

# 邢台地震目录

(续 编)

1976—1984

河北省地震局

一九八五年

## 续 编 说 明

一、自1976年1月至1984年12月共收集邢台余震1400多条。

二、基本参数的测定与原《邢台地震目录》完全一致。但是，对红山台能记录到的邢台小震( $\overline{S}-\overline{P}$ )量不准确的则分别标出了北、中、南、西四个区，以备应用。

三、续编工作由郭妍、夏乱保、王泽皋完成。

一九八五年二月

# 第一部份

## 地震选目

( $M \geq 4, 0$ )

| 年    | 月  | 日  | 发震时刻 |    |   | 震中位置   |         | 深度 | 震级  | 精度 | 备 注        |
|------|----|----|------|----|---|--------|---------|----|-----|----|------------|
|      |    |    | 时    | 分  | 秒 | 北 纬    | 东 经     |    |     |    |            |
| 1980 | 8  | 7  | 10   | 34 |   | 37°28' | 114°20' | 9  | 4.3 | Ⅱ  |            |
|      |    |    | 11   | 16 |   | 37°28' | 114°20' | 9  | 4.0 | Ⅱ  |            |
| 1981 | 11 | 9  | 02   | 01 |   | 37°24' | 114°58' | 20 | 5.8 | I  | M为国家<br>局定 |
|      |    |    | 02   | 15 |   | 37°26' | 115°06' | 5  | 4.4 | I  |            |
|      |    |    | 16   | 52 |   | 37°26' | 115°04' | 19 | 4.0 | I  |            |
| 1982 | 1  | 26 | 17   | 47 |   | 37°24' | 114°54' | 20 | 4.3 | Ⅱ  |            |

# 目 次

第一部分 地震选目 ( $M \geq 4.0$ )

第二部分 地震目录 ( $M \geq 1.0$ )

一九七六年 (5)

一九七七年 (13)

一九七八年 (19)

一九七九年 (25)

一九八〇年 (31)

一九八一年 (37)

一九八二年 (45)

一九八三年 (53)

一九八四年 (61)

附 录 (67)

## 第 二 部 份

# 地 震 目 录

( $M \geq 1.0$ )



