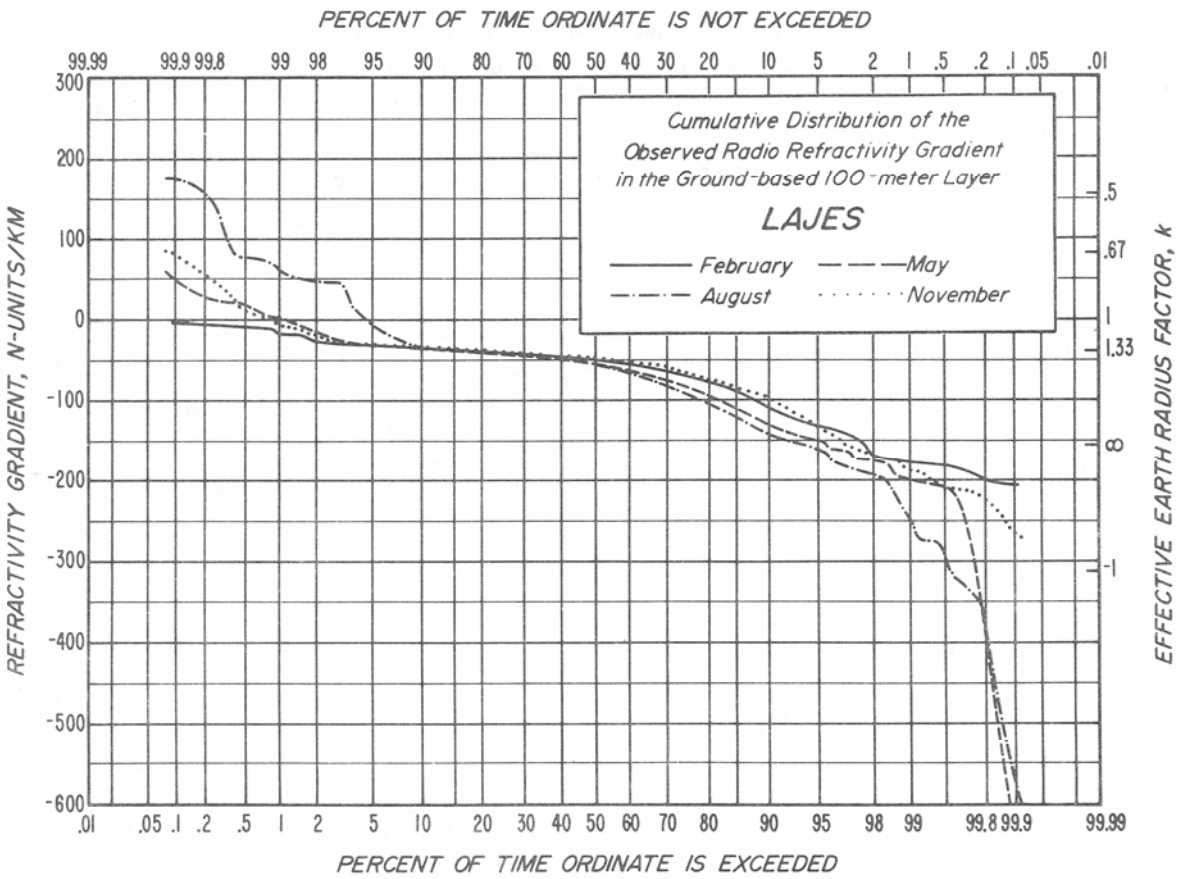


Lajes, Azores

38° 45' N, 27° 05' W 112 m m.s.l.

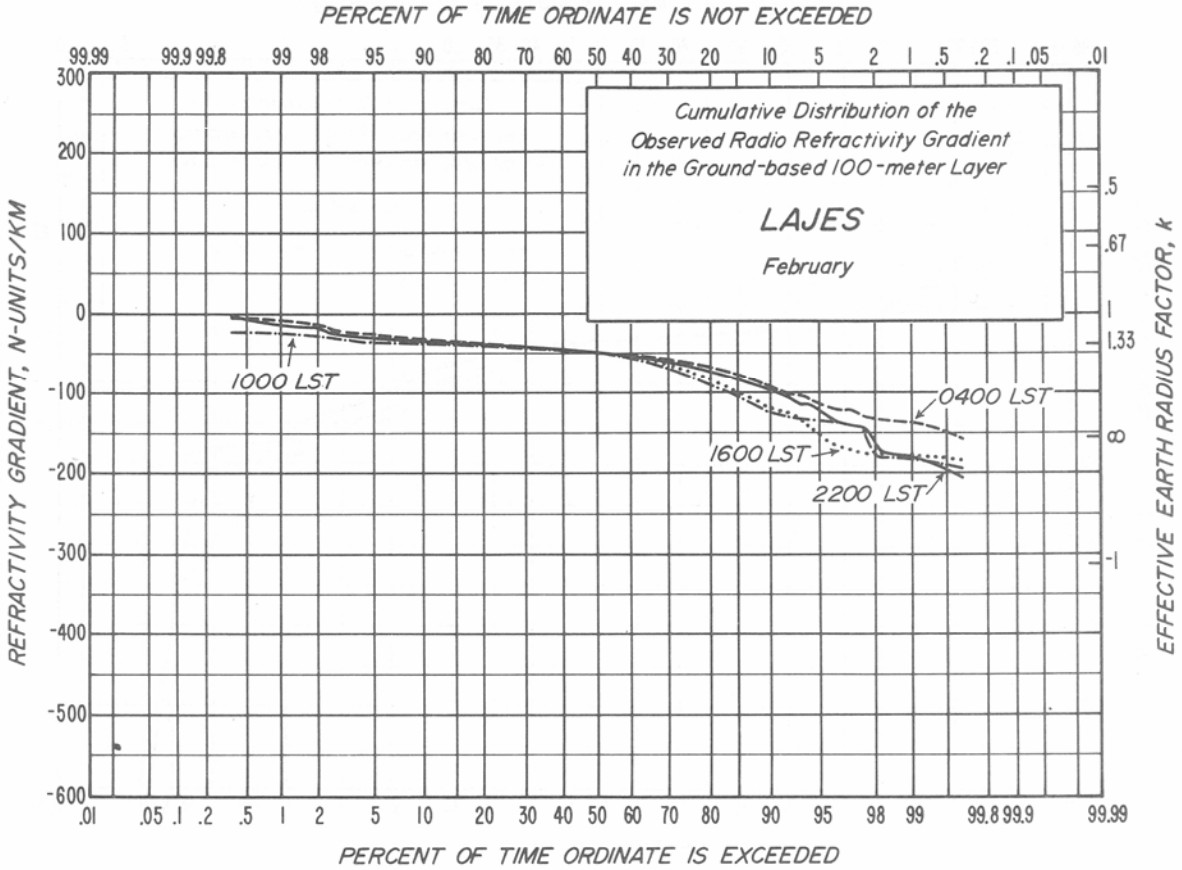
Data: Radiosonde. 0000, 0600, 1200, 1800Z (2200, 0400, 1000, 1600 LST): 11/57 - 8/62

