

Working Group for Planetary System Nomenclature (WGPSN)
Triennial Report (2021-2024)

CHAIR Rita Schulz

MEMBERS George A. Burba
 Guy Consolmagno
 Rosaly Lopes
 Philippe Masson
 James A. Skinner, Jr.
 Gareth V. Williams
 Charles Wood
 Ruth Ziethe

WGPSN Membership Changes: William Sheehan (U.S.A.) resigned on 2 June 2022. Ruth Ziethe (Switzerland) joined on 18 July 2022 and James A. Skinner, Jr. (U.S.A.) on 17 October 2022.

During the 2021-2024 triennium the following actions have been taken:

- From 17 March 2021 to 27 March 2024, 237 new names have been assigned for planetary surface features (Arrokoth: 5; Didymos: 2; Dimorphos: 11; Europa: 8; Io: 21; Mars: 89; Mercury: 35; Moon: 26; Pluto: 17; Rhea: 1; Titan: 12; Venus: 10). See full list after bulleted section.
- Arrokoth:
 - Names for the two lobes of Arrokoth were approved: Weeyo (smaller lobe) and Wenu (larger lobe), and the descriptor term “lobus” was approved for these features.
- The descriptor term “Statio” (*Spacecraft landing site*) was approved.
- Saturn:
 - 13 names were approved for moons of Saturn:
 - Gridr (Saturn LIV)
 - Angrboda (Saturn LV)
 - Skrymir (Saturn LVI)
 - Gerd (Saturn LVII)
 - Eggther (Saturn LIX)
 - Beli (Saturn LXI)
 - Gunnlod (Saturn LXII)
 - Thiazzi (Saturn LXIII)
 - Alvaldi (Saturn LXV)
 - Geirrod (Saturn LXVI)

- A brightness limit was implemented for naming Jovian and Saturnian satellites. Rule 14 now reads:
 - *While there should be no size limit below which a Jovian or Saturnian satellite must not be named, a Jovian or Saturnian satellite with an absolute magnitude H_V fainter than 16.5 should only be named if it is of special scientific interest.*
- A theme was approved for main belt asteroid (152830) Dinkinesh: "*Words for 'wonderful', 'marvelous', or 'beautiful' in the languages of the world. Note: For those languages where such words have separate spellings for the different grammatical genders, the feminine form is used to fit the feminine name of the asteroid, Dinkinesh, which defines the theme. This name means "You are wonderful/marvelous" in Amharic as the local name for Lucy, fossil remains of the female hominid discovered in Ethiopia in 1974.*"
- A Statement on Lunar Basins Naming Conventions and FAQ were added to the Gazetteer website:
 - *Statement: The IAU WGPSN does not give official names to large structural or impact basins that are defined primarily by geophysical data rather than morphology and topography (as impact craters are). Informal names for lunar basins have been in use for decades and are widespread throughout the planetary science literature and planetary geologic maps. It would cause intense and unnecessary confusion to change those names since they appear in thousands of published papers and hundreds of maps. Informal basin names will not be changed to official names. The IAU WGPSN recommends that the existing informal lunar basin naming conventions be followed: 1) basins filled with maria are named for the mare they contain (Nectaris basin/Mare Nectaris, Imbrium basin/Mare Imbrium) 2) basins that were previously recognized as impact craters should bear the crater name (Grimaldi basin, Birkhoff basin) 3) basins located between formally named craters should bear the names of the two craters with a hyphen in between (Dirichlet-Jackson basin, Coulomb-Sarton basin).*
 - *FAQ: Q: Can I submit a proposal to give an official name to a lunar basin? A: No. The IAU WGPSN does not give official names to large structural or impact basins that are defined primarily by geophysical data rather than morphology and topography (as impact craters are). See Lunar Basins Naming Conventions for more information.*

List of 237 feature names approved by the IAU Working Group for Planetary System Nomenclature between the 2021 Triennial Report to the IAU GA (17 March 2021) and 27 March 2024.

