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ユネスコへのわが国からの災害なだれ報告について

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**Data on Destructive Avalanches in Japan Reported to Unesco**

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はじめに

ユネスコは、自然災害についての資料を収集し、その年報(Annual summary of information on natural disasters)を1966年以降現在まで発行している。1970年までに取り上げられた項目は、地震(earthquakes)、津波(tsunamis)、高潮(storm surges)、噴火(volcanic eruptions)であり、1971年からはこれらに地すべり(landslides)、災害なだれ(destructive avalanches)、異常な氷河現象(unusual glacier phenomena)の項目が加えられることになった。<sup>1)2)3)</sup>

国立防災科学技術センター雪害実験研究所が、日本からの連絡機関になった経過を簡単に記す。ユネスコは、1970年5月4日から6日にかけて、パリで国際雪氷委員会(International Commission of Snow and Ice, 略称ICSI)の下部組織である“なだれ作業部会”を開催し(日本からは故荘田幹夫博士、当時は日本国有鉄道所属、前雪害実験研究所長が出席)、なだれ災害の起こりそうな国々に対して、外交ルートを通じて、各国のなだれに関する国内連絡機関(員)の指名を提案し、日本においては、国際水文学十年計画(IHD)国内委員会で検討の結果、雪害実験研究所がこれに当たることになったのである。<sup>4)</sup>

この報告書は、日本で起きた災害なだれの1970年から1974年分までのユネスコへ送付した回答書を集録したものである。

(1) ユネスコから求められた質問状について

災害なだれについての質問状には2種類あり、1つは(A)個々のなだれについてのやや詳しいものと、他の1つ(B)はそれらをまとめたものである。(A)、(B)は著者が仮に名付けたもので、付属資料の最初の各一枚に、質問状(A)、質問状(B)の表示をした。なお、質問状(B)はクリーム色の紙を使ってある。

(2) 日本からの回答書

参考文献(3)の手紙での要請により、日本からは、1970年から1971年の冬季間に発生した災害なだれを1971年7月9日付でユネスコへ報告し、現在まで冬季間ごとに発生した災害なだれを報告している。

(3) 資料収集の方法

毎年6月に各県(沖縄県のみを除く)の消防防災課に調査票(付表1)を送付し、資料の収集をはかっている。回答率は46年度(1970~1971年冬)85%、47年度(1971~1972年冬)85%、48年度(1972~1973年冬)80%、49年度(1973~1974年冬)76%であった。1973年から1974年の冬以降は、上記の方法以外に、新聞等からも資料を収集している。

(4) ユネスコへの報告の概要

1970年から1974年までの報告の一覧表は、表1のとおりであり、その詳細(英訳してユネスコへ送付した回答書の全て)は付属資料としてこの報告書の末尾にのせてある。なおユネスコからの年報には、我が国から参考として添付した図表は印刷されていない。

災害を及ぼした“異常な氷河現象”(unusual glacier phenomena)についても質問状(付表2)が来ているが、我が国ではその例はいまだ見られていない。

ユネスコへの回答書作成にあたり、各県の関係者の皆様から多大の御協力をいただいたことを記し、ここに感謝の意を表する次第である。

参 考 文 献

- 1) Unesco, 1973: *Annual summary of information on natural disasters* 1971, Paris.
- 2) UnescoのDepartment of Environmental Sciencesから日本の伊藤良二氏(Secretary, Committee for the IHD, General Secretary for the Japanese National Commission for Unesco)宛への手紙。1971年4月26

日付, reference SCE53/35.

3) Unesco の Department of Environmental Sciences から, 国立防災科学技術センター-雪害実験研究所長宛への手紙. 1971年6月1日付, reference SCE 53/35.

4) “雪崩に関する国内連絡員” 1971, 雪氷, 33巻, 3号, 93頁.

(1975年9月10日 原稿受理)

表1-1 ユネスコへ報告した、1970年12月～1973年5月までに発生した災害なだれ。

通し番号	月日	発	生	地	名	緯度(北緯)	経度(東経)	分類	死者数	負傷者数	損	害	備	考
1	12.8	新潟県	東頸城郡	松之山町	大字	浦田	95°09'	R	1	0	0			-
2	12.8	新潟県	古志郡	山古志村， <small>県道梶金～小松倉の間</small>				R	2	0	0			-
3	12.12	福井県	大野市	湯上，国道157号線				T	1	2	0			-
4	12.20	新潟県	東頸城郡	松代町	大字	小屋丸，町道		T	1	0	0			-
5	1.1	新潟県	南魚沼郡	塩沢町	大字	清水，前巻礫山		T	2	0	0			-
1971/1972年冬														
1	1.16	長野県	茅野市	北山町，横岳				T	2	3	0			-
2	2.10 (?)	山梨県	韮崎市	清哲町，鳳凰山				-	0	0	建物1戸			無人の小屋
3	2.11	鳥取県	西伯郡	大山町，大山(北壁滝尾根)				T	3	3	0			-
4	2.16	山梨県	南都留郡	鳴沢村，富士山				C	0	0	道路・森林 建物			-
5	3.20	静岡県	御殿場市，富士山(南東斜面2.5合目)					T	24	0	車3台			-
6	4.10	栃木県	那須郡	那須町	湯本，朝日岳			T	2	0	0			-
1972/1973年冬														
1	1.12.1	北海道	上川郡	東川町，大雪山盤ノ沢				T	5	0	0			-
2	12.1	長野県	南安曇郡	安曇町，釜トンネル出口 (上高地側)				T	1	0	0			-
3	1.1-2	長野県	南安曇郡，北穂高	酒沢と横尾谷出会				T	4 (不明)	0	0			-
4	1.29	群馬県	利根郡	水上町	字土合，谷川岳一ノ倉沢			T	2 (不明)	0	0			-
5	5.17	福島県	南会津郡	只見町，鬼面山六十里越				W	1	1	0			-

\* T:旅行者, W:作業中の人, R:住人, C:交通・通信障害

表1-2 ユネスコへ報告した、1973年12月～1974年4月までに発生した災害なだけ。

1973/1974年冬

通し番号	月日	発 生 地 名	緯度(北緯)	経度(東経)	分類*	死者数	負傷者数	損 害	備 考
1	12.21	新潟県新発田市, 蒲谷山(加治川治水ダム工事現場)	37°49'	139°30'	W	0	2	0	-
2	1. 1	山梨県中巨摩郡芦安村, 白根山(北岳)	35°40'	138°14'	T	3	0	0	登山者
3	1.12	長野県上水内郡信濃町, 黒姫山(黒姫スキー場の近く)	36°48'	138°08'	T	2	0	0	ツア-スキー-ヤ
4	1.16	長野県下水内郡栄村樽坂, 国鉄飯山線	36°59'	138°31'	C	0	0	0	-
5	1.24	秋田県由利郡鳥海町清水沢村	39°09'	140°17'	R	0	0	0	-
6	1.24	秋田県鹿角市, 柴内山国有林	40°15'	140°50'	W	1	2	0	-
7	1.24	秋田県山本郡藤里町粕毛	40°17'	140°15'	T	1	1	0	-
8	1.26	秋田県横手市大沢町沼山	39°18'	140°37'	R	0	1	0	-
9	1.28	新潟県南蒲原郡下田村長野, 三九郎平山(山倉山)	37°32'	139°08'	T	1	0	0	-
10	2. 9	長野県北安曇郡白馬村, 五竜遠見スキー場	36°39'	137°48'	C	0	0	0	-
11	2.10	秋田県雄勝郡皆瀬村桂沢	39°00'	140°40'	R	0	0	0	保育園
12	2.10	長野県小県郡和田村, 霧ヶ峰高原	36°07'	138°10'	T	1	1	0	ツア-スキー-ヤ
13	2.11	長野県茅野市, 八ヶ岳連峰横岳	35°59'	138°21'	T	3	0	0	登山者
14	2.23	長野県大町市, 新高瀬川発電所建設現場	36°30'	137°43'	W	0	7	0	-
15	2.24	長野県茅野市, 車山スキー場	36°05'	138°12'	T	1	0	0	ツア-スキー-ヤ
16	3. 4	石川県石川郡尾口村深瀬	36°13'	136°38'	T&C	0	0	0	-
17	3. 6	秋田県鹿角郡小坂町, シクシ森	40°20'	140°45'	R	0	0	0	-
18	3. 9	福島県河沼郡柳津町	37°30'	139°44'	R	1	0	0	-
19	3.16	石川県石川郡輪来町中島	36°24'	136°38'	T	1	2	0	-
20	3.18	長野県北安曇郡白馬村, 白馬山	36°45'	137°46'	T	5	0	0	登山者
21	3.22	秋田県湯沢市, 岩ノ沢山	40°10'	140°30'	R	0	0	0	-
22	3.23	長野県大町市, 鹿島槍ヶ岳	36°35'	137°45'	T	9	2	0	登山者
23	3.25	北海道札幌市定山溪, 無意根山	42°56'	141°02'	T	2	0	0	-
24	3.26	福島県南会津郡只見町	39°23'	139°27'	W	1	0	0	-
25	4. 1	秋田県雄勝郡東成瀬村田子内平良	40°11'	140°39'	W	3	1	0	-
26	4. 8	福島県南会津郡下郷町大字戸赤字竹ノ下, 倉骨沢	37°15'	139°48'	T	2	0	0	-

