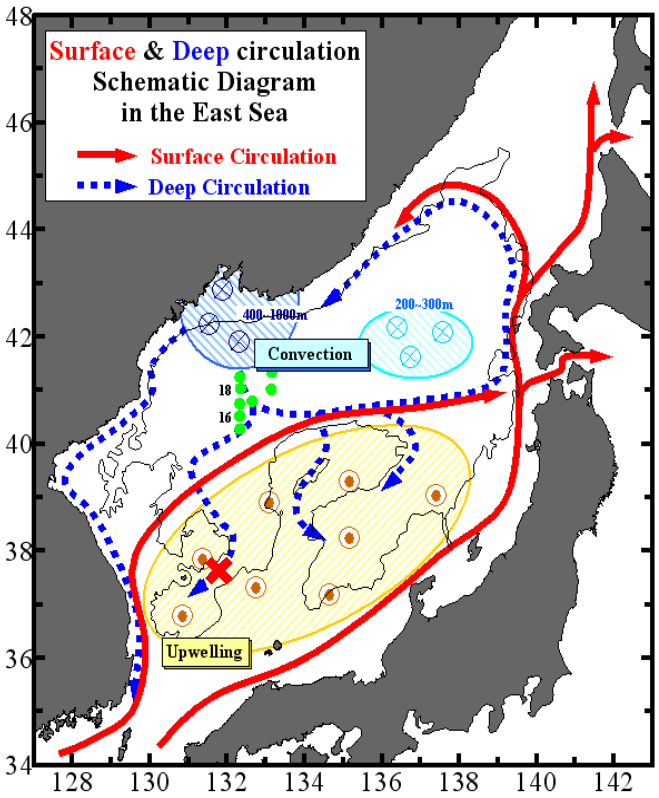
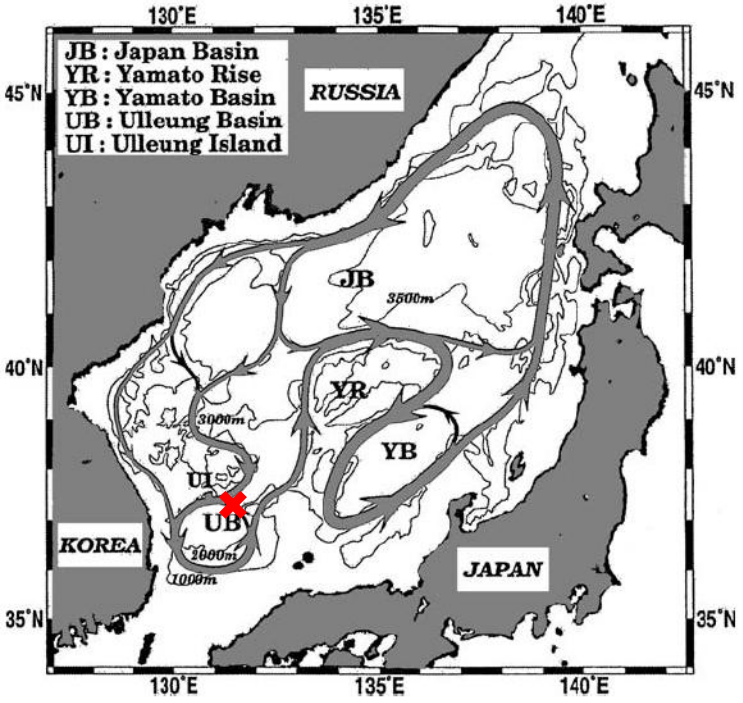
Marginal Sea OceanSITES site: East/Japan Sea (EC1)

