# MOM-SIS / ACCESS-OM2 namelist comparisons

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Latest version is here: https://github.com/aekiss/namelist-check

Tables auto-generated by nmltab (https://github.com/aekiss/nmltab). Missing variables are shown as blank. Variables are weblinks to source code searches. Greyed variables are ignored (greying only works in groups with use\_this\_module shown, so typically doesn't work for tables of differences).

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5.27	access-om2/1deg_jra55_ryf_spinup5	81
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### 1 MOM namelist 'input.nml'

#### TODO: set ncar\_boundary\_scaling\_read = .true. after first run at high resolution

- 1deg\_jra55v13\_ryf9091\_spinup\_A-input.nml is Andy's 1deg namelist from 2017-11-06: /g/data3/hh5/tmp/cosima/access-om2/1deg\_jra55v13\_ryf9091\_spinup\_A/output039/ocean/input.nml
- GFDL\_ESM2M\_input-cut.nml is GFDL\_ESM2M\_input.nml from Steve's email 2017-10-18 with irrelevant atmos/ESM namelist groups cut out.
- MOM\_SIS\_TOPAZ\_input.nml is from MOM\_SIS\_TOPAZ/INPUT/ in /g/data/ua8/mom/test\_data/MOM\_SIS\_TOPAZ.input.tar.gz, dated 2009-12-16 10:44
- fabio\_momsis1\_input.nml is from Fabio's email 2017-09-20, derived from Paul's 1/4 degree (I think)
- paul\_momsis025\_input.nml is from Paul's email 2017-09-20
- fanghua\_momsis01v5KDS75\_WOA13\_input.nml is /g/data3/hh5/tmp/cosima/mom01v5/KDS75\_WOA13/output000/input.nml
- russ-accessom-mom4p1-input.nml is an old MOM4p1 ACCESS-OM input from years ago (Russ' email 2017-10-17)
- hogg\_accessom2\_1deg\_jra55\_ryf\_input.nml is /short/v45/amh157/access-om2/control/1deg\_jra55\_ryf/ocean/input.nml
- kiss\_accessom2\_025deg\_jra55\_ryf\_input.m.nml is /short/v45/aek156/access-om2/control/025deg\_jra55\_ryf/ocean/input.nml
- hogg\_accessom2\_01deg\_jra55\_ryf\_input.nml is /short/v45/amh157/access-om2/control/01deg\_jra55\_ryf/ocean/input.nml
- kiss\_accessom2\_025deg\_jra55\_ryf\_logfile.000000.out is the MOM output file /short/v45/aek156/access-om2/control/025deg\_jra55\_ryf/archive/output144/ocean/logfile.000000.out, modified by deleting lines not starting with whitespace (regex replace ^[^\s]+.\*\$ with nothing), replacing salt\_flxmh\_flux with salt\_flx mh\_flux, removing ascii gremlins from end of FIELDS\_IN and FIELDS\_OUT lines, and deleting the copy of input.nml from the start (to work around bug in nmltab.py). So this shows the values specified in input.nml, plus default values for those not specified in input.nml. However there are some namelist groups it doesn't include, e.g. generic\_tracer, monin\_obukhov\_nml, ocean\_albedo\_nml, ocean\_bihcst\_friction\_nml, ocean\_nphysics\_util\_nml, ocean\_nphysicsa\_nml, ocean\_nphysicsa\_nml, ocean\_nphysicsb\_nml, ocean\_nphysicsc\_nml, ocean\_overflow\_ofp\_nml, ocean\_rough\_nml, ocean\_shortwave\_csiro\_nml, ocean\_xlandinsert\_nml, ocean\_xlandmix\_nml, xgrid\_nml [and ocean\_vert\_kpp\_nml, was replaced by ocean\_vert\_kpp\_mom4p1\_nml in MOM5, and bg\_diff\_lat\_dependence\_nml, ocean\_polar\_filter and ocean\_vert\_kpp\_iow which are not in the MOM5 code at all]; there may be more.

#### Other useful info:

• Griffies et al. (2015) p973

## 1.1 All variables in GFDL & ACCESS configs (differences highlighted)

Group	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log-	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
&auscom_ice_nml	aice_cutoff			0.15	0.15	0.15	<b>file.000000.o</b> t 0.15	0.15	0.15	0.15
Cudscom_rec_rime	chk_fields_period			0.13	0.13	0.13	1	0.13	0.13	0.13
chk	_fields_start_time						0			
	chk_i2o_fields			False	False	False	False	False	False	False
	chk_o2i_fields do_ice_once			False False	False False	False False	False False	False False	False False	False False
	dt_cpl			3600	3600	3600	1800	1800	150	600
	fixmeltt			False	False	False	False	False	False	False
	frazil_factor			1.0	1.0	1.0	1.0	1.0	1.0	1.0
	iceform_adj_salt icemlt_factor			False 1.0	False 1.0	False 1.0	False 1.0	False 1.0	False 1.0	False 1.0
	ige			1.0	1.0	1.0	345	1.0	1.0	1.0
	igs						328			
	ire1						324			
	ire2						331			
	irs1						314			
	irs2 jge						325 198			
	jgs						189			
	jre1						196			
	jre2						180			
	jrs1						169			
	jrs2 kmxice			5	5	5	169	5	5	5
	ksmax			)	3	)	5 5	)	3	)
	limit_srfstress						False			
	mstress						2.0			
	pop_icediag			True	True	True	True	True	True	True
re	dsea_gulfbay_sfix				True	True	False			
	sfix_hours sign_stflx			1.0	1.0	1.0	12 1.0	1.0	1.0	1.0
	tlthk0			1.0	1.0	1.0	10.0	1.0	1.0	1.0
	tmelt			-0.216	-0.216	-0.216	-0.216	-0.216	-0.216	-0.216
	use_ioaice			True	True	True	True	True	True	True
&bg_diff_lat_depende bg_diff_eq				$1 \times 10^{-6}$	$1 \times 10^{-6}$					
0	lat_low_bgdiff	0		20.0	20.0					
&coupler_nml	atmos_npes atmos_nthreads	0 4	0							
	calendar	'NOLEAP'	'NOLEAP'							
	check_stocks	0	0							
	concurrent	True	False							
	current_date	1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0							
	days do_atmos	0 True	2 False							
	do_flux	True	raisc							
	do_ice	True	True							
	do_land	True	False							
	do_ocean	True	True							
	dt_atmos dt_cpld	1800 7200	7200 7200							
	months	12	0							
	ocean_npes	96	0							
	use_lag_fluxes	True	True							
&data_override_nml debug_data_override							False			
9 diag integral and	grid_center_bug	7a!	7al;				False			
&diag_integral_nml	file_name	'diag integral.out'	'diag integral.out'							
	output_interval	1.0	1.0							
	time_units	'days'	'days'							
&diag_manager_nml append_pelist_name							False			
	conserve_water						True			
	ug_diag_manager					True	True	True		True
	do_diag_field_log sue_oor_warnings	Falce	False	False	False	True	False True	True	False	True
IS	max_axes	False 200	100	raise	raise	nue	60	iiue	300	iiue
ma	ax_field_attributes	200	100				2		300	

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.ou	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	max_file_attributes						2			
	max_files	50	400				31		1000	
	max_input_fields	800 200	699 100				300 25		700 40	
r	max_num_axis_sets max_out_per_in_field	200	100				150		40	
	max_output_fields	1300	699				300		700	
mix_sna <sub>l</sub>	pshot_average_fields	False	False				False			
	oor_warnings_fatal						False			
rogio	prepend_date on_out_use_alt_value						True True			
regio	use_cmor						False			
	write_bytes_in_file						False			
&flux_exchange_nn		False	False							
	divert_stocks_report	True	True							
00	_area_weighted_flux nblocks	False 4	False							
&fms_io_nml	checksum_required	т					True		False	
	debug_mask_list						False			
	dr_set_size						10		_	
	fileset_write fms_netcdf_override		'single'	'single'	'single'	'single'	'single'	'multi'	'multi'	'multi'
	fms_netcdr_override fms_netcdf_restart						True True			
	format						'netcdf'			
	iospec_ieee32						'-N', 'ieee_32'			
	max_files_r	300	200				40		700	
	max_files_w	300	200				40 False		700	
	print_chksum read_all_pe						False True			
	read_data_bug						False			
show_open_n	amelist_file_warning						False			
	threading_read	'multi'	'multi'	'multi'	'multi'	'multi'	'multi'	'multi'	'multi'	'multi'
	threading_write		'single'	'single'	'single'	'single'	'single'	'multi'	'multi'	'multi'
&fms_nml	time_stamp_restart clock_flags						True 'NONE'			
CIIII2IIII	clock_grain domains_stack_size	'COMPONENT' 5000000	'LOOP' 8000000	'LOOP'	'L00P'	'COMPONENT' 115200	'LOOP' 0	'COMPONENT' 115200	'LOOP' 115200	'COMPONENT' 115200
	iospec_ieee32						'-N', 'ieee_32'		F-1	
	print_memory_usage read_all_pe						False True		False	
	stack_size	0	0				0			
	warning_level						'warning'			
&generic_tracer_nn		False	False						False	
	do_generic_topaz	True True	True True						False False	
&get_cal_time_nml allow_calendar_con		ilue	nue				True		raise	
&horiz_interp_nml	reproduce_siena						False			
&ice_albedo_nml	t_range	10.0	10.0							
&ice_model_nml	add_diurnal_sw alb_ice	False 0.65	True 0.615							
	alb_ice alb_sno	0.65	0.615							
	channel_viscosity	500 000.0	0.023							
	cm2_bugs	False	False							
	do_icebergs	True	False							
	h_lo_lim	$1 \times 10^{-10}$	$1 \times 10^{-10}$							
	heat_rough_ice ice_bulk_salin	0.005	0.0005 0.005							
	io_layout	1, 2	0.003							
	layout	15, 2								
	nsteps_adv	1	1							
	nsteps_dyn num_part	72 6	108 6							
	spec_ice	False	False							
	t_range_melt	1.0	10.0							
	wd_turn	0.0	0.0							
&icebergs_nml bergy_bit_erosion_f			0.0 Falso							
mal	debug e_calving_reproduce	True	False							
IIIdK	parallel_reproduce	iiue	True							
	really_debug		False							
	sicn_shift		0.1							

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oi	new/ control/ 025deg - jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	speed_limit	0.5					1110.000000.01			
	.average_weight	False	0							
	traj_sample_hrs perator_splitting	0	0 True							
	use_roundoff_fix	True	iiuc							
	verbose	True	False							
&mom_oasis3_interface	verbose_hrs _nml fields_in	120	2400	' <b>A</b> '	' A'	'u_flux',	2. A2	' <b></b>	'u_flux',	'u_flux',
Willow 2021	LIMIC HEUSEM			'u_flux', 'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux',	'u_flux', 'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux',	'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux',	'u_flux', 'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux',	'u_flux', 'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux',	'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux',	'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux',
				'q_flux',	'q_flux',	'q_flux',	'q_flux', '* fl'	'q_flux',	'q_flux',	'q_flux',
				't_flux', 'lw_flux',	't_flux', 'lw_flux',	't_flux', 'lw_flux',	't_flux', 'lw_flux',	't_flux', 'lw_flux',	't_flux', 'lw_flux',	't_flux', 'lw_flux',
				'runof', 'p',	'runof', 'p',	'runof', 'p',	'runof', 'p',	'runof', 'p',	'runof', 'p',	'runof', 'p',
				'aice',	'aice',	'aice',	'aice',	'aice',	'aice',	'aice',
				'wfimelt', 'wfiform'	'wfimelt', 'wfiform'	'wfimelt', 'wfiform'	'wfimelt', 'wfiform'	'wfimelt', 'wfiform'	'wfimelt', 'wfiform'	'wfimelt', 'wfiform'
	fields_out			't_surf',	't_surf',	't_surf',	't_surf',	't_surf',	't_surf',	't_surf',
				's_surf',	's_surf',	's_surf',	's_surf',	's_surf',	's_surf',	's_surf',
				'u_surf',	'u_surf',	'u_surf',	'u_surf',	'u_surf',	'u_surf',	'u_surf',
				'v_surf', 'dssldx',	'v_surf', 'dssldx',	'v_surf', 'dssldx',	'v_surf', 'dssldx',	'v_surf', 'dssldx',	'v_surf', 'dssldx',	'v_surf', 'dssldx',
				'dssldy',	'dssldy',	'dssldy',	'dssldy',	'dssldy',	'dssldy',	'dssldy',
				'frazil'	'frazil'	'frazil'	'frazil'	'frazil'	'frazil'	'frazil'
	num_fields_in			15	15	15	15	15	15	15
send afte	num_fields_out er_ocean_update			7 True	7 True	7 True	7 True	7 True	7 True	7 True
	e_ocean_update			False	False	False	False	False	False	False
&monin_obukhov_nml	neutral		True			True		True	True	True
	rich_crit	10.0								
	stable_option zeta_trans	2 0.5								
&mpp_io_nml	deflate_level	0.5				5	-1	5	5	5
	field_on_root_pe						True			
he	eader_buffer_val io_clocks_on						16384 False			
	shuffle					1	0	1	1	1
&ocean_adv_vel_diag_n	ml diag_step	1200	12	120	4320	4320	4320	4320	576	576
	large_cfl_value	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	max_cfl_value verbose_cfl	100.0 False	100.0 False	100.0 False	100.0 True	100.0 True	100.0 True	100.0 True	100.0 True	100.0 True
&ocean_advection_veloc	city_nml ocity	Tube	ruse	ruse	iiuc	inde	False	nuc	nuc	iruc
	oug_this_module oflow_nboundary						False False			
	vection_velocity	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.5
	ection_transport				-1-		False			
	vection_velocity						False			
&ocean_albedo_nml ocean_albedo_option		5	2			2		2	2	2
&ocean_barotropic_nml	alphat						0.948			
·	barotropic_halo				10	10	10	10	10	10
	tropic_leap_frog		False	False						
	tropic_pred_corr time_stepping_a	True	True	True	True	True	True	True	True	True
barotropic_t	time_stepping_b	False			False	False	False	False	False	False
barotropic_time_ste			True	True						
barotropic_time_ste	epping_mom4p1 oug_this_module	False	False False	False False	False	False	False	False	False	False
deb	diag_step	1200	12	120	4320	4320	4320	4320	576	576
do_bit	wise_exact_sum	True					False			
	eta_max eta_offset	8.0	8.0	8.0	8.0	8.0	$1 \times 10^{-12}$	8.0	8.0	8.0
Trac.	_crit_cell_height geoid_forcing	0.2	0.2	0.2	0.2	0.2	0.2 False	0.2	0.2	0.2
	ideal_initial_eta						False			
	l_eta_amplitude						5.0			
	itial_eta_xwidth						100 000.0			
ideal_in	itial_eta_ywidth						100 000.0			

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oi	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
initsum_with_b							False			
initsum_with_b	pbot_offset						True $1 \times 10^{-12}$			
pred_	corr_gamma	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
smooth_anompb_bt							False			
smooth_anompb_							False			
<mark>smooth_eta_diag</mark> smooth_eta_dia		True	True	True	True	True	False True	True	True	True
smooth_eta_t		True	True	True	False	False	False	False	False	False
smooth_eta_t_bt					. 4.50		False	· disc	, uisc	1 4130
smooth_eta_t_							False			
smooth_eta		False	False	False	True	True	True	True	True	True
smooth_pbot_t smooth_pbot_t_biharn		True	True	True	False	False	False False	False	False	False
smooth_pbot	,	False	False	False	True	True	True	True	True	True
tid	al_forcing_8						False			
	orcing_ideal						False			
	_forcing_m2 runcate_eta	False	False	False	False	False	False False	False	False	False
	udrho_bih	rdise	rdise	raise	raise	rdise	False	rdlSt	raise	rdise
udrho_bih	_vel_micom						0.01			
	drho_bt_bih						False			
u	drho_bt_lap						False			
udrho lan	udrho_lap _vel_micom						False 0.05			
use_legacy_baro					False	False	False	False	False	False
	_micom_bih	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	m_bih_diag						0.1			
	_micom_lap	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	om_lap_diag verbose_init	1.0	1.0	0.2	0.2	0.2	0.2 True	0.2	0.5	0.2
	se_truncate	True	True	True	True	True	True	True	True	True
wri	te_a_restart						True			
zero	_coriolis_bt						False			
	zero_eta_ic zero_eta_t						False False			
zero_e	ta_tendency						False			
201020	zero_eta_u						False			
	_forcing_bt						False			
zero_nonlinea		F-1	F-I	F-I		F-I	False	F-1	F-I	Falsa
· · · · · · · · · · · · · · · · · · ·	ro_tendency omf_implicit	False	False	False		False True	False True	False True	False True	False True
Quedit_Duc_iiiit	bmf_max					iiuc	1.0	iiue	iiue	iiuc
	cdbot	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
cd	bot_gamma						40.0			
	cdbot_hh cdbot_hi					0.007	1100.0 0.007	0.007	0.007	0.007
cdhot	law_of_wall			False	False	0.007	False	0.007	0.007	0.007
	cdbot_lo			. 4.50	. 4.50		0.001			
cdbot_rough	ness_length					False	False	False	False	False
cdbot_roug	nness_uamp cdbot_uu					True	True	True	True	True
	cdbot_wave						1.0 False			
	geothermal						0.001			
debug_:	:his_module						False			
law_of_wall_ro						2.25	0.01			
use_geother	uresidual	0.05 True	0.05 True	False	False	0.05 False	0.05 False	0.05 False	0.05 False	0.05 False
	uvmag_max	iiuc	iluc	ו מנטכ	ו מנטכ	ו מנטכ	10.0	ו מנטכ	ו מנטכ	ו מנטכ
&ocean_bbc_ofam_nml read				False	False		False			
	idual2_max			1.0	1.0	,	0.05			
&ocean_bih_friction_nml b	ıh_friction	'general'	'general'	'general'	'general'	'general'	'general'	'general'	'general'	'general'
	his_module						False			
&ocean_bih_tracer_nml	te_a_restart abih						<b>True</b> 0.0			
	rz_s_diffuse						True			
ho	rz_z_diffuse						False			
	ısivity_mask						False		_	
tracer	mix_micom :his_module	False	False	False	False	False	True False	False	True False	False
LICO S										

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.os	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
&ocean_bihcst_friction_r	nml	False	False	False	False	False		False	False	False
&ocean_bihgen_friction_ bottom_5point	_nml	True	True	True	True	True	False	False	False	False
	ug_this_module						False			
	eq_lat_micom	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
•	el_micom_aniso	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
•	_vel_micom_iso	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	equatorial_zonal itorial_zonal_lat	False	False	False	False	False	False 0.0	False	False	False
cqua	k_smag_aniso	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	k_smaq_iso	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
ncar_bo	oundary_scaling	True	True	True	True	True	True	True	True	True
	ry_scaling_read					False	True	False	True	False
ncar	r_rescale_power	2	2	2	2	2	2	2	2	2
	ncar_vconst_4	$2 \times 10^{-8}$	$2 \times 10^{-8}$	$2  imes 10^{-8}$	$2  imes 10^{-8}$	$2  imes 10^{-8}$	$2  imes 10^{-8}$	$2 \times 10^{-8}$	$2  imes 10^{-8}$	$2 \times 10^{-8}$
	ncar_vconst_5	5	5	5	5	5	5	5	5	5
	neptune						False			
	cune_depth_min						100.0			
	tune_length_eq						4200.0 17 000.0			
	ne_length_pole neptune_scaling						1.0			
	eptune_smooth						True			
	ne_smooth_num						1			
	d_aiso_bih_back						False			
	ag_friction_max						1.0			
	_friction_scaling						1.0			
side_drag_fricti							10.0			
	de_drag_friction		_	_	_	_	False	_		_
	se_this_module	True	True	True	True	True	True	True	True	True
	el_micom_aniso _micom_bottom	0.0 0.01	0.0 0.01	0.0 0.01	0.0 0.01	0.0 0.01	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
vet.	vel_micom_iso	0.01	0.01	0.01	0.01	0.01	0.0	0.0	0.0	0.0
	visc_crit_scale	0.25	0.25	0.25	0.25	0.25	1.0	1.0	1.0	1.0
visc	.diverge_scaling	0.23	0.23	0.23	0.23	0.23	0.0	1.0	1.0	1.0
&ocean_blob_nml bitwis							False			
b	lob_small_mass						1000.0			
	ug_this_module						False			
	wise_exact_sum						False			
max <sub>-</sub>	_prop_thickness						0.7			
&ocean_convect_nml	really_debug			Гојао	False		False		Truco	
convect_full_scalar				False	False		True		True	
	vect_full_vector			True	True		False		False	
COIL	convect_ncon			IIuc	Huc		False		raisc	
	ncon						7			
U	se_this_module	False	False	False	False	False	False	False	False	False
&ocean_coriolis_nml	acor	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	ug_this_module						False			
	se_this_module	True	True	True	True	True	True	True	True	True
&ocean_density_nml a							0.255			
	beta_linear_eos eq_smooth_vert						0.0 True			
	ug_this_module						False			
	ty_equal_potrho						False			
	wise_exact_sum						False			
	odz_diag_stable						True			
	eos_linear	False			False	False	False	False	False	False
	eos_preteos10	True			True	True	True	True	True	True
	eos_teos10						False			
	epsln_drhodz						$1 \times 10^{-10}$			
	sln_drhodz_diag						$1 \times 10^{-10}$			
	ootrho_compute						False			
	o_lrpotrho_max						10.0			
grau_Nrn	no_lrpotrho_min layer_nk	80	80	80	80	80	1.0 80	80	80	80
	linear_eos	00	False	False	00	00	00	00	00	00
mask	_domain_restart		raisc	ialsc			False			
	_density_omega						False			
	_density_potrho						True			
	neutralrho_max	1030.0	1030.0	1030.0	1030.0	1030.0	1038.0	1030.0	1038.0	1030.0
	neutralrho_min	1020.0	1020.0	1020.0	1020.0	1020.0	1028.0	1020.0	1028.0	1020.0

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oi	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
nı	ım_121_passes						1			
	p_test potrho_max	1038.0	1038.0	1038.0	1038.0	1038.0	1000.0 1038.0	1038.0	1038.0	1038.0
	potrho_min	1038.0	1038.0	1038.0	1038.0	1038.0	1028.0	1038.0	1028.0	1038.0
	potrho_press						2000.0			
	press_standard						0.0			
	rho0_density s_test						False 20.0			
	smax_diaq						-1.0			
	min_in_column						False			
smooth_strat	ification_factor						False			
	sn_test t_test						35.0 20.0			
	teos10_eos			False			20.0			
	theta_max						30.0			
	theta_min						-2.0			
undate dia	tn_test gnostic_factors						20.0 False			
	write_a_restart						True			
&ocean_domains_nml	halo						1			
	max_tracers			20	10	5	5	5	5	5
	x_cyclic_offset						0			
0 1:0	y_cyclic_offset						0			
	output_interval se_this_module	False	False				False			
&ocean_form_drag_nml		Talse	Talse				600.0			
Goccan I i i i i i i i i i i i i i i i i i i	cprime_aiki			0.6	0.6		0.3			
	g_this_module						False			
form_drag_aiki_							3			
	i_bottom_layer iiki_gradh_max						False 0.05			
	i_gradh_power						1.0			
	ki_scale_by_gm						False			
form_drag_aiki_							False			
	_gbatch_alpha						300 000 000.0 False			
	patch_alpha_f2 patch_f2overn2						False			
form_draq_qba							False			
	tch_f2overno2						False			
	rag_gbatch_no						0.005			
form_drag_gbat	atch_surf_layer						False False			
	urf_blayer_min						3			
	n_squared_min						$1 \times 10^{-10}$			
	ım_121_passes						1			
	form_drag_aiki						False			
	m_drag_gbatch se_this_module	False	False	False	False	False	False False	False	False	False
	orm_drag_max	rauc	raisc	Talsc	rabc	Talsc	1.0	raisc	raisc	raise
	verbose_init						True			
	orm_drag_max						1.0			
&ocean_frazil_nml air_s		False	False			False	True False	False	False	False
uebu	g_this_module frazil_factor	raise	raise			raise	1.0	raise	raise	raist
frazil_0	only_in_surface	True	True	False		False	False	False	False	False
	temp_accurate		False	True						
	emp_preteos10	_	_		_	True	True	True	True	True
	g_temp_simple g_temp_teos10	True	True	False	True	False	False False	False	False	False
	se_this_module	True	True	True	True	True	True	True	True	True
&ocean_grids_nml debu		True	True	True	True	False	False	False	False	False
do_bitv	ise_exact_sum	True					False			
rea	id_rho0_profile	False	False	False	False		False			
	verbose_init write_grid						True False			
&ocean_increment_eta_n				0	0		1 4136			
days_to_increment	-			V			_			
frac	tion_increment			1.0	1.0		1.0			
	s_to_increment		F .	3600	1800	F 1	0	F .		
110	e_this_module	False	False	False	False	False	False	False	False	False

Group (continued) Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oı	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
fraction_increment			1.0	1.0		1.0			
secs_to_increment	Ealco	Falso	3600 Falso	1800 Ealco	Falso	() False	Ealco	Falso	Ealco
use_this_module &ocean_increment_velocity_nml	False	False	False 0	False	False	False	False	False	False
days_to_increment			0	0		1			
fraction_increment			1.0	1.0		1.0			
secs_to_increment			3600	1800		0			
use_this_module	False	False	False	False	False	False	False	False	False
&ocean_lap_friction_nml						False			
debug_this_module lap_friction_scheme	'aonoral'	'aonoral'	'aonoral'	'annoral'	'aonoral'	'annoral'	'aonaral'	'aonoral'	'aonoral'
write_a_restart	'general'	'general'	'general'	'general'	'general'	'general' True	'general'	'general'	'general'
&ocean_lap_tracer_nml alap						0.0			
horz_s_diffuse						True			
horz_z_diffuse						False			
read_diffusivity_mask						False			
tracer_mix_micom	Falsa	Estas	Falsa	Falsa	F-1	False	F-1	F-1	F-I
use_this_module vel_micom	False	False	False	False	False	False 0.0	False	False	False
vet_micom verbose_init						True			
&ocean_lapcst_friction_nml	False	False	False	False	False	1100	False	False	False
use_this_module									
&ocean_lapgen_friction_nml						False			
async_domain_update blocksize						10			
bottom_5point	True	True	True	True	True	False			
debug_ncar_a	iiuc	nuc	iiuc	iruc	iiuc	False			
debug_ncar_b						False			
debug_this_module						False			
divergence_damp						False			
divergence_damp_vel_micom						0.0			
eq_lat_micom						0.0			
eq_vel_micom_aniso eq_vel_micom_iso						0.0			
equatorial_no_smag						False			
equatorial_zonal						False			
equatorial_zonal_lat						0.0			
k_smag_aniso	0.0	0.0	0.0	0.0	0.0	0.0			
k_smag_iso	0.0	0.0	0.0	0.0	0.0	2.0		2.0	
ncar_isotropic_at_depth ncar_isotropic_at_depth_visc						False 10 000.0			
ncar_isotropic_depth						4000.0			
ncar_isotropic_off_equator						False			
ncar_only_equatorial			True	True		False			
neptune						False			
neptune_depth_min						100.0			
neptune_length_eq						1200.0			
neptune_length_pole neptune_smooth						3000.0 True			
neptune_smooth_num						1			
restrict_polar_visc	True	True	True	True	True	False			
restrict_polar_visc_lat	60.0	60.0	60.0	60.0	60.0	60.0			
restrict_polar_visc_ratio	0.35	0.35	0.35	0.35	0.35	0.35			
side_drag_friction_max						1.0			
side_drag_friction_scaling						1.0 10.0			
side_drag_friction_uvmag_max use_side_drag_friction						False			
use_stde_drag_mction use_this_module	True	True	True	True	True	False	False	False	False
vconst_1			8 000 000.0	8 000 000.0		10 000 000.0			
vconst_2			0.0	0.0		0.0			
vconst_3			0.8	0.8		0.16			
vconst_4			$5 \times 10^{-9}$	$5 \times 10^{-9}$		$2 \times 10^{-8}$			
vconst_5 vconst_6			3 300 000 000.0	3 300 000 000.0		3 10 000 000.0			
vconst_7			100.0	100.0		1000000.0			
vconst_8			100.0	100.0		45.0			
vel_micom_aniso						0.0			
vel_micom_iso	0.1	0.1	0.1	0.1	0.1	0.0			
visc_vel_scale_length	_			_	_	150 000.0			
viscosity_ncar	False	False	False	True	False	False			
viscosity_ncar_2000			False	False		True			
viscosity_ncar_2007			True	True		False			

Viscosity, scale by, rossby True True True True True False Viscosity, scale by, rossby power 4.0 4.0 4.0 4.0 4.0 4.0 2.0 4.0 2.0 4.0 4.0 2.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 4.0 2.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4	jra55_ryf input.nml	01deg jra55_ryf/ ocean/ input.nml
&ocean_mixdownslope.nml debug this module       False       False       False       False       False       False         mixdownslope.mask gfdl       True       True       False       False       False       Palse         mixdownslope.mask gfdl       True       True       False       False       False       False         mixdownslope.mask gfdl       True       True       False       False       False       False         mixdownslope.mask gfdl       True       True       False       False       False       False         mixdownslope.weight_far       True       False		
True	False	
mixdownslope_mask_affdt         True         False	rutse	
mixdownslope mask_ofdl         True         True         False         False         False         False           mixdownslope_weight_far         4         4         4         4         4         1           mixdownslope_weight_far         1         1         1         1           read_mixdownslope_width         True         True         False         False         False           mixdownslope_width         True         True         True         True         True         False         False           use_this_module         True         True         True         True         True         False         Fa		
mixdownslope_npts         4		
Mixdownslope_width   Fead_mixdownslope_mask		
read_mixdownslope_mask use this_module         True		
use_this_moduleTrue		
Barotropic_split   80   80   80   80   80   80   80   8	False	False
False	1	1
debug dt_oceanFalse 7200False 7200False 7200False 3600False 3600False 3600False 3600False 3600False 3600False 3600False 3600False 	80	80 True
Description	False	False
False	150	150
1,4   1,2   1,4		
layout 12,8 6,4 12,10 16,15 16,15 48,40 48,40  mask table reinitialize thickness surface_height_split 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10, 15	10, 15
reinitialize_thickness surface_height_split 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	80,75	80,75
surface_height_split 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
time_tendency 'twolevel' 'twoleve	1	1
use_blobs use_velocity_override vertical_coordinate 'zstar' 'z	'twolevel'	1 'twolevel'
vertical_coordinate     'zstar'     '	tiloteret	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
&ocean_momentum_source_nml     False       debug_this_module     False       rayleigh_damp_exp_from_bottom     False     False       rayleigh_damp_exp_scale     100.0       rayleigh_damp_exp_time     864 000.0       use_rayleigh_damp_table     True     True     True     True     True     True		
debug_this_module       rayleigh_damp_exp_from_bottom     False     False     False       rayleigh_damp_exp_scale     100.0       rayleigh_damp_exp_time     864 000.0       use_rayleigh_damp_table     True     True     True     True     True     True     True     True     True	'zstar'	'zstar'
rayleigh_damp_exp_from_bottom     False     False       rayleigh_damp_exp_scale     100.0       rayleigh_damp_exp_time     864 000.0       use_rayleigh_damp_table     True     True     True     True		
rayleigh_damp_exp_time 864 000.0  use_rayleigh_damp_table True True True True True True	False	False
use_rayleigh_damp_table True True True True True True		
	True	True
<mark>use_this_module</mark> False False True True True True True True	True	True
verbose_init True		
&ocean_nphysics_new_nml False drhodz_smooth_horz		
drhodz_smooth_vert False		
smax 0.01		
use_this_module False		
vel_micom_smooth     0.2       &ocean_nphysics_nml     debug_this     False     False     False     False     False     False	False	False
module	1 0130	1 0130
use_nphysicsa False False False False False False	False	False
use_nphysicsb False True False False False False False False	False	False
<pre>use_nphysicsc True False True True False False use_this_module True True True True False False</pre>	False False	False False
write_a_restart True	1 4150	. 4.50
&ocean_nphysics_util_new_nml 1		
num_121_passes         &ocean_nphysics_util_nml         agm         800.0         800.0         600.0         600.0         600.0         100.0	100.0	100.0
agm_closure True True True True True True True T	True	True
<mark>agm_closure_baroclinic</mark> True True True True True True True	True	True
agm_closure_buoy_freq	0.004	0.004
<pre>agm_closure_eady_ave_mixed True True True True agm_closure_eady_cap True True True True True</pre>		
agm_closure_eady_smooth_horz True True True True True True		
agm_closure_eady_smooth_vert True True True True True		
agm_closure_eden_gamma     0.0     0.0     0.0     0.0       agm_closure_eden_greatbatch     False     False     False		
agm_closure_grid_scaling True True True True True		
agm_closure_length 50 000.0 50 000.0 50 000.0 50 000.0 50 000.0 50 000.0	50 000.0	50 000.0
agm_closure_length_bczone False False False False False False False False False	False	False
agm_closure_length_fixed     False     False     False     False       agm_closure_length_rossby     False     False     False     False	False False	False False
agm_closure_lower_depth 2000.0 2000.0 2000.0 2000.0 2000.0 2000.0	2000.0	2000.0
agm_closure_max 800.0 800.0 600.0 600.0 600.0 600.0	600.0	600.0
agm_closure_min         100.0         100.0         50.0         50.0         50.0         100.0           agm_closure_scaling         0.07         0.07         0.07         0.07         0.07         0.07	100.0 0.07	100.0 0.07
agm_closure_upper_depth 100.0 100.0 100.0 100.0 100.0 100.0 100.0	100.0	100.0
agm_damping_time 45.0 45.0 45.0 45.0 45.0		