\* T:旅行者, W:作業中の人, R:住人, C:交通・通信障害

トネスコへのわが国からの災害なだけ報告について — 中村・山田

付表1 各県へ照会した災害なだれ調査票

ユネスコ（国際連合教育科学文化機構）環境科学省				
災害なだれ報告書				
県，道，府	19	/	19	年冬期のなだれの一連番号
なだれ発生地点（	県，道，府	市，郡	町，村，字	， 山）
北緯	°	東経	°	被災地点の標高 m
西暦	年	月	日	時 分
なだれ事項				
なだれの型	点発生	乾雪	表層なだれ	
	面発生	湿雪	全層なだれ	
斜面の型	開平斜面	谷斜面		
運動形式	けむり型	ながれ型		
堆積地点での乾湿	乾雪	湿雪		
なだれの発生した斜面の方位	北向き，東向き，南向き，西向き，北東向き，南東向き，南西向き，北西向き			
規模	発生地点：標高	m，幅	m，なだれ層の厚さ	m
	なだれ走路：長さ	m，幅	m，平均勾配	°
	なだれの推積：最大の厚さ		m，体積	m <sup>3</sup>
発生要因参考事項（不明のものは記入しないで結構です。）				
積雪の構造				
天気，風，気温等				
直接原因（もし分っていれば）				
死傷者と損害				
死者の数	人，行方不明者の数	人，負傷者の数	人，無傷で救出された者の数	人
建物への被害	：全壊 棟，半壊	棟，埋没	棟，その他	
その他の被害：森林，通信施設等				
備考（救助作業，過去になだれの発生があったか等）				
写真，スケッチ等があれば添付していただきたい。				

付表2 ユネスコからの 異常な氷河現象 についての質問状

UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL ORGANIZATION

Department of Environmental Sciences

**Report on Unusual Glacier Phenomenon  
(Surge, Icefall, Lake Burst)**

DATE OF OCCURENCE: ..... 19 ..... Date  certain  
 uncertain (delete as appropriate)

TIME (if known): .....

LOCATION: (Country, region, etc.; attach a map or sketch showing location; give latitude and longitude)  
 .....  
 .....  
 .....

DESCRIPTION: of phenomenon (or series of phenomena) with information on magnitude (estimation of volume of ice  
 and/or water involved, length and width of affected area); attach photographs if possible.  
 .....  
 .....  
 .....  
 .....

CAUSES: Morphological situation: .....  
 .....  
 Weather conditions (if relevant): .....  
 .....  
 Triggering mechanism (if known): .....  
 .....

EFFECTS: (Casualties, damage) .....  
 .....

REMARKS: .....  
 .....  
 .....

NOTES: 1. Usual mountaineering accidents (breakage into crevasse, collapse of seracs or ice margins) should *not*  
 be reported on this form.  
 2. This form should be completed in duplicate for each glacier event and sent to the following address:

The Director,  
 Department of Environmental Sciences,  
 Unesco,  
 Place de Fontenoy,  
 Paris 7e (France)

付属資料

1970年12月から1974年4月までに発生した災害なだれのわが国からユネスコへ報告した回答書(A, B)

(最初の各一枚に質問状(A), 質問状(B)の表示をした。なお, 質問状(B)はクリーム色の紙を使っている。)



UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL ORGANIZATION  
Department of Environmental Sciences  
ANNUAL REPORT ON DESTRUCTIVE AVALANCHES

ユネスコへのわが国からの災害なだれ報告について — 中村・山田

質問状 (B)

Serial number	Date	Location	Category*	Number of deaths	Number of injured	Damage	Remarks
1	Dec.8	37° 05'N, 138°37'E	R	1	0	0	-
2	Dec.8	37° 19'N, 138°54'E	R	2	0	0	-
3	Dec.12	35° 50'N, 136°40'E	T	1	2	0	-
4	Dec.20	37° 07'N, 138°37'E	T	1	0	0	-
5	Jan.1	36° 58'N, 138°57'E	T	2	0	0	-

\* For accident to tourists, mark T; to people at work, mark W; to residents, mark R; to communications (roads, railways), mark C.

Note: This form should be completed in duplicate at the end of each winter season; and sent, together with the reports on individual avalanches, to the following address:

The Director  
Department of Environmental Sciences  
Unesco  
Place de Fontenoy  
Paris 7e (FRANCE)

UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL ORGANIZATION

質問状(A)

Department of Environmental Sciences

**Report on Destructive Avalanche**

COUNTRY: JAPAN

Winter 1970/1971

Serial No.: 1

Name and address of reporter: INSTITUTE OF SNOW AND ICE STUDIES, NATIONAL RESEARCH  
CENTER FOR DISASTER PREVENTION, SUYOSHI-MACHI, NAGAOKASHI, NIIGATA-KEN

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

9509 OAZA-URATA, MATSUNOYAMA-CHO, HIGASHI-KUBIKI-GUN, NIIGATA-KEN

Latitude: 37°05' N Longitude: 138°37' E Altitude: 400m

DATE: Dec. 8 1970, Time: 11 h 45 m = 02h45m (GMT)

DATA ON AVALANCHE:

Type (International classification): A2 B2 C2 D2 E5 F0

Orientation: NORTH

Dimensions\*

Starting zone: Altitude: 400m Width: — Depth of fracture: 1 m

Avalanche path: Length: 15 m Width: 10 m Average slope: —

Deposit: Maximum depth: — Volume: —

Causes

NEW SNOW DEPTH: 66cm

Snow structure:

Weather (snowfall, wind, temperature): SNOWFALL, NW 1 m/s, +0.6°C

Triggering mechanism (if known): —

CASUALTIES AND DAMAGE:

Number of persons killed: 1 ; injured: 0 ; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): 0

Other damage (forests, communications, etc.): 0

REMARKS (rescue work, former history of avalanches, etc.)

Dug immediately after the accident and tried artificial respiration,  
but not resuscitated.

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

The Director,  
Department of Environmental Sciences,  
Unesco,  
Place de Fontenoy,  
Paris 7e (France)

UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL ORGANIZATION

Department of Environmental Sciences

**Report on Destructive Avalanche**

COUNTRY: JAPAN

Winter 1970/1971

Serial No.: 2

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

YAIKOGHI-MURA, KOSHI-GUN, NIIGATA-KEN

Latitude: 37°19' N Longitude: 138°54' E Altitude: 100 m

DATE: Dec. 8 1970 Time: 13h 40m = 04h 40m (GMT)

DATA ON AVALANCHE:

Type (International classification): A2 B2 C2 D1 E5 F0 Orientation: SOUTH

Dimensions\*

Starting zone: Altitude: 140 m Width: --- Depth of fracture: 1 m

Avalanche path: Length: 70 m Width: 10 m Average slope: ---

Deposit: Maximum depth: --- Volume: ---

Causes

Snow structure: SNOW DEPTH : 130 cm

Weather (snowfall, wind, temperature): SNOWFALL, WNW 3.6m/s, +1.9°C

Triggering mechanism (if known): ---

CASUALTIES AND DAMAGE:

Number of persons killed: 2 ; injured: 0 ; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): 0

Other damage (forests, communications, etc.): 0

REMARKS (rescue work, former history of avalanches, etc.)

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

The Director,  
Department of Environmental Sciences,  
Unesco,  
Place de Fontenoy,  
Paris 7e (France)

UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL ORGANIZATION

Department of Environmental Sciences

**Report on Destructive Avalanche**

COUNTRY: JAPAN

Winter 1970/1971

Serial No.: 3

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

YUNOKAMI, ONO-SHI, FUKUI-KEN

Latitude: 35° 50' 30" N Longitude: 136° 40' E Altitude: 500m

DATE: Dec. 12 1970; Time: 10h 30m = 01h 30m (GMT)

DATA ON AVALANCHE:

Type (International classification): A2 B4 C2 D1 E5 F0 Orientation: ESE

Dimensions\*

Starting zone: Altitude: 820 m Width: 40m Depth of fracture: 2 m  
Avalanche path: Length: 420 m Width: 30 m Average slope: 42°  
Deposit: Maximum depth: 5.5m Volume: 1800 m<sup>3</sup>

Causes

Snow structure: THREE LAYERS(70, 55, 86cm from ground to surface)

Weather (snowfall, wind, temperature): FAIR, CALM, +10<sup>b</sup>c

Triggering mechanism (if known): -

CASUALTIES AND DAMAGE:

Number of persons killed: 1; injured: 2; rescued unharmed: 2  
Damage to buildings (type, number, degree of destruction): 0

Other damage (forests, communications, etc.): A FENCE FOR PROTECTING FALLING STONES WAS DAMAGED BY 20m LONG.

REMARKS (rescue work, former history of avalanches, etc.)

EVERY YEAR, WE HAVE SOME AVALANCHES AT THIS POINT.

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

The Director,  
Department of Environmental Sciences,  
Unesco,  
Place de Fontenoy,  
Paris 7e (France)

UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL ORGANIZATION

Department of Environmental Sciences

**Report on Destructive Avalanche**

COUNTRY: JAPAN Winter 1970/1971 Serial No.: 4

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
HATSUDAI-CHO, HIGASHI-KUBIKI-GUN, NIIGATA-KEN  
Latitude: 37°07'N Longitude: 138°37'E Altitude: 350m

DATE: Dec. 20 1970; Time: 16h 40m = 07h 40m (GMT)

DATA ON AVALANCHE:  
Type (International classification): A2 B4 C2 D1 E2 F0 Orientation: W

Dimensions\*  
Starting zone: Altitude: 350 m Width: - Depth of fracture: 1m  
Avalanche path: Length: 10 m Width: 5 m Average slope: -  
Deposit: Maximum depth: - Volume: -

Causes  
Snow structure: SNOW DEPTH: 110cm  
Weather (snowfall, wind, temperature): CLEAR, CALM, +2.1°C

Triggering mechanism (if known): -

CASUALTIES AND DAMAGE:  
Number of persons killed: 1 ; injured: 0 ; rescued unharmed: 0  
Damage to buildings (type, number, degree of destruction): 0  
Other damage (forests, communications, etc.): 0

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....  
.....

