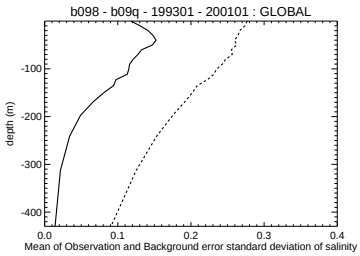
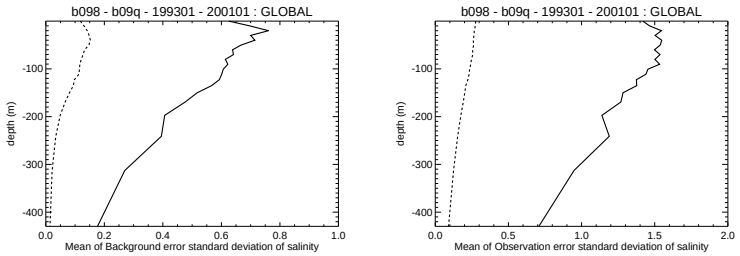


(a) Mean of error standard deviation of salinity

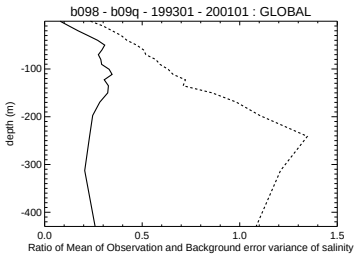
FIG. 1 – Mean of background- and observation-error standard deviations in GLOBAL (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

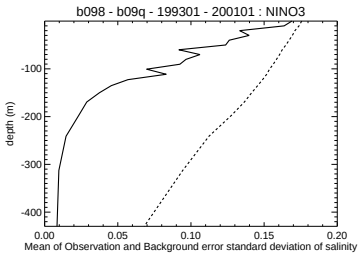
(b) Mean of observation-error standard deviation of salinity

FIG. 2 – Mean specified and diagnosed background- and observation-error standard deviations in GLOBAL (dashed : specified ; solid : diagnosed)



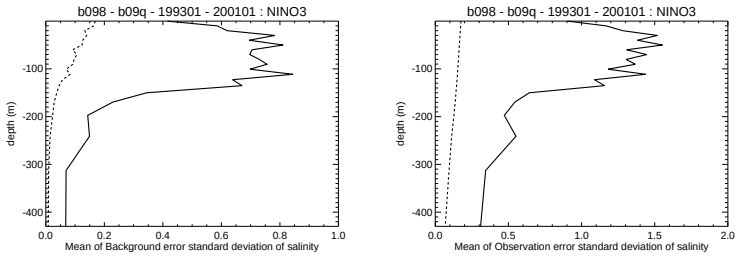
(a) Ratio of salinity error variance

FIG. 3 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in GLOBAL (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

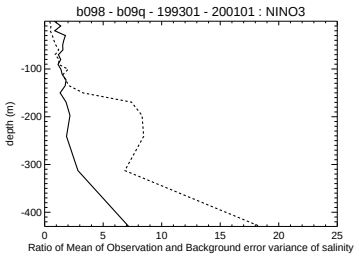
FIG. 4 – Mean of background- and observation-error standard deviations in NINO3 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

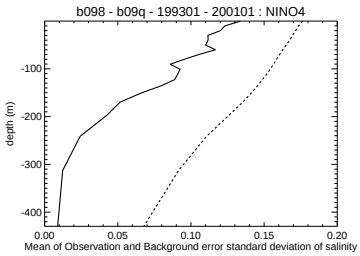
(b) Mean of observation-error standard deviation of salinity

FIG. 5 – Mean specified and diagnosed background- and observation-error standard deviations in NINO3 (dashed : specified ; solid : diagnosed)



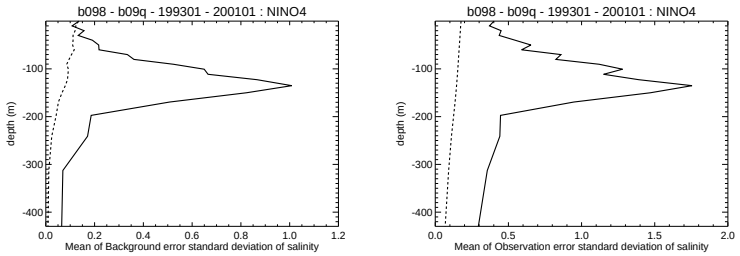
(a) Ratio of salinity error variance

FIG. 6 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NINO3 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

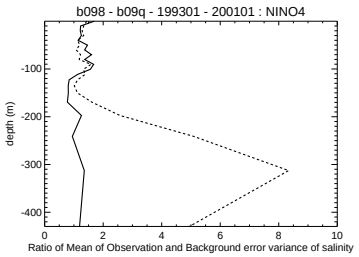
FIG. 7 – Mean of background- and observation-error standard deviations in NINO4 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

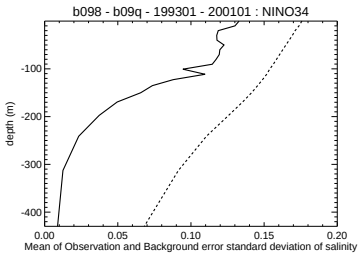
(b) Mean of observation-error standard deviation of salinity

FIG. 8 – Mean specified and diagnosed background- and observation-error standard deviations in NINO4 (dashed : specified ; solid : diagnosed)



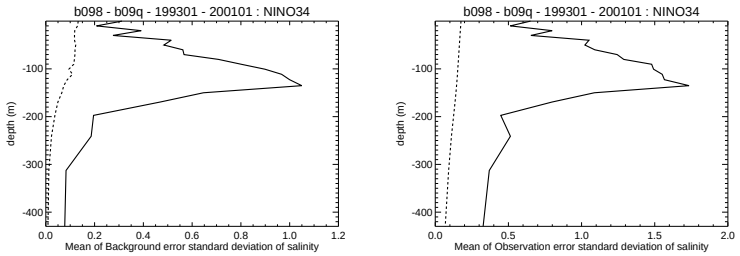
(a) Ratio of salinity error variance

FIG. 9 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NINO4 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

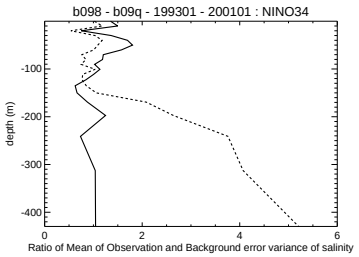
FIG. 10 – Mean of background- and observation-error standard deviations in NINO34 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