一 九 七 六 年



| 月 | 日  | 发震时刻 |    |   | 震 中 位 置 |         | 深<br>度 | 震<br>级 | 精<br>度 | 备 注                        |
|---|----|------|----|---|---------|---------|--------|--------|--------|----------------------------|
|   |    | 时    | 分  | 秒 | 北 纬     | 东 经     |        |        |        |                            |
| 1 | 1  | 13   | 30 |   | 37°21'  | 114°58' | 13     | 1.3    | Ⅲ      |                            |
|   | 2  | 00   | 40 |   | 37°30'  | 114°52' | 20     | 1.3    | Ⅲ      |                            |
|   | 7  | 05   | 48 |   | 37°14'  | 114°55' | 25     | 1.8    | Ⅲ      |                            |
|   |    | 08   | 29 |   |         |         |        | 1.0    |        | 中 区                        |
|   |    | 12   | 02 |   | 37°20'  | 114°58' | 20     | 1.6    | Ⅲ      |                            |
|   | 8  | 11   | 11 |   | 37°37'  | 115°08' | 21     | 1.7    | Ⅱ      |                            |
|   | 9  | 20   | 27 |   | 37°24'  | 114°58' | 23     | 1.1    | Ⅲ      |                            |
|   |    | 21   | 25 |   | 37°25'  | 114°58' | 24     | 3.6    | I      |                            |
|   | 10 | 04   | 29 |   |         |         |        | 1.2    |        | 中 区                        |
|   |    | 11   | 37 |   | 37°23'  | 115°05' | 22     | 1.9    | Ⅲ      |                            |
|   | 11 | 08   | 32 |   | 37°32'  | 115°03' | 23     | 2.2    | Ⅱ      |                            |
|   | 13 | 07   | 43 |   | 37°34'  | 114°55' | 20     | 2.9    | I      |                            |
|   |    | 21   | 18 |   |         |         |        | 1.8    |        | 红山 $\bar{S}-\bar{P}=8.2''$ |
|   |    | 21   | 23 |   |         |         |        | 1.7    |        | 红山 $\bar{S}-\bar{P}=9.0''$ |
|   | 14 | 17   | 29 |   |         |         |        | 1.5    |        | 北 区                        |
|   | 16 | 21   | 02 |   | 37°32'  | 115°02' | 24     | 1.8    | Ⅲ      |                            |
|   | 19 | 19   | 00 |   | 37°21'  | 114°51' | 22     | 1.8    | Ⅲ      |                            |
|   | 23 | 21   | 33 |   |         |         |        | 1.5    |        | 中 区                        |
|   | 30 | 05   | 33 |   | 37°36'  | 114°53' | 30     | 1.4    | Ⅲ      |                            |
| 2 | 2  | 04   | 36 |   | 37°33'  | 115°05' | 8      | 1.2    | Ⅲ      |                            |
|   | 2  | 05   | 52 |   | 37°34'  | 115°04' | 13     | 1.0    | Ⅲ      |                            |
|   | 6  | 17   | 48 |   | 37°21'  | 114°56' | 20     | 3.0    | I      |                            |
|   | 8  | 14   | 07 |   |         |         |        | 1.1    |        | 红山 $\bar{S}-\bar{P}=3.5''$ |
|   |    | 14   | 39 |   |         |         |        | 1.0    |        | 红山 $\bar{S}-\bar{P}=3.5''$ |
|   | 8  | 22   | 35 |   |         |         |        | 2.0    |        | 红山 $\bar{S}-\bar{P}=8.8''$ |
|   | 10 | 11   | 53 |   |         |         |        | 1.0    |        | 红山 $\bar{S}-\bar{P}=3.4''$ |
|   | 11 | 08   | 49 |   | 37°23'  | 114°56' | 22     | 1.6    | I      |                            |
|   |    | 16   | 17 |   |         |         |        | 1.5    |        | 红山 $\bar{S}-\bar{P}=9.0''$ |
|   |    | 22   | 00 |   | 37°17'  | 114°51' | 29     | 1.8    | I      |                            |
|   | 12 | 11   | 19 |   | 37°22'  | 114°54' | 28     | 3.2    | Ⅱ      |                            |
|   | 13 | 15   | 18 |   | 37°23'  | 114°56' | 21     | 1.6    | I      |                            |
|   |    | 17   | 46 |   |         |         |        | 1.2    |        | 红山 $\bar{S}-\bar{P}=3.1''$ |
|   | 15 | 11   | 47 |   | 37°27'  | 114°57' | 25     | 1.8    | Ⅱ      |                            |
|   | 20 | 03   | 35 |   |         |         |        | 1.2    |        | 红山 $\bar{S}-\bar{P}=6.0''$ |
|   |    | 07   | 19 |   |         |         |        | 1.3    |        | 红山 $\bar{S}-\bar{P}=3.0''$ |

