6S | 3.3   | U3.1S | U2.3S | 2.5   | 3.0   |       |     |       |     |
| 31      |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |       |       |       |       |       |       |       |       |       |       |       |       |     |       |     |
|         | 0.6   | 0.8   | 1.1   | 0.9   | 0.8   | 0.7   | 0.5   | 1.0   | 1.2   | 1.1   | 1.6    | 1.4    | 2.1    | 1.5    | 1.1    | 0.7   | 0.9   | 2.1   | 1.0   | 0.6   | 0.6   | 0.6   | 0.5   | 0.5   |       |       |       |     |       |     |
| Медiana | 3.6   | 3.6   | U3.7S | 3.7   | U3.8S | U3.6S | U3.4S | U5.9S | U7.3S | U8.0S | U8.2S  | U9.0S  | 9.0    | U8.0S  | U8.0S  | U8.0S | U7.2S | U5.5S | U4.4S | U3.8S | U3.3S | 3.0   | U3.2S | 3.3   |       |       |       |     |       |     |
| Учено   | 28    | 29    | 30    | 29    | 30    | 27    | 28    | 24    | 23    | 26    | 30     | 30     | 28     | 29     | 28     | 27    | 22    | 19    | 23    | 30    | 29    | 28    | 29    | 27    |       |       |       |     |       |     |
|         | 3.2   | 3.2   | 3.2   | 3.3   | 3.4   | 3.3   | 3.2   | 5.2   | 6.7   | 7.5   | 7.4    | 8.4    | 8.3    | 7.5    | 7.5    | 7.8   | 6.6   | 4.7   | 4.1   | 3.6   | 3.0   | 2.8   | 3.0   | 3.1   |       |       |       |     |       |     |
|         | 3.8   | 4.0   | 4.3   | 4.2   | 4.2   | 4.0   | 3.7   | 6.2   | 7.9   | 8.6   | 9.0    | 9.8    | 10.4   | 9.0    | 8.6    | 8.5   | 7.4   | 6.8   | 5.1   | 4.2   | 3.6   | 3.4   | 3.5   | 3.6   |       |       |       |     |       |     |

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

Станция автоматическая

(ручная, автоматическая)

foF1 МГц Ноябрь 1972г.

(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 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   | L   | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 2       |    |    |    |    |    |    |    |    | L     | L   | L   | L   | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 3       |    |    |    |    |    |    |    |    |       |     | L   | L   | L     | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 4       |    |    |    |    |    |    |    |    | L     | 37  | L   | L   | L     | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 5       |    |    |    |    |    |    |    |    |       | L   | L   | L   | L     | L  | L  | L  |    |    |    |    |    |    |    |    |  |  |
| 6       |    |    |    |    |    |    |    |    |       | L   | 37  | L   | L     | L  | L  | L  |    | L  |    |    |    |    |    |    |  |  |
| 7       |    |    |    |    |    |    |    |    |       | L   | L   | L   | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 8       |    |    |    |    |    |    |    |    |       | L   | L   | L   | L     | L  |    | L  |    |    |    |    |    |    |    |    |  |  |
| 9       |    |    |    |    |    |    |    |    |       |     | L   | L   | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 10      |    |    |    |    |    |    |    |    |       |     |     | L   | U4.1L |    | L  | L  |    |    |    |    |    |    |    |    |  |  |
| 11      |    |    |    |    |    |    |    |    |       |     |     | L   | L     | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 12      |    |    |    |    |    |    |    |    |       |     | L   | L   |       | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 13      |    |    |    |    |    |    |    |    |       | L   |     |     |       | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 14      |    |    |    |    |    |    |    |    |       | L   |     | 4.0 | L     | L  |    | L  |    |    |    |    |    |    |    |    |  |  |
| 15      |    |    |    |    |    |    |    |    | 2.9   |     | L   | 4.0 | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 16      |    |    |    |    |    |    |    |    | L     | 4.0 | 3.9 | L   | 4.2   | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 17      |    |    |    |    |    |    |    |    | U27L  | L   |     |     | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 18      |    |    |    |    |    |    |    |    | L     | L   | L   | L   | L     | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 19      |    |    |    |    |    |    |    |    |       |     | L   | L   | L     | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 20      |    |    |    |    |    |    |    |    |       | L   | L   | L   | L     |    |    | L  |    |    |    |    |    |    |    |    |  |  |
| 21      |    |    |    |    |    |    |    |    |       |     | L   | L   | L     |    | L  |    |    |    |    |    |    |    |    |    |  |  |
| 22      |    |    |    |    |    |    |    |    | L     | L   | L   | L   |       | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 23      |    |    |    |    |    |    |    |    |       | L   | 8   | L   | L     | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 24      |    |    |    |    |    |    |    |    |       |     | L   | L   | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 25      |    |    |    |    |    |    |    |    | L     |     | L   |     | L     | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 26      |    |    |    |    |    |    |    |    |       | L   |     | L   |       |    | L  |    |    |    |    |    |    |    |    |    |  |  |
| 27      |    |    |    |    |    |    |    |    |       |     |     | L   | L     | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 28      |    |    |    |    |    |    |    |    |       |     | L   | L   | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 29      |    |    |    |    |    |    |    |    |       |     | L   | L   | L     | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 30      |    |    |    |    |    |    |    |    |       |     |     | L   | L     |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 31      |    |    |    |    |    |    |    |    |       |     |     |     |       |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Медиана |    |    |    |    |    |    |    |    | U2.8L | 3.8 | 3.8 | 4.0 | 4.2   |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Учтено  |    |    |    |    |    |    |    |    | 2     | 2   | 2   | 2   | 2     |    |    |    |    |    |    |    |    |    |    |    |  |  |

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

Станция автоматическая  
(ручная, автоматическая)

foE МГц Ноябрь 1972г.

АКАДЕМИЯ НАУК Каз ССР

(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 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       |    |    |    |    | E      |        | A      | A      | A      | U280R  | U290A  | 3.10   | 3.20   | 3.05   | 2.95   | 2.60   | 2.10   | E      | E      | E      | E      | E      |        |    |
| 2       |    |    |    |    |        |        | E      | 1.60   | 2.15   | U260A  | A      | A      | A      | A      | 2.95   | 2.60   | A      | A      | A      |        |        |        |        |    |
| 3       |    |    |    |    | E1.40S | E1.60S | E      | 1.90   | 2.30   | A      | A      | A      | A      | A      | A      | A      | A      | A      | A      |        |        |        |        |    |
| 4       |    |    |    |    |        |        | E      | A      | 2.35   | U270A  | A      | A      | A      | 3.05   | I2.95A | 2.50   | 2.00   | A      | E      |        |        |        |        |    |
| 5       |    |    |    |    |        |        | A      | 1.80   | A      | A      | A      | A      | A      | 3.00   | A      | A      | A      | A      | A      |        |        |        |        |    |
| 6       |    |    |    |    |        |        | E      | A      | U2.20A | 2.75   | 2.95   | I3.10R | 3.10   | 3.05   | 2.70   | I2.35A | U1.70A | A      | A      |        |        |        |        |    |
| 7       |    |    |    |    | E      | E1.30S | E      | 1.80   | A      | A      | A      | I3.00A | 3.10   | 3.00   | I2.80A | I2.35A | 2.00   | A      | E1.30S |        |        |        |        |    |
| 8       |    |    |    |    |        |        | E      | A      | A      | A      | A      | 3.00   | 3.00   | 2.95   | 2.70   | 2.40   | A      | A      | A      |        | E1.50B |        |        |    |
| 9       |    |    |    |    | E      | E      | E      | A      | A      | A      | A      | U3.00R | 3.05   | 3.00   | 2.80   | I2.50A | A      | E1.70S | A      | E1.50S |        |        |        |    |
| 10      |    |    |    |    | E      | E      | E      | 1.40   | 2.25   | 2.65   | 2.95   | 3.00   | 3.05   | 2.95   | I2.80A | 2.45   | A      | A      | A      |        |        |        |        |    |
| 11      |    |    |    |    |        |        | E1.30S | 1.65   | I2.30A | 2.70   | 3.00   | U3.00A | U3.00A | U2.95A | 2.85   | A      | A      | A      | A      |        |        |        |        |    |
| 12      |    |    |    |    |        |        |        | 1.60   | U2.20A | A      | A      | 3.00   | 3.00   | 3.00   | 2.80   | U2.40A | A      | E      | E      | E      |        |        |        |    |
| 13      |    |    |    |    | E      | E      | E      | 1.70   | 2.15   | I2.60A | I2.95A | 3.00   | 3.10   | 2.95   | 2.75   | U2.40A | A      | A      | A      | A      |        |        |        | C  |
| 14      |    |    |    |    |        |        | E1.30S | E1.40B | 2.20   | U2.75S | 3.00   | 3.00   | 3.10   | 3.00   | 2.85   | A      | A      | E1.50S | A      |        |        |        |        |    |
| 15      |    |    |    |    |        |        | E1.60S | C      | A      | I2.60A | 2.90   | 3.00   | 3.00   | I3.00A | 2.75   | U2.30A | A      | A      | A      |        |        |        |        |    |
| 16      |    |    |    |    |        |        | E      | E1.30B | 2.05   | I2.45A | 2.90   | U3.00A | U3.00A | U2.95A | U2.70A | U2.30R | A      | A      | E1.30S |        |        |        |        |    |
| 17      |    |    |    |    | E      | E      | A      | E      | A      | U2.80R | A      | A      | A      | R      | U2.75R | R      | A      | E1.50S | E1.40B |        |        |        |        |    |
| 18      |    |    |    |    |        | E      | E      | E      | 2.10   | 2.70   | I2.95A | A      | A      | U3.10R | A      | A      | A      | A      | A      |        |        |        |        |    |
| 19      |    |    |    |    |        | E      | E1.40S | 1.40   | U2.10A | 2.75   | 2.90   | I3.15A | U3.20R | A      | A      | A      | A      | A      | A      |        |        |        |        |    |
| 20      |    |    |    |    |        | E      | A      | 2.05   | A      | A      | A      | 3.00   | A      | A      | A      | U2.25A | A      | A      | E1.40S | E      | E      | A      |        |    |
| 21      |    |    |    |    |        | A      | A      | E1.80B | A      | A      | 2.80   | U3.10A | U3.10H | A      | A      | A      | A      | A      | E1.60B | E      | A      |        |        |    |
| 22      |    |    |    |    |        | E      | E      | 1.40   | 2.05H  | 2.55   | 2.90   | A      | A      | A      | A      | A      | A      | A      | E1.40S | E1.30S | A      |        |        |    |
| 23      |    |    |    |    |        | A      | A      | 1.50   | 2.10   | I2.60A | I2.90S | A      | A      | A      | A      | A      | A      | A      | E1.50S | A      | E1.50S | E1.40S |        |    |
| 24      |    |    |    |    |        | E1.30S |        | E      | E1.30B | 2.10   | A      | A      | A      | 3.05   | A      | A      | A      | A      | A      | E1.50S |        |        |        |    |
| 25      |    |    |    |    |        | E      | E      | A      | I2.05R | 2.65   | 2.95   | A      | A      | A      | A      | A      | A      | A      | E1.50S | A      | A      |        |        |    |
| 26      |    |    |    |    |        | E1.40B | E      | E      | E1.40S | 2.05   | A      | A      | A      | A      | A      | A      | A      | A      | A      | A      |        |        |        |    |
| 27      |    |    |    |    |        | A      | A      | A      | R      | 2.50   | A      | U3.00A | A      | A      | U2.80A | A      | A      | A      | A      | E1.30S | E1.40S | E      |        |    |
| 28      |    |    |    |    | E      | E      | E      | E      | A      | I2.00A | 2.50   | U2.85A | A      | A      | A      | A      | A      | A      | A      | A      |        |        |        |    |
| 29      |    |    |    |    |        | A      | A      | A      | 2.00   | U2.50A | A      | A      | A      | A      | A      | A      | A      | A      | A      | E1.50S |        |        |        |    |
| 30      |    |    |    |    |        | E1.50S | A      | A      | A      | A      | A      | U2.90A | A      | A      | A      | A      | A      | A      | A      | E1.50S |        |        |        |    |
| 31      |    |    |    |    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |
| Медиана |    |    |    |    | E1.30S | E      | E      | E      | E      | U1.40  | 2.10   | 2.65   | 2.90   | 3.00   | 3.10   | 3.00   | 2.80   | U2.40A | 2.00   | E1.50S | E1.35S | E1.30  | E1.45S | E  |
| Учено   |    |    |    |    | 1      | 1      | 8      | 14     | 21     | 18     | 20     | 19     | 16     | 16     | 14     | 16     | 16     | 13     | 4      | 6      | 10     | 9      | 4      | 5  |

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

Станция автоматическая

(ручная, автоматическая)

foEs Мгц Ноябрь 1972г.

