

Table 1. 2015 Site Specifications.

National Park Unit	Site Name	State	NPS Abbr.	CASTNET Abbr.	AQS ID Number	Latitude (degrees north)	Longitude (degrees west)	Elev. (m)	O ₃ Years ^a	SO ₂	CO	NO _x	PM	WS/WD	TMP	RH	RNF	SOL	Filter Pack ^b
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)																			
Big Bend	K-Bar Ranch Road	TX	BIBE-KB	BBE401	48-043-0101	29.3022	103.1772	1052	26	---	---	---	---	X	X	X	X	X	X
Canyonlands	Island in the Sky	UT	CANY-IS	CAN407	49-037-0101	38.4586	109.8211	1809	24	---	---	---	---	X	X	X	X	X	X
<u>Carlsbad Caverns</u>	Maintenance Area	NM	CAVE-MA	---	35-015-3001	32.1792	104.4417	1310	---	---	---	---	---	---	---	---	---	---	---
Chiricahua	Entrance Station	AZ	CHIR-ES	CHA467	04-003-8001	32.0092	109.3892	1570	25	---	---	---	---	X	X	X	X	X	X
Craters of the Moon	Visitor Center	ID	CRMO-VC	---	16-023-0101	43.4606	113.5622	1815	24	---	---	---	---	X	X	---	---	---	---
Death Valley	Park Village	CA	DEVA-PV	---	06-027-0101	36.5092	116.8481	125	23	---	---	---	---	X	X	---	---	---	---
Denali	Headquarters	AK	DENA-HQ	DEN417	02-068-0003	63.7258	148.9633	661	29	---	---	---	---	X	X	---	---	---	X
Dinosaur	West Entrance Housing	UT	DINO-WE	DIN431	49-047-1002	40.4372	109.3047	1463	15	---	---	---	---	X	X	---	---	---	---
Everglades	Beard Center	FL	EVER-BC	EVE419	12-086-0030	25.3911	80.6806	2	---	---	---	---	---	X	X	X	X	X	X
<u>Fort Donelson</u>	Graves' Battery	TN	FODO-GB	---	---	36.4817	87.8569	158	1	---	---	---	---	X	X	X	---	---	---
Fort Laramie	North Boundary	WY	FOLA-NB	---	56-015-0004	42.2092	104.5486	1298	---	---	---	---	X	X	X	---	---	---	---
Glacier	West Glacier Horse Stables	MT	GLAC-WG	GLR468	30-029-8001	48.5103	113.9956	976	24	---	---	---	---	X	X	---	---	---	X
Great Basin	Maintenance Yard	NV	GRBA-MY	GRB411	32-033-0101	39.0053	114.2158	2060	23	---	---	---	---	X	X	X	X	X	X
Grand Canyon	The Abyss	AZ	GRCA-AS	GRC474	04-005-8001	36.0597	112.1822	2073	23	---	---	---	---	X	X	X	X	X	X
Great Smoky Mountains	Clingmans Dome	TN	GRSM-CD	---	47-155-0102	35.5619	83.4981	2021	23	---	---	---	---	X	---	X	X	X	---
Great Smoky Mountains	Cove Mountain	TN	GRSM-CM	---	47-155-0101	35.6967	83.6086	1243	28	---	---	---	---	X	X	X	X	X	---
Great Smoky Mountains	Look Rock NCore	TN	GRSM-LN	GRS420	47-009-0101	---	---	---	---	X	---	---	---	---	---	---	---	---	---
Great Smoky Mountains	Look Rock	TN	GRSM-LR	GRS420	47-009-0101	35.6331	83.9422	793	28	X	---	---	---	X	X	X	X	X	X
Grand Teton	Science School	WY	GRTE-SS	---	56-039-0008	43.6708	110.5994	2105	5	---	---	---	---	X	X	X	X	X	---
Hawaii Volcanoes	Observatory / Jaggar Museum	HI	HAVO-OB	---	15-001-0007	19.4308	155.2578	1215	---	X	---	---	X	X	X	X	X	X	---
Hawaii Volcanoes	Visitor Center	HI	HAVO-VC	---	15-001-0005	19.4308	155.2578	1215	---	X	---	---	---	X	X	X	X	X	---
Joshua Tree	Black Rock	CA	JOTR-BR	JOT403	06-071-9002	34.0714	116.3906	1244	23	---	---	---	---	X	X	X	X	X	X
Joshua Tree	Cottonwood Canyon	CA	JOTR-CC	---	06-065-0008	33.7411	115.8206	984	11	---	---	---	---	X	X	X	X	X	---
<u>Joshua Tree</u>	Pinto Wells	CA	JOTR-PW	---	06-065-1004	33.9397	115.4108	326	10	---	---	---	---	X	X	X	---	---	X
<u>Kings Mountain</u>	Brown's Mountain	SC	KIMO-BM	---	45-021-0003	35.1314	81.405	340	5	---	---	---	---	X	X	X	---	---	---
Lassen Volcanic	Manzanita Lake Fire Station	CA	LAVO-ML	LAV410	06-089-3003	40.5403	121.5764	1756	29	---	---	---	---	X	X	X	X	X	X
Mammoth Cave	Houchin Meadow	KY	MACA-HM	MAC426	21-061-0501	37.1864	86.0411	258	---	X	X	X	---	X	X	X	X	X	X
Mesa Verde	Resource Management Area	CO	MEVE-RM	MEV405	08-083-0101	37.1983	108.4903	2165	23	---	---	---	---	X	X	X	X	X	X
Mindoka	Maintenance Building	ID	MIIN-MB	---	16-053-0003	42.68	114.2525	1223	---	---	---	---	---	X	X	X	---	---	---
<u>Mojave</u>	Kelso Mountains	CA	MOJA-KM	---	06-071-1001	35.1019	115.7767	1212	15	---	---	---	---	X	X	X	X	X	---

Table 1. 2015 Site Specifications (continued).

