EVLA Observation Preparation

Emmanuel Momjian (NRAO)

some slides from L. Sjouwerman

Atacama Large Millimeter/submillimeter Array
Expanded Very Large Array
Robert C. Byrd Green Bank Telescope
Very Long Baseline Array

NRAO

Observational Considerations

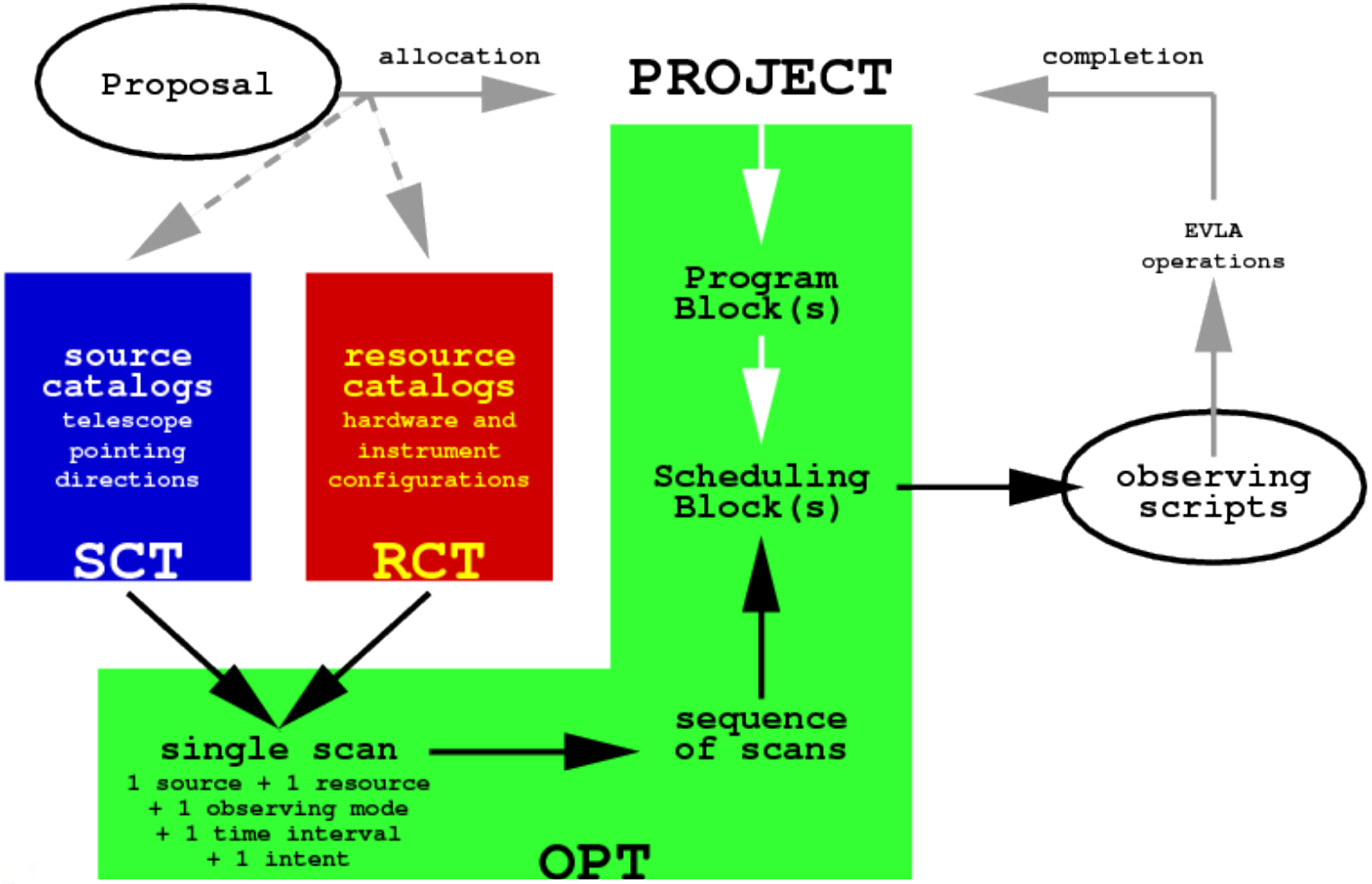
- The EVLA primarily uses dynamic scheduling (i.e., hard to know at what exact time your project will be on the array).
  - Each scheduling block must include a range of scheduling constraints:
    - LST start range
    - Weather (atmospheric phase noise and wind limits)
  - Anticipate and protect against unknown startup slew time and cable wrap
  - Anticipate and protect against availability of calibrators/slew for different starting times

Observational Considerations

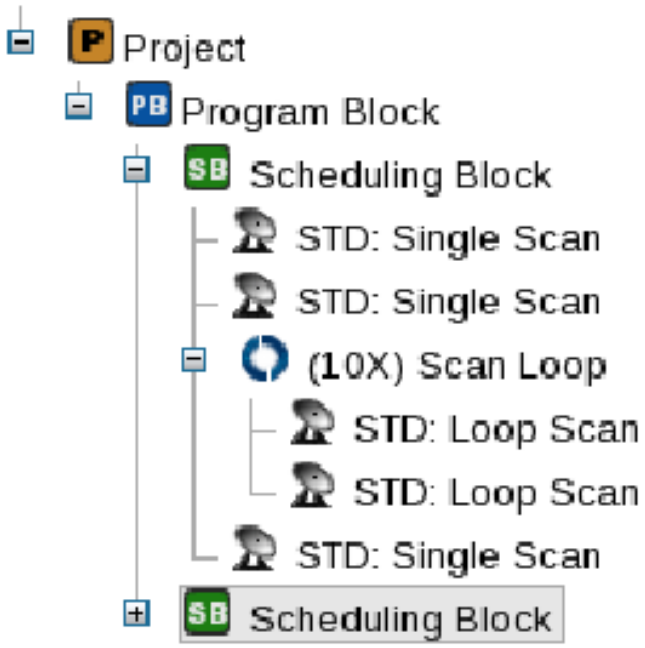
Where are my calibrators and target sources on the sky?

- Strong, point like calibrators are good for bandpass and delay calibration.
- Nearby calibrators are good for phase calibration.
- Pointing calibrators should be in the same general region of the sky.
- What are the choices for a flux calibrator?
- Can certain calibrations be combined with fewer calibrator sources?

Flow diagram



Example project "tree"



- Project has Program Blocks (PB)
- PB has ***Scheduling Blocks*** (SB)
  - Is "observing run" script
  - Sequence of scans and/or (loops of) loops of scans
  - Includes science target and various calibration sources.

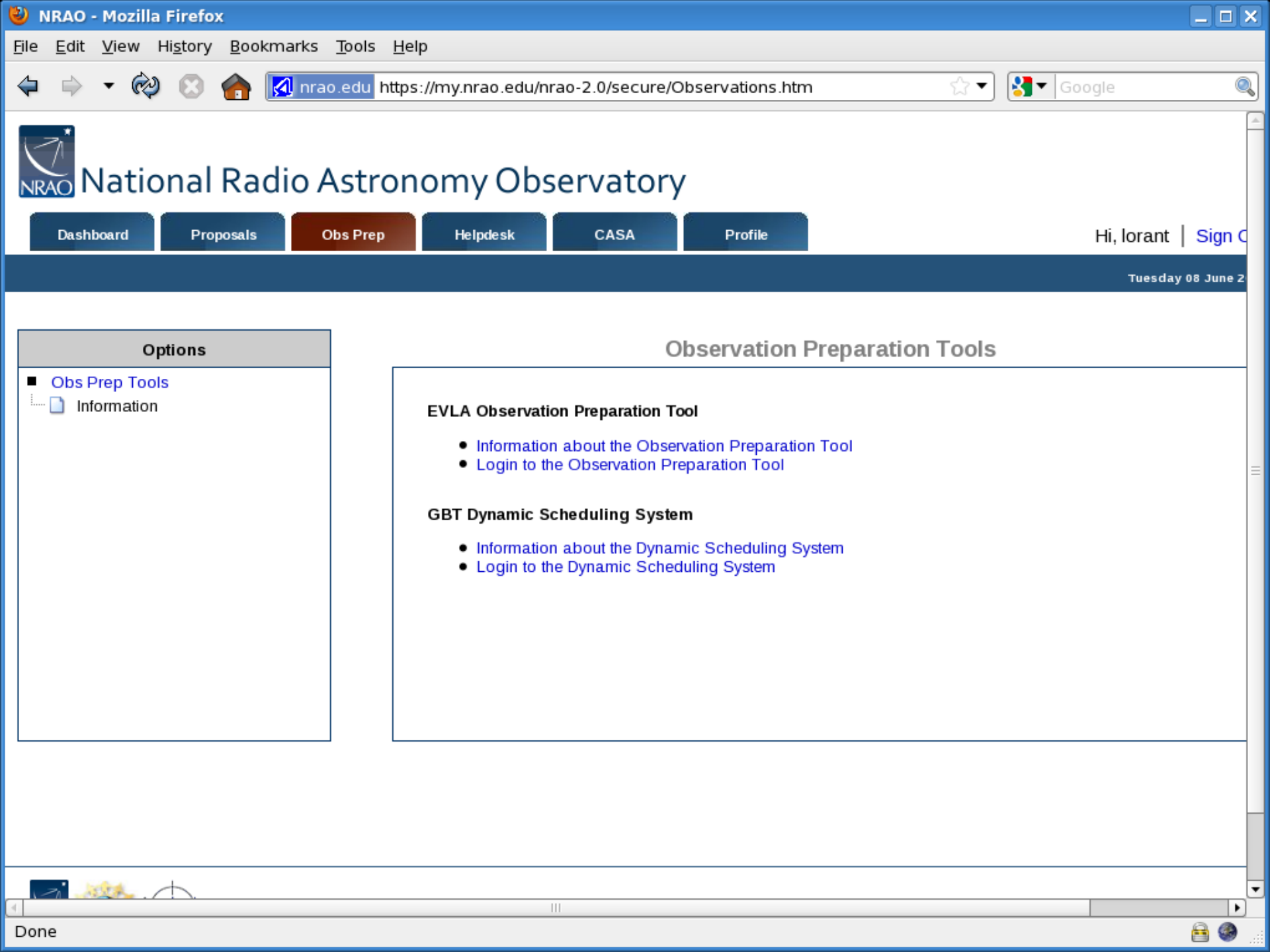
Designing a schedule

- Designing a schedule: determine which/what
  - Sources to observe, and for how long (with each setup).
  - Setups ("resources") to use
    - Receivers, (baseband/subband) signals, correlator
  - Calibrations to perform
    - Extra sources/resources? (e.g. pointing)

How to start the OPT

- Register at

https://my.nrao.edu


NRAO - Mozilla Firefox
File Edit View History Bookmarks Tools Help
nrao.edu https://my.nrao.edu/nrao-2.0/secure/Observations.htm
Google
National Radio Astronomy Observatory
Dashboard
Proposals
Obs Prep
Helpdesk
CASA
Profile
Hi, lorant | Sign C
Tuesday 08 June 2
Options
Obs Prep Tools
Information
Observation Preparation Tools
EVLA Observation Preparation Tool
Information about the Observation Preparation Tool
Login to the Observation Preparation Tool
GBT Dynamic Scheduling System
Information about the Dynamic Scheduling System
Login to the Dynamic Scheduling System
Done

NRAO Observation Preparation Tool - Mozilla Firefox

File Edit View History Bookmarks Tools Help

NRAO Observation Preparation ...

nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface

File Edit Help

NRAO > User Portal > **Observation Preparation** | Sources | Instrument Configurations

- [New Project]
  - [New Program Block]
    - [New Scheduling Block],
      - STD: [New Scan]

Overview | Comments

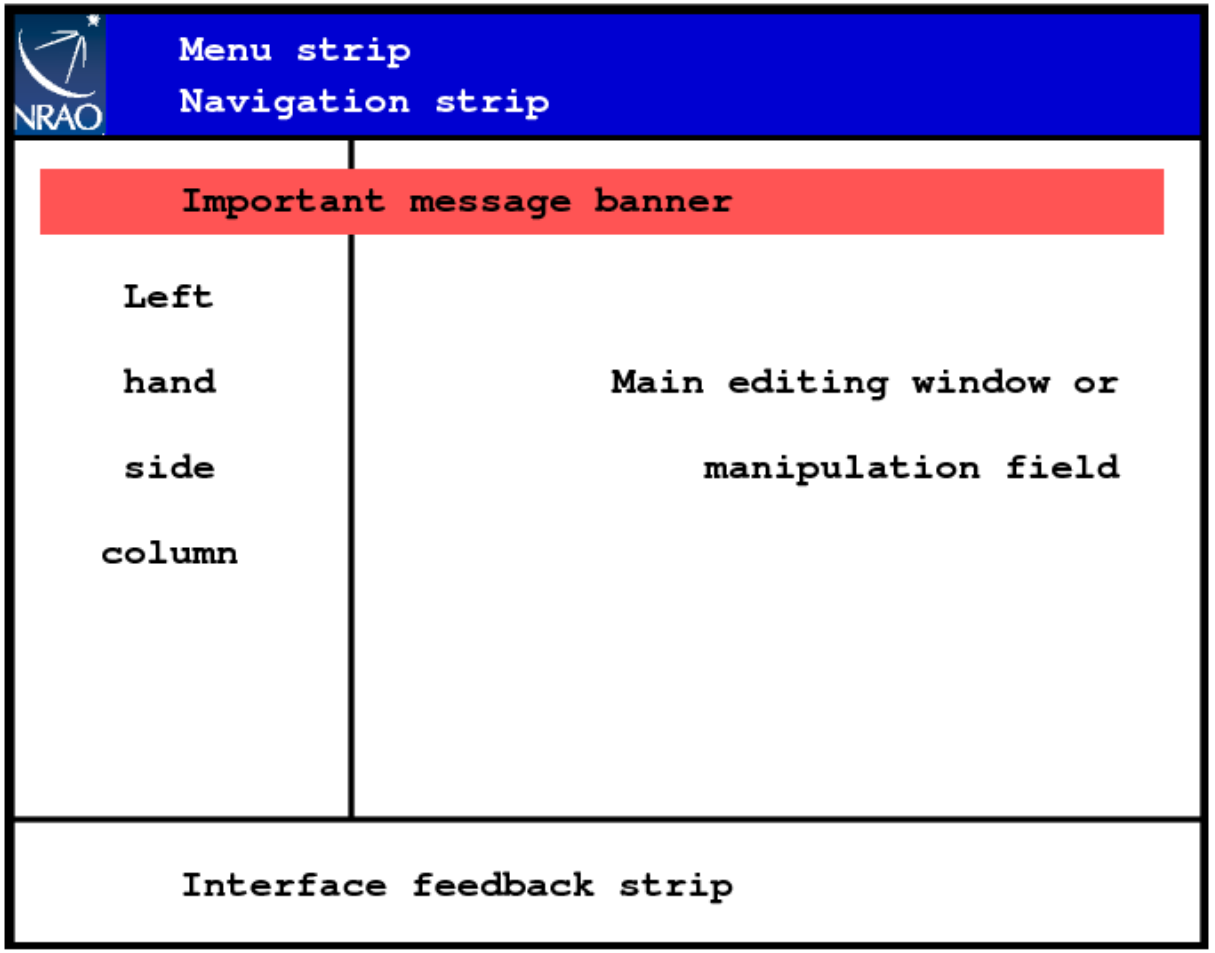
SCAN DETAILS

NAME	SCAN MODE	ANTENNA WRAP	REFERENCE POINTING	PHASE & DELAY CALIBRATION	OVER THE TOP
[New Scan]	Standard Observing	No Preference	Apply Last?	Apply Last?	Allow?

