

## *International Commitments for Argo Floats*

9 Sep 02

<u>Number of Floats by Country</u>	<u>Argo Funded FY99</u>	<u>Float Equiv's FY99</u>	<u>Argo Funded FY00</u>	<u>Float Equiv's FY00</u>	<u>Argo Funded FY01</u>	<u>Float Equiv's FY01</u>	<u>Argo Funded FY02</u>	<u>Float Equiv's FY02</u>	<u>Proposed over next 3 years</u>	<u>Prop Float Equiv's over 3 yrs</u>
Australia	10				13		7		93	
Canada	10		42		20		25		75	
China					10		8		105	
Denmark						5			30	
European Comm.			10		70				160	
France		8	3		50		95		115	
Germany				18		22		42	119	
India							31		300	
Japan			24	4	76	8	90		6	
New Zealand			2		2		2		90	
Norway							3		6	
Republic of Korea					19		25		30	
Russia		1		2		2	2	1	150	40
Spain									75	
United Kingdom			13		50	5	45	12	1238	75
<u>U.S.A.</u>	<u>55</u>		<u>132</u>	<u>51</u>	<u>174</u>	<u>43</u>	<u>275</u>	<u>7</u>	<u>2517</u>	<u>115</u>
<b>TOTALS</b>	<b>75</b>	<b>9</b>	<b>226</b>	<b>75</b>	<b>484</b>	<b>85</b>	<b>608</b>	<b>62</b>		
<b>TOTALS BY YEAR</b>	<u><b>FY99 = 84</b></u>		<u><b>FY00 = 301</b></u>		<u><b>FY01 = 569</b></u>		<u><b>FY02 = 670</b></u>		<u><b>Ave/Yr = 877</b></u>	

*This table reflects the year in which funds are provided for floats; it takes a year or more until such floats are available for deployment.*

*To achieve a global array of 3,000 operating floats—assuming that 90% of the floats have an average lifetime of four years (the other 10% fail early)—it is necessary for the international community to provide floats at a sustained rate of 825 per year.*

*A “Float Equivalent” is defined as a float—while not funded under the Argo Program— whose data are available consistent with the Argo Data Policy and provides the information equivalent to one Argo float.*

*This table and the accompanying annotation were reviewed and approved by the International Argo Science Team at its meeting in Hobart, Australia March 12-14, 2002.*

Australia – FY02 starts Jul 1, 02 – funded by Commonwealth Scientific and Industrial Research Organization (CSIRO) and Bureau of Meteorology (BoM); FY03/04/05 funding includes proposals for 7 floats/yr from CSIRO equipment fund and an additional 24/yr year as part of renewal bid for Antarctic Cooperative Research Center

Canada – FY starts Apr 1 – funded by Dept. of Fisheries & Oceans with potential funding from Dept. of National Defense, Environment Canada, and others

China - FY starts Jan 1 - funded by Ministry of Science & Technology (MOST); implemented by State Oceanic Administration in collaboration with other organizations; 6-10 are proposed for FY02 and 80-130 for FY03/04/05

Denmark – Niels Bohr Institute for Astronomy, Physics and Geophysics is deploying 5 floats in the Greenland Sea and is proposing 30 for next three years

European Commission – Gyroscope proposal—submitted by France, Germany, Spain, and U.K.—has funded 80 floats, with 40 for Institut fuer Meerskunde-Kiel and 40 for Institut Francais de Recherche pour l' Exploitation de la Mer

France – FY starts Jan 1 – Overall coordination under the national Coriolis Project; most funding from Institut Francais de Recherche pour l' Exploitation de la Mer, with smaller contributions from Centre National de la Recherche Scientifique (20 proposed for FY02) and Service Hydrographique de la Marine ( 3 funded in FY00; 15 proposed per year for FY03/04/05); an additional 8 floats were funded as part of POMME

Germany – FY starts Jan 1 – Argo proposal for 115 floats submitted by AWI/BSH/IfM to Ministry for Research & Technology (BMBF). Other floats include: Bundesamt fuer Seeschifffahrt und Hydrographie (BSH) has funded 18, 5 & 7 floats in FY00, 01 & 02 for Mid-Atlantic Ridg; Alfred Wegener Institute (AWI) has funded 10 floats in FY01 and will fund 5-10 floats in FY02 for Southern Ocean; Deutsche Forschungs Gemeinschaft (DFG) has funded Institute fuer Meerskunde-Kiel (IfM) for 7 floats in FY01 for Lab. Sea and 15 floats in FY02 for Indian Ocean; and 15 BMBF-funded IfM floats deployed in Tropical Atlantic will be included in FY02 when data are reported on GTS

India – FY starts Apr 1 – funded by Dept. of Ocean Development; implemented by National Center for Ocean Information Services (lead), National Institute of Ocean Technology, Center for Ocean and Atmospheric Sciences along with National Institute of Oceanography and 6 other academic/R&D/operational institutions

Japan – FY starts Apr 1 – funded by Ministry of Education, Culture, Sports, Science & Technology and Ministry of Land, Infrastructure & Transport; implemented by JAMSTEC, Frontier Research Program, Japanese Meteorological Agency (JMA), and Coast Guard; out-year commitment proposed to ramp up to 100+ floats per year; an additional 12 floats funded by JMA, ½ with 1000-m and ½ with 2000-m depth, all 7-day sampling and reporting data via GTS

**New Zealand** – FY02 starts Jul 1, 02 – funded and implemented by National Institute of Water & Atmospheric Research

**Norway**– FY02 starts Jan 1, 02 – funded and implemented by Institute of Marine Research (IMR)

**Republic of Korea** – FY starts Jan 1 – funded by Ministry of Science & Technology/Korean Meteorological Administration and Ministry of Marine Affairs & Fisheries; implemented by Meteorological Research Institute (METRI) and Korea Ocean Research & Development Institute (KORDI) under supervision of Korea Argo Subcommittee (KAS) of the Korea Oceanographic Committee

**Russia** – FY starts Jan 1 – 2 floats funded in FY02 by Hydromet; will be implemented by Far Eastern Regional Hydrometeorological Research Institute (FERHRI)

**Spain** – proposal submitted to Programa Nacional de Investigacion by Instituto Espanol de Oceanografia, Universidad de Las Palmas de GC, Instituto de Ciencias del Mar de Barcelona-CSIC and several other Spanish research institutions with decision ~ Feb 02

**U.K.** – FY starts Apr 1 – funded by Dept. for Environment, Food & Rural Affairs, Ministry of Defense, and Natural Environment Research Council; managed and implemented by U.K. Meteorological Office in collaboration with Southampton Oceanography Center, British Oceanographic Data Center and U.K. Hydrographic Office; out-year commitment to ramp up to 50 Argo floats per year, to be supplemented by 12 floats in research proposal currently under review and up to 40 additional floats over 3 years depending on successful bids for research funding

**U.S.A.** – FY02 starts Oct 1, 01 – funded by NOAA and Office of Naval Research via National Oceanographic Partnership Program; pending NOAA FY03 budget commitment to provide ½ of the global array; other contributions are from Naval Oceanographic Office (Navoceano, 16 in FY00, 20 in FY01) and NOAA via Consortium for Ocean Research & Climate (35 in FY00, 20 in FY01); an additional 75 equivalent floats by Navoceano are dependent on availability of funding; includes 3 equivalent floats funded by NOAA/OAR/Arctic Program Office for deployment in the Bering Sea in FY01 and 7 in the Bering Sea and subpolar N Pacific for FY02; 412 floats per year requires annual funding at a level of ~\$10M