Southeast Alaska Cloudburst Chronicle

Vol. II, No. 4
Autumn 2002

National Weather Service
Juneau, Alaska

A Quarterly Publication

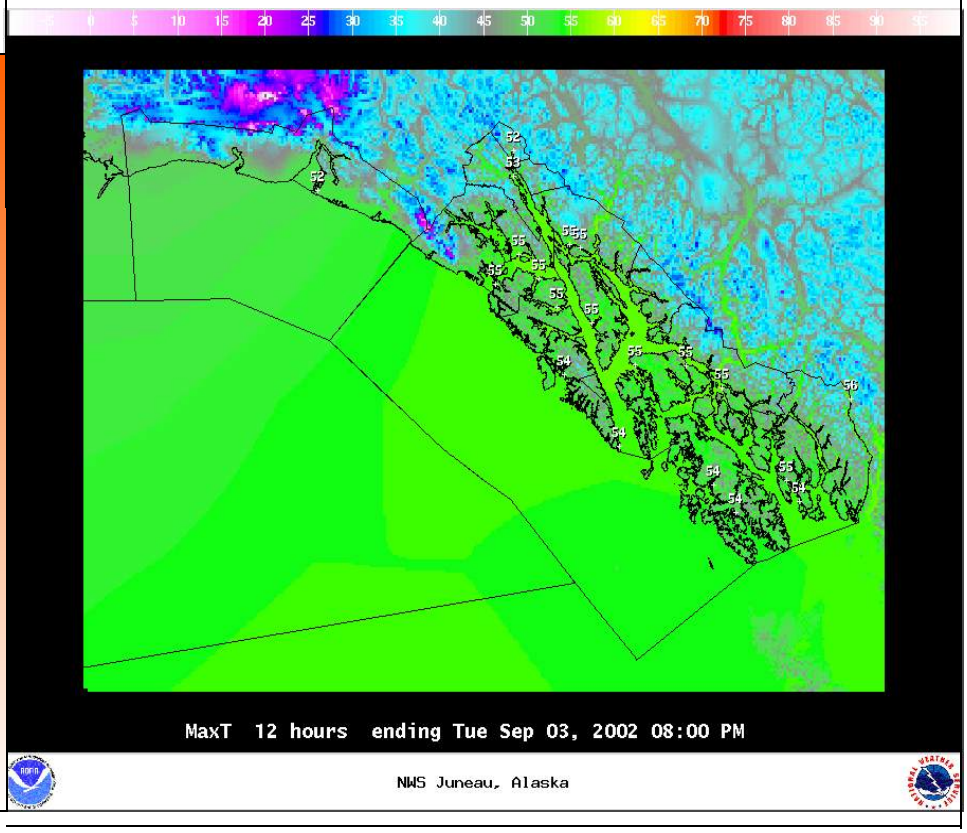
In This Issue:

GETTING WITH THE PICTURE

-by Brian Bezenek

Starting in the summer of 2002, the National Weather Service (NWS) in Alaska began to implement the next generation of forecast preparation. The Interactive Forecast Preparation System (IFPS), installed across the country, stores the forecast in a series of gridded data files.

Each of the major elements has its own grid from the current time out to as far as seven days. From these grids nearly all of our current forecast products can be created. The use of these forecast grids is the next step in using the more detailed model information being generated, and issuance of more detailed forecasts. Some offices used in the test phase in the lower 48, already have this data available



Comments concerning this publication or questions about the National Weather Service can be directed to us. Contact us at:

National Weather Service
8500 Mendenhall Loop Rd.
Juneau, AK 99801

(907)790-6800
Chris.Maier@noaa.gov

To view our newsletter in color, please visit our website at:
http://pajk.arh.noaa.gov

Editors: Chris Maier & Ursula Jones

Getting with the Picture - continued

to the public where they can get the forecast when and where they want it. At the click of a mouse on a geographic map, the forecast is generated for the nearest point in the stored grids. This allows you to get the forecast where you want it and for when you want it! Web pages across the country are already showing some data, (e.g. temperature, weather, probability of precipitation) in a graphical image (see image on the cover page). This is just one of the ways it can be displayed for the internet. Another display that may be available has line graphs with the data displayed on it, in a time series.

