

TABLE 4.3

Future total and annular solar eclipses

Date	Type of eclipse	Location on Earth ●
Sep. 1, 2016	Annular	South Atlantic Ocean, central Africa, Madagascar, Indian Ocean
Feb. 26, 2017	Annular	Southwest Africa, southern tip of South America
Aug. 21, 2017	Total	United States (Oregon to South Carolina) and oceans on either side
July 2, 2019	Total	Southwest South America, Pacific Ocean
Dec. 26, 2019	Annular	Saudi Arabia, southern India, Malaysia
June 21, 2020	Annular	(very short) central Africa, Pakistan, India, China
Dec. 14, 2020	Total	Chile, Argentina, and oceans on either side
June 10, 2021	Annular	Northern Canada, Greenland
Dec. 4, 2021	Total	Only in Antarctica
April 20, 2023	Total O	Mostly Indian Ocean and Pacific Ocean, plus Indonesia
Oct. 14, 2023	Annular	Oregon, Nevada, Utah, New Mexico, Texas, Central America, Colombia, Brazil
April 8, 2024	Total	Northern Mexico, United States (Texas to Maine), southeastern Canada, oceans on either side
Oct. 2, 2024	Annular	Southern Chile, southern Argentina, oceans on either side
Feb. 17, 2026	Annular	Antarctica only
Aug. 12, 2026	Total	Greenland, Iceland, Spain
Feb. 6, 2027	Annular	South Pacific, Argentina, Chile, Uruguay, southern Atlantic Ocean
Aug. 2, 2027	Total	Spain, Morocco, Egypt, Saudi Arabia, Yemen, Arabian Sea
Jan. 26, 2028	Annular	Ecuador, Peru, Brazil, northern Atlantic Ocean, Portugal, Spain
July 22, 2028	Total	Indian Ocean, Australia, New Zealand, southern Pacific Ocean

- Remember that a total or annular eclipse is only visible on a narrow track. The same eclipse will be partial over a much larger area, but partial eclipses are not as spectacular as total ones.
- O This is a so-called hybrid eclipse, which is total in some places and annular in others

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TABLE 4.4

Future total lunar eclipses

Note: Because partial and penumbral lunar eclipses are not that spectacular, we list only the eclipses that become total (when the Moon is completely within the Earth's dark shadow).

Date	Type of eclipse	Location on Earth
Jan. 31, 2018	Total	Asia, Australia, western North America
July 27, 2018	Total	South America, Asia, Africa, Australia, Indian Ocean
Jan. 21, 2019	Total	North America, South America, western Africa, western Europe
May 26, 2021	Total	Eastern Asia, Australia, Pacific Ocean, western North America, western South America
May 16, 2022	Total	North America, South America, Europe, Africa
Nov. 8, 2022	Total	Asia, Australia, Pacific Ocean, North America, South America
March 14, 2025	Total	Pacific Ocean, North America, South America, Atlantic Ocean, western Europe, western Africa
Sep. 7, 2025	Total	Europe, Africa, Asia, Australia, Indian Ocean
March 3, 2026	Total	Eastern Asia, Australia, Pacific Ocean, North America, Central America
June 26, 2029	Total	Eastern North America, South America, Atlantic Ocean, western Europe, western Africa
Dec. 20, 2029	Total	Eastern North America, Eastern South America, Atlantic Ocean, Europe, Africa, Asia