TARGET SOURCE	HARDWARE SETUP	SCAN TIMING	INTENTS
No Source Assigned	No Instrument Config. Assigned Keep Previous Conf.	Duration (LST)	OBSERVE TARGET CALIBRATE COMPLEX GAIN CALIBRATE FLUX DENSITY SCALE CALIBRATE BANDPASS
Change	Change	00:05:00	More >>>

Find: Previous Next Highlight all Match case

Layout of the OPT



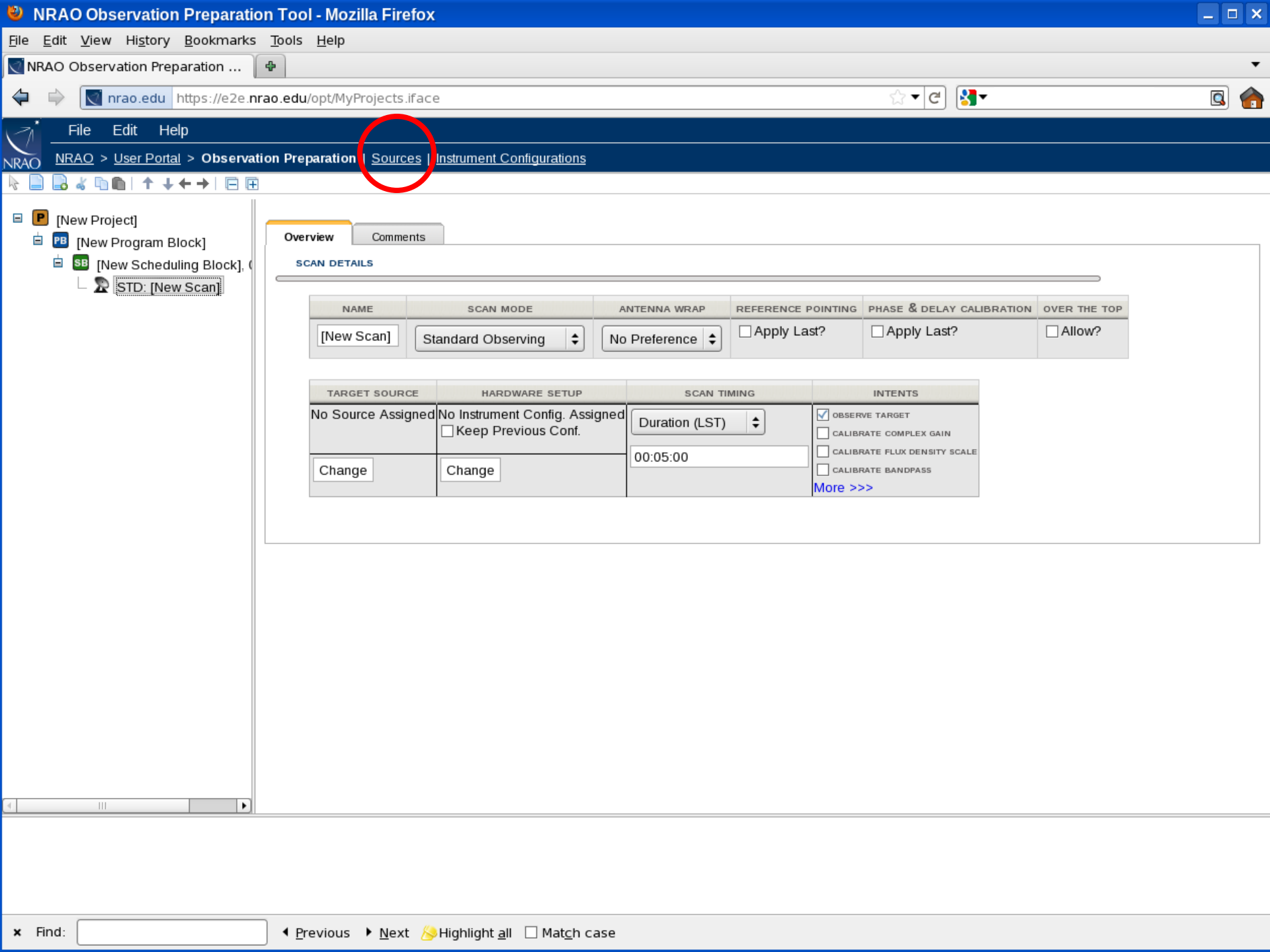
What are we observing?

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s
- Array Configuration: D
- 3 hr long scheduling block
- Ka –band targeting the HC3N (ν_o=36.39232 GHz) and the SiS (ν_o= 36.30963 GHz) lines.

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s

➢ **In the OPT: click on Sources (top menu).**


NRAO Observation Preparation Tool - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
[New Program Block]
[New Scheduling Block],
STD: [New Scan]
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
[New Scan]
Standard Observing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
No Source Assigned
No Instrument Config. Assigned
Keep Previous Conf.
Duration (LST)
00:05:00
OBSERVE TARGET
CALIBRATE COMPLEX GAIN
CALIBRATE FLUX DENSITY SCALE
CALIBRATE BANDPASS
Change
Change
More >>>
Find:
Previous
Next
Highlight all
Match case

Search
Search Aliases As Well
External Search
Advanced Search
Advanced Search

Personal Catalog
VLA

SOURCES IN 'PERSONAL CATALOG' (0)

There are currently no Sources in this group!

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s

➢ **File → create new → catalog. Fill out the name field (e.g. NRAO_CD_OPT).**

NRAO Source Catalog Management Tool - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NRAO Source Catalog Managem...
nrao.edu https://e2e.nrao.edu/sct/MyCatalogs.iface?catalogId=602766
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
Search
Search Aliases As Well
External Search
Advanced Search
Advanced Search
Personal Catalog
VLA
SOURCES IN 'PERSONAL CATALOG' (0)
There are currently no Sources in this group!
Find: Previous Next Highlight all Match case

Search
Search Aliases As Well
External Search
Advanced Search
Advanced Search

Personal Catalog
NRAO_CD_OPT
VLA

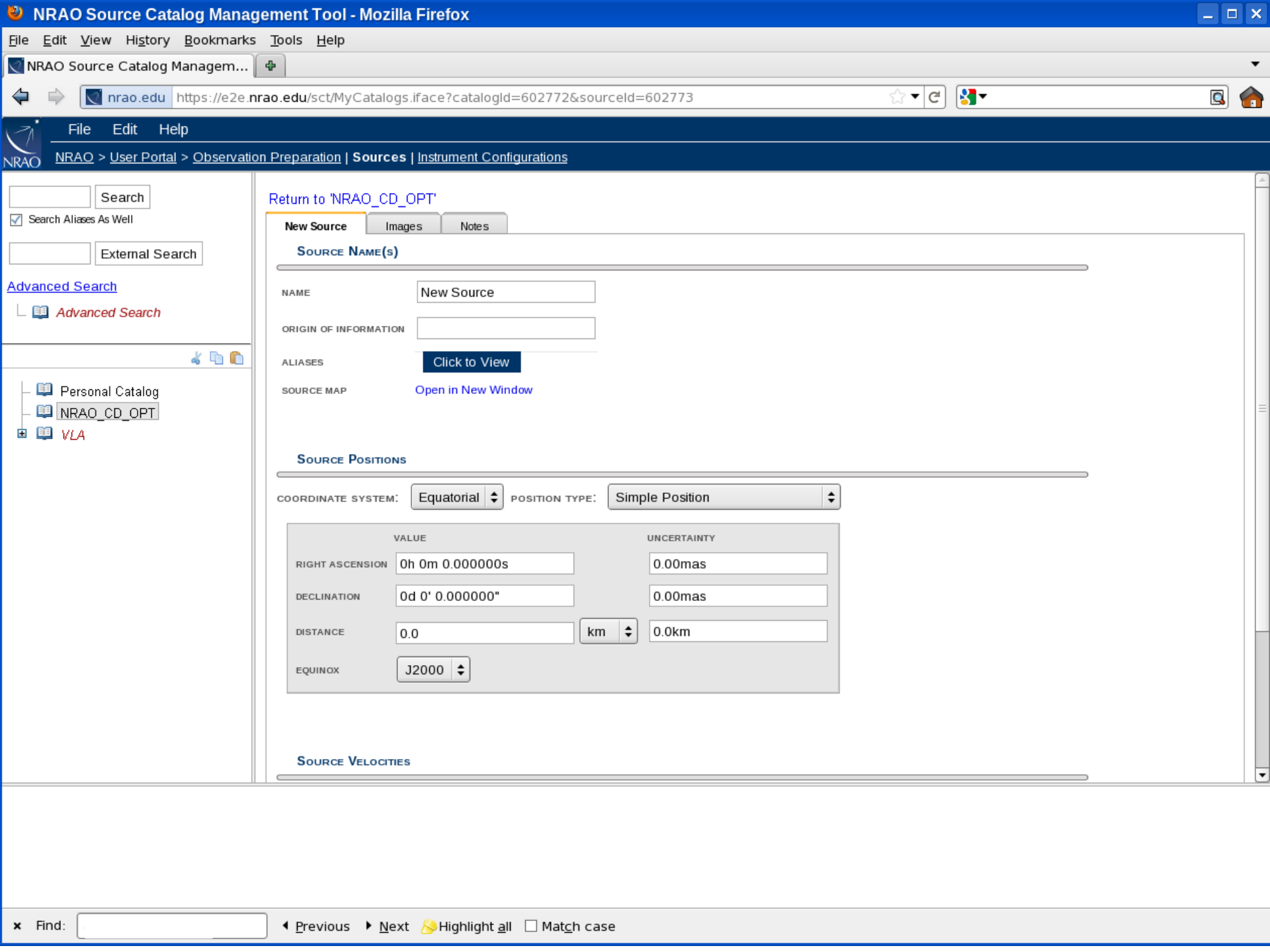
SOURCES IN 'NRAO_CD_OPT' (0)

There are currently no Sources in this group!

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s

➢ **Click on the catalog NRAO_CD_OPT, and go to File → create new → Source**


NRAO Source Catalog Management Tool - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NRAO Source Catalog Managem...
nrao.edu https://e2e.nrao.edu/sct/MyCatalogs.iface?catalogId=602772&sourceId=602773
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
Search
Search Aliases As Well
External Search
Advanced Search
Advanced Search
Personal Catalog
NRAO_CD_OPT
VLA
Return to 'NRAO_CD_OPT'
New Source
Images
Notes
Source Name(s)
NAME
New Source
ORIGIN OF INFORMATION
ALIASES
Click to View
SOURCE MAP
Open in New Window
Source Positions
COORDINATE SYSTEM:
Equatorial
POSITION TYPE:
Simple Position
VALUE
UNCERTAINTY
RIGHT ASCENSION
0h 0m 0.000000s
0.00mas
DECLINATION
0d 0' 0.000000"
0.00mas
DISTANCE
0.0
km
0.0km
EQUINOX
J2000
Source Velocities
Find:
Previous
Next
Highlight all
Match case

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s

➢ **Populate Name, R.A., Dec. fields.**

Search
Search Aliases As Well
External Search
Advanced Search
Advanced Search

Personal Catalog
NRAO_CD_OPT
VLA

Return to 'NRAO_CD_OPT'

IRC+10216 | Images | Notes

Source Name(s)

NAME: IRC+10216
ORIGIN OF INFORMATION:
ALIASES: Click to View
SOURCE MAP: Open in New Window

Source Positions

COORDINATE SYSTEM: Equatorial
POSITION TYPE: Simple Position

	VALUE		UNCERTAINTY
RIGHT ASCENSION	9h 47m 57.382s		0.00mas
DECLINATION	13d 16' 40.66"		0.00mas
DISTANCE	0.0	km	0.0km
EQUINOX	J2000		

Source Velocities

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s

➢ **To insert the velocity information: File → create new → Source Velocity, and fill out the relevant fields.**

NRAO Source Catalog Management Tool - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NRAO Source Catalog Managem...
nrao.edu https://e2e.nrao.edu/sct/MyCatalogs.iface?catalogId=602772&sourceId=602773
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
Search
Search Aliases As Well
External Search
Advanced Search
Advanced Search
Personal Catalog
NRAO_CD_OPT
VLA
SOURCE MAP
Open in New Window
Source Positions
COORDINATE SYSTEM: Equatorial
POSITION TYPE: Simple Position
VALUE
UNCERTAINTY
RIGHT ASCENSION 9h 47m 57.382s 0.00mas
DECLINATION 13d 16' 40.66" 0.00mas
DISTANCE 0.0 km 0.0km
EQUINOX J2000
Source Velocities
Value
Rest Frame
Convention
Valid Frequencies
-26.0 KM/S
LSR
Radio
from 0.0 to +infinity in GHz
Source Brightness
There are no brightnesses specified for this source!
Find:
Previous
Next
Highlight all
Match case

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s

➢ **Target's LST range: Click on the 'images'.**

Return to 'NRAO_CD_OPT'

IRC+10216 | Images | Notes

Visibility Chart

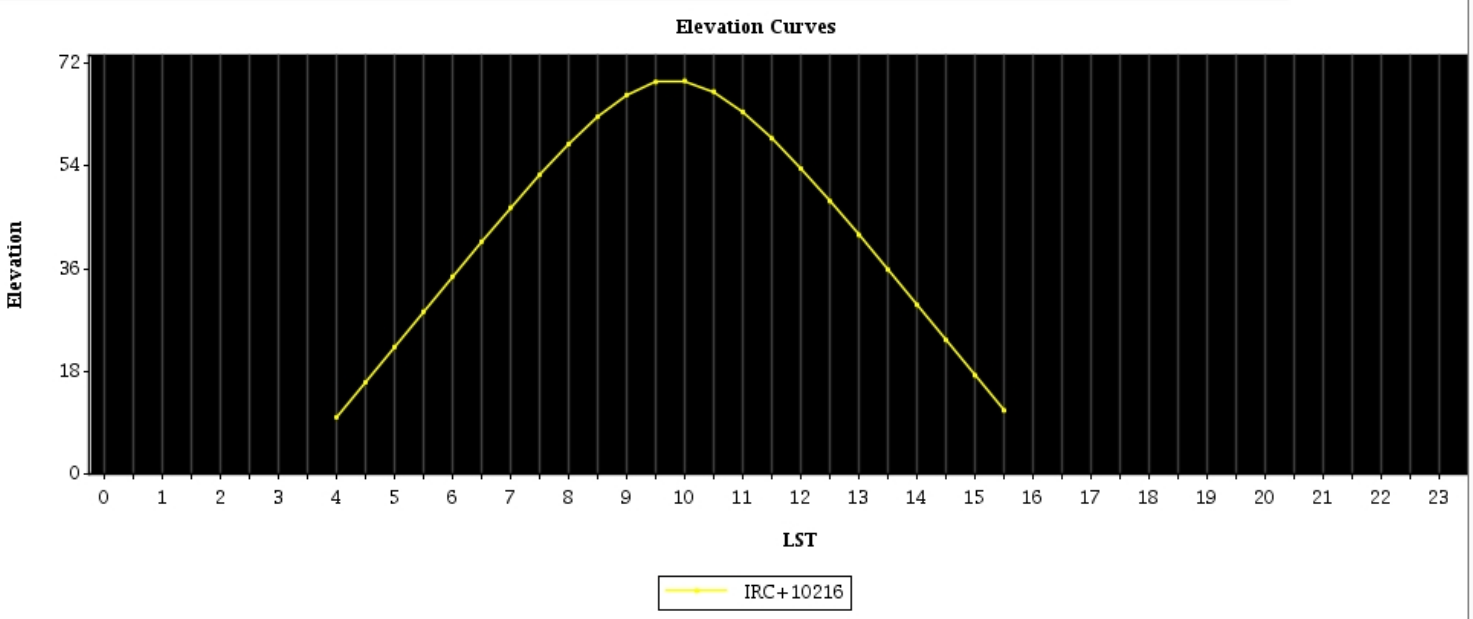


Image Links

There are no image links for this source!

