# DIVISION III / WG PLANETARY SYSTEM NOMENCLTURE 

CHAIR<br>MEMBERS

Kaare Aksnes<br>J. Ellen Blue, Juergen Blunck, George A. Burba, Guy J. Consolmagno, Mikhail Ya. Marov, Brian G. Marsden, Tobias C. Owen, Mark S. Robinson, Rita M. Schulz, Bradford A. Smith, Iwan P. Williams

## PROCEEDINGS BUSINESS MEETING on 23 August 2006

## 1. Introduction

The meeting was attended by six from the WG (K. Aksnes, J. Blunck, G. Consolmagno, B. Marsden, R. Schulz, V. Shevchenko) and two from the Task Groups (D. Morrison, J. Watanabe). Also the incoming WG members E. Bowell and R. Courtin, as well as some guests, attended.

The first session was devoted to a review of the nomenclature for which approval was sought from the IAU through Division III. A total of 252 names have in the triennium been approved by the WG: 228 surface features have been named on Venus (33), Moon (8), Mars (83), Itokawa (3), Io (16), Europa (11), Ganymede (3), Callisto (2), Titan (45) and Phoebe (24), and 24 satellites of Jupiter (10), Saturn (5), Uranus (6), Neptune (1) and Pluto (2) have received names. These 252 names and their attributes are listed at the end of this report. The names and some new name categories and descriptor terms are also listed on the website [http://planetarynames.wr.usgs.gov/](http://planetarynames.wr.usgs.gov/).

In the second session, new terms of reference (see below) for the WG were discussed and agreed upon, in consultation with the president of DivisionIII. The most important change is that names approved by the WG-PSN no longer need to be labeled 'provisional'. New names will immediately upon approval by the WG be displayed on the mentioned website. Any objections to the names must be forwarded in writing or by e-mail to the DivisionIII which will rule on the objections.

Finally, changes in the membership of the WG were agreed on. Rita Schulz becomes the new WG-PSN chairperson, switching place with Kaare Aksnes on the WG. The new Division III president, Edward Bowell, the new Commission 16 president, Regis Courtin, and the new chairperson of the Outer Solar System Task Group, Rosaly Lopes, replace, respectively, Iwan Williams, Guy Consolmagno and Tobias Owen on the WG. The new membership is listed below.

## 2. Terms of Reference

In consultation with Division III, the following new terms of reference have been agreed on for the WG:

1. The IAU Working Group for Planetary System Nomenclature (WG-PSN) is appointed by IAU Division III under similar procedures as Divisional Working Groups (IAU Working Rules 38). It reports to the General Assembly through the president of Division III. For necessary meetings, the Working Group is eligible for travel support from the IAU.
2. The membership of the Working Group includes:
a. A chairperson of the WG-PSN and a minimum of eight other members of IAU Division III, including all the chairpersons of the Task Groups (see $g$ ), representing a diversity of geographical
and cultural backgrounds.
$b$. The president of Division III. The president may delegate the divisional representation to another Division member.
c. The president of IAU Commission 16 on Physical Study of Planets and Satellites or his/her representative.
d. The chairperson of the IAU Committee on Small Body Nomenclature, or his/her representative.
$e$. Additional members up to a maximum of 15 , including a maximum of three consultants who possess special expertise but are not IAU members.
$f$. A member may be in more than one of the above categories.
$g$. The Working Group may appoint Task Groups of up to eight members, including a chairperson, to assist in the nomenclature work for the various celestial bodies, as the need arises.
3. Appointment and terms of service:

The members, including the chairperson, will be appointed for three years at each General Assembly by Division III, upon the advice of the outgoing Working Group. The Working Group may appoint or dismiss Task Group members at any time. Continuity in the work is important, so Working Group and Task Group members are encouraged to serve through several triennia.
4. Names and guidelines:
$a$. The Working Group will develop, maintain, and publish guidelines for naming natural satellites of planets and surface features on all the solar sytem bodies, based on the established guidelines. Significant changes in the guidelines should be submitted by the Working Group to Division III for discussion and approval before being put into effect. Minor changes may be approved by the Division III president.
$b$. The Working Group will periodically approve lists of new nomenclature, with accompanying explanatory notes. The names will be made available immediately on approval in an official website for public review. Any objections to these names based on significant, substantive problems must be forwarded in writing or e-mail to the Division III president within three months of the placing of these names on the website. Valid objections do not include personal references of the discoverers or the individuals. Division III will rule on objections.
$c$. Three months before each General Assembly, the Working Group will submit to the IAU General Secretary, through Division III, a list of all names approved in the immediately preceding three calendar years. The names will be published or referenced in the Proceedings of the General Assembly.

