

# *Variability Analysis*

Group 3

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# Data and region used for analysis

## Hourly analysis:

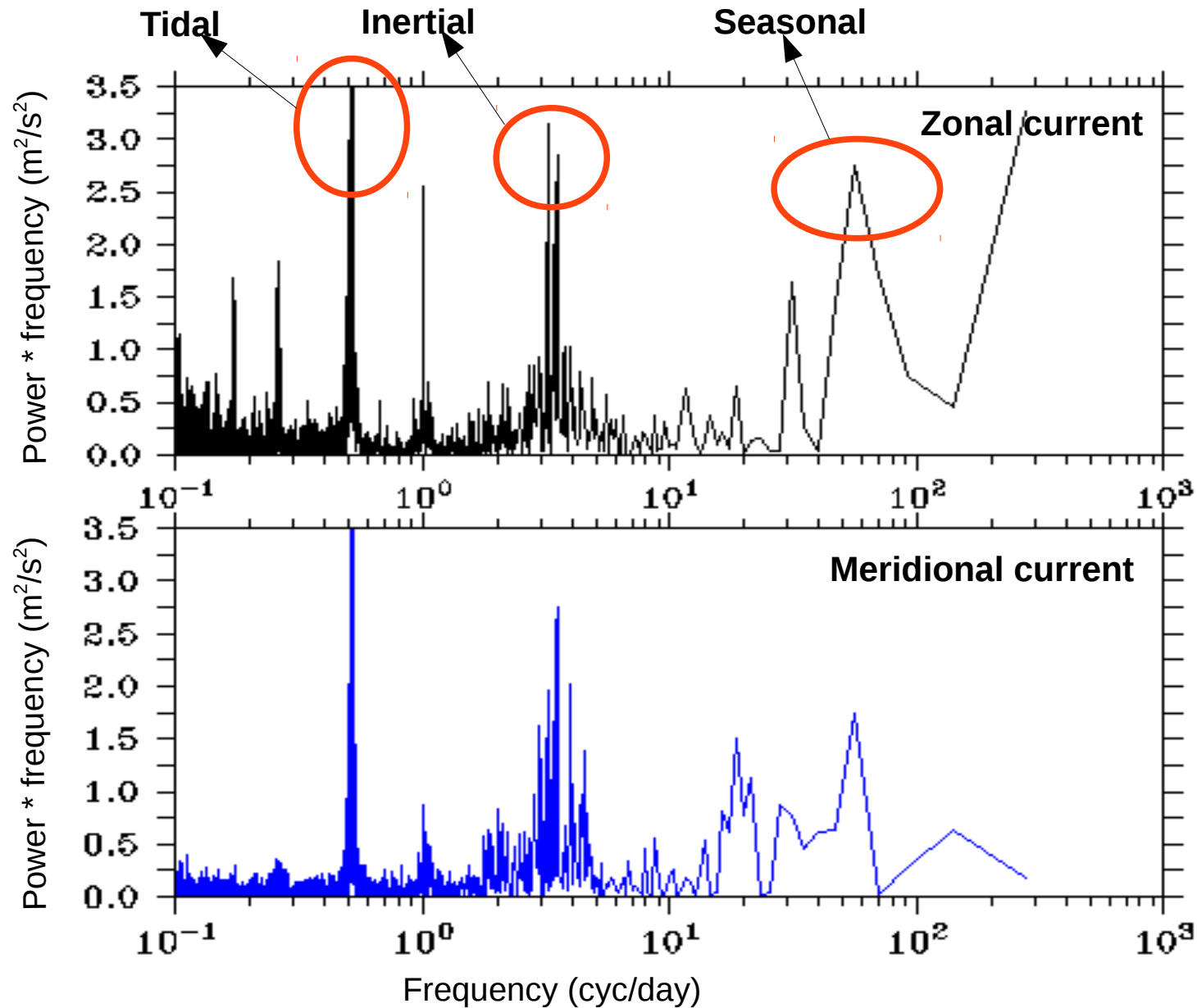
- ADCP Mooring Data
- Nov 2006 – Aug 2007
- 8N, 90E

