

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



*f°F2* Мгц Август 1961г  
(характеристика) (единицы) (месц) (год)

Академия Наук КазССР  
(институт)

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

ИОНОСФЕРНЫЕ ДАННЫЕ  
 поясное время 75°E

Кем составлена Мусатовой  
 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                 | U64S  | 4.6   | 4.5   | 4.4   | 4.4   | U4.6S | C     | C     | U7.3C | C     | C     | C     | C     | C     | C     | C     | C     | 7.0   | 7.0   | 5.6   | 5.6   | 6.0   | 5.8   | 5.6   |       |
| 2                 | 5.6   | 5.4   | I5.4A | I5.6A | 6.0   | 5.2   | 5.2   | 4.6   | 7.6   | 7.4   | 7.8   | 8.1   | I7.9C | 7.8   | 9.3   | 10.0  | C     | U5.5C | C     | S     | S     | S     | S     | S     |       |
| 3                 | U3.4S | S     | 7.3S  | U3.3S | U3.4S | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     |       |
| 4                 | C     | C     | 7.4C  | U4.3M | U4.2C | C     | U5.2C | U5.4C | C     | C     | C     | C     | C     | C     | U6.6C | C     | C     | C     | C     | C     | C     | C     | C     | C     |       |
| 5                 | C     | C     | C     | C     | C     | C     | C     | C     | 7.7   | 7.0   | 6.0   | 6.1   | 6.4   | 6.6   | 7.3   | 6.1   | C     | C     | C     | C     | C     | U6.5S | U6.0S | S     |       |
| 6                 | U5.4M | U5.3S | U5.2S | 4.3   | 3.9   | 4.2   | C     | C     | 7.7   | U7.8C | C     | U7.3C | I7.2C | A     | A     | 6.9   | A     | A     | I6.0C | S     | S     | U6.6S | S     | S     |       |
| 7                 | U5.5S | U5.4S | I5.2C | 4.9   | 4.3   | 4.5   | C     | C     | I6.2C | C     | C     | U8.2C | U7.3C | U7.6C | U6.8C | C     | 6.7   | I7.2C | U7.3C | U7.3C | U7.2S | U5.9S | U5.6S | S     |       |
| 8                 | S     | U5.0S | C     | C     | C     | C     | 6.4   | U7.0C | 7.4   | U8.2C | 8.9   | 8.6   | U8.3C | I8.5C | 9.2   | I8.3C | U7.5C | U7.4C | U7.2C | I7.2C | 7.8   | U6.6C | C     | C     |       |
| 9                 | 5.4   | 5.3   | U5.2C | 5.5   | 5.2   | 5.4   | U6.6C | U7.3C | U7.3C | U7.2C | 7.9   | 9.1   | 9.4   | 8.4   | I7.8C | I7.2C | U7.3C | U6.5C | U7.0C | U7.8C | U7.0C | U7.0C | A     | U5.0C |       |
| 10                | U5.0C | U4.9C | U4.9C | U4.7C | U4.6C | U4.6C | 5.9   | U6.5C | A     | A     | A     | A     | 7.8   | 7.8   | I7.6C | I7.4C | 7.0   | U7.9C | S     | U7.5S | U7.7C | A     | N     | C     |       |
| 11                | 5.4F  | U5.3F | 4.9   | 4.4   | U3.9C | 4.5   | I5.2C | 5.9   | U6.1C | I6.2C | C     | U7.4C | C     | C     | 7.1   | I6.4C | I6.8C | U7.4C | I7.1C | U7.3C | 7.5   | I7.2S | I7.3S | U5.7S |       |
| 12                | 5.5   | 5.1   | 5.3   | 5.4   | 4.3   | 4.9   | 5.9   | U6.6C | U6.7C | I7.1A | U8.0C | 7.4   | 7.9   | 7.9   | 7.9   | U7.4C | C     | 6.3   | U6.6S | A     | 6.9   | 6.9   | 6.8   | S     |       |
| 13                | I6.3S | U5.2S | C     | C     | 4.0   | 4.0   | 5.4   | 6.3   | U7.2C | 7.3   | C     | U7.6C | 7.9   | C     | A     | C     | 7.4   | 7.0   | U6.5C | U6.7C | 6.9   | 6.9   | I6.6C | 6.4   |       |
| 14                | C     | 5.8   | 5.2   | 5.0   | 4.8   | 4.9   | U6.2C | 7.4   | U8.3C | 9.3   | C     | U8.7C | U8.2C | U8.2C | U8.3C | C     | U7.1C | U6.7C | I6.8S | I7.7C | 8.0   | S     | U7.6S | 6.3   |       |
| 15                | I6.1S | I6.0S | 6.2   | U5.8S | 5.4   | 5.3   | I6.6C | 7.9   | 9.4   | U8.8C | U8.2C | U8.2C | U8.3C | 8.0   | U8.2C | U8.4C | U8.2C | 7.4   | 7.2   | 7.1   | 7.5   | 7.2   | U7.3S | I6.3S |       |
| 16                | U6.2S | 5.8   | 5.3   | 5.0   | 4.9   | 5.2   | 6.3   | U7.4C | I8.2C | U9.2R | 9.3   | U8.3R | 8.3   | U9.2R | 8.9   | 8.3   | 7.9   | 7.2   | 7.3   | 7.1   | C     | C     | C     | 6.4   |       |
| 17                | 5.5   | 5.4   | 5.3   | 5.1   | 4.9   | 4.9   | 6.5   | C     | C     | C     | C     | C     | C     | C     | C     | C     | 7.3   | 7.4   | 7.3   | 7.4   | 7.9   | 8.1   | U6.5S | 5.7   |       |
| 18                | 5.2   | 5.1   | 5.1   | 4.9   | 4.6   | 4.9   | 6.1   | 7.1   | 7.6   | 8.0   | 8.6   | 9.0   | U9.3R | 8.8   | 8.7   | U8.2R | 7.4   | 7.3   | 7.2   | 7.8   | U8.2S | 7.7   | 6.4   | 5.7   |       |
| 19                | 5.5   | U5.2S | 4.9   | 4.6   | 4.7   | 5.0   | I5.9C | U7.4R | 7.9   | 8.0   | U8.6R | 8.7   | 8.8   | 8.8   | 9.1   | 8.8   | 8.6   | 7.9   | 7.9   | U8.2S | 7.5   | U7.2S | U6.5S | 6.2   |       |
| 20                | U5.8S | 5.5   | 5.3   | 5.3   | 4.9   | C     | C     | U7.3R | 9.0   | 9.7   | 9.7   | 9.5   | 9.7   | 9.7   | U8.2C | 8.1   | 8.0   | 7.8   | 7.4   | 7.0   | 7.3   | 8.0   | U6.6S | U5.3S | U5.2S |
| 21                | 4.9   | 5.2   | I5.2C | I5.0C | 4.6   | I4.5C | 4.8   | 5.7   | 7.3   | 7.9   | 7.8   | 7.8   | U7.3R | 6.9   | 7.7   | C     | C     | C     | C     | C     | U7.2S | U7.4S | U6.5S | 4.5   |       |
| 22                | U4.3S | 4.3   | 3.9   | 3.8   | 3.7   | 4.0   | 5.5   | U7.2R | 7.9   | 6.9   | U7.3R | 7.7   | 7.9   | 7.4   | 7.5   | 7.1   | 6.6   | 6.9   | U7.2S | U7.2S | U6.5S | U6.5S | U6.4S | 5.9   |       |
| 23                | 5.5F  | 4.5   | U4.0F | U3.8F | 4.0F  | U4.0C | 5.5   | C     | U8.9C | U9.1C | U8.7C | U8.5C | U7.9C | U8.2C | U7.9C | 7.2   | 7.0   | 6.4   | I6.3A | 7.0   | U7.2S | U6.5S | 5.6   | I5.2C |       |
| 24                | U4.6F | U4.8F | 4.9   | 4.7   | 4.4   | 4.4   | 5.3   | U6.6R | 7.9   | U8.2R | 8.0   | U8.3R | 8.6   | U8.3R | 7.9   | U7.1R | 6.9   | 6.7   | U6.6S | 7.0   | 7.1   | U6.7S | 5.5   | 5.2   |       |
| 25                | 5.1   | 5.0   | 5.0   | 4.5   | 4.0   | 4.3   | 5.6   | U6.5R | U7.2R | 8.0   | 8.8   | 9.6   | U8.2R | 7.8   | U7.2R | 7.0   | U7.1R | U7.2R | U7.5S | 7.9   | 7.5   | 7.0   | U7.0S | U5.9S |       |
| 26                | 4.7   | 4.5   | 4.4   | 4.3   | 4.0   | 4.0   | I5.1C | I6.4C | 7.5   | 8.4   | 8.7   | 8.8   | 8.9   | U8.2R | 8.9   | U9.2R | 7.7   | 6.9   | U7.3R | U6.5S | U6.6S | U6.2S | 5.3   | 5.0   |       |
| 27                | 4.6   | 4.3   | 3.9   | U3.8S | 3.9   | 3.7   | 4.7   | U6.3R | 6.8   | 7.6   | 7.5   | U7.5C | U8.1C | 8.1   | U8.0C | U8.0C | U6.9C | U6.4C | U5.7C | U6.2C | 6.0   | 6.2   | 5.9   | 5.7   |       |
| 28                | 5.2   | 4.1   | 4.3   | 4.5   | 4.7   | 5.0   | 5.5   | 7.2   | 7.5   | 8.0   | 8.0   | 8.3   | 8.0   | 7.6   | 7.3   | C     | C     | 6.7   | 6.7   | U7.3R | 6.9   | 6.5   | 5.1   | 4.2   |       |
| 29                | 4.2   | 4.0   | 3.9   | 3.9   | 4.1   | 4.4   | 6.0   | 6.8   | 6.9   | 7.5   | U7.0R | 7.5   | 7.6   | U7.3R | 7.8   | 7.5   | 6.7   | 6.3   | 6.8   | U6.7R | 6.4   | 5.5   | 4.9N  | 4.7F  |       |
| 30                | C     | C     | 3.6   | 3.6   | 3.4   | 3.7   | 4.6   | 5.3   | I6.2R | 8.0   | 8.6   | U7.3R | 7.3   | 6.3   | 7.0   | U6.5R | 6.2   | 6.4   | 6.8   | U7.3C | U7.3C | U7.1C | U5.5C | U5.5C |       |
| 31                | U3.7C | U3.8C | U3.5C | U2.8C | U3.0C | U3.5C | U5.1C | U5.0C | U5.3C | U6.6R | U6.7R | U6.6R | 7.6   | 7.0   | 6.9   | 6.7   | 6.7   | 6.6   | 6.5   | 6.0   | U6.3R | 5.9   | 5.3   | 5.0   |       |
| Медиана           | 5.5   | 5.1   | 4.9   | 4.6   | 4.3   | 4.5   | 5.5   | U6.6C | 7.5   | 8.0   | 8.0   | 8.2   | 8.0   | 8.0   | 7.8   | 7.4   | 7.0   | 7.0   | 7.0   | U7.2C | 7.2   | U6.6S | U6.0S | 5.6   |       |
| Учтено            | 26    | 27    | 28    | 28    | 28    | 26    | 25    | 24    | 27    | 25    | 21    | 26    | 26    | 24    | 26    | 22    | 22    | 26    | 25    | 24    | 25    | 25    | 23    | 22    |       |
| Пробег частоты от | 0.8   | 1.0   | 1.0   | 0.9   | 0.7   | 0.7   | 1.0   | 1.1   | 1.0   | 0.9   | 1.1   | 1.2   | 0.7   | 0.7   | 1.0   | 1.3   | 0.6   | 0.8   | 0.6   | 0.6   | 0.8   | 0.8   | 1.1   | 0.9   |       |

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

Станция автоматическая  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



№ F1 Мгц Август 1961г  
(характеристика) (единица) (месяц) (год)

Академия Наук Каз ССР  
(институт)

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

ИОНОСФЕРНЫЕ ДАННЫЕ  
 поясное время 75°E

Кем составлена Мусатовой  
 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       |    |    |    |    |    |    | 4.0 | V4.0L | 4.4   | C     | C     | C     | C     | C     | C     | C     | C     |       |    |    |    |    |    |    |
| 2       |    |    |    |    |    |    |     |       |       | L     | 4.7   | A     | C     | 4.8   | 4.7   | 4.5   | I4.10 | L     | L  |    |    |    |    |    |
| 3       |    |    |    |    |    |    |     |       | L     | V4.6L | C     | C     | C     | C     | C     | C     | V4.3L | A     | A  |    |    |    |    |    |
| 4       |    |    |    |    |    |    | C   | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C  | C  |    |    |    |    |
| 5       |    |    |    |    |    |    | C   | C     | 4.6   | 4.8   | 4.9   | 4.8   | A     | A     | 4.5   | 4.4   | C     | C     | C  |    |    |    |    |    |
| 6       |    |    |    |    |    |    | L   | V4.0L | 4.5   | 4.6   | V4.8L | V4.50 | 4.8   | A     | A     | A     | A     | A     | A  |    |    |    |    |    |
| 7       |    |    |    |    |    |    | L   | L     | L     | 4.7   | C     | V4.50 | 5.0   | V4.8L | L     | L     | 4.6   | A     | L  |    |    |    |    |    |
| 8       |    |    |    |    |    |    |     |       | V4.5L | 4.8   | V4.9L | 5.0   | 4.9   | 5.1   | 4.9   | V4.7L | V4.6L | L     | L  |    |    |    |    |    |
| 9       |    |    |    |    |    |    | L   | L     | V4.5L | L     | 5.1   | V5.0L | 5.0   | 5.1   | V4.9L | V4.5L | C     | C     | C  |    |    |    |    |    |
| 10      |    |    |    |    |    |    |     |       | A     | A     | A     | A     | A     | A     | A     | A     | L     | L     | L  |    |    |    |    |    |
| 11      |    |    |    |    |    |    |     |       | V4.3L | 4.6   | 4.8   | 4.9   | 5.0   | 5.0   | 5.1   | 5.0   | I4.80 | L     | L  | L  |    |    |    |    |
| 12      |    |    |    |    |    |    |     |       | A     | A     | A     | L     | 5.1   | V5.2L | V5.1L | V5.0L | L     | L     |    |    |    |    |    |    |
| 13      |    |    |    |    |    |    | L   | L     | V4.7L | V4.9L | V4.9L | V5.2L | 5.1   | 5.1   | A     | A     | L     | L     | A  |    |    |    |    |    |
| 14      |    |    |    |    |    |    | L   | L     | L     | V5.1L | I5.0A | 5.1   | V5.2L | 5.3   | 5.1   | C     | L     | L     |    |    |    |    |    |    |
| 15      |    |    |    |    |    |    | L   | L     | V4.8L | V5.0L | V5.0L | 5.4   | V5.4L | V5.2L | A     | A     | L     | L     |    |    |    |    |    |    |
| 16      |    |    |    |    |    |    |     |       | L     | C     | V5.0L | V5.0L | L     | 5.3   | 5.0   | V5.0L | 5.0   | L     | L  |    |    |    |    |    |
| 17      |    |    |    |    |    |    |     |       | C     | C     | C     | C     | C     | C     | C     | C     | L     | L     |    |    |    |    |    |    |
| 18      |    |    |    |    |    |    | L   | L     | V4.8L | V5.0L | V5.1L | V5.2L | 5.1   | V5.1L | I5.0A | V4.9L | L     | L     | L  |    |    |    |    |    |
| 19      |    |    |    |    |    |    | C   | L     | L     | L     | V5.1L | V5.0L | V5.1L | V5.1L | 5.1   | V4.9L | L     | L     |    |    |    |    |    |    |
| 20      |    |    |    |    |    |    | C   |       | V4.4L | V4.9L | V4.9L | 5.1   | A     | A     | L     | V4.9L | V4.5L | L     | L  |    |    |    |    |    |
| 21      |    |    |    |    |    |    |     |       | L     | 4.6   | 4.9   | V5.1L | V5.0L | V5.0L | L     | V4.9L | C     | C     | C  | C  |    |    |    |    |
| 22      |    |    |    |    |    |    |     |       | L     | V4.3L | V4.6L | V5.0L | 5.0   | 4.9   | V5.0L | V4.9L | L     | L     | L  | L  |    |    |    |    |
| 23      |    |    |    |    |    |    |     |       | C     | C     | C     | C     | C     | C     | C     | 4.6   | L     | A     | A  |    |    |    |    |    |
| 24      |    |    |    |    |    |    |     |       | L     | V4.5L | V4.7L | 4.7   | V4.9L | V4.8L | I4.8A | 4.7   | L     | V4.3L | L  | L  |    |    |    |    |
| 25      |    |    |    |    |    |    |     |       | L     | V4.3L | 4.6   | V4.7L | 4.8   | V4.9L | V4.6L | V4.8L | L     | L     | L  |    |    |    |    |    |
| 26      |    |    |    |    |    |    |     |       | C     | V4.3L | V4.6L | V4.6L | A     | V4.8L | 4.9   | V4.9L | V4.5L | A     | L  |    |    |    |    |    |
| 27      |    |    |    |    |    |    |     |       | A     | V4.3L | V4.6L | V4.7L | C     | C     | 4.8   | C     | C     | C     | C  |    |    |    |    |    |
| 28      |    |    |    |    |    |    |     |       | 4.4   | 4.5   | 4.6   | 5.0   | 4.8   | 4.7   | V4.7L | C     | C     |       |    |    |    |    |    |    |
| 29      |    |    |    |    |    |    | L   | L     | V4.2L | L     | V4.7L | 4.8   | 4.8   | V4.8L | L     | V4.4L | L     |       |    |    |    |    |    |    |
| 30      |    |    |    |    |    |    |     |       | 4.1   | I4.3A | I4.4A | 4.5   | 4.6   | 4.9   | L     | 4.6   | V4.4L | L     |    |    |    |    |    |    |
| 31      |    |    |    |    |    |    |     |       | C     | C     | 4.5   | 4.6   | 4.8   | 4.7   | 4.6   | 4.6   | V4.5L | A     |    |    |    |    |    |    |
| Медiana |    |    |    |    |    |    | 4.0 | V4.0L | V4.5L | V4.8L | V4.9L | 5.0   | 5.0   | 5.0   | 4.9   | V4.6L | V4.4L |       |    |    |    |    |    |    |
| Учено   |    |    |    |    |    |    | 1   | 4     | 20    | 20    | 23    | 20    | 21    | 20    | 18    | 15    | 6     |       |    |    |    |    |    |    |

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

Станция автоматическая  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



*f°E* Мгц Август 1961<sub>2</sub>  
(характеристика) (единица) (месяц) (год)

Академия Наук Каз. ССР  
(институт)

Станция Алма-Ата

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Мусатовой

Долгота 76°55' E широта 43°15' N

полное 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       |    |    |        |    |    | A     | V240A | V260A | V300A | C     | C     | C     | C     | C     | C     | C     | C     | V250A | A     |       |       |    |    |    |
| 2       |    |    |        |    |    | 240   | 250   | V260A | A     | A     | 380   | 360   | C     | A     | 330   | A     | C     | A     | 250   | A     | A     |    |    |    |
| 3       |    |    |        | E  | A  | A     | A     | V290A | V310A | C     | C     | C     | C     | C     | C     | C     | A     | A     | A     | A     | A     |    |    |    |
| 4       |    |    |        |    | E  | A     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     |       |    |    |    |
| 5       |    |    |        |    | C  | C     | C     | C     | 320   | 340   | 340   | V330A | 320   | V320A | 310   | A     | C     | C     | C     |       |       |    |    |    |
| 6       |    |    |        |    | A  | A     | A     | A     | V310A | 350   | V350A | V350A | V350A | V340A | A     | A     | A     | A     | A     | A     |       |    |    |    |
| 7       |    |    |        | E  | A  | A     | A     | 300   | A     | A     | V360A | V360A | A     | A     | A     | A     | A     | V260A | A     | A     | A     |    | A  |    |
| 8       |    |    |        |    | C  | C     | A     | A     | V330A | A     | A     | A     | A     | A     | A     | A     | 500   | 280   | 240H  | 170   | E110B |    |    |    |
| 9       |    |    |        |    | A  | A     | 250   | A     | A     | A     | A     | A     | V370R | V380R | I380A | A     | C     | C     | C     | C     | C     |    |    |    |
| 10      |    |    |        |    | C  | C     | A     | A     | V320A | V340A | A     | A     | A     | V380A | A     | V340A | V330A | A     | A     | A     | A     |    |    |    |
| 11      |    |    |        |    | A  | I170B | C     | V280A | V300A | V320A | V350A | V350A | V350A | A     | A     | C     | V320A | V290A | A     | A     | A     |    |    |    |
| 12      |    |    | E 12B  | A  | A  | 170   | 250   | V280A | V310A | A     | V340A | A     | A     | A     | V360A | V340A | 310   | 290   | V210A | A     |       |    |    |    |
| 13      |    |    |        |    | E  | 160   | 240   | V270A | V310A | V330A | A     | A     | A     | A     | A     | A     | V320A | 280   | V210A | A     |       |    |    |    |
| 14      |    |    |        |    |    | A     | 240   | V280A | V320A | V340A | A     | A     | 380   | C     | V360C | C     | V310A | V290A | V210A | C     |       |    |    |    |
| 15      |    |    |        |    |    | 170   | A     | V290A | V310A | V330A | A     | V360A | A     | A     | A     | A     | 310   | 280   | V210A | A     |       |    |    |    |
| 16      |    |    |        |    |    | 170   | I215A | V280A | I315C | V330A | V340A | V350A | A     | A     | A     | V330A | A     | A     | A     | A     |       |    |    |    |
| 17      |    |    |        |    |    | 170   | 240   | C     | C     | C     | C     | C     | C     | C     | C     | C     | A     | A     | A     | A     |       |    |    |    |
| 18      |    |    |        |    | A  | A     | I220A | A     | A     | 340   | V370A | V360A | V350A | A     | A     | 350   | A     | A     | A     | A     |       |    |    |    |
| 19      |    |    |        |    | E  | E150B | I215C | V280A | V300A | A     | A     | A     | A     | A     | 360   | 340   | 310   | 280   | I210A | V160A | A     |    |    |    |
| 20      |    |    |        |    |    | C     | C     | 270   | V310A | A     | A     | V360A | V360A | V350A | A     | A     | A     | 280   | 210   | A     | A     | A  |    |    |
| 21      |    |    |        |    |    | C     | 220   | V290A | A     | A     | A     | V370A | V360A | A     | V350A | C     | C     | C     | C     | C     |       |    |    |    |
| 22      |    |    |        |    |    | V140A | A     | V220A | A     | A     | A     | A     | A     | 350   | I350A | A     | A     | V270A | A     | A     |       |    |    |    |
| 23      |    |    |        |    |    | C     | 220   | C     | C     | C     | C     | C     | C     | C     | C     | A     | A     | A     | A     | A     | A     |    |    |    |
| 24      |    |    |        |    |    | 160   | V210A | V260A | V290A | V310A | V330A | A     | A     | A     | 330   | 310   | V280A | 270   | A     | A     | A     |    |    |    |
| 25      |    |    |        |    |    | 150   | 230   | A     | A     | A     | A     | 350   | I350A | I345A | 330   | 320   | V290A | 260   | A     | A     |       |    |    |    |
| 26      |    |    |        |    |    | 150   | C     | C     | V290A | A     | A     | A     | A     | A     | A     | 310   | I280A | I250A | A     | A     |       |    |    |    |
| 27      |    |    |        |    |    | E130B | V210A | V260A | V300A | A     | A     | C     | C     | A     | C     | C     | C     | C     | C     | C     | A     |    |    |    |
| 28      |    |    |        |    |    | 160   | 230   | I280A | I300A | 310   | 320   | 330   | 340   | 350   | 320   | C     | C     | 230   | A     | A     |       |    |    |    |
| 29      |    |    |        |    |    | E     | 200   | V240A | V280A | V300A | V320A | A     | A     | V340R | 320   | 300   | 280   | 220   | 190   | E     |       |    |    |    |
| 30      |    |    |        |    |    | E     | V190A | V250A | V290A | A     | A     | 330   | 340   | 340   | 330   | 300   | I280A | 230   | 180   | C     |       |    |    |    |
| 31      |    |    |        |    |    | C     | C     | C     | C     | V290A | A     | 340   | I340A | 330   | I330A | 310   | A     | A     | A     | A     | A     |    |    |    |
| Медiana |    |    | E 12 B | E  | E  | 160   | 225   | V280A | V310A | V330A | V340A | V350A | V350A | V345A | 330   | 320   | V310A | 270   | V210A | V160A | E110B |    |    |    |
| Учтено  |    |    | 1      | 2  | 3  | 16    | 18    | 19    | 20    | 13    | 11    | 14    | 12    | 11    | 14    | 11    | 13    | 17    | 10    | 3     | 1     |    |    |    |

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

Станция автоматическая  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



*f<sub>o</sub>F<sub>2</sub> Мгц Август 1961г*  
(характеристика) (единица) (месяц) (год)

*Академия Наук Каз. ССР*  
(институт)

