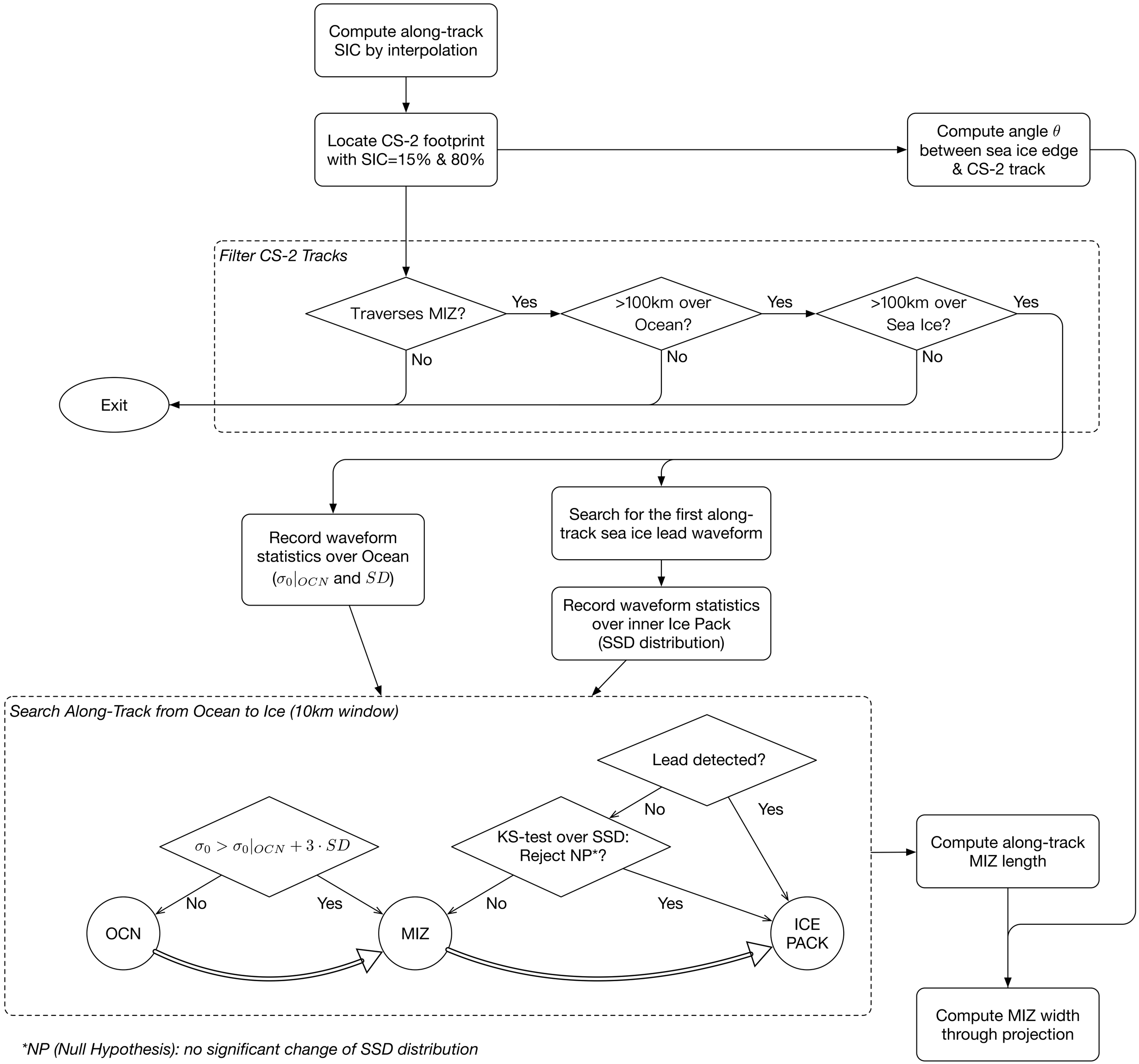
Compute along-track SIC by interpolation
Locate CS-2 footprint with SIC=15% & 80%
Compute angle θ between sea ice edge & CS-2 track
Filter CS-2 Tracks
Traverses MIZ?
Yes
No
>100km over Ocean?
Yes
No
>100km over Sea Ice?
Yes
No
Exit
Record waveform statistics over Ocean ($\sigma_0|_{OCN}$ and SD)
Search for the first along-track sea ice lead waveform
Record waveform statistics over inner Ice Pack (SSD distribution)
Search Along-Track from Ocean to Ice (10km window)
Lead detected?
No
Yes
$\sigma_0 > \sigma_0|_{OCN} + 3 \cdot SD$
No
Yes
KS-test over SSD: Reject NP*?
No
Yes
OCN
MIZ
ICE PACK
Compute along-track MIZ length
Compute MIZ width through projection
*NP (Null Hypothesis): no significant change of SSD distribution