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:  
  
The Director,  
Department of Environmental Sciences,  
Unesco,  
Place de Fontenoy,  
Paris 7e (France)

UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL ORGANIZATION

Department of Environmental Sciences

**Report on Destructive Avalanche**

COUNTRY: JAPAN

Winter 1970/1971

Serial No.: 5

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

QAZA-SHIMIZU, SHIOZAWA-CHO, MINAMI-UONUMA-GUN, NIIGATA-KEN

Latitude: 36°58'N Longitude: 138°57'E Altitude: 1600 m

DATE: Jan. 1 1971, Time: 10h.30m = 01h.30m (GMT)

DATA ON AVALANCHE:

Type (International classification): A4 B2 C1 D2 E1 F1

Orientation: S

Dimensions\*

Starting zone: Altitude: 1700 m Width: — Depth of fracture: 30-40 cm

Avalanche path: Length: 200 m Width: 80 m Average slope: —

Deposit: Maximum depth: — Volume: —

Causes

Snow structure: NEW SNOW : 30-40 cm

Weather (snowfall, wind, temperature): FAIR

Triggering mechanism (if known): —

CASUALTIES AND DAMAGE:

Number of persons killed: 2 ; injured: 0 ; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): 0

Other damage (forests, communications, etc.): 0

REMARKS (rescue work, former history of avalanches, etc.)

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Department of Environmental Sciences  
ANNUAL REPORT ON DESTRUCTIVE AVALANCHES

Serial number	Date	Location	Category*	Number of deaths	Number of injured	Damage	Remarks
1	Jan. 16	35° 58' N 138° 22' E	T	2	3	0	
2	Feb. 10(?)	35° 42' N 138° 18' E	-	0	0	Uninhabited hut	
3	Feb. 11	35° 23' N 133° 33' E	T	3	3	0	
4	Feb. 16	35° 22' N 138° 42' E	c	0	0	Road, forest and buildings	
5	Mar. 20	35° 18' N 138° 56' E	T	24	0	3 cars	
6	Apr. 10	37° 08' N 139° 56' E	T	2	0	0	

\* For accident to tourists, mark T; to people at work, mark W; to residents, mark R; to communications (roads, railways), mark C.

Note: This form should be completed in duplicate at the end of each winter season; and sent, together with the reports on individual avalanches, to the following address:

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Department of Environmental Sciences

Report on Destructive Avalanche

COUNTRY: Japan

Winter 1971/1972

Serial No.: 1

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Mt. Yoko-dake, Kitayama-machi, Chino-shi, Nagano-ken.

Latitude: 35° 58' N Longitude: 138° 22' E Altitude: 2,300m

DATE: Jan. 16, 1972; Time: 5<sup>h</sup>55<sup>m</sup> = Jan. 15, 20<sup>h</sup>55<sup>m</sup> (GMT)

DATA ON AVALANCHE:

Type (International classification): A-4 B-1 C-1 D-2 E-2 F-1  
Orientation: North

Dimensions\*

Starting zone: Altitude: 2,300m Width: 6m Depth of fracture:

Avalanche path: Length: 50m Width: Average slope:

Deposit: Maximum depth: (3m) Volume:

Causes

Snow structure:

Weather (snowfall, wind, temperature): Clear

Triggering mechanism (if known):

CASUALTIES AND DAMAGE:

Number of persons killed: 2; injured: 3; rescued unharmed: 4

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Persons killed and injured were mountaineers. Parties bivouacing near the scene  
and the mountain patrol (total 40 persons) did the rescue works.  
There was no avalanche damage before.

Attach photographs and/or sketches if possible.

\*Please use metric system

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Department of Environmental Sciences

Report on Destructive Avalanche

COUNTRY: Japan Winter 1971/1972 Serial No.: 2  
Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.  
LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Mt. Kōō, Seitetsu-machi, Nirasaki-shi, Yamana-shi-ken.  
Latitude: 35°42'N Longitude: 138°18'E Altitude: 2,500m  
DATE: Feb. 10 (?) 1972; Time: = (GMT)

DATA ON AVALANCHE:

Type (International classification): A.O. B.O. C.O. D.2 E.O. F.O. Orientation: East

Dimensions\*

Starting zone: Altitude: 2,600m Width: 50m Depth of fracture:  
Avalanche path: Length: 100m Width: 50m Average slope:  
Deposit: Maximum depth: 4m Volume:

Causes

Snow structure:

Weather (snowfall, wind, temperature):

Triggering mechanism (if known):

CASUALTIES AND DAMAGE:

Number of persons killed: 0; injured: 0; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): Uninhabited hut (completely destroyed).

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Mountaineers found the hut destroyed by the avalanche on Feb. 10. Therefore, the date was unknown and the detailed information on the avalanche could not be obtained.

Attach photographs and/or sketches if possible. \*Please use metric system

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Report on Destructive Avalanche

COUNTRY: Japan Winter 1971/1972 Serial No.: 3

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path) (gun, Tottori-ken.  
Mt. Daisen (the Taki-no-sawa Ridge of North Wall), Daisen-machi, Saihaku-

Latitude: 35° 23' N Longitude: 133° 33' E Altitude: .....

DATE: Feb. 11 1972; Time: About 12<sup>h</sup> 30<sup>m</sup> = 3<sup>h</sup> 30<sup>m</sup> (GMT)

DATA ON AVALANCHE:

Type (International classification): A. 1 B. 2 C. 2 D. 0 E. 0 F. 0  
Orientation: .....

Dimensions\*

Starting zone: Altitude: About 1,700m Width: 20~40m Depth of fracture: 0.4~0.5m

Avalanche path: Length: 1,200m Width: 20~40m Average slope: 40°

Deposit: Maximum depth: ..... Volume: .....

Causes

Snow structure: New snow of 0.4~0.5m on the 2m old snow.

Weather (snowfall, wind, temperature): Clear, +3°C (at 3<sup>h</sup> GMT).

Triggering mechanism (if known): The air temperature of the day was higher than the average  
by 4~5°C.

CASUALTIES AND DAMAGE:

Number of persons killed: 3; injured: 3; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Six persons were buried under the debris and three persons were rescued. Many  
avalanches occur at the North Wall of Mt. Daisen, because of steepness of the slopes  
and quick changes of weather.

Attach photographs and/or sketches if possible. \* Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national  
reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the  
following address:

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Department of Environmental Sciences

Report on Destructive Avalanche

COUNTRY: Japan

Winter 1971/1972

Serial No.: 4

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Mt. Fuji, Narusawa-mura, Minami-tsuru-gun, Yamanashi-ken.

Latitude: 35° 22' N Longitude: 138° 42' E Altitude: 2,028m

DATE: Feb. 16, 1972; Time: About 7<sup>A</sup> = Feb. 15, 22<sup>B</sup> (GMT)

DATA ON AVALANCHE:

Type (International classification): A. 4 B. 2 C. 2 D. 1 E. 2 F. 2  
Orientation:

Dimensions\*

Starting zone: Altitude: 3,200m Width: 20m Depth of fracture: 1m

Avalanche path: Length: 2,700m Width: 150m Average slope: 26°

Deposit: Maximum depth: 5m Volume: 7,600m<sup>3</sup>

Causes

Snow structure: New snow on the crusted snow cover.

Weather (snowfall, wind, temperature): Cloudy, No wind, -8°C ~ -7°C.

Triggering mechanism (if known): Rain

CASUALTIES AND DAMAGE:

Number of persons killed: 0; injured: 0; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): Uninhabited stall (completely destroyed),  
and public latrine (partly destroyed).

Other damage (forests, communications, etc.): Forest 0.2 ha and facilities of road.

REMARKS (rescue work, former history of avalanches, etc.)

An avalanche once occurred about 70 years ago.

Attach photographs and/or sketches if possible.

\* Please use metric system

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Department of Environmental Sciences

Report on Destructive Avalanche

COUNTRY: Japan Winter 1971/1972 Serial No.: 5

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Mt. Fuji, Gotemba-shi, Shizuoka-ken.  
Latitude: 35°18' N Longitude: 138°56' E Altitude: 1,500m

DATE: Mar. 20 1972; Time: 8<sup>h</sup>15<sup>m</sup> = Mar. 19, 23<sup>h</sup>15<sup>m</sup> (GMT)

DATA ON AVALANCHE:

Type (International classification): A 5 B 4 C 2 D 5 E 2 F 2  
Orientation: South-east

Dimensions\*

Starting zone: Altitude: 1,800~2,000m Width: 20~50m Depth of fracture: .....  
Avalanche path: Length: { Max. 2,800m  
Mean: 2,000m Width: 1,600m Average slope: .....

Deposit: Maximum depth: ..... Volume: .....

Causes

Snow structure: .....

Weather (snowfall, wind, temperature): Rain and fog, S 11.5m/sec, +14.2°C (Mar. 20, 00<sup>h</sup>00<sup>m</sup> GMT)

Triggering mechanism (if known): Rain

CASUALTIES AND DAMAGE:

Number of persons killed: 24 ; injured: 0 ; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): 3 cars at the parking lot of the Gotemba ski field.

