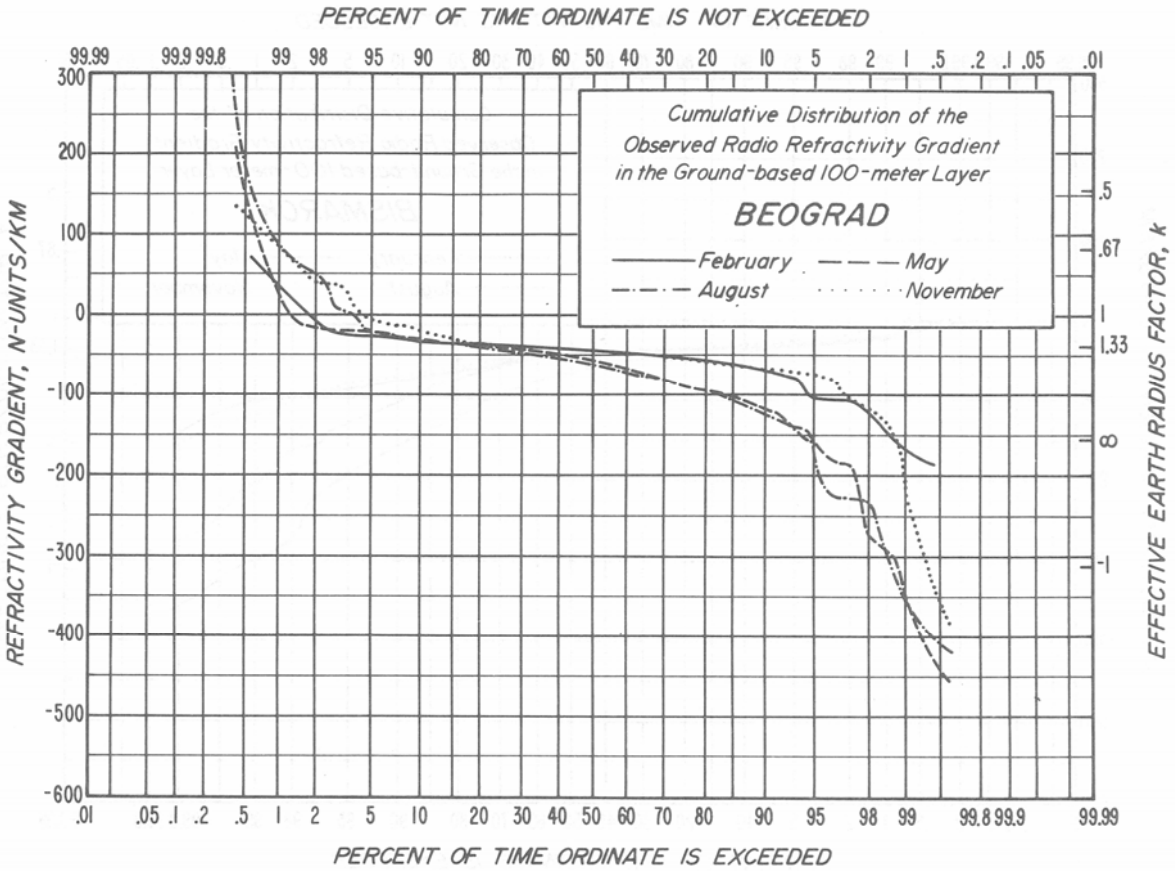


Beograd, Yugoslavia

44° 47' N, 20° 32' E 243 m m.s.l.

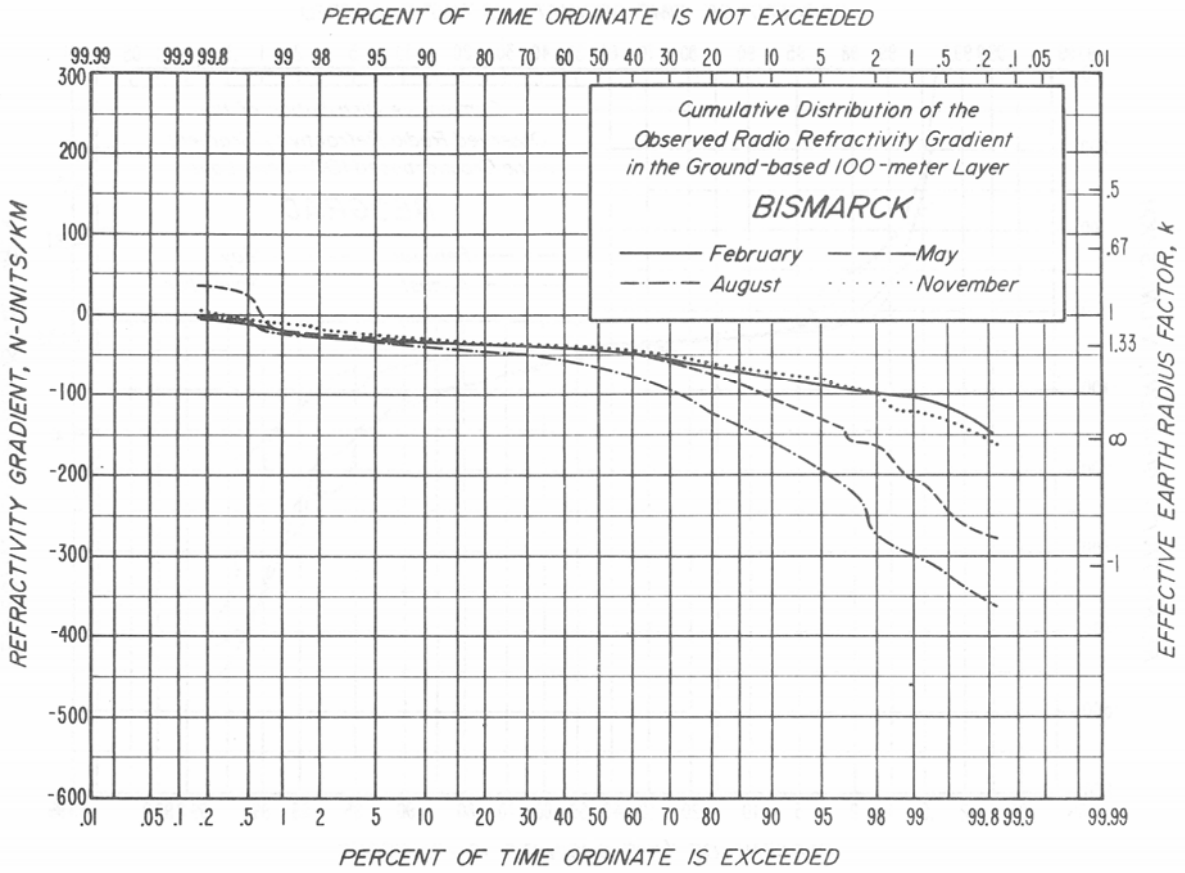
Data: Radiosonde. 0200Z (0300 LST): 2/56 - 2/57
0000Z (0100 LST): 5/57 - 11/60

Temperature (°F): January 37/27; July 84/61

Mean Dewpoint (°F): January 26; July 57

Precipitation (inches): Annual 27.6; June 3.78; February, March 1.81

A Danube River port in northeast Yugoslavia. A continental climate with cold winters and warm summers.



