

*Below are most of the questions posted by viewers during the webinar. The questions listed were addressed by Professor Talmay at the end of the webinar.*

Doesn't *E. huxleyi* die? How do we know that natural death process is insufficient to have deposits form in thousands of years?

The model as described is linear yet virus activity will drive resource availability....is there a way to circularize this?

Why the death of virus is  $\delta^2$ ?

How costly is the defense against viruses? Does it really work via resource allocation?

Could coral bleaching (attributed to global warming) be actually caused by a viral epidemic ?

Data are on the log scale and models are on linear scale. Not sure that comparison is adequate

I'd long heard that Ca Carbonate deposits were largely due extinct coral reefs. Is there a possible association between these two processes (viral-diatom and coral reefs)?

Wouldn't there be a slight shift between the peaks of the Resource and Abundance curves?

How are you applying your predator/prey (producer/consumer) model to the model of the virus abundancy? What assumptions are you making and what additional information do we need to do that?

How many viruses can emerge from a single infected *E. huxleyi* ?

If only a fraction of microbes can be infected by the viruses, perhaps the same correlation with slope  $<1$  can be observed. No need for complicated trade-off hypothesis.

How representative are fyord experiments? I.e., in the experiments algae and viruses are "limited" in where they are, water movement is restricted. But not in real ocean.

If model A occurs in different parts of ocean with different cycle amplitude and phase, on average, the density may be quite average. I.e., model A works just fine

Are there other phase spaces you look at, apart from the virus/host abundance one?