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.o	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
agn	n_smooth_space	False	False	False	False	False				
ag	m_smooth_time	False	False	False	False	False				
	aredi	600.0	600.0	600.0	600.0	600.0		600.0	600.0	600.0
	redi_equal_agm	False	False	False	False	False		False	False	False
	drhodz_mom4p1 dz_smooth_horz	True False	True False	True False	True False	True False		False False	False False	False False
	dz_smooth_vert	False	False	False	False	False		False	False	False
nphysi	cs_util_zero_init	True	True	True	True	True				
ros	ssby_radius_max	100 000.0	100 000.0	100 000.0	100 000.0	100 000.0		100 000.0	100 000.0	100 000.0
ro	ssby_radius_min	15 000.0	15 000.0	15 000.0	15 000.0	15 000.0		15 000.0	15 000.0	15 000.0
	smax	0.005	0.005						0.002	
ter	swidth acer_mix_micom	0.002 False	0.002 False	False	False	False		False	0.002 False	False
uc	vel_micom	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
&ocean_nphysicsa_nml	recomeon	False	False	0.0	0.0	0.0		0.0	0.0	0.0
debug_this_module										
neutral_	linear_gm_taper	True	True							
	ral_physics_limit	True	True							
	_physics_simple	False	False							
	utral_sine_taper nask_neutral_on	True True	True True							
	use_this_module	False	False	False	False	False		False	False	False
&ocean_nphysicsb_nml debug_this_module	ise_tills_illoudte	False	False	i disc	1 disc	i alse		i alse	1 alse	i disc
	nblayer_smooth	True	True							
neutr	ral_physics_limit	True	True							
	_turb_thick_min	50.0	50.0							
	urb_thick_min_k	5	5							
	use_this_module	False	True	False	False	False		False	False	False
&ocean_nphysicsc_nml bv_freq_smooth_vert	bvp_bc_mode	True 2		True 2	True 2	True 2				
	bvp_min_speed	0.1		0.1	0.1	0.1				
	bvp_speed	0.0		0.0	0.0	0.0				
deb	ug_this_module	False		False	False	False				
	do_gm_skewsion	True		True	True	True				
do_n	neutral_diffusion	True		True	True	True				
	epsln_bv_freq	$1 \times 10^{-12}$		$1 \times 10^{-12}$	$1 \times 10^{-12}$	$1 \times 10^{-12}$				
_	sion_bvproblem skewsion_modes	True False		True False	True False	True False				
	tral_eddy_depth	True		True	True	True				
	ral_physics_limit	True		True	True	True				
	mber_bc_modes	2		2	2	2				
	regularize_psi	False		False	False	False				
	smax_psi	0.01		0.01	0.01	0.01				
•	smooth_psi nask_neutral_on	True		True	True	True				
	turb_blayer_min	True 50.0		True 50.0	True 50.0	True 50.0				
	use_this_module	True	False	True	True	True		False	False	False
&ocean_obc_nml	ctrop_inc						0.0, 0.0, 0.0,			
	ctrop_max						0.0 1.5, 1.5, 1.5,			
	ctrop_min						1.5 0.1, 0.1, 0.1, 0.1			
	ctrop_smooth						0.7, 0.7, 0.7, 0.7			
	direction						None			
	enh_fac_d						1.0, 1.0, 1.0,			
	enh_fac_v enh_pnts						0.9, 0.9, 0.9, 0.9 1, 1, 1, 1			
	fieldname_eta						'eta_t', 'none', 'none', 'none'			
	fieldname_ud						'ud', 'none', 'none', 'none'			
	filename_eta						'obc_eta t.nc', 'none', 'none', 'none'			
	filename_tracer						'INPUT'			

Group (continued) Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oi	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
filename_ud						'obc_ud.nc', 'none', 'none', 'none'			
ie						-999, -999, -999, -999			
iere						-999, -999,			
iers						-999, -999 -999, -999,			
is						-999, -999 -999, -999,			
						-999, -999			
itre						-999, -999, -999, -999			
itrs						-999, -999, -999, -999			
je						-999, -999,			
jere						-999, -999 -999, -999,			
						-999, -999			
jers						-999, -999, -999, -999			
js						-999, -999, -999, -999			
jtre						-999, -999,			
jtrs						-999, -999 -999, -999,			
						-999, -999			
name						'test_obc', 'none', 'none',			
						'none'			
nobc obc_adjust_forcing_bt						0 False, False,			
obc_consider_convu						False, False False, False,			
						False, False			
obc_consider_sources						False, False, False, False,			
						False, False,			
						False, False, False, False,			
						False, False,			
						False, False, False, False,			
						False, False,			
						False, False,			
						False, False, False, False,			
						False, False,			
						False, False, False, False,			
						False, False,			
						False, False, False, False,			
						False, False,			
obc_enhance_diff_back						False, False 'NONE',			
						'NONE', 'NONE', 'NONE'			
obc_enhance_visc_back						'NONE',			
						'NONE', 'NONE', 'NONE'			
obc_eta						'NOTHIN', 'NOTHIN',			
						'NOTHIN', 'NOTHIN'			

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oı	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	obc_flow_relax						1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			
	obc_mix						'NOGRAD', 'NOGRAD', 'NOGRAD', 'NOGRAD',			
	obc_nor						'NOGRAD', 'NOGRAD', 'NOGRAD', 'NOGRAD'			
	obc_relax_tracer						False, False, False, False,			
	obc_tan						'NOGRAD', 'NOGRAD', 'NOGRAD', 'NOGRAD'			

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file 000000 ou	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	obc.tra						file.00000.ot  'NOGRAD',			
obc <u>.t</u> i	obc_ud						False, False, False, False,			
							'NOGRAD', 'NOGRAD', 'NOGRAD'			
O	bc_vert_advel_t						False, False, False, False			
ot	oc_vert_advel_u						False, False, False, False			

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss.acces- som2 025deg jra55_ryf log- file.000000.oi	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	rel_clin_pnts						1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			
	rel_coef_eta_in						0.0, 0.0, 0.0, 0.0			
	rel_coef_eta_out						0.0, 0.0, 0.0,			
	rel_coef_tracer_in						0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,			
	el_coef_tracer_out						0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,			
&ocean_operators_nn	rel_eta_pnts	True				False	1, 1, 1, 1 False	False	False	False
use_legacy_div_ud										
&ocean_overexchanger this_module	e_nml debug	False	False	False	False	False	False	False	False	False
overex	bitwise_exact_sum ch_check_extrema xch_min_thickness	False	False	False	False		False False 4.0			
	overexch_npts overexch_stability	4	4	4	4	4	4 0.25	4	4	4
	erexch_weight_far	False	False	False	False	False	False	False	False	False
	overexch_width						0.7777			
	overflow_delta overflow_mu						0.3333 0.0001			
	overflow_umax	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
&ocean_overflow_nm	use_this_module	False	False	False	False	False	False	False	False	False
debug_this_module		False	False	False	False		False		False	
<b>ao_</b>	bitwise_exact_sum no_return_flow						False False			
	overflow_delta						0.3333			
	overflow_mu						0.0001			
	overflow_umax transport_units						0.01 'Sv'			
	use_this_module	False	False	False	False	False	False	False	False	False
&ocean_overflow_ofp debug_this_module									False	
do ent	diag_step rainment_para_ofp								5760 False	
do_cnt	do_mass_ofp								True	
	frac_exchange_src								1.0	
	max_vol_trans_ofp								10 000 000.0	

Group (continued) Variable	e original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.os	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
use_this_modul	2				False	1110.000000.01	False	False	False
&ocean_parameters_nml						4218.0			
cp_liquid_runoff									
cp_oceal						3992.103 223			
cp_solid_runof						2106.0 9.8			
gra omega_eartl						7.2921 ×			
omega_cara	•					10 <sup>-5</sup>			
rhot	ו					1035.0			
tfreezo						273.15			
&ocean_polar_filter_nml	False	False	False	False	False		False	False	False
wse_this_module &ocean_pressure_nml debug_this_module						False			
zero_correction_term_grad	1					False			
zero_diagonal_press_grad						False			
zero_eta_over_h_zstar_pressur	e					False			
zero_pressure_force					False	False	False	False	False
&ocean_rivermix_nml	40.0	40.0				0.0			
calving_insertion_thickness						Fel			
<mark>debug_all_in_top_cel</mark> debug_this_modulo		False	False	False	False	False False	False	False	False
debug_this_module_hea		raise	raise	raise	raise	False	raise	raise	raise
discharge_combine_runoff_calv		True				True			
do_bitwise_exact_sun						False			
river_diffuse_sal		False	False	False	True	False	True	True	True
river_diffuse_tem		False	False	False	True	False	True	True	True
river_diffusion_thicknes		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
river_diffusivit river_insertion_thicknes	,	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
runoff_insertion_thicknes		40.0	10.0	10.0	10.0	0.0	10.0	10.0	10.0
use_this_module	e True	True	True	True	True	True	True	True	True
&ocean_riverspread_nml debug_this_module						False		False	
riverspread_diffusion riverspread_diffusion_passe						False 0			
use_this_modul		False	True	True	False	False	False	True	False
vel_micom_smootl		ruise	iiuc	iide	1 4130	0.2	raise	nuc	ruise
&ocean_rough_nml rough_scheme	e 'beljaars'	'beljaars'			'beljaars'		'beljaars'	'beljaars'	'beljaars'
&ocean_sbc_nml avg_sfc_temp_salt_eta		True	True	True	True	True	True	True	True
avg_sfc_velocit		True	True	True	True	True	True	True	True
calvingspread constant_hl		False			False	False	False	False	False
constant_hi						True True			
constant_sss_for_restore						35.0			
constant_sst_for_restore						12.0			
convert_river_to_pm						False			
debug_water_fluxe						False			
do_bitwise_exact_sun do_flux_correction					False False	False	False False	False False	False False
do_ltux_correction do_langmui					raise	False False	raise	raise	raise
eta_restore_tscal						- 30.0			
ice_salt_concentration			0.005			0.005			
land_model_heat_fluxe		False			False	False	False	False	False
max_delta_salinity_restor			0.5	0.5	0.5	0.5	0.5	0.5	0.5
max_ice_thicknes		8.0	8.0	8.0	0.0	0.0	0.0	0.0	0.0
read_restore_mas read_stokes_drif			False	False	False	False False	False	False	False
restore_mask_qfd			False	False	False	False	False	False	False
rotate_wind					. 4.50	False	. 200		. 3100
runoff_salinit			0.0	0.0	0.0	0.0	0.0	0.0	0.0
runoff_temp_mi						0.0			
runoffspread		False				False			
salinity_re salt_correction_scal					0.0	35.0 0.0	0.0	0.0	0.0
salt_restore_as_salt_flu			True	True	True	True	True	True	True
salt_restore_tscale		-10.0	15.0	15.0	60.0	60.0	60.0	60.0	60.0
salt_restore_under_ice	e		True	True	True	True	True	True	True
sbc_heat_fluxes_cons						False			
sbc_heat_fluxes_const_seasona						False			
sbc_heat_fluxes_const_value tau_x_correction_scale						0.0 0.0			
Lau_A_COTTection_SCall	0.0					0.0			

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oi	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
tau_y_c	correction_scale	0.0					0.0			
	taux_sinx						False			
	tauy_siny	4.0					False			
	correction_scale o_restore_tscale	1.0 —10.0	-10.0	-1.0	-1.0	-10.0	0.0 —10.0	-10.0	-10.0	-10.0
	_sss_for_restore	-10.0	-10.0	-1.0	-1.0	-10.0	— 10.0 False	-10.0	-10.0	-10.0
	_sst_for_restore						False			
use_full_patr	m_for_sea_level	True	True			False	False	False	False	False
	e_ideal_calving						False			
U	ise_ideal_runoff	Tour	T	Т	T	Т	False	Т	T	Т
use_waterflux_o	use_waterflux	True False	True	True	True	True	True False	True	True	True
	<pre>catving </pre>	False					False			
	c_override_fprec	False					False			
	waterflux_tavg	False	False	False	False		False			
	_calving_fluxes						False			
	ero_heat_fluxes	False		False	False	False	False	False	False	False
	me_eta_restore _salt_correction	False				False	False False	Ealco	Ealco	False
	net_salt_restore			True	True	True	True	False True	False True	True
	vater_correction			Huc	nuc	False	False	False	False	False
zero_net_water				True	True	True	True	True	True	True
	t_water_coupler			True	True	True	True	True	True	True
zero_ne	t_water_restore			True	True	True	True	True	True	True
	ero_pme_fluxes						False			
	ero_river_fluxes						False			
	ro_runoff_fluxes			Falsa	False	False	False	F-1	Falsa	Falsa
	o_surface_stress ro_water_fluxes			False False	False	False	False False	False False	False False	False False
&ocean_sbc_ofam_nml	IO_Water_Ituxes			False	False	1 alse	False	1 0130	1 atse	1 alse
restore_mask_ofam				ruisc	ruse		ruisc			
ri	ver_temp_ofam			False	False		False			
&ocean_shortwave_csiro	_nml			True	True					
read_depth										
u	se_this_module	False	False	True	True	False		False	False	False
&ocean_shortwave_gfdl.	zmax_pen			7000	7000		0.08			
chl_default	Jiiiit.						0.00			
	ug_this_module	False	False	False	False	False	False	False	False	False
	enforce_sw_frac	True	True	True	True	True	True	True	True	True
	for_uniform_chl						False			
	optics_manizza	True	True	True	True	True	True	True	True	True
optics optics optics	_morel_antoine	False	False			False	False	False	False	False
	override_f_vis read_chl	False False	False False	False	False	True	True True	True	True	True
	sw_frac_top	raise	raise	rdist	rdise	iiue	0.0	iiue	iiue	iiue
sw mor	el_fixed_depths						False			
	en_fixed_depths			False	False		. 4.50			
u	se_this_module	True	True	False	False	True	True	True	True	True
	zmax_pen	200.0	200.0	200.0	200.0	300.0	300.0	300.0	300.0	300.0
&ocean_shortwave_jerlo	v_nml	False	False	False	False	False		False	False	False
<pre>use_this_module &amp;ocean_shortwave_nml</pre>		False	False	True	True	False	False	False	False	False
use_shortwave_csiro		i alse	Talse	iiue	iiue	raise	i atse	1 0130	i atse	1 0130
	_shortwave_ext						False			
	.shortwave_gfdl	True	True	False	False	True	True	True	True	True
use_sh	nortwave_jerlov	False	False	False	False	False	False	False	False	False
	se_this_module	True	True	True	True	True	True	True	True	True
&ocean_sigma_transport	t_nml						0.3333			
campingoose_delta	ampingooso mu						0.0001			
	mpingoose_mu ug_this_module						False			
	dvection_check						True			
	a_advection_on	False	False	False	False		False		False	
	ection_sgs_only	False	False	False	False		False		False	
	na_diffusion_on	True	True	True	True		True		True	
	igma_diffusivity						1000.0			
	diffusivity_ratio	$1 \times 10^{-6}$	$1 \times 10^{-6}$	$1 \times 10^{-6}$	$1 \times 10^{-6}$		$1 \times 10^{-6}$		$1 \times 10^{-6}$	
sigma_just.	_in_bottom_cell	True	True	True	True		True		True	
cmoath c	sigma_umax sigma_thickness	0.01 True	0.01 True	0.01 True	0.01 True		0.01 True		0.01 True	
	_sigma_velocity	True	True	True	True		True		True	
SITIUUUII	_5/gma_verocity	iiue	nue	iiue	nue		ilue		liue	

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oı	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	smooth_velmicom	0.2	0.2	0.2	0.2		0.2		0.2	_
thi	ckness_sigma_layer	100.0	100.0	100.0	100.0		100.0		100.0	
th	ickness_sigma_max	100.0	100.0	100.0	100.0		100.0		100.0	
th	ickness_sigma_min	100.0	100.0	100.0	100.0		100.0		100.0	
	tmask_sigma_on	False	False	False	False		False		False	
	tracer_mix_micom	True	True	True	True		True		True	
	use_this_module	True	True	True	True	False	False	False	False	False
	vel_micom	0.05	0.05	0.05	0.05		0.05		0.05	
	verbose_init						True			
	write_a_restart						True			
&ocean_solo_nml	calendar			'NOLEAP'	'NOLEAP'	'NOLEAP'	'NOLEAP'	'NOLEAP'	'NOLEAP'	'NOLEAP'
	date_init			1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0
	days			0	1460	0	0	31	30	30
	debug_this_module				False		False			
	dt_cpld			3600	3600	3600	1800	1200	150	600
	hours			0	0	0	0	0	0	0
	layout_mask						0,0			

\$0.03   \$0.00   \$0.0	Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss.acces- som2 025deg jra55_ryf log-	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
0.0.0.0. 0.0		mask_list									
0.0.0.0 0.0.0.								0, 0, 0, 0, 0,			
0.00.00 0.00.00 0.00.00 0.00.00 0.00.00 0.00.0								0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0			
0,0,0,0   0,0,											
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\$								0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0			
0.0.0.0 0.0.0.								0, 0, 0, 0, 0,			
0,0,0,0 0,0,0 0,0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0 0,0,0 0,0 0,0 0,0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0								0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0			
0,0,0,0,0 0,0,0,0,0 0,0,0,0,0 0,0,0,0,0								0, 0, 0, 0, 0,			
0.0.0.0 0.0.0.								0, 0, 0, 0, 0, 0. 0. 0. 0. 0.			
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0.0.0.0 0.0.0.											
0.0.00 0.0.00								0, 0, 0, 0, 0,			
0.0.0.0 0.0.0.											
0,0,0,0, 0,								0, 0, 0, 0, 0,			
0,0,0,0, 0,0,0,0, 0,0,0,0,0,0,0,0,0,0,0											
0.00.00 0.00.00 0.00.00 0.00.00 0.00.00 0.00.0								0, 0, 0, 0, 0,			
0.00.0.0 0.00.0.0 0.00.0.0 0.00.0.0 0.00.0								0, 0, 0, 0, 0,			
0.00.0 0.00.0 0.00.0 0.00.0 0.00.0 0.00.0								0, 0, 0, 0, 0,			
0,0,0,0 0,0,0 0,0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0 0,0,0 0,								0, 0, 0, 0, 0,			
0,0,0,0, 0,0,0,0, 0,0,0,0,0,0,0,0,0,0,0								0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0			
0,0,0,0 0,0,0,0								0, 0, 0, 0, 0,			
0,0,0,0 0,0,0,0								0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0,			
0,0,0,0,0 0,0,0,0,0 0,0,0,0,0 0,0,0,0,0											
0.0,0,0 0,0,0,0 0.0,0 0.0,0,0 0.0,0								0, 0, 0, 0, 0,			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0, 0 0 0 0 0			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0,			
0,0,0,0 0,0,0 0,0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0,0 0,0 0,0,0 0,								0, 0, 0, 0, 0,			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0,			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0,			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0,			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0,			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,											
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0,			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,								0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0			
$\begin{array}{c} 0,0,0,0,0\\ 0,0,0,0,0\\ 0,0,0,0,0\\ 0,0,0,0,$								0, 0, 0, 0, 0,			
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,											
$\begin{array}{c} 0,0,0,0,0\\ 0,0,0,0,0\\ 0,0,0,0,0\\ 0,0,0,0,$								0, 0, 0, 0, 0,			
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$								0, 0, 0, 0, 0, 0, 0. 0. 0. 0.			
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$								0, 0, 0, 0, 0,			
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$								0, 0, 0, 0, 0, 0, 0, 0, 0			
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$								0, 0, 0, 0, 0,			
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$								0, 0, 0, 0, 0,			
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$								0, 0, 0, 0, 0,			
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$								0, 0, 0, 0, 0,			
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$											
$\begin{array}{c} 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,0,\\ 0,0,0,0,$								0, 0, 0, 0, 0,			
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 20 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,								0, 0, 0, 0, 0, 0, 0, 0, 0. 0.			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$								0, 0, 0, 0, 0,			
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0						20					
0,0,0,0,0,						20		0, 0, 0, 0, 0,			
								0, 0, 0, 0, 0, 0, 0, 0, 0, 0,			

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.oi	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	minutes			0	0	0	0	0	0	0
	months			12	0	0	0	0	0	0
	n_mask						0			
restari	t_interval						0, 0, 0, 0, 0, 0			
	seconds			0	0	0	0	0	0	0
0	years				0	2	1	0	0	0
&ocean_sponges_eta_nml umodule	use_this	False	False	False	False	False	False	False	False	False
&ocean_sponges_eta_ofam_nm	al athroch						0.5			
	o_restore						1			
	lambda						0.0083			
	npower						1.0			
secs_t	o_restore						0			
	taumin						720.0			
use_adaptiv							False			
	rd_thump						False			
use_no _use_sponge_	rmalising after init						False False			
&ocean_sponges_tracer_nml	arter_IIIIt	False	False	False	False		False		False	
damp_coeff_3d		1 0125	1 dise	I dist	i dise		i dise		i dise	
	s_module	False	False	False	False	False	False	False	False	False
&ocean_sponges_tracer_ofam_							0.5			
athresh										
days_t	o_restore						1			
	deflate						False			
deflate	-fraction						0.6			
	lambda						0.0083			
	limit_salt _salt_min						False 0.01			
	t_restore						3600.0			
	mit_temp						False			
	emp_min						-1.8			
limit_tem	p_restore						10 800.0			
	npower						1.0			
secs_t	o_restore						0			
	taumin						720.0			
use_adaptiv							False			
	rd_thump						False False			
use_sponge_	rmalising after init						False			
&ocean_sponges_velocity_nml damp_coeff_3d							False			
	s_module	False	False	False	False	False	False	False	False	False
&ocean_sponges_velocity_ofan	n_nml						0.5			
athresh										
days_t	o_restore						0.0083			
	lambda						1.0			
sers to	npower o_restore						0			
3003_0	taumin						720.0			
use_adaptiv							False			
	d_thump						False			
use_no	rmalising						False			
use_sponge_	after_init						False			
&ocean_submesoscale_nml coefficient_ce						0.05	0.05	0.05	0.05	0.05
	tant_hblt	Ealaa	Ealas	Ealas	Ealaa	Ealas	100.0 False	Ealaa	Ealaa	False
debug_this	diag_step	False	False	False	False	False	1200	False	False	False
front_leng		5000.0	5000.0	5000.0	5000.0	5000.0	5000.0	5000.0	5000.0	5000.0
front_length_defor		True	True	True	True	True	True	True	True	True
	limit_psi	True	True	True	True	True	True	True	True	True
limit_psi_velo		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	min_kblt	4	4	4	4	4	4	4	4	4
	num_hblt					_	0.0	-	_	_
smooth_advect_transf						True	True	True	True	True
smooth_advect_transp	oort_num ooth_hblt	False	False	False	False	4 False	4 False	4 Falso	4 Falso	4 Falso
smooth_		raise	ralse	raise	raise	raise	False 2	False	False	False
	nooth_psi					True	True	True	True	True
	_psi_num					3	3	3	3	3
submeso_ad						False	False	False	False	False

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log-	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
suhme	eso_advect_limit					True	file.00000.ou	True	True	True
	o_advect_sweby					iiuc	False	iiuc	iiuc	iiuc
	_advect_upwind					True	True	True	True	True
	advect_zero_bdy					True	True	True	True	True
	omeso_diffusion					False	False	False	False	False
	sion_biharmonic _diffusion_scale					True	True	True	True	True
	meso limit flux	True	True	True	True	10.0	10.0 True	10.0	10.0	10.0
	meso_skew_flux	ilue	iiuc	iiue	iiue	True	True	True	True	True
	time_constant						86 400.0			
us	e_hblt_constant						False			
use.	_hblt_equal_mld	True	True	True	True	True	True	True	True	True
	use_psi_legacy	True	True	Truce	Tuus	False	False	False	False	False
&ocean_tempsalt_nml	ise_this_module	True False	True False	True	True False	True False	True False	True False	True True	True False
debug_this_module		raise	raise		raise	raise	raise	False	irue	False
	p_2nd_iteration	True	True	True	True	True	True	True	True	True
	_equal_contemp					True	True	True	True	True
	it_ts_with_ideal						False			
	with_ideal_efold						1000.0			
	ith_ideal_svalue						30.0			
reinit_ts_w	ith_ideal_tvalue s_max	55.0	55.0	55.0	55.0	70.0	10.0 70.0	70.0	70.0	70.0
	s_max_limit	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
	s_min	-1.0	-1.0	-1.0	-1.0	0.0	0.0	0.0	0.0	0.0
	s_min_limit	5.0	5.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
	t_max	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
	t_max_limit	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
	t_min	-5.0	-5.0	-5.0	-5.0	-20.0	-20.0	-20.0	-20.0	-20.0
tomp	t_min_limit	—1.9 'potential	-1.9 'potential	- 2.0 conservative	-2.0	-5.0	— 5.0 'potential	-5.0	— 5.0 'potential	-5.0 potential
цетр	erature_variable	temp'	temp'	temp'	'conservative temp'	'potential temp'	temp'	'potential temp'	temp'	temp'
	teos10	temp	temp	False	temp	temp	False	temp	temp	temp
&ocean_thickness_nml	debug_this	False	False	False	False	False	False	False	False	False
module	-									
•	s_module_detail	False	False	False	False	False	False	False	False	False
	ı_min_for_sigma						0.01			
	rce_positive_dzt n_init_thickness						False $1  imes 10^{-5}$			
	step_topography						False			
	itialize_zero_eta	False	False	False	False		False			
line	ear_free_surface						False			
max	_num_bad_print						25			
	pbot0_simple		_				False			
	cale_rho0_mask	True	True	False	False		False			
	ead_rhoO_profile _to_get_ht_mod					False	False False	False	False	False
	hoO_basin_label	7.0	7.0	7.0	7.0	Talsc	-1.0	raisc	raisc	1 disc
	rho0_mask_qfdl	True	True	False	False		False			
resi	cale_rho0_value	0.75	0.75	0.75	0.75		1.0			
	ickness_dzt_min	2.0	2.0	1.0	1.0		2.0		2.0	
	ess_dzt_min_init	2.0	2.0	2.0	2.0	, , ,	10.0	, , , ,	10.0	, , ,
	ickness_method ipdate_dzwu_k0	'energetic'	'energetic'	'energetic'	'energetic'	'energetic'	'energetic' True	'energetic'	'energetic'	'energetic'
L.	write_a_restart						True			
&ocean_time_filter_nml		False	False							
use_this_module										
&ocean_topog_nml deb	ug_this_module						True			
	flat_bottom						False			
2	flat_bottom_ht						5500.0 50			
	lat_bottom_kmt kmt_recompute						False			
	ecompute_offset						0			
	min_thickness	5.0	5.0	25.0	25.0		1.0			
	write_topog						False			
&ocean_tracer_advect_n	iml	False	False	True	True		False			
advect_sweby_all					_					
	_domain_update			-	True		False			
compute_gyre_ove	erturn_diagnose ug_this_module	False	False	True False	False	False	False	False	False	False
	lo_fast_compute	raise	raise	True	raise	FdlSE	rdise	Lqr2G	Lqt2G	FdlSE
	nit_with_upwind	False	False	iiuc			False			

Group (continued) Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log-	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
ncom limit prother						file.000000.oı False			
psom_limit_prather read_basin_mask			True		False	False	False	False	False
write_a_restart					. 4.50	True	. 4.50		. 4.50
zero_tracer_advect_horz						False			
zero_tracer_advect_vert						False			
&ocean_tracer_diag_nml buoyancy_crit						0.0003			
debug_diagnose_mixinga debug_diagnose_mixingb						False False			
debug_diagnose_mixingc						False			
debug_diagnose_mixingd						False			
diag_step	1200	12	120	4320	4320	4320	4320	576	576
do_bitwise_exact_sum	False	False	False	False	False	False	False	False	False
dtheta_crit frazil_factor						2.0 1.0			
psu2ppt						1.004 867			
rho_grad_max						$1 \times 10^{+28}$			
rho_grad_min						$1 \times 10^{-5}$			
smooth_kappa_sort						0			
smooth_mld	True	True				False			
smooth_mld_for_subduction	1000	4000	4.0	4.0	700	True	700	700	-0.0
tracer_conserve_days	$\frac{100.0}{1 \times 10^{+40}}$	100.0	1.0	1.0	30.0	30.0	30.0	30.0	30.0
&ocean_tracer_nml age_tracer_max_init compute_tmask_limit_on	$1 \times 10^{+40}$	0.0	0.0	0.0	0.0	0.0 True	0.0	0.0	0.0
debug_this_module	False	False	False	False	False	False	False	False	False
frazil_heating_after_vphysics	True	True	True	True	True	True	True	True	True
frazil_heating_before_vphysics	False	False	False	False	False	False	False	False	False
inflow_nboundary						False			
interpolate_tdiag_to_pbott	False					False			
interpolate_tprog_to_pbott	False	_	_	_	_	True	_	_	_
limit_age_tracer	True	True	True	True	True	True	True	True	True
ocean_tpm_debug remap_depth_to_s_init	False	False	False	False	False	False False	False	False	False
tmask_limit_ts_same	True	True	raisc	Tabe	raisc	True	i disc	raisc	raisc
use_tempsalt_check_range				True	True	True	True	True	True
write_a_restart						True			
zero_tendency	False	False	False	False	False	False	False	False	False
zero_tracer_source	False	False	False	False	False	False	False	False	False
&ocean_tracer_util_nml debug_diagnose_mass_of_layer						False			
epsln_diagnose_mass_of_layer						$1 \times 10^{-5}$			
rebin_onto_rho_all_values						True			
&ocean_velocity_advect_nml						False			
debug_this_module									
velocity_advect_centered						True			
velocity_advect_upwind						False			
zero_velocity_advect_horz zero_velocity_advect_vert						False False			
&ocean_velocity_diag_nml debug_this	False	False	False	False	False	False	False	False	False
module	· ucc	iauc	i disc	, alsc	iuoc	, alsc	iauc	, uisc	i uisc
diag_step	1200	12	120	4320	4320	4320	4320	576	576
do_bitwise_exact_sum						False			
energy_diag_step	1200	12	120	4320	4320	4320	4320	5760	5760
land_cell_num_max	10.0	100	10.0	10.0	100	100	100	10.0	100
large_cfl_value max_cfl_value	10.0	10.0 100.0	10.0	10.0 100.0	10.0 100.0	10.0 100.0	10.0 100.0	10.0	10.0 100.0
verbose_cfl	100.0	100.0	100.0	100.0	100.0	False	100.0	100.0	100.0
&ocean_velocity_nml						0.6			
adams_bashforth_epsilon									
adams_bashforth_third	True	True	True	True	True	True	True	True	True
constant_u						0.0			
constant_v debug_this_module						0.0 False			
max_cgint			1.0	1.0	1.0	1.5	1.0	1.0	1.0
truncate_velocity	False	False	False	True	False	False	False	False	False
truncate_velocity_lat	. 4.50	. 4150	. 4150	nuc	. utoc	0.0	. 4150	. disc	. 4130
truncate_velocity_value	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
truncate_verbose	True	True	True	True	True	True	True	True	True
update_velocity_via_uprime						True			
use_constant_velocity						False			
write_a_restart zero_tendency	False	False	False	False	False	True False	False	False	False
zero_tendency_explicit_a	raise	raise	Lql26	raise	False	False	False False	False	False
zero_tendency_expticit_a					ו מנטכ	ו מנאב	ו מנטב	ו מנאכ	ו מנאכ