Bismarck, N. Dakota

46° 46' N, 100° 45' W 506 m m.s.l.

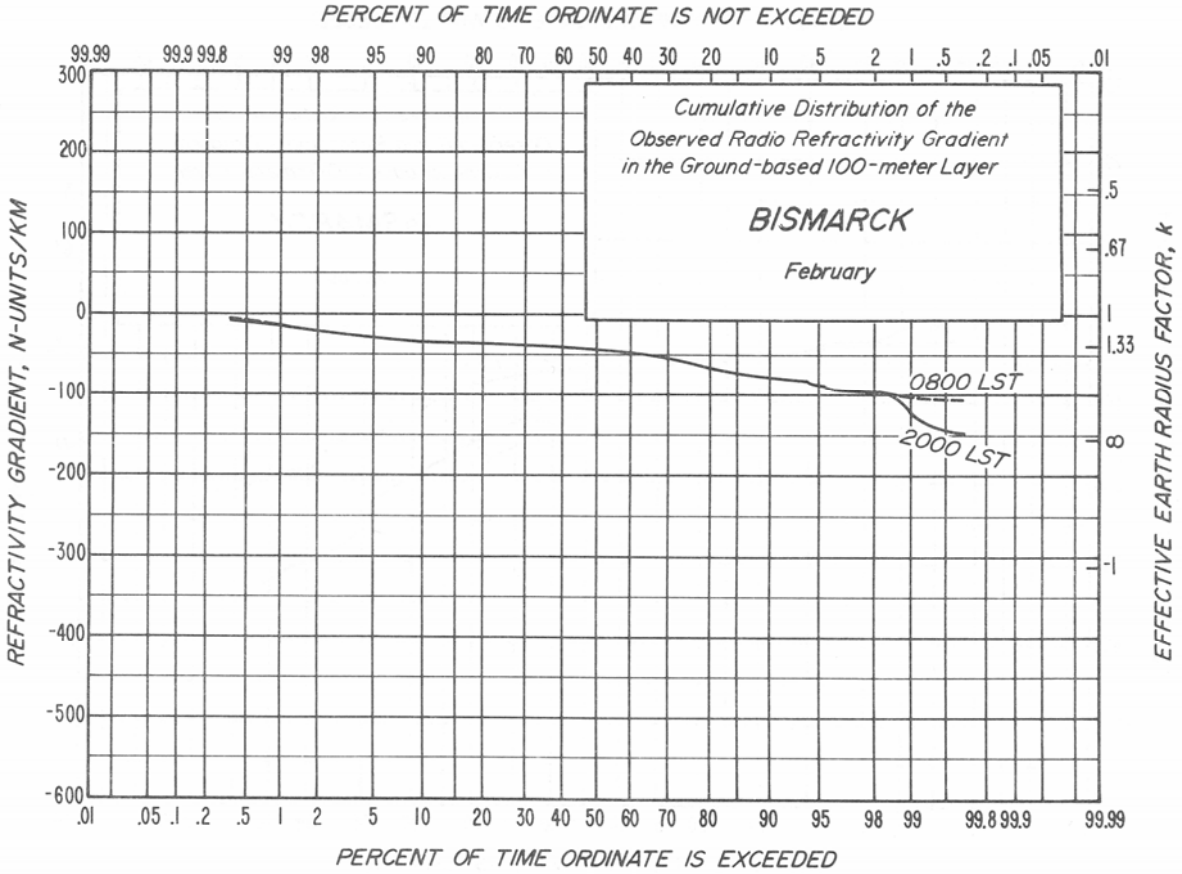
Data: Radiosonde. 0300 and 1500Z (2000 and 0800 LST): 8/52 - 5/57

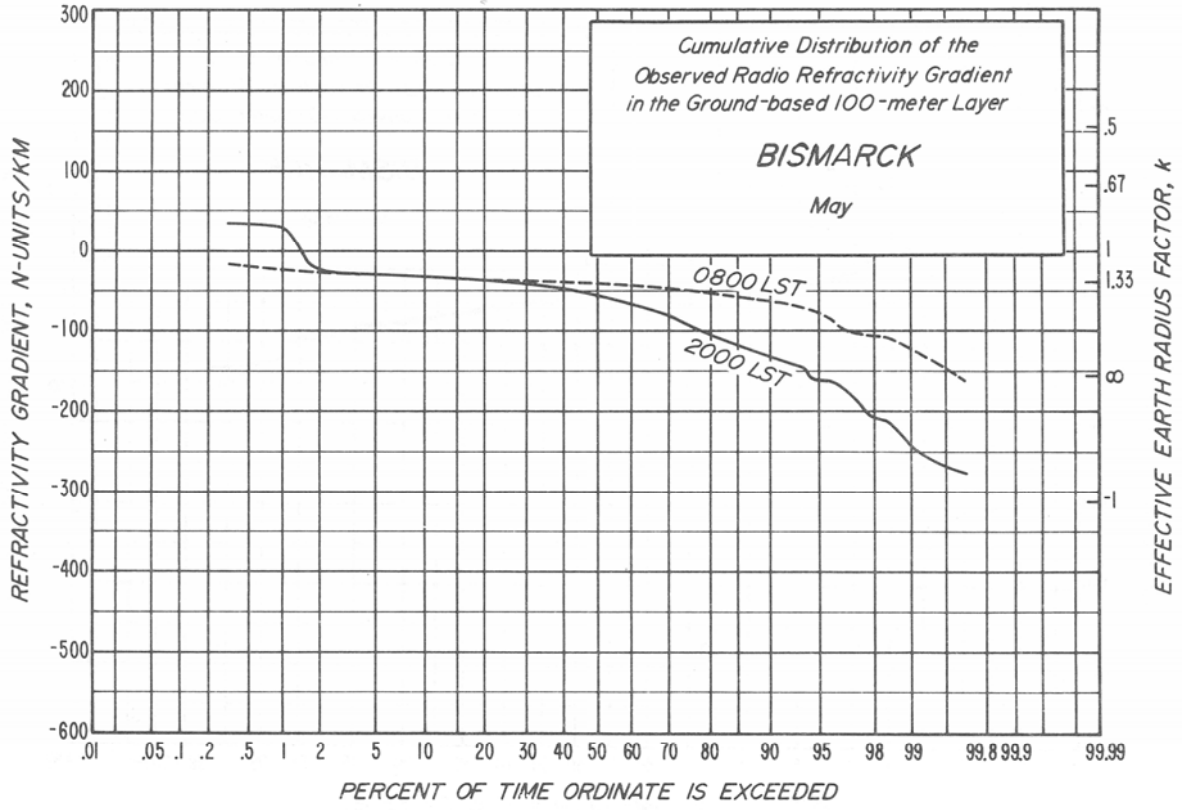
Temperature (°F): January 20/0; July 86/58

