

# Trajectory calculations for the HALO-(AC)3 Dry Run | Mar 22<sup>nd</sup> – 26<sup>th</sup>

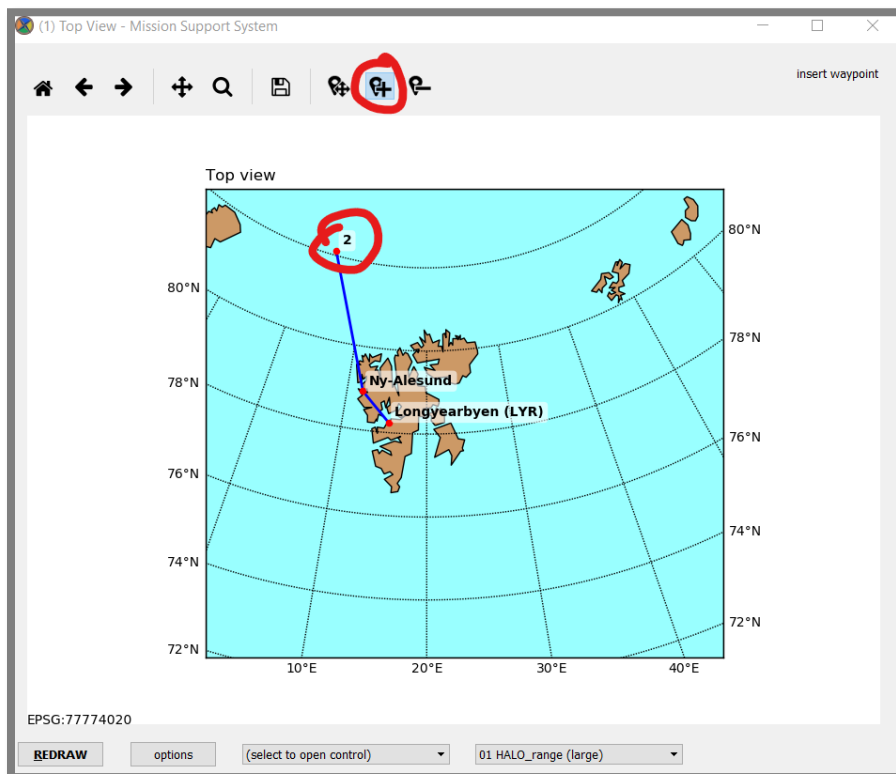
E-Mail: [Benjamin.kirbus@uni-leipzig.de](mailto:Benjamin.kirbus@uni-leipzig.de)

## Finding suitable locations

After you found an interesting feature to follow, I need to know:

- **Time:** When should the trajectory start? E.g. "23<sup>rd</sup> March 2021, 12 UTC"
- **Place:** Where should the trajectory start? E.g. "80.23°N/3.41°E"

You could e.g. set an additional, artificial waypoint on the map:



...and then use the table view (Views – Table View) to show the exact location:

The screenshot shows the 'Table View' of the Mission Support System. The table contains the following data:

Location	Lat (+-90)	Lon (+-180)	Flightlevel	Pressure (hPa)	Leg dist. (km [nm])	Cum. dist. (km [nm])	Leg time	Cum. time	Time (UTC)	Rem. fuel (lb)	Aircraft weight (lb)	Ceiling altitude (hft)	Ascent r (ft/minute)
0 Longyearbyen (LYR)	78,25	15,48	0	1.013,25	0 [0]	0 [0]	00:00:00	00:00:00	2020-04-09 16:38:29	8000	10000	410	0
1 Ny-Alesund	78,93	11,99	0	1.013,25	108 [58]	108 [58]	00:08:47	00:08:47	2020-04-09 16:47:16	7575	9575	410	0
2	82,11	3,99	0	1.013,25	383 [207]	492 [265]	00:31:04	00:39:51	2020-04-09 17:18:21	6073	8073	410	0

The table interface includes a 'performance settings' dropdown and 'Waypoints' buttons: insert, clone, delete selected, and reverse.

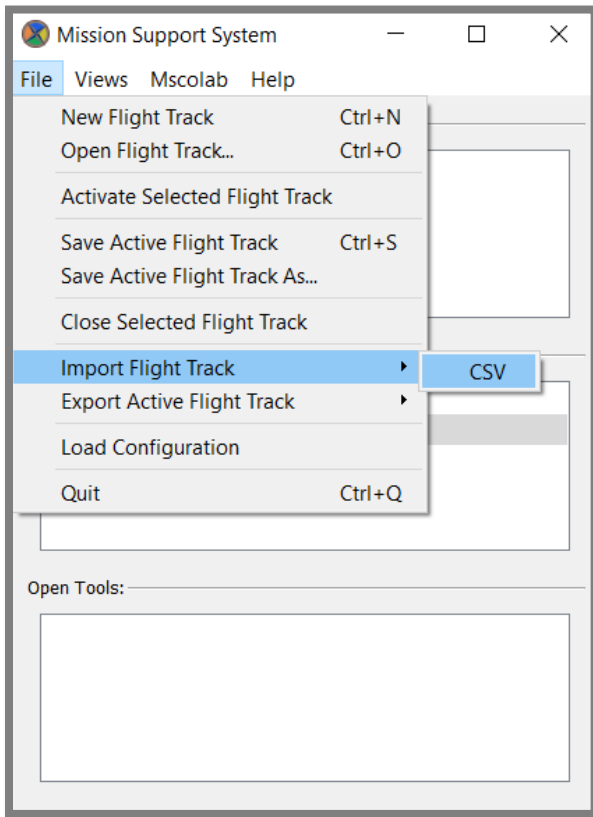
## Trajectory calculations

I will then calculate trajectories between 9 am and 1 PM and upload them into the wiki, column "Trajectories":

[https://home.uni-leipzig.de/~ehrllich/HALO AC3\\_wiki\\_doku/doku.php?id=briefings\\_dryrun](https://home.uni-leipzig.de/~ehrllich/HALO_AC3_wiki_doku/doku.php?id=briefings_dryrun)

## Importing trajectories

Once trajectories are calculated, you can import them easily into MSS: File – Import Flight track:



Then simply double click on the flight track to activate it:

