NAMES ON THE MAPS OF VENUS: A PRE-MAGELLAN REVIEW*

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Abstract. The topographic features on Venus are named with female names: craters and paterae have names of famous women as well as female first names, non-crater features have names of mythological characters. The first 80 names appeared on the maps after the Pioneer Venus mission; about 300 more names after the Venera 15 and 16 missions. 376 features of 17 types are now named. All the names are listed with their coordinates and attribute data. A large number of new names will be necessary after the MAGELLAN mission when detailed maps will be produced for nearly the whole surface of Venus.

The first designations of the surface features on Venus were introduced in the 1960s and 1970s. These designations were given for radar-bright features recognized with Earth-based radar observations from the USA. At first different groups of radar scientists used their own nomenclature systems to name the features. One group used small Greek letters $(\alpha, \beta, \gamma, \delta)$. Another group – capital Latin letters (A, B, C, etc.) to which were added Arabic numerals (A1, A2, B1, B2, etc.) after the designated features were resolved into a number of smaller ones. A third group used Roman numerals (I, II, III, IV). Memorial names were used also for three radar-bright features: Gauss, Hertz, and Maxwell. The names were chosen for scientists who contributed to the principles of radio. This uncoordinated naming procedure resulted in several designations for the same feature. One of the radar-bright features was designated as α , I, F; another one – as β , II, D2, Gauss.

The investigations of Venus with spacecraft revealed a detailed picture of the planetary surface. This resulted in the first maps of the topography of Venus and provided the possibility to introduce a unified nomenclature system for the surface features. The International Astronomical Union (IAU) formed the Working Group on Planetary System Nomenclature (WGPSN) which is responsible for the naming of features on the planets. The WGPSN includes the Task Group on Venus Nomenclature (as well as Task Groups for the other planets). Current members of the Venus Task Group are: M. Ya. Marov (USSR) and H. Masursky (USA) – co-chairmen, G. Balomino (France), A. T. Basilevsky (USSR), D. B. Campbell, R. M. Goldstein, R. F. Jurgens, G. H. Pettengill (all four – USA), and Yu. S. Tyuflin (USSR).

As Venus is the only planet which has a female name, the WGPSN decided to use only female names for topographic features on Venus. Large craters and paterae (crater-like features with non-circular outlines) are named after famous

^{* &#}x27;Geology and Tectonics of Venus', special issue edited by Alexander T. Basilevsky (USSR Acad. of Sci., Moscow), James W. Head (Brown University, Providence), Gordon H. Pettengill (MIT, Cambridge, Massachusetts) and R. S. Saunders (J.P.L., Pasadena).

women. Small craters, less than 30 km in diameter, as a rule, are given female first names. Non-crater features (ridges, plains, mountains, etc.) have names of female mythological characters (Table I). The names of the three main radarbright features known before from the Earth-based radar images – Alpha, Beta, and Maxwell – were used as the names of topographic features Alpha Regio, Beta Regio, and Maxwell Montes as exceptions from the general guidelines of the Venus nomenclature. Latin generic terms are used as a part of the names for all types of features, except craters. Now 376 features of 17 types are named on Venus (Table II).

The first 80 names of topographic features appeared on Venus after the USA Pioneer Venus mission resulted in an altimetric map at 1:50,000,000 scale (it covered 74°N to 65°S latitude). These names were approved at the XVII and XVIII General Assemblies of the IAU in 1979 and 1982 (IAU, 1980; IAU, 1983). The radar survey with the USSR Venera 15 and Venera 16 spacecraft resulted in a 27-sheet map at 1:5,000,000 scale for 1/4 of the planet (30°N latitude to the North pole). 237 new names were introduced in 1985 (IAU, 1986) and 59 more names in 1989 (US Geological Survey, 1989) to designate topographic features revealed with Venera 15 and 16 missions. The latter 59 names should be approved by the IAU General Assembly in 1991, so they are considered now as provisional and are marked by an asterisk in the list below (Table III).

All 376 names of the topographic features on Venus were published on a joint US/USSR Topographic map of part of the northern hemisphere of Venus at 1:15,000,000 scale (US Geological Survey, 1989). All these names are listed in Table III. It begins with the names of craters (these names contain no generic term, only a proper name). The names of the other types of the features are listed after the craters in the alphabetical order of genetic terms (as in Table II). Latitudes and longitudes are given for each named feature with 0.5° accuracy. Northern latitudes are marked with "+" and southern ones with "-". The last column of Table III contains attribute data for the names. The national attribution

TABLE I
Categories of proper names for features on Venus

Chasmata	Goddesses of hunt; moon goddesses
Colles	Sea goddesses
Coronae	Fertility goddesses
Cratera, Paterae	Famous women; female first names
Dorsa	Sky goddesses
Fluctus, Montes, Tholi	Goddesses (miscellaneous)
Fossae, Lineae	Goddesses of war
Planitiae	Mythological heroines
Planum	Goddess of prosperity
Regiones	Giantesses and Titanesses
Rupes	Goddesses of hearth and home
Terrae	Goddesses of love
Tesserae	Goddesses of fate and fortune

TABLE II

Number of named features on Venus. (Generic terms singular/plural forms listed)