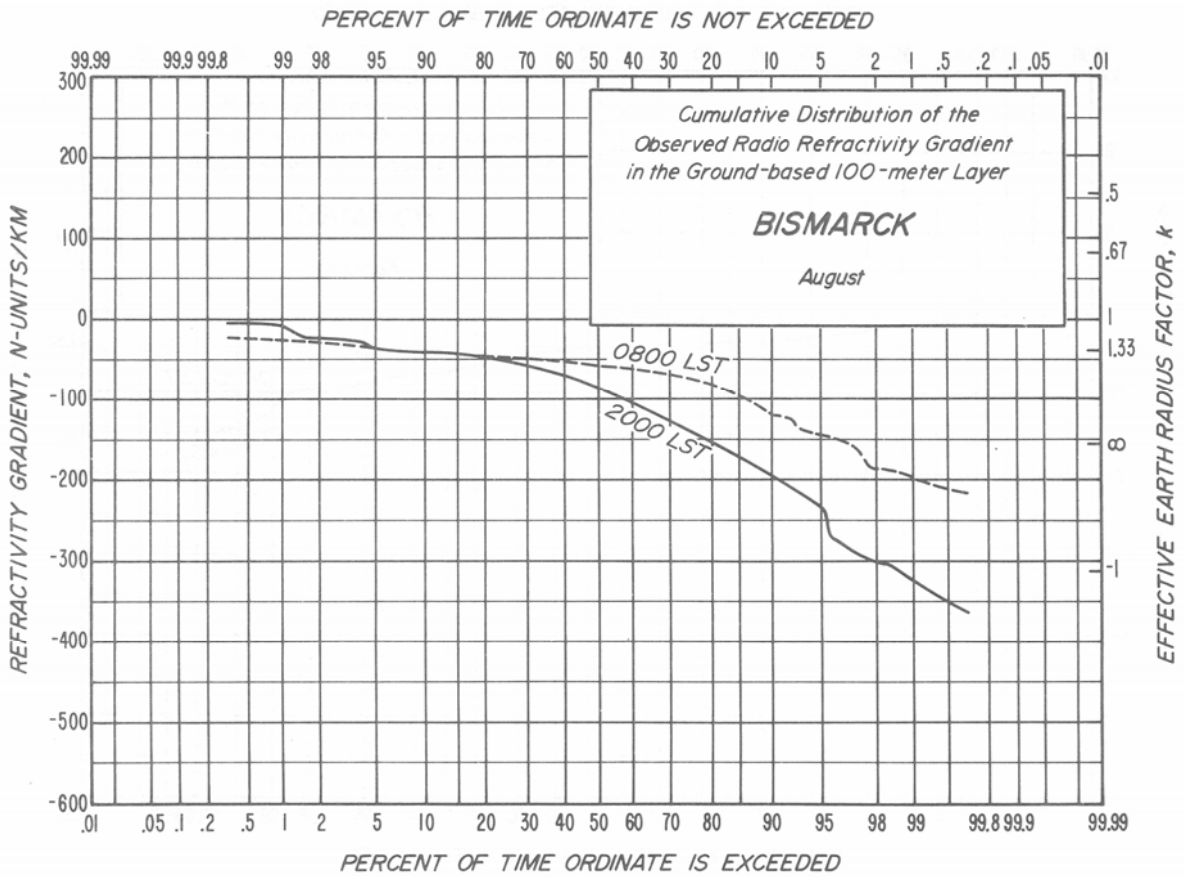
Mean Dewpoint (°F): January 1; July 55

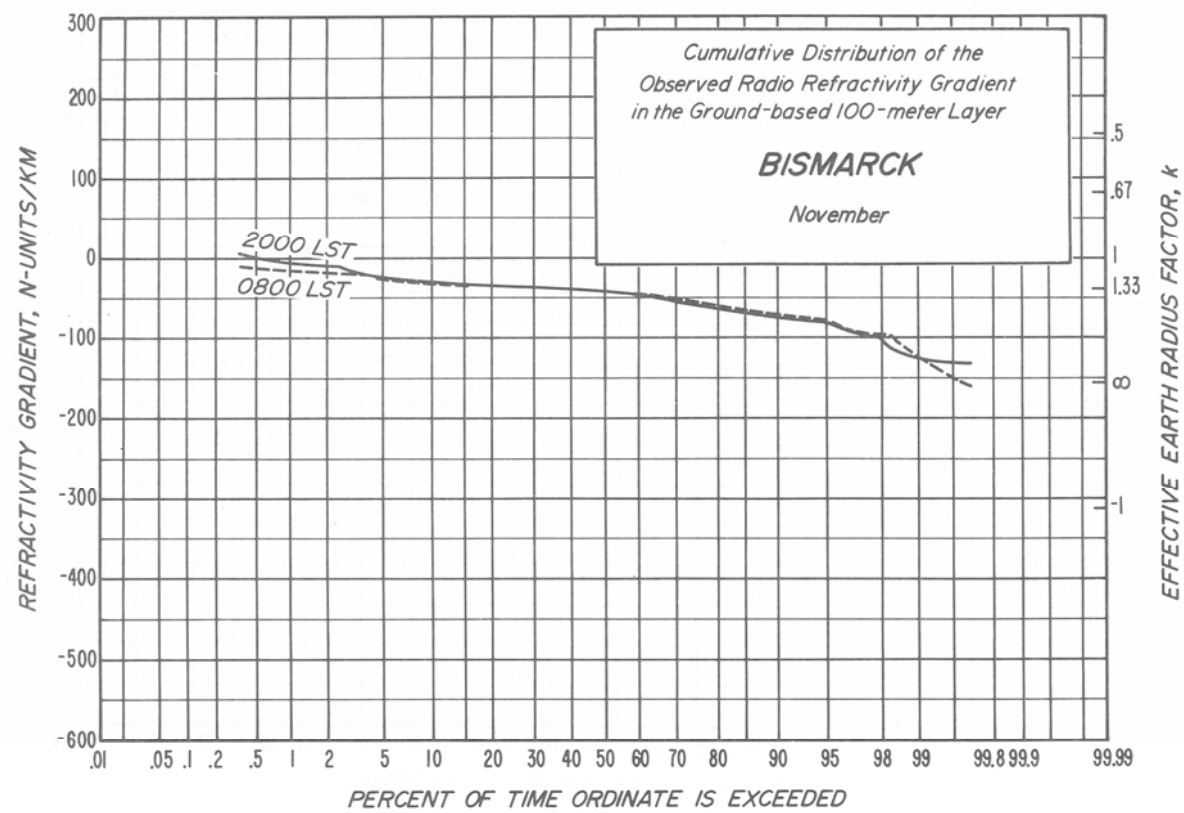
Precipitation (inches): Annual 15.2; June 3.40; December 0.36

