

NATIONAL WEATHER SERVICE ALASKA SUPPLEMENT 09-2004

APPLICABLE TO NWSI 10-503, NWSI 10-204

April 3, 2019

Operations and Services

Public Weather Services, NWSPD 10-5

WFO Public Weather Products Specification, NWSI 10-503

Derived Forecast Text Products Specifications, 10-204

ALASKA REGION PUBLIC WEATHER PRODUCTS

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

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Certified by: W/AR1 (M. Mercer)

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SUMMARY OF REVISIONS: This supplement supersedes Alaska Region Supplement (ARS) 09-2004, “Alaska Region Public Weather Products,” dated November 9, 2012, applicable to National Weather Service Instruction (NWSI) 10-503.

The following changes were made in this issuance:

- 1) Revised numerous section numbers to be numerical order.
- 2) Removed sections 5.1.1 (Mission Connection), 5.1.2 (Issuance Criteria), 5.1.4 (Format Link) and 1.2 (Content) from previous version to remove duplicate information available in 10-204.
- 3) Removed storm total snow accumulation guidance from section 2.4.1 to meet current policy in Alaska Region ZFP formatters.
- 4) Revised section 2.2 (Combining Periods) to remove combining zones with similar weather conditions.
- 5) Revised section 2.4.5 (Wind) to add guidance for areas of complex terrain.
- 6) Revised all examples as well as Appendix B and C to reflect changes to mixed-case text products.
- 7) Removed exceptions in Section 2.4.3 (Sky Cover) to remove duplicate information that either was available in ZFP product specifications, or didn't meet current Alaska Region ZFP formatters.
- 8) Revised section 3.2.2 Issuance Criteria and 3.3.4 Content to update current policy.

Signed
Carven Scott
Regional Director

03/20/19

Date

Public Weather Products

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1. Introduction. The public weather product procedures in this Supplement are described to augment the procedures in NWSI 10-204. These instructions are designed to meet the needs of Alaska Region customers while maintaining consistency with national guidelines.

2. Zone Forecast Product (product category ZFP). The following guidelines are to be used in conjunction with and in addition to the specifications in NWSI 10-204, section 5 and the ZFP product specifications available here:
https://www.weather.gov/media/notification/dir/ZFP_Specifications.pdf

2.1. Valid and Expiration Time. By memorandum from the Director, Office of Climate, Water and Weather Services (available in Appendix A), Alaska Region WFOs have been granted a two hour time extension to issue the morning ZFP. The morning ZFP will be issued no later than 6:00 AM local time. The afternoon issuance deadline remains at 4:00 PM local time.

2.2. Combining Periods. Forecast periods may be combined (after the first period) during times when weather elements are similar in order to shorten product length and reduce repetitive or redundant text. The Alaska Region does not strictly define “similar weather elements”; WFOs are authorized to make that determination. It is recommended that thresholds for combining be more strict early in the forecast period (days 2-3), and more general later in the period (days 4-7). For example, periods could be combined if max/min temperatures are within 5 degrees in days 2-3, or within 5-10 degrees in days 4-7. Sky condition thresholds should be within one category of each other; probability of precipitation should be within the same category (based upon the qualifying terms listed in the ZFP Specifications Document, section 1.5.1.c, Table 1) in order to be combined (i.e., LIKELY).

2.3 Headlines. Alaska Region will use significant weather headlines when dense fog and strong winds are forecast for areas and zones where advisories are optional. Such criteria are defined in ARS 10-515. These significant weather headlines will include the following elements in the order shown:

- (1) Leading ellipsis (...)
- (2) Valid hazard name (either Dense Fog or Strong Wind)
- (3) General event beginning phrase as defined in Appendix C
- (4) General event ending time phrase as defined in Appendix C
- (5) Local descriptors when necessary (e.g., along the coast)
- (6) Trailing ellipsis (...)

Dense Fog or Strong Wind Significant Weather Headline Format:

- (1) Used when hazard is not yet occurring
...<dense fog or strong wind> <event beginning phrase> THROUGH <event ending phrase>
<local descriptor when necessary>...
- (2) Used when hazard is already occurring
...<dense fog or strong wind> THROUGH <event ending phrase> <local descriptor when necessary>...

