The paper reports the results of oxygen isotope studies at two Greenland glaciers that have different histories. The limited studies at the post-surge Kuannersuit Glacier (no data for snow) indicate an absence of diurnal variations of the isotopic composition of river water discharging from the glacier. The authors conclude that the 1995-99 surge disrupted the internal/subglacial drainage system, as well as producing an enlarged surface area of glacier ice, and that glacier drainage during the period of observations (2000-2005) had not reverted to the pre-surge state. At Mittivakkat Gletscher, studies undertake each year from 2003 until 2009 provide the basis for isotope analysis and hydrograph separation. The principal aim was to identify the relative contributions of ice melt and snow melt to glacier river discharge. Overall, the paper is well organized and has adequate references.

A paragraph (p 6 l 6-13) discussing δD analysis is not relevant t the paper and should be omitted.

The paper is well written and the organization is fine. However, some points require clarification and some of the figures should be redrafted to improve ease of interpretation.

The paragraph in p6 (l 20-24) is unclear. The authors give values for the number of samples and "standard deviation variability" for three years and conclude that these "indicate that the glacier runoff was not well-mixed in 2003". Without being given full data or, at least, the range of values around the standard deviation, it is not clear why this conclusion was drawn or why the results may indicate that "parts of the drainage system merged close to the glacier portal".

In order to undertake hydrograph separation, it is necessary to arrive at $\delta^{18}O$ values for the end members, ice and snow melt. Three pits excavated in 1999 at altitudes of 269-675 m a.s.l. provide data for winter snow composition. For each site, the number of samples, the mean and range of $\delta^{18}O$ values is provided. However, an overall mean (-16.5±0.6‰) value is quoted and subsequently is used as the basis for hydrograph separation. It would have been useful to have had more data presented here. For ice, a range of -13.3‰ and -15.0‰ is indicated, based on two groups of samples taken at 10 m intervals along about 4 km, and the mean (-14.1‰) is used as the basis for hydrograph separation. Again, more information about the distribution of the data within the range would have been useful.

In discussing $\delta^{18}O$ characteristics (Section 4.2), the authors suggest that mean values in the early melt season of 2005 were characterised by an increasing trend, but were similar to those in the peak flow period (p 8 l 17). From this, they conclude that "the onset of ice melt commenced before the the early melt season campaign". Whilst this may be true, it would be useful to have some indication of the likely timing of the beginning of melt. (Figure 2a here is poor. It would be useful to have individual values indicated. The $\delta^{18}O$ scale might be changes. There is no specific need for this to be the same as in Figure 2b. The difference of values in 2005 and 2008 is indicated in the text.)

The discussion of the events of 2004 is marred by the difficulty of comparing the different plots in Figure 3. Which is midnight and which midday? Vertical lines spanning all four plots would make it easier to follow the account provided in the lower part of p 8.

The account of transverse variations of $\delta^{18}O$ values at Kuannersuit Glacier is interesting. Although the authors suggest that "relatively high δ^{18}values were observed along both lateral margins" (p 11 l2), Figure 7 indicates only one value lower than -20‰. This does not detract from their argument that marginal ice may have been transported from higher sites during the surge. Isotope studies of surged glaciers are lacking and it is good to have the Kuannersuit Glacier data.

Minor points:
P 3 l30 vary for deviate
P8 l 27 periods for period
P 11 l 21 5 for 4