## Daily analysis:

- OSCAR satellite data
- Oct 1992 – Oct 2015
- Equator, 50E and Equator, 90E

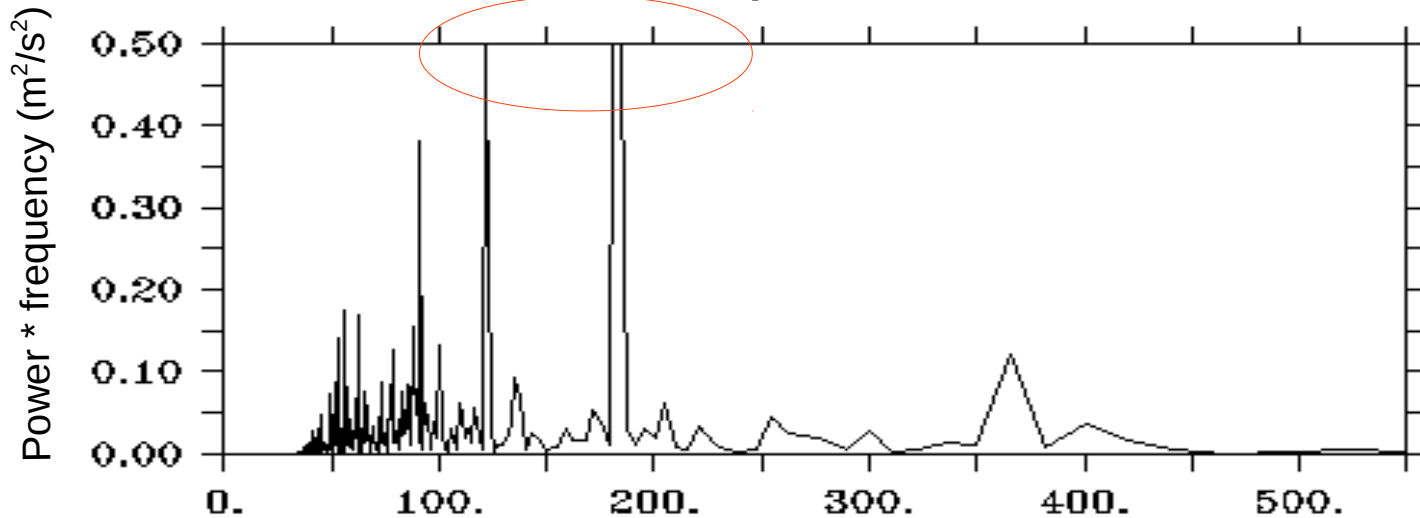
# FFT Analysis

# ADCP Mooring 8N 90E

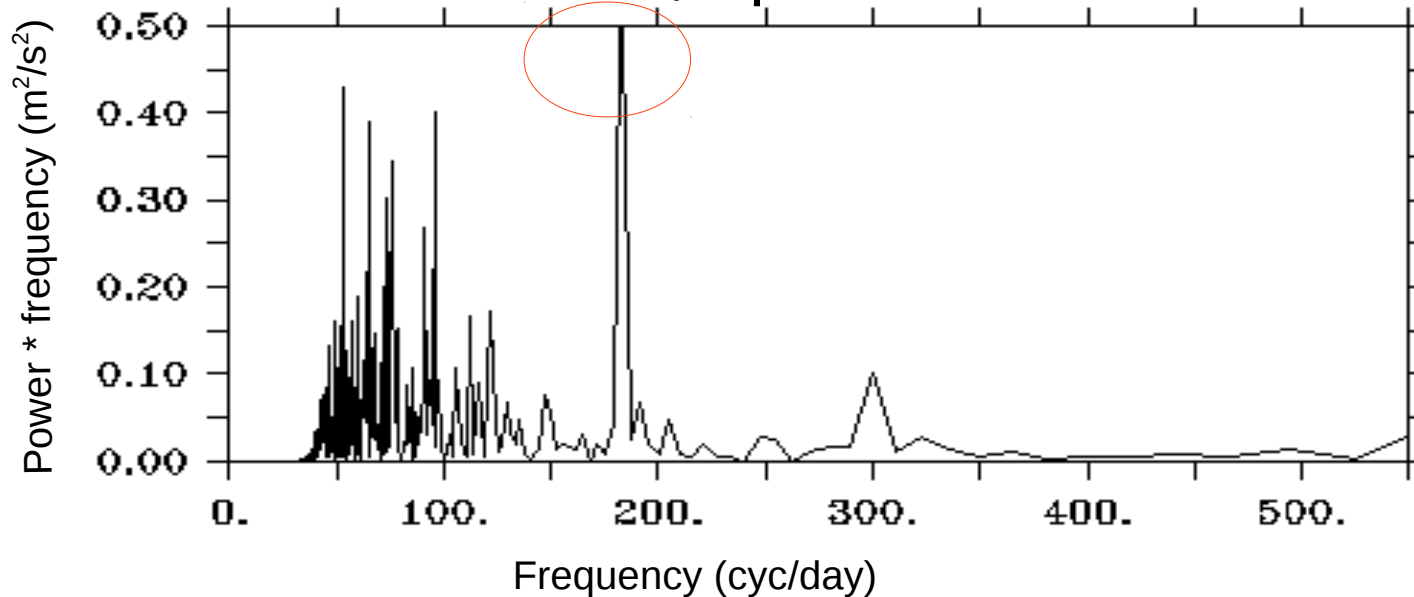


