# Readme file – Digital maps on Recommendation ITU-R P.840-9

Digital maps of worldwide annual and monthly statistics of integrated cloud liquid water content, $L$, in kg/m2, or, equivalently, mm, are an integral part of this Recommendation with the characteristics shown in Tables 1 and 2.

Digital maps of the worldwide annual statistics of integrated cloud liquid water content, $L$, approximated by a log-normal distribution are an integral part of this Recommendation with the characteristics shown in Tables 1 and 3.

Specifically:

– map files with “L” in the title contain the values of mean integrated cloud liquid water content, $\overbar{L}$, standard deviation of integrated cloud liquid water content, $σ\_{L}$, and integrated cloud liquid water content vs. exceedance probability, $L$(p);

– the map file with “mL” in the title contains the values of the mean parameter, $m\_{L}$, of the log-normal probability distribution of integrated cloud liquid water content;

– the map file with “sL” in the title contains the values of the standard deviation parameter, $σ\_{L}$, of the log-normal probability distribution of integrated cloud liquid water content; and

– the map file with “PL” in the title contains the values of the probability of cloud (positive integrated cloud liquid water content).

Table 1

Map file characteristics

|  |  |
| --- | --- |
| Parameter | Value |
| Format | ASCII |
| Upper left corner latitude | −90° N |
| Latitude increment | +0.25° |
| Upper left corner longitude | −180° E |
| Longitude increment | +0.25° |
| Number of rows | 721 |
| Number of columns | 1 441 |
| Column separator | Space |
| Row separator | Windows (CR LF) |

Table 2

Annual and monthly integrated cloud liquid water content maps
(XX: Jan = 01; Feb = 02; …; Nov = 11; Dec = 12)

| Parameter | Annual integrated cloud liquid water content(kg/m2 or mm) | Monthly integrated cloud liquid water content(kg/m2 or mm) |
| --- | --- | --- |
| Mean | L\_mean.TXT | L\_mean.TXT |
| Standard deviation | L\_std.TXT | L\_std.TXT |
| Exceedance probability (CCDF) | 0.01% | L\_001.TXT | - |
| 0.02% | L\_002.TXT | - |
| 0.03% | L\_003.TXT | - |
| 0.05% | L\_005.TXT | - |
| 0.1% | L\_01.TXT | L\_01.TXT |
| 0.2% | L\_02.TXT | L\_02.TXT |
| 0.3% | L\_03.TXT | L\_03.TXT |
| 0.5% | L\_05.TXT | L\_05.TXT |
| 1% | L\_1.TXT | L\_1.TXT |
| 2% | L\_2.TXT | L\_2.TXT |
| 3% | L\_3.TXT | L\_3.TXT |
| 5% | L\_5.TXT | L\_5.TXT |
| 10% | L\_10.TXT | L\_10.TXT |
| 20% | L\_20.TXT | L\_20.TXT |
| 30% | L\_30.TXT | L\_30.TXT |
| 50% | L\_50.TXT | L\_50.TXT |
| 60% | L\_60.TXT | L\_60.TXT |
| 70% | L\_70.TXT | L\_70.TXT |
| 80% | L\_80.TXT | L\_80.TXT |
| 90% | L\_90.TXT | L\_90.TXT |
| 95% | L\_95.TXT | L\_95.TXT |
| 99% | L\_99.TXT | L\_99.TXT |
| 100% | L\_100.TXT | L\_100.TXT |
| File Name | L\_Annual.zip | L\_MonthXX.zip |
| Integral product file name | Annual: [N1-P01\_Annual.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P01%21ZIP-E.zip) | Month01: [N1-P02\_Month01.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P02%21ZIP-E.zip)Month02: [N1-P03\_Month02.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P03%21ZIP-E.zip)Month03: [N1-P04\_Month03.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P04%21ZIP-E.zip)Month04: [N1-P05\_Month04.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P05%21ZIP-E.zip)Month05: [N1-P06\_Month05.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P06%21ZIP-E.zip)Month06: [N1-P07\_Month06.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P07%21ZIP-E.zip)Month07: [N1-P08\_Month07.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P08%21ZIP-E.zip)Month08: [N1-P09\_Month08.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P09%21ZIP-E.zip)Month09: [N1-P10\_Month09.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P10%21ZIP-E.zip)Month10: [N1-P11\_Month10.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P11%21ZIP-E.zip)Month11: [N1-P12\_Month11.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P12%21ZIP-E.zip)Month12: [N1-P13\_Month12.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P13%21ZIP-E.zip) |

Table 3

Annual statistics of integrated cloud liquid water content
approximated by a log-normal distribution

|  |  |
| --- | --- |
| Parameter | Annual log-normal approximation |
| Log-normal mean | mL.TXT |
| Log-normal standard deviation | sL.TXT |
| Probability of cloud | PL.TXT |
| File name | LogN\_Annual.zip |
| Integral product file name | [N1-P14\_LogN\_Annual.zip](https://www.itu.int/dms_ties/itu-r/md/19/wp3j/c/R19-WP3J-C-0254%21N1-P14%21ZIP-E.zip) |