## 3. WG members 2006-2009

R. M. Schulz (chair, the Netherlands). Members: K. Aksnes (Norway), J. Blue (USA), J. Blunck (Germany), E. Bowell (USA), G. A. Burba (Russia), R. Courtin (France), R. M. Lopes (USA), M. Ya. Marov (Russia), B. G. Marsden (USA), M. Robinson (USA), V. V. Shevchenko (Russia), and B. A. Smith (USA).

## 4. New nomenclature

| FEATURE NAME | LAT | LON | DIAM | DESCRIPTION |
| :---: | :---: | :---: | :---: | :---: |
| VENUS |  |  |  |  |
| CHASMA |  |  |  |  |
| Hanwi Chasma | 10.5 N | 247.0 E | 1800.0 | Oglala (Sioux) moon and sky goddess. |
| CORONAE |  |  |  |  |
| Achall Corona | 31.2 S | 259.6 E | 265.0 | Celtic earth and nature goddess. |
| Asintmah Corona | 25.9 N | 208.0E | 150.0 | Athabaskan (W. Canada Subarctic) Earth and nature goddess; the first woman on Earth. |
| Benzozia Corona | 27.5N | 204.5E | 185.0 | Basque mother goddess. |
| Chanum Coronae | 29.2S | 245.5E | 330.0 | Kachin (Tibetan people of Burma/Myanmar) creator goddess. |
| Embla Coronae | 28.9N | 205.4E | 132.0 | Scandinavian Earth goddess, creator of life. |
| Kulimina Corona | 27.85 | 261.9E | 170.0 | Arawakan (Brazil, Venezuela) creator goddess who created women. |
| Madalait Corona | 37.6 N | 206.4E | 150.0 | Australian creator goddess; "Creator of life." |
| Nimba Corona | 32.8 N | 204.5E | 88.0 | Guinea (West Africa) Earth and mother goddess. |


| Qakma Corona | 35.5 N | 207.1E | 130.0 | Bella Coola/Nuxalk (SW Canada) creator of life, the first woman. |
| :---: | :---: | :---: | :---: | :---: |
| Sitapi Coronae | 36.5S | 246.8E | 270.0 | Indonesian earth, nature, and creator goddess. |
| CRATERS |  |  |  |  |
| Clementina | 35.9 N | 208.6E | 4.0 | Portuguese form of Clementine, French first name. |
| Denise | 14.45 | 94.7 E | 2.0 | Greek first name. |
| Gail | 16.1S | 97.5 E | 10.0 | Hebrew first name. |
| Lisa | 29.0 N | 182.0E | 4.5 | Short form of Elizabeth, Hebrew first name. |
| LINEA |  |  |  |  |
| Agrona Linea | 40.0N | 280.0E | 2300.0 | Welsh goddess of slaughter, destroyer of life. |
| MONTES |  |  |  |  |
| Ninisinna Mons | 25.7 N | 197.5E | 110.0 | Mesopotamian goddess of health and healing. |
| Shala Mons | 39.4 N | 208.0E | 90.0 | Canaanite (Phoenicia) storm goddess. |
| Toma Mons | 12.95 | 232.0 E | 80.0 | Tibetan goddess of intelligence and creativity. |
| Waka Mons | 26.3 N | 207.7E | 60.0 | Polynesian lizard goddess. |
| Xtoh Mons | 39.7 N | 194.2E | 110.0 | Quiche (Guatemala) goddess of weather and rain. |
| PATERAE |  |  |  |  |
| Darcle Patera | 37.4 S | 263.8E | 15.0 | Hariclea; Romanian soprano singer (1860-1939). |
| Destinnov Patera | 31.5 S | 250.2E | 15.0 | Ema (pseudonym of Emilia Kittlova); Bohemian/Czech singer, also known as Emmy Destinn (1878-1930). |
| Dutrieu Patera | 33.8 N | 198.5E | 80.0 | Helene; Belgian/French pioneer aviatrix (1877-1961). |
| Garland Patera | 32.7 N | 206.8E | 45.0 | Judy; American singer and actress (1922-1969). |
| Lindgren Patera | 28.1N | 241.4 E | 110.0 | Astrid; Swedish author (1907-2002). |
| Nikolaeva Patera | 33.9 N | 267.5E | 100.0 | Olga V.; Russian planetologist/geochemist (1941-2000). |
| Witte Patera | 25.8 S | 247.6E | 35.0 | Wilhelmine; German astronomer (1777-1854). |
| THOLI |  |  |  |  |
| Apakura Tholus | 40.3 N | 205.8E | 10.0 | Maori (New Zealand) goddess of justice. |
| Azimua Tholi | 34.0 S | 249.3 E | 40.0 | Sumerian underworld goddess. |
| Monoshi Tholus | 37.75 | 252.0 E | 15.0 | Bengal goddess of snakes. |
| Otohime Tholus | 32.0 S | 268.2E | 20.0 | Japanese goddess of the arts and beauty. |
| Wohpe Tholus | 41.4 N | 288.1E | 40.0 | Lakota goddess of order, beauty, and happiness. |