Станция *Алма-Ата*

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена *Мусатовой*

Долгота *76°55' E* широта *43°1' N*

полное время *75° E*

Кем подсчитана *Гусаковой*

| 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       | J 2.1X | E 1.4B | J 2.2X | E 1.4B | E 1.4B | 2.0    | 3.0    | J 4.5X | 3.9    | C       | C       | C      | C      | C       | C      | C      | C      | 3.4    | J 3.6X  | J 3.0X | J 4.0X  | J 3.1X  | J 6.1X | J 6.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 2       | J 5.7X | J 6.9X | J 7.7X | J 8.7X | J 5.3X | 4.0    | J 3.9X | J 3.7X | 3.9    | 4.0     | 4.4     | 4.7    | C      | 3.5     | C      | 4.3    | C      | J 3.1X | 2.9     | 1.9    | 1.8     | J 2.8X  | J 2.8X | J 4.6X |     |     |     |     |     |     |        |        |        |        |        |     |
| 3       | Ф 3.1S | J 2.5X | E 1.3B | C      | 1.8    | 1.9    | 3.1    | J 3.9X | J 5.0X | C       | C       | C      | C      | C       | C      | C      | J 4.0X | J 4.6H | 4.4     | J 2.9X | 2.1     | C       | J 2.9X | J 3.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 4       | 4.5    | J 3.6X | J 4.5X | J 4.5X | C      | J 4.2X | J 2.6X | J 2.7X | J 4.3X | J 6.4X  | C       | J 3.3X | J 4.0X | J 5.3X  | J 3.6X | C      | C      | C      | C       | C      | C       | C       | C      | C      |     |     |     |     |     |     |        |        |        |        |        |     |
| 5       | C      | C      | C      | C      | C      | C      | C      | C      | J 3.6X | J 3.5X  | J 4.5X  | J 5.0X | J 6.6X | 4.6     | 4.2    | J 4.7X | C      | C      | C       | C      | C       | Ф 3.5S  | J 3.9H | J 2.2H |     |     |     |     |     |     |        |        |        |        |        |     |
| 6       | J 3.6X | J 3.1H | J 3.7X | J 2.3X | J 2.9X | J 2.9X | 2.6H   | 3.9H   | 4.6    | 4.5     | 4.3     | 4.9    | J 4.8X | J 8.1H  | J 8.5X | 6.1    | J 8.7H | J 6.5X | J 4.3H  | J 4.7H | J 3.7X  | J 4.7X  | J 3.4H | J 3.8X |     |     |     |     |     |     |        |        |        |        |        |     |
| 7       | E      | E      | J 4.7X | 2.3    | J 4.7X | J 4.8X | 3.1    | J 4.0X | J 3.8X | 3.9     | Ф 3.8C  | 4.4    | J 7.1Y | 4.5     | 4.5    | 3.6    | 3.6    | 7.0    | 3.1     | J 3.0X | J 3.1X  | J 3.6X  | J 3.7H | J 4.7X |     |     |     |     |     |     |        |        |        |        |        |     |
| 8       | Ф 4.4S | J 2.9H | C      | C      | C      | C      | 2.9    | J 5.1X | 4.5    | 4.4     | 4.2     | J 4.7X | 4.4    | 3.8     | J 3.8X | J 3.7X | C      | C      | 2.1     | C      | C       | E       | J 4.9X | J 2.9X |     |     |     |     |     |     |        |        |        |        |        |     |
| 9       | J 4.7H | J 3.7H | 2.9    | 1.9    | J 3.0X | 2.0    | 2.5    | 4.5    | 3.8    | 4.0     | J 5.7X  | 4.5    | C      | J 3.7X  | 4.5    | 3.6    | J 2.8X | J 3.3X | J 3.9X  | J 2.3X | J 2.3X  | J 4.9X  | J 7.9X | J 4.5X |     |     |     |     |     |     |        |        |        |        |        |     |
| 10      | J 4.5X | J 4.3X | J 4.4X | J 4.1X | J 3.3X | J 2.9X | 4.5    | 5.9H   | 7.9H   | Ф 10.4C | J 10.3H | J 9.8X | 5.4    | J 7.1X  | J 7.8H | 6.4H   | J 3.7H | 4.5    | 2.9     | J 3.5X | Ф 10.5C | Ф 10.5C | J 5.2H | C      |     |     |     |     |     |     |        |        |        |        |        |     |
| 11      | J 2.3X | J 4.6X | J 3.1X | 1.8    | J 2.3X | C      | C      | 4.5    | J 4.6X | 4.6     | 4.1     | 4.5H   | 4.4    | 3.9     | Ф 3.5C | C      | 4.1    | 3.9    | 3.7     | 3.6    | 3.0     | J 3.7H  | J 2.3X | 1.9    |     |     |     |     |     |     |        |        |        |        |        |     |
| 12      | E 1.7B | 2.0    | C      | 1.8    | J 2.3X | C      | 2.7    | 4.5    | J 5.4X | J 8.3X  | 5.2     | 4.5    | 4.5    | Ф 10.5C | 4.5    | 4.4    | 3.6    | 3.1    | 3.3     | J 7.2X | J 3.7X  | J 2.9X  | J 4.7H | J 4.7H |     |     |     |     |     |     |        |        |        |        |        |     |
| 13      | J 4.7X | J 2.8X | C      | C      | 1.8    | 1.8    | 2.6    | 3.6    | 3.9    | 4.5     | 4.0     | 4.5    | 4.5    | J 4.6X  | J 8.1X | 5.5    | 4.1    | J 4.6X | 5.2     | J 4.4X | J 3.6X  | J 3.6X  | J 2.7X | E      |     |     |     |     |     |     |        |        |        |        |        |     |
| 14      | E 1.6B | J 2.3X | J 2.3X | J 2.1X | 1.8    | J 2.9X | 2.7    | J 4.2X | J 4.1X | 3.9     | 6.2     | 6.2    | C      | C       | C      | C      | 3.3    | 3.5    | 3.0H    | C      | J 3.3X  | J 3.7X  | J 3.1X | J 2.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 15      | J 2.2H | 2.6H   | E      | J 2.7X | J 3.3X | C      | 2.9    | 3.6    | 3.9    | 4.5     | 4.4     | 4.4    | J 4.8X | 4.2     | 5.1    | J 4.2X | C      | 3.0    | J 4.0X  | J 7.3X | J 7.3H  | J 3.8H  | J 3.2X | J 4.7X |     |     |     |     |     |     |        |        |        |        |        |     |
| 16      | J 3.6X | J 2.9X | J 5.0X | J 4.7X | J 2.3X | C      | 2.8    | J 3.8X | C      | 4.6     | 4.5     | J 7.2X | 4.3    | 4.2     | 4.0    | 3.6    | 4.1    | 3.9    | J 3.5X  | J 3.0X | C       | C       | C      | J 2.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 17      | J 3.0X | J 2.0X | J 2.3X | J 2.9X | J 2.2X | C      | C      | C      | C      | C       | C       | C      | C      | C       | C      | C      | J 6.4X | J 2.9X | J 3.3X  | 4.5    | J 3.6X  | J 2.1X  | J 2.0X | J 3.1X |     |     |     |     |     |     |        |        |        |        |        |     |
| 18      | J 2.8X | J 2.0X | J 2.3X | J 2.0X | J 2.3X | J 2.3X | J 2.8X | 3.3    | J 4.3X | 3.8     | 3.8     | 4.4    | 4.2    | J 4.4X  | J 7.3X | J 4.6X | J 4.5H | J 5.6H | J 3.3H  | J 2.3X | J 2.8H  | J 4.5X  | J 5.3X | J 2.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 19      | J 3.0X | 1.8    | 2.5    | E 1.4B | C      | C      | C      | 3.1    | 3.6    | 4.1     | J 5.2X  | 5.5    | 5.5    | J 4.4X  | C      | C      | 3.5    | J 3.4X | 3.0     | 1.9    | 1.9     | E 1.3B  | 2.1    | 2.1    |     |     |     |     |     |     |        |        |        |        |        |     |
| 20      | J 2.8H | J 2.3X | J 3.7H | J 2.3X | J 2.2X | C      | C      | 2.9    | 3.0    | 3.8     | 4.8     | 5.0    | J 5.2X | J 5.5X  | J 4.8X | J 8.3X | J 3.7X | 3.8    | C       | J 1.9X | 1.9     | 2.0     | J 2.2H | J 3.6X |     |     |     |     |     |     |        |        |        |        |        |     |
| 21      | J 3.8X | J 2.5X | C      | C      | J 1.8X | C      | 3.0    | 3.5    | 4.0H   | 3.9     | 4.3     | 4.4    | 4.5    | J 8.0X  | 3.6    | C      | C      | C      | C       | C      | J 3.7X  | 1.8     | 2.1    | J 2.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 22      | J 2.1X | J 2.3X | J 1.9X | J 1.8X | J 2.2X | 1.8    | 2.9    | J 3.7X | J 4.6X | J 4.6X  | J 8.3H  | 4.4    | 4.1    | C       | 3.8    | 3.7    | J 4.7X | 3.5    | J 2.5X  | J 2.4H | J 4.4H  | J 2.8H  | J 2.7H | J 3.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 23      | J 2.0X | J 2.1X | J 3.3X | 2.7    | 2.8    | C      | C      | C      | J 3.7X | J 3.3X  | J 3.6X  | J 3.6X | J 3.3X | J 3.3X  | J 4.1X | J 4.2X | J 3.8X | J 5.1X | Ф 10.5C | J 4.5X | J 3.6X  | J 3.8X  | J 3.8X | C      |     |     |     |     |     |     |        |        |        |        |        |     |
| 24      | J 3.6X | J 2.0X | J 1.9X | E      | E      | C      | 2.5    | 3.3    | 3.8    | 4.2     | 3.8     | 3.9    | 4.5    | 5.9     | 3.9    | J 4.0X | 3.2    | 2.1    | 2.9     | 2.6    | J 2.0X  | J 2.0X  | 2.0    | 2.0    |     |     |     |     |     |     |        |        |        |        |        |     |
| 25      | E 1.2B | J 2.0X | J 4.7X | E      | E      | 1.8    | J 2.6X | J 4.5X | J 3.6X | J 3.6X  | J 4.7X  | 3.6    | 4.5    | 3.6     | 3.7    | C      | C      | 2.8    | 2.7     | J 2.9X | J 4.4H  | J 3.3X  | J 3.7X | J 2.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 26      | J 4.4X | J 3.0X | J 2.2X | 2.5    | E      | 1.7    | C      | C      | 3.4    | 3.8     | 4.4     | 5.5    | 4.6    | 3.9     | 3.7    | 3.5    | 5.0    | J 2.8X | J 3.0X  | 3.7    | J 2.2X  | 2.0     | J 2.0X | 1.9    |     |     |     |     |     |     |        |        |        |        |        |     |
| 27      | E      | E      | E      | E      | J 1.9X | C      | 2.9    | J 5.2X | 4.0    | J 5.2X  | 4.1     | J 4.3X | J 3.8X | J 4.5X  | J 4.1X | J 3.8X | 4.2    | 3.7    | 4.4     | 2.4    | 2.9     | J 2.8X  | J 2.9X | 2.6    |     |     |     |     |     |     |        |        |        |        |        |     |
| 28      | 2.4    | 3.0    | 1.9    | 2.3    | E 1.3B | C      | C      | 3.5    | 4.3    | 4.6     | C       | 4.3    | 4.2    | 4.3     | 3.5    | C      | C      | 2.8    | 2.7     | J 3.7X | J 3.8H  | J 2.3X  | J 2.3X | J 2.3X |     |     |     |     |     |     |        |        |        |        |        |     |
| 29      | C      | E      | E      | J 2.0X | 2.6H   | 2.0    | C      | 3.3    | 3.3    | 3.5     | J 4.5X  | 3.6    | 4.3Y   | 4.0     | J 3.3X | C      | 3.5    | C      | 2.7     | J 2.3X | J 2.3X  | 2.7     | E      | E 1.5B |     |     |     |     |     |     |        |        |        |        |        |     |
| 30      | C      | C      | J 3.3X | J 2.1X | 2.6    | C      | 2.6    | J 3.8X | J 4.3X | J 5.3X  | J 4.7X  | 3.6    | C      | 3.5     | C      | C      | 3.0    | 1.8C   | C       | C      | C       | C       | C      | C      |     |     |     |     |     |     |        |        |        |        |        |     |
| 31      | C      | C      | C      | C      | C      | C      | U 3.2C | U 4.5C | U 4.4C | J 4.7X  | J 3.7X  | 3.5    | J 3.8X | C       | 3.3H   | J 4.0X | 4.6    | 4.4H   | J 3.8X  | J 2.9X | 2.8     | J 4.5X  | J 4.5X | 3.7    |     |     |     |     |     |     |        |        |        |        |        |     |
| Медиана | 2.0    | 4.1    | 2.0    | 3.0    | 1.9    | 3.7    | 1.8    | 2.7    | 1.6    | 2.7     | C       | 2.6    | 2.6    | 3.0     | 3.5    | 4.5    | 3.8    | 4.4    | 3.8     | 4.6    | 4.0     | 4.3     | 4.4    | 4.4    | 4.2 | 3.8 | 4.0 | 3.7 | 3.4 | 3.2 | J 3.0X | J 3.1X | J 3.1X | J 2.8X | J 2.6X |     |
| Учтено  | 2.8    | 2.8    | 2.6    | 2.6    | 2.8    | 2.5    | 2.6    | 2.7    | 2.9    | 2.8     | 2.7     | 2.8    | 2.7    | 2.8     | 2.8    | 2.3    | 2.5    | 2.8    | 2.8     | 2.6    | 2.7     | 2.7     | 2.8    | 2.7    | 2.8 | 2.7 | 2.8 | 2.3 | 2.5 | 2.8 | 2.8    | 2.6    | 2.7    | 2.7    | 2.8    | 2.7 |
|         | 2.1    | 1.0    | 1.8    | 0.9    | 1.1    | -      | 0.4    | 1.0    | 0.6    | 0.8     | 0.8     | 0.9    | 0.8    | 1.3     | 1.0    | 1.1    | 1.1    | 1.4    | 1.0     | 1.4    | 1.5     | 1.7     | 1.8    | 1.6    |     |     |     |     |     |     |        |        |        |        |        |     |

Пробер частоты от *1.0* Мгц до *18.0* Мгц *20 сек.* шаг.

Станция *автоматическая*  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



*FVEs* Мгц Август 1961г  
(характеристика) (единица) (месяц) (год)

Академия Наук Каз.ССР  
(институт)

