



TITLE : NIRPS TEMPLATES REFERENCE MANUAL

REF. : NIRPS-4500-GEN-UM-203

ISSUE : 1.9

DATE: 9/08/2022

PAGE 1/93

NIRPS Templates Reference Manual

<i>Prepared by :</i>	<i>Signature</i>
Name: Allan de Medeiros Martins François Bouchy	
Institute: Geneva Observatory / UFRN	
Date : 2020.05.05	
<i>Approved by :</i>	<i>Signature</i>
Name: François Wildi	
Institute: University of Geneva	
Date : 2020.05.05	
<i>Released by :</i>	<i>Signature</i>
Name: Frédérique Baron	
Institute: University of Montréal	
Date : 9.08.2022	

Contributors:

François Bouchy

Nicolas Blind

Danuta Sosnowska

Alex Segovia

Gérard Zins



Change Record

Issue	§	Page	Date	Observations	RIX
1.0			2019.08.26	First Version	
1.1			2020.05.05	NIRPS_[HA/HE]_cal_FP renamed NIRPS_[HA/HE]_cal_wave_FP NIRPS_[HA/HE]_cal_contam	
1.2			2020.07.03	NIRPS_gen_cal_LED	
1.3			2020.07.03	Technical tpl renamed NIRPS_gen_tec_XXX NIRPS_gen_tec_AOWfsFov added NIRPS_gen_tec_resetFECU removed Appendix section removed; no longer relevant	
1.4			2020.07.30	All the wavelength calibrations put in one template Added two calibration templates on sky Updated acquisition templates	
1.5			2021.01.26	Both localization templates put into one Flat templates changed to operate on each fibre separately in one template	
1.6			2021.02.09	Added a technical template: both fibres flat	
1.7			2021.05.15	Updated with the ESO RIXes	
1.8			2021.10.05	Updated with the ESO PAE RIXex + update from COMM3 tests	
1.9			2022.08.09	Updated from COMM5	



Table of contents

1. GENERAL ASPECTS.....	5
1.1 Scope of the document	5
1.2 Purpose.....	5
1.3 Applicable Documents	5
1.4 Reference Documents	5
1.5 Acronyms	5
1.6 Stylish conventions	6
1.7 Templates notation	6
2. OVERVIEW.....	7
2.1 Instrument Modes	7
2.2 Detector operation	7
3. TEMPLATE NAMING CONVENTION	8
3.1 TSF keywords	8
3.2 Templates list.....	8
4. NIRPS ACQUISITION TEMPLATES.....	10
4.1 NIRPS_[HA/HE]_acq_objAB.....	10
4.2 NIRPS_[HA/HE]_acq_wavesimult	11
5. NIRPS+HARPS ACQUISITION TEMPLATES	12
6. OBSERVATION TEMPLATES.....	14
6.1 NIRPS_gen_obs	14
6.2 NIRPS_gen_obs_[HAM/EGGS]	14
7. CALIBRATION TEMPLATES.....	16
7.1 NIRPS_[HA/HE]_cal_dark	16
7.2 NIRPS_[HA/HE]_cal_LED	16
7.3 NIRPS_[HA/HE]_cal_loc.....	17
7.4 NIRPS_[HA/HE]_cal_flat.....	17
7.5 NIRPS_[HA/HE]_cal_flatAB	18
7.6 NIRPS_[HA/HE]_cal_wave	18
7.7 NIRPS_[HA/HE]_cal_contam.....	19
7.8 NIRPS_[HA/HE]_cal_skyflat	19
7.9 NIRPS_[HA/HE]_cal_std.....	19
7.10 NIRPS_[HA/HE]_cal_telluric	20
7.11 NIRPS_[HA/HE]_cal_sun_wavesimult	20
8. TECHNICAL TEMPLATES.....	22
8.1 NIRPS_gen_tec_IRCBiasDark	22
8.2 NIRPS_gen_tec_IRCFlat	23
8.3 NIRPS_gen_tec_IRCTTIM	23
8.4 NIRPS_gen_tec_AOWfsDark	23
8.5 NIRPS_gen_tec_AODmBias	24
8.6 NIRPS_gen_tec_AOFiberOffset	24
8.7 NIRPS_gen_tec_AOIm	25
8.8 NIRPS_gen_tec_AOWfsFov	26
8.9 NIRPS_gen_tec_ADCWobble	26
8.10 NIRPS_gen_tec_NCPA	27
8.11 NIRPS_gen_tec_fiberHole	27



8.12	NIRPS_gen_tec_NIRCIImageAverage	28
8.13	NIRPS_[HA/HE]_tec_flat.....	28
9.	TEMPLATE PARAMETERS.....	29
10.	APPENDIX: TSF FILES AS TESTED AT COMM3 (END SEPT 2021)	32

List of Tables

Table 1: Template types and names	8
Table 2: NIRPS Templates.....	9
Table 3a: Devices configuration for acquisition, observation and calibration templates	29
Table 3b: Devices configuration for acquisition, observation and calibration template	30
Table 4: DPR keywords for acquisition, observations and calibration templates	31



1. GENERAL ASPECTS

1.1 Scope of the document

This document describes the NIRPS templates to be used during Acquisition, Observation, Calibration and Maintenance phases. Functional specifications of other parts of the VLT data flow, such as the pipeline, are outside its scope.

1.2 Purpose

The purpose of this document is to describe the NIRPS templates design. It should be used by the templates developers as reference. The reader of this document is assumed to be familiar with the NIRPS instrument [AD-2] and with the Phase 2 preparation tools (P2 or P2PP) [RD-4].

NIRPS templates are characterized by TSFs (Template Signature Files) allowing the user to create OBs (Observation Blocks) of science and calibration exposures. The templates are the building blocks of science, calibration and technical or maintenance OBs.

This document logically follows the NIRPS Control Software User Requirements Specifications [AD-3], NIRPS Calibration Plan [AD-1] and Data Reduction Library Design Description [AD-4] documents.

1.3 Applicable Documents

no.	document name	document number, Iss./Rev.
AD-1	NIRPS Observations and Operations Plan	NIRPS-2020-ALL-RP-001
AD-2	Instrument user manual	NIRPS-2020-GEN-UM-148
AD-3	NIRPS Control Software Architecture	NIRPS-4500-GEN-SP-200
AD-4	Instrument Software User and Maintenance Manual	NIRPS-4500-GEN-UM-204
AD-5	Data Reduction Library Design Description	NIRPS-4500-GEN-DER-210

1.4 Reference Documents

no.	document name	document number, Iss./Rev.
RD-1	Common SW for Templates User Manual	VLT-MAN-ESO-17240-2240 – 1.1 – 2001-03-01
RD-2	HARPS User Manual	3P6-MAN-ESO-90100-0005 1.3 01/03/2006
RD-3	Phase 2 Proposal Preparation Tool (P2PP) v2.13	VLT-MAN-ESO-19200-1644 Issue 9 13/11/2007

1.5 Acronyms

NIRPS	Near Infra-Red Planet Searcher
TSF	Template signature files
SEQ	Sequencer files
REF	Reference files
TDCS	Technical Detector Control System



OB	Observation Block
BOB	Broker for Observation Block
FP	Fabry-Pérot
GUI	Graphical User Interface
VLT	Very Large Telescope
P2PP	Phase 2 Preparation Tool
AO	Adaptive Optics
AORTC	Adaptive Optics Real Time Computer
NIRCAM	Near Infrared Camera
PSF	Point Spread Function
HE/HEF	High Efficiency
HA/HAF	High Accuracy
WFS	Wave Front Sensor
FE	Front-End
CU	Calibration Unit
TT	Tip-Tilt

1.6 Stylish conventions

The following styles are used:

bold - in the text, for pre/suffixes as they have to be typed.

Italic - in the text, for parts that have to be substituted with the real content before typing.

`teletype` - for file names and commands

`<name>` - in the examples, for parts that have to be substituted with the real content before typing

1.7 Templates notation

A template name written as:

`NIRPS_[HA/HE]_acq_wavesimult.tsf`

refers to both the high accuracy mode template:

`NIRPS_HA_acq_wavesimult.tsf`

and the high efficiency mode template:

`NIRPS_HE_acq_wavesimult.tsf`



2. OVERVIEW

The templates file set is made up by their Template Signature Files (.tsf), their Reference Files (.ref) and their Sequences File (.seq). The Template Signature Files contain the parameters - describing the configuration of the telescope, instrument and detector - that have to be set, including those to be specified by the observer during the Phase II of the observation preparation. The Reference Files (.ref) contain the fixed parameters for the initial instrument setup. The Sequence Files (.seq) contain the code, written in Tcl language that is executed when BOB fetches and interprets the template. The templates are the building blocks of the observation, calibration, acquisition and technical OBs. An OB is the quantum of observation, i.e. a data structure containing all the parameters necessary to define a single observation. Furthermore, some templates are defined to handle the maintenance operations needed to maintain the high quality of the instrument and ensure the data accuracy. Every operation performed on the instrument must use a dedicated template. NIRPS is a fiber fed new ultra-stable infrared (YJH) spectrograph that is installed on ESO's 3.6-m telescope in La Silla, Chile. Achieving a precision of 1 m/s, NIRPS is designed to find rocky planets orbiting M dwarfs, and operates together with HARPS (High Accuracy Radial velocity Planet Searcher) [RD-3].

2.1 *Instrument Modes*

NIRPS will have two instrument modes, high efficiency (HE) and high accuracy (HA) [AD-1]:

HE (High Efficiency) mode. In this mode we have the large fiber with 66um core. It provides high efficiency but a smaller spectral resolution and low accuracy in radial velocity measurement.

HA (High Accuracy) mode. In this mode we have the small and high-resolution fiber with a 29um core. It provides a high spectral resolution and high accuracy radial velocity measurements.

2.2 *Detector operation*

The H4RG detector integration time DET_DIT is set to 5.57s. The user defines the integration time of one sub-exposures DET UIT and the number of sub-exposures DET_NEXP considering that exposures longer than **1000** sec are not recommended. DET_DIT and NDSAMPLES are automatically computed according to the following scheme:

If **NIRPS_DET_UIT < 5.57 sec:**

NIRPS_DET_NDSAMPLES = 2

NIRPS_DET_DIT = 5.57

If **NIRPS_DET_UIT > 5.57 sec:**

NIRPS_DET_NDSAMPLES = round (NIRPS_DET_UIT / 5.57) + 1

NIRPS_DET_DIT = 5.57 x (NIRPS_DET_NDSAMPLES -1)



3. TEMPLATE NAMING CONVENTION

NIRPS TSFs are divided into groups according to their functionality. The name of a TSF has the following scheme [RD-1]:

NIRPS_<mode>_<type>_<description>.tsf

<mode> is the instrument configuration (HA for high accuracy or HE for high efficiency or gen for generic templates).

<type> is the type of template (see table Table 1).

<description> is a string identifying the purpose of the template.

Calibration	NIRPS_<mode>_ cal _<description>.tsf
Acquisition	NIRPS_<mode>_ acq _<description>.tsf
Observation	NIRPS_<mode>_ obs _<description>.tsf
Technical	NIRPS_<mode>_ tec _<description>.tsf

Table 1: Template types and names

3.1 TSF keywords

Every TSF specifies and uses a Reference Setup File, which contains the setting of all keywords needed to perform one or more observations foreseen by that template.

Keywords appearing in NIRPS TSFs are:

1. Keywords whose value has to be set by the user (through PHASE 2 tool).
2. Keywords whose value is fixed for a given template but are hidden from the user.

Obviously, fixed keywords cannot be set by the user at PHASE 2 level and hence they are not visible.

3.2 Templates list

Table 2 lists all the NIRPS templates: the ones supplied to the users together with the PHASE 2 tool for the preparation of their science OBs and the technical ones.

NIRPS ACQUISITION TEMPLATES	NIRPS_[HE/HA]_acq_objAB NIRPS_[HE/HA]_acq_wavesimult
NIRPS+HARPS ACQUISITION TEMPLATES	NIRPS_[HA/HE]_acq_HARPS_[HAM,EGGS]
NIRPS OBSERVATION TEMPLATES	NIRPS_gen_obs
NIRPS+HARPS OBSERVATION TEMPLATES	NIRPS_[HA/HE]_obs_HARPS_[HAM/EGGS]
NIRPS CALIBRATION TEMPLATES	NIRPS_[HA/HE]_cal_dark NIRPS_[HA/HE]_cal_loc



	NIRPS_[HA/HE]_cal_flat NIRPS_[HA/HE]_cal_flatAB NIRPS_[HA/HE]_cal_wave NIRPS_[HA/HE]_cal_contam NIRPS_[HA/HE]_cal_skyflat NIRPS_[HA/HE]_cal_std NIRPS_[HA/HE]_cal_telluric NIRPS_[HA/HE]_cal_sun_wavesimult
TECHNICAL TEMPLATES	NIRPS_[HE/HA]_tec_objA NIRPS_HA_tec_objAB_HARPS_HAM_objAB NIRPS_HA_tec_wavesimult_HARPS_EGGS_objAB NIRPS_HA_tec_wavesimult_HARPS_HAM_wavesimult NIRPS_HE_tec_objAB_HARPS_EGGS_objAB NIRPS_HE_tec_objAB_HARPS_HAM_wavesimult NIRPS_gen_tec_LED NIRPS_gen_tec_AOWfsFov NIRPS_gen_tec_ADCWobble NIRPS_gen_tec_AODmBias NIRPS_gen_tec_AOFiberOffset NIRPS_gen_tec_AOIm NIRPS_gen_tec_AOWfsDark NIRPS_gen_tec_IRCBiasDark NIRPS_gen_tec_IRCFlat NIRPS_gen_tec_IRCTTIM NIRPS_gen_tec_NCPA NIRPS_gen_tec_fiberHole NIRPS_gen_tec_NIRCIImageAverage

Table 2: NIRPS Templates



4. NIRPS ACQUISITION TEMPLATES

The goal of these templates for NIRPS only (without HARPS) is to perform the target (object or sky) acquisition. After taking a first acquisition image with the NIRCAM, the target or the reference object is identified by the user and interactively moved to a reference position. At the end of the acquisition phase, the acquisition template starts and configures the AO system. Every observation of a new target must start with an acquisition template. Telescopes preset can only be done via acquisition templates.

Acquisition templates shall support the following operations:

- Object acquisition for visual verification by the observer of the presence of the object in the acquisition field.
- Acquisition of the clear sky during twilight
- Fine centering, to place the object on the fiber center.

The acquisition templates include the specific target parameters:

- Alpha and delta offset for the guiding (default = 0)
- Magnitude in I band and J band (for WFS and NIRCAM automatic preset)
- Target systemic radial velocity (default =0)

The focal plane stage #2 which correspond to the Field of View of the WFS is set to the WIDE mode (the NARROW mode will not be offered). The NIRCAM magnification is set to the HIGH mode in order to keep the higher sampling (35 marcsec / pixel). The LOW mode will not be offered.

The NIRPS instrument package contains [2 acquisition templates](#) for NIRPS alone mode. They are all listed in Table 2.

The NIRPS acquisition phase prepares the instrument to observe with [two](#) different situations:

- objAB: Object positioned in the first fiber and sky in the second.
- wavesimult: Object positioned in the first fiber and a calibration source positioned in the second fiber.

The HARPS part of the template is taken care by the HARPS templates, therefore only the [two](#) proper NIRPS acquisition templates are described here.

The major part of the templates is normally executed in an automatic way, without user intervention.

- Telescope and instrument in guiding state

4.1 NIRPS_[HA/HE]_acq_objAB

This template is used to perform an acquisition with sky simultaneous reference on fiber B, in either mode HA or HE.

¶ Inputs: inputs:

- Target parameters
- Guiding parameters

¶ Instrument setup

- Setup telescope according to target
- Setup FE and CU (Fiber B on Sky and CU on Dark position)

¶ Sequence

- Setup guiding camera
- Setup AO system
- Start guiding



¶ Result

- Telescope and instrument in guiding state

4.2 **NIRPS_[HA/HE]_acq_wavesimult**

This template is used to perform an acquisition with a Hollow-Cathode lamp or FP simultaneous reference on fiber B, in either mode HA or HE.

¶ Inputs:

- Target parameters
- Guiding parameters

¶ Instrument setup

- Setup telescope according to target
- Setup FE and CU
- Lamp selection stage for fiber B (UN1/UN2/FP/[LFC](#))

¶ Sequence

- Setup guiding camera
- Setup AO system
- Start guiding

¶ Result

- Telescope and instrument in guiding state



5. NIRPS+HARPS ACQUISITION TEMPLATES

The goal of these templates is to perform the target (object or sky) acquisition for HARPS+NIRPS mode. After taking a first acquisition image with the NIRCAM, the target or the reference object is identified by the user and interactively moved to a reference position. At the end of the acquisition phase, the acquisition template starts and configures the AO system. Every observation of a new target must start with an acquisition template. Telescopes preset can only be done via acquisition templates. The HARPS acquisition is done through the NIRPS acquisition using then proper HARPS acquisition templates.

Acquisition templates shall support the following operations:

- Object acquisition for visual verification by the observer of the presence of the object in the acquisition field.
- Acquisition of the clear sky during twilight
- Fine centering, to place the object on the fiber center.

The acquisition templates include the specific target parameters:

- Magnitude in I band and J band (for WFS and NIRCAM automatic preset)
- Target systemic radial velocity (default =0)
- Target spectral type (for CCF computation)

Four generic NIRPS+HARPS templates with all possible configurations listed in Table 2 will be provided to the users.

- NIRPS_HA + HARPS_HAM,
- NIRPS_HA + HARPS_EGGS,
- NIRPS_HE + HARPS_HAM,
- NIRPS_HE + HARPS_EGGS.

For these four generic acquisition templates, the acquisition mode of NIRPS and HARPS must be selected among the different possibilities:

- HARPS_HAM acquisition mode (objA, objAB, thosimult, or wavesimult)
- HARPS_EGGS acquisition mode (objA, objAB)
- NIRPS acquisition mode (objAB, wavesimult)

The default lamp for wavesimult mode is set to FP but it should be also LFC.

We expect to have mainly the 5 following NIRPS+HARPS acquisition templates useful for the observers:

- NIRPS_HA_wavesimult + HAM_wavesimult (NIRPS + HARPS both in High Accuracy mode)
- NIRPS_HA_wavesimult + EGGS_objAB (NIRPS driven obs in High Accuracy + HARPS high efficiency)
- NIRPS_HE_objAB + EGGS_objAB (NIRPS + HARPS both in High efficiency mode with Sky)



TITLE : NIRPS TEMPLATES REFERENCE MANUAL

REF. : NIRPS-4500-GEN-UM-203

ISSUE : 1.9

DATE: 9/08/2022

PAGE 13/93

- NIRPS_HE_objAB + HAM_wavesimult (HARPS driven obs in High Accuracy + NIRPS high efficiency)
- NIRPS_HA_objAB + HAM_objAB (NIRPS + HARPS both in high resolution mode with Sky)

The HARPS part of the template is taken care by the HARPS templates, therefore only the three proper NIRPS acquisition templates are described here.

The major part of the templates is normally executed in an automatic way, without user intervention.



6. OBSERVATION TEMPLATES

Observation templates control the science observations. They allow the user to define sequences of scientific exposures. Only one observation template is foreseen for each selected instrument mode (HA, HE). For each instrument mode, two fibers feed the spectrograph: the science fiber (fiber A) and the simultaneous reference or sky fiber (fiber B). Therefore, in any mode, NIRPS is able to record two spectra simultaneously. During scientific observations, fiber A always carries the target, whereas fiber B may carry the simultaneous reference [source or the sky](#) [AD-9].

6.1 [NIRPS_gen_obs](#)

This template is used to perform NIRPS alone observations in either mode HA or HE (defined in the acquisition template). The user defines the integration time of one sub-exposures `NIRPS_DET UIT` and the number of sub-exposures `NIRPS_DET_NEXP` considering that exposures longer than [1000](#) sec are not recommended. `NIRPS_DET_DIT` and `DET_NDSAMPLES` with the following scheme:

If `NIRPS_DET UIT < 5.57` sec:

`NIRPS_DET_NDSAMPLES = 2`
`NIRPS_DET_DIT = 5.57`

If `NIRPS_DET UIT > 5.57` sec:

`NIRPS_DET_NDSAMPLES = round (NIRPS_DET UIT / 5.57) + 1`
`NIRPS_DET_DIT = 5.57 x (NIRPS_DET_NDSAMPLES -1)`

Inputs:

- User Integration time (default = 60s; [maximum 1000s](#))
- NEXP – number of repeated exposures

Instrument setup

- (none)

Sequence

- Start exposure

Result

- FITS file with result of the exposure

6.2 [NIRPS_gen_obs \[HAM/EGGS\]](#)

This template is used to perform NIRPS+HARPS observations in either HARPS mode High Accuracy (HAM) or High Efficiency (EGGS) mode. The user defines the 5 following parameters:

- `HARPS_DET UIT = [13600]` (Exposure time in sec of one sub-exposure)
- `HARPS_TPL_NEXP = [1999]` (Number of sub-exposures)
- `NIRPS_DET UIT = [5.57 1000]` (Exposure time in sec of one sub-exposure)
- `NIRPS_TPL_NEXP = [1 ... 999]` (Number of sub-exposures)
- [CCD readout mode for HARPS \[416kHz,1,high / 104kHz,1,high\]](#)

In order to optimize telescope time, integration times should be roughly matched to minimize overheads and the user must take care to adapt [the 4 following parameters](#) in order to have:

$$\text{HARPS_DET_UIT} \times \text{HARPS_TPL_NEXP} \approx \text{NIRPS_DET_UIT} \times \text{NIRPS_TPL_NEXP}$$

Furthermore, user should consider that `NIRPS_DET UIT > 1000s` and `HARPS_DET UIT > 3600s` are not recommended.