| 月 | 日  | 发震时刻 |    |   | 震 中 位 置 |         | 深<br>度 | 震<br>级 | 精<br>度 | 备 注                        |
|---|----|------|----|---|---------|---------|--------|--------|--------|----------------------------|
|   |    | 时    | 分  | 秒 | 北 纬     | 东 经     |        |        |        |                            |
|   | 21 | 15   | 06 |   | 37°33'  | 115°03' | 27     | 1.9    | Ⅲ      |                            |
|   | 25 | 18   | 36 |   | 37°26'  | 115°04' | 23     | 1.1    | Ⅲ      |                            |
|   |    | 23   | 43 |   | 37°32'  | 115°03' | 28     | 1.9    | I      |                            |
|   | 27 | 15   | 30 |   | 37°24'  | 115°05' | 22     | 2.0    | I      |                            |
|   | 28 | 05   | 15 |   | 37°34'  | 115°05' | 16     | 1.5    | Ⅲ      |                            |
| 3 | 1  | 04   | 40 |   |         |         |        | 1.2    |        | 红山 $\bar{S}-\bar{P}=4.6''$ |
|   | 7  | 14   | 13 |   |         |         |        | 1.3    |        | 中 区                        |
|   | 7  | 21   | 46 |   |         |         |        | 1.1    |        | 红山 $\bar{S}-\bar{P}=2.7''$ |
|   | 8  | 10   | 00 |   |         |         |        | 1.1    |        | 红山 $\bar{S}-\bar{P}=3.7''$ |
|   | 8  | 22   | 21 |   | 37°21'  | 114°51' |        | 1.4    |        |                            |
|   | 11 | 23   | 55 |   | 37°28'  | 115°04' | 30     | 1.5    | Ⅲ      |                            |
|   | 13 | 14   | 23 |   | 37°31'  | 115°00' | 27     | 3.0    | I      |                            |
|   | 14 | 07   | 03 |   | 37°25'  | 114°55' | 30     | 1.6    | Ⅱ      |                            |
|   | 19 | 10   | 54 |   | 37°24'  | 115°06' | 7      | 1.1    | Ⅲ      |                            |
|   | 19 | 11   | 28 |   |         |         |        | 1.2    |        | 红山 $\bar{S}-\bar{P}=2.3''$ |
|   | 22 | 07   | 02 |   | 37°17'  | 114°49' | 27     | 1.9    | I      |                            |
|   | 28 | 07   | 55 |   |         |         |        | 1.0    |        | 红山 $\bar{S}-\bar{P}=3.1''$ |
| 4 | 3  | 17   | 45 |   | 37°29'  | 115°13' | 16     | 1.7    | Ⅲ      |                            |
|   | 6  | 09   | 20 |   | 37°21'  | 114°51' | 29     | 2.4    | I      |                            |
|   | 9  | 22   | 19 |   | 37°37'  | 115°09' | 15     | 1.8    | Ⅱ      |                            |
|   | 13 | 15   | 02 |   | 37°25'  | 115°07' |        | 1.6    |        |                            |
|   | 14 | 12   | 52 |   |         |         |        | 1.2    |        | 红山 $\bar{S}-\bar{P}=2.6''$ |
|   |    | 16   | 19 |   | 27°26'  | 115°06' | 22     | 2.0    | I      |                            |
|   |    | 23   | 08 |   |         |         |        | 1.1    |        | 红山 $\bar{S}-\bar{P}=3.2''$ |
|   | 15 | 17   | 21 |   | 37°24'  | 114°56' | 26     | 1.6    | I      |                            |
|   |    | 17   | 45 |   | 37°29'  | 115°02' | 25     | 2.3    | I      |                            |
|   | 18 | 01   | 00 |   |         |         |        | 1.4    |        | 红山 $\bar{S}-\bar{P}=4.2''$ |
|   | 20 | 03   | 00 |   |         |         |        | 2.0    |        | 红山 $\bar{S}-\bar{P}=8.2''$ |
|   | 24 | 05   | 26 |   |         |         |        | 1.5    |        | 中 区                        |
|   | 30 | 00   | 12 |   | 37°24'  | 114°59' | 19     | 1.7    | I      |                            |
| 5 | 8  | 17   | 25 |   | 37°27'  | 114°53' | 24     | 1.4    | I      |                            |
|   |    | 17   | 35 |   |         |         |        | 1.2    |        | 中 区                        |
|   | 12 | 18   | 04 |   | 37°28'  | 115°04' | 20     | 1.9    | Ⅲ      |                            |
|   | 15 | 02   | 30 |   | 37°39'  | 115°06' | 10     | 1.9    | Ⅲ      |                            |
|   | 27 | 17   | 08 |   | 37°07'  | 114°42' | 20     | 1.6    | Ⅲ      |                            |

