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Alpha Orionis

Probability & Statistics

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CODE:

```
# Load R packages
library(shiny)
library(shinythemes)
mydataset <- read_csv("meteorite_landings.csv")
data(mydataset)

mydataset <- na.omit(mydataset)

library(Hmisc)
library(dplyr)
library(plyr)
library(magrittr)
library(plotrix)
library(ggplot2)
packages <- c('tidyverse','leaflet','leaflet.extras','DT','ggplot2','htmltools')

for (p in packages){
 if (!require(p,character.only=T)){
  install.packages(p)
 }
 library(p, character.only=T)
}

 # UI
 ui <- fluidPage(theme = shinytheme("cyborg"),
  navbarPage(
   "Alpha Orionis",
   tabPanel("Central Tendency & Dispersion",

        mainPanel(
            h1("Median"),
            h2("Mass"),
            verbatimTextOutput("mass"),
```

```
                h1("Inter Quartile Range"),
                h2("Mass"),
                verbatimTextOutput("iqrmass"),
            )

    ),
    tabPanel("Graphical Representaion",),

    tabPanel("Probability Distribution",),

    tabPanel("Summary of Data", ),

    tabPanel("Regression modeling"),
  )
)



#server
server <- function(input, output) {

  output$mass<- renderText({
    x <- mydataset$`mass (g)`
    sort(x, decreasing = FALSE)
    median(x)
  })
  output$iqrmass<- renderText({
    IQR(mydataset$`mass (g)`)
  })
}


# Application
shinyApp(ui = ui, server = server)
```

Alpha Orionis | Central Tendency & Dispersion | Graphical Representaion | Probability Distribution | Summary of Data | Regression modeling

