

Yabitsu: A Medieval Port in Tsushima Island

Kenzo Hayashida (Asian Research Institute of Underwater Archaeology)

ABSTRACT

The medieval port of Yabitsu is located in an inlet at the northwest end of Tsushima Island. Yabitsu is geographically closest to the Korean peninsula, separated by the Korea Strait. It is difficult to use its small isolated hinterland as a field for farming because in the inlet, some stone-built remains, which seem to have been quay and jetty are present. Although no description on Yabitsu has been found in any Japanese historical materials, a few Korean documents have been discovered in the Korean peninsula. From these literal evidences, the port of Yabitsu looks to have been used as an inlet for anchorage in the first half of the 15th century. The name of the inlet appeared in ‘Song Hui-gyeong’s Chronicle’ written in 1420, which was known as ‘老松堂日本行録’ in Japan. This chronicle refers to the port of Yabitsu as ‘也音非梁 (Ya-i-hi-ryo)’, which is on the way to the village of Waniura in Tsushima island. Seongjong of Joseon, the 9th king of the Joseon Dynasty of Korea, recorded this port as ‘也音非道浦 (Ya-i-hi-do-ho)’ in his Annals of Joseon Dynasty written in 1499. The survey in 2018 showed that the port of Yabitsu had a long history from the 4th to 17th centuries with early Haji wares, Sue wares, Goryeo potteries, Chinese white porcelains, and old Karatsu wares being found. However, the exact date when the stone remains in the inlet were constructed and their entire structure have not been known yet, because no full-scale survey has been conducted so far. Additionally, we have not known the exact reason why the port was chosen to be built at Yabitsu. The survey on this port could contribute to restoring the maritime cultural landscape in Tsushima island, as well.

Key words: Port, Tsushima Island, Yabitsu, Maritime Cultural Landscape

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GEOGRAPHICAL ENVIRONMENT

The survey started at Yabitsu in the 2018 season consisted of remotely sensing survey and diving survey in the inlet, and also 3D mapping for submerged stone masonries of the sites A and B. These were carried out as a joint research of the Asian Research Institute of Underwater Archaeology (ARIUA) and Windy Network Co. in August 2018. The Woori Research Institute for Cultural Properties (WRICP) in South Korea also participated in this investigation.

Yabitsu is located 2km west of Waniura at the northwestern end of Tsushima. Yabitsu is an inlet and opens toward the northeast. The inlet stretches toward the southwest and forms a narrow water way extending 400m long. The mouth of the inlet is about 80m wide. The deepest water of the inlet is 10m near the opening (Fig. 1). There is a low-elevated flat hill to the left side of the opening in the inlet, where belongs to the site G. Black-colored mudstone is exposed on the northern slope facing the sea. There are seven holes in different size along the slope of this hill. These holes are not

submerged even at high tide. The hole on the left end is large and in good condition. After passing the hill, there is a small cove on the left side, and a stone masonry wall has been constructed behind the cove to separate the sea and land.

