Visitor Management Plan

for the Realization of “Desired Style of Fujisan Ascents”

（Report of the Research and Study of Carrying Capacities）

March 2018

Fujisan World Cultural Heritage Council

Contents

Chapter 1　Background and Objective of Preparing the Plan

1. Background of Preparing the Plan

- In July 2013, the 37th session of the UNESCO World Heritage Committee made 6 recommendations in deciding to inscribe "Fujisan, sacred place and source of artistic inspiration" (hereinafter referred to as "Fujisan") on the UNESCO World Heritage List (Decision 37COM8B.29)
- In recommendation (c), the World Heritage Committee request the Government of Japan to develop a visitor management strategy based on researched carrying capacities for the upper access routes.
- In response to this, the Government of Japan submitted the state of conservation report, including the progress of the development of the visitor management plan, to the UNESCO World Heritage Centre on 27 January 2016 (Paris time).
- With regard to the visitor management plan, it was proposed that, to realize the "Desired Style of Fujisan Ascents" which has been set out as its goal, the proper operation of a management system would be ensured through PDCA cycle, researches and studied would be carried out on the climbers at the 5th station or higher of the ascending routes continually for 3 years from 2015 to 2017, and several indicators including the number of climbers will be set up by July 2018 for steady progress and improvement of the visitor management plan.

2. Visitor Management Plan

The content of the state of conservation report that the Government of Japan submitted to the UNESCO World Heritage Centre in January 2016 is summarized below:

- Goals and objectives will be set up together with indicators, taking into consideration the "Managing Tourism at World Heritage Sites: A Practical Manual for World Heritage Site Managers", published by the UNESCO World Heritage Centre, and examples of national parks in other countries. And the results will be monitored. (Figure 1)
- The following "Desired Style of Fujisan Ascents" have been set out as the goals of the visitor management plan in the understanding that it is important for climbers who make different styles of ascents to be able to perceive both "sacredness" and "beauty", which convey the OUV of Fujisan.
-

1. Transmission of the Cultural Traditions of Ascents Originating from the 17th Century to Future Generations
   - If climbers greet the sunrise near the summit, climbers should stay or take rest at a mountain hut on the way
   - Climbers should start to climb from one of the specified pilgrimage routes or ascending routes at the foot of the mountain
   - Climbers should recognize or understand the relationship between shrines, sacred places, etc. at the foot of mountain and ascending routes

2. Maintenance of Scenic Landscapes along the Ascending Routes and around the Mountaintop
   - Facilities for climbers such as mountain huts and disaster risk reduction facilities should harmonize with nature
   - The effects of erosion and changes in vegetation, etc. on views and landscapes should be reduced

3. Safety and Comfort of Visitors who Make Ascents
   - Climbing gear, climbers' good manners, etc. should be well understood
   - Visitors can climb without experiencing congestion, danger, and dissatisfaction due to an excessive number of climbers

- To realize the “desired style of Fujisan ascents”, research and survey on “carrying capacity of the upper access routes” etc. are to be carried out over three years from 2015 to 2017 and indicators and desired levels are to be set out, including but not limited to the target daily number of climbers on each ascending route, by July 2018, from the three perspectives of (i) transmission of the cultural traditions of ascents originating from worship ascents in the 17th century to future generations, (ii) maintenance of scenic landscapes along the ascending routs and around the mountaintop, and (iii) safety and comfort of visitors who make ascents.
- Measures to mitigate the concentrations of climbers near the summit on specific peak dates and times as well as to ensure safety of climbers are to be taken, including information provision. Also, in close coordination with the interpretation strategy, measures are to be taken to facilitate visitors’ recognition and understanding of the relationships between the component parts and to encourage climbers and other visitors to tour component parts at the foot of the mountain and other tourist destinations.
- The effectiveness of measures and indicators is to be assessed and reviewed about every five years, with the 2015 level as the baseline, for steady progress and improvement of the visitor management plan.

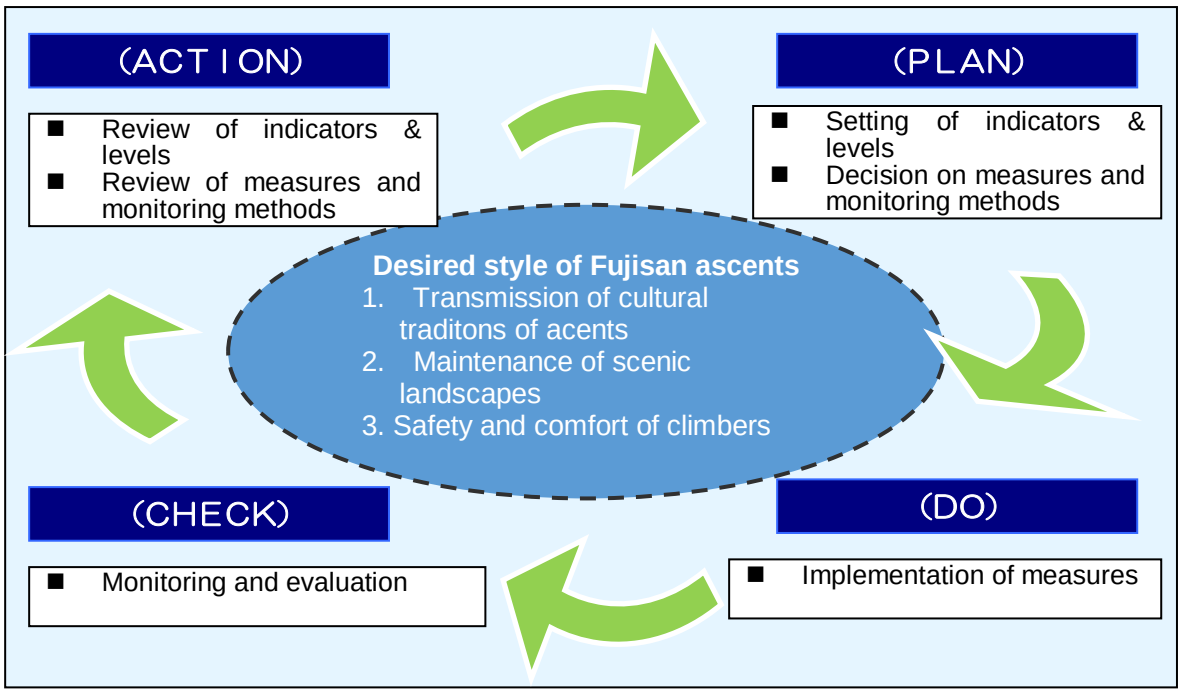


Figure 1 Mechanism of visitor management of Fujisan

3. Objective and Structure of the Plan

- In light of the above, this implementation plan (hereinafter referred to as “this plan”) has been developed to respond to the request from the World Heritage Committee and to ensure the proper implementation of the visitor management of the upper access routes into the future.

- This plan sets out indicators and levels together with specific measures aimed at the realization of the desired levels and monitoring methods, based on the Visitor Management Plan that was submitted to the UNESCO World Heritage Centre in January 2016 and the results of research and study on the carrying capacity of the upper access routes.

- This plan corresponds to the “PLAN” stage specified in the PDCA cycle of Figure 1 and it is to be reviewed, as necessary, taking into consideration the status of implementation of specific measures and the status of achievement of desired levels.

- This plan is structured, as is shown in Figure 2. The content of each chapter is summarized

below.

Chapter 1 describes the background of preparing the plan, summarizes the visitor management plan, and explains about the objective and structure of the plan.

Chapter 2 summarizes the results of research and study, including those on the carrying capacity of the upper access routes that have been carried out since 2015.

Chapter 3 sets out policies of visitor management based on the content of Chapters 1 and 2.

Chapter 4 sets out the indicators and standards for the realization of the “desired style of Fujisan ascents” based on the content of Chapters 2 and 3.

Chapter 5 sets out specific measures to achieve the desired levels by indicators.

Chapter 6 sets out the concrete methods and responsible agencies for the monitoring of the status of achievement of the desired levels.

Chapter 7 clarifies the timetable for the implementation of this plan and the implementation mechanism.

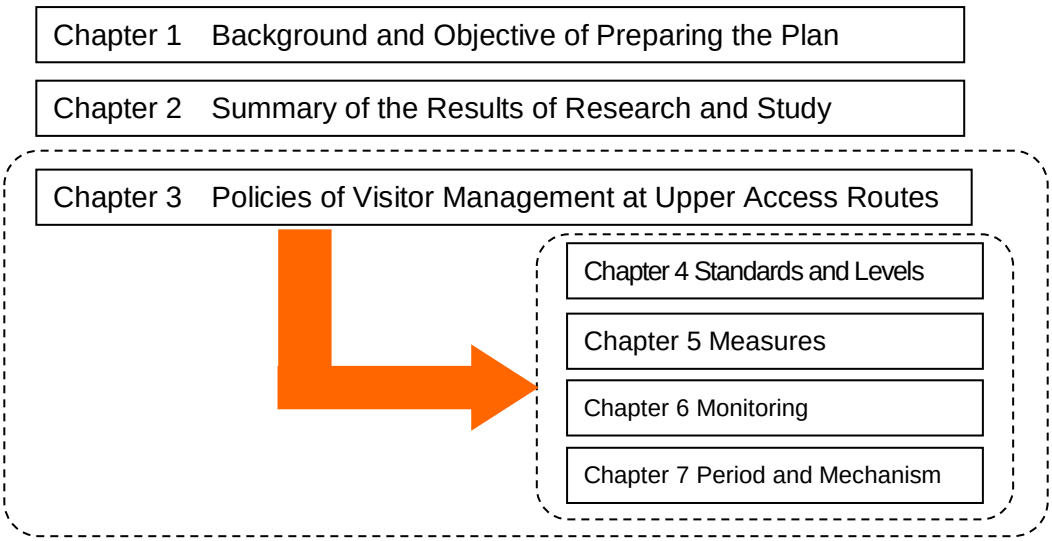


Figure 2 Structure of the Plan

Chapter 2　Summary of the Results of Research and Study

This chapter summarizes the results of research and study that Yamanashi and Shizuoka Prefectures carried out over 3 years from 2015 to 2017, including surveys of perceptions, dynamics, etc. of climbers at the 5th station or higher of the ascending routes in the summer time.

1．Outline of Research and Study

The surveys that have been carried out in relation to the “carrying capacity of the upper access routes” are outlined below.

Table 1. List of Surveys

Category	Content	Years
Survey of the perception of climbers	To examine the perception of climbers by asking them when or after descending from Fujisan about satisfaction, evaluation about congestion and dangerous points, intention to revisit Fujisan, etc.	2015 2016 2017
Survey of the dynamics of climbers	To determine the dynamics of climbers by recording the location (latitude, longitude, and altitude) and speed every five seconds during the ascent with GPS loggers.	2015 2016 2017
Field survey	To record the status of congestion at sunrise by visual observation, photography, and counting of field surveyors.	2017
Fixed-point photography survey	To record the status of congestion by taking photos of the status of congestion with cameras that are installed near the summit of the Fujiyoshida and Yoshida/Subashiri ascending routes at an interval of 15 minutes.	2015 2016
On-line questionnaire survey	To carry out on-line questionnaire about the perception of congestion.	2015

2．Summary of the Results of Research and Study

(Perception of climbers)

- There were a certain ratio of climbers who answered that they “felt the sacredness of Fujisan” or that they “knew cultural traditions of making ascents after making pilgrimage”, both when there were a large number of climbers and when there were a small number of climbers.

- There was a tendency for the ratio of climbers who answered that they cannot tolerate the large number of people on the ascending routes or near the mountaintop or that they felt danger to increase in proportion to the total number of climbers.

(Dynamics of climbers)

- During the climbing season, siginificant levels of congestion take place due to concentration of climbers on particular dates (weekend and the Bon Festival season), hours (before, at, and after sunrise), and places (the area higher than the converging point of Yoshida and Subashiri ascending routes at the 8th station and near the mountaintop on the Fujinomiya ascending route).

- On weekdays and in the other hours than the aforementioned, the movement of climbers tends to be relatively smooth, except that, immediately below the mountaintop of the Yoshida and Subashiri ascending routes, congestion takes place partly, immediately after sunrise.

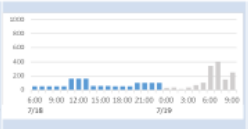
<Reference data > Summary of research results by ascending routes

Summary of Survey Results (Dynamics of climbers: Fujinomiya ascending route)

1. Whole summer climbing season

		2015			2016			2017		
Number of climbers	Daily (people) Counted at the 8th Station									
	Note	Exceeding 1,500 **10** days	Exceeding 2,000 **3** days	Exceeding 2,500 **0** days	Exceeding 1,500 **10** days	Exceeding 2,000 **2** days	Exceeding 2,500 **0** days	Exceeding 1,500 **18** days	Exceeding 2,000 **4** days	Exceeding 2,500 **1** day
		Median **722**	Third quartile **1,131**	Max **2,249**	Median **748**	Third quartile **1,237**	Max **2,107**	Median **994**	Third quartile **1,603**	Max **2,656**

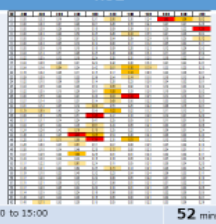
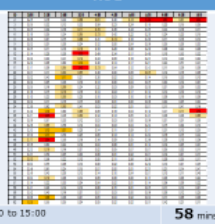
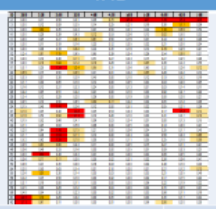
2. Close look, among the surveyed dates, at the dates closest to the median, third quartile, and maximum and a date between the third quartile and max.

Date / Number of climbers (counted at 8th Station) / Weather	18 July 2015 (Sat.) 685 Sun (strong wind)	13 August 2015 (Thu.) 1,182 Rain followed by clouds	11 August 2016 (Thu.) 1,572 Sun followed by clouds	5 August 2017 (Sat.) 2,290 Rain with occasional sun
Hourly number of climbers: Starting time (people) Counted at 5th Station ※Including those who do not reach summit ※GPS loggers were handed out between 6:00 and 24:00 on Day 1				
Hourly number of climbers: Climbers staying at mountaintop (people) Estimated based on GPS logger data				

※ Median is the middle number in a given sequence of numbers; third quartile is the value of the variable below which three quarters of the elements are located.

Summary of Survey Results (Dynamics of climbers: Fujinomiya ascending route)

Density

Date / Number of climbers (counted at 8th Station) / Sunrise	18 July 2015 (Sat.) 685 4:32	13 August 2015 (Thu.) 1,182 4:52	11 August 2016 (Thu.) 1,572 4:51	5 August 2017 (Sat.) 2,290 4:42
Climbers' density: Goraikokan mountain hut (daybreak)				
Required time: Mannen-yuki hut to summit [600m] 11:00 to 15:00	59 mins.	52 mins.	58 mins.	" mins.
Required time: Mannen-yuki hut to summit [600m] 2 am	68 mins.	79 mins.	81 mins.	118 mins.
Required time: Mannen-yuki hut to summit [600m] 3 am	70 mins.	88 mins.	83 mins.	114 mins.
Climbers' perception: Congestion, danger ratio of respondents: The large number of climbers on ascending routes is intolerable.	14.5 %	14.1 %	19.4 %	21.1 %
Congestion, danger ratio of respondents: The large number of climbers on the mountaintop is intolerable.	15.9 %	20.4 %	16.2 %	15.2 %
Congestion, danger ratio of respondents: There was danger due to overtaking.	18.1 %	30.4 %	16.6 %	10.5 %
Satisfaction, impression ratio of respondents: Satisfied very much with climbing Fujisan this time.	41.1 %	40.3 %	54.3 %	71.7 %
Satisfaction, impression ratio of respondents: Disappointed very much/a little with the number and condition of toilets.	No survey in 2015	No survey in 2015	16.1 %	24.5 %
Satisfaction, impression ratio of respondents: Disappointed very much/a little with the service and atmosphere of mountain huts.	No survey in 2015	No survey in 2015	11.4 %	28.7 %
Satisfaction, impression ratio of respondents: I felt (a little) the sacredness of Fujisan, climbing Fujisan.	84.5 %	81.5 %	94.2 %	91.4 %
Other questions ratio of respondents: I knew the cultural traditions of making ascents after pilgrimage / I learned this time.	26.7 %	29.6 %	40.6 %	55.3 %
Other questions ratio of respondents: I saw litter often.	No survey in 2015	No survey in 2015	29.9 %	9.2 %
Other questions ratio of respondents: I stayed overnight at a mountain hut.	50.0 %	42.2 %	48.9 %	69.7 %
Other questions ratio of respondents: I greeted the sunrise at the mountaintop.	20.1 %	29.1 %	47.0 %	67.8 %
Photos (Some photos were taken on a different date with a similar number of climbers.)	 04:31 Section 40 24 Aug. 2015 (Mon.) Climbers who started ascent the previous day 619	 04:30 Section 40	 04:17 Section 40 16 Aug. 2015 (Sun.) Climbers who started ascent the previous day 1,560	 04:43 Section 40 23 Aug. 2015 (Sun.) Climbers who started ascent the previous day 2,328
Analysis	◆ Many people started climbing around noon and stayed at the mountaintop before and after sunrise. But the absolute number was not large compared to other dates. ◆ At daybreak between the 9th Station and the mountaintop, concentrations of climbers were observed in some spots. But, concentrations did not form a long series. Long lines (congestion) did not occur and only concentrations in particular spots occurred.	◆ The peak starting time was around noon for those who stay overnight at a mountain hut and around 20:00 for those who do not stay at a mountain hut. Both types often stay at the mountaintop before and after sunrise. ◆ At daybreak between the 9th Station and the mountaintop, concentrations of climbers were observed in some spots. But, there was no series of red-level concentrations. ◆ Compared to the day when the number of climbers was 685, there were more time slots and locations of high density.	◆ There were climbers throughout the day. The number of those who started climbing in the morning was a little larger than in the afternoon. May climbers stayed at the mountaintop before and after sunrise., but there was another small peak in the afternoon, too. ◆ At daybreak between the 9th Station and the mountaintop, concentrations of climbers were observed in some spots. ◆ Immediately below the mountaintop, people started to pass after 2 am and high density continued after 3:30.	◆ The peak starting time was around noon for those who stay overnight at a mountain hut and around 20:00, and the early morning for those who make one-day ascents. Climbers staying at mountaintop peaked around noon (small peak) and before and after sunrise (big peak). ◆ At daybreak between the 9th Station and the mountaintop, concentrations of climbers were observed in several time slots and places. ◆ Immediately below the mountaintop, climbers contantly passed in congestion from after 2 am to around 6:00 am after sunrise.

Summary of Survey Results (Dynamics of climbers: Subashiri ascending route)

1. Whole summer climbing season

		2015			2016			2017		
Number of climbers	Daily (people) Counted at the 8th Station									
	Note	Exceeding 600 **11** days	Exceeding 800 **3** days	Exceeding 1,000 **0** days	Exceeding 600 **7** days	Exceeding 800 **3** days	Exceeding 1,000 **0** days	Exceeding 600 **9** days	Exceeding 800 **0** days	Exceeding 1,000 **0** days
		Median **285**	Third quartile **480**	Max **964**	Median **222**	Third quartile **382**	Max **950**	Median **345**	Third quartile **497**	Max **791**

2. Close look, among the surveyed dates, at the dates closest to the median, third quartile, and maximum and a date between the third quartile and max.

		25 July 2016 (Mon.) Number of climbers **265** Weather: sun followed by clouds	27 July 2015 (Mon.) Number of climbers **477** Weather: sun	1 August 2015 (Sat.) Number of climbers **964** Weather: clouds
Hourly number of climbers	Starting time (people) Counted at 5th Station Including climbers who do not reach summit	※ No data available because counting survey was not carried out in Shizuoka Prefecture on this specific date.		
	Climbers staying at mountaintop (people) Estimated based on GPS logger data			

※ Median is the middle number in a given sequence of numbers; third quartile is the value of the variable below which three quarters of the elements are located.

Summary of Survey Results (Dynamics of climbers: Subashiri ascending route)

		25 July 2016 (Mon.) Number of climbers **265** (The number of climbers on the same day at Yoshida 1,779)		27 July 2015 (Mon.) Number of climbers **477** (The number of climbers on the same day at Yoshida 1,910)		1 August 2015 (Sat.) Number of climbers **964** (The number of climbers on the same day at Yoshida 3,337)	
Required time GPS logger data	Goraikokan mountain hut ~ Immediately below mountaintop [500m] (Sections 50~54)	11:00 to 15:00	**44** mins.	11:00 to 15:00	**45** mins.	11:00 to 15:00	**48** mins.
		3:37 to 4:37 (1 hour before sunrise to sunrise)	**69** mins.	3:38 to 4:38 (1 hour before sunrise to sunrise)	**66** mins.	3:42 to 4:42 (1 hour before sunrise to sunrise)	**69** mins.
		2:37 to 3:37 (2 to 1 hour before sunrise)	**70** mins.	2:38 to 3:38 (2 to 1 hour before sunrise)	**50** mins.	2:42 to 3:42 (2 to 1 hour before sunrise)	**95** mins.
Climbers' perception Question-naire	Congestion, danger ratio of respondents	The large number of climbers on ascending routes is intolerable.	**1.9** %	The large number of climbers on ascending routes is intolerable.	**11.6** %	The large number of climbers on ascending routes is intolerable.	**21.4** %
		The large number of climbers on the mountaintop is intolerable.	**7.8** %	The large number of climbers on the mountaintop is intolerable.	**15.8** %	The large number of climbers on the mountaintop is intolerable.	**32.6** %
		There was danger due to overtaking.	**5.8** %	There was danger due to overtaking.	**13.1** %	There was danger due to overtaking.	**26.3** %
	Satisfaction, impression ratio of respondents	Satisfied very much with climbing Fujisan this time.	**58.8** %	Satisfied very much with climbing Fujisan this time.	**58.3** %	Satisfied very much with climbing Fujisan this time.	**56.6** %
		Disappointed very much/a little with the number and condition of toilets.	**9.8** %	Disappointed very much/a little with the number and condition of toilets.	**No survey in 2015**	Disappointed very much/a little with the number and condition of toilets.	**No survey in 2015**
		Disappointed very much/a little with the service and atmosphere of mountain huts.	**10.5** %	Disappointed very much/a little with the service and atmosphere of mountain huts.	**No survey in 2015**	Disappointed very much/a little with the service and atmosphere of mountain huts.	**No survey in 2015**
		I felt (a little) the sacredness of Fujisan, climbing Fujisan.	**90.4** %	I felt (a little) the sacredness of Fujisan, climbing Fujisan.	**83.8** %	I felt (a little) the sacredness of Fujisan, climbing Fujisan.	**83.5** %
	Other questions ratio of respondents	I knew the cultural traditions of making ascents after pilgrimage / I learned this time.	**41.7** %	I knew the cultural traditions of making ascents after pilgrimage / I learned this time.	**29.3** %	I knew the cultural traditions of making ascents after pilgrimage / I learned this time.	**34.2** %
		I saw litter often.	**32.7** %	I saw litter often.	**No survey in 2015**	I saw litter often.	**No survey in 2015**
		I stayed overnight at a mountain hut.	**46.2** %	I stayed overnight at a mountain hut.	**56.1** %	I stayed overnight at a mountain hut.	**43.4** %
		I greeted the sunrise at the mountaintop.	**19.2** %	I greeted the sunrise at the mountaintop.	**40.6** %	I greeted the sunrise at the mountaintop.	**37.5** %
Analysis		◆ May people stayed at the mountaintop around noon and before and after sunrise. But, there were no big peaks. ◆ Between the 9th Station and the mountaintop, concentrations of climbers were observed in some spots. But, concentrations did not form a long series.		◆ Many people started climbing in the morning or before 13:00. Climbers staying at the mountaintop peaked before and after sunrise, but there is another small peak from noon to 15:00, too. ◆ Between the 9th Station and the mountaintop, concentrations of climbers were observed in some spots. But, concentrations did not form a long series. There is no difference in situation, compared to the day when the number of climbers was 265.		◆ Many started climbing in the morning or before 13:00, or also around 20:00. Climbers staying at mountaintop peaked before and after sunrise, but there is another small peak from noon to 15:00, too. ◆ Between the 8th Station and the mountaintop, concentrations occurred in a series.

※ For required time, the median of GPS logger holders was adopted.

Summary of Survey Results (Dynamics of climbers: Gotemba ascending route)

1. Whole summer season

		2015			2016			2017		
Number of climbers	Daily (people) Counted at the 8th Station									
	Note	Exceeding 400 **12** days	Exceeding 600 **3** days	Exceeding 800 **0** day	Exceeding 400 **13** days	Exceeding 600 **0** days	Exceeding 800 **0** days	Exceeding 400 **21** days	Exceeding 600 **1** day	Exceeding 800 **1** day
		Median **166**	Third quartile **345**	Max **793**	Median **221**	Third quartile **335** 人	Max **557** 人	Median **306** 人	Third quartile **440** 人	Max **1,020** 人

2. Close look, among the surveyed dates, at the dates closest to the median, third quartile, and maximum and a date between the third quartile and max.

		27 July 2015 (Mon.) Number of climbers **200** Weather: sun followed by clouds	11 August 2016 (Thu.) Number of climbers **485** Weather: sun followed by clouds	30 July 2016 (Sat.) Number of climbers **550** Weather: sun
Hourly number of climbers	Starting time (people) Counted at 5th Station Including climbers who do not reach summit			
	Climbers staying at mountaintop (people) Estimated based on GPS logger data			

※ Median is the middle number in a given sequence of numbers; third quartile is the value of the variable below which three quarters of the elements are located.

Summary of Survey Results (Dynamics of climbers: Gotemba ascending route)

			27 July 2015 (Mon.) Number of climbers **200**		11 August 2016 (Thu.) Number of climbers **485**		30 July 2016 (Sat.) Number of climbers **550**	
Required time	GPS logger data	8th Station ~ Immediately below mountaintop [800m] (Sections 83~91)	11:00 to 15:00 3:38 to 4:38 (1 hour before sunrise to sunrise) 2:38 to 3:38 (2 to 1 hour before sunrise)	**45** mins. **-** mins. **69** mins.	11:00 to 15:00 3:51 to 4:51 (1 hour before sunrise to sunrise) 2:51 to 3:51 (2 to 1 hour before sunrise)	**56** mins. **87** mins. **64** mins.	11:00 to 15:00 3:41 to 4:41 (1 hour before sunrise to sunrise) 2:41 to 3:41 (2 to 1 hour before sunrise)	**54** mins. **75** mins. **60** mins.
Climbers' perception	Question-naire	Congestion, danger ratio of respondents	The large number of climbers on ascending routes is intolerable. The large number of climbers on the mountaintop is intolerable. There was danger due to overtaking.	**2.6** % **3.0** % **0.0** % etc.	The large number of climbers on ascending routes is intolerable. The large number of climbers on the mountaintop is intolerable. There was danger due to overtaking.	**4.8** % **20.0** % **4.8** % etc.	The large number of climbers on ascending routes is intolerable. The large number of climbers on the mountaintop is intolerable. There was danger due to overtaking.	**26.9** % **23.3** % **19.0** % etc.
		Satisfaction, impression ratio of respondents	Satisfied very much with climbing Fujisan this time. Disappointed very much/a little with the number and condition of toilets. Disappointed very much/a little with the service and atmosphere of mountain huts. I felt (a little) the sacredness of Fujisan, climbing Fujisan.	**52.6** % No survey in 2015 No survey in 2015 **77.5** % etc.	Satisfied very much with climbing Fujisan this time. Disappointed very much/a little with the number and condition of toilets Disappointed very much/a little with the service and atmosphere of mountain huts I felt (a little) the sacredness of Fujisan, climbing Fujisan.	**64.5** % **33.3** % **5.6** % **85.5** % etc.	Satisfied very much with climbing Fujisan this time. Disappointed very much/a little with the number and condition of toilets. Disappointed very much/a little with the service and atmosphere of mountain huts. I felt (a little) the sacredness of Fujisan, climbing Fujisan.	**63.5** % **27.1** % **6.5** % **88.9** % etc.
		Other questions ratio of respondents	I knew the cultural traditions of making ascents after pilgrimage / I learned this time. I saw litter often. I stayed overnight at a mountain hut. I greeted the sunrise at the mountaintop.	**30.0** % No survey in 2015 **43.6** % **21.1** %	I knew the cultural traditions of making ascents after pilgrimage / I learned this time. I saw litter often. I stayed overnight at a mountain hut. I greeted the sunrise at the mountaintop.	**33.9** % **14.8** % **55.7** % **50.0** %	I knew the cultural traditions of making ascents after pilgrimage / I learned this time. I saw litter often. I stayed overnight at a mountain hut. I greeted the sunrise at the mountaintop.	**44.5** % **14.3** % **34.9** % **55.2** %
Analysis			◆ Most of the climbers started climbing in the morning. Many stayed at the mountaintop before and after sunrise. The absolute number at peak time was small. ◆ There was no time or place in which the density of climbers became high between the 5th Station and the mountaintop.		◆ Many started climbing in the morning or around 20:00. Many stayed at the mountaintop before and after sunrise. ◆ There was no time or place in which the density of climbers became high between the 5th Station and the mountaintop.		◆ Many started climbing between 6:00 am and 9:00 am. Many stayed at the mountaintop before and after sunrise and there was a small peak in the daytime, too. ◆ There was no time or place in which the density of climbers became high between the 5th Station and the mountaintop.	

