











Profile Summary (Total time: 92758.682 s)

Generated 08-Dec-2021 17:09:39 using performance time.

Function Name	Calls	Total Time (s)	Self Time* (s)	Total Time Plot (dark band = self time)
DAEvalFH_RHS	9092897	47554.205	47554.205	
matrixEvalB	9092897	40890.333	40890.333	
asyMemLocal_IVP	9092897	90981.579	2537.042	
ode15i	1865	64566.743	708.835	
funfun\private\odenumjac	12044	90392.753	657.484	
..._RHS>@(z,W,D)asyMemLocal_IVP(z,W,D,localCompFlux,params)	9092897	91183.182	201.603	
decic>qrank	7460	134.204	134.204	
decic>sls	3730	193.512	59.308	
ode15i>weights	109807	2.922	2.922	
decic	1865	28186.708	2.720	
funfun\private\ode15ipdupdate	6022	90395.362	2.609	
odeset	3730	1.714	1.462	
iofun\private\openExcelWorkbook	8	0.832	0.787	
odeget>getknownfield	42895	0.657	0.657	
asyMemLocalSA_RHS	1865	92755.806	0.642	
funfun\private\odefinalize	1865	0.477	0.477	
odeget	42895	1.091	0.434	
funfun\private\ode15ipdinit	3730	55877.287	0.392	
iofun\private\xlsCleanup	8	0.335	0.335	
strmatch	11190	0.252	0.252	
path	4	0.280	0.240	
funfun\private\odearguments	1865	18.953	0.198	
iofun\private\xlsreadCOM>segmentedRead	8	0.132	0.118	
findSubClasses	1	0.118	0.102	
finitedifferences	5	0.151	0.078	
finDiffEvalAndChkErr	1860	0.098	0.072	
genpath	73	0.077	0.070	
optim\private\trustnleqn	1	0.321	0.056	
iofun\private\xlsreadCOM	8	1.415	0.052	
iofun\private\xlsreadCOM>activate_sheet	8	0.051	0.051	
optim\private\trustnleqn>testStop	5	0.052	0.047	
fsolve	1	0.249	0.044	
general\private\parsedirs	8	0.034	0.034	
funfun\private\odeevents	1865	0.065	0.029	
mdbstatus>localGetFileBreakpoints	2	0.028	0.028	
Manager>Manager.usbDeviceRemovedCallback	3	0.161	0.028	
optim\private\dogleg	4	0.028	0.028	
...x)asyMemLocalSA_RHS(phiFeed,localCompFlux,fugFeed,params)	1865	31.378	0.027	
formatFsolveMessage	1	0.064	0.025	
asyMemLocalSolve	1	1.323	0.022	

Channel>Channel.onCustomEvent	4	0.258	0.020	
dataBank_EXAMPLE_312	1	1.257	0.020	
fullfile	102	0.033	0.019	
getExcelInstance>isactive	8	0.019	0.019	
num2str	21	0.031	0.016	
iofun\private\validpath>getFullName	16	0.021	0.016	
correlationEval	1	0.015	0.015	
EventSource>EventSource.onCustomEvent	4	0.232	0.014	
Manager>Manager.updateSubClasses	1	0.132	0.014	
mtree.mtree>mtree.mtree	4	0.021	0.013	
...tectionClient>ArduinoDevicePluginDetectionClient.initVendorIDMap	1	0.030	0.012	
singMixSim_asyMemLocal	1	1.929	0.011	
mtree.restrict	4	0.017	0.011	
registerevent>addevent	8	0.011	0.011	
strcat	6	0.011	0.010	
num2str>strvrcat	4	0.011	0.010	
winfun\private\checkeventname	8	0.010	0.010	
winfun\private\removeevent	8	0.009	0.009	
iofun\private\xlsreadSplitNumericAndText	8	0.012	0.009	
Manager>Manager.usbDeviceInsertedCallback	1	0.052	0.009	
getExcelInstance	8	0.028	0.009	
fileparts>legacyPCExecution	46	0.008	0.008	
computeFinDiffGradAndJac	5	0.158	0.007	
iofun\private\xlsreadCOM>selectData	8	0.007	0.007	
...ctionClient>VNTDevicePluginDetectionClient.devicePluginHandler	1	0.007	0.007	
isFunctionBasedTest	2	0.023	0.007	
fileparts	46	0.014	0.006	
createExitMsg	1	0.036	0.006	
getFileInfoForToolstrip	2	0.135	0.006	
SolverOptions>SolverOptions.SolverOptions	1	0.021	0.006	
getFunctionFileInfoForToolstrip	2	0.119	0.005	
registerevent	8	0.027	0.005	
cell.unique>celluniqueR2012a	2	0.005	0.005	
xlsread	8	1.482	0.005	
addpath	4	0.287	0.005	
...ervice>FileBasedStaticAnalysisSuiteCreationService.selectFactory	2	0.078	0.005	
replace	1	0.005	0.005	
mtree.mtfind	4	0.022	0.004	
asyMemLocalSA	1	0.279	0.004	
findSubClasses>isAClass	10	0.004	0.004	
findSubClasses>isAbstract	3	0.007	0.004	
...onClient>ArduinoDevicePluginDetectionClient.devicePluginHandler	1	0.035	0.004	
attributes>checkAttrs	2	0.007	0.004	
fileread	3	0.004	0.004	
mtree.pathit	4	0.006	0.004	