Mercury (35)

Craters (6)

Lorde

Audre (born Audrey Geraldine), also called Gamba Adisa or Rey Domini, American poet and writer of Caribbean heritage (1934-1992).

MacNicol	Bessie; Scottish painter (1869-1904).
Manley	Edna; Jamaican sculptor, painter, and printmaker (1900-1987).
Morrison	Toni; American author (1931-2019).
Nairne	Carolina; Scottish songwriter (1766-1845).
Veronese	Paolo; Italian Renaissance painter (1528-1588).

Faculae (3)

Ahas Facula	Filipino/Tagalog word for snake.
Madu Facula	Estonian word for snake.
Ngu Facula	Lao word for snake.

Rupēs (26)

Acadia Rupes	Canadian; hydrographic survey and oceanographic research vessel (1913- 1969), used to chart the coastline of Eastern Canada, performed tidal and depth charting.
Aegaeo Rupes	Greek; research vessel that performs geophysical, geological, and hydrographic surveys in the Mediterranean Sea since 1985.
Akademik Rupes	Bulgarian; a research vessel for geological, biological, chemical, physical, and ecological investigations in the Black Sea since 1979.
Altair Rupes	Mexican; oceanographic vessel used for academic and federal research in the Pacific (2000s).
Antares Rupes	Mexican; an oceanographic research vessel for hydrography, meteorology, and oceanography studies (since 1968).
Arquipelago Rupēs	Origin: Portuguese; a coastal research vessel which has been used in research programs in the Northeast Atlantic (Azores, Madeira) up to 30°N (2010s).
Astrea Rupes	Italian; multi-purpose research vessel used in particular for investigations in fisheries, aquaculture, oceanography within the Mediterranean Sea since 2003.
Baltica Rupes	Polish; a research vessel that performs oceanographic, biological and fishing research in the Baltic Sea since 1993.
Carrasco Rupēs	Peruvian; a multidisciplinary oceanographic research vessel operated by the Peruvian Navy.
Challenger Rupes	British; survey ship used to undertake the first global marine research expedition, the Challenger Expedition (1872-1876), which laid the foundation for the science of oceanography.
Darshak Rupēs	Indian; a hydrographic survey vessel that carries out hydrographic, geophysical, and oceanographic surveys in the Indian Ocean since 2001; has been used to investigate historically significant shipwrecks and the submerged remains of the lost city of Poompuhar.
Endurance Rupes	British; a three-masted barquentine lead by Ernest Shackleton on the Imperial Trans-Antarctic Expedition (1914-1917).
Hesperides Rupes	Spanish; a global research vessel, used since 1991 for studies of geology, geophysics, hydrography, physical and chemical oceanography, marine biology as well as for logistical support to the Spanish Antarctic bases.
Italica Rupes	Italian; general cargo and oceanographic research vessel used to study the Ross Sea continental shelf in Antarctica and as logistical support for Italian Antarctic exploration since 1990.
Lance Rupes	Norwegian; a research vessel that has operated primarily in the Arctic since 1992 for various research purposes, in particular marine biology and oceanography; was used for Mars rover simulations on Svalbard in 2009.