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s
- LST target: 06:00→13:30 (high elevations for high frequencies)

- **What calibrators are needed?**
  - **Phase calibrator.**
  - **Reference pointing calibrator (C or X-band).**
  - **Bandpass Calibrator.**
  - **Flux density Calibrator.**

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s
- LST target: 06:00→13:30 (high elevations for high frequencies)

➢ **Finding a phase calibrator: Click on the catalog name 'NRAO_CD_OPT' on the side menu, then choose 'sky map'**

NRAO Source Catalog Management Tool - Mozilla Firefox

File Edit View History Bookmarks Tools Help

NRAO Source Catalog Managem...

nrao.edu https://e2e.nrao.edu/sct/MyCatalogs.iface?catalogId=602772

File Edit Help

NRAO > User Portal > Observation Preparation | **Sources** | Instrument Configurations

Search

Search Aliases As Well

External Search

Advanced Search

Advanced Search

Personal Catalog

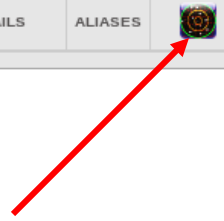
NRAO_CD_OPT

VLA

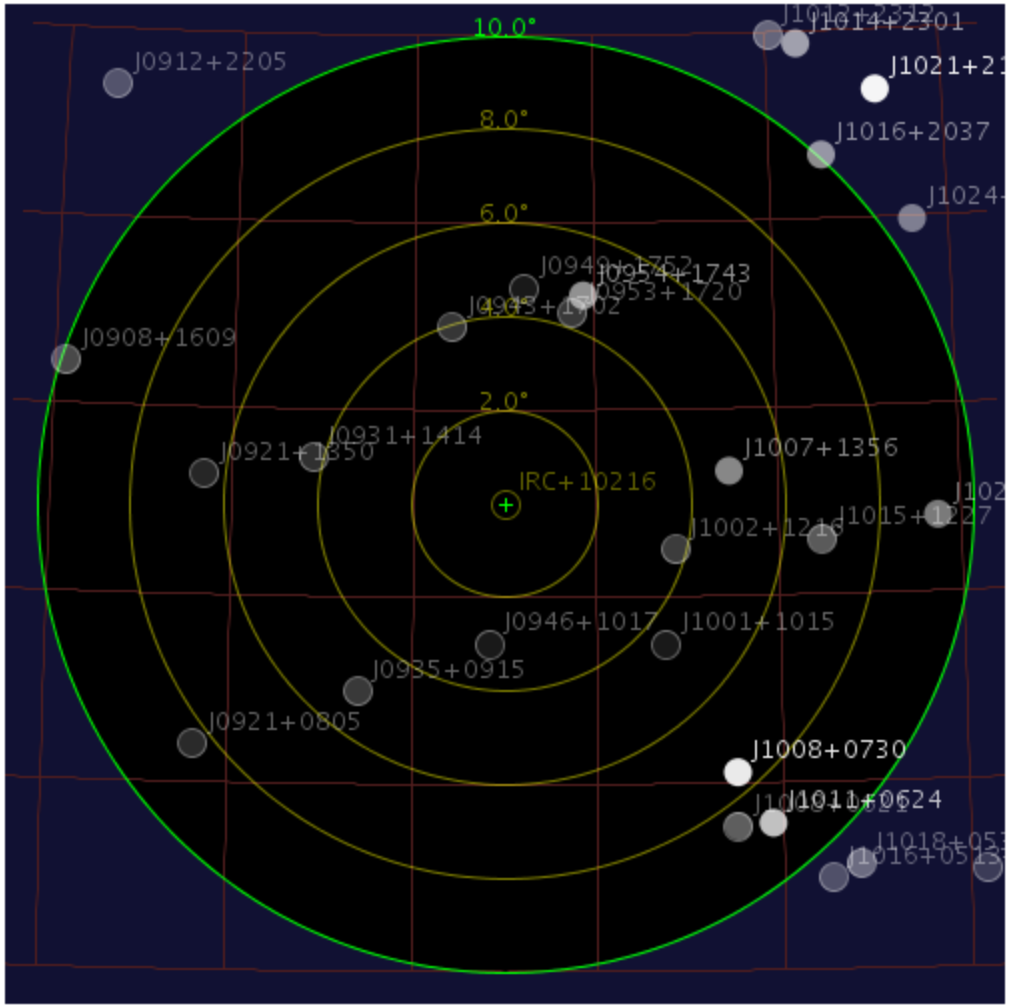
SOURCES IN 'NRAO_CD_OPT' (1)

Select: All | None Show: 25 | 50 | 100 | 200 SELECT COORDINATE SYSTEM: Equatorial

		Name	Right Ascension	Declination	Velocity	Flux / Structure		Sky Map
☐		IRC+10216	9h 47m 57.382s	13d 16' 40.66"	-26.0 km/s LSRK Radio	DETAILS	ALIASES	



× Find: Previous Next Highlight all Match case

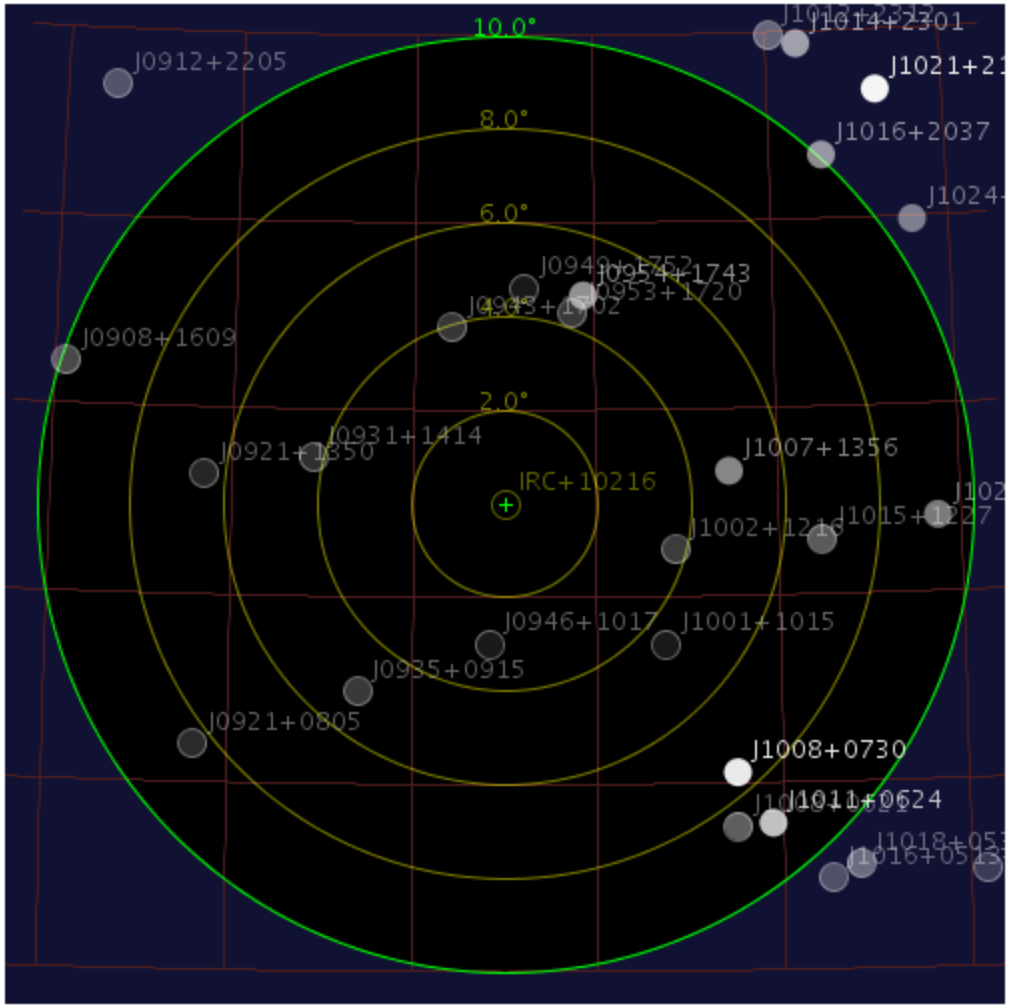


Objective: Finding a nearby phase calibrator.
Hover over source to see information
A good gain calibrator for this frequency band would be J0954+1743

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s
- Ka –band targeting the HC3N (ν_o=36.39232 GHz) and the SiS (ν_o= 36.30963 GHz) lines.
- LST target: 06:00→13:30 (high elevations for high frequencies)
- Phase calibrator: J0954+1743

➢ **Finding a reference pointing calibrator (C or X-band, for the target and the phase calibrator).**



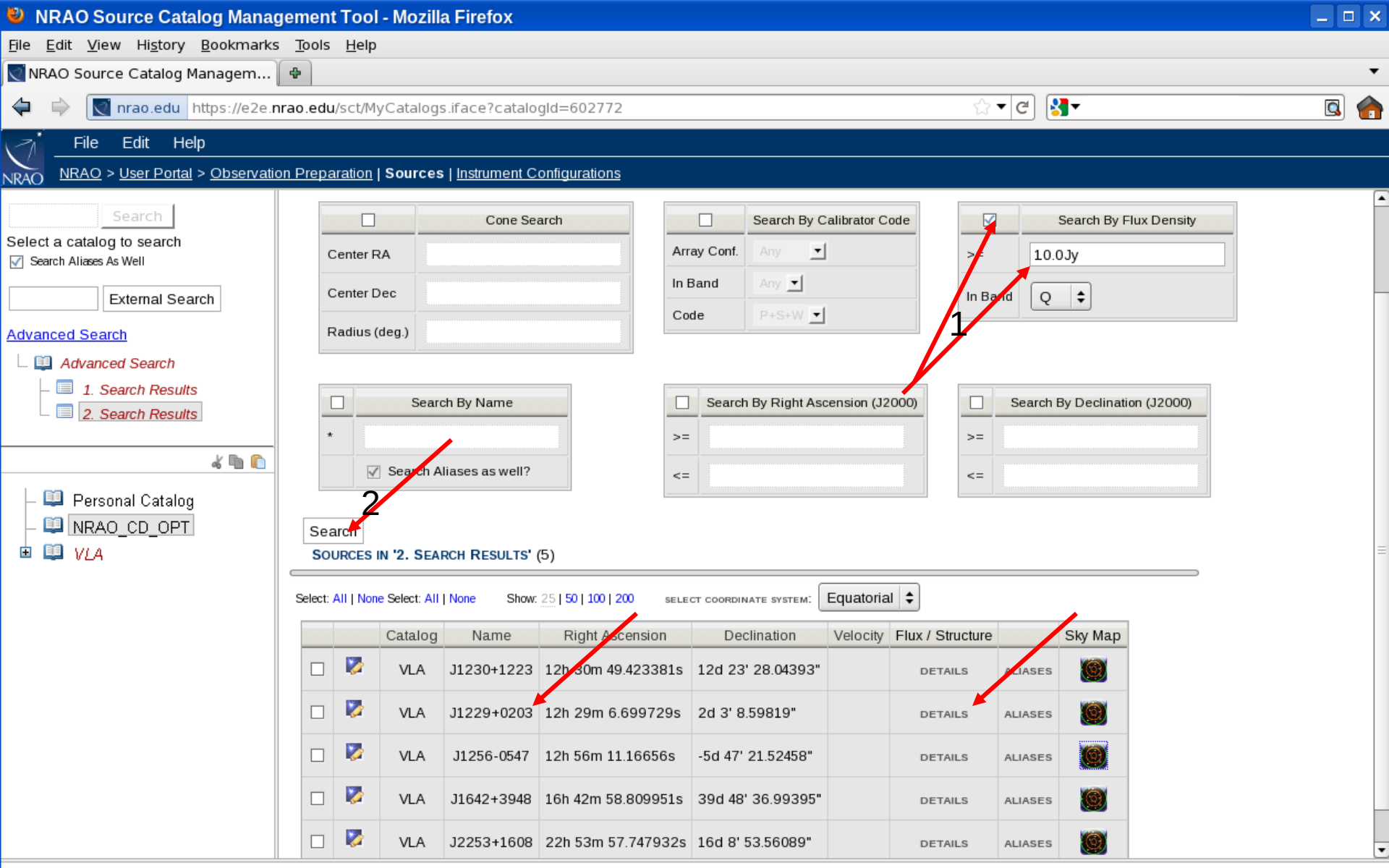
Objective: Finding a nearby reference pointing calibrator.
At C-band, a good reference pointing calibrator would be J1008+0730

NRAO

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s
- Ka –band targeting the HC3N (ν_o=36.39232 GHz) and the SiS (ν_o= 36.30963 GHz) lines.
- LST target: 06:00→13:30 (high elevations for high frequencies)
- Phase calibrator: J0954+1743
- Reference pointing (C-band): J1008+0730

➢ **Finding a bandpass calibrator: use the 'Advanced Search', and look for sources > 10 Jy at Q-band.**


NRAO Source Catalog Management Tool - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NRAO Source Catalog Managem...
nrao.edu https://e2e.nrao.edu/sct/MyCatalogs.iface?catalogId=602772
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
Search
Select a catalog to search
Search Aliases As Well
External Search
Advanced Search
Advanced Search
1. Search Results
2. Search Results
Personal Catalog
NRAO_CD_OPT
VLA
Cone Search
Center RA
Center Dec
Radius (deg.)
Search By Calibrator Code
Array Conf.
In Band
Code
Search By Flux Density
10.0Jy
In Band
Q
1
Search By Name
Search Aliases as well?
2
Search By Right Ascension (J2000)
Search By Declination (J2000)
Search
SOURCES IN '2. SEARCH RESULTS' (5)
Select: All | None Select: All | None
Show: 25 | 50 | 100 | 200
SELECT COORDINATE SYSTEM:
Equatorial
Catalog Name Right Ascension Declination Velocity Flux / Structure Sky Map
VLA J1230+1223 12h 30m 49.423381s 12d 23' 28.04393" DETAILS ALIASES
VLA J1229+0203 12h 29m 6.699729s 2d 3' 8.59819" DETAILS ALIASES
VLA J1256-0547 12h 56m 11.16656s -5d 47' 21.52458" DETAILS ALIASES
VLA J1642+3948 16h 42m 58.809951s 39d 48' 36.99395" DETAILS ALIASES
VLA J2253+1608 22h 53m 57.747932s 16d 8' 53.56089" DETAILS ALIASES
Find:
Previous
Next
Highlight all
Match case

Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s
- Ka –band targeting the HC3N (ν_o=36.39232 GHz) and the SiS (ν_o= 36.30963 GHz) lines.
- LST target 06:00→13:30 (high elevations for high frequencies)
- Phase calibrator: J0954+1743
- Reference pointing (C-band): J1008+0730
- Bandpass calibrator: J1229+0203 (LST range: 8:30→16:30)

➢ **Finding a Flux calibrator: Click on the + of the 'VLA' catalog, then on 'VLA Flux Cal'.**

NRAO Source Catalog Management Tool - Mozilla Firefox

File Edit View History Bookmarks Tools Help

NRAO Source Catalog Managem...

nrao.edu https://e2e.nrao.edu/sct/MyCatalogs.iface?catalogId=602772

File Edit Help

NRAO > User Portal > Observation Preparation | **Sources** | Instrument Configurations