mat2cell	1	0.004	0.004	
getParentNameFromFilename	2	0.021	0.004	
testSuiteFileExtensionServices	2	0.038	0.004	
isSystemObjectCode>plsSystemObjectCode	2	0.035	0.004	
generateArgumentDescriptor	2	0.004	0.004	
iofun\private\validpath	8	0.032	0.003	
EventSource>@(varargin)obj.onCustomEvent(varargin{:})	4	0.236	0.003	
Channel>@(source,data)obj.onCustomEvent(data.Type,data.Data)	4	0.261	0.003	
fullfile>fixIRI	86	0.003	0.003	
...on>SuiteCreationLiaison.get.ParentNameMeetsNamingConvention	2	0.008	0.003	
getfield	371	0.003	0.003	
getBaseFolderFromFilename	2	0.017	0.003	
mdbstatus	2	0.032	0.003	
iofun\private\xlsreadSplitNumericAndText>getCorner	32	0.003	0.003	
findSubClasses>testClass	7	0.014	0.003	
createExitMsg>msgArgs2Str	2	0.030	0.003	
findSubClasses>@(x)x.Abstract	124	0.003	0.003	
winfun\private\comeventcallback	8	0.003	0.003	
iofun\private\openExcelWorkbook>waitForValidWorkbook	8	0.003	0.003	
split	2	0.003	0.003	
mtree.Outs	2	0.003	0.003	
getCode	2	0.004	0.003	
fullfile>refinePath	102	0.006	0.003	
attributes	2	0.017	0.003	
cell.unique	2	0.008	0.003	
optimget	25	0.003	0.003	
SolverOptions>SolverOptions.setAliasProperty	3	0.005	0.003	
isoptimargdbl	2	0.003	0.003	
testSuiteFileExtensionServices>locateAndCreateServices	2	0.027	0.003	
mtree.wholetree	4	0.003	0.003	
EventData>EventData.EventData	4	0.002	0.002	
mtree.Right	2	0.002	0.002	
unregisterevent	8	0.012	0.002	
attributes>checkInputs	2	0.006	0.002	
MultiAlgorithm>MultiAlgorithm.set.Algorithm	1	0.003	0.002	
SuiteCreationLiaison>SuiteCreationLiaison.get.Factory	2	0.003	0.002	
mtree.Parent	2	0.002	0.002	
...LABCodeFileExtensionService.MATLABCodeFileExtensionService	6	0.005	0.002	
mtree.mtree>validateInput	4	0.002	0.002	
SolverOptions>SolverOptions.setProperty	2	0.007	0.002	
SuiteCreationService>SuiteCreationService.fulfill	2	0.082	0.002	
@mtree\private\collect_qualifiers	4	0.002	0.002	
SuiteCreationLiaison>SuiteCreationLiaison.fromFilename	2	0.025	0.002	
isSystemObjectFile	2	0.038	0.002	