`	0 1
Crater/Cratera (craters)	121
Chasma/Chasmata (canyons)	28
Collis/Colles (small hills)	4
Corona/Coronae (large circular features)	25
Dorsum/Dorsa (ridges)	34
Fluctus/Fluctūs (flows)	1
Fossa/Fossae (furrows)	12
Linea/Lineae (lines)	8
Mons/Montes (mountains)	37
Patera/Paterae (shallow, complex edge craters)	38
Planitia/Planitiae (plains)	18
Planum/Plana (plateau)	1
Regio/Regiones (regions)	15
Rupes/Rupēs (scarps)	6
Terra/Terrae (continents)	3
Tessera/Tesserae (tile-like features)	17
Tholus/Tholi (domes)	8
Total	376

of the first names (small craters) mentioned here is not the same as the name origin for a number of cases. Many of the first names from this list are used in a number of languages with minor variations in transcription. The "Attribute" column of Table III refers to the language used for the transcription of a small crater name. More detailed information on the development of current Venus nomenclature and on the origins of the names were described in an earlier publication (Burba, 1988).

Both resolution and area coverage should significantly increase after the forthcoming MAGELLAN survey. One can estimate the number of names to be introduced for the new features. The estimation is necessary for preparation of the bank of names to be used on the new maps of Venus. Such estimation is based on existing Pioneer Venus and Venera 15/16 data on resolution and number of named features. Now there are 322 named features in the northern quarter of Venus (north of 30° N) after the Pioneer Venus and Venera 15/16 surveys. Only 25 of these features were named with Pioneer Venus data alone. It means that the number of names have increased 13 times. The resolution of images increased 50 times (c. 100 km for Pioneer Venus and c. 2 km for Venera 15/16). So, the increase in the number of names was 1/4 of the increase in the resolution. Extrapolation of the northern quarter density of names for the whole planet gives a total number of c. 1300 names (322 × 4) for the entire surface of Venus with Venera 15/16 resolution. Forthcoming Magellan images should have 10 times better resolution (c. 0.2 km). Taking the same 1/4 coefficient (names/resolution increase) it may be concluded that the number of names should increase 2.5 times after the MAGELLAN survey compared with that of Venera 15/16 as extended to the entire planet. So there should be about 3300 names (1300×2.5) on the

Table III
Named features on Venus

	Name Name	d features on Ve	enus
Name	Lat. (deg.)	E. Long. (deg.)	Attribute
Cratera			
Akhmatova	+61	308	Anna (1889–1966), Russian/Soviet poetess
Almeida	+46.5	123	Portugese first name
Antonina	+28	107	Russian first name
Anya	+39.5	297.5	Russian first name
Ariadne	+44	0	Greek first name (Longitude defining crater)
Barsova	+61	223.5	Valeriya (1892–1967), Russian/ Soviet singer
Barto	+45	146	Agniya (1906–1981), Russian/ Soviet poetess
Bernhardt	+31	84.5	Sarah (1844–1923), French actress
Berta	+62	322	Finnish first name
Birute*	+36	33.5	Lithuanian first name
Brooke	+48	296	Frances (1724–1789), Canadian novelist
Browning	+28	5	Elizabeth (1806–1861), British poetess
Cather	+47	107	Willa (1876–1947), American novelist
Christie	+28	72.5	Agatha (1891-1976), British novelist
Cleopatra	+66	7	Egyptian queen (69-30 BC)
Cochran	+52	143	Jacqueline (c. 1906–1980), French/American aviatrex
Cotton	+71	300	Egenni (1881–1967), French physicist
Dashkova	+78	306	Yekaterina (1743–1810), Russian philologist, 1st President of St. Petersburg Academy of Sciences
Deken	+47	288.5	Agatha (1741-1804), Dutch novelist
Deledda	+76	128	Grazia (1871–1936), Italian novelist
Dickinson	+74.5	178	Emily (1830–1886), American poetess
Dolores	+51.5	200.5	Spanish first name
Duncan	+68	292	Isadora (1878–1927), American dancer
Edgeworth	+32	23	Maria (1767–1849), Irish writer
Efimova	+81	223.5	(Simonovish-Efimova) Nina (1877–1948), Soviet painter and puppet-theatre designer
Erika	+72	175.5	Hungarian, German first name
Ermolova	+60	154	Mariya (1853–1928), Russian/ Soviet actress

