

US Avalanche Accidents 2014-15

Dale Atkins

3
Alaska

11 deaths
(5-yr average = 31 deaths)

Fatalities

2
Montana

2
Wyoming

1
Utah

3
Colorado

Accidents

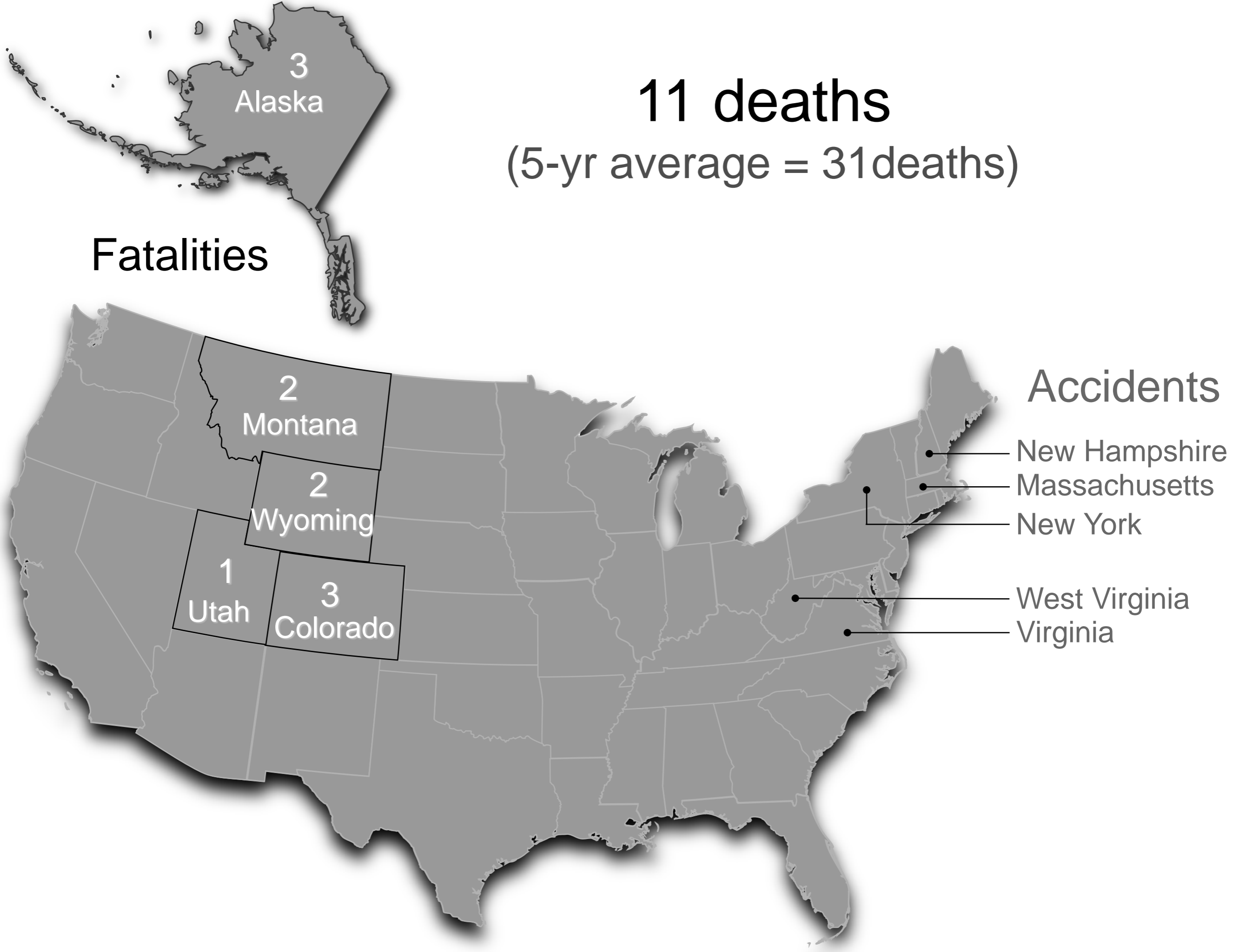
New Hampshire

Massachusetts

New York

West Virginia

Virginia

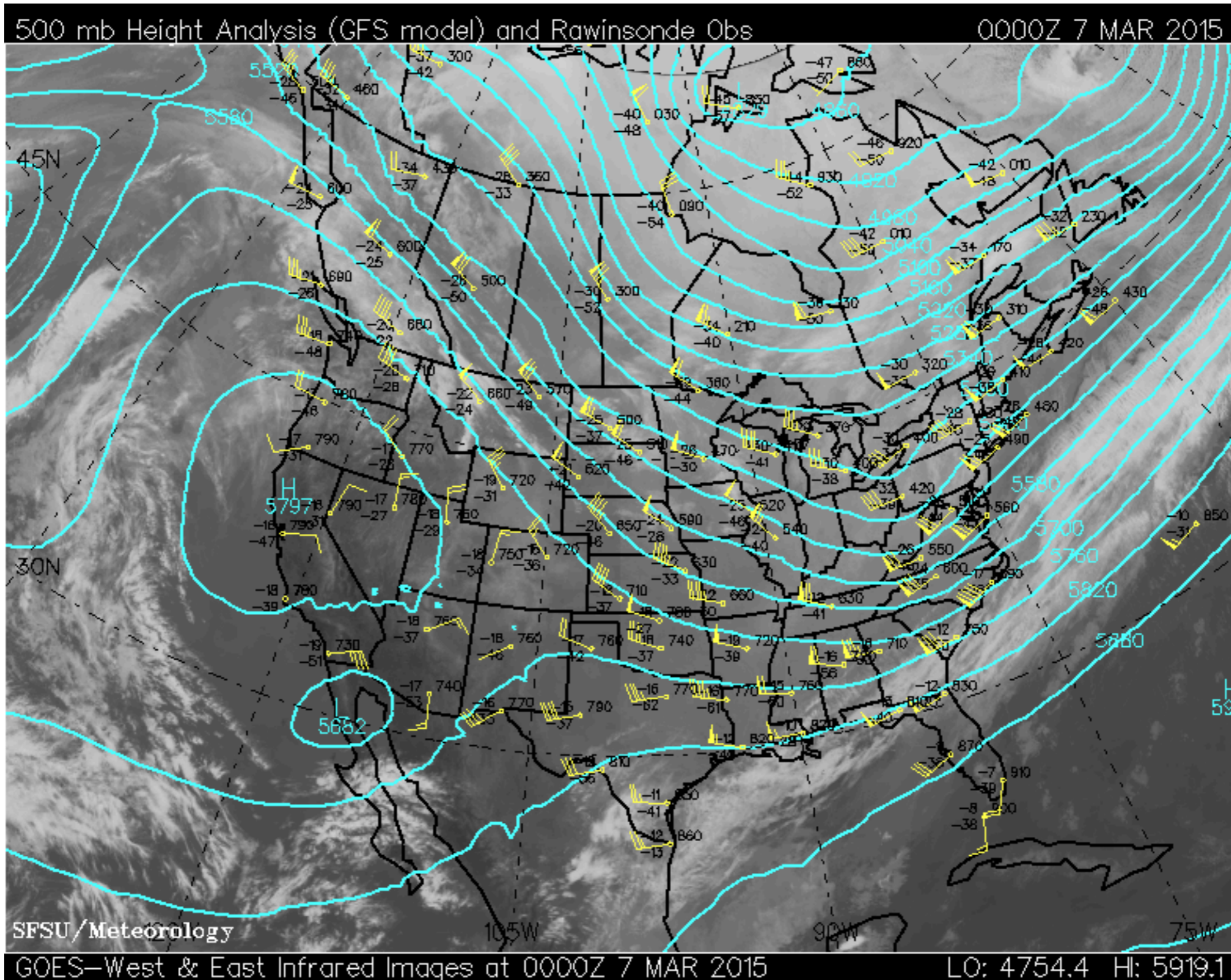


What happened?