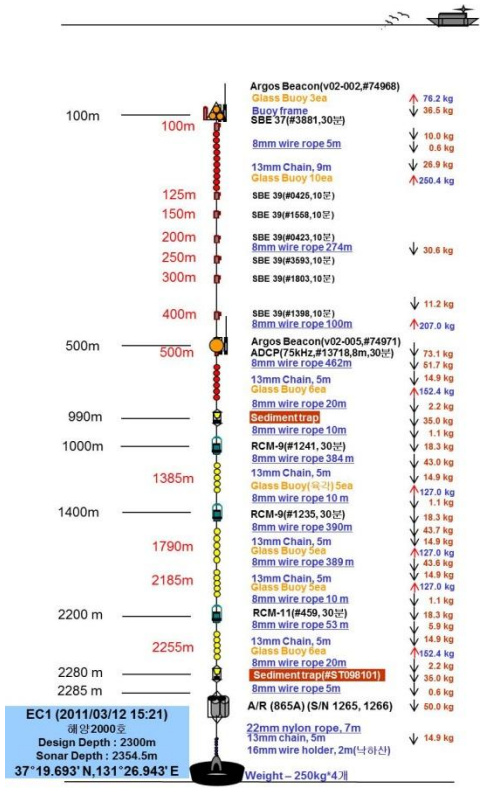


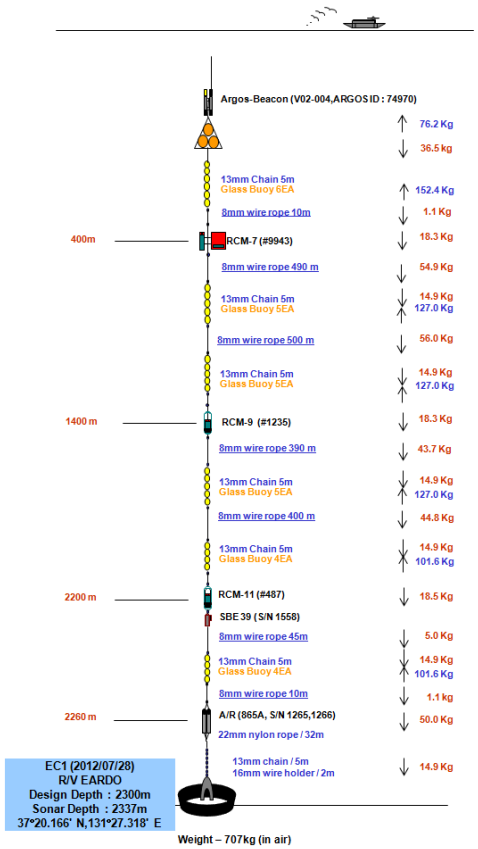


- Subsurface current meter mooring at 2300 m since 1996
- Normally the mooring carries 3 CMs at 400, 1400, 2200 m
- To quantify the deep water exchange discharged to the south from the water mass formation area in the northern EJS
- Endorsed as an OceanSITE sites in Dec. 2011

