

# Larvae from afar colonize hydrothermal vents

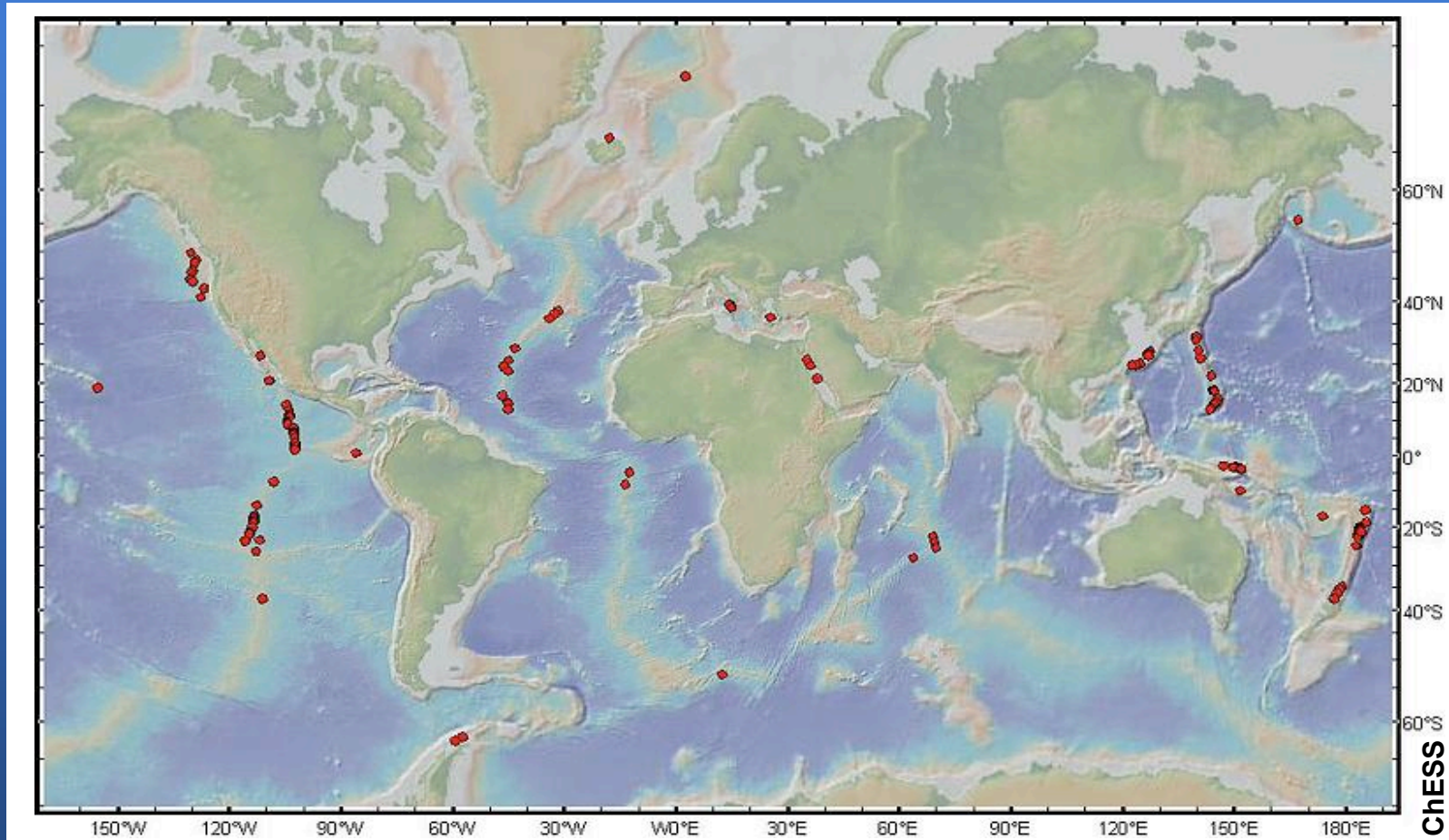


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Funded by the National Science Foundation



WHOI, BBC

# Hydrothermal vents on deep seafloor



Vent populations are: patchy  
transient (eradicated by eruptions)  
unable to disperse, except in larval stage

# Larvae of hydrothermal vent species



How often and by what means do larvae disperse?

