

Global Change Data Encyclopedia

Boundary Data of Kuril Islands

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Keywords: Kuril Islands; data encyclopedia; Iturup island; Russia

Kuril Islands are located between the Sea of Okhotsk and the Pacific Ocean. Geolocation is from 43°21'38"N to 50°55'21"N and 145°23'55"E to 156°30'49"E. The Kuril Islands are consisted of a series of lands from northeast near the Kamchatka peninsula to southwest near the Hokkaido of Japan (Figure 1). These islands are Shumshu Island, Atlasov Island, Paramushir Island, Antsiferova Island, Makanrushi Island, Pmelptam Island, Kharimkotan Island, Ekarma Island, Chirinkotan Island, Shiashkotan Island, Raykoke Island, Matua Island, Rasshua Island, Ushishir Island, Ketoy Island, Simushir Island, Broutona Island, Chirpoy Island, Brat Chirpoyev Island, Urup Island, Iturup Island, Kunashir Island, Shikotan Island and Habomai Islands. The total area of the islands is 10,299.72 km² with the coastline of 3,012.70 km, the biggest one is the Iturup Island, its area is 3,163.76 km²[1]. The Kuril Islands are located between the Okhotsk Plate and the Pacific Plate, earthquakes and volcanos are frequency. All islands of the Kuril Islands are in Russia's jurisdiction although Japan claim four of them, including the Iturup Island, Kunashir Island, Shikotan island and the Habomai Islands. The geo-location, area, coastline of the main islands of Kuril Islands are shown in Table 1.

Between the islands are the main channels of communication, such as the Iturup Strait, the Nemuro Strait, etc. The Alaid Volcano, on Atlasov Island, is 2,339 m above sea level, the highest point of the group. The Kuril Islands are located in the junction zone of the Okhotsk plate and the Pacific plate, the Kuril Trench is 170–200 km from the island. According to the

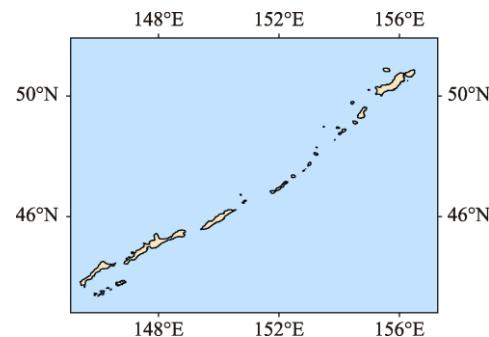


Figure 1 Coastline data of Kuril Islands

Received: 26-02-2018; **Accepted:** 15-03-2018; **Published:** 25-03-2018

Foundation(s): Chinese Academy of Sciences (Y22Q0203TD)

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Author ID: Liu, C. L-3684-2016; Shi, R. X. L-4389-2016; Zhu, Y. Q. L-6116-2016

Data Citation: [1] Liu, C., Shi, R. X., Zhu, Y. Q. Boundary data of Kuril Islands [J]. *Journal of Global Change Data & Discovery*, 2018, 2(1): 107–108. DOI: 10.3974/geodp.2018.01.17.

[2] Liu, C., Shi, R. X., Zhu, Y. Q. Boundary data of Kuril Islands [DB/OL]. Global Change Research Data Publishing & Repository, 2016. DOI: 10.3974/geodb.2016.04.08.V1.

United States Geological Survey (USGS), 9 earthquakes with magnitude 8 or above have occurred since 1923, including earthquake of magnitude 9 in 1952.