Group (continued) Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.ot	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
zero_tendency_explicit_b					False	False	False	False	False
zero_tendency_implicit					False	False	False	False	False
&ocean_vert_kpp_iow_nml use_this_module	False	False		False	False		False	False	False
&ocean_vert_kpp_mom4p0_nml use_this_module	False	False		False					
&ocean_vert_kpp_mom4p1_nml bvf_from_below						False			
calc_visc_on_cgrid						False			
concv						1.8			
cw_0						0.15			
debug_this_module diff_cbt_iw	0.0			0.0	0.0	False 0.0	0.0	0.0	0.0
diff_cbt_limit	0.0			0.0	0.0	0.005	0.0	0.0	0.0
diff_con_limit				0.1		0.1			
do_langmuir						False			
double_diffusion hbl_with_rit	True			True	True	True	True	True	True
kbl standard method				False	False	False False	False	False	False
kot_standard_method kl_min				raisc	raisc	2	raisc	raisc	raisc
l_smyth						2.0			
lgam						1.04			
limit_ghats						False True			
limit_with_hekman linear_hbl						True			
ltmax						5.0			
non_local_kpp						True			
radiation_iow						False			
radiation_large						False			
radiation_zero ricr	0.3			0.3	0.3	False 0.3	0.3	0.3	0.3
shear_instability	0.5			0.5	0.5	True	0.5	0.5	0.5
smooth_blmc	True			False	False	False	False	False	False
smooth_ri_kmax_eq_kmu				True	True	True	True	True	True
use_max_shear						False			
use_sbl_bottom_flux use_this_module	True			True	True	False True	True	True	True
variable_vtc	nuc			nuc	iiuc	False	iiuc	nuc	iiuc
visc_cbu_iw	0.0			0.0	0.0	0.0	0.0	0.0	0.0
visc_cbu_limit						0.005			
visc_con_limit wsfc_combine_runoff_calve	False			0.1		0.1			
wsic_combine_runon_caive wstfac	raise					True 0.6			
&ocean_vert_kpp_nml diff_cbt_iw		0.0	0.0			0.0			
diff_con_limit			0.1						
double_diffusion		True	True						
kbl_standard_method		0.7	True						
ricr smooth_blmc		0.3 True	0.3 True						
use_this_module		True	True						
visc_cbu_iw		0.0	0.0						
visc_con_limit	0.475	2.77	0.1	0.45					
&ocean_vert_mix_nml afkph_00	0.675	0.675	0.65	0.65		0.55			
<mark>afkph_90</mark> aidif	0.725 1.0	0.725 1.0	0.75 1.0	0.75 1.0	1.0	0.55 1.0	1.0	1.0	1.0
bryan_lewis_diffusivity	True	True	False	False	False	False	False	False	False
bryan_lewis_lat_depend	True	True	True	True	False	False	False	False	False
bryan_lewis_lat_transition	35.0	35.0	35.0	35.0		35.0			
debug_this_module dfkph_00	1.15	1.15	1.15	1.15		False 1.05			
dfkph_90	1.15	1.15	0.95	0.95		1.05			
diff_cbt_tanh	1.1.7	1,1,7	0.73	0.73		False			
diff_cbt_tanh_max						0.001			
diff_cbt_tanh_min						$2 \times 10^{-5}$			
diff_cbt_tanh_zmid						150.0			
diff_cbt_tanh_zwid hwf_30_diffusivity						$30.0$ $2 \times 10^{-5}$			
hwf_depth_transition						25 000 000.0			
hwf_diffusivity					False	False	False	False	False
hwf_diffusivity_3d						False			
hwf_min_diffusivity					$2 \times 10^{-6}$	$2 \times 10^{-6}$	$2 \times 10^{-6}$	$2 \times 10^{-6}$	$2 \times 10^{-6}$
hwf_n0_2omega					20.0	20.0	20.0	20.0	20.0

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.o	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
linear_taper_diff_	_cbt_table	False	False	False	False		False			
	21_passes						1			
quebec_200		False	$4.5 \times 10^{-5}$	$4.5 \times 10^{-5}$	$4.5 \times 10^{-5}$		False $4.5  imes 10^{-5}$			
	sfkph_00 sfkph_90	$4.5 \times 10^{-5}$ $4.5 \times 10^{-5}$	$4.5 \times 10^{-5}$ $4.5 \times 10^{-5}$	$4.5 \times 10^{-5}$ $4.5 \times 10^{-5}$	$4.5 \times 10^{-5}$ $4.5 \times 10^{-5}$		$4.5 \times 10^{-5}$ $4.5 \times 10^{-5}$			
smoot	th_rho_n2	4.5 ∧ 10	4.J × 10	T.J × 10	4.5 ∧ 10		True			
use_diff_	_cbt_table	False	False	False	False	False	False	False	False	False
use_explicit_ve							True			
vert_diff_back	rbose_init	True	True	True	True	True	True True	True	True	True
	x_scheme	'kpp	'kpp'	'kpp'	'kpp	'kpp	'kpp	'kpp	'kpp	'kpp
		mom4p1'			mom4p1'	mom4p1'	mom4p1'	mom4p1'	mom4p1'	mom4p1'
	_visc_back						False 0.01			
visc_cbu_ visc_chu	back_min						0.01			
visc_cbu_t							50.0			
visc_cbu_b							30.0			
vmix_min_diss_bvf							0.0006			
vmix_min_c vmix_min_diss_flu							$1 \times 10^{-7}$ 0.2			
vmix_rescale_							False			
vmix_set_min_d							False			
	zfkph_00	250 000 000.0	250 000 000.0	250 000.0	250 000.0		250 000.0			
	zfkph_90	250 000 000.0	250 000 000.0	$\frac{250000.0}{5\times10^{-6}}$	$\frac{250000.0}{5\times10^{-6}}$	0.0	250 000.0	0.0	0.0	0.0
&ocean_vert_tidal_nml background_diffusivity		0.0	0.0	2 × 10 °	5 × 10 °	0.0	0.0	0.0	0.0	0.0
background	_viscosity	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	n_drag_cd						0.0024			
debug_thi		7000	700.0	7000	7000	5000	False	F000	500.0	F00.0
default_roughne	ecay_scale	300.0	300.0	300.0	300.0	500.0	500.0 25.0	500.0	500.0	500.0
default_ti							0.01			
drag_dissipat	tion_efold						True			
drag_dissipation_ti						-	43 200.0	_	<b>-</b>	_
drag_dissipation_u	use_cabot nask_deep					True	True True	True	True	True
drag_mask_d							0.1			
dr	hodz_min	$1  imes 10^{-12}$	$1  imes 10^{-12}$	$1  imes 10^{-12}$	$1  imes 10^{-12}$	$1  imes 10^{-10}$	$1  imes 10^{-10}$	$1  imes 10^{-10}$	$1  imes 10^{-10}$	$1 \times 10^{-10}$
fixed_wave_d		False	False	False	False	False	False	False	False	False
<mark>max_drag_</mark> max_wave_		0.01	0.01	0.01 0.01	0.01 0.01	0.01	0.005 0.01	0.01	0.01	0.01
	efficiency	0.01	0.01	0.01	0.01	0.01	0.2	0.01	0.01	0.01
mixing_efficiency_i		True	True	True	True	True	True	True	True	True
	nderson_p						0.25			
munk_anders	21_passes						3.0 1			
read_leewave_d							False			
read_r	oughness	True	True	True	True	True	True	True	True	True
	ide_speed	True	True	True	True	True	True	True	True	True
read_wave_d reading_rough		False True	False True	False True	False True	False True	False True	False True	False True	False True
reading_roughne		False	False	False	False	False	False	False	False	False
roughr	ness_scale	30 000.0	30 000.0	20 000.0	20 000.0	12 000.0	12 000.0	12 000.0	12 000.0	12 000.0
shelf_dep smooth_bvfre	oth_cutoff	160.0	160.0	160.0	160.0	-1000.0	-1000.0	-1000.0	-1000.0	-1000.0
	th_rho_n2						True True			
S	peed_min						0.005			
tidal_diss_			_	_			0.333 33	_	_	_
tide_speed_data_ use_drag_d		True True	True True	True True	True True	True True	True True	True True	True True	True True
use_arag_a use_leewave_d		irue	irue	irue	ilue	irue	False	irue	ITue	irue
use_legacy		True				False	False	False	False	False
	s_module	True	True	True	True	True	True	True	True	True
use_wave_d <mark>vel_micor</mark>		True	True	True	True	True	True 0.2	True	True	True
wave_diffusivity_n							True			
wave_energy.		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
&ocean_vert_util_nml							False			
debug_this_module	2_smooth						1			
	ri_smooth						1			
	mooth_n2						True			

Group (continued)	Variable	original/ GFDL ESM2M input- cut.nml	original/ MOM_SIS TOPAZ input.nml	original/ russ- accessom- mom4p1- input.nml	original/ hogg_acces- som2 1deg jra55_ryf input.nml	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	original/ kiss_acces- som2 025deg jra55_ryf log- file.000000.ot	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	original/ hogg_acces- som2 01deg jra55_ryf input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	smooth_ri_number						True			
&ocean_wave_nml	damp_where_ice						True			
	debug_this_module						False			
	filter_wave_mom						True			
	use_this_module						False			
	use_tma						True			
	wavedamp						-10.0			
	write_a_restart						True			
&ocean_xlandinserouse_this_module	t_nml	True	True	False	False	False		False	False	False
	verbose_init	True	True	True	True					
&ocean_xlandmix_r	nml use_this_module	True	True	False	False	False		False	False	False
	verbose_init	True	True	True	True					
	xlandmix_kmt	True	True	True	True					
&sat_vapor_pres_nr construct_table_wrt		True	True							
construct_ta	able_wrt_liq_and_ice	True	True							
	show_all_bad_values								True	
&surface_flux_nml	ncar_ocean_flux								True	
	old_dtaudv	False								
	raoult_sat_vap								True	
&time_interp_exter debug_this_module							False			
	max_fields						100			
	max_files						40			
	num_io_buffers						2			
&time_interp_nml	perthlike_behavior						False			
&topography_nml	topog_file	'INPUT/	'INPUT/							
		navy_topog-	navy_topog-							
		ra-	ra-							
		phy.data.nc'	phy.data.nc'							
&xgrid_nml	do_alltoall								True	True
	do_alltoallv								True	True
	interp_method	'second order'	'second order'		'second order'	'second order'		'second order'	'second order'	'second order'
make_	.exchange_reproduce	True	True		False	False		False	False	False
	nsubset					16		16	16	16
	xgrid_log								False	

## 1.2 All variables in new configs (differences highlighted)

Group	Variable	new/ control/ 1deg jra55_ryf/ ocean/	new/ control/ 025deg jra55_ryf/ ocean/	new/ control/ 01deg jra55_ryf/ ocean/
9 auggam iga mml	nice substi	input.nml	input.nml	input.nml
&auscom_ice_nml	aice_cutoff chk_i2o_fields	0.15 False	0.15 False	0.15 False
	chk_o2i_fields	False	False	False
	do_ice_once	False	False	False
	dt_cpl	3600	1800	600
	fixmeltt	False	False	False
	frazil_factor	1.0	1.0	1.0
	iceform_adj_salt	False	False	False
	icemlt_factor	1.0	1.0	1.0
	kmxice	5	5	5
	pop_icediag	True	True	True
	redsea_gulfbay_sfix	True		
	sign_stflx	1.0	1.0	1.0
	tmelt	-0.216	-0.216	-0.216
0 dia	use_ioaice	True	True	True
&diag_manager_nml	debug_diag_manager	True	True	True
&fmc in nml	issue_oor_warnings fileset_write	True	True 'multi'	True 'multi'
&fms_io_nml	threading_read	'single' 'multi'	'multi'	'multi'
	threading_read threading_write	'single'	'multi'	'multi'
&fms_nml	clock_grain	'COMPONENT'	'COMPONENT'	'COMPONENT'
- The second sec	domains_stack_size	115200	115200	115200
&mom_oasis3_interface_nml	fields_in	'u_flux',	'u_flux',	'u_flux',
		'v_flux',	'v_flux',	'v_flux',
		'lprec', 'fprec',	'lprec', 'fprec',	'lprec', 'fprec',
		'salt_flx',	'salt_flx',	'salt_flx',
		'mh_flux',	'mh_flux',	'mh_flux',
		'sw_flux',	'sw_flux',	'sw_flux',
		'q_flux',	'q_flux',	'q_flux',
		't_flux',	't_flux',	't_flux',
		'lw_flux',	'lw_flux',	'lw_flux',
		'runof', 'p',	'runof', 'p',	'runof', 'p',
		'aice',	'aice', 'wfmolt'	'aice', 'wfimelt',
		'wfimelt', 'wfiform'	'wfimelt', 'wfiform'	williett, 'wfiform'
	fields_out	't_surf',	't_surf',	't_surf',
	iictu3_out	's_surf',	's_surf',	's_surf',
		'u_surf',	'u_surf',	'u_surf',
		'v_surf',	'v_surf',	'v_surf',
		'dssldx',	'dssldx',	'dssldx',
		'dssldy',	'dssldy',	'dssldy',
		'frazil'	'frazil'	'frazil'
	num_fields_in	15	15	15
	num_fields_out	7	7	7
	send_after_ocean_update	True	True	True
	send_before_ocean_update	False	False	False
&monin_obukhov_nml	neutral	True	True	True
&mpp_io_nml	deflate_level	5	5	5
Roccan adv val diag nml	shuffle	4320	4720	576
&ocean_adv_vel_diag_nml	diag_step	4320 10.0	4320 10.0	10.0
	large_cfl_value max_cfl_value	10.0	10.0	10.0
	verbose_cfl	True	True	True
&ocean_advection_velocity_nml	max_advection_velocity	0.5	0.5	0.5
&ocean_albedo_nml	ocean_albedo_option	2	2	2
&ocean_barotropic_nml	barotropic_halo	10	10	10
	barotropic_time_stepping_a	True	True	True
	barotropic_time_stepping_b	False	False	False
	debug_this_module	False	False	False
	diag_step	4320	4320	576
	eta_max	8.0	8.0	8.0
	frac_crit_cell_height	0.2	0.2	0.2
	pred_corr_gamma	0.2	0.2	0.2
	smooth_eta_diag_laplacian	True	True	True
	smooth_eta_t_biharmonic	False	False	False
	smooth_eta_t_laplacian	True	True	True
	smooth_pbot_t_biharmonic	False	False	False
	smooth_pbot_t_laplacian	True	True	True
	truncate_eta	False False	False False	False False
	use_legacy_barotropic_halos	rdise	Larse	raise

Group (continued)	Variable	new/ control/ 1deg jra55_ryf/ ocean/	new/ control/ 025deg jra55_ryf/ ocean/	new/ control/ 01deg jra55_ryf/ ocean/
		input.nml	input.nml	input.nml
	vel_micom_bih	0.01	0.01	0.01
	vel_micom_lap vel_micom_lap_diag	0.05 0.2	0.05 0.2	0.05 0.2
	verbose_truncate	True	True	True
	zero_tendency	False	False	False
&ocean_bbc_nml	bmf_implicit	True	True	True
	cdbot cdbot_hi	0.001 0.007	0.001 0.007	0.001 0.007
	cdbot_ni cdbot_roughness_length	0.007 False	0.007 False	0.007 False
	cdbot_roughness_uamp	True	True	True
	uresidual	0.05	0.05	0.05
	use_geothermal_heating	False	False	False
&ocean_bih_friction_nml	bih_friction_scheme	'general'	'general'	'general'
&ocean_bih_tracer_nml &ocean_bihcst_friction_nml	use_this_module use_this_module	False	False False	False False
&ocean_bihgen_friction_nml	bottom_5point	False True	False	False
&occan_bingen_metion_nine	eq_lat_micom	0.0	0.0	0.0
	eq_vel_micom_aniso	0.0	0.0	0.0
	eq_vel_micom_iso	0.0	0.0	0.0
	equatorial_zonal	False	False	False
	k_smag_aniso k_smag_iso	0.0 2.0	0.0 2.0	0.0 2.0
	ncar_boundary_scaling	True	True	True
	ncar_boundary_scaling_read	False	False	False
	ncar_rescale_power	2	2	2
	ncar_vconst_4	$2 \times 10^{-8}$	$2 \times 10^{-8}$	$2 \times 10^{-8}$
	ncar_vconst_5	5	5 T::	5
	use_this_module vel_micom_aniso	True 0.0	True 0.0	True 0.0
	vel_micom_bottom	0.01	0.0	0.0
	vel_micom_iso	0.04	0.0	0.0
	visc_crit_scale	0.25	1.0	1.0
&ocean_convect_nml	use_this_module	False	False	False
&ocean_coriolis_nml	acor use_this_module	0.5 True	0.5 True	0.5 True
&ocean_density_nml	eos_Linear	False	False	False
a contraction of the contraction	eos_preteos10	True	True	True
	layer_nk	80	80	80
	neutralrho_max	1030.0	1030.0	1030.0
	neutralrho_min potrho_max	1020.0 1038.0	1020.0 1038.0	1020.0 1038.0
	potrho_min	1028.0	1038.0	1038.0
&ocean_domains_nml	max_tracers	5	5	5
&ocean_form_drag_nml	use_this_module	False	False	False
&ocean_frazil_nml	debug_this_module	False	False	False
	frazil_only_in_surface	False	False	False
	freezing_temp_preteos10 freezing_temp_simple	True False	True False	True False
	use_this_module	True	True	True
&ocean_grids_nml	debug_this_module	False	False	False
&ocean_increment_eta_nml	use_this_module	False	False	False
&ocean_increment_tracer_nml	use_this_module	False	False	False
&ocean_increment_velocity_nml	use_this_module	False	False	False
&ocean_lap_friction_nml &ocean_lap_tracer_nml	lap_friction_scheme use_this_module	'general' False	'general' False	'general' False
&ocean_lapcst_friction_nml	use_this_module	False	False	False
&ocean_lapgen_friction_nml	bottom_5point	True	ratsc	ruisc
	k_smag_aniso	0.0		
	k_smag_iso	0.0		
	restrict_polar_visc	True		
	restrict_polar_visc_lat restrict_polar_visc_ratio	60.0 0.35		
	use_this_module	True	False	False
	vel_micom_iso	0.1	. 3100	. 4.50
	viscosity_ncar	False		
	viscosity_scale_by_rossby	True		
Pagan mindanmalana mad	viscosity_scale_by_rossby_power	4.0		
&ocean_mixdownslope_nml	debug_this_module	False		
	mixdownslope_mask_gfdl mixdownslope_npts	False 4		
	read_mixdownslope_nask	False		
	use_this_module	True	False	False
&ocean_model_nml	baroclinic_split	1	1	1

Variable	new/ control/ 1deg jra55_ryf/	new/ control/ 025deg jra55_ryf/	new/ control/ 01deg jra55_ryf/
		•	ocean/ input.nml
barotropic_split	80	80	80
cmip_units	True	True	True
			False 150
			10, 15
layout	16, 15	48, 40	80,75
	1		1
•			'twolevel' 'zstar'
			False
use_rayleigh_damp_table	True	True	True
use_this_module	True	True	True
			False
			False False
use_nphysicsc	True	False	False
use_this_module	True	False	False
agm	600.0	100.0	100.0
agm_closure			True
			True 0.004
agm_closure_eady_ave_mixed	True	0.00	0.007
agm_closure_eady_cap	True		
<del>-</del>	True		
	True		
agm_closure_length	50 000.0	50 000.0	50 000.0
	False	False	False
			False
			False 2000.0
agm_closure_max	600.0	600.0	600.0
agm_closure_min	50.0	100.0	100.0
agm_closure_scaling			0.07
		100.0	100.0
agm_smooth_time	False		
aredi	600.0	600.0	600.0
			False
			False False
drhodz_smooth_vert	False	False	False
nphysics_util_zero_init	True		
			100 000.0
			15 000.0 False
			0.0
use_this_module	False	False	False
use_this_module	False	False	False
	False		
do_gm_skewsion	True		
neutral_eddy_depth	True		
neutral_physics_limit	True		
number_bc_modes	2		
tmask_neutral_on	True		
turb_blayer_min	50.0		
use_this_module	True	False	False
	False	False	False
debug_this_module	False	False	False
	barotropic.split cmip.units debug dt.ocean jo.layout layout surface.height.split time.tendency vertical.coordinate rayleigh.damp.exp.from.bottom use.rayleigh.damp.table use.nphysicsa use.nphysicsa use.nphysicsa use.nphysicsa use.physicsa use.physicsa use.this.module debug.this.module agm.closure.baroclinic agm.closure.baroclinic agm.closure.baroclinic agm.closure.eady.ave.mixed agm.closure.eady.ave.mixed agm.closure.eady.smooth.hora agm.closure.eady.smooth.vert agm.closure.eady.smooth.vert agm.closure.eady.smooth.vert agm.closure.eady.smooth.vert agm.closure.eden.gamma agm.closure.elength.fixed agm.closure.length.fixed agm.closure.length.fixed agm.closure.length.fixed agm.closure.length.fixed agm.closure.length.sosby agm.closure.lower.depth agm.closure.elopth agm.closure.min agm.closure.scaling agm.closure.upper.depth agm.damping.time agm.smooth.space agm.smooth.brac drhodz.smooth.hora drhodz.smooth.hora drhodz.smooth.hora drhodz.smooth.hora drhodz.smooth.hora drhodz.smooth.hora drhodz.smooth.hora drhodz.smooth.vert byp.bc.mode byp.sm.dius.min tracer.mix.micom vel.micom use.this.module use.this.module do.gm.skewsion do.neutal.difusion epsin.bv.freq gm.skewsion.byproblem gm.skewsion.byproblem gm.skewsion.byproblem gm.skewsion.byproblem gm.skewsion.byproblem gm.skewsion.modes neutral.eddy.depth neutral.physics.limit number.bc.modes preguarize.psi smax.psi	barotropic.split 80 camp_mints True debug False debug Git ocean 3600 io.ajaout 4,3 layout 16,15 Surface_height.split 1 time_tendency vertical_coordinate 2star rayleigh.damp_exp_from_bottom use_rayleigh.damp_table use_rayleigh.damp_table use_rayleigh.damp_table use_rayleigh.damp_table use_rayleigh.damp_table use_rayleigh.damp_table use_rayleigh.damp_table use_rayleigh.damp_table use_rayleigh.damp_table rure debug_this_module use_physicss False use_nphysics False use_nphysics False use_nphysics True agm_closure_brootlinic True agm_closure_brootlinic True agm_closure_brootlinic True agm_closure_eady_scap True agm_closure_eady_bcap True agm_smooth_broot agm_closure_eady_bcap True agm_smo	10   10   10   10   10   10   10

Group (continued)	Variable	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	overexch_npts overexch_weight_far	4 False	4 False	4 False
	overflow_umax	5.0	5.0	5.0
	use_this_module	False	False	False
&ocean_overflow_nml	use_this_module	False	False	False
&ocean_overflow_ofp_nml	use_this_module	False	False	False
&ocean_polar_filter_nml	use_this_module	False False	False False	False False
&ocean_pressure_nml &ocean_rivermix_nml	zero_pressure_force debug_this_module	False	False	False
Coccan in vernina in it	river_diffuse_salt	True	True	True
	river_diffuse_temp	True	True	True
	river_diffusion_thickness	0.0	0.0	0.0
	river_diffusivity	0.0	0.0	0.0
	river_insertion_thickness use_this_module	40.0 True	40.0 True	40.0 True
&ocean_riverspread_nml	use_this_module	False	False	False
&ocean_rough_nml	rough_scheme	'beljaars'	'beljaars'	'beljaars'
&ocean_sbc_nml	avg_sfc_temp_salt_eta	True	True	True
	avg_sfc_velocity	True	True	True
	calvingspread	False	False	False
	do_bitwise_exact_sum do_flux_correction	False False	False False	False False
	land_model_heat_fluxes	False	False	False
	max_delta_salinity_restore	0.5	0.5	0.5
	max_ice_thickness	0.0	0.0	0.0
	read_restore_mask	False	False	False
	restore_mask_gfdl runoff_salinity	False 0.0	False 0.0	False 0.0
	salt_correction_scale	0.0	0.0	0.0
	salt_restore_as_salt_flux	True	True	True
	salt_restore_tscale	60.0	60.0	60.0
	salt_restore_under_ice	True	True	True
	temp_restore_tscale	-10.0	—10.0 False	-10.0
	use_full_patm_for_sea_level use_waterflux	False True	True	False True
	zero_heat_fluxes	False	False	False
	zero_net_salt_correction	False	False	False
	zero_net_salt_restore	True	True	True
	zero_net_water_correction	False	False	False
	zero_net_water_couple_restore zero_net_water_coupler	True True	True True	True True
	zero_net_water_restore	True	True	True
	zero_surface_stress	False	False	False
	zero_water_fluxes	False	False	False
&ocean_shortwave_csiro_nml	use_this_module	False	False	False
&ocean_shortwave_gfdl_nml	debug_this_module enforce_sw_frac	False	False	False
	optics_manizza	True True	True True	True True
	optics_morel_antoine	False	False	False
	read_chl	True	True	True
	use_this_module	True	True	True
O a series about transport in a series and	zmax_pen	300.0	300.0	300.0
&ocean_shortwave_jerlov_nml &ocean_shortwave_nml	use_this_module use_shortwave_csiro	False False	False False	False False
WOCCON-20101 CMAYCE IIIII	use_shortwave_csito	True	True	True
	use_shortwave_jerlov	False	False	False
	use_this_module	True	True	True
&ocean_sigma_transport_nml	use_this_module	False	False	False
&ocean_solo_nml	calendar	'NOLEAP'	'NOLEAP'	'NOLEAP'
	date_init <mark>days</mark>	1, 1, 1, 0, 0, 0 0	1, 1, 1, 0, 0, 0 31	1, 1, 1, 0, 0, 0 30
	dt_cpld	3600	1200	600
	hours	0	0	0
	minutes	0	0	0
	months	0	0	0
	seconds	0 2	0	0
&ocean_sponges_eta_nml	years use_this_module	False	False	False
&ocean_sponges_tracer_nml	use_this_module	False	False	False
&ocean_sponges_velocity_nml	use_this_module	False	False	False
&ocean_submesoscale_nml	coefficient_ce	0.05	0.05	0.05
	debug_this_module	False	False	False
	front_length_const	5000.0	5000.0	5000.0

Group (continued)	Variable	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	front_length_deform_radius	True	True	True
	limit_psi limit_psi_velocity_scale	True 0.5	True 0.5	True 0.5
	min_kblt	4	4	4
	smooth_advect_transport	True	True	True
	smooth_advect_transport_num	4	4	4
	smooth_hblt	False	False	False
	smooth_psi	True 3	True	True
	smooth_psi_num submeso_advect_flux	False	3 False	3 False
	submeso_advect_limit	True	True	True
	submeso_advect_upwind	True	True	True
	submeso_advect_zero_bdy	True	True	True
	submeso_diffusion	False	False	False
	submeso_diffusion_biharmonic	True	True	True
	submeso_diffusion_scale	10.0	10.0	10.0
	submeso_skew_flux	True	True	True
	use_hblt_equal_mld use_psi_legacy	True False	True False	True False
	use_this_module	True	True	True
&ocean_tempsalt_nml	debug_this_module	False	False	False
	pottemp_2nd_iteration	True	True	True
	pottemp_equal_contemp	True	True	True
	s_max	70.0	70.0	70.0
	s_max_limit	42.0	42.0	42.0
	s_min	0.0	0.0	0.0
	s_min_limit	2.0	2.0	2.0
	t_max	55.0	55.0 32.0	55.0 32.0
	t_max_limit t_min	32.0 — 20.0	-20.0	- 20.0
	t_min_limit	-20.0 $-5.0$	-20.0 $-5.0$	-20.0 $-5.0$
	temperature_variable	'potential	'potential	'potential
	temperature=randote	temp'	temp'	temp'
&ocean_thickness_nml	debug_this_module	False	False	False
	debug_this_module_detail	False	False	False
	rescale_mass_to_get_ht_mod	False	False	False
	thickness_method	'energetic'	'energetic'	'energetic'
&ocean_tracer_advect_nml	debug_this_module	False	False	False
Second tracer dies and	read_basin_mask	False 4320	False 4320	False 576
&ocean_tracer_diag_nml	<mark>diag_step</mark> do_bitwise_exact_sum	False	False	False
	tracer_conserve_days	30.0	30.0	30.0
&ocean_tracer_nml	age_tracer_max_init	0.0	0.0	0.0
West and the second sec	debug_this_module	False	False	False
	frazil_heating_after_vphysics	True	True	True
	frazil_heating_before_vphysics	False	False	False
	limit_age_tracer	True	True	True
	remap_depth_to_s_init	False	False	False
	use_tempsalt_check_range	True	True	True
	zero_tendency zero_tracer_source	False False	False False	False False
&ocean_velocity_diag_nml	debug_this_module	False	False	False
account retoury and gamme	debug_triis_inodute diag_step	4320	4320	576
	energy_diag_step	4320	4320	5760
	large_cfl_value	10.0	10.0	10.0
	max_cfl_value	100.0	100.0	100.0
&ocean_velocity_nml	adams_bashforth_third	True	True	True
	max_cgint	1.0	1.0	1.0
	truncate_velocity	False	False	False
	truncate_velocity_value	2.0 True	2.0	2.0 Truo
	truncate_verbose	True	True False	True
	zero_tendency zero_tendency_explicit_a	False False	False	False False
	zero_tendency_explicit_b	False	False	False
	zero_tendency_implicit	False	False	False
&ocean_vert_kpp_iow_nml	use_this_module	False	False	False
&ocean_vert_kpp_mom4p1_nml	diff_cbt_iw	0.0	0.0	0.0
	double_diffusion	True	True	True
	kbl_standard_method	False	False	False
	ricr	0.3	0.3	0.3
	smooth_blmc	False	False	False
	smooth_ri_kmax_eq_kmu	True	True	True
	use_this_module	True	True	True

Group (continued)	Variable	new/ control/ 1deg jra55_ryf/ ocean/ input.nml	new/ control/ 025deg jra55_ryf/ ocean/ input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	visc_cbu_iw	0.0	0.0	0.0
&ocean_vert_mix_nml	aidif	1.0	1.0	1.0
COCCUI_TCTC_IIIIX_IIIIC	bryan_lewis_diffusivity	False	False	False
	bryan_lewis_lat_depend	False	False	False
	hwf_diffusivity	False	False	False
	hwf_min_diffusivity	$2 \times 10^{-6}$	$2 \times 10^{-6}$	$2 \times 10^{-6}$
	hwf_n0_2omega	20.0	20.0	20.0
	use_diff_cbt_table	False	False	False
	vert_diff_back_via_max	True	True	True
	vert_mix_scheme	'kpp mom4p1'	'kpp mom4p1'	'kpp mom4p1'
&ocean_vert_tidal_nml	background_diffusivity	0.0	0.0	0.0
	background_viscosity	0.0001	0.0001	0.0001
	decay_scale	500.0	500.0	500.0
	drag_dissipation_use_cdbot	True	True	True
	drhodz_min	$1  imes 10^{-10}$	$1  imes 10^{-10}$	$1  imes 10^{-10}$
	fixed_wave_dissipation	False	False	False
	max_wave_diffusivity	0.01	0.01	0.01
	mixing_efficiency_n2depend	True	True	True
	read_roughness	True	True	True
	read_tide_speed	True	True	True
	read_wave_dissipation	False	False	False
	reading_roughness_amp	True	True	True
	reading_roughness_length	False	False	False
	roughness_scale	12 000.0	12 000.0	12 000.0
	shelf_depth_cutoff	-1000.0	-1000.0	-1000.0
	tide_speed_data_on_t_grid	True	True	True
	use_drag_dissipation	True	True	True
	use_legacy_methods	False	False	False
	use_this_module use_wave_dissipation	True True	True True	True True
	wave_energy_flux_max	0.1	0.1	0.1
&ocean_xlandinsert_nml	use_this_module	False	False	False
&ocean_xlandmix_nml	use_this_module	False	False	False
&xgrid_nml	do_alltoall	1 0136	1 0136	True
unginu_iiiit	do_attoatt do_atltoatly			True
	interp_method	'second	'second	'second
	interp_metriou	order'	order'	order'
	make_exchange_reproduce	False	False	False
	nsubset	16	16	16

### 1.3 All variables in new 1/10 deg config (differences highlighted)

Originals are from a fresh git clone, 2017-11-18.

