Sakurajima Volcano Hazard Map

Purpose of the map

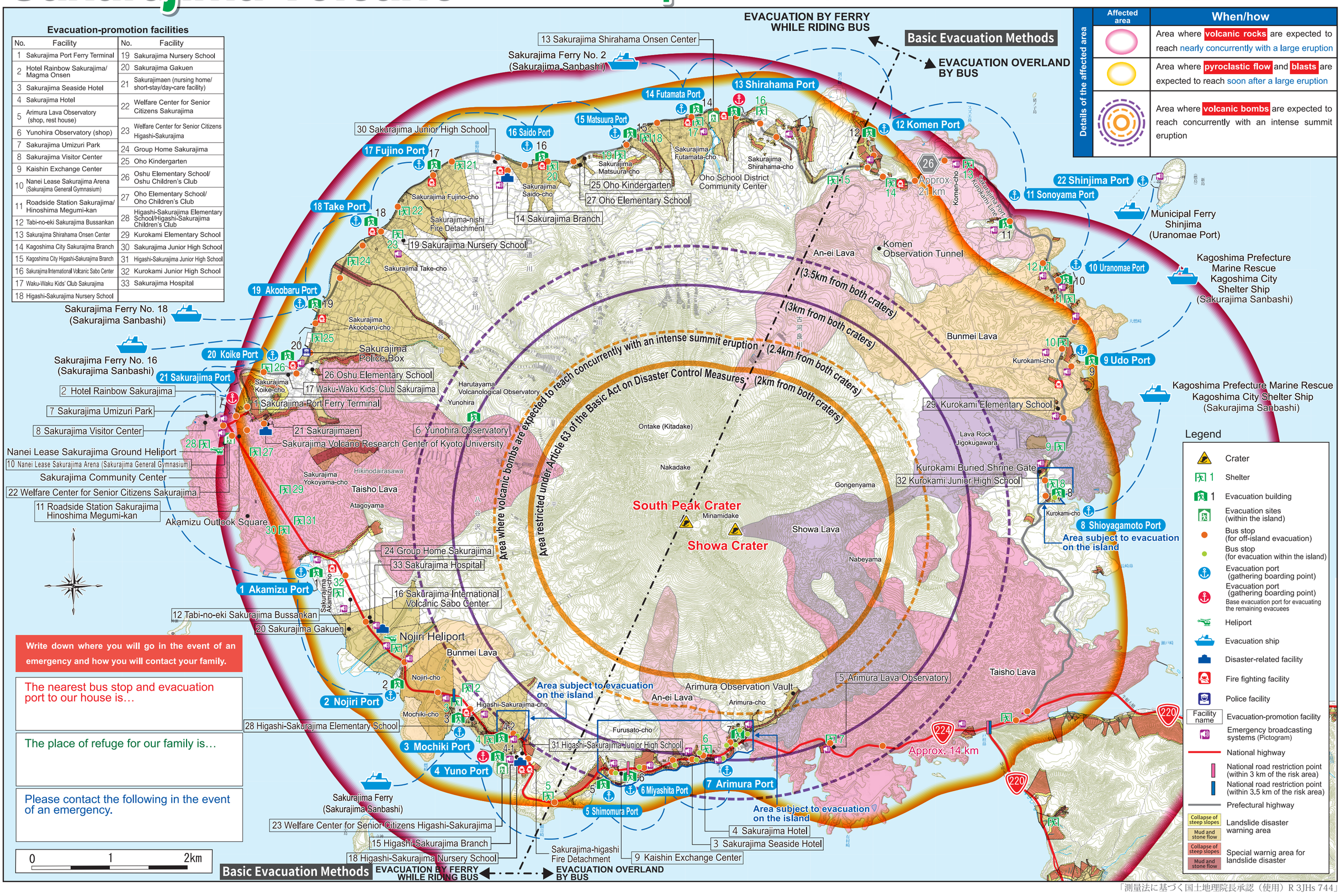
The Sakurajima Volcano Hazard Map is intended to assist local residents in the event that they need to evacuate during emergencies, and it is used for encouraging daily preparedness by providing information with which they can familiarize themselves with the aftermaths of previous major eruptions of Sakurajima as well as future dangers expected to occur during volcanic disasters. Please post this sign in plain view. It is advisable for local residents to discuss actions for local citizens to take during emergencies and to pay attention to precursory phenomena and eruptive activities.