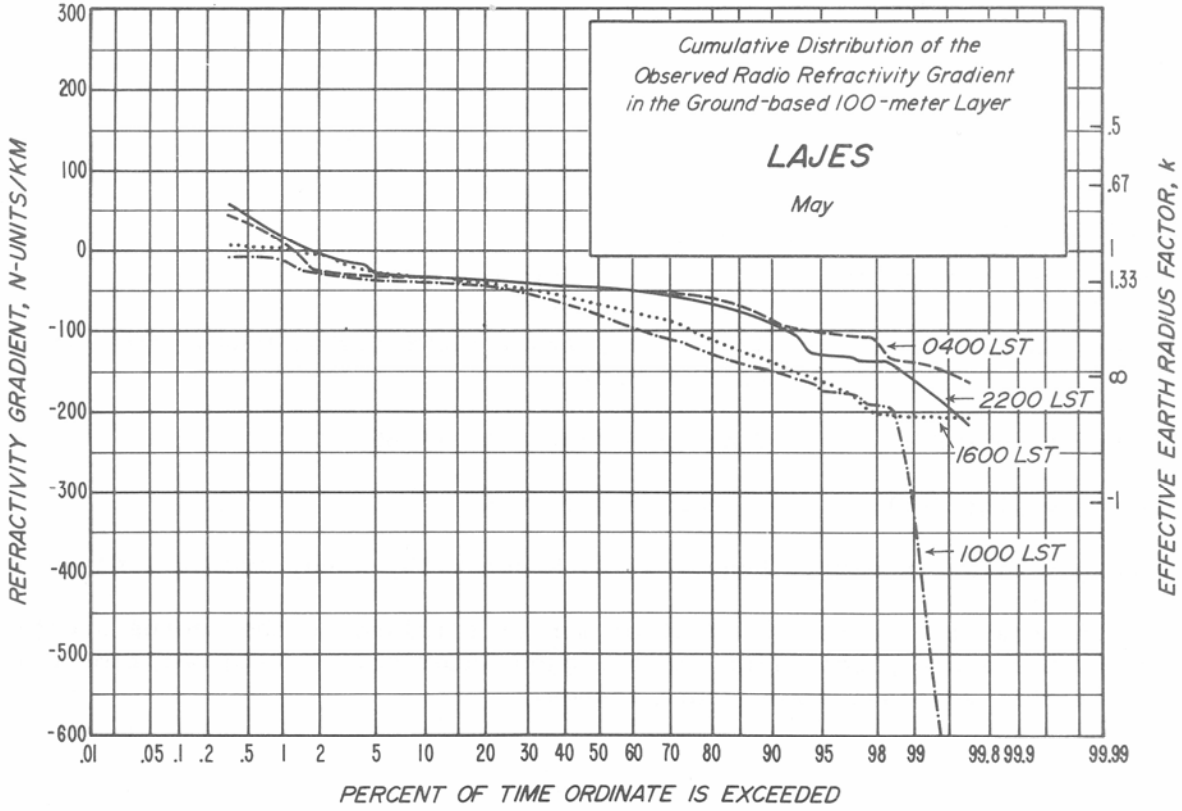
Temperature (°F): January 61/54; July 74/65

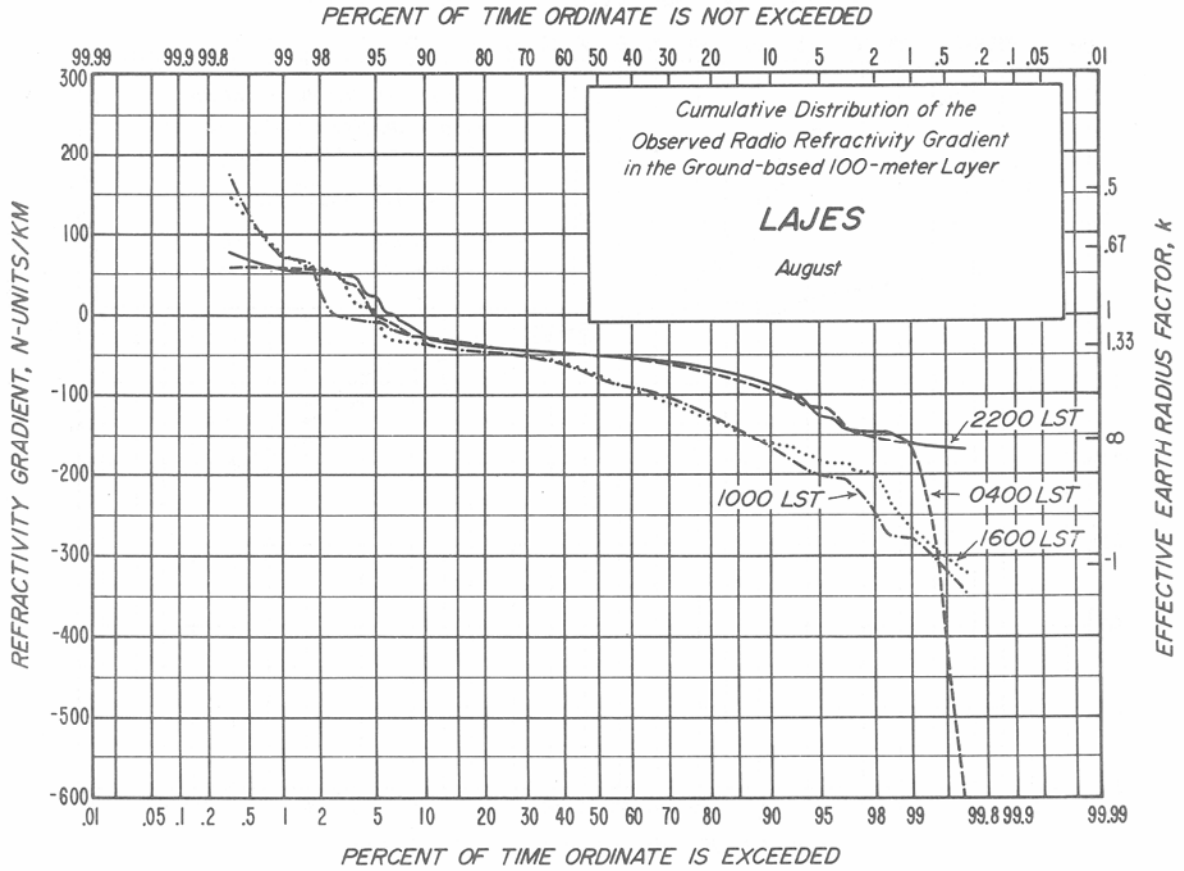
Mean Dewpoint (°F): January 52; July 62

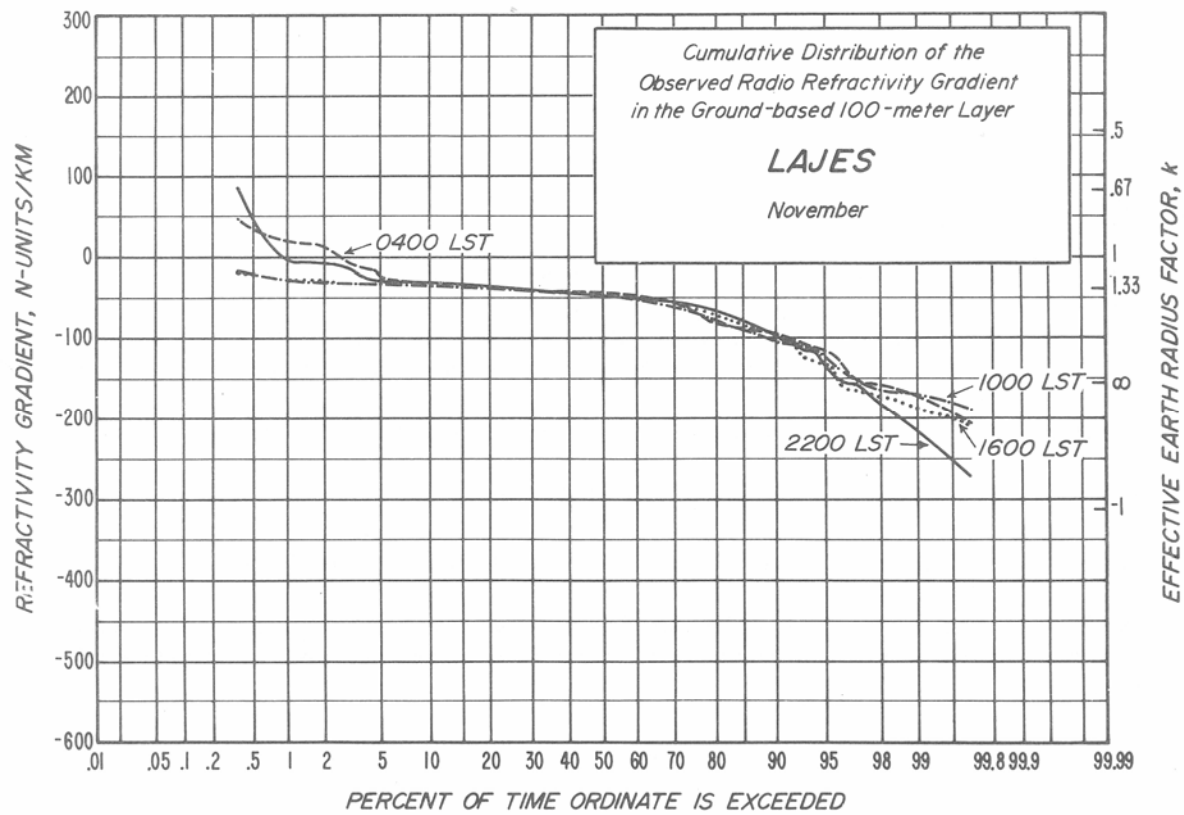
Precipitation (inches): Annual 41.8; March 6.13; June, August 1.41

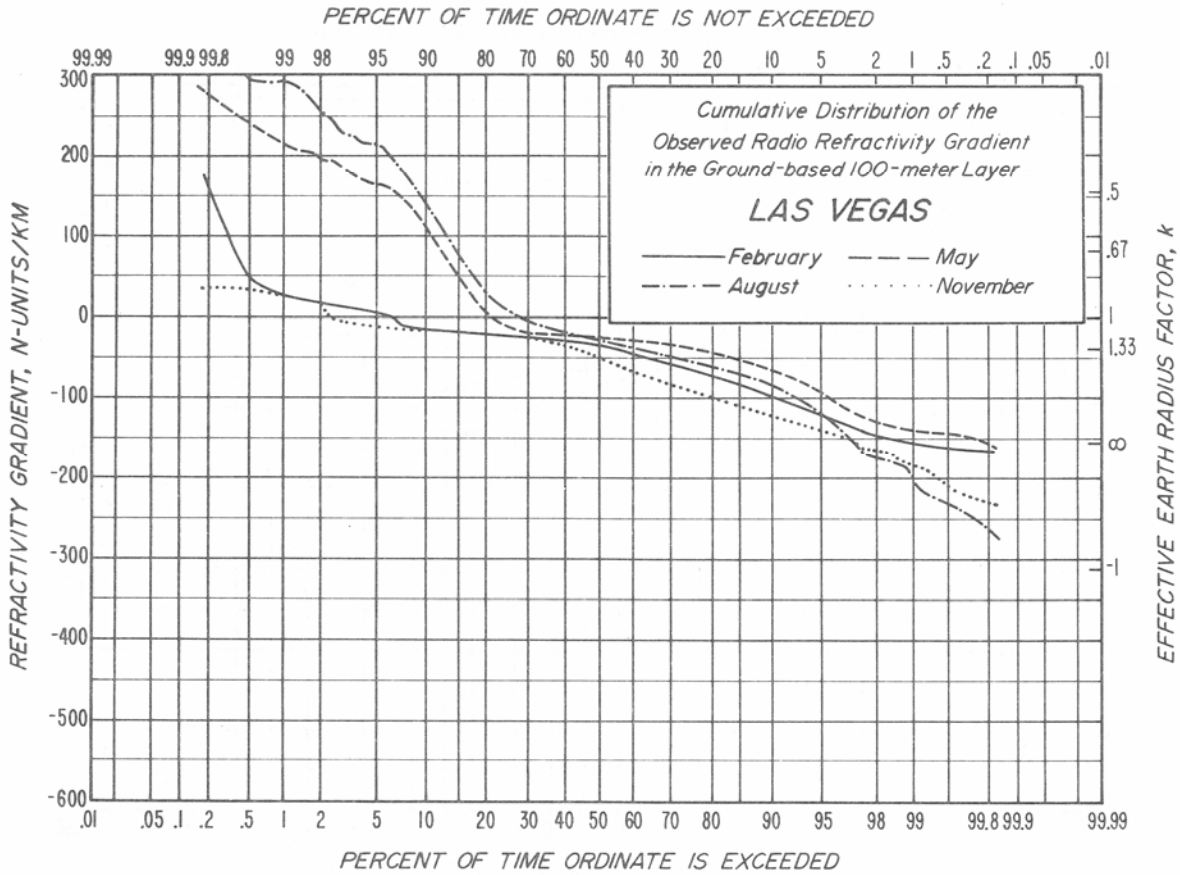
Located near the northeast coast of Terceira Island in the Azores group; the island has a steep coastline and a rugged interior. A mild maritime climate with little seasonal temperature change.


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
LAJES
February
1000 LST
0400 LST
1600 LST
2200 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
LAJES
May
0400 LST
2200 LST
1600 LST
1000 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
Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
LAJES
August
2200 LST
1000 LST
0400 LST
1600 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
EFFECTIVE EARTH RADIUS FACTOR, k
PERCENT OF TIME ORDINATE IS EXCEEDED


Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
LAJES
November
0400 LST
1000 LST
2200 LST
1600 LST
REFRACTIVITY GRADIENT, N-UNITS/KM
EFFECTIVE EARTH RADIUS FACTOR, k
PERCENT OF TIME ORDINATE IS EXCEEDED



Las Vegas, Nevada

36° 05' N, 115° 09' W 664 m m.s.l.