Search

Search Aliases As Well

External Search

Advanced Search

Advanced Search

1. Search Results

2. Search Results

Personal Catalog

NRAO_CD_OPT

VLA

RA Groups

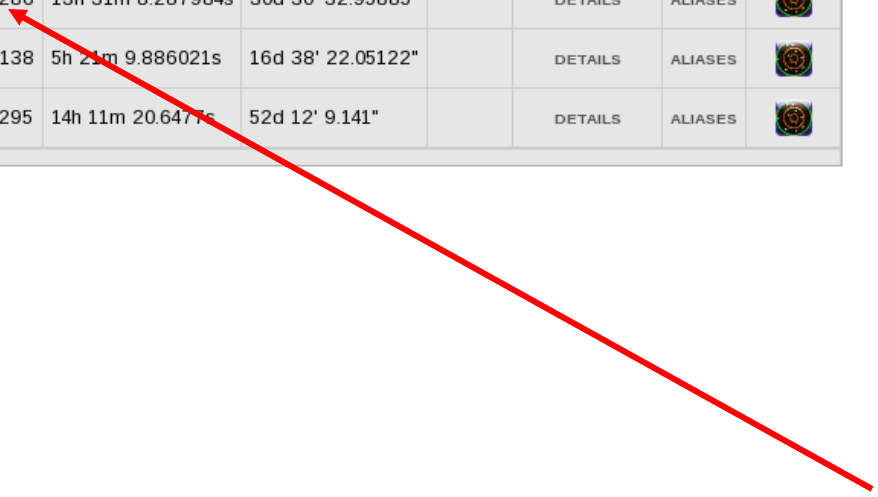
Dec Groups

VLA Flux Cal

SOURCES IN 'VLA FLUX CAL' (5)

Select: All | None Show: 25 | 50 | 100 | 200 SELECT COORDINATE SYSTEM: Equatorial

		Name	Right Ascension	Declination	Velocity	Flux / Structure		Sky Map
☐		0137+331=3C48	1h 37m 41.299431s	33d 9' 35.13299"		DETAILS	ALIASES	
☐		0542+498=3C147	5h 42m 36.137916s	49d 51' 7.23356"		DETAILS	ALIASES	
☐		1331+305=3C286	13h 31m 8.287984s	30d 30' 32.95885"		DETAILS	ALIASES	
☐		0521+166=3C138	5h 21m 9.886021s	16d 38' 22.05122"		DETAILS	ALIASES	
☐		1411+522=3C295	14h 11m 20.6477s	52d 12' 9.141"		DETAILS	ALIASES	



Find: Previous Next Highlight all Match case

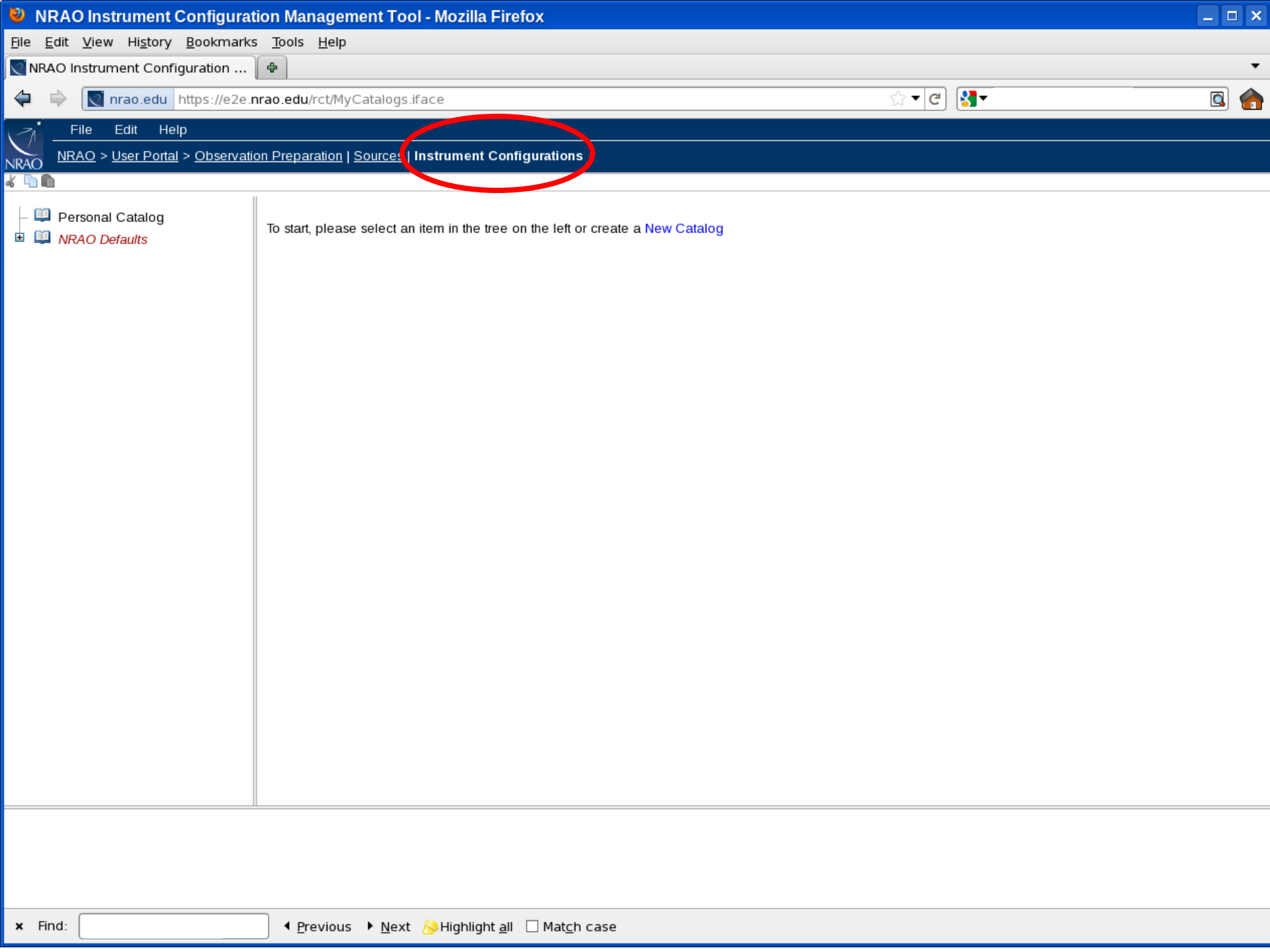
Source Catalog (SCT)

- Target source: the AGB star IRC+10216
- RA (J2000): 09:47:57.382, DEC (J2000)= +13:16:40.66
- V (radio, LSR) = -26 km/s
- Ka –band targeting the HC3N (ν_o=36.39232 GHz) and the SiS (ν_o= 36.30963 GHz) lines.
- LST target: 06:00→13:30 (high elevations for high frequencies)
- Phase calibrator: J0954+1743
- Reference pointing (C-band): J1008+0730
- Bandpass calibrator: J1229+0203 (LST range~ 8:30→16:30)
- Flux density calibrator: J1331+305=3C286 (LST range~ 8:30→18:30)

- Note that the bandpass and flux density calibrators do not require separate reference pointing calibrators.

Resource Catalog (RCT)

- Ka –band targeting the HC3N (ν_o=36.39232 GHz) and the SiS (ν_o= 36.30963 GHz) lines.


NRAO Instrument Configuration Management Tool - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NRAO Instrument Configuration ...
nrao.edu https://e2e.nrao.edu/rct/MyCatalogs.iface
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
Personal Catalog
NRAO Defaults
To start, please select an item in the tree on the left or create a New Catalog
Find: Previous Next Highlight all Match case

Resource Catalog (RCT)

- Ka –band targeting the HC3N (ν_o=36.39232 GHz) and the SiS (ν_o= 36.30963 GHz) lines.

- File → Create New → Catalog, fill out the name (e.g., NRAO_CD).
- File → Create New → Instrument Configuration

- Personal Catalog
- NRAO_CD
- *NRAO Defaults*

Return to 'NRAO_CD'

ID	Name	Telescope	Band	Correlator	Editor
206545	[New Resource]	EVLA	X (8.0GHz - 12.0GHz) 1-dB range: 8.0GHz - 12.4GHz 3-dB range: 7.7GHz - 12.6GHz	WIDAR	11A OSRO/OSRO-2

OSRO Mode

Full Polarization, two subbands, each with 64 channels/product in {RR, RL, LR, LL}

Frequency

Output Pair	Center Frequency	Frequency Type	Sky Freq Range
AC	10.0GHz	Rest Sky	10.0GHz - 10.128GHz
BD	10.0GHz	Rest Sky	10.0GHz - 10.128GHz

Doppler Setting

Configure separately? Configure together?

Position	Velocity
Coordinate System	Velocity
	Rest Frame Topocentric

- Error: The tuning logic was unable to place the frequency for Sampler Ouput AC where you requested. If there are other messages about this Sampler Output on your screen, first handle those and this problem may disappear. If there are not any other messages, it is likely that for your particular request the two frequencies you requested are too far apart for the tuning system. Try more closely spaced frequencies. (The tuning logic received a request to tune to 10.0GHz but centered the subband at 10.064GHz.) [Configuration "[New Resource]"]
- Error: The tuning logic was unable to place the frequency for Sampler Ouput BD where you requested. If there are other messages about this Sampler Output on your screen, first handle those and

Resource Catalog (RCT)

- Ka –band targeting the HC3N (ν_o=36.39232 GHz) and the SiS (ν_o= 36.30963 GHz) lines.

- Insert a name, e.g. IRC+10216
- Choose Ka-band
- Choose OSRO
- Insert the frequencies, choose 'Rest'
- Choose 8 MHz SB BW, Full (64-channel/SB)
- Doppler setting (populate the fields through 'Select Source')
- Choose an integration time (e.g. 3 sec)

- Personal Catalog
- NRAO_CD
- *NRAO Defaults*

Return to 'NRAO_CD'

ID	Name	Telescope	Band	Correlator	Editor
206545	IRC+10216	EVLA	Ka (26.5GHz - 40.0GHz) 1-dB range: 26.0GHz - 40.0GHz 3-dB range: 25.0GHz - 41.0GHz	WIDAR	OSRO

FREQUENCIES

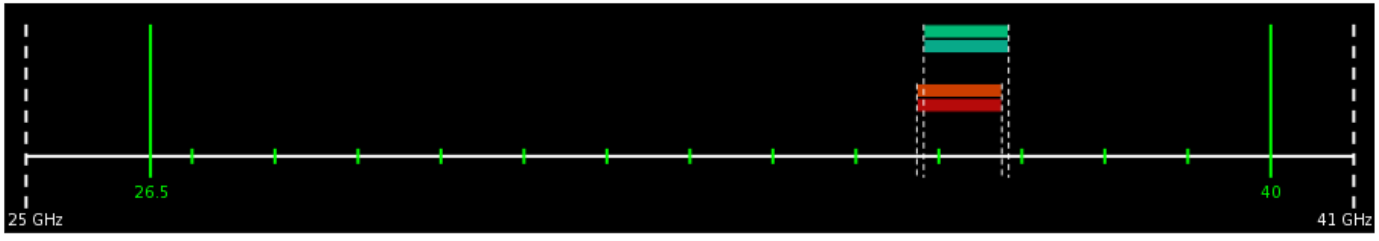
Enabled	Output Pair	SB Center Freq.	Offset Freq. (Optional)	BB Sky Range	Rest/Sky?
☑	AC	36.39232GHz	0.0MHz	35.8179GHz–36.8419GHz	Rest / Sky
☑	BD	36.30963GHz	0.0MHz	35.7352GHz–36.7592GHz	Rest / Sky

SUBBAND CONFIGURATION

# SBs	SB BW	Polarization	Channel Width	AC Sky Range	BD Sky Range
1	8MHz	Full (64 channels/SB)	125.0kHz	36.3939GHz - 36.4019GHz	36.3112GHz - 36.3192GHz

- Personal Catalog
- NRAO_CD
- *NRAO Defaults*

# SBs	SB BW	Polarization	Channel Width	AC Sky Range	BD Sky Range
1	8MHz	Full (64 channels/SB)	125.0kHz	36.3939GHz - 36.4019GHz	36.3112GHz - 36.3192GHz



AC

BD

DOPPLER SETTING

- Personal Catalog
- NRAO_CD
- *NRAO Defaults*

35.74 GHz 36.25 GHz 36.76 GHz

DOPPLER SETTING

Configure separately? Configure together?

Position		Velocity	
Coordinate System	Equatorial		
Right Ascension	9h 47m 57.382s	Velocity	-26.0 km/s
Declination	13d 16' 40.66"	Rest Frame	LSR
Epoch	J2000	Convention	Radio
	Select Source		