Станция Алма-Ата

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Мусатовой

Долгота 76°55'E широта 43°15'N

поясное время 75°E

Кем подсчитана Гусаковой

| 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     | E1.4B | E1.6B | E1.4B | E1.4B | 2.0  | 2.5  | 3.3  | 3.2 | C   | C   | C    | C   | C    | C    | C    | C    | 3.1  | 3.5  | 3.0 | 4.0 | 2.4   | 4.6 | 4.5   |
| 2       | 4.6   | 4.6   | A     | A     | 4.9   | 3.5  | G    | 3.2  | 3.9 | 3.7 | G   | 4.4  | C   | 3.5  | G    | 3.6  | C    | 3.0  | 2.36 | 1.9 | 1.7 | 2.5   | 2.0 | 2.0   |
| 3       | 1.5   | 2.0   | E1.3B | G     | 1.6   | 1.9  | 2.5  | 3.1  | 3.3 | C   | C   | C    | C   | C    | C    | C    | 3.2  | 4.1  | 3.9  | 2.4 | 2.0 | C     | 2.5 | 2.5   |
| 4       | 1.6   | 3.4   | E1.7C | E1.5C | G     | 2.5  | C    | C    | C   | C   | C   | C    | C   | C    | C    | C    | C    | C    | C    | C   | C   | C     | C   | C     |
| 5       | C     | C     | C     | C     | C     | C    | C    | C    | G   | G   | G   | 4.6  | 5.5 | 4.6  | 4.0  | 3.6  | C    | C    | C    | C   | C   | 1.6   | 3.5 | 2.0   |
| 6       | 2.1   | 2.1   | 2.3   | 2.0   | 1.9   | 2.4  | 2.3  | 3.3  | 4.4 | 4.1 | 4.1 | 4.3  | 4.7 | A    | A    | 6.1  | A    | A    | 4.1  | 4.1 | 2.9 | 3.1   | 3.0 | 2.9   |
| 7       | E     | E     | 1.5   | G     | 2.2   | 2.0  | 2.9  | G    | 3.3 | 3.5 | 3.8 | 4.1  | 4.3 | 4.4  | 3.8  | 3.6  | 3.3  | 7.0  | 2.4  | 3.0 | 2.3 | 2.2   | 1.6 | 3.1   |
| 8       | 1.5   | 2.4   | C     | C     | C     | C    | 2.4  | 4.4  | 3.4 | 4.2 | 3.9 | 4.1  | 3.9 | 3.8  | 3.7  | 3.4  | G    | G    | 1.96 | G   | G   | E     | 2.5 | 2.5   |
| 9       | 2.4   | 1.7   | 2.5   | 1.6   | 1.5   | 1.7  | G    | 3.9  | 3.8 | 3.9 | 4.7 | 4.0  | G   | G    | 4.3  | 3.6  | C    | C    | C    | C   | C   | C     | C   | C     |
| 10      | C     | C     | C     | C     | C     | C    | 3.0  | 5.1  | A   | A   | A   | A    | 5.0 | 7.0  | 6.2  | 5.0  | 3.4  | 3.8  | 2.6  | 3.2 | 3.9 | A     | 3.0 | C     |
| 11      | 1.6   | 2.2   | 2.0   | 1.7   | 2.0   | G    | C    | 3.7  | 4.4 | 4.0 | 4.0 | 4.0  | 4.0 | 3.9  | 3.50 | C    | 4.1  | 3.3  | 2.5  | 2.3 | 1.8 | 3.7   | 2.0 | 1.9   |
| 12      | E1.7B | 2.0   | G     | 1.3   | 1.6   | G    | G    | 4.2  | 5.0 | A   | 5.0 | 4.1  | 4.2 | 5.0  | 3.9  | 4.0  | 3.4  | 3.1  | 3.0  | A   | 2.3 | 2.4   | 4.6 | 4.1   |
| 13      | 3.0   | 2.4   | C     | C     | G     | 1.56 | G    | 3.1  | 3.9 | 4.3 | 3.9 | 4.4  | 4.1 | 4.6  | A    | 5.0  | 3.5  | 3.7  | 4.7  | 4.1 | 1.6 | 2.4   | 2.2 | E     |
| 14      | E1.6B | 2.0   | 1.8   | 1.7   | 1.7   | 2.0  | G    | 4.0  | 4.0 | 3.8 | 6.0 | 4.7  | G   | G    | G    | C    | 3.2  | 3.0  | 2.5  | C   | 3.2 | E     | 3.0 | 2.0   |
| 15      | 1.7   | E1.6B | F     | 1.7   | 2.4   | G    | 2.9  | 3.6  | 3.9 | 4.5 | 4.1 | 4.2  | 4.8 | 4.1  | 4.9  | 6.9  | G    | 3.0  | 3.9  | 6.5 | 3.9 | 3.0   | 3.0 | 4.1   |
| 16      | 2.5   | 1.9   | 4.0   | 2.4   | 1.6   | G    | 2.4  | 3.0  | C   | 4.5 | 4.5 | 4.9  | 4.0 | 4.0  | 3.7  | 3.5  | 3.4  | 3.0  | 3.0  | 2.9 | C   | C     | C   | 2.0   |
| 17      | 2.1   | 1.5   | 2.0   | 2.3   | E1.3B | G    | G    | C    | C   | C   | C   | C    | C   | C    | C    | C    | 4.2  | 2.7  | 2.5  | 4.0 | 3.4 | 2.0   | 1.8 | 2.5   |
| 18      | 1.6   | 1.5   | 1.5   | 1.3   | 1.6   | 1.5  | 2.3  | 3.0  | 4.0 | G   | 3.8 | 4.0  | 4.0 | 3.8  | 6.2  | 3.5  | 3.2  | 3.0  | 3.0  | 1.5 | 2.0 | 2.5   | 4.2 | 1.6   |
| 19      | 1.8   | 1.3   | 1.5   | E1.4B | G     | G    | C    | 3.0  | 3.5 | 4.0 | 4.9 | 4.8  | 4.6 | 4.0  | G    | G    | 2.86 | 2.56 | 2.5  | 1.7 | 1.6 | E1.3B | 1.4 | 1.7   |
| 20      | 2.2   | 2.0   | 3.0   | 1.9   | E1.8C | C    | C    | G    | 3.3 | 3.5 | 4.0 | 4.7  | 5.0 | 5.2  | 4.7  | 3.7  | 3.1  | 2.36 | G    | 1.5 | 1.5 | 2.0   | 2.0 | 2.0   |
| 21      | 2.3   | 2.0   | C     | C     | 1.3   | C    | 1.76 | 2.66 | 3.3 | 3.7 | 3.7 | 4.2  | 3.9 | 4.0  | 3.6  | C    | C    | C    | C    | C   | 2.6 | 1.8   | 1.3 | 2.0   |
| 22      | 2.0   | 1.7   | 1.7   | E     | 1.6   | 1.6  | 2.6  | 3.4  | 3.2 | 3.9 | 4.8 | 3.8  | 3.9 | G    | 3.8  | 3.4  | 3.0  | 2.8  | 2.4  | 2.1 | 3.0 | 1.7   | 2.0 | 2.4   |
| 23      | 1.7   | 1.6   | 1.6   | E1.5B | E1.5B | C    | G    | C    | C   | C   | C   | C    | C   | C    | C    | 4.0  | 3.5  | 4.8  | A    | 3.2 | 2.7 | 3.1   | 2.9 | C     |
| 24      | 2.3   | 1.5   | 1.7   | E     | E     | G    | 2.3  | 3.0  | 3.8 | 4.0 | 3.8 | 3.9  | 3.9 | 5.3  | 2.66 | 2.76 | 3.1  | 2.06 | 2.1  | 1.9 | 1.6 | 1.5   | 1.7 | 1.4   |
| 25      | E1.2B | 1.5   | 1.6   | E     | E     | 1.5  | G    | 3.1  | 3.1 | 3.2 | 3.4 | 3.26 | 3.9 | 3.5  | G    | G    | G    | G    | 2.4  | 1.5 | 3.7 | 2.0   | 3.0 | 2.0   |
| 26      | 3.1   | 1.8   | 1.3   | E     | E     | 1.36 | C    | C    | 3.3 | 3.8 | 4.1 | 4.9  | 3.9 | 3.7  | 3.4  | 2.3  | 4.2  | 2.6  | 2.0  | 2.9 | E   | E     | E   | 1.6   |
| 27      | E     | E     | E     | E     | 1.8   | G    | 2.3  | 4.9  | 3.8 | 4.1 | 3.9 | C    | C   | 4.0  | C    | C    | C    | C    | C    | C   | 2.1 | 1.4   | 1.3 | 1.9   |
| 28      | 2.2   | 2.0   | 1.9   | 1.2   | E1.3B | G    | G    | 2.9  | 3.3 | G   | G   | G    | G   | G    | G    | C    | C    | G    | 2.3  | 2.3 | 2.1 | 2.0   | E   | 1.6   |
| 29      | G     | E     | E     | E     | E1.5S | G    | G    | 2.8  | 3.0 | 3.3 | 4.0 | 3.6  | 3.5 | 3.16 | 3.06 | G    | 2.66 | G    | G    | G   | 1.6 | E     | E   | E1.5B |
| 30      | C     | C     | 2.0   | 1.7   | E     | G    | 2.4  | 3.4  | 3.8 | 4.9 | 4.1 | 3.3  | G   | 3.06 | G    | G    | 3.0  | 1.86 | G    | C   | C   | C     | C   | C     |
| 31      | C     | C     | C     | C     | C     | C    | C    | C    | C   | 3.8 | 3.4 | 3.16 | 3.4 | G    | 3.4  | 3.1  | 3.9  | 3.0  | 3.0  | 2.4 | 2.0 | 3.6   | 3.0 | 2.7   |
| Медiana | 1.7   | 1.8   | 1.7   | V1.3  | V1.4  | 1.46 | 2.3  | 3.2  | 3.6 | 3.9 | 4.0 | 4.1  | 4.0 | 4.0  | 3.7  | 3.6  | 3.3  | 3.0  | 2.5  | 2.4 | 2.1 | 2.0   | 2.2 | 2.0   |
| Учено   | 2.7   | 2.7   | 2.5   | 2.5   | 2.7   | 2.4  | 2.4  | 2.5  | 2.6 | 2.6 | 2.6 | 2.5  | 2.4 | 2.6  | 2.5  | 2.2  | 2.3  | 2.6  | 2.6  | 2.4 | 2.6 | 2.6   | 2.7 | 2.6   |

Пробер частоты от 1.0 Мгц до 18.0 Мгц 20 сек. шаг.

Станция автоматическая  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



*f min* МГц Август 1961  
(характеристика) (единицы) (месяц) (год)

Академия Наук Каз. ССР  
(институт)

Станция Алма-Ата

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Погинным

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       | 1.0  | 1.4  | 1.6  | 1.4  | 1.4  | 1.3  | 1.4  | 1.5  | 1.5  | c   | c   | c   | c   | c   | c   | c   | c    | 1.6  | 1.5  | 1.5  | 1.0 | 1.0  | 1.0 | 1.0 |
| 2       | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.5  | 1.5  | 1.5  | 1.6  | 1.6 | 1.6 | 1.8 | c   | 1.7 | 1.7 | 1.6 | c    | 1.5  | 1.1  | 1.0  | 1.2 | 1.1  | 1.0 | 1.0 |
| 3       | 1.0  | 1.0  | 1.3  | 1.0  | 1.0  | 1.0  | 1.0  | 1.4  | 1.4  | c   | c   | c   | c   | c   | c   | c   | E20c | E15c | E20c | E16c | 1.0 | E15c | 1.0 | 1.0 |
| 4       | 1.0  | E16c | E17c | E15c | 1.0  | E16c | 1.3  | 1.4  | 1.5  | 1.5 | c   | 1.2 | 1.5 | 1.5 | 1.5 | c   | c    | c    | c    | c    | c   | c    | c   | c   |
| 5       | c    | c    | c    | c    | c    | c    | c    | c    | 2.2  | 2.2 | 2.2 | 2.4 | 2.4 | 2.4 | 1.6 | 1.6 | c    | c    | c    | c    | c   | 1.0  | 1.0 | 1.0 |
| 6       | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.3  | 1.5  | 1.6 | 1.6 | 1.6 | 1.7 | 1.8 | 1.7 | 1.8 | 1.6  | 1.4  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 7       | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.5  | E12c | 1.6 | 1.6 | 1.6 | 1.5 | 1.9 | 1.5 | 1.7 | 1.6  | 1.6  | 1.5  | 1.5  | 1.0 | 1.0  | 1.0 | 1.0 |
| 8       | 1.0  | 1.0  | c    | c    | c    | c    | 1.5  | 1.5  | 1.6  | 1.6 | 1.7 | 1.6 | 1.6 | 2.4 | 1.6 | 1.7 | 1.6  | 1.4  | 1.0  | 1.4  | 1.1 | 1.0  | 1.0 | 1.0 |
| 9       | 1.0  | 1.0  | 1.5  | 1.0  | 1.0  | 1.0  | 1.4  | 1.5  | 1.6  | 1.6 | 1.7 | 1.6 | 1.6 | 1.7 | 2.3 | 1.5 | 1.6  | 1.5  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 10      | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.3  | 1.4  | 1.6  | 1.6 | 1.7 | 2.3 | 2.1 | 1.6 | 1.6 | 1.6 | 1.6  | 1.5  | 1.1  | 1.3  | 1.4 | 1.0  | 1.2 | c   |
| 11      | 1.0  | 1.0  | 1.4  | 1.0  | 1.0  | 2.0  | c    | 1.4  | 1.0  | 1.5 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | c   | 1.6  | 1.4  | 1.3  | 1.2  | 1.0 | 1.0  | 1.0 | 1.0 |
| 12      | 1.7  | 1.0  | 1.2  | 1.0  | 1.0  | 1.7  | 1.4  | 1.3  | 1.6  | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6  | 1.6  | 1.6  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 13      | 1.0  | 1.0  | c    | c    | 1.0  | 1.0  | 1.4  | 1.4  | 1.7  | 1.6 | 1.7 | 1.7 | 1.6 | 2.4 | 1.6 | 1.6 | 1.6  | 1.6  | 1.3  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 14      | 1.6  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.4  | 1.5  | 1.6  | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.7 | c   | 1.4  | 1.5  | E13c | c    | 1.2 | 1.0  | 1.3 | 1.0 |
| 15      | 1.0  | 1.6  | 1.0  | 1.0  | 1.0  | 1.7  | 1.5  | 1.5  | 1.5  | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.4  | 1.3  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 16      | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.2  | 1.0  | 1.0  | c    | 1.5 | 1.5 | 1.6 | 1.7 | 1.6 | 1.6 | 1.6 | 1.3  | 1.5  | 1.0  | 1.0  | c   | c    | c   | 1.0 |
| 17      | 1.0  | 1.0  | 1.0  | 1.0  | 1.3  | 1.0  | 1.2  | c    | c    | c   | c   | c   | c   | c   | c   | c   | 1.3  | 1.0  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 18      | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.3  | 1.3  | 1.3  | 1.3 | 1.6 | 1.7 | 1.6 | 1.6 | 1.7 | 1.5 | 1.4  | 1.4  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 19      | 1.0  | 1.0  | 1.0  | 1.4  | 1.0  | 1.5  | c    | 1.2  | 1.4  | 1.2 | 1.7 | 1.7 | 2.3 | 1.9 | 1.2 | 1.7 | 1.7  | 1.5  | 1.0  | 1.0  | 1.0 | 1.3  | 1.0 | 1.0 |
| 20      | 1.0  | 1.0  | 1.0  | 1.0  | E18c | c    | c    | 1.2  | 1.2  | 1.5 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.5  | 1.0  | 1.3  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 21      | 1.0  | 1.0  | c    | c    | 1.0  | c    | 1.0  | 1.3  | 1.5  | 1.4 | 1.5 | 1.5 | 1.7 | 1.5 | 1.7 | c   | c    | c    | c    | c    | 1.0 | 1.0  | 1.0 | 1.0 |
| 22      | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.2 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.4 | 1.5  | 1.0  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 23      | 1.0  | 1.0  | 1.0  | 1.5  | 1.5  | c    | 1.3  | c    | 1.5  | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.6 | 1.4  | 1.0  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | c   |
| 24      | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.5  | 1.3  | 1.5  | 1.5 | 1.5 | 1.7 | 1.7 | 1.5 | 1.5 | 1.4 | 1.0  | 1.0  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 25      | 1.2  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.3  | 1.4  | 1.4 | 1.5 | 1.5 | 1.6 | 1.6 | 1.7 | 1.6 | 1.4  | 1.0  | 1.3  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 26      | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | c    | c    | 1.2  | 1.5 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5  | 1.0  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 27      | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.3  | 1.0  | 1.3  | 1.3  | 1.3 | 1.4 | 1.7 | 1.6 | 1.5 | 1.5 | 1.2 | 1.3  | 1.0  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 28      | 1.0  | 1.0  | 1.0  | 1.0  | 1.3  | 1.3  | 1.3  | 1.2  | 1.4  | 1.2 | 1.0 | 1.0 | 1.5 | 1.5 | 1.5 | c   | c    | 1.4  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| 29      | 1.0  | 1.0  | 1.0  | 1.0  | E15S | 1.0  | 1.0  | E13c | 1.3  | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.5  | 1.0  | 1.5  | 1.0  | 1.0 | 1.0  | 1.0 | 1.5 |
| 30      | c    | c    | E15c | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.5  | 1.5 | 1.6 | 1.7 | 2.3 | 2.2 | 1.7 | 1.7 | 1.5  | 1.0  | 1.4  | 1.6  | 1.6 | 1.5  | 1.5 | 1.5 |
| 31      | E15c | E15c | E15c | E15c | E15c | E15c | E15c | E15c | E17c | 1.5 | 1.5 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.0  | 1.0  | 1.0  | 1.0  | 1.0 | E18c | 1.0 | 1.0 |
| Медиана | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.3  | 1.3  | 1.5  | 1.5 | 1.6 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5  | 1.4  | 1.0  | 1.0  | 1.0 | 1.0  | 1.0 | 1.0 |
| Учтено  | 29   | 29   | 27   | 27   | 29   | 26   | 26   | 27   | 29   | 28  | 27  | 28  | 27  | 28  | 28  | 23  | 25   | 28   | 28   | 27   | 28  | 29   | 29  | 28  |

