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Subject: **June 21, 2020 — Annular Solar Eclipse in Pakistan**

In 2020 there will be Six **Eclipses**, four Lunar (of the Moon) and two Solar (of the Sun) during this year. First Solar Eclipses will be on 21st June 2020 which will be visible all most in the whole country. The second Solar Eclipses will be on 14th December 2020 but will not be visible in Pakistan.

On 21st June 2020 a complete Annular (ring) form of solar eclipses be visible in Sakhar (Sindh Province) and its nearby area, where as it will be partial Eclipses in other parts of country.

What is a Solar eclipses? An eclipse of the Sun happens when the Moon moves between the Sun and Earth, blocking out the Sun's rays and casting a shadow on parts of Earth.

Types of Solar Eclipses



There are 4 different types of solar eclipses. How much of the Sun's disk is eclipsed, the eclipse magnitude, depends on which part of the Moon's shadow falls on Earth.

1. **Partial solar eclipses** occur when the Moon only partially obscures the Sun's disk and casts only its lighter outer part of shadow on earth.
2. **Annular solar eclipses** take place when the Moon's disk is not big enough to cover the entire disk of the Sun, and the Sun's outer edges remain visible to form a ring of fire in the sky.
3. **Total solar eclipses** happen when the Moon completely covers the Sun, and it can only take place when the Moon is near **perigee**, the point of the Moon's orbit closest to Earth.
4. **Hybrid Solar Eclipses**, also known as annular-total eclipses, are the rarest type. They occur when the same eclipse changes from an annular to a total solar eclipse, and/or vice versa, along the eclipse's path.

S.No	Major Cities	Coverage (%)	Timings (PST)			Eclipse Type
			Begins	Maximum	Ends	
1	Islamabad	81.99	9:50	11:25	13:06	Partial
2	Lahore	91.19	9:48	11:26	13:10	Partial
3	Karachi	91.53	9:26	10:59	12:46	Partial
4	Peshawar	79.44	9:48	11:21	13:02	Partial
5	Quetta	87.93	9:35	11:06	12:49	Partial
6	Gilgit	74.88	9:56	11:30	13:08	Partial
7	Muzafarabad	79.96	9:52	11:26	13:07	Partial
8	Sukkar	98.78	9:33	11:07	12:54	Partial
9	Gwadar	97.8	9:20	10:48	12:32	Partial

Advisory for lunar eclipses: It is never safe to look directly at the Sun during Solar Eclipse. You can seriously hurt your eyes, and even go blind. When watching a partial eclipse proper eye protection, like eclipse glasses or a Sun filter, is the only safe option. Sunglasses don't work. According to NASA, the following materials should never be used to view a solar eclipse:

- Sunglasses of any kind
- Color film
- Medical X-ray film
- Smoked glass
- Floppy disks

The Sun's UV radiation can burn the eyes leading to permanent damage or even blindness. This can occur even if your eyes are exposed to direct sunlight for just a few seconds.

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