Table III Continued

Name	Lat	E. Long.	Attribute
	(deg.)	(deg.)	
Eve	-32	0	Symbolizes the first woman (Longitude defining crater)
Fedorets	+59.5	65.5	Valentina (1923–1976), Soviet astronomer
Fedosova	+45	172	Irina (1831–1899), Russian folk poet
Fernandez	+76	17	M.A. (18th cen.), Spanish actress
Frida	+68	55.5	Swedish first name
Galina	+47.5	307	Bulgarian, Ukranian first name
Gerda	+45	91	Danish, German first name
Gina	+ 7	78.7	Italian first name
Gloria	+68.5	94.5	Portugese first name
Golubkina	+60.5	286.5	Anna (1864–1927), Soviet sculptor
Hayasi	+54	244.5	Fumiko (1903–1951), Japanese writer
Indira	+64	289.5	Hindu first name
Irina	+35	91	Russian first name
Ivka	+68	304	Serbocroatian first name
Jadwiga	+68.5	91	Polish first name
Jeanne	+40	332	French first name
Jex-Blake*	+65.5	169	Sophia (1840–1912), British physician
Josefina	+45	32.5	Portugese first name
Julie	+51	242.5	Czech first name
Kauffman	+49.5	27	Angelica (1741–1807), German painter
Kemble	+48	15	Fanny (1809–1893), English actress
Khatun	+40.5	87	Mihri (1456–1514), Turkish poetess
Klenova	+78	104	Mariya (1898–1976), Soviet marine geologist
Koidula	+64	139.5	Lidia (1843–1886), Estonian poetess
La Fayette	+70	107.5	Marie (1634–1693), French novelíst
Lagerlöf	+81	289.5	Selma (1858–1940), Swedish novelist
Landowska	+84.5	75	Wanda (1877–1959), Polish harpsichordist
Laura	+49	141	Spanish, Italian first name
Lena	+39.5	23	Russian first name
Lida*	+36.5	274	Russian first name
Liliya	+30	31	Russian first name
Lind	+50	355	Jenny (1820–1887), Swedish singer
Lotta	+51	336	Swedish first name
Ludmila	+62	330	Czech first name
Magda	+67	329.5	Danish first name

Table III Continued

Name	Lat (deg.)	E. Long. (deg.)	Attribute
Magnani	+58	337	Anna (1908–1973), Italian actress
Margit	+60	273	Hungarian first name
Masha	+63	88	Russian first name
Meitner	-55.5	321.5	Lise (1878–1968), Austrian physicist
Monika	+72	122	German first name
Montessori	+59.5	280	Maria (1870–1952), Italian educator
Moses	+34.5	120	A., "Grandma" (20th cen.), American painter
Mukhina	+29.5	0.5	Vera (1889–1953), Soviet sculptor
Nadira	+44	201	(1791-1842), Uzbek poetess
Nana	+50	75	Serbocroatian first name
Natalia	+67	272	Romanian, Russian first name
Obukhova	+71	290	Nadezhda (1886–1961), Russian/ Soviet singer
Odilia	+80.5	206	Portugese first name
Olya	+51.5	292	Russian first name
Orlova	+56.5	234.5	Lyubov' (1902–1975), Russian/ Soviet actress
Osipenko	+71	321	Polina (1907–1939), Soviet aviatrix
Patti	+35	302	Adelina (1843–1919), Italian singer
Pavlova	+14	40	Anna (1881–1931), Russian ballet dancer
Piret*	+38	42	Estonian first name
Polina	+42.5	148	Russian first name
Potanina	+31.5	53	Alexandra (1843–1893), Russian explorer
Pritchard	+44	11.5	Catharina (1884–1969). Australian writer
Radka	+75.5	96	Bulgarian first name
Rani	+64.5	160.5	Hindu first name
Regina	+30	147	Polish first name
Rita	+71	335	Spanish first name
Rosetti	+57	7	Christina (1830–1894), English poetess
Rudneva	+78.5	175	Varvara (1844–1899), Russian physician
Ruslanova	+84	15	Lidiya (1900–1973), Russian/ Soviet singer
Ruth	+43.5	20	English, German first name
elma	+68.5	156	Swedish first name
évigné	+52.5	326.5	Mari (1626–1696), French writer
iddons	+62	341	Sarah (1755–1831), English actress
Sigrid	+63.5	314.5	Norwegian first name
Simone	+59.5	82	French first name

Table III Continued

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Name	Lat (deg.)	E. Long. (deg.)	Attribute
Stefania	+51	333	Romanian, Polish first name
Stina	+37.5	23	Swedish first name
Svetlana*	+82.5	271	Russian first name
Taglioni	+42	122.5	Maria (1804–1884), Italian ballet dancer
Tamara	+61.5	317.5	Georgian (Caucasus) first name
Tatyana	+85.5	213	Russian first name
Tseraskaya	+28	79	Lidiya (1855–1931), Russian astronomer
Tsvetayeva	+65	147	Marina (1892–1941), Russian/ Soviet poetess
Tünde	+76.5	194	Hungarian first name
Ulrique	+76	55.5	French first name
Undset	+52	61	Sigrid (1882–1949), Norwegian author
Valborg	+75.5	272	Danish first name
Valentina	+46.5	144	Latin, Russian first name
Volkova	+75.5	244	Anna (?-1876), Russian chemist
Voynich	+35.5	56	Lilian (1864-1960), English writer
Wanda	+71.5	323	Polish first name
Wharton	+55.5	62	Edith (1862–1937), American writer
Yablochkina	+48	194.5	Alexandra (1866–1964), Russian/Soviet actress
Zdravka	+65	299	Bulgarian first name
Zhilova	+66.5	126	Maria (1870–1934), Russian astronomer
Zina	+41.5	320	Romanian, Russian first name
Zlata	+64.5	334	Czech or Serbocroatian first name
Zoya	+69	236.5	Russian first name
Zvereva	+45.5	283	Lidiya (1890–1916), Russian aviatrix
Chasmata	172/1/0	72/74	Indian famout anddoor
Aranyani Chasma	+73/+68 20/-42	73/74	Indian forest goddess Greek goddess of hunt/moon
Artemis Chasma	-30/-42	121/145 40/56	Slavonic forest witch
Baba-jaga Chasma Dali Chasma	+54/+50 -20/-15	155/180	Georgian (Caucasus) goddess of hunt
Daura Chasma	+74/+73	50/55	Hausa (W. Sudan) great huntress
Devana Chasma	+35/0	284/289	Czech goddess of hunt
Diana Chasma	-20/-14	142/160	Roman goddess of hunt/moon
Ganis Chasma	+20/+15	185/198	Western Lapp/Saami forest maiden
Hecate Chasma	+18/+15	230/245	Greek moon goddess
Heng-O Chasma	+7/0	348/358	Chinese moon goddess
Hina Chasma*	+63/+66	18/22	Hawaiian moon goddess
Ix Chel Chasma	-8/-12	70/78	Aztec wife of the sun god; probably moon goddess
Juno Chasma	-33/-35	95/110	Roman sky goddess; sister and consort of Jupiter

