











Profile Summary (Total time: 33.777 s)

Generated 24-Nov-2025 16:14:46 using performance time.

Function Name	Calls	Total Time (s) ↓	Self Time* (s)	Total Time Plot (dark band = self time)
Ex6_Mechanics	1	33.777	15.895	
get_damper	34	8.571	8.444	
getMechanicsMaps_2D	1	7.612	0.022	
mech_matrix_build_2D	2	7.582	7.582	
buildStrainMat	1	0.537	0.537	
getProjectionMatrix	9	0.354	0.033	
svds	9	0.320	0.019	
LanczosBD	8	0.253	0.034	
LanczosBD>LanczosBDInner	16	0.200	0.050	
grad_matrix	2	0.169	0.169	
subplot	3	0.163	0.041	
getDisplacementProjection_2D	1	0.141	0.001	
stresses	34	0.126	0.126	
augmentCellMaps_2D	1	0.121	0.024	
LanczosBD>orthAgainstRobust	416	0.107	0.087	
imgaussfilt	2	0.097	0.004	
getStrainProjection_2D	1	0.081	0.001	
axis	5	0.065	0.011	
getStressProjection_2D	1	0.064	0.001	
refline	1	0.060	0.008	
scatter	1	0.058	0.000	
scatter>matrixScatter	1	0.058	0.003	
...iedAxesInteractions>UnifiedAxesInteractions.createDefaultInteractions	5	0.048	0.007	
svds>@(x.transflag)AfunL(A.x.transflag)	416	0.048	0.003	
CanvasPlugin.CanvasPlugin>CanvasPlugin.createCanvas	1	0.047	0.002	
addpath	1	0.045	0.004	
svds>AfunL	416	0.045	0.045	
imgaussfilt>parseInputs	2	0.040	0.036	
...ibeStackManager.ScribeStackManager>ScribeStackManager.getLayer	6	0.039	0.005	
path	1	0.039	0.025	
CanvasSetup>CanvasSetup.createScribeLayers	1	0.038	0.001	
subplot>addAxesToGrid	3	0.034	0.011	
imagesc	2	0.033	0.005	
...tackManager.ScribeStackManager>ScribeStackManager.createLayer	3	0.032	0.007	
imgaussfilt>spatialGaussianFilter	2	0.031	0.002	
axis>isnumericAxes	2	0.029	0.009	
buildBoundaries_2D	1	0.029	0.029	
newplotimagewrapper	2	0.027	0.001	
...actions>UnifiedAxesInteractions.createInteractionsForTitlesAndLabels	5	0.026	0.001	
...ractions>UnifiedAxesInteractions.createCartesianAxesTextInteractions	5	0.025	0.003	

newplot	3	0.025	0.004	
imfilter	2	0.024	0.004	
...Interactions>UnifiedAxesInteractions.setDefaultBehaviorForTextArray	5	0.022	0.002	
close	1	0.022	0.008	
RandStream.RandStream>RandStream.RandStream	337	0.022	0.022	
ScribeLayer.ScribeLayer>ScribeLayer.ScribeLayer	3	0.020	0.010	
AbstractScatter.getXYZDataExtents	1	0.020	0.003	
...dAxesInteractions>UnifiedAxesInteractions.setDefaultBehaviorForText	2	0.020	0.003	
svds>checkInputs	9	0.018	0.006	
Scatter.Scatter>Scatter.Scatter	1	0.017	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.AbstractScatter	1	0.017	0.002	
newplot>ObserveAxesNextPlot	3	0.017	0.003	
RandStream.RandStream>RandStream.RandStream	9	0.016	0.008	
axis>LocSetImage	2	0.016	0.007	
num2str	7	0.016	0.008	
InteractionContainer>InteractionContainer.setInteractionsArray	2	0.015	0.001	
...r.SubplotListenersManager>SubplotListenersManager.addToListeners	3	0.015	0.011	
scatter>localXYSCheck	1	0.015	0.000	
cla	3	0.015	0.004	
InteractionContainer>InteractionContainer.set.InteractionsArray	2	0.015	0.002	
stringToChar	4	0.013	0.004	
gobjects	13	0.013	0.007	
findMatchingDimensions	1	0.013	0.005	
close>safegetchildren	1	0.013	0.002	
InteractionContainer>InteractionContainer.InteractionContainer	10	0.013	0.006	
blkdiag	8	0.012	0.005	
...artesianAxesInteractionContainer.CartesianAxesInteractionContainer	3	0.012	0.001	
title	3	0.011	0.005	
allchild	1	0.011	0.006	
imfilter>parse_inputs	2	0.010	0.005	
...StandardAxesInteractionContainer.StandardAxesInteractionContainer	3	0.010	0.001	
imgaussfilt>chooseFilterImplementation	2	0.010	0.003	
...tions>UnifiedAxesInteractions.queueCreateDefaultInteractionsOnAxes	5	0.010	0.003	
arraytolimits	1	0.010	0.001	
svds>fullSVD	1	0.010	0.010	
...ntainer>BaseAxesInteractionContainer.BaseAxesInteractionContainer	3	0.009	0.001	
stringToChar>@(x)convertToChar(x)	14	0.009	0.003	
arraytolimits>localGetLimits	3	0.009	0.009	
get_damper_reduced	1	0.009	0.009	
graphics/private/clo	3	0.008	0.007	
ctorHelper	1	0.008	0.001	
configureAxes	1	0.008	0.001	
findall	3	0.008	0.006	
TextInteractionContainer>TextInteractionContainer.updateInteractions	2	0.008	0.001	
unique	1	0.008	0.005	

graph2d/private/subplot_parseargs	3	0.008	0.006	
AnnotationPane.AnnotationPane>AnnotationPane.AnnotationPane	2	0.007	0.002	
general/private/parsedirs	2	0.007	0.007	
num2str>handleNumericPrecision	6	0.007	0.002	
..nifiedAxesInteractions>UnifiedAxesInteractions.queuedAxesOperations	8	0.007	0.007	
syds>getOptions	9	0.007	0.007	
strcat	1	0.007	0.006	
imfilter>filterDouble2DWithConv	2	0.007	0.002	
RandStream.RandStream>getargs	9	0.007	0.007	
stringToChar>convertToChar	14	0.006	0.006	
configureAxes>checkChildren	1	0.006	0.000	
..xtlInteractionContainer>TextInteractionContainer.createJavaInteractions	2	0.006	0.002	
repmat	2	0.006	0.002	
configureAxes>checkDim	2	0.006	0.002	
validatestring	6	0.006	0.002	
InteractionContainer>InteractionContainer.set.InteractionsArrayMode	12	0.006	0.003	
ScribeLayer.ScribeLayer>@(src,event)hObj_childAdded(src,event)	3	0.006	0.001	
num2str>convertUsingRecycledSprintf	6	0.005	0.005	
AnnotationPane.AnnotationPane>AnnotationPane.doSetup	2	0.005	0.004	
ToolbarFactory>ToolbarFactory.getToolbar	1	0.005	0.000	
CCC_calc	1	0.005	0.002	
axescheck	2	0.005	0.003	
...teractionContainer>TextInteractionContainer.TextInteractionContainer	7	0.005	0.001	
imgaussfilt>useIPPL	2	0.005	0.003	
...oller.DesktopToolbarController>DesktopToolbarController.getInstance	1	0.005	0.000	
subplot>datasiblings	3	0.005	0.004	
ScribeLayer.ScribeLayer>ScribeLayer.childAdded	3	0.005	0.003	
createGaussianKernel	2	0.005	0.003	
...beStackManager.ScribeStackManager>ScribeStackManager.findLayer	21	0.005	0.005	
...ToolbarController>DesktopToolbarController.DesktopToolbarController	1	0.005	0.001	
padarray_algo	2	0.004	0.001	
axis>LocSetLimitMethod	2	0.004	0.003	
genpath	1	0.004	0.004	
repmat	2	0.004	0.003	
parseplotapi	1	0.004	0.000	
getChildrenForRuler	2	0.004	0.004	
getRealData	2	0.004	0.004	
AbstractScatter.getColorAlphaDataExtents	1	0.004	0.003	
AbstractScatter.AbstractScatter>AbstractScatter.setXData	1	0.004	0.001	
Scatter.Scatter>Scatter.validateDataPropertyValue	4	0.004	0.002	
TextInteractionContainer>TextInteractionContainer.findConflicts	2	0.004	0.001	
objArrayDispatch	5	0.004	0.002	
webGraphicsStateManager	2	0.003	0.002	
ToolbarController.ToolbarController>ToolbarController.ToolbarController	1	0.003	0.002	
imgaussfilt>validateSigma	2	0.003	0.003	

