

- 基図;NTT 空間情報の Geospace を使用し鈴木比奈子が加筆・修正.陰影図;国土地理院基盤地図情報 (10 m DEM)を用いてカシミール 3D で作成] 凡例:1.マングローブ林, 2.水系, 3.主要道路, 4.撮影方向, 5.主要な建物, 6.地すべり Fig.1

This map were corrections by Hinako SUZUKI. Base map was used for NTT-GEOSPACE CORPORATION and GSI issue 10 m DEM. And shaded made by Kashimir3D. The legend 1. Mangrove forests, 2. Water area, 3. Main street, 4. Shooting direction, 5. Main building, 6. Land slide. Map of around Sumiyo Town Branch Office.



口絵 1.1 2010 年 10 月 20 日 11:59 (奄美市役所提供) Photo 1.1 At 11:59 on October 20, 2010 (Photo provided by Amami City Office).



口絵 1.2 2010 年 10 月 20 日 12:08 (奄美市役所提供)
Photo 1.2 At 12:08 on October 20, 2010
(Photo provided by Amami City Office).



口絵 1.3 2010 年 10 月 20 日 12:13 (奄美市役所提供) Photo 1.3 At 12:13 on October 20, 2010 (Photo provided by Amami City Office).



口絵 1.4 2010 年 10 月 20 日 13:00 (奄美市役所提供) Photo 1.4 At 13:00 on October 20, 2010 (Photo provided by Amami City Office).

- 口**絵 1** 住用町西仲間地区 冷川右岸 増水の様子 2010 年 10 月 20 日(奄美市役所提供) 短時間の間に一気に増水したことが分かる.
- Photo 1 Rise in water level along the right bank of the Hiya River in Nishinakama District, Sumiyo Town, on October 20, 2010 (Photo provided by Amami City Office).The water level rose in a very short period of time.





口絵2住用町西仲間地区わだつみ苑2010年10月20日15:24(住用総合支所職員提供)

Photo 2 Group Home Wadatsumi-en in Nishinakama District, Sumiyo Town, at 15:24 on October 20, 2010 (Photo provided by Sumiyo Town General Branch Office staff).

口絵3住用町西仲間地区わだつみ苑(撮影日:2010年11月12日)図中矢印(高さ250cm)付近が、当日の最高水位

 Photo 3 Group Home Wadatsumi-en in Nishinakama District, Sumiyo Town (Shooting date: November 12, 2010).
 The arrows in the photo indicate the highest water level of the day (about 250 cm high).



わだつみ苑の建物はバリアフリーを考慮して,平屋建ての構造をしていることが分かる.わだつみ苑の背後には住用川が流下している. 住用町西仲間地区 わだつみ苑 正面全景(パノラマ合成写真,撮影日:2010年11月12日) 口約4

Photo 4 Panoramic front view of Group Home Wadatsumi-en in Nishinakama District, Sumiyo Town (Panoramic composite picture, Shooting date: November 12, 2010).
Wadatsumi-en is a one-story building to create a barrier-free environment. The Sumiyo River flows behind the building.



口絵 5.1 2010 年 10 月 20 日 12:55 (奄美市役所提供) Photo 5.1 At 12:55pm on October 20, 2010 (Photo provided by Amami City Office).



口絵 5.2 2010 年 10 月 20 日 13:39 (奄美市役所提供) Photo 5.2 At 13:39pm on October 20, 2010 (Photo provided by Amami City Office).



口絵 5.3 2010 年 10 月 20 日 14 : 57 (奄美市役所提供) Photo 5.3 At 14:57pm on October 20, 2010 (Photo provided by Amami City Office).



口絵 5.4 2010 年 10 月 20 日 15 : 26 (奄美市役所提供) Photo 5.4 At 15:26pm on October 20, 2010 (Photo provided by Amami City Office).



口絵 5.5 2010 年 10 月 21 日 11:07 (奄美市役所提供) Photo 5.5 At 11:07am on October 21, 2010 (Photo provided by Amami City Office).

口絵 5 奄美市住用支所前の増水の様子 (奄美市役所提供)

Photo 5 Rise in water level in front of Sumiyo Town Branch Office, Amami City (Photo provided by Amami City Office).



口**絵 6.1** 2010 年 10 月 20 日 12:53 (奄美市役所提供) **Photo 6.1** At 12:53pm on October 20, 2010 (Photo provided by Amami City Office).



口絵 6.2 2010 年 10 月 21 日 10:52 (奄美市役所提供) Photo 6.2 At 10:52am on October 21, 2010 (Photo provided by Amami City Office).



口絵 6.3 2010 年 11 月 12 日 10:34 **Photo 6.3** At 10:34am on November 21, 2010 (Photo provided by Amami City Office).



口絵 6.4 2010 年 11 月 12 日 10:34 **Photo 6.4** At 10:34am on November 21, 2010 (Photo provided by Amami City Office).

- 口絵 6 住用支所内の床上浸水の様子(口絵 6.1, 6.2 奄美市役所提供) 12:53 頃から床上浸水が始まり(口絵 6.1),翌日の11:00 頃には水がひいたことが分かる(口絵 6.2). 口絵 6.3 は口絵 6.1 の反対側から撮影した 3 週間後の支所内の様子. 支所の1階部分の床上浸水が150 cm 以上に達したことが分かる(口絵 6.4).
- Photo 6 Inundation above floor level in Sumiyo Town Branch Office (Photo provided by Amami City Office).
 The Office started getting inundated above floor level around 12:53 (Photo 6.1), and the water receded around 11:00 the next day (Photo 6.2). Photo 6.3 shows the inside of the Office three weeks after the inundation, which was taken from the opposite side of Photo 6.1. The water level rose to 150 cm or higher above the 1st floor of the Office (Photo 6.4).



口絵 7.1 2010 年 10 月 20 日 13:38 (奄美市役所提供) Photo 7.1 At 13:38pm on October 20, 2010 (Photo provided by Amami City Office).



口絵 7.2 2010 年 10 月 20 日 14:56 (奄美市役所提供) Photo 7.2 At 14:56pm on October 20, 2010 (Photo provided by Amami City Office).



口絵 7.3 2010 年 10 月 21 日 11:04 (奄美市役所提供) Photo 7.3 At 11:04pm on October 21, 2 010 (Photo provided by Amami City Office).

口絵7 住用支所前と住用郵便局前の増水の様子 写真中央奥の住用郵便局の屋上に郵便局局員が避難している様子が分かる. 15:00 頃には水 位が低下していることが分かる.

Photo 7 Rise in water level in front of Sumiyo Town Branch Office and Sumiyo Post Office.
Postal clerks were evacuating to the roof of Sumiyo Post Office at the back and center of the photo.
The water level lowered around 15:00.



Photo 8.1 At 13:04 on October 20, 2010 (Panoramic composite picture (made by National Research Institute for Earth Science and Disaster Preven-口絵 8.1 2010年 10月 20日 13:04 (パノラマ合成写真(合成: 防災科学技術研究所), 奄美市役所提供) tion, Photo provided by Amami City Office).



口絵 8.2 2010年 10 月 20 日 16:12 (パノラマ合成写真(合成: 防災科学技術研究所),奄美市役所提供) Photo 8.2 At 16:12 on October 20, 2010 (Panoramic composite picture (made by National Research Institute for Earth Science and Disaster Prevention, Photo provided by Amami City Office).



口絵 8.3 2010 年 10 月 20 日 13:20 当日の最高水位 (奄美市役所提供) **Photo 8.3** At 13:20 on October 20, 2010 the water level peaked (Photo provided by Amami City Office).



口絵 8.4 豪雨当日天井まで水没した漁協 (撮影日: 2010 年 11 月 12 日)

Photo 8.4 Water rose to the ceiling of the 1st floor of Fishery Association on the day of heavy rain (Shooting date: November 12, 2010).

口絵 8 奄美市住用国民健康保険診療所前 増水の様子 当日は 13:30 頃が最高水位となり、16:15 頃には水が引き始めていることが分かる. 診療所に隣接する 奄美漁協住用支所は屋根部分を残して1 階部分はすべて水没してしまったことが分かる.

Photo 8 Rise in water level in front of Sumiyo National Health Insurance Association Clinic in Amami City.
The water level rose to the highest around 13:30 and the water began to recede around 16:15. Excepting the roof, the 1st floor of Sumiyo Branch of Amami Fishery Association adjacent to the Clinic was completely covered with water.



口**絵 9.1** 2010 年 10 月 20 日 12:57 (奄美市役所提供) **Photo 9.1** At 12:57pm on October 20, 2010 (Amami City Office).



口絵 9.2 2010 年 10 月 20 日 13:31 (奄美市役所提供) Photo 9.2 At 13:31pm on October 20, 2010 (Amami City Office).



口絵 9.3 2010 年 10 月 20 日 14:46 (奄美市役所提供) Photo 9.3 At 14:46pm on October 20, 2010 (Amami City Office).



口給 9.4 2010 年 10 月 20 日 16:24 (奄美市役所提供) Photo 9.4 At 16:24pm on October 20, 2010 (Amami City Office).

- 口**絵9** 商工会議所前 増水の様子(奄美市役所提供) 車が駐車している場所は住用川を渡る橋の袂に当たる。川の水位が道路と同じ高さまで上がって いたことがうかがえる。
- **Photo 9** Rise in water level at Chamber of commerce.

 Where to park the cars were foot bridge going across Sumiyou river. The water level rose to same the load.



口絵 10.1 2010 年 10 月 20 日 16:10 (住用総合支所職員提供)

Photo 10.1 At 16:10 on October 20, 2010 (Photo provided by Sumiyo Town General Branch Office staff).



口絵 10.2 2010 年 11 月 12 日 11:19 Photo 10.2 At 11:19 on November 12, 2010.

口絵 10 住用消防分駐所 増水の様子

住用川支流の役勝川左岸に位置している住用消防分駐所も、床上浸水に見舞われた.

Photo 10 Rise in water level at Sumiyo Fire Substation.
 Sumiyo Fire Substation located on the left bank of the Yakusho River, a tributary of the Sumiyo River, was also flooded above floor level.



口絵 11 住用支所裏手の斜面災害 (撮影日: 2010 年 11 月 9 日, 奄美市役所提供)
Photo 11 Landslides behind Sumiyo Town Branch Office (Shooting date: November 9, 2010, Photo provided by Amami City Office).



口絵 12 豪雨当時の救助の様子 2010 年 10 月 20 日 14:51(奄美市役所提供) 災害時の人命救助は写真のようなカヌーを利用して行った.カヌー大会があるこの地区で は多数のカヌーが保有されており、当日も救助に利用された.

Photo 12 Rescue operation on the day of heavy rain at 14:51 on October 20, 2010 (Photo provided by Amami City Office).

A canoe was used for the rescue operation as shown in this photo. In the district where a canoe race is held, many canoes were stored and used for rescue operations that day.



口絵 13 避難所となった奄美体験交流館(撮影日:2010年10月30日,奄美市役所提供) 当日,体験交流館入口の階段6段目付近まで浸水した.

Photo 13 Amami Exchange-Experience Hall that became the evacuation center (Shooting date: October 30, 2010, Photo provided by Amami City Office).

The water level rose to the 6th step of the stairs at the entrance to the hall.



口絵 14 避難所に開設されたボランティアセンター受付 (撮影日:2010 年 10 月 30 日, 奄美市役所提供) **Photo 14** Volunteer Reception Center opened in the evacuation center (Shooting date: October 30, 2010, Photo provided by Amami City Office).



口絵 15.1 2010 年 10 月 20 日 11:45 Photo 15.1 At 11:45 on October 10, 2010.



口絵 15.2 2010 年 10 月 20 日 17:11 Photo 15.2 At 17:11 on October 10, 2010.

口絵 15 奄美市名瀬小宿「グループホーム虹の丘」前の浸水の様子(虹の丘提供)

Photo 15 Inundation in front of Group Home Niji no Oka in Naze Kosyuku, Amami City (Photo provided by Group Home Niji no Oka).