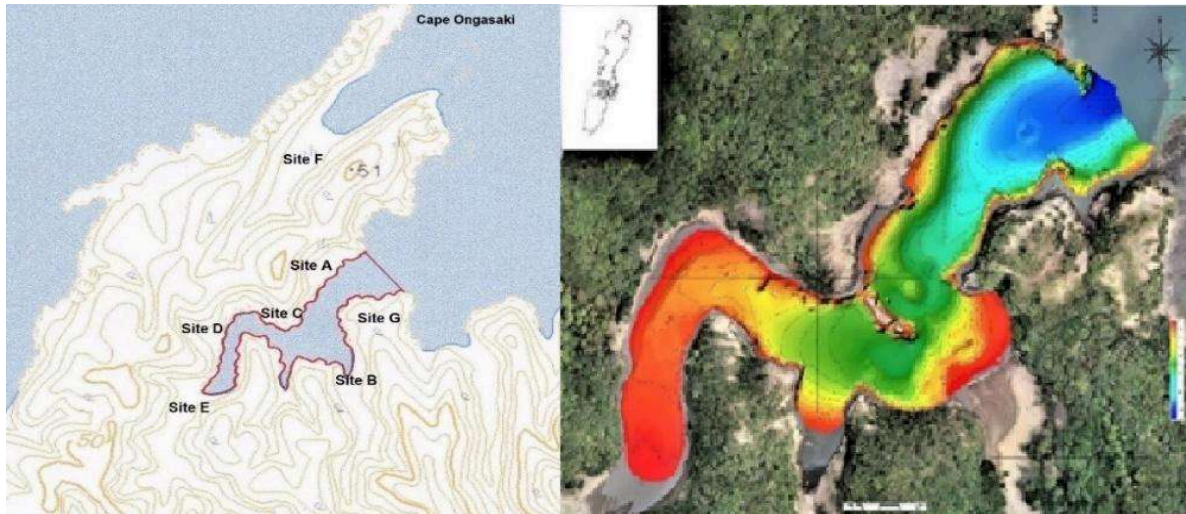


Figure 1: Map of Sites A-G at Yabitsu and Yabitu Inlet. (by Windy Network)

Site B of Yabitsu belongs to the small cove and land area behind the stone masonry wall. During high tide, water in the cove rises and penetrates toward inland about 35m from the masonry stone wall, and the highest tide reaches about 1m from the bottom of stone wall. There is a stream running along the foot of the hill westside of Site B. A natural rock barrier on the opposite bank across the cove of Site B projects toward Site B. This rock barrier situated on an altitude of -5m seafloor is at least 5m high. During high tide, sea covers the barrier and the submerged stone masonry. It is ca. 20m apart between the submerged stone masonry and the Site B stone masonry. The submerged stone masonry situated on an altitude of -2m seafloor to the east end of the masonry top of the rock barrier. It is ca. 40m long and 10m wide. It is ca. 25m apart between the rock and the west end is 50cm deeper. The seafloor becomes deeper toward the east and goes down until 5.5m of the deepest bottom.

A short stone masonry along the northern bank of Site C, and small land area exists between the stone masonry and the cliff. The land of Site C cannot be accessed from the nearest Site A or Site D. It is able to access only from the sea. In addition, the seafloor scan data shows five lumps of the concretions in vary size on the seafloor at Site C. These concretions are located on an altitude of -3.5m through -2m seafloor. The biggest concretion is most likely not a man-made stone masonry, but a solid rock in ca. 1.5m diameter fallen from the cliff behind a small area of the land at Site C.

Site D is located at the area 90 degree turned to the right after passing from the rock barrier. The areas of Sites C and D are called 'Soto-Yabitsu (外矢櫃)' by local people. A submerged stone masonry exists on the seafloor at the east end of the area of Site D. The seafloor of Site D is an altitude of -2m through 0m, and the seafloor appeared on an altitude of 0m during the low tide. The stone masonry has run ca. 85m long along the right bank. The end of the stone masonry is an

altitude of 0m. The far most area of the inlet designates Site E, and behind the masonry narrow land extends toward the southwest. The area of Site E is called 'Uchi- Yabitsu (内矢櫃)'. A part of the land near the stone masonry has been farmed. During the high tide, sea can reach the stone masonry. The masonry is built in two-three steppe high by cubic sand stones. Site F is located in the inlet west of Cape Ongasaki (鬼崎). This inlet is called 'Onga- Ura (鬼が浦)'. Along the beach of the far most inlet the stone masonry exists. This masonry has been restored recently in most part. The land behind the masonry has not been farmed. A stream seems to have been running toward the sea along the foot of the cliff. Site G is directly opposite across Site A and called 'Chokuro-Dan(長九郎段)'.

SURVEY OF YABITSU

As for the survey of Yabitsu, the survey areas with the stone masonry were named by Masayasu Ooe; these areas were designated the sites A through F. Site F is the area where is located at the far most end of the Onga cove. In addition, a low elevated flat hill facing Site A designates Site G. Site A and B were mainly carried out for both sea and land; remotely sensing survey was applied for collecting data of the seafloor and sub-bottom. Moreover, 3D mapping is executed for the quay of Site A by a drown and the Speedy Sea Scanner developed by Windy Network. The holes on the northly faced slope of the low elevated flat hill are mapped in detail by a laser scanner from the land of Site A.

