

Helmstaedter Briggman Turaga Jain Seung Denk, Nature 2013

Helmstaedter_et_al_Nature_2013_skeletons_contacts_matrices.mat

Contains all skeletons, contact lists, cell ID conversions and contact matrices that were used in the publication.

Variable descriptions:

Variable name	Description	Example
kn_e2006_ALLSKELETONS_FINAL2012	1x4188 cell. Each cell entry is one skeleton traced by one annotator. Each skeleton is a structure with relevant fields 'nodes' and 'edges'. Nodes is a n x 4 list with n the number of nodes, listing x-y-z-coordinates and radius (the latter was usually not edited by the user and should be ignored). x,y,z coordinates are in nm from the upper left corner of the dataset. Edges is an m x 2 list with m the number of remaining edges after RESCOP consolidation, listing the two IDs of the nodes in the node list that a particular edge links.	[x,y,z] coordinates of the nodes of skeleton 2400: kn_e2006_ALLSKELETONS_FINAL2012{2400}.nodes(:,1:3)
kn_e2006_ALLSKELETONS_FINAL2012_cellIDs	1x4188 matrix listing for each of the skeletons the internal cell ID.	All redundant skeletons that belong to internal cell ID 741: kn_e2006_ALLSKELETONS_FINAL2012(kn_e2006_ALLSKELETONS_FINAL2012_cellIDs==741)
kn_e2006_ALLSKELETONS_FINAL2012_globalTypeIDs_REDO_MAR2013	1x4188 matrix listing for each of the skeletons the internal type ID	
kn_e2006_ALLSKELETONS_FINAL2012_cellIDs_sortedByType_MAR2013	1x1159 matrix listing the internal cell IDs in the order of the single cell contact matrix (Fig. 4a). Note that the matrix in Fig. 4a did not show the "orphans" and glia cells.	Matrix position of internal cell ID 866: find(kn_e2006_ALLSKELETONS_FINAL2012_cellIDs_sortedByType_MAR2013==866)

kn_e2006_ALLSKELETONS_FINAL2012_cellIDs_sortedByTyp_MAR2013_typ	1x1159 matrix listing the internal cell type IDs in the order of the single cell contact matrix (Fig. 4a).	All matrix IDs of type 211: find(kn_e2006_ALLSKELETONS_FINAL2012_cellIDs_sortedByTyp_MAR2013_typ==211); All internal cell IDs belonging to type 211: kn_e2006_ALLSKELETONS_FINAL2012_cellIDs_sortedByType_MAR2013(kn_e2006_ALLSKELETONS_FINAL2012_cellIDs_sortedByTyp_MAR2013_typ==211)
kn_e2006_ALLSKELETONS_FINAL2012_sortOrderTypes_byDepth_MAR2013	Internal type IDs in the sequence they are reported in the single-cell and type-to-type contact matrix	Position of internal type ID 211 in the type matrix (and type gallery etc): Find(kn_e2006_ALLSKELETONS_FINAL2012_sortOrderTypes_byDepth_MAR2013==211)
kn_allContactData_Interfaces_duplCorr_sizeCorr_APR2013	Contact list; s. Suppl. Information	
kn_contactAreaMx_forDisplay_APR2013	Single-cell contact matrix as in Fig. 4a (but including orphans and glia cells)	
kn_e2006_typeMx_REDOAPR2013	Type-to-type matrix as in Fig. 4b, but unnormalized and including orphans and glia cells	
kn_e2006_typeMx_REDOAPR2013_selfNorm	Type-to-type matrix as shown in Fig. 4b; normalized along rows excluding orphans and glia cells	