## Marine Climatological Summaries Scheme

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The Marine Climatological Summaries Scheme (MCSS) was established by the World Meteorological Organization (WMO) in 1963 to develop and maintain a joint effort of all maritime Members in the collection of marine meteorological data and the production of climatological statistics for the sea areas. To achieve this objective, eight Responsible Members (RMs) were appointed - Germany, Hong Kong, India, Japan, Russia, the Netherlands, UK and USA. Each of the eight RMs was assigned a specific area of responsibility (please see Figure 1) for which they were to manage and archive the weather observations reported by the Voluntary Observatory Ships (VOS). Hong Kong is responsible for the South China Sea area from the Equator to 30°N and from 100°E to 120°E.

VOS are ships recruited by meteorological centres for taking and transmitting weather observations at sea while plying the various oceans of the world. These meteorological centres, known as Contributing Members (CM), are responsible for collecting observation data from their fleet of VOS, applying quality control measures to the data and regularly submitting these data to Global Collecting Centres (GCCs).

The GCCs are the collecting, processing and distribution points for VOS data under MCSS. They were established in 1993 at the meteorological centres of Germany and UK to improve the flow and quality control of the global marine data. After collection of VOS data from CMs, the GCCs will subsequently check the compliance of these data against the pre-established Quality Control Standards and then re-distribute the quality checked data to the eight RMs once every quarter. The RMs will archive these data and prepare climatological summaries for their areas of responsibility.

Hong Kong, represented by the Hong Kong Observatory (HKO), is both a CM and a RM under MCSS. Being a CM, HKO has contributed continuously for 18 years since the GCCs began operation in 1994 (please see Tables 1 extracted from the GCCs Annual Report 2011). As a RM, HKO has compiled and published marine climatological summaries for 1961-1970, 1971-1980 and 1981-1990 in accordance with WMO requirements.

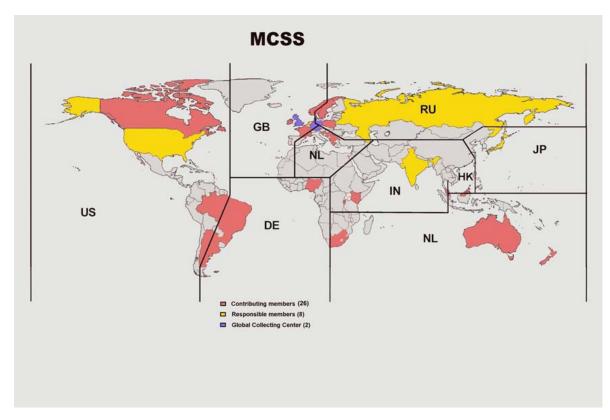


Figure 1. Responsible/Contributing Members under the MCSS

	ISO Alpha- 2 code																			Number of Years with Contributions 1994 - 2011
		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Argentina	AR								Х		Х	Х	Х	Х	Х	Х				7
Australia	AU							Х		Х	Х	Х	Х		Х	Х	Х	Х	Х	10
Brazil	BR	Х	Х	Х	Х															4
Canada	CA																		Х	1
Croatia	HR				Х	Х	Х	Х	Х											5
France	FR	Х	Х	Х	Х	Х			Х		Х	Х	Х	Х	Х	Х	Х		Х	14
Germany	DE	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	18
Greece	GR																	Х		1
Hong Kong, China	нк	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	18
India	IN	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	18
Ireland	IE			Х	Х	Х				Х							Х	Х	Х	7
Israel	IL		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	16
Japan	JP	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	18
Kenya	KE																			0
Malaysia	MY	Х		Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	16
Netherlands	NL	Х	Х	Х		Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	16
New Zealand	NZ													Х	Х	Х	Х	Х	Х	6
Nigeria	NG																			0
Norway	NO	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х			15
Poland	PL	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	18
Russian Federation	RU		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	17
Singapore	SG		Х	Х	Х	Х					Х	Х	Х	Х						8
South Africa	ZA						Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	13
Sweden	SE			Х													Х	Х	Х	4
United Kingdom	GB	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х		Х	Х	Х	Х	Х	Х	16
United States	US	Х	Х	Х	Х	Х	Х	Х		Х	Х				Х	Х	Х	Х	Х	14

Table 1. CM contribution by year since GCCs began operations in 1994