VALLIS
Ganga Valles
4.8N 53.0E 200.0 Hindu goddess of the sacred river Ganges.

MOON
CRATERS
Chawla
D. Brown

Husband
42.8S $\quad 147.5 \mathrm{~W}$
15.0 Kalpana; American astronaut, Space Shuttle Columbia Mission Specialist (1961-2003).
15.0 David McDowell; American astronaut, Space Shuttle Columbia Mission Specialist (1956-2003).
29.0 Rick Douglas; American astronaut, Space Shuttle Columbia Commander (1957-2003).
L. Clark
M. Anderson

McCool
Ramon
Ryder
42.0S 147.2 W
40.8S 147.9W
43.7S 147.7W
$41.6 \mathrm{~S} \quad 149.0 \mathrm{~W}$
41.7S 146.3W
41.6S 148.1W
44.5S 143.2E
16.0 Laurel Blair Salton; American astronaut, Space Shuttle Columbia Mission Specialist (1961-2003).
17.0 Michael Phillip; American astronaut, Space Shuttle Columbia Payload Commander (1959-2003).
21.0 William Cameron; American astronaut, Space Shuttle Columbia Pilot (1961-2003).
17.0 Ilan; Israeli astronaut, Space Shuttle Columbia Payload Specialist (1954-2003).
17.0 Graham; United Kingdom-born, American geologist (1949-2002).

MARS
CATENA
Ophir Catenae $\quad 9.6 \mathrm{~S}$ 59.1W 577.0 Classical albedo feature name.

## CAVI

Amenthes Ca
Boreum Cavus Ganges Cavus
Olympia Cavi
Ophir Cavus
Tenuis Cavus

| 16.0 N | 245.0 W | 1340.0 | Classical albedo feature name. |
| :--- | ---: | ---: | :--- |
| 84.5 N | 20.5 W | 50.0 | Classical albedo feature name. |
| 10.2 S | 51.5 W | 42.3 | Classical albedo feature name. |
| 85.0 N | 178.0 W | 860.0 | Classical albedo feature name. |
| 10.0 S | 55.1 W | 36.8 | Classical albedo feature name. |
| 84.7 N | 0.0 W | 35.0 | Classical albedo feature name. |