Table III Continued

Name	Lat (deg.)	E. Long. (deg.)	Attribute
Kaygus Chasmata	+49/+47	50/55	Ketian (Siberia) mistress of forest animals; both bear and woman
Kottravey Chasma	+28/+32	77/78	Dravidian (S. India) hunting goddess
Kozhla-ava Chasma	+57/+55	47/54	Marian (Volga Region) forest mistress
Kuanja Chasma	-10/-17	97/112	Mbundu (N. Angola) goddess of the spirit of the hunt
Lasdona Chasma	+72/+66	30/35	Lithuanian forest goddess
Medeina Chasma	+48/+43	88/91	Lithuanian mistress of forest
Mežas-mate Chasma	+51/+49	47/55	Latvian "forest mother"
Misne Chasma	+78/+78	310/327.5	Mansi (W. Siberia) forest maiden
Morana Chasma	+67/+71	25	Czech goddess of death
Mots Chasma	+52.5/+50	55/58	Avarian (Caucasus) moon goddess
Parga Chasma	- 8/-37	225/290	Nenets (Siberia) forest witch
Quilla Chasma	-22/-26	118/135	Inca moon goddess
Varz Chasma	+71/+70	27/30	Lezghin (Caucasus) moon goddess
Virava Chasma	-13/-18	117/133	Mordovian (Volga Region) "forest mother"
Vires-akka Chasma	+77/+71	335/355	Saami/Lapp forest goddess
Colles	10/ - 50	110/120	0
Akkruva Colles	+40/+52	110/130	Saami/Lapp fishing goddess
Jurate Colles	+56/+63	150/160	Lithuanian sea goddess
Molpe Colles*	+74/+79	180/190	Greek; mother of sirens
T'ien Hu Colles*	+28.5/+33	11/21	Chinese sea goddess
Coronae			
Anahit Corona	+76/+79	270/286	Armenian goddess of fertility and love
Bachue Corona	+72/+75	250/270	Chibcha (S. America) goddess of fertility
Bau Corona*	+51/+55	254/262	Sumerian fertility goddess
Coatlicue Corona	+62/+65	271/276	Aztec earth goddess
Cauteovan Corona*	+29/+34	140/148	Kagaba (Colombia, S. America) fertility goddess
Demeter Corona	+52/+56	290/300	Greek goddess of fertility
Earhart Corona	+69/+72	132/140	Amelia (1897–1937), American aviatrix
Fakahotu Corona	+57/+61	105/110	Tuamotu Mother-Earth
Feronia Corona	+66/+70	275/285	Ancient Italian goddess of spring and flowers
Maslenitsa Corona*	+76/+78	197/208	Slavonic personification of fertility
Mawu Corona*	+30/+33	249/243	Fon (Dahomey) goddess of fertility
Metra Corona*	+25/+27	97/99	Persian fertility/moon goddess