CORRELATOR SETUP

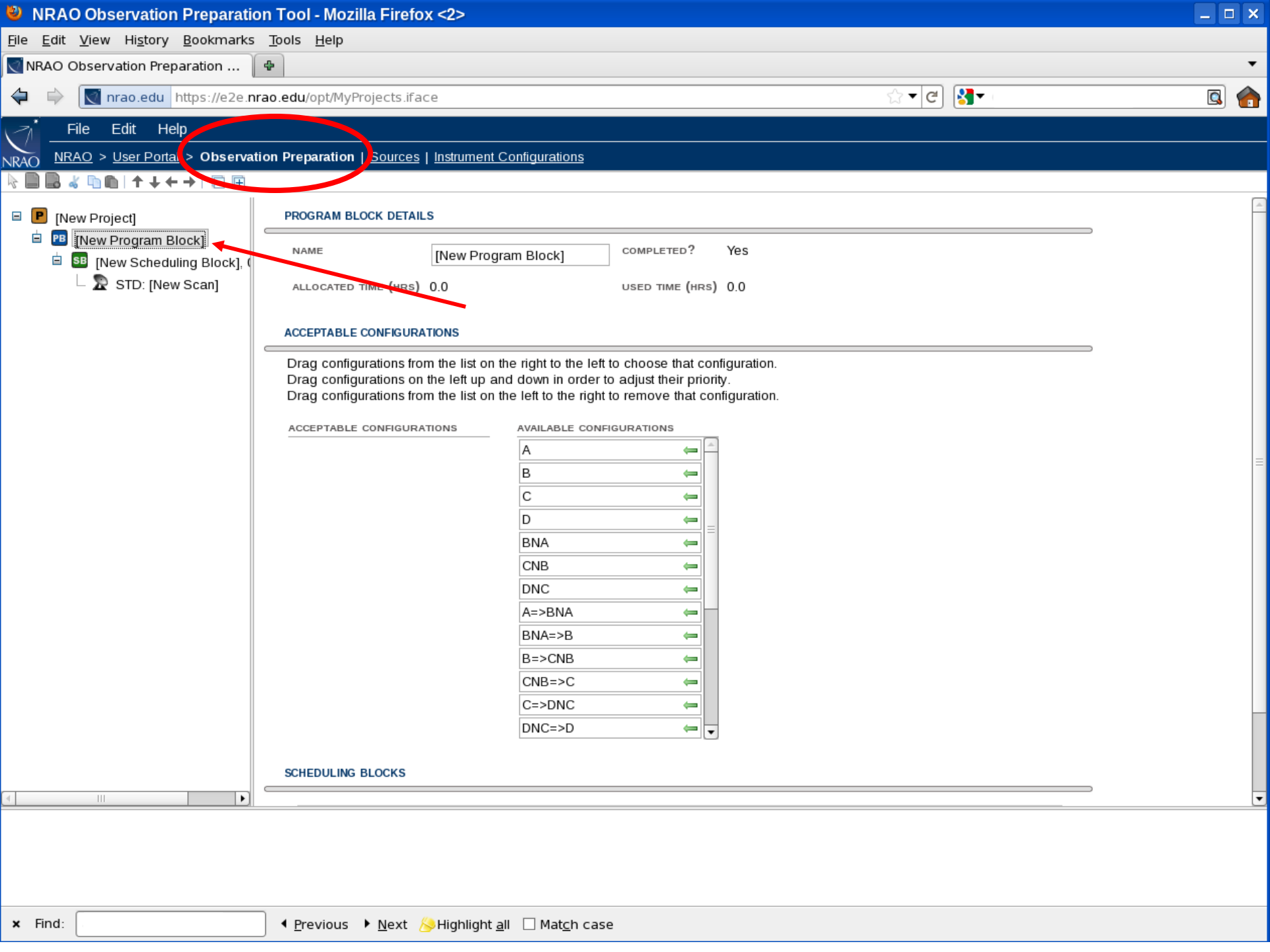
INTEGRATION TIME 3 s

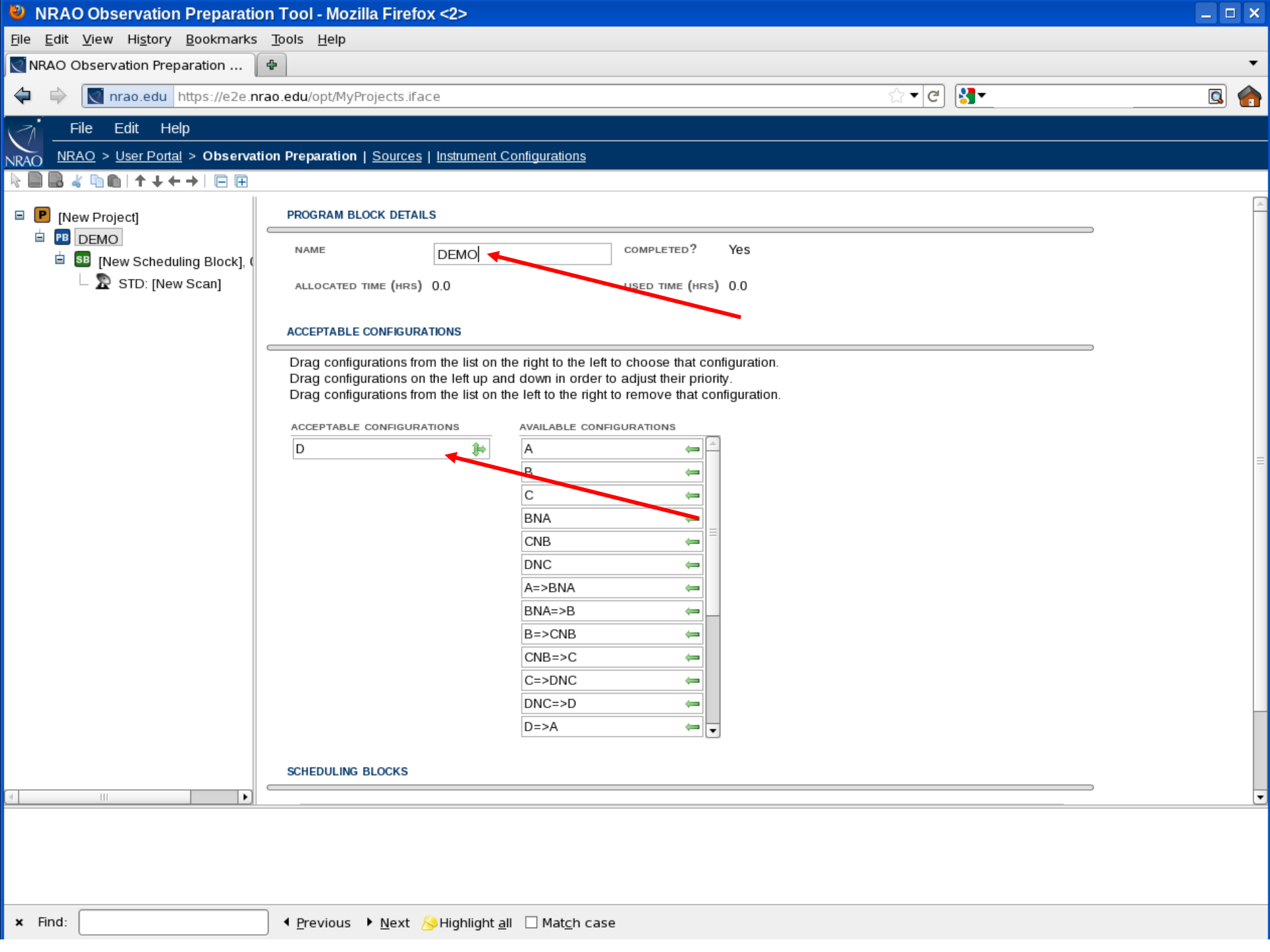
DATA RATE 0.5990 Mbytes/s (2.157 Gbytes/hour)

COMMENTS

Observation Preparation

- Program Block:
  - Name: DEMO
  - Acceptable array configuration: drag the desired configuration


NRAO Observation Preparation Tool - Mozilla Firefox <2>
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
[New Program Block]
[New Scheduling Block],
STD: [New Scan]
PROGRAM BLOCK DETAILS
NAME
[New Program Block]
COMPLETED?
Yes
ALLOCATED TIME (HRS)
0.0
USED TIME (HRS)
0.0
ACCEPTABLE CONFIGURATIONS
Drag configurations from the list on the right to the left to choose that configuration.
Drag configurations on the left up and down in order to adjust their priority.
Drag configurations from the list on the left to the right to remove that configuration.
ACCEPTABLE CONFIGURATIONS
AVAILABLE CONFIGURATIONS
A
B
C
D
BNA
CNB
DNC
A=>BNA
BNA=>B
B=>CNB
CNB=>C
C=>DNC
DNC=>D
SCHEDULING BLOCKS
Find:
Previous
Next
Highlight all
Match case


NRAO Observation Preparation Tool - Mozilla Firefox <2>
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
DEMO
[New Scheduling Block],
STD: [New Scan]
PROGRAM BLOCK DETAILS
NAME
DEMO
COMPLETED?
Yes
ALLOCATED TIME (HRS) 0.0
USED TIME (HRS) 0.0
ACCEPTABLE CONFIGURATIONS
Drag configurations from the list on the right to the left to choose that configuration.
Drag configurations on the left up and down in order to adjust their priority.
Drag configurations from the list on the left to the right to remove that configuration.
ACCEPTABLE CONFIGURATIONS
D
AVAILABLE CONFIGURATIONS
A
B
C
BNA
CNB
DNC
A=>BNA
BNA=>B
B=>CNB
CNB=>C
C=>DNC
DNC=>D
D=>A
SCHEDULING BLOCKS
Find:
Previous
Next
Highlight all
Match case

Observation Preparation

- Scheduling Block: Information tab.
- Name: DEMO SB
- LST range:
  - LST target/phase_cal/ref_cal: 06:00→13:30
  - LST BP_cal: 08:30→16:30
  - LST Flux_cal: 08:30→18:30

Assuming a 3 hr long SB:

optimal LST start range: 08:30 → 10:30

- Scheduling constraints: choose Ka band's

NRAO

NRAO Observation Preparation Tool - Mozilla Firefox <2>

File Edit View History Bookmarks Tools Help

NRAO Observation Preparation ...

nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface

File Edit Help

NRAO > User Portal > **Observation Preparation** | Sources | Instrument Configurations

- [New Project]
  - DEMO
    - DEMO SB, 00:00:00
      - STD: [New Scan]

Information | Reports | Validation and Submission | Bulk Scan Edit | Executions

SCHEDULING BLOCK DETAILS

GENERATED ID 6613118

NAME DEMO SB

STATUS Not Submitted

COUNT 1

COMPLETED 0

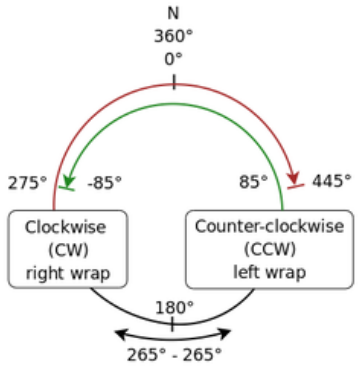
TOTAL TIME 00:00:00

TIME PER EXECUTION 00:00:00

SCHEDULE TYPE Dynamic

LST START RANGE 08 : 30 – 10 : 30

NO CONSTRAINT:



EARLIEST UT START DATE (OPTIONAL) 2011/12/10

SHADOWING LIMIT (MAX) 0.0 m

IN CONFIGURATION D

ASSUMED ANTENNA STARTING POSITION

COORDINATE SYSTEM HORIZONTAL

AZIMUTH 225.0d

Find: Previous Next Highlight all Match case

- [New Project]
  - DEMO
    - DEMO SB, 00:00:00
      - STD: [New Scan]

ASSUMED ANTENNA STARTING POSITION

COORDINATE SYSTEM: HORIZONTAL

AZIMUTH: 225.0d

ELEVATION: 35.0d

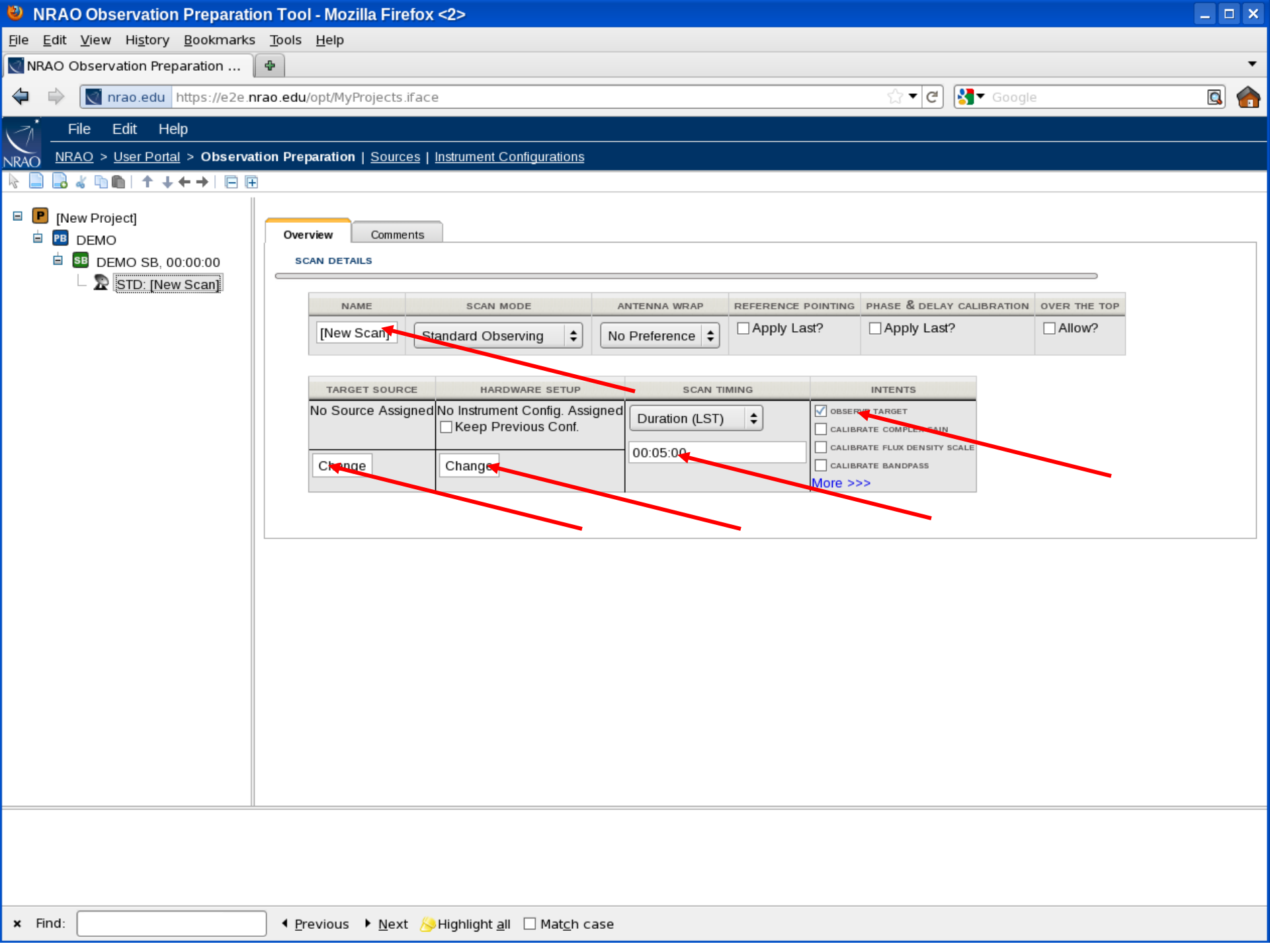
SCHEDULING CONSTRAINTS/CONDITIONS

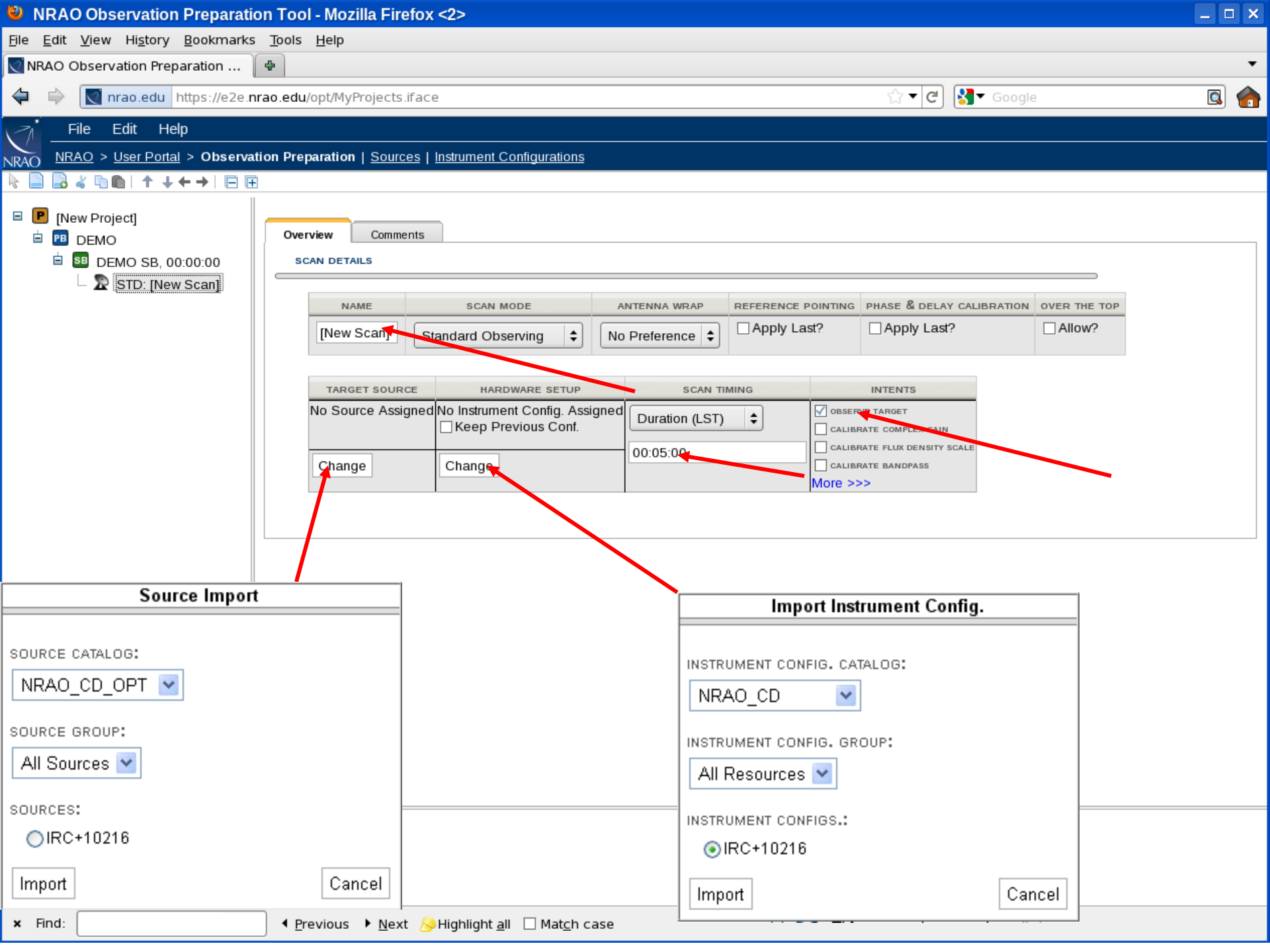
	Description	Wind	Atmospheric Phase Limit
○	Lowest Frequencies (4, P, and L)	Any	Any
○	2.0GHz - 4.0GHz (S)	Any	60.0 degrees
○	4.0GHz - 8.0GHz (C)	Any	45.0 degrees
○	8.0GHz - 12.0GHz (X)	15.0 m/s	30.0 degrees
○	12.0GHz - 18.0GHz (Ku)	10.0 m/s	15.0 degrees
○	18.0GHz - 26.5GHz (K)	7.0 m/s	10.0 degrees
◉	26.5GHz - 40.0GHz (Ka)	6.0 m/s	7.0 degrees
○	40.0GHz - 50.0GHz (Q)	5.0 m/s	5.0 degrees
○	Specified Constraints	m/s	degrees

