

A Revised List of Dust Storms on Mars

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A table of dust clouds and storm observed on Mars by ground-based observers and spacecraft missions. List covers 1886 through 2022.

Year	Date Span	Ls Span	Location	Type	Ref
1886	May 21-May 25	117-118	Syrtis Major-Meroe-Boreosyrtis	Regional	45
1873	May 24-25	146-147	Aeria	Dust Cloud	1
1877	Sep 24-oct 10	271-281	Thaumasia	Regional	45
1890	Jul 05-06	183-184	Tempe	Dust Cloud	3
1892	Jul 02-03	207-208	Hellespontus	Dust Cloud	4
1892	Jul 11-13	213-216	Hellespontus-Noachis	Dust Cloud	4
1894	Oct 10-nov 01	297-310	Libya-Isidis	Regional	45
1894	Nov 25-26	322-325	Protei, Argyre	Dust Cloud	8
1900	Dec 07-08	033-034	Sabaeus S-Icarium	Dust Cloud	11
1903	May 26-27	123-125	Chryse	Dust Cloud	11
1905	Apr 30-jun 15	139-163	Thaumasia	Regional	45
1905	Jul 27-29	186-187	Cerberus I-Elysium	Dust Cloud	10
1907	Jul 29-30	212-213	Libya-Cimmerium M	Dust Cloud	5
1909	Jun 03-Sept 20	206-274	Hellas	Encircling	18
1909	Oct 06-oct 19	284-292	Thaumasia	Regional	45
1911	Oct 06-07	310	Hellas-Ausonia	Dust Cloud	13
1911	Oct 11-18	312-316	Libya-Eridania	Local	5
1911	Oct 10-oct 20	312-318	Libya-Isidis	Regional	45
1911	Nov 13-14	325-015	Hellas	Regional	1
1912	Jan 15-16	003-004	Noachis-Hellas	Dust Cloud	13
1913	Dec 31-01	018-019	Argyre	Dust Cloud	13
1914	Jan 25-26	028-029	Argyre	Dust Cloud	13
1914	Jan 28-29	030-031	Argyre	Dust Cloud	13
1914	Feb 02-03	032-034	Deucalionis Regio	Dust Cloud	13
1914	Feb 06-07	034-035	Sabaeus S-Argyre	Dust Cloud	13
1914	Feb 10-11	036-042	Hellas-Eridania	Local	13
1914	Feb 17-18	039-040	Phaethontis	Dust Cloud	13
1915	Jan 24-25	206-207	Phaethontis-Icaria	Dust Cloud	13
1915	Dec 28-29	037-038	Aeolis-Elysium	Dust Cloud	13
1922	Jul 09-10	190-193	Margaritifer-Chryse	Local	5
1922	May 07-may 22	156-164	Thaumasia	Regional	45
1922	Jun 11-aug 01	175-205	Hellas	Regional	45
1922	Jul 09-jul 15	191-195	Margaritifer S.	Regional	45
1924	Jun 11-Aug 1	200-232	Hellas	Regional	18
1924	Aug 09-10	236-037	Isidis R.-Libya	Local	15
1924	Oct 10-13	275-278	Yaonis-Hellas-ThyleII	Local	1