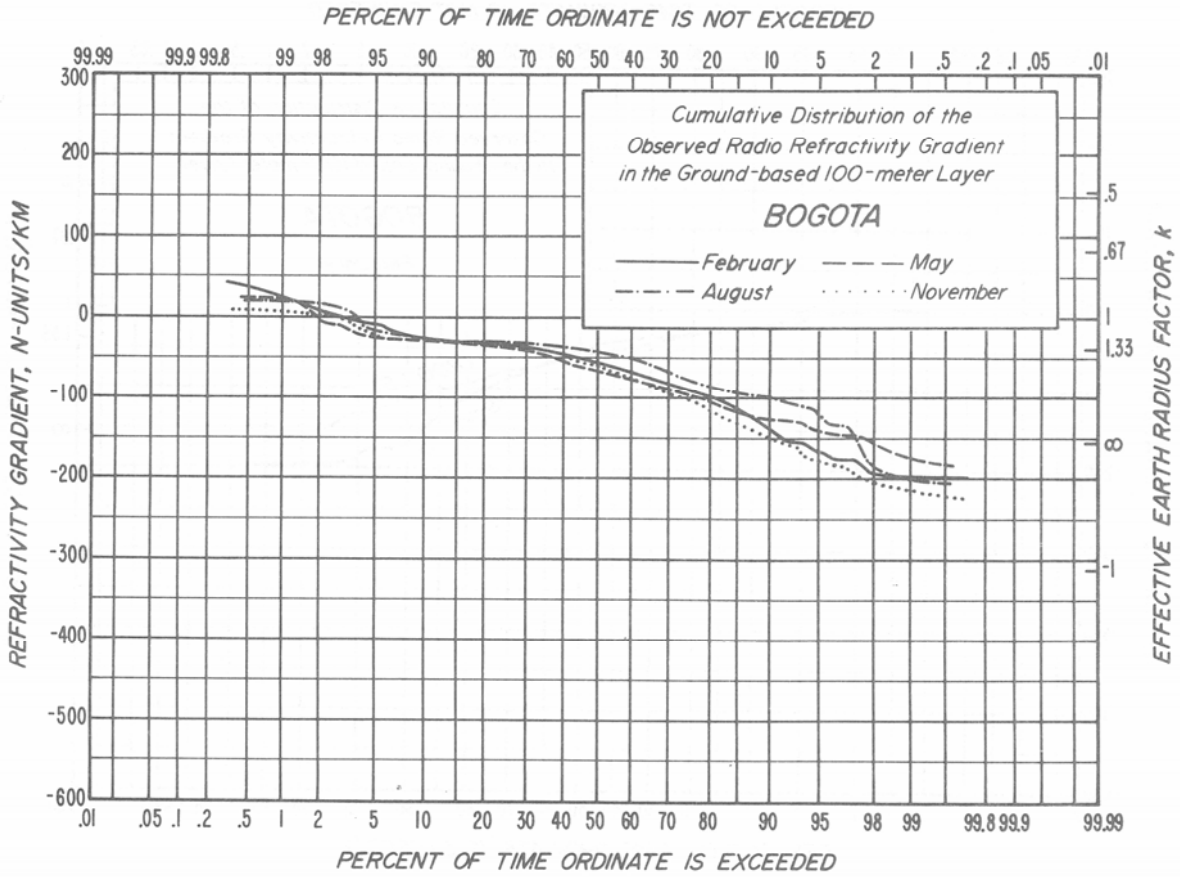
Located on the Missouri River in a shallow basin surrounded by low-lying hills. A semi-arid continental climate with cold winters and warm summers.


PERCENT OF TIME ORDINATE IS NOT EXCEEDED
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 .5 .2 .1 .05 .01
Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BISMARCK
February
0800 LST
2000 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BISMARCK
May
0800 LST
2000 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


PERCENT OF TIME ORDINATE IS NOT EXCEEDED
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 .5 .2 .1 .05 .01
Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BISMARCK
August
0800 LST
2000 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BISMARCK
November
2000 LST
0800 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED



Bogota, Columbia

4° 42' N, 74° 09' W 2547 m m.s.l.

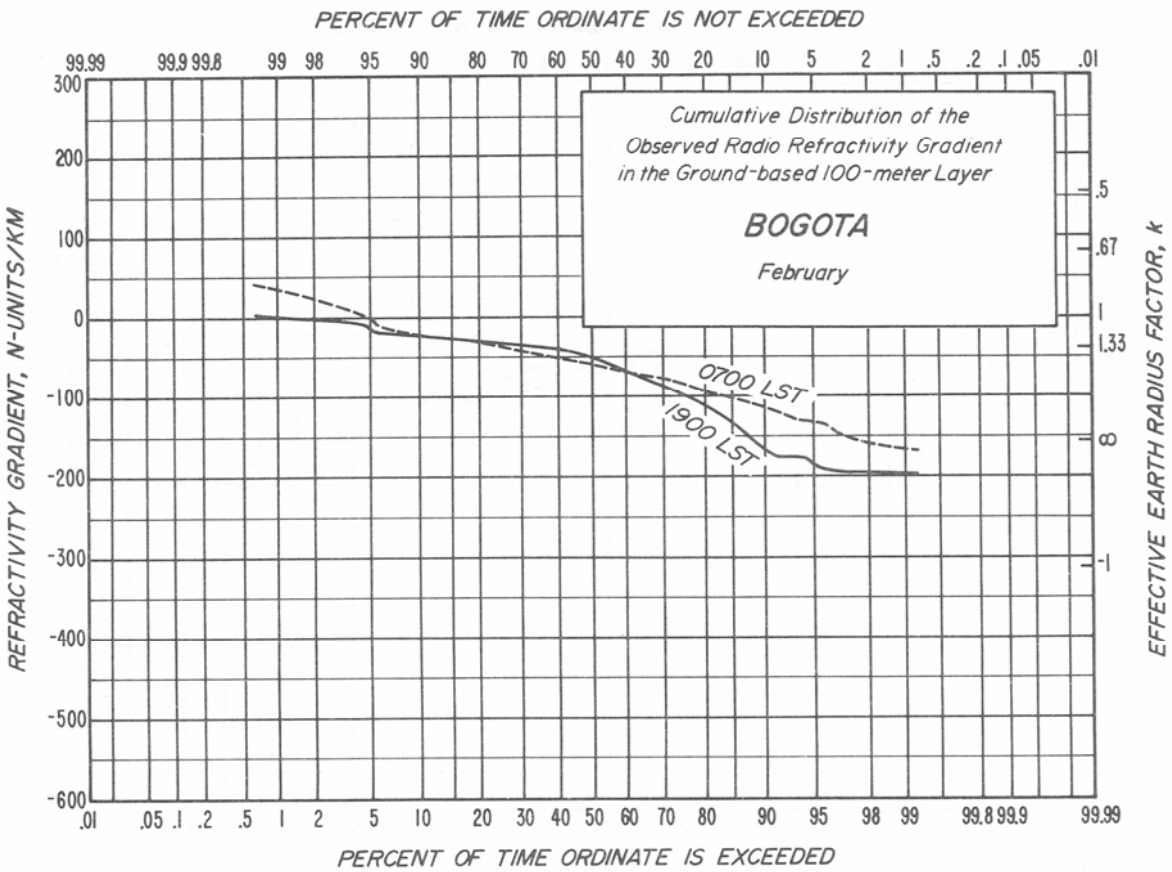
Data: Radiosonde. 0000 and 1200Z (1900 and 0700 LST): 8/60 - 2/63