Legend Rupes	Taiwanese; a research vessel used since 2018 for oceanographic observations, seafloor topographic mapping, seismic survey and sediment coring in the Pacific Ocean area adjacent to East Asia.
Pelagia Rupes	Dutch; a research and survey vessel that has performed hydrographic and oceanographic surveys and sediment sampling since 1990 in the Atlantic (North Sea, Caribbean Sea), Indian, and Pacific Oceans.
Protea Rupes	South African; research vessel that performed hydrographic surveys (1922-1933).
Providencia Rupes	Colombian; a research vessel used for biological, meteorological, chemistry, physics, geology, and oceanographic studies in the Caribbean Sea and Pacific Ocean since 1981.
Selen Rupēs	Turkish; research vessel used mainly in Sea of Marmara since 2010 for high resolution geophysical exploration in shallow waters.
Tangaroa Rupes	New Zealand; a research vessel and icebreaker that performs marine environmental monitoring, ocean science studies and exploration and engineering activities (2000s).
Vejas Rupes	Lithuanian; research vessel deployed in the Baltic Sea during 1992-2010 to study the seasonal dynamics of phytoplankton communities and their development.
Volasiga Rupes	Fiji; research vessel to conduct a hydrographic survey, tides and currents observation, and other surveys in Fiji waters since 2019.
Xuelong Rupes	Chinese; a polar research vessel used for Arctic and Antarctic expeditions in the 2010s.
Yelcho Rupes	Chilean; a steam-powered cutter that rescued the crew of the Endurance in the Antarctic in 1916.
Zapiola Rupes	Argentinian; ship involved in oceanographic surveys in Southwestern Atlantic; performed 10 oceanographic cruises (1962-1976).

Venus (10)

Fluctūs (3)

Nyakaya Fluctus	Shilluk (Sudan) crocodile goddess, wife of the high god Okwe.
Robigo Fluctus	Roman agriculture goddess.
Saosis Fluctus	Egyptian goddess in the form of acacia tree, considered as female sun, counterpart to the sun god Atum.

Montes (2)

Arasy Mons	Guarani (Paraguay) moon goddess.
Firtos Mons	Hungarian diminished goddess, queen of the good fairies.

Tholi (5)

Ignirtoq Tholi*	Inuit lightning goddess (in some myths – god of light and truth).
Ismo Tholi	Finnish wind goddess.
Oxomoco Tholus	Aztec moon and night goddess.
Pakhet Tholus	Egyptian lioness goddess.
Zana Tholus	Albanian female deity of mountains, streams, springs, forests, similar to Roman Diana.

*Ignirtoq Tholi includes the three domes previously named Raskova Paterae; Raskova Paterae now refers exclusively to the irregular craters at the top of the 'twin' tholi (SW domes) of Ignirtoq Tholi.

Moon (26)

Craters (18)

Bandfield	Joshua; American planetary scientist (1974-2019).
Brill	Yvonne; Canadian-American rocket scientist (1924-2013).
Burbidge	E. Margaret; British-American observational astronomer and astrophysicist (1919-2020).
Dawa	Tibetan male first name.
Floss	Christine; American cosmochemist (1961-2018).
Henson	Matthew; American polar explorer (1866-1955).
Jaci	Tupi first name.
Liu Hui	Chinese mathematician during Wei kingdom (about 225-295).
Marvin	Ursula; American planetary geologist (1921-2018).
Masina	Samoan female first name.
Mirzakhani	Maryam; Iranian-American mathematician, first female winner of the Fields Medal (1977-2017).
Pei Xiu	Chinese geographer, cartographer during Jin dynasty (224-271).
Rubin	Vera; American astronomer (1928-2016).
Shen Kuo	Chinese astronomer, mathematician during the Song Dynasty (1031-1095).
Song Yingxing	Chinese scientist and encyclopedist during the late Ming Dynasty (1587–1666).
Spudis	Paul D.; American planetary geologist (1952-2018).
Stose	Anna Isabel Jonas; American geologist (1881-1974).
Xu Guangqi	Chinese agronomist, astronomer, mathematician during the Ming dynasty (1562-1633).

Statio (2)

Statio Shiv Shakti	Compound word from Indian mythology that depicts the masculine (“Shiva”) and feminine (“Shakti”) duality of nature; Landing site of Chandrayaan-3’s Vikram lander.
Statio Tianchuan	Chinese constellation name, which means ship sailing in the Milky Way; Chang’e 5 landing site.