АКАДЕМИЯ НАУК КАЗ. ССР

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

Станция АЛМА-АТА

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Зеленковой

Долгота 76°55'E широт 43°15'N

полное время 75°E

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       | EJ22X  | J1.8X | E1.3B | 6     | E     | 1.4   | 2.3   | 2.8   | 6     | 3.0   | 3.06  | 2.96  | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 2.0    | 1.5   |       |       |
| 2       | J27X   | J27X  | 1.6   | E1.5S | 2.1   | E     | 6     | 2.0   | 2.4H  | 2.9   | 5.0   | J33X  | J4.2X | J4.3X | J3.3X | 3.4   | J3.8X | J4.4X | 3.2   | J4.3X | J4.3X | J2.6X  | J3.3X | J4.4X |       |
| 3       | J28X   | J32X  | 1.8   | 2.0   | 6     | 6     | 6     | 6     | 2.7   | 3.2   | 3.6   | 4.1   | 4.3   | J4.3X | J4.3X | J3.3X | 2.9   | 3.1H  | J4.3H | J4.3X | J4.8X | J7.3X  | J5.0X | J4.3X |       |
| 4       | J33X   | E     | E     | E1.4S | E     | E     | 6     | 2.0   | 6     | 2.8   | 3.3   | J4.3X | J4.3X | 2.76  | 3.0   | 6     | 6     | 1.5   | 6     | E     | E1.4S | E1.6S  | J4.3X | J3.9X |       |
| 5       | EE1.6S | 2.0   | J2.4X | J2.4X | J2.3X | J1.8X | 6     | 2.8   | 3.0   | J3.6X | J4.2X | J3.8X | 3.1   | 3.3   | J3.2X | 2.3   | 1.5   | 2.0   | J4.3X | 2.0   | E1.5S | EE1.4S |       |       |       |
| 6       | J28X   | J4.2X | J2.3X | J2.2X | J1.6X | E     | 6     | 1.8   | 2.4   | 6     | 2.06  | 3.2   | 2.26  | 6     | 6     | 2.8   | 2.1   | 1.5   | 1.5   | 1.4   | E1.5S | 1.7    | 2.0   | 2.0   |       |
| 7       | E1.4S  | E     | E1.3B | E1.3B | 6     | 6     | 6     | 1.76  | 2.8   | 3.1   | 3.1   | 3.1   | 2.86  | 2.76  | J3.4X | 3.3   | 6     | 1.8   | 6     | E1.4S | E1.3S | E1.4S  | E1.3S | E     |       |
| 8       | EE1.6B | E1.5B | E1.3B | E1.4B | 2.0   | 6     | J3.0X | J3.2X | J3.7X | J3.4X | 6     | 6     | 6     | 6     | 6     | J2.8X | 2.1   | 1.6   | 1.9   | 2.3   | 1.6   | 6      | E1.5S | E1.5S |       |
| 9       | E1.4B  | E1.4S | E1.2B | 1.5   | 6     | 6     | 6     | 1.5   | 2.5   | 2.9   | 3.2   | 2.86  | 3.06  | 6     | 2.26  | J3.3X | 2.9   | 6     | 2.1   | 6     | 2.0   | 2.0    | E1.3S | E     |       |
| 10      | E1.5S  | E1.5S | E1.3S | E1.3B | E     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 3.0   | 3.2   | 6     | J3.2X | J4.0X | J3.3X | J3.0X | 3.4    | 2.1   | E1.5S | E1.5S |
| 11      | E1.4S  | E1.4S | E1.3S | J2.3X | E1.4B | E     | 6     | 6     | 2.7   | 6     | 3.2   | 3.3   | 3.2   | 3.2   | 3.4   | 3.0   | 2.0   | 1.9   | J4.3X | J3.3X | E     | E      | E1.5S | E1.4B |       |
| 12      | E1.4S  | E1.3B | E1.2B | C     | E1.5B | 2.3   | E     | 6     | 2.5   | 3.6   | 3.2   | 3.2   | 6     | J3.1X | 3.0   | 2.6   | 2.1   | 6     | 6     | 6     | E1.5S | E1.4S  | 2.0   | E     |       |
| 13      | EE1.4S | E1.3B | E1.3B | 6     | 6     | 6     | 1.46  | 6     | 2.6   | 3.2   | 3.4   | 3.2   | 3.2   | 3.5   | 4.2   | J4.3X | J6.3X | J4.3X | J2.5X | E1.3S | J3.0X | E1.4S  | C     |       |       |
| 14      | J1.8X  | E1.4S | E     | E1.3S | E     | E1.4S | 6     | 6     | 6     | 2.9   | 6     | 6     | 6     | 6     | 2.16  | 2.5   | 2.2   | 6     | 2.0   | E1.5S | E1.3S | E1.9B  | E1.4S | J3.3X |       |
| 15      | J1.8X  | E1.4S | E1.2S | E1.5S | E1.4S | E1.5S | 6     | C     | 2.1   | 2.6   | 6     | 6     | 3.3   | 3.8   | 3.1   | J4.3X | J3.3X | J3.8X | 2.0   | E1.3S | E1.6B | E1.4S  | E1.4S | E     |       |
| 16      | E      | E     | E     | E     | J2.3X | E     | 6     | 6     | 6     | J3.3X | J4.3X | 3.6   | 3.9   | 3.6   | 3.9   | 3.2   | J3.6X | 2.2   | 6     | E1.4S | E     | J3.0X  | J2.3X | J3.7X |       |
| 17      | J33X   | J2.3X | J3.0X | E1.3B | 6     | 6     | 1.3   | 6     | J4.3H | 2.06  | 3.4   | 4.8   | 3.8   | 6     | 2.46  | 6     | J2.3X | 6     | 6     | E1.4S | E1.4B | E1.4S  | E     | E     |       |
| 18      | EE1.4B | E     | E     | E     | E     | 6     | 6     | 6     | 6     | 6     | 3.0   | J3.7X | 3.2   | J3.3X | 3.1   | 3.0   | 2.4   | J3.0C | 2.0   | E1.4S | 2.2   | E1.5S  | E1.4S | E1.3S |       |
| 19      | E      | E     | E     | E     | E     | 2.9   | 6     | 6     | 2.2   | 6     | 6     | 3.5   | 6     | 3.3   | 3.0   | J2.5H | 2.1   | 2.0   | J2.1X | E     | J2.1X | J2.2X  | J2.5X | J2.7X |       |
| 20      | 1.5    | E1.4B | 2.1   | C     | E     | E     | 6     | 1.8   | 2.06  | 3.8   | J3.1X | 2.76  | 3.3   | 3.1   | 3.1   | 2.7   | 2.0   | J2.3X | 6     | 6     | E     | 6      | 1.5   | J2.3X |       |
| 21      | 2.1    | E     | E1.3B | E     | E     | 1.3   | 1.4   | 6     | J3.3X | J4.3X | 2.56  | 3.3   | 3.4   | 3.0   | 3.3   | 2.7   | 2.0   | 2.0   | 6     | 6     | J2.8X | E1.4S  | E1.4S | E1.3S |       |
| 22      | E1.3S  | E1.3S | 2.1   | E     | E     | 6     | 6     | 6     | 6     | J2.5X | 2.86  | 3.4   | 3.2   | 3.5   | 3.9H  | 3.2   | J2.8X | 2.0   | 6     | 6     | J3.3X | E1.4S  | J1.8X | E1.4S |       |
| 23      | C      | E1.3S | 1.6   | J2.1X | E     | J1.8X | 1.8   | 6     | 1.86  | J3.2X | S     | 3.5   | 3.3   | 3.4   | 3.2   | J3.5X | J3.3X | 1.9   | 2.2   | J2.3X | 6     | 6      | E1.5S | E1.3S |       |
| 24      | E1.5S  | 6     | E     | E     | E     | 6     | 6     | 6     | 6     | 2.7   | J4.3X | 3.3   | 3.2   | 3.1   | 3.2   | 3.4   | J5.8X | 2.2H  | 2.0   | 6     | E1.5B | E1.4S  | E1.4S | E1.4S |       |
| 25      | EE1.5B | E     | E     | E     | 2.1   | 6     | 6     | 1.8   | 6     | 6     | 6     | 3.5   | 4.1   | 3.2   | 3.2   | 3.0   | 2.0   | 6     | J2.8X | J2.3X | E1.3S | E1.3S  | E1.4S | J2.7X |       |
| 26      | J2.4X  | E     | J2.0X | E     | 2.0   | 6     | 6     | 6     | 2.5   | 3.4   | 3.2   | 3.7   | 4.0   | 3.6   | 4.1   | J3.5X | J3.3X | J2.5X | J2.7X | J2.1X | J1.9X | J3.0X  | J2.6X | J1.8X |       |
| 27      | E1.5S  | 1.5   | 2.0H  | J1.8H | 2.3   | 1.2   | J2.3X | 1.8   | J2.7X | 3.1   | 3.3   | 3.4   | 3.6   | 3.4   | 3.5   | J2.8X | J3.3X | J3.3X | J2.4X | 6     | 6     | 6      | E1.3S | E1.4S |       |
| 28      | E1.4S  | E     | E     | 6     | 6     | 6     | 6     | 1.6   | 2.3   | 6     | 3.2   | 3.4   | 3.4   | 3.1   | 3.1   | J3.5X | J3.3X | J2.9X | J2.9X | J3.5X | J1.8X | J2.4X  | J2.3X | 1.6   |       |
| 29      | J2.3X  | J2.1X | J2.6X | J1.3R | J2.5X | J2.8X | J2.6X | J2.8X | 1.86  | 3.0   | J3.5X | 3.2   | 3.5   | 3.3   | 3.0   | 3.2   | 2.9   | J3.1X | J3.0X | 2.3   | E1.5S | 2.3    | 2.2   | 2.2   |       |
| 30      | E1.5S  | E1.5S | E1.5B | E1.5S | E     | 6     | J2.3X | J2.2X | J2.6X | J3.6X | 3.0   | 3.2   | 3.6   | 4.0   | J3.3X | J3.6X | J2.9X | J2.8X | J1.8X | J2.5X | 6     | J1.7X  | J2.1X | E     |       |
| 31      |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |
| Медиана | E1.5S  | E1.4S | E1.3B | E1.3B | 6     | 6     | 6     | 1.46  | 2.4   | 2.9   | 3.2   | 3.3   | 3.3   | 3.2   | 3.2   | 3.1   | 2.6   | 2.0   | 2.0   | E1.4S | E1.5S | E1.5S  | E1.5S | E1.5S |       |
| Учено   | 29     | 30    | 30    | 28    | 30    | 30    | 30    | 29    | 30    | 30    | 29    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 30     | 30    | 29    |       |
|         | E      | 6     | E     | E     | E     | 6     | 6     | 6     | 6     | 6     | 2.6   | 3.1   | 2.9   | 2.7   | 3.0   | 2.7   | 2.1   | 1.5   | 6     | 6     | E1.3  | E1.4   | E1.4  | E1.3  |       |
|         | 2.2    | E1.6  | 2.0   | E1.5  | 1.6   | E1.4  | 1.3   | 1.8   | 2.7   | 3.2   | 3.4   | 3.5   | 3.8   | 3.4   | 3.4   | 3.4   | 3.3   | 3.0   | 2.8   | 2.5   | 2.0   | 2.2    | 2.2   | 2.5   |       |

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

Станция автоматическая

(ручная, автоматическая)

f6Es Мгц Ноябрь 1972г.

