

From AMS Glossary

Marshall–Palmer relation

The Z – R relationship developed by J. S. Marshall and W. M. Palmer (1948) consistent with an exponential drop-size distribution.

The relationship is $Z = 200R^{1.6}$, where Z ($\text{mm}^6 \text{ m}^{-3}$) is the reflectivity factor and R (mm h^{-1}) is the rainfall rate. The relationship is sometimes generalized to the form $Z = aR^b$, where a and b are adjustable parameters.

Marshall, J. S., and W. McK. Palmer, 1948: The distribution of raindrops with size. *J. Meteor.*, **5**, 165–166.

Retrieved from "http://glossary.ametsoc.org/w/index.php?title=Marshall-palmer_relation&oldid=19190"

Categories: Term | Terms M

-
- This page was last modified on 15 February 2017, at 16:02.
 - This page has been accessed 8,569 times.

© 2012 American Meteorological Society Contact Us Mobile