Over the next few months the forecasting staff at the Juneau Forecast office will begin to fully train on this new software. By late spring 2003, we hope to have graphics from this beginning to be available on our local web page. By the end of December 2003 IFPS should be fully implemented across Alaska.

I can hear the question on your lips now. Does this mean the standard forecasts we have now, are going away? The answer is no. The graphical images from the forecast grids will be, in addition to, the standard forecasts that already being issued. To be completely truthful, the text products that everyone is familiar with will be predominately generated from the forecast grids being generated and maintained by the forecasters.

If you have any questions regarding this new system and how it may impact the forecasts that you are already receiving, feel free to contact me via e-mail at Brian.Bezenek@noaa.gov I will do my best to answer your questions.

METEOROLOGIST IN CHARGE, LAURA FURGIONE, BIDS FAREWELL TO SOUTHEAST BUT NOT ALASKA

Yes, it is true. After a mere two and a half years with the National Weather Service office in Juneau, my husband, my kitties, and I are moving back to Anchorage. No, it wasn't the June 28, 2000, thunderstorms, the lack of snow the first winter, the snowy and cold past winter, the Thane Avalanches, the Dyea moraine slide, or the unknowns of Russell Fjord/Lake that has us running back to Anchorage. Actually, I have accepted a position in the Alaska Region Headquarters as the Deputy Region Director.

The past two years have really been filled with some interesting weather extremes. You, the emergency managers and NWS spotters, have really made my job easy. Anytime some unusual weather phenomena began to affect our forecast area, you were on the phone or email reporting all the details. This information has added value to our warnings and forecasts. In turn, the public can better interpret the warnings, respond appropriately, and ideally lives are saved.

I want to thank each and every one of you. The kindness and warmth extended to my family and I here in southeast Alaska has made it easy to call Juneau and southeast Alaska home. The NWS has sent me to locations from Missouri to Hawaii and Alaska to North Carolina. Southeast Alaska is, hands down, the nicest place I have ever lived! Good luck and may the wind always blow peacefully in your sails.

Best Wishes,
Laura Furgione

The staff of the forecast office in Juneau wanted to congratulate Laura Furgione on her promotion to Deputy Director of the National Weather Service Alaska Region! Laura, you will be missed, but we are happy for you on this next big challenge in your career. Thanks for everything and best of luck!

Cloudburst Classroom

Temperature: What it is and the instruments that measure it.

-by Kimberly Vaughan

Temperature is one of those weather elements that affects everyone and everything. Some examples of how temperature influences us could be: deciding what to wear for the day, what time of year to take a vacation or when its safe to do the spring planting. So, if temperature affects us all...what is it and how do we measure it?

Everyone knows what temperature is, right...but does everyone *really* know? Temperature by definition is : "The quantity measured by a thermometer" * When most people think of temperature they think about how hot or cold something feels. So if temperature isn't what we are feeling, what are we feeling? We feel the heat, and heat is then measured by a temperature scale. To have heat, we must have energy. Energy is the "capacity to do work" **, and it happens in a variety of forms. For temperature it takes on the form of heat. This heat is made by the molecules vibrating. The more they vibrate the warmer it gets. The less they move the cooler it gets. In meteorology heat energy is measured in units called calories. This doesn't mean temperature is on a diet! It does mean that it takes a certain amount of energy to increase the temperature. It takes 1 calorie to raise the temperature of 1 gram of water, 1 degree Celsius. For all you food dieters out there 1calorie = 1000 heat calories for energy content of food.

Now that we know that temperature is simply a *measure*, what instruments are used to measure it. Galileo Galilei (1564-1642) could be said to have invented the first temperature reading instrument. The standard thermometer was a glass tube filled with liquid, usually mercury or alcohol. This liquid would expand as it was warmed and then rise in the tube. It would contract when getting cooler. The early thermometers only gave people the change of the heat. They could record that it was warmer or colder than the previous reading, but not how hot or cold. It took over 400 years before a scale was made for the thermometer. There are three scales normally used in weather: Celsius (C), Fahrenheit (F) or Kelvin (K). Kelvin is mainly used for scientific use and is set in such a way that the temperature never goes negative. Zero degrees K is where all molecular movement stops and is also known as "absolute zero." Why 3 types? As mentioned before Kelvin can not become negative, making it easier to use in mathematical equations. As for Fahrenheit, a German fellow by the name of Daniel Fahrenheit in the early 1700s came up with this by mixing water, ice and salt and by placing a thermometer in the container. He waited until the mercury stopped falling and marked that as the freezing point or 32 degrees F. Lastly, the metric system uses the scale invented in the 1800s by Anders Celsius of Sweden.

