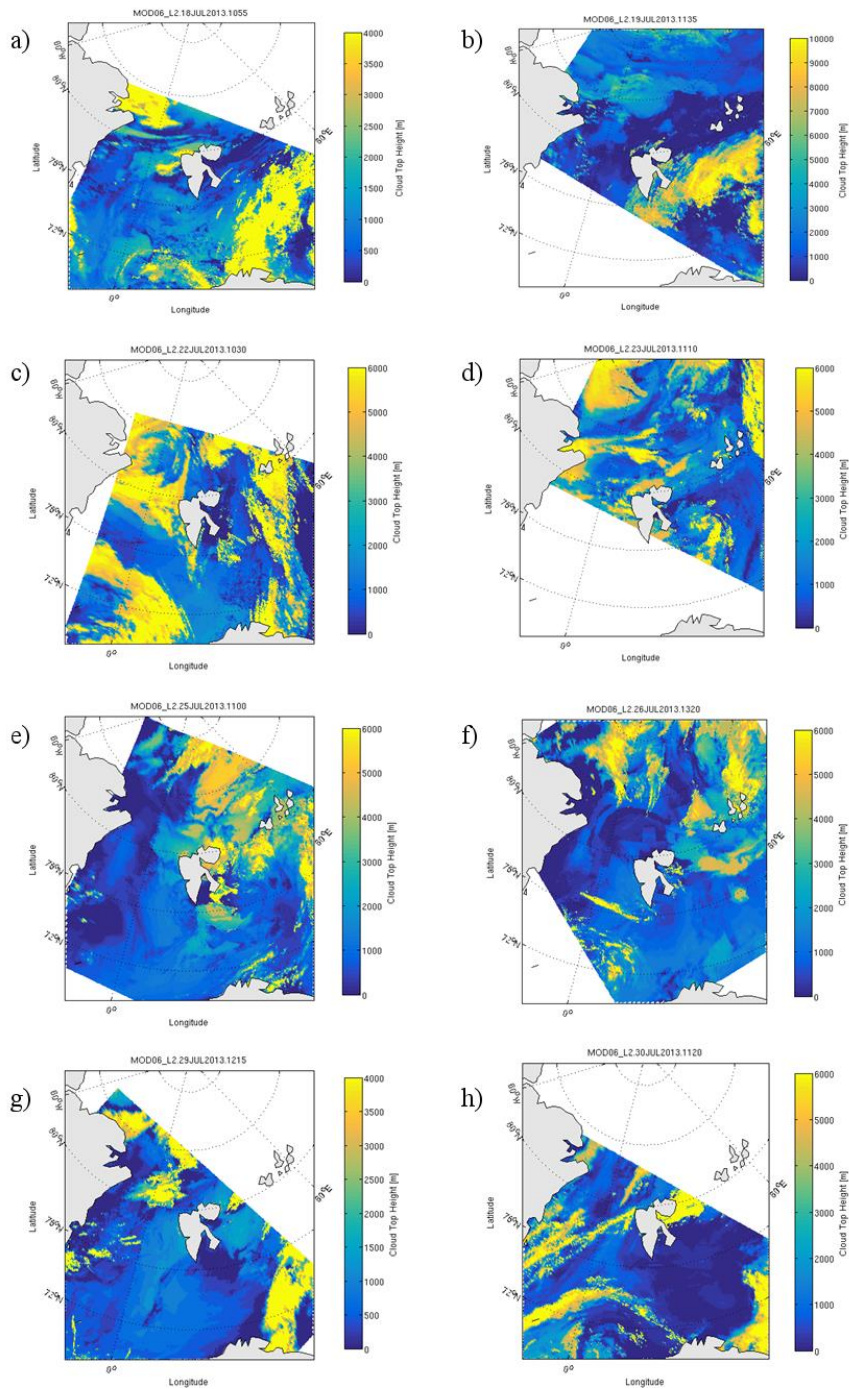


Figure S1: Satellite images for flights M191 – M198 from AVHRR Channel 1, visible. Red circles indicate approximate area of flight track.