SURVEY AT SITE A

The area of Site A has been said 'Tang's-Ship-Anchorage (唐船泊)', where is located on the right side shore in Yabitsu Inlet. The sea of Site A is 10m deep, and a quay of the stone masonry along the shore has been left in 90m long and 2-2.5m high. During the high tide, sea rises until just below a top of the stone masonry near the both ends. However, the high tide penetrates into the land over the quay at two sections of the quay, because the two sections have been damaged by people's activities in the past. The hinterland between the quay and the steep cliff is narrowly land in 20m width. The land had been cultivated for farming and planting sweet potatoes by local people until the 1960's.

STONE MASONRY AT SITE A

The quay was not built in a straight line, but is connected in three brocks. There is a reason why the stone masonry has been looked as curved line (Fig. 2). The first collapsed section is located 25m away from the southwest (left side from sea) end of the stone masonry. The side section of the collapsed wall extending from the northeast (right side from sea) consist of the sandstones piled up in five through six steps, and the wall slightly extends toward sea. On the other hand, the side section of the southwest is continuously piled up from the seafloor with the black mudstones except for the two steps of the sandstones above (Fig. 3). The collapsed stones have spread in semi-circle on the seafloor. The height of the remaining wall of the collapsed section is ca. 2.6m through 3m. This collapsed section seems to indicate reloading for repairing the quay because of the different kinds of stones and of construction methods. The section of the wall was most likely repaired sometime after the 17th century, because iron wadges have been seen on the sandstones. There is a

large hollowed area located in the nearly half way of the quay. The collapsed section is submerged at high tide and is the joint section, where meets the adjacent wall of either side of the quay. The upper part of stones section has collapsed into the sea.

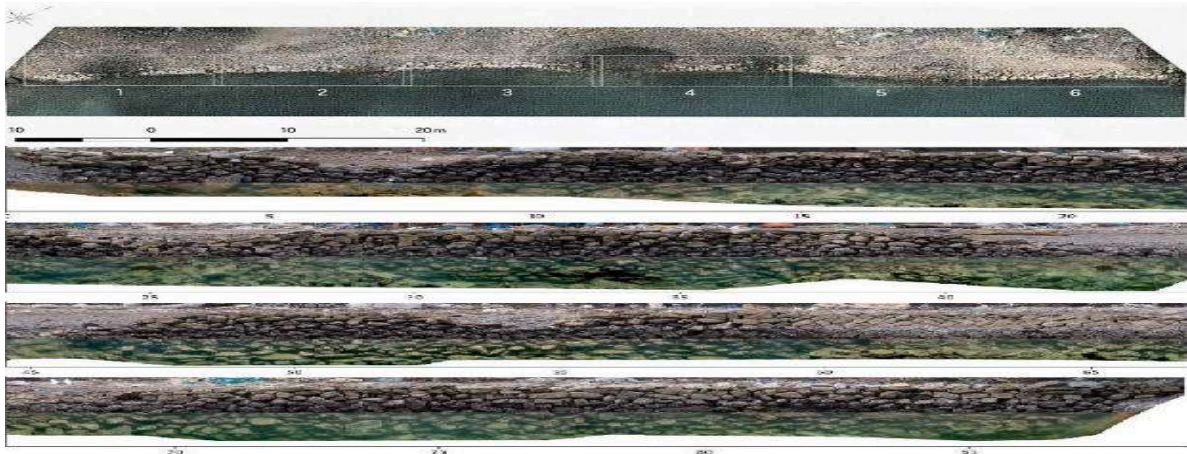


Figure 2: Stone Masonry of Site A from Arial and Side Views (by Windy Network).



Figure 3: Collapsed Section of Site A. (by S. Yanagita)

The relatively large stones in round or oval shape as well as 20cm through 30cm in diameter behind the collapsed section are arranged in semicircle surrounding the collapsed section and in a single low or double. It is considered that the purpose was to stabilize of the foundation of the stone masonry. There is a section with upper part of

the stone masonry repaired probably after WWII in approximately 15m away toward the right side from sea. The stone mason was built for the quay, and the quay was not built in the strait but divided into three sectors connected from the either side of the foot of the cliff. As for the date of construction, there have not been concrete evidence of artifacts found inside the stone masonry.