# OSCAR daily zonal current

50E, equator



90E, equator

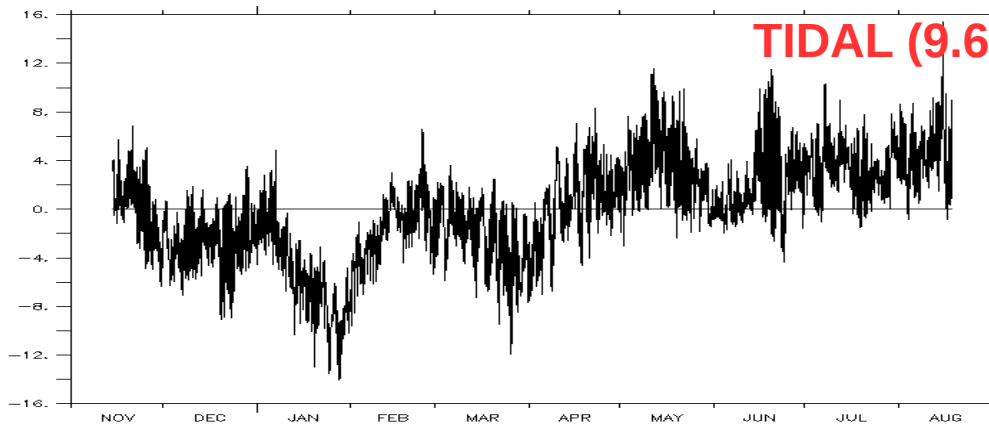


More dominant peaks are seen in the 50E, eq region as compared to 90E, eq region

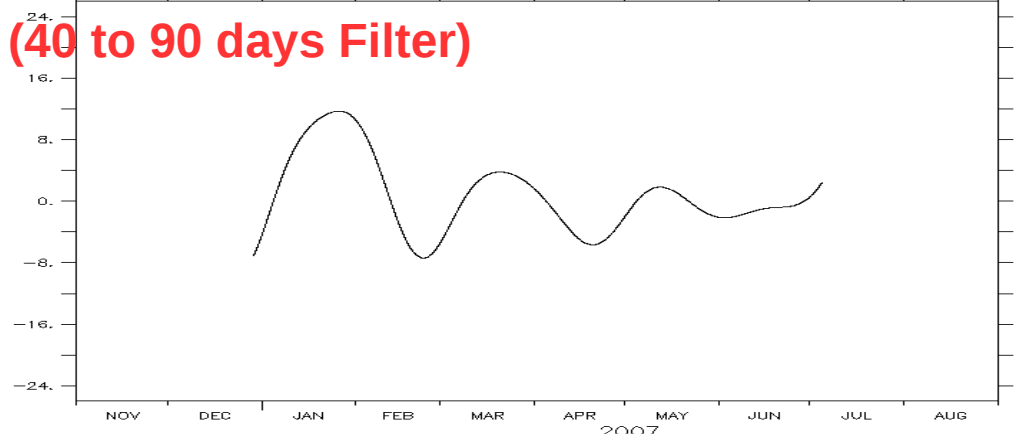