National Park Unit	Site Name	State	NPS Abbr.	CASTNet Abbr.	AQS ID Number	Latitude (degrees north)	Longitude (degrees west)	Elev. (m)	O ₃ Years ^a	SO ₂	CO	NO _x	PM	WS/WD	TMP	RH	RNF	SOL	Filter Pack ^b
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)																			
Petrified Forest	South Entrance	AZ	PEFO-SE	PET427	04-017-0119	34.8225	109.8919	1723	14	---	---	---	---	X	X	---	---	X	X
Pinnacles	SW of East Entrance Station	CA	PINN-ES	PIN414	06-069-0003	36.485	121.1556	335	29	---	---	---	---	X	X	X	X	X	X
Rocky Mountain	Long's Peak	CO	ROMO-LP	ROM406	08-069-0007	40.2778	105.5453	2743	32	---	---	---	---	X	X	X	X	X	X
Sequoia and Kings Canyon	Ash Mountain	CA	SEKI-AS	SEK430	06-107-0009	36.4894	118.8292	457	17	---	---	---	X	X	X	X	X	X	X
Sequoia and Kings Canyon	Lower Kaweah	CA	SEKI-LK	---	06-107-0006	36.5658	118.7772	1890	32	---	---	---	---	X	X	X	X	X	---
Shenandoah	Big Meadows	VA	SHEN-BM	SHN418	51-113-0003	38.5231	78.4347	1072	33	---	---	---	X	X	X	X	X	X	X
<u>Shiloh</u>	Russian Tenant Field	TN	SHIL-RT	---	---	35.1572	88.3394	---	3	---	---	---	---	X	X	X	---	---	---
Voyageurs	Sullivan Bay	MN	VOYA-SB	VOY413	27-137-0034	48.4128	92.8292	429	20	---	---	---	---	X	X	X	X	X	X
Yellowstone	Old Faithful Snow Lodge	WY	YELL-OS	---	56-039-1013	44.3731	110.8308	2230	---	---	X	---	X	X	X	X	---	---	---
Yellowstone	Water Tank	WY	YELL-WT	YEL408	56-039-1011	44.5597	110.4006	2400	20	---	---	---	---	X	X	X	X	X	X
Yosemite	Turtleback Dome	CA	YOSE-TD	YOS404	06-043-0003	37.7133	119.7061	1605	23	---	---	---	---	X	X	X	X	X	X
Zion	Dalton's Wash	UT	ZION-DW	---	49-053-0130	37.1983	113.1506	1213	12	---	---	---	---	X	X	---	---	---	X
# active park units: 34 # active park sites: 42																			
Sites operated by the NPS for the Bureau of Land Management																			
Meeker	Plant Science Center	CO	MEEK-PS	---	08-103-0005	40.0039	107.8475	1994	6	---	---	X	X	X	X	X	X	X	---
Rangely	Golf Course	CO	RANG-GC	---	08-103-0006	40.0869	108.7614	1655	6	---	---	X	X	X	---	X	X	X	---
# active units: 2 # active sites: 2																			
Sites operated by the NPS for the U.S. Forest Service																			
Escalante	Visitor Center	UT	ESCA-VC	---	49-017-0004	37.7756	111.6147	1789	5	---	---	---	---	X	X	X	X	X	---
Walden	Chandler Ranch	CO	WALD-CR	---	08-057-0003	40.8822	106.3061	2417	5	---	---	X	---	X	X	X	---	---	---
# active units: 2 # active sites: 2																			
Sites operated by cooperating state agencies																			
Acadia	Cadillac Mountain	ME	ACAD-CM	---	23-009-0102	44.4083	68.2461	37	21	---	---	---	---	X	X	X	---	---	---
Acadia	McFarland Hill	ME	ACAD-MH	ACA416	23-009-0103	44.3769	68.2608	158	18	---	---	---	---	X	X	X	X	X	X
Badlands	Visitor Center	SD	BADL-VC	---	46-071-0001	43.7436	101.9414	739	12	X	---	---	X	---	---	---	---	---	---
Cape Cod	Cape Cod	MA	CACO-XX	---	25-001-0002	41.9758	70.0247	41	29	---	---	---	---	X	X	X	---	---	---
Chamizal	Chamizal	TX	CHAM-XX	---	48-141-0044	31.7656	106.455	1128	24	---	---	---	---	X	X	X	---	---	---

Table 1. 2015 Site specifications (continued).

National Park Unit	Site Name	State	NPS Abbr.	CASTNet Abbr.	AQS ID Number	Latitude (degrees north)	Longitude (degrees west)	Elev. (m)	O ₃ Years ^a	SO ₂	CO	NO _x	PM	WS/WD	TMP	RH	RNF	SOL	Filter Pack ^b
<i>Congaree</i>	Congaree Bluff	SC	COSW-BL	---	45-079-0021	33.8147	80.7811	34	16	X	---	---	---	---	---	---	---	---	---
<i>Cowpens</i>	State Monitor	SC	COWP-SM	---	45-021-0002	35.1303	81.8164	296	28	---	---	---	---	---	---	---	---	---	---
<i>Everglades</i>	Cutler Road	FL	EVER-CR	---	12-086-0029	25.5861	80.3269	4	31	---	---	---	---	---	---	---	---	---	---
<i>Great Smoky Mountains</i>	Cades Cove	TN	GRSM-CC	---	47-009-0102	35.6042	83.7831	564	23	---	---	---	---	X	X	X	X	X	X
<i>Great Smoky Mountains</i>	Purchase Knob	NC	GRSM-PK	---	37-087-0036	35.59	83.0775	1500	---	---	---	---	---	---	---	---	---	---	---
<i>Indiana Dunes</i>	Ammunition Bunker	IN	INDU-AB	---	18-089-0022	41.7169	86.9075	187	23	X	---	---	---	X	X	X	---	X	---
<i>Mount Rainier</i>	Jackson Visitor's Center	WA	MORA-JV	---	53-053-0012	46.7853	121.7378	1615	18	---	---	---	---	---	---	---	---	---	---
<i>Saguaro</i>	East	AZ	SAGU-EA	---	04-019-0021	32.1744	110.7364	938	---	---	---	---	---	X	---	---	---	---	---
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Cntr	ND	THRO-VC	THR422	38-007-0002	46.8947	103.3778	850	18	X	---	---	X	X	X	X	X	X	X
<i>Wind Cave</i>	Visitor Center	SD	WICA-VC	WNC429	46-033-0132	43.5578	103.4839	1292	12	---	---	---	---	X	X	X	X	X	X
<i>Yellowstone</i>	West Yellowstone	MT	YELL-WS	---	30-031-0017	44.6569	111.0894	2030	---	---	X	X	X	X	X	X	---	---	---
<i>Yosemite</i>	Village	CA	YOSE-VI	---	06-043-1001	37.7458	119.6028	1216	---	---	---	---	X	---	---	---	---	---	---
# active park units: 15 # active park sites: 17																			

^a The values in this column represent the number of years an ozone analyzer has been operational at the site.

^b A filter pack is a part of the CASTNET network and is used to measure dry deposition using the "inferential method." This method combines air quality concentration data with meteorological measurements and land use functions to compute deposition velocities. Ambient air is drawn across the filter at either 3.0 or 1.5 liters per minute. The filter is then analyzed in a lab to yield weekly average concentrations of particulate sulfate (SO₄²⁻), particulate nitrate (NO₃⁻), particulate ammonium (NH₄⁺), sulfur dioxide (SO₂), and nitric acid (HNO₃). In some cases, the positive ions Na⁺, K⁺, Ca²⁺, and Mg²⁺ are also measured from the filter samples.