ARTIFACTS FOUND AT SITE A

There have been three small shards of pottery found at Site A. One of them is the mouth of the blue and white Hizen porcelain bowl dating to probably after the 17th century, and the other two shards are earthenware with the surface in glaze; the other two are most likely Hizen ware, and one of the two seems to be a shard of the mouth of the bowl covered with cloudy white glaze and a light brown colored liner line at a tip of the mouth of the interior. These shards are probably dated after the 17th century.

SURVEY AT SITE B

The primary survey of Site B started in August 2018 as collaborating research between ARIUA and Windy Network. Its objective is the restoring the underwater cultural landscape of medieval port at Yabitsu, Tsushima. WRICP also participated in this survey. Site B is located on the left bank of the Yabitsu inlet with stone masonry separating the land from the sea. Site B is called ‘Naka-Yabitsu’ among the local people and was used as a cultivated land until the 1960s after the second world war, but it has become a fallow land (Fig.4).



Figure 4: Aerial View (by WRICP) and Submerged Stone Masonry of Site B. (M. Takahashi)

Survey for the distribution of artifacts at the site B was conducted at the areas of sea and land of either side of the stone masonry. The high tide penetrates about 35m deep into the inland at the time of high tide. On the other hand, seabed appears at the outside of the stone masonry at the lowest tide. The high tide rises until just below the top of the stone masonry. Although there is very little water, a stream is running along the foot of the cliff westside of the site B and down into the sea while eroding the soil as well as the mudstone and sandstone of the cliff. The eroded the soil and stones were piled up on the seafloor outside of the stone masonry, and the soil of inside of the stone masonry was eroded and washed away to the seafloor outside of the stone masonry. As the result, the shallow seafloor of an altitude of -0.5m appears within approximately 10m distance from the stone masonry, where have been covered with sharded small mudstones and grinded sandstones. The sediment on the seafloor in front of the stone masonry can be seen from the air.

The diving survey was carried out the seabed in front of the stone masonry. The survey area is 3.5m in maximum depth and approximately 25m offshore. According to the sub-bottom profiler survey running from Site B to Site C, the seafloor topographical data shows that there is a low elevated concretion on the seabed at the survey area. This concretion could be identified with a submerged stone masonry at Site B, which is also shown on the map of Yabitsu Inlet as elongated figure in brown color. This elongated figure extending from the northeast to southwest can be identified with the stone masonry on the bottom from an altitude of -2m to -3m; this stone masonry is 1m in mean height from the bottom of an altitude of -3m, and the highest section of the stone masonry is 1.5m. This stone masonry curves along the level of an altitude of -2.5m and is approximately 40m long. The southwest section in a half of the stone masonry has partially been collapsed, and collapsed stones have randomly been scattered on the seafloor, and these stones does not seem to indicate collapse by disaster, otherwise they might have been removed to use for another purpose or for widening a narrow channel between the natural rock barrier and shallow seafloor of the opposite side. If so, ships could pass through safely (Fig. 4).

The trial excavation trench was opened near the area where the highest tide reached inland. The trench is close to a natural stone pillar of approximately 30m in height, and the tide does not rise. The stone pillar seems to indicate some boundaries. At the area of the southern side of the pillar, a hollowed land in approximately 60cm wide is running toward the eastern foot of the cliff. Considering such topographical feature, the hollowed land seemed to a ditch. The trial trench was opened in 1m by 3m in the north-south direction. The first layer is 30cm in lowed from the surface; this layer is a sandy soil containing a lot of coarse sand grains of the sandstone and mudstone, and the second layer is 50cm in lowed from the surface. The second layer contains brownish sandy soil with small gravel. Because water comes out below the send layer. We stopped digging. There is no artifact found in the layers. Therefore, the first and second layers are considered to be natural sedimentary layers without artifacts. Sue wares were found near the trench in 2018, and the Jomon pottery, Sue wares and four modern domestic ceramics and iron nails were also found. In 2019. These relics are believed to have been swept away from the cultivated soils of the hinterland of the stone masonry. An iron hoe and white ceramics dating to the Modern period shows that the land was used as a farm field and also that a black-colored soil was used for the farm field. It will be necessary to have the trench excavations at the far inner place of the field (Fig.5).

