

Looking for Climate Change : Sending them down



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Shrinking Cups 1

We put a single paper towel sheet in each cup to prevent the cups from getting inside each other.

Then, we put the stuffed cups in a mesh bag and tie the bag to the rosette, out of the way of the instruments.

Actually Rob didn't like it that we tied it here on this first cup cast, because if one of the bag ends had come loose it might have prevented some of the bottles from closing.



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Shrinking Cups 2

Lines are tied. Unstrapping the rosette from the cart.



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Shrinking Cups 3

The rosette and the cups leave the deck. The hand signal that Keith is giving the winch operator means "bring it up slowly."



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Shrinking Cups 4

Up, but not yet over the side of the ship. Notice that the A-frame is still leaning in toward the ship.



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Shrinking Cups 5

Going down...

Notice that the A-frame has now started to move outboard (away from the ship).

Shrinking Cups 6

Going in...



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Shrinking Cups 7
All the way...



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Shrinking Cups 8
4276 meters to go



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Shrinking Cups 9
Now all we have to do is wait...



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Shrinking Cups 10
and wait...



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Shrinking Cups 11
and wait ...



Shrinking Cups 12
and wait 😊

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Shrinking Cups 13
It is dark by the time they come back. Shenfu holds up the bag of shrunken cups.

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Shrinking Cups 14
Next time, Rob put the mesh bag where he thinks it won't interfere with the instruments, even if it comes loose.

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Shrinking Cups 15.
In the middle - behind the bottles and CTD.

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Shrinking Cups 16
This time the 2am to 2pm shift sends the rosette and cups down in the dark.

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Shrinking Cups 17
The sun rises...

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Shrinking Cups 18

We're over the Kermadec Trench. The rosette and the cups are in it. The line on the graph is the tension on the winch wire going up as the rosette goes down.



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Shrinking Cups 19

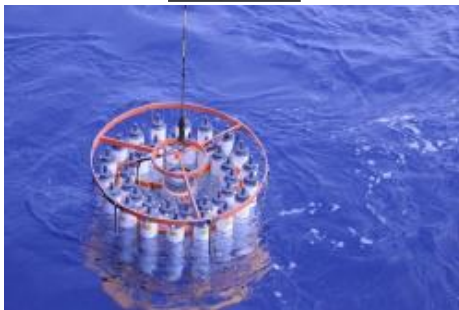
Trying to be the first one to catch sight of the rosette.



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Shrinking Cups 20

Do you see it?



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Shrinking Cups 21

Up she comes...



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Shrinking Cups 22

The tag team grabs it with the hooks.



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Shrinking Cups 23

Then, if nobody takes them from us, we toss our poles 'gently' back onto the deck. All the while telling ourselves not to panic. The rosette won't go anywhere until we are ready.



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Shrinking Cups 24
The lines are on. The cups are coming up. Bridgeview, these are your cups coming out of the trench.



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Shrinking Cups 25
Carolina brings the A-frame in.



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Shrinking Cups 26
Rob puts a third hook on the frame to help bring it in and put it down exactly where we want it.



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Shrinking Cups 27
Telling the winch operator to bring the rosette up...just a little bit.



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Shrinking Cups 28
On the deck.

Notice Rob's fist. He is telling the winch operator to stop. The rosette is just where we want it,

How can you tell that the cups have just come back up and that they are not about to go down?

Well, for one, the bag is somewhat smaller. But I can't tell from here. Can you? The most obvious reasons are that we have the hooks on the rosette and the bottles are closed.



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Shrinking Cups 29
Cutting the bag of cups off the frame being careful not to cut the wrong plastic tie. Don't laugh. We've wrong thing done it before.



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Shrinking Cups 30
The cups have arrived. Can you recognize any of them?



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Shrinking Cups 31
Once we have them out of the bag, we put them in a bucket of hot water.



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Shrinking Cups 32
We take the now very soggy paper towel out.



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Shrinking Cups 33
...And while they are still warm and wet, we attempt to mold them back into their original shape. For some of them, this is impossible, but most end up looking pretty much like smaller versions of their former selves.

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