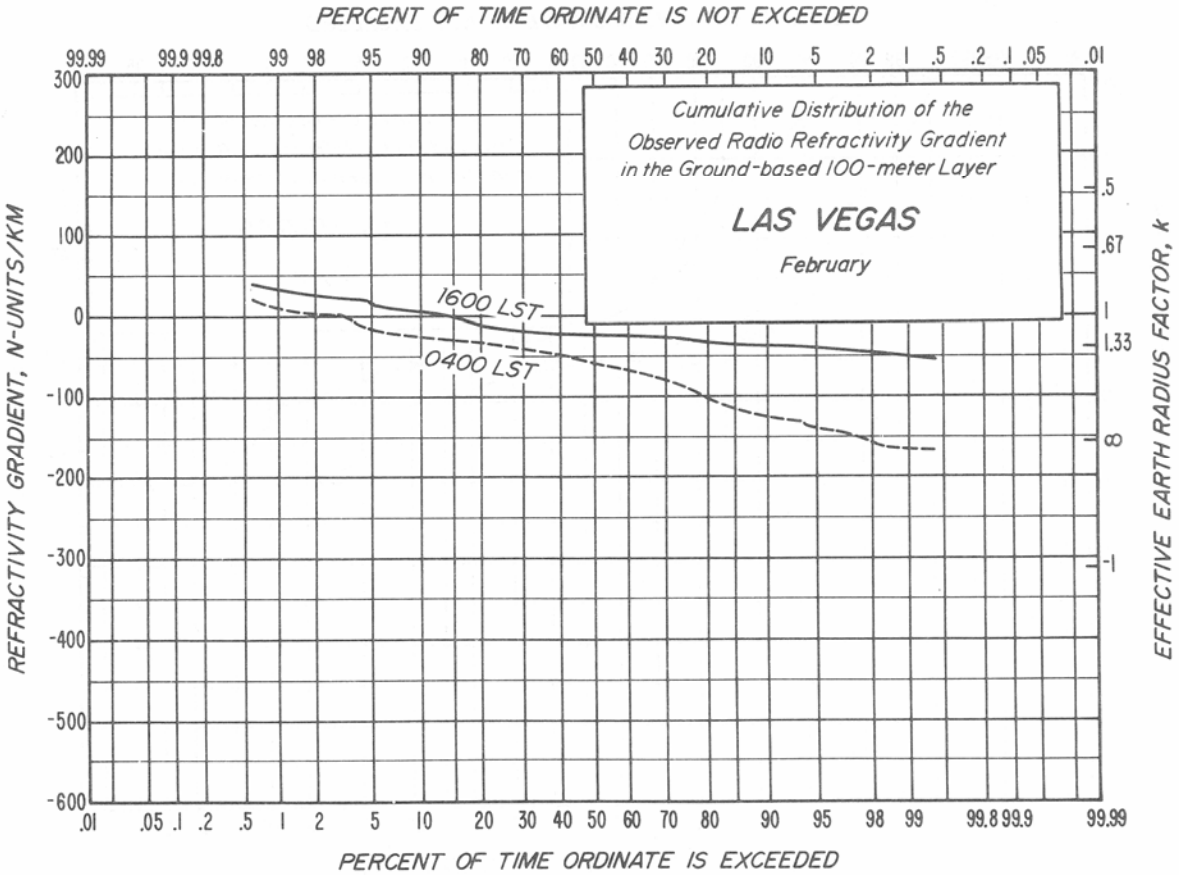
Data: Radiosonde.	0300 and 1500Z (1900 and 0700 LST):	2/56 - 5/57
	0000 and 1200Z (1600 and 0400 LST):	8/57 - 11/60

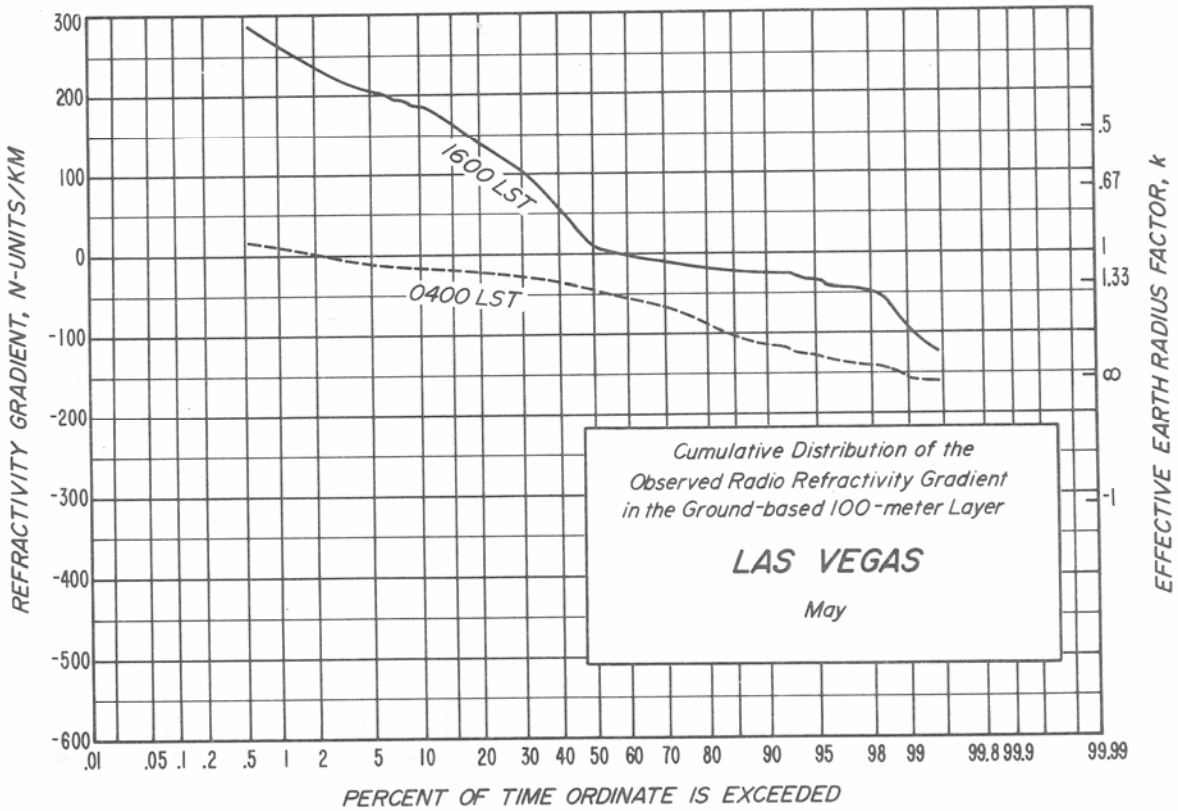
Temperature (°F): January 54/32; July 104/76