Академия Наук Каз. ССР

Станция Алма-Ата  
Долгота 76°55'E широта 43°15'NИОНОСФЕРНЫЕ 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       | E     | 2.0   | 1.5   | E1.3B | ⊖     | E     | 1.4 | 2.2  | 2.6  | ⊖    | 3.0  | ⊖    | ⊖    | ⊖    | ⊖    | ⊖    | ⊖   | ⊖    | ⊖   | ⊖     | ⊖     | ⊖     | 2.0   | 1.5   |  |  |
| 2       | 1.8   | E1.5S | 1.5   | E1.5S | E1.5S | E     | ⊖   | 2.0  | 2.4  | 2.9  | 4.4  | 3.2  | 3.6  | 3.1  | 2.3⊖ | 3.4  | 3.3 | 4.0  | 2.6 | 4.0   | 2.2   | 2.4   | 2.7   | 1.9   |  |  |
| 3       | 1.9   | 2.1   | 1.7   | 1.9   | ⊖     | ⊖     | ⊖   | ⊖    | 2.6  | 3.0  | 3.1  | 3.9  | 3.5  | 4.0  | 3.2  | 2.6  | 2.2 | 3.0  | 2.4 | 2.4   | 3.0   | A     | 1.8   | 2.1   |  |  |
| 4       | 1.4   | E     | E     | E1.4S | E     | E     | ⊖   | 1.9  | ⊖    | 2.8  | 3.1  | 3.9  | 3.8  | 2.5⊖ | 3.0  | ⊖    | ⊖   | 1.4  | ⊖   | E     | E1.4S | E1.6S | 1.7   | 1.8   |  |  |
| 5       | E     | E1.6S | 1.7   | 1.5   | 1.7   | 1.7   | 1.4 | ⊖    | 2.6  | 3.0  | 3.0  | 3.1  | 3.5  | 2.8⊖ | 3.1  | 2.6  | 2.1 | 1.8  | 1.7 | 2.9   | 1.4   | E1.5S | E     | E1.4S |  |  |
| 6       | 2.0   | A     | 2.0   | E     | E     | E     | ⊖   | 1.8  | 2.4  | ⊖    | 2.0⊖ | 3.0⊖ | 2.0⊖ | ⊖    | ⊖    | 2.5  | 2.1 | 1.3  | 1.5 | 1.2   | E1.5S | 1.3   | E1.5S | 1.3   |  |  |
| 7       | E1.4S | E     | E1.3B | E1.3B | ⊖     | ⊖     | ⊖   | 1.4⊖ | 2.8  | 2.9  | 3.0  | 3.0  | ⊖    | ⊖    | 2.9  | 2.4  | ⊖   | 1.8  | ⊖   | E1.4S | E1.3S | E1.4S | E1.3S | E     |  |  |
| 8       | E     | E1.6B | E1.5B | E1.3B | E1.4B | 1.8   | ⊖   | 2.5  | 2.6  | 2.8  | 2.7  | ⊖    | ⊖    | ⊖    | ⊖    | 1.8⊖ | 2.0 | 1.6  | 1.7 | 1.8   | 1.4   | ⊖     | E1.5S | E1.5S |  |  |
| 9       | E1.4B | E1.5S | E1.2B | 1.5   | ⊖     | ⊖     | ⊖   | 1.5  | 2.5  | 2.7  | 3.0  | 2.6⊖ | 2.4⊖ | ⊖    | 2.1⊖ | 3.1  | 2.5 | ⊖    | 1.8 | ⊖     | 1.7   | 1.5   | E1.3S | E     |  |  |
| 10      | E1.5S | E1.5S | E1.3S | E1.3B | E     | ⊖     | ⊖   | ⊖    | ⊖    | ⊖    | ⊖    | ⊖    | ⊖    | 2.1⊖ | 2.8  | ⊖    | 2.0 | 2.9  | 1.6 | 2.4   | 2.5   | 1.4   | E1.5S | E1.5S |  |  |
| 11      | E1.4S | E1.4S | E1.3S | 1.8   | E1.4B | E     | ⊖   | ⊖    | 2.4  | ⊖    | ⊖    | 3.3  | 3.2  | 3.1  | 2.9  | 2.9  | 2.0 | 1.4  | 3.8 | 1.5   | E     | E     | E1.5S | E1.4B |  |  |
| 12      | E1.4S | E1.3B | E1.2B | ⊖     | E1.5B | E1.3S | E   | ⊖    | 2.5  | 3.5  | 3.0  | 3.2  | ⊖    | 2.6⊖ | 2.1⊖ | 2.6  | 2.0 | ⊖    | ⊖   | ⊖     | E1.5S | E1.4S | E1.6S | E     |  |  |
| 13      | E     | E1.4S | E1.3B | E1.3B | ⊖     | ⊖     | ⊖   | 1.4⊖ | ⊖    | 2.6  | 3.0  | 3.4  | 3.2  | 3.1  | 3.5  | 3.6  | 4.0 | A    | A   | 1.7   | E1.3S | 1.8   | E1.4S | ⊖     |  |  |
| 14      | E1.5S | E1.4S | E     | E1.3S | E     | E1.4S | ⊖   | ⊖    | ⊖    | 2.9  | ⊖    | ⊖    | ⊖    | ⊖    | 1.9⊖ | 2.5  | 2.0 | ⊖    | 1.5 | E1.5S | E1.3S | E1.9B | E1.4S | E1.4S |  |  |
| 15      | 1.6   | E1.4S | E1.2S | E1.5S | E1.4S | E1.5S | ⊖   | ⊖    | 2.1  | 2.6  | ⊖    | ⊖    | 3.3  | 3.6  | 3.0  | 4.2  | 3.1 | 2.7  | 1.8 | E1.3S | E1.6B | E1.4S | E1.4S | E     |  |  |
| 16      | E     | E     | E     | E     | 2.0   | E     | ⊖   | ⊖    | ⊖    | 3.3  | 2.5⊖ | 3.5  | 3.9  | 3.3  | 3.4  | ⊖    | 3.6 | 2.0  | ⊖   | E1.4S | E     | 2.5   | 1.6   | 1.5   |  |  |
| 17      | 1.5   | 1.8   | 1.8   | E1.3B | ⊖     | ⊖     | 1.3 | ⊖    | 2.2  | 1.9⊖ | 3.0  | 3.5  | 3.7  | ⊖    | 2.0⊖ | ⊖    | 2.1 | ⊖    | ⊖   | E1.4S | E1.4B | E1.4S | E     | E     |  |  |
| 18      | E     | E1.4B | E     | E     | E     | ⊖     | ⊖   | ⊖    | ⊖    | ⊖    | 3.0  | 3.6  | 3.2  | 2.1⊖ | 3.0  | 2.6  | 2.1 | D30C | 1.8 | E1.4S | E1.4S | E1.5S | E1.4S | E1.3S |  |  |
| 19      | E     | E     | E     | E     | E     | ⊖     | ⊖   | ⊖    | 2.2  | ⊖    | ⊖    | 3.5  | ⊖    | 3.3  | 2.9  | 2.5  | 2.0 | 1.8  | 1.5 | E     | 1.5   | 1.7   | 1.5   | 2.0   |  |  |
| 20      | 1.5   | E1.4B | E     | ⊖     | E     | E     | ⊖   | 1.7  | 1.8⊖ | 2.7  | 2.9  | 2.2⊖ | 3.3  | 3.1  | 3.0  | 2.7  | 2.0 | 1.9  | ⊖   | ⊖     | E     | ⊖     | 1.5   | 1.7   |  |  |
| 21      | 1.6   | E     | E1.3B | E     | E     | 1.3   | 1.3 | ⊖    | 2.8  | 3.5  | 2.4⊖ | 3.3  | 3.4  | 3.0  | 3.0  | 2.7  | 2.0 | 1.5  | ⊖   | ⊖     | 1.5   | E1.4S | E1.4S | E1.3S |  |  |
| 22      | E1.3S | E1.3S | E1.3B | E     | E     | ⊖     | ⊖   | ⊖    | ⊖    | 1.9⊖ | 2.2⊖ | 3.4  | 3.2  | 3.5  | 3.4  | 2.6  | 2.3 | 1.4  | ⊖   | ⊖     | 2.0   | E1.4S | 1.5   | E1.4S |  |  |
| 23      | ⊖     | E1.3S | 1.6   | 1.9   | E     | 1.8   | 1.5 | ⊖    | 1.8⊖ | 3.0  | S    | 3.5  | 3.3  | 3.4  | 3.1  | 3.0  | 3.0 | 1.7  | ⊖   | 1.4   | ⊖     | ⊖     | E1.5S | E1.3S |  |  |
| 24      | E1.5S | ⊖     | E     | E     | E     | ⊖     | ⊖   | ⊖    | ⊖    | 2.7  | 3.2  | 3.3  | 3.2  | 2.8⊖ | 3.2  | 3.2  | 2.4 | 1.5  | 1.8 | ⊖     | E1.5B | E1.4S | E1.4S | E1.4S |  |  |
| 25      | E     | E1.5B | E     | E     | E     | ⊖     | ⊖   | 1.4  | ⊖    | ⊖    | ⊖    | 3.5  | 3.5  | 3.2  | 3.2  | 2.7  | 1.9 | ⊖    | 1.9 | 1.9   | E1.3S | E1.3S | E1.4S | 1.5   |  |  |
| 26      | 2.4   | E     | 1.5   | E     | ⊖     | ⊖     | ⊖   | ⊖    | 1.8⊖ | 3.0  | 3.2  | 3.0  | 3.4  | 3.3  | 2.9  | 2.4  | 2.5 | 2.2  | 2.7 | 1.6   | 1.5   | 2.2   | 1.4   | E1.4S |  |  |
| 27      | E1.5S | 1.5   | 1.4   | 1.3   | E1.3B | 1.2   | 1.9 | 1.8  | 1.8⊖ | 2.0⊖ | 3.3  | 3.4  | 3.6  | 3.4  | 3.5  | 2.6  | 3.3 | 1.5  | 1.5 | ⊖     | ⊖     | ⊖     | E1.3S | E1.4S |  |  |
| 28      | E1.4S | E     | E     | ⊖     | ⊖     | ⊖     | ⊖   | 1.6  | 2.1  | ⊖    | 3.2  | 3.4  | 3.3  | 3.1  | 3.0  | 3.2  | 2.6 | 2.9  | 2.4 | 2.2   | 1.5   | 1.9   | 1.8   | 1.5   |  |  |
| 29      | 1.8   | 1.8   | 1.6   | D13R  | 1.9   | 1.5   | 1.8 | 2.7  | 1.7⊖ | 3.0  | 3.5  | 3.2  | 3.5  | 3.3  | 3.0  | 3.2  | 2.8 | 3.0  | 2.0 | ⊖     | E1.5S | E1.5S | 1.8   | 1.7   |  |  |
| 30      | E1.5S | E1.5S | E1.5B | E1.5S | E     | ⊖     | 1.5 | 1.7  | 2.5  | 2.8  | 3.0  | 3.2  | 3.4  | 3.6  | 3.3  | 3.4  | 2.8 | 1.9  | 1.7 | 1.9   | ⊖     | 1.7   | 1.9   | E     |  |  |
| 31      |       |       |       |       |       |       |     |      |      |      |      |      |      |      |      |      |     |      |     |       |       |       |       |       |  |  |
| Медiana | E1.4S | E1.4S | E1.3S | E1.3S | ⊖     | ⊖     | ⊖   | ⊖    | 2.1  | 2.7  | 3.0  | 3.2  | 3.3  | 3.1  | 3.0  | 2.6  | 2.1 | 1.6  | 1.6 | E1.4S | E1.4S | E1.4S | E1.5S | E1.4S |  |  |
| Учтено  | 29    | 30    | 30    | 28    | 30    | 30    | 30  | 29   | 30   | 30   | 29   | 30   | 30   | 30   | 30   | 30   | 30  | 30   | 30  | 30    | 30    | 30    | 30    | 29    |  |  |

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

fmin МГц Ноябрь 1972г.  
(характеристика) (единицы) (месяц) (год)Станция Алма-АтаДолгота 76°55'E широта 43°15'N

