2019 ECLIPSES

Climate Data Processing Centre/PMD

There will be Five Eclipses, two Lunar (of the Moon) and three Solar (of the Sun) during the year 2019.

1. Partial Eclipse Of Sun On 06th January, 2019 (Not visible in Pakistan)

This partial solar eclipse is visible from location in north Pacific and northeast Asia, including Beijing, Irkutsk in Russia, Seoul, Taipei and Tokyo.

04-34 PST
06-41 PST
08-49 PST

2. <u>Total Eclipse Of Moon On 21st January, 2019 (Not Visible in Pakistan)</u>

The total phase of this total lunar eclipse will be visible from North and South America and western parts of Europe and Africa. Central and eastern Africa, Europe and Asia will see a partial eclipse of the Moon.

Penumbral Eclipse begins Partial Eclipse begins Total Eclipse begins Greatest Eclipse Total Eclipse ends Partial Eclipse ends Penumbral Eclipse ends 07-36 PST 08-34 PST 09-41 PST 10-12 PST 10-43 PST 11-51 PST 12-48 PST

3. <u>Total Eclipse Of Sun On 02nd And 03rd July, 2019</u> (Not Visible in Pakistan)

This total solar eclipse will be visible from small parts of Chile and Argentina just before sunset. Some regions in the Pacific and in South America, including locations in Ecuador, Brazil, Uruguay, and Paraguay will see a partial solar eclipse.

Penumbral Eclipse begins Partial Eclipse begins Total Eclipse begins Greatest eclipse Total Eclipse ends Partial Eclipse ends Penumbral Eclipse ends 21-55 PST (on 02^{nd} July, 2019) 23-01 PST (on 02^{nd} July, 2019) 23-03 PST (on 02^{nd} July, 2019) 00-23 PST (on 03^{rd} July, 2019) 01-42 PST (on 03^{rd} July, 2019) 01-45 PST (on 03^{rd} July, 2019) 02-51 PST (on 03^{rd} July, 2019)

4. <u>Partial Eclipse Of Moon On 16th And 17th July, 2019</u> (Visible in Pakistan)

It will be visible from Much of Europe, Much of Asia, Australia, Africa, South/East North America, South America, Pacific, Atlantic, Indian Ocean and Antarctica. In most part of Pakistan, all phases are visible.



Penumbral Eclipse begins Partial Eclipse begins Greatest Eclipse Partial Eclipse ends Penumbral Eclipse ends 23-44 PST (on 16th July, 2019) 01-02 PST (on 17th July, 2019) 02-32 PST (on 17th July, 2019) 04-00 PST (on 17th July, 2019) 05-18 PST (on 17th July, 2019)

5. <u>Annular Eclipse Of Sun On 26th December, 2019</u> (Visible in Pakistan)

It will be visible from East in Europe, Much of Asia, North/West Australia, East in Africa, Pacific, Indian Ocean.

Penumbral Eclipse begins	07-30 PST
Partial Eclipse begins	08-34 PST
Total Eclipse begins	08-37 PST
Greatest eclipse	10-18 PST
Total Eclipse ends	11-58 PST
Partial Eclipse ends	12-01 PST
Penumbral Eclipse ends	13-06 PST