Unusual conditions resulted in unusual
avalanches.

Dry and warm in the west.
Cold and snowy in the east.

Jet Stream (Feb & Mar)



Average Temperature Departures

Winter 2014/15

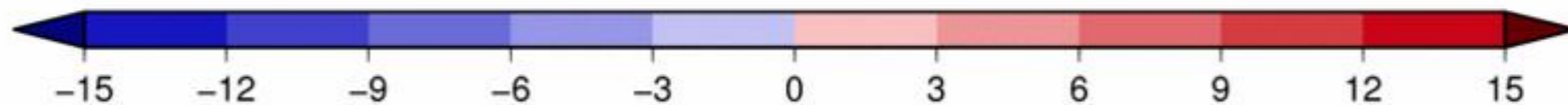
Base Period: 20th Century

Data Source: 5km Gridded Dataset (nClimGrid)



warmest winter
in 120 years

coldest winter
in 120 years



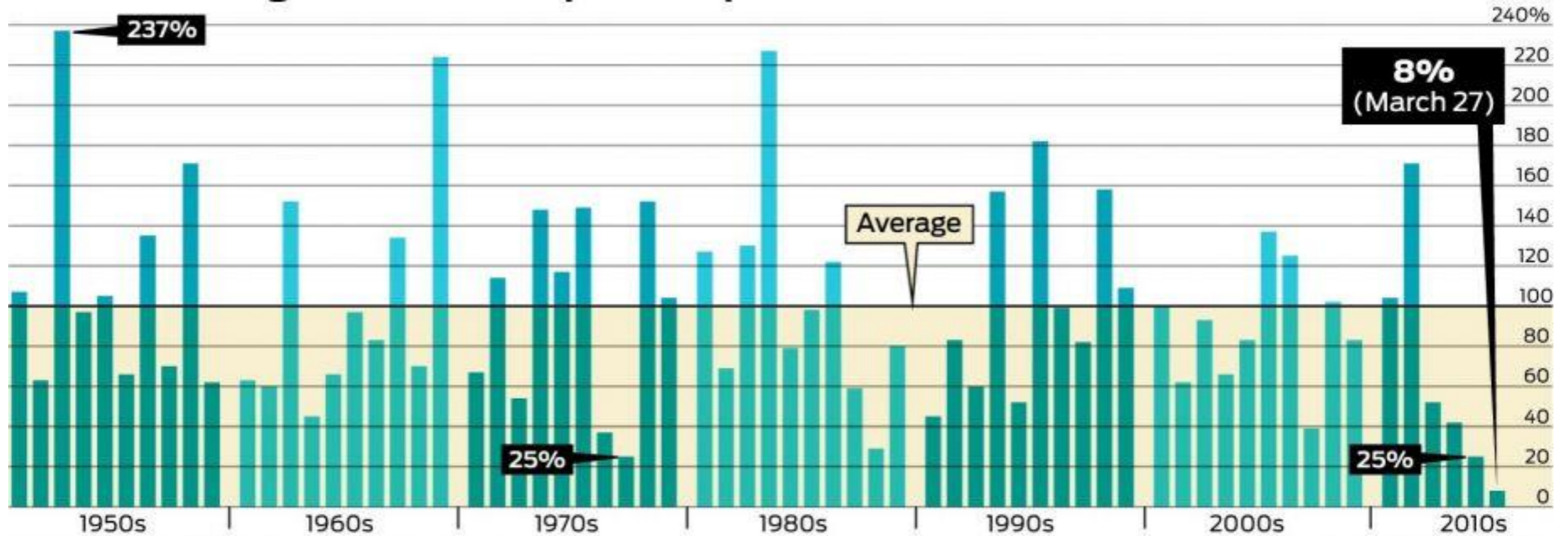
Degrees Fahrenheit

California

Low snow level

Reports from sensors in the Sierra show the snowpack for April to be the lowest recorded since 1950.