FileExtensionService>FileExtensionService.FileExtensionService	6	0.003	0.002	
updateFaultTolStruct	4	0.002	0.002	
ParseTreeUtils>ParseTreeUtils.getTree	2	0.015	0.002	
iofun\private\validpath>abspath	8	0.004	0.002	
MultiAlgorithm>MultiAlgorithm.extractCustomOptionsStructure	1	0.004	0.002	
createSolverOptions	1	0.024	0.002	
optim\private\trustnleqn>updateDelta	4	0.002	0.002	
NamingConventionService>NamingConventionService.fulfill	2	0.002	0.002	
...kageServiceLocator>PackageServiceLocator.validateInterfaceClass	2	0.019	0.002	
Manager>@(source.info)obj.usbDeviceRemovedCallback(info)	3	0.163	0.002	
SuiteCreationLiaison>SuiteCreationLiaison.SuiteCreationLiaison	2	0.002	0.002	
SuiteCreationLiaison>isUninitialized	18	0.002	0.002	
...tectionClient>VexDevicePluginDetectionClient.devicePluginHandler	1	0.002	0.002	
CustomEventInfo>CustomEventInfo.CustomEventInfo	4	0.002	0.002	
PackageServiceLocator>PackageServiceLocator.locate	2	0.021	0.002	
fullfile>addTrailingFileSep	86	0.002	0.002	
num2str>cellPrintf	4	0.002	0.002	
mtree.iskind	8	0.002	0.002	
int2str	16	0.002	0.002	
ServiceFactory>ServiceFactory.create	2	0.001	0.001	
xlsreadSupportedExtensions	16	0.001	0.001	
SolverOptions>SolverOptions.setPropertyNoChecks	5	0.001	0.001	
strip	2	0.002	0.001	
attributes>valueAttributor	2	0.001	0.001	
columnLetter	16	0.001	0.001	
expSpec_EXAMPLE_312	1	0.253	0.001	
getSystemObjectInfo	2	0.041	0.001	
mtree.select	2	0.001	0.001	
SuiteCreationLiaison>SuiteCreationLiaison.get.SimpleParentName	4	0.002	0.001	
general\private\catdirs	4	0.002	0.001	
ServiceLocator>ServiceLocator.forPackage	2	0.002	0.001	
getSystemObjectInfo	2	0.039	0.001	
Information>Information.Information	4	0.001	0.001	
lsqfcnchk	1	0.001	0.001	
optimoptions	1	0.025	0.001	
IntegerType>IntegerType.validate	2	0.001	0.001	
findSubClasses>getSubPackages	1	0.001	0.001	
EnumType>EnumType.validate	2	0.004	0.001	
...mingConventionService.AllowsAnythingNamingConventionService	2	0.002	0.001	
...SuiteCreationService>FunctionSuiteCreationService.getParseTree	2	0.002	0.001	
fullfile>ensureTrailingFilesep	86	0.003	0.001	
...tionService>NamingConventionService.NamingConventionService	2	0.001	0.001	
attributes>checkClass	2	0.001	0.001	
iofun\private\xlsreadCOM>rowCol2A1	8	0.006	0.001	
...ileExtensionService>MFileExtensionService.MFileExtensionService	2	0.003	0.001	

...isscalar,A,'scalar',fname,'expectedScalar',msgld,argname,argpos)	2	0.002	0.001	
pathsep	85	0.001	0.001	
Fsolve>Fsolve.replaceSpecialStrings	1	0.002	0.001	
...geServiceLocator>PackageServiceLocator.PackageServiceLocator	2	0.001	0.001	
NonTestFactory>NonTestFactory.NonTestFactory	2	0.001	0.001	
SolverOptions>SolverOptions.convertForSolver	1	0.001	0.001	
prepareOptionsForSolver	1	0.006	0.001	
iofun\private\xlsreadCOM>@(\)xlsCleanup(Excel,file,workbookState)	8	0.336	0.001	
attributes>findSupportedAttr	2	0.001	0.001	
Service>Service.Service	8	0.001	0.001	
ParseTreeUtils>ParseTreeUtils.isTreeError	2	0.001	0.001	
EnableArduinoHotPlug>EnableArduinoHotPlug.getInstance	1	0.001	0.001	
strjust>strjustOnChar	4	0.001	0.001	
optimget>optimgetfast	2	0.001	0.001	
strfun\privateisTextStrict	5	0.001	0.001	
isdir	8	0.001	0.001	
Fsolve>Fsolve.Fsolve	1	0.022	0.001	
FileExtensionService>FileExtensionService.findServiceThatSupports	2	0.001	0.001	
mtree.root	4	0.001	0.001	
iscom	16	0.001	0.001	
..FileExtensionService>PFileExtensionService.PFileExtensionService	2	0.002	0.001	
SuiteCreationLiaison>SuiteCreationLiaison.get.UsingDefaultFactory	4	0.001	0.001	
isSystemObjectCode	2	0.036	0.001	
getSuiteCreationServicesForToolstrip	2	0.001	0.001	
strfun\private\convertStringToOriginalTextType	3	0.001	0.001	
solverModelSpec EXAMPLE 312	1	0.001	0.001	
createExitMsg>stripHTMLTags	3	0.001	0.001	
createFaultToStruct	1	0.001	0.001	
...ationLiaison>SuiteCreationLiaison.get.NamingConventionServices	2	0.001	0.001	
SuiteCreationLiaison>SuiteCreationLiaison.get.ParseTree	2	0.001	0.001	
...nsonService>MLXFileExtensionService.MLXFileExtensionService	2	0.002	0.001	
validateopts UseParallel	6	0.001	0.001	
...rvice>FunctionSuiteCreationService.selectFactoryUsingParseTree	2	0.023	0.001	
MultiAlgorithm>MultiAlgorithm.MultiAlgorithm	1	0.022	0.001	
SuiteCreationLiaison>SuiteCreationLiaison.get.Filename	4	0.001	0.001	
...ableArduinoHotPlug>EnableArduinoHotPlug.EnableArduinoHotPlug	1	0.001	0.001	
SolverOptions>SolverOptions.extractOptionsStructure	1	0.005	0.001	
mfile	2	0.001	0.001	
...ntionLiaison>NamingConventionLiaison.NamingConventionLiaison	2	0.001	0.001	
Response>Response.Response	3	0.001	0.001	
Fsolve>Fsolve.set.Display	1	0.006	0.001	
blanks	6	0.000	0.000	
nonzerosign	10	0.000	0.000	
ToleranceType>ToleranceType.validate	1	0.000	0.000	
generateArgumentDescriptor>isCharOrString	6	0.000	0.000	