Foreign Language Map (English/Korean/Simplified Chinese/Traditional Chinese)

Sakurajima Volcano Hazard Map
사쿠라지마 화산 해저드맵
樱岛火山防灾地图
櫻島火山防災地圖

Evacuation-promotion facilities

No.	Facility	No.	Facility
1	Sakurajima Port Ferry Terminal	19	Sakurajima Nursery School
2	Hotel Rainbow Sakurajima/ Magma Onsen	20	Sakurajima Gakuen
3	Sakurajima Seaside Hotel	21	Sakurajimaen (nursing home/ short-stay/day-care facility)
4	Sakurajima Hotel	22	Welfare Center for Senior Citizens Sakurajima
5	Arimura Lava Observatory (shop, rest house)	23	Welfare Center for Senior Citizens Higashi-Sakurajima
6	Yunohira Observatory (shop)	24	Group Home Sakurajima
7	Sakurajima Umizuri Park	25	Oho Kindergarten
8	Sakurajima Visitor Center	26	Oshu Elementary School/ Oshu Children's Club
9	Kaishin Exchange Center	27	Oho Elementary School/ Oho Children's Club
10	Nanei Lease Sakurajima Arena (Sakurajima General Gymnasium)	28	Higashi-Sakurajima Elementary School/Higashi-Sakurajima Children's Club
11	Roadside Station Sakurajima/ Hinoshima Megumi-kan	29	Kurokami Elementary School
12	Tabi-no-eki Sakurajima Bussankan	30	Sakurajima Junior High School
13	Sakurajima Shirahama Onsen Center	31	Higashi-Sakurajima Junior High School
14	Kagoshima City Sakurajima Branch	32	Kurokami Junior High School
15	Kagoshima City Higashi-Sakurajima Branch	33	Sakurajima Hospital
16	Sakurajima International Volcanic Sabo Center		
17	Waku-Waku Kids' Club Sakurajima		
18	Higashi-Sakurajima Nursery School		



「測量法に基づく国土地理院長承認（使用）R 3JHs 744」

Volcanic alert levels and disaster prevention measures

	Levels	Expected volcanic activity	Evacuation information issued by the City	Action to be taken by residents etc.	Evacuatees
Eruption Warning (Residential Areas)	5 (Evacuation)	Eruption or imminent eruption that may cause serious damage in residential areas and non-residential areas nearer the crater.	Evacuation order	Evacuate from the danger zone.	Everyone
Eruption Warning (Residential Areas)	4 (Evacuation of the elderly etc.)	Possibility or increasing possibility of eruption that may cause serious damage in residential areas and non-residential areas nearer the crater.	Evacuation of the elderly etc.	Have disabled people evacuate. Prepare to evacuate from alert area.	Those who need time to evacuate, such as the elderly (*Other residents prepare for evacuation)
Eruption Warning (Near-crater)	3 (Restriction on proximity to the volcano)	Eruption or possibility of eruption that may severely affect places near residential areas (possible threat to life in such areas).			
Eruption Warning (Near-crater)	2 (Restriction on proximity to the crater)	Eruption or possibility of eruption that may affect areas near the crater (possible threat to life in such areas).			
Eruption Forecast	1 (Potential for increased activity)	Calm: Possibility of volcanic ash emissions or other related phenomena may occur in the crater (possible threat to life in the crater).			

※When the Volcanic Alert Level increases and an evacuation is called for, an Eruption Warning for Residential Areas will be announced by the Japan Meteorological Agency. Kagoshima City will send out a notification as well.
※Since those within the designated risk areas indicated with "Eruption Warning (Residential Areas)" are at a higher risk of being issued evacuation orders, those in these areas should always have emergency supplies and other items for evacuation prepared, and pay attention to information sent out by Kagoshima City.
※Orders from Kagoshima City will be sent via emergency email, emergency audio broadcast, fire trucks, TV/radio, and social media.
※Normally, Sakurajima's Volcanic Alert Level is at Level 3 (Mountain entry restrictions). "The lives of residents are generally not impacted. Restrictions on entry to risk areas, such as prohibition of climbing and restrictions on mountain entry. Prepare for the evacuation of the elderly and other persons in need of consideration, depending on the situation."

Evacuation procedures

Evacuation within the island (Intensification of eruption)
Target area:
Areas of residence that require alertness
Refer to the table below

Off-island evacuation(in case of a major eruption)
Target area:(entire island)

Basic Evacuation Methods

Bus and private car
[Evacuation bus stop]
Designated ride point

Bus and private car
[Evacuation bus stop]
Nearest bus stop

In case the ferry cannot be used due to typhoon, etc.

