**Needed for TendonForceOdeVecSRS and TendonForceOdeVecSRS\_BP**

|  |  |
| --- | --- |
| Variable | Meaning |
| A | Excitation. Same as in input variable. |
| lMT | Length of MT. Obtained from osimState, which is obtained from osimModel. |
| vMT | Velocity of MT (set to 0) |
| params | Muscle-specific parameters |
| Fvparam |  |
| Fpparam |  |
| Faparam |  |
| vec\_kT |  |
| lMtilda\_isom | Isometic lM |
| ksrs | Short-range stiffness |

**Additionally needed for compute\_state\_derivatives and compute\_state\_derivatives\_BP**

|  |  |
| --- | --- |
| Variable | Meaning |
| s0 | Initial non-muscle states. From IKsolution |
| input | Platform acceleration. Struct with 3 fields: platacc, time and act |
| osimModel | OpenSim model |
| osimState | Obtained from OpenSim model |
| auxdata | Contains info about muscles, largely from existing muscle-parameters (see above) |

Required files

'C:\Users\timvd\Documents\Models\SCP\_gait10dof18musc\_Trial15\_ks.mot' (use importdata)

Fvparam.mat, Faparam.mat

'C:\Users\timvd\Documents\OSIM\_posturePerts\_Friedl\matlab\_files\PlatOnsets.dat'

Trial15\_InputDataTime.mat

'C:\Users\timvd\Documents\OSIM\_posturePerts\_Friedl\processedData\Trial15'

'C:\Users\timvd\Documents\Models\SCP\_gait4dof9musc.osim'

'C:\Users\timvd\Documents\Models\SCP\_gait10dof18musc.osim'

'musdyn\_SRS\_dlmt\_Trial15\_ebase3\_min10\_50ms\_ksrs0\_web30\_rev'