Table III Continued

Name	Lat	E. Long.	Attribute
	(deg.)	(deg.)	
Nefertiti Corona*	+34/+37	47/51	Egyptian queen (1300 BC)
Nepret Corona*	+53	7	Egyptian grain (abundance) goddess
Neyterkob Corona*	+48/+51	203/206	Masai (Tanzania, Kenya) earth/ fertility goddess
Nightingale Corona	+61/+66	126/135	Florence (1820–1910), English nurse
Onatah Corona*	+49	5	Iroquois corn (fertility) spirit
Ops Corona*	+68.5	89	Greek fertility goddess
Otau Corona*	+67/+69	296/301	Bini (S. Nigeria) earth/ fertility goddess
Pomona Corona	+78/+81	290/308	Roman goddess of fruits
Rananeida Corona	+61/+67	255/270	Saami/Lapp goddess of spring and fertility
Rauni Corona	+39/+42	270/273	Finnish goddess of earth and harvest
Tusholi Corona	+69/+71	98/107	Chechen and Ingush (Caucasus) goddess of fertility
Vacuna Corona	+58/+63	88/102	Sabinian (ancient Italy) goddess of harvest
Xilonen Corona*	+51	321	Mexican maize (sign of fertility) goddess
Dorsa			
Ahsonnutli Dorsa	+35/+62	195/200	Navajo (N. America) light and sky goddess
Allat Dorsa	+60/+65	65/80	Ancient Arabian sky/rain goddess
Auska Dorsum	+59/+62	356/2	Lithuanian goddess of sun rays
Aušra Dorsa	+45/+55	20/28	Lithuanian dawn goddess
Ben Dorsa	+71/+67	282/293	Vietnamese sky maiden
Bezlea Dorsa	+24/+40	34/43	Lithuanian goddess of evening light
Breksta Dorsa	+36/(+33)	304/(306)	Lithuanian goddess of night darkness
Dennitsa Dorsa	+66/+86	203/70	Slavonic goddess of daylight
Dodola Dorsa	+51/+45	268/274	South Slavonic rain deity
Dyan-mu Dorsa	+78/+75	28/43	Chinese "mother-lightning"
Fricka Dorsa	+47/+53	149/152	Norse: wife of supreme god Odin and mother of Freyja
Hemera Dorsa	+57/+47	243/245	Greek goddess, personification of day
Hera Dorsa	+27/+44	15/30	Greek sky goddess, wife of Zeus
Iris Dorsa	+45/+65	218/223	Greek goddess of rainbow
Iyele Dorsa	+51.5/+42	277/281	Moldavian witch who directed the winds
Juno Dorsum	-35/-32	85/95	Roman sky goddess: sister and consort of Jupiter
Kamari Dorsa	+62/+50	45/60	Georgian (Caucasus) sky maider

Table III Continued

Name	Lat (deg.)	E. Long. (deg.)	Attribute
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Laūma Dorsa	+55/+74	187/190	Latvian/Lithuanian witch, flies in sky
Lukelong Dorsa	+78/+61	150/185	Polynesian goddess, creator of heavens
Mardezh-ava Dorsa	+28/+40	55/68	Marian (Volga Region) mistress of wind
Nephele Dorsa	+32/+50	130/139	Greek cloud goddess
Okipeta Dorsa	+73/+60	225/245	Greek goddess of whirlwind
Pandrosos Dorsa	+50/+70	205/215	Greek dew goddess
Salme Dorsa*	+56/+60	25/31	Estonian sky maiden
Sel-anya Dorsa	+84/+75	75/80	Hungarian wind goddess
Semuni Dorsa	+70/+78	3/12	Ulchian (Amur Region, E. Siberia) sky mistress
Sige Dorsa*	+30/+34	105/108	Babylonian sky goddess
Tezan Dorsa	+86/+82	0/63	Etruscan sky goddess
Tomem Dorsa	(+26)/+39	2/10	Ketian (Siberia) mother of the hot, lives in the sky, near the sun
Uni Dorsa	+37/+30	110/120	Etruscan supreme goddess, same as Hera or Juno
Varma-ava Dorsa	+58/+68	262/272	Mordovian (Volga Region) wind mistress
Vedma Dorsa	+27/+58	157/180	East Slavonic witch
Yumyn-udyr Dorsa	+75/+84	85/180	Marian (Volga Region) daughter of main god, she came down from heaven to the earth
Zorile Dorsa	+44/(+35)	366/340	Moldavian dawn goddess
Fluctūs			
Neago Fluctūs*	+46/+54	348/354	Seneca (N. American Indian) goddess of the south
Fossae			
Arianrod Fossae	+31/+40	237/242	Warrior queen in Celtic mythology
Bellona Fossae	+33/+41	218/224	Italian war goddess, wife of Mars
Felesta Fossae*	+33/+37	46/47	Amazon queen in Scythian epic tales
Friagabi Fossae	+50/+51	110/112	Old English goddess, connected with war god Mars
Hilde Fossa	+39/+47	160/161	Norse myth warrior
lbis Fossae	+74/+69.5	240/267	Yakutian (Siberia) goddess of bloodshed
Manto Fossae*	+63/+66	55/65	Greek war goddess
Minerva Fossae	+67/+62	250/255	Roman war goddess
Mist Fossae	+40/+38	247/249	Norse valkyrie
Rangrid Fossae	+63/+62	355/0	Norse valkyrie
Sigrun Fossae	+48/+53	17/19	Norse valkyrie
Valkyrie Fossae*	+57/+60	5/10	Teutonic/Norse war goddesses