## ИОНОСФЕРНЫЕ ДАННЫЕ

поясное время 75°EАКАДЕМИЯ НАУК КАЗ. ССР  
(институт)Кем составлена ЗеленковойКем 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       | 1.0   | 1.0   | 1.0   | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.4 | 1.3 | 1.5 | 1.6 | 1.9 | 1.9 | 1.4 | 1.5 | 1.2   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.4   |    |  |  |
| 2       | 1.0   | E1.5S | 1.0   | E1.5S | E1.5S | 1.0   | 1.0   | 1.3   | 1.0 | 1.2 | 1.6 | 1.3 | 1.3 | 1.3 | 1.4 | 1.4 | 1.0   | 1.5   | 1.0   | E1.6S | 1.0   | 1.0   | 1.0   | 1.0   |    |  |  |
| 3       | 1.0   | 1.0   | 1.0   | 1.0   | E1.4S | E1.6S | 1.0   | 1.2   | 1.0 | 1.0 | 1.5 | 1.7 | 1.7 | 1.2 | 1.6 | 1.5 | 1.2   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |    |  |  |
| 4       | 1.0   | 1.0   | 1.0   | E1.5S | 1.0   | 1.0   | 1.0   | 1.0   | 1.2 | 1.2 | 1.4 | 1.4 | 1.9 | 1.7 | 1.4 | 1.2 | 1.3   | 1.0   | 1.0   | 1.0   | E1.4S | E1.6S | 1.0   | E1.5S |    |  |  |
| 5       | 1.0   | E1.6S | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.4   | 1.0 | 1.4 | 1.5 | 1.4 | 1.5 | 1.5 | 1.4 | 1.0 | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | E1.5S | 1.0   | E1.4S |    |  |  |
| 6       | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.2 | 1.2 | 1.2 | 1.3 | 1.2 | 1.3 | 1.3 | 1.0   | 1.0   | 1.0   | 1.0   | E1.5S | 1.0   | E1.5S | 1.0   |    |  |  |
| 7       | E1.4S | 1.0   | 1.3   | 1.3   | 1.0   | E1.3S | 1.0   | 1.0   | 1.2 | 1.5 | 1.4 | 1.5 | 1.5 | 1.3 | 1.5 | 1.0 | 1.3   | E1.3S | E1.3S | E1.4S | E1.3S | E1.4S | E1.3S | 1.0   |    |  |  |
| 8       | 1.0   | 1.6   | 1.5   | 1.3   | 1.4   | 1.0   | 1.0   | 1.0   | 1.0 | 1.3 | 1.4 | 1.3 | 1.3 | 1.2 | 1.5 | 1.0 | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.5   | E1.5S | E1.5S |    |  |  |
| 9       | 1.4   | E1.5S | 1.2   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.2 | 1.4 | 1.3 | 1.8 | 1.7 | 1.8 | 1.6 | 1.2 | 1.3   | E1.7S | E1.3S | E1.5S | E1.5S | 1.0   | E1.3S | 1.0   |    |  |  |
| 10      | E1.5S | E1.5S | E1.3S | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.5 | 1.3 | 1.2 | 1.4 | 1.3 | 1.2 | 1.0   | E1.4S | E1.5S | E1.4S | E1.3S | E1.4S | E1.5S | E1.5S |    |  |  |
| 11      | E1.4S | E1.4S | E1.3S | 1.0   | 1.4   | 1.0   | E1.3S | 1.0   | 1.0 | 1.2 | 1.4 | 1.5 | 1.5 | 1.2 | 1.3 | 1.3 | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | E1.5S | 1.4   |    |  |  |
| 12      | E1.4S | 1.3   | 1.2   | C     | 1.5   | E1.3S | 1.0   | 1.0   | 1.0 | 1.5 | 1.4 | 1.5 | 1.7 | 1.3 | 1.2 | 1.3 | 1.0   | 1.0   | 1.0   | 1.0   | E1.5S | E1.4S | E1.6S | 1.0   |    |  |  |
| 13      | 1.0   | E1.4S | 1.3   | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.6 | 1.4 | 1.7 | 1.5 | 1.6 | 1.6 | 1.8 | 1.8 | E1.5S | E1.5S | E1.2S | E1.4S | E1.3S | 1.0   | E1.4S | C     |    |  |  |
| 14      | E1.5S | E1.4S | 1.0   | E1.3S | 1.0   | E1.4S | E1.3S | E1.4S | 1.2 | 1.5 | 1.5 | 1.5 | 1.6 | 1.6 | 1.2 | 1.5 | 1.3   | E1.5S | E1.3S | E1.5S | E1.3S | 1.9   | E1.4S | E1.4S |    |  |  |
| 15      | E1.4S | E1.4S | E1.2S | E1.5S | E1.4S | E1.5S | E1.6S | 1.0   | 1.0 | 1.2 | 1.5 | 1.6 | 1.9 | 1.7 | 1.3 | 1.5 | E1.3S | E1.3S | E1.2S | E1.3S | 1.6   | E1.4S | E1.4S | 1.0   |    |  |  |
| 16      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.3   | 1.0 | 1.0 | 1.0 | 1.6 | 1.4 | 1.4 | 1.0 | 1.5 | 1.0   | E1.3S | E1.3S | E1.4S | 1.0   | 1.0   | E1.4S | E1.3S |    |  |  |
| 17      | 1.0   | 1.0   | 1.0   | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.4 | 1.3 | 1.5 | 1.5 | 1.7 | 1.3 | 1.5 | 1.0   | E1.5S | 1.4   | E1.4S | 1.4   | E1.4S | 1.0   | 1.0   |    |  |  |
| 18      | 1.0   | 1.4   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.0 | 1.0   | 1.0   | 1.0   | E1.4S | E1.4S | E1.5S | E1.4S | E1.3S |    |  |  |
| 19      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | E1.4S | 1.0   | 1.0 | 1.3 | 1.3 | 1.2 | 1.3 | 1.2 | 1.4 | 1.4 | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |    |  |  |
| 20      | 1.0   | 1.4   | 1.0   | C     | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.0 | 1.3 | 1.5 | 1.4 | 1.3 | 1.2 | 1.0 | 1.0   | 1.0   | E1.4S | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |    |  |  |
| 21      | 1.0   | 1.0   | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.8   | 1.2 | 1.3 | 1.5 | 1.3 | 1.3 | 1.4 | 1.4 | 1.4 | 1.0   | 1.0   | 1.6   | 1.0   | 1.0   | E1.4S | E1.4S | E1.3S |    |  |  |
| 22      | E1.3S | E1.3S | 1.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.3 | 1.3 | 1.4 | 1.4 | 1.3 | 1.4 | 1.3 | 1.3 | E1.3S | 1.0   | E1.4S | E1.3S | 1.0   | E1.4S | 1.0   | E1.4S |    |  |  |
| 23      | C     | E1.3S | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | E1.2S | 1.0 | 1.7 | 1.5 | 1.4 | 1.2 | 1.3 | 1.3 | 1.0 | 1.0   | 1.0   | E1.5S | 1.0   | E1.5S | E1.4S | E1.5S | E1.3S |    |  |  |
| 24      | E1.5S | E1.3S | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.3   | 1.0 | 1.3 | 1.3 | 1.3 | 1.3 | 1.5 | 1.3 | 1.0 | 1.0   | 1.0   | 1.0   | E1.5S | 1.5   | E1.4S | E1.4S | E1.4S |    |  |  |
| 25      | 1.0   | 1.5   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.4 | 1.3 | 1.2 | 1.3 | 1.2 | 1.9 | 2.0 | 1.0 | 1.0   | E1.5S | 1.0   | 1.0   | E1.3S | E1.3S | E1.4S | 1.0   |    |  |  |
| 26      | 1.0   | 1.0   | 1.0   | 1.0   | 1.4   | 1.0   | 1.0   | E1.4S | 1.0 | 1.4 | 1.5 | 1.3 | 1.3 | 1.4 | 1.4 | 1.4 | 1.4   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | E1.4S |    |  |  |
| 27      | E1.5S | 1.0   | 1.0   | 1.0   | 1.3   | 1.0   | 1.0   | 1.0   | 1.3 | 1.2 | 1.4 | 1.3 | 1.8 | 1.7 | 1.0 | 1.5 | 1.3   | 1.0   | 1.0   | E1.3S | E1.4S | 1.0   | E1.3S | E1.4S |    |  |  |
| 28      | E1.4S | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.3 | 1.3 | 1.6 | 1.8 | 1.4 | 1.5 | 1.4 | 1.4 | 1.2   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |    |  |  |
| 29      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.3 | 1.3 | 1.5 | 1.5 | 1.5 | 1.5 | 1.8 | 1.7 | E1.3S | 1.0   | 1.0   | E1.5S | E1.5S | E1.5S | 1.0   | 1.0   |    |  |  |
| 30      | E1.5S | E1.5S | 1.5   | E1.5S | 1.0   | E1.5S | 1.0   | 1.0   | 1.0 | 1.0 | 1.0 | 1.4 | 1.5 | 1.4 | 1.5 | 1.5 | 1.0   | 1.0   | 1.0   | 1.0   | E1.5S | 1.0   | 1.0   | 1.0   |    |  |  |
| 31      |       |       |       |       |       |       |       |       |     |     |     |     |     |     |     |     |       |       |       |       |       |       |       |       |    |  |  |
| Медиана | 1.0   | E1.3  | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0 | 1.3 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.0   | 1.0   | 1.0   | 1.0   | 1.2   | 1.2   | E1.3  | 1.2   |    |  |  |
| Учено   | 29    | 30    | 30    | 28    | 30    | 30    | 30    | 30    | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 29 |  |  |

Пробег частоты от 1.0 МГц до 18 МГц 20 сек мин.Станция автоматическая  
(ручная, автоматическая)

(M3000)F2 Ноябрь 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

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       | 275    | 245    | 245    | 250    | U3.10S | U2.95S | 2.90   | 3.25   | U3.35R | 3.10   | U3.00R | U3.10R | R      | U3.00R | U2.90S | U3.05S | 3.00   | U2.95S | 2.80   | 3.25   | U2.95S | U3.30N | U3.30R | U2.55S |
| 2       | 280    | U2.95S | 3.20   | 3.05   | 2.80   | 2.95   | 3.05   | R      | U3.30R | 3.20   | 3.00   | U3.20S | 3.25   | U3.20S | 3.30   | S      | U3.35S | U3.05S | 3.05   | U3.20S | 3.30   | U3.10S | U2.95S | 2.60   |
| 3       | 2.65   | 2.75   | 2.65   | U2.80S | 2.90   | S      | U2.95S | U3.85S | R      | R      | 3.15   | S      | U3.20S | 3.30   | U3.20S | U3.30S | 3.35   | U3.05S | 3.25   | 3.30   | S      | S      | 2.65   | U2.70S |
| 4       | 2.85   | 2.95   | 2.80   | U2.80S | 2.95   | 3.30   | 3.15   | U3.70S | U3.45S | 3.45   | 3.10   | U3.20C | 3.30   | 3.35   | 3.30   | 3.40   | U3.45S | U3.35S | 3.05   | U3.30S | 3.30   | 3.35   | 2.95   | 2.75   |
| 5       | 2.70   | 2.80   | 2.90   | U2.85S | 3.05   | 3.15   | 3.40   | U3.35R | R      | 3.55   | U3.45R | U3.25R | 3.25   | U3.30R | 3.30   | 3.35   | 3.50   | U3.10S | U3.25S | U3.20S | 3.10   | 3.05   | 3.10   | 3.20   |
| 6       | 3.00   | A      | 2.60   | U2.80S | U2.90S | U3.30S | U3.10S | U3.40S | U3.65S | U3.45S | U3.35R | U3.35S | 3.40   | 3.30   | U3.30R | U3.35R | U3.35S | U3.15S | U3.10R | U3.30S | 3.25   | 3.10   | U3.00F | 2.85   |
| 7       | 2.80F  | 3.00   | U3.10F | 3.00   | 3.30F  | U3.10S | U3.30S | U3.40S | U3.30S | 3.35   | 3.20   | 3.15   | 3.20   | U3.35S | 3.35   | 3.30   | 3.40   | U3.60S | U3.45S | 3.70   | 2.95   | 2.85   | U2.85S | 2.85   |
| 8       | U3.00S | 3.05   | 2.95   | 2.95   | 3.05   | U3.40S | 2.95   | U3.65S | 3.40   | 3.40   | U3.35S | 3.30   | 3.35   | 3.45   | 3.30   | 3.65   | 3.45   | U3.35  | U3.35S | U3.30S | U3.45S | U3.10S | U3.00S | U3.00S |
| 9       | 2.90   | U2.90S | 2.95   | 3.05   | U3.05S | U3.40S | 3.40   | 3.55   | U3.55R | 3.30   | 3.35   | U3.15S | U3.25S | 3.30   | U3.35S | 3.50   | S      | S      | S      | U3.25S | U3.40S | U2.80S | U2.80S | U2.85S |
| 10      | U2.80S | U2.95S | U3.00S | 2.90   | U3.10S | S      | 3.30F  | S      | U3.45S | U3.35S | C      | 3.30   | C      | C      | U3.20C | U3.40C | S      | S      | U3.60S | 3.05   | 3.10   | 2.95   | 3.10   |        |
| 11      | U2.95S | U2.95S | 3.00   | 2.90   | U3.00S | U3.40S | 3.45   | U3.45S | 3.45   | 3.45   | 3.35   | U3.35C | 3.45   | U3.35S | 3.40   | U3.30S | U3.65S | U3.40S | U3.35S | 3.40   | U3.35S | U3.10S | U3.00S | U3.00S |
| 12      | U2.85S | 2.95   | 2.90   | C      | 3.05   | S      | U3.20S | 3.50   | U3.60S | U3.40C | 3.40   | 3.45   | 3.35   | 3.30   | 3.30   | 3.40   | U3.45S | U3.45S | U3.10S | U3.35S | U3.50S | 3.00   | U2.80S | 3.00   |
| 13      | 3.10   | 2.95   | 3.10   | 2.95   | U3.05S | U3.35S | U3.15S | U3.75C | U3.60S | U3.40S | U3.15C | U3.20C | 3.35   | 3.35   | 3.30   | U3.15S | S      | A      | A      | U3.30S | U3.40S | S      | U3.15C | C      |
| 14      | U3.15S | U2.90S | U2.95S | 3.20   | 3.30   | U3.50S | S      | U3.40S | S      | U3.40S | 3.30   | 3.35   | 3.30   | U3.40S | S      | S      | S      | S      | S      | 3.15   | U3.30S | 3.10   | S      | S      |
| 15      | 2.95   | U3.05S | U2.95S | U3.05S | U3.05S | S      | U3.25C | C      | U3.55S | U3.45S | 3.40   | U3.10S | 3.25   | U3.30S | 3.45   | U3.45S | U3.40S | 3.25   | U3.20S | U3.30S | 2.90   | U2.80S | U2.80S | 2.80   |
| 16      | 2.80   | 3.10   | U2.95S | 2.95   | 3.05   | U2.95S | 2.85   | S      | U3.40S | S      | 3.25   | U3.30S | 3.40   | 3.35   | U3.35S | U3.40S | S      | S      | 3.30   | 3.10   | 3.30   | 2.80   | U2.85S | 2.85   |
| 17      | 2.90   | U2.90S | U2.95S | 3.00   | 3.05   | U3.05S | 3.10   | U3.50S | S      | S      | U3.35S | 3.30   | U3.45S | 3.35   | U3.30S | U3.40S | S      | U3.30S | U3.45S | U3.20N | U3.10N | S      | U2.80S | 2.85   |
| 18      | U2.85S | U2.85S | U2.85S | U2.85S | U2.85S | U3.05S | U3.10S | U3.40S | U3.50S | 3.60   | 3.45   | U3.35S | 3.50   | 3.40   | U3.40S | U3.50S | U3.50S | C      | U3.40S | U3.30S | U3.30S | 3.00   | 2.80   | 2.85   |
| 19      | 2.80   | 2.85   | 3.00   | 2.90   | 3.15   | 3.40   | U2.85S | U3.40S | U3.50S | U3.60S | 3.50   | 3.40   | 3.40   | 3.10   | U3.35S | 3.50   | U3.50S | S      | S      | 3.40   | U3.40S | 3.10   | 2.80   | U2.80S |
| 20      | 2.85   | 2.95   | U3.00S | C      | U2.95S | U3.05S | U3.10S | U3.50S | U3.50R | U3.40R | U3.40S | C      | 3.30   | U3.40S | U3.40S | 3.40   | U3.30S | U3.20S | S      | U3.10S | U3.40S | U2.80S | U2.70S | U2.60S |
| 21      | U3.00S | U3.10S | U3.00S | 2.90   | U2.80N | U3.20S | 3.00   | U3.50S | U3.50S | U3.30S | U3.40C | C      | U3.50R | 3.40   | 3.30   | S      | U3.35S | U3.50S | U3.20S | U3.30S | 3.50   | 2.85   | U3.00S | U2.85S |
| 22      | U2.90S | U2.95S | U2.80S | U2.85S | U3.05S | U3.30S | U3.05F | U3.50S | U3.40S | U3.50S | U3.50S | 3.35   | 3.30   | U3.25S | U3.40S | U3.50S | U3.35S | S      | U3.45S | U3.25S | S      | 2.70   | U2.60S | U2.60S |
| 23      | C      | 2.60   | U2.80S | U3.05S | U3.10S | 3.10   | 3.00   | U3.25S | U3.35S | U3.40S | U3.30S | U3.40S | 3.40   | S      | U3.50S | U3.45S | U3.35S | U3.40S | S      | 3.30   | 3.05   | U2.80S | 2.65   | 2.70   |
| 24      | U2.80S | U2.75S | U2.80S | 2.80   | 2.80   | U2.85S | U3.05S | U3.50S | S      | U3.35C | R      | U3.45S | R      | 3.30   | 3.25   | U3.30S | S      | S      | U3.35S | U3.30S | U3.10S | U3.05N | U2.80S | U2.80S |
| 25      | U2.80S | U2.85S | U2.95S | U3.00S | U3.10S | U3.15S | S      | U3.30S | U3.45S | U3.35S | 3.50   | 3.05   | 3.15   | U3.30R | 3.25   | C      | S      | S      | U3.10S | U3.30S | U3.30S | U3.10S | U3.05S | 2.90   |
| 26      | U2.80S | U2.80S | U2.80S | U2.80S | U2.80S | U3.00S | S      | S      | U3.50S | 3.40   | 3.10   | U3.50S | U3.40S | U3.30S | R      | S      | 3.40   | U3.25S | S      | U3.40S | 3.40   | S      | U2.85N | S      |
| 27      | S      | S      | U2.85S | U3.10N | U3.15S | S      | U3.15S | S      | S      | U3.30S | U3.50S | 3.20   | 3.25   | U3.20S | U3.20S | U3.40S | U3.40S | U3.30S | 3.35   | 3.05   | 3.30   | 3.05   | 2.60   | 2.60   |
| 28      | U2.60S | 2.60   | U2.85S | U3.00S | 3.10   | 3.05   | 3.05N  | S      | U3.50S | 3.40   | U3.65R | R      | 3.35   | 3.30   | U3.40S | 3.40   | U3.50S | U3.10S | 3.30   | U3.20S | U3.15S | 3.05   | 2.60   | U2.60S |
| 29      | 2.60N  | U2.75S | 2.80   | 2.80   | U2.85S | U3.10S | U3.05S | U3.45S | 3.30   | 3.40   | U3.25N | U3.35S | 3.20   | U3.45S | U3.10S | U3.15S | S      | S      | U3.40S | U3.35S | 3.40   | 3.05   | 2.95   | 2.90N  |
| 30      | 2.90   | 2.85   | 2.85   | U2.85S | U3.00S | U3.10S | U3.30S | U3.30S | S      | S      | U3.40S | U3.45S | U3.40S | U3.60S | 3.30   | U3.50R | U3.35S | U3.40S | U3.20S | 3.30   | U3.15S | U3.35S | 2.80   | 3.00   |
| 31      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Медиана | 0.10   | 0.15   | 0.20   | 0.20   | 0.20   | 0.25   | 0.25   | 0.15   | 0.10   | 0.10   | 0.20   | 0.15   | 0.15   | 0.10   | 0.10   | 0.20   | 0.15   | 0.30   | 0.30   | 0.10   | 0.30   | 0.25   | 0.20   | 0.20   |
| Учено   | 2.85   | 2.90   | U2.90S | 2.90   | U3.05S | U3.10S | U3.10S | U3.45S | U3.45S | U3.40S | U3.35S | U3.30S | 3.35   | U3.30S | U3.30S | U3.40S | U3.40S | U3.30S | U3.30S | U3.30S | U3.30S | 3.05   | U2.85S | 2.85   |
|         | 2.80   | 2.80   | 2.80   | 2.80   | 2.90   | 3.05   | 3.00   | 3.35   | 3.40   | 3.35   | 3.20   | 3.20   | 3.25   | 3.30   | 3.30   | 3.30   | 3.35   | 3.10   | 3.10   | 3.20   | 3.10   | 2.85   | 2.80   | 2.70   |
|         | 2.90   | 2.95   | 3.00   | 3.00   | 3.10   | 3.30   | 3.25   | 3.50   | 3.50   | 3.45   | 3.40   | 3.35   | 3.40   | 3.40   | 3.40   | 3.50   | 3.50   | 3.40   | 3.40   | 3.30   | 3.40   | 3.10   | 3.00   | 2.90   |