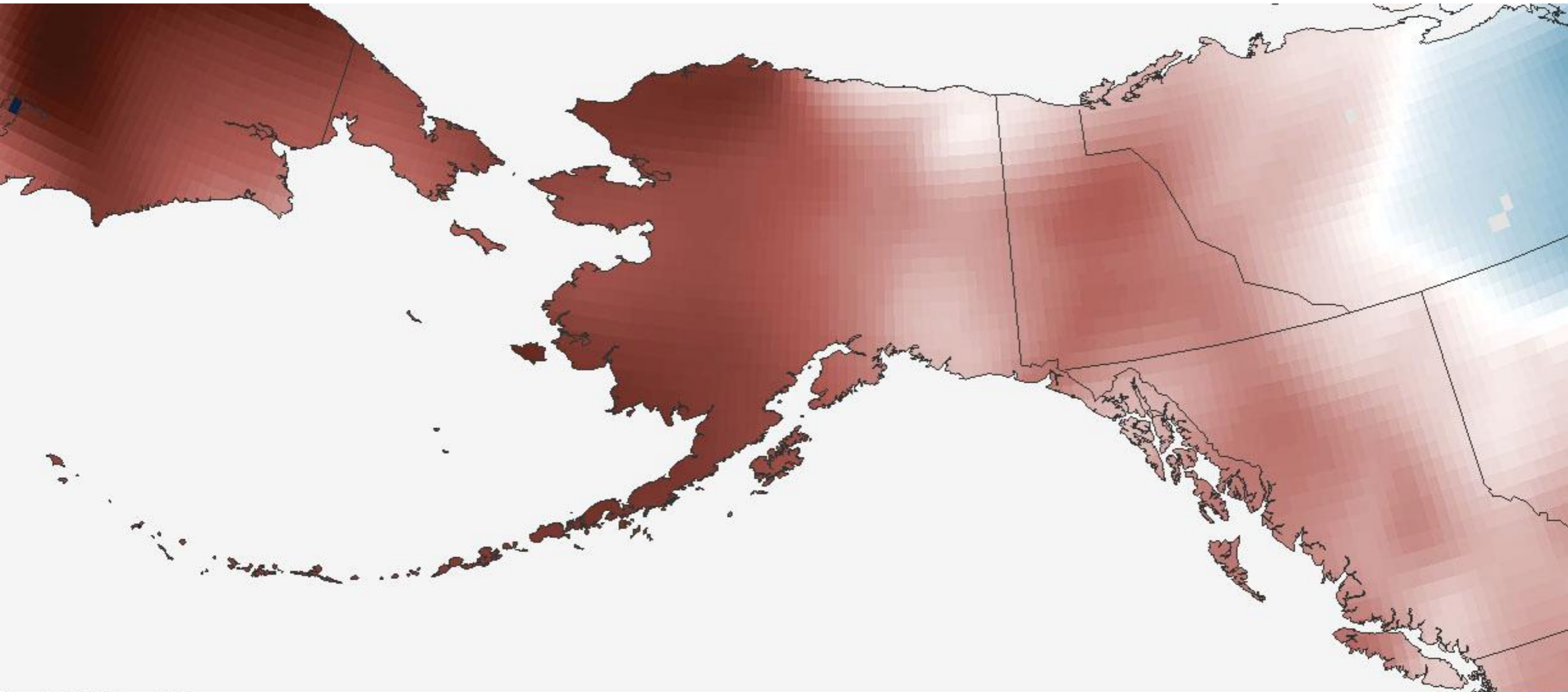
Percent of average statewide snowpack for April 1



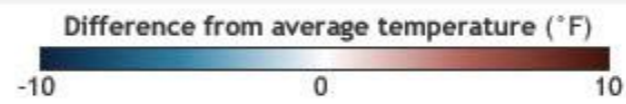
Source: California Department of Water Resources