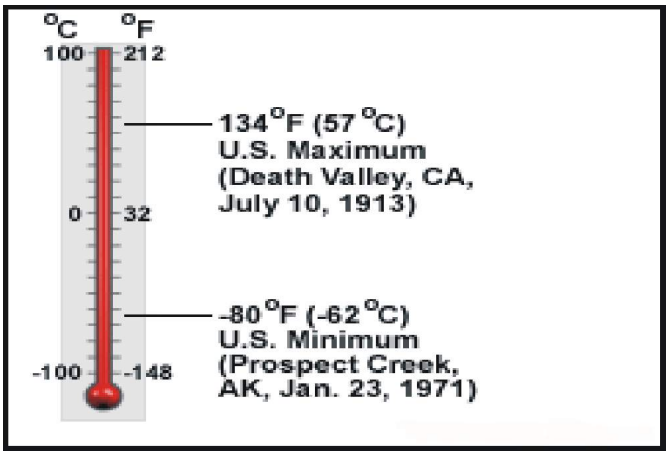
FYI An easy way to convert Celsius to Fahrenheit is to double the Celsius temperature and then add 32. (ie. 20 degrees C is 20 x 2 = 40 + 32 = 72 degrees Fahrenheit. This method is not exact but would be close enough for general use.) To be precise the formula from Celsius to Fahrenheit is: (9/5) C + 32 = F

QUIZ TIME (answers at the bottom):

Q1. Where do Meteorologists measure the temperature?

Q2. For the weather enthusiast: What is the formula for the conversion from Fahrenheit to Celsius?

Q3. That last one too easy? Try this one, it's a toughy! What temperature scale was used in Europe and no longer used officially, with freezing set to 0 and boiling at 80 degrees?



*American Meteorology Society, Glossary of Meteorology, Second Edition 2000

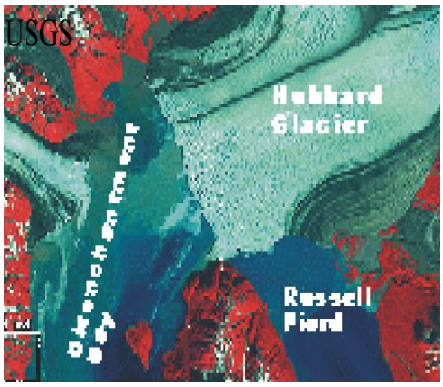
** Physical Geography, A Landscape Appreciation, Fifth Edition 1996

A1. *Everywhere! Ranging from the air, water, soil and the upper levels of the atmosphere. Temperature, it's "cool!"*

A2. *(5/9) (F-32) = C*

A3. *Reaumur (R)*

Hydro-Geological Events Reshape Southeast Alaska in 2002



Satellite view of the advancing Hubbard Glacier in 1986

-By Mike Mitchell

The Hubbard Glacier, located about 35 miles northeast of Yakutat, is the largest tide water glacier in North America. It has been slowly advancing towards the Gulf of Alaska for more than 100 years and over the past decade the face of this glacier has been near the confluence of Russell Fiord and Disenchantment Bay. In June of 2002, the Hubbard Glacier had advanced to Gilbert Point and created a glacial ice and moraine dam across the head of Russell Fiord. The dam cut off the tidal influences into Russell Fiord on June 27th and resulted in the creation of Russell Lake. Runoff from the surrounding 695 square miles of glaciated uplands filled the 39 mile long lake at a rate of one half to one foot per day. By months end, Russell Lake had risen to a stage of 45 feet and was inundating the surrounding National Forest and Wilderness areas.