Bus and private car
[Evacuation bus stop]
Nearest bus stop

In case cars (buses and private cars) cannot be used due to road closure, etc.

Ferry and rescue ship
[Gathering boarding point]
Evacuation port • Evacuation houses

Evacuation sites (within the island)
Welfare Center for Senior Citizens Higashi-Sakurajima
Sakurajima Shirahama Onsen Center
Welfare Center for Senior Citizens Sakurajima
Sakurajima Community Center

Ferry evacuation
[Boarding point]
Sakurajima Port

Overland evacuation

Temporary evacuation sites for a wide area
Tarumizu City Central Athletic Park
Kirishima City Athletic Park

In case the target area is expanded to the whole island

When the evacuation order is issued, private cars are not allowed on the ferry

Evacuation sites (off-island, short-term)
City side: determined by the city, taking into account the wind direction

In case a long-term evacuation is required

Evacuation sites (off-island, mid- to long-term)
City side: public accommodations, temporary housing, etc.

For those who have pets
Always have evacuation supplies for pets prepared and bring your pet with you when evacuating.
A variety of people live at evacuation centers during evacuations. Pet owners must be considerate of others and properly take care of their pets and manage their pets' hygiene.

List of evacuation sites, etc. (Off-island evacuation)

Area		Evacuation bus stop	Evacuation port	Evacuation sites (off-island, short-term)
Sakurajima Akamizu-cho	Nearest Bus Stop		Akamizu Port	Kagoshima Gyokuryu High School
Sakurajima Yokoyama-cho			Sakurajima Port	Josei Junior High School
Sakurajima Koike-cho			Koike Port	
Sakurajima Akoobaru-cho			Akoobaru Port	Kagoshima Gyokuryu High School
Sakurajima Take-cho			Take Port	Tsurumaru High School
Sakurajima Fujino-cho			Fujino Port	Tenposan Junior High School
Sakurajima Saido-cho			Saido Port	Shimizu Junior High School
Sakurajima Matsuura-cho			Matsuura Port	Koto Junior High School
Sakurajima Futamata-cho			Futamata Port	
Sakurajima Shirahama-cho			Shirahama Port	Dairyu Elementary School
Shinjima-cho			Shinjima Port	Nagata Junior High School
Nojiri-cho			Nojiri Port	Downtown medical institutes/ Kagoshima Chuo High School
Mochiki-cho			Mochiki Port	Kagoshima Chuo High School
Higashi-Sakurajima-cho			Yuno Port	Meizan Elementary School Chuo Community Center
Furusato-cho	Furusato Nishi		Shimomura Port	Yamashita Elementary School
	Furusato Higashi		Miyashita Port	
Arimura-cho	Shinfurusato		Arimura Port	Matsubara Elementary School
Kurokami-cho	Shioyagamoto		Shioyagamoto Port	Jonan Elementary School
	Udo		Udo Port	
Komen-cho	Uranomae		Uranomae Port	Nagata Junior High School
	Sonoyama		Sonoyama Port	
	Komen		Komen Port	

*When using the evacuation bus for evacuation within the island, please gather at the designated evacuation bus stop.
*Evacuation sites (within the island):
Welfare Center for Senior Citizens Higashi-Sakurajima for the Arimura and Furusato Higashi areas, and Sakurajima Shirahama Onsen Center for the Shioyagamoto area.
Welfare Center for Senior Citizens Sakurajima and Sakurajima Community Center for the Furusato Nishi and part of Higashi-Sakurajima-cho.

Expected areas of evacuation on the island

Volcanic disasters	Warming area, etc.	Target area of evacuation
Possibility of large volcanic bombs and pyroclastic flows from the crater	3 km from the crater	Arimura-cho, and part of Furusato-cho
	3.5km from the crater	Arimura-cho, Furusato-cho, and part of Higashi-Sakurajima-cho
Possibility of pyroclastic flows from the crater	–	Kurokami-cho Shioyagamoto area

Daily preparedness
Emergency kit
- Helmet, flashlight, etc.
- Change of clothes, eyeglasses, medicine
- Valuables, food, water

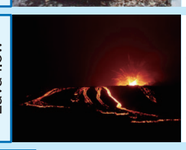
*Evacuations within Sakurajima are expected to last 3 days.
*Evacuations outside of Sakurajima are expected to last 2 weeks.

