## 2016 ECLIPSES

#### **Climate Data Processing Centre/PMD**

There will be four eclipses, two Lunar (of the Moon) and two Solar (of the Sun) during the year 2016.

### 1. Total Eclipse of Sun on 09<sup>th</sup> March 2016 (Not visible in Pakistan)

It will be visible from Asia, Australia, Sumatra, Borneo & Sulawesi.

Eclipse Begin	04 – 19 PST
Partial Eclipse Begins	05 - 16  PST
Total Eclipse Begins	05 - 17  PST
Greatest Eclipse	06 - 58  PST
Total Eclipse Ends	08 - 37  PST
Partial Eclipse Ends	08 - 38  PST
Eclipse Ends	09 - 35  PST

Eclipse Magnitude = 1.0450

# 2. <u>Penumbral Moon Eclipse 23<sup>rd</sup> March, 2016</u> (Partially visible in Pakistan around Moonrise Time)

It will be visible from Asia, Australia & West Americas

Penumbral Eclipse Begins
Greatest Eclipse
Penumbral Eclipse Ends
14 39 PST
16 – 48 PST
18 – 55 PST

Penumbral Magnitude = 0.7747 Umbral Magnitude = - 0.3118

### 3. Annular Eclipse of Sun, 01st September 2016 (Not visible in Pakistan)

It will be visible from Africa, Indian Ocean, Central Africa & Madagascar.

Eclipse Begins	11 – 13 PST
Partial Eclipse Begins	12 - 18  PST
Total Annular Phase Begins	12 - 21  PST
Greatest Eclipse	14 - 08  PST
Total Annular Phase Ends	15 - 53  PST
Partial Eclipse Ends	15 – 56 PST
Eclipse Ends	17 - 01  PST

Eclipse Magnitude = 0.9736

### 4. Penumbral Eclipse of Moon on 16<sup>th</sup> / 17<sup>th</sup> September 2016 (Visible in Pakistan)

twill be visible from Europe, Africa, Asia, Australia & West Pacific.

Eclipse Begins 21 - 55 PST Greatest Eclipse 23 - 55 PST

Eclipse Ends 01 – 54 PST (on 17<sup>th</sup> September)

Penumbral Magnitude = 0.9080 Umbral Magnitude = - 0.0635

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