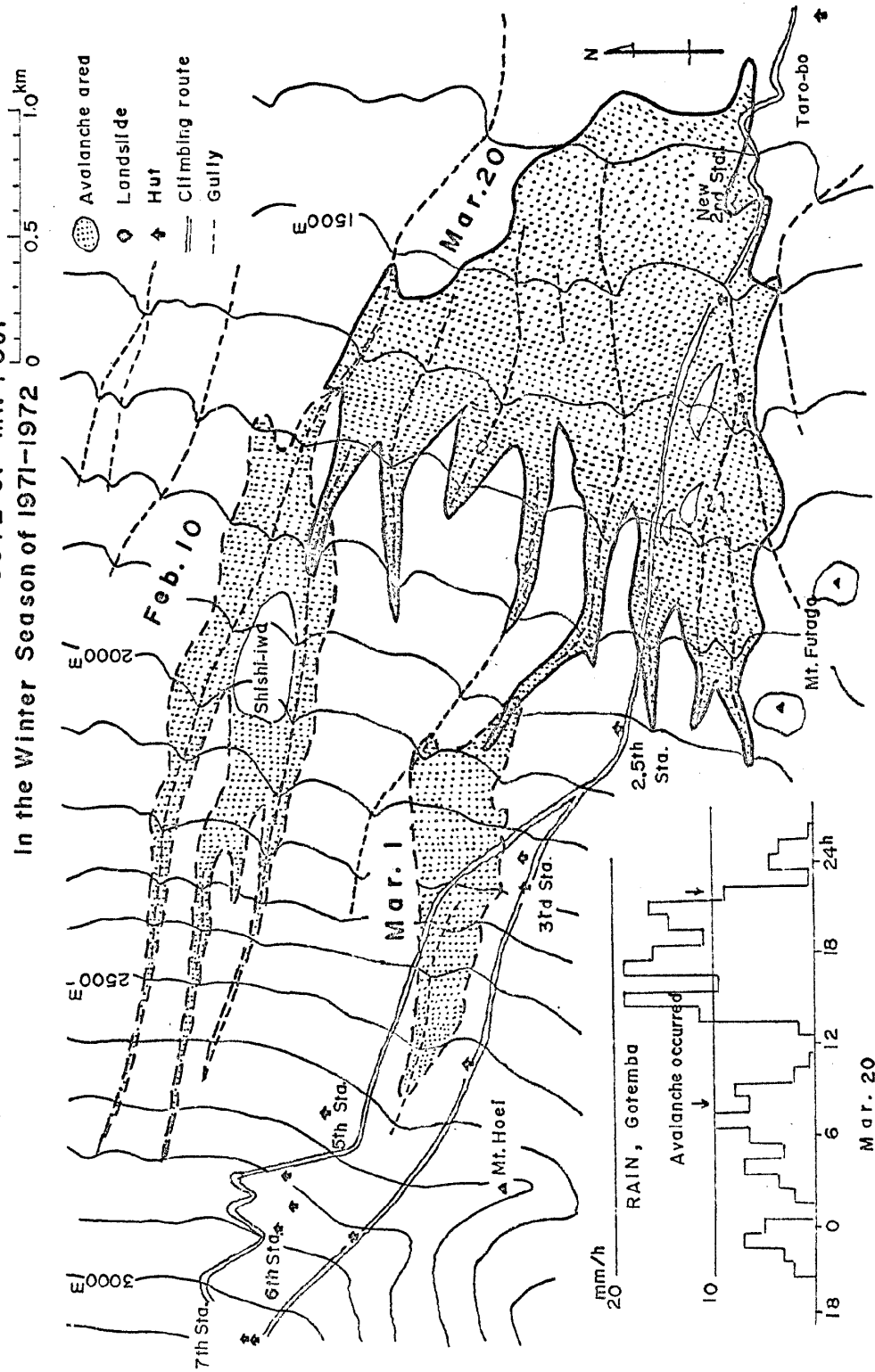
REMARKS (rescue work, former history of avalanches, etc.)  
Recent avalanches at this area: Mar. 31, 1971; Feb. 10, 1972; Mar. 1, 1972.  
Reference: A sketch of the avalanche and a table of the past avalanches at the  
Gotemba route of Mt. Fuji are attached.

Attach photographs and/or sketches if possible. \*Please use metric system

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AVALANCHES AT THE GOTE MBA ROUTE OF Mt. FUJI  
In the Winter Season of 1971-1972



PAST AVALANCHES AT THE GOTEEMBA ROUTE OF Mt. FUJI  
Reported by the Mt. Fuji Weather Station 1)

No.	Date	Location	Time	Casualties and damage 2)
1	Mar. 2, 1947	from the 2nd station to Taro-bo	about 18 <sup>h</sup> 30 <sup>m</sup>	power-transmission line
2	Apr. 2, 1947	the 5th station	unknown	
3	Mar. 13, 1948		13 <sup>h</sup> 15 <sup>m</sup> , 13 <sup>h</sup> 45 <sup>m</sup>	
4	May, 13, 1949	the 6.5th station	7 <sup>h</sup> 8 <sup>m</sup> , 9 <sup>h</sup> 55 <sup>m</sup> , 11 <sup>h</sup> 10 <sup>m</sup>	
5	Mar. 7, 1950		unknown	
6	Mar. 26, 1951		6 <sup>h</sup> 20 <sup>m</sup>	
7	Feb. 27-28, 1954		unknown	two huts of the 2.5th station and the 2nd station
8	Mar. 18, 1955	the 6th station	unknown	
9	Mar. 17, 1956	right side of climbing route	5 <sup>h</sup> 16 <sup>m</sup>	
10	Mar. 19, 1956	the 3rd station	11 <sup>h</sup> 40 <sup>m</sup> , 12 <sup>h</sup> 10 <sup>m</sup>	power-transmission line and electric pole
11	Jan. 30, 1959	the 2.8th station	about 22 <sup>h</sup>	Oishi tea shop

1) Seppyo Vol. 22, No. 1, 1960, p. 28-36.

2) Including the avalanches which had neither casualties nor damage.

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Department of Environmental Sciences

Report on Destructive Avalanche

COUNTRY: Japan Winter 1971/1972 Serial No.: 6

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Mt. Asahi-dake, Yumoto, Nasu-machi, Nasu-gun, Tochigi-ken.

Latitude: 37°08' N Longitude: 139°58' E Altitude: 1,700m

DATE: Apr. 10, 1972; Time: About 10<sup>h</sup> = 1<sup>h</sup> (GMT)

DATA ON AVALANCHE:

Type (International classification): A 4 B 1 C 2 D 0 E 2 F 2  
Orientation:

Dimensions\*

Starting zone: Altitude: 1,700m Width: 20m Depth of fracture:

Avalanche path: Length: 150m Width: 20m Average slope:

Deposit: Maximum depth: Volume:

Causes

Snow structure:

Weather (snowfall, wind, temperature):

Triggering mechanism (if known):

CASUALTIES AND DAMAGE:

Number of persons killed: 2; injured: 0; rescued unharmed: 1

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

The slope is said to be an avalanche site where we have many avalanches frequently.  
The Kuroiso police party and the Kuroiso mountain rescue party (total 23 persons)  
did the rescue activities.

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Department of Environmental Sciences  
ANNUAL REPORT ON DESTRUCTIVE AVALANCHES

Serial number	Date	Location	Category*	Number of deaths	Number of injured	Damage	Remarks
1	Nov. 21	43° 09'N 143° 31'E (Jan-no-sawa, Hokkaido)	T	5	0	0	
2	Dec. 1	36° 13'N 137° 37'E (Kama Tunnel, Nagano)	T	1	0	0	
3	Jan. 1-2	36° 18'N 137° 40'E (Mt. Kitahodaka, Nagano)	T	4 (missing)	0	0	
4	Jan. 29	35° 51'N 138° 57'E (Ichi-no-kure-sawa, Gunma)	T	2 (missing)	0	0	
5	May 17	37° 18'N 139° 13'E (Rokujuri Pass, Fukushima)	V	1	1	0	

\* For accident to tourists, mark T; to people at work, mark W; to residents, mark R; to communications (roads, railways), mark C.

Note: This form should be completed in duplicate at the end of each winter season; and sent, together with the reports on individual avalanches, to the following address:

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Paris 7e (FRANCE)



UNITED NATIONS EDUCATIONAL,  
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Department of Environmental Sciences

Report on Destructive Avalanche

COUNTRY: Japan Winter 1972/1973 Serial No.: 1

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Ban-no-sawa, Mt. Daisetsu, Higashikawa-machi, Kamikawa-gun, Hokkaido.  
Latitude: 43°09'N Longitude: 143°31'E Altitude: 1,350m  
DATE: Nov. 21 1972; Time: About 23<sup>h</sup> = 14<sup>h</sup> (GMT)

DATA ON AVALANCHE:

Type (International classification): A. 2 B. 6 C. 2 D. 2 E. 2 F. 2  
Orientation: North

Dimensions\*

Starting zone: Altitude: Width: 40m Depth of fracture: 1.5m  
Avalanche path: Length: 300m Width: 40m Average slope: 25°  
Deposit: Maximum depth: 4m Volume: 400m<sup>3</sup>

Causes

Snow structure: Wet snow on the new snow.  
Weather (snowfall, wind, temperature): Snow storm, 10m/sec, +9°C  
Triggering mechanism (if known):

CASUALTIES AND DAMAGE:

Number of persons killed: 5; injured: 0; rescued unharmed: 1 (escaped by himself)  
Damage to buildings (type, number, degree of destruction): (A tent was buried)  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
Many avalanches occur in the beginning of winter and the thawing period.

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Report on Destructive Avalanche

COUNTRY: Japan Winter 1972/1973 Serial No.: 2

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Kama Tunnel (on the Kamikochi side), Azumi-machi, Minami-azumi-gun, Nagano-ken.  
Latitude: 36°13'N Longitude: 137°37'E Altitude: 1,400m

DATE: Dec. 1 1972; Time: 14<sup>h</sup>30<sup>m</sup> = 5<sup>h</sup>30<sup>m</sup> (GMT)

DATA ON AVALANCHE:

Type (International classification): A-0 B-1 C-1 D-2 E-2 F-1  
Orientation: South-west

Dimensions\*

Starting zone: Altitude: 1,450m Width: 7m Depth of fracture: 2m

Avalanche path: Length: 50m Width: 7m Average slope:

Deposit: Maximum depth: Volume:

Causes

Snow structure:

Weather (snowfall, wind, temperature): Snow storm.