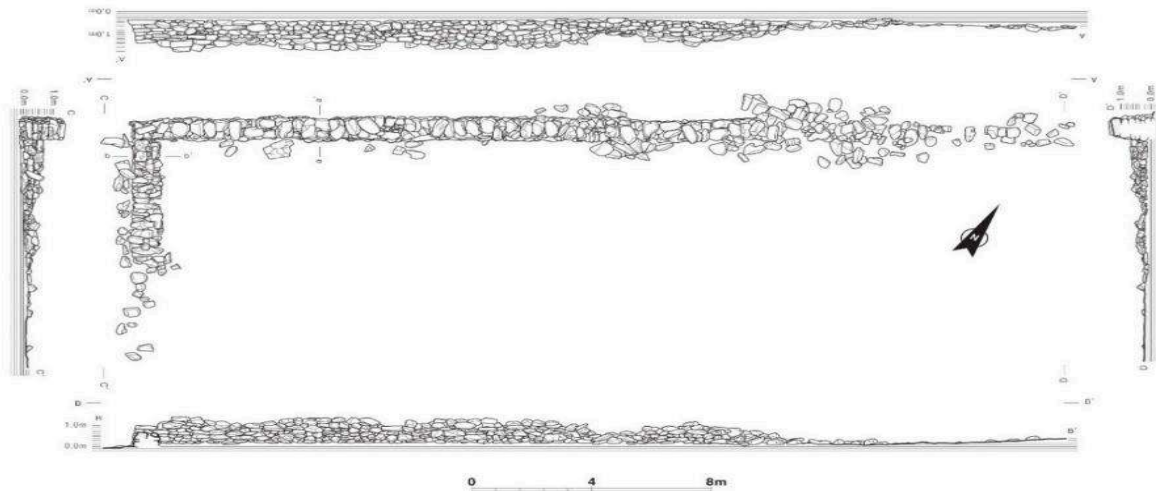


Figure 5: Drawing of Stone Masonry of Site B. (by WRICP)

ANALYSIS OF ARTIFACTS FOUND AT SITE B

Artifacts found by the swim search outside of the stone masonry are B-1 through B-11 shown in the table, and B-1-B-11 except for B-9 have been found on the seafloor between the stone masonry, and the submerged stone masonry located 25m off the shore. The domestic earthen wares of B-1, B-3 and porcelains, B-4 most likely belongs to the 17th century and after. Unlisted artifacts have been found on the seafloor below the low elevated flat hill (Site G) situated to the east side of the cove. These artifacts called Hizen porcelain recovered belong to mostly after the 19th century and after. There used be a house on the hill until sometime after the WWII. Today there is not the house remained. The artifacts of B-11, B-12 and B-13 are shards of the Sue ware found near the trial trench excavated in the 2019 season campaign (Fig. 6).

34°41'34.8"N		B-8	34°41'35.3"N	
129°25'21.8"E			129°25'21.6"E	
34°41'34.7"N		B-9	34°41'35.6"N	
129°25'21.8"E			129°25'21.9"E	
34°41'34.7"N		B-10	34°41'34.6"N	
129°25'21.8"E			129°25'21.8"E	
34°41'34.7"N		B-11	34°41'33.6"N	
129°25'21.7"E			129°25'22.8"E	
34°41'34.7"N		B-12	34°41'33.0"N	
129°25'21.6"E			129°25'22.5"E	
34°41'34.5"N		B-13	34°41'33.3"N	
129°25'21.7"E			129°25'22.5"E	
34°41'34.5"N		B-14	34°41'34.47"N	
129°25'21.2"E			129°25'22.4"E	

Figure 6: Artifacts Found at Site B in 2018.

B-1 is a shard of the mouth of the glazed earthenware, dated to most likely early modern age. This specimen has a concave mouth upward. This type of the mouth is difficult to identify whether is a lid or a mouth section of the body. The surface except the interior surface is covered with light greenish-yellow. B-2 is a flat roof tile. Outer surface has the four zigzag groove patterns executed by comb like tool. B-3 is a shard of the earthenware remained from the mouth to the base, which seems to be either the ring based-bowl or the basin with a ring base. The outer surface covers with olive color glaze and the interior are unglazed. This specimen is probably dated after 17th century. B-4 is a shard of the mouth of the white porcelain, dated to 19th century and after. B-5 is a shard of the body of Sue typed-earthenware jar. On the outer surface a narrow grooved-horizontal line is executed in parallel. The surface is made smooth by fingers and scraped by wooden spatula, and the interior surface is also scraped in upwards direction. This specimen is most likely dated to the Medieval Ages. B-6 is a lower part of the Haji pedestal shallow bowl with a pair of two small holes executed on either side. This specimen is dated to the middle of the Kofun period (mid-5th century).

