

# RV BELGICA ACTIVITY 2012

LIEVEN NAUDTS



MUMM | BMM | UGMM  
Management Unit North Sea Mathematical Models

**museum** Royal Belgian Institute of Natural Sciences

**belspo** Belgian Science Policy Office

## 1. General

RV Belgica 2012:  
Evaluation 165 planned days



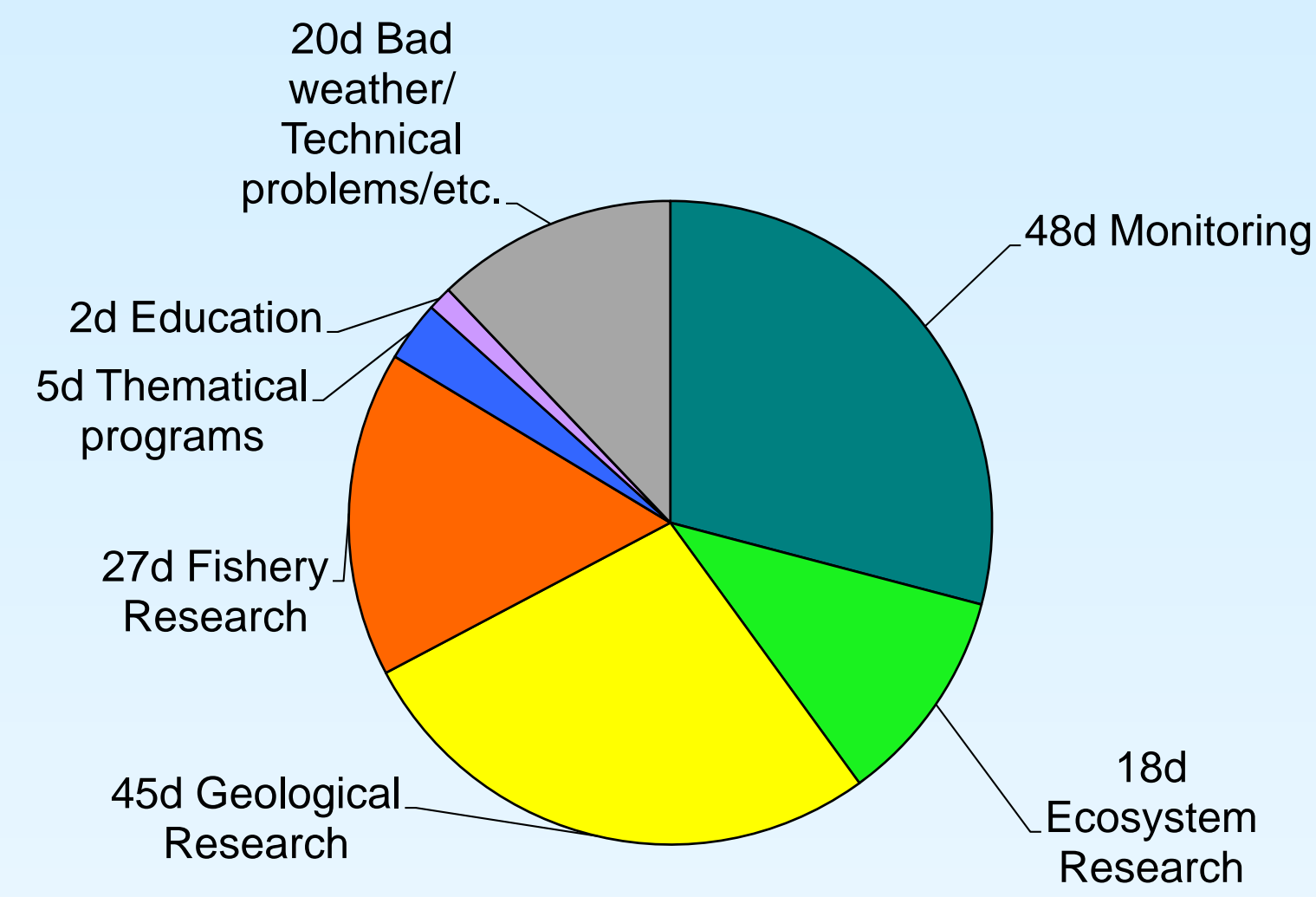
length: 50.9 m beam: 10.0 m draught: 4.6 m