Table 1 Main islands of Kuril Islands

| Name of islands | Geo-location | Area (km ²) | Coastline (km) |
|-------------------------------------|--|-------------------------|----------------|
| Atlasov Island | 50°48'11"N-50°55'22"N, 155°27'26"E-155°40'47"E | 152.63 | 56.51 |
| Shumshu Island | 50°37'36"N-50°52'16"N, 156°10'23"E-156°30'49"E | 383.91 | 101.29 |
| Antsiferova Island | 50°11'5"N-50°12'48"N, 154°57'25"E-155°0'51"E | 8.69 | 13.10 |
| Paramushir Island | 49°59'56"N-50°46'7"N, 155°11'55"E-156°10'13"E | 2,037.28 | 321.24 |
| Makanrushi Island | 49°43'39"N-49°49'3"N, 154°23'10"E-154°29'34"E | 50.09 | 29.70 |
| Onekotan Island | 49°15'23"N-49°38'3"N, 154°36'38"E-154°55'4"E | 429.40 | 133.35 |
| Kharimkotan Island | 49°4'11"N-49°10'8"N, 154°27'8"E-154°36'16"E | 77.15 | 36.89 |
| Chirinkotan Island | 48°57'59"N-48°59'35"N, 153°28'4"E-153°30'19"E | 5.75 | 9.69 |
| Ekarma Island | 48°55'17"N-48°58'22"N, 153°54'1"E-154°0'44"E | 32.12 | 29.43 |
| Shiashkotan Island | 48°43'6"N-48°54'13"N, 153°58'29"E-154°13'42"E | 117.64 | 74.01 |
| Raykoke Island | 48°16'57"N-48°18'5"N, 153°13'58"E-153°16'9"E | 4.20 | 9.41 |
| Matua Island | 48°2'12"N-48°7'26"N, 153°9'33"E-153°16'44"E | 52.92 | 35.01 |
| Rasshua Island | 47°40'28"N-47°48'21"N, 152°57'21"E-153°3'46"E | 63.89 | 43.78 |
| Ushishir Island | 47°30'7"N-47°31'42"N, 152°47'38"E-152°49'42"E | 3.59 | 15.73 |
| Ketoy Island | 47°17'32"N-47°22'42"N, 152°24'38"E-152°32'38"E | 71.90 | 35.79 |
| Simushir Island | 46°46'7"N-47°10'4"N, 151°42'18"E-152°17'33"E | 338.91 | 190.61 |
| Broutona Island | 46°42'7"N-46°44'21"N, 150°42'30"E-150°45'2"E | 8.20 | 13.16 |
| Chirpoy Island | 46°29'43"N-46°32'46"N, 150°49'45"E-150°55'10"E | 19.85 | 25.54 |
| Brat Chirpoyev/ Chirhoian Island | 46°26'30"N-46°29'6"N, 150°46'42"E-150°50'45"E | 13.06 | 21.46 |
| Urup Island | 45°34'8"N-46°13'48"N, 149°23'48"E-150°34'18"E | 1,429.95 | 341.97 |
| Iturup Island | 44°25'26"N-45°33'25"N, 146°51'30"E-148°53'37"E | 3,163.76 | 684.10 |
| Shikotan Island | 43°42'5"N-43°53'25"N, 146°35'8"E-146°55'11"E | 245.08 | 180.01 |
| Kunashir Island | 43°39'9"N-44°27'17"N, 145°23'55"E-146°34'26"E | 1,489.91 | 367.82 |
| Polonskogo Island | 43°37'3"N-43°39'5"N, 146°16'10"E-146°21'26"E | 10.63 | 24.25 |
| Zelyony Island | 43°27'30"N-43°32'56"N, 146°3'33"E-146°12'17"E | 58.01 | 41.47 |
| Yuri Island | 43°25'00"N-43°27'44"N, 145°51'44"E-145°57'20"E | 12.15 | 32.21 |
| Tanfilyeva Island | 43°24'7"N-43°26'53"N, 146°1'29"E-146°6'34"E | 9.62 | 33.83 |
| Anuchina Island | 43°21'38"N-43°22'42"N, 145°59'12"E-146°1'21"E | 1.98 | 11.77 |

The Kuril Islands are currently under Russian jurisdiction. Of these, the Southern Kuril Islands (Japan is known as the “Northern Territory”), including Iturup, Kunashir, Shikotan and Habomai Islands, are the disputed territory between Japan and Russia.

The dataset is developed based on the Google Earth images and references maps. It is archived in the .kmz and .shp formats with the data size of 4.17 MB.

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