

the script below is an example of a [meta-command](#). the script below would be saved as a v3m file and placed in the meta-command folder.

this meta-command creates kinematic gait events using [the method described here](#).

this meta-command can be [downloaded here](#).

calling the meta-command

once the meta-command (v3m file) has been placed in the meta-command folder, it can be called from any other pipeline file:

```
kinematic_events_foot_position
! /heelstrike_label=hs
! /toeoff_label=to
;
```

meta-command

```
! begin_meta
! meta_cmd_name=kinematic_gait_events
! meta_param= heelstrike_label : string :hs:yes
! meta_param= toeoff_label : string :to:yes
! end_meta

!
=====
! kinematic gait events
!
=====

! this step is not necessary, but important to make sure that
! any events that were previously created are deleted

event_delete
/event_name=r&::heelstrike_label&+r&::toeoff_label&+l&::heelstrike_label&+l&
::toeoff_label&
! /event_sequence=
! /exclude_events=
! /event_instance=
! /time=
;

! -----
--
! transform the position of the foot into the pelvis coordinate system
! -----
--
```

! right foot

```
compute_model_based_data
/result_name=rtoe_wrt_pelvis
/function=seg_distal_joint
/segment=rft
/reference_segment=rpv
/resolution_coordinate_system=rpv
! /use_cardan_sequence=false
! /normalization=false
! /normalization_method=
! /normalization_metric=
! /negatex=false
! /negatey=false
! /negatez=false
! /axis1=x
! /axis2=y
! /axis3=z
! /treadmill_data=false
! /treadmill_direction=unit_vector(0,1,0)
! /treadmill_speed=0.0
;
```

```
compute_model_based_data
/result_name=rheel_wrt_pelvis
/function=seg_proximal_joint
/segment=rft
/reference_segment=rpv
/resolution_coordinate_system=rpv
! /use_cardan_sequence=false
! /normalization=false
! /normalization_method=
! /normalization_metric=
! /negatex=false
! /negatey=false
! /negatez=false
! /axis1=x
! /axis2=y
! /axis3=z
! /treadmill_data=false
! /treadmill_direction=unit_vector(0,1,0)
! /treadmill_speed=0.0
;
```

! left foot

```
compute_model_based_data
/result_name=ltoe_wrt_pelvis
/function=seg_distal_joint
/segment=lft
```

```
/reference_segment=rpv
/resolution_coordinate_system=rpv
! /use_cardan_sequence=false
! /normalization=false
! /normalization_method=
! /normalization_metric=
! /negatex=false
! /negatey=false
! /negatez=false
! /axis1=x
! /axis2=y
! /axis3=z
! /treadmill_data=false
! /treadmill_direction=unit_vector(0,1,0)
! /treadmill_speed=0.0
;
```

```
compute_model_based_data
/result_name=lheel_wrt_pelvis
/function=seg_proximal_joint
/segment=lft
/reference_segment=rpv
/resolution_coordinate_system=rpv
! /use_cardan_sequence=false
! /normalization=false
! /normalization_method=
! /normalization_metric=
! /negatex=false
! /negatey=false
! /negatez=false
! /axis1=x
! /axis2=y
! /axis3=z
! /treadmill_data=false
! /treadmill_direction=unit_vector(0,1,0)
! /treadmill_speed=0.0
;
```

```
! -----
--
!   create events
!   - heel strike: when the foot is furthest in front of the pelvis
!   - toe off: when the foot is furthest behind the pelvis
! -----
--
```

```
event_maximum
/signal_types=link_model_based
/signal_names=rheel_wrt_pelvis
! /signal_folder=original
/event_name=r&:heelstrike_label&
```

```
! /select_x=false
/select_y=true
! /select_z=false
! /frame_window=8
! /start_at_event=
! /end_at_event=
! /event_instance=
;

event_minimum
/signal_types=link_model_based
/signal_names=rtoe_wrt_pelvis
! /signal_folder=original
/event_name=r&::toeoff_label&
! /select_x=false
/select_y=true
! /select_z=false
! /frame_window=8
! /start_at_event=
! /end_at_event=
! /event_instance=
;

event_maximum
/signal_types=link_model_based
/signal_names=lheel_wrt_pelvis
! /signal_folder=original
/event_name=l&::heelstrike_label&
! /select_x=false
/select_y=true
! /select_z=false
! /frame_window=8
! /start_at_event=
! /end_at_event=
! /event_instance=
;

event_minimum
/signal_types=link_model_based
/signal_names=ltoe_wrt_pelvis
! /signal_folder=original
/event_name=l&::toeoff_label&
! /select_x=false
/select_y=true
! /select_z=false
! /frame_window=8
! /start_at_event=
! /end_at_event=
! /event_instance=
```

;

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