

January 2021	SUN	MON	TUE	WED	THU	FRI	SAT
	27	28	29	30	31	1	2
Geographic South Pole							
Credit: Yuya Makino, IceCube/NSF							
	3	4	5	6	7	8	9
The South Pole generally refers to the geographic location of the southernmost point on the surface of the Earth that							
intersects its axis of rotation.	10	11	12	13	14	15	16
The location shifts each year due to movement of the polar ice sheet. A sign and a decorative marker—a new one each year—identify the anat							
identify the spot.	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31	1	2	3	4	5	6
ISP SOUTH POLE NEUTRING OBSERVATORY							



February 2021	SUN	MON	TUE	WED	тни	FRI	SAT
	31	1	2	3	4	5	6
South Pole Telescopes							
Credit: Yuya Makino, IceCube/NSF							
	7	8	9	10	11	12	13
Under clear skies, you can see for miles at the South Pole. The Dark Sector, named for the absence of electromagnetic radiation							
that could interfere with the telescopes, houses the South Pole Telescope, the Bicep and Keck arrays, the MAPO (Martin A. Pomerantz Observatory) facility, and the IceCube Laboratory.	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	1	2	3	4	5	6
	7	8	9	10	11	12	13
ISE SOUTH POLE NEUTRING OBSERVATORY							



March 2021	SUN	MON	TUE	WED	THU	FRI	SAT
	28	1	2	3	4	5	6
Snow Vehicle							
Credit: Yuya Makino, IceCube/NSF							
	7	8	9	10	11	12	13
When workers at the Pole need to cover a lot of ground, as they do when taking snow depth measurements out in the field, for							
example, they travel by vehicle—a snow vehicle, that is.	14	15	16	17	18	19	20
There are various types of vehicles for transport over snow at the South Pole, including smaller snowmobiles and larger							
tracked vehicles that hold several people.	21	22	23	24	25	26	27
	28	29	30	31	1	2	3
	4	5	6	7	8	9	10
SEP SOUTH POLE NEUTRING DISSERVATORY							



April 2021	SUN	MON	TUE	WED	тни	FRI	SAT
	28	29	30	31	1	2	3
The IceCube Laboratory							
Credit: Yuya Makino, IceCube/NSF		_		_			
	4	5	6	7	8	9	10
Two IceCube personnel, called "winterovers," are stationed year-round at the South Pole.							
Here the winterovers take a quick break for a self-portrait in front of the IceCube Lab as twilight begins to settle over the South Pole.	11	12	13	14	15	16	17
-	18	19	20	21	22	23	24
-	25	26	27	28	29	30	1
	2	3	4	5	6	7	8
ISE SOUTH POLE NEUTRING DESERVATORY							



May 2021	SUN	MON	TUE	WED	THU	FRI	SAT
	25	26	27	28	29	30	1
Sunset and Twilight							
Credit: Kathrin Mallot, IceCube/NSF	2	3	4	5	6	7	8
The sun sets once per year at the South Pole, at the end of March. But even after the sun falls below the horizon, light lingers in							
the atmosphere. This twilight period can last for weeks, with the sky taking on amazing colors depending on which direction you're facing.	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
u.	30	31	1	2	3	4	5
ICECUBE SOUTH POLE NEUTRING OBSERVATORY							
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June 2021	SUN	MON	TUE	WED	тни	FRI	SAT
	30	31	1	2	3	4	5
Aurora Australis							
Credit: Yuya Makino, IceCube/NSF							
One of the best parts of being at the South Pole all winter is being able to see the aurora australis, also known as the Southern	6	7	8	9	10	11	12
Lights. Auroras occur when charged particles from the sun interact with gases in Earth's atmosphere: oxygen emits green and red light while nitrogen creates the blue and purple glow. Auroras are usually only visible at high latitudes, like the north or south	13	14	15	16	17	18	19
polar regions.	20	21	22	23	24	25	26
	27	28	29	30	1	2	3
NSE SOUTH POLE NEUTRING DISSERVATORY	4	5	6	7	8	9	10



