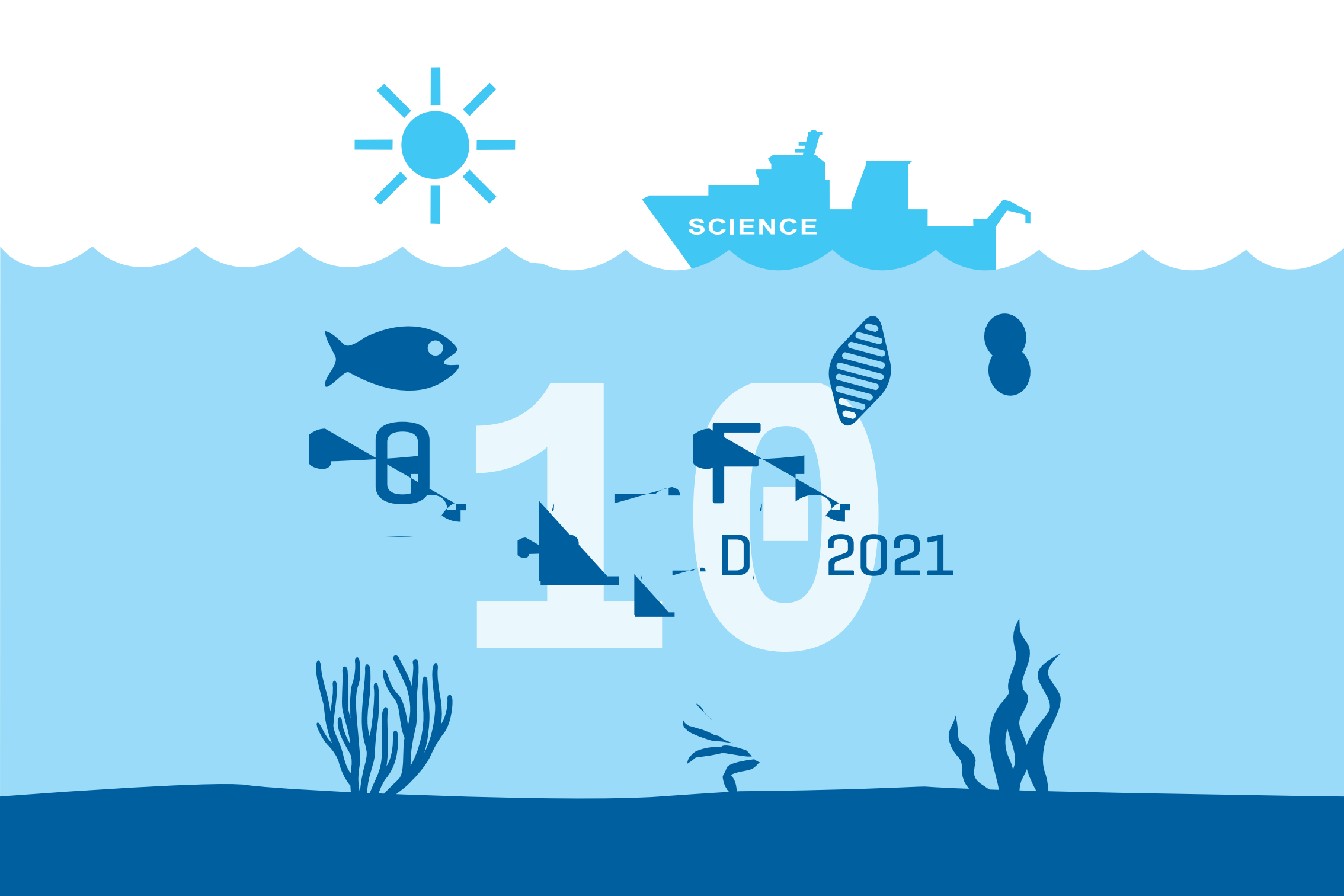
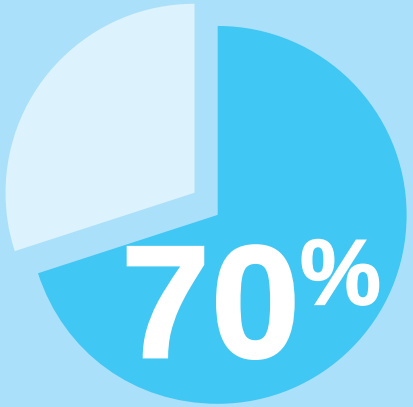
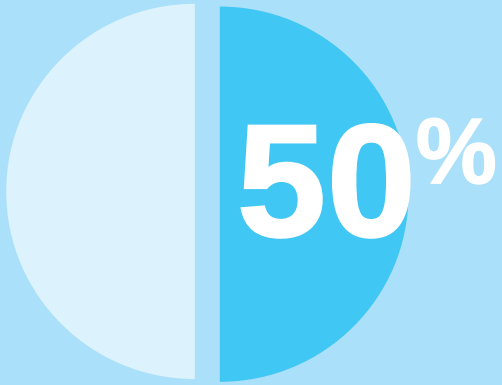