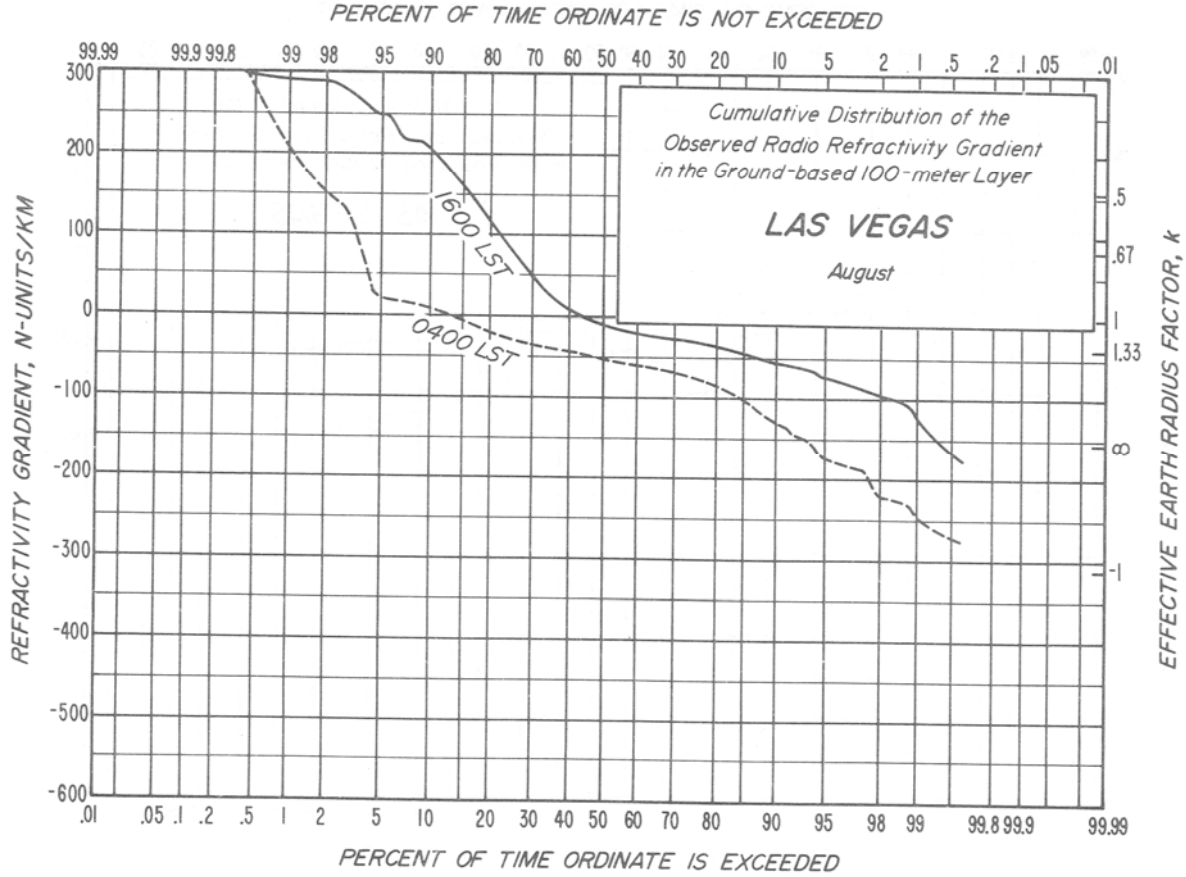
Mean Dewpoint (°F): January 22; July 39

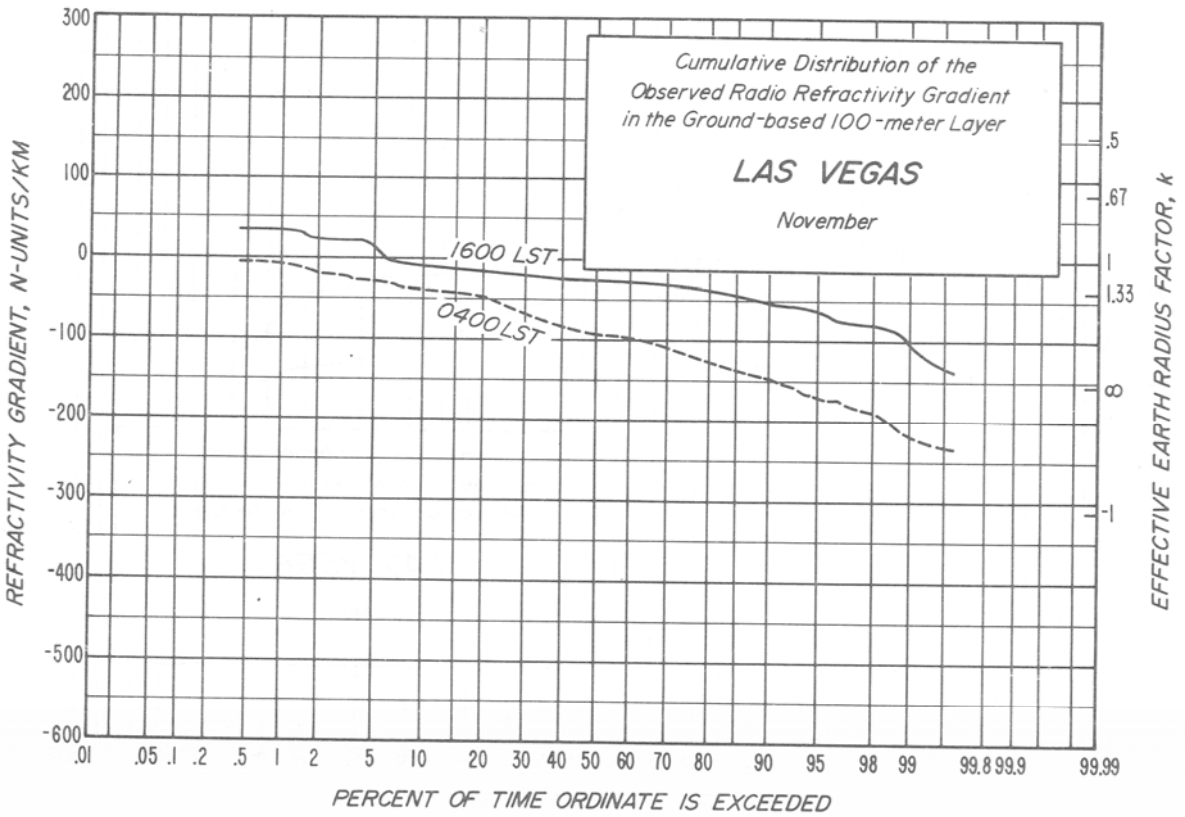
Precipitation (inches): Annual 3.9; January 0.53; June 0.04