**Figure S2: Cloud top height MODIS satellite retrievals shown for all flights. Note that the colorbar maximum value has been capped in all cases to allow structures to be seen clearly.**

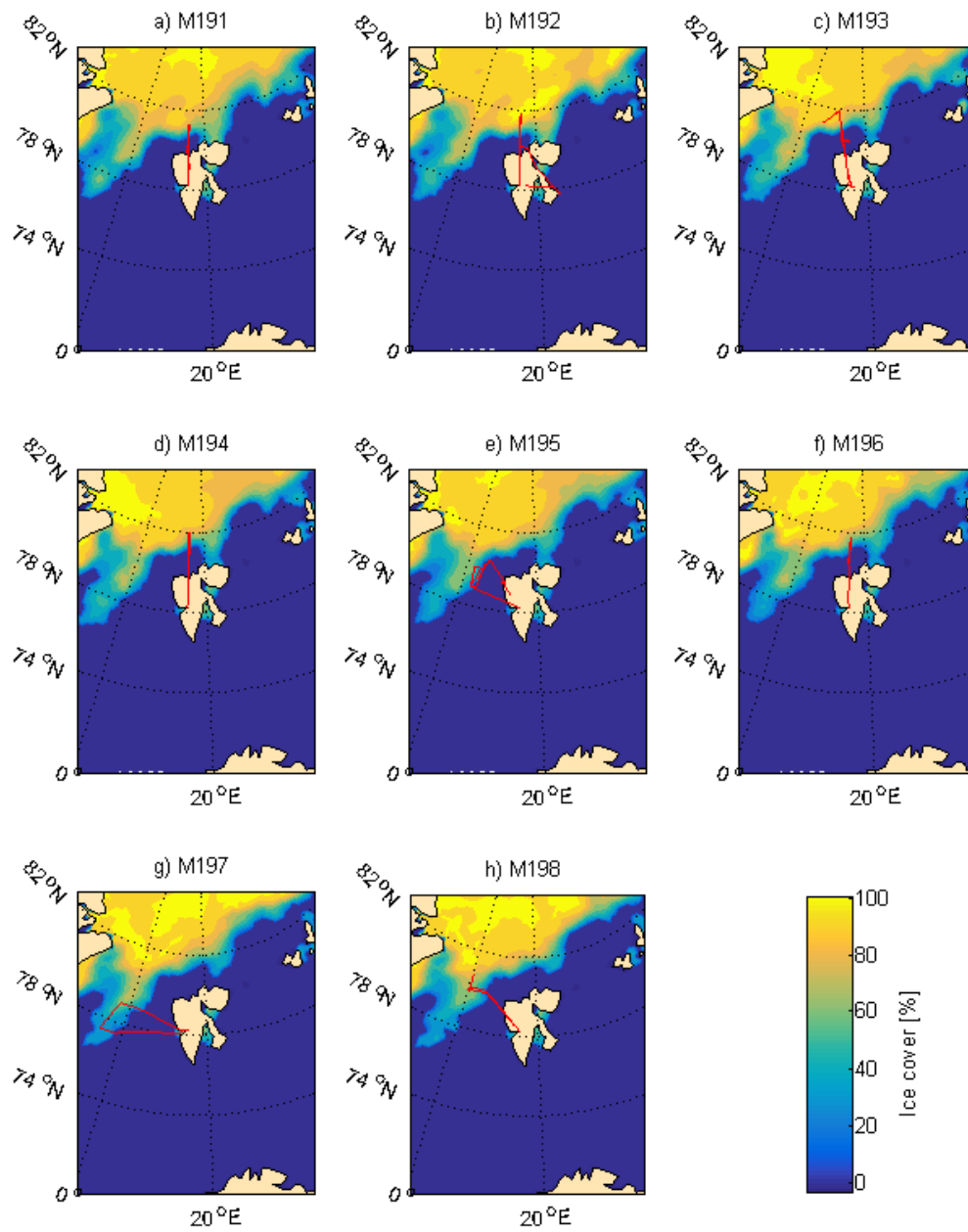


Figure S3: Flight track of MASIN aircraft for all 8 science flights. Also shown is the sea-ice cover (see colorbar) from NSIDC data.