Volcanic disasters of Sakurajima

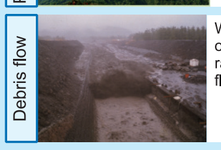
Photos provided by the Disaster Prevention Research Institute of Kyoto University, Kagoshima Local Meteorological Observatory and the Osumi Office of Rivers and National Highways

Volcanic bomb — During an eruption, fragmented rocks and pumice are expelled from the crater. Many are projected as far as a few kilometers from the crater. Boulders a meter or more in diameter can blast out.

Pyroclastic flow — A mixture of high-temperature gas, ash and rocks spills down the mountain slope at 100 km/hour or faster.



Lava flow — Lava overflowing from a crater moves down along the slope. Though it flows slowly, the lava completely burns and buries the flow area. (Photo: Izuoshima, 1986)

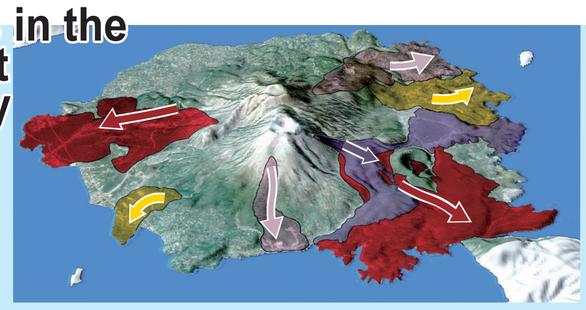


Debris flow — When volcanic ash has deposited on a mountain slope, subsequent rainfall is likely to cause a debris flow.

Volcanic ash — Windborne volcanic ash falls and accumulates. In the Taisho eruption, more than 1m of deposit was recorded within a radius of 15km from the crater.
*Effects of volcanic ash by deposition thickness (Various effects are expected even for thicknesses of only several centimeters or less.)
30-45cm : Wet ash may cause wooden houses to collapse.
45-60cm : Dry ash may cause wooden houses to collapse.

Earthquakes — After a large-scale eruption, a strong earthquake of 6 or more on the Japanese seismic intensity scale may occur in Kagoshima City and its environs.

Major eruptions in the past, and recent volcanic activity



Bunmei eruption (1476) — Lava flowed from the northeast side in 1471 and formed the Omoezaki (Kurokami) area. An explosive eruption occurred in 1476, followed by lava flow from the southwest side, resulting in the formation of the Moezaki (Nojiri) area.

An-ei eruption (1779) — Flank eruptions on the south and northeast sides, accompanied by lava flow, caused 148 deaths. A submarine eruption occurred northeast of Sakurajima, creating Shinjima and other islands.

Taisho eruption (1914) — Eruptions occurred on the east and west flanks of Sakurajima. Lava flows connected Sakurajima with the Osumi Peninsula. Volcanic ash reached Kamchatka and the Ogasawara islands. An earthquake with a Richter magnitude of 7.1 occurred on the Satsuma Peninsula. Fifty-eight people died or went missing.

Showa eruption (1946) — An eruption occurred on the east side (Showa crater). Lava flows reached the shoreline of Kurokami and Arimura. One person died.

Eruptions since 1955 — From 2006 to 2017, Showa Crater erupted. South Peak Crater continues to erupt. There are a large volcanic bombs falling and a lot of damage from volcanic ash, debris, and mudslides.

- After every major eruption of Sakurajima, new craters have formed on the flanks, and the lava flow areas differ from eruption to eruption. Craters tend to form on both flanks of the summit.
- In the event of a large-scale eruption, the entire island is expected to be in danger, so it is important to follow evacuation information and evacuate the island before a massive eruption begins.
  Also, depending on the wind direction, a large amount of volcanic ash may fall on the downtown side, so please pay careful attention to weather information and prepare for evacuation.

Precursory phenomena

In the event of any abnormal phenomena, contact the following.

Frequent earthquakes in the same day
Underground rumbling
Abnormal water levels and temperatures of well-water and hot springs
Fumes, increased ground temperatures and ground fissures
The withering of standing plants and trees

Contact

Kagoshima City	Sakurajima General Citizens' Registration Division	099-293-2346
	Higashi Sakurajima General Citizens' Registration Division	099-221-2111
	Crisis-Management Division	099-216-1489
Fire station (119)	Sakurajima-nishi Fire Detachment	099-245-2099
	Sakurajima-higashi Fire Detachment	099-221-3119
Police (110)	Sakurajima Police Box	099-293-2702
Meteorological office	(Volcano Monitoring Room)	099-250-9916

The portal application "KagoTips" provides useful living information for foreign residents of Kagoshima City.

Through Smartphone ▶ KagoTips Search

For more information about this map, contact Crisis Management Division, Kagoshima City Tel.: 099-216-1513

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