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Assessment of the accuracy of profile available water and potential rooting depth estimates held within New Zealand's fundamental soil layers geo-database

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Supplementary Tables. Calculation of ‘narrow’ and ‘wide’ class intervals for the FSL PAW (Profile Available Water) Layer.

The ‘narrow’ class boundaries are defined using only the maximum and minimum values for the class value assigned to the polygon. PAW class values, and their minimum and maximum PAW (PAW MIN and PAW MAX respectively) are shown in Table S1.

Table S1. Definitions of ‘narrow’ PAW class boundaries.
Reproduced from Newsome *et al.* (2008)

<i>PAW_CLASS</i>	<i>PAW_MIN (mm)</i>	<i>PAW_MAX (mm)</i>	<i>Description</i>
1	250	350	Very high
2	150	249	High
3	90	149	Moderately high
4	60	89	Moderate
5	30	59	Low
6	0	29	Very low

For each polygon, the PAW class value (with ‘narrow’ boundaries specified as in Table S1) is accompanied by an assessment of the variability of the class boundaries (Table 2). Applying assessed variability to the narrow classes increases the class interval width by an amount specified in Table 2, to generate ‘wide’ class boundaries (Newsome, Wilde *et al.* 2008). For example, a soil with PAW class 3 but a variability of 1 has narrow class boundaries of 90-149 mm (Table 1), but since it ‘straddles’ the class above and the class below, the lower ‘wide’ class boundary is the lower boundary for PAW class 4 (60 mm) and the upper ‘wide’ class boundary is the upper boundary for PAW class 2 (249 mm).

Table S2: Definitions of ‘wide’ class boundaries.

Reproduced from Newsome *et al.* (2008)

Variability FSL ‘wide’ class boundaries and location of mean class value

0	Occurs mostly within the nominated class. The middle of the nominated class is a good approximation for a numerical value.
1	Straddles the class above and below. The mean is the middle of the nominated class.
1-	Straddles this class and the class below. The mean is taken at the class boundary.
1+	Straddles this class and the class above. The mean is taken at the class boundary.
2	Straddles 2 classes above and below. The mean is the middle of the nominated class.

Reference

Newsome PFJ, Wilde RH, Willoughby EJ (2008) Land Resource Information System Spatial Data Layers: Data Dictionary. Landcare Research, Palmerston North, New Zealand.