In May of 1965, a total of 15" of snow fell in Yakutat!

Skagway, the driest location in Southeast Alaska, received only 1.78" of rainfall during the entire summer of 1908!

Yakutat

Skagway

Haines

Haines temperatures hit a sizzling 98° on July 31, 1976.

During the record hot summer of 2004, Juneau had an incredible 42 days with high temperatures of 70°F or more! Juneau also experienced a record 7 days with thunderstorms.

Juneau

The windiest summer day (since 1995) in Sitka occurred on August 28, 1999 when wind speeds at the airport averaged 20 knots.

Sitka

Petersburg

Wrangell

Little Port Walter

The wettest summer for Ketchikan occurred in 2001 when 57.12" of rain fell from May through August. That is 20" inches more than Seattle averages in a year!

Ketchikan

Little Port Walter, southern Baranof Island, received 10.34" of rain on August 13, 1955 - highest one-day summer total for Southeast Alaska!

MOIST PACIFIC AIR + MOUNTAINOUS TOPOGRAPHY

Air moving eastward off the ocean into Southeast Alaska is driven up in elevation by the mountains. Mountain tops in the area range from about 3,500 to 6,000 feet. As this air rises, it cools at the rate of about 3 to 5 degrees for every 1,000 feet. The colder the air becomes, the less moisture it is able to retain. This moisture condenses into clouds over ridges. Eventually, precipitation is "wrung" out and falls back to earth as rain, occasionally accompanied by lightning.

## *Southeast Alaska Summer Weather*

The archipelago that is Southeast Alaska is part of the world's largest temperate rain forest. Ocean water and currents affect climate. Because it takes far more energy to change the temperature of water than land or air, water warms up and cools off much more slowly than air. As a result, coastal climates are modified by nearby water and inland climates are subject to more extreme temperature ranges. The moist and mild climate of Southeast Alaska allows lush vegetation to flourish at high latitudes. Rainfall is abundant throughout the year, though April, May, and June mark a distinct dry season. The cloud cover and persistent rains of July mark the end of the dry season during a "typical summer" in Southeast. According to some locals, this marks the end of summer, but temperatures can reach 80°F in August.

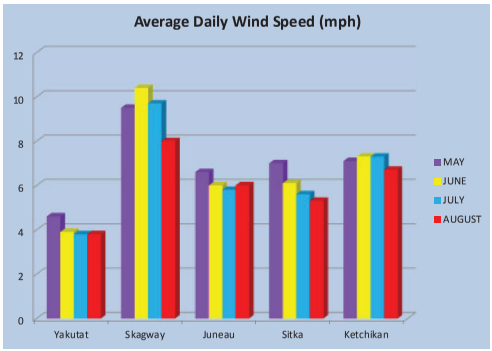
Heat waves are rare in the Panhandle. Due to persistent cloud cover and the proximity of cool ocean water, 70°F is considered warm. An average southeast summer can see from 5 to 40 days with temperatures 70°F or greater, and up to 5 days with highs in the 80s. Our hottest days normally occur in June and July, when the days are longest. Temperatures at night often drop into the 40s. If you are in the mountains, near freezing temperatures are possible, so dressing in layers is important.

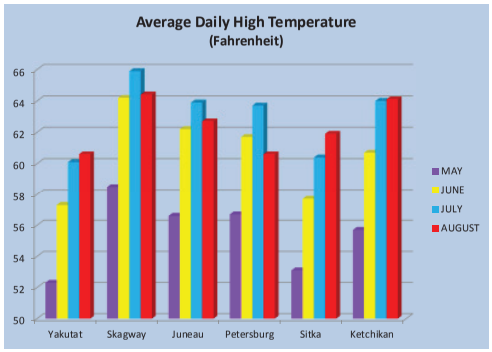
Thunderstorms, lightning, small hail, waterspouts (weak tornados over water), high elevation snowfall, and small wildfires—all can occur during summer in Southeast Alaska, but are rare. Juneau averages one thunderstorm every two years. Locations such as Yakutat, Sitka, and Ketchikan average two thunderstorms per year. Lightning is more common over the mountains.