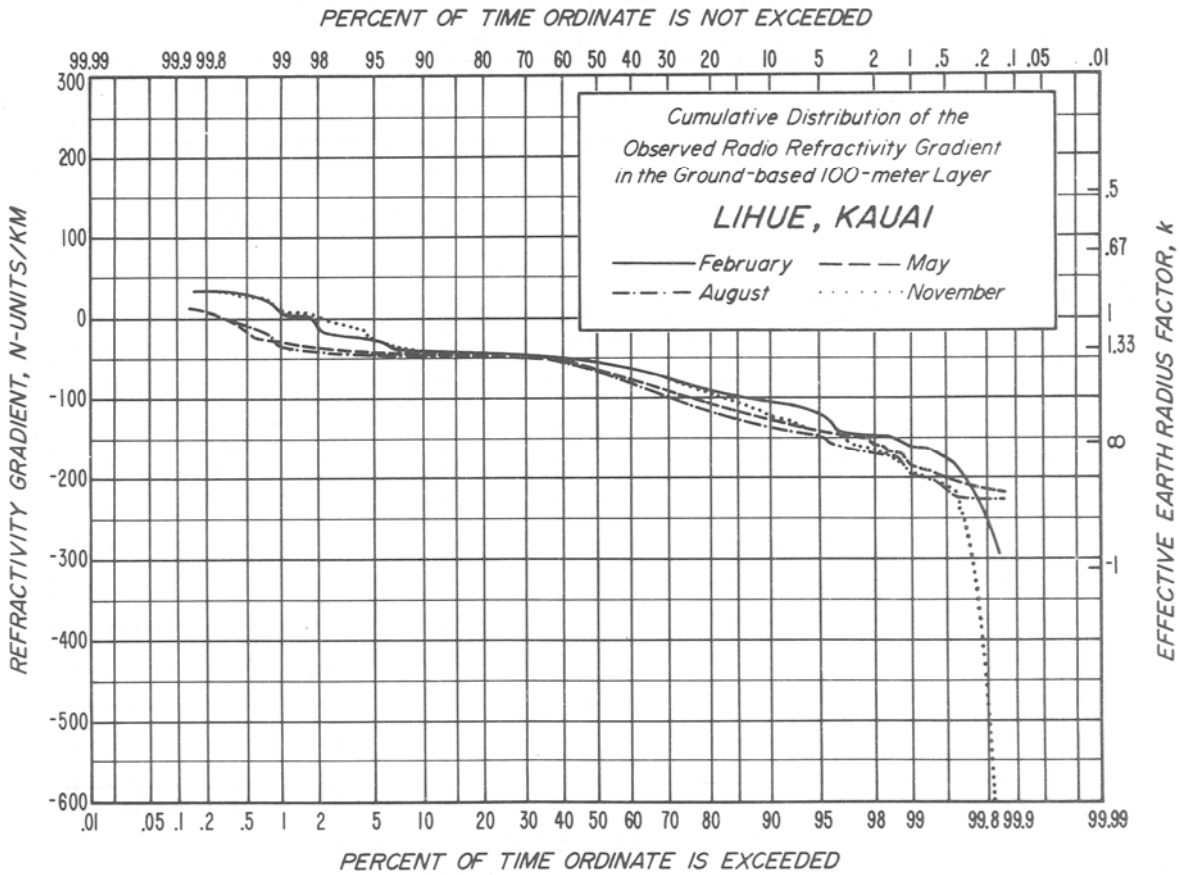
Located near the center of a broad desert valley surrounded by mountains. A desert climate with low humidity, very hot summers, and generally mild winters.


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
LAS VEGAS
February
1600 LST
0400 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


1600 LST
0400 LST
Cumulative Distribution of the
Observed Radio Refractivity Gradient
in the Ground-based 100-meter Layer
LAS VEGAS
May
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
LAS VEGAS
August
1600 LST
0400 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
LAS VEGAS
November
1600 LST
0400 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



Lihue, Kauai, Hawaii

21° 59' N, 159° 21' W 36 m m.s.l.

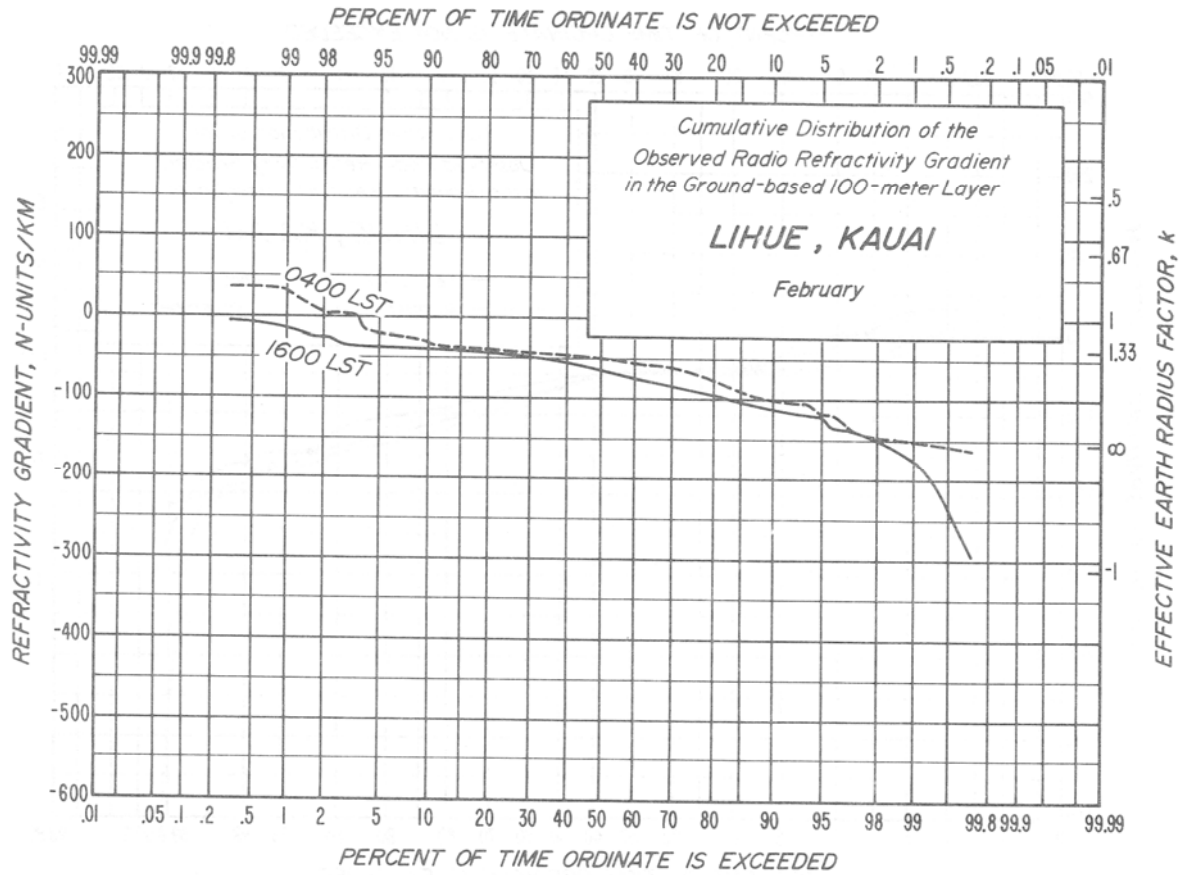
Data: Radiosonde. 0300 and 1500Z (1600 and 0400 LST): 1/51 - 5/57
0000 and 1200Z (1300 and 0100 LST): 6/57 - 12/57

