new norfolk
chokurdakh
upernavik
jamestown
alofi
cherskiy
wajid
northam
brejo da madre de deus
ushuaia
lasa
hasaki
almaznyy
tefe
nabire
cabo san lucas
barawe
yabelo
kapaa
iqaluit
albany
emerald
grindavik
upington
ancud
vardo
bluff
puerto ayora
huarmey
vostok
san francisco del mar
hermanus
sentyabrskiy
port elizabeth
tiksi
mehamn
georgetown
hilo
barrow
penzance
mataura
souillac
fowa
havoysund
saint-philippe
lompoc
kodiak

kaitangata
port alfred
atar
kokopo
yushu
wuhu
vilhena
rikitea
pacifica
punta arenas
nuuk
dawson creek
kingussie
mayumba
hualmay
amderma
provideniya
arraial do cabo
meulaboh
narsaq
taolanaro
kavieng
plettenberg bay
utrecht
thunder bay
butaritari
saldanha
hobart
ruatoria
ribeira grande
berlevag
grand gaube
cape town
tuatapere
bredasdorp
bengkulu
belushya guba
deputatskiy
faanui
valparaiso
sekoma
loreto
avarua
pergamino
mayya
raudeberg
broome

mar del plata
jalu
busselton
lorengau
pangai
mount gambier
vaini
saint george
otavi
viligili
akhtanizovskaya
tezu
yellowknife
paralimni
sao filipe
esperance
torbay
kargasok
lavrentiya
atuona
palabuhanratu
srednekolymsk
jamame
najran
coihaique
yantal
qaanaaq
thompson
sur
port blair
kruisfontein
necochea
illoqqortoormiut
kenai
haines junction
guarda
blind river
xinqing
quatre cocos
evensk
sargatskoye
portland
nikolskoye
dabakala
bloemfontein
barentsburg
nam tha

husavik
arys
carnarvon
jabinyanah
hidalgotitlan
hithadhoo
kalaleh
mys shmidta
pervomayskoye
puerto colombia
tasiilaq
saint-francois
rioja
chuy
coquimbo
bilibino
coahuayana
tabuk
mildura
boundiali
bontang
attawapiskat
wencheng
baghdad
saint-augustin
kaiyuan
los llanos de aridane
tokmak
castro
east london
beringovskiy
keffi
guinope
tuktoyaktuk
stonewall
kaduqli
muros
gamba
te anau
norman wells
klaksvik
pangnirtung
milkovo
pevek
rumonge
mangrol
victoria

blagoyevo
puerto maldonado
bethel
zonalnoye
sola
amapa
hami
de-kastri
noumea
russell
gorno-chuyskiy
esna
yerbogachen
college
barcelos
amahai
honiara
nur
airai
goya
lebu
krasnoyarsk-66
saskylakh
kuantan
santa maria
katsuura
umzimvubu
mumford
kahului
jumla
chilakalurupet
sao raimundo nonato
hustopece
kayes
trincomalee
santa fe
inhambane
aripuana
xiantao
derbent
sinop
terney
puerto escondido
cidreira
los llanitos
muborak
marcona

garden city
quang ngai
dianopolis
tshane
yulara
tura
wolmaranstad
margate
luba
matamoros
prince george
pimentel
kupang
isangel
pisco
yablochnyy
sataua
saint-georges
sinnamary
oxford
oranjemund
tingi
goderich
khatanga
tsihombe
tarudant
bulawayo
bathsheba
khani
vila franca do campo
vao
bambous virieux
yeppoon
orlik
beipiao
dikson
katherine
sambava
lata
akureyri
selma
bay roberts
la asuncion
cabras
cayhagan
aklavik
dzhalil

codrington
houston
talnakh
faya
ostrovnoy
roma
alyangula
yangambi
cap-aux-meules
khairabad
port hueneme
luderitz
minbu
bongaree
mpulungu
mahebourg
saint anthony
nome
linguere
longyearbyen
cacoal
svetlyy
evanton
novikovo
san patricio
paliseul
ust-karsk
brusyliv
sao felix do xingu
calabozo
seybaplaya
itarema
kopavogur
palmas
conde
haikou
champerico
bosobolo
vangaindrano
saleaula
guerrero negro
laguna
kerteh
rorvik
nizhneyansk
kitimat
tigil

hofn
ponta do sol
biak
rolla
perth
tumannyy
ilulissat
yazykovo
redwood city
gat
muroran
praia
grand river south east
mocuba
puerto del rosario
dingle
opuwo
tchibanga
beyneu
preeceville
mitrofanovka
gladstone
port lavaca
bolkhov
maneadero
honghu
waipawa
worthing
nguiu
oktyabrskiy
winslow
kapit
tilichiki
kailua
altay
mukhen
kamenka
padang
jaramana
kingman
saint-louis
miaoli
pierre
acuna
meru
vanimo
nizhnyaya tavda

mancio lima
machali
longlac
moerai
port macquarie
moose factory
hihifo
ust-kamchatsk
pizarro
norvenich
clyde river
vaitupu
bara
mahon
nynashamn
sol-iletsk
marawi
lagoa
kedrovyy
kalmunai
ahmadpur
ahipara
batagay-alyta
peruibe
nantucket
ravar
kinablangan
dunedin
tuy hoa
minot
apac
samusu
san vicente
urubamba
vila velha
taunsa
severo-kurilsk
darhan
wad madani
shaunavon
leshukonskoye
yar-sale
callaway
petropavlovsk-kamchatskiy
broken hill
kanniyakumari
bubaque

auki
belyy yar
pontianak
tevaitoa
pacasmayo
port hardy
skjervoy
karasburg
guayaramerin
wajir
sheridan
boa vista
nikolsk
sayyan
morant bay
clonakilty
aykhal
paamiut
sobolevo
muroto
zabaykalsk
richards bay
chhatarpur
bargal
tupik
labuhan
lincoln
port lincoln
khorinsk
saint-raymond
ust-kuyga
la primavera
maloshuyka
las vegas
tabou
sisimiut
rhyl
olinda
kavaratti
idrinskoye
itigi
kodala
khandyga
hereford
la ronge
beni
grand centre

mahaicony
grass valley
dudinka
ub
rocha
sistranda
teahupoo
la oroya
elliot lake
uruzgan
predivinsk
sretensk
port-gentil
bonthe
twentynine palms
jahrom
la union
halifax
hambantota
ouesso
araouane
kuche
fortuna
burriana
neka
verkh-usugli
dharchula
pacific grove
zhigansk
adrar
illintsi
nemuro
half moon bay
ciudad bolivar
kapuskasing
palu
luanda
porbandar
banda aceh
egvekinot
mitsamiouli
skibbereen
tabory
neuquen
bastia
sulangan
kommunar

mirnyy
nokaneng
encantado
mtambile
terra roxa
yaqui
halalo
bandarbeyla
labutta
umm kaddadah
vagamo
ginir
cienaga de flores
rawson
alakurtti
scottsboro
tual
bukachacha
ituni
leningradskiy
port keats
high level
inndyr
lodja
port augusta
korla
baruun-urt
da nang
sakakah
kultuk
sumkino
talakan
mae hong son
paulista
el angel
turinskaya sloboda
oistins
tongren
la reforma
mamou
nata
vastervik
taicheng
suntar
haicheng
racine
luganville