Table III Continued

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Name	Lat (deg.)	E. Long. (deg.)	Attribute
Lineae			
Antiope Linea	-39/-42	345/358	Greek amazon queen awarded to Theseus
Gyor Linea	+20/+13	0/10	Norse valkyrie
Hariasa Linea	+19	15	German war goddess
Hippolyta Linea	-38/-42	336/345	Greek amazon queen, daughter of war god Ares
Kara Linea	-46/-43	300/310	Norse valkyrie, in Icelandic legend she sang so sweetly that the enemy could not defend themselves
Lampedo Linea	+63/+50	275/310	Scythian amazon queen in Greek myths
Molpadia Linea	-51/-48	345/359	Greek amazon
Vihansa Linea	+49/+57	15/25	German war goddess
Montes			
Akna Montes	+66/+72	310/324	Yucatan, goddess of birth
Api Mons	+39	55	Scythian goddess of earth
Atira Mons	+52	267	Pawnee (N. America) wife of Tirawa – Great Spirit
Becuma Mons*	+34	22	Irish dawn goddess
Bunzi Mons*	+46	355	Woyo (Zaire) rainbow goddess
Cotis Mons	+44	234	Frakian goddess, mother of gods, similar to Cybele
Danu Montes	+58/+62	317/340	Celtic (Irish) mother of gods
Eostre Mons*	+45	329.5	Teutonic goddess of spring
Freyja Montes	+71/+75	322/345	Norse/Teutonic goddess of fertility, love, beauty; daughter of supreme god Odin
Furki Mons	+36	236	Chechen and Ingush (Caucasus) goddess, wife of thunder and lightning god Sela
Gula Mons	+22	0	Babylonian Earth Mother; creative force
Hallgerda Mons*	+55	198	Icelandic goddess of vanity
Hathor Mons	-39	325	Egyptian goddess of the sky
Innini Mons	-35	329	Babylonian (Sumer/Akkad) Earth Mother worshipped at Kish
Jael Mons*	+52	121	Hebrew goddess of dawn
Kurukulla Mons*	+48.5	103	Tibetan goddess of wealth
Maat Mons	-2	196	Ancient Egyptian goddess of truth
Maxwell Montes	+61/+69	345/10	James (1831-1879), British physicist
Melia Mons	+61/+64	117/123	Greek nymph
Mentha Mons	+43	238	Roman goddess, personification of the human mind
Milda Mons*	+52.5	159.5	Lithuanian goddess of love
Mokosha Mons	+56/+59	254/257	East Slavonic main goddess

Table III Continued

		e III Continue	
Name	Lat (deg.)	E. Long. (deg.)	Attribute
Muta Mons*	+56	359	Roman goddess of silence
Nokomis Montes	+21/+18	186/197	Algonquin (N. America) Earth Mother
Ozza Mons	+1/+7	198/202	Koreishies (W. Arabia) supreme goddess
Renpet Mons	+75/+77	235/238	Egyptian goddess of springtide and youth
Rhea Mons	+32	283	Greek Titaness, mother of Zeus
Sapas Mons	+8	188	Phoenician goddess of sun
Sekmet Mons	+43/+46	239/242	Ancient Egyptian goddess of war and battle
Seshat Mons*	26.5	33	Egyptian goddess of writing
Sif Mons	+21	352	Norse/Teutonic goddess with golden hair, wife of god Thor
Tefnut Mons	-39	304	Ancient Egyptian goddess of dew or rain
Tepev Mons	+39	45.	Kiche (Guatemala) creator goddess
Thallo Mons	+74	232	Greek goddess of blossom (spring Hora)
Theia Mons	+24	281	Greek Titaness, personification of the light
Ushas Mons	-25	324	Indian goddess of dawn
Venilia Mons	+31/+34	238/242	Ancient Italian sea goddess, wife of Neptune
Paterae	1.57	5 0	M (4500 4045) 5 314
Anning Paterae*	+66	58	Mary (1799–1847), English paleontologist
Anthony Patera*	+48	33	Susan (1820–1906), American suffrage leader
Apgar Patera*	+43.5	84	Virginia (1909-1974), American doctor
Aspasia Patera	+56	189	(c. 470-after 429 BC), one of the most outstanding woman of Ancient Greece
Bahet Patera*	0	48.5	Egyptian personification of abundance
Bethune Patera*	+47	321.5	Mary Bethune Cookman (1875– 1955), American educator; started first school to educate black women
Boadicea Paterae*	+56	96	(d. 60 AD), Queen of Iceni tribe (present Norfolk, England), led revolt against Roman rule to prevent robbery of her family lands
Bremer Patera*	+67	64	Frederika (1801–1865), Swedish writer, reformer, feminist
Carriera Patera*	+48.5	48.5	Rosalba (1675–1757), Italian portrait painter and miniaturist

Table III Continued

		oie III Continue	:u
Name	Lat (deg.)	E. Long. (deg.)	Attribute
Cassatt Patera*	+65.5	207.5	Mary (1844-1926), American impressionist painter
Colette Patera	+66	323	Gabriel (1873-1954), French novelist
Corday Patera*	+62.5	40	Charlotte (1768–1793), French patriot and martyr (killed Marat)
Cavell Patera*	+38	19	Edith (1865-1915), British nurse
Davies Patera*	+47	269	Emily Sarah (1830–1921), British educator, founder of Girton College, Cambridge
Eliot Patera*	+39	79	George Eliot, pseudonym of Mary Ann Evans (1819–1880), English writer
Hatshepsut Patera	+28	64.5	Egyptian pharaoh at 1525–1503 BC
Hiei Chu Patera	+48	97.5	(2698 BC) Chinese, converted the silk worms product into thread and material
Hroswitha Patera Izumi Patera	+36 +49.5	34.5 194	(c. 935-c. 975), German writer Sikibu (974-1036), Japanese writer
Keller Patera*	+45	273.5	Helen (1880–1968), American writer
Kottauer Patera	+37	39	Helena (1410-1471), Austrian historical writer
Labé Patera*	+52	273	Louise (1524–1566), French poetess
Malintzin Patera*	+57	82	(1501–1550), Aztec (?) Indian guide and interpreter for Cortez in his conquest of Mexico
Nzingha Patera*	+69	206	Ann Zingha (1582–1663), Queen of amazon band that defeated Portugese and kept Angola for Angolans
Pocahontas Patera*	+65	49.5	(1595–1617), Powhatan Indian ruler who helped maintain peace between English colonists at Jamestown, VA and native Americans; married John Rolfe
Razia Patera	+45	198	(13th cen.), Queen of Delhi sultanate (India) in 1236– 1240
Sacajawea Patera	+64	337	(1786–1812), Shoshone Indian guide to the Lewis and Clark expedition to the Pacific Northwest coast across N. America
Sachs Patera*	+49	324	Nelly (1891–1970), German-born Swedish playwright and poet