B-7 is a small fragment of the Sue shallow bowl with smooth surfaces by fingers. B-8 is a shard of the mouth of Sue shallow bowl's cover with smooth surfaces executed by fingers. B-9 is 20th century small white porcelain bowl with stemmed base. 3/4 is lost. B-10 is an earthen fishing weight, 3.9cm long and 1.75cm in the maximum diameter. Inside diameter is 0.4cm and 15g in weight. B-11 is a shard of the body of Sue jar with pressed parallel marks on the outer surface and circular marks inside. B-12 is a shard of the body of Sue jar with pressed parallel marks on the outer surface and circular marks inside. The surface is covered by natural glaze in yellowish brown color. B-13 is a shard of the base of Sue Jar with natural glazed surface and glassified interior surface. B-14 is a shard of the body of Silla typed-Sue vase.

Many Hizen porcelain have been found except for already discussed artifacts found on the seafloor of front of the stone masonry belonging to Site B. These wares have been found in concentration and at the small area where is the seafloor at the foot of the cliff east of the cove. They were discarded after use for daily life lived on the hill. Two shards of the blue celadon belonging to the Koryo Dynasty were found near the trench; one is a shard of probably the bowl with black color-inlaid design, and another shard is the bowl. A shard of the body of the unglazed earthenware have been found near the stone masonry; this specimen is the shard of the vase dated to the 12th century of the Koryo Dynasty.

SURVEY AT SITE C

Remotely sensing survey for the seafloor has been carried out; the data shows five objects on the seafloor of altitude just near the stone masonry.

ANALYSIS OF ARTIFACTS FOUND AT SITE C

Three Hizen were found on the seafloor of Site C; one of two shards is a blue and white porcelain dish dated to, and one is a stemmed bowl in miniature for offering food to the deceased. There are two clay fish weights at the land area. Hizen wares are most likely dated to after the 19th century.

SURVEY AT SITE D

Site D called ‘Soto-Yabitsu’ cove has the stone masonry along the right-side bank, and seafloor is the altitude of -2.5m through 0m. The stone masonry has been built with cubic sandstones in size vary. On the surface of the sandstone, the square notches after cutting with an iron wedge. These notches measure 5.5cm through 6cm wide. Stone cutting technology based on the width of this wedge widespread in the early Edo period (Fig. 7). The size of the wedge can be seen on the sandstones of Site A. The high tide does not reach the top of the quay, therefore, the stone masonry on the altitude of 0m was built at least four layer high (Fig. 7).

The hinterland between the quay and the cliff is not large enough. The land was used for farming sweet potatoes sometime after WWII. A submerged jetty in ca.10m distance southeast from the end of the stone masonry extend until 14m away off shore from the cliff at a right angle. The submerged jetty was built in the shape of trapezoid with relatively squared-large gravels. The end of the jetty becomes slightly inclined and reaches the bottom. The foot of the jetty is approximately 5m wide, and the top is approximately 3m. The end of the bottom is approximately 4m wide, and the top is approximately 2.5m wide (Fig. 7).



Figure 7: Iron Wedge on a Sandstone, Stone Masonry, and Submerged Jetty of Site D. (by M. Ooe)

ANALYSIS OF ARTIFACTS FOUND AT SITE D

There are two clay fishnet weights have been found on the land. They are probably dated to the early Modern period and after. Three Hizen wares found on the seafloor; one of two shards is a blue and white porcelain dish dated to the late Modern period, and another is a stemmed bowl in miniature for offering food to the deceased, dated to the 17th-18th century. A shard of the mouth of the earthenware is most likely a shallow bowl or basin, which has been found on the seafloor; the mouth is executed outward and surface is covered in black glaze (Iron glaze). The fabric was fired in low temperature in a kiln; therefore, this specimen may be the ‘Kyoto styled-earthenware’ in the Medieval Ages, and otherwise this specimen may not be a domestic product.