2.4 Formatted Elements within the ZFP.

2.4.1 Precipitation and Probability of Precipitation (POP) Forecasts. The POP in the text portion of the zone forecast is an average POP expected across the zone area. This POP, therefore, can be different from the point POP in tabular point formats (e.g., the coded cities forecast, point forecast matrices, etc.).

There may be occasions when a single value or description of the POP does not adequately represent the precipitation regime in a zone. For example: when there is significantly higher

chance for precipitation along neighboring mountains than in the valley. Significant is defined here as a different category of uncertainty, such as CHANCE (30%) versus LIKELY (60%). A second POP and/or qualifying term may be used to better represent the situation. Example wording is:

Cloudy. Snow likely along the mountains...except chance of snow along the coast.

When including a single POP in combined periods, that POP is representative of each 12 hour period, not the entire combined period of time.

2.4.2 Precipitation Intensity. Due to the complex terrain and sparse radar coverage in the Alaska Region, forecasters may use discretion to include “light” or “heavy” precipitation intensity qualifying terms in the zone forecast.

2.4.3 Sky Cover. Per ZFP Specification Product section 1.5.3, each forecast period may include a predominant sky cover. In addition to the sky cover descriptions given in Table 3 of that instruction, terms that indicate a trend may be used, e.g., INCREASING CLOUDS, CLEARING, etc.

2.4.4 Temperature. Due to complex terrain and coastal influences, it is not uncommon for large temperature variations to occur within a single zone. Where the temperature is forecast to vary beyond 10 to 15 degrees within a zone, the temperature should be forecast at several locations to properly represent the large variability. For example:

Lows 10 above to 15 below zero, warmest in the hills.

Wind chill values will be included in the forecast when advisory, watch, or warning criteria are met, or when considered locally significant. Including “less severe” wind chill values beyond the second period may add undesirable length to the ZFP. WFOs should make this determination based upon expressed customer/partner needs and document their local policy in the WFO Station Duty Manual (SDM).

2.4.5 Wind. Due to complex terrain and coastal influences, it is not uncommon for large variations in the wind forecast to occur within a single zone. Where the variations in the forecasted wind is deemed by the forecaster to be locally significant, the wind should be forecast at several locations to properly represent the large variability. For example:

Northeast wind 10 to 15 mph, except southeast 20 to 35 mph along Turnagain Arm and higher elevations.

3. Travelers Forecast (product category TVL).

3.1 Mission Connection. The Travelers Forecast (TVL) is a seasonal product issued by WFO Juneau that provides weather conditions for customers planning to travel along the Haines and/or

Klondike Highways during the winter season. These highways link Southeast Alaska to the only major land-based shipping route into Canada and the rest of Alaska.

3.2 Issuance Guidelines. Although the TVL should provide greater detail than the associated ZFP, these products must be well coordinated. Also, changes to the Canadian section of the forecast should not be made without coordination and approval with the issuing office of the Meteorological Services of Canada (MSC). The TVL will adhere to the guidelines as described in the following sections.

3.2.1 Creation Software. The TVL is composed using the AWIPS text editor or other commercial text editor.

3.2.2 Issuance Criteria. The TVL is a scheduled seasonal product issued in conjunction with the MSC in both metric and English units during the winter season (October 1 through April 30). The TVL is issued early in the morning, late in the morning, and late in the afternoon to provide detailed information relevant to customers for travel planning purposes.

3.2.3 Issuance Time. The TVL is a scheduled product generally issued at least three times a day – twice in accordance with scheduled public forecast packages and updated once with the scheduled reception of road reports during the winter season.

3.2.4 Valid Time. The TVL is valid from the time of release (scheduled or non-scheduled) through Day 2.

3.3 Technical Description. The TVL format and content are based on customer requirements.

3.3.1 UGC Type. Universal Geographic Code (UGC) Type. The TVL uses the (Z) form of the UGC.

3.3.2 Mass News Dissemination (MND) Broadcast Instruction Line. There is no MND Broadcast Instruction Line associated with this product.

