

## ***Interactive comment on “Time-series measurements of biochemical and physical properties in the southwestern East/Japan Sea during the spring transition in 2010” by Y.-T. Son et al.***

### **Anonymous Referee #2**

Received and published: 8 July 2013

This paper presented a detailed high-resolution record of various biological and physical properties in the Ulleung Basin. I believe it is for the first time documented. However, it looks like that the authors intended to report everything. I have to admit that reading the manuscript to the end requires patience. Meanwhile, I do not think attributing the onset of the spring bloom to the ESIW is convincing.

I do not think it is suitable for publication on BG as its current form, although the data collected is certainly of value.

Specific comments:

C3289

#### **1. On the title**

Can a better title be derived? The current one looks like a data report.

#### **2. On the abstract**

It looks carrying a bunch of information. It should be more concentrated after you get to one point, the sole of which would be the title. Please also note the typo in Line 27.

#### **3. On the introduction**

This part is not written well. Readers can't see one clear scientific question following your logic.

#### **4. On the data and methods**

I do not think it is necessary to explain everything, particularly the details of the WQM. One sentence noting that valid data were not available due to sensor damage would be enough.

#### **5. On the results and discussion**

There are too many subtitles in the results but no subtitles in the discussion. If the point is interpret the mechanism triggering the bloom, I would like to suggest to focus on variations of CF at 30 m and also at the other two layers (as mentioned in the methods, there were two more fluorometers above and below the 30 m WQM), and put the physical variations and the basin scale pattern (say, satellite observations) in the discussion. The most important is to convince people that the ESIW played a critical role. I do not think the current discussion (P7852-7853) did. It is hard to believe that anomalously cool water at 100 m could be a solid indicator of ESIW intrusion.

#### **6. Line 7854, Line 17-18, what happened to the symbols you use for vertical velocities (now they were three circles)?**

C3290

C3291