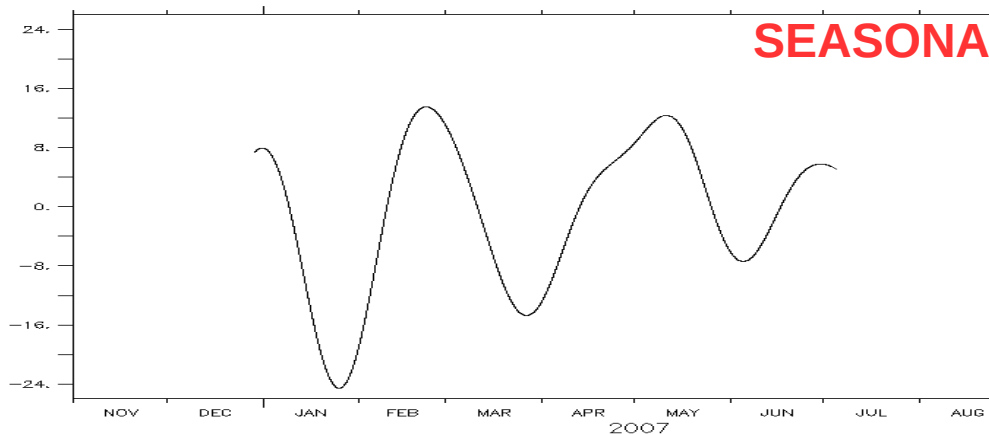
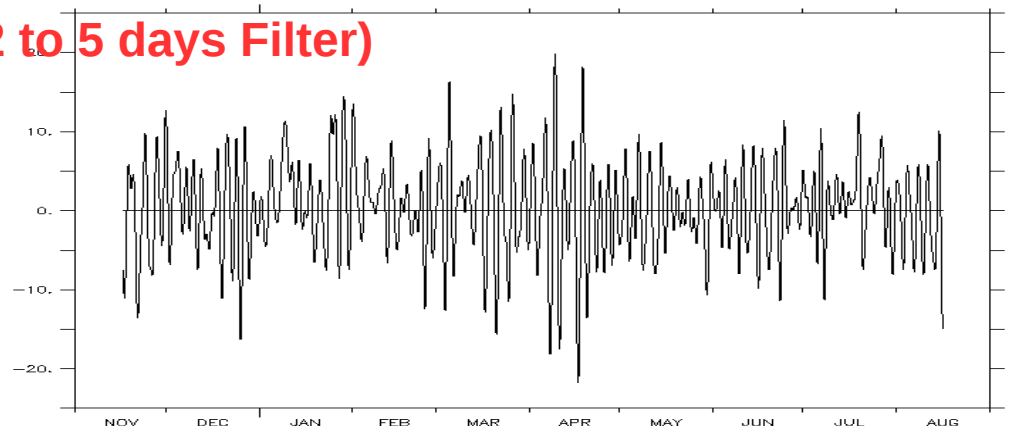
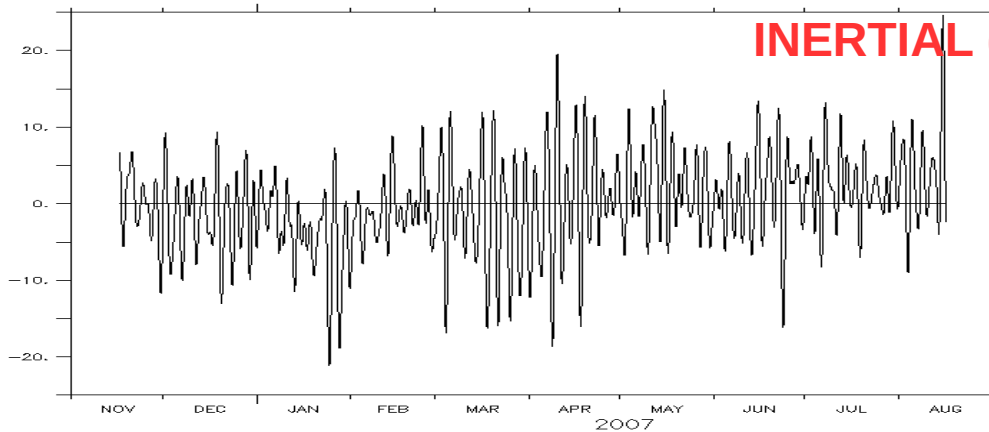
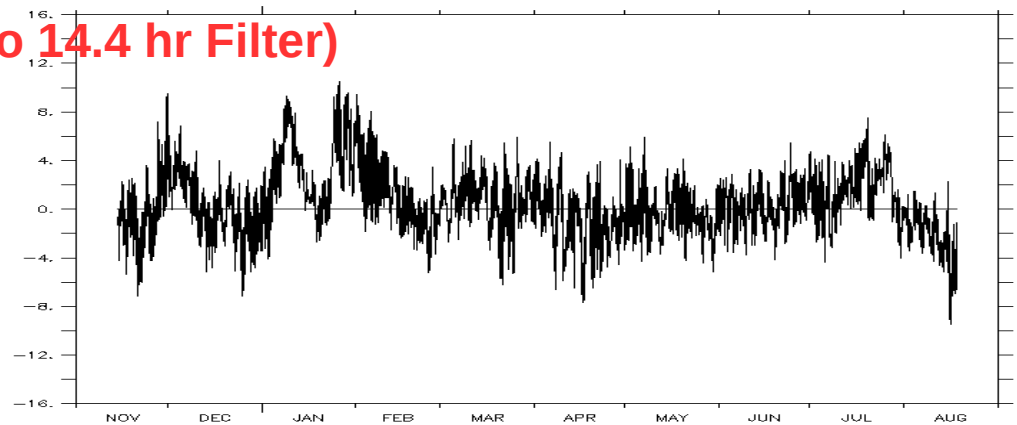
# Band Pass Filter (LANCZOS)