Inputs:

- HARPS User Integration time (default = 60s; maximum [3600s](#))
- NIRPS User Integration time (default = 60s; maximum [1000s](#))
- HARPS NEXP – number of repeated exposures
- NIRPS NEXP – number of repeated exposures

Instrument setup

- (none)

Sequence

- Start exposure

Result

- FITS file with result of the exposure



7. CALIBRATION TEMPLATES

The calibrations templates are used to determine the localization and geometry of spectral orders, the slit geometry, the blaze profile, the spectral flat-field response, the cross-talk contamination from fiber B to fiber A, the relative and absolute fibers efficiency and the wavelength calibration. They should be performed during the day to minimize nighttime losses. Calibrations should take less than 2 hours and should be completed at least 2 hours before the start of the night to avoid any persistence on the IR detector from arc lines of the Hollow-Cathode lamp. If the flash flooding is applied, no need to have idle time before the observations start. Following the timescale of calibration stability, the maximum gap between the calibration sequence and the beginning of the night will be determined during acceptance tests.

The exposure time for the calibration should be negligible with respect to the instrumental drift timescale (few hours) but not too short with respect to possible high-frequency vibrations (few Hz). Therefore, calibration exposure time should be between 5 and 100 sec nominally and in any case shorter than 1800 s per sequence.

7.1 *NIRPS_[HA/HE]_cal_dark*

This is the template responsible for dark exposure in HA/HE instrument mode. Series of minimum 5 Darks (exposure time to be defined during acceptance tests for NIRPS) to check if read-out noise, dark current and hot pixel mask are consistent with baseline values. Number of frames required is given by the user. The operations performed by this template are the following:

- ¶ Inputs:
 - NDIT – number of reads
 - NEXP – number of repeated exposures
- ¶ Instrument setup
 - Setup FE and CU (dark)
- ¶ Sequence
 - Perform DARK exposures
- ¶ Result
 - Dark frame for the detector

7.2 *NIRPS_[HA/HE]_cal_LED*

This is the template responsible for the LED exposure in HA/HE instrument mode.

- ¶ Inputs:
 - Number of exposures
 - Exposure time
- ¶ Instrument setup
 - Turn on LED lamp
 - Setup FE and CU (dark on fiber A and B)
- ¶ Sequence
 - Perform LED exposures
- ¶ Result
 - LED fits frame for the H4RG detector
 - Turn off LED lamp



7.3 *NIRPS_[HA/HE]_cal_loc*

This template performs an exposure of white lamp on fiber A and B sequentially. These exposures are used for order localization.

¶ Inputs:

- NDIT – number of reads
- NEXP – number of repeated exposures
- ND filter wheels positions

¶ Instrument setup

- Setup FE and CU
- Turn on white lamp

¶ Sequence

- Perform exposures

¶ Result

- Result frame

7.4 *NIRPS_[HA/HE]_cal_flat*

This template performs a sequence of, at least 5, white lamp exposures on fibers A and B sequentially. This sequence is used by the data reduction pipeline to produce a spectral "master flat-field", to monitor the ageing of the detector (IR detector loses pixels through its life), to monitor the fiber transmission and to produce the order profile, the flat and the blaze. Note: the final number of exposures will be defined during acceptance tests. The photon noise of the master flat field should be smaller than pixel-to-pixel flat-field variation during the night (FF stability should be 10^{-3} over 10 hours). To reach such accuracy one need 10^6 photons per pixel. To maintain a reasonable linearity, we will use <1/2 of the dynamic range of the detector. For the monitoring of the detector aging, 25 exposures per flat-field sequence are needed.

¶ Inputs:

- NDIT – number of reads
- NEXP – number of repeated exposures
- ND filter wheels positions

¶ Instrument setup

- Setup FE and CU
- Position the white lamp on fiber A

¶ Sequence

- Perform exposures

¶ Instrument setup

- Setup FE and CU
- Position the white lamp on fiber B

¶ Sequence

- Perform exposures

¶ Result

- Result frames



7.5 NIRPS_[HA/HE]_cal_flatAB

This template performs a sequence of, at least 1, white lamp exposures on fibers A and B simultaneously. This sequence is used by the data reduction pipeline to produce a spectral "master flat-field", to monitor the ageing of the detector (IR detector loses pixels through its life), to monitor the fiber transmission and to produce the order profile, the flat and the blaze. Note: the final number of exposures will be defined during acceptance tests. The photon noise of the master flat field should be smaller than pixel-to-pixel flat-field variation during the night (FF stability should be 10^{-3} over 10 hours). To reach such accuracy one need 10^6 photons per pixel. To maintain a reasonable linearity, we will use <1/2 of the dynamic range of the detector. For the monitoring of the detector aging, 25 exposures per flat-field sequence are needed.

- ¶ Inputs:
 - NDIT – number of reads
 - NEXP – number of repeated exposures
 - ND filter wheels positions
- ¶ Instrument setup
 - Setup FE and CU
 - Position the white lamp on fiber A
- ¶ Sequence
 - Perform exposures
- ¶ Instrument setup
 - Setup FE and CU
 - Position the white lamp on fiber B
- ¶ Sequence
 - Perform exposures
- ¶ Result
 - Result frames

7.6 NIRPS_[HA/HE]_cal_wave

This template performs a Hollow Cathode or Fabry-Perrot lamp exposure. Both fibers are illuminated by a Hollow Cathode or Fabry-Perrot, they can be illuminated by two different lamps at the same time. A sequence of FP-FP, HC-FP, FP-HC and HC-HC exposures is used to compute the wavelength solution. The instrumental drift with respect to the previous calibration frames is measured.

- ¶ Inputs:
 - NDIT – number of reads
 - NEXP – number of repeated exposures
 - ND filter wheels positions
 - Lamp selection stage for fiber A (FP/UN1/UN2)
 - Lamp selection stage for fiber B (FP/UN1/UN2)
- ¶ Instrument setup
 - Setup FE and CU
 - Turn on the UN1/UN2 lamp if foreseen to be used
- ¶ Sequence
 - Perform exposures



- Switch off the UN1/UN2 lamp, unless wanted ON by the user

¶ Result

- Result frame

7.7 **NIRPS_[HA/HE]_cal_contam**

This template performs DARK-FP or DARK-UN1 exposures in which only the fiber B is illuminated by light from the Fabry-Perot or the Hollow-Cathode lamp. It is used to compute the contamination level of the simultaneous FP/UN1 on the science fiber A.

¶ Inputs:

- NDIT – number of reads
- NEXP – number of repeated exposures
- Lamp selection stage for fiber B (FP)

¶ Instrument setup

- Setup FE and CU

¶ Sequence

- Perform exposures

¶ Result

- Result frame

7.8 **NIRPS_[HA/HE]_cal_skyflat**

This template performs an observation on sky during daylight or twilight. Both fibers are illuminated by the skylight. The purpose of this calibration is to compute the relative efficiency between the two fibers.

¶ Inputs:

- NDIT – number of reads
- NEXP – number of repeated exposures

¶ Instrument setup

- Setup FE and CU (both fibers on sky)

¶ Sequence

- Perform exposures

¶ Result

- Result frame

7.9 **NIRPS_[HA/HE]_cal_std**

This template performs an observation of a spectrophotometric standard star with sky simultaneous reference on fiber B. It first does the acquisition on the chosen target and then the observation. It is similar to the science observations, but as a calibration template it follows a slightly different scheme, i.e. both acquisition and observation are together in one template. The purpose of this calibration is to compute the absolute efficiency of the instrument.

¶ Inputs:

- Exposure time
- NEXP – number of repeated exposures



- Target parameters
- Guiding parameters
- ¶ Instrument setup
 - Setup telescope according to target
 - Setup FE and CU (Fiber B on Sky and CU on Dark position)
- ¶ Sequence
 - Setup guiding camera
 - Setup AO system
 - Start guiding
 - Start exposure
- ¶ Result
 - FITS file with result of the exposure

7.10 NIRPS_[HA/HE]_cal_telluric

This template performs an observation of a telluric standard star with sky simultaneous reference on fiber B. It first does the acquisition on the chosen target and then the observation. It is similar to the science observations, but as a calibration template it follows a slightly different scheme, i.e. both acquisition and observation are together in one template. The purpose of this calibration is to compute the telluric mask.

- ¶ Inputs:
 - Exposure time
 - NEXP – number of repeated exposures
 - Target parameters
 - Guiding parameters
- ¶ Instrument setup
 - Setup telescope according to target
 - Setup FE and CU (Fiber B on Sky and CU on Dark position)
- ¶ Sequence
 - Setup guiding camera
 - Setup AO system
 - Start guiding
 - Start exposure
- ¶ Result
 - FITS file with result of the exposure

7.11 NIRPS_[HA/HE]_cal_sun_wavesimult

This template performs an observation of the Sun using HELIOS telescope. The setup for this observation is done at the level of the calibration unit. A switch is used to feed the fiber A with the sunlight. The fibre B can be fed with one of the calibration lamps: FP or UNe.

- ¶ Inputs:
 - Exposure time
 - NEXP – number of repeated exposures
- ¶ Instrument setup
 - Setup FE and CU (Fiber B on Sky and CU on Dark position)
- ¶ Sequence
 - Start exposure



TITLE : NIRPS TEMPLATES REFERENCE MANUAL

REF. : NIRPS-4500-GEN-UM-203

ISSUE : 1.9

DATE: 9/08/2022

PAGE 21/93

 Result

- FITS file with result of the exposure



8. TECHNICAL TEMPLATES

The technical templates will allow the analysis of the performances of NIRPS as well as to perform calibrations on the Front End of the instrument (cameras, motors, as well as the Adaptive Optics system). Each template allows to measure/calibrate several parameters related either to the mechanical parts of the Front End or to the Adaptive Optics system. These parameters will be stored in the Instrument Performance Database and/or in the AORTC in order to allow technical staff to monitor the instrument performance or problems.

All the templates have a set of parameters that should be provided either by typing them directly to BOB or via P2 application. Also, each template has a specific setup phase. In this phase, the template configures specific values and positions of the devices in the FE, CU and AO RTC. For the FE and CU, the configurations are stored in reference files. For the AO, the configuration is done directly in the template.

In the next sections we give a brief description of the parameters, setup and actions performed by each template. For details on the internal work of each template see observation plan [AD-1].

8.1 *NIRPS_gen_tec_IRCBiasDark*

This template is used to perform the Bias, Dark and Bad map measurements in the NIRCAM. This template should be executed every day. The goal is to identify the background levels on the guide camera to allow image reductions.

¶ Inputs:

- Number of exposures to average for the bias frame
- Number of exposures to average for the dark frame
- Number of exposures to average for the badmap frame

¶ Instrument setup

- Setup FE and CU to dark

¶ Sequence

- Setup guiding camera for BIAS
- For each sensibility (low, medium, high)
 - Expose guiding camera
 - Store temporary result
- Setup guiding camera for DARK
- For each sensibility (low, medium, high)
 - Expose guiding camera
 - Store temporary result
- Setup guiding camera for BADMAP
- For each sensibility (low, medium, high)
 - Expose guiding camera
 - Store temporary result
- Copy previous flat calibration

¶ Result

- If no errors:
- Average frame for BIAS, DARK and BADMAP for sensibilities low, medium and high
- Copy of the previous flat calibrations

¶ Frequency: daily



8.2 NIRPS_gen_tec_IRCFlat

This template performs the flat calibration of the NIRCAM. The goal is to measure the flat field of the camera.

- ¶ Inputs:
 - Number of exposures for average for the flat frame

- ¶ Instrument setup
 - Setup FE
 - Setup CU

- ¶ Sequence
 - Setup guiding camera for FLAT
 - Expose frames in low, medium and high sensibility
 - Store temporary result

- ¶ Result
 - If successful:
 - Average frame for FLAT for sensibilities low, medium and high

- ¶ Frequency: daily

8.3 NIRPS_gen_tec_IRCTTIM

This template performs the calibration of the Tip-Tilt interaction matrix for the NIRCAM. The purpose of this template is to calibrate the plate scale of the tip tilt relation to the PSF position on the guide camera.

- ¶ Inputs:
 - Tip-Tilt scan amplitude
 - Number of points per scan
 - Lens Magnification

- ¶ Instrument setup
 - Setup FE
 - Setup PSF on AO

- ¶ Sequence
 - Scan tip tilt in the horizontal direction
 - Store PSF centroids
 - Scan tip tilt in the vertical direction
 - Store PSF centroids
 - Compute command matrix

- ¶ Result
 - Tip tilt command matrix

- ¶ Frequency: monthly, after maintenance

8.4 NIRPS_gen_tec_AOWfsDark

This template is used to perform the dark calibration for the WFS for the various defined modes of the camera.

- ¶ Inputs:
 - Number of repetitions



- ¶ Instrument setup
 - Setup FE, (FP1 – OUT)
 - Setup AO
- ¶ Sequence
 - Send WFS dark command on AO
 - AO check for presence of straylight up to gain=600 and dit=40ms.
 - If OK, proceed to calibration
- ¶ Result
 - OK or FAILURE on AO
- ¶ Frequency: daily

8.5 NIRPS_gen_tec_AODmBias

This template performs the calibration of the DM bias commands of the AO system.

[At the time of document delivery, this template is not yet implemented. The calibration is however performed on daily basis on the AO side. It shall be ready for PAE.]

- ¶ Inputs:
 - Number of repetitions
 - Fibers position
- ¶ Instrument setup
 - Setup FE in standard calibration configuration
 - Setup AO [sequence to describe]
- ¶ Sequence
 - Reset AO
 - Load reference slopes according to parameter position
 - Set WFS exposure
 - Check flux level on sub-apertures
 - If OK:
 - Set new reference slopes
 - Perform a short close loop
 - Check flux level on sub-apertures
 - If OK:
 - Save new DM bias according to position
- ¶ Result
 - OK or FAILURE from AO
- ¶ Frequency: daily

8.6 NIRPS_gen_tec_AOFiberOffset

This template aims at defining the tip-tilt offset to apply to the WFS sensor reference slopes at start of observation.

[At the time of document delivery, this template is not yet implemented. The calibration is however performed on regular basis on the AO side. It shall be ready for PAE.]

- ¶ Inputs:
 - Number of repetitions



- Fibers position
- Number of iterations in the centering operation via TTM
- ¶ Instrument setup
 - Setup FE
 - Setup AO
- ¶ Sequence
 - Reset AO system
 - Start laser
 - Load DM bias 'wfs', load 'ncpa' reference slopes
 - Set AO system exposure
 - Check flux level on sub-apertures
 - If OK
 - Re-center PSF on the fiber hole with TT mount (Niter)
 - Check flux level on sub-apertures
 - If OK
 - Save reference slopes according to fiber
- ¶ Result
 - OK or FAILURE from AO
- ¶ Frequency: monthly; after maintenance, after NIRPS_gen_tec_NCPA

8.7 *NIRPS_gen_tec_AOIm*

This template is used to perform the daily calibration of the Interaction Matrix (IM) of the AO system. The goal is to calibrate the response of WFS to DM actuation and gives the material for the computation of all the required command matrices. The calibration follows a standard push-pull sequence for every individual actuator, and is not implemented as an Hadamard method. At the end of the calibration procedure, the AO system performs various verifications (flux level, slope level, actuator detection, and ultimately a short close loop test) and send back an help/error message to the ICS and operator.

- ¶ Inputs:
 - Number of push-pull sequence for each actuator
 - Number of frames averaged for each push and pull step.
- ¶ Instrument setup
 - Setup FE in standard calibration configuration
 - Setup AO [sequence to describe]
- ¶ Sequence
 - Reset AO system
 - Start lasers
 - Set WFS exposure via auto-gain command
 - Check flux level in sub-apertures
 - If OK
 - Proceed to calibration
 - AO checks IM quality and sends error message accordingly
- ¶ Result
 - OK or FAILURE on AO
- ¶ Frequency: daily (weekly)



8.8 *NIRPS_gen_tec_AOWfsFov*

This template to calibrate the center of the WFS field of view (0-TT slope offset) on the guiding camera. Used for displaying the FoV of the WFS.

¶ Inputs:

- Lens magnification
- Field stop

¶ Sequence

- Setup Front-End for internal calibration
 - FP1: IN
 - FIBERS: NCPA
 - FP2: <input>
 - LASERS: ON
- Load AO NCPA config
- WFS auto gain
- Close the loop for 5s to get sharp PSF
- With NIRCAM, measure and save photocenter position

¶ Result

- New calibrate the center of the WFS field of view

¶ Frequency: after maintenance operation.

8.9 *NIRPS_gen_tec_ADCWobble*

This template performs the calibration of the ADC vs TipTilt device positioning. The purpose of this template is to scan the ADC positions and measure the necessary TT correction in order to compensate for the wobbling of the PSF due to ADC motion.

¶ Inputs:

- Fibers position
- Lens magnification
- Number of repetitions
- Number of steps for each ADC full turn

¶ Instrument setup

- Setup FE
- Setup PSF on AO via loading proper reference slopes and DM bias. Perform a short close loop sequence (~10s) to help the DM maintain its shape during the test (subpixel photo-center accuracy is not mandatory for proper results). Flux level on all sub-apertures is checked before proceeding to the calibration.

¶ Sequence

- For each ADC1 position
 - For each ADC2 position
 - Re-center PSF with TT
 - Store TT position

¶ Result

- File with tip-tilt positions for each ADC setup

¶ Frequency: after maintenance operation.



8.10 NIRPS_gen_tec_NCPA

This template performs Non Common Path Aberration (NCPA) calibration between the AO system and the fiber hole, using the NIRCAM. The output is a reference slope vector. The corresponding DM bias is stored, and updated on a daily basis.

Inputs:

- Number of repetitions
- Number of steps per Zernike
- Number of Zernike to scan
- Amplitude of the Zernikes in the scan

Instrument setup

- Setup FE
- Setup PSF on AO, by loading previous 'ncpa' reference slopes

Sequence

- Loop for number of repetitions
 - Scan each Zernike
 - Scan each step centered on previous amplitude
 - Store maximum flux on guiding camera
 - Compute maximum amplitude on Gaussian fitted fluxes
 - Store max amplitude
 - Store Zernike amplitude vector
 - Average guiding camera images
 - Confirm result

Result

- Zernike amplitudes

Frequency: (monthly), after maintenance (to the operator discretion)

8.11 NIRPS_gen_tec_fiberHole

This template performs the calibration of the fiber position for both modes (HA and HE)

Inputs:

- Fibers position
- Lens magnification
- Number measurements to average
- Number of repetitions

Instrument setup

- Setup FE
- Setup CU

Sequence

- Loop for number of repetitions
 - Loop for number of measurements
 - Measure hole position
 - Display average and standard deviation
 - Store fiber position

Result

- Calibrated fiber position



Frequency: daily, after maintenance

8.12 *NIRPS_gen_tec_NIRCI*mageAverage

This template simple acquire N images and published the final average. It is intended to be used after a calibration template to check the quality of the results.

Inputs:

- Number of images to average
- Camera mode

Instrument setup

- Setup NIRCAM

Sequence

- Sets number of exposures
- Start acquisition
- Stops acquisition

Result

- Averaged Image

8.13 *NIRPS_[HA/HE]_tec_flat*

This is the template responsible for the flat exposure on both fiber simultaneously in HA or HE instrument mode.

Inputs:

- Number of exposures
- Exposure time

Instrument setup

- Turn on the white lamp
- Setup FE and CU (white lamp on fiber A and B)

Sequence

- Perform flat exposures

Result

- FLAT,TUN,TUN fits frame for the H4RG detector
- Turn off the white lamp



9. TEMPLATE PARAMETERS

In this section we present the details related to the template parameters and the device configurations for the FE and the CU. In both cases, the information is grouped by template type (calibration, acquisition and observation). For the technical calibrations the table will be updated.

