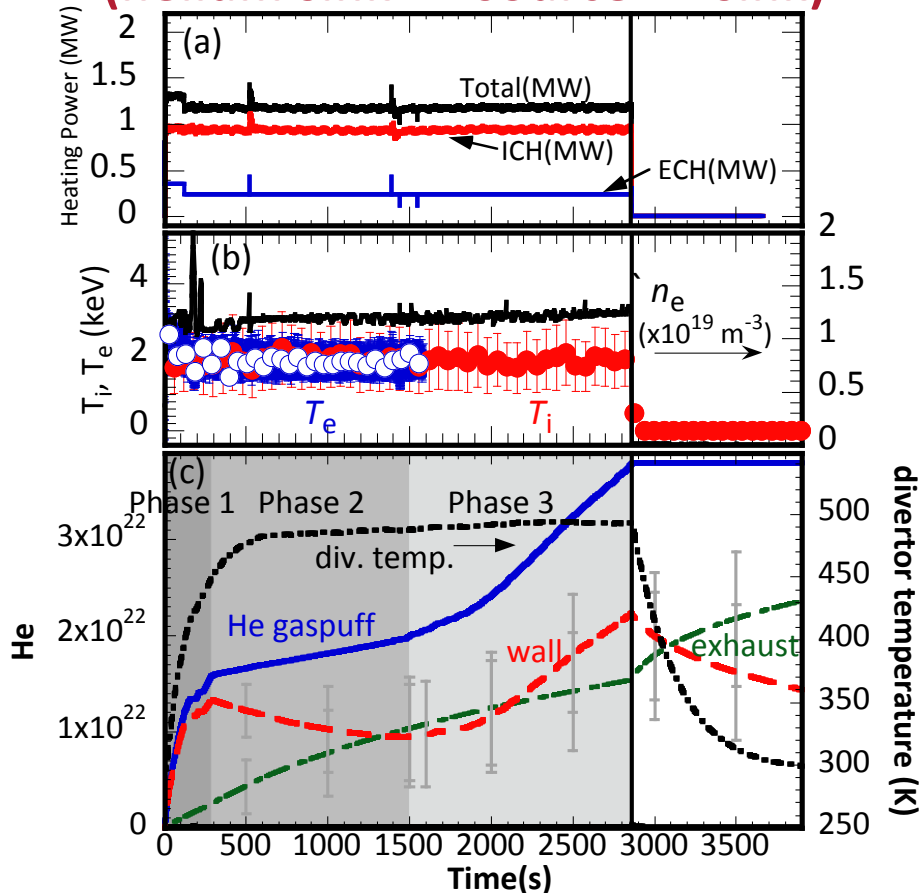




Global particle balance and its relationship with the plasma wall interaction emerging in long pulse discharges on the Large Helical Device EX/P8-3

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Phased wall retention observed in 48 min discharge (helium sink → source → sink)

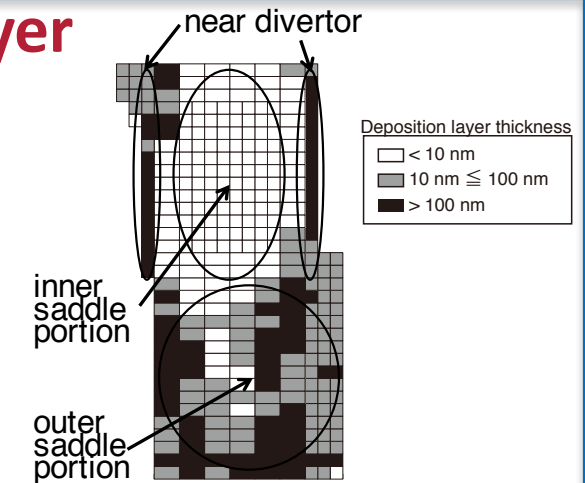


Co-deposition layer (on First wall)

< 348 K

- Sample analysis
- Deposition layer quantification by optical reflection measurement

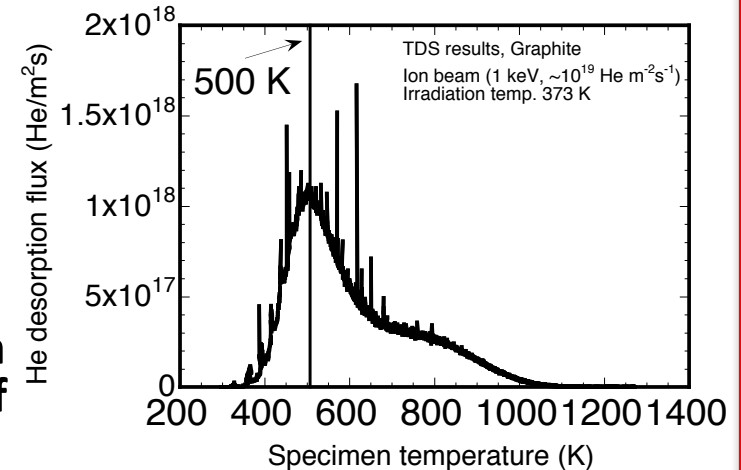
Constant helium retention



Graphite (Divertor)

< ~500 K

- Sample analysis
- Desorption of retained helium with increase of temperature



The difference of the retention characteristics in the plasma facing materials and the difference of their temperature may qualitatively explain the phased wall retention.