# ADCP Mooring (8N, 90E)

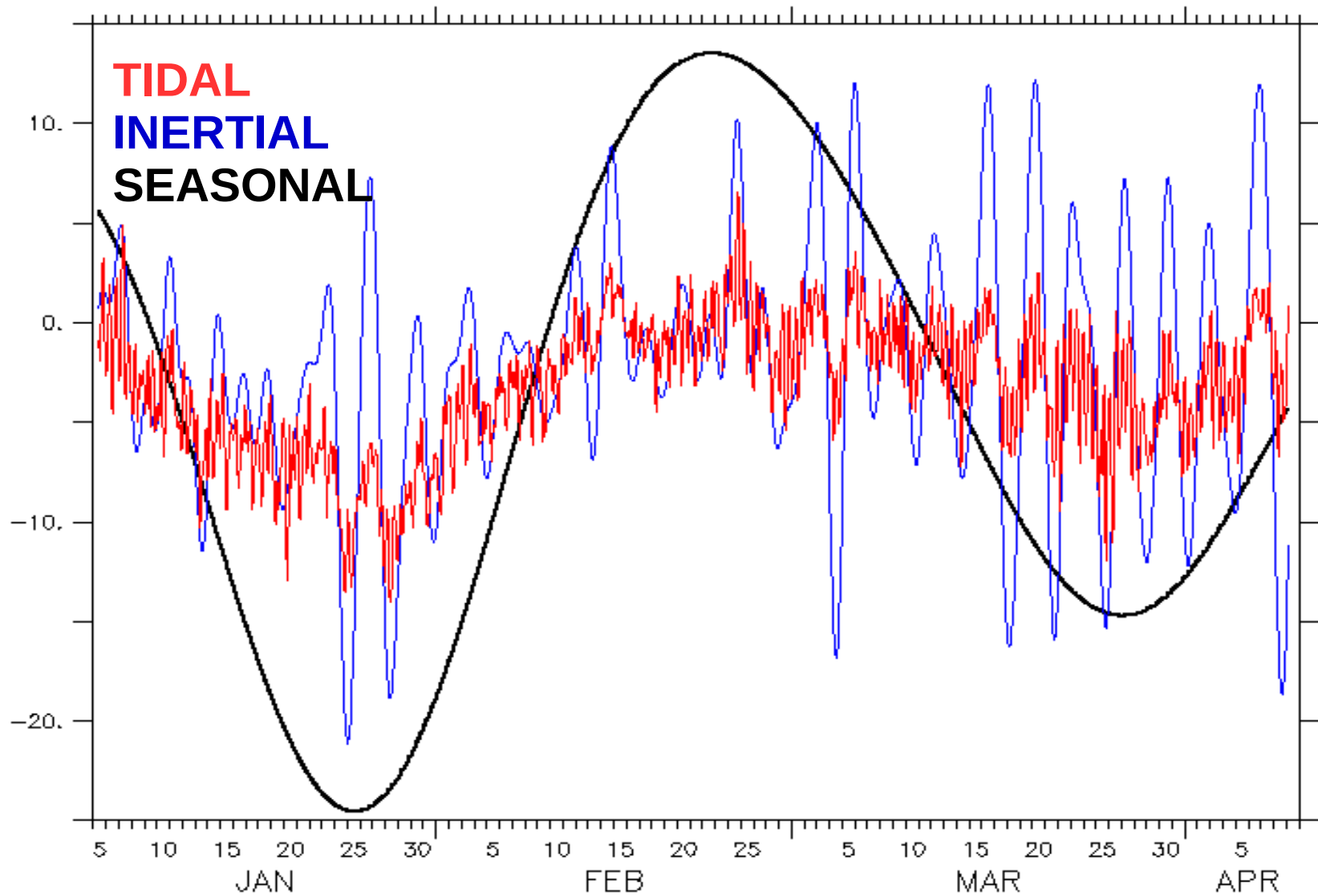
## Zonal Current



## Meridional Current



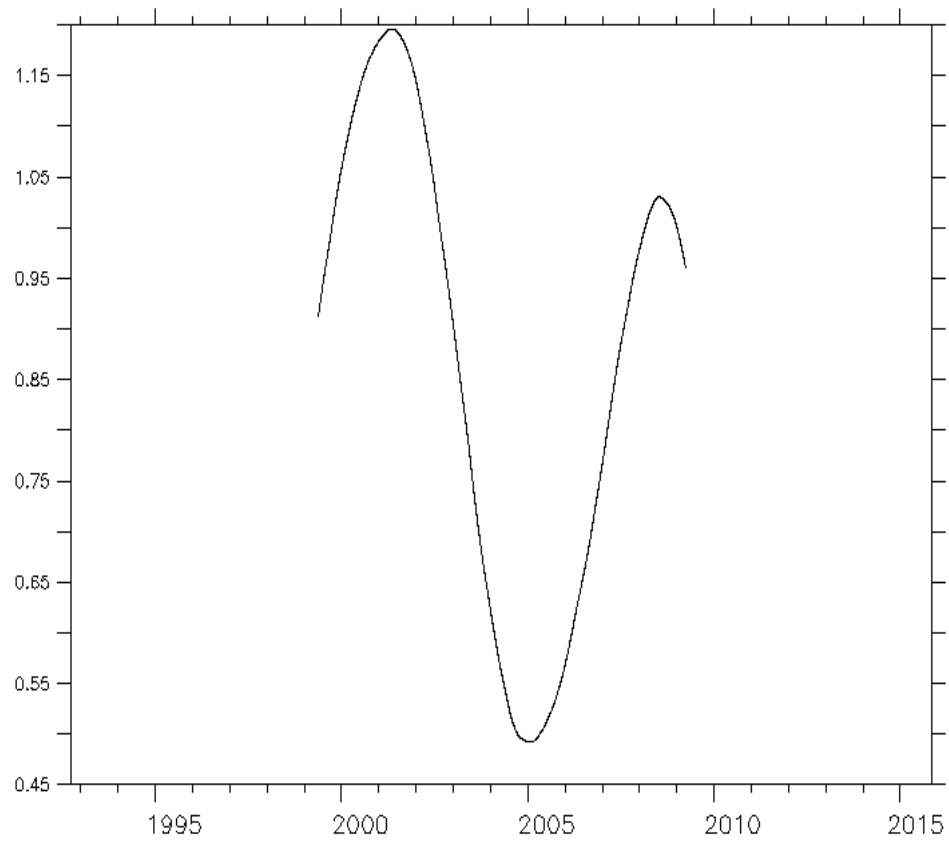
# ADCP Mooring zonal current (8N, 90E)



