



817 images taken by NASA's Mars Exploration Rover Opportunity created this view. It shows the terrain that surrounded the rover while it was stationary during its most recent Martian winter. What kind of weather does this "Martian" have to endure? Find out at [spaceplace.nasa.gov/planet-weather](http://spaceplace.nasa.gov/planet-weather).

Credit: NASA/JPL-Caltech/Cornell/Arizona State Univ.

# DECEMBER 2014

[spaceplace.nasa.gov](http://spaceplace.nasa.gov)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 <i>On this calendar .../ means spaceplace.nasa.gov/</i>	2	3	4 <b>Pioneer 10 flew past Jupiter in 1973.</b> Play "JunoQuest," about a new mission to Jupiter. <i>.../junoquest</i>	5	6 
7 <b>Galileo spacecraft</b> became first to orbit an outer planet (Jupiter) in 1995. Learn more about Dr. Marc's favorite planet. <i>.../dr-marc-solar-system</i>	8	9	10	11 First recorded sighting of <b>Aurora Borealis</b> , from New England in 1719. Learn about an especially memorable aurora from 1859. <i>.../shields-up</i>	12 <b>Radio signals</b> first transmitted across the Atlantic, 1901. How do radio waves carry messages? <i>.../classroom-activities/#phases</i>	13
14  <b>Geminids meteor shower</b> at maximum early this morning. What causes a meteor shower? <i>.../meteor-shower</i>	15	16	17 <b>First powered flight by the Wright Brothers in 1903.</b> Did their invention just come out of the blue? <i>.../classroom-activities/#history</i>	18	19 <b>Apollo 17</b> , the last of the Apollo Moon landing missions, returned to Earth, 1972. Did they find water ice on the Moon? <i>.../i-see-ice</i>	20
21  <b>Winter Solstice (first day of winter).</b> What causes the seasons, anyway? <i>.../seasons</i>	22	23	24	25 <b>Christmas Day.</b> If you get an iPad or iPhone for Christmas, we have some more gifts for you. <i>.../ios</i>	26	27
28  28	29	30	31 <i>Time</i> magazine named <b>Albert Einstein "Person of the Century,"</b> 1999. Einstein's theories predict gravitational waves. Huh? <i>.../ligo-g-waves</i>			