※ For required time, the median of GPS logger holders was adopted.

Chapter 3　Policies of Visitor Management at Upper Access Routes

This chapter describes the existing state and issues based on the results of research and study shown in Chapter 2 for each of the three viewpoints of the “desired style of Fujisan ascents” and clarify policies of specific measures.

1. Transmission of the Cultural Traditions of Ascents Originating from Worship Ascents in the 17th Century to Future Generations

(1) Existing State and Issues

According to the questionnaire survey of climbers, about 90 % of climbers answered that they felt or slightly felt the “sacredness” of Fujisan as the mountain associated with worship ascents. On the other hand, about 60 % answered that they did not know cultural traditions of making pilgrimage to Shinto shrines, lakes, waterfalls, etc. at the mountain foot to purify oneself before making ascents of Fujisan (cf. p. 46).

This tendency is commonly seen in all ascending routes, indicating the need to explore how to provide people who intend to climb Fujisan with basic information about cultural traditions associated with Fujisan and component parts of Fujisan before they make ascents and to encourage them to visit Fujisan World Heritage Centers of Yamanashi Prefecture and Shizuoka Prefecture as well as individual component parts, when they climb Fujisan.

(2) Policies of Specific Measures

Measures are to be taken to raise the awareness of climbers about traditional climbing styles and the OUV, including the climbing from the mountain foot on the Yoshida ascending route and the cultural tradition of greeting the sunrise after taking a rest at a mountain hut.

2. Maintenance of Scenic Landscapes along the Ascending Routes and around the Mountaintop

(1) Existing State and Issues

According to the questionnaire survey of climbers, about 90 % of climbers answered that facilities for the convenience of climbers were harmonious or almost harmonious with the nature, indicating that they had positive impressions about the landscapes of Fujisan including artificial structures (cf. p. 49).

However, as the number of climbers from other countries increases and the types of climber diversify, such perception may also change. Therefore, it is necessary to further promote daily patrols and pay attention to landscapes when artificial structures are installed.

(2) Policies of Specific Measures

Measures are to be taken to prevent negative visual impacts of artificial structures or vegetation change and, if any negative impact appears, to take reactive measures, including the removal of the cause, as soon as possible.

3. Safety and Comfort of Visitors who Make Ascents

(1) Existing State and Issues

The number of climbers during the summer climbing season was approximately 300,000 before Fujisan was inscribed on the UNESCO World Heritage List in 2013. However, since 2014, it has been in a decreasing tendency to the range between 210,000 and 250,000 (the total number of climbers from July to August).

Also, it has turned out that significant levels of congestion do occur on the ascending routes at the 5th station or higher but they are not chronic phenomena and limited to particular dates, hours, and places.

In addition, it has turned out that, in proportion to the number of climbers, the degree of

tolerance toward congestion and the ration of people who felt danger increase.

In view of these, it is necessary to solve significant levels of congestion (excessive concentration (uneven distribution) of climbers) as soon as possible and to improve the safety and perception (comfort) of climbers.

(2) Policies of Specific Measures

Measures are to be taken to mitigate significant levels of congestion due to excessive number of climbers as a viewpoint relevant to carrying capacity (the number of climbers) and to further improve the safety and comfort of climbers, so that all the climbers can enjoy Fujisan ascents.

Among the existing issues, significant levels of congestion need to be addressed as a matter of urgency. Therefore, particularly high priority is given to solution to this issue.

Table 2 Policies of specific measures to realize the "desired style of Fujisan ascents" (outline)

Desired style of Fujisan ascents		Policies of specific measures
Viewpoints	Description	
Transmission of the cultural traditions of ascents originating from worship ascents in the 17th century	・Ascents to the summit for the purposes of viewing sunrise ("Goraiko") should be accompanied by an overnight stay or a short stay at a mountain hut on the way. ・Ascents should be made via the identified pilgrimage or ascending routes. ・The relationships between Shinto shrines and spiritual spots at the foot of the mountain and ascending routes should be recognized and understood.	To raise awareness about traditional climbing styles and the OUV.
Maintenance of scenic landscapes along the ascending routes and around the mountaintop	・Facilities for climbers, such as mountain huts and disaster prevention facilities, should be designed to be in harmony with the natural environment. ・Factors that affect the scenic landscapes such as erosion and vegetation changes, should be controlled.	To prevent the negative visual impact of artificial structures or vegetation change and to take reactive measures including the removal of the cause.
Safety and comfort of visitors who make ascents	・Necessary climbing equipment should be available, and appropriate manners should govern behavior. ・Ascents can be enjoyed without congestion, danger, or dissatisfaction due to excessive numbers of climbers.	To mitigate the significant levels of congestion due to the excessive number of climbers and to further improve the safety and comfort of climbers, so that all the climbers can enjoy Fujisan ascents.

Chapter 4　Setting of Indicators and standards

The visitor management plan is to set out several indicators, including the daily number of climbers for each ascending route, and the desired level of for each indicator, based on the results of research and study of climbers at the 5th station and higher in the summer time.

This chapter describes how the indicators and standards have been selected and how the indicators concerning the number of climbers have been discussed, based on the content of Chapters 2 and Chapter 3. The background, including the process of discussion, for the setting of indicators and standards is provided in P. 36 of the appendix.

1．Setting of Indicators and standards

The indicators and standards have been established based on the principles shown below.

● Indicators

・Indicators should be linked to the realization of the “desired style of Fujisan ascents” and also it should be easy to check their changes.

・It should be possible to monitor these indicators without any special equipment or technologies and without incurring excessive costs.

・At least one indicator should be selected for each of the three viewpoints of “desired style of Fujisan ascents”.

● Standards

・The year 2019 is set as the short-term target year, the level of which should be better than the current level (with regard to quantitative indicators, approximately 10 % improvement is considered to meet the standards).

・While quantitative indicators should be measured in numerical values to the extent possible, there is no need to measure qualitative indicators in numerical values.

Table 3　Indicators and standards to realize the “desired style of Fujisan ascents”

Desired style of Fujisan ascents		Indicator	Route	Current status			Standards (2019 target)	Monitoring method
View point	Category			2015	2016	2017		
Transmission of the cultural traditions of ascents originating from worship ascents in the 17th century	If they greet the sunrise near the summit, climbers should stay or take rest at a mountain hut on the way	Percentage of climbers who take rest at a mountain hut and then greet the sunrise at the summit as the traditional form of climbing or mountain pilgrimage suggests	All	69.0%	68.2%	77.7%	80% or more	◎Climber questionnaire [The denominator is the number of climbers who greet the sunrise at the summit]
	Climbers should start to climb from one of the specified pilgrimage routes or ascending routes at the foot of the mountain	Percentage of climbers who use the Yoshida ascending route, which has been specified as a pilgrimage route since ancient times, from the foot of the mountain	Yoshida	11.9%	13.7%	12.4%	15% or more	◎Number of climbers at the Fifth Station on the Yoshida ascending route [The denominator is the number of climbers at the 8th Station on the Yoshida ascending route]
	Climbers should recognize or understand the relationship between shrines, sacred places, etc. at the foot of mountain and ascending routes	Percentage of climbers who know the cultural tradition of climbing Fujisan after visiting shrines, lakes, etc. at the foot of the mountain	All	32.9%	39.0%	47.0%	50% or more	◎Climber questionnaire [Percentage of climbers who have known it since early on/learned it when they climbed or visited this time]
		Percentage of climbers who felt the sacredness of Fujisan	All	83.0%	88.2%	85.9%	90% or more	◎Climber questionnaire [Percentage of climbers who felt it or did so slightly]
Maintenance of scenic landscapes along the ascending routes and around the mountaintop	Facilities for climbers such as mountain huts and disaster risk reduction facilities should harmonize with nature	Obstruction of views along ascending routes by artificial structures that do not harmonize with nature	All	None	None	None	Non-harmonious factors are not foreseen or detected	◎Visual confirmation by cultural properties rangers on patrol ◎Applications for change of the present condition under the Cultural Properties Protection Law and Natural Parks Act
	The effects of erosion and changes in vegetation, etc. on views and landscapes should be reduced	Changes in scenic landscapes due to erosion on ascending route at the 5th Station or higher and changes in vegetation, etc.	All	None	None	None	Negative effects are not foreseen or confirmed	◎Observation of the entire mountain from the 5th Station on each ascending route

Desired style of Fujisan ascents		Indicator	Route	Current status			Standards (2019 target)	Monitoring method
View point	Category			2015	2016	2017		
Safety and comfort of visitors who make ascents	Climbing gear, climbers' good manners, etc. should be well understood	Percentage of climbers who often see the littering garbage in the ascending routes and the summit and its vicinities littered	All	—	26.8%	19.6%	15% or less	◎Climber questionnaire
		Number of cases in which damage to cultural properties due to human factors is reported	All	1 case	None	2 cases	None	◎Reports on damage to cultural properties around Fujisan, a special place of scenic beauty and historical interest (5th Station or higher)
	Visitors can climb without experiencing congestion, danger, and dissatisfaction due to an excessive number of climbers	Percentage of those who start to climb from the Yoshida ascending route and mistakenly descend from the Subashiri ascending route (those taken care of by the Subashiri ascending route 5th Station guides)	Yoshida Subashiri	0.72% (981 people)	0.48% (731 people)	0.54% (928 people)	0.4% or less	◎Number of those taken care of by Subashiri ascending route 5th Station guides [The denominator is the number of climbers at the Yoshida ascending route 8th Station]
		Percentage of climbers who are dissatisfied with climber facilities such as mountain huts and toilets	All	—	19.1%	19.3%	15% or less	◎Climber questionnaire [Percentage of highly or slightly dissatisfied climbers] (The current figure represents the maximum level of dissatisfaction with toilets)
		Number of days during the summer climbing season when the number of climbers/day that causes significant congestion is exceeded* * Yoshida ascending route: 4,000 people/day Fujinomiya ascending route: 2,000 people/day	Yoshida	4 days	4 days	5 days	3 days or less	◎Number of climbers at the 8th Station ◎Climber questionnaire [Degree of tolerance toward congestion, percentage of climbers who felt danger etc.]

* The indicators and standards concerning the number of climbers (the number of days during the summer climbing season when the number of climbers/day that causes significant congestion is exceeded) have been established based on the estimates that are made in consideration of the results of the 3-year research and study. The content is explained in the next section.

2. Setting of Indicators and standards about the Number of Climbers

The visitor management plan is to establish the desirable number of climbers per day as one of the indicators based on the three viewpoints of the "desired style of Fujisan ascents".

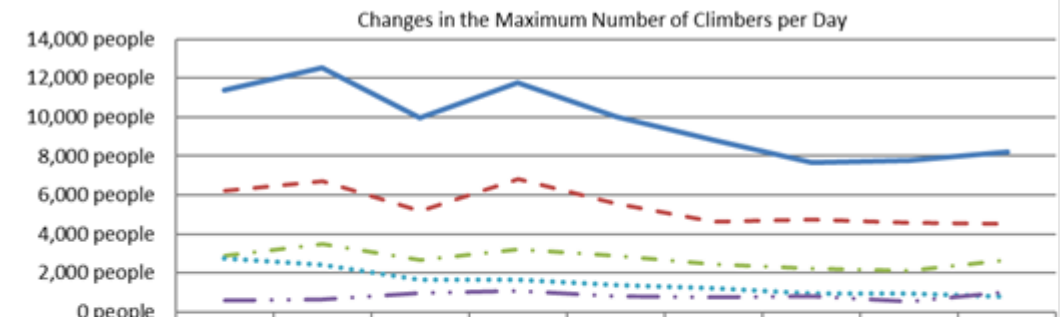
In light of this, the trends in the number of climbers and the status of congestion in the recent years were analyzed and discussion was made, while care was taken to be able to obtain understanding and cooperation from local stakeholders and climbers, to establish the indicators and standards concerning the number of climbers.

(1) Changes and trends in the number of climbers

The number of climbers in the summer climbing season reached its peak in 2010 and stood at about 300,000 until 2013, when Fujisan was inscribed on the UNESCO World Heritage List. In 2014, the number of climbers decreased, partly because there were fewer days that the weather was appropriate for climbing during the climbing season. It continued to decrease to about 200,000 in 2015. In 2017, it increased to about 250,000 (the number of climbers from July to August).

There has been no big change in the maximum number of climbers per day since 2014.

- The total number of climbers has decreased by about 20 %, as compared to the peak (320,975 to 248,411).
- The maximum number of climbers per day has decreased by about 30 %, as compared to the peak (in 2010) (12,538 to 8,201).
- In particular, the maximum number of climbers per day of the Subashiri ascending route has decreased to one third of the peak (in 2009) (2,734 to 791).



	2009	2010	2011	2012	2013	2014	2015	2016	2017
ALL	11,358	12,538	9,961	11,779	10,040	8,803	7,687	7,762	8,201
Yoshida	6,197	6,692	5,175	6,831	5,559	4,610	4,729	4,585	4,544
Fujinomiya	2,880	3,501	2,672	3,185	2,899	2,426	2,249	2,107	2,656
Subashiri	2,734	2,441	1,675	1,639	1,384	1,193	964	950	791
Gotemba	596	627	961	1,101	817	766	793	557	1,020

(2) Congestion that occurred on paths up the mountain

- Movement surveys were conducted using GPS loggers to grasp positional information, speed, etc., and as a result, it was revealed that the occurrence of congestion on ascending routes was **extremely limited**.
- Furthermore, based on the results of surveys, the density of climbers in particular sectors on each trail, the time required, etc. were estimated, and as a result, it was confirmed that the density of climbers and the time required increased in proportion to growth in the number of climbers.

(3) Setting of indicators

- The visitor management strategy states that several indicators should be set, including the number of climbers per day per trail, but **the type of significant level of congestion** that compromise the safety and comfort of climbing, **is not occurring constantly**. Therefore, simply setting the number of climbers per day as an indicator does not lead directly to alleviation of congestion, which occurs in a limited way, and moreover, it may be misunderstood, prompting people to assume that restrictions on the number of climbers will begin as soon as it exceeds the

indicator.

- For this reason, a new indicator for the number of climbers should be set as specified below so that the message stating that the two prefectures **aim at alleviating a significant level of congestion on particular days, during particular time periods, and at particular points** is sent clearly.

[Indicator] Number of days during the summer climbing season when the number of climbers/day that causes a significant level of congestion is exceeded

(4) Setting of target standards

From the viewpoint of alleviating congestion on particular days, during particular time periods, and at particular points, the goal is to reduce the indicator set: the number of days during the summer climbing season when the number of climbers/day that causes a significant level of congestion is exceeded.

A. Number of climbers per day that causes a significant level of congestion

a. Notion of carrying capacity (or the number of climbers)

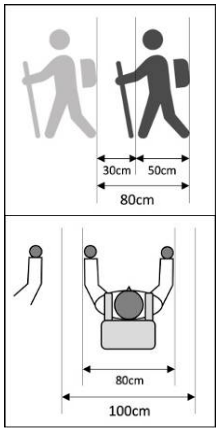
- "Managing Tourism at World Heritage Sites: A Practical Manual for World Heritage Site Managers", published by the UNESCO World Heritage Centre in 2002, divides capacity into three notions: physical carrying capacity, social carrying capacity, and ecological carrying capacity.
- Since it is currently difficult to stipulate the number for upper access routes using the notion of ecological carrying capacity, the number of climbers per day that causes a significant level of congestion should be derived chiefly from the viewpoints of physical and social carrying capacity.

Table 4 Applicability of the concept of carrying capacity to Fujisan

Notion of carrying capacity	Applicability to Fujisan
Physical carrying capacity So called "facility carrying capacity," physical carrying capacity mostly has to do with available space. It is defined as the number of beds available to overnight guests, how many cars would fill a parking lot, how many campers in a campground, seats in a theater, and so forth.	Research results such as climber awareness and movement surveys indicate that the density of climbers rises as the number of climbers grows and lowers the degree of tolerance to congestion. Therefore, the density of climbers can provide the basis for deriving physical carrying capacity by combining it with the awareness of climbers, an indicator of social carrying capacity. On the other hand, the number of climbers that can physically be accommodated on ascending routes in wide areas and at the summit exceeds the corresponding social and ecological carrying capacity. The number of those who can be accommodated based on the carrying and handling capacity of facilities and equipment depends on the status of their maintenance, and for this reason, it is not appropriate to use these numbers as the basis for Fujisan's carrying capacity.
Social carrying capacity Social carrying capacity is psychological and socio-cultural and refers to the limit beyond which the number of people in an available space would cause a decline in the quality of the recreational experience and the users' satisfaction.	Research results such as climber awareness and movement surveys indicate that there are correlations between the number of climbers and congestion on ascending routes and between the number and indicators such as climbers' satisfaction and their tolerance to congestion. Therefore, social carrying capacity should be used as the basis for deriving Fujisan's carrying capacity particularly from the viewpoint of ensuring the safety and comfort of climbing.

Ecological carrying capacity Ecological carrying capacity is the degree to which an ecosystem is able to tolerate human interference while maintaining sustainable functioning.	While paths at the Fifth Station or higher are eroded at some locations due to the harsh natural environment (winds and rain and melted snow), they are not easily affected by climbers' acts at places where they are formed with solid block lava. In addition, as climbers go up, practically no animals and plants are seen. For this and other reasons, it is difficult to derive Fujisan's carrying capacity from soil erosion, the population of living creatures, etc.

B. Area required per person (the density of climbers)



- Based on the results of on-site surveys, etc., it is estimated that the distance specified below is required to prevent climbers from touching those ahead of or behind them or those on the right- or left-hand side when climbing Mt. Fuji.
  - 80cm ahead of or behind them (space required before them [30 cm] + Thickness of baggage and the body [50 cm])
  - Space on the right- or left-hand side: 100 cm ([A person's width [80 cm] + Width of swing of a stick, etc. [10 cm to the right or left])
- Based on this, the minimum space required per person is 0.8 m^2/person.
- If this is converted to the density of climbers, the result is 1.25 person/m^2, and it is assumed that if the density is higher than this, ascending routes are considered as crowded.

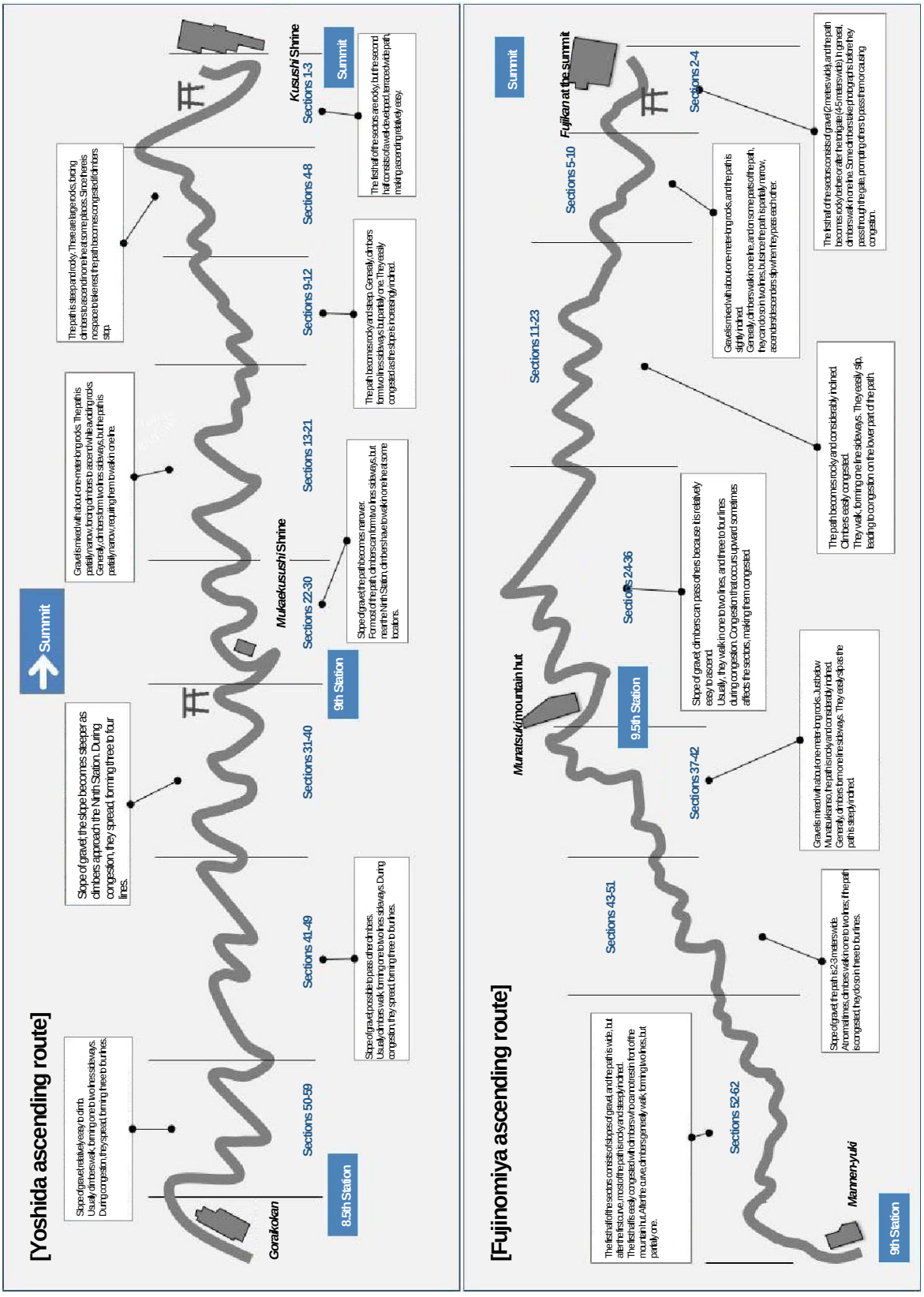
C. Changes in the density of climbers, etc. by the number of climbers

- The density of climbers and their awareness on the Yoshida ascending route and Fujinomiya ascending route near the summit before or after they greet the sunrise were estimated by the number of climbers.
- In this process, the concentration of climbers is classified into four levels using the density of climbers (interval between them), and each level is color-coded as shown below.

Table 6 Comparison of climbers' density

State of climbers	・Climbers can walk at their own pace without worrying about those ahead of them ・Even if they stretch their arms, they do not hit those around them.  	・Climbers have others ahead of and behind them, but they can walk continuously. ・If they stretch their arms, their stick or other belongings may hit others around them.  	・Climbers sometimes need to stop walking. ・If they do not pay attention to others ahead of them, they may bump into them if they stop suddenly.  	・Climbers gradually move forward while stopping from time to time. ・Sticks and knapsacks hit each other. ・If a climber ahead of one falls down, one may be involved in the accident.  
Standards (space between climbers)	~0.67 people/m^2 (100 cm or more)	0.67~1.00 people/m^2 (100-50 cm)	1.00~1.25 people/m^2 (50-30 cm)	1.25 people/m^2~ (less than 30 cm)
Color code indicating the density estimated	White	Yellow	Orange	Red

For the purpose of visualizing the status of congestion for each of the ascending routes, the survey sections were placed, between the 8.5th Station (9th Station for the Fujinomiya ascending route) and the mountaintop, in straight strips extending 20 m to 60 m each, excluding curves where people tend to stop to rest, and straight strips.



Characteristics of Survey Sectors
(Yoshida ascending route: 8.5th Station to the Summit;
Fujinomiya ascending route: 9th Station to the Summit)

A. Yoshida ascending route

Number of climbers (Number of people who started the ascent on the previous day)		**3,500 people**
Density of climbers		Immediately below the summit 9th Station (*Mukaekusushi* Shrine) 8.5th Station (*Goraikokan*)

ID	Note	2:00	5:15	3:00	3:30	4:00	4:30	5:00	5:30	6:00
2		0.22	0.25	0.43	0.82	0.93	1.10	0.77	0.65	0.46
4		0.16	0.33	0.18	0.38	0.51	0.96	0.56	0.15	0.25
5		0.09	0.16	0.13	0.28	0.27	0.29	0.18	0.15	0.27
6		0.21	0.29	0.18	0.22	0.28	0.27	0.21	0.14	0.14
7	Rocks	0.67	0.68	0.93	1.04	1.02	2.47	1.24	1.11	0.48
9		0.20	0.52	0.40	0.62	0.84	0.88	0.43	0.45	0.26
10		0.26	0.29	0.30	0.61	0.77	0.73	0.40	0.37	0.29
11		0.15	0.39	0.40	0.52	0.54	0.70	0.38	0.29	0.19
13		0.33	0.43	0.48	0.77	0.99	0.68	0.36	0.29	0.16
15		0.43	0.44	0.71	1.06	1.10	0.71	0.68	0.14	0.09
17		0.27	0.33	0.67	0.74	1.22	0.65	0.34	0.32	0.07
19		0.20	0.22	0.64	1.00	0.69	0.43	0.23	0.17	0.06
21		0.25	0.19	0.53	0.61	0.47	0.39	0.22	0.08	0.03
23		0.16	0.11	0.31	0.35	0.38	0.20	0.12	0.09	0.03
25		0.30	0.35	0.49	0.86	0.80	0.68	0.12	0.09	0.06
27		0.96	0.66	0.63	0.63	0.79	0.81	0.49	0.45	0.21
30	Bifukushino	0.41	0.31	0.64	0.56	0.47	0.11	0.05	0.04	0.02
32	Saitgate	0.24	0.41	0.72	0.76	0.94	0.12	0.04	0.07	0.03
34		0.18	0.46	0.76	0.71	0.65	0.06	0.06	0.05	0.09
36		0.14	0.27	0.72	0.65	0.25	0.04	0.03	0.04	0.02
38		0.12	0.46	0.59	0.61	0.44	0.15	0.05	0.03	0.03
40		0.30	0.78	0.87	0.72	0.18	0.12	0.09	0.05	0.03
42		0.09	0.40	0.29	0.20	0.20	0.08	0.02	0.02	0.02
44		0.30	0.57	0.57	0.30	0.09	0.05	0.07	0.03	0.06
47		0.27	0.47	0.30	0.17	0.08	0.11	0.07	0.02	0.03
48		0.57	0.62	0.43	0.20	0.15	0.07	0.08	0.04	0.06
50		0.49	0.47	0.35	0.16	0.10	0.04	0.07	0.02	0.06
52		0.65	0.58	0.39	0.15	0.07	0.04	0.04	0.03	0.06
56		0.56	0.29	0.18	0.09	0.05	0.03	0.03	0.04	0.03
58		0.76	0.57	0.36	0.23	0.09	0.06	0.04	0.06	0.15
59	Infront of Goraikokan	1.12	0.95	0.77	0.29	0.58	0.64	0.43	0.45	0.12

Time from *Goraikokan* to immediately below summit		Those who started the ascent in the daytime.	58 mins.
		Those who started the ascent at 2:00 a.m.	97 mins.
Climbers' perception	Tolerance toward congestion (ascending route)	The ratio of the climbers who perceived that the congestion of the ascending route was intolerable.	9.4%
		The ratio of the climbers who perceived that they could not tolerate the congestion of the ascending route very well.	24.8%
	Tolerance toward congestion (summit)	The ratio of the climbers who perceived that the congestion at the summit was intolerable.	9.6%
		The ratio of the climbers who perceived that they could not tolerate the congestion at the summit very well.	22.0%
	Perception of danger	The ratio of the climbers who felt danger as other climbers attempted to pass from behind.	22.4%
Status of climbers		 Immediately below the summit at 4:32 am on 15 August 2016 (3,659 people started the ascent on the previous day)	
Note		・The "red" level of density occurs immediately before the sunrise in Section 7, where large rocks exist on the ascending route, but it does not last for more than 30 minutes.	