Exposure	INS.ADC1	INS.ADC2	INS.FILT1	INS.FILT2	INS.OPTI1
	ADC #1	ADC #2	ND STAR	ND SKY	Dichroic
NIRPS_HA_cal_LED	OFF	OFF	-	-	-
NIRPS_HE_cal_LED	OFF	OFF	-	-	-
NIRPS_HA_cal_flat	OFF	OFF	ND = 3.0	ND = 3.0	-
NIRPS_HE_cal_flat	OFF	OFF	ND = 3.0	ND = 3.0	-
NIRPS_HA_cal_dark	OFF	OFF	-	-	-
NIRPS_HA_cal_loc	OFF	OFF	ND = 2.8	ND = 2.8	-
NIRPS_HA_cal_flat	OFF	OFF	ND = 3.0	ND = 3.0	-
NIRPS_HA_cal_flatAB	OFF	OFF	ND = 3.0	ND = 3.0	-
NIRPS_HA_cal_wave	OFF	OFF	const	const	-
NIRPS_HA_cal_contam	OFF	OFF	-	ND = 0.0	-
NIRPS_HA_cal_skyflat	OFF	OFF	-	-	IN
NIRPS_HA_cal_std	AUTO	AUTO	-	-	IN
NIRPS_HA_cal_telluric	AUTO	AUTO	-	-	IN
NIRPS_HE_cal_dark	OFF	OFF	-	-	-
NIRPS_HE_cal_loc	OFF	OFF	ND = 2.8	ND = 2.8	-
NIRPS_HE_cal_flat	OFF	OFF	ND = 3.0	ND = 3.0	-
NIRPS_HE_cal_flatAB	OFF	OFF	ND = 3.0	ND = 3.0	-
NIRPS_HE_cal_wave	OFF	OFF	const	const	-
NIRPS_HE_cal_contam	OFF	OFF	-	ND = 0.0	-
NIRPS_HE_cal_skyflat	OFF	OFF	-	-	IN
NIRPS_HE_cal_std	AUTO	AUTO	-	-	IN
NIRPS_HE_cal_telluric	AUTO	AUTO	-	-	IN
NIRPS_HARPS_acq_gen	AUTO	AUTO	-	-	IN
NIRPS_HA_acq_wavesimult_HAM_acq_wavesimult	AUTO	AUTO	-	-	IN
NIRPS_HA_acq_wavesimult_EGGS_acq_objAB	AUTO	AUTO	-	-	IN
NIRPS_HE_acq_objAB_EGGS_acq_objAB	AUTO	AUTO	-	-	IN
NIRPS_HE_acq_objAB_HAM_acq_wavesimult	AUTO	AUTO	-	-	IN
NIRPS_HE_acq_objAB_HAM_acq_objAB	AUTO	AUTO	-	-	IN
NIRPS_HA_obs_all	AUTO	AUTO	-	calculated	IN
NIRPS_HE_obs_all	AUTO	AUTO	-	calculated	IN
NIRPS_HA_sun_wavesimult	AUTO	AUTO	-	calculated	IN
NIRPS_HE_sun_wavesimult	AUTO	AUTO	-	calculated	IN

Table 3a: Devices configuration for acquisition, observation and calibration

templates



Exposure	INS.OPTI4	INS.OPTI5	INS.OPTI6	INS.OPTI7	INS.OPTI8	INS.OPTI9
Cal stage A	Cal stage B	Fiber heads	Guiding cam	Lamp sel A	Lamp sel B	
NIRPS_HA_cal_LED	IN	IN	-	-	DARK	DARK
NIRPS_HA_cal_LED	IN	IN	-	-	DARK	DARK
NIRPS_HA_cal_flat	IN	IN	HAF	-	TUN	TUN
NIRPS_HE_cal_flat	IN	IN	HEF	-	TUN	TUN
NIRPS_HA_cal_dark	IN	IN	HAF	-	DARK	DARK
NIRPS_HA_cal_loc	IN	IN	HAF	-	TUN DARK	DARK TUN
NIRPS_HA_cal_flat	IN	IN	HAF	-	TUN DARK	DARK TUN
NIRPS_HA_cal_flatAB	IN	IN	HAF	-	TUN	TUN
NIRPS_HA_cal_wave	IN	IN	HAF	-	FP UN1 UN2	UN1 UN2 FP
NIRPS_HA_cal_contam	IN	IN	HAF	-	DARK	FP UN1
NIRPS_HA_cal_skyflat	OUT	OUT	HAF	-	DARK	DARK
NIRPS_HA_cal_std	OUT	OUT	HAF	LOW HIGH	DARK	DARK
NIRPS_HA_cal_telluric	OUT	OUT	HAF	LOW HIGH	DARK	DARK
NIRPS_HE_cal_dark	IN	IN	HEF	-	DARK	DARK
NIRPS_HE_cal_loc	IN	IN	HEF	-	TUN DARK	DARK TUN
NIRPS_HE_cal_flat	IN	IN	HEF	-	TUN DARK	DARK TUN
NIRPS_HE_cal_flatAB	IN	IN	HEF	-	TUN	TUN
NIRPS_HE_cal_wave	IN	IN	HEF	-	FP UN1 UN2	UN1 UN2 FP
NIRPS_HE_cal_contam	IN	IN	HEF	-	DARK	FP UN1
NIRPS_HE_cal_skyflat	OUT	OUT	HEF	-	DARK	DARK
NIRPS_HE_cal_std	OUT	OUT	HEF	LOW HIGH	DARK	DARK
NIRPS_HE_cal_telluric	OUT	OUT	HEF	LOW HIGH	DARK	DARK
NIRPS_HARPS_acq_gen	OUT	IN OUT	HAF	LOW HIGH	DARK	DARK
NIRPS_HA_acq_wavesimult_HARPS_HAM_acq_wavesimult	OUT	IN	HAF	LOW HIGH	DARK	FP UN1
NIRPS_HA_acq_wavesimult_HARPS_EGGS_acq_objAB	OUT	IN	HAF	LOW HIGH	DARK	FP UN1
NIRPS_HE_acq_objAB_HARPS_EGGS_acq_objAB	OUT	OUT	HEF	LOW HIGH	DARK	DARK
NIRPS_HE_acq_objAB_HARPS_HAM_acq_wavesimult	OUT	OUT	HEF	LOW HIGH	DARK	DARK
NIRPS_HE_acq_objAB_HARPS_HAM_acq_objAB	OUT	OUT	HEF	LOW HIGH	DARK	DARK
NIRPS_HA_obs_all	OUT	IN OUT	HAF	LOW HIGH	DARK	DARK FP UN1
NIRPS_HE_obs_all	OUT	IN OUT	HEF	LOW HIGH	DARK	DARK FP UN1
NIRPS_HA_sun_wavesimult	OUT	IN OUT	HAF	LOW HIGH	HELIOS	UN1
NIRPS_HE_sun_wavesimult	OUT	IN OUT	HEF	LOW HIGH	HELIOS	UN1

Table 4b: Devices configuration for acquisition, observation and calibration template



Exposure	DPR.TYPE	DPR.TECH	DPR.CATG
NIRPS_HA_cal_LED	FLAT,LED	IMAGE	CALIB
NIRPS_HE_cal_LED	FLAT,LED	IMAGE	CALIB
NIRPS_HA_cal_flat	FLAT,TUN,TUN	ECHELLE	CALIB
NIRPS_HE_cal_flat	FLAT,TUN,TUN	ECHELLE	CALIB
NIRPS_HA_cal_dark	DARK	IMAGE	CALIB
NIRPS_HA_cal_loc	ORDERDEF,TUN,DARK & ORDERDEF,DARK,TUN	ECHELLE	CALIB
NIRPS_HA_cal_flat	FLAT,TUN,DARK & FLAT,DARK,TUN	ECHELLE	CALIB
NIRPS_HA_cal_flatAB	FLAT,TUN,TUN	ECHELLE	CALIB
NIRPS_HA_cal_wave	WAVE,FP UN1 UN2, FP UN1 UN2	ECHELLE	CALIB
NIRPS_HA_cal_contam	CONTAM,DARK,FP UN1	ECHELLE	CALIB
NIRPS_HA_cal_skyflat	FLAT,SKY,SKY	ECHELLE	CALIB
NIRPS_HA_cal_std	FLUX,STD,SKY	ECHELLE	CALIB
NIRPS_HA_cal_telluric	TELLURIC,SKY	ECHELLE	CALIB
NIRPS_HE_cal_dark	DARK	IMAGE	CALIB
NIRPS_HE_cal_loc	ORDERDEF,TUN,DARK & ORDERDEF,DARK,TUN	ECHELLE	CALIB
NIRPS_HE_cal_flat	FLAT,TUN,DARK & FLAT,DARK,TUN	ECHELLE	CALIB
NIRPS_HE_cal_flatAB	FLAT,TUN,TUN	ECHELLE	CALIB
NIRPS_HE_cal_wave	WAVE,FP UN1 UN2, FP UN1 UN2	ECHELLE	CALIB
NIRPS_HE_cal_contam	CONTAM,DARK,FP UN1	ECHELLE	CALIB
NIRPS_HE_cal_skyflat	FLAT,SKY,SKY	ECHELLE	CALIB
NIRPS_HE_cal_std	FLUX,STD,SKY	ECHELLE	CALIB
NIRPS_HE_cal_telluric	TELLURIC,SKY	ECHELLE	CALIB
NIRPS_HARPS_acq_gen	OBJECT,DARK SKY FP UN1	ECHELLE	ACQUISITION
NIRPS_HA_acq_wavesimult_HARPS_HAM_acq_wavesimult	OBJECT,FP UN1	ECHELLE	ACQUISITION
NIRPS_HA_acq_wavesimult_HARPS_EGGS_acq_objAB	OBJECT,FP UN1	ECHELLE	ACQUISITION
NIRPS_HE_acq_objAB_HARPS_EGGS_acq_objAB	OBJECT,SKY	ECHELLE	ACQUISITION
NIRPS_HE_acq_objAB_HARPS_HAM_acq_wavesimult	OBJECT,SKY	ECHELLE	ACQUISITION
NIRPS_HE_acq_objAB_HARPS_HAM_acq_objAB	OBJECT,SKY	ECHELLE	ACQUISITION
NIRPS_HA_obs_all	According to ACQ	ECHELLE	SCIENCE
NIRPS_HE_obs_all	According to ACQ	ECHELLE	SCIENCE
NIRPS_HA_sun_wavesimult	SUN,UN1	ECHELLE	SCIENCE
NIRPS_HE_sun_wavesimult	SUN,UN1	ECHELLE	SCIENCE

Table 5: DPR keywords for acquisition, observations and calibration templates



10. APPENDIX: TSF FILES AS TESTED AT COMM3 (END SEPT 2021)

```
#*****
# E.S.O. - VLT project
#
# "@(#) $Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#
PAF.HDR.START;
PAF.TYPE      "Template Signature"; # Type of PAF
PAF.ID        "$Id: NIRPS_HE_acq_objA.tsfx 346921 2021-09-27 12:12:40Z gzins $"; # ID of
PAF
PAF.NAME      "NIRPS_HE_acq_objA"; # Name of PAF
PAF.DESC      "NIRPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan"; # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00"; # Civil time for creation
PAF.LCHG.NAME "nirmgr"; # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:37.00"; # Timestamp of last change
PAF.CHCK.NAME ""; # Name of appl. checking
PAF.CHCK.DAYTIM ""; # Time for checking
PAF.CHCK.CHECKSUM ""; # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM   "NIRPS"; # Instrument this template is for
TPL.MODE      ""; # Mode of observation for this template
TPL.VERSION   "$Revision: 346921 $"; # Version of the template
TPL.REFSUP    "NIRPS_acq.ref"; # Reference Setup File
TPL.PRESEQ    "NIRPS_gen_acq.seq"; # Sequencer script
TPL.GUI       ""; # Template GUI panel
TPL.TYPE      "acquisition"; # Type of template
TPL.EXECTIME  ""; # Expected execution time
TPL.RESOURCES ""; # Required resources

# -----
TPL.PARAM     "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number"; # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2"; # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0"; # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM     "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number"; # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2"; # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0"; # Default value
```



SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

TPL.PARAM "SEQ.OSF.AUTO"; # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean"; # Keyword type
SEQ.OSF.AUTO.RANGE "T F"; # Valid range
SEQ.OSF.AUTO.DEFAULT "T"; # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE "OHS"; # Hide keyword in OHS

TPL.PARAM "SEQ.OSF.SCRIPT"; # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string"; # Keyword type
SEQ.OSF.SCRIPT.RANGE ""; # Valid range
SEQ.OSF.SCRIPT.DEFAULT ""; # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE "OHS, BOB"; # Hide keyword in OHS

TPL.PARAM "SEQ.PRESET"; # Next template parameter
SEQ.PRESET.TYPE "boolean"; # Keyword type
SEQ.PRESET.RANGE "T F"; # Valid range
SEQ.PRESET.DEFAULT "T"; # Default value
SEQ.PRESET.LABEL "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE "OHS"; # Hide keyword in OHS

TPL.PARAM "SEQ.TARG.IMAG"; # Next template parameter
SEQ.TARG.IMAG.TYPE "number"; # Keyword type
SEQ.TARG.IMAG.RANGE ""; # Valid range
SEQ.TARG.IMAG.DEFAULT "5"; # Default value
SEQ.TARG.IMAG.LABEL "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

TPL.PARAM "SEQ.TARG.JMAG"; # Next template parameter
SEQ.TARG.JMAG.TYPE "number"; # Keyword type
SEQ.TARG.JMAG.RANGE ""; # Valid range
SEQ.TARG.JMAG.DEFAULT "5"; # Default value
SEQ.TARG.JMAG.LABEL "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

TPL.PARAM "TEL.TARG.ALPHA"; # Next template parameter
TEL.TARG.ALPHA.TYPE "coord"; # Keyword type
TEL.TARG.ALPHA.RANGE ""; # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT"; # Default value



```
# -----  
TPL.PARAM      "TEL.TARG.DELTA";      # Next template parameter  
TEL.TARG.DELTA.TYPE  "coord";        # Keyword type  
TEL.TARG.DELTA.RANGE  "";            # Valid range  
TEL.TARG.DELTA.DEFAULT "NODEFAULT";   # Default value  
  
# -----  
TPL.PARAM      "TEL.TARG.EQUINOX";    # Next template parameter  
TEL.TARG.EQUINOX.TYPE "keyword";      # Keyword type  
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range  
TEL.TARG.EQUINOX.DEFAULT "2000";      # Default value  
TEL.TARG.EQUINOX.LABEL "Equinox";     # Label used in P2PP  
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.PMA";        # Next template parameter  
TEL.TARG.PMA.TYPE  "number";         # Keyword type  
TEL.TARG.PMA.RANGE  "-10..10";       # Valid range  
TEL.TARG.PMA.DEFAULT "0";           # Default value  
TEL.TARG.PMA.LABEL "Proper Motion Alpha"; # Label used in P2PP  
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.PMD";        # Next template parameter  
TEL.TARG.PMD.TYPE  "number";         # Keyword type  
TEL.TARG.PMD.RANGE  "-10..10";       # Valid range  
TEL.TARG.PMD.DEFAULT "0";           # Default value  
TEL.TARG.PMD.LABEL "Proper Motion Delta"; # Label used in P2PP  
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.EPOCH";      # Next template parameter  
TEL.TARG.EPOCH.TYPE  "number";        # Keyword type  
TEL.TARG.EPOCH.RANGE  "-2000..3000"; # Valid range  
TEL.TARG.EPOCH.DEFAULT "2000";       # Default value  
TEL.TARG.EPOCH.LABEL "Epoch";        # Label used in P2PP  
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.RADVEL";     # Next template parameter  
TEL.TARG.RADVEL.TYPE  "number";       # Keyword type  
TEL.TARG.RADVEL.RANGE  "-9999.0..9999.0"; # Valid range  
TEL.TARG.RADVEL.DEFAULT "0";          # Default value  
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP  
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "INS.ACQ";           # Next template parameter  
INS.ACQ.TYPE    "keyword";          # Keyword type  
INS.ACQ.RANGE   "objA objAB wavesimult"; # Valid range  
INS.ACQ.DEFAULT  "NODEFAULT";       # Default value  
INS.ACQ.VALUE    "objA";            # Allocated value  
INS.ACQ.LABEL    "Acquisition mode"; # Label used in P2PP  
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword
```



```
# -----
TPL.PARAM      "INS.MODE";          # Next template parameter
INS.MODE.TYPE  "keyword";          # Keyword type
INS.MODE.RANGE "HA HE";           # Valid range
INS.MODE.DEFAULT "NODEFAULT";     # Default value
INS.MODE.VALUE  "HE";             # Allocated value
INS.MODE.LABEL   "Instrument mode"; # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "INS.OPTI3.NAME";    # Next template parameter
INS.OPTI3.NAME.TYPE  "keyword";      # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW"; # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";       # Default value
INS.OPTI3.NAME.LABEL  "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM      "AOS.PUPIL";         # Next template parameter
AOS.PUPIL.TYPE  "keyword";          # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE";      # Default value
AOS.PUPIL.LABEL   "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE    "OHS";             # Hide keyword in OHS

# --- oOo ---
```

```
#####
# E.S.O. - VLT project
#
# "@(#)$Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#

PAF.HDR.START;
PAF.TYPE      "Template Signature"; # Type of PAF
PAF.ID        "$Id: NIRPS_HE_acq_objAB.tsfx 346921 2021-09-27 12:12:40Z gzins $"; # ID
of PAF
PAF.NAME      "NIRPS_HE_acq_objAB"; # Name of PAF
PAF.DESC      "NIRPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan"; # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00"; # Civil time for creation
PAF.LCHG.NAME "nirmgr"; # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:37.00"; # Timestamp of last change
PAF.CHCK.NAME ""; # Name of appl. checking
PAF.CHCK.DAYTIM ""; # Time for checking
PAF.CHCK.CHECKSUM ""; # Checksum for the PAF
PAF.HDR.END;
```



```
# -----
TPL.INSTRUM      "NIRPS";          # Instrument this template is for
TPL.MODE         "";              # Mode of observation for this template
TPL.VERSION      "$Revision: 346921 $"; # Version of the template
TPL.REFSUP       "NIRPS_acq.ref"; # Reference Setup File
TPL.PRESEQ        "NIRPS_gen_acq.seq"; # Sequencer script
TPL.GUI          "";              # Template GUI panel
TPL.TYPE         "acquisition"; # Type of template
TPL.EXECTIME     "";              # Expected execution time
TPL.RESOURCES    "";              # Required resources

# -----
TPL.PARAM        "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.OSF.AUTO";          # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";            # Keyword type
SEQ.OSF.AUTO.RANGE "T F";              # Valid range
SEQ.OSF.AUTO.DEFAULT "T";              # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE   "OHS";              # Hide keyword in OHS

# -----
TPL.PARAM        "SEQ.OSF.SCRIPT";        # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";          # Keyword type
SEQ.OSF.SCRIPT.RANGE "";               # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";             # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE   "OHS, BOB";       # Hide keyword in OHS

# -----
TPL.PARAM        "SEQ.PRESET";          # Next template parameter
SEQ.PRESET.TYPE "boolean";            # Keyword type
SEQ.PRESET.RANGE "T F";              # Valid range
SEQ.PRESET.DEFAULT "T";              # Default value
```



```
SEQ.PRESET.LABEL    "Preset telescope?";      # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE     "OHS";                      # Hide keyword in OHS

# -----
TPL.PARAM          "SEQ.TARG.IMAG";           # Next template parameter
SEQ.TARG.IMAG.TYPE "number";                  # Keyword type
SEQ.TARG.IMAG.RANGE "";                      # Valid range
SEQ.TARG.IMAG.DEFAULT "5";                   # Default value
SEQ.TARG.IMAG.LABEL "I band magnitude";      # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude";   # Short Help for keyword

# -----
TPL.PARAM          "SEQ.TARG.JMAG";           # Next template parameter
SEQ.TARG.JMAG.TYPE "number";                  # Keyword type
SEQ.TARG.JMAG.RANGE "";                      # Valid range
SEQ.TARG.JMAG.DEFAULT "5";                   # Default value
SEQ.TARG.JMAG.LABEL "J band magnitude";      # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude";   # Short Help for keyword

# -----
TPL.PARAM          "TEL.TARG.ALPHA";          # Next template parameter
TEL.TARG.ALPHA.TYPE "coord";                 # Keyword type
TEL.TARG.ALPHA.RANGE "";                     # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT";         # Default value

# -----
TPL.PARAM          "TEL.TARG.DELTA";          # Next template parameter
TEL.TARG.DELTA.TYPE "coord";                 # Keyword type
TEL.TARG.DELTA.RANGE "";                     # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT";         # Default value

# -----
TPL.PARAM          "TEL.TARG.EQUINOX";        # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword";             # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000";       # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000";              # Default value
TEL.TARG.EQUINOX.LABEL "Equinox";            # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM          "TEL.TARG.PMA";             # Next template parameter
TEL.TARG.PMA.TYPE "number";                  # Keyword type
TEL.TARG.PMA.RANGE "-10..10";                # Valid range
TEL.TARG.PMA.DEFAULT "0";                    # Default value
TEL.TARG.PMA.LABEL "Proper Motion Alpha";    # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM          "TEL.TARG.PMD";             # Next template parameter
TEL.TARG.PMD.TYPE "number";                  # Keyword type
TEL.TARG.PMD.RANGE "-10..10";                # Valid range
TEL.TARG.PMD.DEFAULT "0";                    # Default value
TEL.TARG.PMD.LABEL "Proper Motion Delta";    # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword
```



```
# -----
TPL.PARAM      "TEL.TARG.EPOCH";          # Next template parameter
TEL.TARG.EPOCH.TYPE "number";           # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000";     # Valid range
TEL.TARG.EPOCH.DEFAULT "2000";          # Default value
TEL.TARG.EPOCH.LABEL "Epoch";           # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.RADVEL";        # Next template parameter
TEL.TARG.RADVEL.TYPE "number";          # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0";            # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

# -----
TPL.PARAM      "INS.ACQ";                # Next template parameter
INS.ACQ.TYPE    "keyword";               # Keyword type
INS.ACQ.RANGE   "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT";           # Default value
INS.ACQ.VALUE    "objAB";                # Allocated value
INS.ACQ.LABEL    "Acquisition mode";    # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode";   # Short Help for keyword

# -----
TPL.PARAM      "INS.MODE";               # Next template parameter
INS.MODE.TYPE   "keyword";              # Keyword type
INS.MODE.RANGE  "HA HE";                # Valid range
INS.MODE.DEFAULT "NODEFAULT";          # Default value
INS.MODE.VALUE   "HE";                  # Allocated value
INS.MODE.LABEL   "Instrument mode";    # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode";   # Short Help for keyword

# -----
TPL.PARAM      "INS.OPTI3.NAME";         # Next template parameter
INS.OPTI3.NAME.TYPE "keyword";          # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW";    # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";          # Default value
INS.OPTI3.NAME.LABEL "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM      "AOS.PUPIL";              # Next template parameter
AOS.PUPIL.TYPE  "keyword";              # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE";          # Default value
AOS.PUPIL.LABEL  "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE   "OHS";                 # Hide keyword in OHS

# --- oOo ---
```



```
#*****
# E.S.O. - VLT project
#
# "@(#) $Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#
PAF.HDR.START;
PAF.TYPE      "Template Signature";   # Type of PAF
PAF.ID        "$Id: NIRPS_HA_acq_objA.tsfx 346921 2021-09-27 12:12:40Z gzins $"; # ID of
PAF
PAF.NAME      "NIRPS_HA_acq_objA";   # Name of PAF
PAF.DESC       "NIRPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";           # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00"; # Civil time for creation
PAF.LCHG.NAME  "nirmgr";          # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:36.00"; # Timestamp of last change
PAF.CHCK.NAME  "";
PAF.CHCK.DAYTIM "";
PAF.CHCK.CHECKSUM "";
PAF.HDR.END;

# -----
TPL.INSTRUM   "NIRPS";           # Instrument this template is for
TPL.MODE      "";
TPL.VERSION   "$Revision: 346921 $"; # Version of the template
TPL.REFSUP    "NIRPS_acq.ref";   # Reference Setup File
TPL.PRESEQ    "NIRPS_gen_acq.seq"; # Sequencer script
TPL.GUI       "";
TPL.TYPE      "acquisition";    # Type of template
TPL.EXECTIME  "";
TPL.RESOURCES "";

# -----
TPL.PARAM     "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";   # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";   # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";   # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM     "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";   # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";   # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";   # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword
```



```
# -----
TPL.PARAM      "SEQ.OSF.AUTO";          # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";          # Keyword type
SEQ.OSF.AUTO.RANGE "T F";            # Valid range
SEQ.OSF.AUTO.DEFAULT "T";            # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE   "OHS";           # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";        # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";          # Keyword type
SEQ.OSF.SCRIPT.RANGE "";               # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";             # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE   "OHS, BOB";       # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.PRESET";           # Next template parameter
SEQ.PRESET.TYPE "boolean";            # Keyword type
SEQ.PRESET.RANGE "T F";              # Valid range
SEQ.PRESET.DEFAULT "T";              # Default value
SEQ.PRESET.LABEL "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE   "OHS";             # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";         # Next template parameter
SEQ.TARG.IMAG.TYPE "number";          # Keyword type
SEQ.TARG.IMAG.RANGE "";               # Valid range
SEQ.TARG.IMAG.DEFAULT "5";            # Default value
SEQ.TARG.IMAG.LABEL "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";         # Next template parameter
SEQ.TARG.JMAG.TYPE "number";          # Keyword type
SEQ.TARG.JMAG.RANGE "";               # Valid range
SEQ.TARG.JMAG.DEFAULT "5";            # Default value
SEQ.TARG.JMAG.LABEL "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";        # Next template parameter
TEL.TARG.ALPHA.TYPE "coord";          # Keyword type
TEL.TARG.ALPHA.RANGE "";              # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT";   # Default value

# -----
TPL.PARAM      "TEL.TARG.DELTA";        # Next template parameter
TEL.TARG.DELTA.TYPE "coord";          # Keyword type
TEL.TARG.DELTA.RANGE "";              # Valid range
```



```
TEL.TARG.DELTA.DEFAULT "NODEFAULT";           # Default value

# -----
TPL.PARAM      "TEL.TARG.EQUINOX";            # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword";              # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000";        # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000";              # Default value
TEL.TARG.EQUINOX.LABEL "Equinox";             # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMA";                # Next template parameter
TEL.TARG.PMA.TYPE "number";                  # Keyword type
TEL.TARG.PMA.RANGE "-10..10";               # Valid range
TEL.TARG.PMA.DEFAULT "0";                   # Default value
TEL.TARG.PMA.LABEL "Proper Motion Alpha";   # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMD";                # Next template parameter
TEL.TARG.PMD.TYPE "number";                  # Keyword type
TEL.TARG.PMD.RANGE "-10..10";               # Valid range
TEL.TARG.PMD.DEFAULT "0";                   # Default value
TEL.TARG.PMD.LABEL "Proper Motion Delta";   # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.EPOCH";              # Next template parameter
TEL.TARG.EPOCH.TYPE "number";                # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000";          # Valid range
TEL.TARG.EPOCH.DEFAULT "2000";               # Default value
TEL.TARG.EPOCH.LABEL "Epoch";                # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year.>"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.RADVEL";             # Next template parameter
TEL.TARG.RADVEL.TYPE "number";               # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0";    # Valid range
TEL.TARG.RADVEL.DEFAULT "0";                 # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

# -----
TPL.PARAM      "INS.ACQ";                   # Next template parameter
INS.ACQ.TYPE   "keyword";                  # Keyword type
INS.ACQ.RANGE  "objA objAB wavesimult";   # Valid range
INS.ACQ.DEFAULT "NODEFAULT";              # Default value
INS.ACQ.VALUE   "objA";                   # Allocated value
INS.ACQ.LABEL   "Acquisition mode";       # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode";       # Short Help for keyword

# -----
TPL.PARAM      "INS.MODE";                 # Next template parameter
INS.MODE.TYPE  "keyword";                # Keyword type
INS.MODE.RANGE "HA HE";                 # Valid range
```



```
INS.MODE.DEFAULT      "NODEFAULT";          # Default value
INS.MODE.VALUE        "HA";                 # Allocated value
INS.MODE.LABEL        "Instrument mode";    # Label used in P2PP
INS.MODE.MINIHELP     "Instrument mode";    # Short Help for keyword

# -----
TPL.PARAM           "INS.OPTI3.NAME";       # Next template parameter
INS.OPTI3.NAME.TYPE "keyword";            # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW";       # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";            # Default value
INS.OPTI3.NAME.LABEL  "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM           "AOS.PUPIL";           # Next template parameter
AOS.PUPIL.TYPE      "keyword";            # Keyword type
AOS.PUPIL.RANGE     "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT   "TELESCOPE";          # Default value
AOS.PUPIL.LABEL     "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP  "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE      "OHS";                # Hide keyword in OHS

# --- oOo ---

#*****
# E.S.O. - VLT project
#
# "@(#) $Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#

PAF.HDR.START;
PAF.TYPE      "Template Signature";      # Type of PAF
PAF.ID        "$Id: NIRPS_HA_acq_objAB.tsfx 346921 2021-09-27 12:12:40Z gzins $"; # ID
of PAF
PAF.NAME      "NIRPS_HA_acq_objAB";      # Name of PAF
PAF.DESC      "NIRPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";                  # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00";      # Civil time for creation
PAF.LCHG.NAME  "nirmgr";                # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:36.00"; # Timestamp of last change
PAF.CHCK.NAME  "";                      # Name of appl. checking
PAF.CHCK.DAYTIM "";                     # Time for checking
PAF.CHCK.CHECKSUM "";                   # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM      "NIRPS";                # Instrument this template is for
TPL.MODE         "";                     # Mode of observation for this template
TPL.VERSION      "$Revision: 346921 $"; # Version of the template
TPL.REFSUP       "NIRPS_acq.ref";       # Reference Setup File
```



```
TPL.PRESEQ      "NIRPS_gen_acq.seq";      # Sequencer script
TPL.GUI         "";                      # Template GUI panel
TPL.TYPE        "acquisition";          # Type of template
TPL.EXECTIME    "";                      # Expected execution time
TPL.RESOURCES   "";                      # Required resources

# -----
TPL.PARAM       "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM       "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM       "SEQ.OSF.AUTO";          # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";            # Keyword type
SEQ.OSF.AUTO.RANGE "T F";              # Valid range
SEQ.OSF.AUTO.DEFAULT "T";              # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE   "OHS";             # Hide keyword in OHS

# -----
TPL.PARAM       "SEQ.OSF.SCRIPT";        # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";          # Keyword type
SEQ.OSF.SCRIPT.RANGE "";               # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";            # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE   "OHS, BOB";      # Hide keyword in OHS

# -----
TPL.PARAM       "SEQ.PRESET";           # Next template parameter
SEQ.PRESET.TYPE "boolean";            # Keyword type
SEQ.PRESET.RANGE "T F";              # Valid range
SEQ.PRESET.DEFAULT "T";              # Default value
SEQ.PRESET.LABEL "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE   "OHS";             # Hide keyword in OHS

# -----
TPL.PARAM       "SEQ.TARG.IMAG";        # Next template parameter
```



```
SEQ.TARG.IMAG.TYPE    "number";          # Keyword type
SEQ.TARG.IMAG.RANGE   "";                # Valid range
SEQ.TARG.IMAG.DEFAULT "5";              # Default value
SEQ.TARG.IMAG.LABEL   "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";        # Next template parameter
SEQ.TARG.JMAG.TYPE "number";          # Keyword type
SEQ.TARG.JMAG.RANGE "";              # Valid range
SEQ.TARG.JMAG.DEFAULT "5";          # Default value
SEQ.TARG.JMAG.LABEL  "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";       # Next template parameter
TEL.TARG.ALPHA.TYPE "coord";          # Keyword type
TEL.TARG.ALPHA.RANGE "";              # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT";   # Default value

# -----
TPL.PARAM      "TEL.TARG.DELTA";       # Next template parameter
TEL.TARG.DELTA.TYPE "coord";          # Keyword type
TEL.TARG.DELTA.RANGE "";              # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT";   # Default value

# -----
TPL.PARAM      "TEL.TARG.EQUINOX";     # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword";       # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000";       # Default value
TEL.TARG.EQUINOX.LABEL  "Equinox";     # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMA";         # Next template parameter
TEL.TARG.PMA.TYPE "number";           # Keyword type
TEL.TARG.PMA.RANGE "-10..10";         # Valid range
TEL.TARG.PMA.DEFAULT "0";             # Default value
TEL.TARG.PMA.LABEL   "Proper Motion Alpha"; # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMD";         # Next template parameter
TEL.TARG.PMD.TYPE "number";           # Keyword type
TEL.TARG.PMD.RANGE "-10..10";         # Valid range
TEL.TARG.PMD.DEFAULT "0";             # Default value
TEL.TARG.PMD.LABEL   "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.EPOCH";       # Next template parameter
TEL.TARG.EPOCH.TYPE "number";          # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000";   # Valid range
TEL.TARG.EPOCH.DEFAULT "2000";         # Default value
```