1924	Oct 20-27	282-286	Hellas	Local	14
1924	Dec 09-Feb 25	312-355	Hellas	Encircling	18
1926	Nov 28-dec 17	330-341	Libya-Isidis	Regional	45
1926	Oct 25-26	310-311	Libya-Isidis-Ausonia	Local	5
1926	Dec 18-feb 03	341-005	Thaumasia	Regional	45
1935	Apr 04	110	Tempe-Arcadia	Regional	45
1937	May 02-05	145-147	Syrtis Major-Isidis	Dust Cloud	5
1937	May 25-29	158-159	Candor-Niliacus L.	Local	5
1937	Jun 02-jun 05	161-163	Thaumasia	Regional	45
1937	Jun 25-jul 08	173-181	Zephyria-Atlantis	Regional	45
1939	May 11-may 17	172-176	Libya-Isidis	Regional	45
1939	Jun 07-jun 12	188-191	Hellas	Regional	45
1939	Oct 02-oct 15	260-268	Thaumasia	Regional	45
1941	Aug 12-aug 24	255-263	Thaumasia	Regional	45
1941	Aug 23-aug 24	262-263	Electris-Phaethontis	Regional	45
1941	Nov 12-28	312-327	Libya-Phaethontis	Regional	5
1941	Nov 15-Dec 02	337-346	Hellas	Regional	45
1943	Sep 28-oct 16	311-321	Libya-Isidis	Regional	45
1943	Nov 03-05	310-315	Libya-Hesperia	Local	15
1943	Dec 20-Dec 27	356-359	Argyre-Noachis	Regional	45
1952	Apr 18-May 24	129-148	Tempe-Arcadia	Regional	45
1954	Jun 02	175	Ulysses-Phoenicia L.	Local	9
1954	Aug 17-Sep 06	221-233	Thrsris-Memnonia	Regional	45
1956	May 30-aug 15	199-247	?	Regional	45
1956	Aug 19-oct 25	249-291	Hellas	Regional	45
1956	Aug 22-25	251-253	Argyre-Noachis	Encircling	9
1956	Aug 28-Sep 04	254-259	Noachis-Syrtis	Encircling	9
1956	Oct 03-oct 07	278-280	Deucalionis R.	Regional	45
1958	Aug 03-aug 05	266-267	Thaumasia	Regional	45
1958	Oct 12-15	305-311	Isidis R.-Hesperia	Local	15
1958	Oct 13-Nov 22	310-332	Isidis-Neith R.	Regional	45
1958	Dec 24-dec 29	349-352	Thaumasia	Regional	45
1961	Jan 19-Jan 23	23-25	Neith R.-Casius	Regional	45
1961	Jan 19-21	019-021	Casius-Elysium	Local	15
1963	Fdb 18-Feb 28	56-61	Tempe-Arcadia	Regional	45
1965	Mar 30-apr 03	93-95	Thaumasia	Regional	45
1969	May 28-jun 13	163-172	Hellas	Regional	45
1971	Jul 10-29	213-224	Hellespontus	Regional	16,17
1971	Sep 22-Dec 31	260-019	Hellespontus	Global	16,17
1972	Jan 01-Apr 24	260-019	Hellespontus	Regional	16,17
1973	Jun 22-jun 30	229-234	Thaumasia	Regional	45
1973	Jul 16-Sep 01	244-273	Hellespontus	Regional	16,17
1973	Oct 13-Jan 30	300-359	Solis Planum	Encircling	16,17
1974	Feb 28	14	N. Ogygia	Local	18
1975	Jun 28-Jul 19	260-273	Hellas	Regional	18
1975	Jul 14-Oct 21	270-329	S. Thaumasia	Encircling	18

