

Dear reviewers,

We appreciate for your helpful comments. According to your comments, we have revised my manuscripts.

Our reply to your comments as follows. Revised manuscripts contains all of these points. All sentence which were added or corrected according to your comments were highlighted in yellow in the file “Kunpei NOJIRI_proceeding of OS2016_REVISIED_Highlighted FOR REVIEWERS”.

Additonally, we improved sentences of our original manuscript. We indicate such changes using green highlight in the file of highlighted version.

1. For understanding, in what experimental conditions one carried out the experiments, it would be good to write particle and energy flows in the D-module.

In the case of no additional gas supply into the D-module in the period from $t = 180$ ms to 280 ms (hatched region in Fig. 2a and b in the revised manuscript), we estimated the particle flux by using ion saturation current measured by Langmuir probe #1 installed near the corner of the V-shaped target and it was $\sim 3 \times 10^{21} \text{ m}^{-2} \text{ s}^{-1}$. Though there was no direct measurement of heat flux in the discharges, typical value of the heat flux measured by a calorimeter at the corner of the V-shaped target for similar discharge is $\sim 0.1 \text{ MW m}^{-2}$ as mentioned in [Y. Nakashima et al., Fusion Sci. Technol., 68, 28, (2015)].

2. It is not clear what the temporal evolution of electron temperature and plasma density in the discussed experiments. As a result, no clear complete experimental conditions for figures 2 and 3. If there exist – show a temporal Langmuir probe data, for example.

We have added temporal Langmuir probe data as well as temporal hydrogen pressure data, upstream electron line density in the case of 800 mbar plenum pressure in Fig. 2b as an example.

3. Values on the axes in the figures are less than 10Pt, one difficult to read.

We fixed the size of the values on the axes in the figures.

Sincerely yours,

Kunpei Nojiri

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