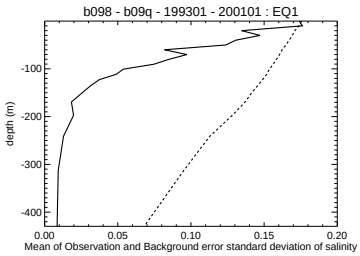
(b) Mean of observation-error standard deviation of salinity

FIG. 11 – Mean specified and diagnosed background- and observation-error standard deviations in NINO34 (dashed : specified ; solid : diagnosed)



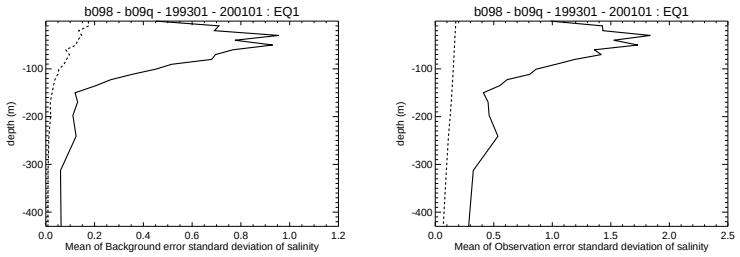
(a) Ratio of salinity error variance

FIG. 12 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NINO34 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

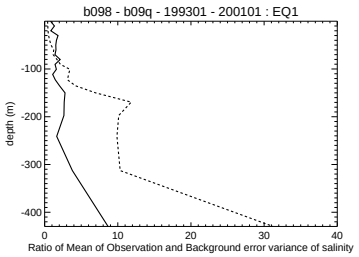
FIG. 13 – Mean of background- and observation-error standard deviations in EQ1 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

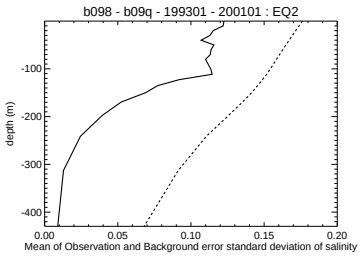
(b) Mean of observation-error standard deviation of salinity

FIG. 14 – Mean specified and diagnosed background- and observation-error standard deviations in EQ1 (dashed : specified ; solid : diagnosed)



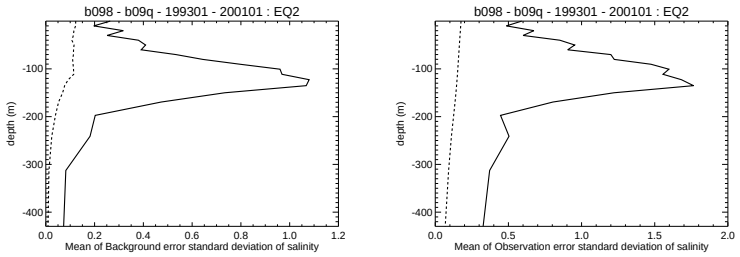
(a) Ratio of salinity error variance

FIG. 15 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in EQ1 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

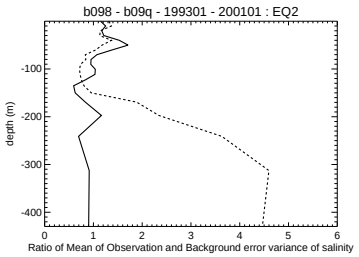
FIG. 16 – Mean of background- and observation-error standard deviations in EQ2 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

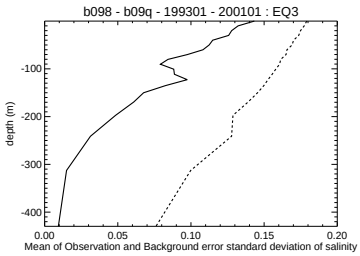
(b) Mean of observation-error standard deviation of salinity

FIG. 17 – Mean specified and diagnosed background- and observation-error standard deviations in EQ2 (dashed : specified ; solid : diagnosed)



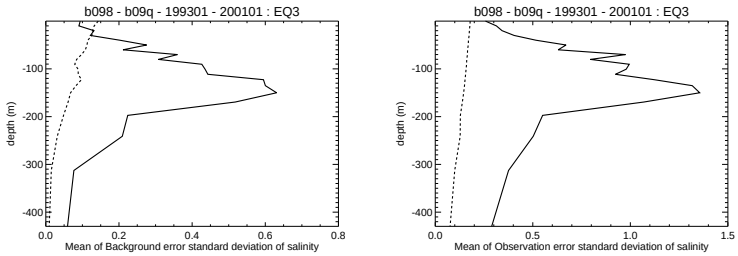
(a) Ratio of salinity error variance

FIG. 18 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in EQ2 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

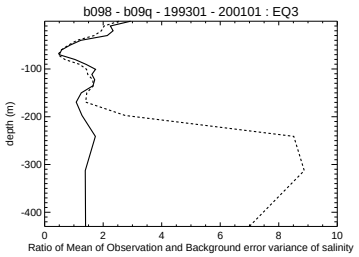
FIG. 19 – Mean of background- and observation-error standard deviations in EQ3 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

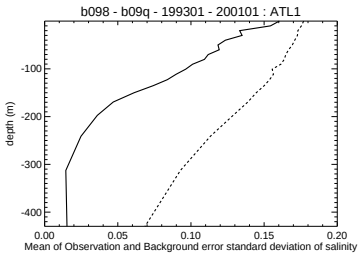
(b) Mean of observation-error standard deviation of salinity

FIG. 20 – Mean specified and diagnosed background- and observation-error standard deviations in EQ3 (dashed : specified ; solid : diagnosed)



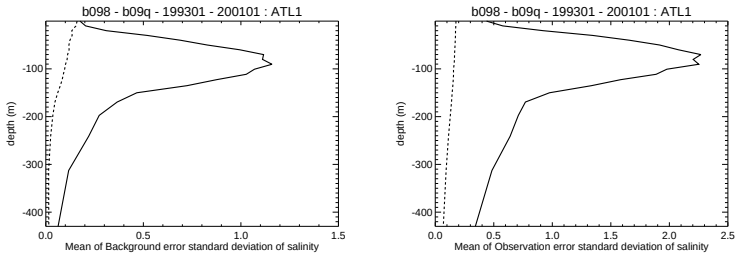
(a) Ratio of salinity error variance

FIG. 21 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in EQ3 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