| 月 | 日  | 发震时刻 |    |    | 震 中 位 置 |         | 深<br>度 | 震<br>级 | 精<br>度 | 备 注                        |
|---|----|------|----|----|---------|---------|--------|--------|--------|----------------------------|
|   |    | 时    | 分  | 秒  | 北 纬     | 东 经     |        |        |        |                            |
|   | 27 | 17   | 24 |    | 37°07'  | 114°42' | 18     | 1.9    | Ⅲ      |                            |
|   | 27 | 17   | 50 |    | 37°07'  | 114°42' | 18     | 2.5    | Ⅲ      |                            |
|   | 28 | 07   | 37 |    | 37°40'  | 115°18' | 15     | 1.9    | Ⅲ      |                            |
|   | 31 | 09   | 15 |    |         |         |        | 1.3    |        | 北 区                        |
| 6 | 1  | 06   | 08 |    | 37°09'  | 114°46' | 18     | 1.2    | Ⅲ      |                            |
|   |    | 15   | 48 |    |         |         |        | 1.2    |        | 南 区                        |
|   | 2  | 12   | 13 |    |         |         |        | 1.4    |        | 中 区                        |
|   | 5  | 01   | 48 |    | 37°22'  | 115°14' | 18     | 1.7    | Ⅲ      |                            |
|   |    | 21   | 25 |    | 37°11'  | 114°53' | 9      | 1.2    | Ⅲ      |                            |
|   | 7  | 02   | 59 |    |         |         |        | 1.4    |        | 南 区                        |
|   |    | 05   | 30 |    | 37°24'  | 114°51' | 23     | 1.3    | I      |                            |
|   |    | 16   | 11 |    | 37°31'  | 115°04' | 24     | 1.8    | Ⅱ      |                            |
|   | 8  | 18   | 09 |    | 37°19'  | 115°02' | 22     | 1.3    | Ⅲ      |                            |
|   | 16 | 10   | 44 |    | 37°46'  | 115°16' | 34     | 1.7    | I      |                            |
|   | 18 | 21   | 07 |    | 37°31'  | 114°59' | 25     | 1.7    | Ⅱ      |                            |
| 7 | 2  | 07   | 33 |    | 37°39'  | 115°18' | 32     | 2.3    | I      |                            |
|   |    | 7    | 00 | 52 |         |         |        | 1.5    |        | 红山 $\bar{S}-\bar{P}=2.7''$ |
|   | 10 | 05   | 00 |    | 37°34'  | 115°06' | 22     | 2.5    | I      |                            |
|   |    | 22   | 55 |    |         |         |        | 1.4    |        | 红山 $\bar{S}-\bar{P}=2.7''$ |
|   | 21 | 22   | 05 |    |         |         |        | 1.5    |        | 红山 $\bar{S}-\bar{P}=4.1''$ |
| 8 | 2  | 11   | 31 |    |         |         |        | 0.9    |        | 中 区                        |
|   |    | 3    | 10 | 53 | 37°23'  | 114°55' | 24     | 2.4    | I      |                            |
|   |    | 5    | 11 | 39 | 37°25'  | 114°52' | 21     | 1.5    | Ⅱ      |                            |
|   | 6  | 18   | 45 |    |         |         |        | 0.9    |        | 红山 $\bar{S}-\bar{P}=2.8''$ |
|   | 7  | 15   | 48 |    |         |         |        | 0.7    |        | 红山 $\bar{S}-\bar{P}=2.6''$ |
|   | 10 | 08   | 06 |    |         |         |        | 1.2    |        | 红山 $\bar{S}-\bar{P}=4.2''$ |
|   | 12 | 01   | 14 |    | 37°20'  | 114°56' | 22     | 1.8    | I      |                            |
|   | 13 | 18   | 07 |    | 37°46'  | 115°12' | 10     | 1.8    | Ⅲ      |                            |
|   |    | 21   | 22 |    | 37°40'  | 115°06' | 17     | 1.2    | Ⅲ      |                            |
|   | 19 | 08   | 36 |    | 37°12'  | 114°47' | 24     | 2.4    | I      |                            |
|   |    | 16   | 22 |    |         |         |        | 1.4    |        | 南 区                        |
|   | 23 | 07   | 12 |    | 37°48'  | 115°13' | 40     | 1.9    | I      |                            |
|   | 26 | 12   | 03 |    |         |         |        | 1.1    |        | 红山 $\bar{S}-\bar{P}=3.6''$ |
|   | 29 | 06   | 39 |    |         |         |        | 1.0    |        | 红山 $\bar{S}-\bar{P}=5.2''$ |
| 9 | 2  | 13   | 56 |    | 37°40'  | 115°24' | 20     | 1.9    | Ⅲ      |                            |