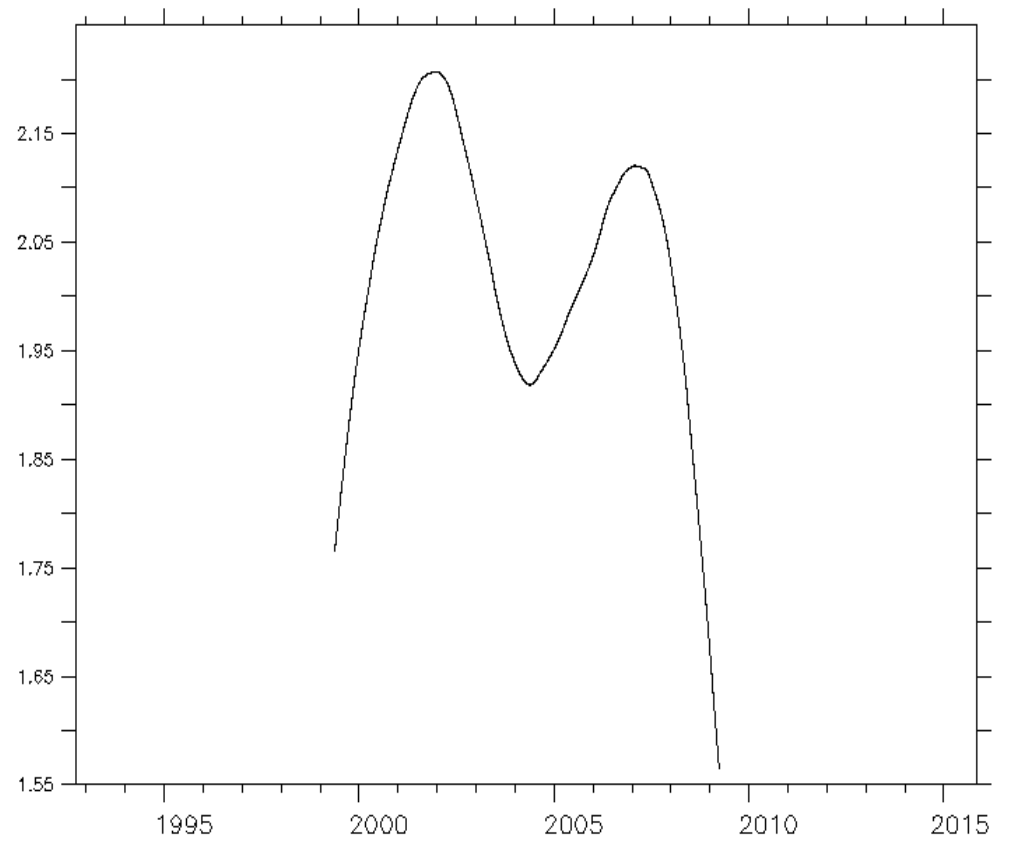


# OSCAR zonal current

50 E, Equator

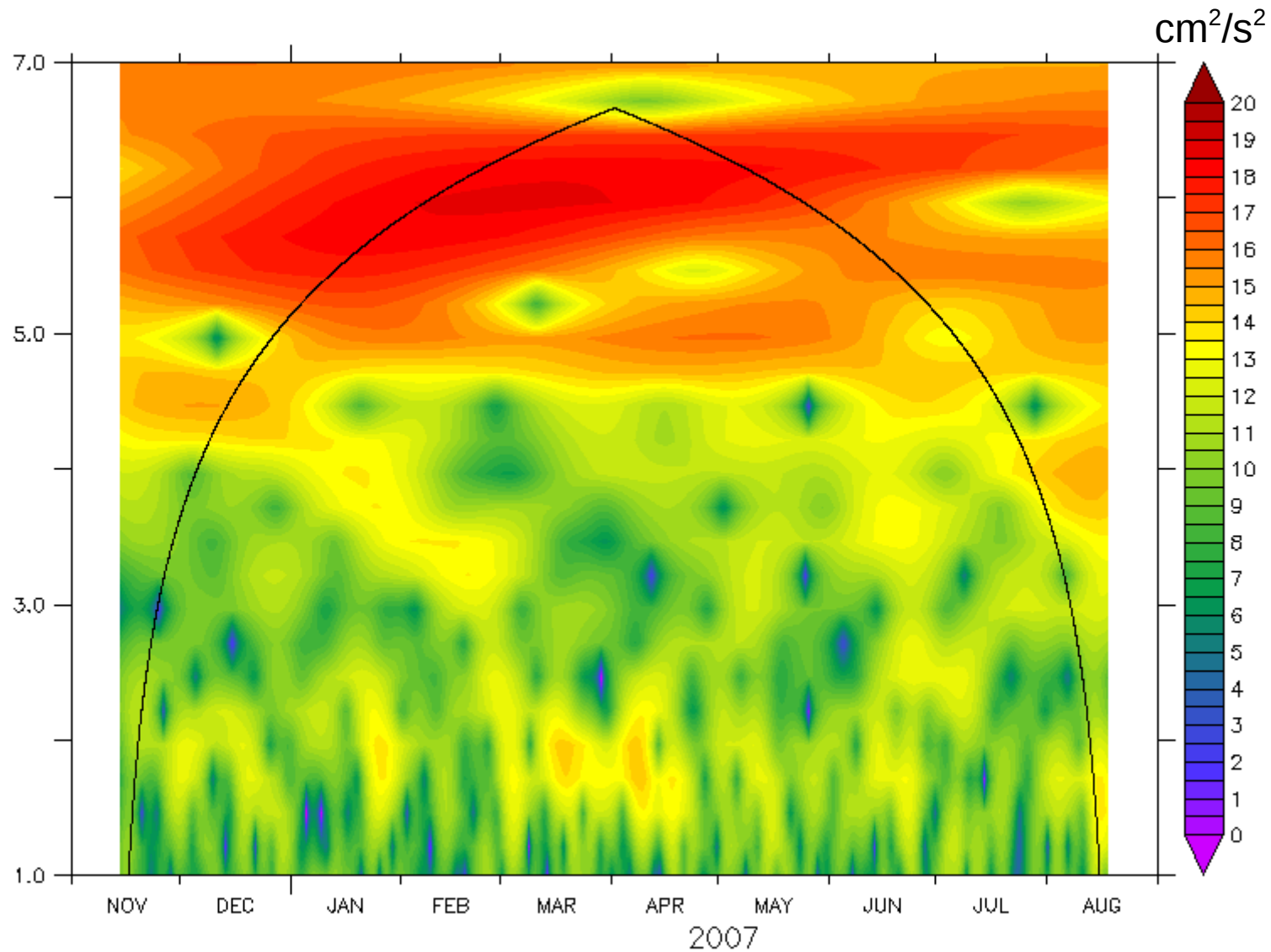


90 E, Equator



# Wavelet Analysis

# ADCP Mooring