

GERMAN RESEARCH VESSELS*

* except RVs from the Ministries of Defence (1 RV), Agriculture (3 RV), Traffic (6 RV)



POLARSTERN

- since 29 years
- more than 32 expeditions
- nearly 310 days per year
- November - March in Antarctic waters
- summer months in Arctic waters



- replacement of POLARSTERN is underway:
- scientific-technical requirements as well as shipbuilding-technical requirements were formulated
 - first design studies were contracted and carried out
 - discussions about the form of call for tenders are under way



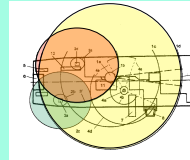
METEOR

- since 25 years 'flagship'
- now fulfilling its 84. expedition
- about 310 days per year at sea

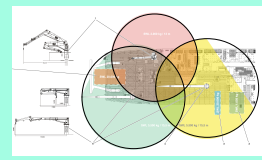


- still running strong with no problems
- new crane concept (see below)

old: 1 main crane covering whole working deck + 2 auxiliary cranes

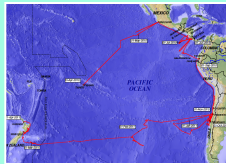


new: 3 rather similar cranes covering whole working deck



SONNE

- only privately owned ship in German fleet
- chartered by Federal Ministry of Education and Research for 250 days per year



- ship operates mainly in the Pacific and Indic
- replacement in 2014 by governmental owned DeepSea RV
- tender process is (hopefully) in its final stage



MARIA S. MERIAN

- newest ship of the fleet (2006)
- 310 days of service / year
- multidisciplinary



- problems with pod-drives solved (new collector rings)
- damages of last years collision with Greek ferry were compensated by insurance of ferry
- new seismic high pressure compressors (4 x 12 m³ / min)

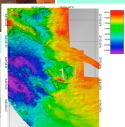


POSEIDON

- the 'old lady' of IFM-GEOMAR
- since 1976 nearly 386 expeditions
- major refit in 2010
- first time in Red Sea



- got class till 2015
- after 2015 replacement needed
- first scientific-technical requirements are formulated

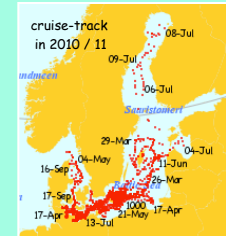


- major refit:
- navigation + motion sensors (Satlog, EM-log, 2-dimensional FG180 Motion Sensor)
 - air conditioning system (cabins + labs)
 - paintwork of skin + deck
 - overhaul of all winches + main crane
 - installation of new diesel engine
 - new data system (DShip) (as on METEOR, MERIAN + SONNE)
 - new multibeam echosounder (ELAC until 2.500 m depth)



ALKOR

- since 1986 multidisciplinary (including fisheries) research cruises and some student practicals
- major refit in 2010



- major refit:
- navigation + motion sensors (Dolog, 2-dimensional EM-log + motion sensor)
 - air conditioning system (cabins and labs)
 - paintwork of skin
 - new wooden deck (Oregon Pine / Bongossi)
 - overhaul of all winches + main hydraulic system
 - USV for labs and ship
 - shallow water sediment echosounder INNMAR SES2000 (as on Heincke)
 - shallow water mobile multibeam (ELAC)
 - extension for fishery echosounder EK 60
 - extension of sensor package for „underway measurements of surface parameters“



HEINCKE



- since 1986 multidisciplinary (including fisheries) research cruises and some student practicals
- 305 days of service
- 30 cruises in 2010