| 月  | 日  | 发震时刻 |    |   | 震 中 位 置 |         | 深<br>度 | 震<br>级 | 精<br>度 | 备 注      |
|----|----|------|----|---|---------|---------|--------|--------|--------|----------|
|    |    | 时    | 分  | 秒 | 北 纬     | 东 经     |        |        |        |          |
|    | 3  | 09   | 06 |   |         |         |        | 1.4    |        | 北 区      |
|    | 4  | 20   | 10 |   | 36°50'  | 114°05' |        | 1.1    |        |          |
|    |    | 19   | 01 |   | 37°22'  | 114°59' | 22     | 1.7    | Ⅱ      |          |
|    | 7  | 13   | 53 |   |         |         |        | 1.2    |        | 南 区      |
|    | 18 | 10   | 49 |   | 37°12'  | 114°42' | 21     | 1.7    | I      |          |
|    | 19 | 07   | 39 |   | 37°15'  | 114°49' | 18     | 2.1    | Ⅱ      |          |
|    | 20 | 05   | 06 |   | 37°47'  | 115°17' | 19     | 1.6    | Ⅲ      |          |
|    | 22 | 09   | 53 |   | 37°22'  | 115°00' | 23     | 2.0    | Ⅱ      |          |
|    |    | 19   | 41 |   | 37°12'  | 114°50' | 22     | 1.6    | I      |          |
|    | 26 | 17   | 31 |   |         |         |        | 1.4    |        | 中 区      |
| 10 | 2  | 12   | 07 |   | 36°58'  | 114°10' |        | 0.7    |        | 沙河朱庄水库附近 |
|    | 5  | 05   | 27 |   | 37°21'  | 114°44' | 16     | 3.6    | I      | 隆尧西南潘庄一带 |
|    |    | 05   | 38 |   |         |         |        | 1.2    |        | "        |
|    |    | 09   | 48 |   |         |         |        | 1.6    |        | "        |
|    |    | 09   | 56 |   |         |         |        | 1.2    |        | "        |
|    |    | 14   | 03 |   |         |         |        | 1.5    |        | "        |
|    |    | 14   | 10 |   |         |         |        | 1.2    |        | "        |
|    |    | 14   | 12 |   |         |         |        | 1.5    |        | "        |
|    |    | 14   | 49 |   |         |         |        | 1.4    |        | "        |
|    |    | 17   | 21 |   |         |         |        | 1.6    |        | "        |
|    | 6  | 14   | 49 |   |         |         |        | 1.2    |        | "        |
|    |    | 17   | 48 |   |         |         |        | 1.6    |        | "        |
|    |    | 21   | 02 |   |         |         |        | 1.5    |        | "        |
|    |    | 21   | 46 |   |         |         |        | 1.2    |        | "        |
|    | 8  | 12   | 06 |   | 36°58'  | 113°52' |        | 0.5    |        | 沙河朱庄水库附近 |
|    | 9  | 04   | 31 |   |         |         |        | 1.3    |        | 沙河西部     |
|    | 11 | 12   | 25 |   |         |         |        | 1.3    |        | 隆尧西南潘庄一带 |
|    |    | 17   | 37 |   |         |         |        | 1.2    |        | "        |
|    |    | 22   | 06 |   |         |         |        | 1.4    |        | 南 区      |
|    | 12 | 04   | 47 |   | 37°22'  | 114°40' | 13     | 2.6    | I      | 隆尧西南潘庄一带 |
|    |    | 05   | 35 |   |         |         |        | 1.5    |        | "        |
|    |    | 06   | 04 |   |         |         |        | 1.1    |        | "        |
|    |    | 07   | 27 |   |         |         |        | 1.4    |        | "        |
|    |    | 08   | 20 |   | 36°56'  | 114°09' | 15     | 1.8    |        | "        |
|    |    | 12   | 50 |   |         |         |        | 1.5    |        | 隆尧西南潘庄一带 |