Operated by Belgian Navy since 1984

Belgian Navy crew :15 pax  
Scientists :16 pax

Owned by Belgian Federal Science Policy

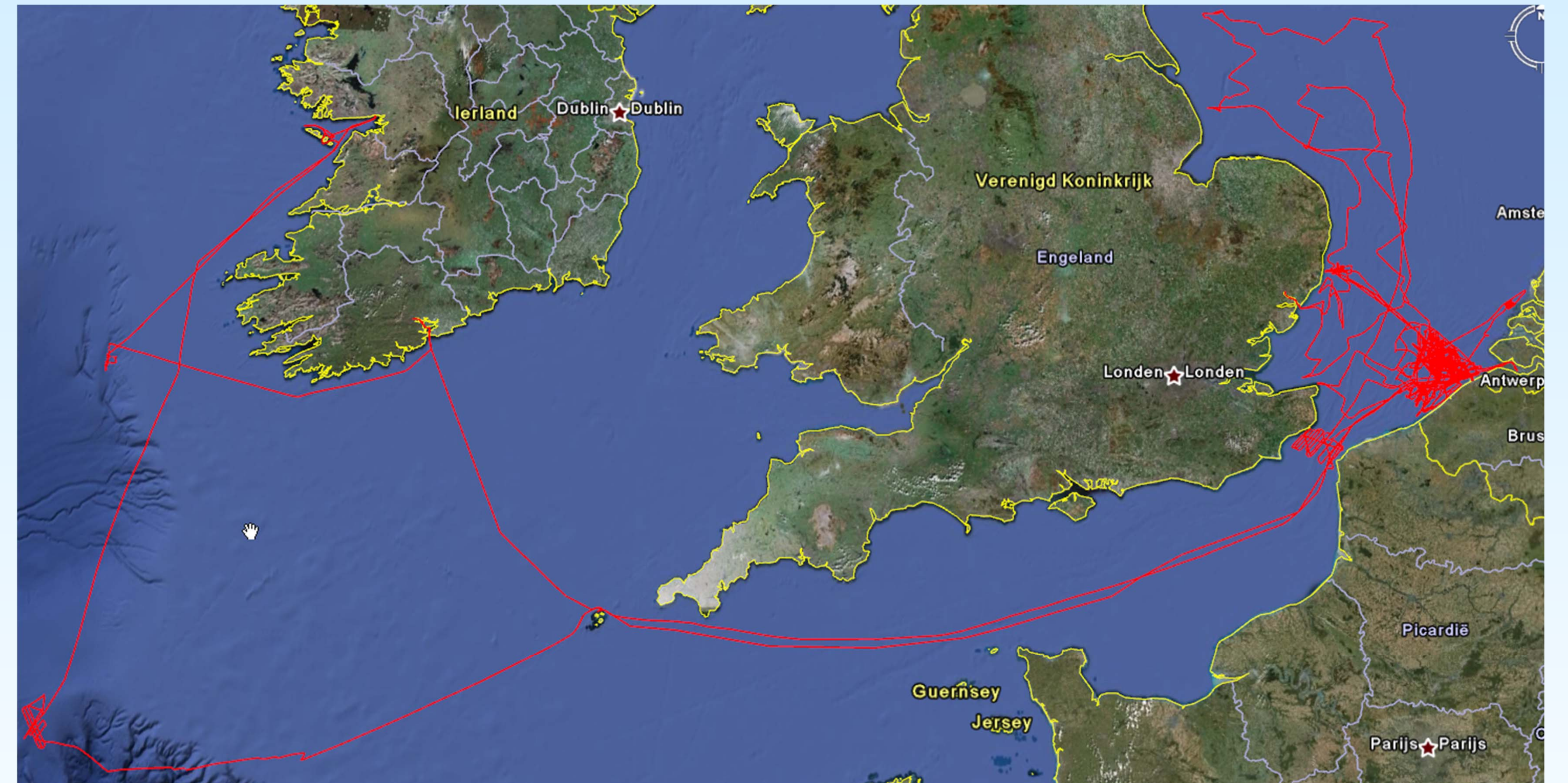
Coordinated by RBINS -MUMM



Day	Activity	Day	Activity	Day	Activity
1	Monitoring	55	Monitoring	101	Monitoring
2	Monitoring	56	Monitoring	102	Monitoring
3	Monitoring	57	Monitoring	103	Monitoring
4	Monitoring	58	Monitoring	104	Monitoring
5	Monitoring	59	Monitoring	105	Monitoring
6	Monitoring	60	Monitoring	106	Monitoring
7	Monitoring	61	Monitoring	107	Monitoring
8	Monitoring	62	Monitoring	108	Monitoring
9	Monitoring	63	Monitoring	109	Monitoring
10	Monitoring	64	Monitoring	110	Monitoring
11	Monitoring	65	Monitoring	111	Monitoring
12	Monitoring	66	Monitoring	112	Monitoring
13	Monitoring	67	Monitoring	113	Monitoring
14	Monitoring	68	Monitoring	114	Monitoring
15	Monitoring	69	Monitoring	115	Monitoring
16	Monitoring	70	Monitoring	116	Monitoring
17	Monitoring	71	Monitoring	117	Monitoring
18	Monitoring	72	Monitoring	118	Monitoring
19	Monitoring	73	Monitoring	119	Monitoring
20	Monitoring	74	Monitoring	120	Monitoring
21	Monitoring	75	Monitoring	121	Monitoring
22	Monitoring	76	Monitoring	122	Monitoring
23	Monitoring	77	Monitoring	123	Monitoring
24	Monitoring	78	Monitoring	124	Monitoring
25	Monitoring	79	Monitoring	125	Monitoring
26	Monitoring	80	Monitoring	126	Monitoring
27	Monitoring	81	Monitoring	127	Monitoring
28	Monitoring	82	Monitoring	128	Monitoring
29	Monitoring	83	Monitoring	129	Monitoring
30	Monitoring	84	Monitoring	130	Monitoring
31	Monitoring	85	Monitoring	131	Monitoring
32	Monitoring	86	Monitoring	132	Monitoring
33	Monitoring	87	Monitoring	133	Monitoring
34	Monitoring	88	Monitoring	134	Monitoring
35	Monitoring	89	Monitoring	135	Monitoring
36	Monitoring	90	Monitoring	136	Monitoring
37	Monitoring	91	Monitoring	137	Monitoring
38	Monitoring	92	Monitoring	138	Monitoring
39	Monitoring	93	Monitoring	139	Monitoring
40	Monitoring	94	Monitoring	140	Monitoring
41	Monitoring	95	Monitoring	141	Monitoring
42	Monitoring	96	Monitoring	142	Monitoring
43	Monitoring	97	Monitoring	143	Monitoring
44	Monitoring	98	Monitoring	144	Monitoring
45	Monitoring	99	Monitoring	145	Monitoring
46	Monitoring	100	Monitoring	146	Monitoring