huaiyin
nouadhibou
waterboro
cairns
saint-joseph
punta alta
clearwater
solwezi
brae
yunjinghong
gimli
varhaug
tukrah
belaya gora
boras
wanning

```
{
    "coord": {
        "lon": 147.06,
        "lat": -42.78
    },
    "weather": [
        {
            "id": 803,
            "main": "Clouds",
            "description": "broken clouds",
            "icon": "04n"
        }
    ],
    "base": "stations",
    "main": {
        "temp": 42.1,
        "pressure": 1008,
        "humidity": 56,
        "temp_min": 39.99,
        "temp_max": 44.6
    },
    "visibility": 10000,
    "wind": {
        "speed": 13.87,
        "deg": 310
    },
    "clouds": {
        "all": 75
    },
    "dt": 1563908267,
    "sys": {
        "type": 1,
        "id": 9545,
        "message": 0.0074,
        "country": "AU",
        "sunrise": 1563917505,
        "sunset": 1563951864
    },
    "timezone": 36000,
    "id": 2155415,
    "name": "New Norfolk",
    "cod": 200
}{
    "coord": {
        "lon": 147.9,
        "lat": 70.62
    },
    "weather": [
        {
            "id": 804,
            "main": "Clouds",
            "description": "overcast clouds",
            "icon": "04d"
        }
    ],
    "base": "stations",
    "main": {
        "temp": 51.28,
```

```
# IPython log file

# citi = cities
units = "imperial"
url = "http://api.openweathermap.org/data/2.5/weather?"
owm.utils.load_config
settings = {"units": units, "APPID": api_key}
query_url = f"{url}appid={api_key}&units={units}&q="

# set up lists to hold reponse info
weather_response = []
cityList = []
citNam = []
lat = []
temp = []
humi = []
eSea = []
eGnd = []
clouds = []
wind = []
code = []

# for citi in cities:
#     weather_response = owm.find_city(citi, **settings)
#     selection = ('id','coord.lat','coord.lon')
#     data = weather_response(selection)
#     cityList.append(data)

# Loop through the list of cities and perform a request for data on each
# for city in cities:
#     response = requests.get(query_url + city).json()
#     lat.append(response['coord']['lat'])
#     temp.append(response['main']['temp'])
#     cloud.append(response['clouds']['all'])
#     wind.append(response['wind']['speed'])
# logger.disabled = True
# logger.disabled = False

# cnt=1
with open('output_data/data.json', 'w', encoding='utf-8') as f:

    get_ipython().run_line_magic('logon', '-o -q')
    for city in cities:

        response = requests.get(query_url + city).json()
        json.dump(response, f, ensure_ascii=False, indent=4)
        response1=response
        try:
            print(f"For the city named {(response1['name'])}, ID Number-{(response1['id'])}: LAT={(response1['coord']['lat'])} WIND=
```

```
        response1=[]
        citNam.append(response['name']) #and citNam.append(cnt)
        code.append(response['id'])
        lat.append(response['coord']['lat'])
        temp.append(response['main']['temp_max'])
        humi.append(response['main']['humidity'])
        clouds.append(response['clouds']['all'])
        wind.append(response['wind']['speed'])
        eSea.append(response['main']['sea_level'])
        eGnd.append(response['main']['grnd_level'])


    except KeyError:
  #          print(f"The NAME is NO GOOD")
          next
#    print(f"The {code} information received is: {wind}")
#    print(f"The latitude information received is: {lat}")
#    print(f"The temperature information received is: {temp}")
#    print(f"The cloud information received is: {cloud}")
#    print(f"The wind information received is: {wind}")

#    print(f"The {city} latitude information received is: {lat}")
#    print(f"The  {city} temperature information received is: {temp}")
#    print(f"The  {city} cloud information received is: {cloud}")
#    print(f"The  {city} wind information received is: {wind}")

# # loop throught the list of units and append them to cityList list
# for citi in cities:
#    query_url = f"{url}appid={api_key}&q={citi}"
#    weather_response = requests.get(query_url)
#    response= weather_response.json()
#    lat.append(response['coord']['lat'])
#    temp.append(response['main']['temp'])
#    cloud.append(response['clouds']['all'])
#    wind.append(response['wind']['speed'])
#    cityList.append(weather_json)

#    for city in cities:
#    response = requests.get(query_url + city).json()
#    selection = ('name','id','coord.lat','coord.lon',"main.temp", 'main.temp_max',"main.humidity", "wind.speed",'clouds.all')
print(var_dic_list())
print(var_dic_list())
ls=[citNam, code,  lat, temp, humi, clouds, wind ]
for l in ls:
   print(len(l))
print(var_dic_list())
print(var_dic_list())
dictionary = {}
dictionary={
```

```
fig1=plt.scatter(latitude, temperature, marker='.', facecolors="blue", edgecolors="blue")
# Set the upper and lower limits of our y axis
plt.ylim(0,120)
# Set the upper and lower limits of our x axis
plt.xlim(-80,100)
# Create a title, x label, and y label for our chart
plt.title("Max Temperature v Latitude")

plt.xlabel("Latitude")
plt.ylabel("Temperature (Degrees F)")

# Save an image of the chart and print to screen
# NOTE: If your plot shrinks after saving an image,
# update matplotlib to 2.2 or higher,
# or simply run the above cells again.
plt.savefig("output_data/temp_v_Latitude.png")
plt.show()
print(var_dic_list())
print(var_dic_list())
fig = plt.figure()
fig1=plt.scatter(latitude, humidity, marker=".", facecolors="blue", edgecolors="blue")
# Set the upper and lower limits of our y axis
plt.ylim(0,105)
# Set the upper and lower limits of our x axis
plt.xlim(-80,100)
# Create a title, x label, and y label for our chart
plt.title("Humidity v Latitude")
plt.xlabel("Latitude")
plt.ylabel("Humidity (%)")

# Save an image of the chart and print to screen
# NOTE: If your plot shrinks after saving an image,
# update matplotlib to 2.2 or higher,
# or simply run the above cells again.
plt.savefig("output_data/humidity_v_Latitude.png")
plt.show()
print(var_dic_list())
print(var_dic_list())
fig = plt.figure()
fig1=plt.scatter(latitude, cloudiness, marker=".", facecolors="blue", edgecolors="blue")
# Set the upper and lower limits of our y axis
plt.ylim(-5,105)
# Set the upper and lower limits of our x axis
plt.xlim(-80,100)
# Create a title, x label, and y label for our chart
plt.title("Cloudiness v Latitude")
plt.xlabel("Latitude")
plt.ylabel("Cloudiness (%)")

# Save an image of the chart and print to screen
# NOTE: If your plot shrinks after saving an image,
# update matplotlib to 2.2 or higher,
# or simply run the above cells again.
plt.savefig("output_data/cloudiness_v_Latitude.png")
plt.show()
print(var_dic_list())
print(var_dic_list())
fig = plt.figure()
fig1=plt.scatter(latitude, wind_speed, marker=".", facecolors="blue", edgecolors="blue")
# Set the upper and lower limits of our y axis
plt.ylim(0,40)
# Set the upper and lower limits of our x axis
plt.xlim(-80,100)
# Create a title, x label, and y label for our chart
plt.title("Wind Speed v Latitude")
```