Table III Continued

Name	Lat (deg.)	E. Long. (deg.)	Attribute
0.10. #			Coorse Sand C
Sand Patera*	+42	15.5	George Sand, pseudonym of Aurore Dupin (1804–1876), French novelist
Sappho Patera	+14	16	(6th cen. BC), Ancient Greece (Lesbos, Asia Minor) lyric poetess
Schumann-Heink Patera*	+74	215	Ernestine (1861–1936), German singer
Stopes Patera*	+42.5	47	Marie (1880–1959), English paleontologist and advocator of family planning
Theodora Patera	+22	277	(c. 500-548), famous Byzantine woman, wife of Emperor Justinian I
Tipporah Patera	+39	43	(16-15th cen. BC), Hebrew medical scholar
Tituba Patera*	+42.5	214	(c. 1692), West Indian nurse who started Salem witch hunt
Trotula Patera	+41.5	19	(11th cen.) Italian physician
Woodhull Patera*	+37.5	306	Victoria (1838–1927), American/ English lecturer
Yaroslavna Patera	+39	21	(12th cen.) daughter of Khan Krnchak and wife of Russian prince Igor, patiently waited for him to return from captivity
Planitiae			
Aino Planitia	-15/-60	50/125	Finnish heroine who became water spirit
Atalanta Planitia	+55/+73	145/185	Famous Arcadian huntress in Greek mythology, she picked up golden apples of Aphrodite
Audra Planitia*	+58/+65	53/90	Lithuanian sea mistress
Bereghinya Planitia	+24/+47	10/45	East Slavonic water spirit, mermaid
Ganiki Planitia	+30/+50	180/200	Orochian (Amur Region, E. Siberia) water spirit mermaid
Guinevere Planitia	-60/0	260/350	British queen, wife of king Arthur
Helen Planitia	-45/-65	220/300	Greek, daughter of Zeus and Leda; "The face that launched 1000 ships"
Kawelu Planitia	+20/+50	230/260	Hawaiian mythology heroine, died and brought back to life
Lavinia Planitia	-35/-55	310/5	Roman, wife of Aeneas, hero of Trojan war
Leda Planitia	+40/+51	55/70	Greek, mother of Helen
Louhi Planitia	+70/+90	80/200	Karelian mistress of the North
Navka Planitia	0/–18	308/325	Slavonic fresh water spirit; daughter of Watersprite

Table III Continued

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Name	Lat (deg.)	E. Long. (deg.)	Attribute
Niobe Planitia	+25/+43	100/140	Greek, wife of Amphion, became a stone after Artemis and Apollo killed her 12 children
Rusalka Planitia	-10/+10	160/185	East Slavonic water spirit,
Sedna Planitia	+55/+32	310/10	Eskimo sea mistress, her fingers became seals and whales
Snegurochka Planitia	+75/+905	215/0/7	Snow maiden in Russian folk- tales, melted in spring
Vellamo Planitia	+40/+53	150/170	Karelian/Finnish salmon- maiden, mermaid
Vinmara Planitia	+50/+65	190/205	Swan maiden whom sea god Qat kept on Earth by hiding her wings (New Hebridis, Oceania)
Planum Lakshmi Planum	+59/+73	315/0	Indian goddess of fortune, prosperity and love
Regiones			
Alpha Regio	- 9/-31	358/10	First letter in the Greek alphabet
Asteria Regio	+15/+30	260/270	Greek titaness
Atla Regio	+25/0	185/210	Norse giantess, mother of Heimdall
Bell Regio	+25/+38	45/55	English giantess
Beta Regio	+15/+40	272/297	Second letter in the Greek alphabet
Eistla Regio	+28/+8	345/55	Norse giantess (misprinted as 'Eisila Regio' in IAU publication (IAU,1980)
Imdr Regio	-40/-50	200/220	Norse giantess
Metis Regio	+74/+69	245/265	Greek oceanides; goddess of intellect
Mnemosyne Regio	+67/+70	275/285	Greek titaness; goddess of memory
Ovda Regio	+ 7/-14	72/108	Marian (Volga Region) titaness, mistress of supernatural power
Phoebe Regio	+10/-22	275/300	Greek titaness
Tethus Regio	+57/+72	93/143	Greek titaness, personification of water
Themes Regio	-37/-45	275/288	Greek titaness, goddess of law and order
Thetis Regio	-2/-16	115/140	Greek nereid, sea deity, daughter of sea god Nereus and oceanid Doris
Ulfrun Regio	+45/+5	215/230	Norse giantess

