

APPENDIX I
LUNAR AND MARTIAN NOMENCLATURE

LUNAR AND MARTIAN NOMENCLATURE

A large number of names of craters and other features on the Moon and Mars, were accepted by the IAU General Assemblies X (Moscow, 1958), XI (Berkeley, 1961), XII (Hamburg, 1964), XIV (Brighton, 1970), and XV (Sydney, 1973).

The names were suggested by the appropriate IAU Commissions (16 and 17). In particular the Lunar names accepted at the XIVth and XVth General Assemblies were recommended by the 'Working Group on Lunar Nomenclature' under the Chairmanship of Dr D. H. Menzel. The Martian names were suggested by the 'Working Group on Martian Nomenclature' under the Chairmanship of Dr G. de Vaucouleurs. At the XVth General Assembly a new 'Working Group on Planetary System Nomenclature' was formed (Chairman: Dr P. M. Millman) comprising various Task Groups, one for each particular subject.

For further references see: *IAU Trans.* X, 259–263, 1960; **XIB**, 236–238, 1962; **XIIB**, 203–204, 1966; **XIIIB**, 99–105, 1968; **XIVB**, 63, 129, 139, 1971; *Space Sci. Rev.* 12, 136–186, 1971.

Because at the recent General Assemblies some small changes, or corrections, were made, the complete list of Lunar and Martian Topographic Features is published here.

Table 1
Lunar Craters

Abbe	58S, 174E	Balboa	19N, 83W
Abbot	6N, 55E	Baldet	54S, 151W
Abel	34S, 85E	Balmer	20S, 70E
Abul Wáfa	2N, 117E	Banachiewicz	5N, 80E
Adams	32S, 69E	Banting	26N, 16E
Aitken	17S, 173E	Barbier	24S, 158E
Al-Biruni	18N, 93E	Barnard	30S, 86E
Alden	24S, 111E	Barringer	29S, 151W
Aldrin	1.4N, 22.1E	Bartels	24N, 90W
Alekhin	68S, 131W	Becquerel	41N, 129E
Alter	19N, 108W	Bečvár	2S, 125E
Amici	10S, 172W	Beijerinck	13S, 152E
Amundsen	85S, 85E	Bel'kovich	61N, 90E
Anders	42S, 144W	Bell	22N, 96W
Anderson	16N, 171E	Bellingsgauzen	61S, 164W
Antoniadi	69S, 173W	Belopol'skij	18S, 128W
Appleton	37N, 158E	Belyaev	23N, 143E
Armstrong	1.5N, 25E	Bergstrand	19S, 176E
Arrhenius	55S, 91W	Berkner	25N, 105W
Artamonov	26N, 104E	Berlage	64S, 164W
Artem'ev	10N, 145W	Bhabha	56S, 165W
Aston	33N, 88W	Birkeland	30S, 174E
Avicenna	39N, 97W	Birkhoff	59N, 148W
Avogadro	64N, 165E	Bjerknes	38S, 113E
Baae	44S, 82W	Blazhko	31N, 148W
Babakin	21S, 123E	Bobone	26N, 132W
Babcock	4N, 94E	Bohr	13N, 86W
Backlund	16S, 103E	Boltzmann	75S, 90W

Bolyai	34S, 125E	Cooper	53N, 176E
Boole	64N, 87W	Coriolis	0, 172E
Borman	39S, 149W	Coulomb	54N, 115W
Bose	54S, 170W	Cremona	67N, 90W
Boss	46N, 88E	Crocco	47S, 150E
Bowen	18N, 9E	Crommelin	68S, 148W
Boyle	54S, 178E	Crookes	11S, 165W
Brackett	18N, 24E	Curie	23S, 92E
Bragg	42N, 103W	Curtis	16N, 56E
Brashear	74S, 172W	Cyrano	20S, 157E
Bredikhin	17N, 158W	Daedalus	6S, 180
Brianchon	75N, 87W	D'Alembert	52N, 164E
Bridgman	44N, 137E	Dalton	17N, 84W
Brouwer	36S, 125W	Daly	5N, 57E
Brunner	10S, 91E	Danjon	11S, 123E
Buffon	41S, 134W	Dante	25N, 180
Buisson	1S, 113E	Das	27S, 138W
Bunsen	42N, 86W	Daubrée	16N, 15E
Butlerov	12N, 110W	Da Vinci	10N, 44E
Buys-Ballot	21N, 175E	Davison	38S, 175W
Byrd	85N, 10E	Dawson	67S, 134W
Cabannes	61S, 171W	Debye	50N, 177W
Cajal	13N, 31E	De Forest	77S, 162W
Cajori	48S, 168E	Dellinger	7S, 140E
Cameron	6N, 46E	Delporte	16S, 121E
Campbell	45N, 152E	Denning	16S, 143E
Cannizzaro	55N, 100W	De Roy	55S, 99W
Cannon	20N, 81E	Desargues	70N, 74W
Cantor	38N, 118E	De Sitter	80N, 38E
Carmichael	20N, 40E	Deutsch	24N, 110E
Carnot	52N, 144W	De Vries	20S, 177W
Carver	43S, 127E	Dewar	3S, 166E
Cassegrain	52S, 113E	Dirichlet	10N, 151W
Catalán	46S, 87W	Dobrovolskij	13S, 129E
Chaffee	39S, 155W	Donner	31S, 98E
Chamberlin	59S, 96E	Doppler	13S, 160W
Champollion	37N, 175E	Douglass	35N, 122W
Chandler	44N, 171E	Dreyer	10N, 97E
Chang Heng	19N, 112E	Drude	39S, 91W
Chant	41S, 110W	Dryden	33S, 157W
Chaplygin	6S, 150E	Drygalski	80S, 80W
Chapman	50N, 101W	Dubyago	5N, 70E
Chappell	55N, 179W	Dufay	5N, 170E
Charlier	36N, 132W	Dugan	65N, 103E
Chaucer	3N, 140W	Dunér	45N, 179E
Chauvenet	12S, 137E	Dyson	61N, 121W
Chebyshev	34S, 133W	Dziewulski	21N, 99E
Chernyshev	47N, 174E	Eckert	18N, 58E
Chrétien	47S, 163E	Eddington	22N, 72W
Clark	38S, 119E	Edison	25N, 99E
Clerke	22N, 29E	Ehngelgardt	5N, 159W
Coblentz	38S, 126E	Ehrlich	41N, 172W
Cockcroft	30N, 164W	Einstein	17N, 88W
Collins	1.3N, 23.7E	Eijkman	63S, 142W
Compton	56N, 105E	Eindhoven	5S, 110E
Comrie	23N, 113W	Ellerman	26S, 121W
Comstock	21N, 122W	Ellison	55N, 108W
Congreve	0, 168W	Elvey	9N, 101W