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service

italics = site operated by a state agency

underline = site operated by the National Park Service, but consisting of non-EPA certified portable instrumentation

Parameter key:

O₃ = ozone (ppb)

SO₂ = sulfur dioxide (ppb)

CO = carbon monoxide (ppm)

NO_x = oxides of nitrogen (ppb)

PM = particulate matter (µg/m³)

WS = wind speed (m/s)

WD = wind direction (degrees)

TMP = ambient temperature (degrees C)

RH = relative humidity (%)

RNF = precipitation (mm/hr)

SOL = solar radiation (watts/m²)

Note: Dashed lines indicate parameter not measured at that site.

Table 2. 2015 Summary of 8-hour average ozone concentrations (ppb).

National Park Unit	Site Name	Valid Number of Days	1 st Highest	2 nd Highest	3 rd Highest	4 th Highest ^a	5 th Highest	# Days with 8-Hour Average O ₃ Values ≥76 ppb ^a
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)								
Big Bend	K-Bar Ranch Road	345	66	66	63	63	62	0
Canyonlands	Island in the Sky	357	72	66	65	65	65	0
Chiricahua	Entrance Station	363	67	66	65	65	65	0
Craters of the Moon	Visitor Center	355	64	63	62	61	60	0
Death Valley	Park Village	352	73	72	71	71	70	0
Denali	Headquarters	358	59	58	56	54	53	0
Dinosaur	West Entrance Housing	323	74	72	69	67	67	0
Glacier	West Glacier Horse Stables	351	63	61	59	57	56	0
Grand Canyon	The Abyss	360	73	71	70	70	70	0
Grand Teton	Science School	357	61	61	60	59	59	0
Great Basin	Maintenance Yard	347	75	72	67	66	65	0
Great Smoky Mountains	Clingmans Dome	166	74	67	65	65	65	0
Great Smoky Mountains	Cove Mountain	363	68	68	68	67	67	0
Great Smoky Mountains	Look Rock	355	72	69	68	68	68	0
Joshua Tree	Black Rock	359	91	87	86	85	83	23
Joshua Tree	Cottonwood Canyon	353	85	81	76	74	72	3
Lassen Volcanic	Manzanita Lake Fire Station	357	69	68	66	66	66	0
Mammoth Cave	Houchin Meadow	355	67	66	65	63	62	0
Mesa Verde	Resource Management Area	360	68	67	67	66	63	0
Petrified Forest	South Entrance	316	70	63	63	61	61	0
Pinnacles	SW of East Entrance Station	338	68	67	67	66	66	0
Rocky Mountain	Long's Peak	346	74	72	70	69	69	0
Sequoia and Kings Canyon	Ash Mountain	348	90	89	88	88	88	52
Sequoia and Kings Canyon	Lower Kaweah	207	86	84	83	83	83	23
Shenandoah	Big Meadows	354	66	65	64	63	63	0
Voyageurs	Sullivan Bay	359	64	62	58	57	56	0
Yellowstone	Water Tank	322	64	63	63	62	62	0
Yosemite	Turtleback Dome	352	83	75	73	73	72	1
Zion	Dalton's Wash	319	73	68	67	66	64	0
Sites operated by the NPS for the Bureau of Land Management								
Meeker	Plant Science Center	359	67	67	64	64	64	0
Rangely	Golf Course	338	70	70	69	66	66	0
Sites operated by the NPS for the U.S. Forest Service								
Escalante	Visitor Center	363	73	71	69	68	67	0
Walden	Chandler Ranch	342	68	65	63	61	60	0
Sites operated by cooperating state agencies								
Acadia	Cadillac Mountain	190	83	80	72	70	69	2
Acadia	McFarland Hill	361	76	69	68	65	65	1
Badlands	Visitor Center	359	59	59	57	57	56	0
Cape Cod	Cape Cod	286	77	76	71	71	67	2
Chamizal	Chamizal	360	76	73	70	70	68	1
Congaree	Congaree Bluff	327	58	56	56	55	55	0
Cowpens	State Monitor	359	66	65	65	65	65	0
Everglades	Cutler Road	327	64	62	61	60	58	0

Table 2. 2015 Summary of 8-hour average ozone concentrations (ppb) (continued).

National Park Unit	Site Name	Valid Number of Days	1 st Highest	2 nd Highest	3 rd Highest	4 th Highest ^a	5 th Highest	# Days with 8-Hour Average O ₃ Values ≥76 ppb ^a
Sites operated by cooperating state agencies								
<i>Great Smoky Mountains</i>	Cades Cove	235	64	60	60	60	59	0
<i>Great Smoky Mountains</i>	Purchase Knob	213	71	70	67	67	67	0
<i>Indiana Dunes</i>	Ammunition Bunker	171	72	67	64	64	63	0
<i>Mount Rainier</i>	Jackson Visitor's Center	321	68	66	63	63	62	0
<i>Saguaro</i>	East	362	71	67	66	66	66	0
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Cntr	364	66	65	65	64	63	0
<i>Wind Cave</i>	Visitor Center	358	62	62	59	59	57	0
Portable ozone monitoring systems (POMS)^b								
<u>Carlsbad Caverns</u>	Maintenance Area	162	68	68	65	65	65	0
<u>Fort Donelson</u>	Graves' Battery	157	55	54	53	53	52	0
<u>Joshua Tree</u>	Pinto Wells	352	84	79	79	77	76	5
<u>Kings Mountain</u>	Brown's Mountain	151	64	60	60	59	59	0
<u>Mojave</u>	Kelso Mountains	154	82	81	80	78	78	8
<u>Shiloh</u>	Russian Tenant Field	177	59	57	57	55	55	0

^a The primary and secondary National Ambient Air Quality Standard for ozone is 0.075 ppm over an 8-hour period. (An exceedance of the standard occurs when an 8-hour average ozone concentration is greater than or equal to 76 ppb. A violation of the standard occurs when the 3-year average of the fourth highest daily maximum 8-hour average ozone concentration equals or exceeds 76 ppb.) Exceedances of the standard are highlighted here in orange or red.

^b The Gaseous Pollutant Monitoring Program Portable Ozone Monitoring Systems (POMS) do not meet EPA standards for regulatory monitoring. However, ozone summary statistics from portable systems can be compared to EPA standards for reference purposes.

Note: The color coding break points follow the color categories used on the EPA's AIRNow Web Site (<http://www.airnow.gov>).

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency
underline = site operated by the National Park Service, but consisting of non-EPA certified portable instrumentation

Bold = Ozone summary statistics for POMS are highlighted bold where exceedances occurred. These sites should be compared to EPA standards for reference purposes only.





Color shading key: 4th highest 8-hour average  = 76 - 104 ppb ozone concentration # days with 8-hour average ≥76 ppb  = 4 - 10 days
 ≥ 105 ppb ozone concentration  > 10 days

Table 3. 2015 Ozone violation summary - primary standard^{a,b}.