Triggering mechanism (if known):

CASUALTIES AND DAMAGE:

Number of persons killed: 1; injured: 0; rescued unharmed: 3

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

A member who was climbing for rescue work of colleague members was struck by the  
avalanche. In March 20, 1972, two persons were attacked by an avalanche at the point twenty  
meter away from this place.

Attach photographs and/or sketches if possible. \* Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Report on Destructive Avalanche

COUNTRY: Japan Winter 1972/1973 Serial No.: 3

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
the junction of Yokoo-dani and Kara-sawa, Mt. Kita-hodaka, Minami-azumi-gun,  
Latitude: 36°18'N Longitude: 137°40'E Altitude: About 1,900m Nagano-ken.

DATE: Jan. 1 - Jan. 2, 1973, Time: = (GMT)

DATA ON AVALANCHE:

Type (International classification): A.0 B.1 C.2 D.1 E.2 F.2  
Orientation:

Dimensions\*

Starting zone: Altitude: Width: Depth of fracture:

Avalanche path: Length: Width: 80m Average slope:

Deposit: Maximum depth: Volume:

Causes

Snow structure:

Weather (snowfall, wind, temperature): Rain and snow storm.

Triggering mechanism (if known): Rain.

CASUALTIES AND DAMAGE:

Number of persons killed: 4 (missing); injured: 0; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

The avalanche came from the North Ridge of Mt. Kita-hodaka and the victims were struck at the point of 700m upward from Marute Bridge.

The slope is said to be an avalanche site where we have many avalanches frequently. In 1968, seven persons were buried alive here.

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Report on Destructive Avalanche

COUNTRY: Japan Winter 1972/1973 Serial No.: 4

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Ichi-no-kurasawa, Mt. Tanigawa, Aza-doi, Minakami-machi, Tone-gun, Gunma-ken

Latitude: 35°51'N Longitude: 138°57'E Altitude: About 900 m

DATE: Jan. 29 1973 Time: About 10h30m = 01h30m (GMT)

DATA ON AVALANCHE: A0 B1 C1 D2 E0 F1  
Type (International classification): ..... Orientation: .....

Dimensions\*  
Starting zone: Altitude: ..... Width: 50-60 m Depth of fracture: .....  
Avalanche path: Length: 600 m Width: ..... Average slope: .....  
Deposit: Maximum depth: ..... Volume: .....

Causes  
Snow structure: About one meter of new snow on the old snow  
Weather (snowfall, wind, temperature): Snow storm  
Triggering mechanism (if known): .....

CASUALTIES AND DAMAGE:  
Number of persons killed: 2 (missing); injured: 0; rescued unharmed: 4 (escaped by themselves)  
Damage to buildings (type, number, degree of destruction): None  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
The case of successive two avalanches. The first avalanche hit four persons. By this avalanche one was buried and three escaped by themselves. One of three returned to ask for help, while two persons stayed there, they were struck again by another avalanche. The one was buried and the other escaped by himself.

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Report on Destructive Avalanche

COUNTRY: Japan Winter 1972/1973 Serial No.: 5

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center  
for Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigataken.

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Rokujuri Pass, Mt. Oni-gatsura, Tadami-machi, Minami-aizu-gun, Fukushima-ken.  
Latitude:  $37^{\circ}18'N$  Longitude:  $139^{\circ}13'E$  Altitude: About 1,000m

DATE: May 17, 1973; Time: About  $7^h30^m$  = May 16,  $22^h30^m$  (GMT)

DATA ON AVALANCHE:

Type (International classification): A-1 B-4 C-2 D-0 E-2 F-2  
Orientation:

Dimensions\*

Starting zone: Altitude: About 1,000m Width: 3m Depth of fracture: 1m

Avalanche path: Length: 10m Width: 3m Average slope:

Deposit: Maximum depth: Volume:

Causes

Snow structure:

Weather (snowfall, wind, temperature): Cloudy, 1m/sec,  $+19.4^{\circ}C$  (at 9 in Irihirose village).

Triggering mechanism (if known):

CASUALTIES AND DAMAGE:

Number of persons killed: 1; injured: 1; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Victims were taking a kind of mountain plant for food.

Attach photographs and/or sketches if possible. \*Please use metric system

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Department of Environmental Sciences,  
Unesco,  
Place de Fontenoy,  
Paris 7e (France)

UNITED NATIONS EDUCATIONAL,  
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Department of Environmental Sciences  
ANNUAL REPORT ON DESTRUCTIVE AVALANCHES

Serial number	Date	Location	Category*	Number of deaths	Number of injured	Damage	Remarks
1	21 Dec.	37°49'N 139°30'E	W	0	2	0	Mountaineers
2	1 Jan.	35°40'N 138°14'E	T	3	0	0	Tour skiers
3	12 Jan.	36°48'N 138°08'E	T	2	0	0	
4	16 Jan.	36°59'N 138°31'E	C	0	0	Railway Building	
5	24 Jan.	39°09'N 140°17'E	R	0	0	0	
6	24 Jan.	40°15'N 140°50'E	W	1	2	0	
7	24 Jan.	40°17'N 140°15'E	T	1	1	0	
8	26 Jan.	39°18'N 140°37'E	R	0	1	Building	
9	28 Jan.	37°32'N 139°08'E	T	1	0	0	
10	9 Feb.	36°39'N 137°48'E	C	0	0	Ski lift & c.	
11	10 Feb.	39°00'N 140°40'E	R	0	0	Building	Nursery school
12	10 Feb.	36°07'N 138°10'E	T	1	1	0	Tour skiers

\* For accident to tourists, mark T; to people at work, mark W; to residents, mark R; to communications (roads, railways), mark C.

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ANNUAL REPORT ON DESTRUCTIVE AVALANCHES

Serial number	Date	Location	Category*	Number of deaths	Number of injured	Damage	Remarks
13	11 Feb.	35°59'N 138°21'E	T	3	0	0	Mountaineers
14	23 Feb.	36°30'N 137°43'E	W	0	7	0	0
15	24 Feb.	36°05'N 138°12'E	T	1	0	0	Tour skier
16	4 Mar.	34°13'N 136°38'E	T & C	0	0	Road & car	
17	6 Mar.	40°20'N 140°45'E	R	0	0	Buildings	
18	9 Mar.	37°30'N 139°44'E	R	1	0	0	0
19	14 Mar.	36°24'N 136°38'E	T	1	2	Motor car	
20	18 Mar.	34°45'N 137°46'E	T	5	0	0	0
21	22 Mar.	40°10'N 140°30'E	R	0	0	Buildings	Mountaineers
22	23-24 Mar.	36°35'N 137°45'E	T	9	2	0	0
23	25 Mar.	42°56'N 141°02'E	T	2	0	0	0
24	26 Mar.	39°23'N 139°27'E	W	1	0	0	0

\* For accident to tourists, mark T; to people at work, mark W; to residents, mark R; to communications (roads, railways), mark C.

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ANNUAL REPORT ON DESTRUCTIVE AVALANCHES

COUNTRY: Japan.....		Winter 19 <sup>73</sup> /19 <sup>74</sup>		Sheet No. 3.....			
Name and address of reporter: .....		Institute of Snow and Ice Studies .....					
Serial number	Date	Location	Category*	Number of deaths	Number of injured	Damage	Remarks
25	1 Apr.	40°11'N 140°39'E	W	3	1	0	
26	8 Apr.	37°15'N 139°48'E	T	2	0	0	

\* For accident to tourists, mark T; to people at work, mark W; to residents, mark R; to communications (roads, railways), mark C.

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**Report on Destructive Avalanche**

COUNTRY: Japan

Winter 1973/1974

Serial No.: 1

Name and address of reporter: Institute of Snow and Ice Studies, National Research Center for  
Disaster Prevention, Suyoshi-machi, Nagaoka-shi, Niigata-ken

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Mt. Takiya, Shibata-shi, Niigata-ken

Latitude: 37°49'N Longitude: 139°30'E Altitude: 220 m

DATE: 21 December 1973 Time: 11h20m = 2h20m (GMT)

DATA ON AVALANCHE:

Type (International classification): A1 E1 C1 D2 E1 F0 G1

Orientation: South

Dimensions\*

Starting zone: Altitude: 270 m Width: 2 m Depth of fracture: 1 m

Avalanche path: Length: 50 m Width: 9 m Average slope: 40°

Deposit: Maximum depth: 3 m Volume: -----

Causes

Snow structure: -----

Weather (snowfall, wind, temperature): Clear

Triggering mechanism (if known): -----

CASUALTIES AND DAMAGE:

Number of persons killed: 0 ; injured: 2 ; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Hit while working at snow removal by bulldozer. Thirty workers of mine office near  
the scene did rescue work.

Attach photographs and/or sketches if possible. \*Please use metric system

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**Report on Destructive Avalanche**

COUNTRY: Japan

Winter 1973/1974

Serial No.: 2

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Mt. Shirane ( Mt. Kita-dake ) Ayasu-mura, Nakakoma-gun, Yamanashi-ken

Latitude: 35°40'N Longitude: 138°14'E Altitude: 3,100 m

DATE: 1 January 1974; Time: About 12h30m = 3h30m (GMT)

DATA ON AVALANCHE:

A1 E1 C1 D2 E2 F0 G2

Type (International classification): .....

