

Recommended AERSURFACE Inputs North Dakota¹ (March 2017)

Radius of study area used for surface roughness: 1.0 km

Define the surface roughness length for multiple sectors? Yes

Number of sectors: 12

Temporal resolution of surface characteristics: Monthly

Continuous snow cover for at least one month? Yes

Reassign the months to different seasons? Yes

Specify months for each season: See Table 1

Is this site at an airport? Yes, if using NWS site data.

Is the site in an arid region? No

Surface moisture condition at the site: Average

Table 1-Geographic areas for specifying months to seasons

	Southwest ND	Northwest ND	South Central ND	North Central ND	Southeast ND	Northeast ND
Late autumn after frost and harvest, or winter with no snow	Oct Nov Dec Feb Mar	Oct Nov Dec Mar	Oct Nov Dec Mar	Oct Nov Mar	Nov Mar	Oct Nov Mar
Winter with continuous snow cover	Jan	Jan Feb	Jan Feb	Dec Jan Feb	Dec Jan Feb	Dec Jan Feb
Transitional spring	Apr May	Apr May	Apr May	Apr May	Apr May	Apr May
Midsummer with lush vegetation	Jun Jul Aug	Jun Jul Aug	Jun Jul Aug	Jun Jul Aug	Jun Jul Aug	Jun Jul Aug
Autumn with un- harvested cropland	Sep	Sep	Sep	Sep	Sep Oct	Sep

¹ These are recommended AERSURFACE inputs applicable for many sites in ND; however, for pre-construction and New Source Review (NSR), companies should consult with the NDDoH Division of Air Quality. Other input values may be used, but require Department approval prior to use.