Emden	63N, 176W	Gum	40S, 89E
Eötvös	36S, 134E	Guthnick	48S, 94W
Erro	6N, 98E	Guyot	11N, 117E
Esnault-Pelterie	47N, 142W	Hadley	25N, 3E
Espin	28N, 109E	Hagen	48S, 135E
Evans	10S, 134W	Haldane	2S, 84E
Evdokimov	35N, 153W	Hale	74S, 90E
Evershed	36N, 160W	Hamilton	43S, 84E
Fabry	43N, 100E	Harriot	33N, 114E
Fechner	59S, 125E	Hartmann	3N, 135E
Fen'yi	45S, 105W	Hartwig	6S, 80W
Feoktistov	31N, 140E	Harvey	19N, 147W
Fermi	20S, 122E	Hatanaka	29N, 122W
Fersman	18N, 126W	Hayford	13N, 176W
Fesenkov	23S, 135E	Hayn	65N, 83E
Firsov	4N, 112E	Healy	32N, 111W
Fitzgerald	27N, 172W	Heavyside	11S, 167E
Fizeau	58s, 133W	Hedin	3N, 77W
Fleming	15N, 109E	Helberg	22N, 102W
Focas	34S, 94W	Henderson	5N, 152E
Foster	23N, 142W	Hendrix	48S, 161W
Fowler	43N, 145W	Heney	13N, 152W
Fox	0, 98E	Hermite	86N, 88W
Franck	23N, 36E	Hertz	13N, 104E
Freud	26N, 52W	Hertzsprung	0, 129W
Freundlich	25N, 171E	Hess	54S, 174E
Fridman	13S, 127W	Heymans	75N, 144W
Froelich	80N, 110W	Hilbert	18S, 108E
Frost	37N, 119W	Hill	21N, 41E
Gadomski	36N, 147W	Hippocrates	71N, 146W
Gagarin	20S, 149E	Hirayama	6S, 93E
Galen	22N, 5E	Hoffmeister	15N, 137E
Galois	15S, 153W	Hogg	34N, 122E
Gamow	65N, 144E	Hohmann	18S, 94W
Ganskij	10S, 97E	Holetschek	28S, 151E
Ganswindt	80S, 110E	Hornsby	24N, 12E
Garavito	48S, 157E	Houtermans	9S, 87E
Gavrilov	17N, 131E	Houzeau	18S, 124W
Geiger	14S, 158E	Hubble	22N, 87E
Gerasimovich	23S, 124W	Humason	31N, 57W
Gernsback	36S, 99E	Hutton	37N, 169E
Gibbs	18S, 84E	Huxley	20N, 5W
Gilbert	3S, 76E	Ibn Yunus	14N, 91E
Gill	64S, 75E	Icarus	6S, 173W
Ginzel	14N, 97E	Idel'son	82S, 114E
Giordano Bruno	36N, 103E	Ingalls	26N, 153W
Glazenap	2S, 138E	Innes	28N, 119E
Goddard	15N, 89E	Ioffe	15S, 129W
Golitsyn	25S, 105W	Izsak	23S, 117E
Golovin	40N, 161E	Jackson	22N, 163W
Grachev	3S, 108W	Jansky	9N, 89E
Graff	43S, 88W	Jeans	56S, 91E
Green	4N, 133E	Jenner	42S, 96E
Gregory	2N, 127E	Joliot	26N, 94E
Grigg	13N, 130W	Joule	27N, 144W
Grissom	48S, 149W	Joy	25N, 7E
Grotrian	66S, 128E	Jules Verne	35S, 147E
Gullstrand	45N, 129W	Kamerlingh Onnes	15N, 116W