During the first 10 days of August, Russell Lake continued to rise at the rate of 1 to 2 feet per day. Heavy rain on the 11th and 12th pushed this rate to almost 3 feet per day. At around 4 am on the 14th, the glacial ice and moraine dam blocking the fiord failed with a gauge height of 60 feet. During the next 24 hours, the 39 mile long Russell Lake released a incredible torrent of water, ice, and debris into Disenchantment Bay. By the morning of the 15th, the gauge height had fallen 44 feet with tidal influences returning to Russell Fiord. Peak discharged was estimated at 1.9 million cubic feet per second making this the second largest glacial flood worldwide in historic times. A similar event in 1987 lasted for 5 months with the lake level reaching 80 feet. This produced the largest glacial lake outburst flood in modern history with the estimated discharge at 3.7 million cubic feet per second.

Hubbard Glacier blocking Russell Fiord on 8/10/02 (looking east)

The glacial dam breaks and Russell Fiord flows once again! (8/15/02)

Another hydro-geological event that reshaped Southeast Alaska occurred in July near the community of Dyea 10 miles northwest of Skagway. On the morning of July 23rd, a 700 feet lateral moraine along the northwest side of the West Creek Glacier collapsed into the West Creek Glacier Lake. The increase in the lake level due to the enormous amount of mud and debris that slide into the lake combined with the "sloshing" of the water, and sent a large flash flood down West Creek and into the Taiya River. As the flood raced down the Taiya, the river stage rose from the July 22nd reading of 15.5 feet to 20.7 feet at 7 am on the 23rd. This is a new flood of record. The Taiya River had fallen back to 17 feet by 10 am on the 23rd. Flood stage is designated at 19.0 feet. 35 people were evacuated from the small community of Dyea where one resident described the river as "sounding like a freight train" and said it "rose out of it's bank to thigh deep water in 15 seconds". Several homes were flooded and at least one was washed off it's foundation. The main road was closed for a day due to heavy silting which was reported to be 10 inches deep near Dyea. Silt deposits in West Creek raised the stream bed 18 feet in places and displaced West creek into areas where water normal does not flow. Large boulders at the confluence of West Creek and the Taiya River were partially responsible for diverting water outside of the Taiya's normal riverbed and into the low lying areas along the river. The Klondike Gold Rush National Park officials estimated that between 536 and 766 million cubic yards of material were displaced by the landslide.

THE SHORT SUMMER

-by Carl Dierking

What happened to the summer? It was off to a such a good start, but then rain prevailed for most of the second half. Some plants did well through it all, but many fruits, berries, and garden vegetables had a rough year. A look at temperature and precipitation data for some Southeast Alaska cities can reveal clues as to why some plants had problems.

The table below shows the number of dry days in 2002 and the departures from average for several Southeast Alaska cities. The early months, April, May, and part of June, had quite a bit more than the usual number of dry days. However, the later summer months had many more rainy days than average. Since dry weather is more conducive to pollination than wet, plants that bloomed early would have had more favorable conditions for pollination than those that bloomed later.

2002 Days without Measurable Precipitation/Departure from Average

	Apr	May	Jun	Jul	Aug	Sep	Oct	Season	Yrs
Skagway	27/+7	19/-1	13/-8	16/-5	16/-2	5/-7	M/-12	96/-28	18
Juneau	24/+10	15/+3	12/-3	8/-7	8/-5	5/-4	M/-7	72/-12	50
Sitka	22/+10	14/+2	10/-4	7/-6	6/-7	4/-5	M/-6	63/-80	52
Petersburg	21/+10	13/+1	10/-2	3/-11	11/-2	2/-7	M/-6	60/-17	45
Ketchikan	16/+5	12/-1	6/-8	6/-9	12/-3	6/-5	M/-7	58/-28	48

Growing Degree Days (GDD) are an indicator of the amount of heating that was experienced during the summer. The table below shows GDD totals and average departures for each month in 2002 as well as the season (up to Sep 30th). For most cities, the early season months were near or above average, but all cities were below average for the later half. This shortage of heat was another symptom of the cloudy, wet weather and lack of sun. Fruit and vegetables that required more heat or a longer season would have had difficulty maturing in the later half of the summer.