3.3.3 MND Product Type Line. The Travelers Forecast Product MND line describes the product type and the area it covers, i.e., “MOTORING FORECAST FOR SOUTH KLONDIKE AND HAINES HIGHWAYS.”

3.3.4 Content. The TVL will contain the following weather elements:

- a. Snow Levels. The forecast snow level should be included in any period when it is expected to affect travel on the highways.
- b. Snowfall. Forecast snowfall amounts above sea level whenever the Probability of Precipitation (POP) is 55% or above.
- c. Fog. Use descriptive wording such as, “patchy fog,” “areas of dense fog,” etc

when fog is expected to affect travel on the highways.

- d. Temperatures. If the temperature range is expected to be 10 degrees or greater, use specific references through 3,000 feet, such as, "near Skagway", "near White Pass", or "near Haines" When there is not much variation, a range of temperatures like, "Highs from 8 to 12 degrees" is sufficient.
- e. Winds and Wind Chill. For winds, the general winds along the highways will be forecast, with significant exceptions. When the magnitude of a significant wind or wind chill at higher elevations is not known, descriptive terms such as, "South wind 10 to 20 mph, except stronger near White Pass" is acceptable.

It is not necessary to mention Wind Chills at higher elevations unless advisory or warning criteria is met or expected, or conditions are deemed significant by the forecaster.

3.3.5 Format. The TVL format is based on customer requirements. Because the TVL is essentially a subset of the ZFP, the format generally follows the guidelines of the Day 1 and Day 2 portions of the ZFP. The TVL is divided into four sections; two sections correspond to the U.S. (Alaska) portion of each highway, and the other two sections correspond to the Canadian side of each highway. Each of these sections is divided into three distinct 12-hour periods for the morning issuances and two distinct 12-hour periods for the evening issuance. The Canadian sections follow Canadian public forecast policies for format and content, so they are slightly different than the Alaska sections. WFO Juneau issues the combined U.S./Canadian forecast product in English units, and MSC issues a metric version. See Appendix B for an example in English Units.

3.4 Updates, Amendments, Corrections. Forecasts should be updated and corrected between scheduled issuances when the forecast is not representative, or a typographical, informational, grammatical, or format error is detected.

Appendix A

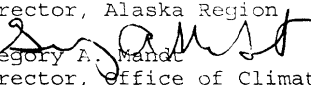
Waiver for the Issuance Time Requirement for the
ZFP



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
1325 East-West Highway
Silver Spring, Maryland 20910-3283

MAY 3 2003

MEMORANDUM FOR: Richard C. Przywarty
Director, Alaska Region

FROM: 
Gregory A. Mandt
Director, Office of Climate, Water,
and Weather Services

SUBJECT: Waiver for Mandatory Morning Zone Forecast Product
(ZFP) Issuance Time

Your request for a waiver from the mandatory morning issuance deadline for the Zone Forecast Product (ZFP) per National Weather Service Instruction 10-503 is approved.

Alaska Region WFOs are granted a two hour time extension to issue the morning ZFP. The morning ZFP will be issued no later than 6:00 a.m. local time, while the afternoon issuance deadline remains at 4:00 p.m. local time as per 10-503 policy.

cc: W/OS22 - G. Austin
W/OS22 - D. Young
W/AR1 - A. Devaris



Appendix B

Sample Travelers Forecast

FPAK87 PAJK 281750
TVLAJK
AKZ019-010300-

Motoring forecast for South Klondike and Haines Highways
Issued jointly by National Weather Service Juneau AK
and Environment Canada Vancouver BC
850 AM AKST Thu Feb 28 2019

South Klondike Highway - Skagway to White Pass-

.TODAY...Clear. Highs around 47 near Skagway, ranging to around 27 near White Pass. Northeast wind 10 to 20 mph.
.TONIGHT...Mostly clear. Lows around 30 near Skagway, ranging to around 12 above near White Pass. Northeast wind 10 to 20 mph.
.FRIDAY...Mostly clear. Highs around 40 near Skagway, ranging to around 24 near White Pass. Northeast wind 15 to 25 mph with gusts to around 40 mph.

