

API Changes							
Method name	Old value (880)	New value (890)	Marked backward compatible in 880	Interface (880)	Interface (890)	Rationale for change	Impact
Added Optional Arguments							
ESMF_FieldBundleGetListAll	N/A	geom	Yes	25.5.10	26.5.10	This change allows the user to retrieve the generic representation of the geometry.	No impact.
ESMF_FieldRegridStoreX	N/A	factorList, factorIndexList,	Yes	26.6.72	27.6.72	This change allows the user to retrieve the weight matrix representation of the regridding.	No impact.
ESMC_FieldRegridStoreFile	N/A	vectorRegrid	No	16.4.15	16.4.16	New feature to enable ESMF vector regridding via C API	No Impact.
ESMC_FieldRegridStore	N/A	vectorRegrid	No	16.4.14	16.4.15	New feature to enable ESMF vector regridding via C API	No Impact.
ESMPy: Field Constructor (_init_)	N/A	grid_to_field_map	No	See ESMPy documentation	See ESMPy documentation	New feature to allow user to specify custom maps between the Grid's indices and the Field's indices.	No Impact.
ESMPy: Regrid Constructor (_init_)	N/A	vector_regrid	No	See ESMPy documentation	See ESMPy documentation	New feature to enable ESMF vector regridding via ESMPy	No Impact.
Added Methods							
ESMF_GridCompSetVMStdRedirect	N/A	N/A	No	N/A	17.4.28	Allow the user to redirect the stdout and stderr streams under a componet to specified file(s).	No impact.
ESMF_CplCompSetVMStdRedirect	N/A	N/A	No	N/A	18.4.28	Allow the user to redirect the stdout and stderr streams under a componet to specified file(s).	No impact.
ESMC_ArrayGetLocalDECount	N/A	N/A	No	N/A	17.2.4	Allow user to get the local DE counts from Array object.	No impact.
ESMC_FieldGetLocalDECount	N/A	N/A	No	N/A	16.4.12	Allow user to get the local DE counts from Field object.	No impact.
ESMC_GridGetLocalDECount	N/A	N/A	No	N/A	19.5.11	Allow user to get the local DE counts from Grid object.	No impact.
ESMPy: singleLocalDEMethod	N/A	N/A	No	N/A	See ESMPy documentation	Added new exception, SingleLocalDEMethod, which is raised when calling a method that only works with one DE per PET when there are multiple DEs on the current PET.	No impact.
ESMPy: Field: all_data	N/A	N/A	No	N/A	See ESMPy documentation	supporting multiple decomposition elements (DEs) on a single Persistent Execution Thread (PET).	No impact.
ESMPy: Field: all_lower_bounds	N/A	N/A	N/A	N/A	See ESMPy documentation	supporting multiple decomposition elements (DEs) on a single Persistent Execution Thread (PET).	No impact.
ESMPy: Field: all_upper_bounds	N/A	N/A	N/A	N/A	See ESMPy documentation	supporting multiple decomposition elements (DEs) on a single Persistent Execution Thread (PET).	No impact.
ESMPy: Field: local_de_count	N/A	N/A	N/A	N/A	See ESMPy documentation	supporting multiple decomposition elements (DEs) on a single Persistent Execution Thread (PET).	No impact.

[illegible]

ESMF_Attribute	N/A	N/A	No	55	55	The underlying implementation for metadata storage has changed and is available through the native ESMF_Info API.	Code that uses the legacy ESMF_Attribute API through derived type, methods, or named constants should migrate to use the ESMF_Info class API.
Deprecated Methods							
deprecated since 8.9.0:							
ESMF_GridCompGetInternalState	N/A	N/A	Yes	17.4.8	17.4.8	The ESMF_InternalState class API provides a more consistent interface to the internal state functionality.	Code that uses this interface should be changed to use the ESMF_InternalState API instead.
ESMF_GridCompSetInternalState	N/A	N/A	Yes	17.4.18	17.4.18	The ESMF_InternalState class API provides a more consistent interface to the internal state functionality.	Code that uses this interface should be changed to use the ESMF_InternalState API instead.
ESMF_CplCompGetInternalState	N/A	N/A	Yes	18.4.8	18.4.8	The ESMF_InternalState class API provides a more consistent interface to the internal state functionality.	Code that uses this interface should be changed to use the ESMF_InternalState API instead.
ESMF_CplCompSetInternalState deprecated since 5.3.1:	N/A	N/A	Yes	18.4.18	18.4.18	The ESMF_InternalState class API provides a more consistent interface to the internal state functionality.	Code that uses this interface should be changed to use the ESMF_InternalState API instead.
ESMF_StateRemove	N/A	N/A	Yes	21.7.15	21.7.15	A different overload of the method exists that is more consistent with the overall API.	Code that uses the scalar version of ESMF_StateRemove() should change to the list version.
Deprecated Arguments							
deprecated since 8.6.0:							
ESMF_VMGet deprecated since 8.5.0:	accDeviceCount	accDeviceCount	yes	51.6.19	51.6.19	Arguments that reflect ESMF's accelerator support strategy better have become available in the general ESMF_VMGet() method (51.6.18).	Code that uses the "accDeviceCount" argument should be changed to using the alternative arguments from 51.6.18.
ESMF_ConfigLoadFile deprecated since 8.1.0:	delayout	delayout	yes	46.3.15	47.3.16	This argument was never used internally, and it is unclear what the original intention was.	Code that currently passes the "delayout" argument into ESMF_ConfigLoadFile should be changed to not pass this argument.
ESMF_FieldBundleSMM	zeroregion	zeroregion	yes	25.5.33	25.5.33	Replaced with zeroregionflag for consistency.	Code that uses the "zeroregion" argument should be changed to using the "zeroregionflag" argument.
ESMF_FieldRegridStore	weights, indices	weights, indices	yes	26.6.60	26.6.67	Replaced with factorList and factorIndexList for consistency.	Code that uses the "weights" argument should be changed to using the "factorList" argument. Code that uses the "indices" argument should be changed to using the "factorIndexList" argument.
ESMF_ArrayBundleSMM deprecated since 5.2.0rp1:	zeroregion	zeroregion	yes	27.5.23	27.5.23	Replaced with zeroregionflag for consistency.	Code that uses the "zeroregion" argument should be changed to using the "zeroregionflag" argument.
ESMF_ArrayGet	localDeList	localDeList	yes	28.5.18	28.5.18	Replaced with localDeToDeMap for consistency.	Code that uses the "localDeList" argument should be changed to using the "localDeToDeMap" argument.