

Processes at the Ocean Surface:

1. Water heating by the Sun, ↑ **temperature**
2. Water evaporation (salt is left behind), ↑ **salinity**
3. Precipitation (fresh water input), ↓ **salinity**
4. Water cooling (cold winds/ice masses), ↓ **temperature**
5. Ice melt (fresh water is released), ↓ **salinity**
6. Ice formation (salt is left behind), ↑ **salinity**
7. Large river inflow (fresh water input), ↓ **salinity**
8. Water movement (pushed by winds/tides)

Processes in the Deep:

9. Water rise and fall (density difference)
10. Deep water downhill flow at the ocean bottom

Interplay of these processes defines **ocean circulation**.