

"Using Organic Molecules to Study the Relationship Between Climate and Carbon Sequestration"

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Over geologic time, the transformation of CO₂(g) into organic molecules and their subsequent burial has resulted in carbon sequestration and contributed to overall global cooling. This loop has been responsible for periods of cooler climate throughout the Earth's history. We will look at how climate has assisted with the processes of transforming labile organic molecules (readily remineralized back into CO₂) into refractory organic molecules and then burying them, hence facilitating carbon sequestration.