e1['clouds']['all'])}")

weather_data_df

City	ID Code	Latitude	Temperature	Humidity	Cloudiness	Wind
New Norfolk	2155415	-42.78	44.6	56	75	13.87
Chokurdakh	2126123	70.62	51.28	53	99	13.42
Upernavik	3418910	72.79	48.4	62	0	7.14
Jamestown	2069194	-33.21	50.92	96	98	6.58
Alofi	4036284	-19.06	66.2	88	7	1.12
Cherskiy	2126199	68.75	40.12	84	100	12.21
Wajid	50814	3.81	79.72	50	64	16.15
Northam	2064550	-31.65	48.2	93	75	2.24
Brejo da Madre de Deus	3404862	-8.14	77.2	56	58	12.62
Ushuaia	3833367	-54.81	35.6	74	75	29.97
Lasa	146639	34.92	80.6	88	0	4.7
Hasaki	2112802	35.73	73.4	100	75	2.24
Almaznyy	582447	48.03	80.6	44	0	6.71
Tefe	3661944	-3.35	78.8	94	40	3.36
Nabire	1634614	-3.36	68.2	99	100	2.44
Cabo San Lucas	3985710	22.89	90	83	90	18.34
Yabelo	326036	4.89	68.2	58	89	5.77
Kapaa	5848280	22.08	82.4	74	40	17.22
Iqaluit	5983720	63.75	42.8	81	20	5.82
Albany	5106834	42.65	79	68	75	3.36
Emerald	2167426	-23.53	50	81	5	3.36
Grindavik	3416888	63.84	59	67	40	10.29
Upington	945945	-28.46	59	41	0	17.22
Ancud	3899695	-41.87	50	57	40	4.7
Vardo	4372777	39.62	78.01	64	40	4.7
Bluff	2175403	-23.58	57.22	71	0	5.46
Puerto Ayora	3652764	-0.74	75.2	69	75	18.34
Huarmey	3939168	-10.07	62.26	86	100	17.38
Vostok	2013279	46.45	66.04	97	96	4.16
San Francisco del Mar	3524965	16.34	94.3	44	64	4.63
Hermanus	3366880	-34.42	50	96	83	18.01
Port Elizabeth	4501427	39.31	78.01	65	40	10.31
Tiksi	2015306	71.64	39.76	74	100	10.38
Mehamn	778707	71.03	66.76	61	19	2.64
Georgetown	3378644	6.8	86	70	40	11.41
Hilo	5855927	19.71	81	73	75	4.7
Barrow	3833859	-38.31	54.16	28	0	10.92
Penzance	2640377	50.12	69.01	93	75	8.05
Mataura	6201424	-46.19	34	98	4	4.65
Souillac	3026644	45.6	102.2	28	0	14.99
Fowa	2352175	8.92	77.74	88	74	3.02
Havoysund	779622	71	62.6	72	0	8.05
Saint-Philippe	6138908	45.36	82.4	37	40	10.85
Lompoc	5367788	34.64	89.6	29	11	6.93
Kodiak	4407665	39.95	79	53	40	9.17
Kaitangata	2208248	-46.28	41	85	6	4
Port Alfred	964432	-33.59	55	89	16	5.99
Atar	2381334	20.52	109.78	12	0	8.88

Kokopo	2093685	-4.34	70.36	96	100	1.97
Yushu	2033242	44.84	68.02	88	71	7.58
Wuhu	1791236	31.35	84.2	83	0	4.47
Vilhena	3924679	-12.74	87.8	38	0	8.05
Rikitea	4030556	-23.12	70	76	97	16.89
Pacifica	5380420	37.61	75.99	87	90	6.93
Punta Arenas	3874787	-53.16	39.2	69	75	8.05
Nuuk	3421319	64.17	46.4	81	75	20.8
Dawson Creek	5935804	55.76	71.6	73	1	2.24
Kingussie	2645409	57.08	80.6	61	20	8.05
Mayumba	2399001	-3.44	71.44	89	56	13.47
Hualmay	3939761	-11.1	61.36	87	100	19.93
Provideniya	4031574	64.42	44.62	96	100	3.31
Arraial do Cabo	3471451	-22.97	78.8	73	0	23.04
Meulaboh	1214488	4.14	84.04	69	84	4.47
Narsaq	3421719	60.91	59	58	40	11.41
Kavieng	2094342	-2.57	82.42	76	99	12.35
Plettenberg Bay	964712	-34.05	51.28	66	63	11.74
Utrecht	2745912	52.09	90	57	0	10.29
Thunder Bay	6166142	48.41	84.99	47	75	8.05
Butaritari	2110227	3.07	84.94	70	100	9.57
Saldanha	2737599	41.42	84.76	36	56	14.43
Hobart	2163355	-42.88	44.6	56	75	13.87
Ribeira Grande	3372707	38.52	73.4	94	75	16.11
Berlevag	780687	70.86	63.88	57	5	14.16
Grand Gaube	934479	-20.01	69.8	88	75	13.87
Cape Town	3369157	-33.93	55	76	75	13.87
Tuatapere	2180815	-46.13	34	98	0	9.17
Bredasdorp	1015776	-34.53	53.6	71	34	12.75
Deputatskiy	2028164	69.3	49.12	46	96	7.56
Faanui	4034551	-16.48	79.18	85	97	14.67
Valparaiso	4927537	41.47	82	36	40	4.7
Sekoma	933102	-24.51	60.82	14	0	9.13
Loreto	3438834	-23.27	76.48	56	94	5.64
Avarua	4035715	-21.21	75.2	60	4	13.87
Pergamino	3841490	-33.9	50	76	98	1.99
Mayya	2020121	61.74	42.8	70	0	4.47
Raudeberg	3146487	61.99	69.8	100	75	4.7
Broome	2656067	52.47	86	54	0	9.17
Mar del Plata	3863379	-46.43	45.52	50	0	13.42
Jalu	86049	29.03	88	30	0	22.19
Busselton	2075265	-33.64	57	67	100	9.84
Lorengau	2092164	-2.02	79.9	81	100	9.46
Pangai	4032369	-19.8	66.2	77	20	9.28
Mount Gambier	2156643	-37.83	42.8	87	75	8.05
Vaini	1273574	15.34	76.48	93	100	2.71
Saint George	262462	39.45	86	42	20	7.27
Otavi	3353934	-19.64	58.48	16	0	7.16
Akhtanizovskaya	583811	45.32	73.4	83	20	6.71