South Klondike Highway - Carcross to White Pass.

.TODAY...Sunny. Wind northeast 12 mph becoming light near noon. High 27.
.TONIGHT...A few clouds. Wind becoming northeast 12 mph near midnight. Low plus 3.
.FRIDAY...Mainly sunny. Wind northeast 12 mph. High 23.

Haines Road - Haines to Pleasant Camp-

.TODAY...Clear. Highs around 45. Northwest wind 10 to 15 mph.
.TONIGHT...Mostly clear. Lows around 25 near Haines, ranging to around 17 near Pleasant Camp. Northwest wind 10 to 15 mph.
.FRIDAY...Mostly clear. Highs around 38. Northwest wind 10 to 15 mph.

Haines Road - Haines Junction to Pleasant Camp.

.TODAY...Sunny. High 27 except 39 near Pleasant Camp.
.TONIGHT...A few clouds. Wind becoming northwest 12 mph near midnight. Low plus 3 except 14 near Pleasant Camp.
.FRIDAY...Mainly sunny. Wind northwest 12 mph becoming light near noon. High 19 except 32 near Pleasant Camp.

For Haines and Klondike Highway conditions...
In Alaska, please call 9 0 7. 9 8 3. 2 3 3 3.
In Canada, please call 8 6 7. 4 5 6. 7 6 2 3.

Appendix C

Dense Fog and Strong Wind Significant Event Headline Time Phrases

Event and ZFP Issuance Occur on the Same Day	
Time of Day	Phrase
Midnight – 2:59 AM	Late (day of week – 1) Night
3:00 AM – 5:59 AM	Early This Morning
6:00 AM – 8:59 AM	This Morning
9:00 AM – 11:59 AM	Late This Morning
12:00 PM – 2:59 PM	Early This Afternoon
3:00 PM – 5:59 PM	Late This Afternoon
6:00 PM – 8:59 PM	This Evening
9:00 PM – 11:59 PM	Tonight

Event is Forecast to Begin or End on the Next Calendar Day	
Time of Day	Phrase
Midnight – 2:59 AM	Late (day of week – 1) Night
3:00 AM – 5:59 AM	Early (day of week) Morning
6:00 AM – 12:00 PM	(day of week) Morning
12:00 PM – 5:59 PM	(day of week) Afternoon
6:00 PM – 11:59 PM	(day of week) Evening

Event is Forecast to Begin or End on the Subsequent Calendar Day	
Time of Day	Phrase
Midnight – 5:59AM	Late (day of week – 1) Night
6:00 AM – 12:00 PM	(day of week) Morning
12:00 PM – 5:59 PM	(day of week) Afternoon
6:00 PM – 11:59 PM	(day of week) Evening

Appendix D

Sample ZFP with Headlines for Dense Fog and Strong Wind Significant Event Headlines
and Advisory Headlines

AKZ185-060500-
EASTERN ALEUTIANS-
INCLUDING...UNALASKA...NIKOLSKI
500 AM ADT THU MAY 5 2005

...STRONG WIND THROUGH THIS AFTERNOON...

.TODAY...Rain. Areas of fog. Highs in the lower 40s. Northeast wind 25
To 45 mph shifting to the north by afternoon.
.TONIGHT...Mostly cloudy with rain showers. Areas of fog. Lows in the
Mid 30s. Northwest wind 20 to 35 mph.
.FRIDAY...Mostly cloudy. Highs in the lower 40s. Northwest wind
15 to 25 mph.
.FRIDAY NIGHT...Partly cloudy. Lows in the mid 30s. Northwest
Wind 15 to 20 mph.
.SATURDAY...Partly cloudy. Highs in the lower 40s. Light winds.
.SATURDAY NIGHT THROUGH TUESDAY NIGHT...Mostly Cloudy with a chance
of rain showers. Lows in the upper 30s. Highs in the mid 40s.
.WEDNESDAY...Partly cloudy. Highs in the mid 40s.