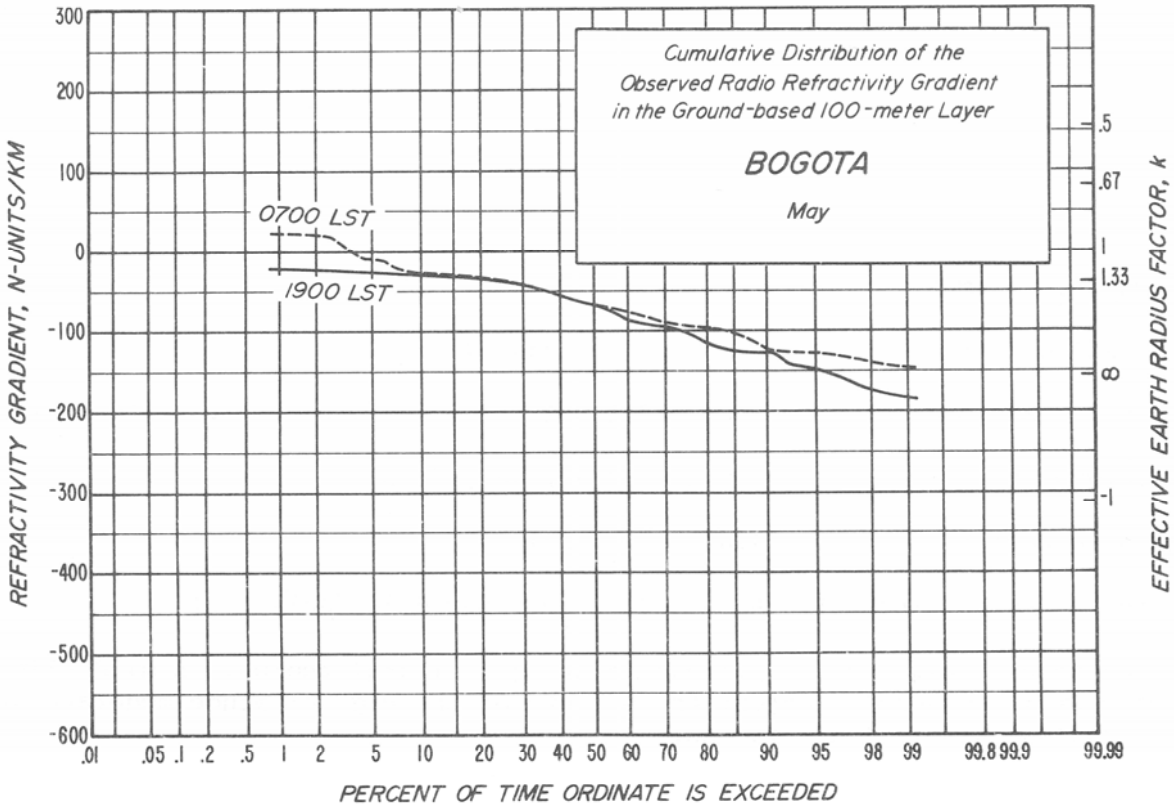
Temperature (°F): January 67/48; July 64/50