@mtree\private\collect_qualifiers>is_qual	4	0.000	0.000	
iofun\private\xlsreadCOM>ensureIsCell	8	0.000	0.000	
prepStringForValidation	2	0.003	0.000	
optim\private\trustnleqn>getOpts	1	0.000	0.000	
Fsolve>Fsolve.set.FunctionTolerance	1	0.003	0.000	
iofun\private\openExcelWorkbook>WorkbookActivateHandler	8	0.000	0.000	
strjust	4	0.001	0.000	
Fsolve>Fsolve.get.FinDiffRelStep	1	0.000	0.000	
Fsolve>Fsolve.set.MaxFunctionEvaluations	1	0.002	0.000	
SolverOptions>SolverOptions.isSetByUser	1	0.000	0.000	
Manager>@(source,info)obj.usbDeviceInsertedCallback(info)	1	0.053	0.000	
mtree.isempty	4	0.000	0.000	
mtree.count	2	0.000	0.000	
replaceFinDiffRelStepString	1	0.000	0.000	
functionNameClashCheck	1	0.000	0.000	
iofun\private\xlsreadSplitNumericAndText>emptyCase	32	0.000	0.000	
getSimpleParentName	2	0.000	0.000	
setOptimFcnHandleOnWorkers	1	0.001	0.000	
mtree.indices	2	0.000	0.000	
path>isValidInput	8	0.000	0.000	
pwd	11	0.000	0.000	
validateFinDiffRelStep	1	0.001	0.000	
mtree.isnull	4	0.000	0.000	
...ationLiaison>SuiteCreationLiaison.set.NamingConventionServices	2	0.000	0.000	
Fsolve>Fsolve.set.MaxIterations	1	0.001	0.000	
fullfile>@(x)~iscell(x)&&isempty(x)	4	0.000	0.000	
fliplr	2	0.000	0.000	
getExcelWorkbookActivationTimeout	8	0.000	0.000	
TestSuiteFactory>TestSuiteFactory.TestSuiteFactory	2	0.000	0.000	
...rvice>AllowsAnythingNamingConventionService.meetsConvention	2	0.000	0.000	
SuiteCreationLiaison>UNINITIALIZED	18	0.000	0.000	
ServiceLocator>ServiceLocator.ServiceLocator	2	0.000	0.000	
Fsolve>Fsolve.mapAlgorithmName	1	0.000	0.000	
...DetectionClient>VexDevicePluginDetectionClient.initVendorIDMap	1	0.000	0.000	
getNumericOrStringFieldValue	1	0.001	0.000	
SolverOptions>SolverOptions.mapOptionsForSolver	1	0.000	0.000	
checkoptionsize	1	0.000	0.000	

***Self time** is the time spent in a function excluding any time spent in child functions. The time includes any overhead time resulting from the profiling process.