**Highlights:**

1. Decrease in biomass with depth varies along the slope.

2. Lower biomass and standing stock variation at either ends of Eastern Arabian Sea.

3. Annual cycle is stronger at NEAS. Interannual, intra-annual is prominent in SEAS.

5. Intraseasonal variability is present across the slope. It has implications.

6. The conventional sampling method is ineffective to capture information on intraseasonal scale.

7. The presence or absence of coherence dictates occurrence of patchiness.

8. The biomass predictability is reduced due to high-frequency intraseasonal variation.