weather_data_df

Tezu	1254709	27.93	71.8	98	100	2.98
Yellowknife	6185377	62.45	77	41	20	11.41
Paralimni	734330	40.99	87.01	65	22	4.99
Sao Filipe	3374210	14.9	74.86	83	18	20.74
Esperance	2071860	-33.86	53.6	100	90	5.82
Torbay	6167817	47.66	68	72	90	10.29
Kargasok	1504382	59.06	57.76	91	100	1.79
Lavrentiya	4031637	65.58	43.9	96	100	4.36
Atuona	4020109	-9.8	79.36	77	4	17.18
Srednekolymsk	2121025	67.46	42.28	68	100	13.73
Jamame	56399	0.07	75.94	69	13	12.03
Najran	103630	17.54	93.2	14	20	6.93
Coihaique	3894426	-45.58	48.2	65	40	4.7
Yantal	2055868	56.85	61	57	100	1.79
Qaanaaq	3831208	77.48	43.18	62	60	5.59
Thompson	6165406	55.74	87.8	35	40	11.41
Sur	286245	22.57	78.82	82	0	7
Port Blair	1259385	11.67	84.22	80	93	22.68
Kruisfontein	986717	-34	52.72	70	58	9.4
Necochea	3430443	-38.55	54	41	0	1.99
Kenai	5866063	60.55	64.99	72	1	10.29
Haines Junction	5969025	60.75	50.2	91	100	4.68
Guarda	2738785	40.54	84.99	40	57	8.48
Blind River	5903851	46.19	71.6	60	1	5.82
Xinqing	2033667	48.28	63.16	98	100	2.24
Quatre Cocos	1106643	-20.21	69.8	88	75	13.87
Evensk	2125693	61.92	40.66	75	59	9.28
Sargatskoye	1493004	55.6	59.56	89	99	4.32
Portland	4975802	43.66	70	68	90	5.82
Nikolskoye	546105	59.7	72	49	20	3.18
Dabakala	2290609	8.36	77.92	86	35	4.52
Bloemfontein	1018725	-29.12	60.8	19	0	13.87
Husavik	5961417	50.56	84	31	3	3
Arys	1526168	42.43	86	20	0	6.71
Carnarvon	1014034	-30.97	41.74	68	82	37.36
Jabinyanah	2470260	35.03	86	37	0	5.82
Hidalgotitlan	3527113	17.78	89.6	62	75	6.93
Hithadhoo	1282256	-0.6	83.32	76	99	7.61
Kalaleh	129512	37.38	82.4	74	0	6.93
Pervomayskoye	1495256	57.07	53.62	81	1	5.32
Puerto Colombia	3671497	10.99	87.8	70	75	11.41
Tasiilaq	3424607	65.61	46.4	65	40	13.87
Saint-Francois	2980080	46.42	96.8	23	0	4.7
Rioja	3692863	-6.06	61.54	63	91	5.82
Chuy	3443061	-33.69	56.5	81	100	14.63
Coquimbo	3893629	-29.95	55.4	58	20	9.17
Bilibino	2126682	68.06	31.84	92	100	4.21
Coahuayana	3981460	18.62	82.78	75	75	3.22
Tabuk	1684803	17.41	65.5	97	98	2.53

Mildura	2157698	-34.18	46.99	100	75	4.7
Boundiali	2290836	9.53	77.38	88	58	5.59
Bontang	1648186	0.12	71.08	97	91	2.91
Wencheng	6972233	27.79	71.8	97	100	2.26
Baghdad	98182	33.3	93.2	16	0	8.05
Saint-Augustin	6138501	45.63	80.01	36	75	12.75
Kaiyuan	2036337	42.54	73.06	95	59	6.53
Los Llanos de Aridane	2514651	28.66	73.4	73	20	18.34
Tokmak	691469	47.26	68.02	72	73	4.79
Castro	3896218	-42.48	50	57	40	4.7
East London	1006984	-33.02	62.6	72	20	33.33
Beringovskiy	2126710	63.05	49.66	58	76	2.04
Keffi	2334652	8.85	78.8	74	20	4.7
Guinope	3609112	13.88	82.4	48	40	3.36
Tuktoyaktuk	6170031	69.44	51.8	81	75	14.99
Stonewall	6157355	50.13	84	39	40	3.36
Kaduqli	373141	11.01	78.64	66	53	3.58
Muros	3115824	42.77	79	61	20	5.82
Gamba	1281256	28.28	47.5	62	94	5.03
Te Anau	2181625	-45.41	40.66	81	0	0.31
Norman Wells	6089245	65.28	73.4	60	20	11.41
Klaksvik	2618795	62.23	55.4	100	90	16.11
Pangnirtung	6096551	66.15	44.6	93	40	9.17
Milkovo	727030	41.53	80.01	73	75	5.82
Pevek	2122090	69.7	30.22	96	100	12.68
Rumonge	423549	-3.97	65.14	69	6	2.55
Mangrol	1263751	25.33	96.1	46	100	8.37
Victoria	1733782	5.28	77	94	75	2.24
Blagoyevo	576093	63.37	58.12	91	44	3.83
Puerto Maldonado	3931470	-12.59	90.52	42	57	3.06
Bethel	5880568	60.79	59	77	90	9.04
Sola	151211	-3.17	70.54	32	23	3.06
Amapa	3603330	15.09	91.4	59	75	4.7
Hami	1529484	42.84	77.02	31	91	3.53
De-Kastri	2126018	51.48	53.62	99	100	5.28
Noumea	2139521	-22.28	55.4	82	0	2.24
Russell	4278471	38.9	84	30	1	6.24
Esna	675840	45.2	68	88	75	2.24
Yerbogachen	2012956	61.28	61.18	61	100	6.78
College	5859699	64.86	73	60	82	1.21
Barcelos	3665098	-0.97	89.08	53	0	5.41
Amahai	1651591	-3.31	78.01	91	100	8.77
Honiara	2108502	-9.43	73.4	94	40	3.36
Nur	763513	52.67	64.78	82	5	5.84
Airai	1651810	-8.93	64.96	66	0	4.85
Goya	3433715	-29.14	50.74	92	100	11.83
Lebu	344979	8.96	59.2	86	54	3.04
Saskylakh	2017155	71.97	46.06	79	84	2.93
Kuantan	1735227	3.82	77	83	75	1.12