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

Станция автоматическая  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



(M3000) F2 Mzч Август 1961г  
(характеристика) (единицы) (месяц) (год)

Академия Наук Каз. ССР  
(институт)

Станция Алма-Ата

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Мусатовой

Долгота 76°55' E широта 43°15' N

полное время 75°E

Кем подсчитана Гусаковой

| 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       | V290S  | 305    | 2.80   | 2.80   | 2.80   | V310S  | C      | C      | V305C  | C      | C      | C      | C      | C      | C      | C      | C      | 285    | 330    | 305    | 295    | 285    | 310    | 285    |      |
| 2       | 275    | 2.85   | A      | A      | 300    | 300    | 315    | 305    | 300    | 2.90   | 360    | 305    | C      | 2.90   | 2.85   | 300    | C      | V310C  | C      | S      | S      | S      | S      | S      |      |
| 3       | V300S  | S      | S      | V260S  | V265S  | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      |      |
| 4       | C      | C      | V2.65C | V2.65M | V2.80C | C      | V2.65C | V2.90C | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      |      |
| 5       | C      | C      | C      | C      | C      | C      | C      | C      | C      | 255    | 260    | 275    | 265    | A      | 305    | 305    | 325    | C      | C      | C      | C      | C      | V2.90S | V2.95S |      |
| 6       | V2.85M | V2.85S | V2.90S | 2.95   | 2.95   | 310    | C      | C      | 315    | V320C  | C      | V300C  | V2.90C | A      | A      | A      | A      | A      | V3.15C | S      | S      | V2.80S | S      | S      |      |
| 7       | V2.90S | V2.90S | C      | 2.95   | 305    | 310    | C      | C      | C      | C      | C      | V300C  | V2.95C | V310C  | V2.95C | C      | 2.95   | C      | V310C  | V310C  | V315S  | V2.90S | V300S  | S      |      |
| 8       | S      | V300S  | C      | C      | C      | C      | 305    | V310C  | 315    | V300C  | 325    | 2.95   | V305C  | C      | V310C  | V2.95C | V2.95C | V305C  | V320C  | V300C  | 305    | V2.90C | C      | C      |      |
| 9       | 2.65   | 2.80   | V2.65C | 2.90   | 305    | 305    | V320C  | V310C  | V3.25C | V2.80C | 270    | 2.90   | 300    | 300    | C      | C      | V305C  | V305C  | V305C  | V305C  | V305C  | V305C  | A      | V2.80C |      |
| 10      | V2.95C | V3.05C | V3.00C | V305C  | V320C  | V330C  | 305    | V310C  | A      | A      | A      | A      | 2.90   | A      | C      | C      | 285    | V2.80C | S      | V300S  | V2.95C | A      | N      | C      |      |
| 11      | 2.80F  | V2.70F | 2.85   | 2.95   | V2.85C | 305    | C      | 2.95   | V2.75C | C      | C      | V2.85C | C      | C      | 2.90   | C      | C      | V300C  | C      | V305C  | 2.90   | V2.80S | V2.95S | V2.90S |      |
| 12      | 2.65   | 2.65   | 2.70   | 2.90   | 2.90   | 305    | 315    | V320C  | V300C  | A      | V310C  | 2.90   | 2.90   | 2.90   | 300    | V2.95C | C      | 315    | V310S  | A      | 2.70   | 2.85   | 2.75   | S      |      |
| 13      | V2.90S | V2.85S | C      | C      | 2.80   | 2.80   | 2.90   | 300    | V310C  | 310    | C      | V2.80C | 2.90   | C      | A      | C      | 305    | 315    | V320C  | V310C  | 2.85   | 2.80   | C      | 2.85   |      |
| 14      | C      | 2.90   | 2.95   | 2.80   | 2.85   | 2.80   | V300C  | 2.95   | V2.90C | 300    | C      | V2.95C | V2.95C | V2.90C | V300C  | C      | V300C  | V315C  | V305S  | C      | 2.80   | S      | V310S  | 2.85   |      |
| 15      | S      | S      | 2.80   | V2.85S | 2.70   | 2.80   | C      | 300    | 3.25   | V300C  | V320C  | V2.85C | V2.90C | 2.85   | V2.80C | V2.90C | V305C  | 305    | 310    | A      | 2.95   | 2.80   | V2.90S | V2.90S |      |
| 16      | V2.80S | 2.85   | 2.85   | 2.85   | 2.85   | 315    | 310    | V305C  | C      | V300R  | 305    | V305R  | 2.80   | V2.90R | 2.95   | 305    | 300    | 300    | 315    | 310    | C      | C      | C      | 300    |      |
| 17      | 2.90   | 2.80   | 2.80   | 2.90   | 2.80   | 2.90   | 305    | C      | C      | C      | C      | C      | C      | C      | C      | C      | 310    | 305    | 305    | 305    | 2.95   | 315    | V320S  | 2.90   |      |
| 18      | 2.90   | 2.65   | 2.80   | 2.80   | 2.80   | 300    | 315    | 320    | 300    | 2.80   | 2.95   | 2.90   | V300R  | 2.90   | 305    | V305R  | 300    | 310    | 310    | 2.95   | V300S  | 300    | 300    | 2.85   |      |
| 19      | 2.85   | V2.75S | 2.80   | 2.80   | 2.80   | 2.90   | C      | V315R  | 305    | 305    | V310R  | 2.90   | 2.90   | 2.80   | 2.85   | 2.85   | 300    | 305    | 305    | V305S  | 2.90   | V2.95S | V2.90S | 2.90   |      |
| 20      | V2.85S | 2.80   | 2.80   | 2.90   | 305    | C      | C      | V2.95R | 305    | 2.90   | 305    | 2.95   | 305    | V2.90C | 2.95   | 2.95   | 310    | 320    | 320    | 2.95   | 310    | V300S  | V2.90S | V2.75S |      |
| 21      | 2.45   | 2.60   | C      | C      | 2.90   | C      | 305    | 2.90   | 2.95   | 2.90   | 2.95   | 3.25   | V325R  | 2.90   | 310    | C      | C      | C      | C      | C      | V300S  | V305S  | V320S  | 315    |      |
| 22      | V2.80S | 2.85   | 2.85   | 2.80   | 2.80   | 2.95   | 310    | V315R  | 330    | 330    | V305R  | 300    | 310    | 300    | 310    | 310    | 315    | 310    | V320S  | V315S  | V305S  | V2.85S | V2.90S | 2.90   |      |
| 23      | 300    | 315F   | V2.80F | V2.75F | 2.80F  | C      | 310    | C      | V300C  | V300C  | V2.95C | V300C  | V2.95C | V2.95C | V2.90C | 310    | 315    | 320    | A      | 305    | V310S  | V310S  | 310    | C      |      |
| 24      | V2.80F | V2.85F | 2.90   | 2.90   | 305    | 305    | 330    | V310R  | 315    | V320R  | 310    | V2.90R | 305    | V305R  | 315    | V310R  | 315    | 310    | V325S  | 305    | 310    | V310S  | 305    | 2.95   |      |
| 25      | 2.80   | 2.80   | 2.95   | 305    | 2.95   | 320    | 315    | V330R  | V325R  | 315    | 315    | 315    | V300R  | 305    | V305R  | 300    | V305R  | V310R  | V2.95S | 305    | 305    | 2.90   | V305S  | V310S  |      |
| 26      | 2.85   | 2.90   | 2.80   | 300    | 2.95   | 305    | C      | C      | 305    | 310    | 310    | 305    | 305    | V300R  | 2.90   | V310R  | 310    | 330    | V325R  | V305S  | V305S  | V305S  | 300    | 305    |      |
| 27      | 2.90   | 2.90   | 2.90   | V2.80S | 2.90   | 2.80   | 315    | V310R  | 300    | 320    | 2.80   | V305C  | V300C  | 300    | V305C  | V305C  | V320C  | V320C  | V305C  | V300C  | 2.90   | 300    | 2.90   | 300    |      |
| 28      | 310    | 300    | 320    | 2.90   | 2.95   | 2.90   | 310    | 325    | 310    | 305    | 305    | 315    | 305    | 315    | 305    | C      | C      | 320    | 330    | V315R  | 305    | 315    | 330    | 2.95   |      |
| 29      | 2.90   | 2.95   | 2.90   | 2.75   | 2.80   | 300    | 335    | 350    | 335    | 315    | V315R  | 315    | 310    | V305R  | 300    | 315    | 320    | 315    | 320    | V310R  | 310    | 315    | 300N   | 305F   |      |
| 30      | C      | C      | 2.65   | 2.70   | 2.85   | 2.95   | 305    | 300    | V2.75R | 305    | 310    | V320R  | 305    | 2.90   | 310    | V330R  | 310    | 305    | 2.95   | V2.80C | V2.95C | V2.95C | V305C  | V2.80C |      |
| 31      | V2.80C | V2.80C | V3.35C | V2.90C | V2.75C | V2.65C | V2.90C | V310C  | V2.80C | V2.95R | V2.95R | V300R  | 305    | 330    | 315    | 305    | 310    | 320    | 330    | 305    | V2.90R | 2.95   | 2.90   | 2.85   |      |
| Медiana | 2.85   | 2.85   | 2.80   | 2.90   | 2.85   | 300    | 310    | V310R  | 305    | 300    | 305    | 300    | 300    | 300    | 300    | 300    | 305    | 305    | 310    | V315C  | V305C  | 300    | V2.95S | V300S  | 2.90 |
| Учтено  | 25     | 26     | 24     | 26     | 29     | 24     | 21     | 23     | 25     | 23     | 21     | 26     | 24     | 22     | 23     | 18     | 21     | 25     | 23     | 22     | 25     | 25     | 22     | 21     |      |
|         | 0.10   | 0.10   | 0.10   | 0.10   | 0.15   | 0.20   | 0.10   | 0.15   | 0.15   | 0.20   | 0.15   | 0.15   | 0.15   | 0.15   | 0.20   | 0.15   | 0.10   | 0.25   | 0.15   | 0.10   | 0.15   | 0.20   | 0.20   | 0.15   |      |

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

Станция автоматическая  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



Академия Наук Каз. ССР  
(институт)

(M3000) F1 Мгц Август 1961  
(характеристика) (единицы) (месяц) (год)