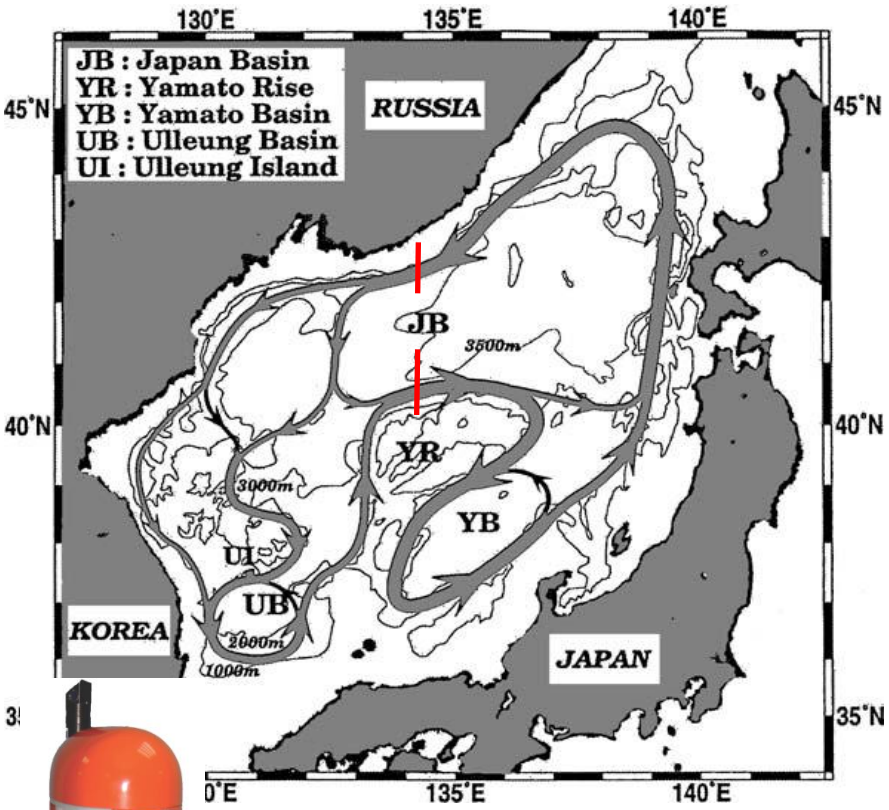
EC1 in 2012~2013

- Mooring turnaround in July 2012 recovery of mooring deployed in March 2011, re-deploy mooring which will be recovered in 2013
- 75 kHz ADCP, microcats in the upper 400 m, CMs at standard depths, 2 sed. traps (2011~2012)
- Standard configuration with 3 CMs and a deep microcat (SBE39) at 2200 m (2012~2013)





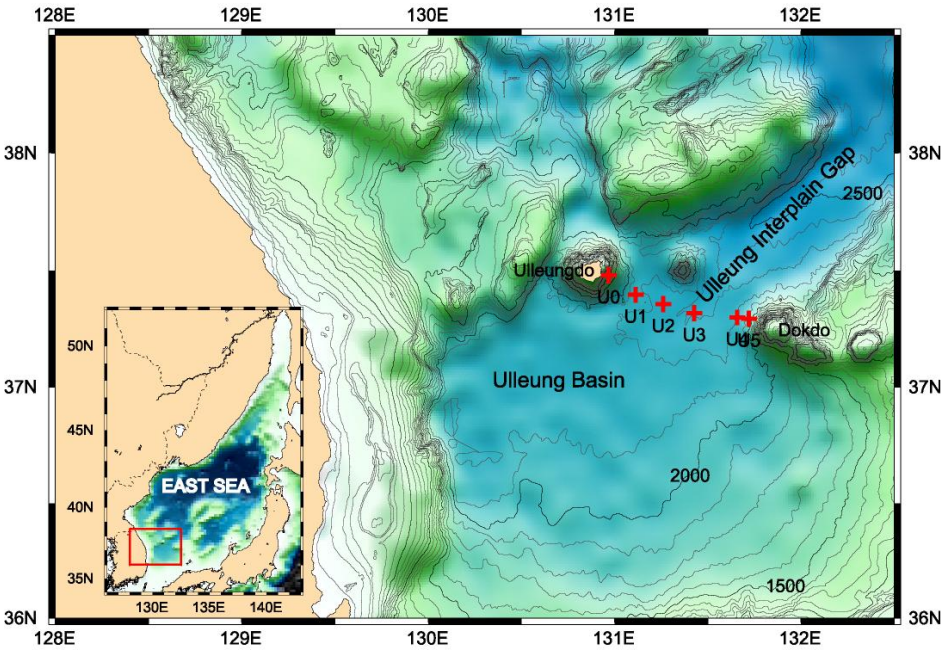
Plan for 2013~2014



- Mooring turnround EC1
- Moored current measurement in the northern EJS: two-arrays of moorings with 2 profilers and three subsurface moorings
- One of them is planned to be maintained as a long-term station.
- To quantify northern cyclonic deep gyre and variability
- SNU (KI Chang), KIOST (JH Park), POI (V Lobanov), SIO (A Ostrovskiy)