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Santa Maria	3462672	-16.02	77	38	20	11.41
Katsuura	1865309	33.93	77	88	75	4.7
Mumford	2297810	5.26	75.4	84	70	7.47
Kahului	5847411	20.89	82.4	54	20	19.6
Jumla	1283285	29.28	56.14	98	100	1.39
Chilakalurupet	1274213	16.09	80.26	80	84	8.01
Hustopece	3074677	48.94	82.4	57	0	13.87
Kayes	2455518	14.44	96.8	47	40	9.17
Trincomalee	1226260	8.58	78.28	76	48	7.2
Santa Fe	3836277	-31.62	54	68	100	7
Inhambane	1045114	-23.87	62.26	67	0	10.96
Aripuana	3665202	-9.17	94.48	31	72	3.65
Xiantao	1790371	30.37	77.92	95	99	3.22
Derbent	566532	42.06	65.5	87	44	3.96
Sinop	739600	42.03	72.16	88	0	10.83
Terney	2015352	45.05	62.8	98	88	2.75
Puerto Escondido	3520994	15.86	86	66	75	5.82
Cidreira	3466165	-30.17	69.64	85	100	1.86
Los Llanitos	3659711	-4.38	78.8	41	75	14.99
Muborak	1216475	39.25	91.24	9	0	15.46
Garden City	5593814	43.62	87.01	42	1	2.8
Quang Ngai	1568770	15.12	71.26	94	25	3.49
Tshane	933726	-24.02	61.36	14	0	7.9
Yulara	6355222	-25.24	50	37	0	8.05
Tura	2014833	64.27	58.12	67	93	2.46
Margate	2158744	-43.03	44.6	56	75	13.87
Luba	1705460	17.32	75.4	93	100	3.13
Matamoros	3523466	25.87	93.2	83	90	19.46
Prince George	6113365	53.92	75	68	1	3.33
Pimentel	3389609	-3.7	88.18	48	40	6.71
Kupang	2057087	-10.16	72.7	71	42	8.86
Isangel	2136825	-19.55	64.4	82	75	6.93
Pisco	3932145	-13.71	71.6	30	0	11.41
Yablochnyy	2119640	47.17	64.4	93	75	6.71
Saint-Georges	6295855	46.12	75.99	55	68	1.99
Sinnamary	3380290	5.38	81.34	77	0	10.58
Oxford	4081914	33.61	81	83	90	11.41
Oranjemund	3354071	-28.55	56.5	81	53	15.26
Tingi	877384	-11.3	55.42	78	10	1.1
Goderich	5962442	43.74	75.99	55	0	11.99
Khatanga	2022572	71.98	46.24	64	83	8.75
Bulawayo	894701	-20.16	62.6	33	0	6.93
Bathsheba	3374083	13.22	82.4	88	40	12.75
Khani	610864	41.96	71.6	94	90	1.12
Vila Franca do Campo	3372472	37.72	71.6	94	75	12.75
Vao	588365	59.1	65.86	73	0	6.73
Bambous Virieux	1106677	-20.34	69.8	88	75	13.87
Yeppoon	2142316	-23.13	50	100	75	0.58
Orlik	3102488	53.95	69.01	93	75	5.82

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Beipiao	2038342	41.8	69.64	97	47	3.87
Dikson	1507390	73.51	34.72	90	5	2.95
Katherine	2068655	-14.47	50	57	0	9.17
Sambava	1056899	-14.27	62.26	83	86	2.8
Lata	1253628	30.78	43	93	38	0.76
Akureyri	2633274	65.68	53.6	71	90	13.87
Selma	4089114	32.41	82.4	78	88	4.7
Bay Roberts	5895424	47.58	68	72	90	10.29
La Asuncion	3856548	-26.05	45.52	34	1	8.01
Cabras	3670719	5.5	72	63	99	1.01
Cayhagan	1717550	9.67	83.14	72	100	5.7
Aklavik	5882953	68.22	62.6	72	75	4.7
Dzhalil	563681	55.02	57.94	92	0	4.07
Codrington	2160063	-28.95	55.99	93	0	10.29
Houston	4699066	29.76	84.99	66	90	14.99
Talnakh	1490256	69.49	57.2	87	0	17.9
Faya	110690	18.39	82.4	69	0	5.82
Ostrovnoy	556268	68.05	50.38	68	100	4.12
Rome	6539761	41.89	91.4	40	0	3.36
Alyangula	2079582	-13.85	60.8	87	18	3.36
Yangambi	203717	0.77	78.28	73	73	3.04
Cap-aux-Meules	5915327	47.38	68	82	75	5.82
Khairabad	1137160	36.84	94.3	8	0	9.91
Port Hueneme	5384339	34.15	86	64	1	6.93
Luderitz	3355672	-26.65	59	82	52	10.29
Minbu	1309289	20.18	75.4	86	100	3.38
Bongaree	2174933	-27.08	54	100	20	4.7
Mpulungu	175961	-8.77	60.28	41	1	4.14
Mahebourg	934322	-20.41	69.8	88	75	13.87
Saint Anthony	5606187	43.97	88	35	1	10.29
Nome	4732862	30.04	84	74	90	4.7
Longyearbyen	2729907	78.22	48.2	70	75	3.36
Cacoal	3925212	-11.43	94.84	29	26	4.72
Evanton	2649851	57.66	80.6	61	20	8.05
Novikovo	487928	51.15	64.96	79	98	2.35
San Patricio	3437029	-26.98	65.32	94	100	6.08
Paliseul	2789354	49.9	91	27	80	4.7
Ust-Karsk	2013942	52.71	47.86	97	6	5.26
Brusyliv	711382	50.28	68	59	90	8.95
Sao Felix do Xingu	3388847	-6.64	92.5	28	41	5.48
Calabozo	3647444	8.92	84.58	73	97	6.73
Seybaplaya	3516685	19.65	86	70	40	9.17
Itarema	3393692	-2.92	85.12	58	55	13.13
Kopavogur	3415212	64.11	59	67	40	10.29
Palmas	3474574	-10.18	89.6	25	20	8.05
Conde	3465713	-11.81	79	60	1	9.8
Haikou	1809078	20.04	77	100	0	1.81
Champerico	3530097	16.38	86	55	40	6.93
Bosobolo	2316473	4.19	72.88	89	73	1.79

Vangaindrano	1054329	-23.35	61.36	84	60	1.01
Guerrero Negro	4021858	27.97	69.28	78	17	5.99
Laguna	3581398	16.17	86	79	40	4.7
Rorvik	3141310	64.86	66.2	93	0	3.36
Kitimat	5993072	54.02	66.2	59	75	5.82
Tigil	2120612	57.8	36.52	82	0	4.21
Hofn	2630299	64.25	40.84	94	100	6.22
Ponta do Sol	3453439	-20.63	73.6	46	81	7.45
Biak	1637001	-0.91	56.14	87	100	5.64
Rolla	4406282	37.95	79	44	1	8.05
Perth	2063523	-31.95	52	100	20	3.36
Ilulissat	3423146	69.22	51.8	53	75	6.93
Yazykovo	468486	54.3	61.36	78	27	2.66
Redwood City	5386834	37.49	82	68	5	9.17
Gat	2249901	14.69	100.4	65	0	10.29
Muroran	2129101	42.32	62.8	94	100	6.85
Praia	3460954	-20.25	77	38	0	8.05
Mocuba	1024312	-16.84	58.48	79	6	2.91
Puerto del Rosario	2512186	28.5	77	65	20	18.34
Dingle	1714733	11	75.04	89	99	2.86
Opuwo	3354077	-18.06	61	32	0	5.66
Tchibanga	2396253	-2.92	70.72	87	18	7.25
Beyneu	610298	45.32	88.54	27	68	15.52
Preeceville	6112862	51.95	71.98	69	93	6.35
Mitrofanovka	526083	49.97	69.28	61	91	3.67
Gladstone	2165478	-23.84	55.4	87	0	5.82
Port Lavaca	4720067	28.61	91	70	90	9.17
Bolkhov	575364	53.44	61.9	92	82	5.03
Honghu	1789137	29.82	77.92	95	88	4.88
Waipawa	2185329	-39.94	45	95	93	1.88
Worthing	2633521	50.81	88	37	0	11.41
Oktyabrskiy	515873	55.61	64.4	88	75	4.47
Winslow	2633808	51.94	88	37	0	11.41
Kapit	1737185	2.02	72.16	98	100	0.54
Tilichiki	2120591	60.47	45.34	95	97	3.15
Kailua	5847486	21.39	82.99	83	75	11.41
Altay	1529651	47.83	47.32	77	33	1.97
Mukhen	2019718	48.19	58.48	97	100	13
Kamenka	618453	48.03	63	81	47	5.53
Padang	1633419	-0.92	80.62	79	100	4.97
Kingman	5301067	35.19	100.99	24	1	10.29
Saint-Louis	2246452	16.03	86	70	0	9.17
Miaoli	1671971	24.56	80.01	94	20	8.05
Pierre	5767918	44.37	84	50	1	12.75
Meru	186827	0.05	52.9	92	87	1.16
Vanimo	2084442	-2.67	80.44	77	100	5.97
Nizhnyaya Tavda	1497376	57.67	60.46	93	6	4.05
Moerai	4034188	-22.43	74.86	89	90	19.51
Port Macquarie	2152659	-31.43	44.01	70	0	2.24