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

Станция

автоматическая

(ручная, автоматическая)

(M3000)F1 Ноябрь 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 Милюттиной

| 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   | L   | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 2       |    |    |    |    |    |    |    |    | L  | L   | L   | L   | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 3       |    |    |    |    |    |    |    |    |    |     | L   | L   | L      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 4       |    |    |    |    |    |    |    |    | L  | 400 | L   | L   | L      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 5       |    |    |    |    |    |    |    |    |    | L   | L   | L   | L      | L  | L  | L  |    |    |    |    |    |    |    |    |  |  |
| 6       |    |    |    |    |    |    |    |    |    | L   | 400 | L   | L      | L  | L  | L  |    | L  |    |    |    |    |    |    |  |  |
| 7       |    |    |    |    |    |    |    |    |    | L   | L   | L   | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 8       |    |    |    |    |    |    |    |    |    | L   | L   | L   | L      | L  |    | L  |    |    |    |    |    |    |    |    |  |  |
| 9       |    |    |    |    |    |    |    |    |    |     | L   | L   | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 10      |    |    |    |    |    |    |    |    |    |     |     | L   | 11350L |    | L  | L  |    |    |    |    |    |    |    |    |  |  |
| 11      |    |    |    |    |    |    |    |    |    |     |     | L   | L      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 12      |    |    |    |    |    |    |    |    |    |     | L   | L   |        | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 13      |    |    |    |    |    |    |    |    |    | L   |     |     |        | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 14      |    |    |    |    |    |    |    |    |    | L   |     | 350 | L      | L  |    | L  |    |    |    |    |    |    |    |    |  |  |
| 15      |    |    |    |    |    |    |    |    | L  |     | L   | 400 | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 16      |    |    |    |    |    |    |    |    | L  | A   | 360 | L   | A      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 17      |    |    |    |    |    |    |    |    | L  | L   |     |     | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 18      |    |    |    |    |    |    |    |    | L  | L   | L   | L   | L      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 19      |    |    |    |    |    |    |    |    |    |     | L   | L   | L      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 20      |    |    |    |    |    |    |    |    |    | L   | L   | L   | L      |    |    | L  |    |    |    |    |    |    |    |    |  |  |
| 21      |    |    |    |    |    |    |    |    |    |     | L   | L   | L      |    | L  |    |    |    |    |    |    |    |    |    |  |  |
| 22      |    |    |    |    |    |    |    |    | L  | L   | L   | L   |        | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 23      |    |    |    |    |    |    |    |    |    | L   | S   | L   | L      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 24      |    |    |    |    |    |    |    |    |    |     | L   | L   | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 25      |    |    |    |    |    |    |    |    | L  |     | L   |     | L      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 26      |    |    |    |    |    |    |    |    |    | L   |     | L   |        |    | L  |    |    |    |    |    |    |    |    |    |  |  |
| 27      |    |    |    |    |    |    |    |    |    |     |     | L   | L      | L  |    |    |    |    |    |    |    |    |    |    |  |  |
| 28      |    |    |    |    |    |    |    |    |    |     | L   | L   | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 29      |    |    |    |    |    |    |    |    |    |     | L   | L   | L      | L  | L  |    |    |    |    |    |    |    |    |    |  |  |
| 30      |    |    |    |    |    |    |    |    |    |     |     | L   | L      |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 31      |    |    |    |    |    |    |    |    |    |     |     |     |        |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Медиана |    |    |    |    |    |    |    |    |    | 400 | 380 | 375 | 11350L |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Учтено  |    |    |    |    |    |    |    |    |    | 1   | 2   | 2   | 1      |    |    |    |    |    |    |    |    |    |    |    |  |  |

R'F КМ Ноябрь 1972г.

МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД

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 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       | E275E | E400A | E395A | E350B | E270E | E205E | E245A | 220   | 225   | 220   | 200   | 200   | 220   | 215   | 210   | 225   | 240   | 245   | 240   | E200E | E220E | E195E | E210A | E255A |
| 2       | E295A | E270S | E230A | E245S | E245S | E250E | 245   | 220   | 205   | 205   | I215A | 205   | I220A | I205A | 205   | 225   | 220   | E250A | E245A | E240A | E215A | E230A | E270A | E350A |
| 3       | E325A | E300A | E300A | E295A | E250S | E225S | 250   | 205   | 200   | 210   | 185   | 235   | 220   | I215A | 215   | 210   | 220   | E200A | E225A | E245A | E250A | A     | E335A | E345A |
| 4       | E255A | E250E | E270E | E295S | E250E | E220E | E200E | 200   | 205   | 185   | 175   | I190A | I210A | 220   | 210   | 205   | 200   | 200   | E230E | E205E | E205S | E215S | E250A | E295A |
| 5       | E295E | E300S | E280A | E275A | E250A | E225A | 225   | 200   | 205   | E215E | 200   | 190   | I210A | 220   | I220A | 220   | 200   | E200A | E205A | E250A | E230A | E245S | E245E | E245S |
| 6       | E260A | A     | E345A | E270E | E265E | E220E | E200E | 215   | 210   | 200   | 195   | 195   | 200   | 205   | 185   | 210   | 200   | 190   | E220A | E215A | E210S | E240A | E250S | E265A |
| 7       | E290S | E240E | E235B | E240B | E220E | E240S | E205E | 210   | 205   | 200   | 185   | 210   | 205   | 220   | 220   | 215   | 210   | 200   | E195S | E195S | E230S | E280S | E255S | E260E |
| 8       | E250E | E250B | E270B | E250B | E250B | E205A | E240E | 200   | 205   | I205A | I200A | 210   | 190   | 200   | 215   | E210E | 200   | 200   | E205A | E225A | E200A | E245B | E250S | E245S |
| 9       | E255B | E250S | E245B | E240A | E205E | E195E | E200E | 200   | 200   | 215   | 190   | 230   | 230   | 215   | 210   | 205   | 200   | 200   | E205S | E210S | E205A | E265A | E280S | E265E |
| 10      | E275S | E255S | E255S | E255B | E240E | E200E | E200E | 200   | 205   | 205   | 200   | E245E | 200   | 205   | 200   | 205   | 200   | E220A | E195A | E265A | E330A | E250A | E265S | E245S |
| 11      | E265S | E255S | E250S | E255A | E250B | E195E | E190S | 200   | 190   | 215   | 205   | 225   | 220   | 205   | 215   | 200   | 200   | 195   | E250A | E210A | E200E | E215E | E250S | E250B |
| 12      | E265S | E245B | E250B | C     | E250B | E220S | E205E | 200   | 200   | 205   | 195   | 210   | 220   | 200   | 200   | 215   | 200   | 195   | E195E | E200E | E200S | E230S | E255S | E240E |
| 13      | E205E | E265S | E245B | E250B | E225E | E205E | 205   | 200   | 205   | 200   | 190   | 220   | 245   | 215   | 240   | 225   | E225A | A     | A     | E230A | E200S | E200A | E235S | C     |
| 14      | E275S | E255S | E250E | E220S | E210E | E200S | E225S | 210   | 205   | 215   | 190   | 240   | 220   | 210   | 225   | E225E | 205   | E200S | E215A | E205S | E205S | E245B | E245S | S     |
| 15      | E250A | E240S | E245S | E235S | E220S | E220S | E240S | 240   | 200   | 195   | 215   | 195   | 205   | I220A | E220E | 220   | E205A | E240A | E205A | E210S | E245B | E295S | E290S | E290E |
| 16      | E275E | E245E | E245E | E245E | E245A | E250E | E255E | 240   | E225E | 220   | E230E | A     | A     | A     | 230   | 210   | 205   | E200A | E200S | E225S | E210B | E375A | E270A | E275A |
| 17      | E250A | E260A | E280A | E250B | E245E | E250E | E240A | 205   | 195   | 205   | 200   | 220   | E225E | 210   | 215   | 205   | 205   | 205   | E205B | E205S | E245B | E250S | E260E | E260E |
| 18      | E275E | E265B | E255E | E260E | E250E | E240E | E235E | 210   | 210   | 205   | 200   | 220   | 215   | 205   | 205   | 200   | 200   | A     | E205A | E210S | E235S | E255S | E295S | E270S |
| 19      | E275E | E260E | E245E | E255E | E225E | E205E | E255S | 225   | 205   | 190   | 190   | 210   | 200   | 210   | 225   | 215   | 200   | 195   | E215A | E200E | E225A | E250A | E300A | E300A |
| 20      | E255A | E250B | E240E | C     | E250E | E240E | E240E | 210   | 205   | 205   | 200   | 200   | 220   | 210   | 220   | 225   | 215   | E205A | E190S | E200E | E205E | E260E | E295A | E335A |
| 21      | E255A | E225E | E250B | E260E | E270E | E240A | 255   | 220   | 205   | 220   | 230   | 220   | 215   | 200   | 200   | 210   | 205   | E200A | E205B | E205E | E205A | E240S | E250S | E255S |
| 22      | E255S | E255S | E270B | E245E | E230E | E200E | E205E | 210   | 205   | 200   | 200   | 210   | 200   | 225   | 205   | 205   | 200   | E205A | E200S | E205S | E240A | E300S | E340A | E305S |
| 23      | C     | E320S | E300A | E260A | E230E | E245A | E275A | 230   | 195   | 220   | 200   | 225   | 220   | E220E | 215   | 215   | 205   | E205A | E200S | E215A | E250S | E290S | E325S | E300S |
| 24      | E290S | E295S | E280E | E265E | E275E | E250E | E240E | 220   | 200   | 200   | 205   | 225   | 220   | 200   | 200   | 225   | 200   | E195A | E205A | E205S | E225B | E225S | E250S | E275S |
| 25      | E280E | E255B | E250E | E215E | E230E | E210E | E230E | 210   | 195   | 205   | 220   | 205   | 210   | 205   | 220   | 205   | 200   | E200S | E240A | E215A | E205S | E210S | E240S | E255A |
| 26      | E300A | E260E | E290A | E285E | E275B | E240E | E215E | 205   | 205   | 200   | 200   | E240E | 210   | 220   | 205   | 225   | 205   | 225   | E210A | E200A | E210A | E250A | E255A | E275S |
| 27      | E255S | E275A | E255A | E245A | E225B | E205A | E230A | 210   | 210   | 200   | 205   | 210   | 240   | 240   | 225   | 225   | 210   | E205A | E200A | E205S | E215S | E250E | E320S | E350S |
| 28      | E345S | E305E | E270E | E245E | E205E | E240E | E235E | 240   | 205   | 205   | E215E | 205   | 210   | 220   | 220   | 230   | 200   | E260A | E240A | E250A | E210A | E255A | E350A | E325A |
| 29      | E340A | E300A | E300A | E290A | E295A | E245A | E250A | E210A | 205   | 240   | I205A | 230   | 215   | 230   | 210   | 215   | E205S | E250A | E245A | E210S | E220S | E260S | E310A | E290A |
| 30      | E285S | E300S | E295B | E290S | E250E | E245S | E225A | 210   | 210   | 220   | 215   | E220E | 220   | 205   | 205   | 210   | E205A | E200A | E225A | E245A | E240S | E245A | E320A | E270E |
| 31      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Медiana | E275S | E260S | E255A | E255E | E250E | E220E | E230E | 210   | 210   | 205   | 200   | 210   | 215   | 210   | U210  | U210  | U200  | E200A | E205A | E210A | E215S | E250S | E260S | E275S |
| Учтено  | 29    | 29    | 30    | 28    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 29    | 29    | 29    | 30    | 30    | 30    | 28    | 29    | 30    | 30    | 29    | 30    | 28    |
|         | E255  | E250  | E245  | E245  | E225  | E205  | E205  | 200   | 200   | 200   | 195   | 205   | 210   | 205   | 205   | 205   | 200   | E200  | E200  | E205  | E205  | E230  | E250  | E255  |
|         | E290  | E300  | E280  | E270  | E250  | E240  | E245  | 220   | 205   | 215   | 205   | 220   | 220   | 220   | 220   | 225   | 205   | E210  | E230  | E225  | E235  | E260  | E310  | E300  |

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

Станция автоматическая  
(ручная, автоматическая)

R'F2 КМ Ноябрь 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  
полное время 75°E

Кем составлена Зеленовой  
Кем подсчитана Милютин

| 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       |    |    |    |    |    |    |    |    |     | 245 | 245 | 250 | 250 | 220 | 220 |     |    |     |    |    |    |    |    |    |  |  |
| 2       |    |    |    |    |    |    |    |    | 225 | 220 | 250 | 235 | 220 | 220 | 225 |     |    |     |    |    |    |    |    |    |  |  |
| 3       |    |    |    |    |    |    |    |    |     |     | 245 | 240 | 230 | 225 |     |     |    |     |    |    |    |    |    |    |  |  |
| 4       |    |    |    |    |    |    |    |    | 205 | 215 | 230 | 230 | 245 | 230 |     |     |    |     |    |    |    |    |    |    |  |  |
| 5       |    |    |    |    |    |    |    |    |     | 205 | 205 | 250 | 245 | 225 | 240 | 220 |    |     |    |    |    |    |    |    |  |  |
| 6       |    |    |    |    |    |    |    |    |     | 205 | 230 | 235 | 225 | 230 | 245 | 210 |    | 250 |    |    |    |    |    |    |  |  |
| 7       |    |    |    |    |    |    |    |    |     | 230 | 245 | 230 | 235 | 220 | 235 |     |    |     |    |    |    |    |    |    |  |  |
| 8       |    |    |    |    |    |    |    |    |     | 215 | 230 | 245 | 235 | 205 |     | 205 |    |     |    |    |    |    |    |    |  |  |
| 9       |    |    |    |    |    |    |    |    |     |     | 215 | 250 | 235 | 230 | 240 |     |    |     |    |    |    |    |    |    |  |  |
| 10      |    |    |    |    |    |    |    |    |     |     |     | 240 | 220 |     | 250 | 215 |    |     |    |    |    |    |    |    |  |  |
| 11      |    |    |    |    |    |    |    |    |     |     |     | 240 | 220 | 210 |     |     |    |     |    |    |    |    |    |    |  |  |
| 12      |    |    |    |    |    |    |    |    |     |     | 215 | 220 |     | 220 | 250 |     |    |     |    |    |    |    |    |    |  |  |
| 13      |    |    |    |    |    |    |    |    |     | 210 |     |     |     | 235 |     |     |    |     |    |    |    |    |    |    |  |  |
| 14      |    |    |    |    |    |    |    |    |     | 240 |     | 245 | 235 | 225 |     | 215 |    |     |    |    |    |    |    |    |  |  |
| 15      |    |    |    |    |    |    |    |    | 245 |     | 225 | 250 | 245 | 240 | 215 |     |    |     |    |    |    |    |    |    |  |  |
| 16      |    |    |    |    |    |    |    |    | 220 | 210 | 220 | 250 | 215 | 230 |     |     |    |     |    |    |    |    |    |    |  |  |
| 17      |    |    |    |    |    |    |    |    | 200 | L   |     |     | 220 | L   | 230 |     |    |     |    |    |    |    |    |    |  |  |
| 18      |    |    |    |    |    |    |    |    | 210 | 205 | 220 | 220 | 215 | 220 |     |     |    |     |    |    |    |    |    |    |  |  |
| 19      |    |    |    |    |    |    |    |    |     |     | 210 | 220 | 230 | 240 |     |     |    |     |    |    |    |    |    |    |  |  |
| 20      |    |    |    |    |    |    |    |    |     | 210 | 240 | 240 | 230 |     |     | 225 |    |     |    |    |    |    |    |    |  |  |
| 21      |    |    |    |    |    |    |    |    |     |     | 240 | 225 | 230 |     | 245 |     |    |     |    |    |    |    |    |    |  |  |
| 22      |    |    |    |    |    |    |    |    | 220 | 220 | 215 | 240 |     | 240 | 210 |     |    |     |    |    |    |    |    |    |  |  |
| 23      |    |    |    |    |    |    |    |    |     | 230 | 225 | 225 | 220 | 210 |     |     |    |     |    |    |    |    |    |    |  |  |
| 24      |    |    |    |    |    |    |    |    |     |     | 210 | 225 | 220 | 240 | 215 |     |    |     |    |    |    |    |    |    |  |  |
| 25      |    |    |    |    |    |    |    |    | 205 |     | 225 |     | 220 | 250 |     |     |    |     |    |    |    |    |    |    |  |  |
| 26      |    |    |    |    |    |    |    |    |     | 210 |     | 220 |     |     | 215 |     |    |     |    |    |    |    |    |    |  |  |
| 27      |    |    |    |    |    |    |    |    |     |     |     | 240 | 250 | 250 |     |     |    |     |    |    |    |    |    |    |  |  |
| 28      |    |    |    |    |    |    |    |    |     |     | 205 | 210 | 225 | 230 | 250 |     |    |     |    |    |    |    |    |    |  |  |
| 29      |    |    |    |    |    |    |    |    |     |     | 225 | 240 | 245 | 235 | L   |     |    |     |    |    |    |    |    |    |  |  |
| 30      |    |    |    |    |    |    |    |    |     |     |     | 210 | 225 |     |     |     |    |     |    |    |    |    |    |    |  |  |
| 31      |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |    |     |    |    |    |    |    |    |  |  |
| Медиана |    |    |    |    |    |    |    |    | 15  | 20  | 25  | 20  | 15  | 20  | 30  | 10  |    |     |    |    |    |    |    |    |  |  |
| Учтено  |    |    |    |    |    |    |    |    | 220 | 215 | 225 | 240 | 230 | 230 | 235 | 215 |    |     |    |    |    |    |    |    |  |  |
|         |    |    |    |    |    |    |    |    | 9   | 15  | 22  | 27  | 26  | 24  | 15  | 6   |    |     |    |    |    |    |    |    |  |  |
|         |    |    |    |    |    |    |    |    | 205 | 210 | 215 | 225 | 220 | 220 | 215 | 210 |    |     |    |    |    |    |    |    |  |  |
|         |    |    |    |    |    |    |    |    | 220 | 230 | 240 | 245 | 235 | 240 | 245 | 220 |    |     |    |    |    |    |    |    |  |  |

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

Станция автоматическая  
(ручная, автоматическая)