National Park Unit	Site Name	2013-2015	2012-2014	2011-2013	2010-2012	2009-2011	2008-2010	2007-2009	2006-2008
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)									
Big Bend	K-Bar Ranch Road	64	65	71	70	69	64	66	66
Canyonlands	Island in the Sky	65	67	69	69	68	69	70	71
Chiricahua	Entrance Station	68	71	73	73	70	68	66	69
Craters of the Moon	Visitor Center	61	62	63	63	61	62	(64)	(67)
Death Valley	Park Village	70	70	72	72	71	72	77	81
Denali	Headquarters	54	54	52	52	53	58	58	58
Dinosaur	West Entrance Housing	81	(84)	---	---	---	---	---	---
Glacier	West Glacier Horse Stables	(54)	53	54	55	55	55	55	56
Grand Canyon	The Abyss	69	70	72	72	69	68	68	70
Grand Teton	Science School	59	62	(60)	(60)	(54)	---	---	---
Great Basin	Maintenance Yard	68	71	74	72	70	69	71	72
Great Smoky Mountains	Clingmans Dome	(65)	(67)	(71)	(75)	(75)	(76)	(79)	(84)
Great Smoky Mountains	Cove Mountain	67	68	72	76	75	76	79	82
Great Smoky Mountains	Look Rock	65	67	74	79	77	77	79	85
Joshua Tree	Black Rock	86	90	90	94	93	98	100	104
Joshua Tree	Cottonwood Canyon	(80)	(81)	(76)	(76)	(78)	(81)	(80)	(79)
Lassen Volcanic	Manzanita Lake Fire Station	66	68	68	67	64	70	74	77
Mammoth Cave	Houchin Meadow	63	69	71	75	70	70	72	74
Mesa Verde	Resource Management Area	66	67	69	68	68	68	69	71
Petrified Forest	South Entrance	66	70	70	70	66	67	(67)	(70)
Pinnacles	SW of East Entrance Station	68	70	70	70	70	76	77	79
Rocky Mountain	Long's Peak	70	74	76	77	74	73	74	76
Sequoia and Kings Canyon	Ash Mountain	89	91	93	95	96	(101)	(103)	(105)
Sequoia and Kings Canyon	Lower Kaweah	(84)	(86)	85	81	79	86	90	96
Shenandoah	Big Meadows	62	65	69	72	71	73	73	75
Voyageurs	Sullivan Bay	57	59	59	63	62	(62)	(61)	(61)
Yellowstone	Water Tank	62	63	65	66	65	64	64	66
Yosemite	Turtleback Dome	74	77	77	78	77	83	86	(88)
Zion	Dalton's Wash	(67)	70	72	73	70	70	70	71
# park units with violations (0.08 ppm standard):								3	4
# sites with violations:								4	5
# park units with violations (0.075 ppm standard):		3	4	4	5	4	5		
# sites with violations:		5	6	6	8	6	9		
Sites operated by the NPS for the Bureau of Land Management									
Meeker	Plant Science Center	63	63	63	64	(64)	(66)	---	---
Rangely	Golf Course	73	74	77	66	(65)	(58)	---	---
# units with violations (0.08 ppm standard):								---	---
# sites with violations:								---	---
# units with violations (0.075 ppm standard):		0	0	1	0	0	0		
# sites with violations:		0	0	1	0	0	0		
Sites operated by the NPS for the U.S. Forest Service									
Escalante	Visitor Center	65	65	(67)	(68)	---	---	---	---
Walden	Chandler Ranch	61	60	(61)	(59)	---	---	---	---
# units with violations (0.08 ppm standard):									
# sites with violations:									
# units with violations (0.075 ppm standard):		0	0	0	0				
# sites with violations:		0	0	0	0				

Table 3. 2015 Ozone violation summary - primary standard^{a,b} (continued).




National Park Unit	Site Name	2013-2015	2012-2014	2011-2013	2010-2012	2009-2011	2008-2010	2007-2009	2006-2008
Sites operated by cooperating state agencies									
<i>Acadia</i>	Cadillac Mountain	67	66	69	72	74	74	78	80
<i>Acadia</i>	McFarland Hill	65	63	65	65	69	69	73	72
<i>Badlands</i>	Visitor Center	58	61	59	58	54	55	57	62
<i>Cape Cod</i>	Cape Cod	(67)	69	72	75	72	74	76	79
<i>Chamizal</i>	Chamizal	68	68	69	70	69	70	71	75
<i>Congaree</i>	Congaree Bluff	55	55	57	61	62	65	67	71
<i>Cowpens</i>	State Monitor	63	65	67	71	66	69	67	74
<i>Everglades</i>	Cutler Road	63	63	64	63	63	67	69	72
<i>Great Smoky Mountains</i>	Cades Cove	59	60	63	68	68	69	69	72
<i>Great Smoky Mountains</i>	Purchase Knob	65	66	67	69	67	72	74	77
<i>Indiana Dunes</i>	Ammunition Bunker	65	69	69	69	62	61	(68)	73
<i>Mount Rainier</i>	Jackson Visitor's Center	(60)	60	58	56	54	(52)	(56)	(59)
<i>Saguaro</i>	East	69	71	73	71	70	69	71	74
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Cntr	58	56	57	58	58	59	60	63
<i>Wind Cave</i>	Visitor Center	59	62	63	62	60	(59)	63	67
# park units with violations (0.08 ppm standard):							0	0	0
# sites with violations:							0	0	0
# park units with violations (0.075 ppm standard):							0	0	0
# sites with violations:							0	0	0

^a The new primary and secondary National Ambient Air Quality Standard for ozone is 0.075 ppm over an 8-hour period. (An exceedance of the standard occurs when an 8-hour average ozone concentration is greater than or equal to 76 ppb. A violation of the standard occurs when the 3-year average of the fourth highest daily maximum 8-hour average ozone concentration equals or exceeds 76 ppb.) For reference, values that would violate the new standard are outlined with a black box. The first 3-year period that the new standard will apply to is 2008-2010.

^b The old primary and secondary National Ambient Air Quality Standard for ozone is 0.08 ppm over an 8-hour period. (An exceedance of the standard occurs when an 8-hour average ozone concentration is greater than or equal to 85 ppb. A violation of the standard occurs when the 3-year average of the fourth highest daily maximum 8-hour average ozone concentration equals or exceeds 85 ppb.) Violations of the old standard are highlighted here in orange and red. The old standard applies to all 3-year periods prior to 2008-2010.

Note: The color coding break points follow the color categories used on the EPA's AIRNow Web Site (<http://www.airnow.gov>).

