

## **OBSERVED NTS WEATHER EXTREMES (1957 - 2003)**

### **Temperature**

|              |       |                   |             |
|--------------|-------|-------------------|-------------|
| NTS Maximum: | 115°F | Areas 5, 25, 22   | July 98, 02 |
| NTS Minimum: | -14°F | Area 6 (UCC)      | Dec. 1967   |
|              | -11°F | Area 12 (Rainier) | Feb. 1989   |

#### **Extreme Ranges**

|                 |              |
|-----------------|--------------|
| Frenchman Flat: | 115°F; -8°F  |
| Yucca Flat:     | 112°F; -14°F |
| Desert Rock     | 115°F; 6°F   |

#### **Extreme Ranges**

|                |             |
|----------------|-------------|
| Jackass Flats: | 115°F; 2°F  |
| Mercury:       | 113°F; 11°F |
| Rainier Mesa:  | 94°F; -11°F |

|                |                                      |               |                |
|----------------|--------------------------------------|---------------|----------------|
| Max T ≥ 100°F: | 52 days (Area 5)                     | Min T ≤ 32°F: | 22 days (MER)  |
| Max T ≥ 90°F:  | 117 days (Area 5)                    | Min T ≤ 32°F: | 155 days (UCC) |
|                | Max T ≤ 32°F: 24 days (Rainier Mesa) |               |                |

### **Precipitation**

Maximum Daily Rainfall: 3.63 inches Mercury 08/18/83

Maximum Annual Rainfall: 26.87 inches Rainier Mesa 1978

Maximum Daily Snowfall: 10 inch UCC 1974; 6 inch DRA, 1987

Maximum Monthly Snowfall: 29.1 inch UCC, 1974

Total Number of Hail Days (UCC): 24 events (1957- June 1978)

Total Number of Hail Days (DRA): 3 events (June 1978-2002)

Maximum Number TRW Days (UCC): 20 days, 1967, (1963-June1978)

Maximum Number TRW Days (DRA): 23 days, 1984, (June1978-2002)

Total Number Ice/Snow Pellets Days (DRA): 11 days (June1978-2002)

Total Number Ice/Snow Pellets Days (UCC): 36 days (1957- June 1978)

Freezing Rain was observed once at DRA; in Feb. 1982

## Wind Speed

|                           |              |                 |
|---------------------------|--------------|-----------------|
| Maximum Wind Gust:        | 91 mph gust, | April 15, 2002  |
| Maximum 5-min Average:    | 60 mph       | April 15, 2002  |
| Duststorm/Sandstorm Days: | DRA: 0       | UCC: 1 (Feb/64) |

## Fog

### Desert Rock (DRA, 1970 through 2002):

Fog is rare at the NTS; however, in January 1995, 12 fog days were observed at DRA. And, in January 1993, there were 8 fog days at DRA. The average number of fog days at DRA, for 1978 through 2002 is 5 days/yr. During the 25-yr record, there have been only 3 fog days that reduced visibility to 1/4 mile or less at DRA.

Fog between April 1 through October 31 is very rare at DRA; having been reported on only 10 days in 25 yrs.

### Yucca Flat (UCC), 1957-1978)

Six fog days, Feb. 1969

Six fog days, Jan. 1974

No fog events have reduced visibility to 1/4 mile or less at UCC.

Average number of fog days at UCC for 1957 to June 1978 is 3 to 4 days/yr.

Fog is rare between May 1 through September 30 having been reported on only 4 days in 16 yrs of continuous observations.

## Cloud-to-Ground (CG) Lightning (within boundary of NTS)

Maximum: 2532 total flashes in 1999 warm season

Minimum: 409 total flashes in 1995 warm season

Maximum Positive: 58 in 1998

Minimum CG flashes occur between 0800 and 0900 PDT

Maximum CG activity tends to occur between 1300 and 1600 PDT

Most active CG Areas are 12, 19 20, and 22.

Average separation distance between successive CG flashes is 3.4 mi

Peak CG flash current detected has been -167,000 amps.

Based on eight warm seasons, the mean annual (warm season) cloud-to-ground flash density for the NTS is 0.35 fl/sq. km. *For safety analyses it is recommended that this flash density be rounded up to 0.40 fl/sq. km to account for limits on detectability.*