

STANDARD DEVIATIONS: A Conversation between Mother Nature and Her **Problem Child**

Greetings,

Overheard on the winds of change....

Mom? I don't feel well.

What's the matter, honey?

I have a fever.

Wow, you do. You feel hot. How long has it been this way?

It's been going on for a while. I thought I was just warm, but it seems to be getting worse.

Let's watch it but you seem pretty feverish. Is something else is bothering you?

I'm having trouble breathing.

Well, there's a lot of smoke in the air.

There's always stuff in the air!

I know, sweetie.

It seems to be getting worse!

Okay, I adjusted the atmosphere. Let's see if altering the cycles helps.

Now my plants are all either too wet or all dried up!

It could be that way for a time. Anything else?

It seems like my skin is all oily.

I noticed that, too! As you age some oils are natural, but they are usually under the skin. Are you noticing any pimples, baby?

I noticed a bunch of little holes where oil seems to be just pumping out, yeah. What the frack!?
I want a bath, a nice cool bath.

Good idea. Just don't make a mess.



Mom! The water is over-filling the tub! Where is all this water coming from?

Someone let all the ice melt into the tub!

That's not all. The water has a bunch of plastic floating in it.

Look at that. Blech! There must be tons of it.

Tons and tons, Mom. It's everywhere! There's a big swirling gyre over here and every drop seems to have lots of little tiny pieces. It floats on top and some's even down at the bottom of the tub!

Maybe you should take a shower instead.

Okay. MOM! The shower either flows in a deluge or barely sprinkles!

Hop out and get dressed. Put on something clean and green. You know, you always look good in green.

All my green cover is tattered or missing!

Looks like something is eating all your clothing! You'll be bare in no time!

I'd wear that plastic stuff, but it doesn't breathe like my natural cover.

It lasts forever but it isn't very comfortable, is it? How are you feeling, now?

Worse. Now I'm having chills and fever. I haven't had these kind of swings in years.

Better get used to it. It's part of getting older.

No, Mom, this feels like a bug.

Oh, no! I think maybe you're coming down with an infection.

Is it bad?

Sure could be. If you let these things go, you can get into real trouble.

Why? What happens?

Well, dear, if you have a normal, healthy biome then everything gets along swimmingly. But if a certain organism starts producing toxins, and manages to get out of control, then you can get very sick, even die! Let Mommy take a look. Oh, my, yes. It seems you've got a bad case of *Homo sapiens*!



Sounds awful. What is it?

It's a nasty, opportunistic organism that has gotten out of control.

How did that happen? Where did it come from?

Honey, it's been around for a long time. It has been part of your normal flora for eons. Over time, the organism has mutated from something benign into one that's become harmful to its host. Looks like this strain has become virulent.

Mom, you're so smart. Tell me more.

This mutation has evolved to become much more invasive than previous strains. It has developed the ability to penetrate your membrane and extract and release the oils underneath. That isn't so bad, but it manipulates your own natural chemicals and makes toxins that poison you.

How did it get so bad?

It seems the reproduction cycle is out of whack. Most organisms reproduce in a natural orderly manner and recognize limits on growth. These things are reproducing at an exponential rate that is out of control. This strain is highly unusual. It's luminescent, giving off radiation, and even beginning to spread to the neighbors.

Gross! Where is it?

It appears to be ubiquitous. Even growing where there aren't enough nutrients to support it. If you look closely, you can see where the growing colonies have borders. Some colonies are showing phagocytic tendencies.

Isn't it all the same bug?

There are small variants that affect appearance and behaviors. If we could sequence it, we'd see small differences that show phylogenetic diversity in the same species. But some have become invasive and they have evolved a survival strategy that makes them immune to a lot of their natural antagonists.

What do you mean?

They do have natural predators that have kept the numbers in check. Over time they have found mechanisms to become resistant.

Is it unstoppable?



There are viruses that are effective, but this organism has many defensive tools. It's a classic evolutionary battle. Of course, it is limited by resource for energy and eventually the toxins it produces will curb its ability to grow. It might even die off on its own, but it is possible that it will kill you, too.

Mom, I'm scared. Is there anything we can do?

Sweetie, it's not the best solution, but there may be remedy.

What, what? I'm getting desperate!

Remember how we got rid of the dinosaurs?

I miss them.

Yes, well, they were here for so long, but you were much younger then. I didn't know what I was doing when I used the Astral Body.

Astral Body?

Yes. A small asteroid dose was all it took. It is always a possible solution.

Bring it on, Momma!

Not so fast, dear. Astral Bodies have a serious side effect. They are not selective in how they kill, remember? The last time we used an asteroid, it killed nearly all the other living things as well.

Well, I don't care! If this doesn't get under control, I don't care what happens! I'll hold my breath until I turn blue!

Don't be silly! You're already blue. Time wounds all heels; and heals all wounds. If this infection continues it will just make its environment too toxic for its own survival and it will disappear. You might be scarred but you will still be you and I'll still love you.

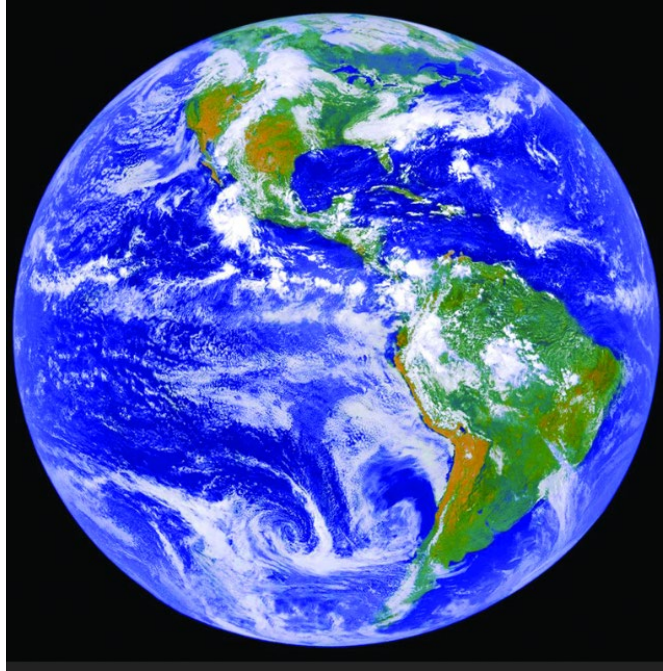
Thanks, Mom. You're the best!

Sound familiar?

Have a great week and be safe,

Bryan





{The big petri dish.}



{Colony morphology?}