# LADDER\* Team

A. Thurnherr (LDEO), D. McGillicuddy and J. Ledwell (WHOI), W. Lavelle (NOAA)



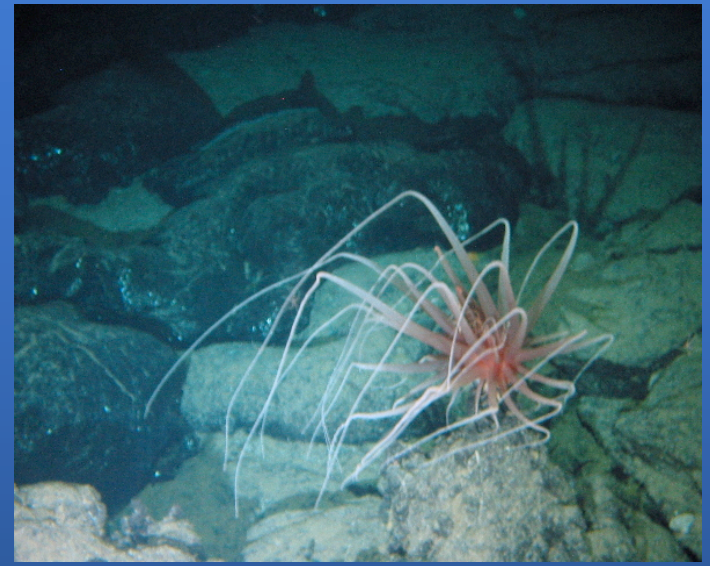
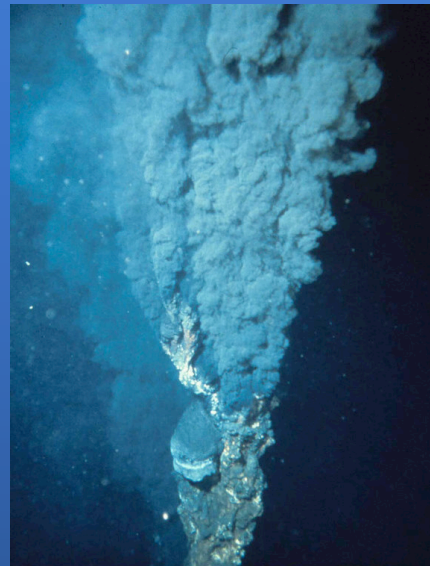
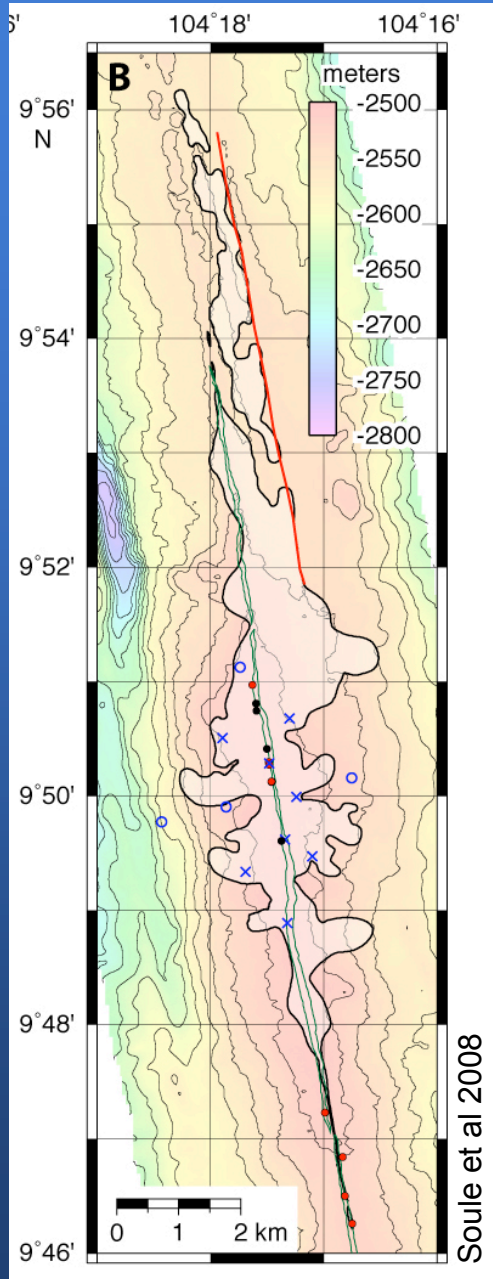
\*LArval Dispersion on the Deep East Pacific Rise

# Eruption at the 9°50'N EPR site!



Getty Images

# 9°50'N EPR Eruption



Some vents remained ... but not the animals ...