Montes (4)

Mons Heng	Named from terrestrial Mount Heng, in Hunan, China.
Mons Hua	Named from terrestrial Mount Hua, in Shaanxi, China.
Mons Latreille	Pierre André; French entomologist (1762-1833).
Mons Mouton	Melba Roy; American mathematician (1929-1990).

Rimae (1)

Rima Louville	Jacques D'Allonville, Chevalier de Louville; French astronomer, mathematician (1671-1732).
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Sinūs (1)

Sinus Viscositatis	“Bay of Stickiness“
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Mars (89)

Cavi (1)

Deuteronilus Cavus Named from albedo feature at 35N, 355W.

Craters (74)

Aarna Village in Rajasthan, India.
Abu Village in Rajasthan, India.
Amed Village in Indonesia.
Arvi Town in India.
Bari Town in India.
Berrocal Village in Spain.
Bohar Village in India.
Chakpar Village in Bihar, India.
Cuparaque Town in Brazil.
Daiyang Village in Shouning County, Ningde City, Fujian Province, China.
Dampier Town in Australia.
Druzhba Village in Ukraine.
Elston Wolfgang; American volcanologist and planetary geologist (1928-2016).
Elva Town in Estonia.
Enns Town in Austria.
Gebog Town in Indonesia.
Güimar Town in Canary Islands.
Gujiang Town in China.
Gutian Town in China.
Huxiang Town in China.
Jintur Town in India.
Kahnawake Town in Canada.
Kai Town in Japan.
Karratha Town in Australia.
Khujirt Town in Mongolia.
Kirinda Village in Sri Lanka.
Kozova Town in Ukraine.
Kyara Village in Rajasthan, India.
Kyela Town in Tanzania.
Leoben Town in Austria.
Límni Town in Greece.
Longboh Town in Indonesia.
Longwood Village in Saint Helena Island.
Lukeqin Town in China.
Luwuk Town in Indonesia.
Maji Town in China.
Margulis Lynn; evolutionary biologist (1938-2011).

Marsabit	Town in Kenya.
Mastung	Town in Pakistan.
Maur	Town in India.
Mikumi	Town in Tanzania.
Mirissa	Town in Sri Lanka.
Mohe	Town in China.
Nunu	Village in Indonesia.
Otepa	Village in Hao atoll, Tuamotu Archipelago, French Polynesia.
Picardi	Giovanni; Italian radar scientist who developed the MARSIS radar instrument onboard the Mars Express orbiter (1936-2015).
Pingle	Town in China.
Piscinas	Town in Italy.
Pohl	Frederik George; American science fiction writer (1919-2013).
Poso	Town in Indonesia.
Qidu	Town in China (Jiangsu Province).
Ramanathan	Kalpathy Ramakrishna; Indian physicist and meteorologist (1893-1984).
Roemer	Elizabeth “Pat”; astronomer (1929-2016).
Roman	Nancy Grace; American astronomer (1925-2018).
Ruwais	Town in United Arab Emirates.
Sasakan	Village in Indonesia.
Satkania	Town in Bangladesh.
Steyr	Town in Austria.
Tairua	Town in New Zealand.
Tangtse	Village in India.
Tarime	Town in Tanzania.
Teknaf	Town in Bangladesh.
Tianzhushan	Town in China.
Varahamihira	Indian mathematician and astronomer (505-587).
Wenjiashi	Town in China.
Wukan	Village in Lufeng City, Guangdong Province, China.
Wuxing	Town in China.
Xibaipo	Town in China.
Yaiza	Town in Canary Islands.
Yangliuqing	Town in China.
Yaodian	Town in China.
Zhengji	Town in China.
Zhouzhuang	Town in China.
Zhufan	Village in Donghai County, Lianyungang City, Jiangsu Province, China.

Dorsa (3)

Arago Dorsa	Named for nearby Arago crater; Dominique F.; French astronomer (1786-1853).
Cantabras Dorsum	From nearby albedo feature Cantabras, at 10N, 5W.
Oxia Dorsum	Named for classical albedo feature name at 25N, 24W.