Group	Variable	original/ control/ 01deg jra55_ryf/ ocean/ input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
&auscom_ice_nml	aice_cutoff	0.15	0.15
	chk_i2o_fields	False	False
	chk_o2i_fields	False	False
	do_ice_once	False	False
	dt_cpl	150 Falso	600 Falso
	fixmeltt frazil_factor	False 1.0	False 1.0
	iceform_adj_salt	False	False
	icemlt_factor	1.0	1.0
	kmxice	5	5
	pop_icediag	True	True
	sign_stflx	1.0	1.0
	tmelt	-0.216	-0.216
	use_ioaice	True	True
&diag_manager_nml	debug_diag_manager		True
	issue_oor_warnings	False	True
	max_axes	300	
	max_files	1000	
	max_input_fields	700	
	max_num_axis_sets	40	
	max_output_fields	700	
&fms_io_nml	checksum_required	False	
	fileset_write	'multi'	'multi'
	max_files_r	700	
	max_files_w	700	'multi'
	threading_read	'multi'	'multi'
&fms_nml	threading_write	'multi' 'LOOP'	'multi' 'COMPONENT'
&IIIIS_IIIII	<mark>clock_grain</mark> domains_stack_size	115200	115200
	print_memory_usage	False	113200
&generic_tracer_nml	do_generic_cfc	False	
ageneric_tracer_nmi	do_generic_topaz	False	
	do_generic_tracer	False	
&mom_oasis3_interface_nml	fields_in	'u_flux',	'u_flux',
		'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux', 'q_flux', 't_flux', 'lw_flux', 'runof', 'p',	'v_flux', 'lprec', 'fprec', 'salt_flx', 'mh_flux', 'sw_flux', 'q_flux', 't_flux', 'lw_flux', 'runof', 'p',
		'aice', 'wfimelt', 'wfiform'	'aice', 'wfimelt', 'wfiform'
	fields_out	't_surf, 's_surf, 'u_surf, 'v_surf, 'dssldx', 'dssldy', 'frazil'	't_surf', 's_surf', 'u_surf', 'v_surf', 'dssldx', 'dssldy', 'frazil'
	num_fields_in	15	15
	num_fields_out	7	7
	send_after_ocean_update	True	True
	send_before_ocean_update	False	False
&monin_obukhov_nml	neutral	True	True
&mpp_io_nml	deflate_level	5	5
&ocean_adv_vel_diag_nml	shuffle	4320	1 576
QUEEdit_auv_vet_ulay_fillit	diag_step large_cfl_value		
	targe_ctt_value max_cfl_value	10.0 100.0	10.0 100.0
	verbose_cfl	True	True
&ocean_advection_velocity_nml	max_advection_velocity	0.2	0.5
&ocean_albedo_nml	ocean_albedo_option	2	2
&ocean_barotropic_nml	barotropic_halo	10	10
woccun_burotropic_nint	barotropic_time_stepping_a	True	True
	barotropic_time_stepping_b	False	False

ol/ control/ g 01deg yf/ jra55_ryf/ an/ ocean/	original/ control/ 01deg jra55_ryf/ ocean/	Variable	Group (continued)
	input.nml False	debug_this_module	
	4320	diag_step	
	8.0	eta_max	
	0.2	frac_crit_cell_height	
	0.2 True	pred_corr_gamma smooth_eta_diag_laplacian	
	False	smooth_eta_t_biharmonic	
	True	smooth_eta_t_laplacian	
	False	smooth_pbot_t_biharmonic	
	True	smooth_pbot_t_laplacian	
	False False	truncate_eta use_legacy_barotropic_halos	
	0.01	use_tegacy_balotropic_riatos vel_micom_bih	
	0.05	vel_micom_lap	
	0.5	vel_micom_lap_diag	
	True	verbose_truncate	
	False	zero_tendency	
	True 0.001	bmf_implicit cdbot	&ocean_bbc_nml
	0.001	cdbot_hi	
	False	cdbot_roughness_length	
	True	cdbot_roughness_uamp	
	0.05	uresidual	
	False	use_geothermal_heating bih_friction_scheme	&ocean_bih_friction_nml
	'general' True	tracer_mix_micom	&ocean_bih_tracer_nml
	False	use_this_module	doccur_on_cracer_min
	0.001	vel_micom	
	False	use_this_module	&ocean_bihcst_friction_nml
	False	bottom_5point	&ocean_bihgen_friction_nml
0.0	0.0 0.0	eq_lat_micom	
	0.0	eq_vel_micom_aniso eq_vel_micom_iso	
	False	equatorial_zonal	
	0.0	k_smag_aniso	
	_2.0	k_smag_iso	
	True	ncar_boundary_scaling	
rue False 2	True 2	<mark>ncar_boundary_scaling_read</mark> ncar_rescale_power	
	$2 \times 10^{-8}$	ncar_vconst_4	
5 5		ncar_vconst_5	
	True	use_this_module	
	0.0	vel_micom_aniso	
	0.0 0.0	vel_micom_bottom vel_micom_iso	
	1.0	visc_crit_scale	
	True	convect_full_scalar	&ocean_convect_nml
	False	convect_full_vector	
	False	use_this_module	
	0.5 True	acor use_this_module	&ocean_coriolis_nml
	True False	use_tnis_module eos_linear	&ocean_density_nml
	True	eos_preteos10	accommodification and a second accommodification accommodification and a second accommodification accommodification and a second accommodification accommodificatio
80 80	80	layer_nk	
	1038.0	neutralrho_max	
	1028.0	neutralrho_min	
	1038.0 1028.0	potrho_max potrho_min	
5 5		max_tracers	&ocean_domains_nml
	False	use_this_module	&ocean_form_drag_nml
lse False	False	debug_this_module	&ocean_frazil_nml
	False	frazil_only_in_surface	
	True False	freezing_temp_preteos10	
	True	freezing_temp_simple use_this_module	
	False	debug_this_module	&ocean_grids_nml
	False	use_this_module	&ocean_increment_eta_nml
I	False	use_this_module	&ocean_increment_tracer_nml
lse False	False	use_this_module	&ocean_increment_velocity_nml
lse False ral' 'general'	False 'general'	lap_friction_scheme	&ocean_increment_velocity_nml &ocean_lap_friction_nml
lse False ral' 'general' lse False	False		&ocean_increment_velocity_nml

Group (continued)	Variable	original/ control/ 01deg jra55_ryf/ ocean/	new/ control/ 01deg jra55_ryf/ ocean/
	use_this_module	<b>input.nml</b> False	input.nml False
&ocean_mixdownslope_nml	debug_this_module	False	
&ocean_model_nml	use_this_module baroclinic_split	False 1	False 1
xocean_modet_mint	barotropic_split	80	80
	cmip_units		True
	debug	False	False
	dt_ocean io_layout	150 10, 15	150 10, 15
	layout	80,75	80, 75
	surface_height_split	1	1
	time_tendency vertical_coordinate	'twolevel' 'zstar'	'twolevel' 'zstar'
&ocean_momentum_source_nml	rayleigh_damp_exp_from_bottom	False	False
	use_rayleigh_damp_table	True	True
	use_this_module	True	True
&ocean_nphysics_nml	debug_this_module	False	False
	use_nphysicsa use_nphysicsb	False False	False False
	use_nphysicsc use_nphysicsc	False	False
	use_this_module	False	False
&ocean_nphysics_util_nml	agm	100.0	100.0
	agm_closure agm_closure_baroclinic	True	True True
	agm_closure_baroclinic agm_closure_buoy_freq	True 0.004	0.004
	agm_closure_length	50 000.0	50 000.0
	agm_closure_length_bczone	False	False
	agm_closure_length_fixed	False	False
	agm_closure_length_rossby agm_closure_lower_depth	False 2000.0	False 2000.0
	agm_closure_max	600.0	600.0
	agm_closure_min	100.0	100.0
	agm_closure_scaling	0.07	0.07
	agm_closure_upper_depth aredi	100.0 600.0	100.0 600.0
	aredi_equal_agm	False	False
	drhodz_mom4p1	False	False
	drhodz_smooth_horz	False	False
	drhodz_smooth_vert	False 100 000.0	False 100 000.0
	rossby_radius_max rossby_radius_min	15 000.0	15 000.0
	smax	0.002	
	swidth	0.002	
	tracer_mix_micom	False	False
&ocean_nphysicsa_nml	vel_micom use_this_module	0.0 False	0.0 False
&ocean_nphysicsb_nml	use_this_module	False	False
&ocean_nphysicsc_nml	use_this_module	False	False
&ocean_operators_nml	use_legacy_div_ud	False	False
&ocean_overexchange_nml	debug_this_module overexch_npts	False 4	False 4
	overexch_npts overexch_weight_far	False	False
	overflow_umax	5.0	5.0
	use_this_module	False	False
&ocean_overflow_nml	debug_this_module	False	Fals-
&ocean_overflow_ofp_nml	use_this_module debug_this_module	False False	False
account of the first of the fir	diag_step	5760	
	do_entrainment_para_ofp	False	
	do_mass_ofp	True	
	frac_exchange_src max_vol_trans_ofp	1.0 10 000 000.0	
	use_this_module	False	False
&ocean_polar_filter_nml	use_this_module	False	False
&ocean_pressure_nml	zero_pressure_force	False	False
v	debug_this_module river_diffuse_salt	False True	False True
&ocean_rivermix_nml		True	True
xocean_rivermix_nmt	river diffuse temp		
xocean_rivermix_nml	river_diffuse_temp river_diffusion_thickness	0.0	
xocean_rivermix_nmi	river_diffusion_thickness river_diffusivity	0.0 0.0	0.0 0.0
xocean_rivermix_nmi	river_diffusion_thickness	0.0	0.0 0.0 40.0 True

Group (continued)	Variable	original/ control/ 01deg jra55_ryf/ ocean/ input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
	use_this_module	True	False
&ocean_rough_nml	rough_scheme	'beljaars'	'beljaars'
&ocean_sbc_nml	avg_sfc_temp_salt_eta	True	True
	avg_sfc_velocity	True	True
	calvingspread do_bitwise_exact_sum	False False	False False
	do_flux_correction	False	False
	land_model_heat_fluxes	False	False
	max_delta_salinity_restore	0.5	0.5
	max_ice_thickness	8.0	0.0
	read_restore_mask	False	False
	restore_mask_gfdl	False	False
	runoff_salinity	0.0	0.0
	salt_correction_scale salt_restore_as_salt_flux	0.0 True	0.0 True
	salt_restore_tscale	60.0	60.0
	salt_restore_under_ice	True	True
	temp_restore_tscale	-10.0	-10.0
	use_full_patm_for_sea_level	False	False
	use_waterflux	True	True
	zero_heat_fluxes	False	False
	zero_net_salt_correction	False	False
	zero_net_salt_restore	True	True
	zero_net_water_correction	False True	False
	zero_net_water_couple_restore zero_net_water_coupler	True	True True
	zero_net_water_restore	True	True
	zero_surface_stress	False	False
	zero_water_fluxes	False	False
&ocean_shortwave_csiro_nml	use_this_module	False	False
&ocean_shortwave_gfdl_nml	debug_this_module	False	False
	enforce_sw_frac	True	True
	optics_manizza	True	True
	optics_morel_antoine	False	False
	read_chl use_this_module	True True	True True
	zmax_pen	300.0	300.0
&ocean_shortwave_jerlov_nml	use_this_module	False	False
&ocean_shortwave_nml	use_shortwave_csiro	False	False
	use_shortwave_gfdl	True	True
	use_shortwave_jerlov	False	False
	use_this_module	True	True
&ocean_sigma_transport_nml	sigma_advection_on	False	
	sigma_advection_sgs_only	False	
	sigma_diffusion_on	True $1 \times 10^{-6}$	
	sigma_diffusivity_ratio sigma_just_in_bottom_cell	True	
	sigma_just_in_buttoin_cett sigma_umax	0.01	
	smooth_sigma_thickness	True	
	smooth_sigma_velocity	True	
	smooth_velmicom	0.2	
	thickness_sigma_layer	100.0	
	thickness_sigma_max	100.0	
	thickness_sigma_min	100.0	
	tmask_sigma_on	False	
	tracer_mix_micom use_this_module	True False	False
	use_triis_modute vel_micom	0.05	Lql2G
&ocean_solo_nml	calendar	'NOLEAP'	'NOLEAP'
	date_init	1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0
	days	30	30
	dt_cpld	150	600
	hours	0	0
	minutes	0	0
	months	0	0
	seconds years	0	0
	•		False
&ocean sponges eta nml	use this module		
&ocean_sponges_eta_nml	use_this_module	False False	1 4150
&ocean_sponges_eta_nml &ocean_sponges_tracer_nml	use_this_module  damp_coeff_3d  use_this_module	False False	
&ocean_sponges_tracer_nml	damp_coeff_3d	False False	False False
	damp_coeff_3d use_this_module	False	False

	Group (continued)	Variable	original/ control/ 01deg jra55_ryf/ ocean/ input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
Part		front_length_const		
		front_length_deform_radius		
Second				
True				
Same				
			False	False
Submess different part   Face   Fac			True	True
State   Stat				
Submess diffusion hibarmonic   Toue   Toue   Submess diffusion hibarmonic   Toue   Toue   Submess diffusion state   Toue   Tou		•		
September   Sept				
Bank				
Page				
Becen_tempsalt_mmil   Belag attimated   Toue   False   False   Pottern_pen_tal_teresion   Toue   T				
Pottern, Dritteration   Time   True   True		use_this_module	True	
Pottern, requal, contern, page   Time   Ti	&ocean_tempsalt_nml			
			True	True
S.max.limit   47.0   47.0   57.0				
S. m.in. in time   20   20   20   20   20   20   20   2				
Between thickness.ml         temperature variable between thickness.ml         temperature variable between thickness.ml         feature thickness.ml         feature thickness.ml         False feature thickness.ml				
Socean.thickness.nml         debug.this.module. debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debug.this.debu				
Kocean.thickness.nml         debug.this.module_detait         False false feate debug.this.module_detait         False False feate rescale_mass.to_get.ht.mod         False False rescale_mass.to_get.ht.mod         False False rescale_mass.to_get.ht.mod         False False feate rescale_mass.to_get.ht.mod         False False feate fea		temperature_variable	'potential	'potential
Fescale mass.to.get.ht.mg         False This thickness.tdr.min. 10.0 thickness.tdr.min.min. 10.0 thickness.tdr.min.min. 10.0 thickness.method. 10.0 thickness.det.min.min. 10.0 thickness.det.min.min. 10.0 thickness.det.min.min. 10.0 thickness.det.min. 10.0 thickness.det.m	&ocean_thickness_nml			
kocean.tracer.advect.mml         fibicioress.det min. Init.         100           kocean.tracer.advect.mml         debug.this.module reads.in.mask. False         False False           kocean.tracer.diag.nml         debug.this.module reads.in.mask. False         False False           kocean.tracer.diag.nml         diag.stse         430         576           kocean.tracer.mxl         debug.this.module reads.in.mask. False False false fazil.heating.after.cynbysics reads.in.module reads.in.mask. False reads.in.mask. False false fazil.heating.after.cynbysics reads.in.mask. False reads.in.				
Cocean.tracer.advect.nml         finitionessdet.minimi         1.00           & ocean.tracer.advect.nml         debug.this.module         False         False           & ocean.tracer.diag.nml         flag.stsp         4320         576           & ocean.tracer.criag.nml         db.bitwise.exact.sum         False         False           & ocean.tracer.nml         age.tracer.cnserve.days         300         300           & ocean.tracer.nml         debug.this.module         False         False           frazil.heating.after.vphysics         True         True         True           frazil.heating.after.yphysics         False         False         False           frazil.heating.after.yphysics         False         False         False         False           frazil.heating.after.yphysics         False         <				i alse
& ccean.tracer.advect.nml         debug.this.medude cread.basin.mask         False False False False False read.basin.mask           & ccean.tracer.diag.nml         disag.step d. 4520         576           & ccean.tracer.conserve.days         30.0         300           & ccean.tracer.nml         age.tracer.max.imit doubug.this.module false false false false false false fazil.heating.after.yhysics from frazil.heating.after.yhysics from frazil.heating.after.yhysics false false limit.age.tracer immediate.         True frazil.heating.after.yhysics from true frazil.heating.after.yhysics false false limit.age.tracer from true true.temps.tt.check.rang from true green.p.depth.tos.s.imit green.p.depth.tos.green.p.depth.tos.green.p.depth.tos.green.p.depth.tos.green.p.depth.tos.green.p.depth.tos.gr				
& ccean.tracer.diag.nml         feat.ble         False         False         False         Accean.tracer.diag.nml         diag.step         4520         576         576         False         False <td></td> <td>thickness_method</td> <td></td> <td>'energetic'</td>		thickness_method		'energetic'
Socean_tracer_diag_nml         diag_step do_bitwise_exact_sum         4320 False False         576 False           Socean_tracer_nmax         age_tracer_max_init         0.0         <	&ocean_tracer_advect_nml	debug_this_module	False	False
Commerce   Commerce				
& ccean_tracer_nml         tracer_conserve_days         30.0         30.0           & ccean_tracer_nml         age_tracer_max_init         0.0         0.0           debug_this_module         False	&ocean_tracer_diag_nml			
& ocean_tracer_nml         age_tracer_max_init debug_this_module         0.0         0.0           debug_this_module         False				
	9			
	&ocean_tracer_nmi			
False   Fals				
Palse   Pals				
Use_tempsalt_check_range   True   True   Zero_tendency   False   False   False   False   Zero_tendency   False   False   False   Zero_tendency   False   False   False   Zero_tendency   False   False   Zero_tendency   False   False   Zero_tendency   Zer				
& ccean_velocity_diag_nml         zero_tracer_source         False         False           & ccean_velocity_diag_nml         debug_this_module         False         False           diag_step         4320         576           energy_diag_step         5760         5760           large_cfl_value         100         100           b         max_cfl_value         100         100           ccean_velocity_nml         adams_bashforth_third         True         True           max_cgint         1.0         1.0         1.0           truncate_velocity_value         1.0         1.0         1.0           truncate_velocity_value         2.0         2.0         1.0		use_tempsalt_check_range	True	True
&ocean_velocity_diag_nml         debug_this_module diag_step         False diag_step         False diag_step         4320         576           energy_diag_step         5760		zero_tendency		
	&ocean_velocity_diag_nml			
docean_velocity_nml         large_cfl_value max_cfl_value max_cfl_value         100 max_cfl_value         1000 max_cfl_value         1000 max_cfl_value         1000 max_cfl_value         True				
&ocean_velocity_nml         max_cfl_value         100.0         100.0           &ocean_velocity_nml         adams_bashforth_third         True         True           max_cgint         1.0         1.0           truncate_velocity         False         False           truncate_velocity_value         2.0         2.0           truncate_verbose         True         True           zero_tendency_explicit_a         False         False           False         False         False           zero_tendency_explicit_b         False         False           False         False         False           &ocean_vert_kpp_iow_nml         use_this_module         False         False           &ocean_vert_kpp_mom4p1_nml         diff_cbt_iw         0.0         0.0           & double_diffusion         True         True           & bl_standard_method         False         False				
&ocean_velocity_nml       adams_bashforth_third       True       True         max_cgint       1.0       1.0         truncate_velocity       False       False         truncate_velocity_value       2.0       2.0         truncate_verbose       True       True         zero_tendency       False       False         zero_tendency_explicit_a       False       False         zero_tendency_explicit_b       False       False         &ocean_vert_kpp_iow_nml       use_this_module       False       False         &ocean_vert_kpp_mom4p1_nml       diff_cbt_iw       0.0       0.0         double_diffusion       True       True         kbl_standard_method       False       False				
max_cgint         1.0         1.0           truncate_velocity         False         False           truncate_velocity_value         2.0         2.0           truncate_verbose         True         True           zero_tendency         False         False           zero_tendency_explicit_a         False         False           zero_tendency_explicit_b         False         False           &ocean_vert_kpp_iow_nml         zero_tendency_implicit         False         False           &ocean_vert_kpp_mom4p1_nml         diff_cbt_iw         0.0         0.0           double_diffusion         True         True           kbl_standard_method         False         False	&ocean_velocity_nml			
truncate_velocity False False truncate_velocity_value 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	,			
kocean_vert_kpp_mom4p1_nmltruncate_verbose zero_tendency_explicit a zero_tendency_explicit bTrue zero_tendency_explicit a zero_tendency_explicit bFalse False False zero_tendency_explicit bFalse False False False False palse b& ocean_vert_kpp_iow_nmluse_this_module false palse use_this_module false palse		truncate_velocity	False	False
kocean_vert_kpp_mom4p1_nmlZero_tendency_explicit.a zero_tendency_explicit.bFalse False False&ocean_vert_kpp_mom4p1_nmlUse_this_module double_diffusion kbl_standard_methodFalse				
zero_tendency_explicit.aFalseFalsezero_tendency_explicit.bFalseFalsezero_tendency_explicit.bFalseFalse&ocean_vert_kpp_iow_nmluse_this_moduleFalseFalse&ocean_vert_kpp_mom4p1_nmldiff_cbt_iw0.00.0double_diffusionTrueTruekbl_standard_methodFalseFalse				
zero_tendency_explicit_bFalseFalsezero_tendency_implicitFalseFalse&ocean_vert_kpp_iow_nmluse_this_moduleFalseFalse&ocean_vert_kpp_mom4p1_nmldiff_cbt_iw0.00.0double_diffusionTrueTruekbl_standard_methodFalseFalse		•		
& ccean_vert_kpp_iow_nmlzero_tendency_implicitFalseFalse& ocean_vert_kpp_mom4p1_nmluse_this_moduleFalseFalse& ocean_vert_kpp_mom4p1_nmldiff_cbt_iw0.00.0double_diffusionTrueTruekbl_standard_methodFalseFalse				
&ocean_vert_kpp_iow_nmluse_this_moduleFalseFalse&ocean_vert_kpp_mom4p1_nmldiff_cbt_iw0.00.0double_diffusionTrueTruekbl_standard_methodFalseFalse				
&ocean_vert_kpp_mom4p1_nml       diff_cbt_iw       0.0       0.0         double_diffusion       True       True         kbl_standard_method       False       False	&ocean vert knn jow nml			
double_diffusion True True kbl_standard_method False False				
kbl_standard_method False False				
ricr 0.3 0.3			False	
		ricr	0.3	0.3

Sample   S	Group (continued)	Variable	original/ control/ 01deg jra55_ryf/ ocean/ input.nml	new/ control/ 01deg jra55_ryf/ ocean/ input.nml
		smooth_blmc	False	False
& cocan.vert.mix.mml         visc.du.iw         0.0         0.0           & cocan.vert.mix.mml         distiff         10         10           byan.lewis.diffusivity         False         False <td></td> <td></td> <td></td> <td></td>				
&ocean.vert.mix.mml         boyan.lewis.idifusivity bryan.lewis.idifusivity bryan.lewis.idifus		use_this_module		
byan.lewis.diffusivity   False   Fal		visc_cbu_iw		
	&ocean_vert_mix_nml			
Part   Part   Part   Part   Part   Part				
Monte   Mont		bryan_lewis_lat_depend	False	False
New Joint   1998   19		•		
Pate			$2  imes 10^{-6}$	$2  imes 10^{-6}$
Kocean.vert.tidal.nml         Vert.mik s.cheme vert.mik s.c		hwf_n0_2omega	20.0	20.0
kocean.vert.tidal.nml         kopp montpolit         ktopp montpolit           & cocan.vert.tidal.nml         background.diffusivity         00         00           & cocan.vert.tidal.nml         background.viscosity         0000         0				
δοcean_vert_tidal_nml         background_diffusivity background_viscosity 0.0001 0.000				
Background.viscosity   0,0001   0,000			mom4p1'	mom4p1'
decay.scale         5000         5000           drag.dissipation.use.cdbet         Titue         Table         False         F	&ocean_vert_tidal_nml			
False   Fals				
max.wave.diffusivity         0.01         0.01           mixing.efficiency_n2depend         True         True <td></td> <td></td> <td><math>1  imes 10^{-10}</math></td> <td></td>			$1  imes 10^{-10}$	
mixing_efficiency_n2depend         True         True <th< td=""><td></td><td></td><td></td><td></td></th<>				
True				
True				
Palse   Pals				
Page				
Palse				
Toughness scale   12 00000   12 0000   12 00				
Shelf_depth_cutoff   -1000.0   -1000.0				
tide_speed_data_on_t_grid         True         True           use_drag_dissipation         True         True           use_legacy_methods         False         False           use_this_module         True         True           wave_energy_flux_max         0.1         0.1           &ccean_xlandnisert_mnl         use_this_module         False         False           &ccean_xlandmix_nml         use_this_module         False         False           &sat_vapor_pres_nml         show_all_bad_values         True           &surface_flux_mml         ncar_ocean_flux         True           xurid         false         True           do_alltoalt         True         True           xurid         do_alltoalt         True         True           furing         make_exchange_reproduce         *scondorder         order           make_exchange_reproduce         False         False				
kocean xlandmix.rml         make_exchange_reproduce         True				
Second		tide_speed_data_on_t_grid		
kocean_xlandinsert_nml         use_this_module use_wave_dissipation use_this_module use_this_module ralse         True         True         True         True         True         True         True         True         True         D.1				
kocean_xlandinsert_nml         use_wave_dissipation wave_energy_flux_max         True         True           & ocean_xlandinisert_nml         use_this_module         False         False           & ocean_xlandmix_nml         use_this_module         False         False           & sat_vapor_pres_nml         show_all_bad_values         True           & surface_flux_nml         ncar_ocean_flux         True           & xgrid_nml         do_alltoall         True         True           & do_alltoall         True         True           interp_method         'second'         'second'           order'         order'         order'           order'         order'         order'           make_exchange_reproduce         False         False           nsubset         16         16				
kocean_xlandinsert_nml         wave_energy_flux_max         0.1         0.1           &ocean_xlandinisert_nml         use_this_module         False         False           &cocean_xlandmix_nml         use_this_module         False         False           &sat_vapor_pres_nml         show_all_bad_values         True           &surface_flux_nml         ncar_ocean_flux         True           &xgrid_nml         do_alltoall         True         True           &xgrid_nml         do_alltoall         True         True           and the properties of the pro				
& ocean_xlandinsert_nml         use_this_module         False         False           & ocean_xlandmix_nml         use_this_module         False         False           & sat_vapor_pres_nml         show_all_bad_values         True           & surface_flux_nml         ncar_ocean_flux         True           & xgrid_nml         do_alltoall         True         True           & do_alltoall         True         True           interp_method         'second         'second           order         order         order           make_exchange_reproduce         False         False           nsubset         16         16				
& ocean_xlandmix_nml     use_this_module     False     False       & sat_vapor_pres_nml     show_all_bad_values     True       & surface_flux_nml     ncar_ocean_flux     True       & xgrid_nml     do_alltoall     True     True       & do_alltoall     True     True       interp_method     'second'     'second'       order       false     False     False       nsubset     16     16	Roccom vlandingert nml	•		
&sat_vapor_pres_nml         show_all_bad_values         True           &surface_flux_nml         ncar_ocean_flux         True           &xgrid_nml         do_alltoall         True         True           &xgrid_nml         do_alltoallv         True         True           interp_method         'second         'second           order         order         order           make_exchange_reproduce         False         False           nsubset         16         16				
&surface_flux_nml         ncar_ocean_flux frue         True           &xgrid_nml         do_alltoall frue         True           do_alltoall frue         True         True           interp_method         'second order'         'second order'           order         order'         order'           make_exchange_reproduce         False         False           nsubset         16         16				ralse
kxgrid_nml         faoult_sat_vap         True           do_alltoall         True         True           do_alltoallv         True         True           interp_method         'second         'second           order'         order'         order'           make_exchange_reproduce         False         False           nsubset         16         16				
&xgrid_nml         do_alltoall do_alltoall do_alltoally         True         True<	\(\text{SUITIBLE}_I\)\(\text{UX_IIIII}\)			
do_alltoallv True True interp_method 'second 'second 'second 'order' order' order' make_exchange_reproduce False False nsubset 16 16	&varid nml	•		True
interp_method 'second 'second order' order' make_exchange_reproduce False False nsubset 16 16	www.min.			
order order order make_exchange_reproduce False False nsubset 16 16				
make_exchange_reproduce False False rsubset 16 16		interp_method		
nsubset 16 16		make evehance considure		
		xqrid_loq	False	10

### 2 CICE namelists 'cice\_in.nml', 'input\_ice.nml', 'input\_ice\_gfdl.nml', 'input\_ice\_monin.nml'

Originals are from a fresh git clone, 2017-11-18. CICE documentation is here: http://oceans11.lanl.gov/trac/CICE/attachment/wiki/WikiStart/cicedoc.pdf?format=raw (HunkeLipscombTurnerJefferyElliott2015a-CICE5p1.pdf). Section 4.5.1 explains the meaning of '1', 'h', 'd', 'm', 'y', 'x' and their dependence on histfreq and histfreq\_n. Mushy formulation (ktherm=2) was recommended by Hallberg to solve MOM problems with sea ice potentially being saltier than ocean when it has a fixed bulk salinity: https://github.com/OceansAus/access-om2/issues/56

See AK email to Petra 2017-11-15 and highlights in HunkeLipscombTurnerJefferyElliott2015a-CICE5p1.pdf TODO: check whether all ice nmls are relevant

#### 2.1 cice\_in.nml

#### 2.1.1 All variables in new configs (differences highlighted)

Group	Variable	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 025deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 01deg jra55_ryf/ ice/ cice_in.nml
&domain_nml	distribution_type	'cartesian'	'cartesian'	'cartesian'
Saurani I m	distribution_wght	'latitude'	'latitude'	'latitude'
	ew_boundary_type	'cyclic'	'cyclic'	'cyclic'
	maskhalo_bound	True	True	True
	maskhalo_dyn	True	True	True
	maskhalo_remap	True	True	True
	nprocs	24	480	1200
	ns_boundary_type	'tripole'	'tripole'	'tripole'
	processor_shape	'slenderX1'	'square-ice'	'square-ice'
&dynamics_nml	advection	'remap'	'remap'	'remap'
,	COSW	0.96	0.96	0.96
	dragio	0.005 36	0.005 36	0.005 36
	iceruf	0.0005	0.0005	0.0005
	kdyn	1	1	1
	krdg_partic	1	1	1
	krdg_redist	1	1	1
	kstrength	1	1	1
	mu_rdg	3	3	3
	ndte	120	120	120
	revised_evp	False	False	False
	sinw	0.28	0.28	0.28
&forcing_nml	atm_data_dir	'unknown	'unknown	'unknown
		atm_data dir'	atm_data dir'	atm_data dir'
	atm_data_format	'nc'	'nc'	'nc'
	atm_data_type	'default'	'default'	'default'
	atmbndy	'default'	'default'	'default'
	calc_strair	True	True	True
	calc_tsfc	True	True	True
	formdrag	False	False	False
	fyear_init	1	1	1
	oceanmixed_file	'unknown ocean-	'unknown ocean-	'unknown ocean-
		mixed_file'	mixed_file'	mixed_file'
	oceanmixed_ice ocn_data_dir	False	False	False
	ocn_aata_dir	'unknown ocn_data	'unknown ocn_data	'unknown ocn_data
	osn data format	dir'	dir'	dir'
	ocn_data_format precip_units	'nc' 'mks'	'nc' 'mks'	'nc' 'mks'
		'mks'		
	restore_ice restore_sst	False False	False False	False False
	sss_data_type	'default'	'default'	'default'
	sst_data_type	'default'	'default'	'default'
	trestore	0	0	0
	update_ocn_f	True	True	True
	update_och_i ustar_min	0.0005	0.0005	0.0005
	ycycle	0.0003	0.0003	0.0003
&grid_nml	grid_file	'RESTART/	'RESTART/	'RESTART/
agrid_nint	grid_iite	grid.nc'	grid.nc'	grid.nc'
				griu.ric
	arid format	'nc'	'nc'	'nc'
	grid_format grid_type	'nc' 'tripole'	'nc' 'tripole'	'nc' 'tripole'