Kapteyn	11S, 71E	Leonov	19N, 148E
Karpinskij	73N, 166E	Leucippus	29N, 116W
Katchalsky	6N, 116E	Leuschner	1N, 109W
Kearons	12S, 113W	Levi-Civita	24S, 143E
Keeler	10S, 162E	Lewis	19S, 114W
Kekulé	16N, 138W	Ley	43N, 154E
Khvol'son	14S, 112E	Lindblad	70N, 99W
Kibal'chich	2N, 147W	Litke	17S, 123E
Kidinnu	36N, 123E	Lobachevskij	9N, 113E
Kiess	6S, 84E	Lodygin	18S, 147W
Kimura	57S, 118E	Lomonosov	27N, 98E
King	5N, 120E	Lorentz	34N, 100W
Kirkwood	69N, 157W	Love	6S, 129E
Klejmenov	33S, 141W	Lovelace	82N, 107W
Klute	37N, 142W	Lovell	37S, 143W
Knox-Shaw	5N, 80E	Lowell	13S, 103W
Koch	43S, 150E	Lucian	15N, 37E
Kohlschütter	15N, 154E	Lucretius	9S, 121W
Kolhörster	10N, 114W	Ludwig	7S, 97E
Komarov	25N, 153E	Lundmark	39S, 152E
Kondratyuk	15S, 115E	Lyapunov	27N, 89E
Konstantinov	20N, 159E	Lyman	65S, 162E
Kopff	17S, 90W	Lytot	51N, 84E
Korolev	5S, 157W	Mach	18N, 149W
Kostinskij	14N, 118E	Maksutov	41S, 169W
Kovalevskaya	31N, 129W	Malyj	22N, 105E
Koval'skij	22S, 101E	Mandel'shtam	6N, 162E
Kramers	53N, 128W	Marci	22N, 169W
Krasnov	30S, 80W	Marconi	9S, 145E
Krasovskij	4N, 176W	Mariotte	29S, 140W
Kreiken	9S, 84E	Markov	53N, 63W
Krylov	35N, 167W	Mauder	14S, 94W
Kugler	53S, 104E	Maxwell	30N, 98E
Kulik	42N, 155W	McKellar	16S, 171W
Kuo Shou Shing	8N, 134W	McLaughlin	47N, 93W
Kurchatov	38N, 142E	McMath	15N, 167W
Lacchini	41N, 107W	McNally	22N, 127W
Lamarck	23S, 70W	Mechnikov	11S, 149W
Lamb	43S, 101E	Mees	14N, 96W
Lamé	14S, 64E	Meggors	24N, 123E
Lampland	31S, 131E	Meitner	11S, 113E
Landau	42N, 119W	Mendel	49S, 110W
Lane	9S, 132E	Mendeleev	6N, 141E
Langemak	10S, 119E	Merrill	75N, 116W
Langevin	44N, 162E	Meshcherskij	12N, 125E
Langley	52N, 87W	Mezentsev	72N, 129W
Langmuir	36S, 129W	Michelson	6N, 121W
Larmor	32N, 180	Milanković	77N, 170E
Laue	28N, 97W	Millikan	47N, 121E
Lauritsen	27S, 96E	Mills	9N, 156E
Lawrence	8N, 43E	Milne	31S, 113E
Leavitt	46S, 140W	Mineur	25N, 162W
Lebedev	48S, 108E	Minkowski	56S, 145W
Lebedinskij	8N, 165W	Minnaert	67S, 179E
Leeuwenhoek	30S, 179W	Mitra	18N, 155W
Leibnitz	38S, 178E	Möbius	16N, 101E
Lemaitre	62S, 150W	Mohorovičić	19S, 165W
Lents	3N, 102W	Moiseev	9N, 103E