2002 Growing Degree Days/Departure from Average

	Apr	May	Jun	Jul	Aug	Sep	Oct	Season	Yrs
Skagway	0/-3	49/-4	101/-83	177/-94	171/-46	46/-13	M/-2	544/-246	20
Juneau	0/-1	53/+26	152/+30	149/-51	144/-25	33/-8	M/-2	531/-31	50
Sitka	0/-4	31/+10	69/-17	115/-75	208/-13	58/-48	M/-14	481/-160	52
Petersburg	0/-1	40/+16	123/+14	102/-91	182/+16	26/-27	M/-5	473/-77	43
Ketchikan	2/-3	25/-23	68/-74	183/-72	221/-50	38/-90	M/-16	537/-329	42

Climate data for many more stations are available at the Juneau Forecast Office web site at http://pajk.arh.noaa.gov/climatology/webcli.htm.

Climate Review: Spring and Summer 2002 in Southeast Alaska

-by Mike Mitchell

From drought in the spring to floods by late summer, the weather across Southeast Alaska between March and August 2002 was extreme. Unprecedented dry weather during March, April and even into May for the far Northern Panhandle, gave way to heavy rains by the end of July and flooding in August. Four stations, Yakutat, Haines, Skagway and Juneau had their driest springs on record while 3 stations, Petersburg, Annette Island, and Juneau had at least their second wettest summer. Notable hydrologic events for the spring and summer of 2002 are summarized below.

Blocking high pressure set up over the Alaskan Interior and Northwest Canada by the beginning of March that brought unusually dry weather to the panhandle. Most stations across the region received less than 40 percent of normal rainfall. Northern Southeast Alaska was most affected with Skagway's 0.15 inches of rain ending the month at less than 10 percent of normal. Haines was not far behind reporting 14 percent of normal. Juneau had a record 26 dry days. Precipitation amounts increased a little along the coast and across the southern panhandle. Ketchikan's 5.77 inches of rain and melted snow made it the wettest location in the panhandle, but this was still only 53 percent of what is normally expected. In spite of abundant sunshine, average temperatures ended the month 4 to 6 degrees below normal. The colder temperatures kept an above normal snowpack across most of the area. The Eaglecrest Ski area was reporting 160 inches on the ground on March 31st while the Haines boarder station at an elevation of 800 feet was reporting 60 inches on the ground.

The blocking high pressure over Northwest Canada and the Gulf of Alaska persisted through April as did the unprecedented dry weather. Precipitation across the region was generally between 10 and 20 percent of normal. Haines was incredibly dry with a mere 0.04 inches or 1.4 percent of normal. The 0.47 inches of rain and melted snow that fell in Juneau was 16 percent of normal and the second driest April on record. One to two inches of rain was reported in Yakutat, Sitka and Ketchikan. The Annette Island weather office was the wettest location with it's 2.62 inches ending the month at 36 percent of normal. Temperatures were well below normal for the second consecutive month averaging 2 to 4 degrees below normal in the north and 1 to 2 degrees below normal in the south. Yakutat's average temperature remained below freezing. The colder than normal temperatures limited snowmelt in April with 2 feet remaining on the ground at Haines Customs, 12 inches at Annex Creek in Taku Inlet, and 10 inches in Yakutat. The dry and cold conditions combined to produce unusually low runoff with the Stikine River dipping to a 10 year low stage of 4.77 feet. Low water levels at the Snettisham Power Plant 30 miles southeast of Juneau, forced Alaska Electric Light and Power to shut off surplus power supplies. Upwards of 20 small wildfires were reported during the final two weeks of April.

Blocking high pressure over the Gulf of Alaska and Northwest Canada broke down during the first half of May and allowed marine moisture to penetrate across most of Southeast Alaska during the second half of the month. The jet stream returned to the southern panhandle by the end of the May. The Eastern Gulf Coast and Northern Southeast Alaska remained very dry while a two and one half month dry spell ended across the central Panhandle. The Southern Panhandle became rather wet. Yakutat had the lowest percent of normal rainfall with it's 3.18 inches at 33 percent of Normal. Haines and Skagway were not as dry as the early spring but only managed to receive 50 percent of normal precipitation. The 3 month combined rainfall for the northern areas was between 20 and 26 percent of normal with each station having it's driest spring on record. Although only receiving 60 percent of normal rainfall, the dry spell across the central panhandle, including Juneau and Sitka, came to an end when persistent light rains brought 2 to 3 inches to the area. Farther south, rainfall increased with 6 to 9 inches falling in Petersburg, Port Alexander, and Craig to end the month near normal. Ketchikan was the wettest location with 13.75 inches which included a 10 inch in 5 day deluge during the end of May. Temperatures were generally below normal although several days of unseasonably warm temperatures were noted between the 18th and 21st.

