Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



ACC030-04 Room:102 Time:May 24 15:00-15:15

New snow albedo parameterizations

Yukina Niimi¹, Takeshi Yamazaki^{1*}

New parameterizations to estimate snow albedo are proposed. The following five methods are discussed: 1) previously studied method using daily mean air temperature and daily amount of precipitation, 2) same formula but coefficients and criterion of snowfall are improved, 3) method with distinction between visible (VIS) and near infrared (NIR), 4) same as method 3) but the ratio of VIS and NIR is estimated from duration of sunshine, and 5) method considering new snow depth. According to data in Sapporo, method 3) is better than methods 1) and 2), also method 4) can obtain similar results as method 3).

¹Graduate School of Science, Tohoku Univ.