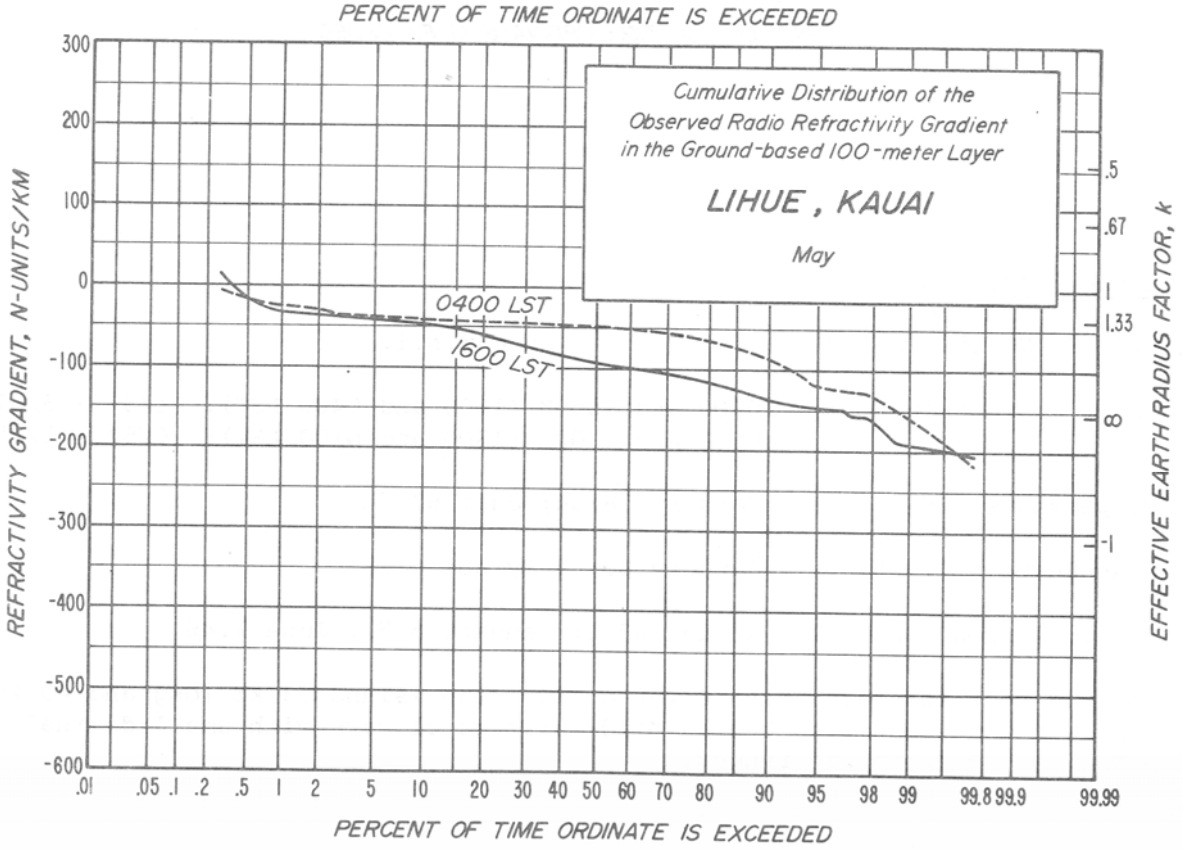
Temperature (°F): January 78/64; July 83/72