Group (continued)	Variable	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 025deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 01deg jra55_ryf/ ice/ cice_in.nml
	kmt_file	'RESTART/ kmt.nc'	'RESTART/ kmt.nc'	'RESTART/ kmt.nc'
&icefields_bgc_nml	f_aero	'X'	'X'	'X'
•	f_bgc_am_ml	'x'	'x'	'x'
	f_bgc_am_sk	'x'	'x'	'x'
	f_bgc_c_sk	'X'	'X'	'x' 'x'
	f_bgc_chl_sk f_bgc_dms_sk	'x' 'x'	'x' 'x'	, X , X,
	f_bgc_dmsp_ml	, ,X,	, 'X'	, 'X'
	f_bgc_dmspd_sk	'x'	'x'	'x'
	f_bgc_dmspp_sk	'x'	'x'	'x'
	f_bgc_n_sk	'X'	'X'	'X'
	f_bgc_nit_ml f_bgc_nit_sk	'x' 'x'	'x' 'x'	'x' 'x'
	f_bgc_sil_ml	, X,	'x'	, X,
	f_bgc_sil_sk	'x'	'x'	'x'
	f_bphi	'x'	'x'	'x'
	f_btin	, X,	'x'	'X'
	f_faero_atm f_faero_ocn	'x' 'x'	'x' 'x'	'x' 'x'
	r_raero_ocri <mark>f_fbri</mark>	x 'm'	x 'm'	, x 'x'
	f_fn	'x'	'x'	'x'
	f_fn_ai	'x'	'x'	'x'
	f_fnh	'X'	'x'	'x'
	f_fnh_ai f_fno	'x' 'x'	'X' 'v'	'x' 'x'
	f_fno_ai	, x 'x'	'x' 'x'	, X 'X'
	f_fsil	'X'	'x'	'x'
	f_fsil_ai	'x'	'x'	'x'
	f_grownet	'X'	'X'	'x'
	f_hbri	'm'	'm' '~'	,χ,
&icefields_drag_nml	f_ppnet f_cdn_atm	'x' 'x'	'x' 'x'	'X' 'X'
Citchetas_dray_min	f_cdn_ocn	, 'X'	'x'	, X
	f_drag	'x'	'x'	'x'
&icefields_mechred_nml	f_alvl	'm'	'm'	'x'
	f_aparticn	'X'	'X'	'X'
	f_araftn <mark>f_ardg</mark>	'x' 'm'	'x' 'm'	'x' 'x'
	f_ardgn	'x'	'x'	, 'X'
	f_aredistn	'x'	'x'	'x'
	f_dardg1dt	'x'	'x'	'x'
	f_dardg1ndt f_dardg2dt	'X'	'X'	'X'
	f_dardg2ndt f_dardg2ndt	'x' 'x'	'x' 'x'	'x' 'x'
	f_dvirdgdt	,x,	'x'	'x'
	f_dvirdgndt	'x'	'x'	'x'
	f_krdgn	'x'	'x'	'x'
	f_opening	'X'	'X'	'X'
	f_vlvl f_vraftn	'm' 'x'	'm' 'x'	'x' 'x'
	f_vrdg	'm'	'm'	'x'
	f_vrdgn	'x'	'x'	'x'
0. 6.11	f_vredistn	'x'	'x'	'X'
&icefields_nml	f_aice f_aicen	'm' 'm'	'm' 'm'	'm' 'x'
	f_aisnap	m 'x'	'm' 'x'	x 'x'
	f_albice	'm'	'm'	'x'
	f_albpnd	'x'	'x'	'x' 'x'
	f_albsni	'm'	'm'	'x'
	<mark>f_albsno</mark> f_alidr	'm' 'x'	'm' 'x'	'x' 'x'
	f_alvdr	'X'	, x 'x'	, x 'x'
	f_angle	True	True	True
	f_anglet	True	True	True
	f_bounds	False	False	False
	<mark>f_congel</mark> f_coszen	'm' 'x'	'm' 'x'	'x' 'x'
	f_daidtd	x 'm'	x 'm'	, x 'x'
	f_daidtt	'm'	'm'	'x'
	f_divu	'm'	'm'	'x'
	f_dsnow	'x'	'X'	'x'
	f_dvidtd	'm' 'm'	'm' 'm'	'x' 'x'
	f_dvidtt	'm'	'm'	X

Group (continued) Variable	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 025deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 01deg jra55_ryf/ ice/ cice_in.nml
f_dxt	True	True	True
f_dxu f_dyt	True True	True True	True True
f_dyu	True	True	True
f_evap	'x'	'x'	'x'
f_evap_ai f_fcondtop_ai	'm' 'm'	'm' 'm'	'x' 'x'
f_fcondtopn_ai	'm'	'm'	'x'
f_fhocn	'X'	'X'	'x'
f_fhocn_ai f_flat	'm' 'x'	'm' 'x'	'x' 'x'
f flat al	'm'	'm'	'x'
f_flatn_ai f_flwdn	'm' 'm'	'm' 'm'	'x' 'x'
f_flwup	'x'	'x'	, x , X,
f_flwup_ai	'm'	'm'	'x'
f_fmeltt_ai	'x' 'm'	'x' 'm'	'x' 'x'
f_frazil	'm'	'm'	'x'
f_fresh	'X' 'm'	'X' 'm'	'x'
f_fresh_ai f_frz_onset	'm' 'm'	'm' 'm'	'x' 'x'
f_frzmlt	'm'	'm'	'x'
f_fsalt f_fsalt_ai	'x' 'm'	'x' 'm'	'x' 'x'
f_fsens	'x'	'x'	'x'
f_fsens_ai	'm'	'm'	'x'
f_fsurf_ai f_fsurfn_ai	'x' 'm'	'x' 'm'	'x' 'x'
f_fswabs	'x'	'x'	'x'
f_fswabs_ai	'm'	'm'	'x'
f_fswdn f_fswfac	'm' 'm'	'm' 'm'	'x' 'x'
f_fswthru	'x'	'x'	'x'
f_fswthru_ai	'm'	'm'	'x'
f_fy f_hi	'x' 'm'	'x' 'm'	'x' 'm'
f_hisnap	'x'	'x'	'x'
f_hs f_hte	'm' True	'm' True	'm' True
f_htn	True	True	True
f_iage	'm'	'm'	'x'
f_icepresent f_meltb	'm' 'm'	'm' 'm'	'x' 'x'
f_meltl	'm'	'm'	'x'
f <u>.melts</u> f_meltt	'm' 'm'	'm' 'm'	'x' 'x'
f_mlt_onset	'm'	'm'	, X , X,
f_ncat	True	True	True
f_qref	'x' 'x'	'x' 'x'	'x' 'x'
f_rain_al	'm'	'm'	'x'
f_shear	'm'	'm'	'x'
f_sice f_sig1	'm' 'x'	'm' 'x'	'x' 'x'
f_sig2	'x'	'x'	'x'
f_sinz f_snoice	'x' 'm'	'x' 'm'	'x' 'x'
f_snow	'x'	'x'	'x'
f_snow_ai	'm'	'm'	'x'
f_sss f_sst	'm' 'm'	'm' 'm'	'x' 'x'
f_strainx	'm'	'm'	'x'
f_strainy f_strainy	'm' 'm'	'm'	'x'
f_strcorx f_strcory	'm' 'm'	'm' 'm'	'x' 'x'
f_strength	'm'	'm'	'x'
f_strintx	'm' 'm'	'm' 'm'	'x' 'x'
f_strinty f_strocnx	m 'm'	m 'm'	'x'
f_strocny	'm'	'm'	'x'
f_strtltx f_strtlty	'm' 'm'	'm' 'm'	'x' 'x'
f_tair	'm'	'm'	'x'

Group (continued)	Variable	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 025deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 01deg jra55_ryf/ ice/ cice_in.nml
	f_tarea f_tinz	True 'x'	True 'x'	True 'x'
	f_tmask	True	True	True
	f_tref	'x'	'x'	'X'
	f_trsig f_tsfc	'm' 'm'	'm' 'm'	'x' 'm'
	f_tsnz	'x'	'x'	'X'
	f_uarea	True	True	True
	f_uocn	'm'	'm'	'x'
	f_uvel f_vgrdb	'm' False	'm' False	'x' False
	f_vgrdi	False	False	False
	f_vgrds	False	False	False
	f_vicen	'm'	'm'	'X'
	f_vocn f_vvel	'm' 'm'	'm' 'm'	'x' 'x'
&icefields_pond_nml	f_apeff	'm'	'm'	, X
· ·	f_apeff_ai	'm'	'm'	'x'
	f_apeffn	'X' 'm'	'X'	'X'
	f_apond f_apond_ai	'm' 'm'	'm' 'm'	'x' 'x'
	f_apondn	'x'	'x'	'x'
	f_hpond	'm'	'm'	'x'
I	f_hpond_ai	'm'	'm'	'X'
	f_hpondn f_ipond	'x' 'm'	'x' 'm'	'x' 'x'
	f_ipond_ai	'm'	'm'	,, ,X,
&ponds_nml	dpscale	0.001	0.001	0.001
	frzpnd	'hlid'	'hlid'	'hlid'
	hp1 hs0	0.01 0.0	0.01 0.0	0.01 0.0
	hs1	0.03	0.03	0.03
	pndaspect	0.8	0.8	0.8
	rfracmax	1.0	1.0	1.0
&setup_nml day	rfracmin rs_per_year	0.15 365	0.15 365	0.15 365
use a security and a	dbug	False	False	False
	diag_file	'ice_diag.d'	'ice_diag.d'	'ice_diag.d'
	diag_type	'file'	'file'	'file'
	diagfreq dt	24 3600	960 1200	960 400
	dump_last	True	True	True
	dumpfreq	'y'	'y'	'm'
<u>d</u>	umpfreq_n	1 True	1 True	3 Truo
	hist_avg histfreq	True 'd', 'm', 'x', 'x', 'x'	True 'd', 'm', 'x', 'x', 'x'	True 'd', 'm', 'x', 'x', 'x'
	histfreq_n	1, 1, 1, 1, 1	1, 1, 1, 1, 1	1, 1, 1, 1, 1
	history_dir history_file	'./OUTPUT/' 'iceh'	'./OUTPUT/' 'iceh'	'./OUTPUT/' 'iceh'
	ice_ic	'default'	'default'	'default'
	incond_dir	'./OUTPUT/'	'./OUTPUT/'	'./OUTPUT/'
	incond_file	'iceh_ic'	'iceh_ic'	'iceh_ic'
	istep0	900 650	0 90.0, —65.0	900 650
	latpnt lcdf64	90.0, —65.0 True	90.0, —65.0 True	90.0, —65.0 True
	lonpnt	0.0, -45.0	0.0, -45.0	0.0, -45.0
	ndtd	1	1	1
t	npt pointer_file	35040 './RESTART/ ice.restart	2232 './RESTART/ ice.restart	6480 './RESTART/ ice.restart
n	rint_global	file' False	file' False	file' False
	rint_globat rint_points	True	True	True
	restart	False	False	False
	restart_dir	'./RESTART/'	'./RESTART/'	'./RESTART/'
	restart_ext restart_file	False 'iced'	False 'iced'	False 'iced'
	tart_format	'nc'	'nc'	'nc'
	runtype	'initial'	'initial'	'initial'
	leap_years estart_time	False True	False	False True
USE_FE	write_ic	False	True False	False
		. 4.54		

Group (continued)	Variable	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 025deg jra55_ryf/ ice/ cice_in.nml	new/ control/ 01deg jra55_ryf/ ice/ cice_in.nml
	year_init	1	1	1
&shortwave_nml	ahmax	0.1	0.1	0.1
	albedo_type	'default'	'default'	'default'
	albicei	0.44	0.44	0.44
	albicev albsnowi	0.86 0.7	0.86 0.7	0.86 0.7
	albsnowv	0.98	0.98	0.98
	dalb_mlt	-0.02	-0.02	-0.02
	dt_mlt	1.0	1.0	1.0
	r_ice	0.0	0.0	0.0
	r_pnd	0.0	0.0	0.0
	r_snw	0.0	0.0	0.0
	rsnw_mlt	1500.0	1500.0	1500.0
	shortwave	'default'	'default'	'default'
&thermo_nml	tocnfrz	-1.8 0.0005	-1.8 0.0005	-1.8 0.0005
&theffilo_fillit	a_rapid_mode aspect_rapid_mode	1.0	1.0	1.0
	chio	0.004	0.004	0.004
	conduct	'bubbly'	'bubbly'	'bubbly'
	dsdt_slow_mode	$-5 \times$	$-5 \times$	$-5 \times$
		$10^{-8}$	$10^{-8}$	$10^{-8}$
	kitd	1	1	1
	ktherm	1	1	1
	phi_c_slow_mode	0.05	0.05	0.05
	phi_i_mushy	0.85	0.85	0.85
&tracer_nml	rac_rapid_mode	10.0 False	10.0 False	10.0 False
&tidet_iiiit	restart_aero restart_age	False	False	False
	restart_fy	False	False	False
	restart_lvl	False	False	False
	restart_pond_cesm	False	False	False
	restart_pond_lvl	False	False	False
	restart_pond_topo	False	False	False
	tr_aero	False	False	False
	tr_fy	False	False	False
	tr_iage tr_lvl	False False	False False	False False
	tr_pond_cesm	False	False	False
	tr_pond_lvl	False	False	False
	tr_pond_topo	False	False	False
&zbgc_nml	bgc_data_dir	'unknown	'unknown	'unknown
		bgc_data	bgc_data	bgc_data
		dir'	dir'	dir'
	bgc_flux_type	'Jin2006'	'Jin2006'	'Jin2006'
	nit_data_type	'default' 0.5	'default' 0.5	'default'
	phi_snow restart_bgc	0.5 False	False	0.5 False
	restart_hbrine	False	False	False
	restore_bgc	False	False	False
	sil_data_type	'default'	'default'	'default'
	skl_bgc	False	False	False
	tr_bgc_am_sk	False	False	False
	tr_bgc_c_sk	False	False	False
	tr_bgc_chl_sk	False	False	False
	tr_bgc_dms_sk	False	False	False
	tr_bgc_dmspd_sk tr_bgc_dmspp_sk	False False	False False	False False
	tr_bgc_sil_sk	False	False	False

### 2.1.2 Old and new configs (differences only)

Group Variable	original/	new/
	control/	control/
	1deg	1deg
	jra55_ryf/	jra55_ryf/
	ice/	ice/
	cice_in.nml	cice_in.nml
&setup_nml lcdf64	False	True
print_points	False	True

Group	Variable	original/	new/
		control/	control/
		025deg	025deg
		jra55_ryf/	jra55_ryf/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	print_points	False	True

Group	Variable	original/	new/
		control/	control/
		01deg	01deg
	jra	a55_ryf/	jra55_ryf/
		ice/	ice/
	cice	e_in.nml	cice_in.nml
&setup_nml	print_points	False	True

### 2.2 input\_ice.nml

### 2.2.1 All variables in new configs (differences highlighted)

Group Variable	new/	new/	new/
	control/	control/	control/
	1deg	025deg	01deg
	jra55_ryf/	jra55_ryf/	jra55_ryf/
	ice/input	ice/input	ice/input
	ice.nml	ice.nml	ice.nml
&coupling_nml chk_a2i_fields	False	False	False
chk_frzmlt_sst	False	False	False
chk_gfdL.roughness	False	False	False
chk_i2a_fields	False	False	False
chk_i2o_fields	False	False	False
chk_o2i_fields	False	False	False
cst_ocn_albedo	True	True	True
dt_cpl_ai	10800	10800	10800
dt_cpl_io	3600	1200	400
gfdl_surface_flux	True	True	True
ice_fwflux	True	True	True
ice_pressure_on	True	True	True
limit_icemelt	False	False	False
meltlimit	-200.0	-200.0	-200.0
ocn.albedo	0.1	0.1	0.1
pop_icediag	True	True	True
precip_factor	1.0	1.0	1.0
rotate_winds	True	True	True
use_ocnslope	False	False	False
use_umask	False	False	False

### 2.2.2 Old and new configs (differences only)

Group		original/ control/ 1deg jra55_ryf/ ice/input ice.nml	new/ control/ 1deg jra55_ryf/ ice/input ice.nml
9 coupling am	chk_frzmlt_sst	ice.iiiit	False
&coupling_nml			
	chk_i2a_fields		False
	chk_i2o_fields		False
	chk_o2i_fields		False

### 2.3 input\_ice\_gfdl.nml

#### 2.3.1 All variables in new configs (differences highlighted)

Group	Variable	new/ control/ 1deg jra55_ryf/ ice/ input_ice gfdl.nml	new/ control/ 025deg jra55_ryf/ ice/ input_ice gfdl.nml	new/ control/ 01deg jra55_ryf/ ice/ input_ice gfdl.nml
&ocean_rough_nml	charnock	0.032	0.032	0.032
	do_cap40	False	False	False
	do_highwind	False	False	False
	rough_scheme	'beljaars'	'beljaars'	'beljaars'
	roughness_heat	$5.8 \times 10^{-5}$	$5.8 \times 10^{-5}$	$5.8 \times 10^{-5}$
	roughness_min	$1  imes 10^{-6}$	$1  imes 10^{-6}$	$1  imes 10^{-6}$
	roughness_moist	$5.8 \times 10^{-5}$	$5.8 \times 10^{-5}$	$5.8 \times 10^{-5}$
	roughness_mom	$5.8 \times 10^{-5}$	$5.8  imes 10^{-5}$	$5.8 \times 10^{-5}$
	zcoh1	0.0	0.0	0.0
	zcoq1	0.0	0.0	0.0
&surface_flux_nml	alt_gustiness	False	False	False
	gust_const	1.0	1.0	1.0
	gust_min	0.0	0.0	0.0
	ncar_ocean_flux	True	True	True
	ncar_ocean_flux_orig	False	False	False
	no_neg_q	False	False	False
	old_dtaudv	False	False	False
	raoult_sat_vap	False	False	False
	use_mixing_ratio	False	False	False
	use_virtual_temp	True	True	True

#### 2.3.2 Old and new configs (differences only)

### 2.4 input\_ice\_monin.nml

#### 2.4.1 All variables in new configs (differences highlighted)

Group	Variable	new/	new/	new/
		control/	control/	control/
		1deg	025deg	01deg
		jra55_ryf/	jra55_ryf/	jra55_ryf/
		ice/	ice/	ice/
		input_ice	input_ice	input_ice
		monin.nml	monin.nml	monin.nml
&monin_obukhov_nml	neutral	True	True	True

### 2.4.2 Old and new configs (differences only)

## 3 MATM namelist 'input\_atm.nml'

Originals are from a fresh git clone, 2017-11-18.

### 3.1 All variables in new configs (differences highlighted)

Group Variable	new/ control/ 1deg jra55_ryf/ atmosphere/ input atm.nml	new/ control/ 025deg jra55_ryf/ atmosphere/ input atm.nml	new/ control/ 01deg jra55_ryf/ atmosphere/ input atm.nml
&coupling caltype	0	0	0
dataset	'jra55'	'jra55'	'jra55'
days_per_year	365	365	365
debug_output	False		
dt_atm	3600	1200	400
dt_cpl	10800	10800	10800
inidate	10101	10101	10101
init_date	10101	10101	10101
runtime	126144000	2678400	2592000
runtype	'NY'	'NY'	'NY'
truntime0	0	0	0

#### 3.1.1 Old and new configs (differences only)

Group	Variable	original/	new/
		control/	control/
		1deg	1deg
		jra55_ryf/	jra55_ryf/
		atmosphere/	atmosphere/
		input	input
		atm.nml	atm.nml
&coupling	chk_a2i_fields	False	
	chk_i2a_fields	False	

Group	Variable	original/	new/
		control/	control/
		025deg	025deg
		jra55_ryf/	jra55_ryf/
	a	atmosphere/	atmosphere/
		input	input
		atm.nml	atm.nml
&coupling	chk_a2i_fields	False	
	chk_i2a_fields	False	

# 4 Andy's 1 deg configs (differences highlighted)

### 4.1 MOM namelist 'input.nml'

Easternier mit         abez auchtif (nix 10 halb) (nix	Group	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ocean/	new/ control/ 1deg jra55_ryf/ ocean/ input.nml
Pate			input.nml	0.45
Common	&auscom_ice_nml			
Martin   M				
Manual				False
			3600	3600
Part		fixmeltt		False
Programmer   Pro				1.0
Memory   M				False
Product   Prod				1.0
Programmer   Pro				5 True
Sign.cht   Sign.cht		pop_iceuldy redsea_culfbay_sfiv		True
Kaliag, manager, mil         finest         — 27.16 <td></td> <td></td> <td></td> <td>1.0</td>				1.0
Kelsig.manager.mil         Sebug kisig.manager.mis         Talse         False         Single         <				-0.216
Sisse.oi.wanings   Ture   Single   Si				True
Efmsio.ml         filest.ex.wite threading.read multi-mount threading.readin	&diag_manager_nml			True
kms.ml         threading.read threading.re				True
&fms.nmi         threading.wite         single         single         Component         Component         Component         Component         Component         Component         Component         Institute         Linux         Linux <th< td=""><td>&amp;tms_10_nml</td><td></td><td></td><td>'single'</td></th<>	&tms_10_nml			'single'
Birms.mil         doors.stail         100P         OMMONE           Amom.oasis5.interface.mil         fields.in         U. flux, V. fl				
Momm.oasi53.interface.mil         Interface.mil	&fmc nml			'COMPONENT'
Emontosi53.interface.nml         fields.in         u.flux, v.flux,	XIIIIZ_IIIIIL			
	&mom_oasis3_interface_nml			'u_flux',
Satt.Rt, S				'v_flux',
			'lprec', 'fprec',	'lprec', 'fprec',
Sw.flux, Sw.flux   1.1				
T. flux, 't. flux '				
				't flux'
Tunof, p.   Tuno				'lw_flux',
Minet   Mine				'runof', 'p',
Minternation   Mint				'aice',
Fields.out   T.surf, S.surf,				'wfimelt',
		nelds_out		
				'v_surf',
kmoninobukhov.nml         disastory				'dssldx',
Num_fields_in num_fields_out num_f			'dssldy',	'dssldy',
Num_fields_out   False   Fal				'frazil'
kmonin_obukhov_nml         send_before_ocean_update         True         True           &monin_obukhov_nml         neutral         True         True           &mpp_io_nml         deflate_level         5            &ocean_adv_vel_diag_nml         flarge_cfl_value         1            &ocean_adv_vel_diag_nml         large_cfl_value         100         100           max_cfl_value         100         100         100           &ocean_advection_velocity_nml         max_advection_velocity         0.5         0.           &ocean_albedo_nml         ocean_albedo_option         2            &ocean_barotropic_nml         barotropic_time_stepping_a         True         True           barotropic_time_stepping_a         True         True         True           debug_this_module         False         False         False           diag_step         4320         4320         4320				15
&monin_obukhov_nml         False         False           &monin_obukhov_nml         neutral         True         True           &mpp_io_nml         deflate_level         5         1           &ocean_adv_vel_diag_nml         diag_step         4320         4320           & large_cfl_value         100         100           & max_cfl_value         1000         100           & ocean_advection_velocity_nml         max_advection_velocity         0.5         0.           & ocean_albedo_nml         ocean_albedo_option         2         0.           & ocean_barotropic_nml         barotropic_time_stepping_a         True         True           & barotropic_time_stepping_a         True         True           & barotropic_time_stepping_a         True         True           & debug_this_module         False         False           & debug_this_module         False         False           & debug_this_module         False         False           & diag_step         4320         4320				7 True
&monin_obukhov_nml         neutral deflate_level         True         True           &mpp_io_nml         deflate_level         5            &ocean_adv_vel_diag_nml         shuffle         1            &ocean_adv_vel_diag_nml         diag_step         4320         4320           max_cfl_value         10.0         10.0         10.0           max_cfl_value         100.0         100.0         100.0           &ocean_advection_velocity_nml         max_advection_velocity         0.5         0.           &ocean_albedo_nml         ocean_albedo_option         2            &ocean_barotropic_nml         barotropic_time_stepping_a         True         True           barotropic_time_stepping_a         True         True           barotropic_time_stepping_a         True         True           debug_this_module         False         False           debug_this_module         False         False           diag_step         4320         4320				False
&mpp_io_nml         deflate_level         5           shuffle         1           &ocean_adv_vel_diag_nml         diag_step         4320         4320           large_cfl_value         10.0         10.0         10.0           max_cfl_value         100.0	&monin_obukhov_nml			True
Shuffle         1           &ocean_adv_vel_diag_nml         diag_step         4320         4320           large_cfl_value         100         100           max_cfl_value         1000         1000           verbose_cfl         True         True           &ocean_advection_velocity_nml         max_advection_velocity         0.5         0.0           &ocean_albedo_nml         ocean_albedo_option         2            &ocean_barotropic_nml         barotropic_time_stepping_a         True         True           barotropic_time_stepping_b         False         False           debug_this_module         False         False           diag_step         4320         4320				5
Large_cfl_value   100		shuffle	1	1
Max_cfl_value   1000	&ocean_adv_vel_diag_nml			4320
& ccean_advection_velocity_nmlverbose_cflTrueTrue& ccean_advection_velocity_nmlmax_advection_velocity0.50.5& ccean_albedo_nmlocean_albedo_option2& ccean_barotropic_nmlbarotropic_tallo1010barotropic_time_stepping_aTrueTruebarotropic_time_stepping_bFalseFalsedebug_this_moduleFalseFalsediag_step43204320				10.0
&ocean_advection_velocity_nml     max_advection_velocity     0.5     0.0       &ocean_albedo_nml     ocean_albedo_option     2        &ocean_barotropic_nml     barotropic_tallo     10     10       barotropic_time_stepping_a     True     True       barotropic_time_stepping_b     False     False       debug_this_module     False     False       diag_step     4320     4320				
&ocean_albedo_nml     ocean_albedo_option     2       &ocean_barotropic_nml     barotropic_halo     10     10       barotropic_time_stepping_a     True     True       barotropic_time_stepping_b     False     False       debug_this_module     False     False       diag_step     4320     4320	&ocean advection velocity nml			0.5
& ocean_barotropic_nmlbarotropic_halo1010barotropic_time_stepping_aTrueTruebarotropic_time_stepping_bFalseFalsedebug_this_moduleFalseFalsediag_step43204320				2
barotropic_time_stepping_a True Tru barotropic_time_stepping_b False Fals debug_this_module False Fals diag_step 4320 4321				10
barotropic_time_stepping_b False False  debug_this_module False False  diag_step 4320 4321		barotropic_time_stepping_a		True
debug_this_module False Fals diag_step 4320 4321		barotropic_time_stepping_b	False	False
		debug_this_module		False
eta max 80 80				4320
Cta_nax U.S		eta_max	8.0	8.0

		access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ocean/	ocean/ input.nml
		input.nml	
	frac_crit_cell_height pred_corr_gamma	0.2 0.2	0.2 0.2
	smooth_eta_diag_laplacian	True	True
	smooth_eta_t_biharmonic	False	False
	smooth_eta_t_laplacian	True	True
	smooth_pbot_t_biharmonic smooth_pbot_t_laplacian	False True	False True
	truncate_eta	False	False
	use_legacy_barotropic_halos	False	False
	vel_micom_bih	0.01	0.01
	vel_micom_lap	0.05	0.05 0.2
	vel_micom_lap_diag verbose_truncate	0.2 True	U.2 True
	zero_tendency	False	False
&ocean_bbc_nml	bmf_implicit	True	True
	cdbot	0.001	0.001
	cdbot_hi cdbot_roughness_length	0.007 False	0.007 False
	cdbot_roughness_uamp	True	True
	uresidual	0.05	0.05
	use_geothermal_heating	False	False
&ocean_bih_friction_nml &ocean_bih_tracer_nml	bih_friction_scheme	'general'	'general
&ocean_bin_tracer_nml &ocean_bihcst_friction_nml	use_this_module use_this_module	False False	False False
&ocean_bihgen_friction_nml	bottom_5point	True	True
	eq_lat_micom	0.0	0.0
	eq_vel_micom_aniso	0.0	0.0
	eq_vel_micom_iso	0.0	0.0
	equatorial_zonal k_smag_aniso	False 0.0	False 0.0
	k_smag_iso	2.0	2.0
	ncar_boundary_scaling	True	True
	ncar_boundary_scaling_read	False	False
	ncar_rescale_power ncar_vconst_4	$2 \times 10^{-8}$	$2 \times 10^{-8}$
	ncar_vconst_5	5	5
	use_this_module	True	True
	vel_micom_aniso	0.0	0.0
	<pre>vel_micom_bottom vel_micom_iso</pre>	0.1 0.04	0.01 0.04
	visc_crit_scale	0.25	0.25
&ocean_convect_nml	use_this_module	False	False
&ocean_coriolis_nml	acor	0.5	0.5
&ocean_density_nml	use_this_module eos_linear	True False	True False
xoccan_ucnorty_milt	eos_preteos10	True	True
	layer_nk	80	80
	neutralrho_max	1030.0	1030.0
	neutralrho_min potrho_max	1020.0 1038.0	1020.0 1038.0
	potrho_min	1038.0	1038.0
&ocean_domains_nml	max_tracers	5	5
&ocean_form_drag_nml	use_this_module	False	False
&ocean_frazil_nml	debug_this_module	False False	False False
	frazil_only_in_surface freezing_temp_preteos10	True	False True
	freezing_temp_simple	False	False
	use_this_module	True	True
&ocean_grids_nml	debug_this_module	False	False
&ocean_increment_eta_nml &ocean_increment_tracer_nml	use_this_module use_this_module	False False	False False
&ocean_increment_velocity_nml	use_this_module	False	False
&ocean_lap_friction_nml	lap_friction_scheme	'general'	'general'
work and the state of the state			
&ocean_lap_tracer_nml &ocean_lapcst_friction_nml	use_this_module use_this_module	False False	False False

