The Global Carbon Cycle

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The Global Carbon Cycle I. Carbon and the Global Carbon Cycle. Photo Credit: NASA SeaWiFS Ocean Color Project. Carbon is a ubiquitous element on Earth. Most of the Earth's carbon is found in the atmosphere, the oceans, the land surface, and the biosphere. The carbon cycle is a complex system that involves the exchange of carbon between these reservoirs and the atmosphere. The cycle is driven by a variety of processes, including photosynthesis, respiration, decomposition, and weathering. The carbon cycle is one of the most important processes on Earth, as it is responsible for regulating the concentration of carbon dioxide in the atmosphere and the global climate. The cycle is also influenced by human activities, such as burning fossil fuels and deforestation.