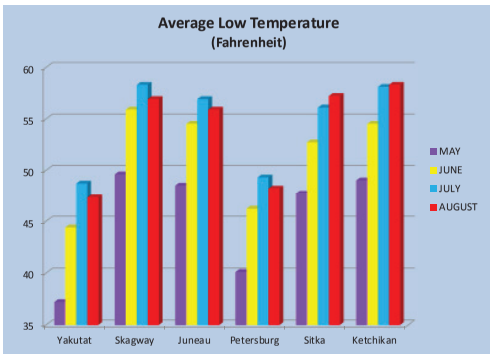
The safest time for navigating the waterways of Southeast Alaska is May through July. Gales (34-47 knot winds) are rare due to relatively weak weather fronts. Extreme tidal currents and cold waters usually represent the major hazards to summer mariners. Daily tides can fluctuate over 20' in Southeast Alaska and water temperatures generally stay below 60°F. In August, storm systems tend to get stronger and gales occur more frequently. These storms often move in fast and catch the ill-prepared by surprise. Even on sunny days, light winds combined with cooler air temperatures over water make jackets a good idea. Whether you are hiking the backcountry or kayaking one of our pristine fjords, monitoring the weather forecast is a must!

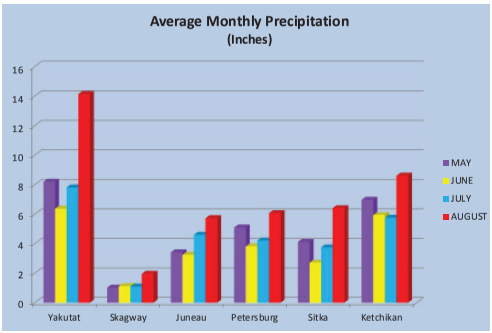
LOCATIONS CHOSEN

This pamphlet contains weather and climate information based on observations in Juneau, Ketchikan, Petersburg, Sitka, Skagway, and Yakutat. Weather data from these cities represent the climatic variation across Southeast Alaska caused by its complex geography. Because of the geographical coverage referenced by these sites, as well as the varying terrain, information tallied from those cities encompasses the most indicative data for those curious about the summer climate of Southeast Alaska as a whole.




## *DAYS BETWEEN APRIL 1 AND SEPTEMBER 1 WHEN:*

### THE DRIEST TIME

(no precipitation received during time period starting with date listed)

| | | |
|---|---|---|
| Skagway | April 21, 1933 | 35 days |
| Yakutat | June 8, 1959 | 25 days |
| Ketchikan | July 9, 1971 | 23 days |
| Juneau | April 11, 1979 | 21 days |
| Petersburg | May 21, 1958 | 20 days |
| Sitka | July 3, 1920 | 18 days |

### ALL TIME HIGHEST TEMPERATURES

| | | |
|---|---|---|
| Ketchikan | June 25,1913 | 96° |
| Skagway | July 11, 1900 | 94° |
| Juneau | July 7, 1975 | 90° |
| Sitka | August 15, 2004 | 89° |
| Yakutat | August 15, 2004 | 88° |
| Petersburg | July 1, 1992 | 83° |

### GREATEST RAINFALL IN ONE DAY

| | | |
|---|---|---|
| Sitka | September 1, 1967 | 8.50" |
| Ketchikan | August 5, 1920 | 8.07” |
| Yakutat | July 28, 1990 | 7.12” |
| Petersburg | May 3, 1992 | 5.07” |
| Skagway | August 7, 1945 | 3.68” |
| Juneau | August 23, 1974 | 4.06” |

NOTE: The data provided is obtained from recorded weather data through 2005. Data collection for Juneau begins in 1890, Skagway in 1898, Sitka in 1900, Ketchikan in 1902, Petersburg in 1940, and Yakutat in 1948.

TO OBTAIN WEATHER INFORMATION:

Recorded Weather Statewide Menu
Within Alaska 800-472-0391
Anchorage 266-5145
Juneau 790-6850

Recorded Marine Forecasts:
Cordova (907) 424-3333
Juneau (907) 586-3997
Sitka (907) 747-6011
Wrangell (907) 874-3232
Yakutat (907) 784-3654

National Weather Service Offices:
Annette/Ketchikan (907) 886-3241
Juneau (907) 790-6800
Yakutat (907) 784-3322

# SUMMER CLIMATE GUIDE TO SOUTHEAST ALASKA

## DATA FOR JUNEAU, KETCHIKAN, PETERSBURG, SITKA, SKAGWAY, AND YAKUTAT

(907) 790-6800
www.weather.gov/juneau