In the first line of the proof of Lemma 5.2 we are actually using $4 \delta_{q+2} \leq \delta_{q+1} \lambda_{q}^{-\alpha}$ (which is also correct).

Moreover the last inequality in (6.9) is not quite right and should rather be

$$
\lesssim \frac{\delta_{q+1}^{1 / 2} \delta_{q}^{1 / 2} \lambda_{q}}{\lambda_{q+1}^{1-\alpha} \lambda_{q}^{-3 \alpha / 2}} \lesssim \frac{\delta_{q+1}^{1 / 2} \delta_{q}^{1 / 2} \lambda_{q}}{\lambda_{q+1}^{1-3 \alpha}}
$$

Since our goal is to prove (6.1), the latter inequality still serves our purposes.
Thanks to Manh Khang Huynh for pointing out these errors.