control, 1deg_ jra55_ryf, ocean, input.nm	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ocean/	Variable	Group (continued)
0.0	input.nml	li anno anto	
0.0	0.0 0.0	k_smag_aniso k_smag_iso	
True	True	restrict_polar_visc	
60.0	60.0	restrict_polar_visc_lat	
0.35	0.35	restrict_polar_visc_ratio	
True 0.1	True	use_this_module	
False	0.1 False	vel_micom_iso viscosity_ncar	
raise	False	viscosity_ncar_2000	
	False	viscosity_ncar_2007	
True	True	viscosity_scale_by_rossby	
4.( False	4.0	viscosity_scale_by_rossby_power	9 acan miydayyadana and
False False	False False	debug_this_module mixdownslope_mask_gfdl	&ocean_mixdownslope_nml
False	raise 4	mixdownslope_nats	
False	False	read_mixdownslope_mask	
True	True	use_this_module	
1	1	baroclinic_split	&ocean_model_nml
- 80	80	barotropic_split	
True False	True False	cmip_units debug	
3600	3600	dt_ocean	
4, 3	4, 3	io_layout	
16, 15	16, 15	layout	
	1	surface_height_split	
'twolevel	'twolevel'	time_tendency	
'zstar False	'zstar' False	vertical_coordinate rayleigh_damp_exp_from_bottom	&ocean_momentum_source_nml
True	True	use_rayleigh_damp_table	Control of the Contro
True	True	use_this_module	
False	False	debug_this_module	&ocean_nphysics_nml
False	False	use_nphysicsa	
False True	False True	use_nphysicsb use_nphysicsc	
True	True	use_this_module	
	600.0	agm	&ocean_nphysics_util_nml
600.0	True		
True		agm_closure	
True True	True	agm_closure_baroclinic	
True True 0.004	0.004	agm_closure_baroclinic agm_closure_buoy_freq	
True True 0.004 True	0.004 True	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed	
True True 0.004	0.004	agm_closure_baroclinic agm_closure_buoy_freq	
True O.004 True True True True	0.004 True True True True	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert	
True True 0.004 True True True True True	0.004 True True True True 0.0	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gamma	
True True 0.002 True True True True True True False	0.004 True True True True 0.0 False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gamma agm_closure_eden_greatbatch	
True True 0.004 True True True True True True False True	0.004 True True True True 0.0 False True	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gramma agm_closure_eden_greatbatch agm_closure_grid_scaling	
True True 0.002 True True True True True True False	0.004 True True True True True 0.0 False True 50 000.0	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gramma agm_closure_eden_greatbatch agm_closure_grid_scaling agm_closure_length	
True True 0.004 True True True True 0.0 False True 50 000.0 False False	0.004 True True True True 0.0 False True 50 000.0 False False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eden_gamma agm_closure_eden_gratbatch agm_closure_eden_grid_scaling agm_closure_length agm_closure_length_bczone agm_closure_length_bczone	
True True 0.004 True True True True 0.0 False True 50 000.0 False False False	0.004 True True True True 0.0 False True 50 000.0 False False False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eden_gamma agm_closure_eden_gamma agm_closure_eden_greatbatch agm_closure_grid_scaling agm_closure_length agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_fixed	
True True 0.004 True True True True 0.0 False False False False	0.004 True True True True 0.0 False True 50 000.0 False False False False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eden_gamma agm_closure_eden_gamma agm_closure_eden_greatbatch agm_closure_eden_grid_scaling agm_closure_length agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_fixed agm_closure_length_rossby agm_closure_lower_depth	
True True 0.004 True True True 0.0 False True 50 000.0 False False False 2000.0	0.004 True True True True 0.0 False True 50 000.0 False False False False 600.0	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gamma agm_closure_eden_greatbatch agm_closure_edid_scaling agm_closure_length agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_fixed agm_closure_lower_depth agm_closure_lower_depth agm_closure_lower_depth	
True True 0.004 True True True True 0.0 False False False False	0.004 True True True True 0.0 False True 50 000.0 False False False False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_grathatch agm_closure_eden_grathatch agm_closure_eingth_scaling agm_closure_length agm_closure_length_fixed agm_closure_length_fixed agm_closure_length_fixed agm_closure_lower_depth agm_closure_lower_depth agm_closure_lower_depth agm_closure_max agm_closure_min	
True True 0.004 True True True True 0.0 False True 50 000.0 False False False 600.0 600.0	0.004 True True True 0.0 False True 50 000.0 False False False 600.0 600.0 50.0 0.07	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_greatbatch agm_closure_eden_greatbatch agm_closure_length agm_closure_length bczone agm_closure_length_fixed agm_closure_length_fixed agm_closure_length_rossby agm_closure_depth agm_closure_max agm_closure_min agm_closure_scaling agm_closure_scaling	
True True 0.004 True True True True 0.0 False True 50 000.0 False False False 600.0 600.0 50.0 45.0	0.004 True True True 0.0 False True 50 000.0 False False False 600.0 50.0 0.07 100.0 45.0	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_greatbatch agm_closure_grid_scaling agm_closure_length agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_rossby agm_closure_losure_max agm_closure_min agm_closure_scaling agm_closure_scaling	
True True 0.004 True True True 0.0. False True 50 000.0 False False 2000.0 600.0 50.0 0.07 100.0 False	0.004 True True True True 0.0 False True 50 000.0 False False False 600.0 50.0 0.07 100.0 45.0 False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_greatbatch agm_closure_eden_greatbatch agm_closure_grid_scaling agm_closure_length agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_fixed agm_closure_length_rossby agm_closure_lower_depth agm_closure_max agm_closure_min agm_closure_scaling agm_closure_upper_depth agm_damping_time agm_smooth_space	
True True 0.004 True True True 0.0 False True 50 000.0 False False 2000.0 600.0 50.0 100.0 45.0 False False	0.004 True True True True 0.0 False True 50 000.0 False False False 2000.0 600.0 50.0 0.07 100.0 45.0 False False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_greatbatch agm_closure_grid_scaling agm_closure_length agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_rixed agm_closure_length_rossby agm_closure_lower_depth agm_closure_min agm_closure_scaling agm_closure_upper_depth agm_damping_time agm_smooth_space agm_smooth_time	
True True 0.004 True True True 0.0 False True 50 000.0 False False 2000.0 600.0 50.0 0.07 1000.0 45.0 False False	0.004 True True True True 0.0 False True 50 000.0 False False False 2000.0 600.0 50.0 0.07 100.0 45.0 False False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_horz agm_closure_eden_gamma agm_closure_eden_gratbatch agm_closure_grid_scaling agm_closure_length agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_rossby agm_closure_lower_depth agm_closure_lower_depth agm_closure_min agm_closure_scaling agm_closure_upper_depth agm_closure_upper_depth agm_closure_upper_depth agm_smooth_space agm_smooth_time aredi	
True True 0.004 True True True 0.0 False True 50 000.0 False False 2000.0 600.0 50.0 100.0 45.0 False False	0.004 True True True 0.0 False True 50 000.0 False False False 2000.0 600.0 50.0 0.07 100.0 45.0 False False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gamma agm_closure_eden_gratbatch agm_closure_lengtd_scaling agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_fixed agm_closure_length_rossby agm_closure_lower_depth agm_closure_max agm_closure_min agm_closure_scaling agm_closure_upper_depth agm_damping_time agm_smooth_space agm_smooth_time aredi_equal_agm	
True True 0.004 True True True 0.0 False False 2000. 600.0 50.0 0.07 100.0 False False False 700.0 False False False False False False False False False	0.004 True True True 0.0 False True 50 000.0 False False 2000.0 600.0 50.0 0.07 100.0 45.0 False False False False False True False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gamma agm_closure_eden_greatbatch agm_closure_length_obzone agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_fixed agm_closure_length_rossby agm_closure_lower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_smooth_space agm_smooth_time aredi aredi_equal_agm drhodz_mom4p1 drhodz_smooth_horz	
True True 0.004 True True True 0.0 False False 2000.0 600.0 50.0 0.07 100.0 False False False 700.0 False	0.004 True True True True 0.0 False True 50 000.0 False False 2000.0 600.0 50.0 0.07 100.0 45.0 False False False 600.0 False False False False False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gamma agm_closure_eden_greatbatch agm_closure_length_foctone agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_fixed agm_closure_length_rossby agm_closure_lower_depth agm_closure_max agm_closure_min agm_closure_scaling agm_closure_upper_depth agm_damping_time agm_smooth_space agm_smooth_time aredi aredi_equal_agm drhodz_mom4p1 drhodz_smooth_horz drhodz_smooth_vert	
True True 0.004 True True True 0.0 False False 2000. 600.0 50.0 0.07 100.0 False False False 700.0 False False False False False False False False False	0.004 True True True 0.0 False True 50 000.0 False False 2000.0 600.0 50.0 0.07 100.0 45.0 False False False False False True False False	agm_closure_baroclinic agm_closure_buoy_freq agm_closure_eady_ave_mixed agm_closure_eady_cap agm_closure_eady_smooth_horz agm_closure_eady_smooth_vert agm_closure_eden_gamma agm_closure_eden_greatbatch agm_closure_length_obzone agm_closure_length_bczone agm_closure_length_fixed agm_closure_length_fixed agm_closure_length_rossby agm_closure_lower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_closure_uower_depth agm_smooth_space agm_smooth_time aredi aredi_equal_agm drhodz_mom4p1 drhodz_smooth_horz	

	Group (continued)  Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ocean/	new/ control/ 1deg jra55_ryf/ ocean/ input.nml
Decem rephysics mill   Sure this module   Falte   Falte   Scenar rephysics mill   Sure this module   Falte   Falte   Scenar rephysics mill   Sure this module   Falte   Falt	tracer mix micen		Ealco
Scoren physics mel         use this module         Faite         Faite <th< td=""><td></td><td></td><td></td></th<>			
Notes   Property   P	&ocean_nphysicsa_nml use_this_module		
Bob ps mode   2   2   2   2   2   2   2   2   2			
Description			
Bod			
Begin by free   1			
Base   Base   Base   Base   Fate			
generated physics limit true True returns physics limit true True returns physics limit true True regularize, poli 5 faste faste same per super physics limit true true regularize, poli 5 faste faste same per super physics limit true true super physics limit true true super physics same physics same physics ph			
Page			
methat is physics limit         Time number bunders bu			
Page			
Smar.psi	number_bc_modes		2
True			
Manual			
Base			
Korean operators.mnl         use_legacy.dv.ud         False         False           &cean.overexchange.mnl         debug.this.module         False         False           overexch.nepflfile         4         4           overexch.nepflfile         4         4           overexch.nepflfile         4         4           overexch.nepflfile         4         4           &cean.overflow.mnl         use.this.module         False         False           &cean.overflow.orlp.mnl         use.this.module         False         False           &cean.pressure.mnl         zero.pressure.force         False         False           &cean.pressure.mnl         zero.pressure.mnl         zero.pressure.force         False         False           &cean.pressure.mnl         zero.pressure.mnl         zero.pressure.pre			
&ocean_overexchange.mnl         debug_this_module         False         False           overexch_ange.mnl         overexch_ange.this         4         4         4         4         4         4         4         4         4         6         6         6         6         6         6         5         4	use_this_module	True	True
New part			
September         Overecht weight far veriflow with 50 50 50 50 50 50 50 50 50 50 50 50 50			
between the comment of the c			
Scoran.overflow.ml         use_this.module         False         False           Scoran.overflow.ml         use_this.module         False         False           Scoran.polar.filter.ml         use_this.module         False         False           Accean.polar.filter.ml         use_this.module         False         False           Accean.priser.ml         zero_pressure_force         False         False           Accean.priser.ml         debug_this_module         False         False           Accean.priser.ml         debug_this_module         False         False           Accean.priser.ml         river_diffuse_salt         Tue         True           Accean.priser.ml         river_diffuse_salt         Tue         True           river_diffuse_salt         Tue         True         False			
& cocan polar filter mil         use. this.module         False         False           & cocan polar filter mil         use. this.module         False         False           & cocan, prissure.mil         zero pressure force         False         False           & cocan, rivermix.mil         debug this. module         False         False           & cocan, rivermix.mil         debug this. module         False         False           inver. diffusion, thickness         400         400         400           on this. module         True         True         True           & cocan. riverpread.mil         use. this. module         False         False           & cocan. rough.mil         aug. st. temp. salt. eta         True         True           & cocan. sbc. mil         aug. sf. temp. salt. eta         True         True           & cocan. sbc. mil         aug. sf. temp. salt. eta         True         True           & cocan. sbc. mil         aug. sf. temp. salt. eta         True         True           & cocan. sbc. mil         aug. sf. temp. salt. eta         True         True           & cocan. sbc. mil         aug. sf. temp. salt. eta         True         True           & cocan. sbc. mil         aug. st. temp. salt. eta         True			
& cocan_pressure_nml         use_this_module         False         False           & cocan_pressure_nml         debug_this_module         False         False           & cocan_rivermix.nml         debug_this_module         False         False           & cocan_rivermix.nml         debug_this_module         False         False           inver_diffuse_salt         True         True         True           inver_diffusion_thickness         0.0         0.0         0.0           decean_river         use_this_module         False         False           & cocan_riverspread_mml         use_this_module         False         False           & cocan_riverspread_mml         asy_sfc_velocity         True         True           & cocan_sbc_mml         asy_sfc_velocity         True         True           & cocan_sbc_mml         asy_sfc_velocity	&ocean_overflow_nml use_this_module	False	
&ocean_pressure.nmt         zero_pressure_force         False         False           &ocean_rivermix.mml         debug_this_module         False         False           river_diffuse_salt         True         True           river_diffuse_salt         True         True           river_diffuse_temp         True         True           river_diffusivity         0.0         0.0           river_insertion_thickness         40.0         40.0           use_this_module         True         True           &cocean_riverspread_nmt         use_this_module         True         True           &cocean_sbc_nmt         rough_scheme         'belipans'         'belgans'           &cocean_sbc_nmt         avg_sfc_temp_salt_eta         True         True           &cocean_sbc_nmt         avg_sfc_temp_salt_eta         True         True           &cocean_sbc_nmt         avg_sfc_temp_salt_eta         True         True           &cocean_sbc_nmt         avg_sfc_temp_salt_eta         False         False           Accean_sbc_nmt         False         False         False         False           do_bitus_cexat_tum         False         False         False           do_bitus_cexat_tum         False         False			
& cean_rivermix.nml         debug_this_module river_diffuse_nall rue         False river_diffuse_nall rue         True         True rue           river_diffuse_nall river_diffuse_nterm         True         0.00         0.00         0.00         0.00         river_diffusion_thickness         0.00         40.00<			
Private   Priv			
river_diffuse_temp         Tue         True           river_diffusion_thickness         0.0         0.0           river_diffusivity         0.0         0.0           river_insertion_thickness         4.00         4.00           &ccean_riverspread_nml         use_this_module         Tue         True           &ccean_rough_mml         avg_sfc_temp_salt_eta         Tue         True           &ccean_sbc_nml         avg_sfc_velocity         True         True           &ccean_sbc_nml         day_sfc_velocity         True         True           &ccean_sbc_nml         day_sfc_velocity         True         True           &ccean_sbc_nml         day_sfc_velocity         True         True           &class         False         Fals			
Image:			
Kocean_riverspread_nml         river_insertion_thickness         40.0         40.0           &ccean_riverspread_nml         use_this_module         False         False           &ccean_rough_nml         rough_scheme         'beljaars'         beljaars'           &ccean_sbc_nml         avg_sft_velocity         True         True           avg_sft_velocity         True         True         True         avg_sft_velocity         True         True         True         avg_sft_velocity         True         True         True         avg_sft_velocity         True         True         True         True         avg_sft_velocity         True         True         True         True         True         True         False		0.0	
Kocean.riverspread.mml         use.this.module         Titue           & Cocean.rough.nml         rough.schem         'beljaars'         'beljaars'           & Cocean.sbc.nml         avg.sfc.temp.salt.eta         Titue         Titue           avg.sfc.temp.salt.eta         Titue         Titue         Titue           avg.sfc.temp.salt.eta         Titue			
&ocean_riverspread_nml         use_this_module         False         False           &ocean_rough_nml         rough_scheme         'beljaars'         'beljaars'           &ocean_sbc_nml         avg_sfc_temp_salt_eta         True         True           avg_sfc_temp_salt_eta         True         True         True           avg_sfc_temp_salt_eta         True         False			
&ocean_rough_nml         rough_scheme         'beljaars'         'beljaars'           &ocean_sbc.nml         avg_sfc_temp_salt_eta         True         True           avg_sfc_velocity         True         True           avg_sfc_velocity         True         True           calvingspread         False         False           do_blivx_correction         False         False           do_flux_correction         False         False           land_model_heat_fluxes         False         False           max_ice_thickness         0.0         0.5         0.5           max_ice_thickness         0.0         0.0         0.0           max_ice_thickness         0.0         0.0         0.0           read_restore_mask_gfdl         False         False         False           runoff_salinity         0.0			
& ocean_sbc_nml         avg_sfc_temp_salt_eta         True         True           avg_sfc_velocity         True         False			
Avg_sfc_velocity   True   True   Calvingspread   False   False   False   Go_bitwise_exact_sum   False   False   Go_bitwise_exact_sum   False   False   Go_flux_correction   False			
do_bitwise_exact_sum   False   False     do_flux_correction   False   False     do_flux_correction   False   False     land_model_heat_fluxes   False   False     max_delta_salinity_restore   0.5   0.5     max_ice_thickness   0.0   0.0     read_restore_mask   False   False     restore_mask_gfdl   False   False     restore_mask_gfdl   False   False     runoff_salinity   0.0   0.0     salt_correction_scale   0.0   0.0     salt_restore_as_salt_flux   True   True     salt_restore_as_salt_flux   True   True     salt_restore_under_ice   True   True     temp_restore_tscale   -10.0   -10.0     use_full_patm_for_sea_level   False   False     use_waterflux   True   True     zero_heat_fluxes   False   False     zero_heat_fluxes   False   False     zero_net_salt_correction   False   False     zero_net_salt_restore   True   True     zero_net_water_correction   False   False     zero_net_water_correction   True   True     True   True   True     zero_net_water_correction   False   False     zero_net_water_correction   True   True     zero_net_water_correction   True   True     True   True   True   True     zero_net_water_correction   True   True     zero_net_water_correction   True   True     zero_net_water_correction   True   True     zero_net_water_correction   True   True     ze			
do_flux_correction   False   False     land_model_heat_fluxes   False   False     max_delta_salinity_restore   0.5   0.5     max_ice_thickness   0.0   0.0     max_ice_thickness   False   False     max_delta_salinity_restore   0.5   0.5     max_ice_thickness   0.0   0.0     read_restore_mask_grid   False   False     runoff_salinity   0.0   0.0     salt_correction_scale   0.0   0.0     salt_restore_as_salt_flux   True   True     salt_restore_scale   6.0   6.0     salt_restore_tscale   6.0   6.0     salt_restore_tscale   7.0   7.0     temp_restore_tscale   -1.0   -1.0     use_full_patm_for_sea_level   False   False     use_waterflux   True   True     true   True   True     zero_heat_fluxes   False   False     zero_heat_fluxes   False   False     zero_net_water_correction   False   False     zero_net_water_couple_restore   True   True     True   True   True     True   True   True   True     True   True   True   True     True   True   True   True     True   True   True   True     True   True   True   True     True   True   True   True     True   True   True   True   True     True   True   True   True   True     True   True   True   True   True   True   True     True			
Iand_model_heat_fluxesFalseFalsemax_delta_salinity_restore0.50.5max_ice_thickness0.00.0read_restore_maskFalseFalserestore_mask_gfdlFalseFalserunoff_salinity0.00.0salt_correction_scale0.00.0salt_restore_as_salt_fluxTrueTruesalt_restore_tscale60.060.0salt_restore_under_iceTrueTruetemp_restore_tscale-10.0-10.0use_full_patm_for_sea_levelFalseFalseuse_waterfluxTrueTruetruezero_hea_f_fluxesFalseFalsezero_net_salt_correctionFalseFalsezero_net_salt_correctionFalseFalsezero_net_salt_correctionFalseFalsezero_net_water_correctionFalseFalsezero_net_water_correctionFalseFalsezero_net_water_correctionFalseFalse			
max_delta_salinity_restore         0.5         0.5           max_ice_thickness         0.0         0.0           read_restore_mask         False         False           restore_mask_gfdl         False         False           restore_mask_gfdl         False         False           restore_mask_gfdl         False         False           salt_correction_scale         0.0         0.0           salt_restore_as_salt_flux         True         True           salt_restore_as_salt_flux         True         True           salt_restore_under_ice         True         True           temp_restore_tscale         -0.0         -0.0           use_full_patm_for_sea_level         False         False           use_waterflux         True         True           true         True         True           zero_net_salt_correction         False         False           zero_net_salt_restore         True         True           True         True         True      <			
read_restore_mask_gfdl False False restore_mask_gfdl False False runoff_salinity 0.0 0.0 salt_correction_scale 0.0 0.0 salt_restore_as_salt_flux True True salt_restore_as_salt_flux True True salt_restore_tscale 60.0 60.0 salt_restore_tscale 60.0 60.0 salt_restore_tscale 60.0 60.0 salt_restore_tscale 60.0 60.0 salt_restore_tscale 60.0 7.0 salt_restore_tscale 60.0 60.0 salt_restore_tscale 60.0 7.0 salt_restore_tscale 7.0 salt_restore 5.0 salt_restore 5.0 salt_restore 5.0 salt_restore 5.0 salt_restore 7.0			
restore_mask_gfdl runoff_salinity 0.0 0.0 salt_correction_scale 0.0 0.0 salt_restore_as_salt_flux True True salt_restore_as_salt_flux True True salt_restore_tscale 60.0 60.0 salt_restore_under_ice True True temp_restore_tscale -10.0 -10.0 use_full_patm_for_sea_level False False use_waterflux True True zero_net_salt_correction False False zero_net_salt_correction False False zero_net_salt_restore True True zero_net_salt_restore True True	max_ice_thickness	0.0	
runoff_salinity         0.0         0.0           salt_correction_scale         0.0         0.0           salt_restore_as_salt_flux         True         True           salt_restore_tscale         60.0         60.0           salt_restore_under_ice         True         True           temp_restore_tscale         -10.0         -10.0           use_full_patm_for_sea_level         False         False           use_waterflux         True         True           true         True         True           zero_net_salt_correction         False         False           zero_net_salt_restore         True         True           true         True         True           zero_net_salt_restore         True         True           true         True         True			
salt_correction_scale0.00.0salt_restore_as_salt_fluxTrueTruesalt_restore_tscale60.060.0salt_restore_under_iceTrueTruetemp_restore_tscale-10.0-10.0use_full_patm_for_sea_levelFalseFalseuse_waterfluxTrueTruezero_heat_fluxesFalseFalsezero_net_salt_correctionFalseFalsezero_net_salt_restoreTrueTruezero_net_water_correctionFalseFalsezero_net_water_correctionFalseFalse			
salt_restore_as_salt_fluxTrueTruesalt_restore_tscale60.060.0salt_restore_under_iceTrueTruetemp_restore_tscale-10.0-10.0use_full_patm_for_sea_levelFalseFalseuse_waterfluxTrueTruezero_heat_fluxesFalseFalsezero_net_salt_correctionFalseFalsezero_net_salt_restoreTrueTruezero_net_water_correctionFalseFalsezero_net_water_correctionFalseFalse			
salt_restore_under_iceTrueTruetemp_restore_tscale-10.0-10.0use_full_patm_for_sea_levelFalseFalseuse_waterfluxTrueTruezero_heat_fluxesFalseFalsezero_net_salt_correctionFalseFalsezero_net_salt_restoreTrueTruezero_net_water_correctionFalseFalsezero_net_water_couple_restoreTrueTrue			
temp_restore_tscale —10.0 —10.0  use_full_patm_for_sea_level False False  use_waterflux True True  zero_heat_fluxes False False  zero_net_salt_correction False False  zero_net_salt_restore True True  zero_net_water_correction False False  zero_net_water_correction False False  zero_net_water_correction False False			
use_full_patm_for_sea_level     False     False       use_waterflux     True     True       zero_heat_fluxes     False     False       zero_net_salt_correction     False     False       zero_net_salt_restore     True     True       zero_net_water_correction     False     False       zero_net_water_couple_restore     True     True			
use_waterflux True True  zero_heat_fluxes False False  zero_net_salt_correction False False  zero_net_salt_restore True True  zero_net_water_correction False False  zero_net_water_correction False False  zero_net_water_couple_restore True True			
zero_heat_fluxes False False zero_net_salt_correction False False zero_net_salt_restore True True zero_net_water_correction False False zero_net_water_couple_restore True True			
zero_net_salt_correction     False       zero_net_salt_restore     True       True     True       zero_net_water_correction     False       zero_net_water_couple_restore     True       True     True			
zero_net_water_correction False False zero_net_water_couple_restore True True	zero_net_salt_correction	False	False
zero_net_water_couple_restore True True			
· · · · · · · · · · · · · · · · · · ·			
Zem ner water roomer mild mild	zero_net_water_couple_restore zero_net_water_coupler	True	True

Group (continued)	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup.A/ output000/ ocean/	new/ control/ 1deg jra55_ryf/ ocean/ input.nml
		input.nml	
	zero_net_water_restore zero_surface_stress	True False	True False
	zero_water_fluxes	False	False
&ocean_shortwave_csiro_nml	use_this_module	False	False
&ocean_shortwave_gfdl_nml	debug_this_module	False	False
	enforce_sw_frac	True	True
	optics_manizza	True	True
	optics_morel_antoine read_chl	False True	False True
	use_this_module	True	True
	zmax_pen	300.0	300.0
&ocean_shortwave_jerlov_nml	use_this_module	False	False
&ocean_shortwave_nml	use_shortwave_csiro	False	False
	use_shortwave_gfdl use_shortwave_jerlov	True False	True False
	use_shiotwave_jertov use_this_module	True	True
&ocean_sigma_transport_nml	use_this_module	False	False
&ocean_solo_nml	calendar	'NOLEAP'	'NOLEAP'
	date_init	1, 1, 1, 0, 0, 0	1, 1, 1, 0, 0, 0
	days	7.000	7.00
	dt_cpld hours	3600 0	3600 0
	minutes	0	0
	months	0	0
	seconds	0	0
	years	2	2
&ocean_sponges_eta_nml	use_this_module	False	False
&ocean_sponges_tracer_nml	use_this_module use_this_module	False False	False False
&ocean_sponges_velocity_nml &ocean_submesoscale_nml	coefficient_ce	0.05	0.05
xoccur-submesoscute_mit	debug_this_module	False	False
	front_length_const	5000.0	5000.0
	front_length_deform_radius	True	True
	limit_psi limit_psi_velocity_scale	True 0.5	True 0.5
	tillit_psi_vetocity_scate min_kblt	0.5 4	4
	smooth_advect_transport	True	True
	smooth_advect_transport_num	4	4
	smooth_hblt	False	False
	smooth_psi	True 3	True 3
	smooth_psi_num submeso_advect_flux	False	False
	submeso_advect_limit	True	True
	submeso_advect_upwind	True	True
	submeso_advect_zero_bdy	True	True
	submeso_diffusion	False	False
	submeso_diffusion_biharmonic submeso_diffusion_scale	True 10.0	True 10.0
	submeso_skew_flux	True	True
	use_hblt_equal_mld	True	True
	use_psi_legacy	False	False
0 t	use_this_module	True	True
kocean_tempsalt_nml	debug_this_module pottemp_2nd_iteration	False True	False True
	pottemp_znd_iteration pottemp_equal_contemp	True	True
	s_max	70.0	70.0
	s_max_limit	42.0	42.0
	s_min	0.0	0.0
	s_min_limit	2.0	2.0
	t_max t_max_limit	55.0 32.0	55.0 32.0
	t_max_umit t_min	-20.0	- 20.0
	t_min_limit	-20.0 $-5.0$	-20.0 -5.0
	temperature_variable	'potential	'potential
		temp'	temp'
Rocean_thickness_nml	debug_this_module	False	False

Group (continued)	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ocean/	new/ control/ 1deg jra55_ryf/ ocean/ input.nml
	debug_this_module_detail	input.nml False	False
	rescale_mass_to_get_ht_mod	False	False
	thickness_method	'energetic'	'energetic'
&ocean_tracer_advect_nml	debug_this_module read_basin_mask	False False	False False
&ocean_tracer_diag_nml	diag_step	4320	4320
	do_bitwise_exact_sum	False	False
&ocean_tracer_nml	tracer_conserve_days age_tracer_max_init	30.0 0.0	30.0 0.0
&ocean_tracer_nime	debug_this_module	False	False
	frazil_heating_after_vphysics	True	True
	frazil_heating_before_vphysics	False	False
	limit_age_tracer remap_depth_to_s_init	True False	True False
	use_tempsalt_check_range	True	True
	zero_tendency	False	False
9 again valority diag and	zero_tracer_source	False False	False False
&ocean_velocity_diag_nml	debug_this_module diaq_step	4320	4320
	energy_diag_step	4320	4320
	large_cfl_value	10.0	10.0
&ocean_velocity_nml	max_cfl_value adams_bashforth_third	100.0 True	100.0 True
&ocean_vetocity_nint	max_cqint	1.0	1.0
	truncate_velocity	False	False
	truncate_velocity_value	2.0	2.0
	truncate_verbose zero_tendency	True False	True False
	zero_tendency_explicit_a	False	False
	zero_tendency_explicit_b	False	False
&ocean_vert_kpp_iow_nml	zero_tendency_implicit use_this_module	False False	False False
&ocean_vert_kpp_mom4p1_nml	diff_cbt_iw	0.0	0.0
The second secon	double_diffusion	True	True
	kbl_standard_method	False	False
	ricr smooth_blmc	0.3 False	0.3 False
	smooth_ri_kmax_eq_kmu	True	True
	use_this_module	True	True
	visc_cbu_iw	0.0	0.0
&ocean_vert_mix_nml	aidif bryan_lewis_diffusivity	1.0 False	1.0 False
	bryan_lewis_lat_depend	False	False
	hwf_diffusivity	False	False
	hwf_min_diffusivity	$2 \times 10^{-6}$	$2 \times 10^{-6}$
	hwf_n0_2omega use_diff_cbt_table	20.0 False	20.0 False
	vert_diff_back_via_max	True	True
	vert_mix_scheme	'kpp	'kpp
&ocean_vert_tidal_nml	background_diffusivity	mom4p1' 0.0	mom4p1' 0.0
COCCUIT OF CHARLETING	background_viscosity	0.0001	0.0001
	decay_scale	500.0	500.0
	drag_dissipation_use_cdbot	True	True
	drhodz_min fixed_wave_dissipation	$1  imes 10^{-10}$ False	$1  imes 10^{-10}$ False
	max_wave_diffusivity	0.01	0.01
	mixing_efficiency_n2depend	True	True
	read_roughness	True	True
	read_tide_speed read_wave_dissipation	True False	True False
	reading_roughness_amp	True	True
	reading_roughness_length	False	False
	roughness_scale shelf_depth_cutoff	12 000.0 1000.0	12 000.0 —1000.0
	snetr_deptn_cutorr tide_speed_data_on_t_grid	— 1000.0 True	— 1000.0 True
	tiuc_specu_uata_on_t_grid	iiuc	iiuc

Group (continued)	Variable	raijin/g/	new/
		data3/hh5/	control/
		tmp/	1deg
		cosima/	jra55_ryf/
		access-	ocean/
		om2/	input.nml
		1deg	-
		jra55v13	
		ryf8485	
		spinup_A/	
		output000/	
		ocean/	
		input.nml	
	use_drag_dissipation	True	True
	use_legacy_methods	False	False
	use_this_module	True	True
	use_wave_dissipation	True	True
	wave_energy_flux_max	0.1	0.1
&ocean_xlandinsert_nml	use_this_module	False	False
&ocean_xlandmix_nml	use_this_module	False	False
&xgrid_nml	interp_method	'second	'second
		order'	order
	make_exchange_reproduce	False	False
	nsubset	16	16

# 4.2 CICE namelists 'cice\_in.nml', 'input\_ice.nml', 'input\_ice\_gfdl.nml', 'input\_ice\_monin.nml'

data3/h tr cosii acco or 1de jra55v1 ryf848 spinup output0	raijin/g/ new, data3/hh5/ control, tmp/ 1deg_ cosima/ jra55_ryf, access- ice, om2/ cice_in.nm 1deg jra55v13 ryf8485 spinup_A/ output000/ ice/ cice_in.nml	data 3/l t cosi acc 1d jra 5 5 v ryf 8 4 spinu output 0
	'cartesian' 'cartesian	
	'latitude' 'latitude	
ry_type 'cy	'cyclic' 'cyclic	
	True True	
lo_dyn 1	True True	
	True True	
nprocs	24 24	
	'tripole' 'tripole	
	'slenderX1' 'slenderX1	
	'remap' 'remap	
	0.96 0.96	
	0.005 36 0.005 36	
	0.0005 0.0005	0.0
kdyn 	1 1	
_partic	1 1	
_redist	1 1	
rength	1 1	
nu_rdg ndte	120 120	
	False False	
	0.28 0.28	
	'unknown 'unknown_	
	atm_data atm_data_ dir' dir	
format	'nc' 'nc	
	'default' 'default	
	'default' 'default	
	True True	
	True True	
•	False False	F
ear_init	1 1	, ,
000	'unknown ocean- mixed_file' 'unknown_ ocean mixed_file'	00
	False False	
ata_dir 'unknov	'unknown ocn_data dir' orn_data dir'	'unkno

Group (continued)	Variable	raijin/g/ data 3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ice/ cice_in.nml	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml
	ocn_data_format	'nc'	'nc'
	precip_units restore_ice	'mks' False	'mks' False
	restore_ice restore_sst	False	False
	sss_data_type	'default'	'default'
	sst_data_type	'default'	'default'
	trestore	0	0
	update_ocn_f ustar_min	True 0.0005	True 0.0005
	ycycle	0.0003	0.0003
&grid_nml	grid_file	'RESTART/ grid.nc'	'RESTART/ grid.nc'
	grid_format	'nc'	'nc'
	grid_type kcatbound	'tripole' 0	'tripole' 0
	kmt_file	'RESTART/ kmt.nc'	'RESTART/ kmt.nc'
&icefields_bgc_nml	f_aero	'x'	'x'
	f_bgc_am_ml	'X'	'X'
	f_bgc_am_sk f_bgc_c_sk	'x' 'x'	'x' 'x'
	f_bgc_chl_sk	, , , , , , , , , , , , , , , , , , ,	, ,X,
	f_bgc_dms_sk	'x'	'x'
	f_bgc_dmsp_ml	'X'	'X'
	f_bgc_dmspd_sk f_bgc_dmspp_sk	'x' 'x'	'X'
	1_bgc_anspp_sk f_bgc_n_sk	x 'x'	'x' 'x'
	f_bgc_nit_ml	'x'	'x'
	f_bgc_nit_sk	'x'	'x'
	f_bgc_sil_ml f_bgc_sil_sk	'x' 'x'	'x' 'x'
	f_bphi	, X 'X'	, 'X'
	f_btin	'x'	'x'
	f_faero_atm	'X'	'x'
	f_faero_ocn f_fbri	'x' 'm'	'x' 'm'
	f_fn	'x'	'x'
	f_fn_ai	'x'	'x' 'x'
	f_fnh	'X' 'v'	'X'
	f_fnh_ai f_fno	'x' 'x'	X 'x'
	f_fno_ai	'x'	'x' 'x' 'x' 'x' 'x' 'x'
	f_fsil	'x'	'x'
	f_fsil_ai	'x' 'x'	'X'
	f_grownet f_hbri	x 'm'	x 'm'
	f_ppnet	'x'	'x' 'x'
&icefields_drag_nml	f_cdn_atm	'X'	'x'
	f_cdn_ocn f_drag	'x' 'x'	'x' 'x'
&icefields_mechred_nml	f_alvl	'm'	'm'
	f_aparticn	'x'	'x'
	f_araftn	'X'	'x'
	f_ardg f_ardgn	'm' 'x'	'm' 'x'
	f_aredistn	'x'	'x'
	f_dardg1dt	'x'	'x' 'x'
	f_dardg1ndt	'X'	'X'
	f_dardg2dt f_dardg2ndt	'x' 'x'	'x' 'x'
	f_dardg2ndt f_dvirdgdt	'x'	'x' 'x'
	f_dvirdgndt	'x'	'x' 'x'
	f_krdgn	'X'	'x'
	f_opening f_vlvl	'x' 'm'	'x' 'm'
	f_vraftn	'x'	'x'
	f_vrdg	'm'	'm'

