

Assimilation of Himawari-8 Imager Radiance Data with the WRF-3DVAR 2 system for the prediction of Typhoon Soulder

Overview

This manuscript has been significantly improved from the original manuscript. Nevertheless, I have found some mistakes. So, I want to request a revision to the authors. In particular, please go through deep consideration for the following comments.

Major comment

1. **A very critical error in title and Fig. 13. “Typhoon Soulder” → “Typhoon Soudelor”**, Also, please specify Soudelor’s year for the clarity.
2. **Line 232:** “Grell Devenyi cumulus parameterization scheme (Grell et al., 2002),” By the way, it is not always true. Nevertheless, since the authors set a 5-km spatial resolution in this study, I am very wondering why the authors did activate Grell Devenyi cumulus parameterization?

Minor comments

1. Lines 59-62: the sentence starts with “some researches ...” but the authors cited one paper” Please cite more papers or revise this sentence.
2. Lines 68-69: I cannot understand what the authors mean (in bold) “it is highlighted that they are not able to perform continuous monitoring over a fixed area, **thus leaving out some rapidly intensified TCs or storms.**”
3. Line 70: “because geostationary satellites have a fixed location related to the earth’s surface,” it could potentially give a misunderstanding to the reader. Please just say “rotate with the earth”.
4. Line 76: “In fact, they can capture convective spiral cloud systems relating to TCs.” Since the geostationary satellites can capture more features related to TCs, the authors need to consider make a list or remove this sentence.
5. Lines:236-262: is there any reason why the authors explain first Figs. 5 and 6 and followed by Fig. 4?

Technical comments

1. **In Abstract**, remove JMA WRF-3DVAR abbreviations.
2. Please keep the abbreviation order: some are “Abbreviation (extended)” and some

extended form (abbreviation) (Lines: 163-164). Please fix this from the whole manuscript.

3. Line: 228, Model center is (17.5 °N, 140 °E) (Fig. 4). ?? please make a complete sentence.

Editorial comments

1. “the background field of the model is effectively corrected...” → “...was effectively corrected...”. **Please consider whether the authors want to keep “past form of a verb. In my opinion, if the authors are explaining the results of this work, it should be the past form of a verb. (not critical)**
2. Lines: 278, 280, “Fig. 7a, c, e” (go through the whole manuscript) → “Figs. 7a, c, and e” please put this to the end of this sentence.