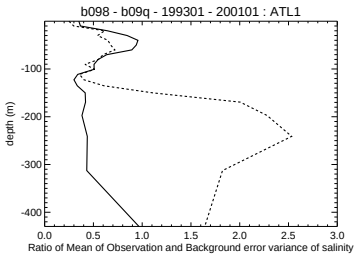
FIG. 22 – Mean of background- and observation-error standard deviations in ATL1 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

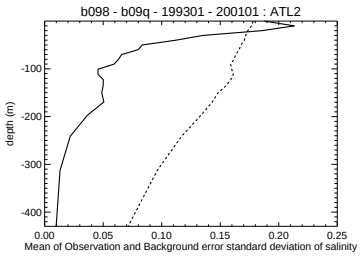
(b) Mean of observation-error standard deviation of salinity

FIG. 23 – Mean specified and diagnosed background- and observation-error standard deviations in ATL1 (dashed : specified ; solid : diagnosed)



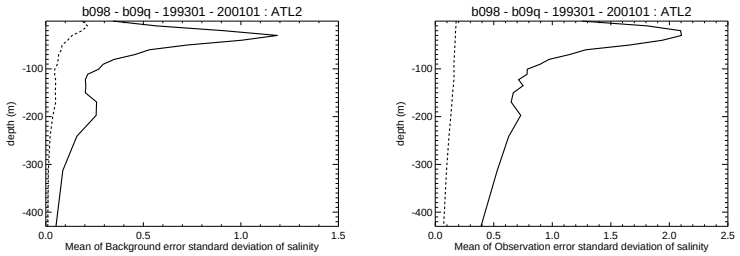
(a) Ratio of salinity error variance

FIG. 24 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in ATL1 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

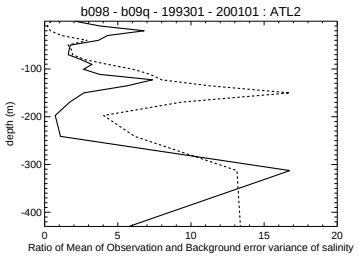
FIG. 25 – Mean of background- and observation-error standard deviations in ATL2 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

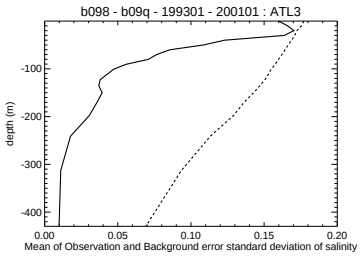
(b) Mean of observation-error standard deviation of salinity

FIG. 26 – Mean specified and diagnosed background- and observation-error standard deviations in ATL2 (dashed : specified ; solid : diagnosed)



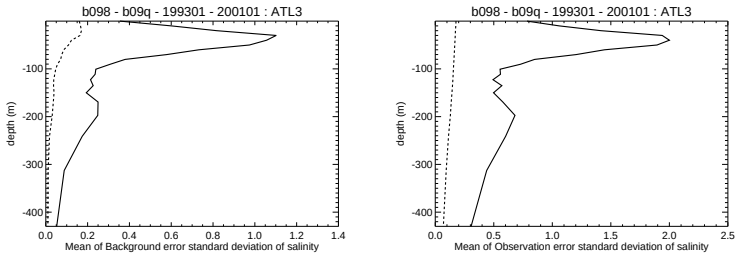
(a) Ratio of salinity error variance

FIG. 27 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in ATL2 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

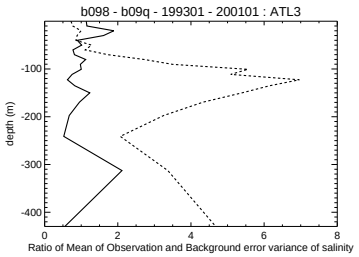
FIG. 28 – Mean of background- and observation-error standard deviations in ATL3 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

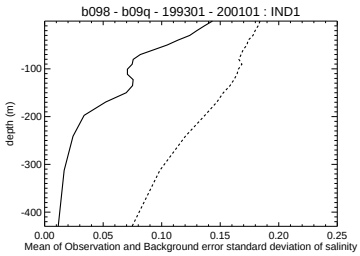
(b) Mean of observation-error standard deviation of salinity

FIG. 29 – Mean specified and diagnosed background- and observation-error standard deviations in ATL3 (dashed : specified ; solid : diagnosed)



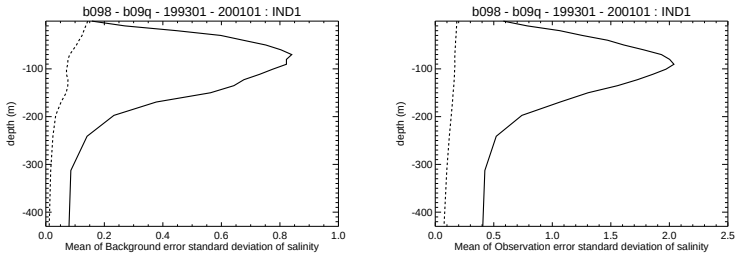
(a) Ratio of salinity error variance

FIG. 30 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in ATL3 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

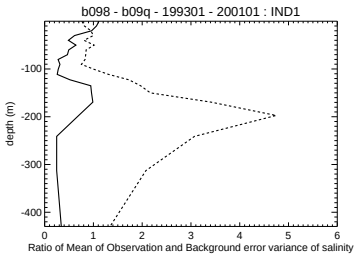
FIG. 31 – Mean of background- and observation-error standard deviations in IND1 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

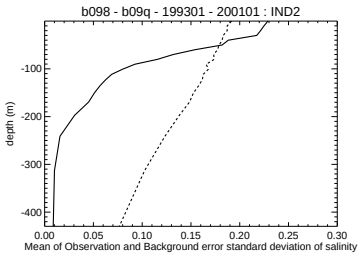
(b) Mean of observation-error standard deviation of salinity

FIG. 32 – Mean specified and diagnosed background- and observation-error standard deviations in IND1 (dashed : specified ; solid : diagnosed)



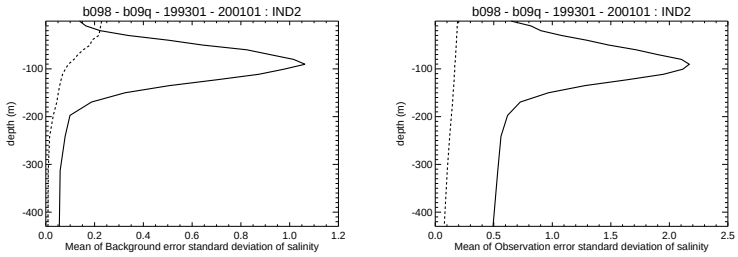
(a) Ratio of salinity error variance

FIG. 33 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in IND1 (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