| CHAOS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Baetis Chaos | 0.2 S | 60.5W | 55.0 | Classical albedo feature name. |
| Ganges Chaos | 9.7S | 46.2W | 120.0 | Classical albedo feature name. |
| Iamuna Chaos | 0.2 S | 40.6W | 18.0 | Classical albedo feature name. |
| Oxia Chaos | 0.2 N | 39.9 W | 26.5 | Classical albedo feature name. |
| Xanthe Chaos | 11.8 N | 42.2W | 34.0 | Classical albedo feature name. |
| CHASMATA |  |  |  |  |
| Promethei Chasma | 82.5S | 217.5W | 300.0 | Classical albedo feature name. |
| Ultimum Chasma | 81.15 | 209.9W | 350.0 | Classical albedo feature name. |
| COLLES |  |  |  |  |
| Chryse Colles | 7.9N | 42.1W | 60.0 | Classical albedo feature name. |
| CRATERS |  |  |  |  |
| Bacolor | 33.0 N | 241.4W | 20.8 | Town in the Philippines. |
| Beloha | 39.55 | 303.4W | 33.5 | Town in Madagascar. |
| Boola | 81.2N | 105.8W | 17.0 | Town in Guinea. |
| Bronkhorst | 10.7 S | 55.2W | 17.9 | Town in the Netherlands. |
| Castril | 14.75 | 184.8W | 2.2 | Town in Spain. |
| Crotone | 82.3 N | 70.0W | 6.4 | Town in Italy. |
| Culter | 8.8S | 54.0W | 4.6 | Village near Aberdeen, Scotland, also called Peterculter. |
| Davies | 46.0 N | 0.0W | 49.2 | Merton Edward; American engineer, planetary geodesist (1917-2001). |
| Deseado | 80.6 S | 289.7W | 27.0 | Town in Argentina. |
| Dilly | 13.2N | 202.9W | 1.3 | Town in Mali. |
| Dokka | 77.1 N | 146.0W | 52.5 | Town in Norway. |
| Eberswalde | 24.0 S | 33.3W | 65.3 | Town in Germany. |
| Elim | 80.15 | 263.4W | 43.0 | Town in South Africa. |
| Gamboa | 40.7 N | 44.4W | 33.0 | Town in Panama. |
| Gratteri | 17.7S | 160.2W | 7.3 | Town on the island of Sicily, Italy. |
| Johnstown | 9.8S | 51.1W | 3.2 | Town in Pennsylvania, USA. |
| Jojutla | 81.5 N | 169.6W | 19.0 | Town in Mexico. |
| Jumla | 21.3S | 273.6W | 45.0 | Town in Nepal. |
| Karzok | 18.3 N | 131.9 W | 15.6 | Village in Kashmir. |
| Katoomba | 79.0 S | 232.5 W | 53.0 | Town in Australia. |
| Mojave | 7.5 N | 33.1 W | 58.5 | Town in California, USA. |
| Morella | 9.7S | 51.4W | 78.9 | Town in Spain. |
| Okotoks | 21.2 S | 275.7W | 22.6 | Town in Alberta, Canada. |
| Pangboche | 17.2 N | 133.6W | 10.4 | Village in Nepal. |
| Persbo | 8.5 N | 203.2W | 19.5 | Town in Sweden. |
| Puyo | 83.9 N | 222.4W | 10.4 | Town in Ecuador. |
| Saheki | 21.7 S | 286.9W | 85.0 | Tsuneo; Japanese amateur astronomer (1916-1996). |
| Somerset | 9.7S | 51.3W | 3.3 | Town in Pennsylvania, USA. |
| Toconao | 20.95 | 74.8W | 17.7 | Town in Chile. |
| Tombaugh | 3.5 N | 198.2W | 60.3 | Clyde William; American astronomer (1906-1997). |
| Tomini | 16.3 N | 234.2W | 7.4 | Town in Indonesia. |
| Tooting | 23.1N | 152.4W | 27.5 | Town in England. |
| Udzha | 81.9 N | 282.8W | 45.0 | Village in northern Russia. |
| Wallula | 9.9S | 54.4W | 12.5 | Town in Washington, USA. |
| Winslow | 3.85 | 300.8W | 1.0 | Town in Arizona. |
| Zumba | 28.6 S | 133.2W | 3.3 | Town in Ecuador. |
| FOSSA |  |  |  |  |
| Idaeus Fossae | 37.0 N | 51.9W | 235.0 | Classical albedo feature name. |
| LABYRINTHUS |  |  |  |  |
| Tyrrhenus Labyrinthus | 16.0 S | 258.9W | 93.0 | Classical albedo feature name. |
| LINGULAE |  |  |  |  |
| Australe Lingula | 83.8S | 289.4W | 430.0 | Classical albedo feature name. |
| Hyperborea Lingula | 80.0 N | 53.5W | 80.0 | Classical albedo feature name. |
| Promethei Lingula | 83.0S | 240.0W | 560.0 | Classical albedo feature name. |
| Ultima Lingula | 76.35 | 215.0W | 560.0 | Classical albedo feature name. |
| MENSAE |  |  |  |  |
| Abalos Mensa | 81.1N | 75.6W | 130.0 | Classical albedo feature name. |
| Australe Mensa | 86.85 | 5.0W | 200.0 | Classical albedo feature name. |
| Ganges Mensa | 7.2S | 48.8W | 140.0 | Classical albedo feature name. |
| Olympia Mensae | 78.4 N | 236.0W | 380.0 | Classical albedo feature name. |
| Tenuis Mensa | 81.1 N | 93.8 W | 130.0 | Classical albedo feature name. |
| MONS |  |  |  |  |
| Xanthe Montes | 18.4N | 54.5W | 500.0 | Classical albedo feature name. |