Montgolfier	47N, 160W	Pirquet	20S, 140E
Moore	37N, 178W	Pizzetti	35S, 119E
Morozov	5N, 127E	Planck	58S, 135E
Morse	22N, 175W	Plaskett	82N, 175E
Moseley	21N, 90W	Plummer	25S, 155W
Moulton	61S, 97E	Pogson	42S, 111E
Nagaoka	20N, 154E	Poincaré	57S, 161E
Nansen	81N, 93E	Poinsot	79N, 145W
Nassau	25S, 177E	Polzunov	26N, 115E
Nernst	36N, 94W	Poncelet	76N, 54W
Neujmin	27S, 125E	Popov	17N, 99E
Nicholson	26S, 85W	Porter	56S, 10W
Nielsen	32N, 52W	Poynting	17N, 133W
Niepe	72N, 120W	Prager	4S, 131E
Nijland	33N, 134E	Prandtl	60S, 141E
Nikolaev	35N, 151E	Priestley	57S, 108E
Nishina	45S, 171W	Purkyně	1S, 95E
Nobel	15N, 101W	Quételet	43N, 135W
Nöther	66N, 114W	Racah	14S, 180
Numerov	71S, 161W	Raimond	14N, 159W
Nunn	4N, 91E	Ramsay	40S, 145E
Nušl	32N, 167E	Rayet	45N, 114E
Obruchev	39S, 162E	Rayleigh	29N, 90E
O'Day	31S, 157E	Razumov	39N, 114W
Ohm	18N, 114W	Ricco	75N, 177E
Olcott	20N, 117E	Riedel	49S, 140W
Omar Khayyam	58N, 102W	Riemann	40N, 88E
Oppenheimer	35S, 166W	Rittenhouse	74S, 107E
Oresme	43S, 169E	Ritz	15S, 92E
Orlov	26S, 175W	Roberts	71N, 175W
Ostwald	11N, 122E	Robertson	22N, 105W
Paneth	63N, 95W	Roche	42S, 135E
Pannekoek	4S, 140E	Röntgen	33N, 92W
Papaleksi	10N, 164E	Rowland	57N, 163W
Paracelsus	23S, 163E	Rozhdestvenskij	86N, 155W
Paraskevopoulos	50N, 150W	Rumford	29S, 170W
Parenago	26N, 109W	Runge	2S, 87E
Parkhurst	34S, 103E	Russell	27N, 75W
Parsons	37N, 171W	Rydberg	47S, 96W
Pascal	74N, 70W	Rynin	47N, 104W
Paschen	14S, 141W	Saenger	4N, 102E
Pasteur	12S, 105E	Safařik	10N, 177E
Patsaev	17S, 133E	Saha	2S, 103E
Pauli	45S, 136E	St. John	10N, 150E
Pavlov	29S, 142E	Sanford	32N, 139W
Pawsey	44N, 145E	Sarabhai	25N, 21E
Peary	89N, 30E	Sarton	49N, 121W
Pease	13N, 106W	Scaliger	27S, 109E
Peek	3N, 87E	Schaeberte	26S, 117E
Perel'man	24S, 106E	Schjellerup	69N, 157E
Perepelkin	10S, 128E	Schlesinger	47N, 138W
Perkin	47N, 176W	Schliemann	2S, 155E
Perrine	42N, 129W	Schlüter	6S, 83W
Petrie	45N, 108E	Schneller	42N, 164W
Petropavlovskij	37N, 115W	Schönfeld	45N, 98W
Petrov	61S, 88E	Schorr	19S, 90E
Pettit	28S, 86W	Schrödinger	75S, 133E
Petzval	63S, 113W	Schuster	4N, 147E

Schwarzschild	71N, 120E	Timiryazev	5S, 147W
Scott	82S, 45E	Titius	27S, 101E
Seares	74N, 145E	Titov	29N, 150E
Sechenov	7S, 143W	Trumpler	28N, 168E
Segers	47N, 128E	Tsander	5N, 149W
Seidel	33S, 152E	Tseraskij	49S, 141E
Seyfert	29N, 114E	Tsinger	57N, 176E
Shajn	33N, 172E	Tsiolkovskij	20S, 129E
Shaler	33S, 85W	Tsu Chung-Chi	17N, 144E
Shapley	10N, 57E	Tyndall	35S, 117E
Sharonov	13N, 173E	Väisälä	26N, 48W
Shatalov	24N, 140E	Valier	7N, 174E
Shi Shen	76N, 104E	Van de Graaff	27S, 172E
Shternberg	19N, 117W	Van den Bergh	31N, 159W
Siedentopf	22N, 135E	Van der Waals	44S, 119E
Sierpinski	27S, 155E	Van Gent	16N, 160E
Sisakyan	41N, 109E	Van Maanen	36N, 127E
Sklodowska	18S, 96E	Van Rhijn	53N, 145E
Slipher	50N, 160E	Van 't Hoff	62N, 132W
Smoluchowski	60N, 97W	Van Wijk	63S, 119E
Sniadecki	22S, 169W	Vashakidze	44N, 93E
Sommerfeld	65N, 161W	Vavilov	1S, 139W
Spencer Jones	13N, 166E	Vening Meinesz	0, 163E
Spiru Haret	59S, 176W	Ventris	5S, 158E
Spurr	26N, 3W	Vernadskij	23N, 130E
Stark	25S, 134E	Very	26N, 25E
Stebbins	65N, 143W	Vesalius	3S, 115E
Stefan	46N, 109W	Vestine	34N, 94E
Stein	7N, 179E	Vetchinkin	10N, 131E
Steklov	37S, 105W	Vil'ev	6S, 144E
Steno	33N, 162E	Volkov	13S, 131E
Stetson	40S, 119W	Volta	54N, 85W
Stokes	52N, 88W	Volterra	57N, 131E
Stoletov	45N, 155W	Von der Pahlen	25S, 133W
Stoney	56S, 156W	Von Kármán	45S, 176E
Störmer	57N, 145E	Von Neumann	40N, 153E
Stratton	6S, 165E	Von Zeipel	42N, 142W
Strömgren	22S, 133W	Voskresenskij	28N, 88W
Struve	23N, 76W	Walker	26S, 162W
Subbotin	29S, 135E	Wan-Hoo	11S, 139W
Sumner	37N, 109E	Waterman	26S, 128E
Sundman	11N, 91W	Watson	63S, 124W
Swann	52N, 112E	Watts	9N, 46E
Sylvester	83N, 80W	Weber	50N, 124W
Szilard	34N, 106E	Wegener	45N, 114W
Tachinni	5N, 86E	Wells	41N, 122E
Tebbutt	9N, 53E	Wexler	69S, 90E
Teisserenc	32N, 136W	Weyl	16N, 120W
Ten Bruggencate	9S, 134E	White	45S, 160W
Tereshkova	28N, 144E	Widmannstätten	6S, 85E
Tesla	38N, 125E	Wiechert	84S, 165E
Theophrastos	17N, 39E	Wiener	41N, 146E
Thiel	40N, 134W	Wilsing	22S, 155W
Thiessen	75N, 169W	Winkler	42N, 179W
Thomson	33S, 166E	Winlock	35N, 106W
Tikhomirov	25N, 162E	Woltjer	45N, 160W
Tikhov	62N, 172E	Wood	44N, 121W
Tiling	52S, 132W	Wright	32S, 86W