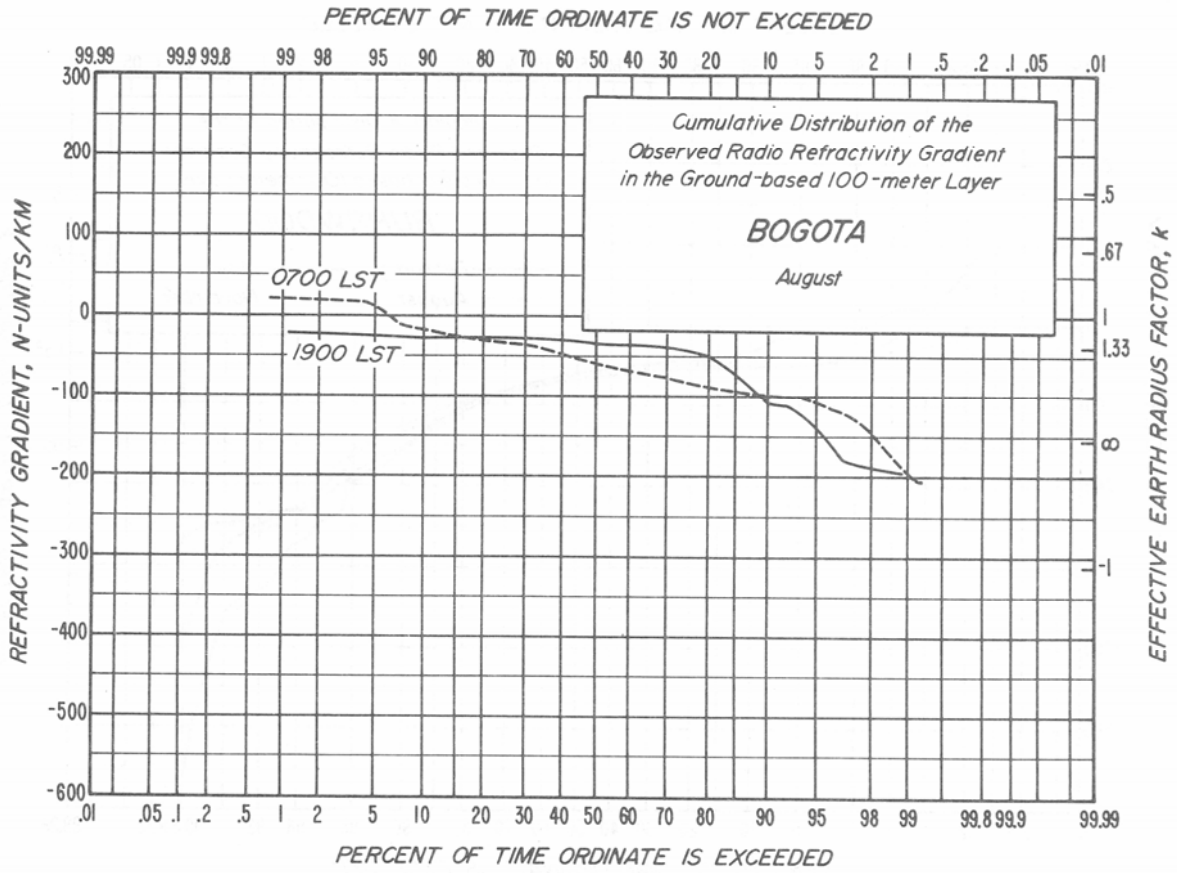
Mean Dewpoint (°F): January 48; July 48

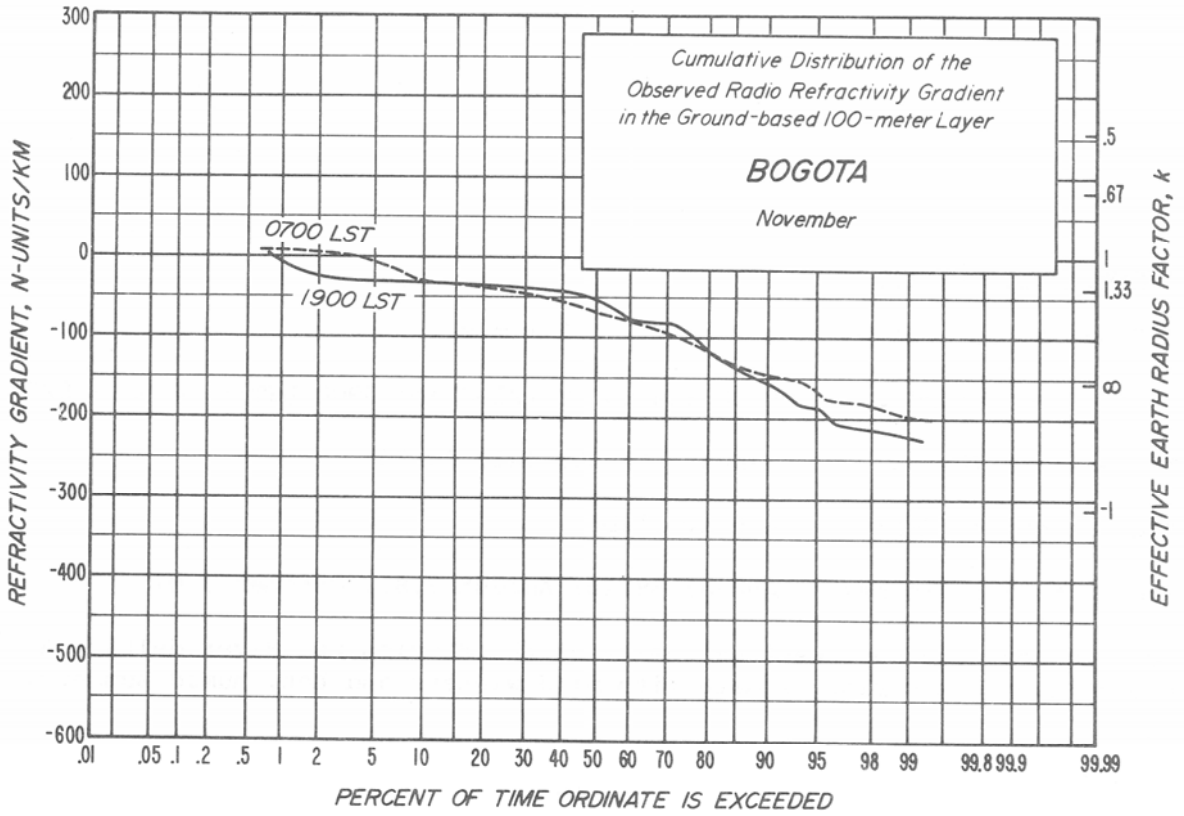
Precipitation (inches): Annual 41.7; October 6.30; July 2.01

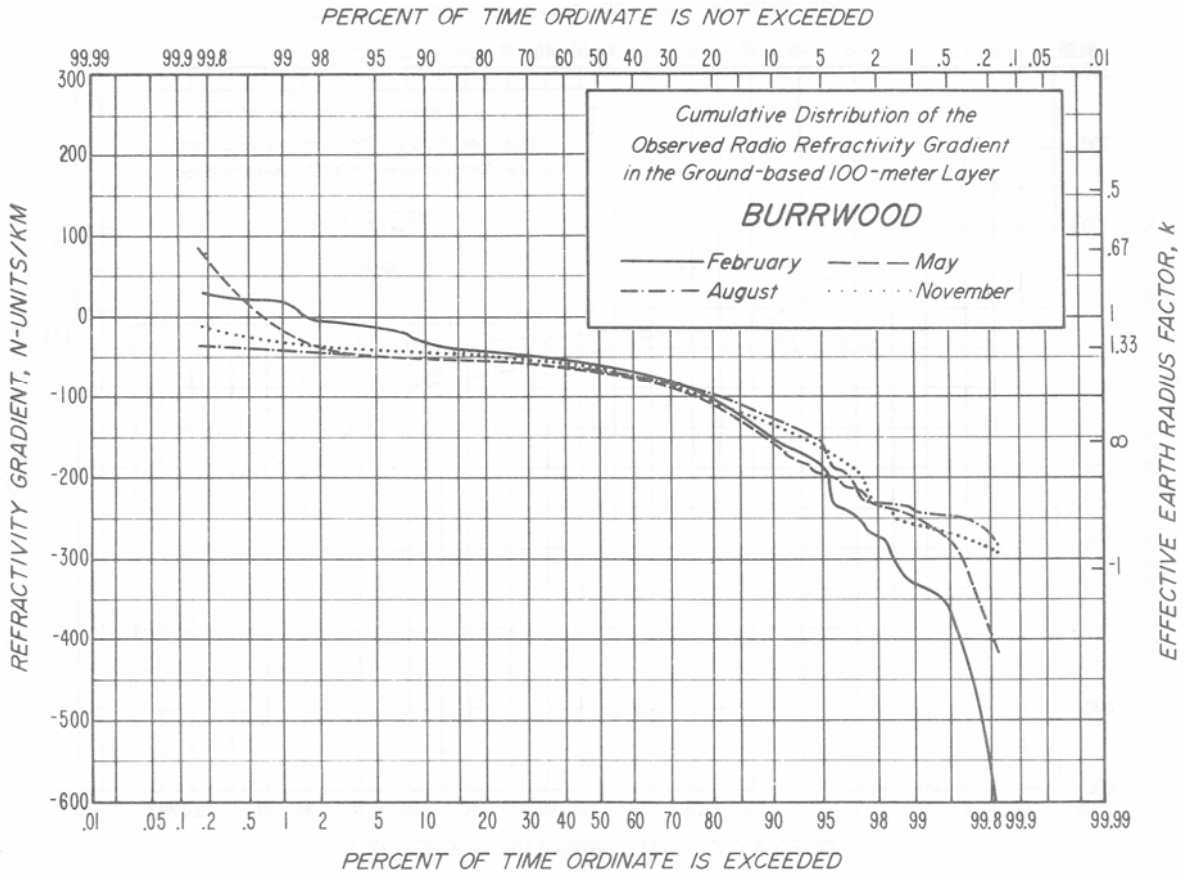
Located on a high Andean plateau in an agricultural region. A mild climate with small seasonal changes; the effects of the high altitude moderate the prevailing tropical air masses.


PERCENT OF TIME ORDINATE IS NOT EXCEEDED
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 .5 .2 .1 .05 .01
Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BOGOTA
February
0700 LST
1900 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BOGOTA
May
0700 LST
1900 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


PERCENT OF TIME ORDINATE IS NOT EXCEEDED
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 .5 .2 .1 .05 .01
Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BOGOTA
August
0700 LST
1900 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BOGOTA
November
0700 LST
1900 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED



Burrwood, Louisiana

28° 58' N, 89° 22' W 2 m m.s.l.