Median

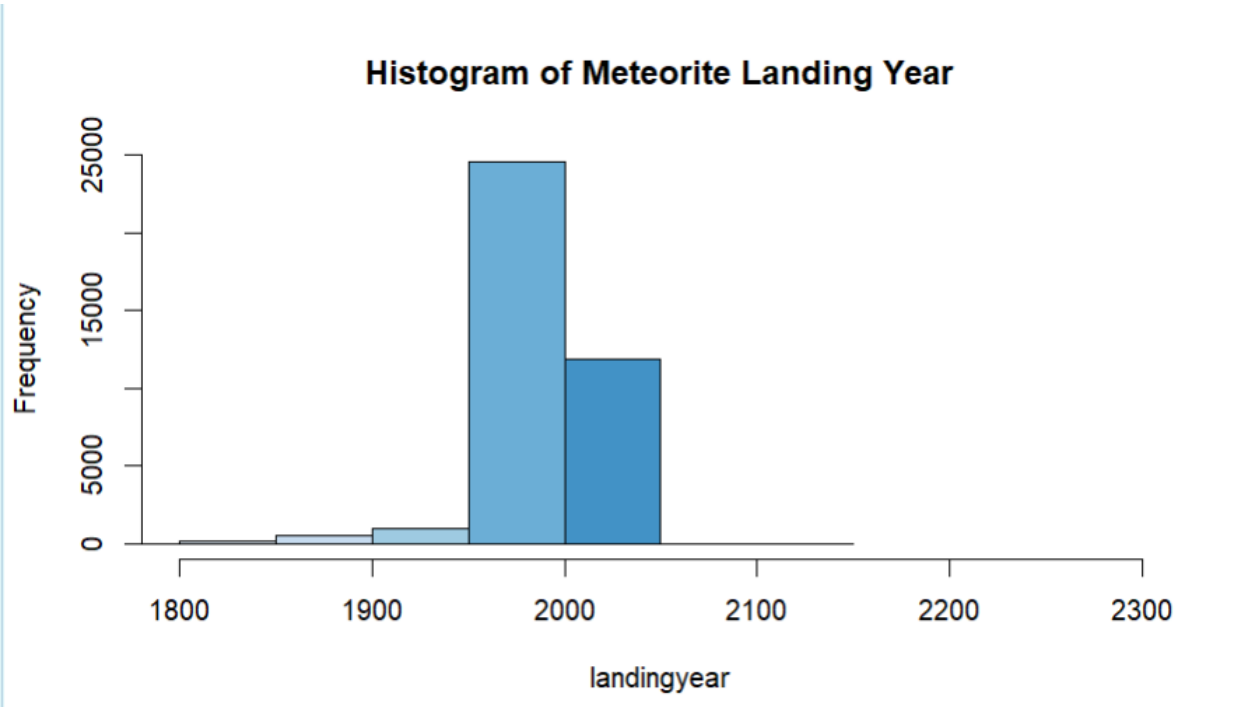
Mass

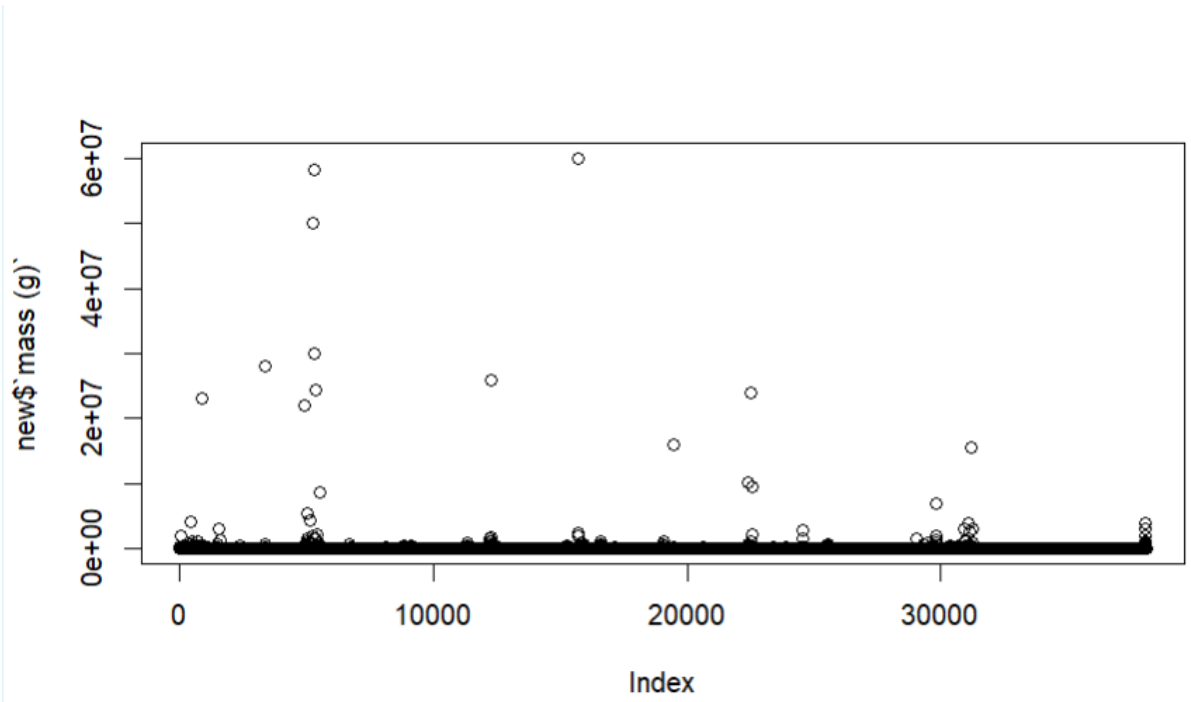
29.09

Inter Quartile Range

Mass

180.66





	name	id	nametype	recclass	mass (g)	fall	year	reclat	reclong	GeoLocation
1	Aachen	1	Valid	L5	21.0	Fell	1880	50.77500	6.08333	(50.775, 6.08333)
2	Aarhus	2	Valid	H6	720.0	Fell	1951	56.18333	10.23333	(56.18333, 10.23333)
3	Abajo	4	Valid	H5	331.0	Found	1982	26.80000	-105.41667	(26.8, -105.41667)
4	Abbott	5	Valid	H3-6	21100.0	Found	1951	36.30000	-104.28333	(36.3, -104.28333)
5	Abee	6	Valid	EH4	107000.0	Fell	1952	54.21667	-113.00000	(54.21667, -113.0)
6	Abernathy	7	Valid	L6	2914.0	Found	1941	33.85000	-101.80000	(33.85, -101.8)
7	Abo	8	Valid	H	1.2	Found	1840	60.43333	22.30000	(60.43333, 22.3)
8	Abu Moharek	9	Valid	H4	4500.0	Found	1997	27.23944	29.83583	(27.23944, 29.83583)
9	Acapulco	10	Valid	Acapulcoite	1914.0	Fell	1976	16.88333	-99.90000	(16.88333, -99.9)
10	Acfer 001	11	Valid	L6	6700.0	Found	1989	27.50000	3.61667	(27.5, 3.61667)
11	Acfer 002	12	Valid	H5	228.0	Found	1989	27.61667	3.85000	(27.61667, 3.85)
12	Acfer 003	13	Valid	H5	145.0	Found	1989	27.81667	4.03333	(27.81667, 4.03333)
13	Acfer 004	14	Valid	L6	1020.0	Found	1989	27.58333	3.81667	(27.58333, 3.81667)