John Blanchard / The Chronicle

Alaska



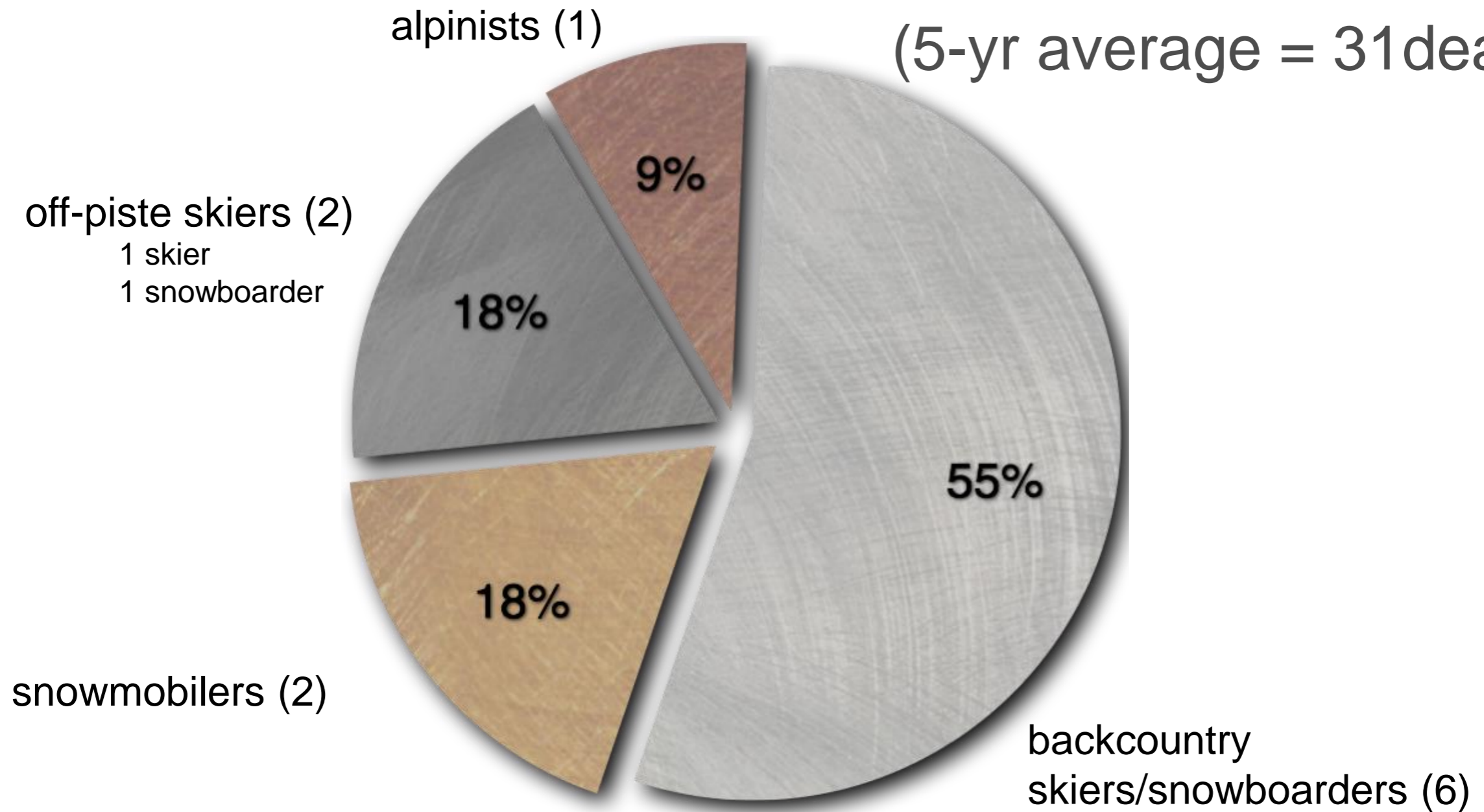
December 2014-February 2015
compared to 1981-2010 average