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency
underline = site operated by the National Park Service, but consisting of non-EPA certified portable instrumentation

Color shading key: 4th highest 8-hour average
 = 85 - 104 ppb ozone concentration
 ≥ 105 ppb ozone concentration
 ≥ 76 ppb ozone concentration

Note: A number in parenthesis () indicates that data completeness was not met. The primary standard requires 90 percent data completeness, on average, during the 3-year period, with no single year within the period having less than 75 percent data completeness. This data completeness requirement would have to be satisfied in order to determine that the standard has been met at a monitoring site. However, calendar years with less than 75 percent data completeness are included in the computation if the annual fourth-highest daily maximum 8-hour concentration is greater than the level of the standard. A site could be found not to have met the standard with less than complete data.

Dashed lines represent no data available at that site.

Table 4. 2015 Summary of indices for resource injury (SUM06 and W126).

National Park Unit	Site Name	O ₃ % Valid	SUM06 ^a (ppm-hr)	W126 ^b (ppm-hr)	Period	NPS W126 ^c (ppm-hr)	NPS W126 Period
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)							
Big Bend	K-Bar Ranch Road	97.0	4.2	5.2	March-May	5.7	March-May
Canyonlands	Island in the Sky	99.0	9.5	10.3	April-June	10.7	April-June
Chiricahua	Entrance Station	100.0	17.7	12.7	April-June	13.2	April-June
Craters of the Moon	Visitor Center	99.0	3.9	6.4	April-June	6.9	April-June
Death Valley	Park Village	98.0	28.8	18.2	April-June	18.7	April-June
Denali	Headquarters	99.0	0.2	2.7	March-May	3.3	March-May
Dinosaur	West Entrance Housing	94.0	11.6	10.6	April-June	11.1	April-June
Glacier	West Glacier Horse Stables	99.0	1.2	3.1	April-June	3.6	April-June
Great Basin	Maintenance Yard	98.0	12.6	10.4	May-July	10.9	May-July
Grand Canyon	The Abyss	99.0	12.7	12.2	April-June	12.7	April-June
Great Smoky Mountains	Clingmans Dome	48.0	4.0	4.1	May-July	4.5	May-July
Great Smoky Mountains	Cove Mountain	100.0	6.2	6.3	April-June	6.8	April-June
Great Smoky Mountains	Look Rock	99.0	7.4	5.9	April-June	6.4	April-June
Grand Teton	Science School	99.0	2.3	4.7	April-June	5.2	April-June
Joshua Tree	Black Rock	99.0	42.3	28.6	April-June	29.1	April-June
Joshua Tree	Cottonwood Canyon	98.0	29.1	19.3	April-June	19.7	April-June
Lassen Volcanic	Manzanita Lake Fire Station	99.0	9.2	8.2	April-June	8.7	April-June
Mammoth Cave	Houchin Meadow	99.0	5.0	4.9	April-June	5.4	April-June
Mesa Verde	Resource Management Area	100.0	9.7	11.0	April-June	11.4	April-June
Petrified Forest	South Entrance	95.0	8.9	10.1	April-June	10.6	April-June
Pinnacles	SW of East Entrance Station	98.0	9.2	7.5	April-June	8.0	April-June
Rocky Mountain	Long's Peak	96.0	13.7	11.0	June-August	11.5	June-August
Sequoia and Kings Canyon	Ash Mountain	96.0	56.4	40.6	June-August	41.1	June-August
Sequoia and Kings Canyon	Lower Kaweah	97.0	40.7	28.7	June-August	29.2	June-August
Shenandoah	Big Meadows	99.0	4.4	6.4	March-May	6.9	March-May
Voyageurs	Sullivan Bay	99.0	1.1	2.5	March-May	3.0	March-May
Yellowstone	Water Tank	91.0	2.3	5.4	March-May	6.8	April-June
Yosemite	Turtleback Dome	98.0	22.3	14.7	June-August	15.2	June-August
Zion	Dalton's Wash	94.0	6.7	8.0	March-May	12.0	April-June
Sites operated by the NPS for the Bureau of Land Management							
Meeker	Plant Science Center	100.0	5.8	7.4	April-June	7.8	April-June
Rangely	Golf Course	95.0	8.0	9.1	April-June	9.6	April-June
Sites operated by the NPS for the U.S. Forest Service							
Escalante	Visitor Center	99.0	13.3	11.8	April-June	12.3	April-June
Walden	Chandler Ranch	95.0	2.6	4.3	June-August	4.8	June-August
Sites operated by cooperating state agencies							
<i>Acadia</i>	Cadillac Mountain	89.0	3.6	3.6	May-July	4.1	May-July
<i>Acadia</i>	McFarland Hill	99.0	3.0	3.8	March-May	4.3	March-May
<i>Badlands</i>	Visitor Center	99.0	0.4	3.3	May-July	3.8	May-July
<i>Cape Cod</i>	Cape Cod	79.0	6.6	5.4	July-September	5.9	July-September
<i>Chamizal</i>	Chamizal	100.0	10.4	9.6	June-August	9.7	June-August
<i>Congaree</i>	Congaree Bluff	96.0	0.3	2.3	March-May	2.7	March-May
<i>Cowpens</i>	State Monitor	99.0	6.3	5.7	July-September	6.2	July-September
<i>Everglades</i>	Cutler Road	92.0	2.0	1.9	March-May	2.3	March-May

Table 4. 2015 Summary of indices for resource injury (SUM06 and W126) (continued).

National Park Unit	Site Name	O ₃ % Valid	SUM06 ^a (ppm-hr)	W126 ^b (ppm-hr)	Period	NPS W126 ^c (ppm-hr)	NPS126	Period
Sites operated by cooperating state agencies								
<i>Great Smoky Mountains</i>	Cades Cove	97.0	2.5	3.4	April-June	3.8		April-June
<i>Great Smoky Mountains</i>	Purchase Knob	100.0	8.5	7.0	April-June	7.5		April-June
<i>Indiana Dunes</i>	Ammunition Bunker	98.0	4.6	4.0	May-July	4.5		May-July
<i>Mount Rainier</i>	Jackson Visitor's Center	91.0	3.2	3.7	June-August	4.2		June-August
<i>Saguaro</i>	East	99.0	15.4	11.9	April-June	12.3		April-June
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Center	100.0	4.9	6.0	May-July	6.4		May-July
<i>Wind Cave</i>	Visitor Center	99.0	1.0	4.0	June-August	4.5		June-August
Portable ozone monitoring systems (POMS)								
<u>Carlsbad Caverns</u>	Maintenance Area	100.0	4.3	5.7	June-August	6.2		June-August
<u>Fort Donelson</u>	Graves' Battery	81.0	0.2	1.4	July-September	1.8		July-September
<u>Joshua Tree</u>	Pinto Wells	97.0	40.4	24.7	April-June	25.2		April-June
<u>Kings Mountain</u>	Brown's Mountain	97.0	2.1	2.4	July-September	2.8		July-September
<u>Mojave</u>	Kelso Mountains	91.0	38.4	23.4	May-July	23.9		May-July
<u>Shiloh</u>	Russian Tenant Field	97.0	0.8	1.4	May-July	1.8		May-July

^a SUM06 exposure index represents the 0800-2000 hourly ozone concentrations equaling or exceeding 0.06 ppm. The value reported here represents a three-month maximum value during the ozone season. Units are ppm-hr.