TEL.TARG.EPOCH.LABEL "Epoch"; # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year.;" # Short Help for keyword

TPL.PARAM "TEL.TARG.RADVEL"; # Next template parameter
TEL.TARG.RADVEL.TYPE "number"; # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0"; # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

TPL.PARAM "INS.ACQ"; # Next template parameter
INS.ACQ.TYPE "keyword"; # Keyword type
INS.ACQ.RANGE "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT"; # Default value
INS.ACQ.VALUE "objAB"; # Allocated value
INS.ACQ.LABEL "Acquisition mode"; # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword

TPL.PARAM "INS.MODE"; # Next template parameter
INS.MODE.TYPE "keyword"; # Keyword type
INS.MODE.RANGE "HA HE"; # Valid range
INS.MODE.DEFAULT "NODEFAULT"; # Default value
INS.MODE.VALUE "HA"; # Allocated value
INS.MODE.LABEL "Instrument mode"; # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword

TPL.PARAM "INS.OPTI3.NAME"; # Next template parameter
INS.OPTI3.NAME.TYPE "keyword"; # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW"; # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE"; # Default value
INS.OPTI3.NAME.LABEL "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

TPL.PARAM "AOS.PUPIL"; # Next template parameter
AOS.PUPIL.TYPE "keyword"; # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE"; # Default value
AOS.PUPIL.LABEL "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE "OHS"; # Hide keyword in OHS

--- oOo ---

E.S.O. - VLT project

"@(#) \$Id\$"

who when what



```
# -----
# nirmgr 2021-10-05 created.
#
PAF.HDR.START;
PAF.TYPE      "Template Signature";    # Type of PAF
PAF.ID        "$Id: NIRPS_HA_acq_wavesimult.tsfx 346921 2021-09-27 12:12:40Z gzins $"; #
ID of PAF
PAF.NAME      "NIRPS_HA_acq_wavesimult"; # Name of PAF
PAF.DESC      "NIRPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";                 # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00";   # Civil time for creation
PAF.LCHG.NAME  "nirmgr";                # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:37.00"; # Timestamp of last change
PAF.CHCK.NAME  "";                      # Name of appl. checking
PAF.CHCK.DAYTIM "";                     # Time for checking
PAF.CHCK.CHECKSUM "";                  # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM   "NIRPS";                 # Instrument this template is for
TPL.MODE       "";                      # Mode of observation for this template
TPL.VERSION   "$Revision: 346921 $";   # Version of the template
TPL.REFSUP    "NIRPS_acq.ref";        # Reference Setup File
TPL.PRESEQ    "NIRPS_gen_acq.seq";    # Sequencer script
TPL.GUI        "";                      # Template GUI panel
TPL.TYPE      "acquisition";          # Type of template
TPL.EXECTIME  "";                      # Expected execution time
TPL.RESOURCES "";                      # Required resources

# -----
TPL.PARAM     "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";   # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";   # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";   # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM     "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";   # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";   # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";   # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM     "SEQ.OSF.AUTO";          # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";          # Keyword type
SEQ.OSF.AUTO.RANGE "T F";            # Valid range
SEQ.OSF.AUTO.DEFAULT "T";             # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
```



```
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short
Help for keyword
SEQ.OSF.AUTO.HIDE     "OHS";           # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";      # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";        # Keyword type
SEQ.OSF.SCRIPT.RANGE "";             # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";          # Default value
SEQ.OSF.SCRIPT.VALUE  "NIRPS_acq.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL  "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE   "OHS, BOB";       # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.PRESET";         # Next template parameter
SEQ.PRESET.TYPE "boolean";          # Keyword type
SEQ.PRESET.RANGE "T F";            # Valid range
SEQ.PRESET.DEFAULT "T";            # Default value
SEQ.PRESET.LABEL  "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE    "OHS";           # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";      # Next template parameter
SEQ.TARG.IMAG.TYPE "number";        # Keyword type
SEQ.TARG.IMAG.RANGE "";             # Valid range
SEQ.TARG.IMAG.DEFAULT "5";          # Default value
SEQ.TARG.IMAG.LABEL  "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";      # Next template parameter
SEQ.TARG.JMAG.TYPE "number";        # Keyword type
SEQ.TARG.JMAG.RANGE "";             # Valid range
SEQ.TARG.JMAG.DEFAULT "5";          # Default value
SEQ.TARG.JMAG.LABEL  "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";     # Next template parameter
TEL.TARG.ALPHA.TYPE "coord";        # Keyword type
TEL.TARG.ALPHA.RANGE "";             # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM      "TEL.TARG.DELTA";     # Next template parameter
TEL.TARG.DELTA.TYPE "coord";        # Keyword type
TEL.TARG.DELTA.RANGE "";             # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM      "TEL.TARG.EQUINOX";   # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword";     # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range
```



```
TEL.TARG.EQUINOX.DEFAULT "2000";           # Default value
TEL.TARG.EQUINOX.LABEL "Equinox";           # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMA";           # Next template parameter
TEL.TARG.PMA.TYPE "number";             # Keyword type
TEL.TARG.PMA.RANGE "-10..10";          # Valid range
TEL.TARG.PMA.DEFAULT "0";              # Default value
TEL.TARG.PMA.LABEL "Proper Motion Alpha"; # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMD";           # Next template parameter
TEL.TARG.PMD.TYPE "number";             # Keyword type
TEL.TARG.PMD.RANGE "-10..10";          # Valid range
TEL.TARG.PMD.DEFAULT "0";              # Default value
TEL.TARG.PMD.LABEL "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.EPOCH";          # Next template parameter
TEL.TARG.EPOCH.TYPE "number";            # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000";     # Valid range
TEL.TARG.EPOCH.DEFAULT "2000";          # Default value
TEL.TARG.EPOCH.LABEL "Epoch";           # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.RADVEL";          # Next template parameter
TEL.TARG.RADVEL.TYPE "number";           # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0";             # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

# -----
TPL.PARAM      "INS.ACQ";                # Next template parameter
INS.ACQ.TYPE    "keyword";               # Keyword type
INS.ACQ.RANGE   "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT";            # Default value
INS.ACQ.VALUE    "wavesimult";           # Allocated value
INS.ACQ.LABEL    "Acquisition mode";    # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode";    # Short Help for keyword

# -----
TPL.PARAM      "INS.MODE";               # Next template parameter
INS.MODE.TYPE   "keyword";               # Keyword type
INS.MODE.RANGE  "HA HE";                # Valid range
INS.MODE.DEFAULT "NODEFAULT";           # Default value
INS.MODE.VALUE   "HA";                  # Allocated value
INS.MODE.LABEL   "Instrument mode";     # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode";    # Short Help for keyword
```



```
TPL.PARAM      "INS.OPTI3.NAME";      # Next template parameter
INS.OPTI3.NAME.TYPE  "keyword";      # Keyword type
INS.OPTI3.NAME.RANGE  "WIDE NARROW";    # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";        # Default value
INS.OPTI3.NAME.LABEL   "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM      "INS.OPTI9.NAME";      # Next template parameter
INS.OPTI9.NAME.TYPE  "keyword";      # Keyword type
INS.OPTI9.NAME.RANGE  "UN1 UN2 FP";    # Valid range
INS.OPTI9.NAME.DEFAULT "FP";        # Default value
INS.OPTI9.NAME.LABEL   "Lamp selector B for NIRPS"; # Label used in P2PP
INS.OPTI9.NAME.MINIHELP "Lamp selector B for NIRPS"; # Short Help for keyword

# -----
TPL.PARAM      "AOS.PUPIL";          # Next template parameter
AOS.PUPIL.TYPE  "keyword";      # Keyword type
AOS.PUPIL.RANGE  "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE";    # Default value
AOS.PUPIL.LABEL   "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE    "OHS";        # Hide keyword in OHS

# --- oOo ---

#*****
# E.S.O. - VLT project
#
# "@(#) $Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#

PAF.HDR.START;
PAF.TYPE      "Template Signature";    # Type of PAF
PAF.ID        "$Id: NIRPS_HE_acq_HAM.tsfx 346921 2021-09-27 12:12:40Z gzins $"; # ID of
PAF
PAF.NAME      "NIRPS_HE_acq_HAM";      # Name of PAF
PAF.DESC      "NIRPS + HARPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";                # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00";    # Civil time for creation
PAF.LCHG.NAME  "nirmgr";                # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:37.00"; # Timestamp of last change
PAF.CHCK.NAME  "";                     # Name of appl. checking
PAF.CHCK.DAYTIM "";                    # Time for checking
PAF.CHCK.CHECKSUM "";                 # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM    "NIRPS";                # Instrument this template is for
TPL.MODE       "";                     # Mode of observation for this template
```



```
TPL.VERSION      "$Revision: 346921 $";    # Version of the template
TPL.REFSUP       "NIRPS_acq.ref";        # Reference Setup File
TPL.PRESEQ        "NIRPS_gen_acq.seq";    # Sequencer script
TPL.GUI          "";                      # Template GUI panel
TPL.TYPE         "acquisition";        # Type of template
TPL.EXECTIME     "";                      # Expected execution time
TPL.RESOURCES    "";                      # Required resources

# -----
TPL.PARAM        "SEQ.BOB.DISPLAY";      # Next template parameter
SEQ.BOB.DISPLAY.TYPE "string";          # Keyword type
SEQ.BOB.DISPLAY.RANGE  "";              # Valid range
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0"; # Default value
SEQ.BOB.DISPLAY.VALUE   "ltxt058.ls.eso.org:1.0"; # Allocated value
SEQ.BOB.DISPLAY.LABEL  "Display for HARPS BOB"; # Label used in P2PP
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help for keyword
SEQ.BOB.DISPLAY.HIDE   "OHS, BOB";        # Hide keyword in OHS

# -----
TPL.PARAM        "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL  "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.DELTA.LABEL  "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.HARPS.ACQ";        # Next template parameter
SEQ.HARPS.ACQ.TYPE "keyword";            # Keyword type
SEQ.HARPS.ACQ.RANGE   "objA objAB thosimult wavesimult"; # Valid range
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT";      # Default value
SEQ.HARPS.ACQ.LABEL  "HARPS Acquisition mode"; # Label used in P2PP
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.HARPS.DPR.TYPE";    # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string";        # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE  "";            # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,WAVE,NONE"; # Default value
SEQ.HARPS.DPR.TYPE.LABEL  "Exposure info"; # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help for keyword

# -----
```



```
TPL.PARAM      "SEQ.HARPS.MODE";      # Next template parameter
SEQ.HARPS.MODE.TYPE  "keyword";
SEQ.HARPS.MODE.RANGE   "ECH EGGS";      # Valid range
SEQ.HARPS.MODE.DEFAULT  "ECH";          # Default value
SEQ.HARPS.MODE.VALUE    "ECH";          # Allocated value
SEQ.HARPS.MODE.LABEL    "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.OSF.AUTO";      # Next template parameter
SEQ.OSF.AUTO.TYPE  "boolean";
SEQ.OSF.AUTO.RANGE   "T F";          # Valid range
SEQ.OSF.AUTO.DEFAULT  "T";           # Default value
SEQ.OSF.AUTO.LABEL    "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short
Help for keyword
SEQ.OSF.AUTO.HIDE    "OHS";          # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";      # Next template parameter
SEQ.OSF.SCRIPT.TYPE  "string";
SEQ.OSF.SCRIPT.RANGE   "";            # Valid range
SEQ.OSF.SCRIPT.DEFAULT  "";           # Default value
SEQ.OSF.SCRIPT.VALUE    "NIRPS_acq_harps.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL    "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE    "OHS, BOB"; # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.PRESET";      # Next template parameter
SEQ.PRESET.TYPE  "boolean";
SEQ.PRESET.RANGE   "T F";          # Valid range
SEQ.PRESET.DEFAULT  "T";           # Default value
SEQ.PRESET.LABEL    "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE    "OHS";          # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";      # Next template parameter
SEQ.TARG.IMAG.TYPE  "number";
SEQ.TARG.IMAG.RANGE   "";            # Valid range
SEQ.TARG.IMAG.DEFAULT  "5";           # Default value
SEQ.TARG.IMAG.LABEL    "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";      # Next template parameter
SEQ.TARG.JMAG.TYPE  "number";
SEQ.TARG.JMAG.RANGE   "";            # Valid range
SEQ.TARG.JMAG.DEFAULT  "5";           # Default value
SEQ.TARG.JMAG.LABEL    "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";      # Next template parameter
```



```
TEL.TARG.ALPHA.TYPE "coord"; # Keyword type
TEL.TARG.ALPHA.RANGE ""; # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM "TEL.TARG.DELTA"; # Next template parameter
TEL.TARG.DELTA.TYPE "coord"; # Keyword type
TEL.TARG.DELTA.RANGE ""; # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM "TEL.TARG.EQUINOX"; # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword"; # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000"; # Default value
TEL.TARG.EQUINOX.LABEL "Equinox"; # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.PMA"; # Next template parameter
TEL.TARG.PMA.TYPE "number"; # Keyword type
TEL.TARG.PMA.RANGE "-10..10"; # Valid range
TEL.TARG.PMA.DEFAULT "0"; # Default value
TEL.TARG.PMA.LABEL "Proper Motion Alpha"; # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.PMD"; # Next template parameter
TEL.TARG.PMD.TYPE "number"; # Keyword type
TEL.TARG.PMD.RANGE "-10..10"; # Valid range
TEL.TARG.PMD.DEFAULT "0"; # Default value
TEL.TARG.PMD.LABEL "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.EPOCH"; # Next template parameter
TEL.TARG.EPOCH.TYPE "number"; # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000"; # Valid range
TEL.TARG.EPOCH.DEFAULT "2000"; # Default value
TEL.TARG.EPOCH.LABEL "Epoch"; # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.RADVEL"; # Next template parameter
TEL.TARG.RADVEL.TYPE "number"; # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0"; # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

# -----
TPL.PARAM "INS.ACQ"; # Next template parameter
INS.ACQ.TYPE "keyword"; # Keyword type
INS.ACQ.RANGE "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT"; # Default value
```



```
INS.ACQ.LABEL      "Acquisition mode";      # Label used in P2PP
INS.ACQ.MINIHELP   "Acquisition mode";      # Short Help for keyword

# -----
TPL.PARAM          "INS.MODE";              # Next template parameter
INS.MODE.TYPE      "keyword";              # Keyword type
INS.MODE.RANGE     "HA HE";                # Valid range
INS.MODE.DEFAULT   "NODEFAULT";            # Default value
INS.MODE.VALUE     "HE";                   # Allocated value
INS.MODE.LABEL     "Instrument mode";       # Label used in P2PP
INS.MODE.MINIHELP  "Instrument mode";       # Short Help for keyword

# -----
TPL.PARAM          "INS.OPTI3.NAME";        # Next template parameter
INS.OPTI3.NAME.TYPE "keyword";              # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW";         # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";              # Default value
INS.OPTI3.NAME.LABEL  "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM          "AOS.PUPIL";             # Next template parameter
AOS.PUPIL.TYPE     "keyword";              # Keyword type
AOS.PUPIL.RANGE    "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT   "TELESCOPE";            # Default value
AOS.PUPIL.LABEL    "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE     "OHS";                  # Hide keyword in OHS

# --- oOo ---

#####
# E.S.O. - VLT project
#
# "@(#) $Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#

PAF.HDR.START;
PAF.TYPE      "Template Signature";      # Type of PAF
PAF.ID        "$Id: NIRPS_HE_acq_EGGS.tsfx 346921 2021-09-27 12:12:40Z gzins $"; # ID
of PAF
PAF.NAME      "NIRPS_HE_acq_EGGS";        # Name of PAF
PAF.DESC      "NIRPS + HARPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";                  # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00";       # Civil time for creation
PAF.LCHG.NAME  "nirmgr";                 # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:37.00"; # Timestamp of last change
PAF.CHCK.NAME  "";
PAF.CHCK.DAYTIM "";
PAF.CHCK.CHECKSUM "";
```