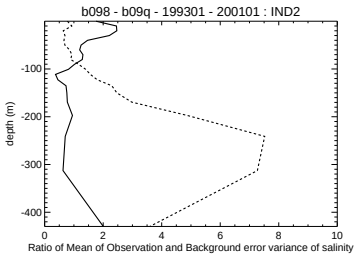
FIG. 34 – Mean of background- and observation-error standard deviations in IND2 (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

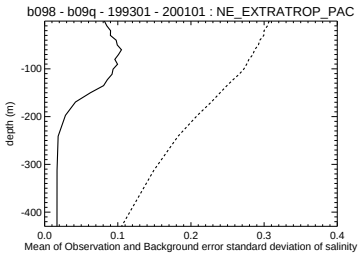
(b) Mean of observation-error standard deviation of salinity

FIG. 35 – Mean specified and diagnosed background- and observation-error standard deviations in IND2 (dashed : specified ; solid : diagnosed)



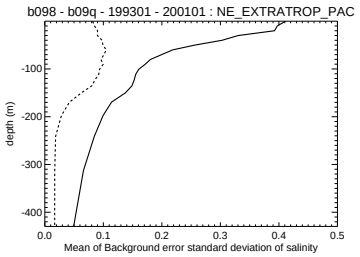
(a) Ratio of salinity error variance

FIG. 36 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in IND2 (dashed : observation-error ; solid : background-error)

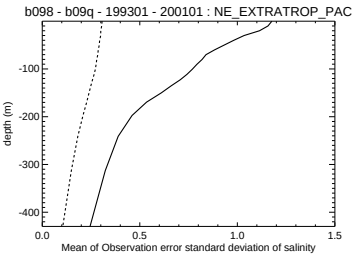


(a) Mean of error standard deviation of salinity

FIG. 37 – Mean of background- and observation-error standard deviations in NE_EXTRATROP_PAC (dashed : observation-error ; solid : background-error)

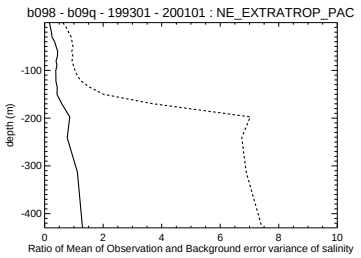


(a) Mean of background-error standard deviation of salinity



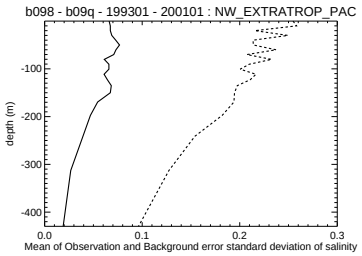
(b) Mean of observation-error standard deviation of salinity

FIG. 38 – Mean specified and diagnosed background- and observation-error standard deviations in NE_EXTRATROP_PAC (dashed : specified ; solid : diagnosed)



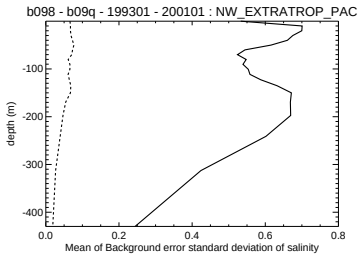
(a) Ratio of salinity error variance

FIG. 39 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NE_EXTRATROP_PAC (dashed : observation-error ; solid : background-error)

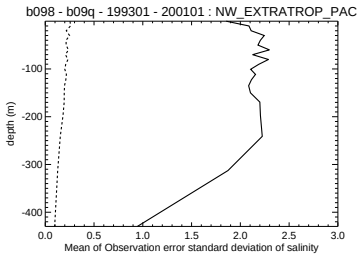


(a) Mean of error standard deviation of salinity

FIG. 40 – Mean of background- and observation-error standard deviations in NW_EXTRATROP_PAC (dashed : observation-error ; solid : background-error)

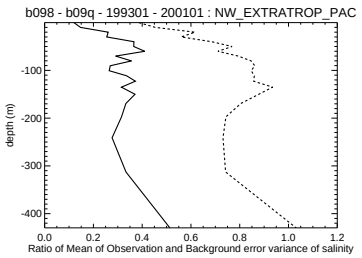


(a) Mean of background-error standard deviation of salinity



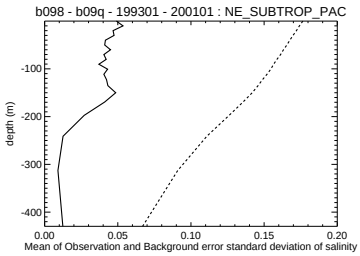
(b) Mean of observation-error standard deviation of salinity

FIG. 41 – Mean specified and diagnosed background- and observation-error standard deviations in NW_EXTRATROP_PAC (dashed : specified ; solid : diagnosed)



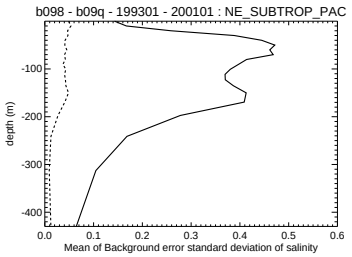
(a) Ratio of salinity error variance

FIG. 42 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NW_EXTRATROP_PAC (dashed : observation-error ; solid : background-error)

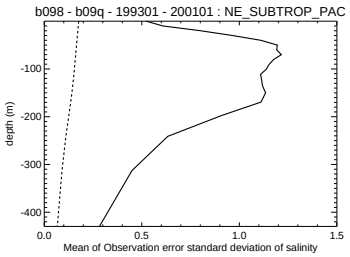


(a) Mean of error standard deviation of salinity

FIG. 43 – Mean of background- and observation-error standard deviations in NE_SUBTROP_PAC (dashed : observation-error ; solid : background-error)

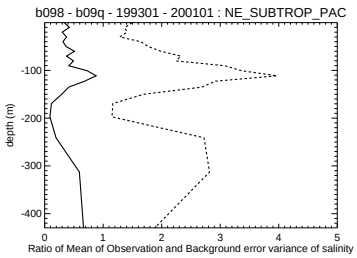


(a) Mean of background-error standard deviation of salinity



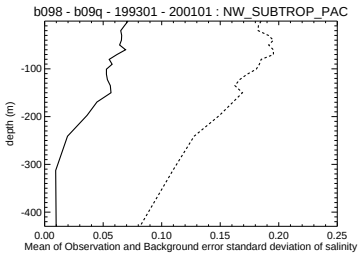
(b) Mean of observation-error standard deviation of salinity