Table III Continued

	Table	III Continue	<u> </u>
Name	Lat (deg.)	E. Long. (deg.)	Attribute
Rupēs			
Fornax Rupēs	+29/+32	200/202	Roman goddess of hearth and baking of bread
Gabie Rupes	+68/+66	107/1145	Lithuanian goddess of fire and hearth
Hestia Rupes	+8/+3	60/75	Greek hearth goddess
Uorsar Rupes	+78/+76	330/345	Adygan (Caucasus) goddess of hearth
Ut Rupes	+55/+53	320/327	Mongolian goddess of the hearth fire
Vesta Rupes	+68/+58	313/350	Roman hearth and fire goddess
Terrae			
Aphrodite Terra	+25/-45	60/210	Greek goddess of love and beauty
Ishtar Terra	+79/+45	290/80	Babylonian (Akkad) goddess of love, fertility and war
Lada Terra	-50/(6	310/1105)	Slavonic goddess of love, beauty and spring
Tesserae			
Ananke Tessera	+45/+57	125/145	Greek goddess of necessity
Atropos Tessera	+66/+75	285/314	Greek, one of three Fates
Clotho Tessera	+54/+60	329/344	Greek, one of three Fates
Dekla Tessera	+54/+59	64/83	Latvian goddess of fate
Fortuna Tessera	+54/+76	4/82	Roman goddess of chance
Itzpapaloti Tessera	+71/+79	305/0	Aztec goddess of fate
Kutue Tessera	+37/+42	105/110	Ulchian (Amur Region, E. Siberia) folklore toad that bring happiness
Lachesis Tessera	+41/+45	296/301	Greek, one of three Fates
Laima Tessera	+45/+58	31/58	Latvian and Lithuanian goddess of happiness, fate and birth
Manzan-Gurme Tesserae	+33/+46	356/3	Ancestor lady who possesses the book of fate in Mongol, Tibet, Buryat mythologies
Meni Tessera	+46/+50	75/80	Semitic goddess of fate
Meshkenet Tessera	+65/+68	92/128	Egyptian goddess of fortune
Moira Tessera	+57.5/+60	307/314	Greek, general name for three Fates – Atropos, Clotho and Lachesis
Nemesis Terrera	+44/+46	193/196	Greek goddess of fate
Shimti Tessera	+28/+35	94/102	Babylonian; Ishtar as the goddess of fate
Tellus Tessera	+28/+49	70/92	Ancient Italian goddess of Earth; "Earth-Mother"
Virilis Tesserae	+52/+61	230/243	One of the names of Roman chance goddess Fortuna

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Name	Lat. (deg.)	E. Long. (deg.)	Attribute	
Tholi				
Ale Tholus	+68	246	Igbo (Nigeria) goddess, created Earth and vegetation	
Ashtart Tholus	+49	247	Phoenician goddess of love, fertility and war	
Bast Tholus	+57.5	131	Egyptian goddess of joy	
Brigit Tholus	+49	246	Celtic goddess of wisdom, doctoring, smithing	
Nertus Tholus	+61.5	248	German/Norse goddess of vegetation and fertility	
Semele Tholi	+64	203/204	Phrygian Earth goddess	
Upunusa Tholus	+67.5	247	Earth goddess of Leti and Babar South-Western Islands, E. Indonesia)	
Wurunsemu Tholus	+39.5	210	Sun goddess and mother of gods in Hatti (Hittite) mythology	

whole planet imaged with MAGELLAN resolution. As about 400 names exist now it will be necessary to give about 2900 new names during production of the maps after MAGELLAN.

The increase of resolution from Pioneer Venus to Venera 15/16 images resulted also in increasing the number of types of named features. There were 8 types of features named after Pioneer Venus and 9 new types were introduced with Venera 15/16 data. So, 17 types of named features exist now (Table II). MAGELLAN images could lead to introducing new types of features to be named. The distribution of named features by types surely will be changed in comparison with the current proportions (Table II). The increase of resolution will lead to a special increase of the fraction of the small feature names such as Colles (small hills), Fluctūs (flows), and Tholi (domes). The new generic terms should be introduced most probably for small-scale features also. The terms used earlier for the smallscale features on Mars, such as *Undae* ("waves", ripple-like, dune-like features) and Labes ("tongue", landslides), could be introduced on Venus. The necessity of adding new generic terms for the specific features cannot be excluded. It may be noted that Tessera ("tile-like") and Corona terms were introduced to planetary nomenclature for the first time after the Venera 15/16 detailed images of Venus were received (IAU, 1985).

Acknowledgments

The author had the great pleasure of many years of productive collaboration with the WGPSN, as a consultant to this Working Group. Special gratitude is due to Harold Masursky, President of the WGPSN. The planetary nomenclature activity that will be required by the new frontiers opened by the MAGELLAN data promises much additional collaboration in the future. I am also grateful to Professor T. Owen who carefully edited the English of this paper.

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