47	Monitoring	101	Monitoring	147	Monitoring
48	Monitoring	102	Monitoring	148	Monitoring
49	Monitoring	103	Monitoring	149	Monitoring
50	Monitoring	104	Monitoring	150	Monitoring
51	Monitoring	105	Monitoring	151	Monitoring
52	Monitoring	106	Monitoring	152	Monitoring
53	Monitoring	107	Monitoring	153	Monitoring
54	Monitoring	108	Monitoring	154	Monitoring
55	Monitoring	109	Monitoring	155	Monitoring
56	Monitoring	110	Monitoring	156	Monitoring
57	Monitoring	111	Monitoring	157	Monitoring
58	Monitoring	112	Monitoring	158	Monitoring
59	Monitoring	113	Monitoring	159	Monitoring
60	Monitoring	114	Monitoring	160	Monitoring
61	Monitoring	115	Monitoring	161	Monitoring
62	Monitoring	116	Monitoring	162	Monitoring
63	Monitoring	117	Monitoring	163	Monitoring
64	Monitoring	118	Monitoring	164	Monitoring
65	Monitoring	119	Monitoring	165	Monitoring

Program 2012

Ship track 2012



sailed distance 2012: 8 600 nm

## 2. Activities

### Eurofleets CWC-MOIRA cruise:

- Cork – Galway
- 01- 08 May 2012
- 6 institutes
- 5 countries (CH, IT, IE, ES, BE)
- 9/15 pax: students
- 10/15 pax: women
- Cold-water coral investigations
- Moira Mounds
- USBL-guided box-coring
- Oceanography



### Increased monitoring activities BPNS:

- Wind mill farms
  - Fishery (P&I Club special clause)
  - Noise measurements – sea mammals
  - Bird counting
  - Artificial reefs (fish, megafauna, etc.)
  - sediment transport
- Dredging of harbors and dumping
- Sand and gravel extraction
- Sea water quality



### EGNOS-GALILEO test (ESA):

- Evaluation of EGNOS SATNAV for maritime purposes
- Evaluation of GALILEO signals



## 3. Ship: maintenance



- Sandblasting and painting superstructure
  - New paint system (Hempel 2 component epoxy)
- Installation VSAT
  - Intellian V110
  - 512/256 Kbit/s CIR – 1536/768 MIR
  - KU-band

### PROBLEMS:

- Since 2012, RBINS-MUMM needs to pay 21% VAT (as enforced by FPS Finances)
- VAT discussion led to blockage between RBINS-MUMM & Belgian Defence: no planned winter maintenance
- EC decided not the formal condition of the ship (military), but the main activity (science) is the deciding factor

## 4. Future challenge: RV Belgica II



2013: Budget study

<http://www.mumm.ac.be/>