FIG. 44 – Mean specified and diagnosed background- and observation-error standard deviations in NE_SUBTROP_PAC (dashed : specified ; solid : diagnosed)



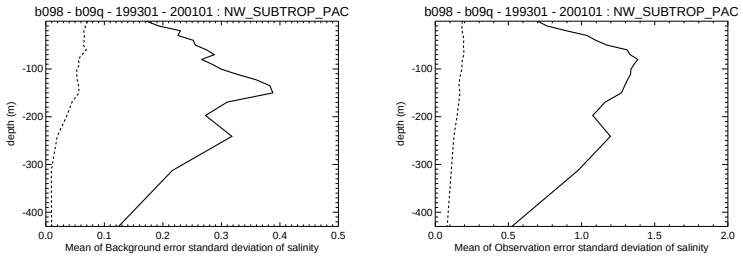
(a) Ratio of salinity error variance

FIG. 45 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NE_SUBTROP_PAC (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

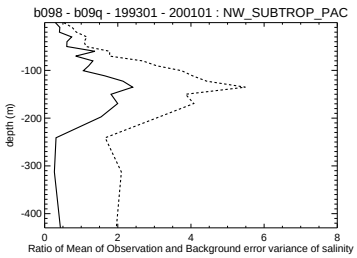
FIG. 46 – Mean of background- and observation-error standard deviations in NW_SUBTROP_PAC (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

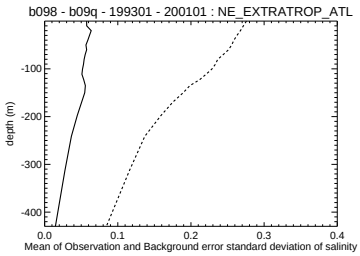
(b) Mean of observation-error standard deviation of salinity

FIG. 47 – Mean specified and diagnosed background- and observation-error standard deviations in NW_SUBTROP_PAC (dashed : specified ; solid : diagnosed)



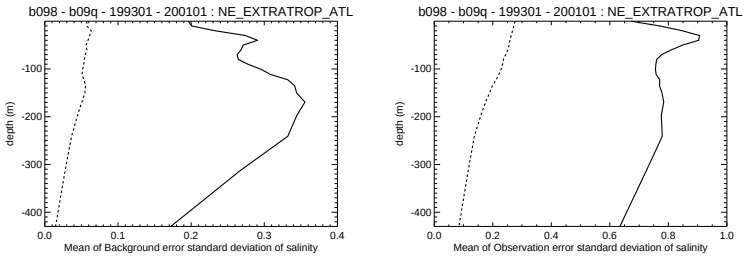
(a) Ratio of salinity error variance

FIG. 48 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NW_SUBTROP_PAC (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

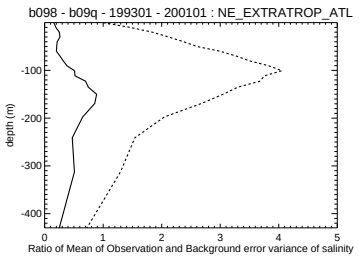
FIG. 49 – Mean of background- and observation-error standard deviations in NE_EXTRATROP_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

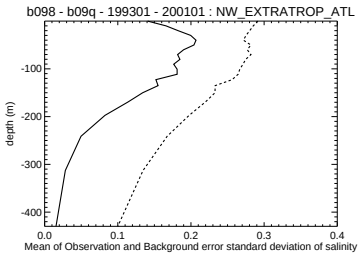
(b) Mean of observation-error standard deviation of salinity

FIG. 50 – Mean specified and diagnosed background- and observation-error standard deviations in NE_EXTRATROP_ATL (dashed : specified ; solid : diagnosed)



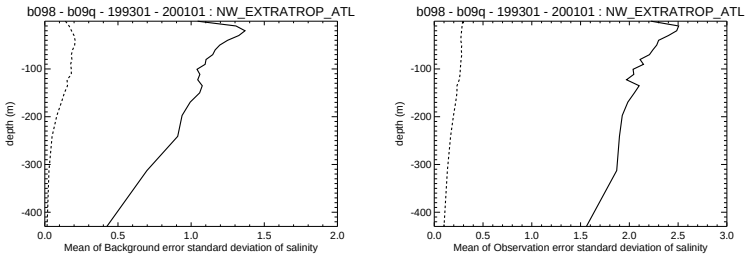
(a) Ratio of salinity error variance

FIG. 51 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NE_EXTRATROP_ATL (dashd : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

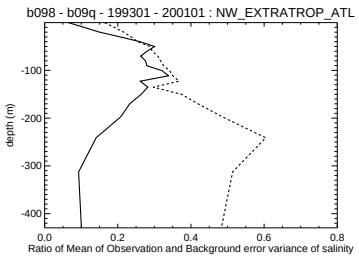
FIG. 52 – Mean of background- and observation-error standard deviations in NW_EXTRATROP_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

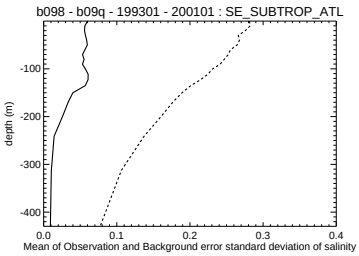
(b) Mean of observation-error standard deviation of salinity

FIG. 53 – Mean specified and diagnosed background- and observation-error standard deviations in NW_EXTRATROP_ATL (dashed : specified ; solid : diagnosed)



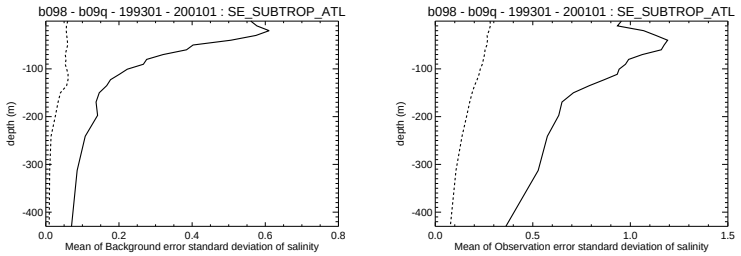
(a) Ratio of salinity error variance

FIG. 54 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NW_EXTRATROP_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