Orientation: South

Dimensions\*

Starting zone: Altitude: 3,100 m Width: ----- Depth of fracture: -----

Avalanche path: Length: 400 m Width: ----- Average slope: 50-80°

Deposit: Maximum depth: ----- Volume: -----

Causes

Snow structure: -----

Weather (snowfall, wind, temperature): Clear, no wind

Triggering mechanism (if known): -----

CASUALTIES AND DAMAGE:

Number of persons killed: 3; injured: 0; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Attach photographs and/or sketches if possible. \*Please use metric system

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**Report on Destructive Avalanche**

COUNTRY: Japan Winter 19.73/19.74 Serial No.: 3

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Mt. Kurohime (near Kurohime skiing ground) Shinano-machi, Kami-minochi-gun,  
Latitude: 36°48'N Longitude: 138°08'E Altitude: 1,200 m Nagano-ken

DATE 12 January 19.74, Time: 12h45m = 3h45m (GMT)

DATA ON AVALANCHE: A1 E1 C1 D2 E0 F0 G1  
Type (International classification): ..... Orientation: East

Dimensions\*  
Starting zone: Altitude: 1,200 m Width: ..... Depth of fracture: .....  
Avalanche path: Length: 300 m Width: ..... Average slope: 37°  
Deposit: Maximum depth: ..... Volume: .....

Causes  
Snow structure: .....  
Weather (snowfall, wind, temperature): Clear  
Triggering mechanism (if known): .....

CASUALTIES AND DAMAGE:  
Number of persons killed: 2 ; injured: 0 ; rescued unharmed: 0  
Damage to buildings (type, number, degree of destruction): None  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....  
.....

Attach photographs and/or sketches if possible. \*Please use metric system

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Report on Destructive Avalanche

COUNTRY: Japan Winter 19<sup>73</sup>/19<sup>74</sup> Serial No.: 4

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Tarusaka, Sakae-mura, Shimo-minochi-gun, Nagano-ken

Latitude: 36°59'N Longitude: 138°31'E Altitude: 320 m

DATE: 16 January 1974; Time: 7h40m = 15 January (GMT) 22h40m

DATA ON AVALANCHE:

Type (International classification): A Q I O C O D O E O F O G O Orientation: .....

Dimensions\*

Starting zone: Altitude: 340 m Width: 15 m Depth of fracture: .....

Avalanche path: Length: 20 m Width: 15 m Average slope: 70°

Deposit: Maximum depth: ..... Volume: 300 m<sup>3</sup>

Causes

Snow structure: Snow depth; about 3 m

Weather (snowfall, wind, temperature): .....

Triggering mechanism (if known): .....

CASUALTIES AND DAMAGE:

Number of persons killed: 0 ; injured: 0 ; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): avalanche blocked railway and the train was derailed by the deposit

REMARKS (rescue work, former history of avalanches, etc.)

.....  
.....  
.....

Attach photographs and/or sketches if possible. \*Please use metric system

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**Report on Destructive Avalanche**

COUNTRY: Japan

Winter 1973/1974

Serial No.: 5

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Shimizusawa-mura, Chokai-machi, Yuri-gun, Akita-ken

Latitude: 39°09'N Longitude: 140°17'E Altitude: 300m

DATE: 24 January 1974; Time: 3h00m = 23 January (GMT) 18h00m

DATA ON AVALANCHE:

Type (International classification): A2 E1 C1 D1 E1 F0 G2 Orientation: South-west

Dimensions\*

Starting zone: Altitude: 400 m Width: 50 m Depth of fracture: 1 m

Avalanche path: Length: 150 m Width: 50 m Average slope: 35°

Deposit: Maximum depth: 3 m Volume: 1,000 m<sup>3</sup>

Causes

Snow structure: New snow on old snow cover

Weather (snowfall, wind, temperature): Snowfall, wind: 7m/sec, temperature: -2.1°C

Triggering mechanism (if known): -----

CASUALTIES AND DAMAGE:

Number of persons killed: 0; injured: 0; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): One heavily damaged

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Attach photographs and/or sketches if possible. \*Please use metric system

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Report on Destructive Avalanche

COUNTRY: Japan Winter 1973/1974 Serial No.: 6

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

National forest in Mt. Shibauchi, Kazuno-shi, Akita-ken

Latitude: 40°15'N Longitude: 140°50'E Altitude: 510 m

DATE: 24 January 1974; Time: 11h30m = 02h30m (GMT)

DATA ON AVALANCHE:

Type (International classification): A2 E1 C1 D2 E1 F0 G1 Orientation: East

Dimensions\*

Starting zone: Altitude: 600 m Width: 13 m Depth of fracture: 0.3 m

Avalanche path: Length: 60 m Width: 13 m Average slope: 40°

Deposit: Maximum depth: 1 m Volume: 1,000 m<sup>3</sup>

Causes

Snow structure: -----

Weather (snowfall, wind, temperature): Snowfall, wind; 6.0 m/sec, temperature; -1.5°C

Triggering mechanism (if known): -----

CASUALTIES AND DAMAGE:

Number of persons killed: 1; injured: 2; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Attach photographs and/or sketches if possible. \*Please use metric system

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**Report on Destructive Avalanche**

COUNTRY: Japan Winter 1973/1974 Serial No.: 7

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Kashige, Fujisato-machi, Yamamoto-gun, Akita-ken  
Latitude: 40°17'N Longitude: 140°15'E Altitude: 160 m

DATE: 24 January 1974; Time: 12h05m = 03h05m (GMT)

DATA ON AVALANCHE:  
Type (International classification): A2 E4 C2 D1 E2 F0 G2  
Orientation: East

Dimensions\*  
Starting zone: Altitude: 250 m Width: 230 m Depth of fracture: 0.5 m  
Avalanche path: Length: 100 m Width: 230 m Average slope: 40°  
Deposit: Maximum depth: 5 m Volume: 37,500 m<sup>3</sup>

Causes  
Snow structure: Granular snow through all layer  
Weather (snowfall, wind, temperature): Snowfall, wind; 3 m/sec, temperature; -1.0°C  
Triggering mechanism (if known): High temperature

CASUALTIES AND DAMAGE:  
Number of persons killed: 1 ; injured: 1 ; rescued unharmed: 0  
Damage to buildings (type, number, degree of destruction): None  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
25 persons working at Subari dam station discovered the victim dead

Attach photographs and/or sketches if possible. \*Please use metric system

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**Report on Destructive Avalanche**

COUNTRY: Japan Winter 1973/1974 Serial No.: 8

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Numayama, Osawa-machi, Yokote-shi, Akita-ken

Latitude: 39°18'N Longitude: 140°37'E Altitude: 140 m  
DATE: 26 January 1974; Time: 22h30m = 13h30m (GMT)

DATA ON AVALANCHE:  
Type (International classification): A2 E1 C1 D2 E2 F0 G2 Orientation: North-west

Dimensions\*  
Starting zone: Altitude: 220 m Width: 40 m Depth of fracture: 1 m  
Avalanche path: Length: 150 m Width: 50 m Average slope: 39°  
Deposit: Maximum depth: 5 m Volume: 7,500 m<sup>3</sup>

Causes  
Snow structure: -----  
Weather (snowfall, wind, temperature): Snowfall, wind; 2 m/sec, temperature; -1.3°C  
Triggering mechanism (if known): -----

CASUALTIES AND DAMAGE:  
Number of persons killed: 0; injured: 1; rescued unharmed: 0  
Damage to buildings (type, number, degree of destruction): One heavily destroyed  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....  
.....

Attach photographs and/or sketches if possible. \*Please use metric system

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Report on Destructive Avalanche

COUNTRY: **Japan** Winter 1973/1974 Serial No.: 9

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
**Mt. Sankurobira, Nagano, Shitada-mura, Minami-kanbara-gun, Niigata-ken**

Latitude: **37°32'N** Longitude: **139°08'E** Altitude: **85 m**

DATE: **28 January** 19**74**; Time: **16h10m** = **07h10m** (GMT)

DATA ON AVALANCHE:

Type (International classification): **A1 E1 C1 D1 E1 F0 G1** Orientation: **East**

Dimensions\*

Starting zone: Altitude: **155 m** Width: **30 m** Depth of fracture: **1 m**

Avalanche path: Length: **60 m** Width: **50 m** Average slope: **30°**

Deposit: Maximum depth: **5 m** Volume: **1,500 m<sup>3</sup>**

Causes

Snow structure: **New snow on granular snow**

Weather (snowfall, wind, temperature): **Cloudy, no wind**

Triggering mechanism (if known): **-----**

CASUALTIES AND DAMAGE:

Number of persons killed: **1**; injured: **0**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **None**

Other damage (forests, communications, etc.): **None**

REMARKS (rescue work, former history of avalanches, etc.)

**An avalanche occurred at the same site about 50 years ago. The victim is a pupil on her way home.**

Attach photographs and/or sketches if possible. \*Please use metric system

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### Report on Destructive Avalanche

COUNTRY: Japan Winter 1973/1974 Serial No.: 10

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Goryu-tomi skiing ground, Hakuba-mura, Kita-azumi-gun, Nagano-ken

Latitude: 36°39'N Longitude: 137°48'E Altitude: 970-1,090 m

DATE: 9 February 1974; Time: 08h00m = 8 February (GMT)  
23h00m

DATA ON AVALANCHE:

Type (International classification): A0 E1 C1 D2 E1 F0 G1

Orientation: East

Dimensions\*

Starting zone: Altitude: 1,400 m Width: ----- Depth of fracture: 0.5-1 m

Avalanche path: Length: 1,100 m Width: 40-60 m Average slope: 40°

Deposit: Maximum depth: 3 m Volume: -----

Causes

Snow structure: New snow more than 1 m

Weather (snowfall, wind, temperature): Snow storm, wind; average 25 m/sec, max. 38 m/sec

Triggering mechanism (if known): Strong wind

CASUALTIES AND DAMAGE:

Number of persons killed: 0; injured: 0; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): Operation house for ski lift completely destroyed

Other damage (forests, communications, etc.): Supporting structures of the ski lift

REMARKS (rescue work, former history of avalanches, etc.)