4,000 people

ID	Note	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00
2		0.28	0.27	0.52	0.97	1.11	1.39	0.95	0.80	0.57
4		0.20	0.39	0.15	0.41	0.54	1.21	0.64	0.14	0.26
5		0.11	0.18	0.13	0.28	0.30	0.33	0.17	0.16	0.34
6		0.26	0.34	0.21	0.23	0.30	0.31	0.23	0.16	0.17
7	Rocks	0.74	0.71	1.03	1.14	1.05	1.69	1.30	1.27	0.60
9		0.23	0.60	0.42	0.62	0.87	1.04	0.46	0.54	0.28
10		0.31	0.32	0.35	0.61	0.85	0.86	0.42	0.42	0.36
11		0.18	0.45	0.46	0.50	0.60	0.85	0.42	0.35	0.21
13		0.40	0.49	0.51	0.72	1.19	0.78	0.40	0.34	0.17
15		0.53	0.47	0.75	1.10	1.20	0.86	0.81	0.16	0.10
17		0.35	0.38	0.82	0.81	1.48	0.79	0.41	0.43	0.07
19		0.25	0.24	0.70	1.12	0.83	0.49	0.28	0.20	0.06
21		0.29	0.20	0.65	0.71	0.55	0.44	0.25	0.08	0.03
23		0.21	0.11	0.35	0.37	0.49	0.23	0.16	0.11	0.03
25		0.36	0.36	0.51	1.02	0.99	0.78	0.13	0.09	0.06
27		1.12	0.72	0.67	0.73	0.96	1.02	0.64	0.52	0.27
30	Below 9th Station	0.51	0.39	0.71	0.61	0.55	0.14	0.05	0.04	0.03
32	9th Station	0.31	0.48	0.82	0.95	1.18	0.12	0.04	0.07	0.04
34		0.23	0.55	0.91	0.82	0.78	0.08	0.07	0.05	0.10
36		0.17	0.31	0.88	0.83	0.28	0.04	0.04	0.05	0.01
38		0.13	0.55	0.72	0.77	0.52	0.18	0.06	0.03	0.03
40		0.32	0.94	1.09	0.88	0.20	0.14	0.10	0.06	0.03
42		0.10	0.48	0.35	0.24	0.23	0.11	0.02	0.02	0.02
44		0.30	0.68	0.67	0.35	0.09	0.06	0.08	0.03	0.07
47		0.30	0.56	0.34	0.20	0.09	0.13	0.07	0.02	0.04
48		0.73	0.74	0.50	0.21	0.18	0.07	0.09	0.05	0.07
50		0.57	0.52	0.38	0.18	0.13	0.04	0.07	0.03	0.07
52		0.82	0.69	0.45	0.17	0.07	0.04	0.04	0.04	0.08
56		0.66	0.32	0.20	0.10	0.05	0.03	0.03	0.04	0.03
58		0.86	0.67	0.41	0.25	0.09	0.07	0.04	0.07	0.20
59	Infront of Gosikolan	1.23	0.93	0.81	0.27	0.65	0.71	0.48	0.53	0.13

Those who started the ascent in the daytime.	60 mins.
Those who started the ascent at 2:00 am.	105 mins.
The ratio of the climbers who perceived the congestion of the ascending route intolerable.	11.1%
The ratio of the climbers who perceived that they could not tolerate the congestion of the ascending route very well.	28.5%
The ratio of the climbers who perceived that the congestion at the summit was intolerable.	11.2%
The ratio of the climbers who perceived that they could not tolerate the congestion at the summit very well.	25.2%
The ratio of the climbers who felt danger as other climbers attempted to pass from behind.	24.5%

Near the 9th Station at 5:21 am on 6 August 2017
(4,066 people started the ascent on the previous day)

- The “red” level of density lasts for more than one hour in Section 7, where large rocks exist on the ascending route.
- The “red” level of density occurs in a series in Sections 17-15, where a rocky stretch starts.
- The “yellow” level of density spreads in sections lower than the 9th Station.

4,500 people

ID	Note	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00
2		0.33	0.30	0.60	1.11	1.30	1.68	1.14	0.95	0.68
4		0.24	0.45	0.12	0.45	0.58	1.45	0.72	0.14	0.28
5		0.13	0.20	0.13	0.29	0.32	0.37	0.17	0.17	0.42
6		0.30	0.39	0.25	0.24	0.33	0.36	0.24	0.17	0.19
7	Rocks	0.81	0.73	1.13	1.25	1.08	1.81	1.37	1.42	0.73
9		0.25	0.69	0.44	0.63	0.91	1.21	0.49	0.62	0.31
10		0.37	0.35	0.40	0.62	0.92	1.02	0.43	0.47	0.43
11		0.21	0.50	0.52	0.48	0.66	1.01	0.46	0.41	0.23
13		0.47	0.54	0.54	0.67	1.37	0.87	0.44	0.40	0.18
15		0.64	0.51	0.78	1.13	1.42	1.01	0.94	0.18	0.12
17		0.43	0.43	0.96	0.89	1.76	0.93	0.48	0.54	0.08
19		0.31	0.26	0.75	1.25	0.97	0.55	0.33	0.22	0.07
21		0.33	0.22	0.76	0.80	0.63	0.49	0.28	0.08	0.04
23		0.26	0.12	0.39	0.39	0.60	0.27	0.19	0.12	0.04
25		0.43	0.38	0.52	1.18	1.18	0.88	0.13	0.10	0.06
27		1.25	0.77	0.72	0.84	1.14	1.24	0.79	0.58	0.33
30	Below 9th Station	0.61	0.44	0.78	0.66	0.63	0.16	0.05	0.04	0.03
32	9th Station	0.37	0.54	0.92	1.15	1.42	0.13	0.05	0.08	0.04
34		0.28	0.64	1.07	0.92	0.91	0.09	0.09	0.05	0.11
36		0.20	0.34	1.04	1.02	0.32	0.05	0.04	0.06	0.01
38		0.13	0.64	0.84	0.92	0.60	0.20	0.07	0.03	0.04
40		0.34	1.10	1.30	1.05	0.22	0.15	0.12	0.07	0.04
42		0.12	0.57	0.42	0.27	0.26	0.13	0.02	0.01	0.02
44		0.29	0.78	0.77	0.41	0.09	0.06	0.08	0.03	0.09
47		0.34	0.66	0.39	0.23	0.11	0.16	0.07	0.03	0.04
48		0.88	0.85	0.56	0.23	0.20	0.07	0.09	0.05	0.08
50		0.65	0.57	0.41	0.21	0.16	0.04	0.07	0.03	0.08
52		0.99	0.81	0.50	0.20	0.07	0.04	0.05	0.05	0.09
56		0.76	0.34	0.21	0.10	0.06	0.03	0.03	0.05	0.03
58		0.96	0.78	0.46	0.27	0.09	0.07	0.04	0.08	0.26
59	Infront of Gosikolan	1.35	0.92	0.86	0.25	0.73	0.78	0.53	0.60	0.15

Those who started the ascent in the daytime.	61 mins.
Those who started the ascent at 2:00 am.	112 mins.
The ratio of the climbers who perceived the congestion of the ascending route intolerable.	12.8%
The ratio of the climbers who perceived that they could not tolerate the congestion of the ascending route very well.	32.2%
The ratio of the climbers who perceived that the congestion at the summit was intolerable.	12.7%
The ratio of the climbers who perceived that they could not tolerate the congestion at the summit very well.	28.4%
The ratio of the climbers who felt danger as other climbers attempted to pass from behind.	26.5%

Near the 9th Station at 3:22 am on 13 August 2017
(4,544 people started the ascent on the previous day)

- The “red” level of density occurs at several spots at the same time. Congestion lasts for more than one hour in some places and congestion extends over two sections in others.
- The “red” level of density occurs even below the 9th Station. The “orange” level of density occurs at more sections, as compared to when the number of climbers is 4,000 people.

B. Fujinomiya ascending route

Number of climbers (Number of people who started the ascent on the previous day)	**1,500 people**

Density of climbers

Location	ID	Note	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
Directly below the summit	2		0.06	0.17	0.38	0.53	0.53	0.51	1.41	1.39	1.22	0.88	0.94	0.56
	3		0.02	0.12	0.12	0.22	0.22	0.22	0.38	0.30	0.30	0.35	0.30	0.19
	5		0.02	0.26	0.19	0.41	0.50	0.41	0.61	0.49	0.58	0.37	0.35	0.25
	6		0.05	0.16	0.28	0.49	0.58	0.41	0.49	0.44	0.44	0.33	0.34	0.17
	8		0.05	0.15	0.26	0.38	0.39	0.31	0.37	0.27	0.31	0.24	0.23	0.15
	9		0.01	0.06	0.08	0.13	0.15	0.10	0.11	0.08	0.12	0.07	0.06	0.06
	10		0.03	0.16	0.18	0.44	0.33	0.24	0.25	0.26	0.27	0.22	0.15	0.14
	12		0.12	0.30	0.42	0.56	0.59	0.43	0.28	0.36	0.32	0.41	0.27	0.20
	13		0.04	0.11	0.21	0.36	0.37	0.23	0.18	0.19	0.21	0.21	0.13	0.18
	15		0.11	0.25	0.37	0.59	0.56	0.33	0.28	0.46	0.29	0.45	0.29	0.24
	17		0.16	0.26	0.59	0.94	0.81	0.47	0.41	0.42	0.28	0.38	0.24	0.28
	20		0.23	0.11	0.45	0.57	0.60	0.27	0.22	0.41	0.31	0.27	0.10	0.18
	22		0.16	0.16	0.45	0.52	0.49	0.27	0.21	0.22	0.25	0.28	0.15	0.24
	24		0.05	0.09	0.14	0.19	0.14	0.06	0.05	0.05	0.04	0.07	0.03	0.04
	25		0.09	0.14	0.46	0.47	0.35	0.18	0.13	0.10	0.11	0.11	0.07	0.09
	28		0.13	0.13	0.39	0.39	0.25	0.18	0.14	0.22	0.22	0.18	0.14	0.14
	29		0.17	0.23	0.41	0.39	0.36	0.14	0.23	0.14	0.15	0.21	0.15	0.19
	32		0.04	0.14	0.24	0.34	0.25	0.21	0.10	0.08	0.09	0.07	0.06	0.05
	34		0.14	0.31	0.68	0.35	0.21	0.08	0.15	0.10	0.12	0.23	0.13	0.09
9.5th Station (Munatsuki mountain hut)	37	In front of *Munatsuki* mountain hut	0.49	0.58	0.66	0.77	0.54	0.55	0.19	0.40	0.56	0.73	1.00	0.44
	39		0.57	0.84	0.94	0.94	0.47	0.15	0.19	0.29	0.33	0.43	0.51	0.32
	40		0.11	0.31	0.34	0.28	0.14	0.05	0.04	0.07	0.09	0.08	0.10	0.06
	42		0.17	0.35	0.46	0.36	0.20	0.06	0.07	0.11	0.11	0.11	0.18	0.07
	43		0.29	0.66	0.85	0.65	0.29	0.06	0.10	0.18	0.24	0.27	0.38	0.18
	44		0.30	0.85	1.24	0.95	0.42	0.08	0.13	0.31	0.28	0.24	0.60	0.26
	46		0.45	0.82	0.88	0.79	0.41	0.07	0.15	0.27	0.28	0.36	0.53	0.28
	48		0.30	0.56	0.53	0.36	0.11	0.04	0.08	0.17	0.15	0.19	0.19	0.18
	49		0.17	0.37	0.29	0.32	0.08	0.08	0.05	0.17	0.11	0.19	0.20	0.12
	51		0.15	0.57	0.31	0.17	0.09	0.01	0.02	0.16	0.12	0.15	0.15	0.13
	52		0.30	0.47	0.46	0.24	0.08	0.05	0.10	0.11	0.17	0.17	0.28	0.19
	53		0.27	0.42	0.29	0.18	0.11	0.03	0.07	0.15	0.25	0.20	0.24	0.17
	54		0.37	0.49	0.52	0.34	0.11	0.09	0.11	0.17	0.30	0.32	0.40	0.31
	55		0.33	0.44	0.30	0.18	0.08	0.06	0.05	0.09	0.18	0.20	0.23	0.28
	56		0.31	0.40	0.35	0.16	0.06	0.03	0.07	0.10	0.18	0.18	0.23	0.23
	57		0.17	0.24	0.23	0.16	0.05	0.03	0.04	0.05	0.15	0.13	0.14	0.13
	58		0.30	0.39	0.31	0.13	0.05	0.05	0.03	0.07	0.14	0.12	0.15	0.14
	59		0.29	0.33	0.25	0.11	0.03	0.03	0.03	0.06	0.12	0.13	0.14	0.15
9th Station (in front of Mannen-yuki mountain hut)	61		0.75	0.72	0.43	0.10	0.05	0.06	0.03	0.05	0.17	0.22	0.18	0.29
	62	In front of *Mannen-yuki* mountain hut	0.75	0.68	0.28	0.09	0.04	0.06	0.05	0.12	0.30	0.21	0.49	0.38

Time from *Mannen-yuki* mountain hut to immediately below summit	Those who started the ascent in the daytime.	33 mins.
	Those who started the ascent at 2:00 a.m.	52 mins.

Climbers' perception			
	Tolerance toward congestion (ascending route)	The ratio of the climbers who perceived that the congestion of the ascending route was intolerable.	4.4%
		The ratio of the climbers who perceived that they could not tolerate the congestion of the ascending route very well.	13.0%
	Tolerance toward congestion (summit)	The ratio of the climbers who perceived that the congestion at the summit was intolerable.	4.6%
		The ratio of the climbers who perceived that they could not tolerate the congestion at the summit very well.	10.9%
	Perception of danger	The ratio of the climbers who felt danger as other climbers attempted to pass from behind.	17.3%

Status of climbers

Immediately below the summit at 4:47 am on 12 August 2015
(1,494 people started the ascent on the previous day)

Note

・The "red" level of density occurs after the sunrise immediately below the summit, lasting for about one hour. However, the "red" level of density does not occur in other sections.

2,000 people

ID	Note	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2		0.06	0.23	0.49	0.59	0.40	0.42	1.74	1.78	1.38	1.12	1.38	0.75
3		0.04	0.19	0.17	0.29	0.23	0.24	0.42	0.36	0.45	0.60	0.40	0.24
5		0.03	0.47	0.28	0.43	0.59	0.57	0.76	0.57	0.96	0.60	0.42	0.37
6		0.08	0.27	0.41	0.59	0.74	0.54	0.57	0.54	0.68	0.45	0.42	0.22
8		0.09	0.25	0.37	0.46	0.49	0.42	0.46	0.35	0.49	0.34	0.26	0.20
9		0.02	0.09	0.14	0.14	0.19	0.11	0.12	0.09	0.18	0.11	0.08	0.09
10		0.06	0.24	0.28	0.53	0.42	0.32	0.30	0.33	0.44	0.30	0.17	0.19
12		0.22	0.50	0.61	0.65	0.75	0.51	0.31	0.47	0.46	0.60	0.35	0.28
13		0.06	0.17	0.31	0.51	0.48	0.26	0.21	0.23	0.31	0.30	0.17	0.27
15		0.15	0.42	0.53	0.66	0.75	0.38	0.30	0.62	0.43	0.62	0.40	0.30
17		0.27	0.42	0.79	1.26	1.10	0.55	0.49	0.51	0.38	0.50	0.34	0.36
20		0.40	0.16	0.52	0.72	0.78	0.32	0.21	0.60	0.44	0.32	0.12	0.23
22		0.23	0.22	0.57	0.70	0.58	0.31	0.23	0.27	0.32	0.42	0.20	0.32
24		0.09	0.15	0.16	0.26	0.17	0.06	0.06	0.06	0.05	0.12	0.04	0.05
25		0.15	0.22	0.60	0.67	0.40	0.16	0.14	0.13	0.14	0.16	0.10	0.12
28		0.20	0.17	0.54	0.56	0.28	0.17	0.19	0.28	0.32	0.27	0.21	0.18
29		0.30	0.26	0.47	0.48	0.53	0.12	0.22	0.15	0.18	0.33	0.21	0.24
32		0.05	0.20	0.32	0.51	0.41	0.33	0.13	0.10	0.10	0.11	0.09	0.07
34		0.22	0.45	1.05	0.45	0.23	0.07	0.22	0.12	0.15	0.31	0.19	0.12
37	Inlet of Murataki mountainhut	0.75	0.65	0.72	1.04	0.65	0.67	0.21	0.43	0.64	1.13	1.52	0.55
39		0.76	0.88	1.10	1.10	0.45	0.20	0.22	0.34	0.43	0.61	0.78	0.44
40		0.17	0.45	0.51	0.37	0.14	0.06	0.05	0.07	0.11	0.11	0.17	0.07
42		0.26	0.49	0.69	0.47	0.19	0.08	0.08	0.11	0.14	0.17	0.29	0.08
43		0.42	0.89	1.18	0.82	0.32	0.08	0.12	0.19	0.34	0.36	0.56	0.21
44		0.41	1.02	1.58	1.05	0.43	0.07	0.15	0.37	0.42	0.31	0.93	0.30
46		0.68	1.12	1.28	1.00	0.50	0.09	0.15	0.29	0.39	0.51	0.84	0.35
48		0.42	0.78	0.69	0.34	0.13	0.05	0.11	0.23	0.22	0.28	0.29	0.23
49		0.22	0.52	0.39	0.45	0.08	0.07	0.06	0.25	0.16	0.29	0.33	0.18
51		0.21	0.89	0.39	0.12	0.13	0.01	0.02	0.20	0.16	0.21	0.21	0.17
52		0.40	0.67	0.59	0.24	0.10	0.06	0.11	0.13	0.24	0.23	0.48	0.24
53		0.37	0.55	0.39	0.17	0.15	0.03	0.08	0.19	0.36	0.26	0.37	0.22
54		0.50	0.61	0.62	0.37	0.12	0.08	0.13	0.20	0.38	0.42	0.59	0.42
55		0.44	0.62	0.38	0.20	0.09	0.07	0.05	0.10	0.24	0.28	0.35	0.40
56		0.36	0.44	0.43	0.16	0.06	0.03	0.08	0.10	0.24	0.25	0.34	0.32
57		0.22	0.23	0.26	0.20	0.03	0.02	0.04	0.07	0.21	0.20	0.17	0.17
58		0.39	0.38	0.36	0.14	0.05	0.06	0.04	0.08	0.18	0.15	0.21	0.20
59		0.41	0.43	0.29	0.14	0.03	0.03	0.03	0.07	0.16	0.18	0.20	0.20
61	Inbnchikmmayaki mountainhut	1.22	1.01	0.46	0.09	0.06	0.07	0.03	0.06	0.25	0.30	0.30	0.45
62		1.04	0.80	0.28	0.06	0.03	0.05	0.06	0.19	0.51	0.32	0.74	0.54

Those who started the ascent in the daytime.	32 mins.
Those who started the ascent at 2:00 am.	57 mins.
The ratio of the climbers who perceived the congestion of the ascending route intolerable.	5.7%
The ratio of the climbers who perceived that they could not tolerate the congestion of the ascending route very well.	17.3%
The ratio of the climbers who perceived that the congestion at the summit was intolerable.	5.9%
The ratio of the climbers who perceived that they could not tolerate the congestion at the summit very well.	13.9%
The ratio of the climbers who felt danger as other climbers attempted to pass from behind.	21.5%

Near the 9.5th Station at 2:58 am on 13 August 2017
(1,919 people started the ascent on the previous day)

・ The congestion (“red” level of density) lasts longer immediately below the summit after the sunrise. In addition, the “red” level of density occurs in lower sections when climbers ascend or descend. Around the Section 44, congestion occurs over two sections in the same time period.

2,500 people

ID	Note	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2		0.06	0.29	0.60	0.64	0.28	0.32	2.08	2.19	1.77	1.38	1.68	0.93
3		0.06	0.25	0.21	0.35	0.24	0.27	0.47	0.43	0.59	0.84	0.50	0.29
5		0.05	0.68	0.37	0.44	0.68	0.74	0.91	0.66	0.78	0.83	0.48	0.49
6		0.11	0.38	0.54	0.69	0.90	0.66	0.65	0.64	0.91	0.58	0.49	0.28
8		0.12	0.35	0.49	0.53	0.58	0.53	0.55	0.42	0.67	0.44	0.30	0.26
9		0.03	0.13	0.19	0.16	0.23	0.13	0.13	0.11	0.25	0.14	0.09	0.12
10		0.09	0.33	0.37	0.61	0.50	0.41	0.35	0.39	0.61	0.39	0.20	0.25
12		0.31	0.71	0.80	0.73	0.91	0.59	0.34	0.58	0.61	0.80	0.43	0.37
13		0.08	0.23	0.41	0.65	0.59	0.28	0.25	0.28	0.41	0.38	0.21	0.36
15		0.20	0.59	0.69	0.73	0.94	0.43	0.32	0.78	0.57	0.79	0.51	0.37
17		0.39	0.58	0.99	1.58	1.39	0.64	0.57	0.61	0.48	0.62	0.43	0.44
20		0.56	0.22	0.59	0.88	0.97	0.37	0.20	0.80	0.58	0.36	0.14	0.28
22		0.31	0.27	0.69	0.89	0.66	0.35	0.25	0.32	0.40	0.57	0.25	0.40
24		0.13	0.21	0.19	0.32	0.20	0.06	0.06	0.07	0.06	0.17	0.05	0.07
25		0.21	0.30	0.74	0.87	0.45	0.13	0.15	0.15	0.17	0.22	0.13	0.15
28		0.27	0.21	0.70	0.73	0.31	0.16	0.24	0.35	0.42	0.36	0.28	0.21
29		0.43	0.29	0.53	0.57	0.69	0.09	0.22	0.17	0.21	0.45	0.27	0.29
32		0.07	0.27	0.41	0.68	0.57	0.44	0.15	0.13	0.12	0.14	0.12	0.09
34		0.29	0.59	1.41	0.55	0.24	0.05	0.28	0.15	0.19	0.39	0.26	0.14
37	Inlet of Murataki mountainhut	1.02	0.71	0.78	1.32	0.76	0.78	0.23	0.46	0.71	1.53	2.04	0.65
39		0.94	0.92	1.28	1.28	0.43	0.24	0.25	0.38	0.52	0.78	1.05	0.56
40		0.23	0.58	0.68	0.45	0.13	0.07	0.07	0.07	0.13	0.14	0.24	0.08
42		0.35	0.63	0.92	0.57	0.19	0.09	0.09	0.11	0.17	0.22	0.40	0.09
43		0.56	1.13	1.53	1.00	0.35	0.09	0.14	0.19	0.43	0.46	0.75	0.24
44		0.53	1.20	1.93	1.15	0.44	0.05	0.17	0.42	0.57	0.38	1.27	0.33
46		0.90	1.42	1.64	1.21	0.60	0.10	0.14	0.32	0.49	0.67	1.14	0.43
48		0.53	1.00	0.84	0.33	0.14	0.07	0.14	0.28	0.28	0.37	0.38	0.27
49		0.27	0.67	0.49	0.58	0.09	0.06	0.07	0.34	0.20	0.39	0.45	0.25
51		0.28	1.22	0.46	0.07	0.17	0.01	0.03	0.23	0.20	0.27	0.28	0.20
52		0.50	0.88	0.73	0.25	0.11	0.07	0.12	0.15	0.31	0.29	0.68	0.29
53		0.47	0.68	0.49	0.15	0.18	0.03	0.10	0.24	0.46	0.31	0.49	0.28
54		0.63	0.74	0.73	0.40	0.13	0.07	0.15	0.23	0.47	0.53	0.79	0.52
55		0.56	0.79	0.46	0.22	0.09	0.08	0.05	0.12	0.30	0.36	0.47	0.53
56		0.41	0.49	0.52	0.16	0.06	0.03	0.09	0.10	0.30	0.33	0.44	0.40
57		0.28	0.22	0.28	0.24	0.02	0.02	0.04	0.08	0.27	0.26	0.20	0.21
58		0.48	0.38	0.42	0.15	0.04	0.06	0.04	0.09	0.23	0.19	0.28	0.26
59		0.52	0.54	0.33	0.17	0.03	0.03	0.03	0.09	0.19	0.22	0.26	0.25
61	Inbnchikmmayaki mountainhut	1.68	1.36	0.49	0.09	0.07	0.08	0.03	0.07	0.32	0.38	0.41	0.62
62		1.33	0.92	0.27	0.04	0.02	0.05	0.07	0.27	0.71	0.44	0.99	0.69

Those who started the ascent in the daytime.	31 mins.
Those who started the ascent at 2:00 am.	62 mins.
The ratio of the climbers who perceived the congestion of the ascending route intolerable.	7.0%
The ratio of the climbers who perceived that they could not tolerate the congestion of the ascending route very well.	21.6%
The ratio of the climbers who perceived that the congestion at the summit was intolerable.	7.3%
The ratio of the climbers who perceived that they could not tolerate the congestion at the summit very well.	16.8%
The ratio of the climbers who felt danger as other climbers attempted to pass from behind.	25.7%

Immediately below summit at 6:06 am on 6 August 2017
(2,290 people started the ascent on the previous day)

・ The “red” level of density occurs for a long time immediately below the summit after the sunrise, lasting until around 7:30 am. In addition, the “red” level of density occurs in several sections. Congestion lasts for more than one hour in some places and congestion extends over two sections in others.

D. Definition of “significant level of congestion” in Fujisan and criteria for predicting congestion to occur

●Definition of “significant level of congestion”

- Based on the results of on-site surveys and those of estimation as described in the preceding section, “significant level of congestion” in Fujisan is defined as follows:

> The occurrence of a condition in which, in the sectors from the summit to the Ninth Station, the density of climbers rises to 1.25 people/m^2 or more simultaneously at several points and in which it continues to be 1.25 people/m^2 or more in one section for one hour or more or it does so in two sections or more.

●Criteria for predicting “significant level of congestion” to occur

- The indicative numbers of climbers/day that cause a significant level of congestion have been set at 4,000 people/day for the Yoshida ascending route and 2,000 people/day for the Fujinomiya ascending route, with agreement among the stakeholders, taking into consideration the results of surveys of physical and social carrying capacities (ex. correlations between the density of climbers and the perceptions of climbers) and the definition of “significant level of congestion”.
- No indicator and standard are set for the Gotemba ascending route and the Subashiri ascending route (the point where it meets the Yoshida ascending route or lower) because noticeable congestion currently does not occur.

(1) Target standards for 2019

- Based on the current status (the average of the number of exceeding days between 2015 and 2017), from the viewpoint of decreasing the number of days when the number of climbers set in the preceding section is exceeded, the target for 2019 is set at:

  Three days or less for the Yoshida ascending route

  Two days or less for the Fujinomiya ascending route

Table 7 The number of days that the number of visitors exceeded 4,000 at the Yoshida ascending route and 2,000 at the Fujinomiya ascending route

Ascending routes	2015	2016	2017	Average
Yoshida	4 days	4 days	5 days	4.3 days
Fujinomiya	3 days	2 days	4 days	3.0 days

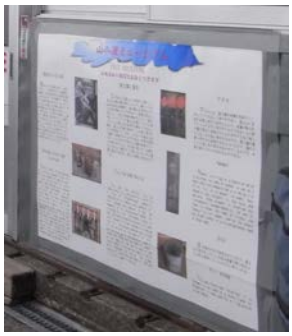
Chapter 5　Implementation of Specific Measures

This chapter describes specific measures currently implemented and to be implemented by Yamanashi Prefecture, Shizuoka Prefecture, and related municipal governments to achieve the desired levels for the indicators that are set out in Chapter 4.

Awareness raising about cultural traditions and values at the starting points of ascending routes, mountain huts, etc.	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
	○		

Actions to be delivered at the starting points of ascending routes where many climbers start Fujisan ascents, mountain huts, etc. are to be explored, including the distribution of information materials about traditional climbing styles of Fujisan and cultural values of Fujisan, the organization of exhibits and lectures, and encouraging people to visit the World Heritage Centers.

Shinto altar in a mountain hut



Signboard explaining about origins etc.

Recommendation of climbing from the foot of the mountain	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
	○		

To promote traditional climbing styles in which people make ascents starting from the mountain foot, information spots and rest spots are to be installed and operated at *Nakanochaya* and *Umagaeshi* of the Yoshida ascending route; temporary toilets are to be installed, among other facilities for the convenience of visitors; information provision through pamphlets, the Internet, SNS, etc. is also to be strengthened.

Nakanochaya rest spot

Fujisan Oyasumi Dokoro rest spot

Encouragement of excursions to component parts at the foot of the mountain	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
	○		

To facilitate visitors' recognition and understanding of relationships between individual component parts and the OUV and to enable visitors to appreciate and experience the attractiveness of the mountain-foot area of Fujisan, model courses are to be developed and promoted for visiting the component parts and other tourist destinations that are located at the mountain foot as a measure to encourage visitors to make a tour not only of the ascending routes but also of the mountain-foot area.