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Moose Factory	6078372	51.26	55.4	76	90	4.7
Pizarro	3672086	4.95	75.94	84	100	9.95
Norvenich	2861801	50.8	93.2	29	40	6.93
Clyde River	5924351	70.47	51.8	81	40	12.75
Bara	2347758	10.41	80.44	66	56	3.2
Mahon	2965139	51.89	63	82	75	10.29
Nynashamn	2687636	58.9	72	73	0	6.93
Sol-Iletsk	491019	51.16	64.96	70	0	5.99
Marawi	1701054	8	75	92	100	5.99
Lagoa	2267254	37.14	82	83	0	9.17
Kedrovyy	1538641	56.17	51.8	100	40	3.02
Kalmunai	1242110	7.42	77.38	78	99	1.39
Ahmadpur	1279227	18.7	82.06	65	41	16.02
Ahipara	2194098	-35.17	45	100	33	12.48
Batagay-Alyta	2027042	67.8	50.02	46	19	4.41
Peruibe	3454061	-24.32	84.76	43	10	4.56
Nantucket	4944903	41.28	70	83	90	18.34
Ravar	118704	31.27	74.32	7	14	6.02
Kinablangan	1708743	7.69	71.98	89	100	3.2
Dunedin	2191562	-45.87	46	86	52	11.99
Tuy Hoa	1563281	13.08	77.92	74	11	6.22
Minot	5690532	48.23	81	39	1	8.05
Apac	235130	1.98	65.5	92	44	2.84
San Vicente	3660401	-0.59	78.8	83	40	13.87
Urubamba	3926438	-13.31	59	33	40	16.11
Vila Velha	6320062	-3.71	82.4	58	0	16.11
Taunsa	1163724	30.7	103.84	26	0	7.49
Severo-Kurilsk	2121385	50.68	45.88	91	99	2.3
Darhan	2031964	49.49	57.4	98	100	5.19
Shaunavon	6145425	49.65	80.8	51	35	17.78
Leshukonskoye	535839	64.9	59.74	80	40	3.6
Yar-Sale	1486321	66.83	51.46	69	78	11.32
Callaway	5024237	46.98	80.6	44	1	4.7
Petropavlovsk-Kamchatskiy	2122104	53.05	53.6	100	75	6.71
Broken Hill	2173911	-31.97	50	71	0	10.29
Kanniyakumari	1268008	8.08	79.36	78	68	22.5
Bubaque	2374583	11.28	79.54	83	92	12.41
Auki	2339937	12.18	81.52	66	62	4.61
Belyy Yar	1510377	53.6	59	87	46	4.47
Pontianak	1630789	-0.02	81.52	79	100	12.17
Tevaitoa	4033375	-16.78	78.82	82	98	16.13
Pacasmayo	3694178	-7.4	62.8	90	99	14.05
Port Hardy	6111862	50.7	62.6	72	40	8.05
Skjervoy	777682	70.03	64.4	82	0	5.82
Karasburg	3356343	-28.01	49.48	80	26	30.76
Guayaramerin	3915350	-10.82	93.2	44	0	6.93
Wajir	178443	1.75	86	40	0	8.05
Sheridan	5438542	39.65	87.01	36	20	3.11
Boa Vista	3664980	2.82	78.8	78	75	4.7

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Nikolsk	521773	59.53	56.86	95	56	2.68
Sayyan	70979	15.17	73.6	58	71	2.68
Morant Bay	3489440	17.88	89.6	55	20	14.99
Clonakilty	2965402	51.62	63	82	75	10.29
Aykhal	2027296	65.95	68	37	97	4.47
Paamiut	3421193	61.99	40.48	95	100	4.32
Sobolevo	525426	54.43	61.54	93	98	5.99
Muroto	1856392	33.37	72.16	90	100	3.13
Zabaykalsk	2012780	49.64	52.72	89	55	9.37
Richards Bay	962367	-28.77	76.84	37	0	22.46
Chhatarpur	1274337	24.92	93.22	47	88	7.43
Tupik	2014836	54.43	46.6	94	2	4.07
Labuhan	1641899	-2.54	70	81	93	1.43
Lincoln	2644487	53.23	86	61	0	10.29
Port Lincoln	2063036	-34.72	57.94	76	7	16.13
Khorinsk	2022304	52.16	53.8	88	84	4.27
Saint-Raymond	6639619	46.89	78.01	53	75	6.93
Ust-Kuyga	2013921	70	58.66	55	73	4
La Primavera	3844421	-32.92	51.8	27	0	8.05
Las Vegas	5506956	36.17	100.99	25	1	7.45
Tabou	2281120	4.42	75.76	83	63	5.82
Sisimiut	3419842	66.94	43.9	81	0	13.94
Rhyl	2639409	53.32	86	48	0	5.82
Olinda	2154386	-37.84	46	86	17	5.82
Kavaratti	1267390	10.57	82.78	76	99	20.56
Idrinskoye	1505998	54.37	61.18	75	62	4.43
Itigi	158904	-5.7	64.06	30	36	4.5
Kodala	1266422	19.62	80.26	84	96	2.28
Khandyga	2022773	62.65	49.3	43	0	4.25
Hereford	2647074	52.06	86	37	20	4.7
La Ronge	6050066	55.1	82.4	45	20	10.29
Beni	219057	0.49	64.6	97	99	2.28
Grass Valley	5353775	39.22	93	37	1	7.65
Dudinka	1507116	69.41	57.2	87	0	17.9
Rocha	3440777	-34.48	53.08	75	100	12.03
Sistranda	3139597	63.73	64.4	82	75	4.7
Teahupoo	4033543	-17.83	80.6	74	20	16.11
La Oroya	3936952	-11.52	49.48	37	85	10.98
Elliot Lake	5947866	46.37	68	68	1	9.17
Uruzgan	1131462	32.93	65.86	27	0	2.46
Predivinsk	1494237	57.07	54.16	79	0	3.74
Sretensk	2016110	52.24	48.94	92	7	9.04
Port-Gentil	2396518	-0.72	75.2	88	20	9.17
Bonthe	2409914	7.53	74.5	91	100	13.11
Twentynine Palms	5404198	34.14	102.2	25	90	3.36
La Union	3593500	14.97	87.01	38	88	1.88
Halifax	6324729	44.65	72	73	90	2.24
Hambantota	1244926	6.12	80.98	78	100	16.06
Ouesso	2255564	1.61	73.6	86	62	2.06