Frequent avalanche site

Attach photographs and/or sketches if possible. \*Please use metric system

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**Report on Destructive Avalanche**

COUNTRY: Japan Winter 1973/1974 Serial No.: 11

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Katsurasawa, Minase-mura, Ogachi-gun, Akita-ken

Latitude: 39°00'N Longitude: 140°40'E Altitude: 340 m  
DATE: 10 February 1974; Time: 6h35m = 9 February (GMT)  
21h35m

DATA ON AVALANCHE:  
Type (International classification): A1 B4 C2 D1 E2 F0 G2 Orientation: South-west

Dimensions\*  
Starting zone: Altitude: 500 m Width: 50 m Depth of fracture: 1 m  
Avalanche path: Length: 150 m Width: 50 m Average slope: 37°  
Deposit: Maximum depth: 5 m Volume: 12,000 m<sup>3</sup>

Causes  
Snow structure: New snow on old snow cover  
Weather (snowfall, wind, temperature): -----  
Triggering mechanism (if known): Snow cornice

CASUALTIES AND DAMAGE:  
Number of persons killed: 0; injured: 0; rescued unharmed: 0  
Damage to buildings (type, number, degree of destruction): One nursery school completely destroyed  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....  
.....

Attach photographs and/or sketches if possible. \*Please use metric system

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**Report on Destructive Avalanche**

COUNTRY: Japan Winter 1973/1974 Serial No.: 12

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
The Kirigamine Heights, Wada-mura, Chiisagata-gun, Nagano-ken  
Latitude: 36°07'N Longitude: 138°10'E Altitude: 1,700 m  
DATE: 10 February 1974; Time: 16h00m = 7h00m (GMT)

DATA ON AVALANCHE:  
Type (International classification): A0 B1 C1 D0 E0 F0 G1 Orientation: .....

Dimensions\*  
Starting zone: Altitude: 1,600 m Width: ..... Depth of fracture: .....  
Avalanche path: Length: ..... Width: ..... Average slope: .....  
Deposit: Maximum depth: ..... Volume: .....

Causes  
Snow structure: .....  
Weather (snowfall, wind, temperature): Strong wind  
Triggering mechanism (if known): .....

CASUALTIES AND DAMAGE:  
Number of persons killed: 1; injured: 1; rescued unharmed: 0  
Damage to buildings (type, number, degree of destruction): None  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....

Attach photographs and/or sketches if possible. \*Please use metric system

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Report on Destructive Avalanche

COUNTRY: Japan Winter 1973/1974 Serial No.: 13

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Mt. Yoko-dake (Yatsugatake mountain range), Chino-shi, Nagano-ken  
Latitude: 35°59'N Longitude: 138°21'E Altitude: 2,700 m

DATE: 11 February 1974; Time: 08h30m = 10 February (GMT)  
23h30m

DATA ON AVALANCHE:  
Type (International classification): A0 E1 C1 D2 E1F0 G1  
Orientation: .....

Dimensions\*  
Starting zone: Altitude: 2,600 m Width: ----- Depth of fracture: -----  
Avalanche path: Length: ----- Width: ----- Average slope: -----  
Deposit: Maximum depth: ----- Volume: -----

Causes  
Snow structure: One meter of new snow, snow depth; 2 m  
Weather (snowfall, wind, temperature): Fog, temperature; below -10°C  
Triggering mechanism (if known): .....

CASUALTIES AND DAMAGE:  
Number of persons killed: 3; injured: 0; rescued unharmed: 0  
Damage to buildings (type, number, degree of destruction): None  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....  
.....

Attach photographs and/or sketches if possible. \* Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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**Report on Destructive Avalanche**

COUNTRY: Japan Winter 1973/1974 Serial No.: 14

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Site of construction for Shintakase-gawa power station, Omachi-shi, Nagano-ken

Latitude: 36°30'N Longitude: 137°43'E Altitude: .....

DATE: 23 February 1974; Time: 08h40m = 22 February (GMT)  
23h40m

DATA ON AVALANCHE:  
Type (International classification): A0 E0 CO DO E0 F0 G0 Orientation: .....

Dimensions\*  
Starting zone: Altitude: .....

Avalanche path: Length: 15 m Width: 30 m Average slope: 35°

Deposit: Maximum depth: ..... Volume: .....

Causes  
Snow structure: .....

Weather (snowfall, wind, temperature): .....

Triggering mechanism (if known): .....

CASUALTIES AND DAMAGE:  
Number of persons killed: 0; injured: 7; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....  
.....

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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**Report on Destructive Avalanche**

COUNTRY: Japan Winter 1973/1974 Serial No.: 15

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
Mt. Kuruma skiing ground, Chino-shi, Nagano-ken  
Latitude: 36°05'N Longitude: 138°12'E Altitude: 1,900 m  
DATE: 24 February 1974; Time: 15h30m = 06h30m (GMT)

DATA ON AVALANCHE:  
Type (International classification): A0 E1 C0 D2 E0 F0 G0 Orientation: -----

Dimensions\*  
Starting zone: Altitude: 1,900 m Width: 50 m Depth of fracture: 1 m  
Avalanche path: Length: 100 m Width: 50 m Average slope: -----  
Deposit: Maximum depth: ----- Volume: -----

Causes  
Snow structure: -----  
Weather (snowfall, wind, temperature): Snow storm  
Triggering mechanism (if known): -----

CASUALTIES AND DAMAGE:  
Number of persons killed: 1; injured: 0; rescued unharmed: 0  
Damage to buildings (type, number, degree of destruction): None  
Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....  
.....

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:  
  
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Report on Destructive Avalanche

COUNTRY: **Japan** Winter 1973/1974 Serial No.: **16**

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

**Fukase, Oguchi-machi, Ishikawa-gun, Ishikawa-ken**

Latitude: **36°13'N** Longitude: **136°38'E** Altitude: **350 m**

DATE: **4 March** 19**74**; Time: **17h30m** = **08h30m** (GMT)

DATA ON AVALANCHE:

Type (International classification): **A2 B4 C1 D1 E2 F0 G2**

Orientation: **West**

Dimensions\*

Starting zone: Altitude: **400 m** Width: **20 m** Depth of fracture: **-----**

Avalanche path: Length: **70 m** Width: **20-30 m** Average slope: **45°**

Deposit: Maximum depth: **40 m** Volume: **500 m<sup>3</sup>**

Causes

Snow structure: **Snow depth: 253 cm**

Weather (snowfall, wind, temperature): **Temperature: +5°C at 16h00m**

Triggering mechanism (if known): **-----**

CASUALTIES AND DAMAGE:

Number of persons killed: **0**; injured: **0**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **None**

Other damage (forests, communications, etc.): **Road blocked and one motorcar damaged**

REMARKS (rescue work, former history of avalanches, etc.)

**Frequent avalanche site, but no rescue work before**

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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**Report on Destructive Avalanche**

COUNTRY: **Japan** Winter 1973/1974 Serial No.: 17

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
**Tsukushimori, Kosaka-machi, Kazuno-gun, Akita-ken**

Latitude: **40°20'N** Longitude: **140°45'E** Altitude: **80 m**

DATE: **6 March** 19**74**; Time: **06h30m** = **5 March 21h30m** (GMT)

DATA ON AVALANCHE:

Type (International classification): **A2 B4 C2 D1 E2 F0 G2** Orientation: **East**

Dimensions\*

Starting zone: Altitude: **180 m** Width: **30 m** Depth of fracture: **1 m**

Avalanche path: Length: **100 m** Width: **30 m** Average slope: **35 °**

Deposit: Maximum depth: **3 m** Volume: **3,000 m<sup>3</sup>**

Causes

Snow structure: **Granular snow through all layer**

Weather (snowfall, wind, temperature): **Cloudy, no wind, temperature: -1.2°C**

Triggering mechanism (if known): **Snow cornice**

CASUALTIES AND DAMAGE:

Number of persons killed: **0**; injured: **0**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **2; one completely destroyed and another heavily damaged**

Other damage (forests, communications, etc.): **None**

REMARKS (rescue work, former history of avalanches, etc.)

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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**Report on Destructive Avalanche**

COUNTRY: **Japan** Winter 19<sup>73</sup>/19<sup>74</sup> Serial No.: **18**

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

**Yanazu-machi, Kawanuma-gun, Fukushima-ken**

Latitude: **37°30'N** Longitude: **139°44'E** Altitude: **750 m**

DATE: **9 March** 19<sup>74</sup>; Time: **10h00m** = **01h00m** (GMT)

DATA ON AVALANCHE:

Type (International classification): **A1 E1 C2 D2 E2 F0 G1**

Orientation: **South**

Dimensions\*

Starting zone: Altitude: **750 m** Width: **30 m** Depth of fracture: **0.5 m-2 m**

Avalanche path: Length: **50 m** Width: **30 m** Average slope: **30°**

Deposit: Maximum depth: **3 m** Volume: **4,500 m<sup>3</sup>**

Causes

Snow structure: .....

Weather (snowfall, wind, temperature): **Cloudy, no wind**

Triggering mechanism (if known): .....

CASUALTIES AND DAMAGE:

Number of persons killed: **1**; injured: **0**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **None**

Other damage (forests, communications, etc.): **None**

REMARKS (rescue work, former history of avalanches, etc.)

**No avalanche before**

Attach photographs and/or sketches if possible. \*Please use metric system

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### Report on Destructive Avalanche

COUNTRY: **Japan** Winter 19. ~~73~~ 19. 74 Serial No.: 19

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

**Nakajima, Tsurugi-machi, Ishikawa-gun, Ishikawa-ken**  
Latitude: **36°24'N** Longitude: **136°38'E** Altitude: **150 m**

DATE: **16 March** 19. 74 Time: **17h05m** = **08h05** (GMT)

DATA ON AVALANCHE:

Type (International classification): **A1 E4 C1 D1 E2 F0 G2**  
Orientation: **South**

Dimensions\*

Starting zone: Altitude: **200 m** Width: **10 m** Depth of fracture: **-----**  
Avalanche path: Length: **150 m** Width: **10 m** Average slope: **45°**  
Deposit: Maximum depth: **-----** Volume: **2,000 m<sup>3</sup>**

Causes

Snow structure: **Snow depth; 145 cm**  
Weather (snowfall, wind, temperature): **-----**  
Triggering mechanism (if known): **-----**

CASUALTIES AND DAMAGE:

Number of persons killed: **1**; injured: **2**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **None**

Other damage (forests, communications, etc.): **One motor car in which victims were riding was heavily destroyed**

REMARKS (rescue work, former history of avalanches, etc.)