| PALUS |  |  |  |  |
| :--- | ---: | ---: | ---: | :--- |
| Cerberus Palus | 5.7 N | 212.1 W | 480.0 | Classical albedo feature name. |
| PLANA |  |  |  |  |
| Aeolis Planum | 0.8 S | 215.0 W | 820.0 | Classical albedo feature name. |
| Amenthes Planum | 3.2 N | 254.3 W | 960.0 | Classical albedo feature name. |
| Zephyria Planum | 1.0 S | 206.9 W | 550.0 | Classical albedo feature name. |
|  |  |  |  |  |
| SCOPULI |  |  |  |  |
| Abalos Scopuli | 80.7 N | 75.7 W | 110.0 | Classical albedo feature name. |
| Australe Scopuli | 83.5 S | 115.0 W | 530.0 | Classical albedo feature name. |
| Boreales Scopuli | 88.2 N | 105.0 W | 850.0 | Classical albedo feature name. |
| Gemini Scopuli | 81.0 N | 335.0 W | 1100.0 | Classical albedo feature name. |
| Ultimi Scopuli | 77.5 S | 180.0 W | 1100.0 | Classical albedo feature name. |
|  |  |  |  |  |
| SULCUS |  |  |  |  |
| Australe Sulci | 85.0 S | 225.0 W | 400.0 | Classical albedo feature name. |
|  |  |  |  |  |
| THOLUS | 4.8 N | 196.1 W | 600.0 | Classical albedo feature name. |
| Cerberus Tholi |  |  |  |  |
|  |  |  |  |  |
| VALLES |  |  |  |  |
| Columbia Valles | 9.5 S | 42.9 W | 94.0 | River in Washington, USA. |
| Coogoon Valles | 17.3 N | 21.8 W | 300.0 | River in Australia. |
| Daga Vallis | 12.1 S | 42.3 W | 70.0 | River in Burma. |
| Grjot Valles | 15.6 N | 194.6 W | 370.0 | River in Iceland. |
| Lethe Vallis | 4.0 N | 206.5 W | 225.0 | River in Katmai National Monument, Alaska, USA. |
| Rahway Valles | 9.4 N | 186.2 W | 500.0 | River in New Jersey, USA. |
| Silinka Vallis | 9.0 N | 28.2 W | 140.0 | River in Russia. |
| Vichada Valles | 19.6 S | 271.9 W | 430.0 | River in Colombia. |
| Walla Walla Vallis | 9.9 S | 54.5 W | 24.0 | River in Washington, USA. |

ITOKAWA

| REGIONES <br> MUSES-C Regio | 70.0 S | 60.0 | 0.3 | MUSES-C, the name of the Hayabusa spacecraft prior to <br> lauch. |
| :--- | :--- | :--- | :--- | :--- |
| Sagamihara Regio | 80.0 N | 15.0 | 0.23 Town in Japan where the Institute of Space and |  |
| Uchinoura Regio | 40.0 N | 90.0 | 0.07 | Astronautical Science is located. |

IO

| ERUPTIVE CENTER Thor | 39.2N | 133.1W | 239.4 | Norse god of thunder. |
| :---: | :---: | :---: | :---: | :---: |
| MENSAE |  |  |  |  |
| Prometheus Mensa | 1.95 | 151.9W | 184.0 | Greek fire god. |
| Tvashtar Mensae | 61.6 N | 119.9W | 326.4 | Indian sun god and smith who forged the thunderbolt of the thunder god Indra. |
| MONTES |  |  |  |  |
| Gish Bar Mons | 18.6 N | 87.7W | 110.0 | Babylonian sun god. |
| Monan Mons | 15.2 N | 104.5W | 297.0 | Brazilian god who destroyed the world with fire and flood. |
| Pillan Mons | 8.8S | 246.7W | 163.0 | Araucanian thunder, fire, and volcano god. |
| PATERAE |  |  |  |  |
| Ah Peku Patera | 10.3N | 107.0W | 84.0 | Mayan thunder god. |
| Chors Patera | 68.5 N | 249.9W | 65.0 | Slavic sun god. |
| Estan Patera | 21.6 N | 87.7W | 95.0 | Hittite sun god. |
| Llew Patera | 12.2 N | 242.3W | 78.0 | Celtic sun god. |
| Rarog Patera | 41.7 S | 304.4W | 104.3 | Czech fire deity. |
| Reshef Patera | 27.7 N | 158.1W | 62.0 | Phoenician god of lightning, sun, and thunder. |
| Thomagata Patera | 25.7 N | 165.9W | 59.0 | Chibcha storm god, a terrifying fire spirit who flew through the air changing men into animals. |
| Vivasvant Patera | 75.1N | 294.0W | 83.2 | Hindu god of the morning sun. |
| REGIO |  |  |  |  |
| Bulicame Regio | 34.8 N | 190.8W | 498.0 | Hot sulphur spring, the water of which sinful women were permitted to use in "The Inferno." |

