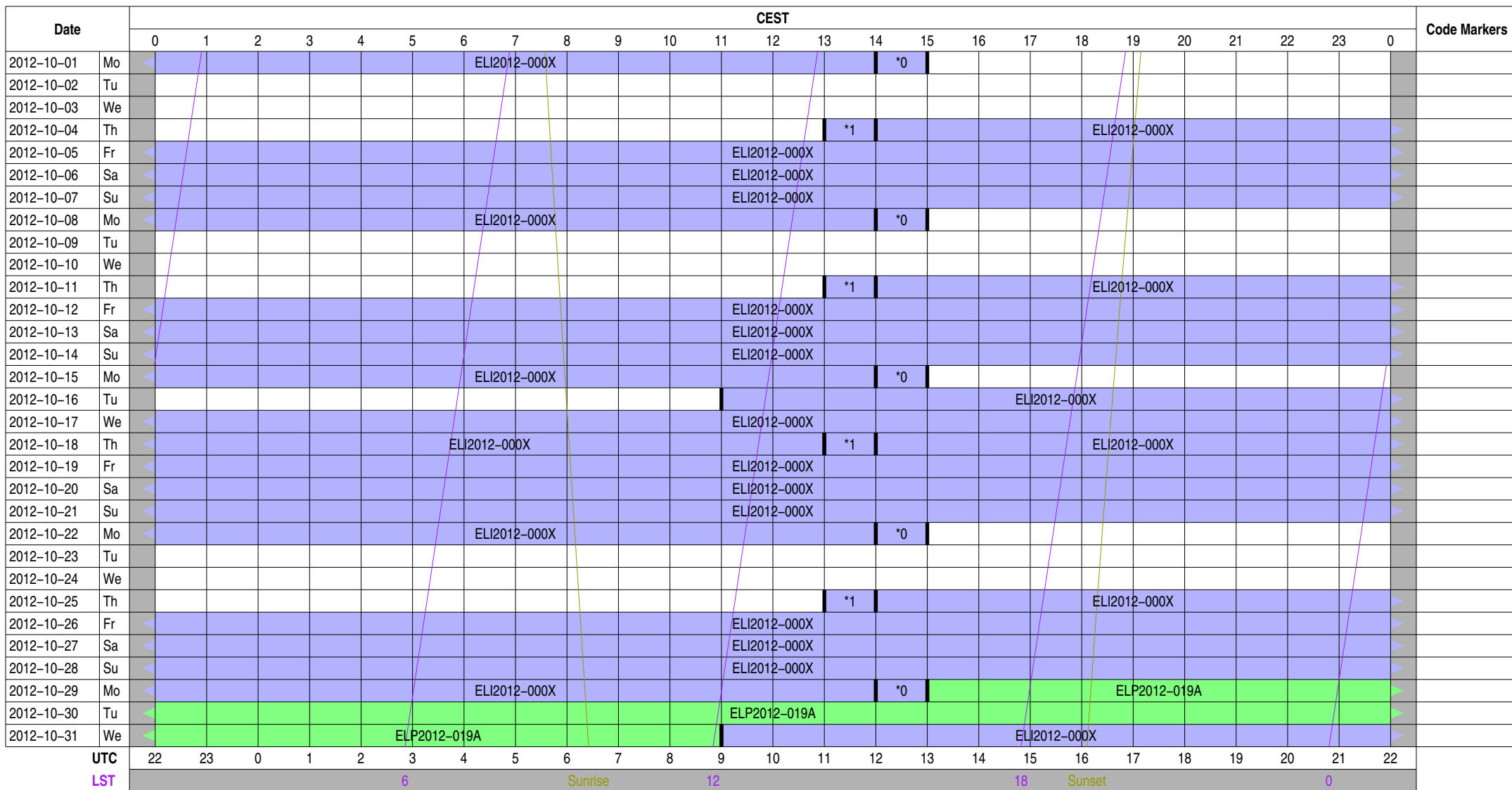


# Observing Plan for Station Control (LCU)

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



#### Normal Experiment Code Markers

- 0 ELI2012-003AT
- 1 ELI2012-003AS

#### Other Experiment Code Markers

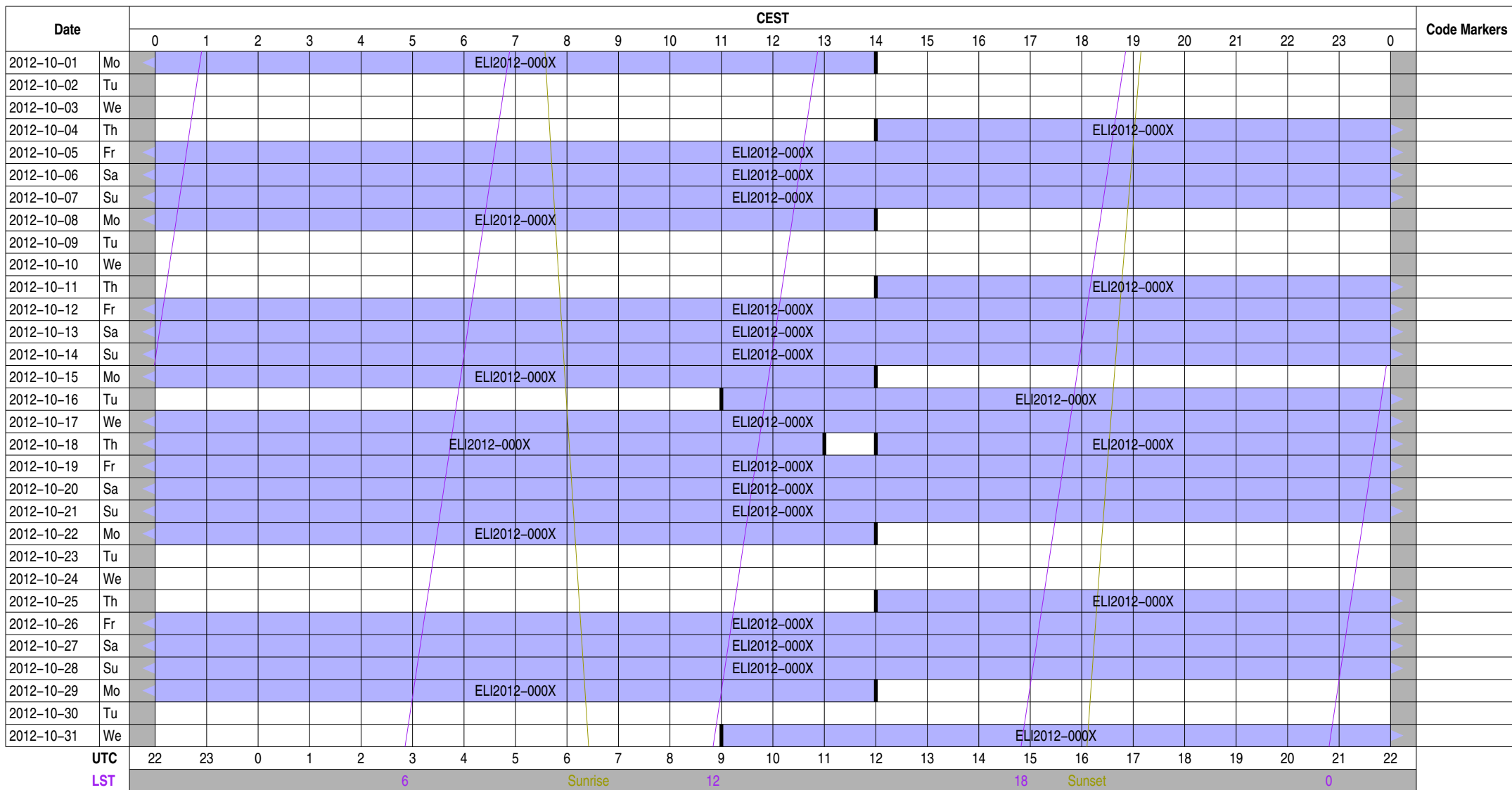
#### Color Meanings

- |                           |                          |                  |                           |
|---------------------------|--------------------------|------------------|---------------------------|
| Science A (Astrometry)    | Science N (AGN)          | Test Observation | Juelich Mode              |
| Science C (Cosmology)     | Science O (Other)        | Maintenance Mode | Piggyback Control         |
| Science E (Extragalactic) | Science P (Pulsar)       | ILT Mode         | Piggyback Without Control |
| Science G (Galactic)      | Science R (Cosmic Rays)  | Effelsberg Mode  | Experiment Warning        |
| Science H (Ionosphere)    | Science S (Solar System) | GLOW Mode        | Override Possible         |