Who Got Killed

11 deaths

(5-yr average = 31 deaths)



The Accidents

date	location	state	description	rescue method	rescue technique
Nov. 26	Cooke City	Montana	1 snowmobiler caught, buried and killed	small party (companion)	transceiver
Dec. 6	Delta Range	Alaska	2 backcountry skiers caught, 1 buried and killed	small party (companion)	hand out
Dec. 31	Bakerville, Mt Kelso	Colorado	1 climber caught, buried and killed	small party / professional	transceiver*
Jan. 6	Silverton	Colorado	1 backcountry skier caught, buried and killed	small party / professional	transceiver
Feb. 23	Aspen Mountain	Colorado	1 off-piste skier caught, buried and killed	professional	transceiver**
Mar. 4	Snowbasin	Utah	1 off-piste snowboarder	professional	dog
Mar. 15	Cantwell	Alaska	1 snowmobiler caught, buried and killed ‡	small party / professional	transceiver***
Apr. 1	Wrangel-St. Elias National Park	Alaska	1 backcountry (alpinist) skier caught and killed §	professional	not buried
Apr. 11	Big Sky	Montana	1 backcountry (alpinist) skier caught and killed	small party (companion)	not buried
May 17	Grand Teton National Park	Wyoming	2 backcountry (alpinist) skiers caught and killed	small party /professional	not buried

What Happened?

date	location	state	description	rescue method	rescue technique
Nov. 29	Cooke City	Montana	1 snowmobiler caught, buried and killed	small party (companion)	transceiver
Dec. 6	Velta Range	Alaska	1 backcountry skier caught and killed	small party (companion)	hand out
Dec. 31	Pakerville, Mt Kelso	Colorado	1 climber caught, buried and killed	small party / professional	transceiver*
Jan. 6	Silverton	Colorado	1 backcountry skier caught, buried and killed	small party / professional	transceiver
Feb. 23	Aspen Mountain	Colorado	1 off-piste skier caught, buried and killed	professional	transceiver**
Mar. 4	Snowbasin	Utah	1 off-piste snowboarder	professional	dog
Mar. 15	Cantwell	Alaska	1 snowmobile caught, buried and killed	small party / professional	transceiver***
Apr. 11	Wrangell-St. Elias National Park	Alaska	1 backcountry (alpinist) skier caught and killed	professional	not buried
Apr. 11	Big Sky	Montana	1 backcountry (alpinist) skier caught and killed	small party (companion)	not buried
May 17	Grand Teton National Park	Wyoming	2 backcountry (alpinist) skiers caught and killed	small party /professional	not buried