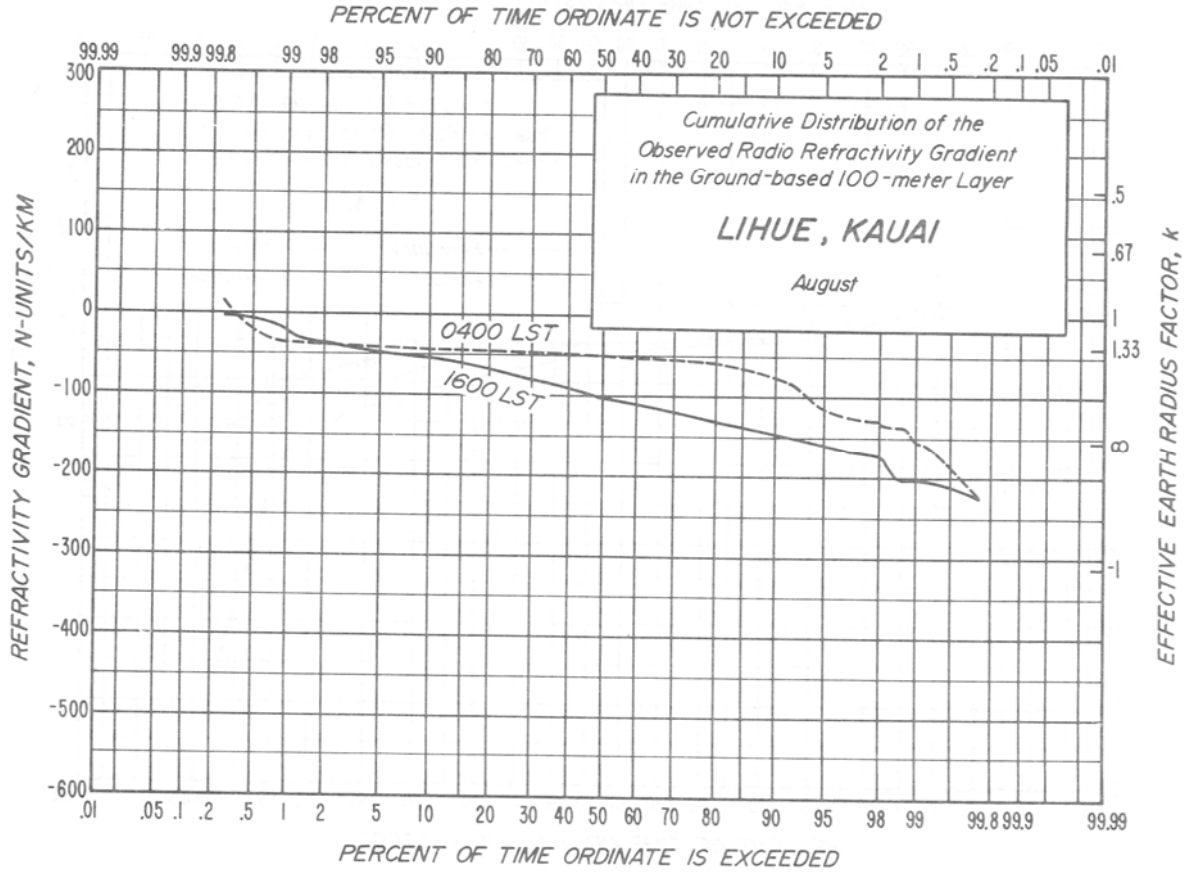
Mean Dewpoint (°F): January 63; July 68

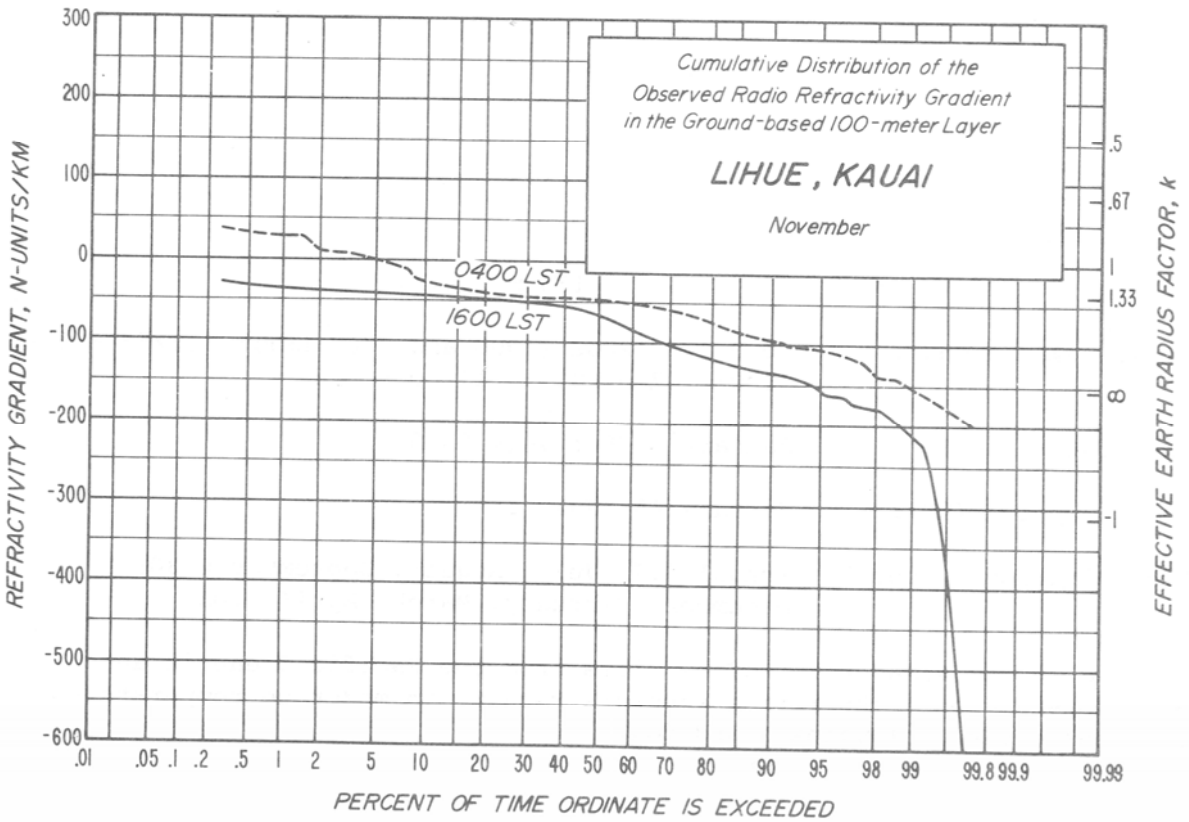
Precipitation (inches): Annual 43.0; January 5.51; June 1.46

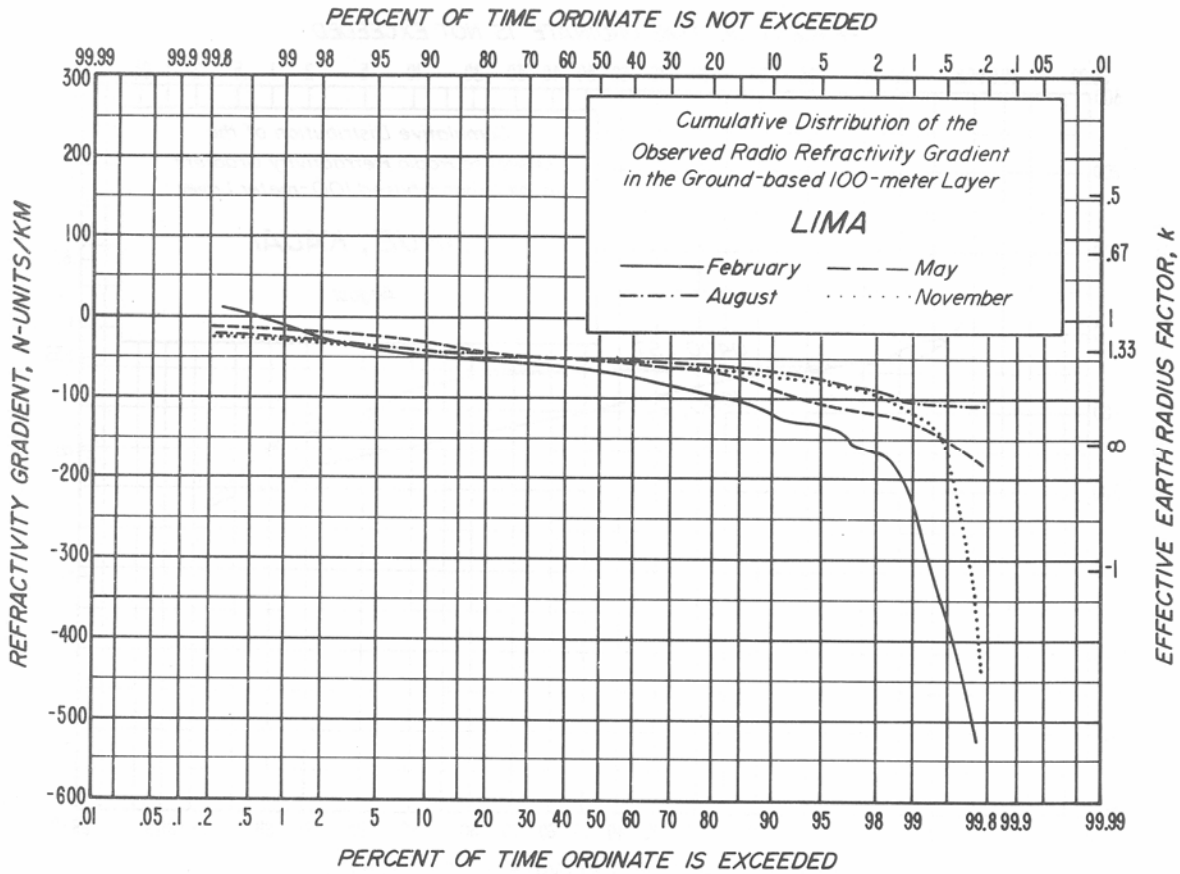
Located near the eastern shore of a mid-ocean island 53 km long and 40 km wide; in the trade wind belt. Mild maritime climate with small diurnal and annual temperature ranges.


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
LIHUE, KAUAI
February
0400 LST
1600 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
LIHUE, KAUAI
May
0400 LST
1600 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
LIHUE, KAUAI
August
0400 LST
1600 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
LIHUE, KAUAI
November
0400 LST
1600 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



Lima, Peru

12° 06' S, 77° 02' W 135 m m.s.l.

Data:	Radiosonde.	0000 and 1200Z (1900 and 0700 LST): 11/57 - 8/60 1200Z (0700 LST): 11/60 - 8/61
Temperature (°F):		January 76/66; July 63/57
Mean Dewpoint (°F):		January 65; July 56
Precipitation (inches):		Annual 1.7; July, August, September 0.30; December, February, March, April 0.03

Located on the Rimac River a few miles from the Pacific Ocean in an arid coastal zone; the marine exposure results in moderate temperatures and considerable cloudiness and fog.