A few summary presentation highlights with relevance to Ecosystem and Climate goals...

► Exploration for active volcanic and hydrothermal activity and associated ecosystems remarkably productive; ~175 new sites

► About 20% of the global spreading center and arc volcanic systems have been explored; more than 80% of the former by Vents and collaborators and 100% of the latter.

► SRoF discoveries lay the groundwork for measuring heat and chemical fluxes from an active deep volcanic eruption.

► Widespread deployment of hydrophones is beginning to yield a global perspective of the variability of the global ocean noise field.

► Observations of calcareous organisms in a naturally occurring environment reveal that they are highly stressed by show acidity caused by CO$_2$ venting.
NOAA PMEL Vents Program

Ocean Ecosystems on Submarine Volcanoes

Priorities for the Next Five Years

▶ Continue to explore volcanic arc ecosystems and processes

▶ Exploit high pH sites for quantifying impacts of ocean acidification

▶ Continue and expand acoustic and seafloor monitoring; “exploration in time domain”

▶ Partner with OER in development of new ocean exploration technologies utilization of tele-presence
**Preeminence:** Communication of Science Results Through Peer-Reviewed Publications

Total number of peer-reviewed publications: 419  
(average >17/year)

Currently 8 PIs (reduced during past 8 years by 4)

* 2008 total as of 7/1/08

Special Issues
1: Axial  
2: JdF  
3: SJdF  
4: CoAxial  
5: Gorda  
6: Axial  
7: Mariana

Vents Program
Performance: VENTS Funding Profiles

1984 to Present
Vents Base Funding Adjusted For Inflation

Adjusted to 2008 dollars using the Consumer Price Index calculator (http://www.dol.gov/dol/topic/statistics/inflation.htm)