В'Е КМ Ноябрь 1972г.  
(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 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       |    |    |    |    | E  |    | A  | 105   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | E   | E  | E  | E  | E  |    |    |  |  |
| 2       |    |    |    |    |    |    | E  | E115B | 100   | 100   | 100   | 95    | 95    | 95    | A     | A     | A     | A   | A  |    |    |    |    |    |  |  |
| 3       |    |    |    |    | S  | S  | E  | 110   | 100   | 100   | 100   | 100   | 100   | 95    | 100   | 100   | A     | A   | A  |    |    |    |    |    |  |  |
| 4       |    |    |    |    |    |    | E  | A     | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 105   | A   | E  |    |    |    |    |    |  |  |
| 5       |    |    |    |    |    |    | A  | 105   | 100   | 100   | 100   | A     | A     | A     | 90    | A     | A     | A   | A  |    |    |    |    |    |  |  |
| 6       |    |    |    |    |    |    | E  | 100   | 100   | 95    | I90A  | 90    | I95A  | 95    | 90    | A     | A     | A   | A  |    |    |    |    |    |  |  |
| 7       |    |    |    |    | E  | S  | E  | A     | 100   | 100   | 95    | 100   | 100   | 95    | 95    | 100   | E120B | A   | S  |    |    |    |    |    |  |  |
| 8       |    |    |    |    |    |    | E  | A     | 100   | 100   | 100   | 95    | 95    | 95    | 95    | A     | A     | A   | A  |    |    | B  |    |    |  |  |
| 9       |    |    |    |    | E  | E  | E  | E     | 100   | 100   | 100   | I100A | I100A | 100   | I100A | I95A  | A     | S   | A  | S  |    |    |    |    |  |  |
| 10      |    |    |    |    |    | E  | E  | 105   | 100   | 95    | 95    | 95    | 100   | I100A | I100A | 100   | A     | A   | A  |    |    |    |    |    |  |  |
| 11      |    |    |    |    |    |    | S  | E120E | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | E110E | 100 | A  |    |    |    |    |    |  |  |
| 12      |    |    |    |    |    |    |    | 110   | 100   | 100   | 100   | 100   | 100   | A     | A     | 95    | A     | E   | E  | E  |    |    |    |    |  |  |
| 13      |    |    |    |    | E  | E  | E  | A     | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | B     | A   | A  | A  |    |    |    | C  |  |  |
| 14      |    |    |    |    |    |    | S  | B     | 100   | 100   | 100   | 100   | 100   | 100   | I100A | 100   | 105   | S   | A  |    |    |    |    |    |  |  |
| 15      |    |    |    |    |    |    | S  | C     | A     | A     | 100   | 100   | 100   | 100   | 100   | 100   | S     | A   | A  |    |    |    |    |    |  |  |
| 16      |    |    |    |    |    |    | E  | B     | 100   | I100A | I100A | A     | A     | A     | 95    | 100   | E     | A   | S  |    |    |    |    |    |  |  |
| 17      |    |    |    |    | E  | E  | A  | E     | A     | A     | A     | A     | A     | 100   | I100A | 100   | A     | S   | B  |    |    |    |    |    |  |  |
| 18      |    |    |    |    |    | E  | E  | E     | 100   | 100   | 100   | A     | A     | A     | A     | A     | A     | A   | A  |    |    |    |    |    |  |  |
| 19      |    |    |    |    |    | E  | S  | E125E | 100   | 100   | 95    | 95    | 95    | 100   | 100   | 100   | 105   | A   | A  |    |    |    |    |    |  |  |
| 20      |    |    |    |    |    |    | E  | A     | A     | A     | A     | A     | A     | A     | A     | A     | A     | A   | S  | E  |    | E  | A  |    |  |  |
| 21      |    |    |    |    |    | A  | A  | B     | B     | A     | A     | 100   | 100H  | I95A  | 95    | 105   | A     | A   | B  | E  | A  |    |    |    |  |  |
| 22      |    |    |    |    |    | E  | E  | 105   | 100H  | A     | A     | A     | 95    | 100   | 100   | 100   | S     | A   | S  | S  | A  |    |    |    |  |  |
| 23      |    |    |    |    |    | A  | A  | E120S | I105A | I100A | 100   | 95    | I95A  | I100A | 100   | I100A | E     | A   | S  | A  | S  | S  |    |    |  |  |
| 24      |    |    | S  |    |    | E  | E  | B     | 105   | 100   | 100   | 95    | 95    | I100A | 100   | A     | A     | A   | A  | S  |    |    |    |    |  |  |
| 25      |    |    |    |    |    | E  | E  | A     | 105   | 100   | 100   | 95    | 95    | 100   | 105   | A     | A     | S   | A  | A  |    |    |    |    |  |  |
| 26      |    |    |    |    | B  | E  | E  | S     | A     | 100   | 95    | A     | A     | A     | 95    | 100   | B     | E   | A  |    |    |    |    |    |  |  |
| 27      |    |    |    |    |    | A  | A  | A     | A     | A     | 100   | 95    | 95    | 95    | A     | A     | B     | A   | A  | S  | S  | E  |    |    |  |  |
| 28      |    |    |    | E  | E  | E  | E  | A     | A     | 100   | 100   | I100A | 95    | 95    | 100   | 100   | A     | A   | A  | A  | A  |    |    |    |  |  |
| 29      |    |    |    |    |    | A  | A  | A     | A     | 100   | A     | A     | 95    | 95    | 105   | 105   | S     | A   | A  | S  |    |    |    |    |  |  |
| 30      |    |    |    |    |    | S  | A  | A     | A     | A     | A     | A     | A     | 100   | 100   | 105   | 105   | A   | A  | A  | S  |    |    |    |  |  |
| 31      |    |    |    |    |    |    |    |       |       |       |       |       |       |       |       |       |       |     |    |    |    |    |    |    |  |  |
| Медиана |    |    |    |    | E  | E  | E  | E     | 110   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 105   | E   | E  | E  | E  | E  |    |    |  |  |
| Учтено  |    |    |    |    | 1  | 6  | 11 | 17    | 14    | 21    | 23    | 24    | 21    | 23    | 24    | 25    | 21    | 9   | 4  | 3  | 4  | 1  | 3  |    |  |  |

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

Станция автоматическая  
(ручная, автоматическая)

R'Es КМ Ноябрь 1972г.

АКАДЕМИЯ НАУК КАЗ. ССР

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       | E   | 100 | 100 | B    | 6   | E   | 100 | 100   | 100   | 6     | 105   | 95    | 100   | 6     | 6     | 6     | 6     | 6    | 6    | 6   | 6   | 6   | 100 | 100 |
| 2       | 95  | 95  | 95  | S    | 95  | E   | 6   | E1406 | E1356 | 105   | 100   | 100   | 95    | 95    | 95    | E1206 | 105   | 100  | 100  | 100 | 100 | 100 | 95  | 95  |
| 3       | 95  | 95  | 100 | 100  | 6   | 6   | 6   | 6     | E1306 | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100H | 100H | 100 | 100 | 100 | 100 | 100 |
| 4       | 105 | E   | E   | S    | E   | E   | 6   | 100   | 6     | 110   | 100   | 100   | 100   | 100   | 105   | 6     | 6     | 95   | 6    | E   | S   | S   | 100 | 100 |
| 5       | E   | S   | 100 | 100  | 100 | 100 | 100 | 6     | 100   | 100   | 100   | 95    | 90    | 95    | 95    | 95    | 95    | 95   | 95   | 95  | 90  | S   | E   | S   |
| 6       | 100 | 100 | 95  | 95   | 90  | E   | 6   | E1406 | E1456 | 6     | 95    | 100   | 90    | 6     | 6     | 105   | E1456 | 90   | 90   | 90  | S   | 95  | 95  | 100 |
| 7       | S   | E   | B   | B    | E   | 6   | 6   | 105   | 100   | 100   | 100   | 100   | 100   | 95    | 100   | 100   | 6     | 105  | 6    | S   | S   | S   | S   | E   |
| 8       | E   | B   | B   | B    | B   | 95  | 6   | 100   | 100   | 100   | 100   | 6     | 6     | 6     | 6     | 85    | 85    | 105  | 100  | 100 | 100 | 6   | S   | S   |
| 9       | B   | S   | B   | 95   | 6   | 6   | 6   | 100   | 100   | 100   | 100   | 100   | 100   | 6     | 90    | 90    | 90    | 6    | 100  | 6   | 100 | 95  |     | E   |
| 10      | S   | S   | S   | B    | E   | 6   | 6   | 6     | 6     | 6     | 6     | 6     | 6     | 100   | 95    | 6     | 100   | 100  | 100  | 100 | 95  | 90  | S   | S   |
| 11      | S   | S   | S   | 100  | B   | E   | 6   | 6     | 100   | 6     | E1606 | 105   | 105   | 110   | 100   | 100   | 105   | 100  | 100  | 100 | E   | E   | S   | B   |
| 12      | S   | B   | B   | C    | B   | 95  | E   | 6     | E1306 | 105   | 100   | E1506 | 6     | 95    | 95    | E1456 | 105   | 6    | 6    | 6   | S   | S   | 90  | E   |
| 13      | E   | S   | B   | B    | 6   | 6   | 6   | 105   | 6     | 105   | 100   | E1556 | E1556 | E1506 | E1306 | 120   | 100   | 100  | 100  | 100 | S   | 100 | S   | C   |
| 14      | 95  | S   | E   | S    | E   | S   | 6   | 6     | 6     | 110   | 6     | 6     | 6     | 6     | 95    | 105   | 100   | 6    | 100  | S   | S   | B   | S   | 90  |
| 15      | 95  | S   | S   | S    | S   | S   | 6   | C     | 100   | 100   | 6     | 6     | E1406 | 110   | E1256 | 105   | 110   | 100  | 100  | S   | B   | S   | S   | E   |
| 16      | E   | E   | E   | E    | 100 | E   | 6   | 6     | 6     | 100   | 95    | E1306 | E1156 | E1306 | 105   | 105   | 110   | 100  | 6    | S   | E   | 100 | 100 | 100 |
| 17      | 95  | 95  | 95  | B    | 6   | 6   | 100 | 6     | 95H   | 100   | 95    | 90    | 95    | 6     | 95    | 6     | 90    | 6    | 6    | S   | B   | S   | E   | E   |
| 18      | E   | B   | E   | E    | E   | 6   | 6   | 6     | 6     | 6     | E1256 | 90    | E1556 | 90    | E1406 | 110   | 100   | 100  | 100  | S   | 100 | S   | S   | S   |
| 19      | E   | E   | E   | E    | E   | 100 | 6   | 6     | E1256 | 6     | 6     | E1606 | 6     | E1756 | E1406 | 100H  | 105   | 100  | 100  | E   | 100 | 95  | 95  | 90  |
| 20      | 105 | B   | 95  | C    | E   | E   | 6   | 100   | 100   | 95    | 95    | 95    | E1906 | E1506 | E1306 | E1156 | 90    | 90   | 6    | 6   | E   | 6   | 95  | 95  |
| 21      | 95  | E   | B   | E    | E   | 100 | 100 | 6     | 95    | 95    | 100   | E1906 | E1456 | E1106 | 100   | 130   | 100   | 100  | 6    | 6   | 105 | S   | S   | S   |
| 22      | S   | S   | 95  | E    | E   | 6   | 6   | 6     | 6     | 100   | 95    | E1756 | E1506 | E1406 | 110H  | 105   | 100   | 100  | 6    | 6   | 95  | S   | 100 | S   |
| 23      | C   | S   | 100 | 100  | E   | 105 | 100 | 6     | 100   | 95    | S     | E1506 | E1506 | E1856 | E1156 | 105   | 100   | 100  | 100  | 105 | 6   | 6   | S   | S   |
| 24      | S   | 6   | E   | E    | E   | 6   | 6   | 6     | 6     | E1156 | 95    | E1906 | E1506 | 100   | 115   | 110   | 105   | 95H  | 100  | 6   | B   | S   | S   | S   |
| 25      | E   | B   | E   | E    | 100 | 6   | 6   | 110   | 6     | 6     | 6     | E1456 | 115   | E1506 | E1406 | 140   | 110   | 6    | 100  | 100 | S   | S   | S   | 100 |
| 26      | 95  | E   | 95  | E    | 105 | 6   | 6   | 6     | 100   | 100   | 155   | E1406 | 115   | 120   | 110   | 105   | 100   | 100  | 100  | 95  | 95  | 95  | 95  | 95  |
| 27      | S   | 95  | 95H | 100H | 100 | 105 | 95  | 100   | 100   | 95    | E1856 | E1606 | E1406 | E1456 | E1206 | 105   | 105   | 100  | 100  | 6   | 6   | 6   | S   | S   |
| 28      | S   | E   | E   | 6    | 6   | 6   | 6   | 105   | 100   | 6     | E1956 | E1556 | E1406 | E1456 | 135   | 105   | 105   | 95   | 100  | 100 | 100 | 100 | 100 | 105 |
| 29      | 105 | 105 | 100 | 100  | 100 | 100 | 100 | 100   | 100   | E1606 | 100   | E1556 | 120   | E1456 | E1856 | 125   | 110   | 105  | 105  | 100 | S   | 100 | 100 | 100 |
| 30      | S   | S   | B   | S    | E   | 6   | 100 | 105   | 100   | 100   | E1756 | E1456 | 120   | 120   | 110   | 105   | 105   | 105  | 100  | 100 | 6   | 100 | 100 | E   |
| 31      |     |     |     |      |     |     |     |       |       |       |       |       |       |       |       |       |       |      |      |     |     |     |     |     |
| Медiana | 95  | 95  | 95  | 100  | 100 | 100 | 100 | 100   | 100   | 100   | 100   | E1356 | 1100  | 1110  | 1105  | 105   | 100   | 100  | 100  | 100 | 100 | 100 | 100 | 100 |
| Учено   | 11  | 7   | 12  | 8    | 8   | 8   | 8   | 14    | 21    | 22    | 24    | 26    | 25    | 24    | 27    | 26    | 27    | 24   | 21   | 14  | 12  | 12  | 14  | 13  |