Wyld	1S, 98E	Zelinskij	29S, 167E
Yablochkov	61N, 127E	Zernike	18N, 168E
Yamamoto	59N, 161E	Zhiritskij	25S, 120E
Yangel'	17N, 5E	Zhukovskij	8N, 167W
Zanstra	3N, 124E	Zinner	27N, 59W
Zeeman	75S, 135W	Zsigmondy	59N, 105W

Table 2
List of Reference Points on the Moon

No.	Name	ξ	η	ζ
1	W. Bond B	+0.055	+0.906	+0.420
2	Rhaeticus A	.091	.030	.995
3	Egede A	.113	.782	.611
4	Sulpicius Gallus	.191	.336	.924
5	Cayley	.260	.069	.963
6	Bessel	.286	.370	.883
7	Luther	.342	.547	.864
8	Dawes	.424	.296	.856
9	Hercules G	.435	.723	.537
10	Maurý	.510	.604	.614
11	Sina	.518	.153	.842
12	Berzelius F	.605	.542	.583
13	Tralles B	.688	.458	.564
14	Taruntius A	.758	.126	.640
15	Picard	.789	.251	.557
16	Bode A	-0.020	+0.156	+0.989
17	Archimedes A	.098	.470	.877
18	Pico B	.182	.724	.665
19	La Condamine Q	.246	.795	.555
20	Gambart A	.321	.017	.947
21	Carlini	.339	.555	.760
22	Draper C	.350	.293	.887
23	Sharp A	.456	.738	.495
24	Diophantus	.499	.463	.732
25	Brayley	.561	.356	.746
26	Kepler A	.584	.124	.802
27	Marius A	.701	.218	.679
28	Herodotus A	.734	.366	.572
29	Reiner A	.778	.089	.621
30	Galilaei A	.872	.203	.445
31	Mösting A	-0.090	-0.056	+0.994
32	Orontius D	.083	.634	.767
33	Alpetragius B	.115	.261	.958
34	Gauricus D	.162	.576	.822
35	Clavius J	.164	.847	.501
36	Guericke C	.196	.200	.959
37	Scheiner A	.232	.868	.439
38	Hesiodus B	.268	.456	.856
39	Fra Mauro A	.355	.095	.930
40	Epimenides A	.365	.685	.629

No.	Name	ξ	η	ζ
41	Darney C	.425	.244	.872
42	Mee F	.435	.686	.584
43	Herigonius	.543	.231	.806
44	Drebbel D	.598	.615	.514
45	Wichmann	.610	.131	.781
46	Flamsteed A	.674	.137	.725
47	Billy D	.722	.255	.644
48	Vico C	.829	.352	.436
49	Damoiseau E	.847	.091	.524
50	Licetus H	+ 0.038	- 0.718	+ 0.695
51	Airy A	.128	.293	.949
52	Jacobi B	.140	.813	.562
53	Hipparchus C	.142	.129	.981
54	Pontanus F	.178	.467	.866
55	Nicolai A	.296	.675	.676
56	Alfraganus C	.309	.106	.950
57	Pons B	.311	.481	.820
58	Janssen K	.466	.720	.512
59	Rosse	.545	.307	.780
60	Rheita P	.553	.615	.564
61	Isidorus D	.559	.074	.825
62	Reichenbach K	.598	.483	.645
63	Gaudibert J	.620	.193	.761
64	Biot	.718	.385	.580
65	Messier A.	.730	.035	.682
66	Langrenus C	.862	.098	.497
67	Bruce	+ 0.007	+ 0.020	+ 0.999
68	Hadley A	.104	.423	.901
69	Cassini M	.049	.660	.750
70	W. Bond C	.059	.910	.408
71	Aristillus A	.066	.553	.829
72	Hyginus D	.074	.198	.977
73	Hyginus B	.088	.132	.987
74	Egede B	.098	.771	.627
75	Sulpicius Gallus G	.104	.338	.935
76	Manilius D	.119	.229	.967
77	Aratus D	+ 0.136	+ 0.412	+ 0.899
78	Godin D	.144	.017	.989
79	Sulpicius Gallus A	.144	.375	.916
80	Linné B	.211	.507	.833
81	Menelaus A	.221	.293	.929
82	Silberschlag A	.227	.121	.965
83	Eudoxus A	.240	.717	.654
84	Bessel E	.251	.336	.906
85	Linné E	.253	.447	.856
86	Aristoteles M	.272	.802	.529
87	Taquet	.315	.286	.905
88	Bessel A	.325	.418	.848
89	Deseilligny	.328	.360	.872
90	Tacquet C	.350	.233	.906
91	Arago B	.355	.060	.932