PAF.HDR.END;

```
# -----
TPL.INSTRUM      "NIRPS";           # Instrument this template is for
TPL.MODE         "";                # Mode of observation for this template
TPL.VERSION      "$Revision: 346921 $"; # Version of the template
TPL.REFSUP       "NIRPS_acq.ref";   # Reference Setup File
TPL.PRESEQ        "NIRPS_gen_acq.seq"; # Sequencer script
TPL.GUI          "";                # Template GUI panel
TPL.TYPE         "acquisition";    # Type of template
TPL.EXECTIME     "";                # Expected execution time
TPL.RESOURCES    "";                # Required resources

# -----
TPL.PARAM        "SEQ.BOB.DISPLAY";  # Next template parameter
SEQ.BOB.DISPLAY.TYPE "string";      # Keyword type
SEQ.BOB.DISPLAY.RANGE "";            # Valid range
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0"; # Default value
SEQ.BOB.DISPLAY.VALUE  "ltxt058.ls.eso.org:1.0"; # Allocated value
SEQ.BOB.DISPLAY.LABEL  "Display for HARPS BOB"; # Label used in P2PP
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help for keyword
SEQ.BOB.DISPLAY.HIDE   "OHS, BOB";    # Hide keyword in OHS

# -----
TPL.PARAM        "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL  "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.DELTA.LABEL  "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.HARPS.ACQ";        # Next template parameter
SEQ.HARPS.ACQ.TYPE "keyword";           # Keyword type
SEQ.HARPS.ACQ.RANGE "objA objAB thosimult wavesimult"; # Valid range
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT";     # Default value
SEQ.HARPS.ACQ.LABEL  "HARPS Acquisition mode"; # Label used in P2PP
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.HARPS.DPR.TYPE";   # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string";       # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE "";            # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,WAVE,NONE"; # Default value
```



SEQ.HARPS.DPR.TYPE.LABEL "Exposure info"; # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help for keyword

TPL.PARAM "SEQ.HARPS.MODE"; # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword"; # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS"; # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH"; # Default value
SEQ.HARPS.MODE.VALUE "EGGS"; # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

TPL.PARAM "SEQ.OSF.AUTO"; # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean"; # Keyword type
SEQ.OSF.AUTO.RANGE "T F"; # Valid range
SEQ.OSF.AUTO.DEFAULT "T"; # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE "OHS"; # Hide keyword in OHS

TPL.PARAM "SEQ.OSF.SCRIPT"; # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string"; # Keyword type
SEQ.OSF.SCRIPT.RANGE ""; # Valid range
SEQ.OSF.SCRIPT.DEFAULT ""; # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq_harps.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE "OHS, BOB"; # Hide keyword in OHS

TPL.PARAM "SEQ.PRESET"; # Next template parameter
SEQ.PRESET.TYPE "boolean"; # Keyword type
SEQ.PRESET.RANGE "T F"; # Valid range
SEQ.PRESET.DEFAULT "T"; # Default value
SEQ.PRESET.LABEL "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE "OHS"; # Hide keyword in OHS

TPL.PARAM "SEQ.TARG.IMAG"; # Next template parameter
SEQ.TARG.IMAG.TYPE "number"; # Keyword type
SEQ.TARG.IMAG.RANGE ""; # Valid range
SEQ.TARG.IMAG.DEFAULT "5"; # Default value
SEQ.TARG.IMAG.LABEL "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

TPL.PARAM "SEQ.TARG.JMAG"; # Next template parameter
SEQ.TARG.JMAG.TYPE "number"; # Keyword type
SEQ.TARG.JMAG.RANGE ""; # Valid range
SEQ.TARG.JMAG.DEFAULT "5"; # Default value



```
SEQ.TARG.JMAG.LABEL "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.ALPHA"; # Next template parameter
TEL.TARG.ALPHA.TYPE "coord"; # Keyword type
TEL.TARG.ALPHA.RANGE ""; # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM "TEL.TARG.DELTA"; # Next template parameter
TEL.TARG.DELTA.TYPE "coord"; # Keyword type
TEL.TARG.DELTA.RANGE ""; # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM "TEL.TARG.EQUINOX"; # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword"; # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000"; # Default value
TEL.TARG.EQUINOX.LABEL "Equinox"; # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.PMA"; # Next template parameter
TEL.TARG.PMA.TYPE "number"; # Keyword type
TEL.TARG.PMA.RANGE "-10..10"; # Valid range
TEL.TARG.PMA.DEFAULT "0"; # Default value
TEL.TARG.PMA.LABEL "Proper Motion Alpha"; # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.PMD"; # Next template parameter
TEL.TARG.PMD.TYPE "number"; # Keyword type
TEL.TARG.PMD.RANGE "-10..10"; # Valid range
TEL.TARG.PMD.DEFAULT "0"; # Default value
TEL.TARG.PMD.LABEL "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.EPOCH"; # Next template parameter
TEL.TARG.EPOCH.TYPE "number"; # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000"; # Valid range
TEL.TARG.EPOCH.DEFAULT "2000"; # Default value
TEL.TARG.EPOCH.LABEL "Epoch"; # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.RADVEL"; # Next template parameter
TEL.TARG.RADVEL.TYPE "number"; # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0"; # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword
```



```
# -----
TPL.PARAM      "INS.ACQ";          # Next template parameter
INS.ACQ.TYPE   "keyword";        # Keyword type
INS.ACQ.RANGE  "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT";    # Default value
INS.ACQ.LABEL   "Acquisition mode"; # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM      "INS.MODE";        # Next template parameter
INS.MODE.TYPE  "keyword";        # Keyword type
INS.MODE.RANGE  "HA HE";         # Valid range
INS.MODE.DEFAULT "NODEFAULT";   # Default value
INS.MODE.VALUE   "HE";           # Allocated value
INS.MODE.LABEL   "Instrument mode"; # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "INS.OPTI3.NAME";   # Next template parameter
INS.OPTI3.NAME.TYPE "keyword";    # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW"; # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";    # Default value
INS.OPTI3.NAME.LABEL  "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM      "AOS.PUPIL";       # Next template parameter
AOS.PUPIL.TYPE "keyword";        # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE";    # Default value
AOS.PUPIL.LABEL  "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE   "OHS";          # Hide keyword in OHS

# --- oOo ---

#*****
# E.S.O. - VLT project
#
# "@(#)$Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#

PAF.HDR.START;
PAF.TYPE      "Template Signature"; # Type of PAF
PAF.ID        "$Id: NIRPS_HA_acq_HAM.tsfx 346921 2021-09-27 12:12:40Z gzins $"; # ID of PAF
PAF.NAME      "NIRPS_HA_acq_HAM"; # Name of PAF
PAF.DESC      "NIRPS + HARPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan"; # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00"; # Civil time for creation
```



```
PAF.LCHG.NAME      "nirmgr";          # Name of person/applic. chg.  
PAF.LCHG.DAYTIM   "2021-10-05T08:03:36.00"; # Timestamp of last change  
PAF.CHCK.NAME     "";                # Name of applic. checking  
PAF.CHCK.DAYTIM   "";                # Time for checking  
PAF.CHCK.CHECKSUM "";                # Checksum for the PAF  
PAF.HDR.END;  
  
# -----  
TPL.INSTRUM       "NIRPS";          # Instrument this template is for  
TPL.MODE          "";                # Mode of observation for this template  
TPL.VERSION        "$Revision: 346921 $"; # Version of the template  
TPL.REFSUP         "NIRPS_acq.ref"; # Reference Setup File  
TPL.PRESEQ         "NIRPS_gen_acq.seq"; # Sequencer script  
TPL.GUI            "";                # Template GUI panel  
TPL.TYPE           "acquisition"; # Type of template  
TPL.EXECTIME       "";                # Expected execution time  
TPL.RESOURCES      "";                # Required resources  
  
# -----  
TPL.PARAM          "SEQ.BOB.DISPLAY"; # Next template parameter  
SEQ.BOB.DISPLAY.TYPE "string";      # Keyword type  
SEQ.BOB.DISPLAY.RANGE "";            # Valid range  
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0"; # Default value  
SEQ.BOB.DISPLAY.VALUE  "ltxt058.ls.eso.org:1.0"; # Allocated value  
SEQ.BOB.DISPLAY.LABEL  "Display for HARPS BOB"; # Label used in P2PP  
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help  
for keyword  
SEQ.BOB.DISPLAY.HIDE  "OHS, BOB";      # Hide keyword in OHS  
  
# -----  
TPL.PARAM          "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter  
SEQ.GUID.OFFSET.ALPHA.TYPE "number";    # Keyword type  
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";   # Valid range  
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";    # Default value  
SEQ.GUID.OFFSET.ALPHA.LABEL  "Alpha offset for the guiding"; # Label used in P2PP  
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; #  
Short Help for keyword  
  
# -----  
TPL.PARAM          "SEQ.GUID.OFFSET.DELTA"; # Next template parameter  
SEQ.GUID.OFFSET.DELTA.TYPE "number";    # Keyword type  
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";   # Valid range  
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";    # Default value  
SEQ.GUID.OFFSET.DELTA.LABEL  "Delta offset for the guiding"; # Label used in P2PP  
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; #  
Short Help for keyword  
  
# -----  
TPL.PARAM          "SEQ.HARPS.ACQ";      # Next template parameter  
SEQ.HARPS.ACQ.TYPE "keyword";        # Keyword type  
SEQ.HARPS.ACQ.RANGE "objA objAB thosimult wavesimult"; # Valid range  
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT";    # Default value  
SEQ.HARPS.ACQ.LABEL  "HARPS Acquisition mode"; # Label used in P2PP  
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword
```



```
# -----
TPL.PARAM      "SEQ.HARPS.DPR.TYPE";      # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string";          # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE "";                # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,WAVE,NONE"; # Default value
SEQ.HARPS.DPR.TYPE.LABEL "Exposure info";   # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help
for keyword

# -----
TPL.PARAM      "SEQ.HARPS.MODE";      # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword";          # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS";       # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH";           # Default value
SEQ.HARPS.MODE.VALUE "ECH";             # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.OSF.AUTO";      # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";          # Keyword type
SEQ.OSF.AUTO.RANGE "T F";            # Valid range
SEQ.OSF.AUTO.DEFAULT "T";             # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short
Help for keyword
SEQ.OSF.AUTO.HIDE "OHS";              # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";      # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";          # Keyword type
SEQ.OSF.SCRIPT.RANGE "";                # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";              # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq_harps.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE "OHS, BOB";        # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.PRESET";      # Next template parameter
SEQ.PRESET.TYPE "boolean";          # Keyword type
SEQ.PRESET.RANGE "T F";            # Valid range
SEQ.PRESET.DEFAULT "T";             # Default value
SEQ.PRESET.LABEL "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE "OHS";              # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";      # Next template parameter
SEQ.TARG.IMAG.TYPE "number";          # Keyword type
SEQ.TARG.IMAG.RANGE "";                # Valid range
SEQ.TARG.IMAG.DEFAULT "5";             # Default value
SEQ.TARG.IMAG.LABEL "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword
```



```
# -----  
TPL.PARAM      "SEQ.TARG.JMAG";          # Next template parameter  
SEQ.TARG.JMAG.TYPE "number";           # Keyword type  
SEQ.TARG.JMAG.RANGE  "";               # Valid range  
SEQ.TARG.JMAG.DEFAULT "5";            # Default value  
SEQ.TARG.JMAG.LABEL   "J band magnitude"; # Label used in P2PP  
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.ALPHA";        # Next template parameter  
TEL.TARG.ALPHA.TYPE "coord";          # Keyword type  
TEL.TARG.ALPHA.RANGE  "";              # Valid range  
TEL.TARG.ALPHA.DEFAULT "NODEFAULT";    # Default value  
  
# -----  
TPL.PARAM      "TEL.TARG.DELTA";        # Next template parameter  
TEL.TARG.DELTA.TYPE "coord";          # Keyword type  
TEL.TARG.DELTA.RANGE  "";              # Valid range  
TEL.TARG.DELTA.DEFAULT "NODEFAULT";    # Default value  
  
# -----  
TPL.PARAM      "TEL.TARG.EQUINOX";       # Next template parameter  
TEL.TARG.EQUINOX.TYPE "keyword";        # Keyword type  
TEL.TARG.EQUINOX.RANGE "-2000..3000";  # Valid range  
TEL.TARG.EQUINOX.DEFAULT "2000";        # Default value  
TEL.TARG.EQUINOX.LABEL   "Equinox";     # Label used in P2PP  
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.PMA";          # Next template parameter  
TEL.TARG.PMA.TYPE "number";           # Keyword type  
TEL.TARG.PMA.RANGE  "-10..10";        # Valid range  
TEL.TARG.PMA.DEFAULT "0";             # Default value  
TEL.TARG.PMA.LABEL   "Proper Motion Alpha"; # Label used in P2PP  
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.PMD";          # Next template parameter  
TEL.TARG.PMD.TYPE "number";           # Keyword type  
TEL.TARG.PMD.RANGE  "-10..10";        # Valid range  
TEL.TARG.PMD.DEFAULT "0";             # Default value  
TEL.TARG.PMD.LABEL   "Proper Motion Delta"; # Label used in P2PP  
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.EPOCH";         # Next template parameter  
TEL.TARG.EPOCH.TYPE "number";          # Keyword type  
TEL.TARG.EPOCH.RANGE  "-2000..3000";  # Valid range  
TEL.TARG.EPOCH.DEFAULT "2000";         # Default value  
TEL.TARG.EPOCH.LABEL   "Epoch";        # Label used in P2PP  
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.RADVEL";        # Next template parameter  
TEL.TARG.RADVEL.TYPE "number";         # Keyword type
```



```
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0";      # Valid range
TEL.TARG.RADVEL.DEFAULT "0";                      # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword
```

```
# -----
TPL.PARAM      "INS.ACQ";           # Next template parameter
INS.ACQ.TYPE   "keyword";          # Keyword type
INS.ACQ.RANGE   "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT";       # Default value
INS.ACQ.LABEL    "Acquisition mode"; # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword
```

```
# -----
TPL.PARAM      "INS.MODE";          # Next template parameter
INS.MODE.TYPE   "keyword";          # Keyword type
INS.MODE.RANGE   "HA HE";           # Valid range
INS.MODE.DEFAULT "NODEFAULT";       # Default value
INS.MODE.VALUE    "HA";              # Allocated value
INS.MODE.LABEL    "Instrument mode"; # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword
```

```
# -----
TPL.PARAM      "INS.OPTI3.NAME";     # Next template parameter
INS.OPTI3.NAME.TYPE "keyword";       # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW"; # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";        # Default value
INS.OPTI3.NAME.LABEL "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword
```

```
# -----
TPL.PARAM      "AOS.PUPIL";         # Next template parameter
AOS.PUPIL.TYPE   "keyword";          # Keyword type
AOS.PUPIL.RANGE   "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE";       # Default value
AOS.PUPIL.LABEL    "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE     "OHS";             # Hide keyword in OHS
```

```
# --- oOo ---
```

```
#####
# E.S.O. - VLT project
#
# "@(#) $Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#
```

```
PAF.HDR.START;
PAF.TYPE      "Template Signature"; # Type of PAF
```



```
PAF.ID      "$Id: NIRPS_HA_acq_EGGS.tsfx 346921 2021-09-27 12:12:40Z gzins $"; # ID
of PAF
PAF.NAME    "NIRPS_HA_acq_EGGS";      # Name of PAF
PAF.DESC    "NIRPS + HARPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";                # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00";   # Civil time for creation
PAF.LCHG.NAME "nirmgr";               # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:36.00"; # Timestamp of last change
PAF.CHCK.NAME "";                     # Name of appl. checking
PAF.CHCK.DAYTIM "";                  # Time for checking
PAF.CHCK.CHECKSUM "";                # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM "NIRPS";                 # Instrument this template is for
TPL.MODE     "";                      # Mode of observation for this template
TPL.VERSION  "$Revision: 346921 $";   # Version of the template
TPL.REFSUP   "NIRPS_acq.ref";        # Reference Setup File
TPL.PRESEQ   "NIRPS_gen_acq.seq";    # Sequencer script
TPL.GUI      "";                      # Template GUI panel
TPL.TYPE     "acquisition";         # Type of template
TPL.EXECTIME "";                     # Expected execution time
TPL.RESOURCES "";                   # Required resources

# -----
TPL.PARAM    "SEQ.BOB.DISPLAY";       # Next template parameter
SEQ.BOB.DISPLAY.TYPE "string";       # Keyword type
SEQ.BOB.DISPLAY.RANGE "";            # Valid range
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0"; # Default value
SEQ.BOB.DISPLAY.VALUE "ltxt058.ls.eso.org:1.0"; # Allocated value
SEQ.BOB.DISPLAY.LABEL "Display for HARPS BOB"; # Label used in P2PP
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help
for keyword
SEQ.BOB.DISPLAY.HIDE "OHS, BOB";     # Hide keyword in OHS

# -----
TPL.PARAM    "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";  # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2"; # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0"; # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help
for keyword

# -----
TPL.PARAM    "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";  # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2"; # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0"; # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help
for keyword

# -----
TPL.PARAM    "SEQ.HARPS.ACQ";        # Next template parameter
```



```
SEQ.HARPS.ACQ.TYPE "keyword"; # Keyword type
SEQ.HARPS.ACQ.RANGE "objA objAB thosimult wavesimult"; # Valid range
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT"; # Default value
SEQ.HARPS.ACQ.LABEL "HARPS Acquisition mode"; # Label used in P2PP
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM "SEQ.HARPS.DPR.TYPE"; # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string"; # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE ""; # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,WAVE,NONE"; # Default value
SEQ.HARPS.DPR.TYPE.LABEL "Exposure info"; # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help for keyword

# -----
TPL.PARAM "SEQ.HARPS.MODE"; # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword"; # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS"; # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH"; # Default value
SEQ.HARPS.MODE.VALUE "EGGS"; # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM "SEQ.OSF.AUTO"; # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean"; # Keyword type
SEQ.OSF.AUTO.RANGE "T F"; # Valid range
SEQ.OSF.AUTO.DEFAULT "T"; # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE "OHS"; # Hide keyword in OHS

# -----
TPL.PARAM "SEQ.OSF.SCRIPT"; # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string"; # Keyword type
SEQ.OSF.SCRIPT.RANGE ""; # Valid range
SEQ.OSF.SCRIPT.DEFAULT ""; # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq_harps.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE "OHS, BOB"; # Hide keyword in OHS

# -----
TPL.PARAM "SEQ.PRESET"; # Next template parameter
SEQ.PRESET.TYPE "boolean"; # Keyword type
SEQ.PRESET.RANGE "T F"; # Valid range
SEQ.PRESET.DEFAULT "T"; # Default value
SEQ.PRESET.LABEL "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE "OHS"; # Hide keyword in OHS

# -----
TPL.PARAM "SEQ.TARG.IMAG"; # Next template parameter
```



```
SEQ.TARG.IMAG.TYPE    "number";          # Keyword type
SEQ.TARG.IMAG.RANGE   "";                # Valid range
SEQ.TARG.IMAG.DEFAULT "5";              # Default value
SEQ.TARG.IMAG.LABEL   "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";        # Next template parameter
SEQ.TARG.JMAG.TYPE "number";          # Keyword type
SEQ.TARG.JMAG.RANGE "";               # Valid range
SEQ.TARG.JMAG.DEFAULT "5";           # Default value
SEQ.TARG.JMAG.LABEL  "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";       # Next template parameter
TEL.TARG.ALPHA.TYPE "coord";          # Keyword type
TEL.TARG.ALPHA.RANGE "";              # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT";   # Default value

# -----
TPL.PARAM      "TEL.TARG.DELTA";       # Next template parameter
TEL.TARG.DELTA.TYPE "coord";          # Keyword type
TEL.TARG.DELTA.RANGE "";              # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT";   # Default value

# -----
TPL.PARAM      "TEL.TARG.EQUINOX";     # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword";       # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000";       # Default value
TEL.TARG.EQUINOX.LABEL  "Equinox";     # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMA";         # Next template parameter
TEL.TARG.PMA.TYPE "number";           # Keyword type
TEL.TARG.PMA.RANGE "-10..10";         # Valid range
TEL.TARG.PMA.DEFAULT "0";             # Default value
TEL.TARG.PMA.LABEL   "Proper Motion Alpha"; # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMD";         # Next template parameter
TEL.TARG.PMD.TYPE "number";           # Keyword type
TEL.TARG.PMD.RANGE "-10..10";         # Valid range
TEL.TARG.PMD.DEFAULT "0";             # Default value
TEL.TARG.PMD.LABEL   "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.EPOCH";       # Next template parameter
TEL.TARG.EPOCH.TYPE "number";          # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000";   # Valid range
TEL.TARG.EPOCH.DEFAULT "2000";         # Default value
```