July 2021	SUN	MON	TUE	WED	THU	FRI	SAT
	27	28	29	30	1	2	3
Auroras and Stars over the ICL							
Credit: Yuya Makino, IceCube/NSF							
	4	5	6	7	8	9	10
The best of the South Pole winter in one stunning shot: auroras, the Milky Way, and the IceCube Laboratory.							
	11	12	13	14	15	16	17
_							
	18	19	20	21	22	23	24
_	25	26	27	28	29	30	31
-							
ICECUBE SQUAR BOLE NELIZEDING DESERVATION	1	2	3	4	5	6	7



August 2021	SUN	MON	TUE	WED	тни	FRI	SAT
Sunrise Over the Station	1	2	3	4	5	6	7
Credit: Kathrin Mallot, IceCube/NSF While the sun doesn't officially appear on	8	9	10	11	12	13	14
the horizon until September, winterovers start seeing hints of it in August. On the right is the Amundsen-Scott South Pole Station, which houses up to 150 people in the summer and about 45 in the winter as well as a gymnasium, music room, galley,	15	16	17	18	19	20	21
greenhouse, and more.	22	23	24	25	26	27	28
-	29	30	31	1	2	3	4
NSF SOUTH POLE NEUTRING OBSERVATORY	5	6	7	8	9	10	11



September 2021	SUN	MON	TUE	WED	THU	FRI	SAT
	29	30	31	1	2	3	4
The IceAct Telescope							
Credit: Kathrin Mallot, IceCube/NSF							
	5	6	7	8	9	10	11
The roof of the IceCube Laboratory is home to a prototype air Cherenkov telescope, "IceAct." This small and cost-effective							
telescope is a candidate instrument for a future extension of IceCube.	12	13	14	15	16	17	18
IceAct uses a specialized camera to detect Cherenkov light: radiation that is							
emitted when high-energy particles in the atmosphere travel faster than the speed of light in air.	19	20	21	22	23	24	25
	26	27	28	29	30	1	2
	3	4	5	6	7	8	9
ISE SOUTH POLE NEUTRING DISSERVATORY							



October 2021	SUN	MON	TUE	WED	тни	FRI	SAT
	26	27	28	29	30	1	2
The Mpemba Effect							
Credit: Benjamin Eberhardt, IceCube/NSF	3	4	5	6	7	8	9
	5	7	3		,		3
Sounds crazy, but it's true: Hot water freezes faster than cold water!							
This counterintuitive effect was named after Tanzanian schoolboy Erasto Bartholomeo Mpemba (born 1950) who discovered it in 1963. IceCube's winterovers demonstrated the effect by tossing hot water into the air under a sunny sky at the South Pole.	10	11	12	13	14	15	16
under a sunny sky at the south Pole.	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
ICECUBE SOUTH POLE NEUTRING DISSERVATORY	31	1	2	3	4	5	6



November 2021	SUN	MON	TUE	WED	THU	FRI	SAT
	31	1	2	3	4	5	6
Sastrugi							
Credit: Kathrin Mallot, IceCube/NSF							
	7	8	9	10	11	12	13
This gravity-defying snow formation is an example of "sastrugi": wavelike ridges of hard snow formed by the wind.							
They look somewhat like small sand dunes but aren't as easily shaped, and they are deceptively sturdy. Winterovers report occasionally tripping over them as they walk around at the South Pole.	14	15	16	17	18	19	20
walk around at the South Pole.	21	22	23	24	25	26	27
	28	29	30	1	2	3	4
ICECUBE SOUTH PILE NEUTRING ORSERVATION	5	6	7	8	9	10	11



December 2021	SUN	MON	TUE	WED	THU	FRI	SAT
	28	29	30	1	2	3	4
Summer Crew							
Credit: John Hardin, IceCube/NSF							
	5	6	7	8	9	10	11
Summer at the South Pole is the time to get work done! Dozens of people fly in and out of the Pole between November and February							
to perform maintenance on IceCube and other experiments.	12	13	14	15	16	17	18
The most common form of transportation is the LC-130 airplane, which takes about three hours to fly from McMurdo Station on							
Antarctica's coast to the South Pole.	19	20	21	22	23	24	25
	26	27	28	29	30	31	1
	2	3	4	5	6	7	8
NSF SOUTH POLE NEUTRING OBSERVATORY							