No.	Name	ξ	η	ζ
92	Baily B	.362	.776	.513
93	Arago D	.378	.120	.915
94	Le Monnier C	.411	.380	.827
95	Posidonius A	.419	.525	.739
96	Hercules C	.425	.678	.600
97	Janssen G	.433	.162	.886
98	Janssen D	.458	.271	.845
99	Maskelyne K	.494	.056	.866
100	Römer L	.523	.395	.755
101	Maskelyne H	.532	.085	.842
102	Maraldi A	.556	.342	.757
103	Maraldi B	.580	.248	.775
104	Secchi B	.661	.064	.746
105	Picard X	.856	.227	.464
106	Marco Polo B	-0.031	+0.295	+0.955
107	Archimedes D	.040	.532	.844
108	Piazzi Smyth B	.045	.649	.758
109	Bode G	.061	.110	.992
110	Pico C	.078	.733	.675
111	Spitzberg C	.128	.542	.828
112	Pico D	.142	.687	.710
113	Eratosthenes B	.143	.321	.935
114	Schröter D	.165	.079	.984
115	Plato E	.180	.762	.621
116	Timocharis B	.186	.467	.864
117	Schröter M	-0.200	+0.121	+0.971
118	Gambart C	.208	.034	.978
119	Le Verrier E	.215	.673	.705
120	Stadius B	.230	.205	.951
121	Carlini D	.231	.544	.806
122	Timocharis A	.240	.419	.874
123	Helicon B	.286	.615	.734
124	Copernic H	.311	.120	.942
125	Laplace A	.326	.690	.642
126	La Hire A	.349	.477	.807
127	Pytheas A	.346	.349	.869
128	Reinhold F	.364	.059	.929
129	Heis D	.439	.524	.727
130	Tobias Mayer D	.440	.212	.872
131	Hortensius C	.446	.103	.888
132	Diophantus B	.469	.485	.736
133	Mairan E	.477	.612	.628
134	Euler E	.508	.417	.751
135	Brayley D	.509	.342	.788
136	Landsberg A	.516	.003	.856
137	Angström	.575	.498	.647
138	Encke E	.644	.006	.763
139	Bessarion C	.650	.276	.707
140	Aristarchus C	.650	.469	.596
141	Schiaparelli A	.813	.390	.432
142	Alphonsus H	-0.008	-0.269	+0.962

No.	Name	ξ	η	ζ
143	Herschel C	.055	.087	.995
144	Thebit E	.074	.392	.916
145	Hell E	.088	.567	.819
146	Regiomontanus E	.095	.473	.875
147	Maginus Y	.098	.786	.610
148	Palisa P	.126	.168	.978
149	Mösting B	.128	.047	.989
150	Lassell E	.168	.312	.934
151	Lippershey T	.174	.426	.886
152	Gauricus N	.186	.536	.823
153	Tycho H	.192	.710	.677
154	Turner F	.243	.028	.969
155	Longomontanus R	.269	.792	.547
156	Cichus K	.274	.596	.754
157	Gould A	.276	.329	.902
158	Opelt K	.285	.235	.929
159	Kies D	.288	.421	.859
160	Guericke A	.291	.193	.936
161	Cichus H	.321	.541	.777
162	Darney J	-0.353	-0.248	+0.902
163	Bonpland E	.379	.169	.910
164	Marth	.419	.517	.746
165	Darney E	.418	.215	.882
166	Euclides D	.428	.163	.888
167	Ramsden A	.434	.551	.712
168	Landsberg B	.470	.043	.882
169	Hippalus A	.495	.402	.770
170	Vittelo E	.510	.487	.707
171	Hérigonius E	.565	.238	.787
172	Gassendi Y	.580	.356	.731
173	Gassendi L	.623	.348	.698
174	Gassendi F	.682	.259	.683
175	Flamsteed D	.704	.055	.706
176	De Gasparis B	.707	.454	.542
177	Parrot L	+0.015	-0.310	+0.051
178	Zach J	.044	.842	.537
179	Seeliger	.053	.039	.998
180	Albategnius C	.064	.179	.982
181	Aliacensis G	.069	.550	.833
182	Blanchinus K	.080	.419	.904
183	Pickering B	.129	.037	.991
184	Airy P	.140	.275	.951
185	Gemma Frisius K	.151	.608	.779
186	Ritchey C	.157	.190	.969
187	Mutus K	.195	.846	.495
188	-	.196	.701	.683
189	Geber E	.210	.351	.912
190	Dollond D	.215	.143	.966
191	Abulfeda R	.219	.221	.950
192	Buch B	+0.230	-0.614	+0.755
193	Hommel M	.232	.864	.445

No.	Name	ξ	η	ζ
194	Barocius E C	.255	.745	.615
195	Zagut F	.260	.505	.824
196	Theon Senior A	.266	.003	.964
197	Hommel H A	+0.313	-0.788	+0.529
198	Fermat E	.320	.341	.885
199	Zagyt S	.322	.551	.772
200	Tacitus C	.329	.236	.916
201	Alfraganus D	.343	.070	.936
202	Polybius D	.418	.452	.788
203	Cyrillus G	.432	.270	.860
204	Polybius L	.438	.374	.817
205	Watt A	.462	.769	.440
206	Neander Y	.509	.568	.647
207	Rheita P	.553	.615	.562
208	Bohnenberger G	.616	.295	.730
209	Lubbock G	.632	.064	.772
210	Messier D	.722	.062	.687
211	Holden V	.838	.317	.442

The craters 1-66 have a diameter larger than 8 km, while the rest are smaller.

