THE NEIGHBORING SEAS OF KOREA

SCHEMATIC MAPS OF SURFACE CURRENTS

Korea Hydrographic and Oceanographic Agency

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Science based schematic maps of ocean surface currents in the neighboring seas of Korea

Korea Hydrographic and Oceanographic Agency

Schematic Maps of Surface Currents

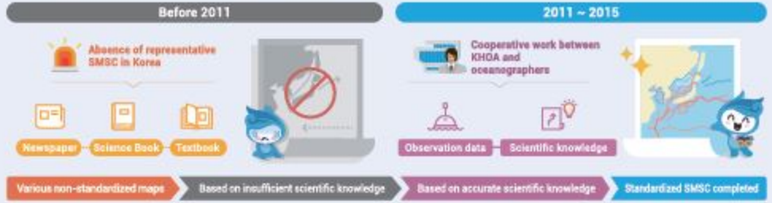
in the Neighboring Seas of Korea

Ocean currents are important to weather and climate.

Currents represent the continuous movement of seawater that carries heat and salt around the oceans.
They strongly affect the weather, climate and marine environment around Korea and in the northwest Pacific Ocean.

Why do we need standardized schematic maps of surface currents ?

Before 2011, a range of different schematic maps were used to explain surface currents for various purposes. Such maps, displayed via diverse media (including in broadcasts, textbooks, and scientific journals), hindered people understanding the oceanic currents in a consistent manner. In order to convey scientifically accurate surface current information, the Korea Hydrographic and Oceanographic Agency (KHOA) has been working with ocean experts since 2011 to construct standardized 'Schematic Maps of Surface Currents (SMSC)' that accurately represent flows of seawater around Korea.



Who can use the new standardized schematic maps of surface currents ?

Because the new maps can be used to help understand surface circulations in the seas around Korea, they are expected to be very useful for marine experts, maritime transport, school education, and the general public.

Where to access them?

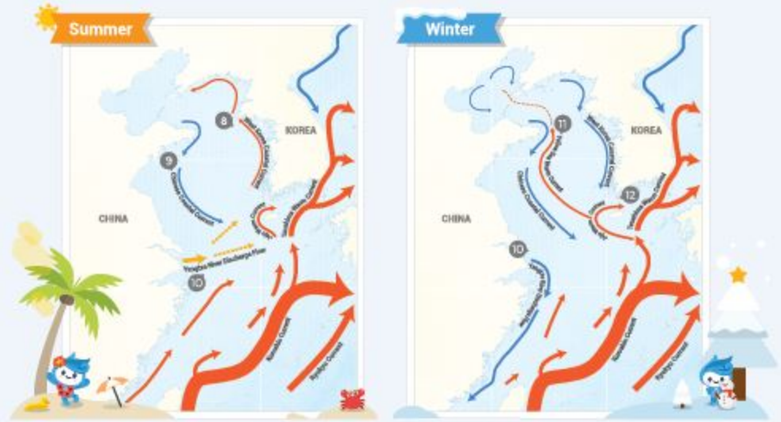
KHOA web site (http://www.khoa.go.kr/oceangrid/koofs/eng/seawf/sea_wflow.do)
Here you can access files containing the SMSC images and digitized current data.

Education

Schematic Map of Surface Currents

Simplified version for school education

Surface currents in summer and winter



Characteristics of major currents and flow around the Korean peninsula

East Sea

1	East Korea Warm Current	Warm current flowing northward along the east coast of Korea
2	Tsushima Warm Current	Warm current flowing through the Korea Strait into the East Sea
3	North Korea Cold Current	Cold current flowing southward along the northeast coast of the Korean peninsula
4	Primorye Cold Current	Cold current flowing south-westward along the south coast of Russia

Northwest Pacific Ocean

5	Kuroshio Current	The northwest Pacific Ocean western boundary current, which flows along the southeast coast of Taiwan and southern coast of Japan, and is characterized by high temperatures and highly saline waters.
6	Ryukyu Current	Current flowing north-eastward along the southeast coast of the Ryukyu Islands
7	Oyashio Current	Current flowing south-westward along the Aleutian Islands, in the northwest Pacific Ocean

Yellow Sea and East China Sea

8	West Korea Coastal Current	Current flowing along the west coast of Korea, characterized by warm northward flowing waters in summer, and cold southward flowing waters in winter
9	Chinese Coastal Current	Current flowing across the western Yellow Sea from north to south
10	Yangtze River (Changjiang) Discharge Flow	Current flowing from China's Yangtze River (Changjiang) mouth, towards the northeast in summer and the southwest in winter
11	Yellow Sea Warm Current	Warm, subsurface wintertime current flowing northward through the middle of the Yellow Sea
12	Jeju Warm Current	Warm current flowing clockwise from the south coast of Jeju Island around to, and through, the Jeju Strait