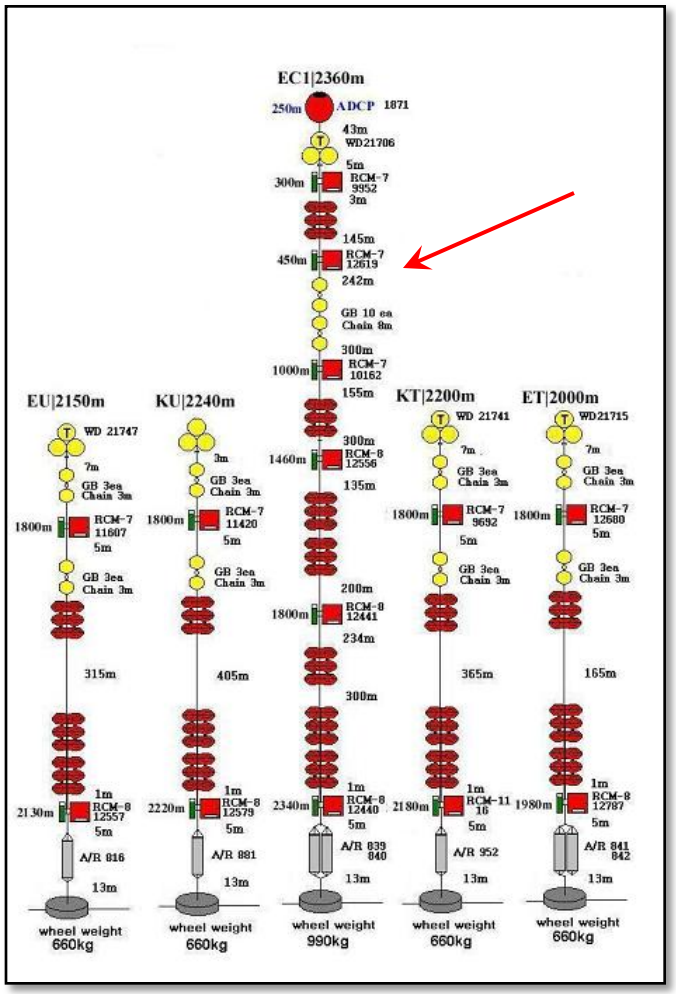
Products (EC1)

➢ Indexing of deep water volume transport through the channel based on long-term single mooring in the gap



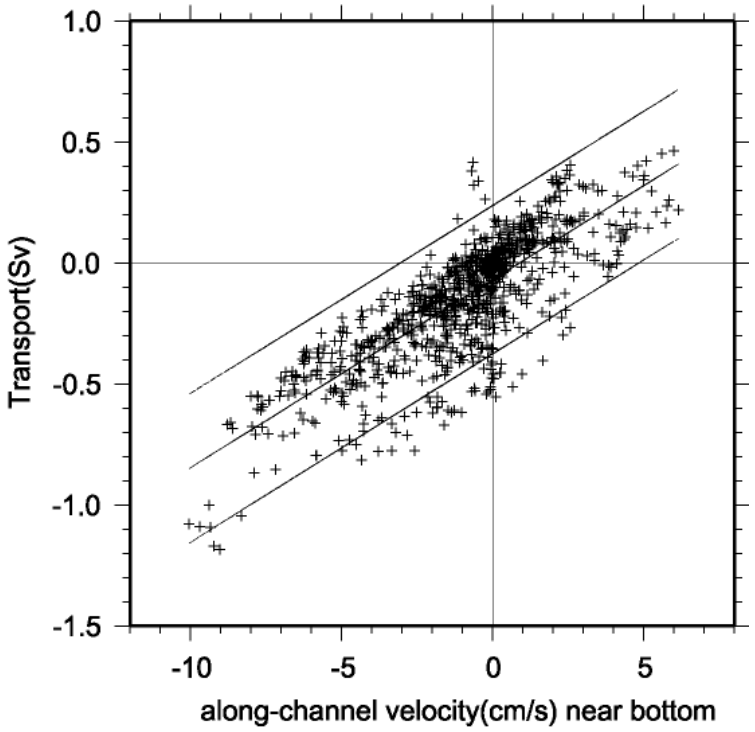
U3 = EC1

Nov. 2002/11~April 2004



1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007

Product (EC1)



$$Tr\ (Sv) = 0.078 \times Ur\ (cm/s) - 0.068$$

- Correlation between near-bottom along channel currents and deep water transport through the channel
- Reconstruct long-term volume transport time series
- Now transport monitoring based on single mooring
- Seasonal & interannual variability but no long-term trend in this 17-year data

Current Measurement in the UIG