allchild>getchildren	1	0.003	0.003	
EditInteraction>EditInteraction.createInteraction	2	0.003	0.001	
preprocessexents	1	0.003	0.003	
getPaddingIndices	2	0.003	0.001	
unique>uniqueR2012a	1	0.003	0.003	
..._teractionContainer>TextInteractionContainer.findDuplicateInteractions	2	0.003	0.002	
Scatter.Scatter>Scatter.doSetup	1	0.003	0.002	
..._StackManager.ScribeStackManager>ScribeStackManager.hasLayers	3	0.003	0.002	
scatter>localGetAxesInfo	1	0.003	0.000	
SubplotListenersManager.SubplotListenersManager>find3emptycells	2	0.003	0.003	
blkdiag>getIndexVectors	8	0.003	0.003	
RandStream.RandStream>RandStream.delete	9	0.003	0.003	
..._tainer>CartesianAxesInteractionContainer.getDefaultInteractionsArray	3	0.003	0.001	
mean	2	0.003	0.002	
validatestring>checkString	6	0.002	0.002	
graphics/private/ciaNotify	3	0.002	0.002	
svds>getSizeA	9	0.002	0.001	
..._ctScatter.AbstractScatter>AbstractScatter.dataPropertyValueChanged	4	0.002	0.002	
markFigure	8	0.002	0.002	
EditInteraction>EditInteraction.EditInteraction	2	0.002	0.002	
AnnotationPane.AnnotationPane>AnnotationPane.getParentImpl	14	0.002	0.002	
getPaddingIndices>ReplicatePad	2	0.002	0.002	
scatter>parseargs	1	0.002	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.set.MarkerHandle	1	0.002	0.000	
convertStringToCharArgs	9	0.002	0.002	
general/private/catdirs	1	0.002	0.002	
editInteraction	2	0.002	0.001	
axescheck>@(x)(isStringScalar(x) ischar(x))&&strcmpi('parent',x)	5	0.002	0.001	
graph2d/private/labelcheck	5	0.002	0.002	
AbstractScatter.AbstractScatter>AbstractScatter.set.SizeData	1	0.002	0.001	
..._catter.AbstractScatter>AbstractScatter.setMarkerHandleFanoutProps	1	0.002	0.001	
AnnotationPane.AnnotationPane>AnnotationPane.setParentImpl	2	0.002	0.002	
UnifiedAxesInteractions>UnifiedAxesInteractions.getCanvas	5	0.002	0.002	
xlabel	1	0.002	0.001	
parseparams	1	0.002	0.001	
Capability>Capability.isSupported	2	0.002	0.001	
imfilter>computeSizes	2	0.002	0.002	
AbstractScatter.getHints	1	0.002	0.002	
AbstractScatter.validateDataPropertyValue	4	0.002	0.002	
AbstractScatter.AbstractScatter>AbstractScatter.set.CData_1	1	0.002	0.000	
RandStream.RandStream>RandStream.algName	9	0.002	0.002	
meshgrid	2	0.002	0.002	
FigureUtils>FigureUtils.isEditorSnapshotFigure	5	0.002	0.002	
PostUpdatePlugin>PostUpdatePlugin.PostUpdatePlugin	1	0.001	0.001	
blkdiag>hasSameClass	8	0.001	0.001	