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Araouane	2460954	18.9	105.1	18	0	5.01
Fortuna	5563839	40.6	77	77	20	13.87
Burriana	2520709	39.89	89.01	30	0	5.82
Neka	122397	36.65	78.8	83	20	2.24
Verkh-Usugli	2013459	52.7	47.32	95	1	3.22
Dharchula	1272864	29.85	57.58	94	87	0.45
Pacific Grove	5380437	36.62	87.01	72	75	8.05
Zhigansk	2012530	66.77	58.66	45	0	6.2
Adrar	2508813	27.87	109.4	10	0	11.41
Illintsi	707695	49.11	61.9	83	83	7.18
Nemuro	2128975	43.32	59.02	88	80	14.14
Half Moon Bay	5354943	37.46	81	68	5	9.17
Ciudad Bolivar	3645532	8.12	90.16	53	32	11.92
Kapuskasing	5989403	49.42	57.2	82	90	6.93
Palu	1633034	-0.9	72.7	93	71	4.07
Luanda	2240449	-8.83	71.6	83	3	5.82
Porbandar	1259395	21.64	83.86	85	93	18.79
Banda Aceh	1215502	5.56	83.68	73	97	8.1
Egvekinot	4031742	66.32	43.36	93	100	2.57
Mitsamiouli	921786	-11.38	75.2	73	20	12.75
Skibbereen	2961459	51.55	62.6	82	75	10.29
Tabory	3099842	53.89	64	88	88	4.52
Neuquen	3843123	-38.95	50	39	0	11.41
Bastia	3176217	44.6	91	74	0	3.36
Sulangan	1685422	11.14	81.7	75	88	6.64
Kommunar	545788	59.62	72	49	20	4.92
Mirnyy	502265	56.57	61.72	94	92	4.72
Nokaneng	933211	-19.66	64.42	19	0	2.82
Encantado	3464274	-29.24	69.01	96	100	2.17
Mtambile	152877	-5.38	77.2	66	10	25.21
Terra Roxa	3444997	-20.79	84.2	30	0	3.36
Yaqui	3979975	27.37	95	39	40	4.16
Bandarbeyla	64814	9.49	78.1	61	37	27.09
Umm Kaddadah	364933	13.6	93.94	29	27	8.95
Vagamo	3133053	61.88	63.16	74	78	1.74
Ginir	336454	7.14	60.28	97	66	4.63
Rawson	3839307	-43.3	48.94	44	0	14.09
Alakurtti	583472	66.96	68	58	100	1.81
Scottsboro	4088916	34.67	81	61	82	12.75
Tual	1623197	-5.67	76.84	85	100	18.16
Bukachacha	2026023	52.99	48.04	95	25	4.61
Leningradskiy	2123814	69.38	39.4	81	100	3.04
Port Keats	2063039	-14.25	66.4	31	0	12.21
High Level	5975004	58.52	75.2	60	90	4.7
Inndyr	3151056	67.03	61	82	75	8.05
Lodja	211647	-3.52	77.74	30	52	0.92
Port Augusta	2063056	-32.49	55.4	87	90	2.24
Baruun-Urt	2032614	46.68	59.02	93	84	14.18
Kultuk	2021343	51.73	57.4	99	100	1.14

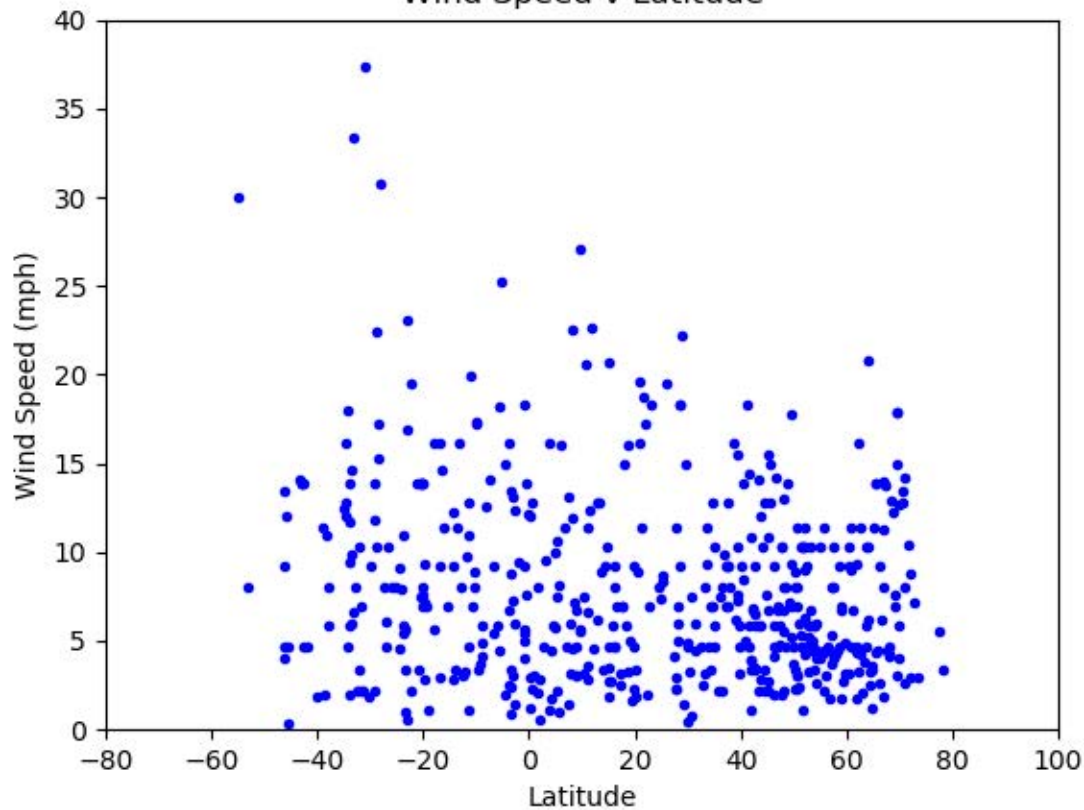|						
Sumkino	1490655	58.11	62.44	58	13	4.41
Talakan	2015686	50.29	56.5	98	87	2.33
Mae Hong Son	1152222	19.3	69.82	98	100	1.63
Paulista	3392742	-6.6	83.68	45	79	9.22
El Angel	3658379	0.62	55.4	71	75	12.75
Turinskaya Sloboda	1488931	57.62	59.2	95	37	4.34
Oistins	3373652	13.07	82.4	88	40	12.75
Tongren	1792592	27.72	73.06	91	0	2.33
La Reforma	4000490	25.08	96.01	52	75	8.66
Mamou	2417833	10.37	72.34	93	100	7.54
Nata	933238	-20.21	62.44	28	0	7.58
Taicheng	1793700	22.25	82	87	86	1.99
Suntar	2015913	62.16	56.5	72	0	3.29
Haicheng	2037086	40.85	75.76	94	88	4.83
Racine	5268249	42.73	79	47	40	9.17
Luganville	2136150	-15.51	75.2	73	75	6.93
Huaiyin	1797873	33.59	81.7	83	100	9.33
Nouadhibou	2377457	20.93	75.2	64	0	16.11
Waterboro	4982218	43.54	69.01	77	90	5.82
Cairns	2172797	-16.92	70	77	75	9.17
Saint-Joseph	3037456	43.56	89.6	51	0	2.24
Punta Alta	3429886	-27.46	66.2	100	90	8.05
Clearwater	4151316	27.97	89.01	70	40	6.93
Solwezi	897045	-12.18	58.3	36	0	3.27
Brae	2654970	60.4	66.2	82	76	9.17
Gimli	5961417	50.63	84	31	0	3
Varhaug	3132644	58.61	69.01	77	20	9.17
Belaya Gora	2126785	68.54	51.82	44	100	12.95
Boras	2720501	57.72	68	77	0	10.29
Wanning	3220813	48.64	84.99	39	28	4.7

