Structure for the processed file in the MDSplus Tree

An appropriate MDSplus tree has been created in order to save processed data which
can be used in the analysis. The MDSplus tree can be used in LAC by adding the following
to .bashrc file

    export tcv_topic21_path="/home/vianello/work/topic21/Experiments/TCV/data/tree/"

The following quantities have been saved in order to be easily restored. They are shown with
both the absolute path and the corresponding tag in MDSplus

Description	Signal absolute path	Signal tag
En 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:EN	\FP_1PL_EN
En Error 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:ENERR	\FP_1PL_ENERR
Te 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:TE	\FP_1PL_TE
Te Error 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:TEERR	\FP_1PL_TEERR
Vf Top 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:VFT	\FP_1PL_VFT
Vf Bottom 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:VFB	\FP_1PL_VFB
Vf Medium 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:VFM	\FP_1PL_VFM
Js 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:JS	\FP_1PL_JS
Rho 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:rho	\FP_1PL_RHO
R-Rsep 1st Plunge	\TOP::FP:FIRSTPLUNGE:PROFILE:rrsep	\FP_1PL_RRSEP
En 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:EN	\FP_2PL_EN
En Error 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:ENERR	\FP_2PL_ENERR
Te 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:TE	\FP_2PL_TE
Te Error 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:TEERR	\FP_2PL_TEERR
Vf Top 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:VFT	\FP_2PL_VFT
Vf Bottom 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:VFB	\FP_2PL_VFB
Vf Medium 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:VFM	\FP_2PL_VFM
Js 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:JS	\FP_2PL_JS
Rho 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:rho	\FP_2PL_RHO
R-Rsep 2nd Plunge	\TOP::FP:SECONDPLUNGE:PROFILE:rrsep	\FP_2PL_RRSEP
L parallel Div-Ups	\TOP::LPARALLEL:DIVU	\LPDIVU
L parallel Div-Xp	\TOP::LPARALLEL:DIVX	\LPDIVX
RHO for Lparallel	\TOP::LPARALLEL:RHO	\LPRHO
Lambda Div-Ups	\TOP::LAMBDA:DIVU	\LDIVU
Lambda Div-Xp	\TOP::LAMBDA:DIVX	\LDIVX
RHO for Lambda	\TOP::LAMBDA:RHO	\LRHO

Both the L// and the Lambda are saved as a function of time and R-Rsep (second dimension in the
save MDSplus tree). We have also computed the appropriate mapping in rho poloidal (square root of normal-
ized poloidal flux).
The Lambda are computed using the parallel connection length from the divertor to upstream and using also
the parallel connection length from the divertor to the X-point.