Станция Алма-Ата

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Мусатовой

Долгота 76°55' E широта 43°15' N

поисное время 75°E

Кем подсчитана Гусаковой

| 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       |    |    |    |    |    |    | 3.15 | A      | 3.65   | C      | C      | C      | C      | C      | C      | C      | C      | C  |    |    |    |    |    |    |
| 2       |    |    |    |    |    |    |      |        |        | L      | A      | A      | C      | A      | 4.50   | 4.70   | C      | L  | L  |    |    |    |    |    |
| 3       |    |    |    |    |    |    |      | L      | V3.60L | C      | C      | C      | C      | C      | C      | C      | V3.55L | A  | A  |    |    |    |    |    |
| 4       |    |    |    |    |    |    | C    | C      | C      | C      | C      | C      | C      | C      | C      | C      | C      | C  | C  |    |    |    |    |    |
| 5       |    |    |    |    |    |    | C    | C      | 3.75   | 4.20   | 3.65   | 3.70   | A      | A      | A      | A      | C      | C  | C  |    |    |    |    |    |
| 6       |    |    |    |    |    |    | L    | V3.75L | A      | A      | V3.75L | A      | A      | A      | A      | A      | A      | A  | A  |    |    |    |    |    |
| 7       |    |    |    |    |    |    | L    | L      | L      | 4.05   | C      | V4.10C | 3.70   | A      | L      | L      | 3.55   | A  | L  |    |    |    |    |    |
| 8       |    |    |    |    |    |    |      |        | V3.50L | A      | V3.90L | 4.00   | 3.90   | 3.70   | 3.70   | V3.70L | V3.70L | L  | L  |    |    |    |    |    |
| 9       |    |    |    |    |    |    | L    | L      | A      | L      | A      | A      | 3.80   | 8.55   | V3.65L | V3.80L | C      | C  | C  |    |    |    |    |    |
| 10      |    |    |    |    |    |    |      |        | A      | A      | A      | A      | A      | A      | A      | A      | L      | L  | L  |    |    |    |    |    |
| 11      |    |    |    |    |    |    |      | A      | A      | 3.75   | 3.65   | 3.80   | 3.70   | 3.70   | 3.60   | C      | L      | L  | L  |    |    |    |    |    |
| 12      |    |    |    |    |    |    |      |        | A      | A      | A      | L      | A      | A      | V3.45L | V3.50L | L      | L  |    |    |    |    |    |    |
| 13      |    |    |    |    |    |    | L    | L      | V3.60L | A      | V3.80L | A      | 3.70   | A      | A      | A      | L      | L  | A  |    |    |    |    |    |
| 14      |    |    |    |    |    |    | L    | L      | L      | V3.55L | A      | A      | V3.45L | 3.75   | 3.70   | C      | L      | L  |    |    |    |    |    |    |
| 15      |    |    |    |    |    |    | L    | L      | V3.55L | A      | A      | 3.45   | A      | V3.65L | A      | A      | L      | L  |    |    |    |    |    |    |
| 16      |    |    |    |    |    |    |      | L      | C      | V3.65L | V3.65L | L      | 3.60   | 3.50   | V3.60L | 3.60   | L      | L  |    |    |    |    |    |    |
| 17      |    |    |    |    |    |    |      | C      | C      | C      | C      | C      | C      | C      | C      | C      | L      | L  |    |    |    |    |    |    |
| 18      |    |    |    |    |    |    | L    | L      | A      | V3.70L | V3.65L | V3.70L | 3.80   | V3.45L | A      | V3.50L | L      | L  | L  |    |    |    |    |    |
| 19      |    |    |    |    |    |    | C    | L      | L      | L      | A      | A      | V3.70L | V3.60L | 3.55   | V3.60L | L      | L  |    |    |    |    |    |    |
| 20      |    |    |    |    |    |    | C    |        | V3.50L | V3.65L | V3.70L | A      | A      | A      | L      | V3.75L | V4.00L | L  | L  |    |    |    |    |    |
| 21      |    |    |    |    |    |    |      | L      | 3.65   | 3.85   | V3.70L | V3.60L | V3.85L | L      | V3.70L | C      | C      | C  | C  |    |    |    |    |    |
| 22      |    |    |    |    |    |    |      | L      | V3.80L | A      | A      | 3.90   | 3.75   | V3.90L | V3.80L | L      | L      | L  | L  |    |    |    |    |    |
| 23      |    |    |    |    |    |    |      | C      | C      | C      | C      | C      | C      | C      | C      | A      | L      | A  | A  |    |    |    |    |    |
| 24      |    |    |    |    |    |    |      | L      | A      | A      | 3.80   | V3.75L | V3.80L | A      | 3.65   | L      | V3.50L | L  | L  |    |    |    |    |    |
| 25      |    |    |    |    |    |    |      | L      | V3.70L | 3.65   | V3.75L | 3.65   | V3.90L | V4.10L | V3.75L | L      | L      | L  |    |    |    |    |    |    |
| 26      |    |    |    |    |    |    |      | C      | V3.70L | V3.80L | V3.50L | A      | V3.95L | 3.65   | V3.45L | V3.75L | A      | L  |    |    |    |    |    |    |
| 27      |    |    |    |    |    |    |      | A      | A      | A      | V3.85L | C      | C      | 3.40   | C      | C      | C      | C  |    |    |    |    |    |    |
| 28      |    |    |    |    |    |    |      |        | 3.70   | 3.75   | 3.90   | 3.60   | 3.75   | 3.80   | V3.85L | C      | C      |    |    |    |    |    |    |    |
| 29      |    |    |    |    |    |    | L    | L      | V4.05L | L      | V3.80L | 3.80   | 3.90   | V3.80L | L      | V3.80L | L      |    |    |    |    |    |    |    |
| 30      |    |    |    |    |    |    |      | 3.50   | R      | A      | 3.90   | 3.90   | 3.75   | L      | 3.85   | V3.85L | L      |    |    |    |    |    |    |    |
| 31      |    |    |    |    |    |    |      | C      | C      | 3.60   | 3.85   | 3.75   | 3.75   | 3.80   | 3.60   | V3.55L | A      |    |    |    |    |    |    |    |
| Медиана |    |    |    |    |    |    | 3.15 | 3.65   | V3.65L | 3.75   | V3.75L | 3.75   | 3.75   | 3.70   | 3.70   | V3.70L | V3.55L |    |    |    |    |    |    |    |
| Учтено  |    |    |    |    |    |    | 1    | 2      | 13     | 12     | 17     | 14     | 18     | 15     | 16     | 12     | 5      |    |    |    |    |    |    |    |

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

Станция автоматическая  
(ручная, автоматическая)



# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



*hF* км Август 1961  
(характеристика) (единицы) (месяц) (год)

Академия Наук КазССР  
(институт)

Станция

Алма-Ата

ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена

Мусатовой

Долгота

76°55'E широта 43°15'N

полное время 75°E

Кем подсчитана

Гусаковой

| 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       | E240E | E210B | E260B | E260B | E265B | E250A | 220   | T215A | 210   | C     | C     | C     | C     | C     | C     | C     | C     | 200   | E240A | E250A | A     | A     | A     | A     |
| 2       | A     | A     | A     | A     | A     | A     | 300   | T290A | 220   | 170   | 200   | A     | C     | 240   | 210   | 220   | T220C | 220   | 240   | 240   | E240A | E270A | E275A | E225A |
| 3       | E200A | E280A | E280B | 305   | 320   | E250A | 220   | 225   | 240   | C     | C     | C     | C     | C     | C     | C     | 200   | A     | A     | E240A | E245A | C     | E250A | E275A |
| 4       | C     | E315A | E300C | E300C | E255E | A     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     |
| 5       | C     | C     | C     | C     | C     | C     | C     | C     | C     | 220   | 220   | 250   | A     | A     | 200   | A     | A     | C     | C     | C     | C     | C     | C     | C     |
| 6       | 275   | 260   | E270A | E245A | E260A | E250A | 220   | 220   | A     | A     | 225   | E225A | A     | A     | A     | A     | A     | A     | E255A | A     | 275   | 290   | E250A | E250A |
| 7       | E245E | E250E | E255A | E240E | E225A | E240A | E230A | 210   | 200   | 180   | 180   | E195A | E220A | A     | 300   | 210   | 210   | T215A | 225   | E225A | E220A | E240A | E245A | E300A |
| 8       | E250A | E250A | C     | C     | C     | C     | 225   | 255   | 200   | E220A | 175   | 200   | 190   | 200   | 200   | 185   | 205   | 210   | 230   | 240   | E225B | E230E | E260A | E245A |
| 9       | E295A | E275A | E290A | E260A | E225A | 250   | 225   | A     | A     | E190A | A     | E190A | 190   | 195   | T200A | 200   | C     | C     | C     | C     | C     | A     | C     |       |
| 10      | C     | C     | C     | C     | C     | C     | 265   | E290A | A     | A     | A     | A     | A     | A     | A     | A     | 220   | E260A | 255   | 245   | E255A | A     | E300A | C     |
| 11      | E250A | E300A | E260A | E245A | E250A | 265   | C     | A     | A     | 210   | 200   | 200   | 200   | 200   | 205   | C     | A     | A     | 230   | 240   | E240A | E300A | C     | E250A |
| 12      | E280B | E300A | E270B | 250   | E240A | 250   | 215   | 250   | A     | A     | A     | 210   | E220A | A     | 225   | E210A | 230   | 220   | 250   | A     | E275A | 270   | A     | E280A |
| 13      | E265A | E255A | C     | C     | E245E | 270   | 245   | 210   | 220   | T200A | 180   | E220A | E210A | A     | A     | A     | 220   | A     | A     | E260A | E240A | E255A | E260A | E250E |
| 14      | E245B | E250A | E245A | E265A | E255A | 230   | 230   | E245A | E225A | 205   | A     | A     | 175   | 190   | 190   | T195C | 200   | 225   | 250   | C     | E275A | E250E | E230A | E260A |
| 15      | E260A | E300B | E250E | E250A | E295A | 275   | 245   | 225   | 225   | A     | E200A | 180   | A     | E180A | A     | A     | 220   | 225   | 250   | T255A | 260   | E260A | E260A | E255A |
| 16      | E270A | E250A | A     | E275A | E260A | 240   | 215   | 210   | C     | A     | A     | A     | A     | 195   | 180   | 205   | 210   | E220A | E250A | 230   | C     | C     | C     | E250A |
| 17      | E250A | E270A | E280A | E275A | E260B | 270   | 230   | C     | C     | C     | C     | C     | C     | C     | C     | C     | A     | 200   | 245   | E250A | E265A | E230A | 225   | E255A |
| 18      | E250A | E280A | E270A | E250A | E260A | 250   | 220   | 220   | T210A | 200   | 195   | 205   | 170   | 205   | T205A | 205   | 210   | 225   | E220A | 245   | 230   | 240   | A     | E240A |
| 19      | E250A | E255A | E265A | E250B | E255B | 255   | T240C | 215   | 210   | E220A | A     | A     | A     | E205A | 195   | 200   | 205   | 220   | 245   | 245   | 235   | 225   | E245A | 230   |
| 20      | E255A | E255A | A     | E250A | E235C | C     | C     | 200   | 185   | 205   | E200A | A     | A     | A     | A     | 210   | 210   | 225   | 230   | 250   | 220   | E220A | E250A | E310A |
| 21      | E360A | E315A | C     | C     | E250A | C     | 220   | 220   | 210   | 205   | 190   | 230   | 170   | E205A | 190   | C     | C     | C     | C     | C     | 250   | E230A | E220A | E230A |
| 22      | E280A | E250A | E255A | E270E | E275A | 255   | E230A | 225   | A     | A     | A     | 195   | 195   | 180   | 180   | 200   | 195   | 215   | 235   | E210A | A     | E250A | E245A | E270A |
| 23      | E240A | E220A | E275A | E280B | E280B | C     | 220   | C     | C     | C     | C     | C     | C     | C     | C     | A     | A     | A     | A     | A     | E250A | E240A | E280A | E240A |
| 24      | E320A | E275A | E250A | E250A | E230E | 240   | 225   | 225   | E230A | E220A | 195   | 180   | 190   | T190A | 185   | 180   | 200   | 220   | 230   | 230   | 230   | 225   | E225A | E250A |
| 25      | E270B | E265A | E245A | E225E | E225E | 230   | 225   | 225   | 200   | 180   | 175   | 175   | 180   | 180   | 195   | 195   | 210   | 230   | 250   | 220   | E240A | E255A | E245A | E210A |
| 26      | E300A | E255A | E275A | E235E | 245   | 250   | C     | C     | 220   | 205   | E210A | A     | E200A | E210A | 200   | 200   | T205A | 210   | 235   | E230A | E240E | E210E | E245E | E240A |
| 27      | E245E | E245E | E245E | E265E | 250   | E245B | 220   | A     | A     | A     | 205   | C     | C     | A     | C     | C     | C     | C     | C     | C     | C     | C     | C     | C     |
| 28      | E250A | E255A | E235A | E240A | 245   | 230   | 220   | 220   | 200   | T200A | 200   | 170   | 170   | 180   | 180   | C     | C     | 230   | 235   | E225A | E245A | E225A | 200   | E225A |
| 29      | 250   | 250   | E260E | E275E | E275S | 250   | 225   | 210   | 200   | 195   | 200   | 195   | 190   | 185   | 200   | 205   | 215   | 215   | 235   | 215   | E220A | E210E | E230E | E245B |
| 30      | C     | C     | E325A | E300A | 275   | 250   | 250   | A     | A     | A     | A     | 175   | 160   | 195   | 195   | 210   | 210   | 225   | 245   | C     | C     | C     | C     | C     |
| 31      | C     | C     | C     | C     | C     | C     | C     | C     | C     | A     | 200   | 200   | 190   | 200   | 200   | 210   | A     | A     | E235A | E240A | E250A | A     | A     | A     |
| Медiana | E250A | E255A | E260A | E255A | E255A | 250   | 225   | 220   | 210   | 200   | 200   | 185   | 180   | 190   | 200   | 200   | 210   | 220   | 240   | 230   | E240A | E250A | E245A | E250A |
| Учено   | 25    | 26    | 22    | 24    | 26    | 22    | 25    | 21    | 18    | 17    | 18    | 17    | 17    | 19    | 19    | 17    | 19    | 20    | 23    | 22    | 24    | 23    | 22    | 24    |
|         | -     | -     | -     | -     | -     | 20    | 15    | 20    | 20    | 30    | 15    | 25    | 30    | 15    | 10    | 10    | 15    | 15    | 20    | 215   | -     | -     | -     | -     |

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

Станция автоматическая  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



h'F2 Км Август 1961  
(характеристика) (единицы) (месяц) (год)

Академия Наук Каз. ССР  
(институт)

