ORDZHONIKIDZE (RUSSIA) Altitude: 670 m.
Latitude: 43°3’N Longitude: 44°39’E
Temperature observation period.: 1967-1994 (28)
Rainfall observation period....: 1984-1994 (11)

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<th>(C/mm)</th>
<th>Ti</th>
<th>Mi</th>
<th>mi</th>
<th>M'i</th>
<th>m'i</th>
<th>Pi</th>
<th>Epi</th>
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<td>-33.89</td>
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<td>-8.33</td>
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<td>26.4</td>
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<td>-22.22</td>
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<td>6.47</td>
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<tr>
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<td>36.11</td>
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<tr>
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<td>25.00</td>
<td>15.00</td>
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<td>5.00</td>
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BIOClimatic Indices and Diagnosis
Thermicity index.........................(It): -6
Compensated thermicity index..........(Itc): 61
Simple continentality index..........(Ic): 24.4
Diurnality index.........................(Id): 11.7
Annual ombrothermic index............(Io): 7.82
Monthly estival ombrothermic index....(Ios1): 5.68
Bimonthly estival ombrothermic index...(Ios2): 5.68
Threemonthly estival ombrothermic index...(Ios3): 6.64
Fourmonthly estival ombrothermic index...(Ios4): 7.44
Annual ombro-evaporation index.......(Ioe): 2.42
Annual positive temperature...........(Tp): 1092
Annual negative temperature..........(Tn): 94
Estival temperature.....................(Ts): 572
Positive precipitation..................(Pp): 854

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<th>N. of Months</th>
<th>P&gt;4T</th>
<th>P:2T-4T</th>
<th>PT-2T</th>
<th>P&lt;T</th>
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Latitudinal Belt....: High eutemperate
Continentality......: Continental - High Subcontinental
Bioclimate........: TEMPERATE CONTINENTAL
Bioclimatic Belt...: UPPER SUPRATEMPERATE LOW HUMID
**TEMPERATE CONTINENTAL**
**UPPER SUPRATEMPERATE LOW HUMID**

**WATER INDEX CARD**
**ORDZHONIKIDZE (RUSSIA)**

Altitude: 670 m. Latitude: 43° 3’N

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<tr>
<th>(C/mm)</th>
<th>T</th>
<th>PE</th>
<th>P</th>
<th>VR</th>
<th>R</th>
<th>RE</th>
<th>DF</th>
<th>SP</th>
<th>DR</th>
<th>HC</th>
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<td>31</td>
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<td>0</td>
<td>0</td>
<td>31</td>
<td>28</td>
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<tr>
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<td>26</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>26</td>
<td>27</td>
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</tr>
<tr>
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<td>45</td>
<td>0</td>
<td>49</td>
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<td>85</td>
<td>0</td>
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<td>117</td>
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<td>75</td>
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<td>34</td>
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<td>100</td>
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<td>0</td>
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<td>616</td>
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<td>328</td>
<td>328</td>
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</table>

R = Reserve  VR = Variation of the reserve  RE = Real evapotranspiration  
DR = Drainage  HC = Humidity coefficient  DF = Deficit  SP = Superavit

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**ORDZHONIKIDZE (RUSSIA)**

43°3’N 44°39’E  670 m 28/11 y.

TEMPERATE CONTINENTAL
UPPER SUPRATEMPERATE
LOW HUMID

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<thead>
<tr>
<th>Imbibing</th>
<th>7 Aug.</th>
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<td>Saturation</td>
<td>15 Oct.</td>
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<tr>
<td>Reserve Use</td>
<td>23 Jun.</td>
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<td>Deficit</td>
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ORDZHONIKIDZE (RUSSIA)
Latitude: 43°3’N  Longitude: 44°39’E  Altitude: 670 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index  [C2b]
+ Type ................: C. Continental
+ Subtype .............: 2. Subcontinental
+ Variant .............: b. High

Thermic types  [B1.B5]
+ Latitudinal zone ....: B. Temperate
  + Latitudinal belt ...: 1. High eutemperate
  + Thermic type ......: B. Temperate
  + Thermic subtype ...: 5. Subtemperate

Bioclimatic types  [C2.4a.7b]
+ Macrobioclimate .....: C. TEMPERATE
  + Bioclimate ..........: 2. CONTINENTAL
  + Bioclimatic variant : 4. SUPRATEMPERATE
  + Thermic type........: a. UPPER
  + Ombrothermic type ...: 7. HUMID
  + Ombrothermic subtype: b. LOW

Bioclimatic Classification ....................: Teoc.Ste.Hum

ORDZHONIKIDZE (RUSSIA)
Latitude: 43°3’N  Longitude: 44°39’E  Altitude: 670 m

PRECIPITATION PARAMETERS

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<thead>
<tr>
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<th>Winter Tr1-W</th>
<th>Spring Tr2-P</th>
<th>Summer Tr3-S</th>
<th>Autumn Tr4-F</th>
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<td>90</td>
<td>300</td>
<td>380</td>
<td>172</td>
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</table>

Seasonal rainfall rhythms:  S > P > F > W

ORDZHONIKIDZE (RUSSIA)
Latitude: 43°3’N  Longitude: 44°39’E  Altitude: 670 m

TEMPERATURE PARAMETERS

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<th>Tmmin: -9.4</th>
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<td>Average coldest month [T]..........</td>
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<th>Tpd1: 0</th>
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<th>Tps2: 397</th>
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<td>Positive temperature warmest 3 months.</td>
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### Seasonal Parameters