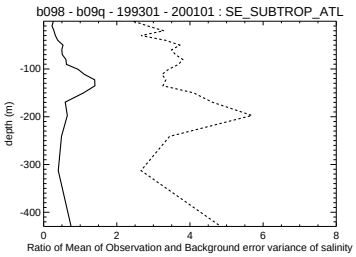
FIG. 55 – Mean of background- and observation-error standard deviations in SE_SUBTROP_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

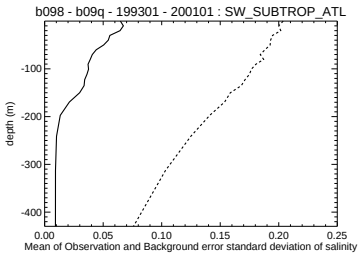
(b) Mean of observation-error standard deviation of salinity

FIG. 56 – Mean specified and diagnosed background- and observation-error standard deviations in SE_SUBTROP_ATL (dashed : specified ; solid : diagnosed)



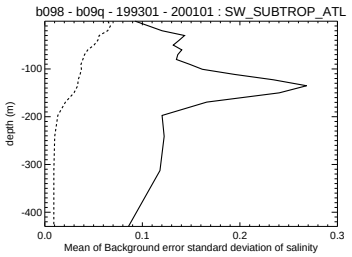
(a) Ratio of salinity error variance

FIG. 57 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SE_SUBTROP_ATL (dashed : observation-error ; solid : background-error)

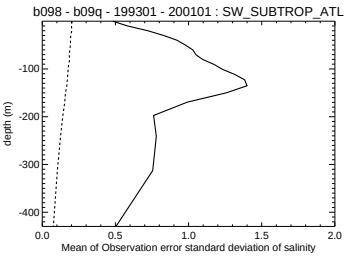


(a) Mean of error standard deviation of salinity

FIG. 58 – Mean of background- and observation-error standard deviations in SW_SUBTROP_ATL (dashed : observation-error ; solid : background-error)

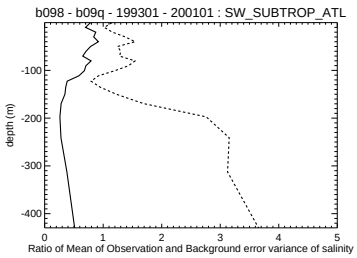


(a) Mean of background-error standard deviation of salinity



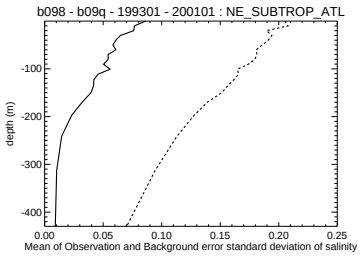
(b) Mean of observation-error standard deviation of salinity

FIG. 59 – Mean specified and diagnosed background- and observation-error standard deviations in SW_SUBTROP_ATL (dashed : specified ; solid : diagnosed)



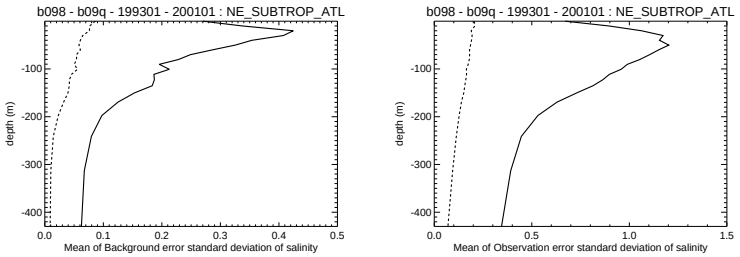
(a) Ratio of salinity error variance

FIG. 60 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SW_SUBTROP_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

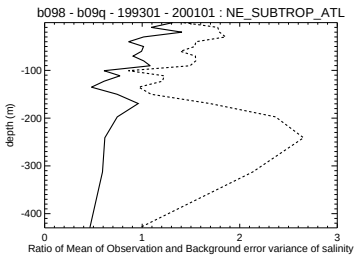
FIG. 61 – Mean of background- and observation-error standard deviations in NE_SUBTROP_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

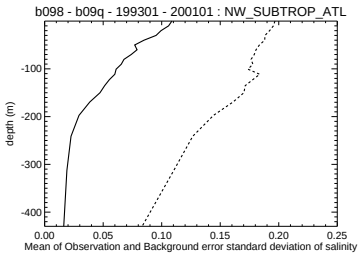
(b) Mean of observation-error standard deviation of salinity

FIG. 62 – Mean specified and diagnosed background- and observation-error standard deviations in NE_SUBTROP_ATL (dashed : specified ; solid : diagnosed)



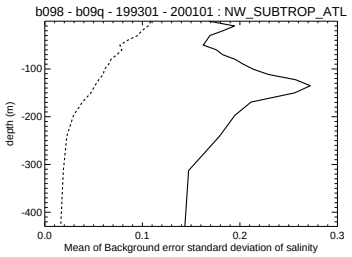
(a) Ratio of salinity error variance

FIG. 63 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NE_SUBTROP_ATL (dashed : observation-error ; solid : background-error)

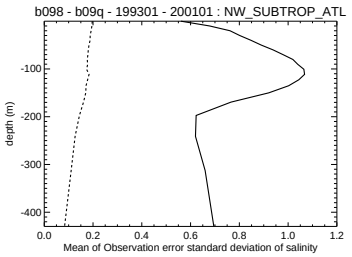


(a) Mean of error standard deviation of salinity

FIG. 64 – Mean of background- and observation-error standard deviations in NW_SUBTROP_ATL (dashed : observation-error ; solid : background-error)

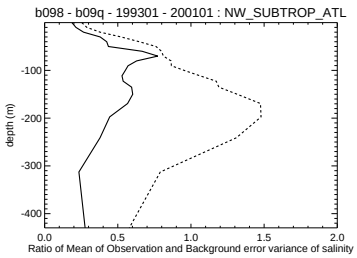


(a) Mean of background-error standard deviation of salinity



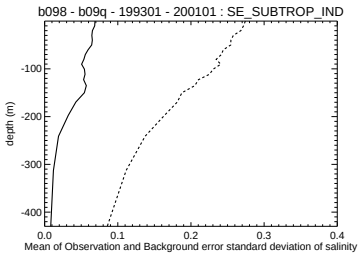
(b) Mean of observation-error standard deviation of salinity

FIG. 65 – Mean specified and diagnosed background- and observation-error standard deviations in NW_SUBTROP_ATL (dashed : specified ; solid : diagnosed)