Didymos (2)

Saxa (2)

Carillon Saxum	Belgium, Netherlands, France; a percussion instrument of at least 23 cast bronze bells in fixed suspension.
Gong Saxum	Indonesian name of a percussion musical instrument popular in East and South East Asia, a circular metal disk with a definite or indefinite pitch, which is hung vertically and hit in the center by a soft beater; originated in Ancient China.

Dimorphos (11)

Craters (6)

Bala	West African gourd-resonated xylophone (Guinea, Senegal, Mali).
Bongo	Afro-Cuban; a pair of open bottomed drums played with both hands.
Marimba	Percussion musical instrument popular in Guatemala and other Central and NW South American countries; wooden bars with pipe or gourd resonators, struck by yarn wrapped or rubber mallets. Originally developed in Africa. Marimba was proclaimed the national instrument of Guatemala in its independence proclamation.
Msondo	Tanzania; tall cylindrically shaped drum for important rituals, which “drives” the dance.
Naqqara	Drum of the Near and Middle East (Iraq, Iran, Turkey), and India; pair of clay or metal kettle drums of various sizes played with curved beaters.
Tamboril	Uruguay; barrel-shaped drum used to play the Candombe music, a style created by African slaves.

Saxa (5)

Atabaque Saxum	Afro-Brazilian one-headed barrel-shaped drum.
Bodhran Saxum	An Irish frame drum with a single membrane.
Caccavella Saxum	Italian friction drum.
Dhol Saxum	Indian double-headed string-tensioned conical drum.
Pūniu Saxum	Hawaiian small drum with a coconut body and a single sharkskin or fishskin head laced to the bottom.

Jupiter System (29)

Europa (8)

Chaoses (4)

Dinrigh Chaos	In Celtic mythology, the location where Maon slew Covac.
Goirias Chaos	In Celtic mythology, one of the four cities of the Tuatha Dé Danann (Dana) people.
Leix Chaos	In Celtic mythology, the city to which Maeldūn voyaged to avenge his father, Ailill Edge-of-Battle.
Rathcroghan Chaos	In Celtic mythology, the seat or palace of Maev, warrior queen.

Lineae (4)

Acacallis Linea	Granddaughter of Europa and sibling of Phaedra and Katreus.
Ancaeus Linea	The nephew of Europa, in Greek mythology.
Arachne Linea	Daughter of Idmon of Colophon in Greek mythology, who challenged the goddess Athena in a weaving contest.
Pasiphae Linea	Daughter-in-law of Europa, wife of King Minos (Europa's son by Zeus), mother of the Minotaur.

Io (21)

Eruptive center (2)

Tonatiuh	Aztec sun god.
Xihe	Chinese sun goddess, “;Mother of the Ten Suns.“;

Fluctūs (4)

Mixcoatl Fluctus	Aztec cloud-serpent, a storm god who uses lightning arrows as his weapon.
Pillan Fluctus	Araucanian (Chile/Argentina) thunder, fire, and volcano god.
Quzah Fluctūs	Ancient Arabian god of thunder.
Upulevo Fluctus	Timor Island (Indonesia) sun god.

Paterae (15)

Asis Patera	Nandi (Kenya) supreme god, personified by the Sun.
Gauwa Patera	!Kung (people of Sao/Bushmen group in Angola, Namibia, and Botswana) western sky sun god.
Gurzil Patera	Huwwara (Berbers of Libya) sun god.
Kanlaon Patera	Visayan (Philippines) supreme god that resides on the Kanlaon/Malaspina Volcano of Negros island.
Kotar Patera	Old Syrian blacksmith god.
Mandulis Patera	Nubian (Sudan/Egypt) sun god.
Odqan Patera	Mongolian fire-spirit.
Olafat Patera	Caroline Islands (Micronesia) fire-bringing demigod, the great trickster, similar to Polynesian Maui.
Pajonn Patera	Lapp/Sami god of thunder.
Shurdi Patera	Illyrian (modern-day Albania, Croatia, etc.) storm god who sends thunder and lightning.
Tabiti Patera	Scythian goddess of fire.
Tiwaz Patera	Luvian (ancient people in Anatolia, present-day Turkey) sun god.
Verbti Patera	Albanian god of fire.
Wanajo Patera	Louisiade Archipelago (Papua New Guinea) cultural hero, lit the first fire and scattered its ashes across the heavens to form clouds.
Yeloje Patera	Yukaghir (NE Siberia, Asiatic Russia) sun god.