# Observing Plan for Transient Buffer Boards

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30



**Normal Experiment Code Markers**

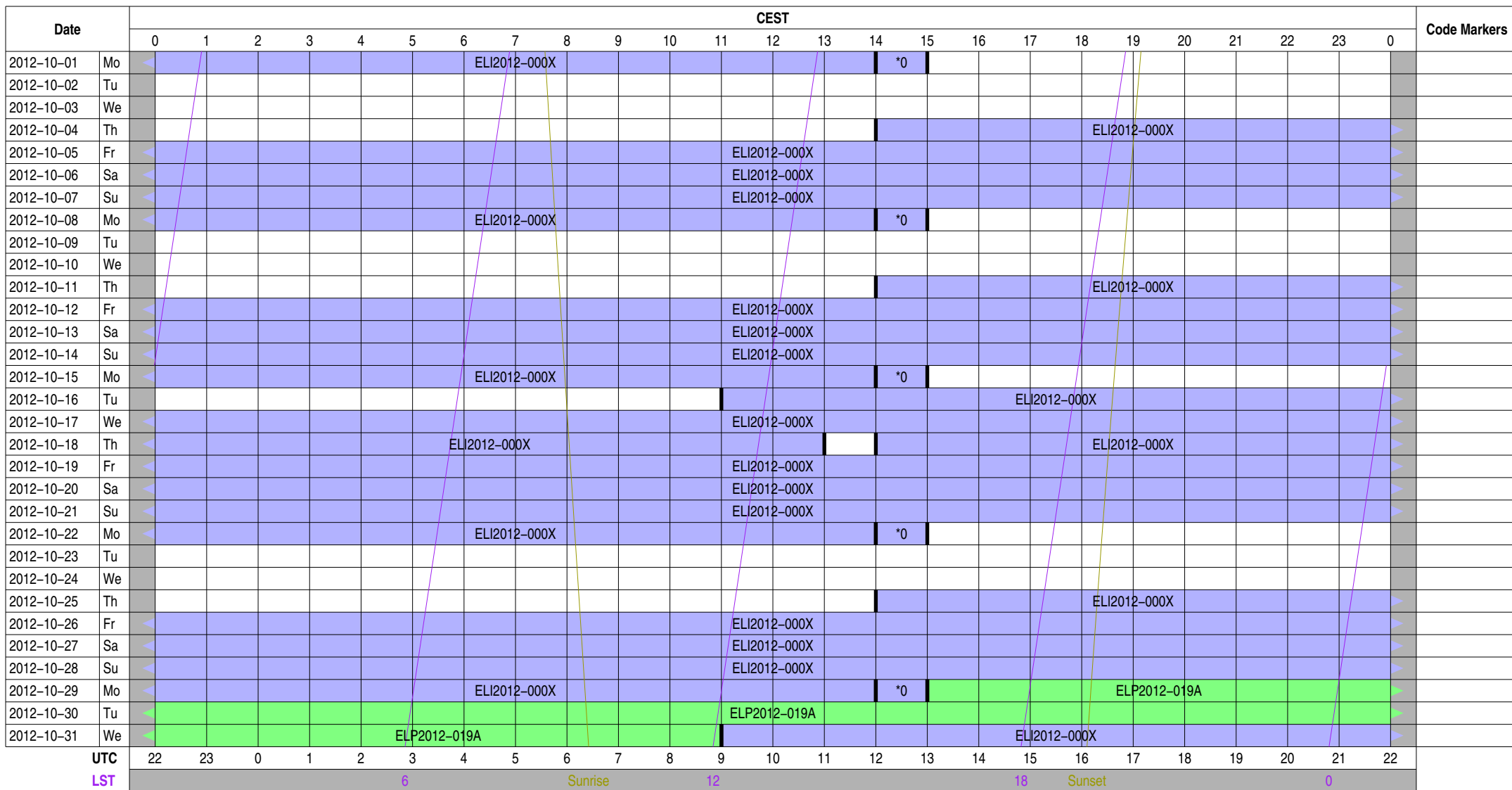
**Other Experiment Code Markers**

**Color Meanings**

Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for HBA MPIfR Effelsberg LOFAR Station 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



