---

title: "Ozone"

output:

html\_document:

css: faded.css

---

## Data

The `atmos` data set resides in the `nasaweather` package of the \*R\* programming language. It contains a collection of atmospheric variables measured between 1995 and 2000 on a grid of 576 coordinates in the western hemisphere. The data set comes from the [2006 ASA Data Expo](http://stat-computing.org/dataexpo/2006/).

Some of the variables in the `atmos` data set are:

\* \*\*temp\*\* - The mean monthly air temperature near the surface of the Earth (measured in kelvins (\*K\*))

\* \*\*pressure\*\* - The mean monthly air pressure at the surface of the Earth (measured in millibars (\*mb\*))

\* \*\*ozone\*\* - The mean monthly abundance of atmospheric ozone (measured in Dobson units (\*DU\*))

You can convert the temperature unit from Kelvin to Celsius with the formula

$$ celsius = kelvin - 273.15 $$

And you can convert the result to Fahrenheit with the formula

$$ fahrenheit = celsius \times \frac{9}{5} + 32 $$

```{r, echo = FALSE, results = 'hide'}

example\_kelvin <- 282.15

data(AirPassengers)

AirPassengers[time(AirPassengers) >= 1949 & time(AirPassengers) < 1950]

```

For example, `r example\_kelvin` degrees Kelvin corresponds to `r example\_kelvin - 273.15` degrees Celsius.