10 of 11

“expert” sportspeople

1 of 11

“novice” sportspeople

5 of 11

“advanced” avalanche training

4 of 11

“some” avalanche training

1

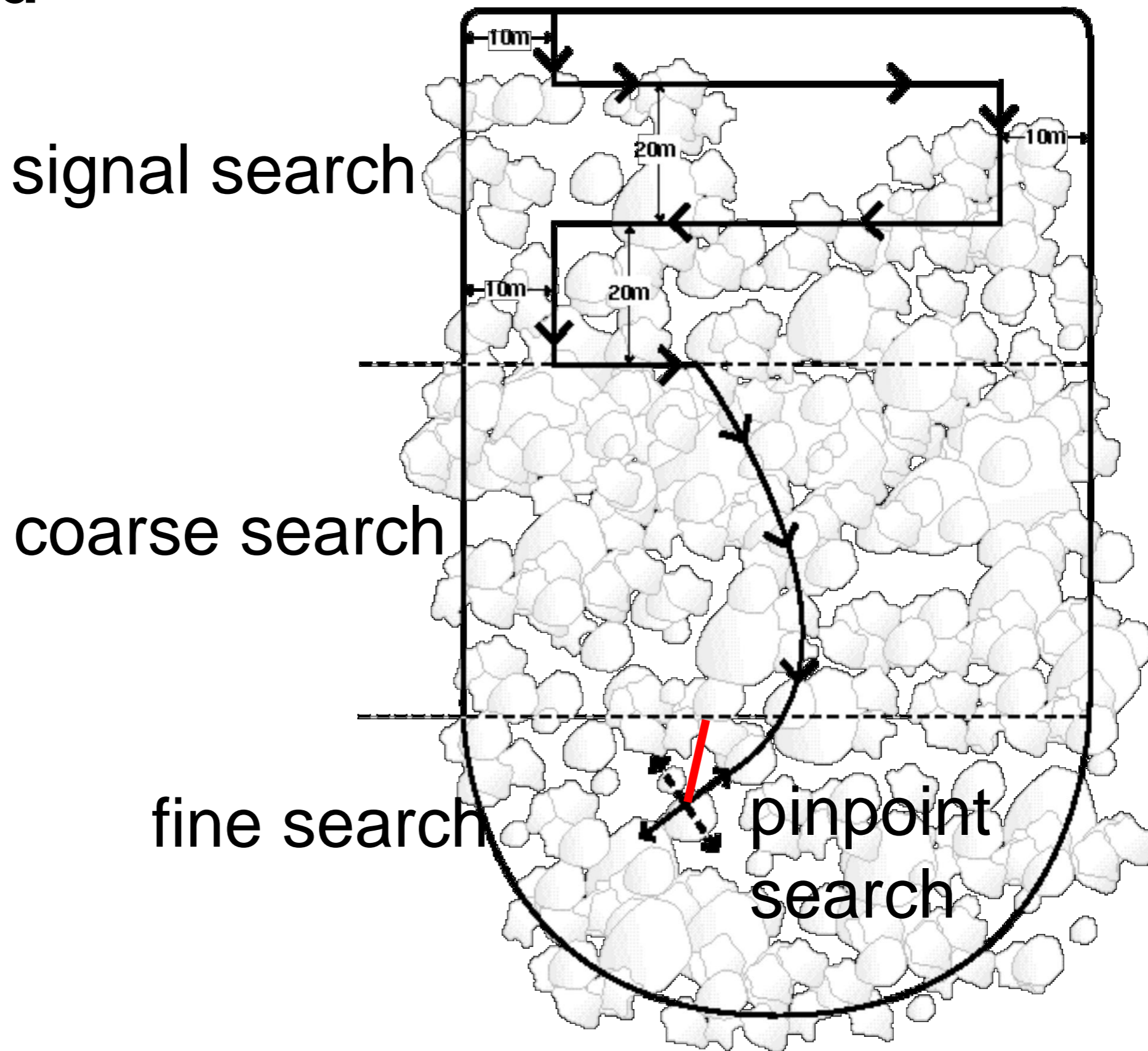
with air bag – not deployed

3 of 5

companions could not use transceivers

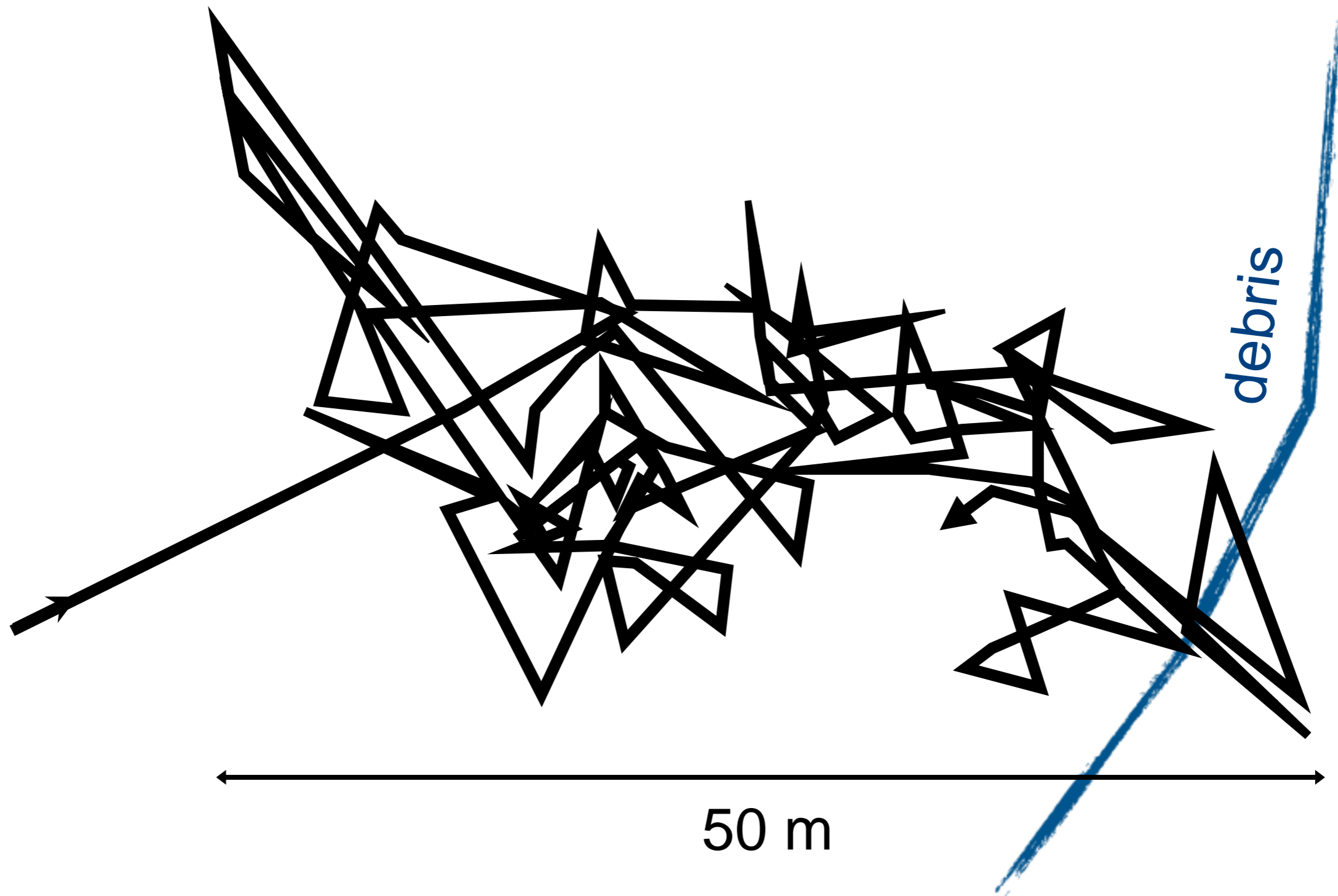
Ideal World

4 Search Phases

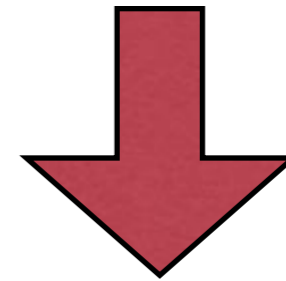


Real World

Transceiver search (search time = 20 min)



The Accidents



date	location	state	description	rescue method	rescue technique
Nov. 26	Cooke City	Montana	1 snowmobiler caught, buried and killed	small party (companion)	transceiver
				small party (companion)	hand out
				small party / professional	transceiver*
				small party / professional	transceiver
				professional	transceiver**
				professional	dog
				small party / professional	transceiver***
				professional	not buried
				small party (companion)	not buried
May 17	Grand Teton National Park	Wyoming	2 backcountry (alpinist) skiers caught and killed	small party /professional	not buried

we need to improve awareness to recreationalists about professional rescue.