1975	Nov 20-21	345	S. Thaumasia/Claritas	Local	18
1975	Dec 5-8	353-354	Meridiani S.	Local	18
1976	May 15-24	68-72	Aetheria/Utopia/Syrtis Mjr	Regional	18
1977	Feb 15-Apr 30	204-250	Solis Planum	Encircling	19,20
1977	Jan 05-??	227-???	Solis Planum	Local	19,20
1977	May 27-Oct	268-342	Solis Planum	Encircling	19,20
1978	Jan 17-Feb 11	35-46	Tempe	Regional	45
1981	Jun 14-??	330-???	Chryse	Local	21,22
1981	Nov 20-??	048-050	Hellas-Yaonis Regio	Regional	23
1982	Feb 26-Mar 10	91-96	Elysium	Regional	23,24
1982	Apr 12-Apr 20	111-115	Elysium	Regional	45
1982	May 12-??	124-126	Hellespontus	Regional	23,24
1982	Oct 14-Jan 25	208-273	Hellas	Encircling	18
1983	Nov 27-Dec 28	070-083	Xanthe-Candor-Thau.	Local	25
1984	Jan 05-1	086-091	Chryse-Xanthe	Local	25
1984	Jan 29-Feb 15	097-105	Isidis Regio-Libya	Regional	25,26a,b,c
1986	May 25-Jun 04	176-181	Hellas	Local	26a,b,c
1986	Aug 05-11	218-222	Hellas	Local	26a,b,c
1986	Sep 12-18	242-246	Hellas	Local	26a,b,c
1986	Nov 08-nov 19	278-285	Hellas	Regional	45
1987	Jan 31-feb 02	328-329	Hellas	Regional	45
1988	May 04-07	189-191	Hellas	Local	26a,b,c
1988	Jun 03-27	206-221	Hellas	Regional	27a,b
1988	Jun 13-jul 09	213-229	Hellas	Regional	46
1988	Jun 17-jul 25	215-239	Argyre	Regional	46
1988	Oct 01-oct 04	282-284	Thaumasia	Regional	46
1988	Nov 23-Dec 06	313-321	Thaumasia	Regional	27a,b
1990	Oct 03-07	309-311	Chryse-Solis Planum	Regional	28,29,30,31
1990	Nov 03-09	327-330	Chryse-Solis Planum	Regional	28,29,30,31
1992	July 04	145	Hellas, Hadriacum	Dust Cloud	32
1992	Aug 31-Sep 07	316-320		Regional	46
1992	Oct 03-06	334-344	Aurorae Sinus, Ophir	Local	32
1992	Oct 15-25	340-346	Solis Lacus & Chryse	Local	32
1993	Feb 12-Mar 15	38-53		Regional	46
1994	Jun 05	290	Argyre	Dust Cloud	33
1994	Oct 05	358	Chryse	Dust Cloud	33
1994	Nov 03-14	012-017	Xanthe	Local	33
1995	Jan 14	045	Elysium	Dust Cloud	33
1995	Jan 26	050	Chryse-Xanthe-Tharsis	Dust Cloud	33
1995	Jan 26	050	Arcadia-Tempe	Local	33
1995	Mar ??	??	Xanthe	Dust Cloud	33
1995	Oct 05	168	Chryse	Dust Cloud	34,35
1995	Nov 03 -14	184-191	Xanthe	Local	34,35
1996	Sep 18	011	NPR	Dust Cloud	36
1997	Jun 27	126	Vallis Marineris	Dust Cloud	36
1997	November 26	224	Noachis	Local	48

1998	August 22	19	Tempe Terra	Local	49
1999	Feb 19-21	99-100	Valles Marineris	Dust Cloud	37
1999	Mar 27- Apr 5	115-120	Valles Marineris	Dust Cloud	37
1999	Apr 16	125	Margaritifer S./ Erythraeum M.	Streak	37
1999	Apr 20	127	Erythraeum/Eos	Streak	37
1999	May 10 - 16	136-139	Valles Marineris	Streak	37, 38
1999	Jun 2-3	148-149	Mare Boreum	Dust Cloud	37
1999	Jun 30	162	NPR/Mare Acidalium	Dust Cloud	37
2000	August 29	42	NPR/Mare Acidalium	Local	49
2001	April 08	142	Hellas	Dust Cloud	42a
2001	June 18-21	180-182	Hellas	Local	39
2001	June 24- Aug 02	184-206	Hellas	Global	40, 4748
2001	Sep 06	228	Solis Planitia	Dust Cloud	39
2002	Aug 01-07	49 - 51	Acidalia	Local	42
2003	Mar 07	148	NPR- Uchronia-Utipia	Dust Cloud	42b
2003	May 20-30	188 -194	Syria- Claritas	Dust Cloud	42c, 43
2003	May 28	193	Acidalia	Local	42d
2003	Jun 23-28	208 -211	SPC	Dust Cloud	43
2003	Jun 23-29	208 -212	Isidis R	Local	42e, 43
2003	Jun 28	211	Acidalium M	Local	42f, 43
2003	Jun 28	211	Cydonia-Arabia Terra	Dust Cloud	42g
2003	Jul 01 - 13	213 -221	Pandorae – Iapygia	Regional	43
2003	Jul 28-Aug 03	230 -233	Chryse - Erythraeum Mare	Local	43
2003	Jul 29	231	Isidis R	Local	43
2003	Jul 28 - 31	230 -232	Acidalium-Achillis P-Niliacus L	Local	43
2003	Aug 01-02	232 -233	Eos and Aurorae S.	Local	43
2003	Dec 13 - 14	315 -316	Chryse - Eos - Aurorae Sinus	Local	43
2003	Dec 13 - 14	315 -316	Erythraeum Mare-Argyre	Local	43
2003	Dec 14 - 16	316 -317	Bosporos – Argyre	Regional	43
2003	Dec 16 - 25	317 -322	Noachis- Hellespontus, Argyre	Regional	43
2003	Dec 16 - 25	317 -322	Tyrrhenum -Hadriacum - Hellas	Regional	43
2004	March 05	170	Noachis	Local	48
2005	Aug 02–Aug 04	261-262	Australe Mare-Dia	Local	49
2005	Oct 13-Oct 27	305-318	Chryse-Erythraeum,Eos-Argyre-Margaritiferr	Regional	49
2005	Oct 20	309	Ophir- Aurorae Sinus	Local	49
2005	Oct 23	311	Boreosyrtis- Nereidum Fretum	Local	49
2003	Oct 23	311	Hydraotes- Aurorae Fretum	Local	49
2005	Oct 27– Nov 04	313 -318	Edom-Eos -Aurorae-Argyre	Local	43, 49,
2005	Nov 23-24	329	Chryse	Local	43, 49
2006	May 24	57	Hellas	Local	48
2007	May 23-May 31	244-249	Eridania, Ausonia	Local	43, 49, 50
2007	Jun 22 - Aug 03	262– 289	Noachis-Hellespontus- Argyre	Encircling	43, 49, 50
2007	Oct 31	340	NPR	Local	43, 49, 50
2007	Nov 1-Nov 5	340-342	NPR	Local	43, 49, 50
2007	Nov 22-Nov 25	351-353	Niliacus Lacus	Local	43, 49, 50
2008	Jan 9-Jan 11	15-16	Tempe	Local	43, 49, 50