SCIENCE
D 2021

01: THE OCEAN

Did you know that the **entire ocean covers 70 percent** of the surface of our planet, and the **deep sea 50 percent?** The area of the Pacific Ocean alone is larger than the entire land area of the Earth.

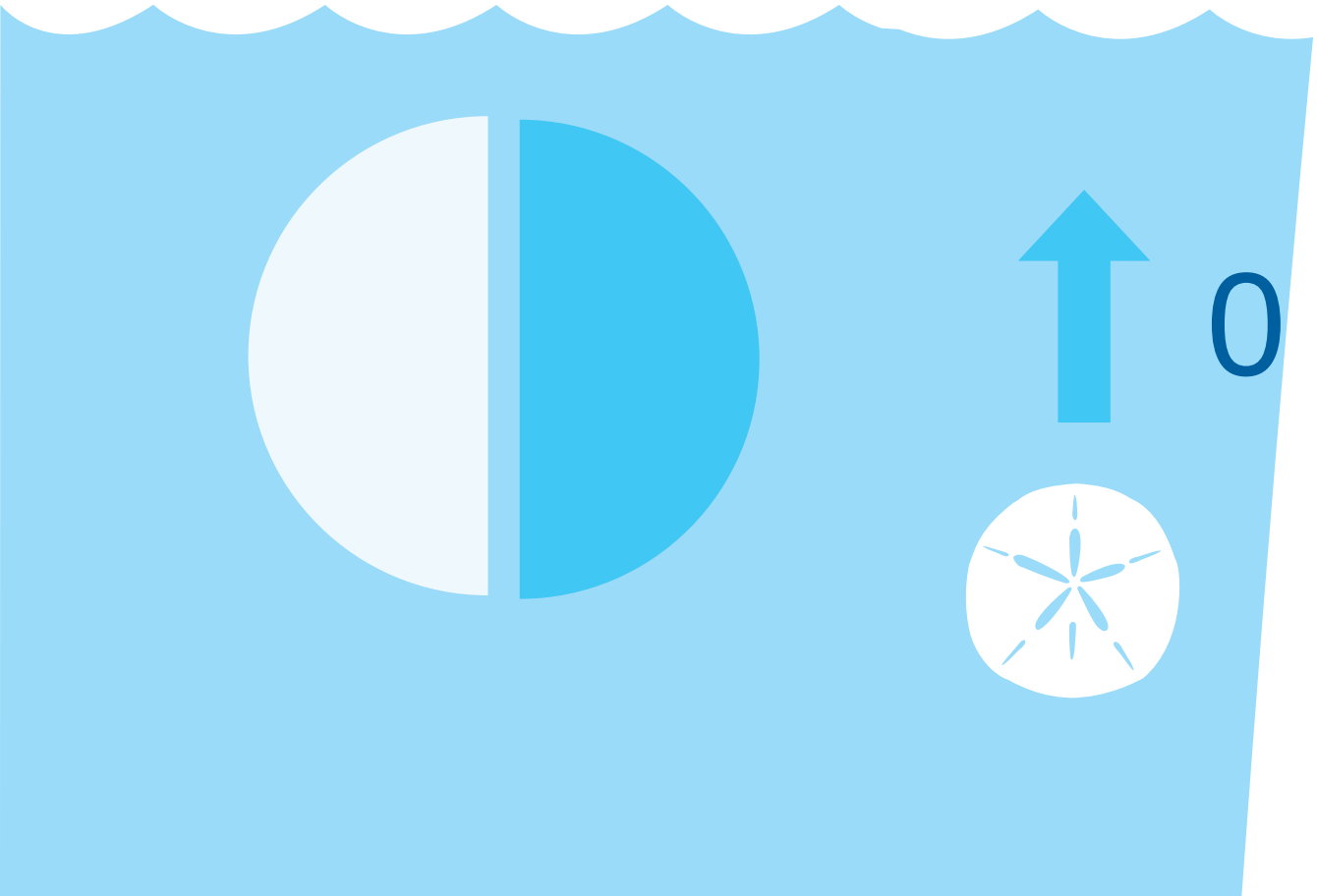




03: M

Did you know that high-resolution multibeam echo sounder data are only available for just under **20 percent of the entire seafloor?** Echo sounders are the only method to map the large areas of the seafloor directly.

Did you know that **half of the oxygen currer**
generated by photosynthesis is produced