VALLIS

## EUROPA

| CRATERS |  |  |  |  |
| :--- | ---: | ---: | ---: | :--- |
| Amaethon | 13.8 N | 177.4 W | 1.7 | Celtic god of agriculture. |
| Bress | 37.6 N | 98.6 W | 10.0 | Beautiful son of Elatha in Celtic mythology. |
| Dagda | 37.3 N | 168.7 W | 9.8 | One of the chief deities of the Tuatha de Danan in <br> mythology. |
|  |  |  |  |  |
| Eochaid | 50.4 S | 233.3 W | 10.6 | King of the Fir Bolgs in Celtic mythology. |
| Gwern | 9.1 N | 344.5 W | 22.2 | Son of Branwen in Celtic mythology. |
| Luchtar | 40.2 S | 257.5 W | 19.9 | Celtic god of carpentry. |
| Lug | 27.9 N | 44.3 W | 11.0 | Irish omnicompetent god. |
| Midir | 3.6 N | 338.7 W | 37.4 | Gaelic fate and underworld deity. |
| Ogma | 87.4 N | 287.8 W | 5.0 | Celtic god of eloquence and literature, a son of Dagda. |
| Tuag | 59.9 N | 172.3 W | 15.2 | Irish dawn goddess. |
|  |  |  |  |  |
| LINEA |  |  |  |  |

GANYMEDE
CRATERS
Damkina

Menhit
Saltu
CALLISTO
CRATER
Debegey
FACULA
Kol Facula
4.5N 282.7W 390.0 Icelandic frost or storm giant.

## TITAN

| ALBEDO FEATURE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Aaru | 10.0N | 340.0W | 0.0 | Egyptian abode of the blessed dead. |
| Adiri | 10.0 S | 210.0W | 0.0 | Melanesian afterworld where life is easier than on Earth. |
| Aztlan | 10.0 S | 20.0W | 0.0 | Mythical land from which the Aztecs believed they migrated. |
| Belet | 5.0S | 255.0W | 0.0 | Malay afterworld reached by a flower-lined bridge. |
| Ching-tu | 30.0 S | 205.0W | 0.0 | Chinese Buddhist paradise where those who attain salvation will live in unalloyed happiness. |
| Dilmun | 15.0N | 175.0W | 0.0 | Sumerian garden of paradise, primeval land of bliss. |
| Fensal | 5.0N | 30.0W | 0.0 | In Norse mythology, magnificent mansion of Frigga, to which she invited all married couples who had led virtuous lives on Earth to enjoy each other's company forever. |
| Mezzoramia | 70.0 S | 0.0W | 0.0 | Oasis of happiness in the African desert, from an Italian legend. |
| Quivira | 0.0 N | 15.0W | 0.0 | Legendary city in the American Southwest; site of a fabulous treasure sought by Coronado and other explorers. |
| Senkyo | 5.0S | 320.0W | 0.0 | Japanese ideal realm of aloofness and serenity, freedom from wordly cares and death. |
| Shangri-la | 10.0S | 165.0W | 0.0 | Tibetan mythical land of eternal youth. |
| Tsegihi | 40.0 S | 10.0W | 0.0 | Navajo sacred place. |
| Xanadu | 15.0S | 100.0W | 3400.0 | An imaginary country in Coleridge's "Kubla Khan." |
| ARCUS |  |  |  |  |
| Hotei Arcus | 28.0 S | 79.0W | 600.0 | One of the seven gods of happiness in Japanese Buddhism. He is the god of contentment, good fortune, cheerfulness, and he is always smiling. |
| CRATERS |  |  |  |  |
| Menrva | 20.1N | 87.2W | 392.0 | Etruscan goddess of wisdom. |
| Sinlap | 11.3 N | 16.0W | 80.0 | Kachin (N. Burma) wise spirit who dwells in the sky and gives wisdom to his worshippers. |
| FACULAE |  |  |  |  |
| Antilia Faculae | 11.0S | 187.0W | 260.0 | Archipelago corresponding to the mythical island of |