Hands-on tour

Example of a model course

Examination of remodeling methods for artificial structures	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
		○	(○)

With regard to artificial structures, such as barriers to stop falling stones, which are installed for the safety of climbers etc. and also for the conservation of the ascending routes, further measures for visual harmonization are to be explored in consideration of the surrounding mountain environments and scenic landscapes.

Example of visual harmonization (wall greening)

A mountain hut designed on the model of traditional *Iwaya* (rock-covered house)

Prevention of invasion of introduced plants	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
		○	

To prevent rapid change in ecosystems and landscapes due to the growth of alien plant species, mats and brushes to remove seeds from shoes are to be placed at the starting points of ascending routes, bus stops, etc.

Fujinomiya ascending route

Subashiri ascending route

Information provision and awareness raising to promote good climbing manners at the starting points of ascending routes	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
			○

Information for safe climbing (outfits and equipment, the characteristics of ascending routes, etc.) is provided and awareness-raising activities to promote good climbing manners (bringing back trash etc.) are carried out at the starting points of ascending routes, inside buses, etc., through face-to-face instruction, the distribution of handouts, video programs, etc.

Awareness raising for good manners at the 5th Station

Video

Assignment of safety guides and other personnel	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
			○

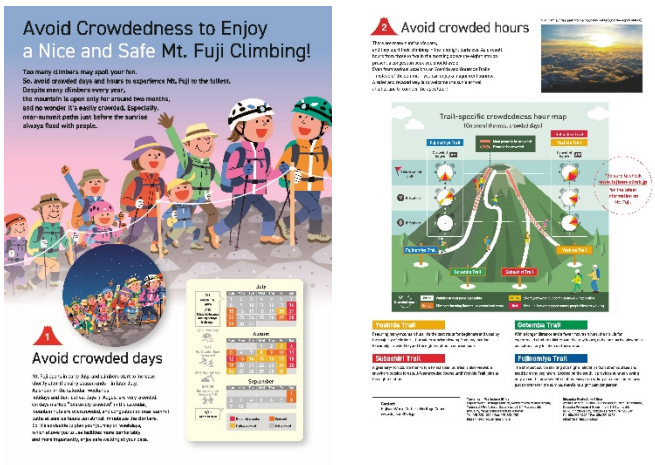
At congestion-prone places where the narrowing route width causes climbers' concentration, staff are stationed to provide guidance and safety instructions to climbers as a measure to prevent accidents of climbers who make ascents to greet the sunrise at the mountaintop and also to mitigate congestion. Also at the divergence point of the Subarshiri and Yoshida descending routes, staff are stationed to prevent descenders from taking the wrong route.

Fujinomiya ascending route near the mountaintop

Yoshida-Subashiri descending route

Provision of congestion information to alleviate concentrations of climbers	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
			○

To alleviate the concentrations of climbers that take place on particular days of the week, hours, and places, information is to be provided, such as the dates and hours that congestion is likely to occur and the situations that are expected to happen, through pamphlets and the Internet, so that people can adjust their climbing plan accordingly.



Handout in which information about congestion is provided during the climbing season (congestion forecast calendar)

Reduction of overnight climbing without taking sufficient rest on the way	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
			○

To ensure the safety of climbers and solve congestion at the mountaintop, awareness-raising is to be carried out about the danger of “bullet climbing” (night-time ascents without sufficient rest before and during climbing). In addition, other control measures are to be explored and implemented, including the review of the operation time of shuttle buses that carry visitors to and from the 5th station.

Signboard

Shuttle bus station

Past reviewing of operation time of shuttle bus service

	Yoshida ascending route	Fujinomiya ascending route	Subashiri ascending route
Route	Parking lot on the northern slope →5th Station	*Mizugatsuka* parking lot→5th Station	*Suda* multipurpose field→5th Station
2014	—	6:00 to 22:00 (every 30 mins.) every day	5:00 to 22:00 (every 30 mins.) every day
2015	Friday, Saturday, the previous day of a holiday: 4:30 to 19:00 Other days: 5:30 to 22:00	Friday, Saturday, the previous day of a holiday: 6:00 to 20:00 (every 30 mins.) Other days: 6:00 to 22:00 (every 30 mins.)	Friday, Saturday, the previous day of a holiday: 5:00 to 20:00 (every 30 mins.) Other days: 5:00 to 21:00 (every 30 mins.)
2016	Friday, Saturday, the previous day of a holiday: 4:30 to 19:30 Other days: 5:30 to 19:30	6:00 to 20:00 (every 30 mins.) every day	5:00 to 20:00 (every 30 mins.) every day

Restriction of private vehicles on the roads to the 5th station and reviewing of the restriction period	Transmission of cultural traditions	Maintenance of scenic landscapes	Safety and comfort of Fujisan ascent
			○

Private vehicles have been restricted on the Fujisan Sky Line (Fujiyoshida ascending route), Fuji Azami Line (Subashiri ascending route), and Fuji Subaru Line (Yoshida ascending route) to provide congestion-free, safe, and comfortable traffic to visitors of Fujisan and to conserve the natural environment of Fujisan. The next fiscal year's restriction periods are to be decided on, taking into consideration the experience of this fiscal year.

Status of implementation of private vehicle restriction

	2014	2015	2016	2017	2018
Fujisan Skyline (Fujinomiya)	63 days	63 days	65 days	63 days	63 days
Fuji Azami Line (Subashiri)	40 days	47 days	63 days	63 days	63 days
Fuji Subaru Line (Yoshida)	53 days	53 days	53 days	63 days	63 days

Chapter 6　Implementation of Monitoring

To monitor the progress toward the realization of the “desired style of Fujisan Ascents”, which has been set out as the goal of the visitor management plan, the indicators and standards for each standard are to be evaluated and reviewed together with the measures to be implemented to achieve the standards at an interval of approximately 5 years.

This chapter describes the concrete methods of the monitoring particularly the progress toward the achievement of the standards that have been set out for different indicators, as well as the responsible organizations.

1． Principle

Because indicators and standardssneed to be monitored in the long term and on a continual basis, the monitoring should be carried out, using the same methods, without excessive equipment costs or labor costs, as a matter of principle.

2． Method

The monitoring of the indicators currently set out are to be carried out by questionnaire surveys, surveys of the number of climbers, recording by on-site staff, submission of legally-required notification documents, observation of visual change. The details are described below.

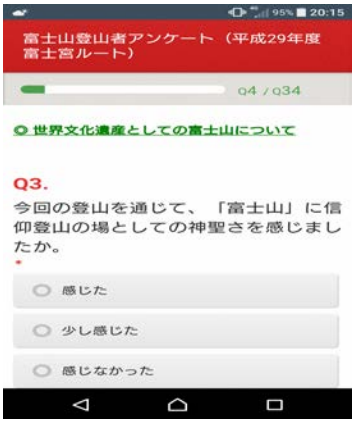
(1) Questionnaire surveys

Yamanashi Prefecture and Shizuoka Prefecture conduct simple questionnaire surveys targeted at climbers. To be specific, Survey Request Cards are distributed when the Fujisan Conservation Donation is collected. Climbers can fill out the questionnaire on their mobile devices.

Although interview surveys were carried out since 2015 by stationing field surveyors at the 5th Station of each ascending route, the decision was made not to adopt this method, because it needs a large cost and therefore is not suitable for regular monitoring.

Also, a questionnaire survey using mobile devices was carried out in 2017 in parallel with the interview survey and its effectiveness was confirmed.

Survey Request Card



Questionnaire on a mobile device

Table 8　Indicators to be monitored by questionnaire survey

Indicator	Standards (2019 target)	Measurement content and method	Responsible organization
Ratio of climbers who, like traditional worship ascents, take a rest at a mountain hut before greeting the sunrise at the mountaintop	80 % or higher	To calculate the ratio of climbers who stayed overnight at a mountain hut among the climbers who greeted the sunrise at the mountaintop.	Yamanashi Prefecture Shizuoka Prefecture
Ratio of climbers who know cultural traditions of making Fujisan ascents after visiting Shinto shrines, lakes, etc.	50 % or higher	To calculate the ratio of climbers who knew the cultural traditions before making ascents and those who learned about them this time.	Yamanashi Prefecture Shizuoka Prefecture
Ratio of climbers who felt sacredness of Fujisan	90 % or higher	To calculate the ratio of climbers who felt the sacredness and those who felt the sacredness to some extent.	Yamanashi Prefecture Shizuoka Prefecture
Ration of climbers who often saw trash on the ascending route and near the mountaintop	15 % or lower	To calculate the ratio of climbers who answered that they saw litter many times.	Yamanashi Prefecture Shizuoka Prefecture
Ratio of climbers who found facilities for the convenience of climbers such as mountain huts and toilets unsatisfactory	15 % or lower	To calculate the ratio of climbers who found the “service and atmosphere at mountain huts” or “the number of toilets and the condition of facilities” very unsatisfactory or a little unsatisfactory.	Yamanashi Prefecture Shizuoka Prefecture

※ The degree of tolerance to congestion and the ratio of climbers who felt danger are also to be monitored as items related to the number of climbers, although not for the purpose of measuring desired levels.

(2)　Surveys of the number of climbers

The number of climbers is to be monitored with infrared counters that have been installed by Fujiyoshida City at the 5th Station of the Yoshida ascending route and infrared counters that have been installed by the Ministry of the Environment near the 8th Stations of the ascending routes.

Infrared counter

Table 9　Indicators to be monitored by the survey of the number of climbers

Indicator	Standards (2019 target)	Measurement content and method	Responsible organization
Ration of climbers who make ascents, starting from the mountain foot among the total climbers who use the Yoshida ascending route, for which the pilgrimage route that has been used since old times is identified.	15 % or higher	To count the number of climbers who pass the infrared counter installed at the 5th Station of the Yoshida ascending route.	Fujiyoshida City
The number of days during the summer climbing season that the number of climbers that causes significant congestion* is exceeded. ※Yoshida ascending route: 4,000/day Fujinomiya ascending route: 2,000/day	Yoshida ascending route: 3 days or fewer Fujinomiya ascending route: 2 days or fewer	To count the number of climbers who pass the infrared counter installed near the 8th Station of the Yoshida ascending route and Fujinomiya Ascending routes.	Ministry of the Environment

(3) Records kept by local personnel

When Fujisan rangers and Cultural Property Protection Instructors carry out patrols, they record visually

disturbing elements, including artificial structures, that they observed. In addition, Fujisan navigators who are stationed at the 5th Station of the Subashiri ascending route to provide guidance about facilities to visitors record the number of climbers who take the wrong route on their way down the mountain.

Fujisan ranger

Fujisan navigators

Table 10　Indicators to be monitored by field surveyors

Indicator	Standards (2019 target)	Measurement content and method	Responsible organization
Visual disturbance of artificial structures that are not harmonious with the natural environment along ascending routes	No unharmonious elements are foreseen or ascertained.	To record visual disturbing elements that Fujisan rangers etc. have identified on patrol.	Yamanashi Prefecture Shizuoka Prefecture
The ratio of climbers who made ascents on the Yoshida ascending route but took the wrong descending route (Subashiri descending route) (as recorded by guides at the 5th Station of Subashiri ascending route)	0.4 % or lower	To record the number of climbers who made ascents on the Yoshida ascending route but took the wrong descending route (Subashiri descending route), as identified by Fujisan navigators who are stationed at the 5th Station of the Subashiri ascending route.	Shizuoka Prefecture

(4) Number of reports on legal procedures

The ascending routes and the area near the mountaintop are strictly protected by the Law for the Protection of Cultural Properties and the Natural Parks Act. Therefore, visually disturbing elements etc. are to be identified through the administrative procedure that needs to be taken for the installation of artificial structures, alterations to the existing landform, etc.

Table 11　Indicators to be monitored by the number of legally-required notification documents

Indicator	Standards (2019 target)	Measurement content and method	Responsible organization
To count the number of climbers who pass the infrared counter installed at the 5th Station of the Yoshida ascending route.	No unharmonious elements are foreseen or ascertained.	To identify visually disrobing elements through the procedure of application for alteration to the existing state under the Law for the Protection of Cultural Properties and the Natural Parks Act.	Yamanashi Prefecture Shizuoka Prefecture
Number of cases in which damage is caused by people to cultural properties	0	To record the number of notifications about damage that are required by the Law for the Protection of Cultural Properties.	Yamanashi Prefecture Shizuoka Prefecture

(5) Observation of landscape changes

Photos are taken of views from the fixed points that are set at the 5th Stations (excluding the Gotemba ascending route) to check visual changes, if any.

View from the 5th Station of the Yoshida ascending route

View from the 5th Station of Fujiyoshida ascending route

Table 12 Indicators to be monitored by observation of landscape change

Indicator	Standards (2019 target)	Measurement content and method	Responsible organization
Change in visual landscapes in the area higher than the 5th Station due to erosion of ascending routes and vegetation change.	No negative impact is foreseen or ascertained.	To identify visually disturbing elements in the views from fixed observation points (at the 5th Station).	Yamanashi Prefecture Shizuoka Prefecture Municipal govts.

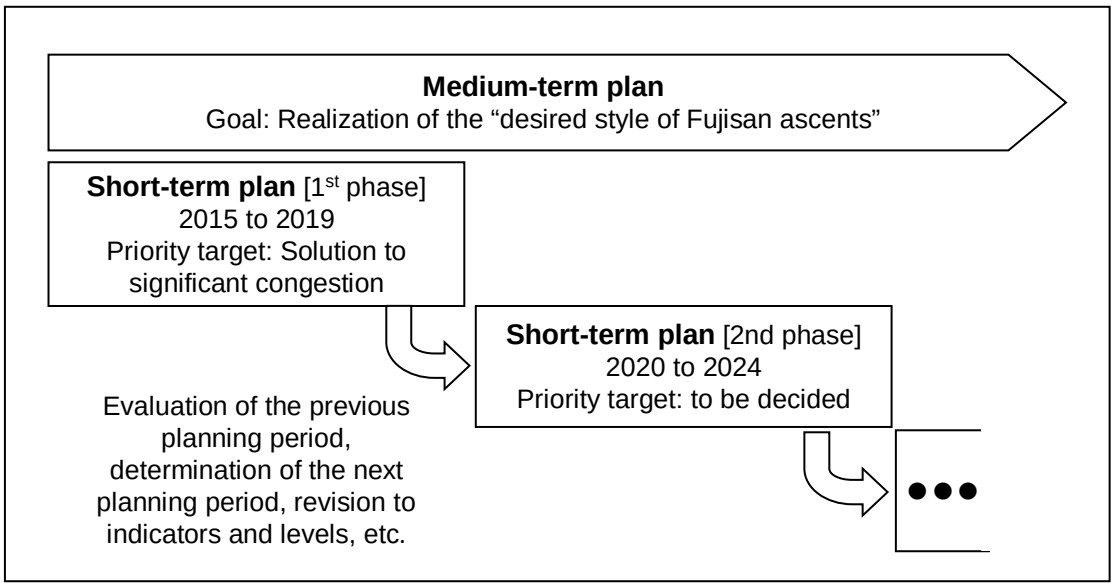
Chapter 7　Planning Period and Implementation Mechanism

This chapter describes the planning period, envisaged future revision, and the implementation mechanism necessary for the implementation of the plan.

1. Planning Period

This plan aims at realizing the “desired style of Fujisan ascents” as the medium-term goal of the plan; the five-year period from 2015 is set out as the short-term planning period.

In the last year of the planning period, the achievement of indicators and desired levels is to be evaluated and the priority target for the next planning period will be determined, if necessary, with revisions to indicators and desired levels.



2. Perspectives for Future Revision to the Plan (Reviewing of Indicators and standards)

The significant levels of congestion that are observed at present are highly limited to particular dates, hours, and places. Therefore, once the issue has been solved as a result of the successful implemenation of a series of countermeasures, the focus of the plan will be shifted from the number of climbers itself to enhancing the quality of climbers’ experience (for example, increase in the ratio of climbers who do not feel danger or dissatisfaction).

3. Implementation Mechanism

This plan has been developed under the Visitor Management Plan. Therefore, as is the case with the “Vision and Strategies for Fujisan, Sacred Place and Source of Artistic Inspiration” and “World Cultural Heritage Fujisan Comprehensive Preservation and Management Plan”, the Fujisan World Cultural Heritage Council, which consists of Yamanashi Prefecture, Shizuoka Prefecture, and related municipal governments, monitors the progress of implementation of the plan, and evaluates and reviews this plan, in coordination with the Agency for Cultural Affairs, the Ministry of the Environment, and the Forestry Agency.

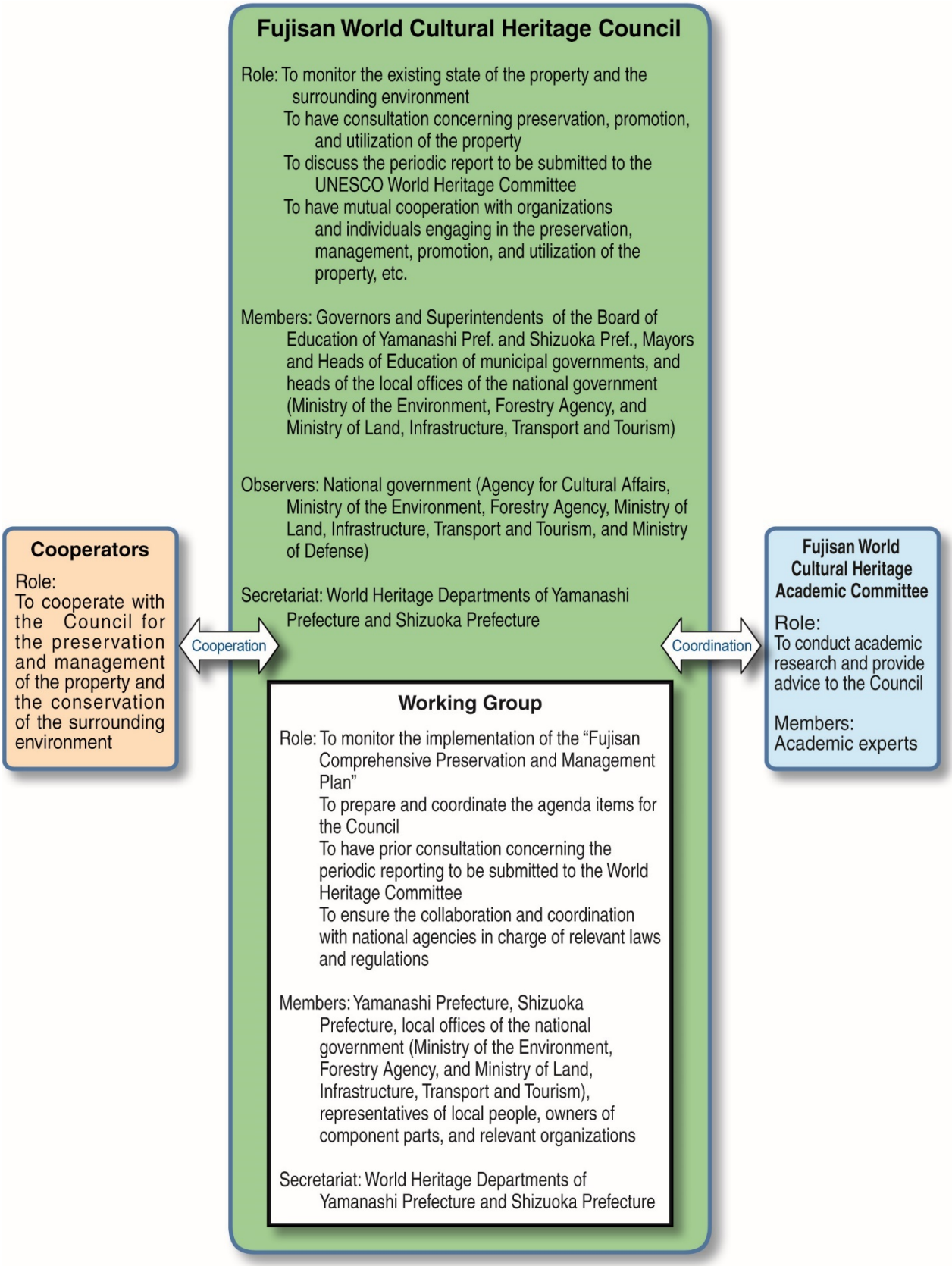


Figure 4 System for the preservation and management of Fujisan

<APPENDIX>

1. History of Relevant Discussion and Consultation

Yamanashi Prefecture and Shizuoka Prefecture have been organizing study meetings since 2015 with the participation of academic experts in the field of park use, the Agency for Cultural Affairs, the Ministry of the Environment, Yamanashi Prefecture, Shizuoka Prefecture, and private consulting firms that carry out surveys on contract, in which the methods of surveys and studies have been discussed and the results of surveys have been analyzed.

Members of carrying capacity study meetings

Category	Name	Title	Specialty
Academic experts	AIKO Tetsuya	Associate Professor, Graduate School, Hokkaido University	Park use
	YAMAMOTO Kiyotatsu	Associate Professor, Graduate School, University of Tokyo	Park use
Administrative organizations	Agency for Cultural Affairs, Ministry of the Environment, Yamanashi Prefecture, and Shizuoka Prefecture		
Cooperator	Authorized NPO National Council on Fujisan World Heritage		

Yamanashi Prefecture and Shizuoka Prefecture started to study indicators and desired levels by convening carrying capacity study meetings with the aim of drafting indicators etc. and additionally set up a sub-committee in November 2016 with the participation of 5 members of the Fujisan World Cultural Heritage Academic Committee who have particular expertise in World Heritage and park use to seek advice about the draft indicators and other matters that are developed at the carrying capacity study meetings.

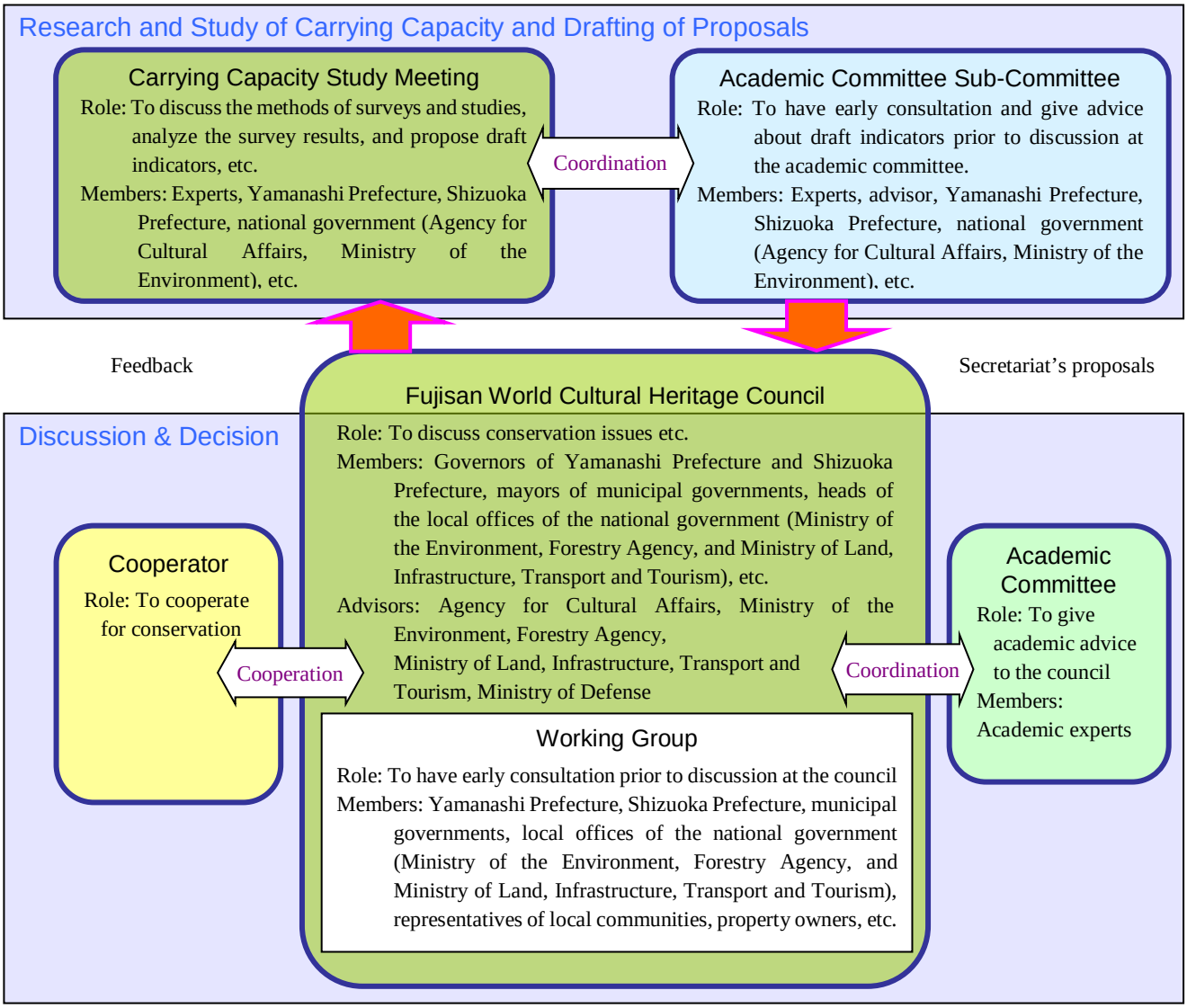
Furthermore, efforts to build consensus have been made, heeding opinions widely from property owners, mountain hut stakeholders, and representatives of local communities by taking advantage of the Fujisan World Cultural Heritage Academic Committee and working groups of the Fujisan World Cultural Heritage Council. At the 10th meeting of the Fujisan World Cultural Heritage Council held in March 2018, the indicators and desired levels for each indicator are to be decided on and the visitor management based on these indicators is to be started in July 2018.

The visitor management plan is to be evaluated and reviewed periodically, about every 5 years starting in 2015; therefore, after the summer climbing season of 2019 has closed, the indicators and desired levels for the subsequent fiscal years are to be discussed and decided on.

Members of the sub-committee of the Fujisan World Cultural Heritage Academic Committee

Category	Name	Title	Specialty
Academic experts	INABA Nobuko	Professor, Graduate School, University of Tsukuba	World Heritage, architecture
	OKADA Yasuyoshi	Professor, Kokushikan University	World Heritage, architecture
	KATO Mineo	Professor, Graduate School, Yokohama National University	Park use
	NISHIMURA Yukio	Professor, Graduate School, Kobe Design University	World Heritage, urban landscape

			planning
	YOSHIDA Masahito	Professor, Graduate School, University of Tsukuba	World Heritage. Environmental policies
Advisor	MOTONAKA Makoto	World Cultural Heritage advisor	World Heritage
Administrative organizations	Agency for Cultural Affairs, Ministry of the Environment, Yamanashi Prefecture, and Shizuoka Prefecture		
Cooperator	NPO National Council on Fujisan World Heritage		



Schematic Figure Showing the Organizations Involved in the Relevant Discussion and Consultation

2. Research and Study

(1) Outline

A. Survey of climbers' perception (2015 to 2017)

i Content

A questionnaire survey was carried out about general information about climbing, perceptions about Fujisan, impressions about Fujisan ascents, etc.

ii Summary

	2015 and 2016	2017
Location	5th Stations of ascending routes	
Target	Adults (male and female) descending after climbing Fujisan	
Method	Self-completion (on-site drop-off)	Self-completion (on-site drip off) Self-completion (postal drop-off) Self-completion on a mobile device
Period	(Day 1 15:00 to 20:00 Day 2 8:00 to 15:00) × 5 times/year	8:00 to 14:00 × 6 times
Surveyed items	Recognition about cultural traditions of Fujisan ascents, perception of Fujisan's "sacredness", degree of congestion and danger during accents, degree of satisfaction with climbing experience, etc.	

iii Number of responses

			Yoshida	Fujinomiya	Gotemba	Subashiri	Total
2015	7/13 (Mon.) & 14 (Tue.)		130	87	27	119	363
	7/18 (Sat.) & 19 (Sun.) *1		214	188	55	142	599
	7/27 (Mon.) & 28 (Tue.)		176	252	40	107	575
	8/1 (Sat.) & 2 (Sun.)		302	210	53	160	725
	8/13 (Thu.) & 14 (Fri.)		278	135	52	85	550
	Sub-total		1,100	872	227	613	2,812
2016	7/16 (Sat.) & 17 (Sun.)		225	219	61	151	656
	7/25 (Mon.) & 26 (Tue.)		162	134	31	52	379
	7/30 (Sat.) & 31 (Sun.)		299	235	63	155	752
	8/11 (Thu.) & 12 (Fri.)		274	187	62	179	702
	8/20 (Sat.) & 21 (Sun.)		269	198	61	113	641
	Sub-total		1,229	973	278	650	3,130
2017	On-site drop off	7/16 (Sun.)	125	80	50	40	295
		7/17 (Mon.)	100	69	34	25	228
		7/26 (Wed.)	52	29	18	26	125
		7/27 (Thu.)	50	28	12	14	104
		8/5 (Sat.)	100	79	36	48	263
		8/6 (Sun.)	102	69	22	53	246
		Sub-total	529	354	172	206	1,261
	Postal drop-off		464	213	78	106	861
	Mobile device		319	143	82	89	633
	Total		1,312	710	332	401	2,755

*1 Due to bad weather, the survey at the Yoshida ascending route was carried out on 8/22 (Sat.) and 23 (Sun.).