A stable marine airmass dominated the Alaskan Panhandle during June except for a 4 to 7 day intrusion of a warm continental airmass mid month. A series of stronger weather fronts brought moderate to heavy rain to the southern panhandle during the final week of June. Although not as dry as the spring, below normal rainfall continued for the fourth consecutive month across the Eastern Gulf Coast and Northern Southeast Alaska. The central panhandle was a little drier than normal. Sitka had the lowest percent of normal precipitation with it's 1.80 inches ending the month at 47 percent of normal. This pushed Sitka to it's 2nd driest march through June period. Once again, the southern panhandle was the wet

Juneau Hydrologic Service Area: Spring and Summer 2002

Southeast Alaska Station:	March through May				June Through August			
	Average Temp (Degrees F)	Departure from Normal	Precipitation (inches)	Percent of Normal	Average Temp (Degrees F)	Departure from Normal	Precipitation (inches)	Percent of Normal
Yakutat, WSO	33.5	-4.0	8.38*	26%	55.2	0.0	28.92	102%
Haines	37.4	-3.5	1.15*	17%	56.2	-0.6	7.26	124%
Skagway	38.3	-2.4	0.60*	16%	55.8	-0.5	4.73	106%
Juneau Airport	37.2	-3.6	3.90*	39%	54.6	-0.9	18.55[2]	144%
Petersburg	37.8	-2.8	11.23	56%	55.2	+0.7	25.43[1]	142%
Sitka	41.0	-3.0	5.73	38%	54.2	-1.2	17.86	123%
Annette, WSO	42.1	-2.2	12.98	62%	57.2	+0.2	23.42[2]	155%
Ketchikan	38.9	-4.5	20.40	69%	56.0	-0.9	37.55	155%

* Driest March-May on Record [1] Ties wettest June-August [2] 2nd wettest June-August

spot. Ketchikan Airport's 10.99 inches was 151 percent of normal while the observer at 14 miles north of Ketchikan reported 5.84 inches and the Craig Fire Station only managed 1.77 inches for the month. Temperatures were generally within one degree of normal. Hyder was the warmest location with high temperatures averaging 63.2 degrees. The warm temperatures mid month pushed flows on many of the river and streams across the area into the 90th percentile.

High pressure to the south and east of the panhandle kept an onshore marine flow into Southeast Alaska during the first three weeks of July. A southwest jet stream set up for the last 10 days of the month which brought a series of strong weather fronts into the central panhandle. In spite of receiving an above average number of days with measurable precipitation, many locations had below normal rainfall. Yakutat had it's fifth consecutive below normal precipitation month with it's 5.12 inches at 65 percent of normal. The one to two inches that fell in Haines and Skagway help ease the long standing drought conditions but left the 5 month total at around 60 percent of normal. The central panhandle had precipitation that was a little above normal in July with 4 to 7 inches falling. Juneau's 4.73 inches was 115 percent of normal. The southern panhandle had below normal rain for a change. Blashke Island ended the month with 5.02 inches while Ketchikan's 4.73 inches was 40 percent of normal. Persistent cloud cover helped to hold down temperatures in July with daily highs averaging 5 degrees below normal in the north to 2 degrees below normal in the south. This was offset by lows that averaged 1 to 2 degrees above normal.

