Sunny Patel

PHEV 146

Final Paper

KAGOSHIMA, JAPAN 130.33 W° 31.33 N° 31m Elevation

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
| Temp(°C) | 7.3 | 8.1 | 11.4 | 16.2 | 19.7 | 23.1 | 26.9 | 27.4 | 24.7 | 19.6 | 14.4 | 9.4 | 17.3 |
| Prep (mm) | 82.0 | 102.8 | 157.3 | 226.7 | 233.5 | 429.2 | 307.1 | 210.9 | 218.7 | 115.7 | 90.4 | 76.7 | 2250.9 |

(Temperature Data from 1883-1991, Precipitation data from 1883-2001)

Climograph

The following are the steps I took using the flow chart for Köppen climate classification:

* Is every T < 10 : No
* Is it a B climate : No
* Is every T > 18 : No
* Is every T >= -3 : Yes
* Is every P >= 30 “ Yes
* Is the hottest T >= 22 Yes
* Yes -> Cfa

Using the flow chart Kagoshima, Japan was classified as a Cfa climate. This is consistent with the Köpeen world map classification. Kagoshima has very rainy summers and fairly dry winter seasons. Being an island off the continent of Asia it makes sense that climate is classified as a Humid subtropical.

NANTES, FRANCE 47.10 N° 1.36 W° 27m Elevation

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|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
| Temp(°C) | 4.6 | 5.4 | 7.8 | 10.8 | 14.0 | 17.1 | 18.9 | 18.9 | 18.7 | 16.5 | 12.5 | 8.1 | 5.4 |
| Prep (mm) | 78.5 | 63.5 | 60.1 | 54.8 | 60.2 | 53.8 | 48.9 | 52.9 | 70.7 | 88.8 | 91.5 | 87.7 | 811.4 |

(Temperature data from 1851-1991, Precipitation data from 1835-2000)

Climograph

* Is every T < 10 : No
* Is it a B climate : No
* Is every T >= 18c : No
* Is every T >= -3 : Yes
* Is every P >= 30mm : Yes
* Is the hottest T >= 22 : No
* Are at least 4 T’s >= 10 Yes
* Yes => CWB

Deriving the classification from the flow chart, Nantes, France will be classified as a Cwb climate. However referring to the Köpeen this area and all of the surrounding countries of France fall under the Cfb / Cfc climate.

SAO PAULO, BRAZIL 23.30 S° 46.37 W° 732m Elevation

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|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
| Temp(°C) | 21.3 | 21.5 | 20.8 | 18.9 | 16.7 | 15.4 | 14.8 | 15.9 | 16.9 | 18.1 | 19.2 | 20.5 | 18.3 |
| Prep (mm) | 232.3 | 215.0 | 164.8 | 73.0 | 66.8 | 54.1 | 36.1 | 46.9 | 80.7 | 117.8 | 137.4 | 189.5 | 1182.1 |

Climograph

* Is every T < 10 : No
* Is it a B Climate : No
* Is every T >= 18c : Yes
* Is every P >= 60mm : No
* Using Fig 12-2 determined : Aw / As

Using figure 12-2 Sao Paulo, Brazil is classified as a Aw / As climate and this is shown on the Köpeen world map classification also. Being so close to the tropic of Capricorn it does make sense that the Sao Paulo climate be a tropical wet and dry climate.

MOSCOW U OF ID, USA 46.44 N° 116.58 W° 811m Elevation

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
| Temp (°C) | -2.0 | 0.5 | 3.9 | 7.9 | 11.8 | 15.3 | 19.2 | 18.9 | 14.7 | 9.3 | 3.0 | -0.7 | 8.5 |
| Prep (mm) | 74.1 | 56.8 | 55.9 | 48.2 | 51.9 | 41.6 | 18.5 | 20.3 | 32.0 | 47.2 | 77.8 | 74.4 | 598.6 |

Climograph

* Is every T < 10 : No
* Is it a B climate : No
* Is every T >= 18c : No
* Is every P >= 30mm : No
* Is the driest winter less than 1/10 of the wetest summer : no
* Is the driest summer P <1/3 of the wettest winter P : Yes
* Is the hottest T >= 22c : No
* Are at least 4 T >= 10c : Yes
* Yes => Csb

This region and the rest of the Philippines has a dark green shading on the Kopen world map indicating a Tropical monsoon climate. After evaluating the flowchart MOSCOW U OF ID, USA is classified as having a Csb climate.