**Normal Experiment Code Markers**

0 ELI2012-003AT

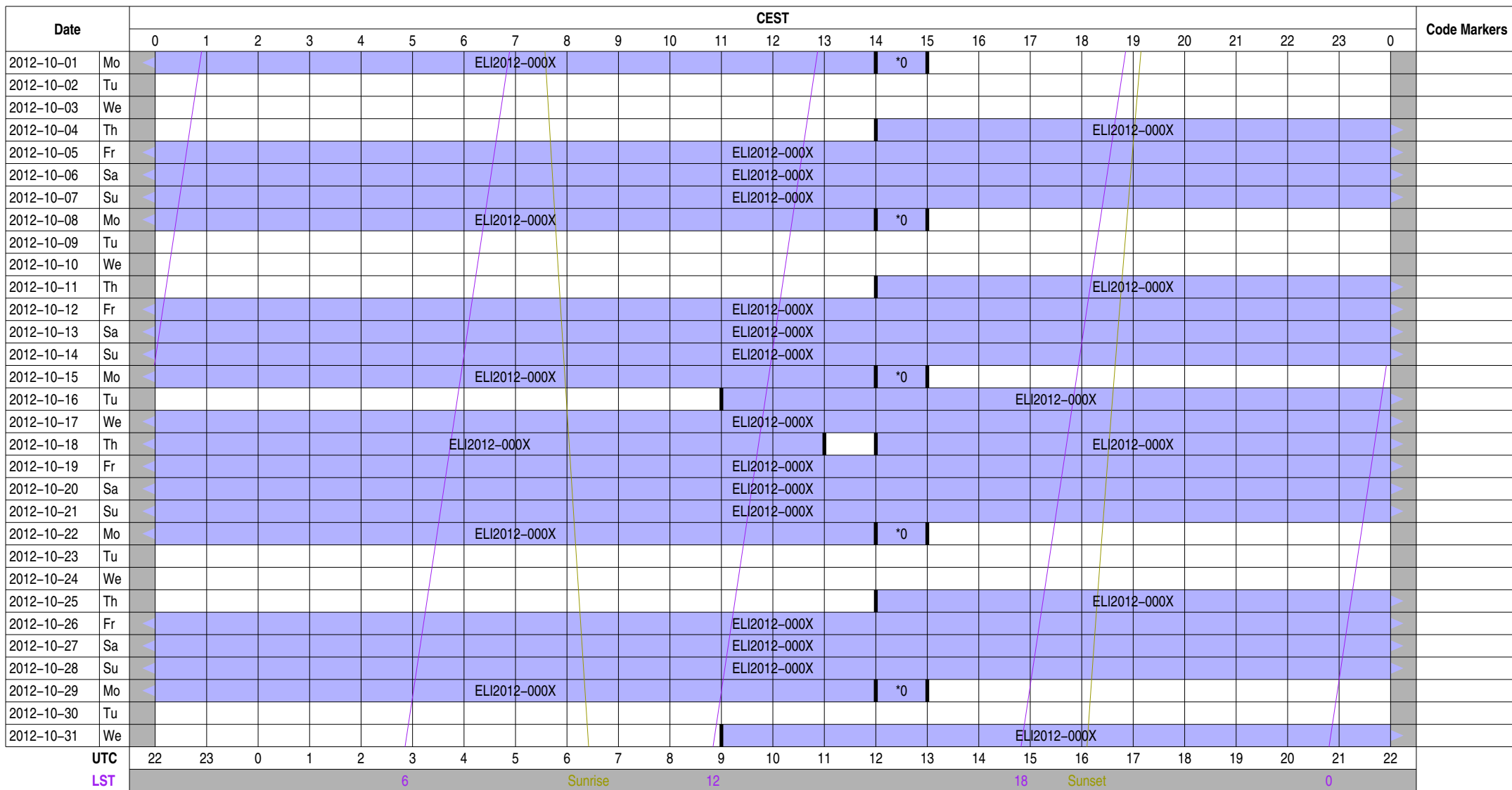
**Other Experiment Code Markers**

**Color Meanings**

Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for Low Band High (LBA) MPIfR Effelsberg LOFAR Station 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