Cloudiness v Latitude
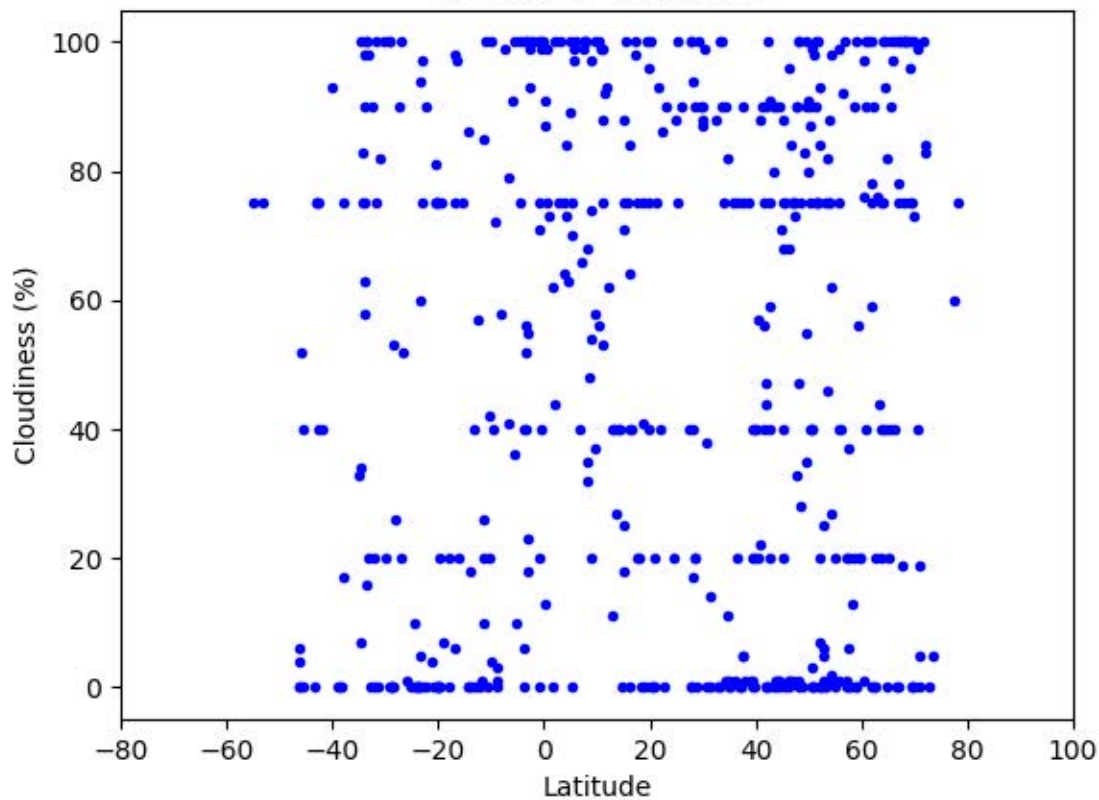
Humidity v Latitude
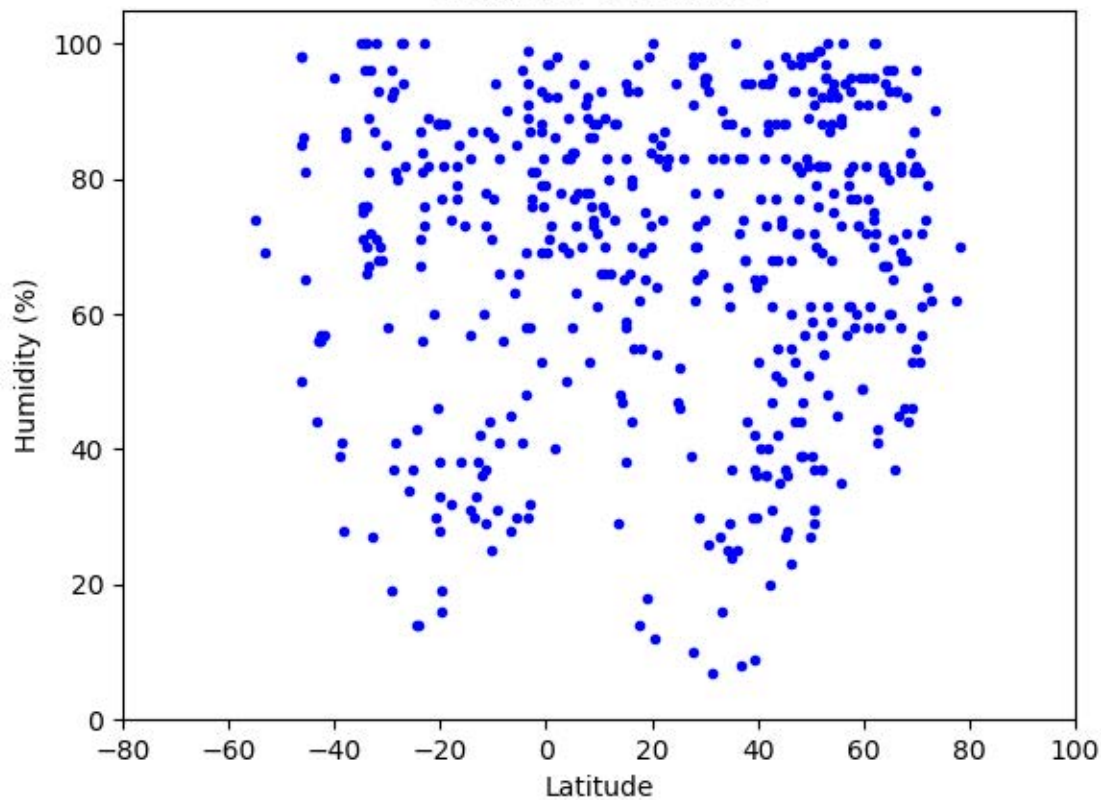
Wind Speed v Latitude

Max Temperature v Latitude