2008	Oct 06	138	Icaria Planum	Dust Cloud	49
2016	April 05	133	Hellas	Local	50
2018	May 31–Jun 22	184-198	Acidalium Mare	Global	51
2019	Jan 04-Jan 14(?)	318-324	Aurorae Sinus-Noachis-Hellas	Regional	51
2020	Feb 02	144	Sabeus S., Hellas, Pandoria F	Dust Cloud	52
2020	Feb 21 – Feb 27	154-158	Hellas	Dust Cloud	52
2020	Mar 08 - 10	163-164	Zephyria/Aeolis region	Dust Cloud	53
2020	Mar 20	169	Hellas	Dust Cloud	52
2020	May 19	204	Chryse	Dust Cloud	53
2020	June 23-26	226-227	Bospoeros G.,Chryse, Ganges, Erythraeum, Thaumasia	Dust Cloud	53
2020	Nov 05 –Nov 29	308-323	Juventae Fons– Erythraeum Mare - Hellas	Encircling	54
2021	Dec 20-Dec 26	144-148	Solis Lacus- Erythraeum	Dust Cloud	55
2022	Jan 03-09	151-155	Syrtis Major-Hellas	Dust Cloud	55
2022	Jan 10-16	155-158	Syrtis Major-	Dust Cloud	55
2022	Jan 17-23	159-162	Ausonia	Dust Cloud	55
2022	Feb 02-03	167-168	Hellas-Yaonis	Dust Cloud	55
2022	Feb 07	170	SPR, Ausonia	Dust Cloud	55
2022	Feb 21	178	SPR-Argyre	Dust Cloud	55
2022	Mar 13-14	189-190	Hellas – SPC edge	Dust Cloud	55
2022	Apr 30-May 05	219-221	Hellas	Dust Cloud	55
2022	May 05	221	Chryse	Dust Cloud	55
2022	May 06	222	Ausonia - Eridania	Dust Cloud	55
2022	Jul 25 – Jul 29	272-275	SPR	Dust Cloud	55
2022	Sep 23	310	Aurorae Sinus, Valles Marineris, Erythraeum, Margartifer	Regional	55
2022	Sep 30	313	Hellas, Noachis, Mare Serpentis, Syrtis Major, Erythraeum, Solis Lacus	Regional	55

Notes: **Dust Cloud/Dust Streak**; stationary dust cloud observed for one to three Sols. **Local**; localized dust storm that displays movement and expansion. **Regional**; large expanding dust storm covering much of a Martian hemisphere. **Encircling**; Dust storm with major axis that completely encircles either one or both hemispheres of Mars. **Global**; entire planet covered by dust average Ls start 262 +/- 50.

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