ocean? The phythoplankton, i.e. microscopic pla
essentially responsible for this process.



06: H S

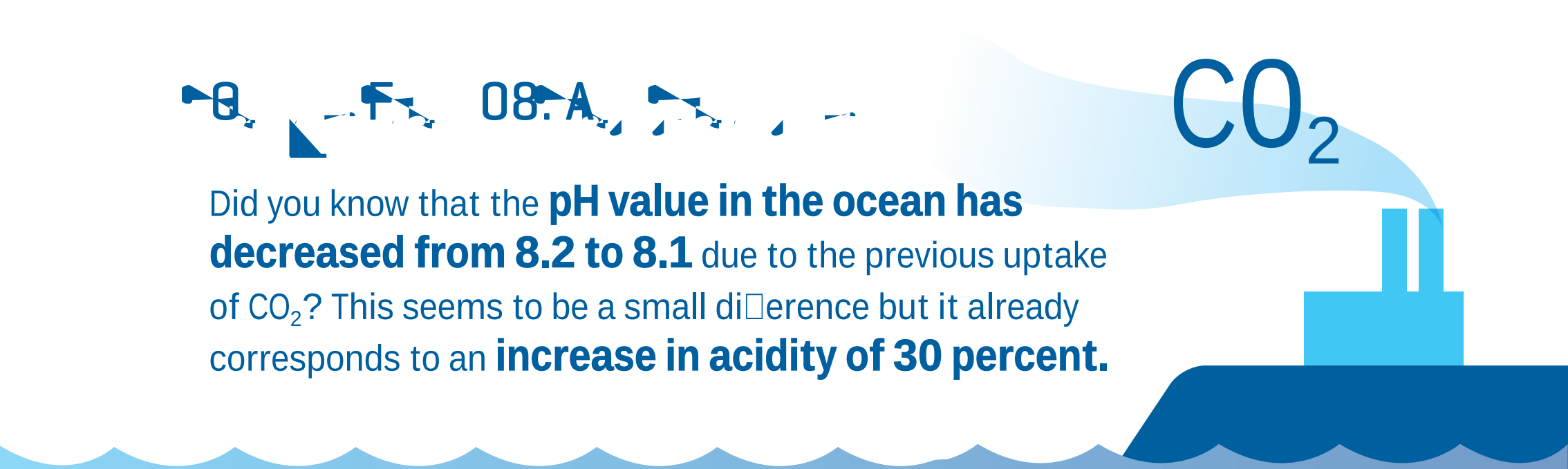
Did you know that the ocean is delaying the e□ects of climate change by absorbing more than **90 percent of the extra**

Did you know that the ocean has absorbed about
30 percent of the carbon dioxide

8 [illegible] 08.A [illegible]

CO_2

Did you know that the **pH value in the ocean has decreased from 8.2 to 8.1** due to the previous uptake of CO_2? This seems to be a small di□erence but it already corresponds to an **increase in acidity of 30 percent.**