| 月                                  | 日  | 发震时刻 |    |   | 震 中 位 置 |         | 深<br>度 | 震<br>级 | 精<br>度 | 备 注                        |
|------------------------------------|----|------|----|---|---------|---------|--------|--------|--------|----------------------------|
|                                    |    | 时    | 分  | 秒 | 北 纬     | 东 经     |        |        |        |                            |
|                                    | 13 | 08   | 42 |   |         |         |        | 2.9    |        | 隆尧西南潘庄一带                   |
|                                    |    | 10   | 54 |   |         |         |        | 2.4    |        | "                          |
|                                    |    | 12   | 49 |   |         |         |        | 1.7    |        | "                          |
|                                    |    | 15   | 11 |   |         |         |        | 1.5    |        | "                          |
|                                    |    | 15   | 40 |   |         |         |        | 1.1    |        | "                          |
|                                    |    | 23   | 09 |   |         |         |        | 1.9    |        | "                          |
|                                    | 14 | 11   | 02 |   |         |         |        | 1.4    |        | "                          |
|                                    | 15 | 03   | 35 |   |         |         |        | 1.3    |        | 南 区                        |
|                                    |    | 14   | 32 |   |         |         |        | 1.4    |        | 隆尧西南潘庄一带                   |
|                                    | 16 | 09   | 26 |   |         |         |        | 1.4    |        | "                          |
|                                    |    | 09   | 26 |   | 36°52'  | 114°20' | 15     | 1.4    | I      |                            |
|                                    | 17 | 22   | 54 |   | 37°28'  | 114°55' | 20     | 2.7    | I      |                            |
|                                    |    | 23   | 12 |   | 37°24'  | 115°02' | 9      | 1.4    | III    |                            |
|                                    | 20 | 12   | 34 |   |         |         |        | 1.8    |        | 北 区                        |
|                                    |    | 17   | 27 |   | 37°28'  | 114°52' |        | 1.7    |        |                            |
|                                    |    | 19   | 34 |   | 37°36'  | 115°09' | 18     | 2.3    | I      |                            |
|                                    | 23 | 22   | 29 |   |         |         |        | 1.7    |        | 西区临城营等村                    |
|                                    | 25 | 05   | 34 |   | 37°41'  | 114°53' | 26     | 1.8    |        |                            |
|                                    |    | 20   | 48 |   | 37°22'  | 114°43' | 15     | 2.6    | I      | 隆尧西南潘庄一带                   |
|                                    | 27 | 04   | 32 |   |         |         |        | 1.3    |        | 中 区                        |
|                                    | 31 | 14   | 50 |   |         |         |        | 1.3    |        | 中 区                        |
| 到本月末共记到南潘庄小震群171次 $M \geq 1.0$ 28次 |    |      |    |   |         |         |        |        |        |                            |
| 11                                 | 1  | 09   | 54 |   |         |         |        | 1.5    |        | 红山 $\bar{S}-\bar{P}=4.2''$ |
|                                    |    | 10   | 10 |   |         |         |        | 1.0    |        | 红山 $\bar{S}-\bar{P}=4.2''$ |
|                                    | 6  | 01   | 02 |   |         |         |        | 1.4    |        | 红山 $\bar{S}-\bar{P}=7.6''$ |
|                                    | 8  | 10   | 12 |   |         |         |        | 1.1    |        | 红山 $\bar{S}-\bar{P}=2.4''$ |
|                                    | 12 | 13   | 59 |   | 37°29'  | 114°57' | 30     | 2.3    | I      |                            |
|                                    | 12 | 14   | 32 |   | 37°33'  | 115°05' | 18     | 0.9    | I      |                            |
|                                    |    | 17   | 57 |   | 37°29'  | 115°03' | 25     | 2.4    | I      |                            |
|                                    | 19 | 23   | 16 |   |         |         |        | 1.9    |        | 红山 $\bar{S}-\bar{P}=4.0''$ |
|                                    | 27 | 03   | 14 |   | 37°21'  | 114°58' | 11     | 1.3    | III    |                            |
|                                    |    | 08   | 35 |   |         |         |        | 1.3    |        | 红山 $\bar{S}-\bar{P}=2.5''$ |
| 12                                 | 1  | 00   | 14 |   | 37°47'  | 115°19' |        | 2.8    |        |                            |
|                                    |    | 09   | 50 |   | 37°47'  | 115°19' |        | 1.6    |        |                            |