TEL.TARG.EPOCH.LABEL "Epoch"; # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year.;" # Short Help for keyword

TPL.PARAM "TEL.TARG.RADVEL"; # Next template parameter
TEL.TARG.RADVEL.TYPE "number"; # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0"; # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

TPL.PARAM "INS.ACQ"; # Next template parameter
INS.ACQ.TYPE "keyword"; # Keyword type
INS.ACQ.RANGE "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT"; # Default value
INS.ACQ.LABEL "Acquisition mode"; # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword

TPL.PARAM "INS.MODE"; # Next template parameter
INS.MODE.TYPE "keyword"; # Keyword type
INS.MODE.RANGE "HA HE"; # Valid range
INS.MODE.DEFAULT "NODEFAULT"; # Default value
INS.MODE.VALUE "HA"; # Allocated value
INS.MODE.LABEL "Instrument mode"; # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword

TPL.PARAM "INS.OPTI3.NAME"; # Next template parameter
INS.OPTI3.NAME.TYPE "keyword"; # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW"; # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE"; # Default value
INS.OPTI3.NAME.LABEL "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

TPL.PARAM "AOS.PUPIL"; # Next template parameter
AOS.PUPIL.TYPE "keyword"; # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE"; # Default value
AOS.PUPIL.LABEL "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE "OHS"; # Hide keyword in OHS

--- oOo ---

E.S.O. - VLT project

"@(#) \$Id\$"

who when what



```
# nirmgr 2021-10-05 created.
#
PAF.HDR.START;
PAF.TYPE      "Template Signature";    # Type of PAF
PAF.ID        "$Id: NIRPS_HE_acq_objAB_HAM_wavesimult.tsfx 346921 2021-09-27
12:12:40Z gzins $"; # ID of PAF
PAF.NAME      "NIRPS_HE_acq_objAB_HAM_wavesimult"; # Name of PAF
PAF.DESC      "NIRPS + HARPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";                # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00";   # Civil time for creation
PAF.LCHG.NAME  "nirmgr";              # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:37.00"; # Timestamp of last change
PAF.CHCK.NAME  "";                    # Name of appl. checking
PAF.CHCK.DAYTIM "";                  # Time for checking
PAF.CHCK.CHECKSUM "";               # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM   "NIRPS";                # Instrument this template is for
TPL.MODE      "";                     # Mode of observation for this template
TPL.VERSION   "$Revision: 346921 $";  # Version of the template
TPL.REFSUP    "NIRPS_acq.ref";       # Reference Setup File
TPL.PRESEQ    "NIRPS_gen_acq.seq";   # Sequencer script
TPL.GUI       "";                     # Template GUI panel
TPL.TYPE      "acquisition";         # Type of template
TPL.EXECTIME  "";                     # Expected execution time
TPL.RESOURCES "";                   # Required resources

# -----
TPL.PARAM     "SEQ.BOB.DISPLAY";      # Next template parameter
SEQ.BOB.DISPLAY.TYPE "string";       # Keyword type
SEQ.BOB.DISPLAY.RANGE "";            # Valid range
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0"; # Default value
SEQ.BOB.DISPLAY.VALUE "ltxt058.ls.eso.org:1.0"; # Allocated value
SEQ.BOB.DISPLAY.LABEL "Display for HARPS BOB"; # Label used in P2PP
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help for keyword
SEQ.BOB.DISPLAY.HIDE "OHS, BOB";     # Hide keyword in OHS

# -----
TPL.PARAM     "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";  # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2"; # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";  # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM     "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";  # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2"; # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";  # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
```



SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; #
Short Help for keyword

```
# -----
TPL.PARAM      "SEQ.HARPS.ACQ";          # Next template parameter
SEQ.HARPS.ACQ.TYPE "keyword";           # Keyword type
SEQ.HARPS.ACQ.RANGE "objA objAB thosimult wavesimult"; # Valid range
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT";      # Default value
SEQ.HARPS.ACQ.VALUE "wavesimult";        # Allocated value
SEQ.HARPS.ACQ.LABEL "HARPS Acquisition mode"; # Label used in P2PP
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.DPR.TYPE";      # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string";         # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE "";              # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,WAVE,NONE"; # Default value
SEQ.HARPS.DPR.TYPE.LABEL "Exposure info"; # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help
for keyword

# -----
TPL.PARAM      "SEQ.HARPS.MODE";          # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword";           # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS";        # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH";            # Default value
SEQ.HARPS.MODE.VALUE "ECH";              # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.OPTI6.NAME";    # Next template parameter
SEQ.HARPS.OPTI6.NAME.TYPE "keyword";      # Keyword type
SEQ.HARPS.OPTI6.NAME.RANGE "THAR2 FP COMB"; # Valid range
SEQ.HARPS.OPTI6.NAME.DEFAULT "FP";        # Default value
SEQ.HARPS.OPTI6.NAME.LABEL "Lamp selector B for HARPS"; # Label used in P2PP
SEQ.HARPS.OPTI6.NAME.MINIHELP "Lamp selector B for HARPS"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.OSF.AUTO";            # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";             # Keyword type
SEQ.OSF.AUTO.RANGE "T F";               # Valid range
SEQ.OSF.AUTO.DEFAULT "T";                # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short
Help for keyword
SEQ.OSF.AUTO.HIDE "OHS";                 # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";          # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";            # Keyword type
SEQ.OSF.SCRIPT.RANGE "";                # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";              # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq_harps.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
```



```
SEQ.OSF.SCRIPT.MINIHELP "OSF script name";      # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE   "OHS, BOB";                # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.PRESET";                      # Next template parameter
SEQ.PRESET.TYPE "boolean";                       # Keyword type
SEQ.PRESET.RANGE "T F";                          # Valid range
SEQ.PRESET.DEFAULT "T";                          # Default value
SEQ.PRESET.LABEL "Preset telescope?";           # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool";    # Short Help for keyword
SEQ.PRESET.HIDE  "OHS";                          # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";                  # Next template parameter
SEQ.TARG.IMAG.TYPE "number";                     # Keyword type
SEQ.TARG.IMAG.RANGE "";                         # Valid range
SEQ.TARG.IMAG.DEFAULT "5";                      # Default value
SEQ.TARG.IMAG.LABEL "I band magnitude";         # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude";       # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";                  # Next template parameter
SEQ.TARG.JMAG.TYPE "number";                     # Keyword type
SEQ.TARG.JMAG.RANGE "";                         # Valid range
SEQ.TARG.JMAG.DEFAULT "5";                      # Default value
SEQ.TARG.JMAG.LABEL "J band magnitude";         # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude";       # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";                 # Next template parameter
TEL.TARG.ALPHA.TYPE "coord";                    # Keyword type
TEL.TARG.ALPHA.RANGE "";                        # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT";            # Default value

# -----
TPL.PARAM      "TEL.TARG.DELTA";                 # Next template parameter
TEL.TARG.DELTA.TYPE "coord";                   # Keyword type
TEL.TARG.DELTA.RANGE "";                        # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT";            # Default value

# -----
TPL.PARAM      "TEL.TARG.EQUINOX";              # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword";               # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000";          # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000";               # Default value
TEL.TARG.EQUINOX.LABEL "Equinox";              # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMA";                   # Next template parameter
TEL.TARG.PMA.TYPE "number";                    # Keyword type
TEL.TARG.PMA.RANGE "-10..10";                 # Valid range
TEL.TARG.PMA.DEFAULT "0";                      # Default value
TEL.TARG.PMA.LABEL "Proper Motion Alpha";      # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword
```



```
# -----
TPL.PARAM      "TEL.TARG.PMD";          # Next template parameter
TEL.TARG.PMD.TYPE "number";           # Keyword type
TEL.TARG.PMD.RANGE "-10..10";         # Valid range
TEL.TARG.PMD.DEFAULT "0";             # Default value
TEL.TARG.PMD.LABEL  "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.EPOCH";        # Next template parameter
TEL.TARG.EPOCH.TYPE "number";          # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000";    # Valid range
TEL.TARG.EPOCH.DEFAULT "2000";         # Default value
TEL.TARG.EPOCH.LABEL  "Epoch";          # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.RADVEL";       # Next template parameter
TEL.TARG.RADVEL.TYPE "number";         # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0";           # Default value
TEL.TARG.RADVEL.LABEL  "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

# -----
TPL.PARAM      "INS.ACQ";              # Next template parameter
INS.ACQ.TYPE   "keyword";             # Keyword type
INS.ACQ.RANGE  "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT";         # Default value
INS.ACQ.VALUE   "objAB";              # Allocated value
INS.ACQ.LABEL   "Acquisition mode";  # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM      "INS.MODE";             # Next template parameter
INS.MODE.TYPE  "keyword";             # Keyword type
INS.MODE.RANGE  "HA HE";              # Valid range
INS.MODE.DEFAULT "NODEFAULT";         # Default value
INS.MODE.VALUE   "HE";                # Allocated value
INS.MODE.LABEL   "Instrument mode";  # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "INS.OPTI3.NAME";       # Next template parameter
INS.OPTI3.NAME.TYPE "keyword";         # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW";    # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";          # Default value
INS.OPTI3.NAME.LABEL  "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM      "AOS.PUPIL";            # Next template parameter
AOS.PUPIL.TYPE  "keyword";             # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
```



```
AOS.PUPIL.DEFAULT      "TELESCOPE";           # Default value
AOS.PUPIL.LABEL        "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP     "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE          "OHS";                  # Hide keyword in OHS
```

```
# --- oOo ---
```

```
*****
```

```
# E.S.O. - VLT project
```

```
#
```

```
# "@(#) $Id$"
```

```
#
```

```
# who    when    what
```

```
# -----
```

```
# nirmgr 2021-10-05 created.
```

```
#
```

```
PAF.HDR.START;
```

```
PAF.TYPE      "Template Signature";   # Type of PAF
PAF.ID        "$Id: NIRPS_HE_acq_objAB_EGGS_objAB.tsfx 346921 2021-09-27 12:12:40Z
gzins $"; # ID of PAF
PAF.NAME      "NIRPS_HE_acq_objAB_EGGS_objAB"; # Name of PAF
PAF.DESC      "NIRPS + HARPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";                 # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00";   # Civil time for creation
PAF.LCHG.NAME  "nirmgr";                # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:35.00"; # Timestamp of last change
PAF.CHCK.NAME  "";                      # Name of appl. checking
PAF.CHCK.DAYTIM "";                     # Time for checking
PAF.CHCK.CHECKSUM "";                  # Checksum for the PAF
PAF.HDR.END;
```

```
# -----
```

```
TPL.INSTRUM   "NIRPS";            # Instrument this template is for
TPL.MODE       "";                 # Mode of observation for this template
TPL.VERSION    "$Revision: 346921 $"; # Version of the template
TPL.REFSUP     "NIRPS_acq.ref";   # Reference Setup File
TPL.PRESEQ     "NIRPS_gen_acq.seq";# Sequencer script
TPL.GUI        "";                 # Template GUI panel
TPL.TYPE       "acquisition";    # Type of template
TPL.EXECTIME   "";                 # Expected execution time
TPL.RESOURCES  "";                 # Required resources
```

```
# -----
```

```
TPL.PARAM      "SEQ.BOB.DISPLAY";    # Next template parameter
SEQ.BOB.DISPLAY.TYPE "string";       # Keyword type
SEQ.BOB.DISPLAY.RANGE  "";           # Valid range
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0"; # Default value
SEQ.BOB.DISPLAY.VALUE  "ltxt058.ls.eso.org:1.0"; # Allocated value
SEQ.BOB.DISPLAY.LABEL  "Display for HARPS BOB"; # Label used in P2PP
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help
for keyword
SEQ.BOB.DISPLAY.HIDE   "OHS, BOB";      # Hide keyword in OHS
```



TPL.PARAM "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number"; # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2"; # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0"; # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

TPL.PARAM "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number"; # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2"; # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0"; # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

TPL.PARAM "SEQ.HARPS.ACQ"; # Next template parameter
SEQ.HARPS.ACQ.TYPE "keyword"; # Keyword type
SEQ.HARPS.ACQ.RANGE "objA objAB thosimult wavesimult"; # Valid range
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT"; # Default value
SEQ.HARPS.ACQ.VALUE "objAB"; # Allocated value
SEQ.HARPS.ACQ.LABEL "HARPS Acquisition mode"; # Label used in P2PP
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword

TPL.PARAM "SEQ.HARPS.DPR.TYPE"; # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string"; # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE ""; # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,SKY,NONE"; # Default value
SEQ.HARPS.DPR.TYPE.LABEL "Exposure info"; # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help for keyword

TPL.PARAM "SEQ.HARPS.MODE"; # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword"; # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS"; # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH"; # Default value
SEQ.HARPS.MODE.VALUE "EGGS"; # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

TPL.PARAM "SEQ.OSF.AUTO"; # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean"; # Keyword type
SEQ.OSF.AUTO.RANGE "T F"; # Valid range
SEQ.OSF.AUTO.DEFAULT "T"; # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE "OHS"; # Hide keyword in OHS



```
# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";          # Next template parameter
SEQ.OSF.SCRIPT.TYPE  "string";           # Keyword type
SEQ.OSF.SCRIPT.RANGE  "";                # Valid range
SEQ.OSF.SCRIPT.DEFAULT  "";              # Default value
SEQ.OSF.SCRIPT.VALUE  "NIRPS_acq_harps.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL  "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE   "OHS, BOB";        # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.PRESET";            # Next template parameter
SEQ.PRESET.TYPE  "boolean";             # Keyword type
SEQ.PRESET.RANGE  "T F";               # Valid range
SEQ.PRESET.DEFAULT  "T";                # Default value
SEQ.PRESET.LABEL  "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE   "OHS";                # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";         # Next template parameter
SEQ.TARG.IMAG.TYPE  "number";            # Keyword type
SEQ.TARG.IMAG.RANGE  "";                # Valid range
SEQ.TARG.IMAG.DEFAULT  "5";              # Default value
SEQ.TARG.IMAG.LABEL  "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";         # Next template parameter
SEQ.TARG.JMAG.TYPE  "number";            # Keyword type
SEQ.TARG.JMAG.RANGE  "";                # Valid range
SEQ.TARG.JMAG.DEFAULT  "5";              # Default value
SEQ.TARG.JMAG.LABEL  "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";        # Next template parameter
TEL.TARG.ALPHA.TYPE  "coord";            # Keyword type
TEL.TARG.ALPHA.RANGE  "";                # Valid range
TEL.TARG.ALPHA.DEFAULT  "NODEFAULT";     # Default value

# -----
TPL.PARAM      "TEL.TARG.DELTA";        # Next template parameter
TEL.TARG.DELTA.TYPE  "coord";            # Keyword type
TEL.TARG.DELTA.RANGE  "";                # Valid range
TEL.TARG.DELTA.DEFAULT  "NODEFAULT";     # Default value

# -----
TPL.PARAM      "TEL.TARG.EQUINOX";       # Next template parameter
TEL.TARG.EQUINOX.TYPE  "keyword";          # Keyword type
TEL.TARG.EQUINOX.RANGE  "-2000..3000";    # Valid range
TEL.TARG.EQUINOX.DEFAULT  "2000";          # Default value
TEL.TARG.EQUINOX.LABEL  "Equinox";         # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword
```



```
# -----  
TPL.PARAM      "TEL.TARG.PMA";          # Next template parameter  
TEL.TARG.PMA.TYPE "number";           # Keyword type  
TEL.TARG.PMA.RANGE "-10..10";        # Valid range  
TEL.TARG.PMA.DEFAULT "0";            # Default value  
TEL.TARG.PMA.LABEL "Proper Motion Alpha"; # Label used in P2PP  
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.PMD";          # Next template parameter  
TEL.TARG.PMD.TYPE "number";           # Keyword type  
TEL.TARG.PMD.RANGE "-10..10";        # Valid range  
TEL.TARG.PMD.DEFAULT "0";            # Default value  
TEL.TARG.PMD.LABEL "Proper Motion Delta"; # Label used in P2PP  
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.EPOCH";         # Next template parameter  
TEL.TARG.EPOCH.TYPE "number";          # Keyword type  
TEL.TARG.EPOCH.RANGE "-2000..3000";    # Valid range  
TEL.TARG.EPOCH.DEFAULT "2000";         # Default value  
TEL.TARG.EPOCH.LABEL "Epoch";          # Label used in P2PP  
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year.>"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "TEL.TARG.RADVEL";        # Next template parameter  
TEL.TARG.RADVEL.TYPE "number";         # Keyword type  
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range  
TEL.TARG.RADVEL.DEFAULT "0";           # Default value  
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP  
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "INS.ACQ";                # Next template parameter  
INS.ACQ.TYPE   "keyword";              # Keyword type  
INS.ACQ.RANGE  "objA objAB wavesimult"; # Valid range  
INS.ACQ.DEFAULT "NODEFAULT";          # Default value  
INS.ACQ.VALUE   "objAB";              # Allocated value  
INS.ACQ.LABEL   "Acquisition mode"; # Label used in P2PP  
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "INS.MODE";               # Next template parameter  
INS.MODE.TYPE  "keyword";              # Keyword type  
INS.MODE.RANGE "HA HE";               # Valid range  
INS.MODE.DEFAULT "NODEFAULT";          # Default value  
INS.MODE.VALUE   "HE";                 # Allocated value  
INS.MODE.LABEL   "Instrument mode"; # Label used in P2PP  
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword  
  
# -----  
TPL.PARAM      "INS.OPTI3.NAME";         # Next template parameter  
INS.OPTI3.NAME.TYPE "keyword";          # Keyword type  
INS.OPTI3.NAME.RANGE "WIDE NARROW";    # Valid range  
INS.OPTI3.NAME.DEFAULT "WIDE";          # Default value
```



INS.OPTI3.NAME.LABEL "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

TPL.PARAM "AOS.PUPIL"; # Next template parameter
AOS.PUPIL.TYPE "keyword"; # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE"; # Default value
AOS.PUPIL.LABEL "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE "OHS"; # Hide keyword in OHS

--- oOo ---

E.S.O. - VLT project

"@(#) \$Id\$"

who when what

nirmgr 2021-10-05 created.
#

PAF.HDR.START;
PAF.TYPE "Template Signature"; # Type of PAF
PAF.ID "\$Id: NIRPS_HA_acq_wavesimult_HAM_wavesimult.tsfx 346921 2021-09-27
12:12:40Z gzins \$"; # ID of PAF
PAF.NAME "NIRPS_HA_acq_wavesimult_HAM_wavesimult"; # Name of PAF
PAF.DESC "NIRPS + HARPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan"; # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00"; # Civil time for creation
PAF.LCHG.NAME "nirmgr"; # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:37.00"; # Timestamp of last change
PAF.CHCK.NAME ""; # Name of appl. checking
PAF.CHCK.DAYTIM ""; # Time for checking
PAF.CHCK.CHECKSUM ""; # Checksum for the PAF
PAF.HDR.END;

TPL.INSTRUM "NIRPS"; # Instrument this template is for
TPL.MODE ""; # Mode of observation for this template
TPL.VERSION "\$Revision: 346921 \$"; # Version of the template
TPL.REFSUP "NIRPS_acq.ref"; # Reference Setup File
TPL.PRESEQ "NIRPS_gen_acq.seq"; # Sequencer script
TPL.GUI ""; # Template GUI panel
TPL.TYPE "acquisition"; # Type of template
TPL.EXECTIME ""; # Expected execution time
TPL.RESOURCES ""; # Required resources

