The answers to the RC1 reviewer comments:

- 1. Added in Fig. 3 sign of sandbound and contemporary settlements (A part) and marked crosssection places, which are in Fig. 1 and Fig. 4 (B part).
- 2. In line 76 changed term "dune tectonic" in "tectonic subsidence".
- 3. Added information about hurricane influence on dunes surface changes (185 190 line).
- 4. In References added Lampe et all., 2011.
- 5. Transpose the first and second position in References.

The answers to the RC2 reviewer comments:

- 1. Revised and corrected wind speed measurement frequency. The wind speed measured every 6 hours (207 line).
- 2. Corrected summary of windy hours (211 line).
- 3. Transformed Table 1. The new version is clearer.
- 4. Part text from chapter 3, moved to chapter 2 as suggested by the reviewer (124 132 line).
- 5. Corrected the fourth conclusion.

The answers to the RC3 reviewer comments:

1. The RC3 reviewer notes is the same as the RC2 reviewer and will have a hope that we responded to them

The answers to editor:

- 1. Added information and references about sea level impact to dunes slope changes during of storm.
- 2. Shorted 4 conclusion and not explain the human affected on sand stability.
- 3. Corrected mistakes in references list:
  - Berendt G.: Geologie des Kurishen Haffes und seiner Umgebung, Königsberg, 1869.

- Corrected maps title on: Karte des Deutschen Reiches 1:100 000. K 3 II L 62. Blattnummer: 3, 8, 15, 16, 29. 1911.