| 月  | 日  | 发震时刻 |    |   | 震 中 位 置 |         | 深<br>度 | 震<br>级 | 精<br>度 | 备 注                        |
|----|----|------|----|---|---------|---------|--------|--------|--------|----------------------------|
|    |    | 时    | 分  | 秒 | 北 纬     | 东 经     |        |        |        |                            |
|    | 3  | 14   | 52 |   |         |         |        | 1.2    |        | 红山 $\bar{S}-\bar{P}=4.0''$ |
|    | 9  | 19   | 25 |   |         |         |        | 1.1    |        | 红山 $\bar{S}-\bar{P}=5.0''$ |
|    | 11 | 19   | 34 |   |         |         |        | 1.3    |        | 红山 $\bar{S}-\bar{P}=2.8''$ |
|    | 12 | 01   | 06 |   |         |         |        | 1.2    |        | 红山 $\bar{S}-\bar{P}=3.0''$ |
|    | 15 | 09   | 10 |   |         |         |        | 1.6    |        | 红山 $\bar{S}-\bar{P}=2.7''$ |
|    |    | 11   | 56 |   |         |         |        | 1.5    |        | 红山 $\bar{S}-\bar{P}=3.7''$ |
| 19 | 02 | 08   |    |   | 37°37'  | 115°03' | 16     | 2.9    | Ⅲ      |                            |
|    |    | 02   | 46 |   |         |         |        | 1.5    |        | 红山 $\bar{S}-\bar{P}=5.0''$ |
|    |    | 03   | 51 |   |         |         |        | 1.0    |        | 红山 $\bar{S}-\bar{P}=5.2''$ |
|    |    | 05   | 08 |   | 37°36'  | 115°05' | 25     | 2.3    | I      |                            |
|    |    | 11   | 40 |   | 37°33'  | 115°07' | 21     | 1.8    | I      |                            |
| 20 | 03 | 35   |    |   | 37°41'  | 115°18' | 25     | 1.7    | I      |                            |
| 22 | 12 | 12   |    |   | 37°25'  | 115°07' | 23     | 1.9    | Ⅲ      |                            |
| 24 | 23 | 56   |    |   | 37°42'  | 115°05' | 18     | 2.6    | Ⅲ      |                            |
| 28 | 09 | 52   |    |   |         |         |        | 1.4    |        | 红山 $\bar{S}-\bar{P}=4.0''$ |
| 30 | 04 | 31   |    |   |         |         |        | 1.4    |        | 红山 $\bar{S}-\bar{P}=9.5''$ |
| 30 | 09 | 54   |    |   | 37°18'  | 114°56' | 28     | 1.7    | Ⅱ      |                            |
| 31 | 11 | 09   |    |   |         |         |        | 1.9    |        | 红山 $\bar{S}-\bar{P}=2.7''$ |

一 九 七 七 年