TPL.PARAM "SEQ.BOB.DISPLAY"; # Next template parameter
SEQ.BOB.DISPLAY.TYPE "string"; # Keyword type
SEQ.BOB.DISPLAY.RANGE ""; # Valid range



```
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0";      # Default value
SEQ.BOB.DISPLAY.VALUE  "ltxt058.ls.eso.org:1.0"; # Allocated value
SEQ.BOB.DISPLAY.LABEL  "Display for HARPS BOB"; # Label used in P2PP
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help
for keyword
SEQ.BOB.DISPLAY.HIDE  "OHS, BOB";            # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help
for keyword

# -----
TPL.PARAM      "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help
for keyword

# -----
TPL.PARAM      "SEQ.HARPS.ACQ";          # Next template parameter
SEQ.HARPS.ACQ.TYPE "keyword";           # Keyword type
SEQ.HARPS.ACQ.RANGE "objA objAB thosimult wavesimult"; # Valid range
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT";     # Default value
SEQ.HARPS.ACQ.VALUE  "wavesimult";      # Allocated value
SEQ.HARPS.ACQ.LABEL  "HARPS Acquisition mode"; # Label used in P2PP
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.DPR.TYPE";    # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string";       # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE "";           # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,WAVE,NONE"; # Default value
SEQ.HARPS.DPR.TYPE.LABEL "Exposure info"; # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help
for keyword

# -----
TPL.PARAM      "SEQ.HARPS.MODE";        # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword";         # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS";      # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH";          # Default value
SEQ.HARPS.MODE.VALUE  "ECH";           # Allocated value
SEQ.HARPS.MODE.LABEL  "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.OPTI6.NAME"; # Next template parameter
SEQ.HARPS.OPTI6.NAME.TYPE "keyword";   # Keyword type
```



```
SEQ.HARPS.OPTI6.NAME.RANGE "THAR2 FP COMB";      # Valid range
SEQ.HARPS.OPTI6.NAME.DEFAULT "FP";                # Default value
SEQ.HARPS.OPTI6.NAME.LABEL "Lamp selector B for HARPS"; # Label used in P2PP
SEQ.HARPS.OPTI6.NAME.MINIHELP "Lamp selector B for HARPS"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.OSF.AUTO";                  # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";                   # Keyword type
SEQ.OSF.AUTO.RANGE "T F";                      # Valid range
SEQ.OSF.AUTO.DEFAULT "T";                      # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE   "OHS";                      # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";               # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";                  # Keyword type
SEQ.OSF.SCRIPT.RANGE "";                       # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";                     # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq_harps.osf";  # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name";        # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name";    # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE   "OHS, BOB";              # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.PRESET";                  # Next template parameter
SEQ.PRESET.TYPE "boolean";                   # Keyword type
SEQ.PRESET.RANGE "T F";                      # Valid range
SEQ.PRESET.DEFAULT "T";                      # Default value
SEQ.PRESET.LABEL "Preset telescope?";         # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE   "OHS";                      # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";               # Next template parameter
SEQ.TARG.IMAG.TYPE "number";                 # Keyword type
SEQ.TARG.IMAG.RANGE "";                      # Valid range
SEQ.TARG.IMAG.DEFAULT "5";                   # Default value
SEQ.TARG.IMAG.LABEL "I band magnitude";     # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude";  # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";               # Next template parameter
SEQ.TARG.JMAG.TYPE "number";                 # Keyword type
SEQ.TARG.JMAG.RANGE "";                      # Valid range
SEQ.TARG.JMAG.DEFAULT "5";                   # Default value
SEQ.TARG.JMAG.LABEL "J band magnitude";     # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude";  # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";              # Next template parameter
TEL.TARG.ALPHA.TYPE "coord";                 # Keyword type
TEL.TARG.ALPHA.RANGE "";                     # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT";          # Default value
```



```
# -----
TPL.PARAM      "TEL.TARG.DELTA";      # Next template parameter
TEL.TARG.DELTA.TYPE  "coord";        # Keyword type
TEL.TARG.DELTA.RANGE  "";            # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM      "TEL.TARG.EQUINOX";    # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword";      # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000";      # Default value
TEL.TARG.EQUINOX.LABEL "Equinox";     # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMA";        # Next template parameter
TEL.TARG.PMA.TYPE  "number";         # Keyword type
TEL.TARG.PMA.RANGE  "-10..10";       # Valid range
TEL.TARG.PMA.DEFAULT "0";            # Default value
TEL.TARG.PMA.LABEL  "Proper Motion Alpha"; # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMD";        # Next template parameter
TEL.TARG.PMD.TYPE  "number";         # Keyword type
TEL.TARG.PMD.RANGE  "-10..10";       # Valid range
TEL.TARG.PMD.DEFAULT "0";            # Default value
TEL.TARG.PMD.LABEL  "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.EPOCH";      # Next template parameter
TEL.TARG.EPOCH.TYPE "number";        # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000"; # Valid range
TEL.TARG.EPOCH.DEFAULT "2000";       # Default value
TEL.TARG.EPOCH.LABEL  "Epoch";       # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.RADVEL";    # Next template parameter
TEL.TARG.RADVEL.TYPE "number";       # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0";         # Default value
TEL.TARG.RADVEL.LABEL  "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

# -----
TPL.PARAM      "INS.ACQ";           # Next template parameter
INS.ACQ.TYPE   "keyword";          # Keyword type
INS.ACQ.RANGE   "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT";       # Default value
INS.ACQ.VALUE   "wavesimult";       # Allocated value
INS.ACQ.LABEL   "Acquisition mode"; # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword
```



```
# -----
TPL.PARAM      "INS.MODE";          # Next template parameter
INS.MODE.TYPE  "keyword";         # Keyword type
INS.MODE.RANGE "HA HE";          # Valid range
INS.MODE.DEFAULT "NODEFAULT";    # Default value
INS.MODE.VALUE  "HA";            # Allocated value
INS.MODE.LABEL   "Instrument mode"; # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "INS.OPTI3.NAME";    # Next template parameter
INS.OPTI3.NAME.TYPE  "keyword";     # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW"; # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";      # Default value
INS.OPTI3.NAME.LABEL  "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM      "INS.OPTI9.NAME";    # Next template parameter
INS.OPTI9.NAME.TYPE  "keyword";     # Keyword type
INS.OPTI9.NAME.RANGE "UN1 UN2 FP"; # Valid range
INS.OPTI9.NAME.DEFAULT "FP";       # Default value
INS.OPTI9.NAME.LABEL  "Lamp selector B for NIRPS"; # Label used in P2PP
INS.OPTI9.NAME.MINIHELP "Lamp selector B for NIRPS"; # Short Help for keyword

# -----
TPL.PARAM      "AOS.PUPIL";        # Next template parameter
AOS.PUPIL.TYPE  "keyword";         # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE";    # Default value
AOS.PUPIL.LABEL   "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE    "OHS";           # Hide keyword in OHS

# --- oOo ---
```

```
#####
# E.S.O. - VLT project
#
# "@(#) $Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#
```

```
PAF.HDR.START;
PAF.TYPE      "Template Signature"; # Type of PAF
PAF.ID        "$Id: NIRPS_HA_acq_wavesimult_EGGS_objAB.tsfx 346921 2021-09-27
12:12:40Z gzins $"; # ID of PAF
PAF.NAME      "NIRPS_HA_acq_wavesimult_EGGS_objAB"; # Name of PAF
PAF.DESC      "NIRPS + HARPS Acquisition Template"; # Short description of PAF
```



```
PAF.CRTE.NAME      "allan";           # Name of creator
PAF.CRTE.DAYTIM   "24/04/18 12:00:00";    # Civil time for creation
PAF.LCHG.NAME      "nirmgr";          # Name of person/appl. chg.
PAF.LCHG.DAYTIM   "2021-10-05T08:03:36.00"; # Timestamp of last change
PAF.CHCK.NAME      "";                # Name of appl. checking
PAF.CHCK.DAYTIM   "";                # Time for checking
PAF.CHCK.CHECKSUM  "";                # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM        "NIRPS";          # Instrument this template is for
TPL.MODE           "";                # Mode of observation for this template
TPL.VERSION        "$Revision: 346921 $"; # Version of the template
TPL.REFSUP         "NIRPS_acq.ref";  # Reference Setup File
TPL.PRESEQ         "NIRPS_gen_acq.seq"; # Sequencer script
TPL.GUI            "";                # Template GUI panel
TPL.TYPE           "acquisition";   # Type of template
TPL.EXECTIME       "";                # Expected execution time
TPL.RESOURCES      "";                # Required resources

# -----
TPL.PARAM          "SEQ.BOB.DISPLAY"; # Next template parameter
SEQ.BOB.DISPLAY.TYPE "string";      # Keyword type
SEQ.BOB.DISPLAY.RANGE  "";          # Valid range
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0"; # Default value
SEQ.BOB.DISPLAY.VALUE  "ltxt058.ls.eso.org:1.0"; # Allocated value
SEQ.BOB.DISPLAY.LABEL  "Display for HARPS BOB"; # Label used in P2PP
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help for keyword
SEQ.BOB.DISPLAY.HIDE   "OHS, BOB";     # Hide keyword in OHS

# -----
TPL.PARAM          "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";       # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL  "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM          "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";       # Default value
SEQ.GUID.OFFSET.DELTA.LABEL  "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM          "SEQ.HARPS.ACQ";       # Next template parameter
SEQ.HARPS.ACQ.TYPE "keyword";          # Keyword type
SEQ.HARPS.ACQ.RANGE  "objA objAB thosimult wavesimult"; # Valid range
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT";     # Default value
SEQ.HARPS.ACQ.VALUE   "objAB";         # Allocated value
```



```
SEQ.HARPS.ACQ.LABEL "HARPS Acquisition mode"; # Label used in P2PP
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.DPR.TYPE";      # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string";        # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE "";            # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,SKY,NONE"; # Default value
SEQ.HARPS.DPR.TYPE.LABEL "Exposure info"; # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help
for keyword

# -----
TPL.PARAM      "SEQ.HARPS.MODE";          # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword";           # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS";        # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH";            # Default value
SEQ.HARPS.MODE.VALUE "EGGS";             # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.OSF.AUTO";            # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";             # Keyword type
SEQ.OSF.AUTO.RANGE "T F";                # Valid range
SEQ.OSF.AUTO.DEFAULT "T";                # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short
Help for keyword
SEQ.OSF.AUTO.HIDE "OHS";                 # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";          # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";            # Keyword type
SEQ.OSF.SCRIPT.RANGE "";                # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";              # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq_harps.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE "OHS, BOB";         # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.PRESET";              # Next template parameter
SEQ.PRESET.TYPE "boolean";               # Keyword type
SEQ.PRESET.RANGE "T F";                  # Valid range
SEQ.PRESET.DEFAULT "T";                  # Default value
SEQ.PRESET.LABEL "Preset telescope?";    # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE "OHS";                   # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";           # Next template parameter
SEQ.TARG.IMAG.TYPE "number";             # Keyword type
SEQ.TARG.IMAG.RANGE "";                 # Valid range
SEQ.TARG.IMAG.DEFAULT "5";               # Default value
```



```
SEQ.TARG.IMAG.LABEL "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

# -----
TPL.PARAM "SEQ.TARG.JMAG"; # Next template parameter
SEQ.TARG.JMAG.TYPE "number"; # Keyword type
SEQ.TARG.JMAG.RANGE ""; # Valid range
SEQ.TARG.JMAG.DEFAULT "5"; # Default value
SEQ.TARG.JMAG.LABEL "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.ALPHA"; # Next template parameter
TEL.TARG.ALPHA.TYPE "coord"; # Keyword type
TEL.TARG.ALPHA.RANGE ""; # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM "TEL.TARG.DELTA"; # Next template parameter
TEL.TARG.DELTA.TYPE "coord"; # Keyword type
TEL.TARG.DELTA.RANGE ""; # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT"; # Default value

# -----
TPL.PARAM "TEL.TARG.EQUINOX"; # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword"; # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000"; # Default value
TEL.TARG.EQUINOX.LABEL "Equinox"; # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.PMA"; # Next template parameter
TEL.TARG.PMA.TYPE "number"; # Keyword type
TEL.TARG.PMA.RANGE "-10..10"; # Valid range
TEL.TARG.PMA.DEFAULT "0"; # Default value
TEL.TARG.PMA.LABEL "Proper Motion Alpha"; # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.PMD"; # Next template parameter
TEL.TARG.PMD.TYPE "number"; # Keyword type
TEL.TARG.PMD.RANGE "-10..10"; # Valid range
TEL.TARG.PMD.DEFAULT "0"; # Default value
TEL.TARG.PMD.LABEL "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM "TEL.TARG.EPOCH"; # Next template parameter
TEL.TARG.EPOCH.TYPE "number"; # Keyword type
TEL.TARG.EPOCH.RANGE "-2000..3000"; # Valid range
TEL.TARG.EPOCH.DEFAULT "2000"; # Default value
TEL.TARG.EPOCH.LABEL "Epoch"; # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword
```



TPL.PARAM "TEL.TARG.RADVEL"; # Next template parameter
TEL.TARG.RADVEL.TYPE "number"; # Keyword type
TEL.TARG.RADVEL.RANGE "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0"; # Default value
TEL.TARG.RADVEL.LABEL "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

TPL.PARAM "INS.ACQ"; # Next template parameter
INS.ACQ.TYPE "keyword"; # Keyword type
INS.ACQ.RANGE "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT"; # Default value
INS.ACQ.VALUE "wavesimult"; # Allocated value
INS.ACQ.LABEL "Acquisition mode"; # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword

TPL.PARAM "INS.MODE"; # Next template parameter
INS.MODE.TYPE "keyword"; # Keyword type
INS.MODE.RANGE "HA HE"; # Valid range
INS.MODE.DEFAULT "NODEFAULT"; # Default value
INS.MODE.VALUE "HA"; # Allocated value
INS.MODE.LABEL "Instrument mode"; # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword

TPL.PARAM "INS.OPTI3.NAME"; # Next template parameter
INS.OPTI3.NAME.TYPE "keyword"; # Keyword type
INS.OPTI3.NAME.RANGE "WIDE NARROW"; # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE"; # Default value
INS.OPTI3.NAME.LABEL "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

TPL.PARAM "INS.OPTI9.NAME"; # Next template parameter
INS.OPTI9.NAME.TYPE "keyword"; # Keyword type
INS.OPTI9.NAME.RANGE "UN1 UN2 FP"; # Valid range
INS.OPTI9.NAME.DEFAULT "FP"; # Default value
INS.OPTI9.NAME.LABEL "Lamp selector B for NIRPS"; # Label used in P2PP
INS.OPTI9.NAME.MINIHELP "Lamp selector B for NIRPS"; # Short Help for keyword

TPL.PARAM "AOS.PUPIL"; # Next template parameter
AOS.PUPIL.TYPE "keyword"; # Keyword type
AOS.PUPIL.RANGE "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE"; # Default value
AOS.PUPIL.LABEL "AO pupil configuration"; # Label used in P2PP
AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE "OHS"; # Hide keyword in OHS

--- oOo ---



```
# E.S.O. - VLT project
#
# "@(#) $Id$"
#
# who      when      what
# -----
# nirmgr  2021-10-05 created.
#
PAF.HDR.START;
PAF.TYPE      "Template Signature";    # Type of PAF
PAF.ID        "$Id: NIRPS_HA_acq_objAB_HAM_objAB.tsfx 346921 2021-09-27 12:12:40Z
gzins $"; # ID of PAF
PAF.NAME      "NIRPS_HA_acq_objAB_HAM_objAB"; # Name of PAF
PAF.DESC      "NIRPS + HARPS Acquisition Template"; # Short description of PAF
PAF.CRTE.NAME "allan";                 # Name of creator
PAF.CRTE.DAYTIM "24/04/18 12:00:00";   # Civil time for creation
PAF.LCHG.NAME  "nirmgr";                # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:38.00"; # Timestamp of last change
PAF.CHCK.NAME  "";                      # Name of appl. checking
PAF.CHCK.DAYTIM "";                     # Time for checking
PAF.CHCK.CHECKSUM "";                  # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM   "NIRPS";                 # Instrument this template is for
TPL.MODE       "";                      # Mode of observation for this template
TPL.VERSION    "$Revision: 346921 $";   # Version of the template
TPL.REFSUP    "NIRPS_acq.ref";         # Reference Setup File
TPL.PRESEQ     "NIRPS_gen_acq.seq";    # Sequencer script
TPL.GUI        "";                      # Template GUI panel
TPL.TYPE       "acquisition";          # Type of template
TPL.EXECTIME   "";                      # Expected execution time
TPL.RESOURCES  "";                      # Required resources

# -----
TPL.PARAM      "SEQ.BOB.DISPLAY";      # Next template parameter
SEQ.BOB.DISPLAY.TYPE "string";        # Keyword type
SEQ.BOB.DISPLAY.RANGE "";             # Valid range
SEQ.BOB.DISPLAY.DEFAULT "127.0.0.1:0.0"; # Default value
SEQ.BOB.DISPLAY.VALUE "ltxt058.ls.eso.org:1.0"; # Allocated value
SEQ.BOB.DISPLAY.LABEL "Display for HARPS BOB"; # Label used in P2PP
SEQ.BOB.DISPLAY.MINIHELP "Display to be used when starting BOB on HARPS"; # Short Help for keyword
SEQ.BOB.DISPLAY.HIDE  "OHS, BOB";      # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.GUID.OFFSET.ALPHA"; # Next template parameter
SEQ.GUID.OFFSET.ALPHA.TYPE "number";   # Keyword type
SEQ.GUID.OFFSET.ALPHA.RANGE "-2..2";  # Valid range
SEQ.GUID.OFFSET.ALPHA.DEFAULT "0.0";   # Default value
SEQ.GUID.OFFSET.ALPHA.LABEL "Alpha offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.ALPHA.MINIHELP "Alpha offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword
```



```
# -----
TPL.PARAM      "SEQ.GUID.OFFSET.DELTA"; # Next template parameter
SEQ.GUID.OFFSET.DELTA.TYPE "number";      # Keyword type
SEQ.GUID.OFFSET.DELTA.RANGE "-2..2";      # Valid range
SEQ.GUID.OFFSET.DELTA.DEFAULT "0.0";      # Default value
SEQ.GUID.OFFSET.DELTA.LABEL "Delta offset for the guiding"; # Label used in P2PP
SEQ.GUID.OFFSET.DELTA.MINIHELP "Delta offset for the guiding in arcseconds (-2 to 2)"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.ACQ";          # Next template parameter
SEQ.HARPS.ACQ.TYPE "keyword";           # Keyword type
SEQ.HARPS.ACQ.RANGE "objA objAB thosimult wavesimult"; # Valid range
SEQ.HARPS.ACQ.DEFAULT "NODEFAULT";     # Default value
SEQ.HARPS.ACQ.VALUE "objAB";           # Allocated value
SEQ.HARPS.ACQ.LABEL "HARPS Acquisition mode"; # Label used in P2PP
SEQ.HARPS.ACQ.MINIHELP "HARPS Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.DPR.TYPE";    # Next template parameter
SEQ.HARPS.DPR.TYPE.TYPE "string";       # Keyword type
SEQ.HARPS.DPR.TYPE.RANGE "";           # Valid range
SEQ.HARPS.DPR.TYPE.DEFAULT "STAR,SKY,NONE"; # Default value
SEQ.HARPS.DPR.TYPE.LABEL "Exposure info"; # Label used in P2PP
SEQ.HARPS.DPR.TYPE.MINIHELP "Info on object A and B and target spectral type"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.MODE";        # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword";         # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS";      # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH";          # Default value
SEQ.HARPS.MODE.VALUE "ECH";            # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.OSF.AUTO";          # Next template parameter
SEQ.OSF.AUTO.TYPE "boolean";           # Keyword type
SEQ.OSF.AUTO.RANGE "T F";              # Valid range
SEQ.OSF.AUTO.DEFAULT "T";              # Default value
SEQ.OSF.AUTO.LABEL "Automatic execution of OSF scripts?"; # Label used in P2PP
SEQ.OSF.AUTO.MINIHELP "Enable/disable Automatic execution of OSF scripts, bool"; # Short Help for keyword
SEQ.OSF.AUTO.HIDE   "OHS";             # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.OSF.SCRIPT";        # Next template parameter
SEQ.OSF.SCRIPT.TYPE "string";          # Keyword type
SEQ.OSF.SCRIPT.RANGE "";               # Valid range
SEQ.OSF.SCRIPT.DEFAULT "";             # Default value
SEQ.OSF.SCRIPT.VALUE "NIRPS_acq_harps.osf"; # Allocated value
SEQ.OSF.SCRIPT.LABEL "OSF script name"; # Label used in P2PP
SEQ.OSF.SCRIPT.MINIHELP "OSF script name"; # Short Help for keyword
SEQ.OSF.SCRIPT.HIDE   "OHS, BOB";       # Hide keyword in OHS
```



```
# -----
TPL.PARAM      "SEQ.PRESET";          # Next template parameter
SEQ.PRESET.TYPE "boolean";          # Keyword type
SEQ.PRESET.RANGE "T F";            # Valid range
SEQ.PRESET.DEFAULT "T";             # Default value
SEQ.PRESET.LABEL "Preset telescope?"; # Label used in P2PP
SEQ.PRESET.MINIHELP "Preset telescope, bool"; # Short Help for keyword
SEQ.PRESET.HIDE "OHS";              # Hide keyword in OHS

# -----
TPL.PARAM      "SEQ.TARG.IMAG";        # Next template parameter
SEQ.TARG.IMAG.TYPE "number";          # Keyword type
SEQ.TARG.IMAG.RANGE "";               # Valid range
SEQ.TARG.IMAG.DEFAULT "5";            # Default value
SEQ.TARG.IMAG.LABEL "I band magnitude"; # Label used in P2PP
SEQ.TARG.IMAG.MINIHELP "I band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.JMAG";        # Next template parameter
SEQ.TARG.JMAG.TYPE "number";          # Keyword type
SEQ.TARG.JMAG.RANGE "";               # Valid range
SEQ.TARG.JMAG.DEFAULT "5";            # Default value
SEQ.TARG.JMAG.LABEL "J band magnitude"; # Label used in P2PP
SEQ.TARG.JMAG.MINIHELP "J band magnitude"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.ALPHA";        # Next template parameter
TEL.TARG.ALPHA.TYPE "coord";          # Keyword type
TEL.TARG.ALPHA.RANGE "";               # Valid range
TEL.TARG.ALPHA.DEFAULT "NODEFAULT";   # Default value

# -----
TPL.PARAM      "TEL.TARG.DELTA";        # Next template parameter
TEL.TARG.DELTA.TYPE "coord";          # Keyword type
TEL.TARG.DELTA.RANGE "";               # Valid range
TEL.TARG.DELTA.DEFAULT "NODEFAULT";   # Default value

# -----
TPL.PARAM      "TEL.TARG.EQUINOX";       # Next template parameter
TEL.TARG.EQUINOX.TYPE "keyword";        # Keyword type
TEL.TARG.EQUINOX.RANGE "-2000..3000"; # Valid range
TEL.TARG.EQUINOX.DEFAULT "2000";        # Default value
TEL.TARG.EQUINOX.LABEL "Equinox";       # Label used in P2PP
TEL.TARG.EQUINOX.MINIHELP "Equinox expressed as year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.PMA";          # Next template parameter
TEL.TARG.PMA.TYPE "number";            # Keyword type
TEL.TARG.PMA.RANGE "-10..10";          # Valid range
TEL.TARG.PMA.DEFAULT "0";              # Default value
TEL.TARG.PMA.LABEL "Proper Motion Alpha"; # Label used in P2PP
TEL.TARG.PMA.MINIHELP "Proper Motion Alpha in arcseconds/year"; # Short Help for keyword

# -----
```



```
TPL.PARAM      "TEL.TARG.PMD";      # Next template parameter
TEL.TARG.PMD.TYPE  "number";        # Keyword type
TEL.TARG.PMD.RANGE  "-10..10";     # Valid range
TEL.TARG.PMD.DEFAULT "0";          # Default value
TEL.TARG.PMD.LABEL   "Proper Motion Delta"; # Label used in P2PP
TEL.TARG.PMD.MINIHELP "Proper Motion Delta in arcseconds/year"; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.EPOCH";      # Next template parameter
TEL.TARG.EPOCH.TYPE  "number";        # Keyword type
TEL.TARG.EPOCH.RANGE  "-2000..3000";  # Valid range
TEL.TARG.EPOCH.DEFAULT "2000";        # Default value
TEL.TARG.EPOCH.LABEL   "Epoch";        # Label used in P2PP
TEL.TARG.EPOCH.MINIHELP "Epoch expressed as year."; # Short Help for keyword

# -----
TPL.PARAM      "TEL.TARG.RADVEL";      # Next template parameter
TEL.TARG.RADVEL.TYPE  "number";        # Keyword type
TEL.TARG.RADVEL.RANGE  "-9999.0..9999.0"; # Valid range
TEL.TARG.RADVEL.DEFAULT "0";          # Default value
TEL.TARG.RADVEL.LABEL   "Target radial velocity"; # Label used in P2PP
TEL.TARG.RADVEL.MINIHELP "Target radial velocity"; # Short Help for keyword

# -----
TPL.PARAM      "INS.ACQ";            # Next template parameter
INS.ACQ.TYPE    "keyword";           # Keyword type
INS.ACQ.RANGE   "objA objAB wavesimult"; # Valid range
INS.ACQ.DEFAULT "NODEFAULT";         # Default value
INS.ACQ.VALUE    "objAB";             # Allocated value
INS.ACQ.LABEL    "Acquisition mode"; # Label used in P2PP
INS.ACQ.MINIHELP "Acquisition mode"; # Short Help for keyword

# -----
TPL.PARAM      "INS.MODE";           # Next template parameter
INS.MODE.TYPE   "keyword";           # Keyword type
INS.MODE.RANGE  "HA HE";             # Valid range
INS.MODE.DEFAULT "NODEFAULT";        # Default value
INS.MODE.VALUE   "HA";                # Allocated value
INS.MODE.LABEL   "Instrument mode"; # Label used in P2PP
INS.MODE.MINIHELP "Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "INS.OPTI3.NAME";      # Next template parameter
INS.OPTI3.NAME.TYPE  "keyword";        # Keyword type
INS.OPTI3.NAME.RANGE  "WIDE NARROW";   # Valid range
INS.OPTI3.NAME.DEFAULT "WIDE";         # Default value
INS.OPTI3.NAME.LABEL   "Focal plane stage #2"; # Label used in P2PP
INS.OPTI3.NAME.MINIHELP "Focal plane stage #2"; # Short Help for keyword

# -----
TPL.PARAM      "AOS.PUPIL";          # Next template parameter
AOS.PUPIL.TYPE   "keyword";           # Keyword type
AOS.PUPIL.RANGE  "TELESCOPE FRONT-END"; # Valid range
AOS.PUPIL.DEFAULT "TELESCOPE";        # Default value
AOS.PUPIL.LABEL   "AO pupil configuration"; # Label used in P2PP
```