Table 3
Large Craters on Mars

Adams	31N, 197	Comas Sola	20S, 158
Agassiz	70S, 89	Copernicus	50S, 169
Airy	5S, 0	Crommelin	5N, 10
Antoniadi	22N, 299	Cruis	43S, 197
Arago	10N, 330	Curie	29N, 5
Arrhenius	40S, 237	Daly	66S, 22
Bakhuysen	23S, 344	Dana	73S, 32
Baldet	23N, 295	Darwin	57S, 20
Barabashov	47N, 69	Da Vinci	2N, 39
Barnard	61S, 298	Dawes	9S, 322
Becquerel	22N, 8	Denning	18S, 326
Beer	15S, 8	Douglass	52S, 70
Bianchini	64S, 97	Du Martheray	6N, 266
Bjerknes	43S, 189	Du Toit	72S, 46
Boeddicker	15S, 197	Eddie	12N, 218
Bond	33S, 36	Ejriksson	19S, 174
Bouguer	19S, 333	Escalante	0, 245
Brashear	54S, 120	Eudoxus	44S, 147
Briault	10S, 270	Fesenkov	22N, 87
Burroughs	72S, 243	Flammarion	26N, 312
Burton	14S, 156	Flaugergues	17S, 341
Campbell	54S, 195	Focas	34N, 347
Cassini	24N, 328	Fontana	64S, 73
Cerulli	32N, 338	Fournier	4S, 287
Chamberlin	66S, 124	Gale	6S, 222
Charlier	69S, 169	Galileo	6N, 27
Clark	56S, 134	Galle	51S, 31
Coblentz	55S, 91	Gilbert	68S, 274
Columbus	29S, 166	Gill	16N, 354

Gledhill	53S, 273	Mie	48N, 220
Graff	21S, 206	Milankovič	55N, 147
Green	52S, 8	Millochau	21S, 275
Hadley	19S, 203	Mitchel	68S, 284
Haldane	53S, 231	Molesworth	28S, 211
Hale	36S, 36	Moreux	42N, 315
Halley	49S, 59	Müller	26S, 232
Hartwig	39S, 16	Nansen	50S, 141
Heaviside	71S, 95	Newcomb	24S, 358
Helmholtz	46S, 21	Newton	40S, 158
Henry	11N, 336	Nicholson	0, 166
Herschel	14S, 230	Nielsen	28S, 302
Hipparchus	44S, 151	Oudemans	10S, 92
Holden	26S, 34	Pasteur	19N, 335
Holmes	75S, 292	Perepelkin	52N, 65
Hooke	45S, 44	Peridier	26N, 276
Huggins	49S, 204	Pettit	12N, 174
Hussey	54S, 127	Phillips	67S, 45
Hutton	72S, 255	Pickering	34S, 133
Huxley	63S, 259	Playfair	78S, 125
Huygens	14S, 304	Porter	50S, 114
Janssen	3N, 322	Priestley	54S, 228
Jarry-Desloges	9S, 276	Proctor	48S, 330
Jeans	70S, 206	Ptolemaeus	46S, 158
Joly	75S, 42	Quenisset	34N, 319
Jones	19S, 20	Rabe	44S, 325
Kaiser	46S, 340	Radau	17N, 5
Keeler	61S, 152	Rayleigh	76S, 240
Kepler	47S, 219	Redi	61S, 267
Knobel	6S, 226	Renaudot	42N, 297
Korolev	73N, 196	Reuyl	10S, 193
Kunowsky	57N, 9	Reynolds	74S, 160
Lambert	20S, 335	Richardson	73S, 181
Lamont	59S, 114	Ritchey	29S, 51
Lampland	36S, 79	Ross	58S, 108
Lassell	21S, 63	Rossby	48S, 192
Lau	74S, 107	Rudaux	38N, 309
Le Verrier	38S, 343	Russell	55S, 348
Liais	75S, 253	Rutherford	19N, 11
Li Fan	47S, 153	Schaeberle	24S, 310
Liu Hsin	53S, 172	Schiaparelli	3S, 343
Lockyer	28N, 199	Schmidt	72S, 79
Lohse	43S, 16	Schroeter	2S, 304
Lomonosov	65N, 8	Secchi	58S, 258
Lowell	52S, 81	Sharonov	27N, 59
Lyell	70S, 15	Skłodowska	34N, 3
Lytot	50N, 331	Slipher	48S, 84
Madler	11S, 357	Smith	66S, 103
Magelhaens	32S, 174	South	77S, 339
Maggini	28N, 350	Spallanzani	58S, 273
Main	77S, 310	Steno	68S, 115
Maraldi	62S, 32	Stokes	56N, 189
Mariner	35S, 164	Stoney	69S, 134
Marth	13N, 3	Suess	67S, 179
Martz	34S, 217	Teisserenc de Bort	1N, 315
Maunder	50S, 358	Terby	28S, 286
McLaughlin	22N, 22	Tikhov	51S, 254
Mendel	59S, 199	Trouvelot	16N, 13