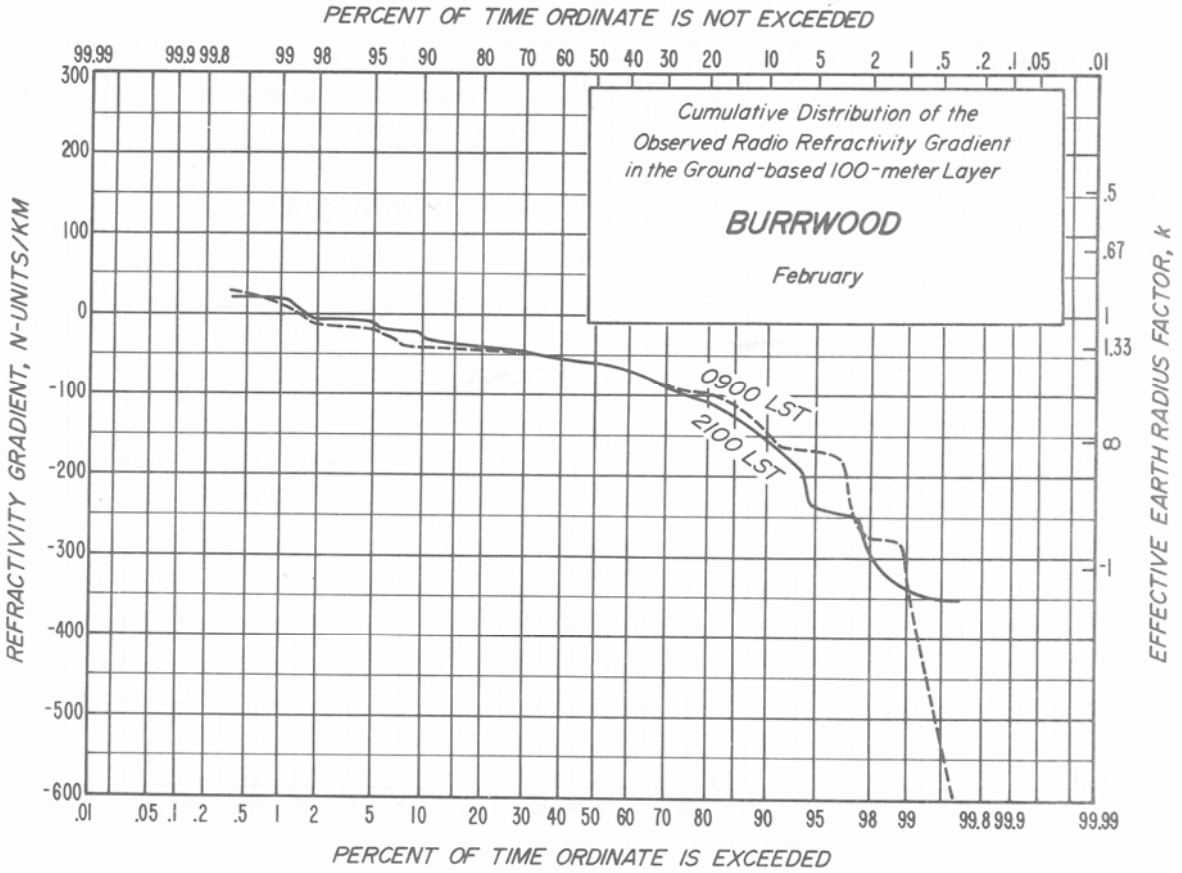
Data: Radiosonde. 0300 and 1500Z (2100 and 0900 LST): 8/52 - 5/57

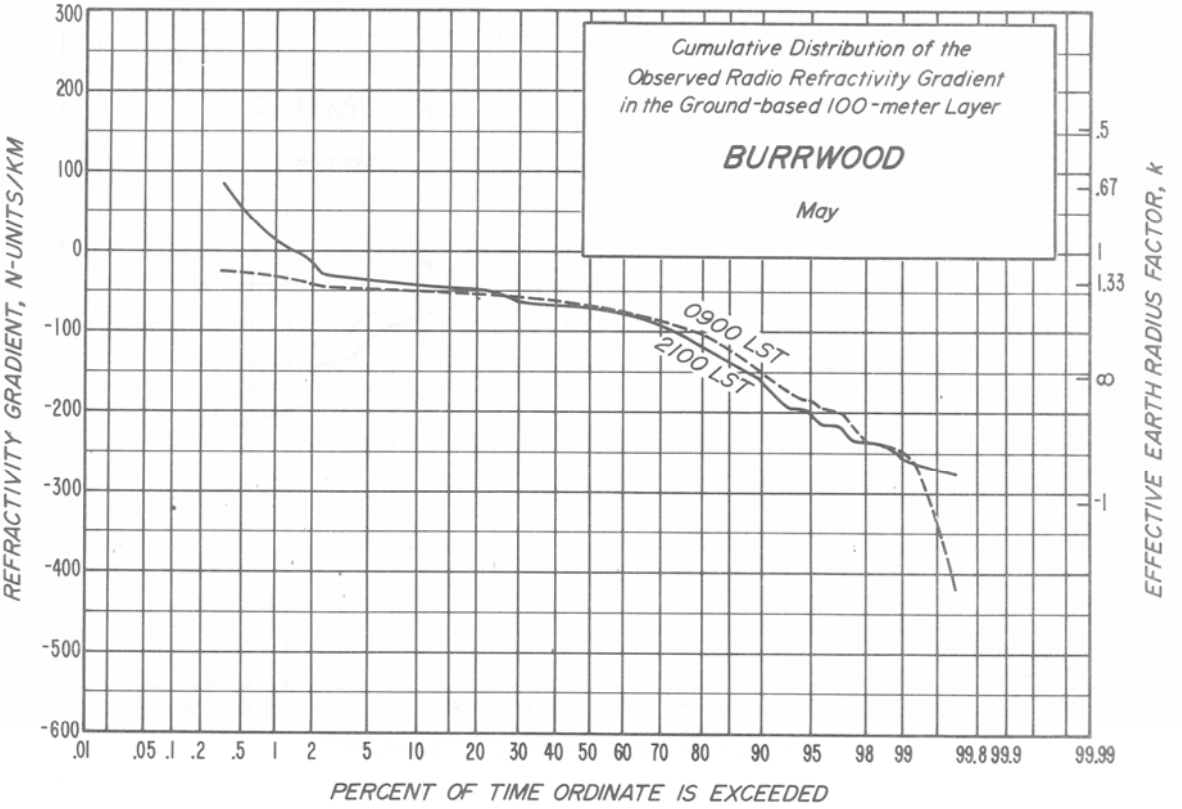
Temperature (°F): January 65/50; July 89/76