B. Survey of the dynamics of climbers（2015 to 2017）

i Content

A dynamics survey using GPS loggers was carried out to track the movements of climbers making ascents of Fujisan and collect data on the status of congestion etc. near the mountaintop and on the ascending routes.

ii Summary

	2015 and 2016	2017
Location	5th Stations of ascending routes	5th Stations of Yoshida and Fujinomiya ascending routes
Target	Adults (male and female) starting to make ascents	
Method	GPS loggers were distributed to targets and collected after completion of ascents to recover the recorded data.	
Period	Day 1 6:00 to 24:00 Day 2 6:00 to 15:00 * GPS distributed on Day 1 only ×5 times/year	8:00 to 14:00 × 4 times
Surveyed items	Location (latitude, longitude, and altitude), speed, etc. of each target by the hour	

iii Number of responses

		Yoshida	Fujinomiya	Gotemba	Subashiri	Total
2015	7/13 (Mon.) & 14 (Tue.)	62	60	15	70	207
	7/18 (Sat.) & 19 (Sun.) *1	118	119	39	114	390
	7/27 (Mon.) & 28 (Tue.)	108	109	18	47	282
	8/1 (Sat.) & 2 (Sun.)	120	113	41	114	388
	8/13 (Thu.) & 14 (Fri.)	127	112	40	78	357
	Sub-total	535	513	153	423	1,624
2016	7/16 (Sat.) & 17 (Sun.)	117	103	40	97	357
	7/25 (Mon.) & 26 (Tue.)	116	90	15	36	257
	7/30 (Sat.) & 31 (Sun.)	119	118	40	115	392
	8/11 (Thu.) & 12 (Fri.)	117	118	40	119	394
	8/20 (Sat.) & 21 (Sun.)	116	119	38	87	360
	Sub-total	585	548	173	454	1,760
2017	8/4 (Fri.)	80	68	—	—	148
	8/5 (Sat.)	80	63	—	—	143
	8/11 (Fri.)	75	80	—	—	155
	8/12 (Sat.)	76	78	—	—	154
	Sub-total	311	289	—	—	600

*1 Due to bad weather, the survey at the Yoshida ascending route was carried out on 8/22 (Sat.) and 23 (Sun.).

C. Field survey near the mountaintop (2017)

i Content

Field surveys were carried out to make on-site observations of specific places where there are problematic levels of congestion (near the mountaintop and the 9th Station) to verify the adequacy of the analysis based on the GPS logger survey and photos were taken to inform visitors of the status of congestion.

ii Summary

Location	Between the 9th Station of Fujinomiya and Yoshida ascending routes and the mountaintop
Method	・ The number of people who passed was counted ・ On-site observation was made of ascending routes
Date and time	8/5 (Sat.), 8/6 (Sun.), 8/12 (Sat.), and 8/13 (Sun.). From 2：00 to 6：00

D. Fixed-point photography survey（2015 and 2016）

i Content

Photos were taken at the bottle-neck points of ascending routes with cameras that were installed at fixed observation points.

ii Summary

	2015	2016
Location	2 locations on Yoshida and Subashiri ascending routes (near the mountaintop *torii* gate and near the 9th Station *torii* gate) and 1 location on the Fujinomiya ascending route (near the mountaintop *torii* gate)	
Scope	Approximately a range of 10 m on the ascending route	
Frequency	One photo/5 seconds from 3:00 to 5:00 One photo/15 minutes 24 hours/day	
Period	28 days	44 days
Photos (example)	 Camera installed at the 9th Station torii gate	 Photo taken on the Yoshida ascending route immediately below the mountaintop

E. Web questionnaire survey (2015)

i Content

A web questionnaire was carried out on the Internet to look into the perception of potential climbers of Fujisan about congestion.

ii Summary

	Yamakei on-line monitors (People who have climbing experience or interest)	Macromill monitors (general public)
Target	Adults (male and female) who are interested in climbing Fujisan	
Method	On-line questionnaire	
Period	From 8 to 23 October	From 29 to 30 September
Surveyed items	Climbing experience, reasons to make ascents, the number of people who feel inclined to make ascents, etc.	
Number of respondents	618	650
Photos used	  Photo montage used in the questionnaire	

Information

2018 World Heritage "Fujisan" Climbers' Questionnaire

※ You can fill out this questionnaire in no more than 5 minutes and there is no need to identify yourself.

Shizuoka Prefecture (Fujisan World Heritage Division, Culture and Tourism Department)

Notice
- The respondent must be 18 years of age or older.
- Circle the number of the answer that matches the best.
- In open questions, please describe your answer as concretely as possible.

◎ About Fujisan as World Cultural Heritage

Q1 (1) Did you feel the sacredness of Fujisan as a mountain of worship ascent when you were climbing Fujisan this time? (Choose only one answer)

1. I felt it. 2. I felt it a little. 3. I did not feel it.

Q2 Did you know before you climbed Fujisan this time that it is a cultural tradition of Fujisan ascents to start climbing after giving prayer and purifying oneself at Shinto shrines, lakes, or waterfalls at the mountain foot? (Choose only one answer)

1. I knew before. 2. I learned about it this time. 3. I do not know about it.

◎ About your climbing experience

Q3 (1) How was congestion you experienced this time? (Choose one answer for each location)

Location	Crowded very much	A little crowded	Neutral	Little congestion	No congestion	I don't remember
1. Ascending route	5	4	3	2	1	0
2. Mountaintop	5	4	3	2	1	0
3. Toilet	5	4	3	2	1	0
4. Mountain hut	5	4	3	2	1	0

(2) How did you find the number of people on Fujisan this time? (Choose one answer for each location)

Location	Intolerable	A little intolerable	Neutral	A little tolerable	Tolerable	I don't remember
1. Ascending route	5	4	3	2	1	0
2. Mountaintop	5	4	3	2	1	0
3. Toilet	5	4	3	2	1	0
4. Mountain hut	5	4	3	2	1	0

Q4 Did you feel any danger this time? (Choose all)

1. I did not feel any danger at all.
2. There was danger of falling or toppling due to erosion or damage to the ascending route.
3. There was danger of person-to-person collision or stone falls as an overtaking climber pushes through from behind.
4. There was danger of person-to-person collision or stone falls as an ascending climber and a descending climber pass each other.
5. Other ( )

Q5 Did you see litter along ascending routes or near the mountaintop? (Choose only one answer)

1. Very often. 2. I didn't see much. 3. I didn't see any.

◎ About impression after Fujisan ascent

Q6 How much are you satisfied with Fujisan ascent this time? (Choose one answer for each item)

Item	Satisfied very much	Satisfied	Normal	Disappointed a little	Disappointed very much	I do not know
1. In its entirety, are you…?	5	4	3	2	1	0
2. Sunrise view and atmosphere	5	4	3	2	1	0
3. Service and atmosphere at mountain huts	5	4	3	2	1	0
4. Number and condition of toilets and other facilities	5	4	3	2	1	0

Q7 Please let us know what you found disappointing about Fujisan ascent this time, if any?

◎ About Fujisan ascent this time

Q8 How did you make an ascent of Fujisan this time?

Where did you start ascent?		1. Fujinomiya 5th Station 2. Gotemba 5th Station 3. Subashiri 5th Station 4. Yoshida 5th Station 5. Yoshida (below 5th Station) 6. Other（ ）
When did you start?	Day	1. The day before yesterday 2. Yesterday 3. Today 4. Other（ ）
	Time	Time of passing 5th Station：（ am • pm ）_____hours_____minutes
Did you stay at a mountain hut?		1. Yes （_____nights） 2. No
Did you reach the summit?		1. Yes:（ am • pm ）_____hours_____minutes 2. No: I turned back near_____Station）→reason（_____）
Did you see sunrise?		1. Yes⇒Where?: Mountaintop • Ascending route • In front of a mountain hut • Other（ ） 2. No
Did you use a guide?		1. Yes 2. No
How many times have you climbed Fujisan?		1. 1st time 2. 2 or 3 times 3. 4 to 9 times 4. 10 to 19 times 5. 20 times or more

(1) Did you check the congestion forecast calendar of Fujisan before you made ascent this time?

Did you check congestion forecast calendar	1. Yes → Where: Official web site for Mt. Fuji Climbing • Hand-out • Magazine • Other（ ） 2. No

(2) Did you change the date or time of climbing after you checked the information? (Answer this question if you answered "1. Yes" to Q9(1))

Did you change the date or time?	1. Yes → Content: Date • Time • Ascending route • Other（ ） 2. No

Q10 About yourself.

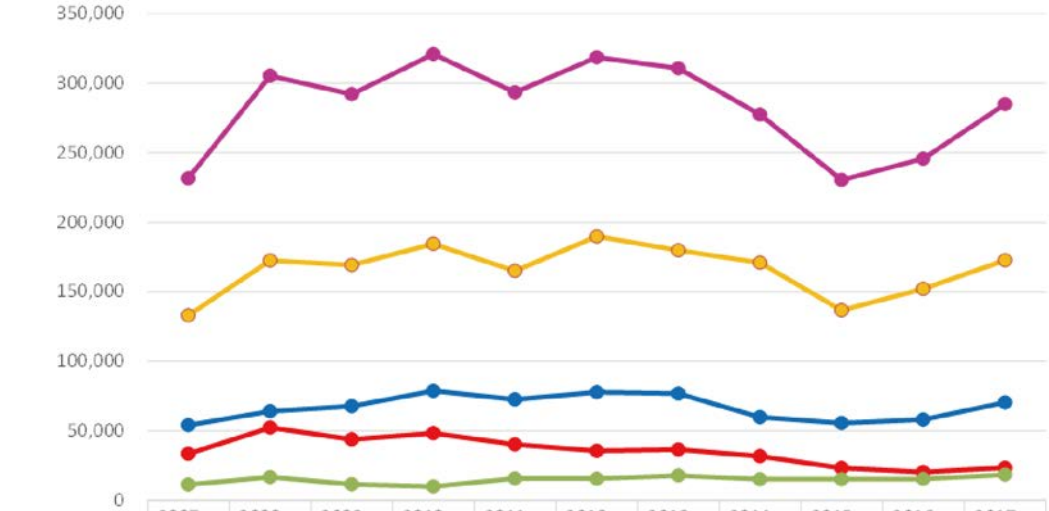
Gender	1. Male 2. Female	Age	In the（ ）s	Place of residence	（ ）Prefecture
Profession	1. Student 2. Company/government employee 3. Self-employed 4. Others（ ）				
Climbing experience	1. Beginner 2. 2 to 3 years 3. 4 to 9 years 4. 10 years or longer				

～Thank you for your cooperation～

(3) Summary of survey results

A. Change in the number of climbers over time

The total number of climbers of Fujisan and the number of climbers by ascending routes



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	231,532	305,350	292,058	320,975	293,416	318,565	310,721	277,494	230,348	245,675	284,862
Yoshida	132,980	172,369	169,217	184,320	165,038	189,771	179,720	170,947	136,587	151,969	172,657
Subashiri	33,394	52,323	43,861	48,196	40,179	35,577	36,508	31,626	23,122	20,277	23,475
Gotemba	11,157	16,624	11,390	9,845	15,758	15,462	17,709	15,150	15,123	15,339	18,411
Fujinomiya	54,001	64,034	67,590	78,614	72,441	77,755	76,784	59,771	55,516	58,090	70,319

Source: Ministry of the Environment

○ The number of climbers in the climbing season of 2017 was 284,862, a 16 % increase as compared to the previous year.

○ By ascending routes, the number of climbers who used the Fujinomiya ascending route rose to 70,321, a 21.1 % increase as compared to the previous year, which was the largest increase rate among the ascending routes. The second largest was the 20.0 % increase on the Gotemba ascending route (18,411 people), followed by the 15.8 % increase on the Subashiri ascending route (23,475 people) and the 13.6 % increase on the Yoshida ascending route (172,657 people).

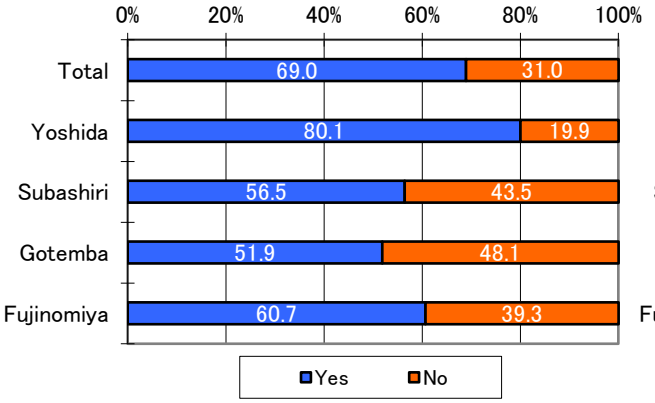
※ From 2007 to 2013, the climbing season was from 1 July to 31 August.
In 2014 and 2015, the climbing season was from 1 July to 14 September on the Yoshida ascending route and from 10 July to 10 September on the Subashiri, Gotemba, and Fujinomiya ascending routes.
In 2016 and 2017, the climbing season was from 1 July to 10 September on the Yoshida ascending route and from 10 July to 10 September on the Subashiri, Gotemba, and Fujinomiya ascending route.

B. Survey of climbers' perception

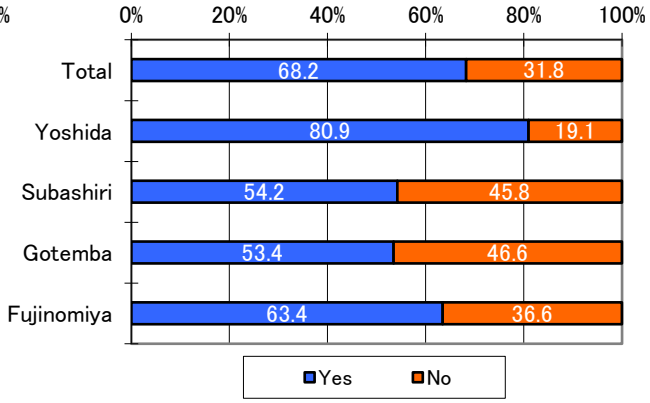
■Ratio of climbers who stayed overnight at a mountain hut among the climbers who greeted the sunrise near the mountaintop (Unit: %)

Did you stay overnight stay at a mountain hut?	Total			Yoshida			Subashiri			Gotemba			Fujinomiya		
	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
Yes	69.0	68.2	77.7	80.1	80.9	87.5	56.5	54.2	55.1	51.9	53.4	68.8	60.7	63.4	75.1
No	31.0	31.8	22.3	19.9	19.1	12.5	43.5	45.8	44.9	48.1	46. 6	31.2	39.3	36.6	24.9

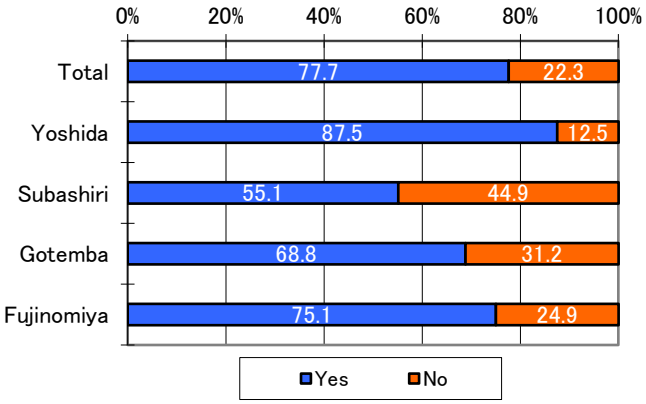
【2015】



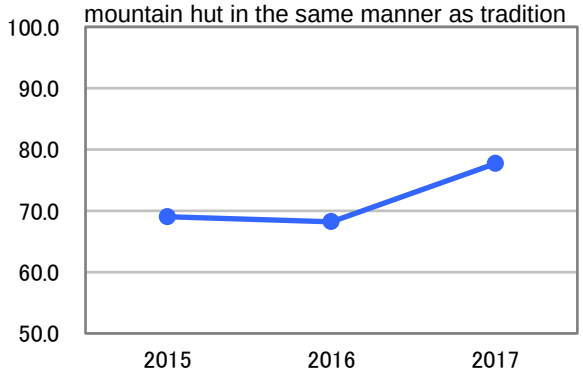
【2016】



【2017】



Ratio of climbers who greeted the sunrise near the mountaintop after taking a rest at a mountain hut in the same manner as tradition



○ The ratio of climbers who stayed overnight at a mountain hut among those who greeted the sunrise near the mountaintop was around 80 % in total, which was almost a 10 % increase as compared to 2017.

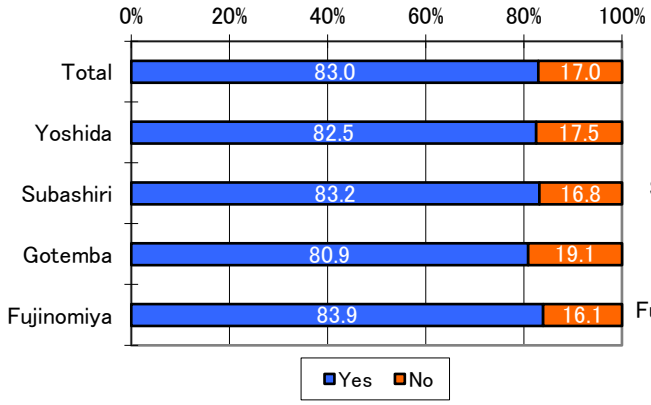
○ Particularly on the Yoshida ascending route, as many as 87.5 % answered they stayed overnight at a mountain hut, which was the highest ratio.

■Ratio of climbers who felt sacredness (Unit: %)

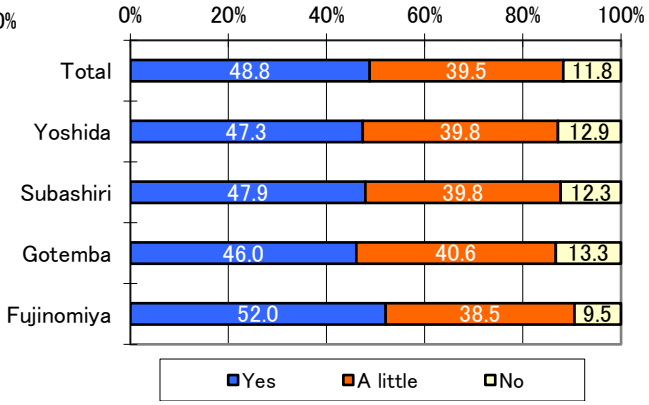
Did you feel sacredness?	Total			Yoshida			Subashiri			Gotemba			Fujinomiya		
	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
Yes	83.0	48.8	45.5	82.5	47.3	46.5	83.2	47.9	47.8	80.9	46.0	37.6	83.9	52.0	46.1
A little		39.5	40.4		39.8	39.6		39.8	40.0		40.6	43.3		38.5	40.6
No	17.0	11.8	14.1	17.5	12.9	13.9	16.8	12.3	12.3	19.1	13.3	19.1	16.1	9.5	13.3

※ The cells for “yes” and “a little” are combined for 2015, since the answer options were only yes and no in 2015. (Blank answers are not counted.)

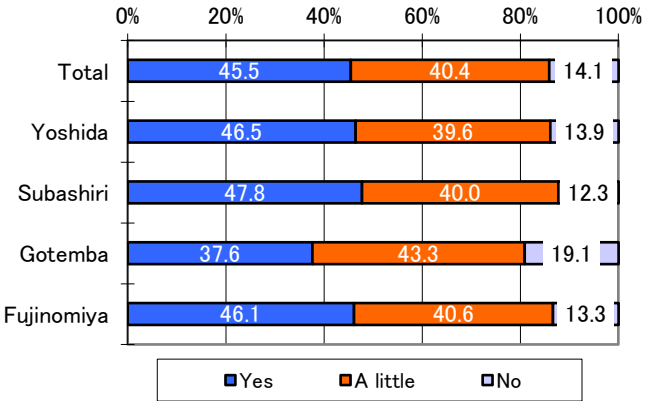
【2015】



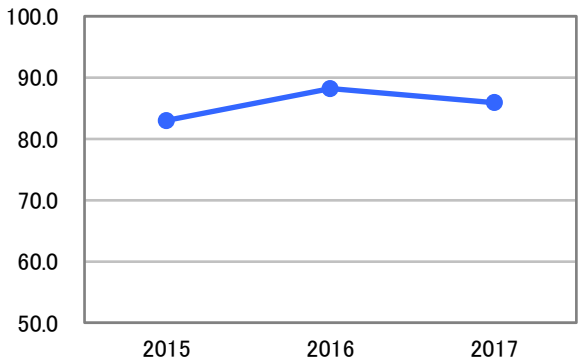
【2016】



【2017】



【Ratio of climbers who felt the sacredness of Fujisan】



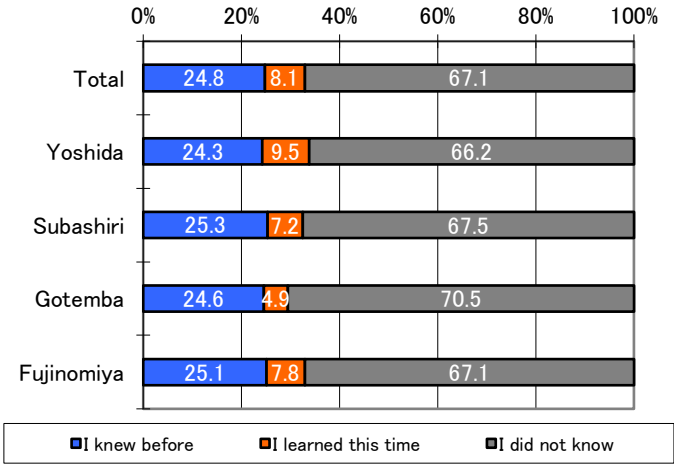
○ The ratio of those who answered that they felt the sacredness of Fujisan or they felt it a little exceeded 80 % in total. In other words, many climbers felt the sacredness of Fujisan. There wasn’t much difference between ascending routes.

■ Recognition of cultural traditions of Fujisan ascent (Unit: %)

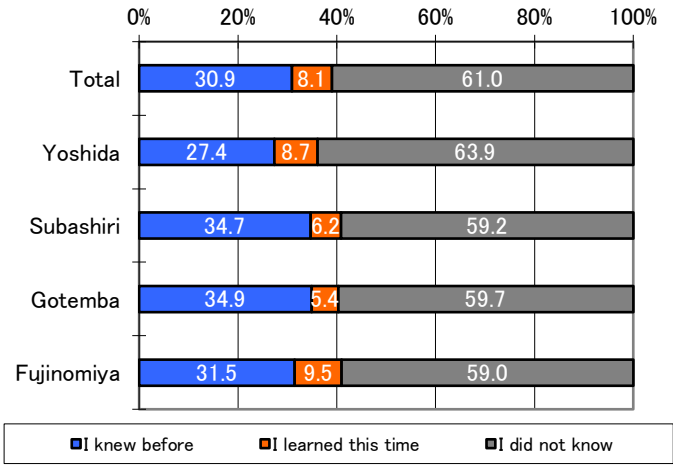
Did you know cultural traditions of Fujisan ascent?	Total			Yoshida			Subashiri			Gotemba			Fujinomiya		
	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
Yes. I knew them before.	24.8	30.9	36.5	24.3	27.4	31.5	25.3	34,7	38.7	24.6	34.9	41.2	25.1	31.5	42.5
I learned about them this time.	8.1	8.1	10.5	9.5	8.7	12.3	7.2	6.2	11.0	4.9	5.4	4.8	7.8	9.5	9.4
No.	67.1	61.0	53.0	66.2	63.9	56.2	67.5	59.2	50.4	70.5	59.7	53.9	67.1	59.0	48.1

(Blank answers are not counted.)

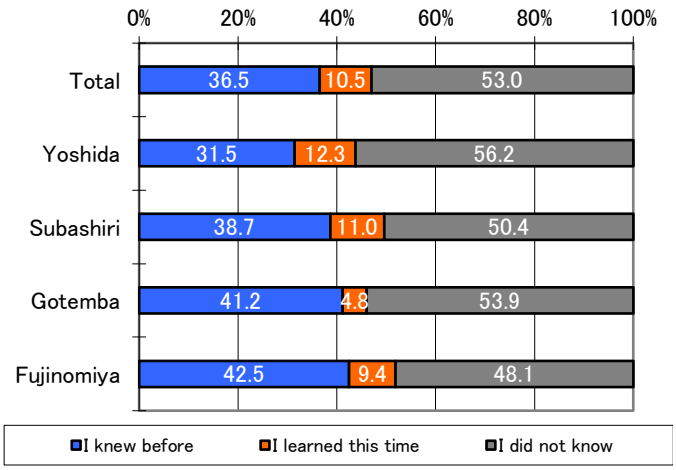
【2015】



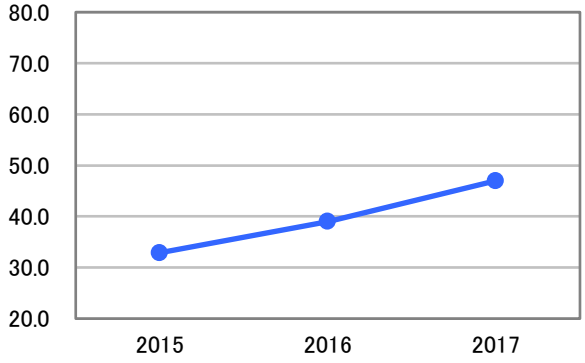
【2016】



【2017】



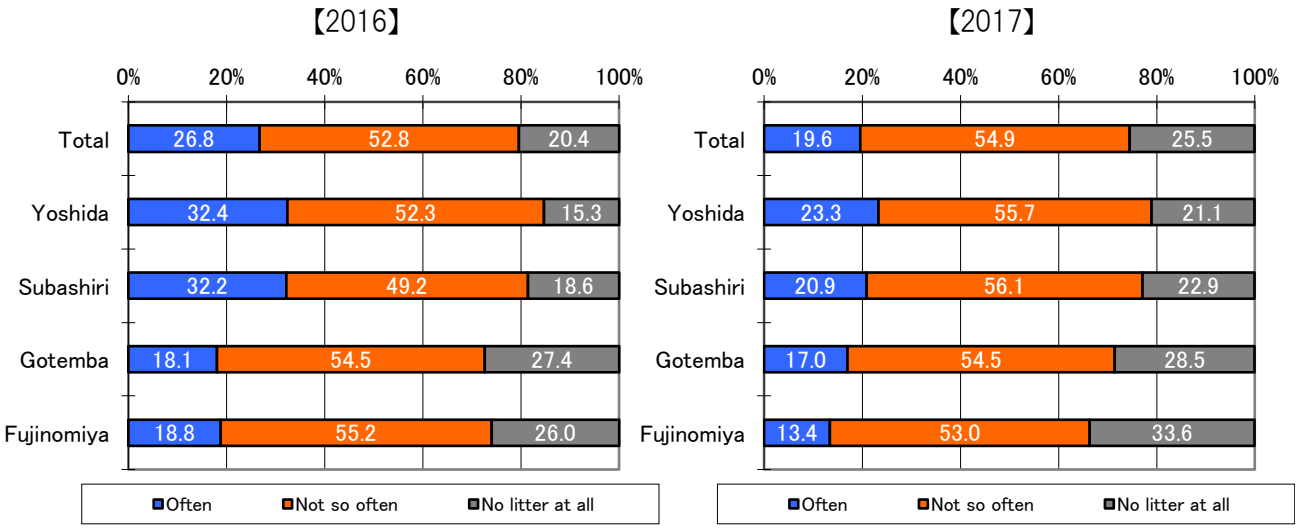
【Ratio of climbers who knew the cultural traditions of climbing Fujisan after visiting Shinto shrines, lakes, etc. in pilgrimage first】



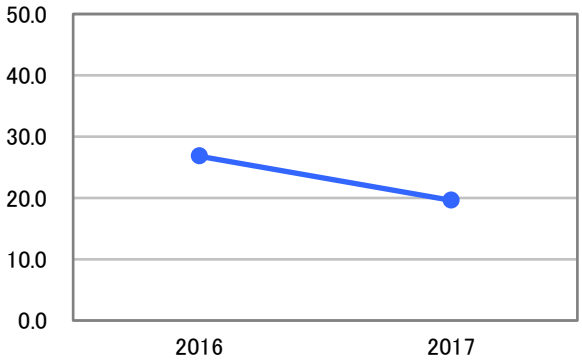
○ With regard to the recognition of cultural traditions of giving prayer and purifying oneself at a Shinto shrine etc. at the mountain foot before climbing Fujisan, more than 50 % answered that they did not know but the ratio of those who answered that they knew before or they learned about the cultural traditions this time is increasing year by year. The recognition and understanding about relations between Shinto shrines, sacred places, and the like on one hand and ascending routes on the other is growing.