August was a very wet month across all of Southeast Alaska as a strong southwest jet stream persisted over the region. Port Alexander /29.80/ and Petersburg /14.84/ both ousted 1956 as the wettest August on Record. Juneau's 10.51 inches ended up as the second wettest while five other stations placed in the top six for wettest August. The southern panhandle was the wettest area with 15 to 30 inches reported. Port Alexander had the highest percent of normal at 289 percent mostly due to the 6 days when over 2 inches fell including an 8 inch in 2 day deluge on the 8th and 9th . Ketchikan and Annette were not far behind with 225 percent of normal including a 12 inch in 3 day event between 25th and 28th . The central panhandle also had an unusually high number of one inch or greater events that helped push monthly totals between 8 and 20 inches. Annex Creek led the way with 18.40 inches including two 5.00 inch in 48 hour events on the 7th-8th and 26th-27th. Petersburg's 14.84 inch was exactly 200 percent of normal for August. The northern panhandle had it's first above normal month since February with 2 to 6 inches falling across Northern Lynn Canal. Haines 4.89 inches was 189 percent of normal while Skagway's 2.89 inches ended the month at 139 percent of normal. Yakutat had the lowest percent of normal with it's 18.20 inches 134 percent of normal. Temperatures averaged between 1.5 degrees below normal to near normal.

stream flooding across the northern one half of the Alaskan Panhandle occurred on the12th. After 5 days of moderate rain, a final strong frontal system with unusually high freezing levels, moved into the northeast gulf shortly before midnight on the 12th. This front then produced 3.50 in the next 12 hours at Yakutat and up to 2 inches in Haines, Gustavus, Juneau, and Sitka by the evening of the 12th. The Situk and Dangerous Rivers near Yakutat each washed out a bridge and the road in several places. Standing water in the lowland adjacent to the Yakutat Airport spread across the runway for a short time during the morning. The Kahtaheena River near Gustavus set a new stage of record on the afternoon of 12th when the river rose to 30.49 feet. Mendenhall Lake near Juneau crested at 9.0 feet that afternoon with several inches of water covering the recreation area access road. That evening, rain at the rate of one half inch per hour and 1.50 inches in 6 hours, produced flooding in Sitka. Reports of damage included washed out driveways, a flooded campground, and several mud slides.

The Alsek River reached flood stage early on the 13th and remained there until the evening of the 15th. This remote river, 40 miles southeast of Yakutat, crested at a new record of 89.4 feet on the 13th with a discharge of almost 185,000 cfs. Small stream flooding occurred across the southern panhandle on the 27th. Persistent heavy rains between the 25th and the 27th dumped over 12 inches in Ketchikan during the 3 day event and 6 inches in Port Alexander. The City of Ketchikan reported its sewer system at capacity on the 27th.

Questions? Mike can be reached at michael.j.mitchell@noaa.gov

Upcoming winter in Southeast Alaska expected to be warmer and wetter than normal

-by Chris Maier

The Climate Prediction Center, a division of the Commerce Department's National Oceanic and Atmospheric Administration, updated their seasonal forecasts for the United States in mid October. Their outlooks for the upcoming winter are primarily based on the influence of the current El Nino and climate trends over the past 10 to 15 years. To cut to the chase...they are predicting this winter to be warmer and wetter than normal in Southeast Alaska.

Research at your National Weather Service Forecast Office in Juneau shows that during the last several El Nino events (dating back to the late 80s), Southeast Alaska winters were indeed warmer and wetter than normal. The winter season is defined here as November 1st through March 31st. For reasons not completely understood as yet, the persistent weather feature known as the "Aleutian Low" is deeper than normal during our recent El Nino events. This means a more active storm track across the Gulf and into Southeast Alaska. More storms tracking into the Panhandle from the Gulf means more southerly winds and more clouds. The southerly winds spread warmer air up into our region and the clouds keep our temperatures relatively mild.

What about snow this winter in Southeast Alaska? Typical when we experience warmer than normal winters, we receive below normal snowfall. This is especially true for the months of November and December. This is based on the historical weather record of our communities, which are all near sea level in elevation. There is no historical data for seasonal snowfall in our mountains, but higher freezing levels would hint at near or below normal snowfall up there as well. Remember, near normal snow in the mountains makes for an awesome ski season!