SURVEY AT SITE E

The survey at Site E has not been carried out in the 2018 and 2019 seasons. However, two pottery shards have been come to light near the stone masonry in 2019.

ANALYSIS OF ARTIFACTS FOUND AT SITE E

A shard of Joseon white porcelain (N34°38'14.85" E129°23'52.18") was recovered on the land near the stone masonry of Site E by Akira Nagasaki. This shard is a base with ring on the exterior and three unglazed clay marks on the interior. The surface is covered with thin untransparent white glaze except for the top surface of the ring. This specimen is dated to the 15th-16th century. Another specimen has been recovered by Nagasaki at the Site E; a basin like-shard has been found on the seafloor near the stone masonry. This shard seems to be the Sue typed-ware dating to the late of the Medieval Ages.

SURVEY AT SITE F

A general survey at the land of Onga cove has been done by Akira Nagasaki and the Tsushima City Board of Education. Their survey result has shown in the analysis of artifacts found at Site F. We should evaluate this site, because the artifacts belong to the Jomon period, the Yayoi period and the Kofun period as well. The concrete archaeological evidence for artifacts proves the people's activities lasted from the ancient time at Yabitsu. Undocumented Yabitsu's history before the 15th century will also reveal at Site F.

ANALYSIS OF ARTIFACTS FOUND AT SITE F

Artifacts found at Site F in the Onga cove are dated to the Jomon period through the Kofun period. These artifacts have been recovered before by Akira Nagasaki; artifacts recovered at Site F are obsidian flakes, shale stone tools, concave stones, whetstones and Sue ware. These artifacts have been recovered at the west side land area at Site F.

There are shards of the Karatsu earthenware found the east of the land of the Onga cove in the 2018 season. The shards are a mouth of the bowl dated to the 17th century. To the west of Site F, a narrowed cape extends toward northeast. and at the ridge of the cape obsidian arrowheads, flakes, shale stone tools, Haji wares and Sue wares have been found. In addition, a mushroom look like-shaped bronze ornament has been found at the ridge area recovered the other artifacts. Many stones received fire have been found at the ridge area, and there is the surface of the soil near the ridge area fired in red color. If considering about geographical feature, the fired soil may have been used the smoke signal because the ridge is 20m above sea level, no obstacle around and approximately 50km distance between Tsushima Strait.

SURVEY AT SITE G

Site G is located at the left bank of the opening the inlet, where is a low elevated flat hill of the black colored mudstone. Along the slope of the north side of the hill, there have been seven holes in different size on the slope facing toward the sea, and these holes do not go under water even during the high tide, and they are facing directly toward the quay where is located at the right bank of the mouth of the Yabitsu inlet in 80m apart.

The holes could have kept off the northerly wind and rough sea blowing into the inlet from the open sea during the winter. The holes have been 3D mapped by remotely sensing tools of drone and laser, and above all, the best-preserved large hole located at the left end of the slope have been measured by hands. The hole is 140cm wide for the opening, 100cm in depth and 80cm in high. The other two holes are located at the right end of the slope. These holes may have used as the places for torch; ships would have safely reached the inlet in night under the light. A rough streak on the cliff used to use as a path by local people has been running from the two holes to the top of the hill; there is no way to reach the hill from the sea except for the land access from southeast. There is archaeological evidence to settle. The land on the hill was used as the living quarters until the 1950s.

ANALYSIS OF ARTIFACTS FOUND AT SITE G

Artifacts found at the hill of Site G are mostly domestic earthenware and ceramics. They are dated to the 17th century and after. On the other hand, Site G shows the archaeological evidence that the close relation had been connecting between Korean peninsula and Tsushima in the Medieval Ages through the early Modern period. There are two shards of the bases of the white porcelain bowls of the Joseon Dynasty; one is most likely dated the 15th century, and another one is the 17th-18th century. There are shards of the base and the mouth of white porcelain dishes, which are probably belong to the Joseon Dynasty. In addition, there are two shards of the blue celadon bowls; one is so-called Bungjeong ware, probably dated to the 15th century, and another shard is belonging to the Koryo Dynasty. WRICP will make a plan for the collaborative trench excavations with ARIUA at Site G. This campaign is to obtain further evidences between Korean peninsula and Tsushima as well as Kyushu Island.

