

The African Easterly Jet: Structure and Effect on Easterly Wave Development



- 20°N) was recorded from 1948 to 2016.

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Fig. 5 Difference in AEW strength between double and single core cases (dotted line shows 99% significance level)



RESULTS (CONTINUED)

Table. 1 Average track of AEWs for each jet core case (Numbers in bold show 99% significance)

Cases	Average AEW track length (degrees)
Single Core	26.1
core (Eastern core south of western core)	29.2
Double core core north of western core)	18.6
- ••	• r = 0.31
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variance 1948 to 2016 (from HURDAT2 database)

CONCLUSIONS

The double-core structure on monthly time scales is maintained throughout the month for most years (Fig. 3). Double core cases with the southward eastern core have longer average track length and significantly stronger AEWs compared to single core cases(**Fig. 4,5, Table 1**). Double core cases with the northward eastern core have significantly shorter average track length and weaker

AEWs (Fig. 4,5, Table 1).

There is a weak relationship between AEW strength and east Atlantic TC activity (Fig.6).

REMAINING QUESTIONS

These results depend on the years chosen. If additional data is included in the analysis, will the observations made in this original work remain the same?

If reanalysis data at a finer resolution is used, will this significantly alter the results?

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