

Salinity versus Depth

Salinity is a measure of dissolved salts in sea water. It is calculated as the amount of salt (in grams) dissolved in 1,000 grams (1 kilogram) of seawater. In much of Earth's oceans, there is a marked difference in salinity between the **Surface Zone** and the **Deep Zone**. Although salinity generally increases with depth, there is a distinct layer where salinity increases sharply called the **Halocline**.

Graph : The data below lists temperature and salinity values for a water column in the Pacific Ocean near California. Carefully plot the data and answer the questions that follow

1. What happens to the salinity as you move deeper into the ocean? Why do you think this happens?
2. Label the Halocline on your graph. Is this a high latitude or low latitude area of the Pacific Ocean? Explain

Depth (m)	Salinity (ppt)
0	31.22
10	31.4
20	31.56
30	31.88
50	32.4
75	33.24
100	33.6
150	33.88
200	33.94
250	33.98
300	34.01
400	34.07
500	34.14
600	34.2
700	34.26
800	34.31
1000	34.41