^b W126 exposure index represents 0800-2000 hourly ozone concentrations where each concentration is weighted by a function that gives greater emphasis to the higher hourly concentrations while still including the lower ones. The value reported here represents a three-month maximum value during the ozone season. Units are ppm-hr. For more information on the W126 exposure index go to <http://www.nature.nps.gov/air/aqbasics/glossary.cfm>.

^c NPS W126 represents a three-month maximum value during the growing season (March to September) with a monthly completeness criteria of 50%, a three-month completeness criteria of 75%, and a seasonal completeness criteria of 60%.

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
 italics = site operated by a state agency
underline = site operated by the National Park Service, but consisting of non-EPA certified portable instrumentation

Table 5. 2015 Summary of sulfur dioxide data.

National Park Unit	Site Name	Highest Daily Maximum 1-Hour Average Concentration ^a (ppb)					Highest Daily Maximum 3-Hour Average Concentration ^b (ppb)					No. of Days with 3-Hr Maximum \geq 550 ppb
		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	99 th Percentile Value	No. of Days with 1-Hr Average \geq 76 ppb	1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)												
Great Smoky Mountains	Look Rock NCORE	5.1	4.1	3.9	3.8	3.8	0	4.0	3.8	2.6	2.5	0
Hawaii Volcanoes *	Observatory / Jaggar Museum	1779.2	1572.6	1505.7	1377.2	1377.2	114	1227.7	837.2	793.3	774.1	8
Hawaii Volcanoes *	Visitor Center	2102.9	1634.6	1483.9	1459.5	1459.5	85	965.4	935.4	780.6	758.5	11
Mammoth Cave	Houchin Meadow	9.9	7.9	7.7	7.4	7.4	0	7.3	5.9	5.8	5.3	0
Sites operated by cooperating state agencies												
Badlands	Visitor Center	2.2	1.7	1.6	1.6	1.7	0	2.1	2.0	1.8	1.7	0
Congaree	Congaree Bluff	9.5	8.8	7.6	5.8	5.8	0	7.6	6.1	4.7	4.3	0
Indiana Dunes	Ammunition Bunker	40.0	37.9	36.5	35.4	35.4	0	28.7	25.9	22.1	20.4	0
Theodore Roosevelt	Painted Canyon Visitor Ctr	6.8	6.2	5.8	5.8	5.8	0	4.9	3.5	3.4	3.4	0

^a The primary hourly National Ambient Air Quality Standard for sulfur dioxide is a daily maximum 1-hour average of 75 ppb. (An exceedance of the Standard occurs when a daily maximum 1-hour average exceeds 75 ppb. A violation of the Standard occurs when the 3-year average of the 99th percentile of the daily maximum 1-hour average exceeds 75 ppb.)

^b The secondary National Ambient Air Quality Standard for sulfur dioxide is 0.5 ppm over a 3-hour period not to be exceeded more than once per year. (A value greater than 0.5 ppm, 549 ppb, or 1300 $\mu\text{g}/\text{m}^3$ exceeds the standard.) (40 CFR 50.5.)

* This site collected sulfur dioxide data using an instrument or a range that is not an EPA reference method.

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency

Color shading key: > 75 ppb 99th percentile value, or >549 ppb 3-hour average

Table 6. 2015 Summary of carbon monoxide data.

National Park Unit	Site Name	Highest Daily Maximum 1-Hour Average Concentration ^a (ppm)				No. of Days with 1-Hr Average \geq 35 ppm	Highest Daily Maximum 8-Hour Average Concentration ^b (ppm)				No. of Days with 8-Hr Average \geq 9 ppm
		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)											
Great Smoky Mountains	Look Rock NCore	0.3	0.3	0.3	0.3	0	0.3	0.3	0.3	0.3	0
Mammoth Cave	Houchin Meadow	0.3	0.3	0.3	0.3	0	0.3	0.2	0.2	0.2	0
Yellowstone	Old Faithful Snow Lodge	0.9	0.8	0.8	0.7	0	0.4	0.4	0.4	0.4	0
Sites operated by cooperating state agencies											
Yellowstone	West Yellowstone	2.8	2.3	1.5	1.4	0	0.7	0.7	0.6	0.6	0

^a The primary hourly National Ambient Air Quality Standard for carbon monoxide is a daily maximum 1-hour average of 35 ppm. (An exceedance of the Standard occurs when a daily maximum 1-hour average exceeds 35 ppm. A violation of the Standard occurs when a daily maximum 1-hour average exceeds 35 ppm more than once in a calendar year.)

^b The primary National Ambient Air Quality Standard for carbon monoxide is 9 ppm over an 8-hour period. (An exceedance of the Standard occurs when an 8-hour average exceeds 9 ppm. A violation of the Standard occurs when a daily maximum 8-hour average exceeds 9 ppm more than once in a calendar year.) (40 CFR 50.8.)

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency

Color shading key: ■ >35 ppm 1-hour average or >9 ppm 8-hour average

Table 7. 2015 Summary of nitrogen dioxide data.

National Park Unit	Site Name	Highest Daily Maximum 1-Hour Average Concentrations ^{ab} (ppb)						No. of Days with 1-Hour Average \geq 100 ppb	Annual Arithmetic Mean
		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	98 th Percentile Value			
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)									
Great Smoky Mountains	Look Rock NCore	10.2	7.8	7.5	7.5	7.1	0	2	
Mammoth Cave	Houchin Meadow	17.1	15.5	15.2	15.2	14.2	0	3	
Sites operated by the NPS for the Bureau of Land Management									
Meeker	Plant Science Center	5.1	4.9	4.7	4.2	4.0	0	1	
Rangely	Golf Course	20.5	20.0	18.9	17.1	15.9	0	2	
Sites operated by the NPS for the U.S. Forest Service									
Walden	Chandlers Ranch	10.2	10.1	9.3	8.3	6.3	0	1	
Sites operated by cooperating state agencies									
Yellowstone	West Yellowstone	31.0	30.6	30.3	30.0	23.7	0	2	

Table 8. 2015 Summary of oxides of nitrogen data.