**There is a protection forest for avalanches above the road, but no avalanche record before**

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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### Report on Destructive Avalanche

COUNTRY: Japan

Winter 1973/1974

Serial No.: 20

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Mt. Hakuba, Hakuba-mura, Kita-azumi-gun, Nagano-ken  
Latitude: 36°45'N Longitude: 137°46'E Altitude: 2,400 m

DATE: 18 March 1974; Time: 08h00m = 17 March (GMT)  
23h00m

DATA ON AVALANCHE:

Type (International classification): A2 B1 C1 D2 E2 F1 G0  
Orientation: East

Dimensions\*

Starting zone: Altitude: ----- Width: ----- Depth of fracture: -----

Avalanche path: Length: 500-600 m Width: 300 m Average slope: -----

Deposit: Maximum depth: ----- Volume: -----

Causes

Snow structure: -----

Weather (snowfall, wind, temperature): -----

Triggering mechanism (if known): -----

CASUALTIES AND DAMAGE:

Number of persons killed: 5; injured: 0; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): None

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Report on Destructive Avalanche

COUNTRY: Japan Winter 1973/1974 Serial No.: 21

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

Mt. Iwanosawa, Yuzawa-shi, Akita-ken

Latitude: 40°10'N Longitude: 140°30'E Altitude: 120 m

DATE: 22 March 1974, Time: 10h00m = 01h00m (GMT)

DATA ON AVALANCHE:

Type (International classification): A2 B4 C2 D1 E2 F0 G2 Orientation: West

Dimensions\*

Starting zone: Altitude: 240 m Width: 20 m Depth of fracture: 1 m

Avalanche path: Length: 60 m Width: 20 m Average slope: 38°

Deposit: Maximum depth: 4 m Volume: 2,400 m<sup>3</sup>

Causes

Snow structure: Granular snow through all layer

Weather (snowfall, wind, temperature): Cloudy, wind; 2 m/sec, temperature; -0.2°C

Triggering mechanism (if known): Climax avalanche

CASUALTIES AND DAMAGE:

Number of persons killed: 0; injured: 0; rescued unharmed: 0

Damage to buildings (type, number, degree of destruction): 2; one completely destroyed and another heavily destroyed

Other damage (forests, communications, etc.): None

REMARKS (rescue work, former history of avalanches, etc.)

In view of avalanche threat, the people of eleven homes of the town were ordered to evacuate their houses

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Report on Destructive Avalanche

COUNTRY: **Japan** Winter **1973/1974** Serial No.: **22**  
Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)  
**Mt. Kashimayariga-take, Omachi-shi, Nagano-ken**  
Latitude: **36°35'N** Longitude: **137°45'E** Altitude: **2,400 m**  
DATE: **23-24 March** 19**74**; Time: **unknown** = ----- (GMT)

DATA ON AVALANCHE:  
Type (International classification): **A0 B4 C0 D2 E0 F0 G0** Orientation: -----

Dimensions\*  
Starting zone: Altitude: ----- Width: ----- Depth of fracture: -----  
Avalanche path: Length: ----- Width: ----- Average slope: -----  
Deposit: Maximum depth: ----- Volume: -----

Causes  
Snow structure: -----  
Weather (snowfall, wind, temperature): -----  
Triggering mechanism (if known): -----

CASUALTIES AND DAMAGE:  
Number of persons killed: **9**; injured: **2**; rescued unharmed: **0**  
Damage to buildings (type, number, degree of destruction): **None**  
Other damage (forests, communications, etc.): **None**

REMARKS (rescue work, former history of avalanches, etc.)  
.....  
.....

Attach photographs and/or sketches if possible. \* Please use metric system

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Report on Destructive Avalanche

COUNTRY: **Japan**

Winter 1973/1974

Serial No.: 23

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

**Mt. Muine, Jozankei, Sapporo-shi, Hokkaido**

Latitude: **42°56'N** Longitude: **141°02'E** Altitude: **1,130 m**

DATE: **25 March** 19**74** Time: **About 16h00m = 07h00m** (GMT)

DATA ON AVALANCHE:

Type (International classification): **A2 B1 C1 D2 E2 F0 G1**

Orientation: **South-east**

Dimensions\*

Starting zone: Altitude: **1,130 m** Width: **50 m** Depth of fracture: **0.4 m**

Avalanche path: Length: **200 m** Width: **50 m** Average slope: **40°**

Deposit: Maximum depth: **3 m** Volume: **-----**

Causes

Snow structure: **New snow on crust of snow cover**

Weather (snowfall, wind, temperature): **Clear, no wind**

Triggering mechanism (if known): **Accidental triggering by skiers**

CASUALTIES AND DAMAGE:

Number of persons killed: **2**; injured: **0**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **None**

Other damage (forests, communications, etc.): **None**

REMARKS (rescue work, former history of avalanches, etc.)

Attach photographs and/or sketches if possible. \*Please use metric system

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Report on Destructive Avalanche

COUNTRY: **Japan** Winter 1973/1974 Serial No.: 24

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

**Tadami-machi, Minamiaizu-gun, Fukushima-ken**

Latitude: **39°23'N** Longitude: **139°27'E** Altitude: **370 m**

DATE: **26 march** 19**74**; Time: **09h40m** = **00h40m** (GMT)

DATA ON AVALANCHE: **A1 E1 C2 D2 E2 F0 G2**

Type (International classification): ..... Orientation: **South-east**

Dimensions\*

Starting zone: Altitude: **370 m** Width: **10 m** Depth of fracture: **1 m**

Avalanche path: Length: **60 m** Width: **10 m** Average slope: **45°**

Deposit: Maximum depth: **5-6 m** Volume: **3,000-3,500 m<sup>3</sup>**

Causes

Snow structure: .....

Weather (snowfall, wind, temperature): **Cloudy, weak wind, temperature: +5-10°C**

Triggering mechanism (if known): .....

CASUALTIES AND DAMAGE:

Number of persons killed: **1**; injured: **0**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **None**

Other damage (forests, communications, etc.): **None**

REMARKS (rescue work, former history of avalanches, etc.)

**Avalanche occurred before and the snow-shed was constructed there.**

Attach photographs and/or sketches if possible. \*Please use metric system

Note: This form should be completed as soon as possible after the event and, after checking by the national reporting centre, be sent, in duplicate, together with the corresponding annual avalanche report, to the following address:

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Report on Destructive Avalanche

COUNTRY: **Japan**

Winter 1973/1974

Serial No.: 25

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

**Takonaitaira, Higashi-naruse-mura, Ogachi-gun, Akita-ken**

Latitude: **40°11'N** Longitude: **140°39'E** Altitude: **220 m**

DATE: **1 April** 19**74**; Time: **13h50m** = **04h50m** (GMT)

DATA ON AVALANCHE:

Type (International classification): **A2 B4 C2 D1 E2 F0 G2**  
Orientation: **North-east**

Dimensions\*

Starting zone: Altitude: **300 m** Width: **100 m** Depth of fracture: **2 m**

Avalanche path: Length: **300 m** Width: **100 m** Average slope: **38°**

Deposit: Maximum depth: **5 m** Volume: **20,000 m<sup>3</sup>**

Causes

Snow structure: **Granular snow through all layer**

Weather (snowfall, wind, temperature): **Clear, wind: 1 m/sec, temperature: +5.3°C**

Triggering mechanism (if known): **Warm weather and rain falling from the day before**

CASUALTIES AND DAMAGE:

Number of persons killed: **3**; injured: **1**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **None**

Other damage (forests, communications, etc.): **None**

REMARKS (rescue work, former history of avalanches, etc.)

**Wood cutters while bringing down timbers were hit**

Attach photographs and/or sketches if possible. \*Please use metric system

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**Report on Destructive Avalanche**

COUNTRY: **Japan** Winter 19~~73~~<sup>74</sup> 1974 Serial No.: 26

Name and address of reporter: .....

LOCATION: (Name of district, nearest town or village, mountain area, avalanche path)

**Kurakotsu-sawa, Shimogo-machi, Minamiaizu-gun, Fukushima-ken**  
Latitude: **37°15'N** Longitude: **139°48'E** Altitude: **650 m**

DATE: **8 April** 1974 Time: **09h30m-11h30m = 00h30m-02h30m (GMT)**

DATA ON AVALANCHE:

Type (International classification): **A1 B1 C1 D2 E2 F0 G2**  
Orientation: **East**

Dimensions\*

Starting zone: Altitude: **650 m** Width: **-----** Depth of fracture: **1.0-1.5 m**  
Avalanche path: Length: **200 m** Width: **150 m** Average slope: **' 60°**  
Deposit: Maximum depth: **15 m** Volume: **30,000-45,000 m<sup>3</sup>**

Causes

Snow structure: **-----**

Weather (snowfall, wind, temperature): **Clear, weak wind**

Triggering mechanism (if known): **Snow cornice**

CASUALTIES AND DAMAGE:

Number of persons killed: **2**; injured: **0**; rescued unharmed: **0**

Damage to buildings (type, number, degree of destruction): **None**

Other damage (forests, communications, etc.): **None**

REMARKS (rescue work, former history of avalanches, etc.)

**Frequent avalanches at this site**

Attach photographs and/or sketches if possible. \*Please use metric system

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