Trumpler	62S, 151	Wegener	65S, 4
Tycho Brahe	50S, 214	Weinbaum	66S, 245
Tyndall	40N, 190	Wells	60S, 238
Very	50S, 177	Williams	18S, 164
Vinogradsky	56S, 217	Wirtz	49S, 26
Vogel	37S, 13	Wislicenus	18S, 349
Von Karman	64S, 59	Wright	59S, 151
Wallace	53S, 249		

Table 4
Topography on Mars

<i>Catena</i>	λ	φ
Coprates	66° to 56°	-15°
Ganges	71° to 67°	-02° to -03°
Tithonia	98° to 80°	-06°
<i>Chasma</i>		
Australis	270°	-80° to -88°
Borealis	65° to 30°	+85°
Candor	78° to 73°	-04° to -06°
Capri	52° to 32°	-14° to -03°
Coprates	68° to 54°	-11° to -14°
Eos	51° to 32°	-16° to -17°
Ganges	52° to 48°	-08°
Hebes	81° to 73°	+01° to -01°
Ius	98° to 80°	-07°
Juventae	61°	-04°
Melas	78° to 70°	-08° to -12°
Ophir	77° to 64°	-03° to -09°
Tithonia	90° to 80°	-04°
<i>Dorsum</i>		
Argyre	70°	-61° to -65°
<i>Fossa</i>		
Alba	117° to 109°	+38° to +49°
Cerauniae	107°	+25°
Claritas	108° to 105°	-19° to -32°
Elysium	225° to 219°	+28° to +26°
Hephaestus	240° to 233°	+22° to +18°
Mareotis	85° to 69°	+41° to +48°
Medusae	162°	-08°
Memnonia	158° to 140°	-22° to -15°
Nili	284° to 279°	+20° to +26°
Sirenum	163° to 138°	-36° to -27°
Tantalus	105° to 99°	+34° to +47°
Tempe	80° to 62°	+35° to +46°
Thaumasia	100° to 80°	-36° to -40°
<i>Labyrinthus</i>		
Noctis	110° to 92°	-05° to -08°
<i>Mensa</i>		
Deuteronilus	346° to 340°	+42° to +45°
Nilosyrtris	290°	+32°
Protonilus	315°	+38°

Mons

Arsia	121°	− 09°
Ascræus	104°	+ 12°
Elysium	213°	+ 25°
Olympus	133°	+ 18°
Pavonis	113°	+ 01°

Montes

Charitum	50° to 32°	− 57°
Hellesponti	315°	− 45° to − 48°
Nereidum	57° to 43°	− 48° to − 38°
Phlegra	195°	+ 31° to + 46°
Tharsis	125° to 101°	− 12° to + 16°

Planitia

Acidalia	30°	+ 48°
Arcadia	155°	+ 48°
Amazonis	160°	+ 13°
Argyre	43°	− 49°
Chryse	45°	+ 17°
Elysium	210°	+ 15°
Hellas	290°	− 45°
Isidis	270°	+ 15°
Syrtis	290°	+ 15°
Utopia	235°	+ 35°

Patera

Alba	110°	+ 40°
Amphitrites	299°	− 59°
Apollinaris	186°	− 08°
Biblis	124°	+ 02°
Hadriaca	267°	− 31°
Orcus	181°	+ 14°
Pavonis	121°	+ 03°
Tyrrhena	253°	− 22°
Uranus	93°	+ 26°

Planum

Auroræ	52° to 48°	− 10° to − 11°
Hesperia	258° to 242°	+ 10° to − 35°
Lunæ	70° to 60°	+ 05° to + 20°
Ophir	61° to 55°	− 09° to − 12°
Solis	98° to 88°	− 20° to − 30°
Syria	105° to 100°	− 10° to − 18°
Sinai	90° to 70°	− 10° to − 20°

Tholus

Albor	210°	+ 19°
Australis	323°	− 57°
Ceraunius	97°	+ 24°
Hecates	210°	+ 32°
Hippalus	89°	+ 76°
Iaxartes	15°	+ 72°
Jovis	117°	+ 18°
Kison	358°	+ 73°
Ortygia	8°	+ 70°
Tharsis	91°	+ 14°
Uranus	98°	+ 26°

<i>Vallis</i>		
Al-Qahira	202° to 194°	− 23° to − 15°
Ares	23° to 14°	+ 02° to + 10°
Auqakuh	298°	+ 28°
Huo Hsing	295° to 292°	+ 32° to + 28°
Ma'adim	183°	− 27° to − 20°
Mangala	151°	− 10° to − 4°
Nirgal	44° to 36°	− 32° to − 27°
Kasei	70° to 56°	+ 21
Shalbatana	45°	+ 01° to + 15°
Simud	40° to 37°	+ 00° to + 14°
Tiu	32°	+ 10° to + 18°
Valles Marineris	95° to 45°	− 05° to − 15°
<i>Vastitas</i>		
Borealis	continuous	+ 55° to + 67°

Table 5
Crater Names on Phobos and Deimos

<i>Phobos</i>	<i>Deimos</i>
1 – Roche	A – Swift
7 – Wendell	B – Voltaire
8 – Todd	
10 – Sharpless	
14 – D'Arrest	
18 – Stickney	
34 – Hall	