Asian monsoon variability over 100 years through long-term data rescue activities in ACRE-Japan

*Jun Matsumoto, Hisayuki Kubota, Tomoshige Inoue, Ikumi Akasaka, Hirotaka Kamahori, Fumiaki Fujibie, Taiichi Hayashi, Toru Terao, Fumie Murata, Hatsuki Fujinami, Azusa Fukushima, Takehiko Mikami, Masumi Zaiki


Climatic data utilized for climatic change studies have been limited prior to 1950 in the Asian monsoon region. A lot of data are still stored only in paper or image formats. These data which have not used in the past studies will provide important information not only for better recognition of past climatic changes but also for future climate prediction. We have started ACRE-Japan program for promoting data rescue activities in Japan since September 2017, in collaboration with the international project: Atmospheric Reconstruction over the Earth (ACRE).

We have digitized daily precipitation data published in the data books; Rainfall of India (1891-1914), Daily Rainfall of India (1915-1946), Daily Rainfall Record in Burma (1938-1941, 1947-1953) in the current Bangladesh and Myanmar where belonged in the former British India; Zi-Ka-Wei (1891-1939) in China; Observatorio Meteorologico de Manila (1868-1900) and Monthly Bulletins of the Philippine Weather Bureau (1901-1940); Data sheets of the climatological stations (Kunai-Kansokusho) in the Kanto and Tokai Districts (1891-1976) and those of light house stations (1877-1882) in Japan. Some preliminary results on the changes of daily rainfall characteristics, monsoon seasonal changes will be presented. Some of the digitized data are available at JCDP (Japan-Asia Climate Data Program) Web site (http://www.jcdp.jp/).

Acknowledgment: Part of this study was supported by the JSPS KAKENHI (No. 26220202; 15K16283; 15KK0030; 16H03116), and the Asian Human Resource Fund of the Tokyo Metropolitan Government.

Acknowledgment: Part of this study was supported by the JSPS KAKENHI (No. 26220202; 15K16283; 15KK0030; 16H03116), and the Asian Human Resource Fund of the Tokyo Metropolitan Government.