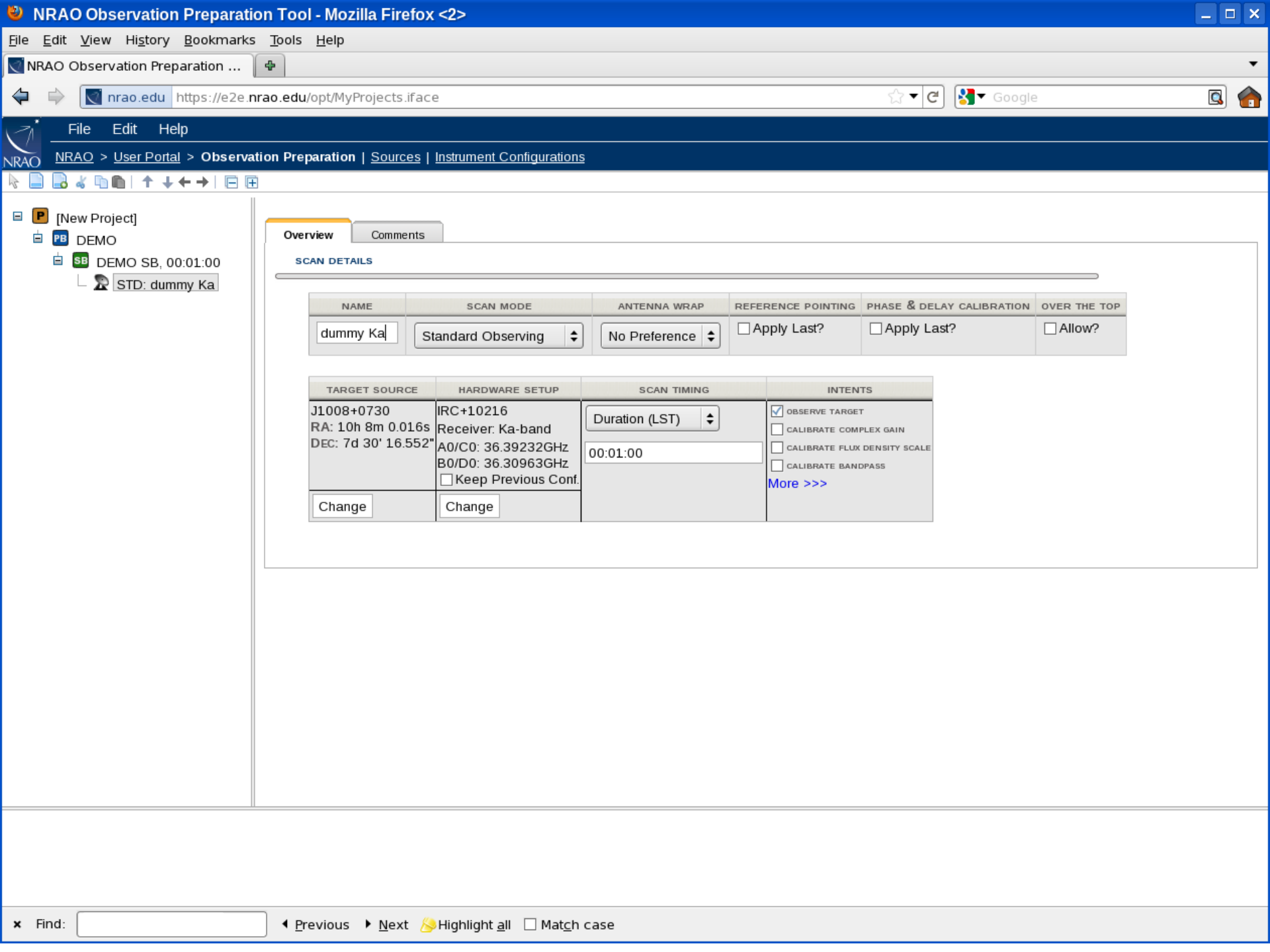
COMMENTS TO THE OPERATOR

Observation Preparation

- Scheduling Block: Scans
  - Dummy scan for each correlator configuration
    - The Ka-band configuration
    - The C-band reference pointing configuration
  - Reference pointing scan on J1008+0730
  - Phase calibrator J0954+0743
  - Target-Phase cal loop
  - Repeat the last three steps
  - Ref. point. on BP cal, Ka-band scan on BP cal
  - Ref. point. on Flux cal, Ka-band scan on Flux cal


NRAO Observation Preparation Tool - Mozilla Firefox <2>
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
Google
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
DEMO
DEMO SB, 00:00:00
STD: [New Scan]
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
[New Scan]
Standard Observing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
No Source Assigned
No Instrument Config. Assigned
Keep Previous Conf.
Duration (LST)
00:05:00
OBSERVE TARGET
CALIBRATE COMPLEX GAIN
CALIBRATE FLUX DENSITY SCALE
CALIBRATE BANDPASS
More >>>
Change
Change
Find:
Previous
Next
Highlight all
Match case


NRAO Observation Preparation Tool - Mozilla Firefox <2>
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
Google
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
DEMO
DEMO SB, 00:00:00
STD: [New Scan]
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
[New Scan]
Standard Observing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
No Source Assigned
No Instrument Config. Assigned
Keep Previous Conf.
Duration (LST)
00:05:00
OBSERVE TARGET
CALIBRATE COMPLEX GAIN
CALIBRATE FLUX DENSITY SCALE
CALIBRATE BANDPASS
More >>>
Change
Change
Source Import
SOURCE CATALOG:
NRAO_CD_OPT
SOURCE GROUP:
All Sources
SOURCES:
IRC+10216
Import
Cancel
Import Instrument Config.
INSTRUMENT CONFIG. CATALOG:
NRAO_CD
INSTRUMENT CONFIG. GROUP:
All Resources
INSTRUMENT CONFIGS.:
IRC+10216
Import
Cancel
Find:
Previous
Next
Highlight all
Match case


NRAO Observation Preparation Tool - Mozilla Firefox <2>
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
Google
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
DEMO
DEMO SB, 00:01:00
STD: dummy Ka
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
dummy Ka
Standard Observing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
J1008+0730
RA: 10h 8m 0.016s
DEC: 7d 30' 16.552"
IRC+10216
Receiver: Ka-band
A0/C0: 36.39232GHz
B0/D0: 36.30963GHz
Keep Previous Conf.
Duration (LST)
00:01:00
OBSERVE TARGET
CALIBRATE COMPLEX GAIN
CALIBRATE FLUX DENSITY SCALE
CALIBRATE BANDPASS
More >>>
Change
Change
Find:
Previous
Next
Highlight all
Match case

Observation Preparation

- Scheduling Block: Scans
  - Insert more scans through File → Create New → Scan

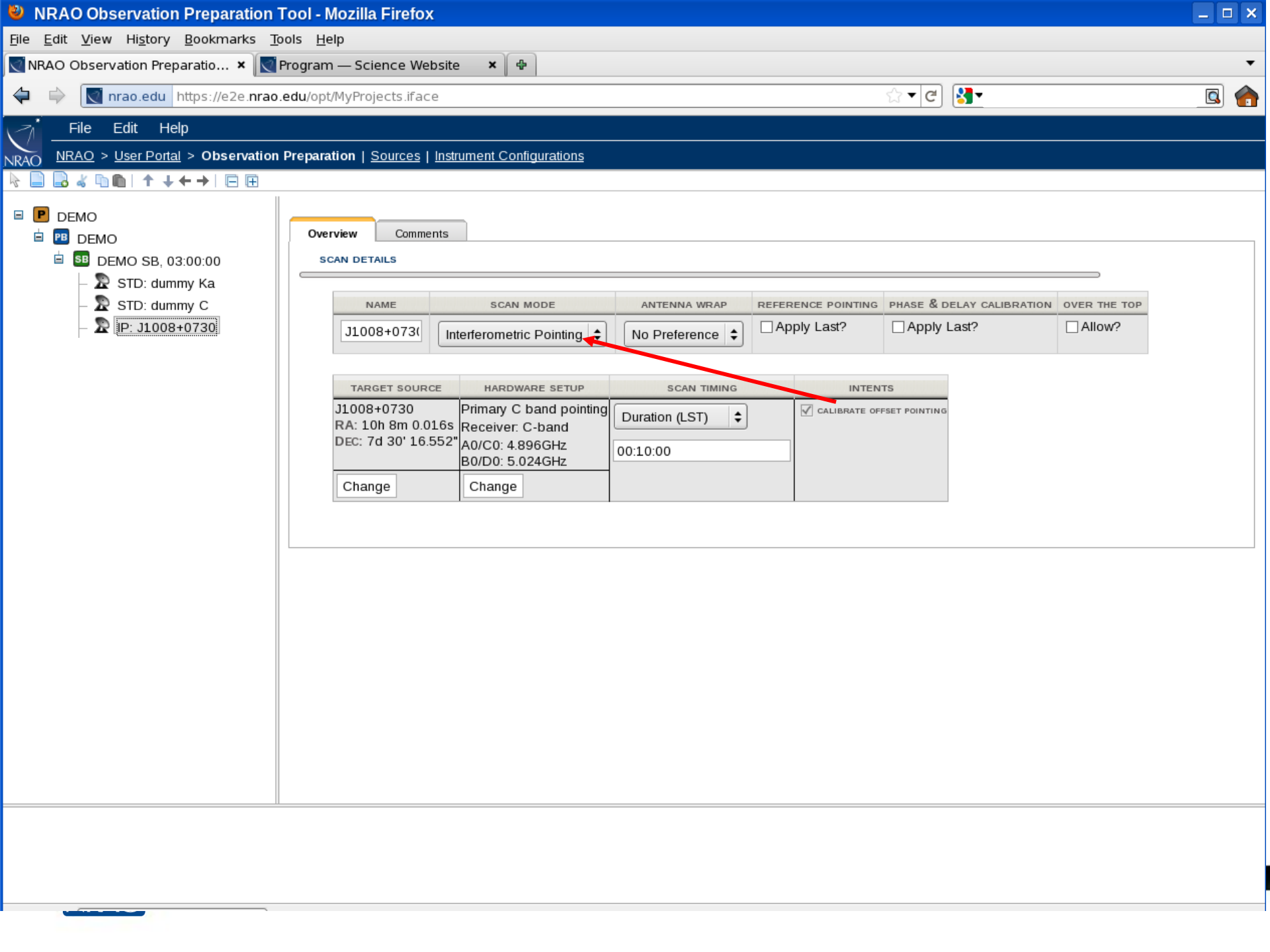
- [New Project]
  - DEMO
    - DEMO SB, 00:02:00
      - STD: dummy Ka
      - STD: dummy C