How does larval dispersal influence re-colonization after disturbance?

# Measuring larval supply ... and pioneer colonization

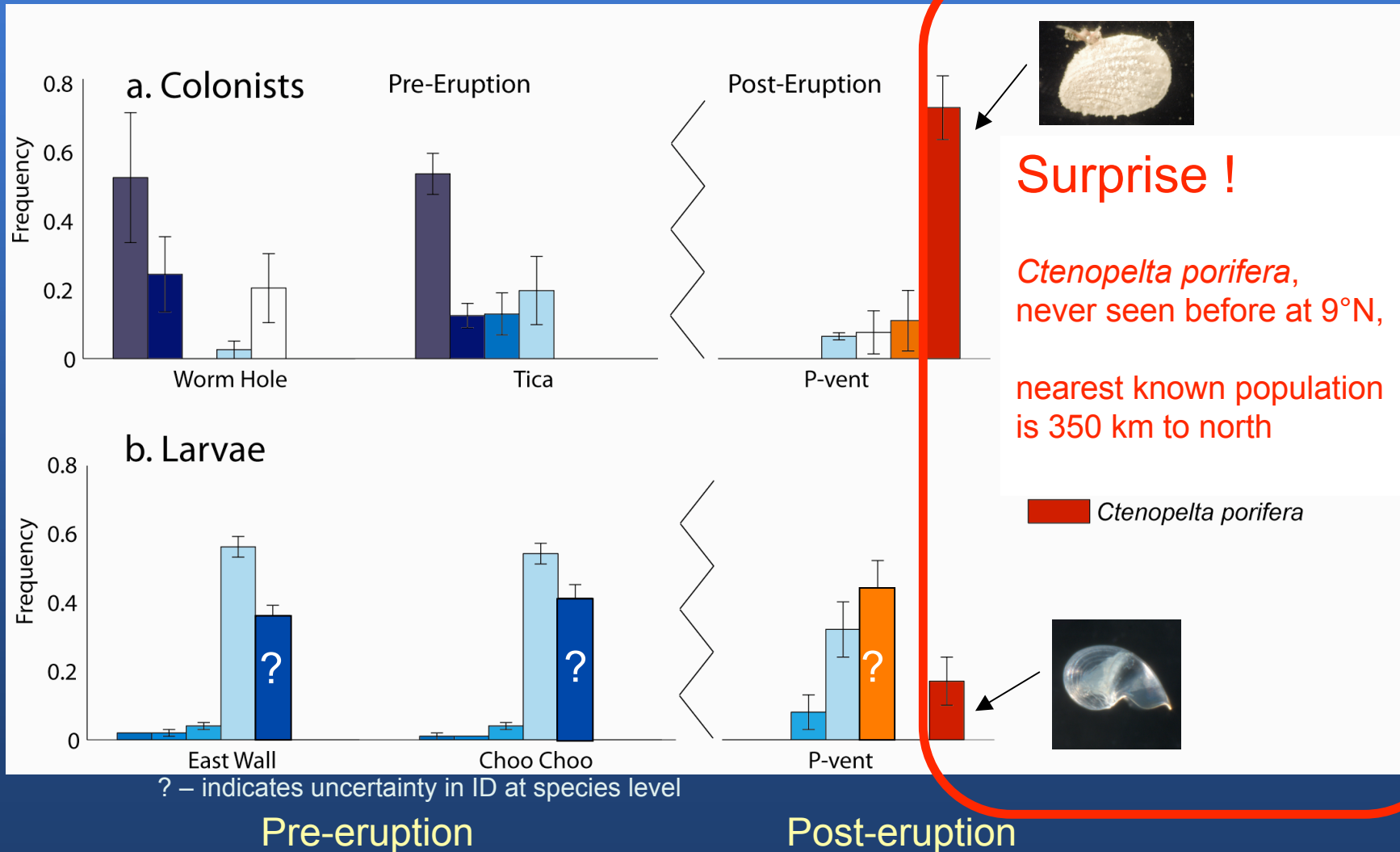


Time-series sediment trap



Basalt colonization surface

# Larval Supply & Colonization



# Larval dispersal and succession at vents

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Conclusion: pioneers invade from surprising distance

New question: how did the larvae disperse so far?

Implication: may result in lasting regime shift