■Ratio of climbers who saw litter often (Unit: %)

Did you see litter?	Total		Yoshida		Subashiri		Gotemba		Fujinomiya	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Often	26.8	19.6	32.4	23.3	32.2	20.9	18.1	17.0	18.8	13.4
Not so often	52.8	54.9	52.3	55.7	49.2	56.1	54.5	54.5	55.2	53.0
I did not see litter at all	20.4	25.5	15.3	21.1	18.6	22.9	27.4	28.5	26.0	33.6



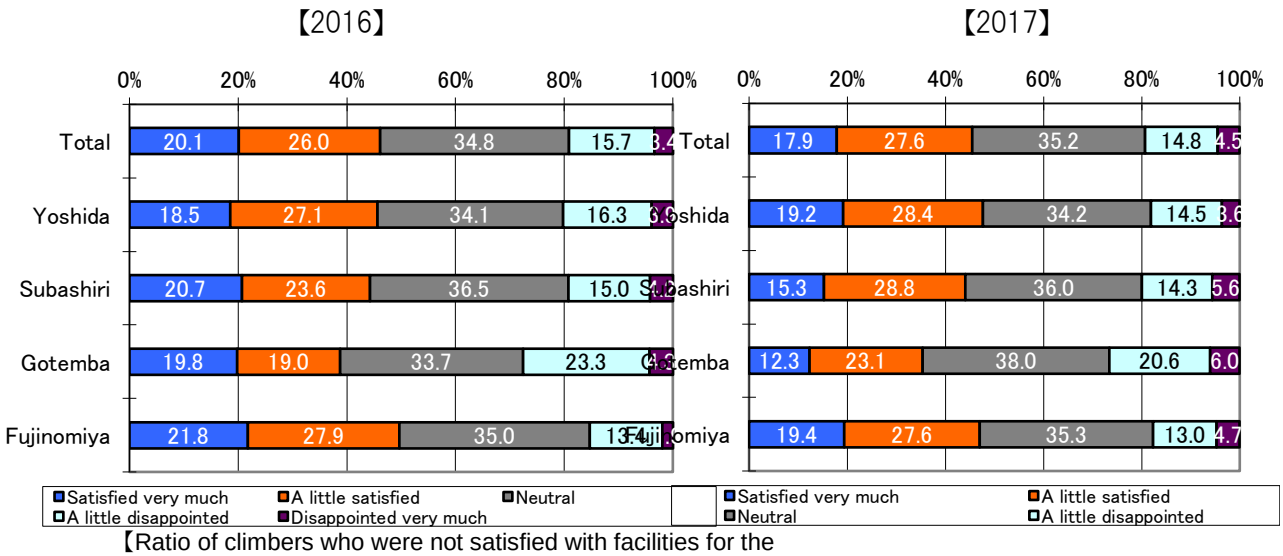
【Ratio of climbers who saw litter along ascending routes and near the mountaintop often】



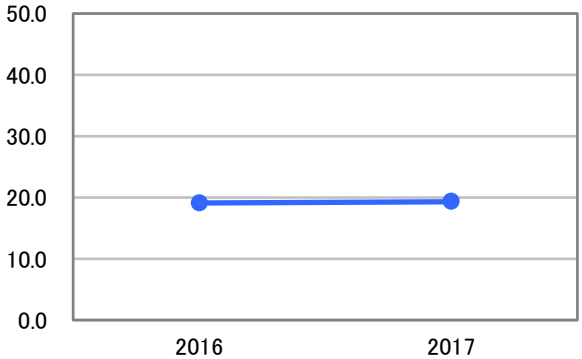
○ In response to the question asking if climbers saw litter along the ascending routes or near the mountaintop, 19.6 % answered that they saw litter often, while 54.9 % answered that they did not see litter so often and 25.5 % answered that they did not see litter at all in 2017. This indicates that litter is not so conspicuous.

■Ratio of climbers who were not satisfied with facilities for the convenience of climbers (toilets) (Unit: %)

Were you satisfied with the number of toilets and other facilities?	Total		Yoshida		Subashiri		Gotemba		Fujinomiya	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Satisfied very much	20.1	17.9	18.5	19.2	20.7	15.3	19.8	12.3	21.8	19.4
A little satisfied	26.0	27.6	27.1	28.4	23.6	28.8	19.0	23.1	27.9	27.6
Neutral	34.8	35.2	34.1	34.2	36.5	36.0	33.7	38.0	35.0	35.3
A little disappointed	15.7	14.8	16.3	14.5	15.0	14.3	23.3	20.6	13.4	13.0
Disappointed very much	3.4	4.5	3.9	3.6	4.2	5.6	4.3	6.0	1.9	4.7



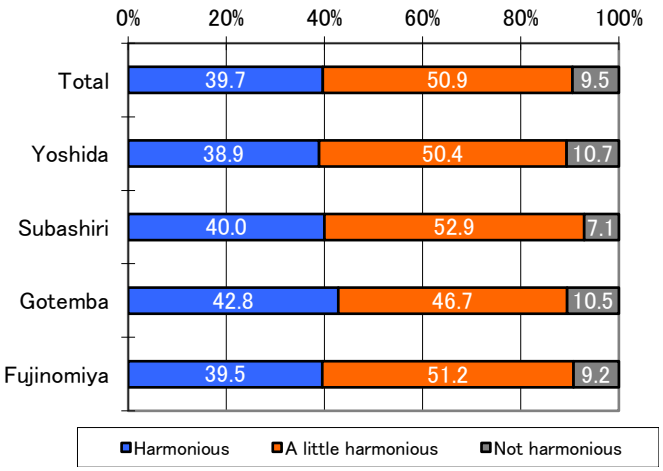
【Ratio of climbers who were not satisfied with facilities for the convenience of climbers such as toilets (respondents who chose “a little disappointed” and “disappointed very much”)】



○ With regard to the degree of satisfaction with the availability and condition of toilets, 45.5 % answered that they were satisfied very much or satisfied a little, while as many as 19.3 % answered that they were disappointed very much or disappointed a little.

<Information> ■ Ratio of climbers who felt that facilities for the convenience of climbers were harmonious with the natural environment (Unit: %)

Visual harmony	Total	Yoshida	Subashiri	Gotemba	Fujinomiya
	2016	2016	2016	2016	2016
Harmonious	39.7	38.9	40.0	42.8	39.5
A little harmonious	50.9	50.4	52.9	46.7	51.2
Not harmonious	9.5	10.7	7.1	10.5	9.2



C. Survey of the dynamics of climbers

a. Density of climbers

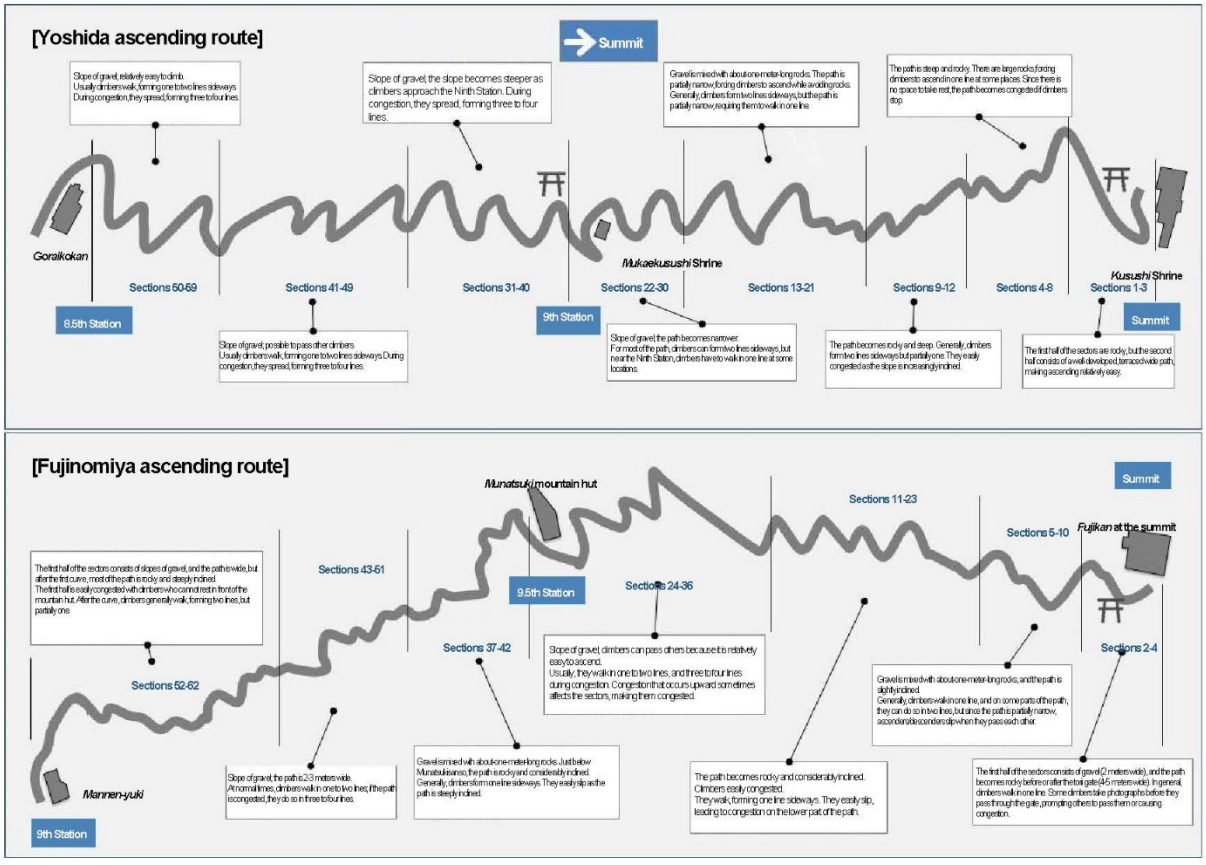
i Section number

- The data obtained with GPS loggers represent the locations (latitude, longitude, and altitude) of individual loggers.
- To analyze the status of congestion on the ascending routes, the data of GPS loggers need to be spatially differentiated. For this purpose, the ascending routes were divided into sections.
- The ascending routes were divided into sections of 20 m to 60 m and numbered.
- Based on the results of field surveys, the characteristics of these sections were added to the map.

Section numbers of ascending routes

Ascending route	Sections
Fujinomiya route	62 sections from the Mannenyuki mountain hut to the mountaintop.
Yoshida route	59 sections from the Goraikokan mountain hut to the mountaintop.

Location and number of measurement sections



ii Results of the survey of density by section and time (FY2017)

Based on the data of GPS loggers, the number of climbers per section was estimated and the density of climbers was calculated by dividing the estimated number by the area of each section.

The density of climbers by time and section (immediately below the mountaintop of Fujinomiya ascending route)

8/5 (Sat.) The number of people who started ascent the previous day: 1,575.

ID	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00
2	0.00	0.00	0.22	0.44	0.25	0.08	2.80	0.59	1.38	1.24	1.21
3	0.00	0.01	0.05	0.13	0.14	0.06	0.04	0.31	0.46	0.25	1.40
5	0.00	0.03	0.03	0.22	0.51	0.13	0.03	0.36	0.83	0.23	0.49
6	0.00	0.05	0.14	0.38	0.57	0.25	0.09	0.76	0.98	0.27	0.66
8	0.00	0.04	0.00	0.25	0.40	0.21	0.01	0.07	0.38	0.17	0.14
9	0.00	0.00	0.05	0.07	0.08	0.06	0.03	0.19	0.36	0.04	0.22
10	0.00	0.03	0.06	0.22	0.17	0.02	0.01	0.37	0.26	0.20	0.06
12	0.00	0.07	0.16	0.35	0.71	0.21	0.02	0.80	0.27	0.70	0.48
13	0.00	0.00	0.06	0.26	0.51	0.17	0.01	0.13	0.27	0.22	0.15
15	0.00	0.08	0.17	0.28	0.73	0.06	0.01	0.88	0.17	0.65	0.38
17	0.00	0.13	0.29	0.51	1.05	0.04	0.01	0.37	0.52	0.24	0.17
20	0.00	0.04	0.24	0.65	0.25	0.00	0.02	0.04	0.04	0.30	0.14
22	0.00	0.10	0.23	0.51	0.31	0.00	0.30	0.24	0.29	0.32	0.10
24	0.01	0.01	0.10	0.11	0.11	0.01	0.05	0.06	0.02	0.05	0.02
25	0.02	0.04	0.19	0.57	0.10	0.03	0.09	0.15	0.03	0.11	0.05
28	0.00	0.05	0.15	0.36	0.05	0.04	0.12	0.23	0.16	0.20	0.13
29	0.04	0.08	0.19	0.09	0.00	0.00	0.42	0.09	0.13	0.24	0.09
32	0.00	0.17	0.09	0.37	0.01	0.04	0.00	0.09	0.06	0.09	0.06
34	0.00	0.35	0.06	0.43	0.00	0.02	0.17	0.22	0.17	0.45	0.38
37	0.17	0.24	0.09	0.31	0.74	1.36	0.57	0.49	1.31	0.24	0.79
39	0.26	0.17	0.62	0.38	0.98	0.09	0.73	0.04	0.18	0.18	0.80
40	0.04	0.01	0.41	0.17	0.20	0.00	0.04	0.06	0.22	0.04	0.06
42	0.03	0.04	0.48	0.21	0.17	0.00	0.22	0.04	0.12	0.06	0.19
43	0.06	0.07	0.82	0.36	0.32	0.00	0.27	0.07	0.22	0.17	0.29
44	0.19	0.10	1.30	0.10	0.44	0.00	0.16	0.03	0.27	0.22	0.24
46	0.17	0.07	1.11	0.34	0.90	0.00	0.05	0.13	0.35	0.37	0.43
48	0.09	0.15	0.89	0.00	0.10	0.00	0.39	0.05	0.27	0.19	0.18
49	0.02	0.37	0.43	0.00	0.33	0.00	0.01	0.07	0.10	0.09	0.07
51	0.02	0.22	0.11	0.00	0.00	0.00	0.00	0.01	0.12	0.10	0.08
52	0.06	0.18	0.38	0.00	0.25	0.00	0.32	0.05	0.13	0.12	0.11
53	0.06	0.25	0.13	0.06	0.30	0.00	0.42	0.12	0.16	0.25	0.15
54	0.06	0.53	0.30	0.48	0.20	0.00	0.14	0.31	0.25	0.50	0.40
55	0.12	0.33	0.15	0.26	0.03	0.00	0.14	0.12	0.08	0.24	0.21
56	0.04	0.15	0.07	0.51	0.02	0.00	0.30	0.13	0.06	0.20	0.27
57	0.03	0.51	0.50	1.35	0.00	0.00	0.18	0.01	0.05	0.19	0.12
58	0.11	0.33	0.12	0.26	0.03	0.11	0.04	0.15	0.10	0.31	0.16
59	0.02	0.34	0.09	0.25	0.02	0.08	0.04	0.08	0.12	0.12	0.18
61	0.07	1.07	0.03	0.31	0.02	0.38	0.04	0.05	0.13	0.56	0.13
62	0.14	0.76	0.01	0.18	0.01	0.06	0.11	0.03	0.23	0.29	0.19

8/6 (Sun.) The number of people who started ascent the previous day: 2,290.

ID	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00
2	0.00	0.17	0.56	0.31	0.39	0.75	2.54	2.07	1.49	1.52	2.46
3	0.00	0.12	0.09	0.35	0.14	0.25	0.21	0.19	0.38	1.17	0.36
5	0.00	1.04	0.35	0.43	0.21	0.50	0.31	0.42	1.10	0.96	0.52
6	0.00	0.29	0.39	0.63	0.72	0.53	0.36	0.13	0.82	0.50	0.33
8	0.00	0.25	0.37	0.81	0.67	0.50	0.19	0.31	0.44	0.31	0.28
9	0.00	0.11	0.19	0.16	0.20	0.12	0.05	0.02	0.21	0.08	0.04
10	0.00	0.36	0.16	0.82	0.43	0.45	0.16	0.13	0.76	0.29	0.27
12	0.24	0.97	1.15	0.65	0.65	0.39	0.04	0.26	0.54	0.88	0.37
13	0.00	0.10	0.38	0.71	0.51	0.27	0.03	0.15	0.27	0.25	0.26
15	0.00	0.78	1.02	0.72	0.78	0.29	0.03	0.85	0.39	0.43	0.59
17	0.07	0.28	1.54	1.24	0.95	0.31	0.06	0.60	0.32	0.26	0.72
20	0.99	0.15	0.50	0.85	0.37	0.01	0.02	0.95	0.26	0.22	0.13
22	0.03	0.07	0.38	0.39	0.45	0.00	0.18	0.12	0.13	0.52	0.19
24	0.17	0.30	0.05	0.10	0.14	0.00	0.05	0.04	0.03	0.20	0.05
25	0.16	0.13	0.37	0.33	0.24	0.00	0.13	0.07	0.03	0.14	0.11
28	0.22	0.05	0.51	0.22	0.21	0.00	0.19	0.03	0.62	0.27	0.20
29	0.34	0.12	0.29	0.20	0.26	0.00	0.19	0.08	0.08	0.38	0.27
32	0.05	0.10	0.50	0.65	0.80	0.77	0.22	0.02	0.05	0.12	0.09
34	0.15	0.48	1.41	0.36	0.12	0.00	0.51	0.02	0.05	0.31	0.36
37	0.70	0.35	0.48	1.48	0.35	0.53	0.03	0.03	0.17	1.56	0.74
39	0.76	0.50	0.92	1.71	0.10	0.28	0.10	0.03	0.31	0.37	0.70
40	0.15	0.52	0.66	0.47	0.06	0.03	0.04	0.01	0.08	0.13	0.15
42	0.11	0.25	0.63	0.56	0.06	0.00	0.05	0.02	0.13	0.08	0.21
43	0.28	0.64	1.49	0.75	0.27	0.00	0.06	0.04	0.35	0.17	0.48
44	0.17	0.46	1.31	0.71	0.13	0.00	0.04	0.02	0.56	0.03	0.69
46	0.52	0.62	1.35	0.78	0.08	0.00	0.11	0.05	0.25	0.18	0.89
48	0.09	0.81	0.68	0.23	0.17	0.00	0.05	0.15	0.27	0.11	0.27
49	0.06	0.49	0.33	0.16	0.00	0.00	0.05	0.01	0.09	0.03	0.21
51	0.08	1.34	0.46	0.03	0.31	0.00	0.00	0.04	0.09	0.05	0.20
52	0.06	0.77	0.77	0.08	0.08	0.02	0.01	0.02	0.26	0.06	0.47
53	0.06	0.41	0.45	0.00	0.16	0.03	0.00	0.02	0.46	0.10	0.40
54	0.30	0.50	0.63	0.14	0.07	0.10	0.00	0.07	0.27	0.12	0.70
55	0.36	1.91	0.38	0.14	0.00	0.03	0.00	0.03	0.21	0.05	0.49
56	0.42	0.45	0.58	0.10	0.00	0.02	0.00	0.02	0.17	0.15	0.23
57	0.07	0.19	0.08	0.11	0.00	0.00	0.00	0.06	0.22	0.19	0.22
58	0.45	0.38	0.29	0.12	0.00	0.04	0.00	0.02	0.15	0.09	0.31
59	0.48	0.54	0.30	0.23	0.00	0.02	0.00	0.03	0.06	0.11	0.19
61	2.25	1.10	0.29	0.02	0.00	0.05	0.00	0.03	0.45	0.17	0.34
62	1.71	0.67	0.11	0.00	0.00	0.01	0.00	0.56	0.98	0.30	0.38

8/12 (Sat.) The number of people who started ascent the previous day: 1,726.

ID	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00
2	0.00	0.01	0.07	0.00	0.20	0.33	0.36	0.98	0.45	0.62	0.80
3	0.00	0.00	0.02	0.00	0.05	0.17	0.04	0.29	0.33	0.21	0.24
5	0.00	0.06	0.04	0.00	0.23	0.75	0.91	0.53	0.33	0.31	0.17
6	0.00	0.00	0.05	0.00	0.14	0.48	0.10	0.42	0.30	0.31	0.22
8	0.00	0.00	0.01	0.03	0.12	0.10	0.02	0.27	0.19	0.27	0.13
9	0.00	0.01	0.01	0.02	0.00	0.07	0.06	0.10	0.06	0.06	0.08
10	0.00	0.06	0.02	0.03	0.02	0.25	0.06	0.31	0.17	0.20	0.14
12	0.00	0.04	0.02	0.08	0.29	0.26	0.23	0.56	0.27	0.16	0.22
13	0.00	0.03	0.03	0.11	0.43	0.06	0.03	0.27	0.13	0.11	0.12
15	0.00	0.07	0.02	0.14	0.58	0.07	0.17	0.53	0.22	0.30	0.28
17	0.03	0.05	0.02	0.21	0.24	0.16	0.21	0.46	0.26	0.22	0.16
20	0.03	0.00	0.00	0.56	0.10	0.10	0.06	0.10	0.62	0.21	0.04
22	0.03	0.00	0.04	0.13	0.22	0.03	0.13	0.18	0.20	0.16	0.09
24	0.00	0.01	0.01	0.03	0.05	0.02	0.03	0.05	0.07	0.03	0.03
25	0.02	0.01	0.02	0.20	0.10	0.06	0.09	0.11	0.18	0.06	0.06
28	0.03	0.01	0.04	0.12	0.04	0.05	0.09	0.21	0.20	0.08	0.09
29	0.04	0.00	0.03	0.13	0.06	0.05	0.11	0.15	0.15	0.11	0.07
32	0.00	0.00	0.00	0.23	0.02	0.02	0.06	0.15	0.17	0.07	0.04
34	0.01	0.02	0.00	0.23	0.02	0.03	0.14	0.07	0.12	0.04	0.05
37	0.09	0.00	0.42	0.36	0.35	0.02	0.33	0.19	0.85	0.31	0.28
39	0.08	0.03	0.24	0.41	0.14	0.00	0.39	0.21	0.59	0.27	0.10
40	0.01	0.01	0.03	0.13	0.02	0.00	0.08	0.03	0.09	0.04	0.03
42	0.00	0.01	0.10	0.14	0.02	0.02	0.18	0.04	0.18	0.07	0.05
43	0.00	0.00	0.18	0.21	0.05	0.03	0.25	0.13	0.31	0.18	0.10
44	0.00	0.14	0.33	0.02	0.04	0.00	0.37	0.18	0.23	0.26	0.13
46	0.00	0.02	0.13	0.44	0.03	0.04	0.26	0.15	0.31	0.24	0.20
48	0.03	0.00	0.32	0.03	0.01	0.05	0.33	0.16	0.09	0.16	0.08
49	0.00	0.00	0.09	0.02	0.02	0.01	0.13	0.04	0.07	0.08	0.04
51	0.00	0.00	0.56	0.04	0.02	0.06	0.13	0.14	0.08	0.53	0.03
52	0.01	0.27	0.66	0.01	0.02	0.10	0.30	0.06	0.19	0.11	0.12
53	0.01	0.09	0.06	0.01	0.03	0.06	0.08	0.13	0.17	0.23	0.04
54	0.03	0.09	0.31	0.03	0.04	0.08	0.18	0.10	0.29	0.23	0.19
55	0.03	0.04	0.11	0.01	0.03	0.14	0.07	0.14	0.13	0.14	0.06
56	0.01	0.09	0.46	0.01	0.06	0.11	0.04	0.06	0.07	0.22	0.08
57	0.01	0.03	0.05	0.01	0.03	0.15	0.03	0.07	0.12	0.12	0.04
58	0.02	0.09	0.16	0.01	0.04	0.10	0.05	0.14	0.07	0.10	0.03
59	0.01	0.06	0.08	0.00	0.03	0.10	0.06	0.11	0.09	0.09	0.06
61	0.01	0.08	0.18	0.00	0.03	0.09	0.02	0.06	0.05	0.08	0.10
62	0.01	0.05	0.06	0.00	0.02	0.25	0.02	0.04	0.05	0.25	0.08

8/13 (Sun.) The number of people who started ascent the previous day: 1,919.

ID	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00
2	0.07	0.72	0.84	0.33	0.50	0.20	0.67	1.65	0.98	0.77	0.63
3	0.03	0.19	0.45	0.25	0.11	0.11	0.74	0.36	0.30	0.37	0.17
5	0.03	0.26	0.42	1.15	0.26	0.79	1.29	0.29	0.57	0.76	0.05
6	0.09	0.23	0.23	0.43	0.32	0.23	0.53	0.56	0.24	0.24	0.11
8	0.17	0.05	0.39	0.42	0.34	0.56	1.15	0.13	0.39	0.73	0.07
9	0.03	0.29	0.35	0.28	0.17	0.02	0.19	0.03	0.22	0.26	0.02
10	0.08	0.13	0.07	0.07	0.21	0.22	0.73	0.12	0.14	0.18	0.03
12	0.03	0.15	0.52	0.23	0.06	0.00	0.34	0.06	0.22	0.11	0.05
13	0.08	0.71	0.88	0.68	0.21	0.02	0.47	0.07	0.55	0.64	0.04
15	0.23	0.66	0.46	0.70	0.39	0.13	0.58	0.21	0.51	1.05	0.10
17	0.44	0.67	1.23	0.78	0.68	0.34	1.49	0.34	0.38	1.41	0.11
20	0.33	0.18	0.65	0.43	0.61	0.41	0.11	0.57	1.28	0.59	0.08
22	0.17	0.31	0.77	0.28	0.33	0.28	0.11	0.48	0.24	0.46	0.07
24	0.10	0.09	0.08	0.17	0.04	0.06	0.01	0.10	0.03	0.11	0.05
25	0.16	0.20	0.12	0.14	0.09	0.17	0.04	0.26	0.13	0.24	0.16
28	0.15	0.12	0.12	0.20	0.00	0.24	0.06	0.89	0.22	0.28	0.53
29	0.23	0.26	0.17	0.10	0.16	0.04	0.03	0.12	0.26	0.10	0.43
32	0.03	0.07	0.08	0.16	0.00	0.11	0.03	0.30	0.10	0.03	0.22
34	0.29	0.56	0.21	0.14	0.15	0.12	0.04	0.08	0.16	0.04	0.09
37	0.85	0.83	0.55	0.20	0.25	0.42	0.26	1.64	0.56	0.49	0.98
39	0.69	1.00	0.88	0.76	0.16	0.03	0.18	0.85	0.36	0.30	0.32
40	0.14	0.38	0.24	0.32	0.02	0.02	0.02	0.14	0.03	0.26	0.23
42	0.12	0.60	0.39	0.24	0.06	0.05	0.04	0.22	0.08	0.09	0.15
43	0.31	0.43	0.88	0.98	0.03	0.03	0.10	0.42	0.13	0.13	0.17
44	0.27	0.91	0.47	1.96	0.00	0.00	0.23	0.89	0.21	0.18	0.75
46	0.94	0.96	0.94	0.85	0.00	0.12	0.03	0.76	0.16	0.23	0.21
48	0.19	0.37	0.39	0.53	0.00	0.09	0.04	0.66	0.16	0.15	0.09
49	0.34	0.66	0.69	0.94	0.00	0.15	0.07	1.17	0.28	0.27	0.16
51	0.05	0.74	0.05	0.12	0.00	0.00	0.02	0.25	0.03	0.08	0.09
52	0.10	0.28	0.19	0.51	0.00	0.00	0.04	0.42	0.38	0.18	0.19
53	0.18	0.20	0.45	0.19	0.10	0.00	0.03	0.64	0.35	0.08	0.14
54	0.38	0.37	0.69	0.05	0.00	0.00	0.04	0.29	0.54	0.15	0.15
55	0.16	0.17	0.59	0.04	0.02	0.01	0.01	0.14	0.60	0.61	0.24
56	0.26	0.17	0.31	0.01	0.07	0.01	0.03	0.09	0.73	0.17	0.47
57	0.09	0.04	0.45	0.05	0.04	0.00	0.00	0.07	0.46	0.15	0.12
58	0.18	0.17	0.69	0.00	0.00	0.01	0.01	0.08	0.45	0.21	0.18
59	0.15	0.16	0.26	0.00	0.02	0.02	0.00	0.07	0.41	0.14	0.19
61	0.24	0.37	0.55	0.01	0.00	0.01	0.00	0.04	0.35	0.11	0.63
62	0.11	0.86	0.66	0.01	0.00	0.04	0.00	0.04	0.30	0.07	1.75

- ○ The following tables show the daily data of the GPS logger survey that was carried out in 2017. The density of climbers is shown for each section between the Mannen-yuki mountain hut to the mountaintop of the Fujinomiya ascending route.
- ○ The sections for which it is not possible to measure the accurate width, such as curves and spaces in front of mountain huts, are excluded.
- ○ On 8/5 (Sat.), the density increased in a series of sections immediately below the mountaintop after sunrise. In other sections, there were areas of high density fragmentarily but not in a series.
- ○ On 8/6 (Sun.), very high density was observed for a long time immediately below the mountaintop after sunrise. Also, around 3 am, very high density occurred in a series of sections around section 44.