National Park Unit	Site Name	Highest Daily Maximum 1-Hour Average Concentrations (ppb)				No. of Days with 1-Hour Average \geq 100 ppb
		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)						
Great Smoky Mountains	Look Rock NCore	10.3	7.9	7.6	7.5	0
Mammoth Cave	Houchin Meadow	23.1	17.1	16.5	15.6	0
Sites operated by the NPS for the Bureau of Land Management						
Meeker	Plant Science Center	10.1	8.3	8.0	7.6	0
Rangely	Golf Course	21.3	20.2	19.8	19.4	0
Sites operated by the NPS for the U.S. Forest Service						
Walden	Chandler Ranch	14.1	13.8	13.7	12.1	0
Sites operated by cooperating state agencies						
Yellowstone	West Yellowstone	166.1	161.1	144.0	125.0	4

Table 9. 2015 Summary of PM_{2.5} data from reference and equivalency methods.

National Park Unit	Site Name	Sampler Type*	% Valid ^a	Annual Arithmetic Mean ^b (µg/m ³)	Highest Daily 24-Hour Average Concentrations ^c (µg/m ³)					
					1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	98 th Percentile Value	No. of Days with 24-Hour Average >35 µg/m ³
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)										
Fort Laramie	North Boundary	BAM	42.9	6.3	50.7	46.5	34.6	30.5	30.5	2
Hawaii Volcanoes	Observatory	SHARP / BAM	47.1	9.0	27.3	26.3	21.4	20.9	20.9	0
Minidoka	Maintenance Building	BAM	68.0	3.0	13.6	12.7	11.4	9.2	13.6	0
Sequoia and Kings Canyon	Ash Mountain	BAM	90.2	5.5	62.1	46.6	46.0	45.8	39.4	7
Shenandoah	Big Meadows	TEOM	88.6	2.7	26.5	23.5	17.8	17.7	13.9	0
Yellowstone	Old Faithful Snow Lodge	BAM	96.0	2.7	53.0	39.6	24.5	23.3	18.7	2
Sites operated by the NPS for the Bureau of Land Management										
Meeker	Plant Science Center	TEOM	99.3	6.0	28.8	23.6	21.3	19.8	16.7	0
Rangely	Golf Course	BAM	95.1	7.5	32.6	27.2	22.4	19.7	15.6	0
Sites operated by cooperating state agencies										
<i>Badlands</i>	Visitor Center	BAM	98.4	4.0	52.0	37.4	33.1	29.5	23.3	2
<i>Indiana Dunes</i>	Ammunition Bunker	BAM	95.6	10.5	50.8	45.6	38.2	29.2	26.5	3
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Ctr	TEOM	98.3	5.0	59.7	46.0	43.7	33.4	29.5	3
<i>Wind Cave</i>	Visitor Center	BAM	98.3	3.2	48.5	42.4	29.7	28.9	21.3	2
<i>Yellowstone</i>	West Entrance	BAM	93.2	1.5	49.1	26.9	26.8	17.0	9.3	1
<i>Yosemite</i>	Village	BAM	79.0	8.5	164.9	108.1	87.8	67.3	26.5	5

^a At sites operated by an agency other than the National Park Service, the primary responsibility for the operation and data reporting of particulate matter belongs to the operating agency.

^b The primary annual National Ambient Air Quality Standard for PM_{2.5} is an annual arithmetic mean of 15.0 µg/m³. (An exceedance of the standard occurs when an annual arithmetic mean of PM_{2.5} concentrations is greater than 15.0 µg/m³. A violation of the standard occurs when the 3-year average of the weighted annual mean PM_{2.5} concentrations is greater than 15.0 µg/m³ (40 CFR 50.7.)

^c The primary daily National Ambient Air Quality Standard for PM_{2.5} is a 24-hour average concentration of 35 µg/m³. (An exceedance of the standard occurs when a 24-hour average PM_{2.5} concentration is greater than 35 µg/m³. A violation of the standard occurs when the 3-year average of the annual 98th percentile of 24-hour PM_{2.5} concentrations is greater than 35 µg/m³.) (40 CFR 50.7.)

* TEOM = tapered element oscillating microbalance
 BAM = beta attenuation monitor
 SHARP = synchronized hybrid ambient real-time particulate monitor

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
 italics = site operated by a state agency

Color shading key: Annual arithmetic mean > 15 µg/m³
 98th percentile value > 35 µg/m³

Table 10. 2015 Summary of PM₁₀ data from reference and equivalency methods.

National Park Unit	Site Name	Sampler Type*	% Valid ^a	Annual Arithmetic Mean ^b (µg/m ³)	Highest Daily 24-Hour Average Concentrations ^c (µg/m ³)				No. of Days with 24-Hour Average >150 µg/m ³
					1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	
Sites operated by cooperating state agencies									
<i>Badlands</i>	Visitor Center	BAM	95.4	9	30	30	30	30	0
<i>Wind Cave</i>	Visitor Center	BAM	98.0	7	20	20	20	20	0

^a At sites operated by an agency other than the National Park Service, the primary responsibility for the operation and data reporting of particulate matter belongs to the operating agency.

^b The primary annual National Ambient Air Quality Standard for PM₁₀ is an annual arithmetic mean of 50 µg/m³. (An exceedance of the standard occurs when an annual arithmetic mean of PM₁₀ concentrations is greater than 50 µg/m³. A violation of the standard occurs when the 3-year average of the weighted annual mean PM₁₀ concentrations is greater than 50 µg/m³ (40 CFR 50.6.)

^c The primary daily National Ambient Air Quality Standard for PM₁₀ is a 24-hour average concentration of 150 µg/m³. (An exceedance of the standard occurs when a 24-hour average PM₁₀ concentration is greater than 150 µg/m³. A violation of the standard occurs when a 24-hour average concentration greater than 150 µg/m³ occurs more than once in a calendar year.) (40 CFR 50.6.)

* TEOM = tapered element oscillating microbalance
BAM = beta attenuation monitor

Color shading key: >50 µg/m³ annual arithmetic mean, >150 µg/m³ 24-hour average

italics = site operated by a state agency

Table 11. 2015 PM₁₀ summary - maximum daily 24-hour average concentration in 2010-2012 (µg/m³)^a.

National Park Unit	Site Name	Sampler Type*	2014	2013	2012
Sites operated by cooperating state agencies					
<i>Badlands</i>	Visitor Center	BAM	30	40	60
<i>Wind Cave</i>	Visitor Center	BAM	20	40	50

^a The primary daily National Ambient Air Quality Standard for PM₁₀ is a 24-hour average concentration of 150 µg/m³. (An exceedance of the standard occurs when a 24-hour average PM₁₀ concentration is greater than 150 µg/m³. A violation of the standard occurs when a 24-hour average concentration greater than 150 µg/m³ occurs more than once in a calendar year.) (40 CFR 50.6.)

