

Article Ref: OS2016

Title: Study of The Impurity Transport by Injecting The Gas to D-module in GAMMA 10/PDX

Author: T. Yokodo, et al.

Dear referee,

Thank you very much for your valuable comments. According to your comments, we revised the manuscript as follows.

1) About Xenon

As the referee pointed out, there is another possibility of the decrease of the light emission of Xe II.

Thus, we soften the conclusion and we added the following sentence in summary:

“Two following reasons are conceivable, the first reason is that friction force against  $Xe^+$  flow from the end-cell become stronger therefore the  $Xe^+$  density was decreased in the plug/barrier-cell and for second reason is that the ionization progress of  $Xe^+$  to  $Xe^{2+}$ .”

2) About Carbon

According to the referee's comments, we modified the interpretations as follows:

“However, the rapid increase of C III was due to the increase of  $n_e$  and also presumably involved with  $T_e$ , because ECH would raise electron temperature.”

3) Graph

According to the referee's comment, we modified figure 2 (e) and (f).

4) Misprint

According to the referee's comments, we fixed misprints in the document in the following sentence.

H → N

5) Correction of documents

Page 2 “Spectrum measured with exposure time of 40 ms, wavelength resolution is 0.031 nm FWHM @656.27 nm.” Means SR500i instead of Spectrum?

According to the referee's comments, we modified the sentence as follows

“Spectrum measured by SR500i with exposure time of 40 ms, wavelength resolution is 0.031 nm FWHM @656.27 nm.”

Thank you again for your comments.