○ On 8/12 (Sat.), there was a heavy rain from midnight to around 4 am. Therefore, there was no area where the density of climbers increased before or after sunrise.
○ On 8/13 (Sun.), high density was observed immediately below the mountaintop after sunrise like 8/5 (Sat.). Also, high density was observed around section 44 but not in a series.

The density of climbers by time and section (immediately below the mountaintop of Yoshida ascending route)

8/5 (Sat.) The number of people who started ascent the previous day: 2,617.

ID	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00
2	0.20	0.26	0.04	0.22	0.69	1.26	1.11	2.41	0.83	0.11	0.86
4	0.27	0.06	0.00	0.20	1.48	0.00	0.43	0.00	0.41	0.30	0.22
5	0.07	0.07	0.05	0.43	0.28	0.00	0.00	0.00	0.05	0.00	0.08
6	0.16	0.06	0.03	0.13	0.31	0.00	0.13	0.00	0.03	0.04	0.37
7	0.65	0.04	0.05	0.25	0.48	0.00	0.03	2.16	0.61	0.12	0.49
8	0.08	0.05	0.03	0.27	0.08	0.00	0.19	0.30	0.16	0.02	0.43
9	0.34	0.10	0.13	0.12	1.09	0.00	0.15	0.67	0.15	0.20	0.66
10	0.09	0.06	0.00	0.37	0.70	0.00	0.08	0.84	0.21	0.25	0.39
11	0.26	0.10	0.00	0.30	0.38	0.00	1.57	0.19	0.40	0.09	0.67
13	0.22	0.06	0.10	0.32	1.20	0.00	0.16	0.16	0.06	0.17	0.59
15	0.63	0.03	0.17	0.97	0.19	1.23	3.43	0.25	0.01	0.05	0.46
17	0.17	0.03	0.26	0.98	0.43	0.28	0.04	0.17	0.03	0.06	0.13
19	0.02	0.04	0.53	0.93	0.00	1.06	0.05	0.02	0.03	0.05	0.06
21	0.00	0.01	0.15	0.39	0.00	0.27	0.04	0.02	0.05	0.37	0.54
23	0.01	0.03	0.38	0.17	0.00	0.00	0.02	0.01	0.01	0.06	0.03
25	0.02	0.16	0.28	0.62	0.37	0.03	0.01	0.01	0.02	0.09	0.06
27	0.10	0.03	0.59	0.43	1.59	0.02	0.01	0.95	0.07	0.33	0.65
30	0.02	0.04	0.51	0.22	0.45	0.00	0.00	0.05	0.07	0.09	0.02
32	0.02	0.02	0.28	0.44	0.00	0.00	0.02	0.06	0.02	0.03	0.01
34	0.05	0.16	0.49	0.15	0.00	0.02	0.01	0.04	0.04	0.05	0.01
36	0.01	0.00	0.11	0.05	0.00	0.02	0.04	0.02	0.03	0.02	0.02
38	0.03	0.04	0.60	0.00	0.00	0.08	0.03	0.00	0.07	0.01	0.01
40	0.02	0.12	0.33	0.06	0.00	0.02	0.07	0.02	0.02	1.00	0.12
42	0.02	0.09	0.15	0.30	0.00	0.04	0.03	0.01	0.01	0.01	0.00
44	0.13	0.51	0.34	0.34	0.00	0.02	0.06	0.03	0.22	0.08	0.03
47	0.28	0.34	0.55	0.00	0.00	0.04	0.03	0.01	0.11	0.03	0.01
48	0.37	0.24	0.26	0.00	0.00	0.06	0.06	0.02	0.23	0.08	0.00
50	0.48	0.52	0.44	0.00	0.00	0.02	0.14	0.01	0.09	0.03	0.01
52	0.44	0.36	0.31	0.00	0.00	0.10	0.05	0.02	0.05	0.05	0.03
56	1.18	0.19	0.09	0.00	0.02	0.03	0.01	0.08	0.05	0.01	0.02
58	1.63	0.39	0.32	0.00	0.26	0.05	0.09	0.05	0.15	0.74	0.28

8/6 (Sun.) The number of people who started ascent the previous day: 4,066.

ID	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00
2	0.01	0.22	0.00	0.10	0.75	2.46	1.10	0.12	0.00	0.06	0.00
4	0.02	0.01	0.00	0.51	0.66	1.81	0.27	0.10	0.17	0.12	0.09
5	0.01	0.01	0.00	0.11	0.27	0.91	0.09	0.00	0.00	0.30	0.00
6	0.00	0.00	0.00	0.09	0.19	0.55	0.34	0.20	0.44	0.10	0.00
7	0.00	0.01	0.01	0.32	0.25	2.72	0.28	0.68	0.14	0.35	0.12
8	0.00	0.00	0.00	0.53	0.81	0.67	0.87	0.32	0.00	0.06	0.00
9	0.00	0.00	0.00	0.99	0.60	2.17	0.27	0.58	0.00	0.08	0.07
10	0.00	0.00	0.00	0.68	0.84	1.07	0.16	0.18	0.06	0.02	0.00
11	0.00	0.00	0.00	0.47	0.37	1.69	0.50	0.30	0.07	0.02	0.06
13	0.00	0.00	0.00	0.22	0.67	0.95	0.12	0.09	0.06	0.05	0.10
15	0.06	0.02	0.44	0.35	2.38	1.21	0.10	0.08	0.04	0.01	0.01
17	0.10	0.28	1.30	1.17	1.23	1.89	0.01	0.43	0.05	0.02	0.02
19	0.57	0.57	0.59	0.33	0.41	0.59	0.20	0.10	0.05	0.01	0.02
21	0.11	0.35	1.10	0.96	0.62	0.36	0.01	0.00	0.03	0.01	0.01
23	0.07	0.40	0.37	0.29	0.41	0.09	0.29	0.00	0.15	0.00	0.03
25	0.35	0.64	2.01	0.89	1.43	0.07	0.14	0.00	0.01	0.03	0.01
27	0.21	0.89	1.15	0.92	0.56	0.40	0.52	0.00	0.08	0.02	0.27
30	0.17	0.13	0.96	0.39	1.02	0.00	0.00	0.00	0.02	0.01	0.39
32	0.12	0.12	0.51	0.39	1.68	0.00	0.00	0.00	0.05	0.01	0.10
34	0.07	0.15	0.28	0.52	0.71	0.07	0.10	0.00	0.01	0.00	0.21
36	0.04	0.02	1.37	0.65	0.34	0.06	0.00	0.02	0.01	0.00	0.05
38	0.06	0.03	0.48	0.88	0.55	0.16	0.00	0.00	0.00	0.07	0.28
40	0.07	0.04	0.98	0.53	0.05	0.06	0.00	0.09	0.01	0.10	0.04
42	0.60	0.81	0.38	0.59	0.00	0.46	0.00	0.00	0.00	0.09	0.00
44	0.85	0.39	0.35	0.64	0.00	0.24	0.00	0.02	0.01	0.10	0.08
47	0.20	1.24	0.35	0.06	0.17	0.00	0.00	0.01	0.01	0.03	0.01
48	0.82	0.84	0.57	0.27	0.36	0.00	0.00	0.02	0.01	0.13	0.16
50	0.38	0.33	0.31	0.32	0.42	0.00	0.00	0.02	0.00	0.00	0.13
52	0.78	0.72	0.53	0.48	0.01	0.00	0.00	0.02	0.25	0.14	0.03
56	1.16	0.33	0.36	0.11	0.00	0.00	0.00	0.02	0.02	0.03	0.10
58	0.49	0.42	0.34	0.03	0.00	0.00	0.00	0.04	0.52	0.14	0.54

8/12 (Sat.) The number of people who started ascent the previous day: 3,786.

ID	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00
2	0.17	0.22	0.03	0.19	0.17	0.32	0.28	0.60	0.21	0.03	0.21
4	0.27	0.05	0.00	0.20	1.35	0.00	0.43	0.00	0.40	0.30	0.22
5	0.07	0.07	0.05	0.42	0.28	0.00	0.00	0.00	0.05	0.00	0.08
6	0.15	0.06	0.03	0.13	0.30	0.00	0.12	0.00	0.03	0.04	0.36
7	0.63	0.04	0.05	0.25	0.47	0.00	0.03	0.71	0.59	0.11	0.48
8	0.07	0.05	0.03	0.26	0.08	0.00	0.19	0.29	0.16	0.02	0.42
9	0.33	0.10	0.12	0.11	1.06	0.00	0.14	0.66	0.15	0.20	0.64
10	0.09	0.06	0.00	0.36	0.69	0.00	0.08	0.82	0.20	0.24	0.38
11	0.25	0.10	0.00	0.30	0.37	0.00	1.24	0.18	0.39	0.09	0.66
13	0.21	0.05	0.10	0.31	1.17	0.00	0.16	0.16	0.06	0.17	0.58
15	0.62	0.03	0.17	0.95	0.19	1.21	3.35	0.24	0.01	0.05	0.45
17	0.17	0.03	0.25	0.96	0.42	0.27	0.04	0.17	0.03	0.06	0.13
19	0.02	0.04	0.52	0.91	0.00	1.04	0.05	0.02	0.03	0.05	0.06
21	0.00	0.01	0.14	0.38	0.00	0.27	0.04	0.02	0.05	0.36	0.53
23	0.01	0.03	0.37	0.17	0.00	0.00	0.02	0.01	0.01	0.06	0.03
25	0.02	0.16	0.28	0.61	0.36	0.03	0.01	0.01	0.02	0.08	0.06
27	0.10	0.03	0.57	0.42	1.55	0.02	0.01	0.93	0.07	0.33	0.63
30	0.02	0.04	0.50	0.21	0.44	0.00	0.00	0.05	0.07	0.08	0.02
32	0.02	0.02	0.28	0.43	0.00	0.00	0.02	0.06	0.02	0.03	0.01
34	0.05	0.15	0.48	0.14	0.00	0.02	0.01	0.04	0.04	0.05	0.01
36	0.01	0.00	0.11	0.05	0.00	0.02	0.04	0.02	0.03	0.02	0.02
38	0.03	0.04	0.59	0.00	0.00	0.07	0.03	0.00	0.07	0.01	0.01
40	0.02	0.12	0.32	0.05	0.00	0.02	0.06	0.02	0.02	0.98	0.12
42	0.02	0.09	0.15	0.29	0.00	0.04	0.03	0.01	0.01	0.01	0.00
44	0.13	0.50	0.34	0.33	0.00	0.02	0.06	0.03	0.22	0.08	0.03
47	0.28	0.33	0.53	0.00	0.00	0.04	0.03	0.01	0.10	0.03	0.01
48	0.36	0.24	0.25	0.00	0.00	0.06	0.06	0.02	0.22	0.08	0.00
50	0.47	0.51	0.43	0.00	0.00	0.02	0.14	0.01	0.09	0.03	0.01
52	0.43	0.35	0.30	0.00	0.00	0.09	0.05	0.02	0.05	0.05	0.03
56	0.82	0.27	0.13	0.00	0.03	0.04	0.02	0.11	0.08	0.02	0.03
58	1.60	0.38	0.32	0.00	0.26	0.05	0.09	0.05	0.15	0.72	0.28

8/13 (Sun.) The number of people who started ascent the previous day: 4,544.

ID	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00
2	0.08	0.22	0.25	0.11	2.36	2.75	2.56	2.31	0.29	0.05	0.13
4	0.07	0.10	0.36	0.11	0.44	1.32	0.36	0.20	0.05	0.10	0.66
5	0.10	0.13	0.09	0.09	0.16	0.25	0.05	0.33	0.13	0.00	0.43
6	0.22	0.00	0.00	0.16	0.22	0.64	0.76	0.07	0.02	0.00	0.30
7	0.89	0.14	0.71	0.21	0.34	1.43	0.22	1.46	0.22	0.19	0.51
8	0.00	0.06	0.27	0.08	0.22	0.47	0.51	0.12	0.18	0.10	0.04
9	0.27	0.17	0.58	0.46	0.93	1.04	0.57	1.04	0.15	0.03	0.48
10	0.61	0.14	0.29	0.33	0.32	0.98	0.25	0.51	0.16	0.15	0.29
11	0.16	0.23	0.35	0.11	0.91	1.59	0.48	0.44	0.02	0.98	0.26
13	0.11	0.41	0.29	0.75	1.11	0.56	0.38	0.11	0.13	0.55	0.00
15	0.05	0.32	0.27	2.19	1.65	0.27	0.68	0.09	0.14	0.26	0.00
17	0.07	0.15	0.30	1.02	1.40	0.11	0.62	0.01	0.06	0.14	0.00
19	0.01	0.11	0.31	0.52	1.64	0.00	0.42	0.03	0.03	0.11	0.00
21	0.12	0.28	0.42	0.65	0.37	0.00	0.28	0.02	0.01	0.11	0.00
23	0.58	0.20	0.69	0.27	0.56	0.00	0.17	0.19	0.06	0.02	0.00
25	0.05	0.21	0.15	0.45	1.08	2.49	0.65	0.09	0.08	0.10	0.00
27	0.48	0.87	0.45	0.73	4.00	4.25	0.14	0.12	0.87	0.56	0.00
30	0.15	0.19	0.77	1.64	0.78	0.09	0.00	0.03	0.23	0.00	0.00
32	0.35	0.27	0.63	0.85	0.96	0.00	0.00	0.05	0.16	0.00	0.00
34	0.24	0.64	0.61	1.53	0.38	0.00	0.01	0.02	0.06	0.00	0.00
36	0.08	0.92	0.45	1.84	0.35	0.00	0.01	0.04	0.02	0.00	0.00
38	0.24	0.33	0.81	1.66	0.25	0.00	0.01	0.07	0.09	0.00	0.00
40	0.25	0.45	1.16	0.99	0.00	0.00	0.03	0.18	0.01	0.00	0.05
42	0.05	0.07	0.21	0.15	0.00	0.00	0.01	0.03	0.00	0.00	0.00
44	0.68	0.92	1.21	0.33	0.00	0.00	0.02	0.03	0.04	0.00	0.01
47	0.18	0.81	0.47	0.10	0.00	0.00	0.01	0.07	0.02	0.01	0.00
48	0.39	0.63	0.28	0.00	0.00	0.00	0.02	0.62	0.12	0.00	0.00
50	0.21	0.29	0.91	0.00	0.00	0.00	0.01	0.37	0.04	0.00	0.00
52	0.86	0.65	0.44	0.00	0.00	0.00	0.03	0.07	0.13	0.02	0.00
56	0.48	0.73	0.37	0.00	0.00	0.00	0.11	0.05	0.00	0.00	0.00
58	0.59	0.75	0.42	0.00	0.00	0.00	0.14	0.05	0.00	0.00	0.00

○ The following tables show the daily data of the GPS logger survey that was carried out in 2017. The density of climbers is shown for each section between the Goraikokan mountain hut to the mountaintop of the Yoshida ascending route.
○ Like the case of the Fujinomiya ascending route, the sections for which it is not possible to measure the accurate width, such as curves and spaces in front of mountain huts, are excluded.
○ On 8/6 (Sun.), very high density was observed immediately below the mountaintop before and after sunrise. Also in other sections, there were sections of very high density.
○ On 8/12 (Sat.), there was a heavy rain up to around 4 am. Therefore, there was no

area where high density occurred continually.

○ On 8/13 (Sun.), there was very high density for a long time immediately below the mountaintop before and after sunrise. In other sections, very high density continued for more than one hour in several places.

(i) Required time

Ascending routes and areas where the required time were measured

Ascending route	Area	Distance
Fujinonmiya	From the Munatsuki mountain hut to immediately below the mountaintop	600 m
Yoshida	From the Gokaikokan mountain hut to immediately below the mountaintop	500 m

Required time by day (median)

Fujinomiya

	2015					2016					2017		
Starting time at Munetsuki mountain hut	13 July	27 July	1 August	13 August	22 August	16 July	25 July	30 July	11 August	20 August	6 August	12 August	13 August
1:00	-	49	47	108	-	47	26	30	42	41	-	-	43
2:00	37	49	54	36	43	45	45	46	53	44	54	42	46
3:00	33	46	63	53	44	65	48	64	48	51	52	44	52
4:00	65	44	53	43	40	86	38	56	63	52	43	35	47
Daytime	36	35	43	33	26	37	35	38	34	37	16	26	-
Toal number of people who started the previous day	342	1,013	2,249	1,182	685	1,494	982	1,948	1,572	1,147	2,290	1,726	1,919

Yoshida

	2015					2016					2017		
Starting time at Gokaikokan mountain hut	13 July	27 July	1 August	13 August	22 August	16 July	25 July	30 July	11 August	20 August	6 August	12 August	13 August
1:00	-	56	108	70	58	70	68	102	64	62	79	68	98
2:00	61	70	120	94	101	103	88	127	86	82	112	92	112
3:00	76	66	106	81	111	107	70	117	85	96	114	152	103
4:00	45	56	74	74	102	85	77	122	88	97	-	44	-
Daytime	55	50	58	63	58	52	57	57	52	47	-	-	-
Toal number of people who started the previous day	1,023	1,910	3,337	2,797	4,099	3,587	1,779	4,585	3,862	2,788	4,066	3,786	4,544

○ To compare the situations of congestion near the mountaintop based the data of GPS loggers, the time required to move from above the Munatsuki mountain hut to the mountaintop of the Fujinomiya ascending route and that required to move from the Goraikokan mountain hut to the mountaintop were calculated.

○ Both of the Fujinomiya ascending route and the Yoshida ascending route show the tendency of daytime climbers taking a shorter time than nighttime climbers.

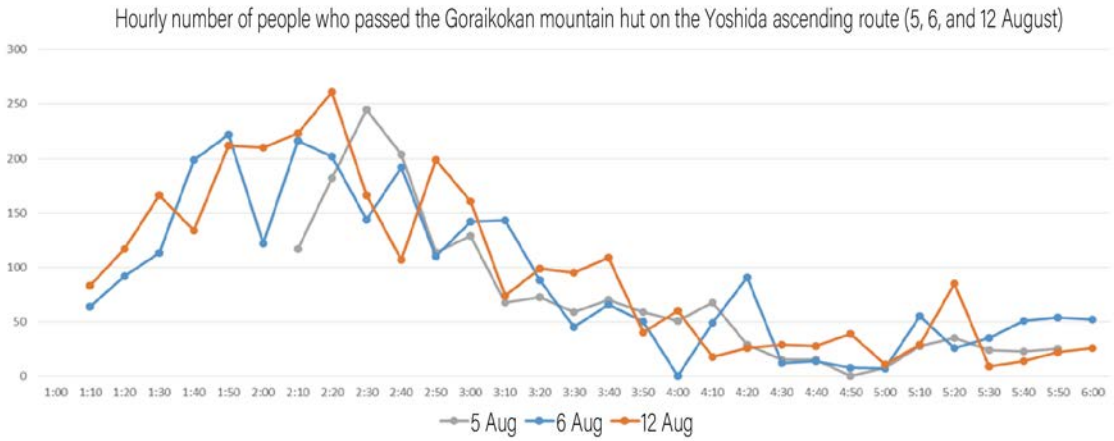
○ In the nighttime (from 1 to 4 am), the time required tends to be short if climbers departed at 1 am from the Goraikokan mountain hut of the Yoshida ascending route and long if at 2 am or 3 am. On the Fujinomiya ascending route, the time required tends to be relatively long if climbers departed at 3 am or 4 am from the Munetsuki mountain hut.

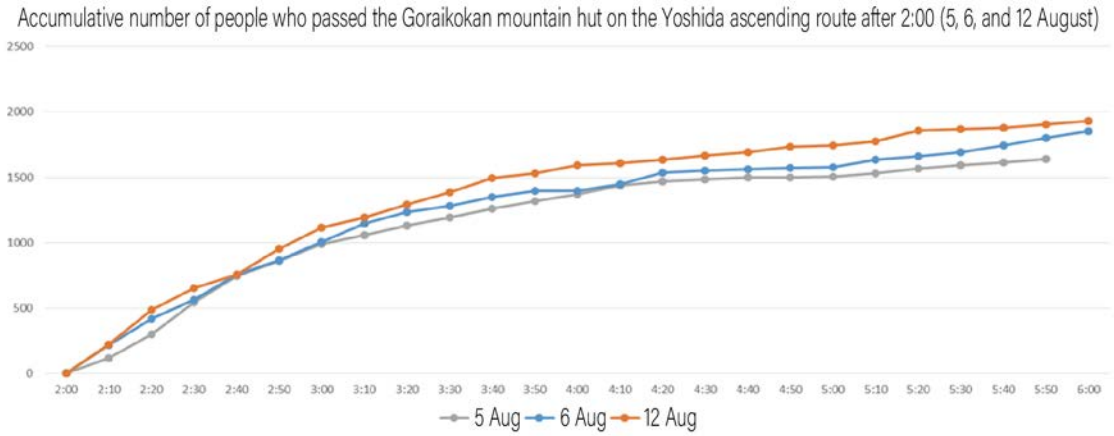
D. Field survey near the mountaintop

(i) The number of people who pass the survey point

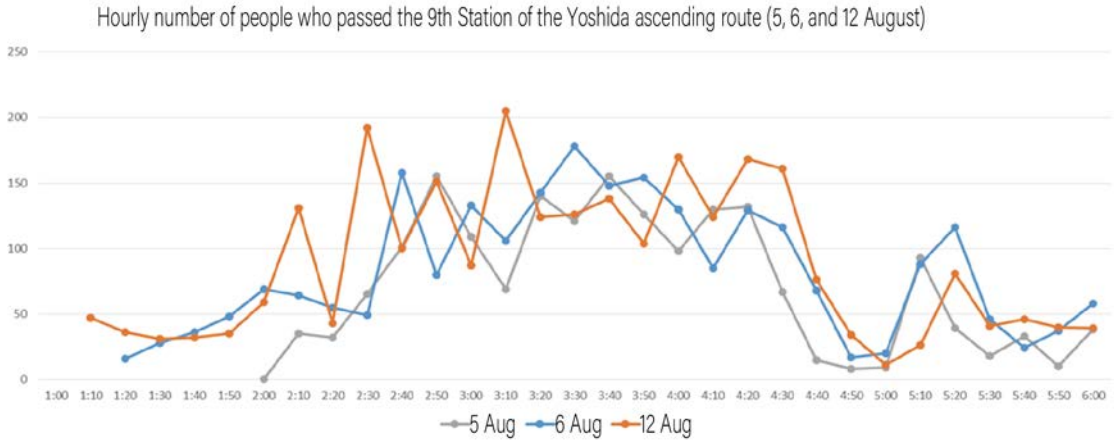
On the dates and hours when congestion was expected to occur, the number of people who passed specific places (the Goraikokan mountain hut and the 9th Station on the Yoshida ascending route and the Mannen-yuki mountain hut and the mountaintop of the Fujinomiya

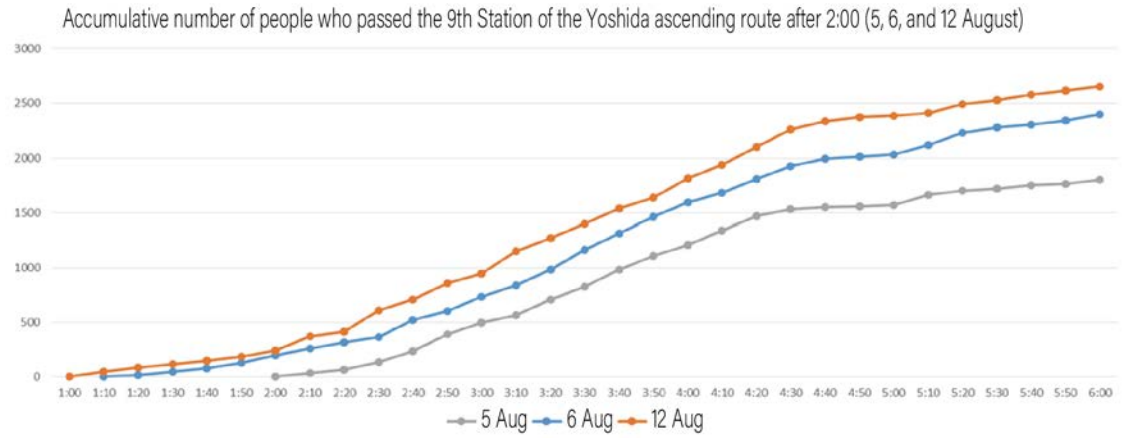
ascending route) were counted.



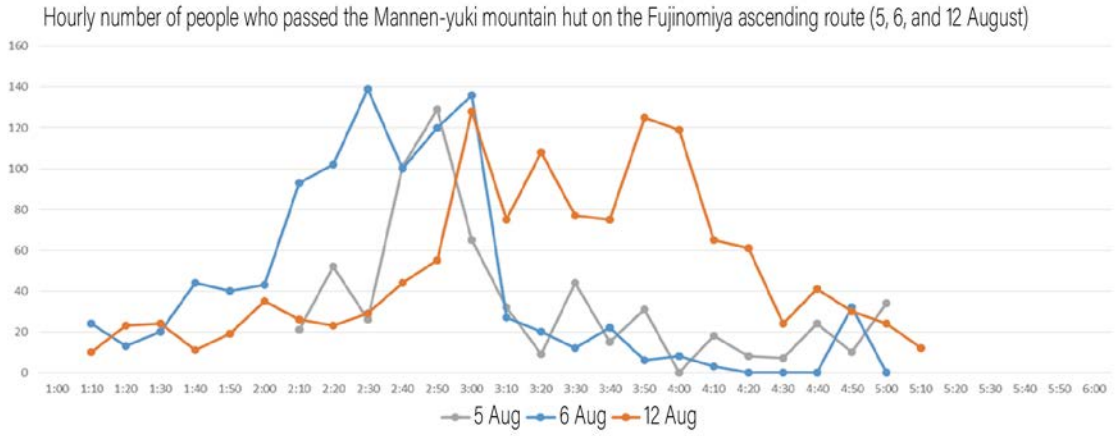


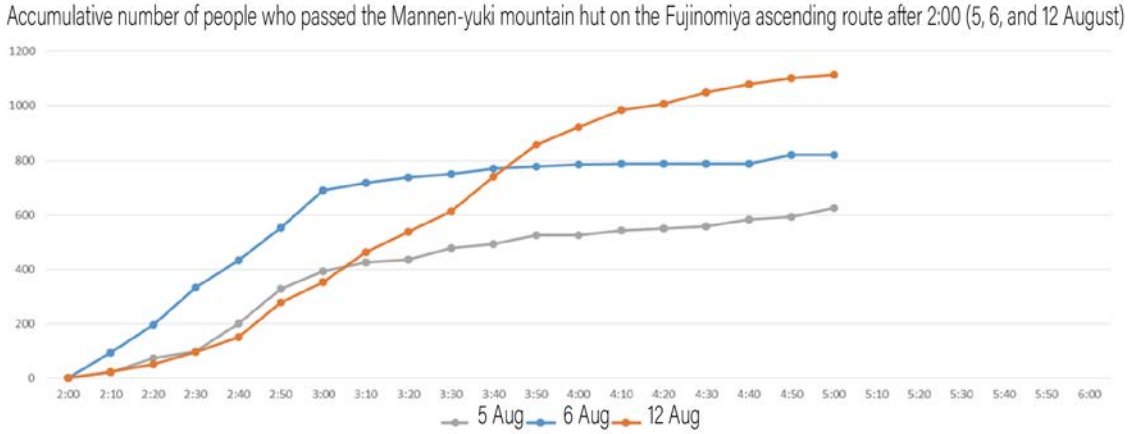
○ The number of climbers who passed the Goraikokan mountain hut showed a similar trend each day. In the hour when many people passed, more than 200 climbers passed this spot in 10 minutes. The peak was from 1:30 am to around 3:00 am.