Some winter (November-March) weather statistics for Southeast Alaska

Southeast Alaska Town:	Average High Temp	Average Low Temp	Average Snowfall	Snowfall last winter	Average Precipitation	Precipitation last winter
Juneau	35°F	24°F	92"	79"	22.28"	18.34"
Yakutat	35°F	22°F	178"	193"	62.23"	46.74"
Skagway	33°F	23°F	45"	33"	11.03"	7.00"
Haines	33°F	23°F	166"	142"	26.39"	31.10"
Sitka	41°F	29°F	58"	50"	41.85"	38.93"
Ketchikan	42°F	31°F	46"	58"	70.07"	47.26"
Annette	42°F	32°F	47"	73"	52.61"	43.51"
Petersburg	38°F	27°F	110"	84"	49.23"	40.95"
Wrangell	38°F	28°F	56"	no data	34.14"	no data

WEATHER WATCHERS

Southeast Alaska's Spotter Network

Our Most Active Spotters!

The National Weather Service forecast staff here in Juneau really appreciates your time and dedication as weather spotters. Let's face it, without your help our forecasts and warnings would suffer! Because your work means so much to us, each quarter we recognize our most active spotter with a special prize or award. Once again our most active spotter was **Martha Reeves of Juneau** with a whopping 37 reports!

We would also like to commend **William and Wynn Hopkins of Point Higgins** (near Ketchikan) this quarter. The Higgins came in second place this quarter for the total number of reports submitted but also provided some very valuable spotter reports during our thunderstorm "outbreaks" this past summer.

The Hopkins and Martha Reeves will receive the soon to be released 2003 version of the Alaska Weather Calendar! Thanks for your service as some of Southeast Alaska's best Weather Watchers! Congratulations!

Do you know someone interested in weather that is not a ***Weather Watcher?*** Let them know that becoming a weather spotter in Southeast Alaska is easy! You can browse through the training information on the web, we can mail you a course packet, or you can attend a short 2-hour spotter course. Courses may be scheduled in any community where there is enough interest to satisfy a minimal level of attendance (usually at least 10 people).

If you are interested in becoming a spotter or have some thoughts on how to improve our Spotter Program, please give us a call at (907) 790-6803 or e-mail Chris.Maier@noaa.gov. You will also find more information on our Spotter internet web page: ***http://pajk.arh.noaa.gov/spotter/spot.htm***

Craig vs. Donna?

-by Chris Maier

Over the past month, the Juneau forecast office has undergone a test period of our new computerized voices on our NOAA Weather Radio System. Foremost, we would like to thank you for your patience as we make this transition. Secondly, we would like to thank you for the valuable input we have received on the new voices thus far. The pronunciation for these new voices can be tweaked and we will continue to monitor for any inaudible words.

So what were the results of your input? By a 2 to 1 margin (41 votes to 19) Craig has beaten out Donna! From now on, Craig will be the main voice featured on Southeast Alaska's NOAA Weather Radio broadcasts. He will read all of our routine forecasts, nowcasts and observations.

Now we do want to still use Donna. We are going to have her read all of our severe weather watches, warnings and advisories. That way when you hear her voice on your weather radio, you will know something ominous is imminent or occurring with the weather.

The last thing I want to mention about our NOAA Weather Radio is that we have heard feedback from several of you that the broadcast cycle is too long. We are looking at ways to improve that as well! Thanks!

Southeast Alaska Autumn Weather Trivia...

1. What is the coldest autumn (September-November) air temperature ever recorded in Southeast Alaska (SEAK)?
2. How about the warmest SEAK autumn temperature?
3. On average, what is the wettest spot in the Panhandle during the autumn (September-November) season?
4. What is the most rain ever recorded in 1 autumn day for Southeast Alaska?
5. What SEAK town experienced a record 88 consecutive days with measurable precipitation back in the fall of 1920?
6. What SEAK location averages the most autumn (September-November) snow?
7. What was the most snowfall ever recorded in 1 autumn day for Southeast Alaska?
8. What SEAK town experienced the "whitest" Christmas in our weather record history back in 1948?

Trivia Answers: (1) -15°F in Gustavus 11/27/85 (2) 86°F in Haines 9/9/56 (3) Little Port Walter with an average of 82.23" of precipitation (4) 19.56" in Port Alexander on 9/21/81 (5) Ketchikan (a total of 47.82" of rain occurred from 9/19-12/16/20) (6) The Pleasant Camp Customs Station on the Haines Highway with an average of 74" of snow (7) 26" in Haines 11/11/75 (8) 11.3" in Yakutat 12/25/48