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<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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| **Warmest semester...** (Sm) |    | *   |   | *   | *   | *  |   |    | *   | *   |    | *
| **Dryest semester...** (Sm)   | *   | *   | *  |    |    |    |    |    |    |    |    |    |
| **Warmest 4 months...** (Cm1) |    |     |   |    |    | *  |    | *  |    |    |    | *
| **Dryest 4 months...** (Cmd)  | *   | *   | *  |    |    |    |    |    |    |    |    |    |
| **Vegetation Activity** (Pav) |    |     |   |    |    |    |    |    |    |    |    |    |
| **Ultragelid...** [M'<=0] (Pf) |    |    |   |    |    |    |    |    |    |    |    |    |
| **Hypergelid...** [M <=0] (Pf) |    |    |   |    |    |    |    |    |    |    |    |    |
| **Gelid...** [T <=0] (Pf)     |    |    |   |    |    |    |    |    |    |    |    |    |
| **Subgelid...** [m <=0] (Pf)  |    |    |   |    |    |    |    |    |    |    |    |    |
| **Pregelid...** [m'<=0] (Pf)  |    |    |   |    |    |    |    |    |    |    |    |    |
| **Agelid...** [m'> 0] (Pf)    |    |    |   |    |    |    |    |    |    |    |    |    |
| **HiperAgelid...** [all>0] (Pf)|    |    |   |    |    |    |    |    |    |    |    |    |

### Ombrothermic Parameters

- **Annual aridity index** [PE/P]...............(Iar): 0.65
- **Mediterranean index of July** [PE/P]............(Im1): 1.13
- **Mediterranean index of July & August**..........(Im2): 1.08
- **Mediterranean index of June, July & August**....(Im3): 0.93

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<td>1135</td>
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<td>920</td>
<td>450</td>
<td>358</td>
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<tr>
<td>Tp</td>
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<td>*</td>
<td>*</td>
<td>17</td>
<td>89</td>
<td>142</td>
<td>175</td>
<td>200</td>
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<td>150</td>
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<th>June-November</th>
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### Aridity Value Index (AVI)

- **[10xPP/TP=IO]:** 8535/1092=7.82  **There is No Yearly Aridity**

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<td>920</td>
<td>450</td>
<td>358</td>
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<tr>
<td>Tp [T*10]</td>
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<td>*</td>
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<td>142</td>
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<td>200</td>
<td>197</td>
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<td>94</td>
<td>28</td>
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<tr>
<td>Avm [200-Iom]</td>
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<td>***</td>
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<td>***</td>
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<tr>
<th>Seasons</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
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<tbody>
<tr>
<td>Pp / Tp</td>
<td><em>/</em></td>
<td>3005/247</td>
<td>3802/572</td>
<td>1728/272</td>
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<tr>
<td>Io (Iot)</td>
<td></td>
<td>1215</td>
<td>664</td>
<td>635</td>
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<tr>
<td>Avs E[Avm&lt;200]</td>
<td>***</td>
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ORDZHONIKIDZE (RUSSIA)
Latitude: 43°3’N  Longitude: 44°39’E  Altitude: 670 m

BIOCLIMATIC INDICES I

CI of Supan (1884) \[\Tmax-\Tmin\] ..........(Sp): 24.44
CI of Gorezinski (1920) \[1.7*Sp/\sin(Lat)-20.4\] .......: 40.46
CI of Conrad (1946) \[1.7*Sp/\sin(Lat+10)-14\] .........: 37.99
  + Oceanic (20<CI<40)
CI of Currey (1974) \[CI=Sp/(1+Lat/3)\] ...............: 1.59
  + Subcontinental (1.1<CI<1.7)
Rainfall Index of Lang (1925) \[R=P/T\] ...............: 113.63
  + Temperate humid (160>R>100)
Aridity Index of Martonne (1926) \[Ia=P/(T+10)\] .......: 51.58
  + Humid (60>Ia>30)
I of Emberger (1930) \[Q=100*P/(Tmmax²−Tmmin²)\] ......: 176.23
  + Humid (Q>90)
I of Dantin & Revenga (1940) \[DR=100*T/P\] ...........: 0.88
  + Humid (2>DR>0)
Aridity Index of UNEP \[I=P/PE\] ......................: 1.53
  + Humid (I>0.65)
Potential Erosion I of Fournier (1960) \[K=Pi²/P\].....: 25.24
  + Very low (K<60)

ORDZHONIKIDZE (RUSSIA)
Latitude: 43°3’N  Longitude: 44°39’E  Altitude: 670 m

BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
  + Climate ......: B. Cold and temperate cold
  + Region ......: 11. Psicroaxeric (Axeric cold)
  + Thermic type: 5. Meso−microthermic

Thornthwaite (1948)

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<tbody>
<tr>
<td>P−E ratio</td>
<td>0.24</td>
<td>0.21</td>
<td>0.39</td>
<td>0.54</td>
<td>0.77</td>
<td>0.72</td>
<td>0.48</td>
<td>0.48</td>
<td>0.44</td>
<td>0.23</td>
<td>0.23</td>
<td>0.27</td>
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<tr>
<td>T−E ratio</td>
<td>0.00</td>
<td>0.00</td>
<td>0.75</td>
<td>4.00</td>
<td>6.38</td>
<td>7.88</td>
<td>9.00</td>
<td>8.87</td>
<td>6.75</td>
<td>4.25</td>
<td>1.25</td>
<td>0.00</td>
</tr>
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</table>

Precipitation-effectiveness: 50.16  Temperature-efficiency ....: 49.13

Moisture Index \[MI=100*(P−PE)/PE\] ...............: 53.31
  + B2. Humid medium-humid (40<MI<60)
Index of dryness \[DI=100*d/PE\] .................: 0.00
  + No deficit (0<DI<16.7)
Index of humidity \[HI=100*s/PE\] ...............: 53.29
  + Strong surplus (20<HI)
Potential Evapotranspiration PE ...................: 616.02
  + First mesothermic (570<PE<712)