AOS.PUPIL.MINIHELP "AO pupil configuration"; # Short Help for keyword
AOS.PUPIL.HIDE "OHS"; # Hide keyword in OHS

--- oOo ---

```
#####
# E.S.O. - VLT project
#
# "@(#)$Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#



PAF.HDR.START;
PAF.TYPE      "Template Signature";   # Type of PAF
PAF.ID        "$Id: NIRPS_gen_obs.tsfx 346967 2021-09-28 09:50:29Z gzins $"; # ID of PAF
PAF.NAME      "NIRPS_gen_obs";       # Name of PAF
PAF.DESC      "NIRPS Observation template"; # Short description of PAF
PAF.CRTE.NAME "allan";             # Name of creator
PAF.CRTE.DAYTIM "23/04/18 12:00:00"; # Civil time for creation
PAF.LCHG.NAME "nirmgr";            # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:36.00"; # Timestamp of last change
PAF.CHCK.NAME "";                  # Name of appl. checking
PAF.CHCK.DAYTIM "";                # Time for checking
PAF.CHCK.CHECKSUM "";             # Checksum for the PAF
PAF.HDR.END;

# -----
TPL.INSTRUM  "NIRPS";           # Instrument this template is for
TPL.MODE     "";                 # Mode of observation for this template
TPL.VERSION  "$Revision: 346967 $"; # Version of the template
TPL.REFSUP   "NIRPS_obs.ref";   # Reference Setup File
TPL.PRESEQ   "NIRPS_gen_obs.seq"; # Sequencer script
TPL.GUI      "";                 # Template GUI panel
TPL.TYPE     "science";         # Type of template
TPL.EXECTIME "";                # Expected execution time
TPL.RESOURCE "";                # Required resources

# -----
TPL.PARAM    "DET1.FRAME.STORE"; # Next template parameter
DET1.FRAME.STORE.TYPE "boolean"; # Keyword type
DET1.FRAME.STORE.RANGE "T F";   # Valid range
DET1.FRAME.STORE.DEFAULT "T";   # Default value
DET1.FRAME.STORE.LABEL "Store individual frames?"; # Label used in P2PP
DET1.FRAME.STORE.MINIHELP "Store individual frames, bool"; # Short Help for keyword
DET1.FRAME.STORE.HIDE "OHS";    # Hide keyword in OHS

# -----
TPL.PARAM    "SEQ.EXPOTIME";    # Next template parameter
SEQ.EXPOTIME.TYPE "number";    # Keyword type
SEQ.EXPOTIME.RANGE "6..999";  # Valid range
```



```
SEQ.EXPOTIME.DEFAULT "60"; # Default value
SEQ.EXPOTIME.LABEL "Exposure time (s)"; # Label used in P2PP
SEQ.EXPOTIME.MINIHELP "Exposure time in seconds"; # Short Help for keyword

# -----
TPL.PARAM "SEQ.NEXPO"; # Next template parameter
SEQ.NEXPO.TYPE "integer"; # Keyword type
SEQ.NEXPO.RANGE "1..9999"; # Valid range
SEQ.NEXPO.DEFAULT "1"; # Default value
SEQ.NEXPO.LABEL "Number of exposures"; # Label used in P2PP
SEQ.NEXPO.MINIHELP "Number of exposures"; # Short Help for keyword

# -----
TPL.PARAM "SEQ.TARG.SPTYPE"; # Next template parameter
SEQ.TARG.SPTYPE.TYPE "string"; # Keyword type
SEQ.TARG.SPTYPE.RANGE ""; # Valid range
SEQ.TARG.SPTYPE.DEFAULT "NONE"; # Default value
SEQ.TARG.SPTYPE.LABEL "Target spectral type"; # Label used in P2PP
SEQ.TARG.SPTYPE.MINIHELP "Target spectral type"; # Short Help for keyword

# -----
TPL.PARAM "DPR.CATG"; # Next template parameter
DPR.CATG.TYPE "keyword"; # Keyword type
DPR.CATG.RANGE "SCIENCE CALIB TEST OTHER"; # Valid range
DPR.CATG.DEFAULT "SCIENCE"; # Default value
DPR.CATG.LABEL "Observation category"; # Label used in P2PP
DPR.CATG.MINIHELP "Category of the observation"; # Short Help for keyword
DPR.CATG.HIDE ""; # Hide keyword in OHS

# --- oOo ---

#####
# E.S.O. - VLT project
#
# "@(#)$Id$"
#
# who    when    what
# -----
# nirmgr 2021-10-05 created.
#

PAF.HDR.START;
PAF.TYPE "Template Signature"; # Type of PAF
PAF.ID "$Id: NIRPS_gen_obs_HAM.tsfx 346967 2021-09-28 09:50:29Z gzins $"; # ID of PAF
PAF.NAME "NIRPS_gen_obs_HAM"; # Name of PAF
PAF.DESC "NIRPS Observation template"; # Short description of PAF
PAF.CRTE.NAME "allan"; # Name of creator
PAF.CRTE.DAYTIM "23/04/18 12:00:00"; # Civil time for creation
PAF.LCHG.NAME "nirmgr"; # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:36.00"; # Timestamp of last change
PAF.CHCK.NAME "";
PAF.CHCK.DAYTIM "";
PAF.CHCK.CHECKSUM "";
```



PAF.HDR.END;

```
# -----
TPL.INSTRUM      "NIRPS";           # Instrument this template is for
TPL.MODE         "";                # Mode of observation for this template
TPL.VERSION      "$Revision: 346967 $"; # Version of the template
TPL.REFSUP       "NIRPS_obs.ref";   # Reference Setup File
TPL.PRESEQ        "NIRPS_gen_obs.seq"; # Sequencer script
TPL.GUI          "";                # Template GUI panel
TPL.TYPE         "science";        # Type of template
TPL.EXECTIME     "";                # Expected execution time
TPL.RESOURCES    "";                # Required resources

# -----
TPL.PARAM        "DET1.FRAME.STORE"; # Next template parameter
DET1.FRAME.STORE.TYPE "boolean";    # Keyword type
DET1.FRAME.STORE.RANGE "T F";       # Valid range
DET1.FRAME.STORE.DEFAULT "T";        # Default value
DET1.FRAME.STORE.LABEL "Store individual frames?"; # Label used in P2PP
DET1.FRAME.STORE.MINIHELP "Store individual frames, bool"; # Short Help for keyword
DET1.FRAME.STORE.HIDE "OHS";         # Hide keyword in OHS

# -----
TPL.PARAM        "SEQ.EXPOTIME";     # Next template parameter
SEQ.EXPOTIME.TYPE "number";         # Keyword type
SEQ.EXPOTIME.RANGE "6..999";        # Valid range
SEQ.EXPOTIME.DEFAULT "60";          # Default value
SEQ.EXPOTIME.LABEL "Exposure time for NIRPS"; # Label used in P2PP
SEQ.EXPOTIME.MINIHELP "Exposure time in seconds for NIRPS"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.HARPS.DPR.CATG"; # Next template parameter
SEQ.HARPS.DPR.CATG.TYPE "keyword";   # Keyword type
SEQ.HARPS.DPR.CATG.RANGE "SCIENCE CALIB TEST OTHER"; # Valid range
SEQ.HARPS.DPR.CATG.DEFAULT "SCIENCE"; # Default value
SEQ.HARPS.DPR.CATG.LABEL "HARPS Observation type"; # Label used in P2PP
SEQ.HARPS.DPR.CATG.MINIHELP "Set one of the following types: SCIENCE CALIB TEST OTHER"; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.HARPS.EXPOTIME"; # Next template parameter
SEQ.HARPS.EXPOTIME.TYPE "number";    # Keyword type
SEQ.HARPS.EXPOTIME.RANGE "0..9999"; # Valid range
SEQ.HARPS.EXPOTIME.DEFAULT "60";    # Default value
SEQ.HARPS.EXPOTIME.LABEL "Exposure time for HARPS"; # Label used in P2PP
SEQ.HARPS.EXPOTIME.MINIHELP "User defined integration time in seconds (0..42300)."; # Short Help for keyword

# -----
TPL.PARAM        "SEQ.HARPS.MODE";    # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword";      # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS";   # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH";       # Default value
SEQ.HARPS.MODE.VALUE "ECH";         # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
```



SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

TPL.PARAM "SEQ.HARPS.NEXPO"; # Next template parameter
SEQ.HARPS.NEXPO.TYPE "integer"; # Keyword type
SEQ.HARPS.NEXPO.RANGE "1..1000"; # Valid range
SEQ.HARPS.NEXPO.DEFAULT "1"; # Default value
SEQ.HARPS.NEXPO.LABEL "Number of exposures for HARPS"; # Label used in P2PP
SEQ.HARPS.NEXPO.MINIHELP "Number of exposures for HARPS"; # Short Help for keyword

TPL.PARAM "SEQ.HARPS.READOUT"; # Next template parameter
SEQ.HARPS.READOUT.TYPE "keyword"; # Keyword type
SEQ.HARPS.READOUT.RANGE "416kHz,1,high 104kHz,1,high"; # Valid range
SEQ.HARPS.READOUT.DEFAULT "416kHz,1,high"; # Default value
SEQ.HARPS.READOUT.LABEL "CCD readout mode for HARPS"; # Label used in P2PP
SEQ.HARPS.READOUT.MINIHELP "CCD readout mode for HARPS"; # Short Help for keyword

TPL.PARAM "SEQ.NEXPO"; # Next template parameter
SEQ.NEXPO.TYPE "integer"; # Keyword type
SEQ.NEXPO.RANGE "1..9999"; # Valid range
SEQ.NEXPO.DEFAULT "1"; # Default value
SEQ.NEXPO.LABEL "Number of exposures for NIRPS"; # Label used in P2PP
SEQ.NEXPO.MINIHELP "Number of exposures for NIRPS"; # Short Help for keyword

TPL.PARAM "SEQ.TARG.SPTYPE"; # Next template parameter
SEQ.TARG.SPTYPE.TYPE "string"; # Keyword type
SEQ.TARG.SPTYPE.RANGE ""; # Valid range
SEQ.TARG.SPTYPE.DEFAULT "NONE"; # Default value
SEQ.TARG.SPTYPE.LABEL "Target spectral type"; # Label used in P2PP
SEQ.TARG.SPTYPE.MINIHELP "Target spectral type"; # Short Help for keyword

TPL.PARAM "DPR.CATG"; # Next template parameter
DPR.CATG.TYPE "keyword"; # Keyword type
DPR.CATG.RANGE "SCIENCE CALIB TEST OTHER"; # Valid range
DPR.CATG.DEFAULT "SCIENCE"; # Default value
DPR.CATG.LABEL "Observation category"; # Label used in P2PP
DPR.CATG.MINIHELP "Category of the observation"; # Short Help for keyword
DPR.CATG.HIDE ""; # Hide keyword in OHS

--- oOo ---

E.S.O. - VLT project

"@(#) \$Id\$"

who when what

nirmgr 2021-10-05 created.



#

PAF.HDR.START;
PAF.TYPE "Template Signature"; # Type of PAF
PAF.ID "\$Id: NIRPS_gen_obs_EGGS.tsfx 346967 2021-09-28 09:50:29Z gzins \$"; # ID of PAF
PAF.NAME "NIRPS_gen_obs_EGGS"; # Name of PAF
PAF.DESC "NIRPS Observation template"; # Short description of PAF
PAF.CRTE.NAME "allan"; # Name of creator
PAF.CRTE.DAYTIM "23/04/18 12:00:00"; # Civil time for creation
PAF.LCHG.NAME "nirmgr"; # Name of person/appl. chg.
PAF.LCHG.DAYTIM "2021-10-05T08:03:35.00"; # Timestamp of last change
PAF.CHCK.NAME ""; # Name of appl. checking
PAF.CHCK.DAYTIM ""; # Time for checking
PAF.CHCK.CHECKSUM ""; # Checksum for the PAF
PAF.HDR.END;

TPL.INSTRUM "NIRPS"; # Instrument this template is for
TPL.MODE ""; # Mode of observation for this template
TPL.VERSION "\$Revision: 346967 \$"; # Version of the template
TPL.REFSUP "NIRPS_obs.ref"; # Reference Setup File
TPL.PRESEQ "NIRPS_gen_obs.seq"; # Sequencer script
TPL.GUI ""; # Template GUI panel
TPL.TYPE "science"; # Type of template
TPL.EXECTIME ""; # Expected execution time
TPL.RESOURCES ""; # Required resources

TPL.PARAM "DET1.FRAME.STORE"; # Next template parameter
DET1.FRAME.STORE.TYPE "boolean"; # Keyword type
DET1.FRAME.STORE.RANGE "T F"; # Valid range
DET1.FRAME.STORE.DEFAULT "T"; # Default value
DET1.FRAME.STORE.LABEL "Store individual frames?"; # Label used in P2PP
DET1.FRAME.STORE.MINIHELP "Store individual frames, bool"; # Short Help for keyword
DET1.FRAME.STORE.HIDE "OHS"; # Hide keyword in OHS

TPL.PARAM "SEQ.EXPOTIME"; # Next template parameter
SEQ.EXPOTIME.TYPE "number"; # Keyword type
SEQ.EXPOTIME.RANGE "6..999"; # Valid range
SEQ.EXPOTIME.DEFAULT "60"; # Default value
SEQ.EXPOTIME.LABEL "Exposure time for NIRPS"; # Label used in P2PP
SEQ.EXPOTIME.MINIHELP "Exposure time in seconds for NIRPS"; # Short Help for keyword

TPL.PARAM "SEQ.HARPS.DPR.CATG"; # Next template parameter
SEQ.HARPS.DPR.CATG.TYPE "keyword"; # Keyword type
SEQ.HARPS.DPR.CATG.RANGE "SCIENCE CALIB TEST OTHER"; # Valid range
SEQ.HARPS.DPR.CATG.DEFAULT "SCIENCE"; # Default value
SEQ.HARPS.DPR.CATG.LABEL "HARPS Observation type"; # Label used in P2PP
SEQ.HARPS.DPR.CATG.MINIHELP "Set one of the following types: SCIENCE CALIB TEST OTHER"; # Short Help for keyword



```
TPL.PARAM      "SEQ.HARPS.EXPOTIME";      # Next template parameter
SEQ.HARPS.EXPOTIME.TYPE "number";          # Keyword type
SEQ.HARPS.EXPOTIME.RANGE "0..9999";        # Valid range
SEQ.HARPS.EXPOTIME.DEFAULT "60";           # Default value
SEQ.HARPS.EXPOTIME.LABEL "Exposure time for HARPS"; # Label used in P2PP
SEQ.HARPS.EXPOTIME.MINIHELP "User defined integration time in seconds (0..42300)."; #
Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.MODE";          # Next template parameter
SEQ.HARPS.MODE.TYPE "keyword";           # Keyword type
SEQ.HARPS.MODE.RANGE "ECH EGGS";        # Valid range
SEQ.HARPS.MODE.DEFAULT "ECH";            # Default value
SEQ.HARPS.MODE.VALUE "EGGS";             # Allocated value
SEQ.HARPS.MODE.LABEL "HARPS Instrument mode"; # Label used in P2PP
SEQ.HARPS.MODE.MINIHELP "HARPS Instrument mode"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.NEXPO";         # Next template parameter
SEQ.HARPS.NEXPO.TYPE "integer";          # Keyword type
SEQ.HARPS.NEXPO.RANGE "1..1000";         # Valid range
SEQ.HARPS.NEXPO.DEFAULT "1";             # Default value
SEQ.HARPS.NEXPO.LABEL "Number of exposures for HARPS"; # Label used in P2PP
SEQ.HARPS.NEXPO.MINIHELP "Number of exposures for HARPS"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.HARPS.READOUT";       # Next template parameter
SEQ.HARPS.READOUT.TYPE "keyword";         # Keyword type
SEQ.HARPS.READOUT.RANGE "416kHz,1,high 104kHz,1,high"; # Valid range
SEQ.HARPS.READOUT.DEFAULT "416kHz,1,high"; # Default value
SEQ.HARPS.READOUT.LABEL "CCD readout mode for HARPS"; # Label used in P2PP
SEQ.HARPS.READOUT.MINIHELP "CCD readout mode for HARPS"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.NEXPO";               # Next template parameter
SEQ.NEXPO.TYPE "integer";                # Keyword type
SEQ.NEXPO.RANGE "1..9999";              # Valid range
SEQ.NEXPO.DEFAULT "1";                  # Default value
SEQ.NEXPO.LABEL "Number of exposures for NIRPS"; # Label used in P2PP
SEQ.NEXPO.MINIHELP "Number of exposures for NIRPS"; # Short Help for keyword

# -----
TPL.PARAM      "SEQ.TARG.SPTYPE";        # Next template parameter
SEQ.TARG.SPTYPE.TYPE "string";           # Keyword type
SEQ.TARG.SPTYPE.RANGE "";                 # Valid range
SEQ.TARG.SPTYPE.DEFAULT "NONE";          # Default value
SEQ.TARG.SPTYPE.LABEL "Target spectral type"; # Label used in P2PP
SEQ.TARG.SPTYPE.MINIHELP "Target spectral type"; # Short Help for keyword

# -----
TPL.PARAM      "DPR.CATG";               # Next template parameter
DPR.CATG.TYPE "keyword";                # Keyword type
DPR.CATG.RANGE "SCIENCE CALIB TEST OTHER"; # Valid range
DPR.CATG.DEFAULT "SCIENCE";              # Default value
DPR.CATG.LABEL "Observation category";   # Label used in P2PP
```



TITLE : NIRPS TEMPLATES REFERENCE MANUAL

REF. : NIRPS-4500-GEN-UM-203

ISSUE : 1.9

DATE: 9/08/2022

PAGE 93/93

DPR.CATG.MINIHELP "Category of the observation"; # Short Help for keyword
DPR.CATG.HIDE ""; # Hide keyword in OHS

--- oOo ---