CONCLUSION

As for Yabitsu, the inlet was most likely used to anchor ships at least in the first half of the 15th century, which is based on a few written sources having found in the Korean Peninsula. The artifacts found at the seafloor and land at Site B have shown people activities from the Jomon period until sometime after WWII. Therefore, it is necessary to comprehensively investigate Yabitsu with archaeological methods and knowledge; collaborate surveys with the Windy Network's remotely sensing technology and knowledge and WRICP's wide ranged knowledge and archaeological experience for the history of Korean Peninsula were very helpful to accomplish objectives of the 2018 and 2019 season campaigns.

Though the ARIUA Yabitsu survey campaign has not finished yet because of the COVID-19 pandemic. Through the two-season's primary survey, we have been able to obtain archaeological several evidences for underwater cultural heritage by remotely sensing seafloor and sub-bottom surveys, diving survey and land survey for distribution of artifacts. These survey's results have made a seafloor topographic map (three-dimensional mapping). Especially at Site A 3D mapping of the quay was carried out by Windy Network. WRICP was in charge of making a three-dimensional mapping of the stone masonry remained at Site B and surveying the distribution of artifacts on the hill at Site G, where is located east side of Site B. Making the detail map of 3 dimensional phases of the stone masonries of Site A and Site B is an important procedure to restore one of the components of underwater cultural heritage. The result will have to be inquired further investigation for the structure and date of the quay at Site A and the stone masonry kept land safe from invaded sea at Site B. Site G on the low elevated flat hill will be made a plan for executing trial excavations by WRICP next year.

Acknowledgments

The ARUIA Yabitsu survey collaborated with Windy Network began in August 2018 and will continue until 2020. However, the Yabitsu survey postpones by 2022 because of Covid-19. The Yabitsu survey has been financially endowed by Windy Network. The Woori Research Institute for Cultural Properties in South Korea has joined the survey since 2018. During the surveys, many helps for the survey were received from local fishermen who provided us vessels to carry to the Yabitsu site, and also Tsushima City Board of Education and Nagasaki Prefecture Board Education. The surveys would not have been possible without the dedicated helps of the following people; Mitsuhiro Ogawa, Masahiro Takahashi, Mikihiro Tsunematsu, Tomo Ishimura, Hirokazu Onoue, Hironobu Matsui, Yasuo Baba, Toshihiro Ninomiya, Mayu Ito, Kazuhito Kato, Kenichi Sugimoto, Yusuke Sugimoto, Shingo Sakamoto, Yoshihiro Saito, Momoko Koiso, Masaki Katata, Tetsuo Furiya, Masayasu Ooe, Kwak Jong Cheol, Kim Dong Hyun, Im Ki Hyun, and Ha Tea Jung. Finally, my many thanks go to the following people; WRICP has made 3D mapping for the stone masonry at Site B and also go to Sumitaka Yanagita; he has made a detail map for the part of the stone masonry at Site A and analyzed the characteristic of the structure. Akira Nagasaki especially has given many geographical features of Yabitsu as well as the data of the artifacts recovered at Yabitsu by him. He kindly permit to use his collected data on the artifacts found at Yabitsu. The trial excavation at Site B could not be achieved without help of Shizuo Miyahara who is a landowner of Site B.

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Biography

Kenzo Hayashida completed his MA in classical archaeology at the University of Pennsylvania in 1981, majoring in the Bronze Ages of the Mediterranean. He was the president director of KOSUWA in 1986-2005, and since 2005 he has been the president director of the NPO organization of the Asian Research Institute of Underwater Archaeology. He engaged in the archaeological excavations of the Takashima underwater site or the medieval trading ship explorations and diving surveys in the Genkai Sea. In 2012 he edited *The Database of Underwater Cultural Heritage and Promotion of Underwater Archaeology* (6 vols., Fukuoka: ARIUA) as a project of the Nippon Foundation Grant. He was a lecturer in nautical archaeology at Tokyo University of Marine Science and Technology [UNESCO UNITWIN Network for Underwater Archaeology]. Since 1986, in addition, he has been a part-time employee of the Buried Cultural Assets Department and the Financial Sightseeing Cultural Bureau of Fukuoka City Board of Education.