zonal current (8N, 90E)



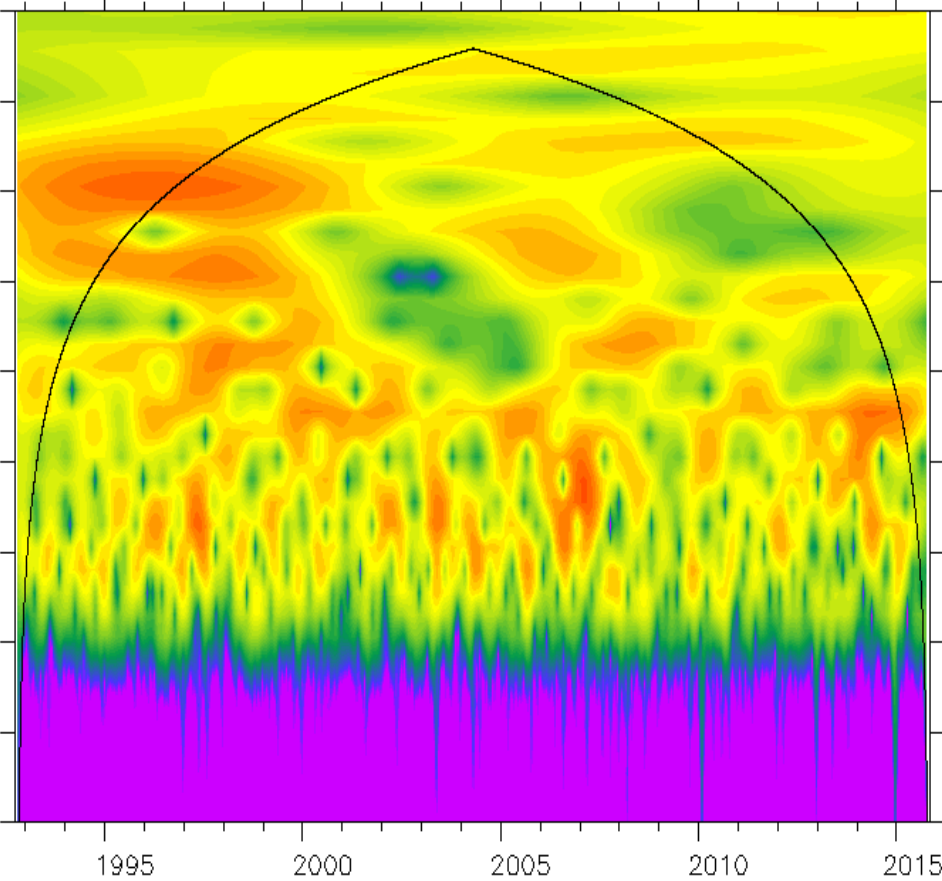
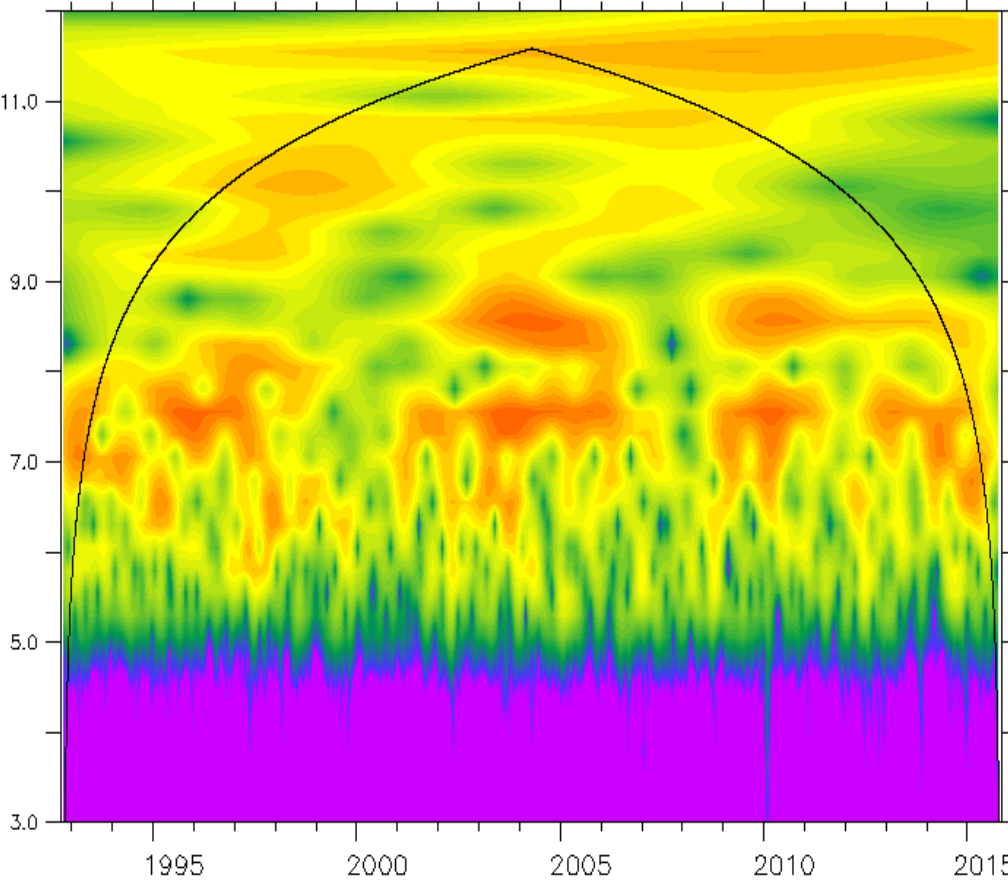
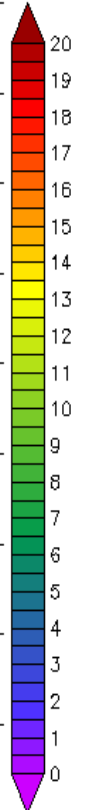
- 64 days variability seen during Jan-Mar 2007 period
- Dominant variability is within the cone of influence region

# OSCAR zonal current

50 E, Equator

90 E, Equator

cm<sup>2</sup>/s<sup>2</sup>



THANK YOU