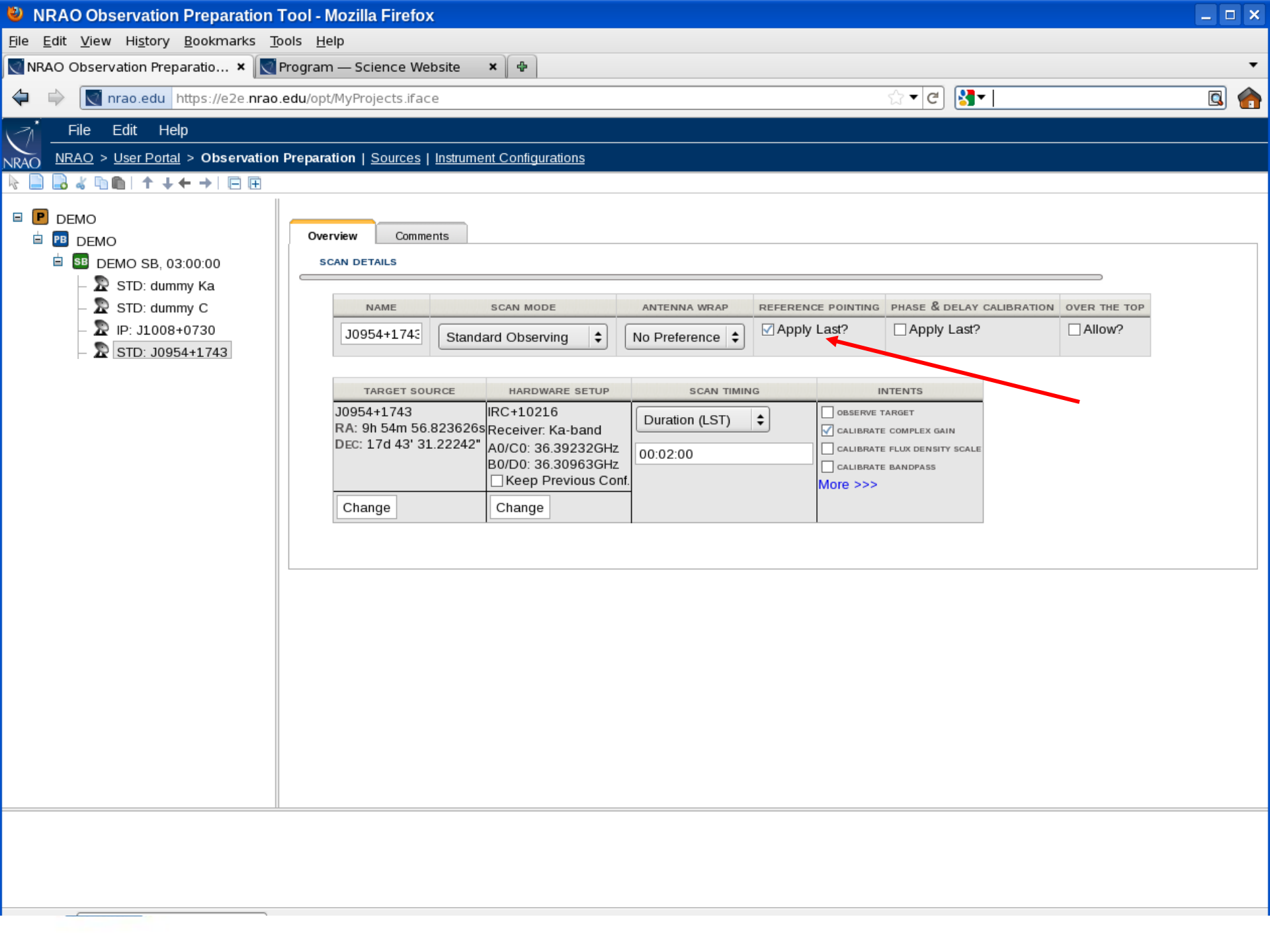
Overview | Comments

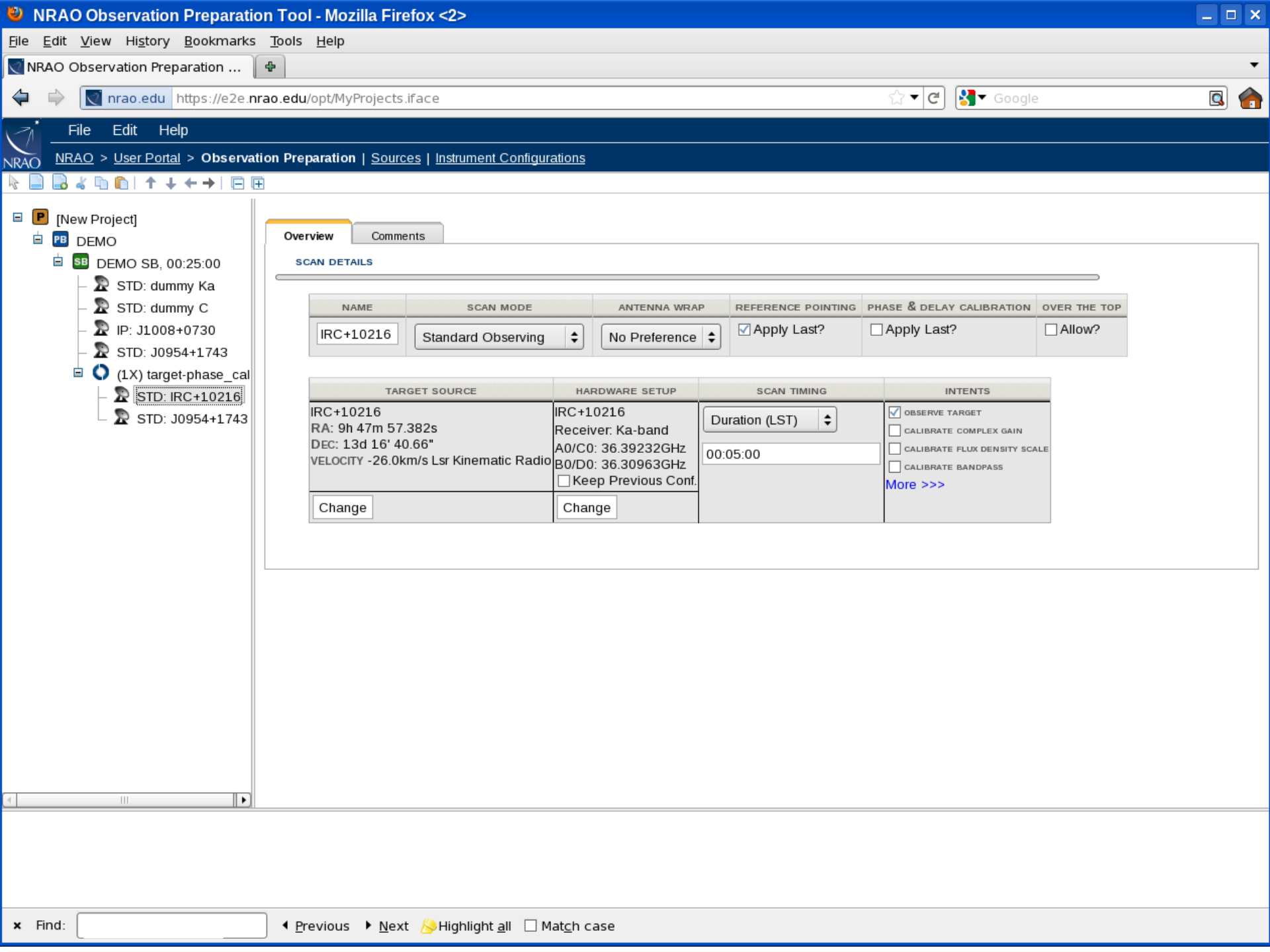
SCAN DETAILS

NAME	SCAN MODE	ANTENNA WRAP	REFERENCE POINTING	PHASE & DELAY CALIBRATION	OVER THE TOP
dummy C	Standard Observing	No Preference	Apply Last?	Apply Last?	Allow?

TARGET SOURCE	HARDWARE SETUP	SCAN TIMING	INTENTS
J1008+0730 RA: 10h 8m 0.016s DEC: 7d 30' 16.552"	Primary C band pointing Receiver: C-band A0/C0: 4.896GHz B0/D0: 5.024GHz Keep Previous Conf.	Duration (LST) 00:01:00	OBSERVE TARGET CALIBRATE COMPLEX GAIN CALIBRATE FLUX DENSITY SCALE CALIBRATE BANDPASS More >>>
Change	Change		


NRAO Observation Preparation Tool - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NRAO Observation Preparatio...
Program — Science Website
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
DEMO
DEMO
DEMO SB, 03:00:00
STD: dummy Ka
STD: dummy C
IP: J1008+0730
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
J1008+073(
Interferometric Pointing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
J1008+0730
RA: 10h 8m 0.016s
DEC: 7d 30' 16.552"
Primary C band pointing
Receiver: C-band
A0/C0: 4.896GHz
B0/D0: 5.024GHz
Duration (LST)
00:10:00
CALIBRATE OFFSET POINTING
Change
Change

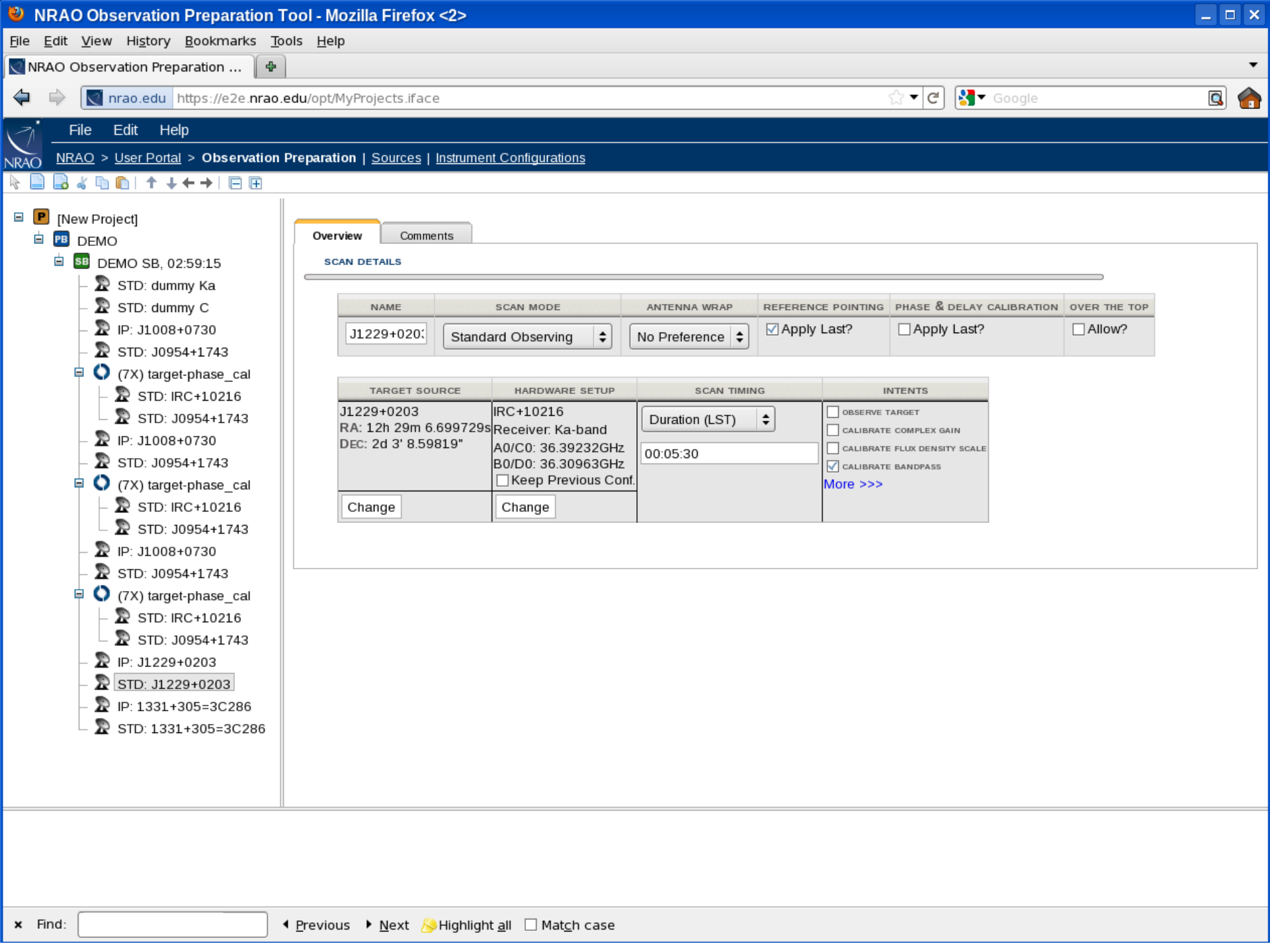

NRAO Observation Preparation Tool - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NRAO Observation Preparatio...
Program — Science Website
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
DEMO
DEMO
DEMO SB, 03:00:00
STD: dummy Ka
STD: dummy C
IP: J1008+0730
STD: J0954+1743
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
J0954+1743
Standard Observing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
J0954+1743
RA: 9h 54m 56.823626s
DEC: 17d 43' 31.22242"
IRC+10216
Receiver: Ka-band
A0/C0: 36.39232GHz
B0/D0: 36.30963GHz
Keep Previous Conf.
Duration (LST)
00:02:00
OBSERVE TARGET
CALIBRATE COMPLEX GAIN
CALIBRATE FLUX DENSITY SCALE
CALIBRATE BANDPASS
More >>>
Change
Change


NRAO Observation Preparation Tool - Mozilla Firefox <2>
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
Google
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
DEMO
DEMO SB, 00:25:00
STD: dummy Ka
STD: dummy C
IP: J1008+0730
STD: J0954+1743
(1X) target-phase_cal
STD: IRC+10216
STD: J0954+1743
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
IRC+10216
Standard Observing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
IRC+10216
RA: 9h 47m 57.382s
DEC: 13d 16' 40.66"
VELOCITY -26.0km/s Lsr Kinematic Radio
IRC+10216
Receiver: Ka-band
A0/C0: 36.39232GHz
B0/D0: 36.30963GHz
Keep Previous Conf.
Duration (LST)
00:05:00
OBSERVE TARGET
CALIBRATE COMPLEX GAIN
CALIBRATE FLUX DENSITY SCALE
CALIBRATE BANDPASS
More >>>
Change
Change
Find:
Previous
Next
Highlight all
Match case

Observation Preparation

- Scheduling Block: Scans
  - Insert more scans through File → Create New → Scan
  - Duplicate scans and scan loops through: Edit → Copy, Edit →Paste

NRAO Observation Preparation Tool - Mozilla Firefox <2>
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
Google
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
DEMO
DEMO SB, 02:59:15
STD: dummy Ka
STD: dummy C
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_cal
STD: IRC+10216
STD: J0954+1743
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_cal
STD: IRC+10216
STD: J0954+1743
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_cal
STD: IRC+10216
STD: J0954+1743
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
IRC+10216
Standard Observing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
IRC+10216
RA: 9h 47m 57.382s
DEC: 13d 16' 40.66"
VELOCITY -26.0km/s Lsr Kinematic Radio
IRC+10216
Receiver: Ka-band
A0/C0: 36.39232GHz
B0/D0: 36.30963GHz
Keep Previous Conf.
Duration (LST)
00:05:00
OBSERVE TARGET
CALIBRATE COMPLEX GAIN
CALIBRATE FLUX DENSITY SCALE
CALIBRATE BANDPASS
More >>>
Change
Change
Find:
Previous
Next
Highlight all
Match case


NRAO Observation Preparation Tool - Mozilla Firefox <2>
File Edit View History Bookmarks Tools Help
NRAO Observation Preparation ...
nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface
Google
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
[New Project]
DEMO
DEMO SB, 02:59:15
STD: dummy Ka
STD: dummy C
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_cal
STD: IRC+10216
STD: J0954+1743
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_cal
STD: IRC+10216
STD: J0954+1743
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_cal
STD: IRC+10216
STD: J0954+1743
IP: J1229+0203
STD: J1229+0203
IP: 1331+305=3C286
STD: 1331+305=3C286
Overview
Comments
SCAN DETAILS
NAME
SCAN MODE
ANTENNA WRAP
REFERENCE POINTING
PHASE & DELAY CALIBRATION
OVER THE TOP
J1229+020
Standard Observing
No Preference
Apply Last?
Apply Last?
Allow?
TARGET SOURCE
HARDWARE SETUP
SCAN TIMING
INTENTS
J1229+0203
RA: 12h 29m 6.699729s
DEC: 2d 3' 8.59819"
IRC+10216
Receiver: Ka-band
A0/C0: 36.39232GHz
B0/D0: 36.30963GHz
Keep Previous Conf.
Duration (LST)
00:05:30
OBSERVE TARGET
CALIBRATE COMPLEX GAIN
CALIBRATE FLUX DENSITY SCALE
CALIBRATE BANDPASS
More >>>
Change
Change
Find:
Previous
Next
Highlight all
Match case

Observation Preparation

- SB: 'Reports' to view all you have done

NRAO Observation Preparation Tool - Mozilla Firefox <2>

File Edit View History Bookmarks Tools Help

NRAO Observation Preparation ...

nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface

Google

File Edit Help

NRAO > User Portal > **Observation Preparation** | Sources | Instrument Configurations

- [New Project]
  - DEMO
    - DEMO SB, 03:00:00
      - STD: dummy Ka
      - STD: dummy C
      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
        - STD: J0954+1743
      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
        - STD: J0954+1743
      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
        - STD: J0954+1743
      - IP: J1229+0203
      - STD: J1229+0203
      - IP: 1331+305=3C286
      - STD: 1331+305=3C286

Information | **Reports** | Validation and Submission | Bulk Scan Edit | Executions

OBSERVING PROGRAM

Print

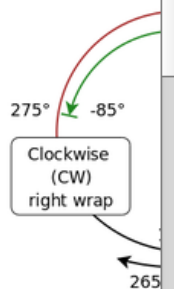
PROJECT CODE: 5429_1
GENERATED ID: 6613118
PRINCIPAL INVESTIGATOR: Dr. Galactico Armenian <emomjian@gmail.com>

ASSUMED SCHEDULE START: 62633 09:30:00 LST Update Display UTC times

SCHEDULE STOP: 62633 12:30:00 LST

ASSUMED ANTENNA POSITION
AZIMUTH: 225.0d
ELEVATION: 35.0d

LST START RANGE: 08:30:00-10:30:00
WIND CONSTRAINTS: 6.0 m/s
API CONSTRAINTS: 7.0 degrees



- Instrument Configuration Summary
- Time On Source Summary
- Schedule Summary

INSTRUMENT CONFIGURATION SUMMARY

	Name	T_{int} / Band	AC Freq / BD Freq	AC Rest/Sky / BD Rest/Sky	AC Summed BW / BD Summed BW	AC Coverage (%) / BD Coverage (%)	Req. BIBPs / Total BIBPs	# Channels / Min/Max Width	AC Doppler Vel. / BD Doppler Vel.	
1	IRC+10216	3s	36.39232GHz	Rest	8.0MHz	0.78125	2	128	-26.0km/s LSR Radio	9h
		Ka	36.30963GHz	Rest	8.0MHz	0.78125	2	125.0kHz / 125.0kHz	-26.0km/s LSR Radio	9h
		Show All Subbands |							
2	Primary C band pointing	1s	4.896GHz	Sky	128.0MHz	12.5	2	128	--- --- ---	---
		C	5.024GHz	Sky	128.0MHz	12.5	2	2.0MHz / 2.0MHz	--- --- ---	---
		Show All Subbands |							

Find: Previous Next Highlight all Match case

Observation Preparation

- SB: 'Reports' to view all you have done

- Check
  - Instrument configuration summary
  - Time on source summary
  - Schedule summary.