|  |  |  |  | Antilia, once thought to lie midway between Europe and the Americas. |
| :---: | :---: | :---: | :---: | :---: |
| Bazaruto Facula | 11.6 N | 16.1W | 215.0 | Mozambique island. |
| Coats Facula | 11.1S | 29.2W | 80.0 | Canadian island. |
| Crete Facula | 9.4 N | 150.1W | 680.0 | Greek island. |
| Elba Facula | 10.8 S | 1.2W | 250.0 | Italian island. |
| Kerguelen Facula | 5.4S | 151.0W | 135.0 | French subantarctic island. |
| Mindanao Facula | 6.6 S | 174.2 W | 210.0 | Philippine island. |
| Nicobar Faculae | 2.0N | 159.0W | 575.0 | Indian archipelago. |
| Oahu Facula | 5.0 N | 166.7 W | 465.0 | Hawaiian island. |
| Santorini Facula | 2.4 N | 145.6W | 140.0 | Greek island also known as Thira. |
| Shikoku Facula | 10.45 | 164.1W | 285.0 | Japanese island. |
| Sotra Facula | 12.5 S | 39.8 W | 235.0 | Norwegian island. |
| Texel Facula | 11.5 S | 182.6 W | 190.0 | Dutch island. |
| Tortola Facula | 8.8N | 143.1W | 65.0 | Island in the British Virgin Islands. |
| Vis Facula | 7.0 N | 138.4W | 215.0 | Croatian island. |
| LACUS |  |  |  |  |
| Ontario Lacus | 72.0S | 183.0W | 235.0 | Lake on the border between Canada and the United States. |
| LARGE RINGED FEATURE |  |  |  |  |
| Guabonito | 10.9S | 150.8 W | 55.0 | Taino Indian (Antilles) sea goddess who taught the use of amulets. |
| Nath | 30.55 | 7.7W | 95.0 | Irish goddess of wisdom. |
| Veles | 2.0 N | 137.3W | 45.0 | Slavic god of housekeeping wisdom. |
| MACULAE |  |  |  |  |
| Eir Macula | 24.0S | 114.7 W | 145.0 | Norse goddess of healing and peace. |
| Elpis Macula | 31.2 N | 27.0 W | 500.0 | Greek goddess of happiness and hope. |
| Ganesa Macula | 50.0 N | 87.3 W | 160.0 | Hindu god of good fortune and wisdom. |
| Omacatl Macula | 17.6 N | 37.2W | 225.0 | Aztec god of good cheer and lord of banquets. |
| REGIO |  |  |  |  |
| Tui Regio | 20.0S | 130.0W | 0.0 | Chinese goddess of happiness, joy, and water. |
| VIRGAE |  |  |  |  |
| Bacab Virgae | 19.0S | 151.0W | 485.0 | Mayan rain god. |
| Hobal Virga | 35.0 S | 166.0W | 1075.0 | Arabian rain god. |
| Kalseru Virga | 36.0 S | 137.0W | 630.0 | NW Australian rainbow serpent, bringer of rain. |
| Perkunas Virgae | 27.0 S | 162.0W | 980.0 | Lithuanian god of rain, thunder, and lightning. |
| Shiwanni Virgae | 25.0 S | 32.0 W | 1400.0 | Zuni rain god. |

PHOEBE

| CRATERS |  |  |  |
| :--- | ---: | ---: | ---: |
| Acastus | 9.6 N | 148.5 W | 34.0 |
|  |  |  |  |
| Admetus | 11.4 N | 39.1 W | 58.0 |
| Amphion | 27.0 S | 1.8 W | 18.0 |
| Butes | 49.6 S | 292.5 W | 29.0 |
| Calais | 38.7 S | 225.4 W | 31.0 |
| Canthus | 69.6 S | 342.2 W | 44.0 |
|  |  |  |  |
| Clytius | 46.0 N | 193.1 W | 52.0 |
|  |  |  |  |
| Erginus | 31.6 N | 337.1 W | 38.0 |
|  |  |  |  |
| Euphemus | 31.3 S | 331.1 W | 23.0 |
| Eurydamas | 61.5 S | 281.6 W | 19.0 |
| Eurytion | 30.4 S | 8.0 W | 14.0 |
| Eurytus | 39.7 S | 177.2 W | 89.0 |
| Hylas | 7.9 N | 354.5 W | 30.0 |
| Idmon | 67.1 S | 197.8 W | 61.0 |
|  |  |  |  |
| Iphitus | 27.2 S | 293.3 W | 22.0 |
|  |  |  |  |
| Jason | 16.2 N | 317.7 W | 101.0 |
|  |  |  |  |
| Mopsus | 31.6 N | 109.1 W | 241.5 W |
| Nauplius | 77.1 S | 96.9 W | 24.0 |
| Oileus |  |  |  |

