Average and Extreme Monthly Temperatures with Dew-Points

Cabo Engaño, Dominican Republic (18°37’ N, 69°19’ W)
(1973-1993)

Source: International Station Meteorological Climate Summary CD-ROM, 1996
Drawn by David Weissberger 10-20-2005
## Cooling Degree Days by Month
(Base 65º F)

<table>
<thead>
<tr>
<th></th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punta Cana</td>
<td>413</td>
<td>361</td>
<td>457</td>
<td>471</td>
<td>515</td>
<td>533</td>
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<td>523</td>
<td>523</td>
<td>467</td>
<td>438</td>
<td>5830</td>
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<tr>
<td>Cabo Engano</td>
<td>392</td>
<td>327</td>
<td>418</td>
<td>412</td>
<td>510</td>
<td>524</td>
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<td>548</td>
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<td>5704</td>
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<tr>
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<td>207</td>
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<td>301</td>
<td>89</td>
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<td>0</td>
<td>964</td>
</tr>
</tbody>
</table>

## Heating Degree Days by Month
(Base 65º F)

<table>
<thead>
<tr>
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<th>O</th>
<th>N</th>
<th>D</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
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<td>Punta Cana</td>
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<tr>
<td>Cabo Engano</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Roanoke</td>
<td>905</td>
<td>747</td>
<td>548</td>
<td>267</td>
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<td>8</td>
<td>239</td>
<td>531</td>
<td>483</td>
<td>3776</td>
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</tbody>
</table>

*Punta Cana data: www.wunderground.com
*Cabo Engano data: International Station Meteorological Climate Summary CD-Rom 1996
Mean Monthly Relative Humidity

* Morning Humidity data missing for April, May, June, July, and November

Source:
Punta Cana: www.onamet.gov.do/onamet/frameset.htm (Dominican Meteorological Department)
Cabo Engaño: International Station Meteorological Climate Summary CD-ROM, 1996

Punta Cana 18°34’N, 68°21´W / Cabo Engaño 18°37’N, 69°19´W
Cloud Cover at Cabo Engaño (1973-1993)

Source: International Station Meteorological Climate Summary CD-ROM, 1996
Mean Monthly Solar Radiation (1961-1990)
Falling on a Horizontal Flat surface
Uncertainty of +/- 9%

Source: Renewable Resource Data center website (http://rredc.nrel.gov/solar/old_data/nsrdb/redbook/atlas/)
Data Source: National Solar Radiation Database
San Juan 18.43 N, 66.00 W / Roanoke 37.32 N 79.97 W / Pheonix 33.43 N 112.02 W
Average Monthly Rainfall
Two sites in the Dominican Republic

Cabo Engaño 1951-1970
(18°37' N, 69°19' W)

Punta Cana 1961-1990
(18°34' N, 68°21' W)

Totals:
Cabo Engaño:
Max- 62.7"
Avg- 41.4"
Min- 30.0"
Punta Cana:
Avg- 43.4"

Theoretical Gallons/Month:
GPM=.48 (Roof Area)
4000 sq.ft. R4; GPM=1920
5000 sq.ft. R4; GPM=2400

Sources:
Cabo Engaño data: International Station Meteorological Climate Summary CD-Rom, 1996
Punta Cana data: WMO data from www.worldweather.org
Drawn by David Weissberger 10-25-2005
Annual Wind Speed and Direction

Frequency Graph (1972-1993)
Cabo Enghão, Dominican Republic
18° 37' N 69° 19' W

- There is little seasonal variation in speed or direction. (Table shows average monthly wind speed in mph)

<table>
<thead>
<tr>
<th></th>
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<th>D</th>
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</thead>
<tbody>
<tr>
<td>Speed</td>
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<td>9.5</td>
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<td>8.9</td>
<td>8.7</td>
<td>8.4</td>
<td>8.9</td>
<td>8.5</td>
<td>8.4</td>
<td>7.4</td>
<td>9.4</td>
<td>9.9</td>
</tr>
</tbody>
</table>

- The wind blows from the east 51.3% of the time throughout the year.

Source: International Station Meteorological Climate Summary CD-ROM, 1996
drawn 10-24-2005 by David Weissberger