imgaussfilt>useSeparableFiltering	2	0.001	0.001	
RandStream.reset	9	0.001	0.001	
blkdiag>hasSparse	8	0.001	0.001	
findall>showHiddenHandlesToFindAllHandles	3	0.001	0.001	
...sInteractionSet>DefaultAxesInteractionSet.DefaultAxesInteractionSet	3	0.001	0.001	
AnnotationPane.AnnotationPane>AnnotationPane.addChild	2	0.001	0.001	
blkdiag>checkAllAreMatrices	8	0.001	0.001	
axis>limitmethodfanout	2	0.001	0.001	
cell.unique	2	0.001	0.001	
configureRuler	2	0.001	0.001	
SubplotListenersManager.SubplotListenersManager>findemptycell	2	0.001	0.001	
ylabel	1	0.001	0.001	
AbstractScatter.AbstractScatter>AbstractScatter.setSelectionHandle_I	1	0.001	0.000	
imgaussfilt>computeFilterSizeFromSigma	2	0.001	0.001	
mustBeValidGraphicsObject	10	0.001	0.001	
EditInteraction>EditInteraction.EditInteraction	2	0.001	0.001	
AbstractScatter.AbstractScatter>AbstractScatter.get.YJitter	1	0.001	0.001	
newplot>ObserveFigureNextPlot	3	0.001	0.001	
...ter.AbstractScatter>AbstractScatter.setSelectionHandle_IFanoutProps	1	0.001	0.000	
LanczosBD>isFloatDouble	16	0.001	0.001	
AbstractScatter.AbstractScatter>AbstractScatter.get.ZJitter	1	0.001	0.001	
svds>isPosInt	9	0.001	0.001	
...teListenersManager>SubplotDeleteListenersManager.addToListeners	3	0.001	0.001	
images/private/chooseFilterDomain	2	0.001	0.001	
axis>iscartesian	3	0.001	0.001	
...stractScatter.AbstractScatter>AbstractScatter.setCurrentIconColorInfo	1	0.001	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.XJitter	1	0.001	0.001	
validatestring>checkInputs	6	0.001	0.001	
LanczosBD>@()warning(W)	8	0.001	0.001	
ChildEventData>ChildEventData.ChildEventData	3	0.001	0.001	
isCharOrString	6	0.001	0.001	
...anager.SubplotListenersManager>@(o,e)subplotlayoutInvalid(ax,e,fig)	5	0.001	0.001	
...InteractionContainer>BaseAxesInteractionContainer.setCurrentMode	3	0.001	0.001	
AbstractScatter.AbstractScatter>AbstractScatter.set.MarkerHandleNaN	1	0.001	0.000	
svds>isFloatDouble	9	0.001	0.001	
repmat>checkSizesType	2	0.001	0.001	
axis>allAxes	5	0.001	0.001	
InteractionContainer>InteractionContainer.get.Enabled	5	0.001	0.001	
images/private/isImageTooBigForIPPFILTER	2	0.001	0.001	
TextInteractionContainer>TextInteractionContainer.validateInteractions	2	0.001	0.001	
images/private/isImageIPPFILTERType	2	0.001	0.001	
...er.AbstractScatter>AbstractScatter.set.MarkerHandleNaNFanoutProps	1	0.001	0.001	
subplot>isSubplotCandidate	3	0.001	0.001	
imfilter>isSeparable	2	0.001	0.001	
AbstractScatter.AbstractScatter>AbstractScatter.set.YData	1	0.001	0.000	