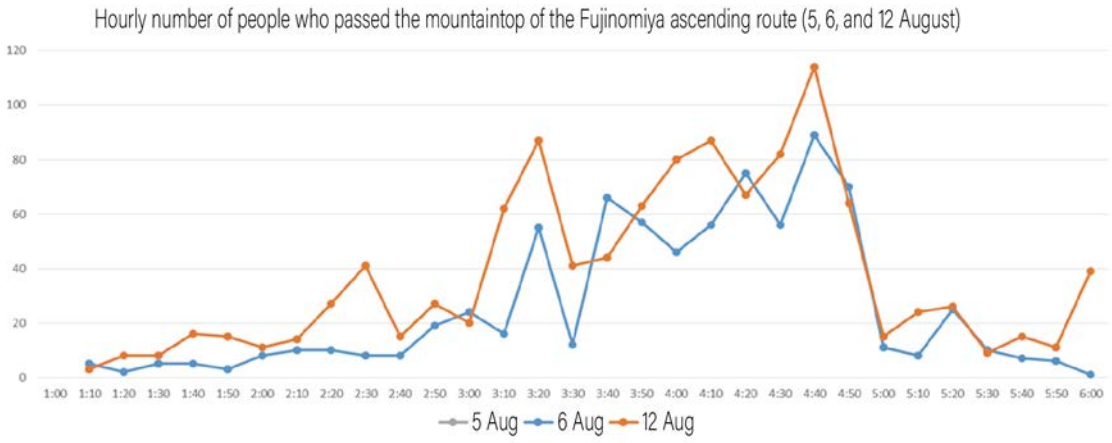


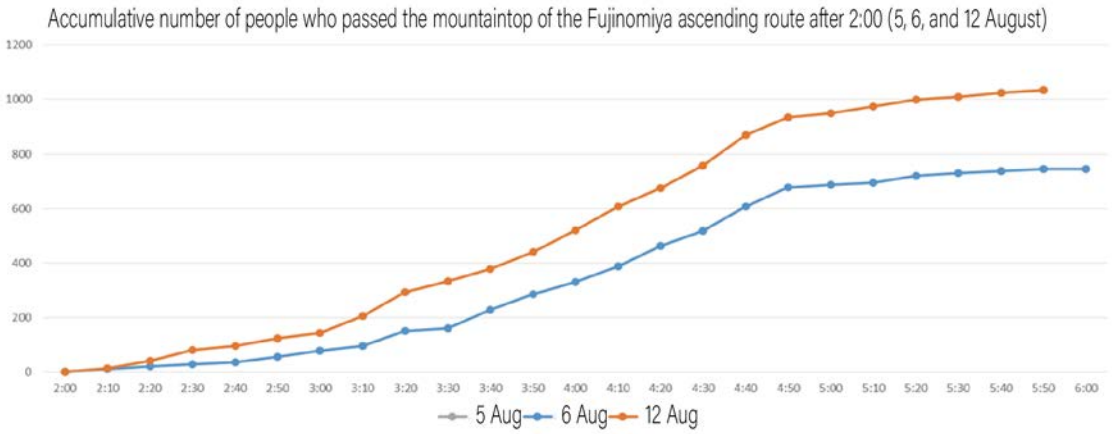
○ At the 9th Station of the Yoshida ascending route, each date showed a similar trend. The number of people who passed this spot was in the range of 150 to 200, a little smaller than the Goraikokan mountain hut. Also, the peak hour is longer, from around 2:30 am to around 4:30 am.





○ With regard to the number of climbers who passed the Mannen-yuki mountain hut of the Fujinomiya ascending route, the peak hour differs from day to day. The number of people who passed this spot was in the range of 100 to 150.





○ Each day shows almost the same trends, reaching the peak around 4:30 am. The number of people who pass the section rapidly decreases after the peak.

(1) Situations on ascending routes

The results of visually observing the situations of ascending routes in the daytime are shown in figures and table on Page 49.

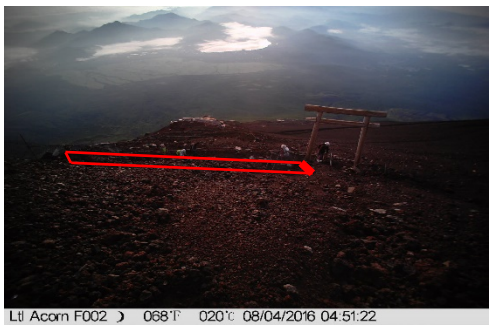
E. Fixed-point photography survey

(i) Measurement

Areas in which climbers are counted were selected, so that the whole areas and reference points such as rocks can be recorded in photographs. The length of the four sides was measured with a measure and the area was calculated. The number of climbers in the photographs was counted and then divided by the area to calculate the density of climbers.

Near the mountaintop on the Fujinomiya ascending route
※Area: 29.1 m^2

Near the torii gate at the mountaintop on the Yoshida ascending route
※Area: 15.57 m^2



Near the torii gate at the 9th Station of Subashiri and Yoshida ascending routes
※Area: 14.0 m^2

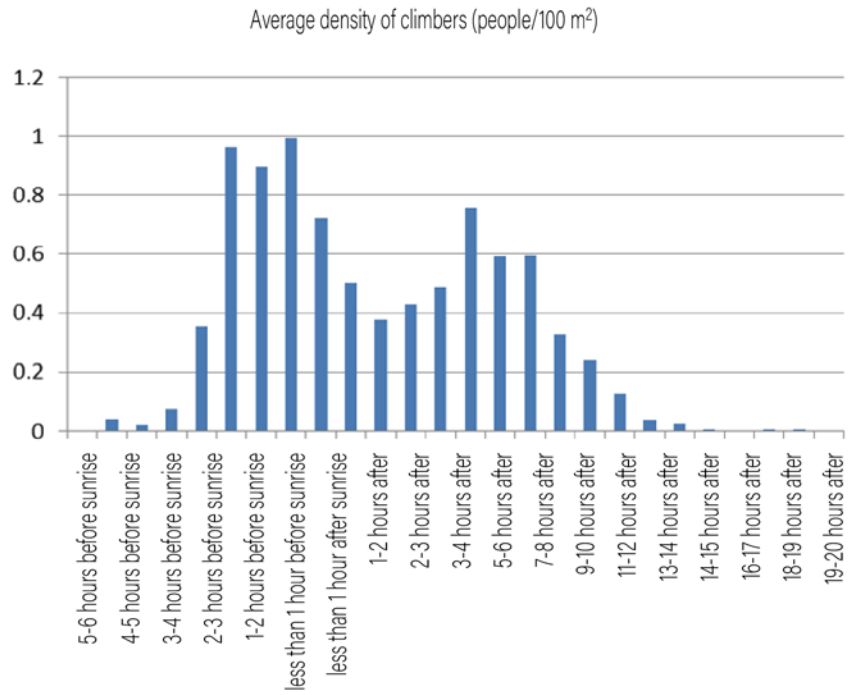
(2) Change in the density of climbers over time

■ Fujinomiya ascending route

○ Based on the image data taken all day with a camera, the change in the density of climbers over time before and after sunrise is shown:

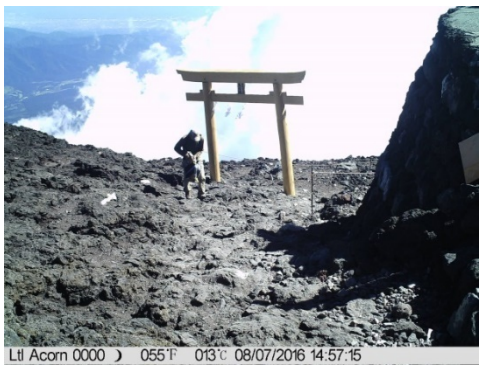
○ The density of climbers immediately below the mountaintop started to rise about 2 hours before sunrise and peaked from one hour before sunrise to two hours after sunrise. Then, it declines once but rises again around 7 to 8 hours after sunrise (around noon), before declining in the evening and nighttime. As a result, the graph shows two peaks.

Change in the density of climbers over time (Fujinomiya)



Status of climbers immediately below the mountaintop (Fujinomiya)

Immediately after sunrise (8/7)



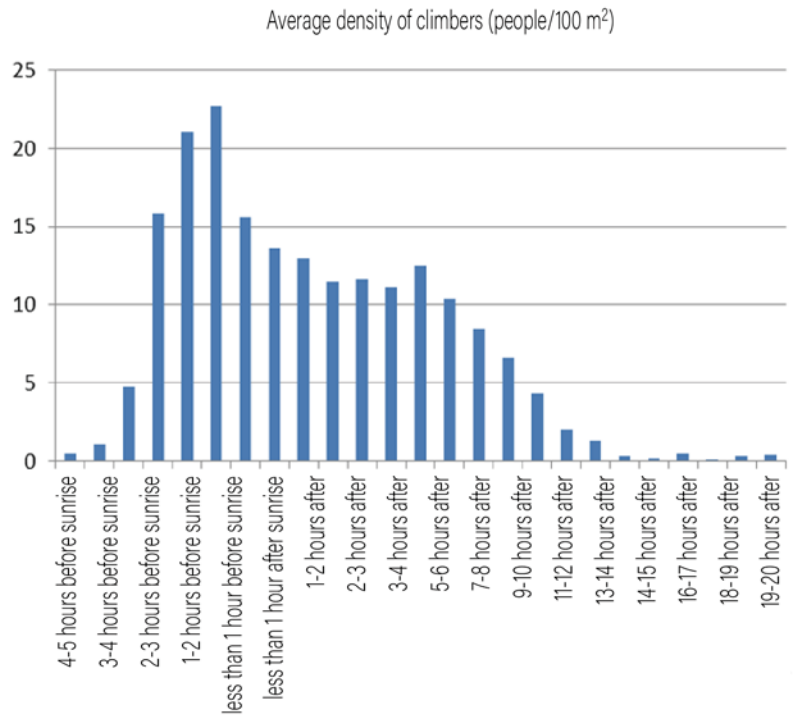
In the afternoon (8/7)

■ Subashiri and Yoshida ascending routes

○ Based on the image data taken all day with a camera (in front of the torii gate immediately below the mountaintop), the change in the density of climbers over time before and after sunrise is shown below.

○ The density of climbers immediately below the mountaintop started to rise about 3 hours before sunrise and peaked one hour before and after sunrise. After that, it stood at 10 to 15 (people/100 m^2) and then after a small peak 7 to 8 hours after sunrise (around noon) it declined in the evening and nighttime.

Change in the density of climbers over time (Subashiri and Yoshida)



Status of climbers near the torii gate immediately below the mountaintop

Immediately after sunrise (8/19)

In the evening (8/19)

(iii) Density of climbers by date and time

■ Fujinomiya ascending route

○ Based on the image data taken all day with a camera, the change in the density of climbers over time with reference to the days of the week and the time of sunrise is shown.

○ The density of climbers immediately below the mountaintop became the highest between one hour before sunrise and 3 hours after sunrise on Sunday. However, the absolute density was low, fewer than 2 people/100 m^2. Generally, the number of climbers tends to become large before and after sunrise. But, on Tuesday, Wednesday, and Thursday, there were a small number of climbers. On Saturday, the density became high also 6 to 9 hours after sunrise, probably because there were many climbers who tried to reach the mountaintop around the noon on the day before a holiday.

Density of climbers by date and time (Fujinomiya)

Relative time	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Average
5-6 hours before sunrise	—	0.0	0.0	0.0	0.0	0.0	—	0.0
4-5 hours before sunrise	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-4 hours before sunrise	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
2-3 hours before sunrise	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1
1-2 hours before sunrise	0.1	0.0	0.1	0.2	0.5	0.4	1.3	0.4
Less than 1 hour before sunrise	0.7	0.5	0.4	0.3	1.4	1.5	1.8	1.0
Less than 1 hour after sunrise	0.9	0.3	0.5	0.3	1.2	1.4	1.8	0.9
1-2 hours after	1.0	0.4	0.6	1.0	1.2	1.5	1.3	1.0
2-3 hours after	0.5	0.2	0.4	0.6	0.7	0.8	1.8	0.7
3-4 hours after	0.2	0.3	0.3	0.4	0.3	0.5	1.6	0.5
4-5 hours after	0.1	0.1	0.2	0.3	0.3	0.8	0.9	0.4
5-6 hours after	0.2	0.2	0.2	0.2	0.4	0.9	0.7	0.4
6-7 hours after	0.2	0.2	0.5	0.4	0.4	1.3	0.4	0.5
7-8 hours after	0.2	0.5	0.5	0.8	0.7	1.7	0.9	0.8
8-9 hours after	0.4	0.4	0.3	0.3	0.5	1.6	0.8	0.6
9-10 hours after	0.2	0.5	0.3	0.8	0.5	1.1	0.7	0.6
10-11 hours after	0.2	0.4	0.3	0.3	0.3	0.6	0.4	0.3
11-12 hours after	0.1	0.1	0.1	0.5	0.2	0.5	0.2	0.2
12-13 hours after	0.1	0.0	0.0	0.0	0.2	0.3	0.3	0.1
13-14 hours after	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
14-15 hours after	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
15-16 hours after	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16-17 hours after	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17-18 hours after	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18-19 hours after	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-20 hours after	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.2	0.2	0.2	0.3	0.4	0.7	0.6	0.4

■ Subashiri and Yoshida ascending routes

○ The density of climbers immediately below the mountaintop becomes the highest for two hours after sunrise on Sunday, exceeding 30 people/m^2. Generally, the number of climbers tends to be large before and after sunrise. But, there were relatively a small number of people on Wednesday and Thursday, about the half of that on Sunday. On Saturday, the density also became high 6 to 8 hours after sunrise, probably because there were many climbers who tried to reach the mountaintop around the noon on the

Density of climbers by date and time (Subashiri and Yoshida)

Relative time	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Average
4-5 hours before sunrise	0.4	0.0	0.4	0.4	1.1	0.0	0.9	0.5
3-4 hours before sunrise	0.8	0.3	1.0	0.8	2.5	0.5	1.4	1.1
2-3 hours before sunrise	5.5	2.6	2.6	2.9	6.7	5.7	7.5	4.8
1-2 hours before sunrise	20.7	21.5	7.1	12.8	13.6	17.1	20.1	15.8
Less than 1 hour before sunrise	17.4	20.9	14.1	22.6	23.1	23.3	24.5	21.1
Less than 1 hour after sunrise	27.0	19.3	14.5	14.9	22.9	25.5	32.3	22.7
1-2 hours after	12.2	12.8	15.8	7.7	15.8	10.9	33.1	15.6
2-3 hours after	14.2	11.5	12.8	9.0	12.6	13.8	20.6	13.6
3-4 hours after	18.9	10.4	11.1	6.2	12.8	14.0	18.2	13.0
4-5 hours after	13.2	9.4	14.0	6.2	12.8	8.2	17.2	11.5
5-6 hours after	9.1	12.5	6.7	8.0	13.5	15.6	14.7	11.6
6-7 hours after	6.1	8.7	2.8	7.4	13.1	22.9	14.6	11.1
7-8 hours after	11.1	8.9	3.7	9.9	12.8	22.2	15.6	12.5
8-9 hours after	8.0	4.2	5.5	7.4	14.0	15.6	15.9	10.4
9-10 hours after	7.0	3.1	5.9	10.0	6.9	15.7	10.0	8.5
10-11 hours after	3.4	3.5	1.8	4.8	7.8	12.4	10.9	6.6
11-12 hours after	4.5	1.4	1.2	3.0	6.7	6.9	6.4	4.3
12-13 hours after	2.8	1.6	0.5	0.7	3.2	3.3	1.6	2.0
13-14 hours after	0.4	0.3	1.4	0.7	1.5	3.2	1.0	1.3
14-15 hours after	0.0	0.0	0.0	0.2	0.0	1.0	0.9	0.3
15-16 hours after	0.0	0.0	0.0	0.7	0.0	0.2	0.0	0.1
16-17 hours after	0.0	0.0	0.7	1.0	0.3	1.0	0.0	0.5
17-18 hours after	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1
18-19 hours after	0.0	0.0	0.0	0.7	0.5	0.5	0.5	0.3
19-20 hours after	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.4
Total	7.7	6.0	4.8	5.7	8.4	9.8	11.1	7.7

F. Web questionnaire survey

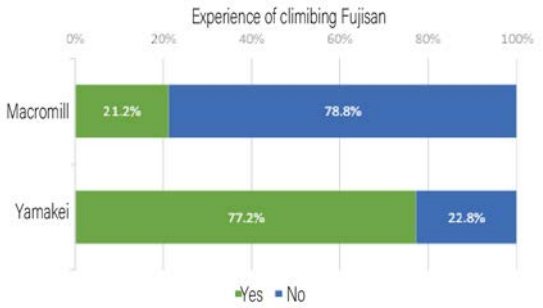
a) Experience of climbing Fujisan

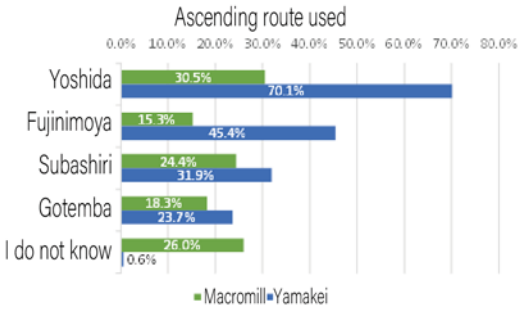
■ Past experience of climbing Fujisan and the time of climbing Fujisan○ 78.8 % of the Macromill monitors did not have experience of climbing Fujisan. In contrast, 77.2 % of the Yamakei monitors had experience of climbing Fujisan.

○ With regard to the routes they used to climb Fujisan, many used the Yoshida ascending route in both groups of monitors. But, there were relatively many monitors who answered “I do not know” among the Macromill monitors. It is indicated that Yamakei monitors generally have a high degree of experience with experiences of climbing Fujisan along several ascending routes.

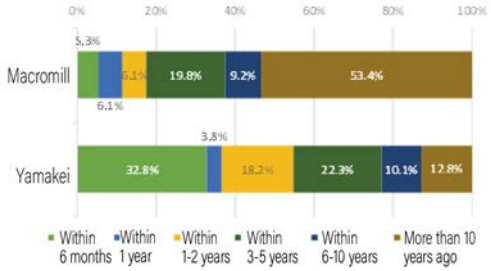
○ The majority of Macromill monitors (53.4 %) answered that they climbed Fujisan “more than 10 years ago”, while the majority of Yamakei monitors (54.8 %) answered that they climbed Fujisan within the past 2 years.

Climbing experience in the past





	No. of respondents		Percentage	
	Macromill	Yamakei	Macromill	Yamakei
Within the past 6 months	7	5	5.3 %	32.8 %
Within the past 1 year	8	166	6.1 %	3.8 %
Within the past 2 years	8	19	6.1 %	18.2 %
Within the past 3-5 years	26	92	19.8 %	22.3 %
Within the past 6-10 years	12	113	9.2 %	10.1 %
More than 10 years ago	70	51	53.4 %	12.8 %
Total	131	506	100.0%	100.0%

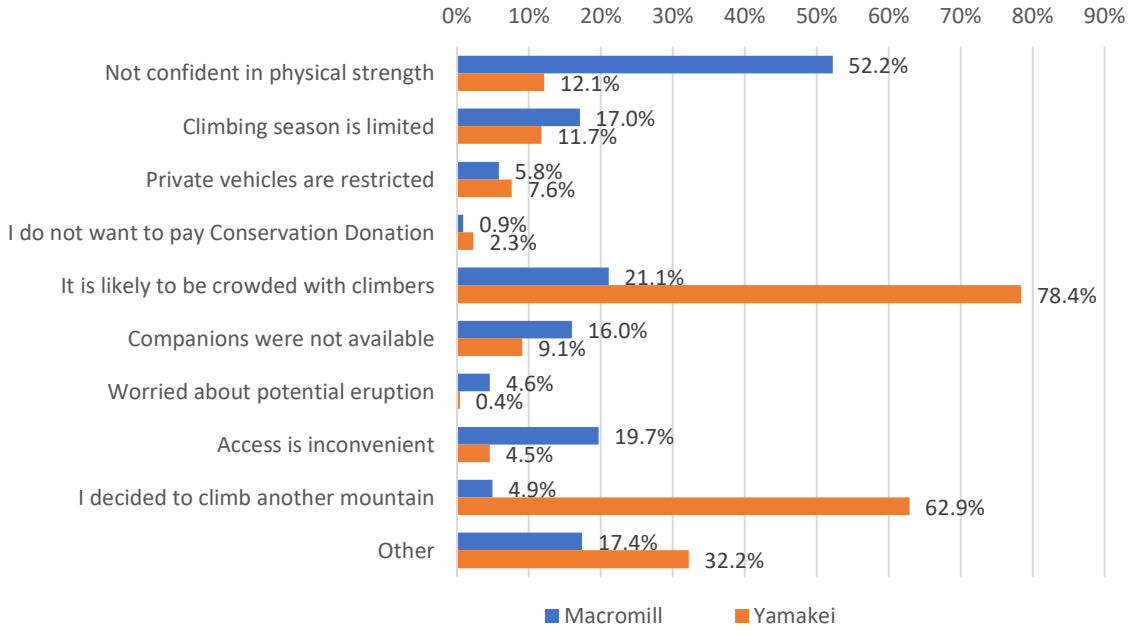


■ Reasons not to climb Fujisan in the past

○ With regard to Macromill monitors who did not climb Fujisan, “because I am not confident in my physical strength”was the predominant reason（52.2 %）.

○ With regard to Yamakei monitors who did not climb Fujisan, “because it is likely to be congested with climbers” (78.4 %) and “Because I decided to climb another mountain” (62.9 %) were the major reasons, suggesting a strong trend of avoiding congestion in particular. Also, 21.1 % of Macromill monitors pointed out congestion as the reason not to climb Fujisan.

Reasons why respondents did not climb Fujisan in the past

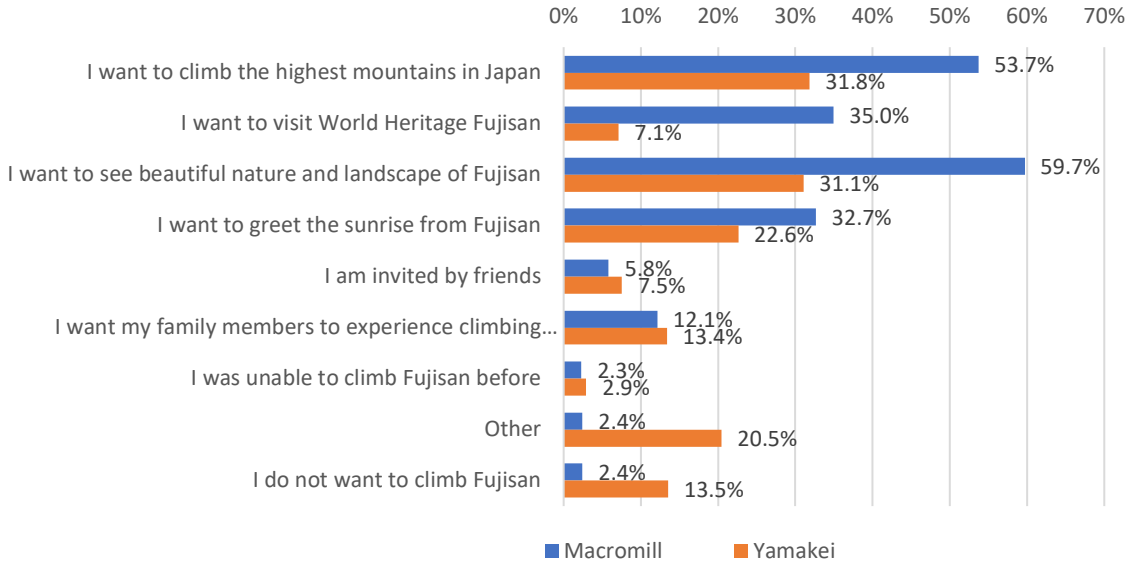


b) Intention to climb Fujisan

■ Reasons to climb Fujisan

○ The reasons to climb Fujisan that rank high for both groups of monitors are: “I want to climb the highest mountain in Japan”, “I want to see the beautiful nature and landscapes of Fujisan”, and “I want to greet the sunrise from Fujisan”.
○ There were many people who answered “I want to see World Heritage Fujisan” among Macromill monitors (3rd rank, 35.0 %), but it was only 7.1 % of the Yamakei monitors.
○ A relatively high ratio of the Yamakei monitors (20.5 %) chose “others”. Many of them were interested in climbing several routes (or all of the four ascending routes) to build up physical strength or to have high altitude training in preparation of climbing other mountains.

Reasons why respondents intending to climb Fujisan think so



■The number of people that discourage people from making ascent

＜Photos of Subashiri and Yoshida ascending routes＞

○ In both groups of monitors, the highest ratio selected Photo C and the second highest ratio selected Photo D.

○ The choice of the Macromill monitors tended to be spread. 61.5 ％ of the Macromill monitors chose photos A to D. 79.9 % of the Yamakei monitors chose photos A to D.

○ The most of the Macromill monitors chose Photo C, followed by Photo D and Photo F.

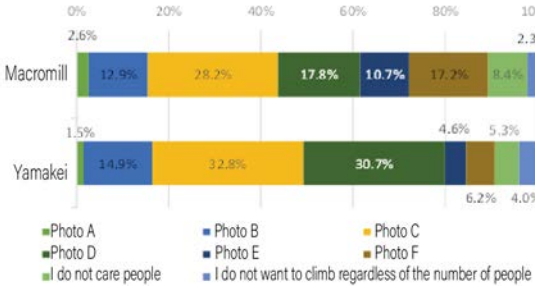
○ The most of the Yamakei monitors chose Photo C, followed by Photo D and Photo B.

＜Photos of Fujinomiya ascending route＞

○ In comparison with photos of Subashiri and Yoshida ascending routes, the width of the ascending route is narrower, and the number of people shown on the photo are smaller. With these photos, Macromill monitors were divided between those who chose the photo with a smaller number of people (Photo C) and those who chose the photo with a larger number of people (Photo F).

The number of people that discourage people from making ascent (Subashiri and Yoshida ascending routes)

	No. of respondents		Percentage	
	Macromill	Yamakei	Macromill	Yamakei
Photo A	8	5	2.6 %	1.5 %
Photo B	40	48	12.9 %	14.9 %
Photo C	87	106	28.2 %	32.8 %
Photo D	55	99	17.8 %	30.7 %
Photo E	33	15	10.7 %	4.6 %
Photo F	53	20	17.2 %	6.2 %
I do not care people	26	17	8.4 %	5.3 %
I do not want to climb regardless of the number of people	7	13	2.3 %	4.0 %
Total	309	323	100.0%	100.0%



Photos used in the questionnaire (Subashiri and Yoshida ascending routes)

A

B

C

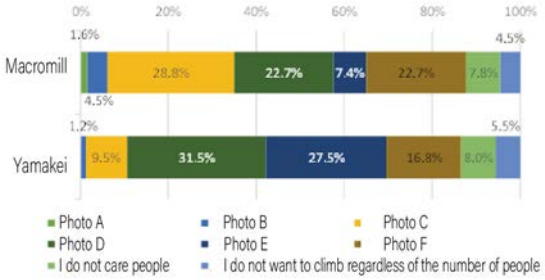
D

E

F

The number of people that discourage people from making ascent (Fujinomiya ascending route)

	No. of respondents		Percentage	
	Macromill	Yamakei	Macromill	Yamakei
Photo A	5	0	1.6 %	0.0 %
Photo B	14	4	4.5 %	1.2 %
Photo C	89	31	28.8 %	9.5 %
Photo D	70	103	22.7 %	31.5 %
Photo E	23	90	7.4 %	27.5 %
Photo F	70	55	22.7 %	16.8 %
I do not care people	24	26	7.8 %	8.0 %
I do not want to climb regardless of the number of people	14	18	4.5 %	5.5 %
Total	309	327	100.0%	100.0%



Photos used in the questionnaire (Fujinomiya ascending route)

A

B

C

D

E

F