Material	Group (continued)	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml
Scelebis.met		f_vrdan		'x'
Factor   Tailor   T		f_vredistn	'x'	'x'
full color   ful	&icefields_nml		'm'	'm'
Labbe   m'   m'   falton   m'   m'   falton   m'   m'   falton   m'   m'   m'   falton   m'   m'   m'   falton   m'   m'   m'   m'   falton   m'   m'   m'   falton   m'   m'   m'   m'   m'   m'   m'   m			m 'y'	m 'v'
Calibration   Total		f_albice	'm'	'm'
Calibro		f_albpnd	'x'	'x'
f_alide				'm'
Eaded		T_alosno f alidr	m 'x'	m 'x'
Langlet True		f_alvdr	'x'	'x'
f.bounds   faice   f		f_angle	True	True
f.cozgen   x		f_anglet f_bounds		
Cooken   Y   Y		f_conael	'm'	'm'
f.daidt   m'   m'   f.dav		f_coszen	'x'	'x'
f_dsnow		f_daidtd		'm'
f_dovided   m' m' m'   f_dovided   m' m' m'   f_dovided   m' m' m'   f_dovided   m' m' m'   f_dovided   m' m'   m'   f_dovided   m'   m'   f_dovided   m'   m'   f_dovided		T_0al0tt f divu		m 'm'
f.dott   m			'x'	,,, ,X,
f.dx		f_dvidtd	'm'	'm'
f.dou   True   True   Full		f_dvidtt		
f_dyt				
f.eop		f_dyt	True	True
f.condop.ai   m'   m'   f.frondop.ai   m'   m'   f.frondop.ai   m'   m'   f.frondop.ai   m'   m'   m'   m'   m'   f.frondop.ai   m'   m'   m'   m'   f.frondop.ai   m'   m'   m'   m'   m'   m'   m'   m		f_dyu	True	True
f.f.condop.ai   m'   m'   m'   m'   m'   m'   m'   m'   m'   m		t_evap f evap ai	'm'	'm'
f.fondtopn.ai   m'   m'   f.fhorn   x'   x'   f.fhorn.ai   m'   m'   m'   f.flat   x   x'   x'   f.flat.ai   m'   m'   m'   f.flwup   x'   x'   f.flwup   x'   x'   f.flwup   x'   x'   f.flwup.ai   m'   m'   f.flwup.ai   m'   m'   f.flat.ai   m'   m'   m'   m'   f.flat.ai   m'   m'   m'   m'   f.flat.ai   m'   m'   m'   m'   m'   m'   m'   m		f_fcondtop_ai		
f_floca_i		f_fcondtopn_ai	'm'	'm'
f.flat			'X' 'm'	'X' 'm'
f.flat.ai			'X'	'X'
f.flath.ai		f_flat_ai	'm'	'm'
f.flwup_ai   m'   m'   f.flmeltt.ai   X   X   X   f.flmeltt.ai   X   X   X   f.flmeltt.ai   m'   m'   m'   f.frazil   m'   m'   m'   f.frazil   m'   m'   f.frazil   m'   m'   f.frazil   m'   m'   m'   m'   f.frazil   m'   m'   m'   m'   m'   m'   m'   m		f_flatn_ai	'm'	'm'
f.flwup.ai   m'   m'   f.fmeltt.ai   X'   X'   X'   f.fmeltt.ai   m'   m'   m'   f.fmeltt.ai   m'   m'   m'   f.frazil   m'   m'   f.fresh.ai   m'   m'   m'   f.fresh.ai   m'   m'   f.fsatt   X   X   X   f.fsatt.ai   m'   m'   f.fsens.ai   m'   m'   f.fsens.ai   m'   m'   m'   f.fsunf.ai   X   X   X   f.fsunf.ai   m'   m'   f.fsunf.ai   m'   m'   f.fswabs   X   X   X   f.fswabs.ai   m'   m'   m'   f.fswabs.ai   m'   m'   f.fswabs.ai   m'   m'   m'   m'   m'   m'   m'   m				
f_fmeltt_ai			'm'	'm'
f.frazil		f_fmeltt_ai	'x'	'x'
f.fresh.ai   n'   m'   f.fresht   x'   x'   x'   x'   x'   x'   x'   x		f_fmelttn_ai	'm' ''	'm'
f_fresh_ai   m'   m'   f_frzonset   m'   m'   f_frzent   m'   m'   f_frzent   m'   m'   f_frzent   m'   m'   f_fsalt   x'   x'   x'   f_fsalt   x'   x'   x'   f_fsalt   x'   x'   x'   f_fsens_ai   m'   m'   f_fsens_ai   m'   m'   f_fsunf_ai   x'   x'   x'   f_fsunf_ai   m'   m'   f_fswabs_ai   m'   m'   m'   m'   m'   m'   m'   m		T_Trazil f fresh	m 'x'	m 'x'
f_frz_onset		f_fresh_ai	'm'	'm'
f_fsalt_ai		f_frz_onset	'm'	'm'
f_fsat_ai		f_frzmlt f_fcol+	'm' '√'	'm' '√'
f_fsens.ai         'X'         'X'           f_fsens.ai         'm'         'm'           f_fsurf_ai         'X'         'X'           f_fsurf_ai         'm'         'm'           f_fswabs         X'         X'           f_fswabs_ai         'm'         'm'           f_fswda         'm'         'm'           f_fswfac         'm'         'm'           f_fswfac         'm'         'm'           f_fswthru_ai         'm' <t< td=""><td></td><td>f_fsalt_ai</td><td>'m'</td><td>'m'</td></t<>		f_fsalt_ai	'm'	'm'
f_fsurf_ai       'X'       'X'         f_fsurf_ai       'm'       'm'         f_fswabs       'X'       'X'         f_fswabs_ai       'm'       'm'         f_fswdn       'm'       'm'         f_fswthru       'X'       'X'         f_fswthru_ai       'm'       'm'         f_fsy       'X'       'X'         f_his       'm'       'm'         f_hs       'm'       'm'         f_htn       True       True         f_lage       'm'       'm'         f_meltb       'm'       'm'		f_fsens	'x'	'x'
f_fsurfn_ai       'm'       'm'         f_fswabs       'x'       'x'         f_swabs_ai       'm'       'm'         f_fswdn       'm'       'm'         f_fswdra       'm'       'm'         f_fswthru       'x'       'x'         f_fswthru.ai       'm'       'm'         f_fsy       'x'       'x'         f_hin       'm'       'm'         f_hisnap       'x'       'x'         f_hs       'm'       'm'         f_ht       'm'       'm'         f_ht       'm'       'm'         f_iage       'm'       'm'         f_icepresent       'm'       'm'         f_meltb       'm'       'm'		f_fsens_ai	'm'	'm'
f_fswabs       'x'       'x'         f_fswabs_ai       'm'       'm'         f_fswdn       'x'       'x'         x'       x'       'x'         f_hisnap       'x'       'x'         f_hsnap       'x'       'x'         f_ht       'm'       'm'         f_ht       True       True         f_ht       True       True         f_iage       'm'       'm'         f_icepresent       'm'       'm'         f_meltb       'm'       'm'		ı_rsurt_ai f fsurfn ai	x 'm'	x 'm'
f_fswdn         'm'         'm'           f_fswfac         'm'         'm'           f_fswthru         'x'         'x'           f_fswthru_ai         'm'         'm'           f_fy         'x'         'x'           f_hi         'm'         'm'           f_hisnap         'x'         'x'           f_hs         'm'         'm'           f_hte         True         True           f_hte         True         True           f_iage         'm'         'm'           f_meltb         'm'         'm'		f_fswabs	'x'	'x'
f_fswfac         'm'         'm'           f_fswthru         'x'         'x'           f_fswthru_ai         'm'         'm'           f_fy         'x'         'x'           f_hi         'm'         'm'           f_hsap         'x'         'x'           f_hte         True         True           f_hte         True         True           f_iage         'm'         'm'           f_ineltb         'm'         'm'		f_fswabs_ai	'm'	'm'
f_fswthru_ai         'x'         'x'           f_fswthru_ai         'm'         'm'         'm'           f_fy         'x'         'x'         'x'           f_hi         'm'         'm'         'm'           f_hisnap         'x'         'x'         'x'           f_hs         'm'         'm'         'm'           f_hte         True         True         True           f_iage         'm'         'm'         'm'           f_icepresent         'm'         'm'         'm'           f_meltb         'm'         'm'         'm'		f_fswdn	'm' 'm'	'm' 'm'
f_fswthru_ai         'm'         'm'           f_fy         'x'         'x'           f_hi         'm'         'm'           f_hisnap         'x'         'x'           f_hs         'm'         'm'           f_hte         True         True           f_htm         True         True           f_iage         'm'         'm'           f_meltb         'm'         'm'		f_fswthru	'x'	'x'
f_hi         'm'         'm'           f_hisnap         'x'         'x'           f_hs         'm'         'm'           f_hte         True         True           f_htn         True         True           f_iage         'm'         'm'           f_inepresent         'm'         'm'           f_meltb         'm'         'm'		f_fswthru_ai	'm'	'm'
f_hisnap         'x'         'x'           f_hs         'm'         'm'           f_hte         True         True           f_htn         True         True           f_iage         'm'         'm'           f_icepresent         'm'         'm'           f_meltb         'm'         'm'		f_fy	'X' '~~'	'χ' ' <sub>~~</sub> '
f_hs         'm'         'm'           f_hte         True         True           f_htn         True         True           f_iage         'm'         'm'           f_icepresent         'm'         'm'           f_meltb         'm'         'm'			'x'	'X'
f_htn         True         True           f_iage         'm'         'm'           f_icepresent         'm'         'm'           f_meltb         'm'         'm'		f_hs	'm'	'm'
f_iage         'm'         'm'           f_icepresent         'm'         'm'           f_meltb         'm'         'm'		f_hte		
f_icepresent 'm' 'm' f_meltb 'm' 'm'				
f_meltb 'm' 'm'		f_icepresent	'm'	'm'
f_meltl 'm' 'm'		f_meltb	'm'	'm'
		f_meltl	'm'	'm'

Group (continued)	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ice/ cice_in.nml	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml
	f_melts f_meltt	'm' 'm'	'm' 'm'
	f_mlt_onset	'm'	'm'
	f_ncat	True	True
	f_qref	'x'	'X'
	f_rain f_rain_ai	'x' 'm'	'x' 'm'
	f_shear	'm'	'm'
	f_sice	'm'	'm'
	f_sig1	'x'	'x' 'x' 'x'
	f_sig2	'X'	'X'
	f_sinz f_snoice	'x' 'm'	'x' 'm'
	f_snow	'x'	'X'
	f_snow_ai	'm'	'm'
	f_sss	'm'	'm'
	f_sst f_strairx	'm' 'm'	'm' 'm'
	f_strairy	'm'	'm'
	f_strcorx	'm'	'm'
	f_strcory	'm'	'm'
	f_strength f_strintx	'm' 'm'	'm' 'm'
	f_strinty	'm'	'm'
	f_strocnx	'm'	'm'
	f_strocny	'm'	'm'
	f_strtltx	'm' 'm'	'm' 'm'
	f_strtlty f_tair	'm'	'm'
	f_tarea	True	True
	f_tinz	'x'	'X'
	f_tmask	True 'x'	True
	f_tref f_trsig	x 'm'	'x' 'm'
	f_tsfc	'm'	'm'
	f_tsnz	'X'	'x'
	f_uarea f_uocn	True 'm'	True
	f_uvel	'm'	'm' 'm'
	f_vgrdb	False	False
	f_vgrdi	False	False
	f_vgrds f_vicen	False 'm'	False 'm'
	f_vocn	'm'	'm'
	f_vvel	'm'	'm'
&icefields_pond_nml	f_apeff	'm'	'm'
	f_apeff_ai f_apeffn	'm' 'x'	'm' 'x'
	f_apond	'm'	'm'
	f_apond_ai	'm'	'm'
	f_apondn f_hpond	'X' 'm'	'X' 'm'
	r_npond f_hpond_ai	'm' 'm'	'm' 'm'
	f_hpondn	'x'	'x'
	f_ipond	'm'	'm'
2 nonde nml	f_ipond_ai	'm'	'm'
&ponds_nml	dpscale frzpnd	0.001 'hlid'	0.001 'hlid'
	hp1	0.01	0.01
	hs0	0.0	0.0
	hs1	0.03	0.03
	pndaspect rfracmax	0.8 1.0	0.8 1.0
	rfracmin	0.15	0.15
&setup_nml	days_per_year	365	365
	dbug	False	False
	diag_file	'ice_diag.d'	'ice_diag.d'

day by   Mile   Mile	Group (continued)	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ice/ cice_in.nml	new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml
displex   34		diag_type		'file'
		diagfreq	24	
		dumpfred n		у 1
history,die   continue   history,die   continue   history,die   continue				
Shistony file   Control   File   Control   C				
Section   Sect				1, 1, 1, 1, 1
Inc.   Inc.   Contact				
				'./OUTPUT/'
Martin   M		incond_file	'iceh_ic'	'iceh_ic'
Image: Comparison of the com				
Popinter-file   Popinter-fil		ndtd		
		pointer_file		'./RESTART/
Paire   Pair				
Print   Points   False   Fal		print_global		
restart.urt   restart.ext   False				True
Pate   False   False		restart		
restart.file   restart.format				
restart.format not numbpe   imitial intital intital   numbpe   imitial intital				
Recommodified   Recommodifie				
		runtype	'initial'	'initial'
Shortwave_nml   Shortwave_nml   1   1   1   1   1   1   1   1   1		use_leap_years		
& shortwave_nml         year_init         1         1           & ahmax         0.1         0.1         albeot_type         'default'         'default'         'default'         'default'         'default'         'default'         0.44         0.44         0.44         0.44         0.44         0.44         0.44         0.44         0.44         0.45         0.86 <t< th=""><th></th><th></th><th></th><th></th></t<>				
&shortwave_nml         ahmax on table of the fault' default' default' default' default' albice on the fault' on the fault' default' on the fault' default' on the fault' default' on the fault' of the fault' on				
ablice   0.44   0.44   albice   0.86   0.86   0.86   0.86   0.85   0.8	&shortwave_nml	ahmax		0.1
Albicov				'default'
Albsnowi   0.7				
albsnoww   0,98   0,98   dalb.mlt   -0,02   -0,02   dt.mlt   1,0   1,0   r.ice   0,0   0,0   r.pnd   0,0   0,0   r.pnd   0,0   0,0   r.smw.mlt   1500,0   1500,0   r.smw.mlt   1,0   1,0   r.smw.mlt   1,0   1,0   r.smw.mlt   1,0   1,0   r.smw.mlt   1,0   r.smw.mlt   1,0   1,0   r.smw.mlt   1,0   r.smw.mlt				
r_ice   0.0   0.			-0.02	-0.02
Content			0.0 0.0	0.0 0.0
Shortwave   Gefault   Ge				0.0
&thermo_nml         tocnfrz         -1.8         -1.8           &thermo_nml         a_rapid_mode         0.0005         0.0005           aspect_rapid_mode         1.0         1.0           chio         0.004         0.004           conduct         'bubbly'         'bubbly'           bubbly'         'bubbly'         'bubbly'           dsdt_slow_mode         -5 × -5 ×         -5 ×           10^8         10^8         10^8           kitd         1         1         1           phi_c_slow_mode         0.05         0.05           phi_i_mushy         0.85         0.85           rac_rapid_mode         1.0         1.0           &tracer_nml         restart_aero         False         False           restart_aero         False         False           restart_fy         False         False           restart_pond_cesm         False         False		rsnw_mlt	1500.0	1500.0
&thermo_nml         a_rapid_mode aspect_rapid_mode chio         0.0005 0.0005 0.0005 0.0005 0.0005 0.0005 0.0005 0.0005 0.0004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.005				
aspect_rapid_mode	&thermo nml			-1.8 0.0005
chio         0.004         0.004           conduct         'bubbly'         'bubbly'           dsdt_slow_mode         -5 × -5 × 10^-8         -5 × 10^-8           kitd         1         1         1           ktherm         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         2         2         2         2         2         2         3         2         3         2         3         3         3         3         3         3         3         3         3         4         3         4				
dsdt_slow_mode         -5 ×   -5 ×   10^-8             100-8         100-8             kitd         1         1           ktherm         1         1           phi_c_slow_mode         0.05         0.05           phi_i_mushy         0.85         0.85           rac_rapid_mode         10.0         10.0           &tracer_nml         restart_aee         False         False           restart_fy         False         False           restart_Lvl         False         False           restart_pond_cesm         False         False			0.004	0.004
10-8   10-8     10-8       10-8       10-8       10-8         10-8         10-8				'bubbly'
kitd         1         1           ktherm         1         1           phi_c_slow_mode         0.05         0.05           phi_i_mushy         0.85         0.85           phi_i_mushy         0.85         0.85           rac_rapid_mode         10.0         10.0           &tracer_nml         restart_aero         False         False           restart_age         False         False           restart_fy         False         False           restart_lvl         False         False           restart_pond_cesm         False         False		usat_slow_mode	-5 × 1∩-8	-5 × 10−8
ktherm         1         1           phi_c_slow_mode         0.05         0.05           phi_i_mushy         0.85         0.85           phi_i_mushy         0.85         0.85           rac_rapid_mode         10.0         10.0           &tracer_nml         restart_aero         False         False           restart_age         False         False           restart_fy         False         False           restart_lvl         False         False           restart_pond_cesm         False         False		kitd		
phi.i_mushy         0.85         0.85           rac_rapid_mode         10.0         10.0           &tracer_nml         restart_aero         False         False           restart_age         False         False           restart_fy         False         False           restart_lvl         False         False           restart_pond_cesm         False         False		ktherm	1	1
&tracer_nml         restart_aero         False         False           restart_age         False         False         False           restart_fy         False         False           restart_lvl         False         False           restart_pond_cesm         False         False				
&tracer_nmlrestart_aero restart_ageFalseFalserestart_fyFalseFalserestart_fyFalseFalserestart_lvlFalseFalserestart_pond_cesmFalseFalse				
restart_age         False         False           restart_fy         False         False           restart_lvl         False         False           restart_pond_cesm         False         False	&tracer nml			
restart_fy False False restart_lvl False False restart_pond_cesm False False	Kudecialinik			
restart_lvl False False restart_pond_cesm False False		restart_fy		
		restart_lvl	False	False
restart_pond_tvt False False	re			
		restart_pullu_tVl	raise	raise

new/ control/ 1deg jra55_ryf/ ice/ cice_in.nml	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ice/ cice_in.nml	oup (continued) Variable
False	False	restart_pond_topo
False	False	tr_aero
False	False	tr_fy
False	False	tr_iage
False	False	tr_lvl
False	False	tr_pond_cesm
False	False	tr_pond_lvl
False	False	tr_pond_topo
'unknown bgc_data dir'	'unknown bgc_data dir'	bgc_nml bgc_data_dir
'Jin2006'	'Jin2006'	bgc_flux_type
'default'	'default'	nit_data_type
0.5	0.5	ph_snow
False	False	restart_bgc
False	False	restart_hbrine
False	False	restore_bgc
'default'	'default'	siL.data_type
False	False	skL-bgc
False	False	tr_bgc_am_sk
False	False	tr_bgc_c_sk
False	False	tr_bgc_chl_sk
False	False	tr_bgc_dms_sk
False	False	tr_bgc_dmspd_sk
False	False	tr_bgc_dmspp_sk
False	False	tr_bgc_siL_sk
False	False	tr_brine

Group	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ice/input ice.nml	new/ control/ 1deg jra55_ryf/ ice/input ice.nml
&coupling_nml	chk_a2i_fields	False	False
	chk_frzmlt_sst		False
	chk_gfdl_roughness	False	False
	chk_i2a_fields		False
	chk_i2o_fields		False
	chk_o2i_fields		False
	cst_ocn_albedo	True	True
	dt_cpl_ai	10800	10800
	dt_cpl_io	3600	3600
	gfdl_surface_flux	True	True
	ice_fwflux	True	True
	ice_pressure_on	True	True
	limit_icemelt meltlimit	False	False
	ocn_albedo	-200.0 0.1	-200.0 0.1
	pop_icediag	True	True
		1.0	1.0
	precip_factor rotate_winds	True	True
	use_ocnslope	False	False
	use_umask	False	False

Group	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ice/ input_ice gfdLnml	new/ control/ 1deg jra55_ryf/ ice/ input_ice gfdl.nml
&ocean_rough_nml	charnock	0.032	0.032
	do_cap40	False	False
	do_highwind	False	False
	rough_scheme	'beljaars'	'beljaars'
	roughness_heat	$5.8 \times 10^{-5}$	$5.8 \times 10^{-5}$
	roughness_min	$1 \times 10^{-6}$	$1 \times 10^{-6}$
	roughness_moist	$5.8 \times 10^{-5}$	$5.8 \times 10^{-5}$
	roughness_mom	$5.8 \times 10^{-5}$	$5.8 \times 10^{-5}$
	zcoh1	0.0	0.0
	zcoq1	0.0	0.0
&surface_flux_nml	alt_gustiness	False	False
	gust_const	1.0	1.0
	gust_min	0.0	0.0
	ncar_ocean_flux	True	True
	ncar_ocean_flux_orig	False	False
	no_neg_q	False	False
	old_dtaudv	False	False
	raoult_sat_vap	False	False
	use_mixing_ratio	False	False
	use_virtual_temp	True	True

Group	Variable	raijin/g/	new/
·		data3/hh5/	control/
		tmp/	1deg
		cosima/	jra55_ryf/
		access-	ice/
		om2/	input_ice
		1deg	monin.nml
		jra55v13	
		ryf8485	
		spinup_A/	
		output000/	
		ice/	
		input_ice	
		monin.nml	
&monin_obukhov_nml	neutral	True	True

# 4.3 MATM namelist 'input\_atm.nml'

Group	Variable	raijin/g/	new/
		data3/hh5/	control/
		tmp/	1deg
		cosima/	jra55_ryf/
		access-	atmosphere/
		om2/	input
		1deg	atm.nml
		jra55v13	
		ryf8485	
		spinup_A/	
		output000/	
		atmosphere/	
		input	
		atm.nml	
&coupling	caltype	0	0
	chk_a2i_fields	False	
	chk_i2a_fields	False	
	dataset	'jra55'	'jra55'
	days_per_year	365	365
	debug_output	False	False
	dt_atm	3600	3600
	dt_cpl	10800	10800
	·		20000

Group (continued)	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup A/ output000/ atmosphere/ input atm.nml	new/ control/ 1deg jra55_ryf/ atmosphere/ input atm.nml
	inidate	10101	10101
	init_date	10101	10101
	runtime	63072000	126144000
	runtype	'NY'	'NY'
	truntime0	0	0

## 5 Changes during runs

## 5.1 access-om2-01/01deg\_jra55v13\_ryf8485\_spinup1

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-01/	om2-01/
		01deg	$01deg_{-}$
		jra55v13	jra55v13
		ryf8485	ryf8485
		spinup1/	spinup1/
		output000/	output001/
		ocean/	ocean/
		input.nml	input.nml
&auscom_ice_nml	dt_cpl	120	300
&ocean_model_nml	dt_ocean	120	300
&ocean_solo_nml	dt_cpld	120	300
	months	1	2

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-01/	om2-01/
		01deg	01deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		spinup1/	spinup1/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	dt	120	300
	istep0	0	8928
	npt	22320	16992
	restart	False	True
	runtype	'initial'	'continue'

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-01/	om2-01/
		01deg	01deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		spinup1/	spinup1/
		output000/	output001/
		ice/input	ice/input
		ice.nml	ice.nml
&coupling_nml	dt_cpl_io	120	300

Group	Variable	raijin/g/	raijin/g/
· ·		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-01/	om2-01/
		01deg	01deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		spinup1/	spinup1/
		output000/	output001/
		atmosphere/	atmosphere/
		input	input
		atm.nml	atm.nml
&coupling	dt_atm	120	300
	inidate	10101	10201
	runtime	2678400	5097600
	truntime0	0	2678400

### $5.2\quad access-om 2-01/01 deg\_jra 55v 13\_ry f8485\_spinup 2$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-01/	om2-01/
		01deg	01deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		spinup2/	spinup2/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	16992
	npt	16992	17568
	restart	False	True
	runtype	'initial'	'continue'

Group Va	iable raijin/g	raijin/g/
	data3/hh5	
	tmp	' tmp/
	cosima	cosima/
	access	access-
	om2-01	
	01deg_	- 01deg
	jra55v13.	- jra55v13
	ryf8485_	
	spinup2	' spinup2/
	output000	output001/
	atmosphere	/ atmosphere/
	input_	- input
	atm.nm	l atm.nml
&coupling ir	idate 1010:	. 10301
ru	ntime 5097600	5270400
trun	ime0	5097600

## $5.3 \quad access-om 2-01/01 deg\_jra 55v 13\_ryf8 485\_spinup 3$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-01/	om2-01/
		01deg	01deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		spinup3/	spinup3/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	16992
	npt	16992	17568
	restart	False	True
	runtype	'initial'	'continue'

Group Variable	raijin/g/	raijin/g/
	data3/hh5/	data3/hh5/
	tmp/	tmp/
	cosima/	cosima/
	access-	access-
	om2-01/	om2-01/
	01deg	01deg
	jra55v13	jra55v13
	ryf8485	ryf8485
	spinup3/	spinup3/
	output000/	output001/
	atmosphere/	atmosphere/
	input	input
	atm.nml	atm.nml
&coupling inidate	10101	10301
runtime	5097600	5270400
truntime0	0	5097600

## 5.4 access-om2-01/01deg\_jra55v13\_ryf9091\_spinup1

## $5.5 \quad access-om 2-025/025 deg\_jra 55\_ryf\_broad well\_test$

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		broadwell	broadwell	broadwell	broadwell
		test/	test/	test/	test/
		output000/	output008/	output011/	output014/
		ocean/	ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	540	900	1350	1800
&ocean_model_nml	dt_ocean	540	900	1350	1800
&ocean_solo_nml	dt_cpld	540	900	1350	1800

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		broadwell	broadwell	broadwell	broadwell	broadwell
		test/	test/	test/	test/	test/
		output000/	output001/	output008/	output011/	output014/
		ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	540	540	900	1350	1800
	istep0	0	58400	280320	256960	245280
	npt	58400	58400	35040	23360	17520
	restart	False	True	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		broadwell	broadwell	broadwell	broadwell
		test/	test/	test/	test/
		output000/	output008/	output011/	output014/
		ice/input	ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	540	900	1350	1800

Group Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
	tmp/	tmp/	tmp/	tmp/
	cosima/	cosima/	cosima/	cosima/
	access-	access-	access-	access-
	om2-025/	om2-025/	om2-025/	om2-025/
	025deg	025deg	025deg	025deg
	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
	broadwell	broadwell	broadwell	broadwell
	test/	test/	test/	test/
	output000/	output008/	output011/	output014/
	atmosphere/	atmosphere/	atmosphere/	atmosphere/
	input	input	input	input
	atm.nml	atm.nml	atm.nml	atm.nml
&coupling dt_atn	540	900	1350	1800
inidate	10101	90101	120101	150101
truntime	0	252288000	346896000	441504000

## $5.6 \quad access-om 2-025/025 deg\_jra 55\_ryf\_spinup 1$

Group	Variable	raijin/g/	raijin/g/	raijin/g/
•		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup1/	spinup1/	spinup1/
		output000/	output005/	output006/
		ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	540	600	900
&ocean_model_nml	dt_ocean	540	600	900
&ocean_solo_nml	dt_cpld	540	600	900

Group	Variable	raijin/g/ data3/hh5/	raijin/g/ data3/hh5/	raijin/g/ data3/hh5/	raijin/g/ data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup1/ output000/	spinup1/ output001/	spinup1/ output005/	spinup1/ output006/
		ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	540	540	600	900
	istep0	0	58400	262800	210240
	npt	58400	58400	52560	35040
	restart	False	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/
•		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup1/	spinup1/	spinup1/
		output000/	output005/	output006/
		ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	540	600	900

Group	Variable	raijin/g/	raijin/g/	raijin/g/
	74.14516	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup1/	spinup1/	spinup1/
		output000/	output005/	output006/
		atmosphere/	atmosphere/	atmosphere/
		input	input	input
		atm.nml	atm.nml	atm.nml
&coupling	dt_atm	540	600	900
	inidate	10101	60101	70101
	truntime0	0	157680000	189216000

## 5.7 access-om2-025/025deg\_jra55\_ryf\_spinup2

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup2/	spinup2/	spinup2/	spinup2/	spinup2/
		output000/	output006/	output010/	output013/	output032/
		ocean/	ocean/	ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	540	600	900	1200	1350
&ocean_model_nml	dt_ocean	540	600	900	1200	1350
&ocean_solo_nml	dt_cpld	540	600	900	1200	1350

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup2/	spinup2/	spinup2/	spinup2/	spinup2/	spinup2/
		output000/	output001/	output006/	output010/	output013/	output032/
		ice/	ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	540	540	600	900	1200	1350
	istep0	0	58400	315360	350400	341640	747520
	npt	58400	58400	52560	35040	26280	23360
	restart	False	True	True	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
·		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup2/	spinup2/	spinup2/	spinup2/	spinup2/
		output000/	output006/	output010/	output013/	output032/
		ice/input	ice/input	ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	540	600	900	1200	1350

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup2/	spinup2/	spinup2/	spinup2/	spinup2/
		output000/	output006/	output010/	output013/	output032/
		atmosphere/	atmosphere/	atmosphere/	atmosphere/	atmosphere/
		input	input	input	input	input
		atm.nml	atm.nml	atm.nml	atm.nml	atm.nml
&coupling	dt₋atm	540	600	900	1200	1350
	inidate	10101	70101	110101	140101	330101
	truntime0	0	189216000	315360000	409968000	1009152000

## 5.8 access-om2-025/025deg\_jra55\_ryf\_spinup3

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup3/	spinup3/	spinup3/
		output000/	output006/	output008/
		ocean/	ocean/	ocean/
		input.nml	tmp/ tmp/ cosima/ cosima/ access- i2-025/ om2-025/ 25deg 025deg 55_ryf jra55_ryf pinup3/ spinup3/ out000/ output006/ ocean/ ocean/	input.nml
&auscom_ice_nml	dt_cpl	540	600	540
&ocean_model_nml	dt_ocean	540	600	540
&ocean_solo_nml	dt_cpld	540	600	540
	months	6	0	0
	years	0	1	1

Group	Variable	raijin/g/							
		data3/hh5/							
		tmp/							
		cosima/							
		access-							
		om2-025/							
		025deg							
		jra55_ryf							
		spinup3/							
		output000/	output001/	output002/	output003/	output004/	output005/	output006/	output008/
		ice/							
		cice_in.nml							
&setup_nml	dt	540	540	540	540	540	540	600	540
	istep0	0	28960	58400	87360	116800	145760	157680	292000
	npt	28960	29440	28960	29440	28960	29440	52560	58400
	restart	False	True						
	runtype	'initial'	'continue'						

Group	Variable	raijin/g/	raijin/g/	raijin/g/
<del></del>		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup3/	spinup3/	spinup3/
		output000/	output006/	output008/
		ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	540	600	540

Group	Variable	raijin/g/							
		data3/hh5/							
		tmp/							
		cosima/							
		access-							
		om2-025/							
		025deg							
		jra55_ryf							
		spinup3/							
		output000/	output001/	output002/	output003/	output004/	output005/	output006/	output008/
		atmosphere/							
		input							
		atm.nml							
&coupling	dt_atm	540	540	540	540	540	540	600	540
	inidate	10101	10701	20101	20701	30101	30701	40101	60101
	runtime	15638400	15897600	15638400	15897600	15638400	15897600	31536000	31536000
	truntime0	0	15638400	31536000	47174400	63072000	78710400	94608000	157680000

## $5.9\quad access-om 2-025/025 deg\_jra 55\_ryf\_spinup 4$

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup4/	spinup4/	spinup4/
		output000/	output001/	output007/
		ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	540	300	600
&ocean_model_nml	dt_ocean	540	300	600
&ocean_solo_nml	dt_cpld	540	300	600
	months	0	6	6