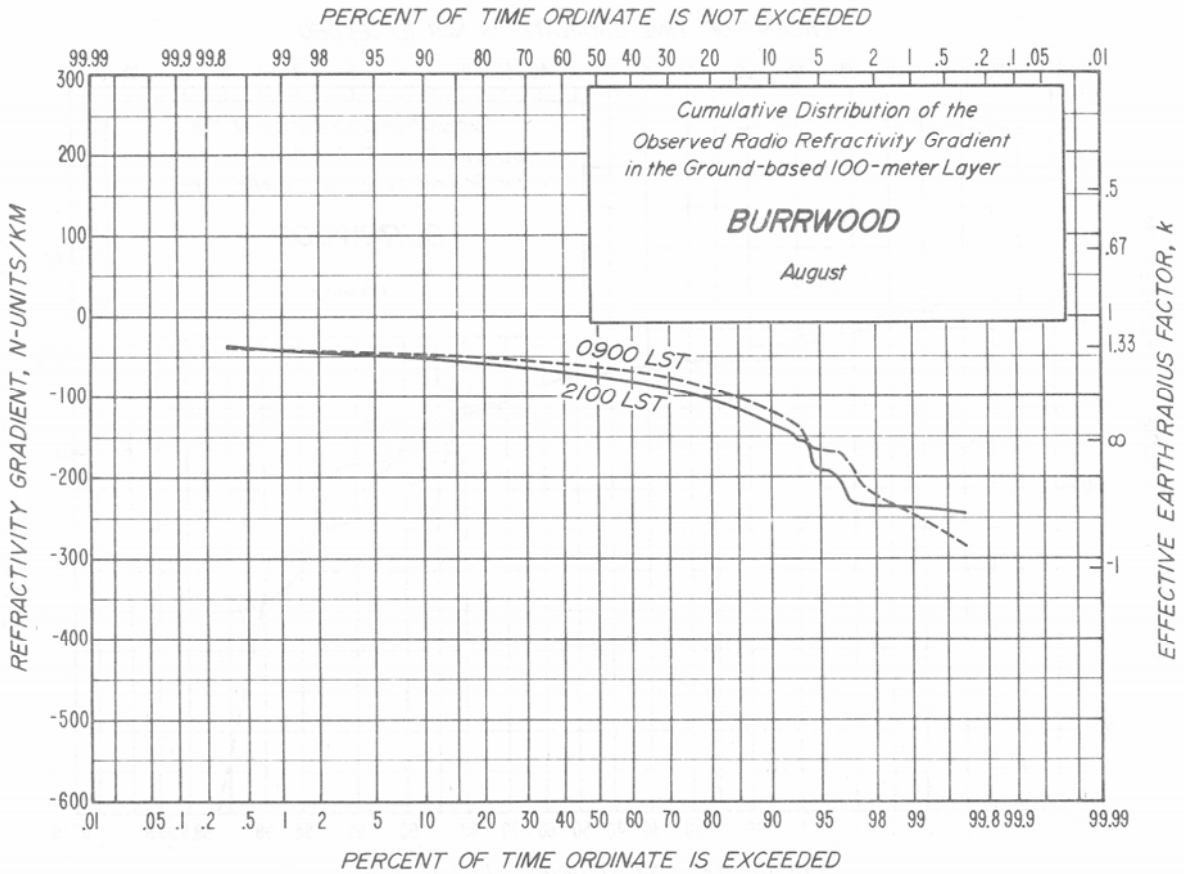
Mean Dewpoint (°F): Not available

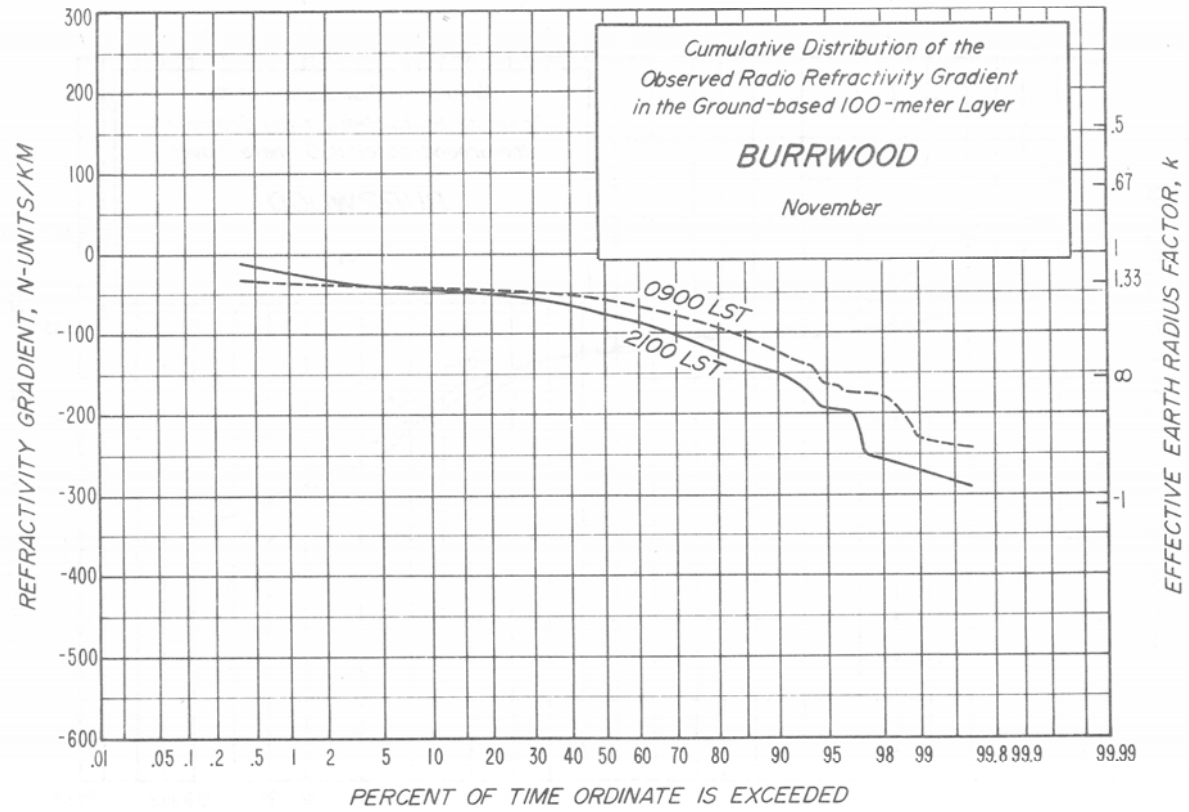
Precipitation (inches): Annual 58.20; August 7.85; October 3.07

Located near the southwest extremity of the Mississippi River delta. A predominantly maritime climate with mild winters and hot, humid summers.


PERCENT OF TIME ORDINATE IS NOT EXCEEDED
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 .5 .2 .1 .05 .01
Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BURRWOOD
February
0900 LST
2100 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BURRWOOD
May
0900 LST
2100 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


PERCENT OF TIME ORDINATE IS NOT EXCEEDED
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 .5 .2 .1 .05 .01
Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BURRWOOD
August
0900 LST
2100 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED


Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
BURRWOOD
November
0900 LST
2100 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
300 200 100 0 -100 -200 -300 -400 -500 -600
EFFECTIVE EARTH RADIUS FACTOR, k
.5 .67 1 1.33 ∞ -1
.01 .05 .1 .2 .5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PERCENT OF TIME ORDINATE IS EXCEEDED