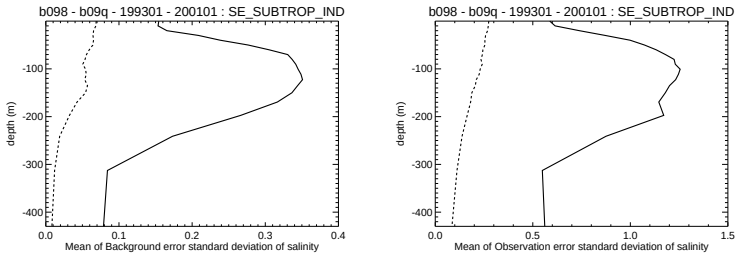
(a) Ratio of salinity error variance

FIG. 66 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in NW_SUBTROP_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

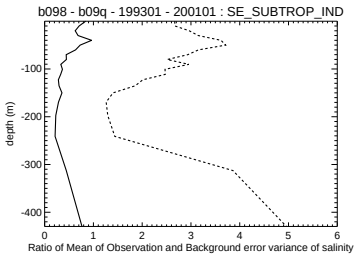
FIG. 67 – Mean of background- and observation-error standard deviations in SE_SUBTROP_IND (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

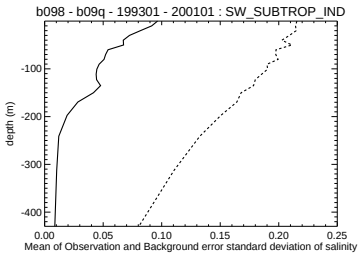
(b) Mean of observation-error standard deviation of salinity

FIG. 68 – Mean specified and diagnosed background- and observation-error standard deviations in SE_SUBTROP_IND (dashed : specified ; solid : diagnosed)



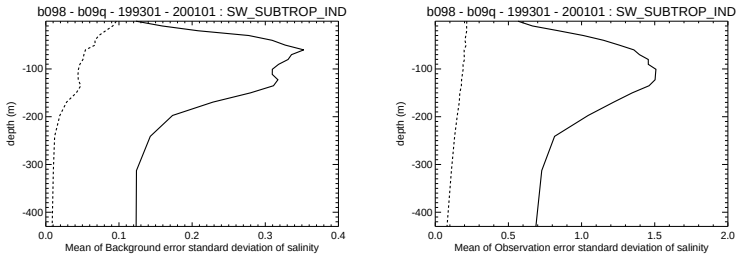
(a) Ratio of salinity error variance

FIG. 69 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SE_SUBTROP_IND (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

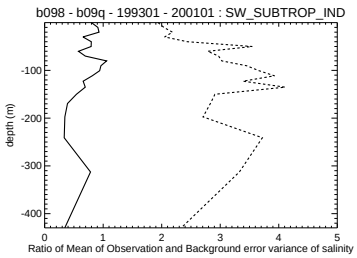
FIG. 70 – Mean of background- and observation-error standard deviations in SW_SUBTROP_IND (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

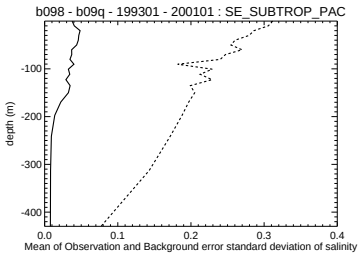
(b) Mean of observation-error standard deviation of salinity

FIG. 71 – Mean specified and diagnosed background- and observation-error standard deviations in SW_SUBTROP_IND (dashed : specified ; solid : diagnosed)



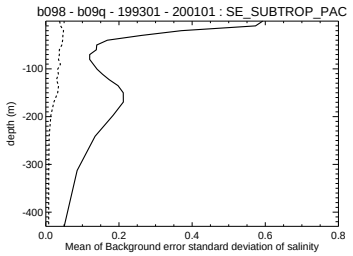
(a) Ratio of salinity error variance

FIG. 72 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SW_SUBTROP_IND (dashed : observation-error ; solid : background-error)

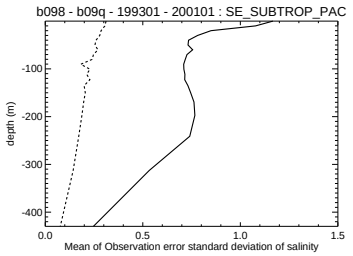


(a) Mean of error standard deviation of salinity

FIG. 73 – Mean of background- and observation-error standard deviations in SE_SUBTROP_PAC (dashed : observation-error ; solid : background-error)

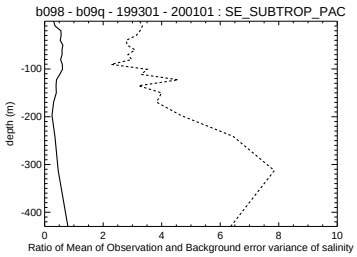


(a) Mean of background-error standard deviation of salinity



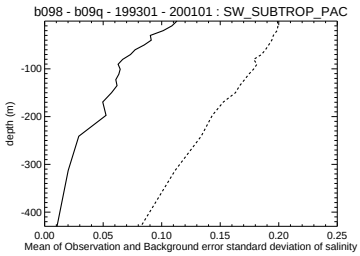
(b) Mean of observation-error standard deviation of salinity

FIG. 74 – Mean specified and diagnosed background- and observation-error standard deviations in SE_SUBTROP_PAC (dashed : specified ; solid : diagnosed)



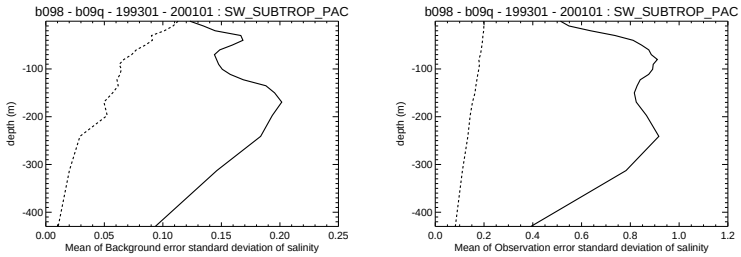
(a) Ratio of salinity error variance

FIG. 75 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SE_SUBTROP_PAC (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

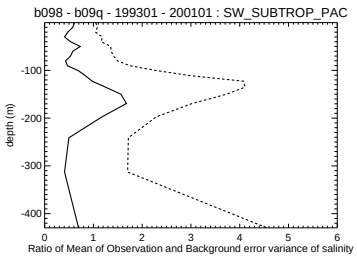
FIG. 76 – Mean of background- and observation-error standard deviations in SW_SUBTROP_PAC (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

