IPWG-11
P-14.4

Attention-Based Deep Fusion CNN for Geostationary Satellite Rainfall Estimates over Taiwan
Part 2: Product Evaluation

Yun-Lan Chen[1], Yung-Han Tsai[1,2], Chun-Erh Tseng[1], Yu-Cheng Chang[1], Chia-Rong Chen[1], J. Y. Chang[2], C. T. Tsai[2]
Central Weather Administration, Taiwan[1] International Integrated Systems, Inc.[2]
Email : yunlan.chen@cwa.gov.tw

- A deep leaning model for estimating surface rainfall based on Himawari-8/AHI data (named AIQPE) was developed for Taiwan area (See Part 1 for model details).
- **This poster presents an assessment of AIQPE's performance. An IR-based product established by the PDF-matching technique (named IRQPE) and two GPM rainfall products(IMERG Late V6 and GSMaP MVK V8) are also used for the inter-comparison.**
- The results show that AIQPE outperforms other satellite rainfall products at all time scales from daily rainfall to monthly rainfall estimates over Taiwan's land area.

Verify on short/long term time scales

Corr. With G.T.	1-day	11-day	31-day
AIQPE	**0.68**	**0.76**	**0.77**
IRQPE	0.32	**0.62**	**0.59**
IMERG	0.36	0.48	0.49
GSMaP	0.45	0.39	0.49

Some cases for 1-day rainfall , more in the poster