Станция Алма-Ата

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Мусатовой

Долгота 76°55'E широта 43°15'N

поясное время 75°E

Кем подсчитана Гусаковой

| 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       |    |    |    |    |    |    | 310 | 240 | 270 | C     | C     | C   | C     | C   | C     | C     | C   |       |     |    |    |    |    |    |
| 2       |    |    |    |    |    |    |     |     |     | 300   | 290   | 280 | I2800 | 285 | 300   | 275   | C   | L     | 240 |    |    |    |    |    |
| 3       |    |    |    |    |    |    |     | L   | 275 | C     | C     | C   | C     | C   | C     | C     | 280 | 275   | 270 |    |    |    |    |    |
| 4       |    |    |    |    |    |    | C   | C   | C   | C     | C     | C   | C     | C   | C     | C     | C   | C     | C   |    |    |    |    |    |
| 5       |    |    |    |    |    |    | C   | C   | 310 | 350   | 350   | 305 | I300A | 300 | 270   | 240   | C   | C     | C   |    |    |    |    |    |
| 6       |    |    |    |    |    |    | L   | 280 | 280 | 255   | 295   | 300 | 325   | A   | A     | A     | A   | A     |     |    |    |    |    |    |
| 7       |    |    |    |    |    |    | 250 | L   | C   | I2900 | C     | 300 | 275   | 275 | L     | 315   | 300 | I280A | 250 |    |    |    |    |    |
| 8       |    |    |    |    |    |    |     |     | 275 | 300   | 255   | 300 | 280   | 315 | 300   | 265   | 300 | L     | 240 |    |    |    |    |    |
| 9       |    |    |    |    |    |    | 255 | 255 | 250 | L     | 350   | 300 | 290   | 290 | 300   | 275   | C   | C     | C   |    |    |    |    |    |
| 10      |    |    |    |    |    |    |     |     | A   | A     | A     | A   | I305A | A   | A     | 315   | L   | L     | 260 |    |    |    |    |    |
| 11      |    |    |    |    |    |    |     | 315 | 375 | 435   | 350   | 380 | 320   | 315 | 330   | I335C | 345 | 265   |     |    |    |    |    |    |
| 12      |    |    |    |    |    |    |     |     | 300 | I290A | 280   | L   | 320   | 310 | 300   | 310   | L   | L     |     |    |    |    |    |    |
| 13      |    |    |    |    |    |    | L   | L   | 285 | 280   | 275   | 340 | 320   | 300 | I315A | 330   | 280 | 260   | A   |    |    |    |    |    |
| 14      |    |    |    |    |    |    | L   | L   | L   | 280   | I290A | 300 | 310   | 330 | 310   | I305C | 300 | L     |     |    |    |    |    |    |
| 15      |    |    |    |    |    |    | L   | 275 | 250 | 280   | 260   | 330 | 330   | 320 | 325   | A     | L   | L     |     |    |    |    |    |    |
| 16      |    |    |    |    |    |    |     | L   | C   | 280   | 275   | 280 | 330   | 315 | 295   | 290   | L   | L     |     |    |    |    |    |    |
| 17      |    |    |    |    |    |    |     | C   | C   | C     | C     | C   | C     | C   | C     | C     | L   | L     |     |    |    |    |    |    |
| 18      |    |    |    |    |    |    | L   | L   | 300 | 280   | 280   | 305 | 290   | 305 | I310A | 275   | 300 | L     | L   |    |    |    |    |    |
| 19      |    |    |    |    |    |    | C   | L   | 275 | I280L | 275   | 300 | 310   | 305 | 305   | 295   | 275 |       |     |    |    |    |    |    |
| 20      |    |    |    |    |    |    | C   |     | 270 | 280   | 210   | 295 | 275   | 270 | 305   | 290   | 270 | 250   | L   |    |    |    |    |    |
| 21      |    |    |    |    |    |    |     | L   | 320 | 300   | 300   | 355 | 265   | L   | 290   | C     | C   | C     | C   |    |    |    |    |    |
| 22      |    |    |    |    |    |    |     | 260 | 250 | 250   | 290   | 300 | 280   | 300 | 280   | 275   | 260 | L     | 245 |    |    |    |    |    |
| 23      |    |    |    |    |    |    |     | C   | C   | C     | C     | C   | C     | C   | C     | 290   | 260 | A     | A   |    |    |    |    |    |
| 24      |    |    |    |    |    |    |     | L   | 270 | 265   | 275   | 290 | 275   | 280 | 275   | 280   | 275 | L     | 240 |    |    |    |    |    |
| 25      |    |    |    |    |    |    |     | L   | 260 | 270   | 265   | 265 | 280   | 275 | 280   | L     | L   | L     |     |    |    |    |    |    |
| 26      |    |    |    |    |    |    |     | C   | 270 | 265   | 270   | 275 | 280   | 280 | 300   | 260   | 260 | L     |     |    |    |    |    |    |
| 27      |    |    |    |    |    |    |     | A   | 295 | 260   | 300   | C   | C     | 300 | C     | C     | C   | C     |     |    |    |    |    |    |
| 28      |    |    |    |    |    |    |     |     | 270 | 275   | 260   | 270 | 270   | 270 | 280   | C     | C   |       |     |    |    |    |    |    |
| 29      |    |    |    |    |    |    | L   | 235 | 240 | 270   | 270   | 265 | 280   | 295 | 295   | 270   | 255 |       |     |    |    |    |    |    |
| 30      |    |    |    |    |    |    |     | 305 | 360 | 280   | 260   | 255 | 300   | L   | 280   | 260   | L   |       |     |    |    |    |    |    |
| 31      |    |    |    |    |    |    |     | C   | C   | 305   | 325   | 300 | 295   | 255 | 280   | 290   | A   |       |     |    |    |    |    |    |
| Медиана |    |    |    |    |    |    | 255 | 265 | 275 | 280   | 280   | 300 | 290   | 300 | 300   | 290   | 280 | 265   | 245 |    |    |    |    |    |
| Учтено  |    |    |    |    |    |    | 3   | 8   | 22  | 24    | 24    | 23  | 25    | 22  | 22    | 21    | 14  | 5     | 7   |    |    |    |    |    |

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



К'Е Км Август 1961г  
(характеристика) (единицы) (месяц) (год)

Академия Наук Каз. ССР  
(институт)

Станция Алма-Ата

Кем составлена Мусатовой

Долгота 76°55' E широта 43°15' N

ИОНОСФЕРНЫЕ ДАННЫЕ

Кем подсчитана Гусаковой

полное время 75°E

| Дни     | 00 | 01 | 02 | 03 | 04 | 05    | 06  | 07  | 08   | 09    | 10   | 11  | 12    | 13    | 14    | 15   | 16    | 17  | 18    | 19    | 20 | 21 | 22 | 23 |  |  |
|---------|----|----|----|----|----|-------|-----|-----|------|-------|------|-----|-------|-------|-------|------|-------|-----|-------|-------|----|----|----|----|--|--|
| 1       |    |    |    |    |    | A     | 100 | 100 | 100  | C     | C    | C   | C     | C     | C     | C    | C     | 100 | A     |       |    |    |    |    |  |  |
| 2       |    |    |    |    |    | 100   | 100 | 100 | 100  | I100A | 100  | 100 | I100C | 100   | 100   | A    | C     | A   | A     | A     | A  |    |    |    |  |  |
| 3       |    |    |    | E  | A  | A     | 100 | 100 | 100  | C     | C    | C   | C     | C     | C     | C    | A     | A   | A     | A     | A  |    |    |    |  |  |
| 4       |    |    |    |    | E  | A     | C   | C   | C    | C     | C    | C   | C     | C     | C     | C    | C     | C   | C     | C     | C  |    |    |    |  |  |
| 5       |    |    |    |    | C  | C     | C   | C   | 100  | 100   | 100  | 100 | 100   | 100   | 100   | 100  | C     | C   | C     | C     | C  |    |    |    |  |  |
| 6       |    |    |    |    | A  | A     | A   | 95  | 100  | 100   | 100  | 95  | 95    | 95    | 100   | 100  | 95    | 100 | 100   | A     |    |    |    |    |  |  |
| 7       |    |    |    | E  | A  | A     | 100 | 95  | A    | A     | 95   | 95  | 90    | 100   | I95A  | 95   | 95    | 95  | 100   | A     | A  |    |    | A  |  |  |
| 8       |    |    |    |    | C  | C     | 100 | 100 | 100  | 100   | 100  | A   | A     | A     | A     | A    | 95    | 95  | A     | E110B | B  |    |    |    |  |  |
| 9       |    |    |    |    | A  | A     | 100 | 100 | 95   | 95    | 95   | 95  | 95    | 95    | A     | A    | C     | C   | C     | C     | C  |    |    |    |  |  |
| 10      |    |    |    |    |    |       | 95  | 95  | 95   | 95    | 100  | 100 | 100   | 95    | 95    | 95   | I100A | 100 | A     | B     | A  |    |    |    |  |  |
| 11      |    |    |    |    | A  | B     | C   | 100 | 95   | 95    | 100  | 95  | 100   | 100   | I100C | 95   | 95    | A   | A     | 95    |    |    |    |    |  |  |
| 12      |    |    | B  | A  | A  | B     | 100 | 100 | 100  | 100   | 100  | 100 | I100A | 100   | 100   | 100  | 100   | 100 | 100   | A     |    |    |    |    |  |  |
| 13      |    |    |    |    | E  | E     | 100 | 100 | 95   | 95    | 95   | 90  | 90    | A     | A     | A    | 100   | 95  | 105   | E110E |    |    |    |    |  |  |
| 14      |    |    |    |    |    | A     | 100 | 95  | 95   | 95    | 95   | 95  | 95    | 95    | 95    | I95C | 95    | 95  | A     | C     |    |    |    |    |  |  |
| 15      |    |    |    |    |    | B     | 100 | 95  | 95   | 95    | I95A | 95  | 95    | 95    | 95    | 95   | 95    | 100 | 100   | A     |    |    |    |    |  |  |
| 16      |    |    |    |    |    | E125B | A   | 90  | I90C | 90    | 90   | 90  | 95    | 95    | 95    | 100  | 100   | 100 | 100   | 100   |    |    |    |    |  |  |
| 17      |    |    |    |    |    | 100   | 100 | C   | C    | C     | C    | C   | C     | C     | C     | C    | C     | 95  | 95    | A     | A  |    |    |    |  |  |
| 18      |    |    |    |    | A  | A     | A   | 95  | 95   | 95    | 95   | 95  | 95    | 95    | 95    | 95   | A     | A   | A     | A     |    |    |    |    |  |  |
| 19      |    |    |    |    | E  | B     | C   | 95  | 95   | 100   | 100  | 100 | 100   | 100   | 95    | 95   | A     | A   | A     | A     | 95 |    |    |    |  |  |
| 20      |    |    |    |    |    | C     | C   | 95  | 95   | 95    | 95   | 95  | 95    | 95    | 95    | 95   | A     | A   | A     | 100   | A  | A  |    |    |  |  |
| 21      |    |    |    |    |    | C     | A   | A   | A    | A     | A    | 95  | 95    | I95A  | 95    | C    | C     | C   | C     | C     |    |    |    |    |  |  |
| 22      |    |    |    |    |    | A     | A   | 95  | 95   | 95    | 95   | 95  | 95    | 95    | 95    | 95   | 95    | A   | A     | A     |    |    |    |    |  |  |
| 23      |    |    |    |    |    | C     | 100 | C   | C    | C     | C    | C   | C     | C     | C     | C    | 90    | 95  | A     | A     | A  | A  |    |    |  |  |
| 24      |    |    |    |    |    | E     | 95  | 95  | 95   | 95    | I95A | 95  | 95    | 95    | A     | A    | A     | A   | A     | A     | A  |    |    |    |  |  |
| 25      |    |    |    |    |    | A     | 95  | 95  | 95   | A     | A    | A   | A     | A     | A     | 95   | 95    | 95  | 95    | E110B | A  |    |    |    |  |  |
| 26      |    |    |    |    |    | A     | C   | C   | 100  | 100   | 95   | 95  | 90    | 95    | 95    | A    | A     | A   | A     | A     |    |    |    |    |  |  |
| 27      |    |    |    |    |    | B     | 100 | 95  | 95   | 95    | 95   | C   | C     | A     | C     | C    | C     | C   | C     | C     |    |    |    | A  |  |  |
| 28      |    |    |    |    |    | 100   | 100 | 100 | 100  | 100   | 100  | 100 | 100   | 100   | 100   | 100  | C     | C   | 100   | 110   | A  |    |    |    |  |  |
| 29      |    |    |    |    |    | E     | 100 | 100 | 95   | 100   | 100  | 95  | 95    | A     | A     | 100  | I100A | 95  | 110   | E     |    |    |    |    |  |  |
| 30      |    |    |    |    |    | E     | 100 | 100 | 95   | 95    | A    | A   | 100   | I100A | 95    | 100  | A     | A   | E110B | C     |    |    |    |    |  |  |
| 31      |    |    |    |    |    | C     | C   | C   | C    | 100   | A    | A   | A     | 100   | A     | A    | A     | A   | A     | A     | A  |    |    |    |  |  |
| Медiana |    |    |    | E  | E  | E110B | 100 | 95  | 95   | 95    | 95   | 95  | 95    | 95    | 95    | 95   | 95    | 95  | 100   | E110B | 95 |    |    |    |  |  |
| Учтено  |    |    |    | 2  | 3  | 8     | 19  | 24  | 25   | 23    | 22   | 21  | 22    | 21    | 19    | 16   | 15    | 15  | 11    | 4     | 2  |    |    |    |  |  |

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

Станция автоматическая  
(ручная, автоматическая)

# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



*h'Es* Км Август 1961г  
(характеристика) (единицы) (месяц) (год)

Академия Наук Каз. ССР  
(институт)