Group (continued)	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup4/	spinup4/	spinup4/
		output000/	output001/	output007/
		ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml
	years	1	0	0

Group	Variable	raijin/g/								
		data3/hh5/								
		tmp/								
		cosima/								
		access-								
		om2-025/								
		025deg								
		jra55_ryf								
		spinup4/								
		output000/	output001/	output002/	output003/	output004/	output005/	output006/	output007/	output008/
		ice/								
		cice_in.nml								
&setup_nml	dt	540	300	300	300	300	300	300	600	600
	istep0	0	105120	157248	210240	262368	315360	367488	210240	236304
	npt	58400	52128	52992	52128	52992	52128	52992	26064	26496
	restart	False	True							
	runtype	'initial'	'continue'							

raijin/g/	raijin/g/	raijin/g/	Variable	Group
data3/hh5/	data3/hh5/	data3/hh5/		•
tmp/	tmp/	tmp/		
cosima/	cosima/	cosima/		
access-	access-	access-		
om2-025/	om2-025/	om2-025/		
025deg	025deg	025deg		
jra55_ryf	jra55_ryf	jra55_ryf		
spinup4/	spinup4/	spinup4/		
output007/	output001/	output000/		
ice/input	ice/input	ice/input		
ice.nml	ice.nml	ice.nml		
600	300	540	dt_cpl_io	&coupling_nml

Group	Variable	raijin/g/								
		data3/hh5/								
		tmp/								
		cosima/								
		access-								
		om2-025/								
		025deg								
		jra55_ryf								
		spinup4/								
		output000/	output001/	output002/	output003/	output004/	output005/	output006/	output007/	output008/
		atmosphere/								
		input								
		atm.nml								
&coupling	dt_atm	540	300	300	300	300	300	300	600	600
	inidate	10101	20101	20701	30101	30701	40101	40701	50101	50701
	runtime	31536000	15638400	15897600	15638400	15897600	15638400	15897600	15638400	15897600
	truntime0	0	31536000	47174400	63072000	78710400	94608000	110246400	126144000	141782400

## $5.10 \quad access-om2-025/025 deg\_jra55\_ryf\_spinup5$

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup5/	spinup5/	spinup5/	spinup5/	spinup5/
		output000/	output005/	output007/	output012/	output014/
		ocean/	ocean/	ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	540	600	900	1080	1200
&ocean_model_nml	dt_ocean	540	600	900	1080	1200
&ocean_solo_nml	dt_cpld	540	600	900	1080	1200

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup5/	spinup5/	spinup5/	spinup5/	spinup5/	spinup5/
		output000/	output001/	output005/	output007/	output012/	output014/
		ice/	ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	540	540	600	900	1080	1200
	istep0	0	58400	262800	245280	350400	367920
	npt	58400	58400	52560	35040	29200	26280
	restart	False	True	True	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
·		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup5/	spinup5/	spinup5/	spinup5/	spinup5/
		output000/	output005/	output007/	output012/	output014/
		ice/input	ice/input	ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	540	600	900	1080	1200

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
·		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup5/	spinup5/	spinup5/	spinup5/	spinup5/
		output000/	output005/	output007/	output012/	output014/
		atmosphere/	atmosphere/	re/ atmosphere/ atmosphere/ atmospher	atmosphere/	
		input	input	input	input	input
		atm.nml	atm.nml	atm.nml	atm.nml	atm.nml
&coupling	dt_atm	540	600	900	1080	1200
	inidate	10101	60101	80101	130101	150101
	truntime0	0	157680000	220752000	378432000	441504000

## $5.11 \quad access-om2-025/025 deg\_jra55\_ryf\_spinup6$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-025/	om2-025/
		025deg	025deg
		jra55_ryf	jra55_ryf
		spinup6/	spinup6/
		output000/	output002/
		ocean/	ocean/
		input.nml	input.nml
&auscom.ice_nml	dt_cpl	540	600
&ocean_model_nml	dt_ocean	540	600
&ocean_solo_nml	dt_cpld	540	600

Group	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2-025/ 025deg jra55_ryf spinup6/ output000/ ice/ cice_in.nml	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2-025/ 025deg jra55_ryf spinup6/ output001/ ice/ cice_in.nml	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2-025/ 025deg jra55_ryf spinup6/ output002/ ice/ cice_in.nml
&setup_nml	dt	540	540	600
	istep0	0	58400	105120
	npt	58400	58400	52560
	restart	False	True	True
	runtype	'initial'	'continue'	'continue'

Group	Variable raijin/g/	raijin/g/
·	data3/hh5/	data3/hh5/
	tmp/	tmp/
	cosima/	cosima/
	access-	access-
	om2-025/	om2-025/
	025deg	025deg
	jra55_ryf	jra55_ryf
	spinup6/	spinup6/
	output000/	output002/
	ice/input	ice/input
	ice.nml	ice.nml
&coupling_nml	dt_cpl_io 540	600

Group	Variable	raijin/g/	raijin/g/
·		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-025/	om2-025/
		025deg	025deg
		jra55_ryf	jra55_ryf
		spinup6/	spinup6/
		output000/	output002/
		atmosphere/	atmosphere
		input	input
		atm.nml	atm.nml
&coupling	dt_atm	540	600
	inidate	10101	30101
	truntime0	0	63072000

## 5.12 access-om2-025/025deg\_jra55\_ryf\_spinup7

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup7/	spinup7/	spinup7/	spinup7/
		output000/	output002/	output004/	output005/
		ocean/	ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	600	900	1350	1800
&ocean_model_nml	dt_ocean	600	900	1350	1800
&ocean_solo_nml	dt_cpld	600	900	1350	1800

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup7/	spinup7/	spinup7/	spinup7/	spinup7/
		output000/	output001/	output002/	output004/	output005/
		ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	600	600	900	1350	1800
	istep0	0	52560	70080	93440	87600
	npt	52560	52560	35040	23360	17520
	restart	False	True	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
·	da	ata3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg
	j	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup7/	spinup7/	spinup7/	spinup7/
	OI	utput000/	output002/	output004/	output005/
	i	ice/input	ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	600	900	1350	1800

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2-025/	om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg	025deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup7/	spinup7/	spinup7/	spinup7/
		output000/	output002/	output004/	output005/
		atmosphere/	atmosphere/	atmosphere/	atmosphere/
		input	input	input	input
		atm.nml	atm.nml	atm.nml	atm.nml
&coupling	dt_atm	600	900	1350	1800
	inidate	10101	30101	50101	60101
	truntime0	0	63072000	126144000	157680000

## $5.13 \quad access-om2-025/025 deg\_jra55\_ryf\_spinup7\_RCP45$

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2-025/
		025deg
		jra55_ryf
		spinup7
		RCP45/
		output100/
		ice/
		cice_in.nml
&setup_nml	istep0	1752000

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2-025/
		025deg
		jra55_ryf
		spinup7
		RCP45/
		output100/
		atmosphere/
		input
		atm.nml
&coupling	inidate	1010101
	truntime0	3153600000

## $5.14 \quad access-om 2-025/025 deg\_jra 55v 13\_ryf8 485\_gmredi$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-025/	om2-025/
		025deg	025deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		gmredi/	gmredi/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	35040
	restart	False	True
	runtype	'initial'	'continue'

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2-025/
		025deg
		jra55v13
		ryf8485
		gmredi/
		output000/
		atmosphere/
		input
		atm.nml
&coupling	inidate	10101

Group (continued)	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2-025/
		025deg
		jra55v13
		ryf8485
		gmredi/
		output000/
		atmosphere/
		input
		atm.nml
	truntime0	0

#### $5.15 \quad access-om2-025/025 deg\_jra55v13\_ryf8485\_redi$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-025/	om2-025/
		025deg	025deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		redi/	redi/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	35040
	restart	False	True
	runtype	'initial'	'continue'

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2-025/
		025deg
		jra55v13
		ryf8485
		redi/
		output000/
		atmosphere/
		input
		atm.nml
&coupling	inidate	10101
	truntime0	0

#### $5.16 \quad access-om 2-025/025 deg\_jra 55v 13\_ry f8485\_redi 2$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-025/	om2-025/
		025deg	025deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		redi2/	redi2/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	35040

Group (continued)	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-025/	om2-025/
		025deg	025deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		redi2/	redi2/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
	restart	False	True
	runtype	'initial'	'continue'

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2-025/
		025deg
		jra55v13
		ryf8485
		redi2/
		output000/
		atmosphere/
		input
		atm.nml
&coupling	inidate	10101
	truntime0	0

#### $5.17 \quad access-om2-025/025 deg\_jra55v13\_ryf8485\_redi3$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-025/	om2-025/
		025deg	025deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		redi3/	redi3/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	35040
	restart	False	True
	runtype	'initial'	'continue'

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2-025/
		025deg
		jra55v13
		ryf8485
		redi3/
		output000/
		atmosphere,
		input
		atm.nml
&coupling	inidate	10101
	truntime0	0

### 5.18 access-om2-025/025deg\_jra55v13\_ryf8485\_spinup\_A

oup	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2-025/	om2-025/
		025deg	025deg
		jra55v13	jra55v13
		ryf8485	ryf8485_
		spinup_A/	spinup_A/
		output000/	output006/
		ocean/	ocean/
		input.nml	input.nml
ocean_solo_nml	years	1	2

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2-025/	om2-025/	om2-025/
		025deg	025deg	025deg
		jra55v13	jra55v13	jra55v13
		ryf8485	ryf8485	ryf8485
		spinup_A/	spinup_A/	spinup_A/
		output000/	output001/	output006/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	istep0	0	17520	105120
	npt	17520	17520	35040
	restart	False	True	True
	runtype	'initial'	'continue'	'continue'

Group Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2-025/ 025deg jra55v13 ryf8485 spinup_A/ output000/ atmosphere/ input atm.nml	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2-025/ 025deg jra55v13 ryf8485 spinup_A/ output006/ atmosphere/ input atm.nml
&coupling inidate	10101	70101
runtime	31536000	63072000
truntime0	0	189216000

# 5.19 access-om2/1deg\_core\_nyf\_spinup\_A

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg_core	1deg_core	1deg_core
		nyf	nyf	nyf
		spinup_A/	spinup_A/	spinup_A/
		output000/	output113/	output114/
		ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	1800	3600	5400
&ocean_model_nml	dt_ocean	1800	3600	5400
&ocean_solo_nml	dt_cpld	1800	3600	5400

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2/	om2/	om2/	om2/
		1deg_core	1deg_core	1deg_core	1deg_core
		nyf	nyf	nyf	nyf
		spinup_A/	spinup_A/	spinup_A/	spinup_A/
		output000/	output001/	output113/	output114/
		ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	1800	1800	3600	5400
	istep0	0	17520	989880	665760
	npt	17520	17520	8760	5840
	restart	False	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg_core	1deg_core	1deg_core
		nyf	nyf	nyf
		spinup_A/	spinup_A/	spinup_A/
		output000/	output113/	output114/
		ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	1800	3600	5400

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg_core	1deg_core	1deg_core
		nyf	nyf	nyf
		spinup_A/	spinup_A/	spinup_A/
		output000/	output113/	output114/
		atmosphere/	atmosphere/	atmosphere/
		input	input	input
		atm.nml	atm.nml	atm.nml
&coupling	dt_atm	1800	3600	5400
	inidate	10101	1140101	1150101
	truntime0	0	3563568000	3595104000

#### 5.20 access-om2/1deg\_jra55\_ryf8485\_spinup1

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55	jra55
		ryf8485	ryf8485
		spinup1/	spinup1/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	35040
	restart	False	True
	runtype	'initial'	'continue'

Group Va	ariable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2/
		1deg
		jra55
		ryf8485
		spinup1/
		output000/
		atmosphere/
		input
		atm.nml
	inidate	10101
trun	ntime0	0

### 5.21 access-om2/1deg\_jra55\_ryf8485\_spinup2

Group	ariable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55	jra55
		ryf8485	ryf8485
		spinup2/	spinup2/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	17520
	restart	False	True
п	untype	'initial'	'continue'

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2/
		1deg
		jra55
		jra55 ryf8485
		spinup2/
		output000/
		atmosphere/
		input
		atm.nml
&coupling	inidate	10101
	truntime0	0

### 5.22 access-om2/1deg\_jra55\_ryf\_RCP45

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf
		RCP45/	RCP45/	RCP45/
		output099/	output100/	output101/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	istep0	280320	0	35040
	restart	True	False	True
	runtype	'continue'	'initial'	'continue'

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2/
		1deg
		jra55_ryf
		RCP45/
		output099/
		atmosphere,
		input
		atm.nml
&coupling	inidate	170101
	truntime0	504576000

### $5.23 \quad access-om2/1deg\_jra55\_ryf\_spinup1$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55_ryf	jra55_ryf
		spinup1/	spinup1/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	8760
	restart	False	True
	runtype	'initial'	'continue'

roup Variabl	e raijin/g/
	data3/hh5/
	tmp/
	cosima/
	access-
	om2/
	1deg
	jra55_ryf
	spinup1/
	output000/
	atmosphere/
	input
	atm.nml
Acoupling inidat	e 10101
truntime	0 0

### 5.24 access-om2/1deg\_jra55\_ryf\_spinup2

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup2/	spinup2/	spinup2/
		output000/	output024/	output031/
		ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	1800	1800	2700
&ocean_model_nml	dt_ocean	1800	1800	2700
	io_layout		4, 3	4, 3
&ocean_solo_nml	dt_cpld	1800	1800	2700

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup2/	spinup2/	spinup2/
		output000/	output001/	output031/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	1800	1800	2700
	istep0	0	17520	362080
	npt	17520	17520	11680
	restart	False	True	True
	runtype	'initial'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55_ryf	jra55_ryf
		spinup2/	spinup2/
		output000/	output031/
		ice/input	ice/input
		ice.nml	ice.nml
&coupling_nml	dt_cpl_io	1800	2700

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55_ryf	jra55_ryf
		spinup2/	spinup2/
		output000/	output031/
		atmosphere/	atmosphere/
		input	input
		atm.nml	atm.nml
&coupling	dt_atm	1800	2700
	inidate	10101	320101
	truntime0	0	977616000

### $5.25 \quad access-om2/1deg\_jra55\_ryf\_spinup3$

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup3/	spinup3/	spinup3/	spinup3/	spinup3/
		output000/	output009/	output038/	output039/	output073/
		ocean/	ocean/	ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	1800	2700	1800	2700	1800
&ocean_model_nml	dt_ocean	1800	2700	1800	2700	1800
&ocean_solo_nml	dt_cpld	1800	2700	1800	2700	1800

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup3/	spinup3/	spinup3/	spinup3/	spinup3/	spinup3/
		output000/	output001/	output009/	output038/	output039/	output073/
		ice/	ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	1800	1800	2700	1800	2700	1800
	istep0	0	35040	210240	1331520	911040	2557920
	npt	35040	35040	23360	35040	23360	35040
	restart	False	True	True	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
·		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup3/	spinup3/	spinup3/	spinup3/	spinup3/
		output000/	output009/	output038/	output039/	output073/
		ice/input	ice/input	ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	1800	2700	1800	2700	1800

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup3/	spinup3/	spinup3/	spinup3/	spinup3/
		output000/	output009/	output038/	output039/	output073/
		atmosphere/	atmosphere/	atmosphere/	atmosphere/	atmosphere/
		input	input	input	input	input
		atm.nml	atm.nml	atm.nml	atm.nml	atm.nml
&coupling	dt_atm	1800	2700	1800	2700	1800
			100101			
	inidate	10101	190101	770101	790101	1470101

### $5.26 \quad access-om2/1deg\_jra55\_ryf\_spinup4$

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup4/	spinup4/	spinup4/
		output000/	output014/	output023/
		ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	1800	1800	2700
redsea	_gulfbay_sfix		True	True
&ocean_model_nml	dt_ocean	1800	1800	2700
	io_layout		4, 3	4, 3
&ocean_sbc_nml ice_salt_c	oncentration		0.004	0.004
&ocean_solo_nml	dt_cpld	1800	1800	2700
&ocean_tracer_advect_nml adve	ct_sweby_all		True	True
async do	main_update		True	True

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup4/	spinup4/	spinup4/
		output000/	output001/	output023/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nr	l dt	1800	1800	2700
	istep0	0	35040	537280
	npt	35040	35040	23360
	restart	False	True	True
	runtype	'initial'	'continue'	'continue'

Group	Variable raijin/g	/ raijin/g/
	data 3/hh	
	tm	/ tmp/
	cosima	/ cosima/
	acces	s- access-
	omi	/ om2/
	1deg	1deg
	jra55_ryf	jra55_ryf
	spinup <sup>4</sup>	/ spinup4/
	output000	/ output023/
	ice/input	ice/input
	ice.nr	nl ice.nml
&coupling_nml	dt_cpl_io 180	0 2700

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55_ryf	jra55_ryf
		spinup4/	spinup4/
		output000/	output023/
		atmosphere/	atmosphere/
		input	input
		atm.nml	atm.nml
&coupling	dt_atm	1800	2700
	inidate	10101	470101
	truntime0	0	1450656000

# $5.27 \quad access-om2/1deg\_jra55\_ryf\_spinup5$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55_ryf	jra55_ryf
		spinup5/	spinup5/
		output000/	output005/
		ocean/	ocean/
		input.nml	input.nml
&auscom_ice_nml	dt_cpl	1800	2160
&ocean_model_nml	dt_ocean	1800	2160
&ocean_solo_nml	dt_cpld	1800	2160

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup5/	spinup5/	spinup5/
		output000/	output001/	output005/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	1800	1800	2160
	istep0	0	35040	146000
	npt	35040	35040	29200
	restart	False	True	True
	runtype	'initial'	'continue'	'continue'

Group	Variable ra	ijin/g/	raijin/g/
	data 3	/hh5/	data3/hh5/
		tmp/	tmp/
	CC	osima/	cosima/
	a	ccess-	access-
		om2/	om2/
	:	1deg	1deg
	jra5!	5_ryf	jra55_ryf
	spi	nup5/	spinup5/
	outpu	t000/	output005/
	ice/i	nput	ice/input
	i	ce.nml	ice.nml
&coupling_nml	dt_cpl_io	1800	2160

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55_ryf	jra55_ryf
		spinup5/	spinup5/
		output000/	output005/
		atmosphere/	atmosphere/
		input	input
		atm.nml	atm.nml
&coupling	dt_atm	1800	2160
	inidate	10101	110101
	truntime0	0	315360000

# $5.28 \quad access-om2/1deg\_jra55\_ryf\_spinup6$

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55_ryf	jra55_ryf
		spinup6/	spinup6/
		output000/	output001/
		ice/	ice/
		cice_in.nml	cice_in.nml
&setup_nml	istep0	0	35040
	restart	False	True
	runtype	'initial'	'continue'

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2/
		1deg
		jra55_ryf spinup6/ output000/
		spinup6/
		output000/
		atmosphere/
		input
		atm.nml
&coupling	inidate	10101
	truntime0	0

### 5.29 access-om2/1deg\_jra55\_ryf\_spinup7

	ariable (ariable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55_ryf spinup7/ output000/ ice/ cice_in.nml	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55_ryf spinup7/ output001/ ice/ cice_in.nml
·	istep0	0	35040
	restart	False	True
r	runtype	'initial'	'continue'

Group	Variable	raijin/g/
		data3/hh5/
		tmp/
		cosima/
		access-
		om2/
		1deg jra55_ryf
		jra55_ryf
		spinup7/
		output000/
		atmosphere,
		input
		atm.nml
&coupling	inidate	10101
	truntime0	0

### 5.30 access-om2/1deg\_jra55\_ryf\_spinup8

Group	Variable	raijin/g/ data3/hh5/	raijin/g/ data3/hh5/	raijin/g/ data3/hh5/	raijin/g/ data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup8/	spinup8/	spinup8/	spinup8/
		output000/	output002/	output009/	output071/
		ocean/	ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	1800	1800	2160	1800
	redsea_gulfbay_sfix	False	True	True	True
&ocean_model_nml	dt_ocean	1800	1800	2160	1800
&ocean_solo_nml	dt_cpld	1800	1800	2160	1800

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup8/	spinup8/	spinup8/	spinup8/	spinup8/	spinup8/
		output000/	output001/	output009/	output071/	output091/	output092/
		ice/	ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	1800	1800	2160	1800	1800	1800
	istep0	0	35040	262800	2487840	0	35040

Group (continued)	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup8/	spinup8/	spinup8/	spinup8/	spinup8/	spinup8/
		output000/	output001/	output009/	output071/	output091/	output092/
		ice/	ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
	npt	35040	35040	29200	35040	35040	35040
	restart	False	True	True	True	False	True
	runtype	'initial'	'continue'	'continue'	'continue'	'initial'	'continue'

&coupling_nml	dt_cpl_io	ice.nml 1800	ice.nml 2160	ice.nml 1800
		ice/input	ice/input	ice/input
		output000/	output009/	output071/
		spinup8/	spinup8/	spinup8/
		jra55_ryf	jra55_ryf	jra55_ryf
		1deg	1deg	1deg
		om2/	om2/	om2/
		access-	access-	access-
		cosima/	cosima/	cosima/
		tmp/	tmp/	tmp/
		data3/hh5/	data3/hh5/	data3/hh5/
Group	Variable	raijin/g/	raijin/g/	raijin/g/

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf
		spinup8/	spinup8/	spinup8/
		output000/	output009/	output071/
		atmosphere/	atmosphere/	atmosphere/
		input	input	input
		atm.nml	atm.nml	atm.nml
&coupling	dt_atm	1800	2160	1800
	inidate	10101	190101	1430101
	truntime0	0	567648000	4478112000

# 5.31 access-om2/1deg\_jra55\_ryf\_spinup9

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup9/	spinup9/	spinup9/	spinup9/
		output000/	output001/	output003/	output005/
		ocean/	ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml	input.nml
&auscom_ice_nml	dt_cpl	1200	1800	1200	1800
&ocean_model_nml	dt_ocean	1200	1800	1200	1800
&ocean_solo_nml	dt_cpld	1200	1800	1200	1800

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup9/	spinup9/	spinup9/	spinup9/
		output000/	output001/	output003/	output005/
		ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	1200	1800	1200	1800
	istep0	0	35040	157680	175200
	npt	52560	35040	52560	35040
	restart	False	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup9/	spinup9/	spinup9/	spinup9/
		output000/	output001/	output003/	output005/
		ice/input	ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	1200	1800	1200	1800

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg
		jra55_ryf	jra55_ryf	jra55_ryf	jra55_ryf
		spinup9/	spinup9/	spinup9/	spinup9/
		output000/	output001/	output003/	output005/
		atmosphere/	atmosphere/	atmosphere/	atmosphere/
		input	input	input	input
		atm.nml	atm.nml	atm.nml	atm.nml
&coupling	dt_atm	1200	1800	1200	1800
	inidate	10101	30101	70101	110101
	truntime0	0	63072000	189216000	315360000

# 5.32 access-om2/1deg\_jra55v13\_ryf0304\_RCP45

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf0304	ryf0304	ryf0304
		RCP45/	RCP45/	RCP45/
		output150/	output151/	output166/
		ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml
&ocean_solo_nml	years	2	4	10

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf0304	ryf0304	ryf0304
		RCP45/	RCP45/	RCP45/
		output150/	output151/	output166/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	istep0	1752000	1763680	2114080
	npt	11680	23360	58400

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf0304	ryf0304	ryf0304
		RCP45/	RCP45/	RCP45/
		output150/	output151/	output166/
		atmosphere/	atmosphere/	atmosphere/
		input	input	input
		atm.nml	atm.nml	atm.nml
&coupling	inidate	3010101	3030101	3630101
	runtime	63072000	126144000	315360000
	truntime0	9460800000	9523872000	11416032000

### 5.33 access-om2/1deg\_jra55v13\_ryf0304\_spinup\_A

Group	/ariable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55v13	jra55v13
		ryf0304	ryf0304
		spinup_A/	spinup_A/
		output000/	output056/
		ocean/	ocean/
		input.nml	input.nml
&auscom_ice_nml	dt_cpl	3600	5400
&ocean_model_nml dt	t_ocean	3600	5400
&ocean_solo_nml	dt_cpld	3600	5400

Group	Variable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg - jra55v13 - ryf0304 - spinup A/ output000/	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf0304 spinup_A/ output001/	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf0304 spinup_A/ output056/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	3600	3600	5400
	istep0	0	17520	654080
	npt	17520	17520	11680

Group (continued)	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf0304	ryf0304	ryf0304
		spinup_A/	spinup_A/	spinup_A/
		output000/	output001/	output056/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
	restart	False	True	True
	runtype	'initial'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55v13	jra55v13
		ryf0304	ryf0304
		spinup_A/	spinup_A/
		output000/	output056/
		ice/input	ice/input
		ice.nml	ice.nml
&coupling_nml	dt_cpl_io	3600	5400

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55v13	jra55v13
		ryf0304	ryf0304
		spinup_A/	spinup_A/
		output000/	output056/
		atmosphere/	atmosphere/
		input	input
		atm.nml	atm.nml
&coupling	dt_atm	3600	5400
	inidate	10101	1130101
	truntime0	0	3532032000

# 5.34 access-om2/1deg\_jra55v13\_ryf8485\_RCP45

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13	jra55v13	jra55v13
		ryf8485	ryf8485	ryf8485	ryf8485	ryf8485
		RCP45/	RCP45/	RCP45/	RCP45/	RCP45/
		output150/	output151/	output170/	output178/	output179/
		ocean/	ocean/	ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml	input.nml	input.nml
&ocean_solo_nml	years	2	4	10	4	10

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13	jra55v13	jra55v13
		ryf8485	ryf8485	ryf8485	ryf8485	ryf8485
		RCP45/	RCP45/	RCP45/	RCP45/	RCP45/
		output150/	output151/	output170/	output178/	output179/
		ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	istep0	1752000	1763680	2207520	2674720	2698080
	npt	11680	23360	58400	23360	58400

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13	jra55v13	jra55v13
		ryf8485	ryf8485	ryf8485	ryf8485	ryf8485
		RCP45/	RCP45/	RCP45/	RCP45/	RCP45/
		output150/	output151/	output170/	output178/	output179/
		atmosphere/	atmosphere/	atmosphere/	atmosphere/	atmosphere/
		input	input	input	input	input
		atm.nml	atm.nml	atm.nml	atm.nml	atm.nml
&coupling	inidate	3010101	3030101	3790101	4590101	4630101
	runtime	63072000	126144000	315360000	126144000	315360000
	truntime0	9460800000	9523872000	11920608000	14443488000	14569632000

### 5.35 access-om2/1deg\_jra55v13\_ryf8485\_spinup\_A

Group	ariable	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output000/ ocean/ input.nml	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output017/ ocean/ input.nml	raijin/g/ data3/hh5/ tmp/ cosima/ access- om2/ 1deg jra55v13 ryf8485 spinup_A/ output108/ ocean/ input.nml
&auscom_ice_nml	dt_cpl	3600	3600	5400
&ocean_bihgen_friction_nml vel_micom_t	bottom	0.1	0.01	0.01
&ocean_lapgen_friction_nml viscosity_ncar	r_2000	False		
&ocean_model_nml dt	_ocean	3600	3600	5400
&ocean_solo_nml c	dt_cpld	3600	3600	5400

Group	Variable	raijin/g/	raijin/g/	raijin/g/
•		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf8485	ryf8485	ryf8485
		spinup_A/	spinup_A/	spinup_A/
		output000/	output001/	output108/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	3600	3600	5400

Group (continued)	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf8485	ryf8485	ryf8485
		spinup_A/	spinup_A/	spinup_A/
		output000/	output001/	output108/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
	istep0	0	17520	1261440
	npt	17520	17520	11680
	restart	False	True	True
	runtype	'initial'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		spinup_A/	spinup_A/
		output000/	output108/
		ice/input	ice/input
		ice.nml	ice.nml
&coupling_nml	dt_cpl_io	3600	5400

Group	Variable	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/
		tmp/	tmp/
		cosima/	cosima/
		access-	access-
		om2/	om2/
		1deg	1deg
		jra55v13	jra55v13
		ryf8485	ryf8485
		spinup_A/	spinup_A/
		output000/	output108/
		atmosphere/	atmosphere/
		input	input
		atm.nml	atm.nml
&coupling	dt_atm	3600	5400
	inidate	10101	2170101
	truntime0	0	6811776000

### 5.36 access-om2/1deg\_jra55v13\_ryf9091\_RCP45

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf9091	ryf9091	ryf9091
		RCP45/	RCP45/	RCP45/
		output150/	output151/	output171/
		ocean/	ocean/	ocean/
		input.nml	input.nml	input.nml
&ocean_solo_nml	years	2	4	10

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf9091	ryf9091	ryf9091
		RCP45/	RCP45/	RCP45/
		output150/	output151/	output171/
		ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	istep0	1752000	1763680	2230880
	npt	11680	23360	58400

Group	Variable	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/
		access-	access-	access-
		om2/	om2/	om2/
		1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13
		ryf9091	ryf9091	ryf9091
		RCP45/	RCP45/	RCP45/
		output150/	output151/	output171/
		atmosphere/	atmosphere/	atmosphere/
		input	input	input
		atm.nml	atm.nml	atm.nml
&coupling	inidate	3010101	3030101	3830101
	runtime	63072000	126144000	315360000
	truntime0	9460800000	9523872000	12046752000

### 5.37 access-om2/1deg\_jra55v13\_ryf9091\_spinup\_A

Group	Variable	raijin/g/						
		data3/hh5/						
		tmp/						
		cosima/						
		access-						
		om2/						
		1deg						
		jra55v13						
		ryf9091						
		spinup_A/						
		output000/	output001/	output003/	output011/	output015/	output062/	output145/
		ocean/						
		input.nml						
&auscom_ice_nml	dt_cpl	1800	1800	2700	3600	3600	3600	5400
	redsea_gulfbay_sfix	False	False	False	False	True	True	True
&ocean_bbc_nml	bmf_implicit		True	True	True	True	True	True
	cdbot_hi		0.007	0.007	0.007	0.007	0.007	0.007
	cdbot_law_of_wall	False						
	cdbot_roughness_length		False	False	False	False	False	False
	cdbot_roughness_uamp		True	True	True	True	True	True
	uresidual		0.05	0.05	0.05	0.05	0.05	0.05
&ocean_bihgen_friction_nml	vel_micom_bottom	0.1	0.1	0.1	0.1	0.1	0.01	0.01
&ocean_lapgen_friction_nml	viscosity_ncar_2000	False	False	False	False	False		
&ocean_model_nml	dt_ocean	1800	1800	2700	3600	3600	3600	5400
&ocean_solo_nml	dt_cpld	1800	1800	2700	3600	3600	3600	5400

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-	access-
		om2/	om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13	jra55v13	jra55v13
		ryf9091	ryf9091	ryf9091	ryf9091	ryf9091
		spinup_A/	spinup_A/	spinup_A/	spinup_A/	spinup_A/
		output000/	output001/	output003/	output011/	output145/
		ice/	ice/	ice/	ice/	ice/
		cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml	cice_in.nml
&setup_nml	dt	1800	1800	2700	3600	5400
	istep0	0	35040	70080	192720	1693600
	npt	35040	35040	23360	17520	11680
	restart	False	True	True	True	True
	runtype	'initial'	'continue'	'continue'	'continue'	'continue'

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13	jra55v13
		ryf9091	ryf9091	ryf9091	ryf9091
		spinup_A/	spinup_A/	spinup_A/	spinup_A/
		output000/	output003/	output011/	output145/
		ice/input	ice/input	ice/input	ice/input
		ice.nml	ice.nml	ice.nml	ice.nml
&coupling_nml	dt_cpl_io	1800	2700	3600	5400

Group	Variable	raijin/g/	raijin/g/	raijin/g/	raijin/g/
		data3/hh5/	data3/hh5/	data3/hh5/	data3/hh5/
		tmp/	tmp/	tmp/	tmp/
		cosima/	cosima/	cosima/	cosima/
		access-	access-	access-	access-
		om2/	om2/	om2/	om2/
		1deg	1deg	1deg	1deg
		jra55v13	jra55v13	jra55v13	jra55v13
		ryf9091	ryf9091	ryf9091	ryf9091
		spinup_A/	spinup_A/	spinup_A/	spinup_A/
		output000/	output003/	output011/	output145/
		atmosphere/	atmosphere/	atmosphere/	atmosphere/
		input	input	input	input
		atm.nml	atm.nml	atm.nml	atm.nml
&coupling	dt_atm	1800	2700	3600	5400
	inidate	10101	70101	230101	2910101
	truntime0	0	189216000	693792000	9145440000

#### References

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