AbstractScatter.AbstractScatter>AbstractScatter.get.MarkerEdgeAlpha	1	0.001	0.000	
allchild>@().set(rootobj,'ShowHiddenHandles',Temp)	1	0.001	0.001	
ScribeLayer.ScribeLayer>ScribeLayer.checkValidity	3	0.001	0.001	
nextstyle	1	0.001	0.001	
AbstractScatter.AbstractScatter>AbstractScatter.get.YDataCache	1	0.001	0.001	
isStringScalar	5	0.001	0.001	
ControlManager>ControlManager.sendPVPairsToControl	5	0.001	0.001	
svds>getSigma	9	0.001	0.001	
isPublishingTest	7	0.001	0.001	
findall>@().set(rootobj,'ShowHiddenHandles',Temp)	3	0.001	0.001	
Capability>Capability.Current	2	0.001	0.001	
useIPLLibrary	2	0.001	0.001	
AbstractScatter.AbstractScatter>AbstractScatter.get.XDataCache	1	0.001	0.001	
InteractionContainer>InteractionContainer.get.InteractionsArray	2	0.001	0.001	
uitools/private/allchildRootHelper	1	0.001	0.001	
AbstractScatter.AbstractScatter>AbstractScatter.get.Clipping_I	3	0.001	0.001	
InteractionOptions>InteractionOptions.InteractionOptions	3	0.001	0.001	
pathsep	4	0.001	0.001	
mean>mysize	2	0.001	0.001	
usejava	1	0.001	0.001	
close>request_close	1	0.001	0.001	
blanks	1	0.001	0.001	
close>checkfigs	1	0.000	0.000	
close>getEmptyHandleList	1	0.000	0.000	
makemcode	1	0.000	0.000	
images/private/getSeparableFilterThreshold	4	0.000	0.000	
ScribeLayer.ScribeLayer>ScribeLayer.findCanvas	3	0.000	0.000	
...actScatter.AbstractScatter>AbstractScatter.get.CurrentIconColorInfo_I	1	0.000	0.000	
deal	1	0.000	0.000	
BaseAxesInteractionContainer>BaseAxesInteractionContainer.set.is2d	3	0.000	0.000	
path>isValidInput	2	0.000	0.000	
InteractionsList>InteractionsList.InteractionsList	2	0.000	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.SelectionHandle	4	0.000	0.000	
FigureUtils>FigureUtils.isEditorEmbeddedFigure	5	0.000	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.LineWidth_I	2	0.000	0.000	
...ger>SubplotDeleteListenersManager.SubplotDeleteListenersManager	3	0.000	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.CDataMode	1	0.000	0.000	
BaseInteraction>BaseInteraction.BaseInteraction	2	0.000	0.000	
gsqrt	1	0.000	0.000	
BaseInteractionSet>BaseInteractionSet.BaseInteractionSet	3	0.000	0.000	
pwd	2	0.000	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.JitterDirty_I	2	0.000	0.000	
isFigureShowEnabled	2	0.000	0.000	
...ics.illustration.Legend') isa(obj,'matlab.graphics.illustration.ColorBar')	67	0.000	0.000	
num2str>strvrcat	1	0.000	0.000	

AbstractScatter.AbstractScatter>AbstractScatter.get.ZJitter_1	1	0.000	0.000	
hasDisplay	2	0.000	0.000	
Scatter.Scatter>Scatter.get.MarkerFaceAlpha	1	0.000	0.000	
PointerMixin>PointerMixin.setPointerStrategy	1	0.000	0.000	
configureAxes>doesClassHaveDedicatedRuler	2	0.000	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.YJitter_1	1	0.000	0.000	
...ractionContainer>TextInteractionContainer.getDefaultInteractionsArray	7	0.000	0.000	
usev6plotapi	1	0.000	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.XJitter_1	1	0.000	0.000	
InteractionContainer>InteractionContainer.clearList	2	0.000	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.MarkerEdgeAlpha_1	1	0.000	0.000	
strjust	1	0.000	0.000	
makemcode>localRegisterHandle	1	0.000	0.000	
ToolbarFactory>ToolbarFactory.getInstance	1	0.000	0.000	
...catter.AbstractScatter>AbstractScatter.set.CurrentIconColorInfoMode	1	0.000	0.000	
...istenersManager>SubplotListenersManager.SubplotListenersManager	1	0.000	0.000	
num2str>cellPrintf	1	0.000	0.000	
CanvasPlugin.CanvasPlugin>CanvasPlugin.getInstance	1	0.000	0.000	
strjust>strjustOnChar	1	0.000	0.000	
...ModeStrategy>FigureBasedModeStrategy.FigureBasedModeStrategy	1	0.000	0.000	
...tackManager.ScribeStackManager>ScribeStackManager.getInstance	1	0.000	0.000	
AbstractScatter.AbstractScatter>AbstractScatter.get.ZDataCache	1	0.000	0.000	
...odeStrategy>FigurePointerModeStrategy.FigurePointerModeStrategy	1	0.000	0.000	
checkpvpairs	1	0.000	0.000	
datachk	1	0.000	0.000	
...catter.AbstractScatter>AbstractScatter.get.CurrentIconColorInfoMode	1	0.000	0.000	
...actScatter.AbstractScatter>AbstractScatter.set.CurrentIconColorInfo_1	1	0.000	0.000	
scatter>localCheckXYForZeroDim	1	0.000	0.000	
IconColorInfoCache>IconColorInfoCache.IconColorInfoCache	1	0.000	0.000	
AbstractModeStrategy>AbstractModeStrategy.AbstractModeStrategy	1	0.000	0.000	
PointerMixin>PointerMixin.PointerMixin	1	0.000	0.000	
PointerModeStrategy>PointerModeStrategy.PointerModeStrategy	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.