

## Khurana Jupiter Current Sheet Structure Model 2022 Python User Guide

The program calculates the current sheet structure at Jupiter at a particular point in space and time.

### ## Instructions

Call the Python function `csheet\_struc` with the input parameters of the desired location in space, given separately as `R`, `theta`, `phi` in System III coordinates, and `XJSO` and `YJSO` in Jupiter-Sun-Orbit coordinates, as well as time argument `ctime` in UNIX time. The output is `ZNS3`, the height of the current sheet in System III.

### ## Main Python Function Call

```
``` Python
```

```
csheet_struc(R,theta,phi,XJSO,YJSO,ctime)
```

```
```
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```
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```

Arguments:

INPUT: R,theta,phi : position in System III

XJSO,YJSO : position in JSO

ctime : UNIX time

OUTPUT: ZNS3 : height of the current sheet in System III

```
```
```

### ## Other Useful Information

Helpful information on the Jupiter coordinate systems, such as System III and JSO:

[https://lasp.colorado.edu/home/mop/files/2015/02/CoOrd\\_systems7.pdf](https://lasp.colorado.edu/home/mop/files/2015/02/CoOrd_systems7.pdf)

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### ## Contacts

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