NRAO Observation Preparation Tool - Mozilla Firefox <2>

File Edit View History Bookmarks Tools Help

NRAO Observation Preparation ...

nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface

Google

File Edit Help

NRAO > User Portal > **Observation Preparation** | Sources | Instrument Configurations

- [New Project]
  - DEMO
    - DEMO SB, 03:00:00
      - STD: dummy Ka
      - STD: dummy C
      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
        - STD: J0954+1743
      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
        - STD: J0954+1743
      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
        - STD: J0954+1743
      - IP: J1229+0203
      - STD: J1229+0203
      - IP: 1331+305=3C286
      - STD: 1331+305=3C286

Information | **Reports** | Validation and Submission | Bulk Scan Edit | Executions

OBSERVING PROGRAM

Print

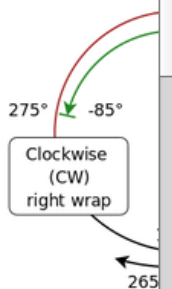
PROJECT CODE: 5429_1
GENERATED ID: 6613118
PRINCIPAL INVESTIGATOR: Dr. Galactico Armenian <emomjian@gmail.com>

ASSUMED SCHEDULE START: 62633 09:30:00 LST Update Display UTC times

SCHEDULE STOP: 62633 12:30:00 LST

ASSUMED ANTENNA POSITION
AZIMUTH: 225.0d
ELEVATION: 35.0d

LST START RANGE: 08:30:00-10:30:00
WIND CONSTRAINTS: 6.0 m/s
API CONSTRAINTS: 7.0 degrees



- Instrument Configuration Summary
- Time On Source Summary
- Schedule Summary

INSTRUMENT CONFIGURATION SUMMARY

	Name	T_{int} / Band	AC Freq / BD Freq	AC Rest/Sky / BD Rest/Sky	AC Summed BW / BD Summed BW	AC Coverage (%) / BD Coverage (%)	Req. BIBPs / Total BIBPs	# Channels / Min/Max Width	AC Doppler Vel. / BD Doppler Vel.	
1	IRC+10216	3s	36.39232GHz	Rest	8.0MHz	0.78125	2	128	-26.0km/s LSR Radio	9h
		Ka	36.30963GHz	Rest	8.0MHz	0.78125	2	125.0kHz / 125.0kHz	-26.0km/s LSR Radio	9h
		Show All Subbands |							
2	Primary C band pointing	1s	4.896GHz	Sky	128.0MHz	12.5	2	128	--- --- ---	---
		C	5.024GHz	Sky	128.0MHz	12.5	2	2.0MHz / 2.0MHz	--- --- ---	---
		Show All Subbands |							

Find: Previous Next Highlight all Match case

Observation Preparation

- SB: Reports to view all you have done.

- Change the 'assumed schedule start' at the top to assess whether all the scans in the SB are OK at all possible start times (in 0.5 hour increments) in the assumed LST range.

NRAO Observation Preparation Tool - Mozilla Firefox <2>

File Edit View History Bookmarks Tools Help

NRAO Observation Preparation ...

nrao.edu https://e2e.nrao.edu/opt/MyProjects.iface

Google

File Edit Help

NRAO > User Portal > **Observation Preparation** | Sources | Instrument Configurations

- [New Project]
  - DEMO
    - DEMO SB, 03:00:00
      - STD: dummy Ka
      - STD: dummy C
      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
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      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
        - STD: J0954+1743
      - IP: J1008+0730
      - STD: J0954+1743
      - (7X) target-phase_cal
        - STD: IRC+10216
        - STD: J0954+1743
      - IP: J1229+0203
      - STD: J1229+0203
      - IP: 1331+305=3C286
      - STD: 1331+305=3C286

Information | **Reports** | Validation and Submission | Bulk Scan Edit | Executions

OBSERVING PROGRAM

Print

PROJECT CODE: 5429_1
GENERATED ID: 6613118
PRINCIPAL INVESTIGATOR: Dr. Galactico Armenian <emomjian@gmail.com>

ASSUMED SCHEDULE START: 62633 09:30:00 LST Update Display UTC times

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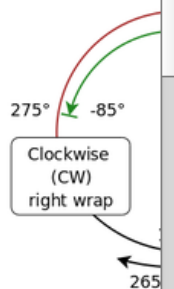
API CONSTRAINTS: 7.0 degrees



- Instrument Configuration Summary
- Time On Source Summary
- Schedule Summary

INSTRUMENT CONFIGURATION SUMMARY

	Name	T_{int} / Band	AC Freq / BD Freq	AC Rest/Sky / BD Rest/Sky	AC Summed BW / BD Summed BW	AC Coverage (%) / BD Coverage (%)	Req. BIBPs / Total BIBPs	# Channels / Min/Max Width	AC Doppler Vel. / BD Doppler Vel.
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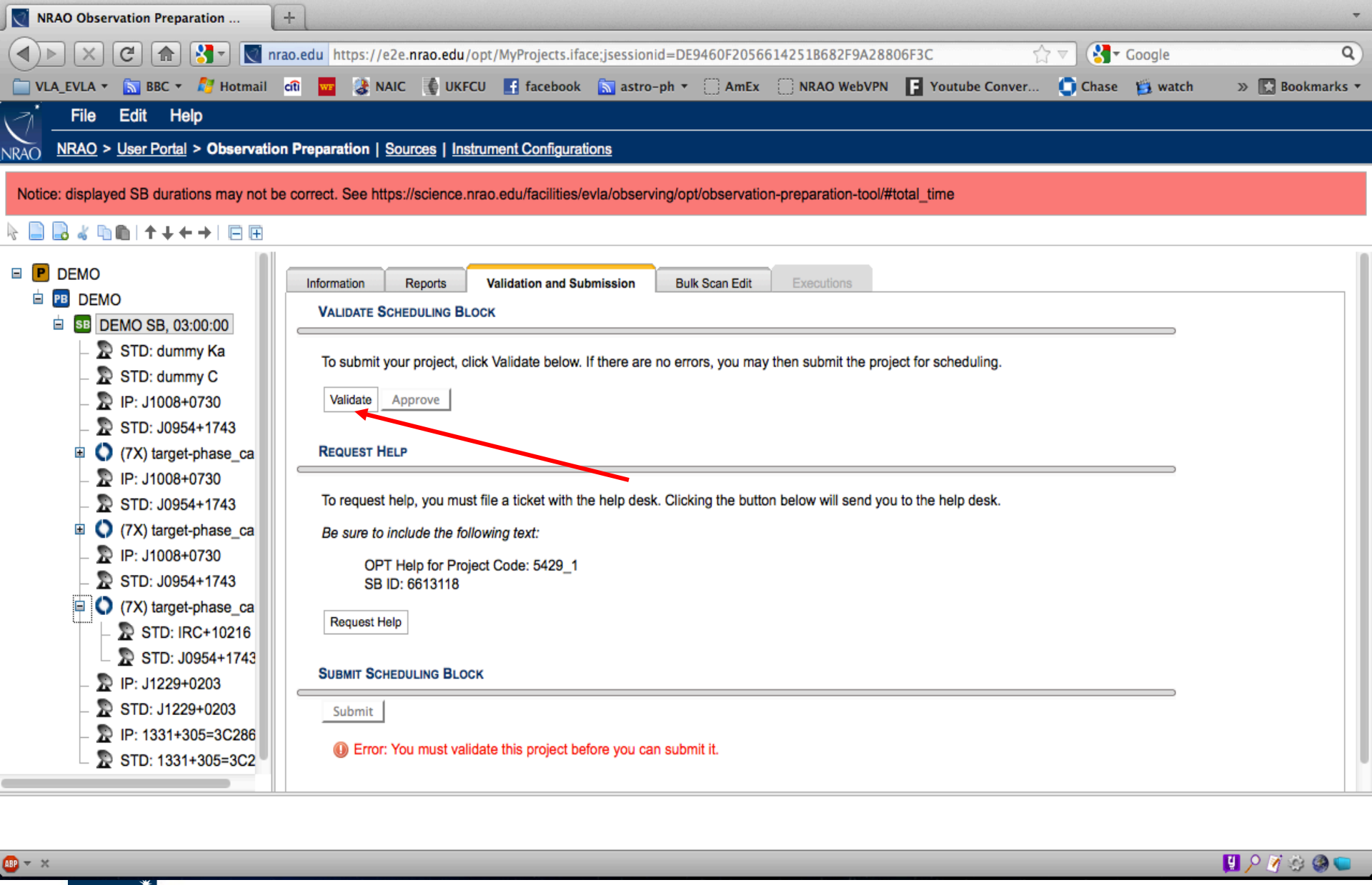
		Ka	36.30963GHz	Rest	8.0MHz	0.78125	2	125.0kHz / 125.0kHz	-26.0km/s LSR Radio
		Show All Subbands |						
2	Primary C band pointing	1s	4.896GHz	Sky	128.0MHz	12.5	2	128	--- --- ---
		C	5.024GHz	Sky	128.0MHz	12.5	2	2.0MHz / 2.0MHz	--- --- ---
		Show All Subbands |						

Find: Previous Next Highlight all Match case

Observation Preparation

- SB: Validation and Submission.


NRAO Observation Preparation ...
https://e2e.nrao.edu/opt/MyProjects.iface;jsessionid=DE9460F20566142518682F9A28806F3C
File Edit Help
NRAO > User Portal > Observation Preparation | Sources | Instrument Configurations
Notice: displayed SB durations may not be correct. See https://science.nrao.edu/facilities/evla/observing/opt/observation-preparation-tool/#total_time
DEMO
DEMO
DEMO SB, 03:00:00
STD: dummy Ka
STD: dummy C
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_ca
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_ca
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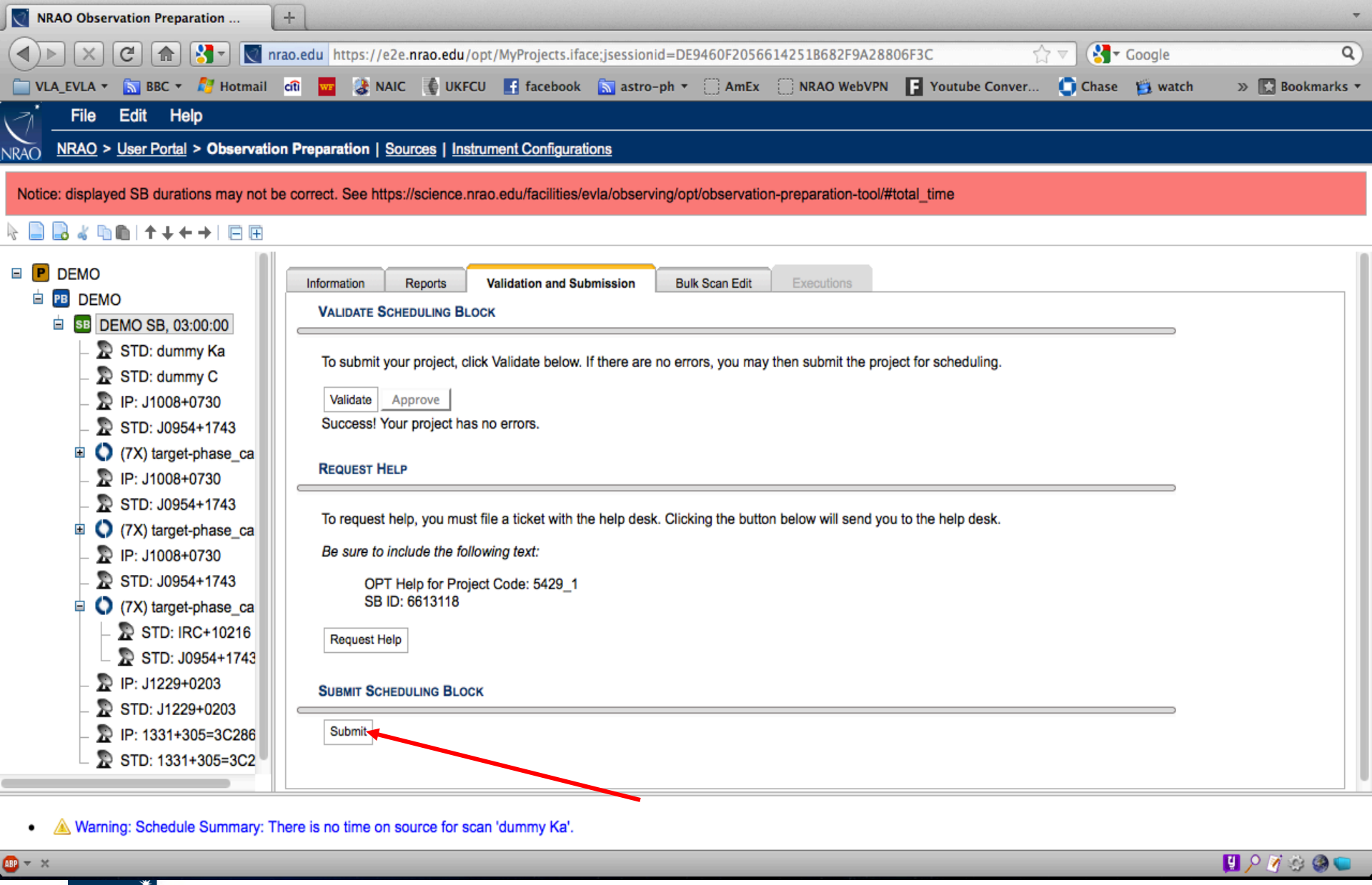
STD: IRC+10216
STD: J0954+1743
IP: J1229+0203
STD: J1229+0203
IP: 1331+305=3C286
STD: 1331+305=3C2
Information
Reports
Validation and Submission
Bulk Scan Edit
Executions
VALIDATE SCHEDULING BLOCK
To submit your project, click Validate below. If there are no errors, you may then submit the project for scheduling.
Validate
Approve
REQUEST HELP
To request help, you must file a ticket with the help desk. Clicking the button below will send you to the help desk.
Be sure to include the following text:
OPT Help for Project Code: 5429_1
SB ID: 6613118
Request Help
SUBMIT SCHEDULING BLOCK
Submit
Error: You must validate this project before you can submit it.


NRAO Observation Preparation ...
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DEMO
DEMO
DEMO SB, 03:00:00
STD: dummy Ka
STD: dummy C
IP: J1008+0730
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(7X) target-phase_ca
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(7X) target-phase_ca
IP: J1008+0730
STD: J0954+1743
(7X) target-phase_ca
STD: IRC+10216
STD: J0954+1743
IP: J1229+0203
STD: J1229+0203
IP: 1331+305=3C286
STD: 1331+305=3C2
Information
Reports
Validation and Submission
Bulk Scan Edit
Executions
VALIDATE SCHEDULING BLOCK
To submit your project, click Validate below. If there are no errors, you may then submit the project for scheduling.
Validate
Approve
Success! Your project has no errors.
REQUEST HELP
To request help, you must file a ticket with the help desk. Clicking the button below will send you to the help desk.
Be sure to include the following text:
OPT Help for Project Code: 5429_1
SB ID: 6613118
Request Help
SUBMIT SCHEDULING BLOCK
Submit
Warning: Schedule Summary: There is no time on source for scan 'dummy Ka'.

Observation Preparation

Logout of the OPT as soon as you are done!

Wait for an email from the EVLA operator notifying that the observations have been carried out!