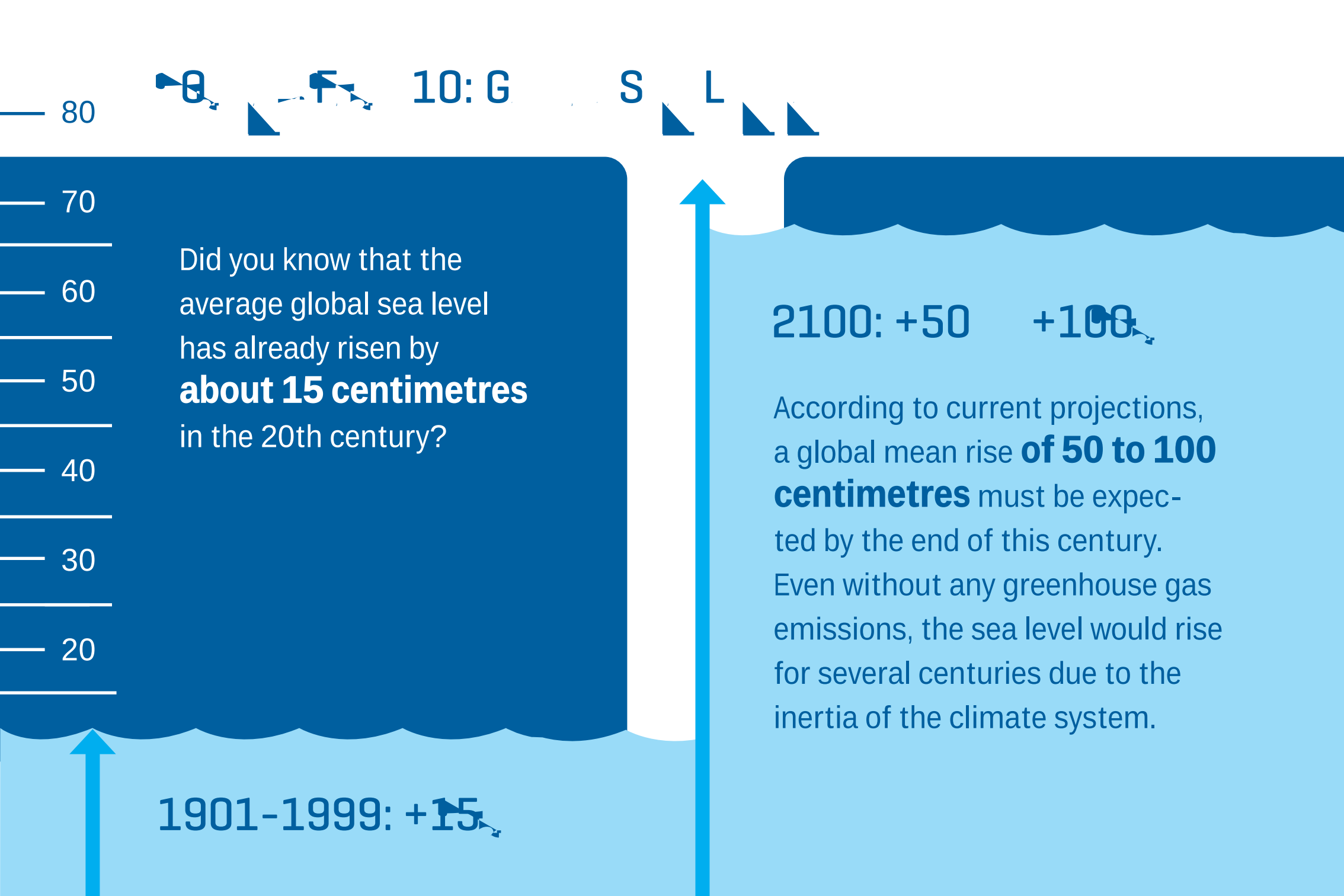


A [illegible]

+30% +150?%

1820 2020 2100

By the end of the century, the pH value could probably drop by another 0.3 to 0.4 units, making seawater **100 to 150 percent more acidic.** This would become in particluar an increasing problem for calcifying organisms, even leading to the disappearance of entire species.


80
70
60
50
40
30
20
Did you know that the average global sea level has already risen by **about 15 centimetres** in the 20th century?
1901-1999: +15
2100: +50 +100
According to current projections, a global mean rise **of 50 to 100 centimetres** must be expected by the end of this century. Even without any greenhouse gas emissions, the sea level would rise for several centuries due to the inertia of the climate system.