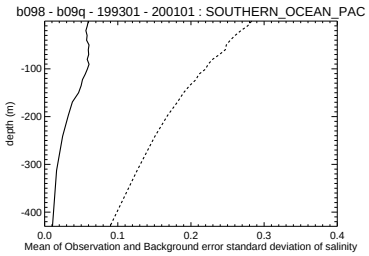
(b) Mean of observation-error standard deviation of salinity

FIG. 77 – Mean specified and diagnosed background- and observation-error standard deviations in SW_SUBTROP_PAC (dashed : specified ; solid : diagnosed)



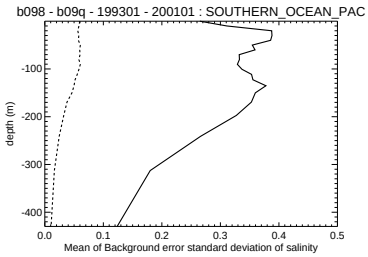
(a) Ratio of salinity error variance

FIG. 78 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SW_SUBTROP_PAC (dashed : observation-error ; solid : background-error)

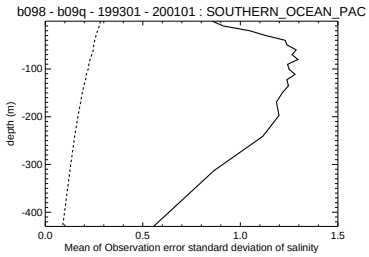


(a) Mean of error standard deviation of salinity

FIG. 79 – Mean of background- and observation-error standard deviations in SOUTHERN_OCEAN_PAC (dashed : observation-error ; solid : background-error)

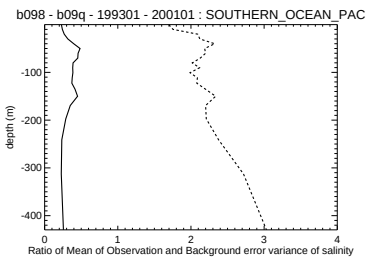


(a) Mean of background-error standard deviation of salinity



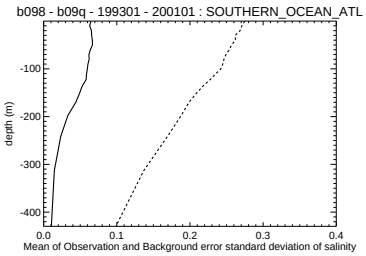
(b) Mean of observation-error standard deviation of salinity

FIG. 80 – Mean specified and diagnosed background- and observation-error standard deviations in SOUTHERN_OCEAN_PAC (dashed : specified ; solid : diagnosed)



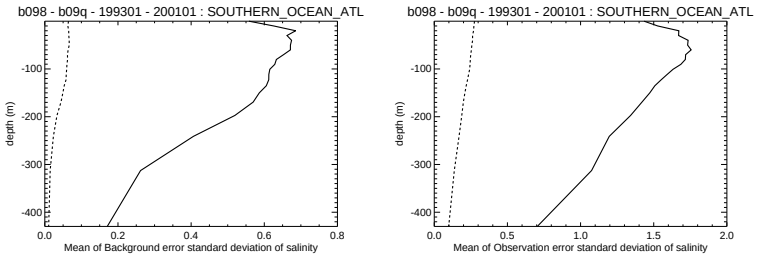
(a) Ratio of salinity error variance

FIG. 81 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SOUTHERN_OCEAN_PAC (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

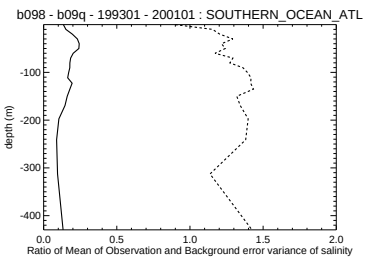
FIG. 82 – Mean of background- and observation-error standard deviations in SOUTHERN_OCEAN_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

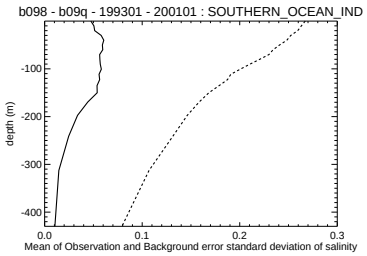
(b) Mean of observation-error standard deviation of salinity

FIG. 83 – Mean specified and diagnosed background- and observation-error standard deviations in SOUTHERN_OCEAN_ATL (dashed : specified ; solid : diagnosed)



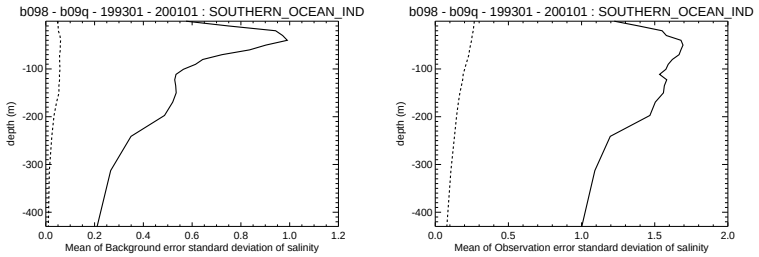
(a) Ratio of salinity error variance

FIG. 84 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SOUTHERN_OCEAN_ATL (dashed : observation-error ; solid : background-error)



(a) Mean of error standard deviation of salinity

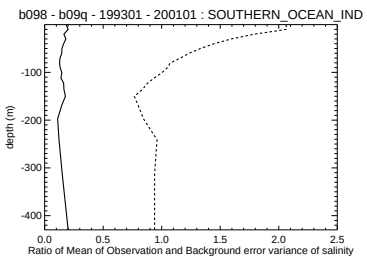
FIG. 85 – Mean of background- and observation-error standard deviations in SOUTHERN_OCEAN_IND (dashed : observation-error ; solid : background-error)



(a) Mean of background-error standard deviation of salinity

(b) Mean of observation-error standard deviation of salinity

FIG. 86 – Mean specified and diagnosed background- and observation-error standard deviations in SOUTHERN_OCEAN_IND (dashed : specified ; solid : diagnosed)



(a) Ratio of salinity error variance

FIG. 87 – Ratio (specified/diagnosed) of the mean of background- and observation-error variance in SOUTHERN_OCEAN_IND (dashed : observation-error ; solid : background-error)