* TEOM = tapered element oscillating microbalance
BAM = beta attenuation monitor

Color shading key: > 1 24-hour average concentration >150 µg/m³

italics = site operated by a state agency

Table 12. 2015 Annual summary of selected meteorological data.

National Park Unit	Site Name	Wind Speed (m/s)	Ambient Temperature (degrees C)			Relative Humidity (%)			Precipitation (mm)
		Average	Average	Maximum	Minimum	Average	Maximum	Minimum	Annual Accumulation
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)									
Big Bend	K-Bar Ranch Road	3.7	20.3	40.0	-4.5	48	98	4	259.6
Canyonlands	Island in the Sky	2.7	15.1	36.0	-11.6	45	100	4	378.7
Chiricahua	Entrance Station	3.0	16.3	35.8	-6.6	48	100	7	380.0
Craters of the Moon	Visitor Center	3.1	8.7	38.0	-19.3	---	---	---	---
Denali	Headquarters	1.3	-0.5	28.0	-33.8	70	97	13	391.7
Everglades	Beard Center	2.9	24.3	36.2	2.0	81	100	28	891.6
Fort Laramie	North Boundary	3.0	12.8	37.6	-20.7	57	100	8	---
Glacier	West Glacier Horse Stables	0.8	6.6	37.0	-31.1	---	---	---	---
Grand Canyon	The Abyss	2.7	11.6	32.2	-9.9	46	99	4	518.9
Grand Teton	Science School	2.3	3.1	30.5	-27.5	69	100	12	423.4
Great Basin	Maintenance Yard	2.8	10.1	34.5	-19.1	45	99	3	306.6
Great Smoky Mountains	Clingmans Dome	2.7	11.5	20.6	-4.8	87	100	7	865.9
Great Smoky Mountains	Cove Mountain	4.4	12.4	28.0	-22.1	73	100	7	1138.5
Great Smoky Mountains	Look Rock	2.2	13.6	29.9	-20.1	73	100	12	1470.4
Hawaii Volcanoes	Observatory / Jaggar Museum	4.4	16.8	27.1	8.0	88	100	5	1895.0
Hawaii Volcanoes	Visitor Center	3.3	16.4	25.1	8.3	92	100	8	1883.2
Joshua Tree	Black Rock	3.7	16.8	36.8	-5.0	34	100	3	105.3
Joshua Tree	Cottonwood Canyon	3.4	20.1	39.0	-1.7	31	99	5	67.5
Lassen Volcanic	Manzanita Lake Fire Station	1.4	7.8	31.2	-17.0	63	100	6	767.5
Mammoth Cave	Houchin Meadow	1.8	14.6	32.7	-19.2	72	99	20	1293.3
Mesa Verde	Resource Management Area	2.9	10.6	33.1	-13.1	49	98	8	508.0
Minidoka	Maintenance Building	2.9	-3.4	14.9	-23.9	82	100	23	---
Petrified Forest	South Entrance	3.7	13.2	35.1	-11.8	---	---	---	---
Pinnacles	SW of East Entrance Station	2.2	15.4	42.1	-6.4	61	100	6	208.3
Rocky Mountain	Long's Peak	2.3	5.0	26.0	-24.9	55	100	3	428.4
Sequoia and Kings Canyon	Ash Mountain	2.6	18.1	40.1	-1.8	50	95	8	438.2
Sequoia and Kings Canyon	Lower Kaweah	1.8	14.1	27.7	-5.9	55	98	11	226.2
Shenandoah	Big Meadows	1.9	8.8	26.1	-24.0	76	100	11	1546.2
Voyageurs	Sullivan Bay	2.8	4.9	32.9	-31.7	74	99	15	774.2
Yellowstone	Old Faithful Snow Lodge	1.6	3.1	28.8	-31.1	68	99	12	---
Yellowstone	Water Tank	1.6	2.9	27.5	-28.0	68	100	13	367.9
Yosemite	Turtleback Dome	4.1	12.5	30.9	-8.8	47	100	9	614.5
Zion	Dalton's Wash	4.0	17.4	43.0	-8.2	---	---	---	228.0
Sites operated by the NPS for the Bureau of Land Management									
Meeker	Plant Science Center	3.2	7.6	32.5	-28.3	58	100	8	470.5
Rangely	Golf Course	3.0	9.7	35.5	-26.6	53	100	6	293.2
Sites operated by the NPS for the U.S. Forest Service									
Escalante	Visitor Center	2.9	11.9	34.6	-14.5	44	100	7	307.6
Walden	Chandler Ranch	3.5	3.6	27.7	-36.8	64	100	8	---
Sites operated by cooperating state agencies									
Acadia	Cadillac Mountain	5.8	---	---	---	---	---	---	---
Acadia	McFarland Hill	2.7	6.8	29.1	-25.0	75	100	20	956.5

Table 12. 2015 Annual summary of selected meteorological data (continued).

National Park Unit	Site Name	Wind Speed (m/s)	Ambient Temperature (degrees C)			Relative Humidity (%)			Precipitation (mm)
		Average	Average	Maximum	Minimum	Average	Maximum	Minimum	Annual Accumulation
Sites operated by cooperating state agencies									
<i>Cape Cod</i>	Cape Cod	2.4	10.7	33.9	-17.2	69	91	19	----
<i>Chamizal</i>	Chamizal	3.2	19.6	39.0	-3.6	38	97	4	----
<i>Great Smoky Mountains</i>	Cades Cove	1.2	13.9	33.4	-20.7	81	100	9	1522.2
<i>Indiana Dunes</i>	Ammunition Bunker	4.2	11.3	37.1	-22.2	72	100	12	----
<i>Saguaro</i>	East	---	22.0	41.8	-1.4	39	99	5	----
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Cntr	5.1	7.8	37.8	-26.8	64	99	11	278.0
<i>Wind Cave</i>	Visitor Center	2.8	8.4	35.6	-18.5	54	96	11	70.4
Portable ozone monitoring systems (POMS) (seasonal)									
<u>Carlsbad Caverns</u>	Maintenance Area	4.2	24.6	38.0	5.6	48	100	9	279.2
<u>Fort Donelson</u>	Graves' Battery	0.7	21.8	35.3	-0.3	82	96	24	----
<u>Joshua Tree</u>	Pinto Wells	3.1	23.3	44.8	-7.0	29	99	5	----
<u>Kings Mountain</u>	Brown's Mountain	1.4	24.2	36.7	8.8	69	100	24	163.2
<u>Mojave</u>	Kelso Mountains	3.5	24.0	37.6	4.3	32	100	5	92.1
<u>Shiloh</u>	Russian Tenant Field	0.4	22.0	35.5	0.3	82	100	19	570.0

Note: Dashed lines represent no data available for that particular parameter at that site.

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency
underline = site operated by the National Park Service, but consisting of non-EPA certified portable instrumentation