Saturn System (13)

Titan (12)

Craters (1)

Ihi Tahitian goddess of wisdom, worshipped by the learned.

Faculae (1)

Tasmania Facula Australian island.

Lacunae (2)

Cerknica Lacuna Intermittent lake in Slovenia.

Orog Lacuna Intermittent lake in Mongolia.

Lacūs (5)

Enriquillo Lacus Lake in the Dominican Republic.

Gatun Lacus Lake in Panama.

Pielinen Lacus Lake in Finland.

Sarygamysh Lacus Lake in Turkmenistan and Uzbekistan.

Totak Lacus Lake in Norway.

Montes (1)

Luin Montes Name of a mountain range from Middle-earth, the fictional setting in fantasy novels by J.R.R. Tolkien.

Planitiae (1)

Xuttah Planitia Planet from the Dune series; the ninth planet in the star system Alkalurops, which provides advanced technology to the Imperium.

Sinūs

Montego Sinus Named for Montego Bay, Jamaica.

Rhea (1)

Craters (1)

Okikurumi Ainu (Japan) god of the heavens, who gave the Ainu civilization and taught them hunting and fishing.

Pluto (17)

Colles (2)

Challenger Colles Second fully operational US Space Shuttle, first launched on April 4, 1983. It was lost during its tenth launch on January 28, 1986.

Columbia Colles First fully operational US space shuttle, launched first on April 12, 1981, and lost during re-entry on February 1, 2003.

Craters (2)

Coradini Angioletta; Italian planetary scientist (1946-2011).

Kowal Charles T.; American astronomer and discoverer of 2060 Chiron (1940-2011).

Lineae (6)

Chandrayaan Linea	A series of Indian lunar probes, beginning in 2008.
Hiten Linea	First Japanese spacecraft to the Moon, 1990.
Luna Linea	A series of 24 unmanned Soviet lunar probes launched between 1959 and 1976.
Surveyor Linea	A series of seven unmanned U.S. probes to the lunar surface, 1966-1968.
Yutu Linea	A series of Chinese lunar probes, beginning in 2013.
Zond Linea	A series of eight unmanned Soviet lunar and interplanetary probes, 1964–1970.

Montes (1)

Coleman Mons	Elizabeth “Bessie”; early American aviator and the first woman of African-American and Native American descent to earn a pilot’s license (1892-1926).
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Planitiae (1)

Rosetta Planitia	Rosetta mission, the first mission to orbit and land a spacecraft on a comet.
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Regiones (2)

Belton Regio	Michael J. S.; British astronomer who in 2002 chaired the first Planetary Science Decadal Survey, which established NASA’s New Frontiers Program, including the New Horizons mission to Pluto and the Kuiper Belt (1934-2018).
Safronov Regio	Viktor; Russian astronomer who proposed the planetesimal hypothesis for how the Solar System formed from a disk of gas and dust around the Sun (1917-1999).

Rupēs (1)

Ride Rupes	Sally; American physicist, astronaut, and first American woman in space (1951-2012).
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Valles (2)

Lemminkäinen	Lemminkäinen is a hero of the Finnish national epic The Kalevala. He travels to the Underworld to capture the black swan.
Väinämöinen Vallis	Väinämöinen is a central character of the Finnish national epic The Kalevala. He traveled to the Underworld to seek knowledge of the dead.