0 Argonaut, son of the Thessalian king Pelias, took part in
the Calydonian boar hunt.
0 Argonaut, founder and king of Pherae in Thessaly.
0 Argonaut, son of Hyperasius and Hypso.
0 Argonaut, son of Teleon, bee-master.
0 Argonaut, son of Boreas, the north wind.
Argonaut, son of Kanethos or Cerion, the only member of
the expedition to die in combat.
Argonaut, son of Eurytus, skilled archer who was killed by
Apollo for challenging the god to a shooting match.
Argonaut, son of Neptune, helmsman of the Argo after the
death of Tiphys.
0 Argonaut, son of Neptune and Europa.
0 Argonaut, son of Ctimenus.
Argonaut, son of Kenethos or Cerion.
Argonaut, son of Mercury and Antianira.
0 Argonaut, son of Theiodamas/Theodamas, king of the Dryopes.
Argonaut, son of Apollo and the nymph Cyrene, or of Abas,
a prophet.
Argonaut, son of Eurytus, Jason's host during his
consultation with the Oracle at Delphi.
The leading argonaut, son of the Thessalian king Aeson,
delivered the Fleece.
Argonaut, prophesying son of Apollo.
Argonaut, son of Neptune and Amymone, or of Klytoneos.
0 Argonaut, king of the Locrians, renowned for his courage
in battle.

| Peleus | 20.2 N | 192.2 W | 44.0 | Argonaut, son of Aeacus, father of Achilles. |
| :--- | ---: | ---: | ---: | :--- |
| Phlias | 1.6 N | 359.1 W | 14.0 | Argonaut, son of Dionysus. |
| Talaus | 52.3 S | 325.2 W | 15.0 | Argonaut, son of Teleon, or of Bias and Pero. |
| Telamon | 48.1 S | 92.6 W | 28.0 | Argonaut, son of Aeacus, took part in the Calydonian boar <br> hunt. |
| Zetes | 20.0 S | 223.0 W | 29.0 | Argonaut, son of Boreas, the north wind. |

## CHANGES TO APPROVED NAMES

VENUS

Breksta Dorsa changed to Breksta Linea

SATELLITES OF JUPITER

| Hegemone | $=$ Jupiter XXXIX | $=$ S/2003 J 8 |
| :--- | :--- | :--- | :--- |
| Mneme | $=$ Jupiter XL | $=$ S/2003 J 21 |
| Aoede | $=$ Jupiter XLI | $=$ S/2003 J 7 |
| Thelxinoe | $=$ Jupiter XLII | $=$ S/20023J 22 |
| Arche | $=$ Jupiter XLIII | $=$ S/2002 J 1 |
| Kallichore | $=$ Jupiter XLIV | $=$ S/2003 J 11 |
| Helike | $=$ Jupiter XLV | $=$ S/2003 J 6 |
| Carpo | $=$ Jupiter XLVI | $=\mathrm{S} / 2003 \mathrm{~J} 20$ |
| Eukelade | $=$ Jupiter XLVII | $=\mathrm{S} / 2003 \mathrm{~J} 1$ |
| Cyllene | $=$ Jupiter XLVIII | $=$ S/2003 J 13 |

SATELLITES OF SATURN

| Narvi | $=$ Saturn XXXI | $=$ S/2003 S 1 |
| :--- | :--- | :--- |
| Methone | $=$ Saturn XXXII | $=$ S $/ 2004$ S 1 |
| Pallene | $=$ Saturn XXXIII | $=$ S $/ 2004$ S 2 |
| Polydeuces | $=$ Saturn XXXIV | $=$ S $/ 2004$ S 5 |
| Daphnis | Saturn XXXV | $=$ S $/ 2005$ |

SATELLITES OF URANUS

| Francisco | $=$ Uranus XXII | $=$ S/2001 U 3 |
| :--- | :--- | :--- |
| Margaret | $=$ Uranus XXIII | $=$ S/2003 U 3 |
| Ferdinand | $=$ Uranus XXIV | $=$ S/2001 U 2 |
| Perdita | $=$ Uranus XXV | $=$ S/1986 U 10 |
| Mab | $=$ Uranus XXVI | $=$ S/2003 U 1 |
| Cupid | $=$ Uranus XXVII | $=$ S/2003 U 2 |

SATELLITES OF NEPTUNE
Psamathe $=$ Neptune $X \quad=\mathrm{S} / 2003 \mathrm{~N} 1$

SATELLITES OF PLUTO

| Nix | $=$ Pluto II | $=$ S/2005 P 2 |
| :--- | :--- | :--- |
| Hydra | $=$ Pluto III | $=S / 2005$ P 1 |

Kaare Aksnes
chair of the Working Group