&&

TEMPERATURE / PRECIPITATION
UNALASKA 43 38 41 / 80 60 10

\$\$

AKZ195-060500-
PRIBILOF ISLANDS-
INCLUDING...SAINT PAUL
500 AM ADT THU MAY 5 2005

...AREAS OF DENSE FOG THROUGH LATE THIS MORNING...

.TODAY...Cloudy. Areas of dense fog until noon. Highs in the mid to upper
30s. Light north wind.
.TONIGHT...Mostly cloudy. Lows in the upper 20s. Northwest wind
15 mph.
.FRIDAY...Mostly cloudy. Highs in the upper 30s. Light winds.
.FRIDAY NIGHT...Mostly Cloudy. Lows in the lower 30s. Light winds
Becoming southwest 15 mph after midnight.
.SATURDAY...Mostly cloudy in the morning then becoming partly
Cloudy. Highs in the lower 40s. Light winds.
.SATURDAY NIGHT...Mostly cloudy with a chance of rain showers.
Lows in the mid 30s.
.SUNDAY...Mostly cloudy. Highs in the lower 40s.
.SUNDAY NIGHT THROUGH WEDNESDAY...Mostly cloudy with a chance of rain
showers. Lows in the mid 30s. Highs in the lower 40s.

&&

TEMPERATURE / PRECIPITATION
SAINT PAUL 37 28 37 / 0 0 0

\$\$

AKZ101-060500-
ANCHORAGE-
INCLUDING...ANCHORAGE...EAGLE RIVER...INDIAN...EKLUTNA
500 AM ADT THU MAY 5 2005

...STRONG WIND THIS EVENING THROUGH FRIDAY AFTERNOON ALONG TURNAGAIN ARM AND
HIGHER ELEVATIONS...

.TODAY...Increasing clouds this morning. Rain likely in the
afternoon. Highs 50 to 55. Light winds becoming southeast 15 mph
in the afternoon. East wind 20 to 35 mph along Turnagain Arm and
higher elevations.

.TONIGHT AND FRIDAY...Rain likely. Lows in the upper 30s. Highs in
the 50s. Southeast wind 5 to 15 mph except east 50 mph along
Turnagain Arm and higher elevations.

.FRIDAY NIGHT...Partly cloudy. Patchy fog late. Lows in the mid 30s.
light winds.

.SATURDAY...Partly cloudy with patchy fog in the morning. Sunny by
noon. Highs in the 50s. Light winds.

.SATURDAY NIGHT...Clear. Lows in the lower 30s.

.SUNDAY THROUGH WEDNESDAY...Mostly cloudy. Highs in the mid 50s to
lower 60s. Lows in the mid 30s to lower 40s.

&&

TEMPERATURE / PRECIPITATION
ANCHORAGE 53 38 55 / 30 70 70

\$\$

AKZ111-060500-
MATANUSKA VALLEY-
INCLUDING...PALMER...WASILLA...SUTTON...CHICKALOON
500 AM ADT THU MAY 5 2005

...DENSE FOG ADVISORY IN EFFECT UNTIL NOON ADT TODAY...

.TODAY...Mostly cloudy. Dense fog reducing visibilities to less than one
quarter mile along the Glenn Highway until noon. A chance of rain in the
afternoon. Highs in the mid 50s. Wind becoming southeast 5 to 15 mph.

.TONIGHT AND FRIDAY...Rain likely. Lows in the upper 30s. Highs 55 to
60. Southeast wind 5 to 15 mph.

.FRIDAY NIGHT...Partly cloudy. Patchy fog. Lows in the mid 30s to
lower 40s. Light winds.

.SATURDAY...Partly cloudy with patchy fog in the morning then
becoming sunny. Highs in the mid 50s to lower 60s. Light winds.

.SATURDAY NIGHT...Clear. Lows in the 30s.

.SUNDAY...Partly cloudy. Highs in the upper 50s to mid 60s.

.SUNDAY NIGHT THROUGH WEDNESDAY...Partly cloudy. Lows in the upper
30s to mid 40s. Highs in the upper 50s to mid 60s.

&&

TEMPERATURE / PRECIPITATION
PALMER 54 38 56 / 30 70 70
WASILLA 53 38 57 / 30 70 70

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