

Author:  [ADVANCED](#)

Volume Page

Keyword:    [TOP](#) > [Available Volumes](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1882-3416

**Hydrological Research Letters**

Vol. 2 (2008) pp.47-51

[\[PDF \(2978K\)\]](#) [\[References\]](#) [\[Supplementary Materials\]](#)**Importance of wind-induced undercatch adjustment in a gauge-based analysis of daily precipitation over Japan**[Nobuyuki Utsumi](#)<sup>1)</sup>, [Shinjiro Kanae](#)<sup>1)</sup>, [Hyungjun Kim](#)<sup>1)</sup>, [Shinta Seto](#)<sup>1)</sup>, [Taikan Oki](#)<sup>1)</sup>, [Tomoko Nitta](#)<sup>1)</sup> and [Yukiko Hirabayashi](#)<sup>2)</sup>

1) Institute of Industrial Science, The University of Tokyo

2) Interdisciplinary Graduate School of Medicine and Engineering, University of Yamanashi

(Received: May 26, 2008)

(Accepted for publication: July 27, 2008)

**Abstract:**

We produced a new gauge-based analysis of daily precipitation over Japan from 1981 to 2000 on a 0.01° grid. Wind-induced undercatch was adjusted at each observation station, and orographic effects were considered in the process of spatial interpolation from station data to the gridded product. The resulting gridded gauge-based analysis of precipitation was validated against observed river discharge data. The validation demonstrated that the product is reasonable, mostly because of the undercatch adjustment. Based on the resulting product, Japan receives nearly 2000 mm/year of precipitation on average, which is approximately 10% larger than commonly thought.

[\[PDF \(2978K\)\]](#) [\[References\]](#) [\[Supplementary Materials\]](#)Download Meta of Article [[Help](#)][RIS](#)[BibTeX](#)

To cite this article:

Nobuyuki Utsumi, Shinjiro Kanae, Hyungjun Kim, Shinta Seto, Taikan Oki, Tomoko Nitta and Yukiko Hirabayashi: "Importance of wind-induced undercatch adjustment in a gauge-

doi:10.3178/hr1.2.47

JOI JST.JSTAGE/hr1/2.47

Copyright (c) 2008 Japan Society of Hydrology and Water Resources

---



---

[Japan Science and Technology Information Aggregator, Electronic](#)

