

Table A1 (Table 1 in printed version). Two errors in the equations for potential annual direct incident radiation and heat load for the northern hemisphere presented by McCune & Keon (2002) and supplemental equations for the southern hemisphere. Equations in McCune & Keon (2002) can be applied to the southern hemisphere by using a different formula for folded aspect. Enter latitudes as positive values. Diagrams on McCune's web site (<http://oregonstate.edu/~mccuneb/>) illustrate the principle. The equations for folding aspect are given below in degrees, so conversion to radians may be needed.

	N hemisphere*	S hemisphere
Folded aspect for incident radiation	$180 - \text{Aspect} - 180 $	$ \text{Aspect} - 180 $
Folded aspect for heat load	$ 180 - \text{Aspect} - 225 $	$ 180 - \text{Aspect} - 315 $

*Errors in the equations in McCune & Keon (2002):
 1. Excel equation on p. 605, the last term of the first line should be $-1.5 * \text{COS}(I3)$, not $-1 * \text{COS}(I3)$;
 2. In Table 2, p. 605, the third to last value in the "Eq. 1" column should be -0.984 , not -0.939 .

Table A2 (Table 3 in printed version). File specifications. Files are provided (online <http://oregonstate.edu/~mccuneb/>) for estimating potential direct incident radiation (PDIR) and heat load for new sites (Table 1). Two sets of files are available, one for the northern hemisphere and one for the southern hemisphere.

	Northern hemisphere	Southern hemisphere
PDIR	PDIR-N.wk1 833 rows × 1 column	PDIR-S.wk1 833 rows × 1 column
Heat load	HeatLoad-N.wk1 833 rows × 1 column	HeatLoad-S.wk1 833 rows × 1 column
Topographic variables	LatSlopeAspect360.wk1 833 rows × 3 columns	LatSlopeAspect360.wk1 833 rows × 3 columns (same as for N hemisphere)
Model specification file for HyperNiche	BestLLModel.spx (same model file for both PDIR and Heat load)	BestLLModel.spx (same as for N hemisphere)

Row names in these files follow the convention: Rows for aspects from 0-180 degrees east of north are named ObsE1, ObsE2, etc. Rows for aspects from 180-360 degrees east of north are named ObsW1, ObsW2, etc.

In HyperNiche, generate estimates for new points on the landscape with the following steps.

1. Create a spreadsheet with row (point) names, plus three data columns named lat, slope, aspect (all lower case). Note that all angles must be in the domain 0-360 degrees. Convert the data to degrees, if not already in those units. Save as a *.wk1 file.
2. In HyperNiche, open the appropriate PDIR or heat load file as the response matrix.
3. Open the model specification file (*File | Open | Model file | BestLLModel.spx*).
4. Open the file LatSlopeAspect360 as the predictor matrix.
5. Select *Prediction | New sites* and select the file you prepared in step 1. Select other options as desired. The resulting estimates will be written into the result file and/or a spreadsheet, as you choose.