Станция Алма-Ата

Кем составлена Мусатовой

Долгота 76°55' E широта 43°15' N

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем подсчитана Гусаковой

полосное время 75°E

| Дня     | 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       | 100 | B    | 100 | B   | B   | 110 | 110   | 100   | 100  | C   | C    | C    | C   | C    | C     | C     | C     | 110   | 100  | 100 | 100  | 100  | 100  | 100  |
| 2       | 100 | 100  | 100 | 100 | 100 | 100 | 100   | 100   | 110  | 100 | 100  | 100  | C   | 100  | G     | 100   | C     | 100   | 95   | 95  | 95   | 95   | 95   | 100  |
| 3       | 100 | 100  | B   | G   | 100 | 100 | 105   | 105   | 100  | C   | C    | C    | C   | C    | C     | C     | 95    | 95H   | 95   | 105 | 100  | 100  | 100  | 100  |
| 4       | 100 | 100  | 100 | 95  | G   | 105 | C     | C     | C    | C   | C    | C    | C   | C    | C     | C     | C     | C     | C    | C   | C    | C    | C    | C    |
| 5       | C   | C    | C   | C   | C   | C   | C     | C     | 100  | 110 | 120  | 110  | 100 | 100  | 100   | 100   | C     | C     | C    | C   | C    | 90H  | 100H | 100H |
| 6       | 100 | 100H | 95  | 90  | 95  | 100 | 100H  | 105H  | 105  | 105 | 100  | 100  | 100 | 100H | 100   | 100   | 95H   | 100   | 95H  | 90H | 110  | 105  | 100H | 100  |
| 7       | E   | E    | 95  | 95  | 100 | 95  | 100   | 95    | 100  | 100 | 120  | 100  | 100 | 100  | 95    | E155G | 105   | 100   | 100  | 100 | 100  | 100  | 100H | 100  |
| 8       | 95  | 95H  | C   | C   | C   | C   | 105   | 100   | 100  | 100 | 100  | 95   | 95  | 95   | 95    | 95    | G     | G     | 90   | G   | G    | E    | 95   | 95   |
| 9       | 95H | 90H  | 95  | 95  | 100 | 100 | 120   | 100   | 100  | 100 | 95   | 95   | G   | 95   | 95    | 95    | C     | C     | C    | C   | C    | C    | C    | C    |
| 10      | C   | C    | C   | C   | C   | C   | 100   | 100H  | 100H | 100 | 100H | 100  | 100 | 100  | 100H  | 100H  | 100H  | 100   | 100  | 100 | 100  | 100H | 95H  | C    |
| 11      | 95  | 90   | 95  | 95  | 90  | G   | C     | 105   | 100  | 100 | 100  | 100H | 100 | 100  | 100   | C     | 115   | 110   | 95   | 110 | 100  | 95H  | 95   | 90   |
| 12      | B   | 95   | G   | 100 | 100 | G   | 125   | 105   | 100  | 100 | 100  | 100  | 100 | 95   | 110   | 110   | 125   | 115   | 110  | 100 | 100  | 100  | 100H | 100H |
| 13      | 95  | 95   | C   | C   | 95  | 115 | 125   | 105   | 100  | 100 | 100  | 95   | 95  | 95   | 95    | 95    | 125   | 110   | 110  | 105 | 100  | 100  | 100  | E    |
| 14      | B   | 90   | 90  | 90  | 90  | 95  | 115   | 100   | 100  | 100 | 100  | 95   | G   | G    | G     | C     | E130G | 115   | 110H | C   | 100  | 110  | 100  | 100  |
| 15      | 95H | 100H | E   | 90  | 95  | G   | 110   | 105   | 105  | 100 | 100  | 100  | 100 | 95   | 100   | 100   | G     | E125G | 105  | 100 | 100H | 100H | 100  | 95   |
| 16      | 95  | 100  | 100 | 100 | 100 | G   | 100   | 110   | C    | 100 | 100  | 100  | 100 | 100  | 100   | 100   | 100   | 100   | 100  | 100 | C    | C    | C    | 100  |
| 17      | 90  | 90   | 90  | 90  | 90  | G   | G     | C     | C    | C   | C    | C    | C   | C    | C     | C     | 90    | 90    | 90   | 90  | 90   | 90   | 90   | 95   |
| 18      | 95  | 95   | 95  | 95  | 95  | 95  | 95    | 100   | 100  | 105 | 105  | 100  | 100 | 100  | 95    | 95    | 95H   | 95H   | 95H  | 95  | 100H | 100  | 95   | 95   |
| 19      | 100 | 100  | 95  | B   | G   | G   | C     | 110   | 100  | 100 | 100  | 100  | 100 | 100  | G     | G     | 95    | 95    | 95   | 95  | 95   | B    | 95   | 95   |
| 20      | 95H | 95   | 95H | 95  | 95  | C   | C     | E120G | 100  | 100 | 100  | 100  | 100 | 100  | 100   | 100   | 95    | 100   | G    | 90  | 90   | 100  | 100H | 100  |
| 21      | 100 | 100  | C   | C   | 95  | C   | 95    | 100   | 100  | 100 | 100  | 100  | 100 | 100  | E110G | C     | C     | C     | C    | C   | 100  | 100  | 100  | 100  |
| 22      | 90  | 90   | 90  | 95  | 95  | 100 | 95    | 95    | 95   | 95  | 95   | 95   | 95  | G    | 100   | 100   | 95    | 95    | 95   | 95  | 95   | 95   | 95   | 95   |
| 23      | 90  | 90   | 90  | 90  | 90  | C   | G     | C     | C    | C   | C    | C    | C   | C    | 95    | 95    | 95    | 95    | 95   | 95  | 95   | 95   | 100  | C    |
| 24      | 95  | 95   | 95  | E   | E   | G   | E125G | 100   | 100  | 100 | 100  | 100  | 95  | 90   | 90    | 90    | 90    | 90    | 90   | 90  | 90   | 90   | 90   | 90   |
| 25      | B   | 90   | 95  | E   | E   | 110 | 125   | 100   | 95   | 95  | 95   | 95   | 95  | 95   | 100   | G     | G     | E125G | 105  | 100 | 100H | 100  | 95   | 95   |
| 26      | 95  | 95   | 95  | 95  | E   | 110 | C     | C     | 100  | 100 | 95   | 95   | 95  | 95   | 95    | 95    | 95    | 90    | 90   | 90  | 90   | 90   | 90   | 95   |
| 27      | E   | E    | E   | E   | 95  | G   | 130   | 105   | 100  | 100 | 100  | C    | C   | 95   | C     | C     | C     | C     | C    | C   | 100  | 100  | 100  | 100  |
| 28      | 100 | 100  | 100 | 100 | B   | G   | G     | 100   | 100  | 100 | G    | 100  | 100 | 100  | 100   | C     | C     | E125G | 110  | 100 | 100H | 100  | 100  | 100  |
| 29      | G   | E    | E   | 95  | 95  | 95  | G     | 100   | 100  | 100 | 100  | 100  | 95  | 95   | 90    | G     | 95    | G     | 95   | 95  | 90   | 90   | E    | B    |
| 30      | C   | C    | 95  | 100 | 100 | G   | 110   | 105   | 100  | 100 | 95   | 90   | G   | 95   | G     | G     | 95    | 95    | G    | C   | C    | C    | C    | C    |
| 31      | C   | C    | C   | C   | C   | C   | C     | C     | C    | 100 | 95   | 95   | 95  | G    | 100H  | 95    | 90    | 95H   | 90   | 85  | 95   | 100  | 100  | 100  |
| Медiana | 95  | 95   | 95  | 95  | 95  | 100 | 110   | 100   | 100  | 100 | 100  | 100  | 100 | 100  | 100   | 100   | 95    | 100   | 95   | 95  | 100  | 100  | 100  | 100  |
| Учено   | 21  | 22   | 20  | 19  | 20  | 14  | 20    | 25    | 26   | 25  | 25   | 25   | 21  | 23   | 21    | 18    | 20    | 24    | 24   | 23  | 25   | 25   | 26   | 24   |

Пробег частоты от 1.0 Мгц до 18.0 Мгц 20 сек.

Станция автоматическая  
(ручная, автоматическая)



# МЕЖДУНАРОДНЫЙ ГЕОФИЗИЧЕСКИЙ ГОД



Типы Es Август 1961  
(характеристика) (единица) (месяц) (год)

Академия Наук Каз. ССР  
(институт)

Станция Алма-Ата

## ИОНОСФЕРНЫЕ ДАННЫЕ

Кем составлена Мусатовой

Долгота 76°55'E широта 43°15'N

поясное время 75°E

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 |    |    | e2 | c2   | c2   | c1   |      |      |    |    |      |    |      |      | c1 | e2   | f1 | f2 | f2 | f5 | f6 |    |
| 2       | f4 | f7 | f8 | f5 | f5 | c4 | c1   | c1   | c3   | e1   | c1   | c2 |    | c1   |    | e1   |      | e2 | e2   | e1 | e2 | f1 | f1 | f1 |    |
| 3       | f1 | f1 |    |    | e1 | e1 | c2   | c1   | c2   |      |      |    |    |      |    |      | e2   | e2 | e3   | e1 | e1 | f1 | f2 | f2 |    |
| 4       | f1 | f2 | f2 | f1 | e1 | e2 |      |      |      |      |      |    |    |      |    |      |      |    |      |    |    |    |    |    |    |
| 5       |    |    |    |    |    |    |      |      | c1   | c1   | c2   | c2 | c4 | c2   | c1 | c1   |      |    |      |    |    | f2 | f2 | f1 |    |
| 6       | f2 | f2 | f2 | f2 | e2 | e2 | e2c2 | c1   | c2   | c2   | c1   | c2 | c2 | c2   | c2 | c2   | c2   | c4 | c3   | e5 | f2 | f3 | f4 | f3 |    |
| 7       |    |    | f2 | e2 | e3 | e2 | c3   | e1c1 | e1c1 | e1   | c1   | c1 | c1 | c2   | e1 | m1   | c1   | c4 | c1   | e4 | e3 | f2 | e2 | f2 |    |
| 8       | f2 | f2 |    |    |    |    | c1   | c2   | c2   | c2   | c1   | e1 | e1 | e1   | e1 | e1   |      |    | e2   |    |    |    | f2 | f2 |    |
| 9       | f2 | f2 | f2 | f1 | e2 | e1 | c1   | c2   | c1   | c1   | c2   | c2 |    | c1   | e2 | e2   |      |    |      |    |    |    |    |    |    |
| 10      |    |    |    |    |    |    | c2   | c2   | c2   | c2   | c2   | c2 | c1 | c2   | c1 | c2   | e1   | c2 | c2e1 | c2 | e2 | f4 | f3 |    |    |
| 11      | f2 | f3 | f2 | f1 | e1 |    |      | c2   | c3   | c1   | c1   | c1 | c1 | c1   | c1 |      | c1   | c2 | e1c1 | e2 | c2 | f2 | f2 | f2 |    |
| 12      |    | f1 |    | e2 | e2 |    | c1   | c2   | c2   | c2   | c2   | c2 | c1 | e1   | c1 | c1   | c1   | c1 | c2   | e2 | f2 | f2 | f7 | f3 |    |
| 13      | f2 | f2 |    |    | e1 | c1 | c1   | c1   | c1   | c2   | c1   | c2 | c1 | e2   | e2 | e2   | c2   | c2 | c3   | c4 | f2 | f3 | f2 |    |    |
| 14      |    | f1 | f1 | f1 | f1 | e1 | c1   | c2   | e1c2 | c1   | c1   | c2 |    |      |    |      | c1   | c1 | c2e1 |    | f3 | f2 | f2 | f2 |    |
| 15      | f2 | f2 |    | f1 | f2 |    | c2   | c2   | c2   | c1   | e1   | c1 | c3 | c1   | c2 | c3   |      | c1 | c2   | e3 | f3 | f3 | f3 | f4 |    |
| 16      | f3 | f2 | f2 | f3 | f1 |    | e1   | c1   |      | c2   | c2   | c2 | c1 | c1   | c1 | c1   | c2   | c3 | e4   | e2 |    |    |    | f2 |    |
| 17      | f2 | f2 | f2 | f2 | f1 |    |      |      |      |      |      |    |    |      |    |      | c2   | c2 | e2   | e4 | f3 | f2 | f2 | f4 |    |
| 18      | f1 | f1 | f2 | f1 | e1 | e1 | e1   | c2   | c2   | c1   | c1   | c1 | c1 | c1   | c3 | c2   | e2   | e2 | e2   | e1 | f2 | f4 | f4 | f2 |    |
| 19      | f1 | f1 | f1 |    |    |    |      | c1   | c1   | c2   | c2   | c2 | c2 | c2   |    |      | e2   | e2 | e2   | e2 | e2 |    | f1 | f1 |    |
| 20      | f2 | f4 | f2 | f2 | f2 |    |      | c1   | c1   | c2   | c2   | c2 | c2 | c2   | c2 | e2   | e2   | e1 |      | e2 | e1 | e2 | f3 | f3 |    |
| 21      | f2 | f2 |    |    | f1 |    | e1   | e1   | e2   | c1e1 | c1e1 | c2 | c2 | c2e1 | c1 |      |      |    |      |    |    | f5 | f1 | f1 | f2 |
| 22      | f2 | f1 | f2 | f2 | f2 | e1 | e2   | c2   | c2   | e2   | e3   | c1 | c1 |      | c2 | c2   | c2   | e2 | e3   | e2 | f2 | f2 | f2 | f3 |    |
| 23      | f1 | f1 | f1 | f1 | f1 |    |      |      |      |      |      |    |    |      |    | c2   | c3   | e4 | e3   | e3 | e3 | f3 | f2 |    |    |
| 24      | f3 | f1 | f2 |    |    |    | c1   | c1e1 | c2s2 | c2   | c1e1 | c1 | c2 | c2   | e1 | e2   | c1e2 | e2 | e2   | e2 | e1 | f1 | f1 | f1 |    |
| 25      |    | f2 | f1 |    |    | e1 | c1e1 | c2   | e1   | e1   | e1   | e1 | e2 | e2   | c1 |      |      | c1 | c3   | e3 | f4 | f2 | f2 | f2 |    |
| 26      | f3 | f2 | f1 | f1 |    | e1 |      |      | c1   | e2   | c2   | c2 | c2 | c2   | c2 | e1c1 | e2   | e2 | e2   | e2 | e2 | f2 | f1 | f1 | f2 |
| 27      |    |    |    |    | f1 |    | e1c1 | c4   | c2   | c3   | c2   |    |    | e2   |    |      |      |    |      |    | e2 | f2 | f2 | f1 |    |
| 28      | f1 | f2 | f2 | f1 |    |    |      | c1   | c1   | c2   |      | c1 | c1 | c1   | c1 |      |      | c1 | c2   | e4 | f3 | f2 | f1 | f2 |    |
| 29      |    |    |    | f1 | f1 | e1 |      | c2   | c1   | c1   | c1   | c1 | c1 | e1   | e1 |      | e1   |    | e1   | e2 | f2 | f1 |    |    |    |
| 30      |    |    | f3 | f2 | f1 |    |      | c1   | c2   | c3   | s1c2 | e2 | e1 |      | e1 |      | e2   | e1 |      | e2 | e1 |    |    |    |    |
| 31      |    |    |    |    |    |    |      |      |      | c2   | e1   | e1 | e1 |      | e1 | e2   | e2   | e2 | e3   | e2 | e2 | f2 | f4 | f2 |    |
| Медвана |    |    |    |    |    |    |      |      |      |      |      |    |    |      |    |      |      |    |      |    |    |    |    |    |    |
| Учтено  |    |    |    |    |    |    |      |      |      |      |      |    |    |      |    |      |      |    |      |    |    |    |    |    |    |

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

Станция автоматическая  
(ручная, автоматическая)