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

РрF2 КМ Ноябрь 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 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       | 360   | 440   | 440   | 415   | U290S | U320S | 325   | 270   | U255R | 295   | U310R | U295R | R     | U305R | U330S | U300S | 310   | U315S | 345   | 270   | U320S | U265N | U260R | U410S |
| 2       | 350   | U320S | 275   | 300   | 345   | 320   | 300   | R     | U265R | 275   | 305   | U275S | 270   | U275S | 260   | S     | U255S | U300S | 300   | U275S | 260   | U290S | U320S | 400   |
| 3       | 385   | 360   | 380   | U350S | 330   | S     | U315S | U255S | R     | R     | 285   | S     | U275S | 265   | U275S | U260S | 255   | U300S | U270S | 265   | S     | A     | 385   | U365S |
| 4       | 340   | 320   | 350   | U350S | 320   | 260   | 285   | U220S | U245S | 245   | 295   | U275C | 265   | 255   | 265   | 250   | U245S | U255S | 300   | U265S | 265   | 255   | 320   | 360   |
| 5       | 370   | 355   | 330   | U335S | 300   | 280   | 250   | U255R | R     | 235   | U245R | U270R | 270   | U260R | 260   | 255   | 240   | U290S | U270S | U275S | 295   | 300   | 295   | 275   |
| 6       | 310   | A     | 390   | U345S | U325S | U260S | U290S | U250S | U225S | U245S | U255R | U255S | 250   | 260   | U265R | U255R | U255S | U280S | U290R | U265S | 270   | 295   | U305E | 340   |
| 7       | 345F  | U310F | 295   | 310   | 265F  | U290S | U265S | U250S | U260S | 255   | 275   | 280   | 275   | U255S | 255   | 260   | 250   | U230S | U245S | 220   | 315   | 340   | U335S | 340   |
| 8       | U310S | 300   | 320   | 315   | 300   | U250S | 315   | U225S | 250   | 250   | U255S | 265   | 255   | 245   | 265   | 225   | 245   | U255S | U255S | U260S | U245S | U295S | U305S | U305S |
| 9       | 325   | U330S | 320   | 300   | U300S | U250S | 250   | 235   | U235R | 260   | 255   | U280S | U270S | 265   | U255S | 240   | S     | S     | S     | U270S | U250S | U345S | U345S | U340S |
| 10      | U350S | U320S | U310S | 330   | U295S | S     | 265F  | S     | U245S | U255S | C     | 260   | C     | C     | U275C | U250C | S     | S     | U230S | 300   | S     | 295   | 320   | 295   |
| 11      | U320S | U315S | 310   | 325   | U305S | U250S | 245   | U245S | 245   | 245   | 255   | U255C | 245   | U255S | 250   | U260S | U225S | U250S | U255S | 250   | U255S | U295S | U310S | U310S |
| 12      | U340S | 315   | 330   | C     | 300   | S     | U275S | 240   | U230S | U250C | 250   | 245   | 255   | 260   | 265   | 250   | U245S | U245S | U295S | U255S | U240S | 310   | U345S | 305   |
| 13      | 290   | 315   | 295   | 320   | U300S | U255S | U285S | U215C | U230S | U250S | U280C | U275C | 255   | 255   | 260   | U280S | A     | A     | A     | U260S | U250S | S     | U280C | C     |
| 14      | U280S | U330S | U320S | 275   | 265   | U240S | S     | U250S | S     | U250S | 260   | 255   | 265   | U250S | S     | S     | S     | S     | S     | 285   | U265S | 295   | S     | S     |
| 15      | 320   | U300S | U320S | U300S | U300S | S     | U270C | C     | U235S | U245S | 250   | U290S | 270   | U265S | 245   | U245S | U250S | 270   | U275S | U265S | 325   | U345S | U350S | 350   |
| 16      | 350   | 295   | U315S | 315   | 300   | U315S | 340   | S     | U250S | S     | 270   | U260S | 250   | 255   | U255S | U250S | S     | S     | 260   | 295   | 265   | 355   | U340S | 340   |
| 17      | 325   | U330S | U320S | 310   | 300   | U300S | 290   | U240S | S     | S     | U255S | 260   | U245S | 255   | U260S | U250S | S     | U260S | U245S | U275N | U290N | S     | U345S | 340   |
| 18      | U340S | U340S | U335S | U340S | U335S | U300S | U295S | U250S | U240S | 230   | 245   | U255S | 240   | 250   | U250S | U240S | U240S | C     | U250S | U260S | U260S | 310   | 350   | 340   |
| 19      | 345   | 340   | 305   | 325   | 280   | 250   | U335S | U250S | U240S | U230S | 240   | 250   | 250   | 290   | U255S | 240   | U240S | S     | S     | 250   | U250S | 295   | 350   | U350S |
| 20      | 340   | 320   | U305S | C     | U320S | U300S | U290S | U240S | U240R | U250R | U250S | C     | 260   | U250S | U250S | 250   | U260S | U275S | S     | U290S | U250S | U350S | U365S | U390S |
| 21      | U310S | U290S | U305S | 325   | U350N | U275S | 310   | U240S | U240S | U260S | U250C | C     | U240R | 250   | 260   | S     | U255S | U240S | U275S | U260S | 240   | 340   | U305S | U340S |
| 22      | U325S | U320S | U355S | U340S | U300S | U260S | U300F | U240S | U250S | U240S | U240S | 255   | 260   | U270S | U250S | U240S | U255S | S     | U245S | U270S | S     | 365   | U405S | U390S |
| 23      | C     | 395   | U350S | U300S | U290S | 290   | 310   | U270S | U255S | U250S | U260S | U250S | 250   | S     | U240S | U245S | U255S | U250S | S     | 260   | 300   | U350S | 375   | 365   |
| 24      | U350S | U360S | U355S | 350   | 350   | 340   | U300S | U240S | S     | U255C | R     | U245S | R     | 260   | 270   | U265S | S     | S     | U255S | U265S | U290S | U300N | U350S | U350S |
| 25      | U350S | U340S | U320S | U305S | U290S | U280S | S     | U260S | U245S | U255S | 240   | 300   | 285   | U260R | 270   | C     | S     | S     | U290S | U260S | U260S | U290S | U300S | 330   |
| 26      | U350S | U345S | U350S | U350S | U345S | U305S | S     | S     | U240S | 250   | 290   | U240S | U250S | U260S | R     | S     | 250   | U270S | S     | U250S | 250   | S     | U335N | S     |
| 27      | S     | S     | U340S | U290N | U280S | S     | U280S | S     | S     | U260S | U240S | 275   | 270   | U275S | U275S | U250S | U250S | U260S | 255   | 300   | 265   | 300   | 400   | 390   |
| 28      | U390S | 390   | U340S | U305S | 290   | 300   | 300N  | S     | U240S | 250   | U225R | R     | 255   | 260   | U250S | 250   | U240S | U290S | 265   | U275S | U280S | 300   | 390   | U395S |
| 29      | 400N  | U360S | 350   | 350   | U340S | U290S | U300S | U245S | 260   | 250   | U270N | U255S | 275   | U245S | U290S | U280S | S     | S     | U250S | U255S | 250   | 300   | 320   | 325N  |
| 30      | 330   | 340   | 340   | U340S | U305S | U290S | U260S | U260S | S     | S     | U250S | U245S | U250S | U230S | 265   | U240R | U255S | U250S | U275S | 260   | U280S | U255S | 350   | 310   |
| 31      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Медиана | 340   | U330S | U320S | 325   | U300S | U290S | U290S | U245S | U245S | U250S | 255   | U260S | 255   | 260   | U260S | U250S | U250S | U260S | U265S | U265S | U265S | 300   | U340S | U340S |
| Учтено  | 28    | 28    | 30    | 28    | 30    | 25    | 27    | 23    | 23    | 26    | 28    | 26    | 27    | 28    | 28    | 25    | 21    | 19    | 23    | 30    | 27    | 26    | 29    | 27    |

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

Станция автоматическая  
(ручная, автоматическая)

Типы Es Ноябрь 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       |    | f2 | f1 |    |    |    | l1 | c2 | c2 |    | c1   | c1   | c1     |      |      |      |      |    |    |    |    |    | f2 | f1 |  |  |
| 2       | f2 | f2 | f1 |    | f1 |    |    | h1 | h1 | c1 | c2   | c2   | c2     | c2   | l1   | c1l1 | c1l1 | l2 | l2 | f2 | f2 | f2 | f2 | f2 |  |  |
| 3       | f2 | f2 | f1 | f2 |    |    |    |    | c1 | c1 | c1   | c1   | c2     | c2   | c2   | c1   | l1   | l2 | l2 | f2 | f2 | f2 | f2 | f2 |  |  |
| 4       | f1 |    |    |    |    |    |    | l1 |    | c1 | c1   | c2   | c2     | c1   | c1   |      |      | l1 |    |    |    |    | f2 | f2 |  |  |
| 5       |    |    | f1 | f2 | f2 | f1 | l1 |    | c2 | c1 | c1   | l1   | l2     | l1   | c2   | l2   | l1   | l1 | l2 | f3 | f1 |    |    |    |  |  |
| 6       | f2 | f2 | f2 | f2 | f1 |    |    | h1 | h1 |    | l1   | c1   | l1     |      |      | c1l1 | h1l1 | l1 | l1 | f1 |    | f1 | f1 | f1 |  |  |
| 7       |    |    |    |    |    |    |    | l1 | c2 | c1 | c1   | c2   | c1     | c1   | c1   | c1   |      | l1 |    |    |    |    |    |    |  |  |
| 8       |    |    |    |    |    | f1 |    | l1 | c2 | c2 | c2   |      |        |      |      | l1   | l1   | l1 | l2 | f2 | f1 |    |    |    |  |  |
| 9       |    |    |    | f1 |    |    |    | c1 | c2 | c1 | c1   | l1   | l1     |      | l1   | l1   | l2   |    | l1 |    | f1 | f1 |    |    |  |  |
| 10      |    |    |    |    |    |    |    |    |    |    |      |      |        | l1   | l1   |      | l1   | l2 | l1 | f2 | f1 | f1 |    |    |  |  |
| 11      |    |    |    | f2 |    |    |    |    | c1 |    | h1   | c1   | c1     | c1   | c1   | c2   | c2   | c1 | l3 | f2 |    |    |    |    |  |  |
| 12      |    |    |    |    |    | f1 |    |    | c2 | c2 | c2   | h1   |        | l2   | l2   | h2   | c1l1 |    |    |    |    |    | f1 |    |  |  |
| 13      |    |    |    |    |    |    |    | l1 |    | c2 | c1   | h1   | h1     | h1   | c1   | c2   | c2   | l2 | l2 | f2 |    | f1 |    |    |  |  |
| 14      | f1 |    |    |    |    |    |    |    |    | c1 |      |      |        |      | l1   | c1   | c1   |    | l1 |    |    |    |    | f2 |  |  |
| 15      | f1 |    |    |    |    |    |    |    | l1 | l2 |      |      | h1     | c1   | c1   | c2   | c2   | l2 | l1 |    |    |    |    |    |  |  |
| 16      |    |    |    |    | f1 |    |    |    |    | l2 | l1   | h1l1 | c1l1   | c1l1 | c2   | c2   | c3   | l2 |    |    |    | f2 | f2 | f2 |  |  |
| 17      | f2 | f2 | f2 |    |    |    | l1 |    | l1 | l1 | l2   | l1   | l2     |      | l1   |      | l2   |    |    |    |    |    |    |    |  |  |
| 18      |    |    |    |    |    |    |    |    |    |    | c1   | l2   | h1c1l1 | l2   | c2l2 | c1l1 | c1l1 | l3 | l2 |    | f1 |    |    |    |  |  |
| 19      |    |    |    |    |    | l1 |    |    | c1 |    |      | h1   |        | h1   | c1   | c1   | c2   | l2 | l1 |    | f2 | f2 | f2 | f2 |  |  |
| 20      | f1 |    | f1 |    |    |    |    | l1 | l1 | l2 | l2   | l1   | h1l1   | h1l1 | c1l1 | c1l1 | l2   | l2 |    |    |    |    | l1 | f1 |  |  |
| 21      | f1 |    |    |    |    | l1 | l1 |    | c2 | l2 | l1   | h1   | c1     | c1l1 | c1   | c1   | c1l1 | l1 |    |    | l2 |    |    |    |  |  |
| 22      |    |    | f1 |    |    |    |    |    | l2 | l2 | l1   | h1l1 | h1     | c2   | c2   | c1   | c2   | l1 |    |    | l2 |    | f1 |    |  |  |
| 23      |    |    | f1 | f2 |    | l1 | l1 |    | l1 | l2 |      | c1   | h1l1   | c1l1 | c1   | c2l1 | c4   | l1 | l1 | l1 |    |    |    |    |  |  |
| 24      |    |    |    |    |    |    |    |    | c1 | c2 | h1   | h1   | l1     | c1   | c2l1 | c2l1 | l1   | l1 |    |    |    |    |    |    |  |  |
| 25      |    |    |    |    | f1 |    |    | l1 |    |    |      | c1h1 | c1     | c1   | c1   | c1l1 | c1l1 |    | l2 | l2 |    |    |    | f2 |  |  |
| 26      | f2 |    | f2 |    | l1 |    |    |    | l2 | c2 | h1c1 | c2l2 | c2l2   | c2l1 | c1   | c3   | c2   | c2 | l2 | f2 | f2 | f3 | f1 | f1 |  |  |
| 27      |    | f1 | f2 | f1 | f1 | l1 | l2 | l2 | l1 | l2 | h1   | h1   | c1     | c1   | c1l1 | c1l1 | c2   | l2 | l1 |    |    |    |    |    |  |  |
| 28      |    |    |    |    |    |    |    | l1 | l1 |    | h1c1 | h1l1 | c2     | c1   | c2   | c2   | c3l1 | l3 | l2 | l2 | l1 | f2 | f2 | f2 |  |  |
| 29      | f2 | f3 | f2 | f1 | f4 | f2 | l2 | l2 | l2 | h1 | l2   | h1l2 | c1     | c1   | h1   | c1   | c2   | l2 | l1 | l1 |    | f1 | f1 | f1 |  |  |
| 30      |    |    |    |    |    |    | l1 | l1 | l2 | l3 | h1l2 | c1l2 | c1l1   | c1   | c3   | c2   | c3   | l2 | l1 | l2 |    | f1 | f2 |    |  |  |
| 31      |    |    |    |    |    |    |    |    |    |    |      |      |        |      |      |      |      |    |    |    |    |    |    |    |  |  |
| Медиана |    |    |    |    |    |    |    |    |    |    |      |      |        |      |      |      |      |    |    |    |    |    |    |    |  |  |
| Учтено  |    |    |    |    |    |    |    |    |    |    |      |      |        |      |      |      |      |    |    |    |    |    |    |    |  |  |

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