**Normal Experiment Code Markers**

0 ELI2012-003AT

**Other Experiment Code Markers**

**Color Meanings**

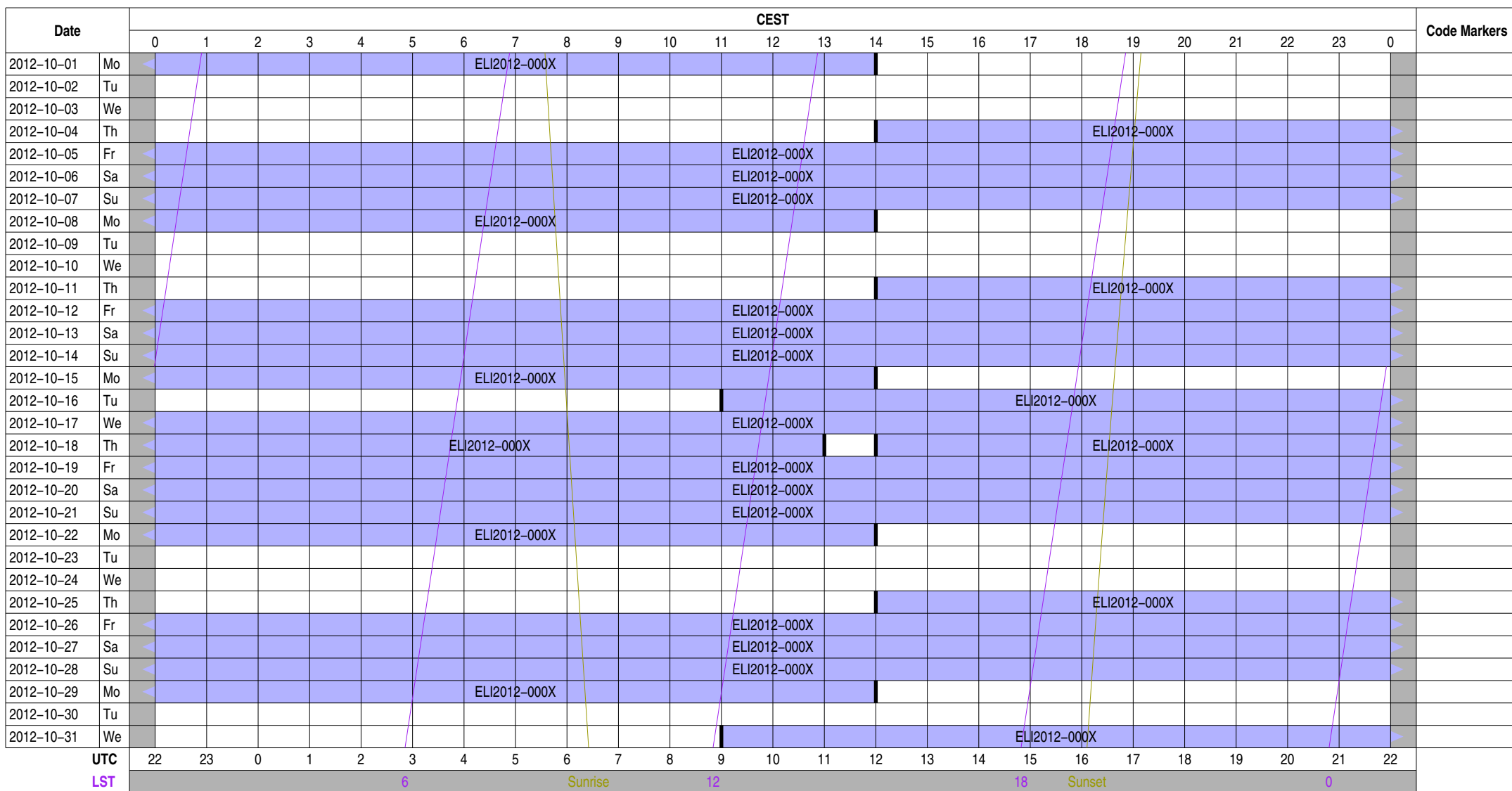
- |                           |                          |                  |                           |
|---------------------------|--------------------------|------------------|---------------------------|
| Science A (Astrometry)    | Science N (AGN)          | Test Observation | Juelich Mode              |
| Science C (Cosmology)     | Science O (Other)        | Maintenance Mode | Piggyback Control         |
| Science E (Extragalactic) | Science P (Pulsar)       | ILT Mode         | Piggyback Without Control |
| Science G (Galactic)      | Science R (Cosmic Rays)  | Effelsberg Mode  | Experiment Warning        |
| Science H (Ionosphere)    | Science S (Solar System) | GLOW Mode        | Override Possible         |

# Observing Plan for Low Band Low, Unused Inputs

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



#### Normal Experiment Code Markers

#### Other Experiment Code Markers

#### Color Meanings

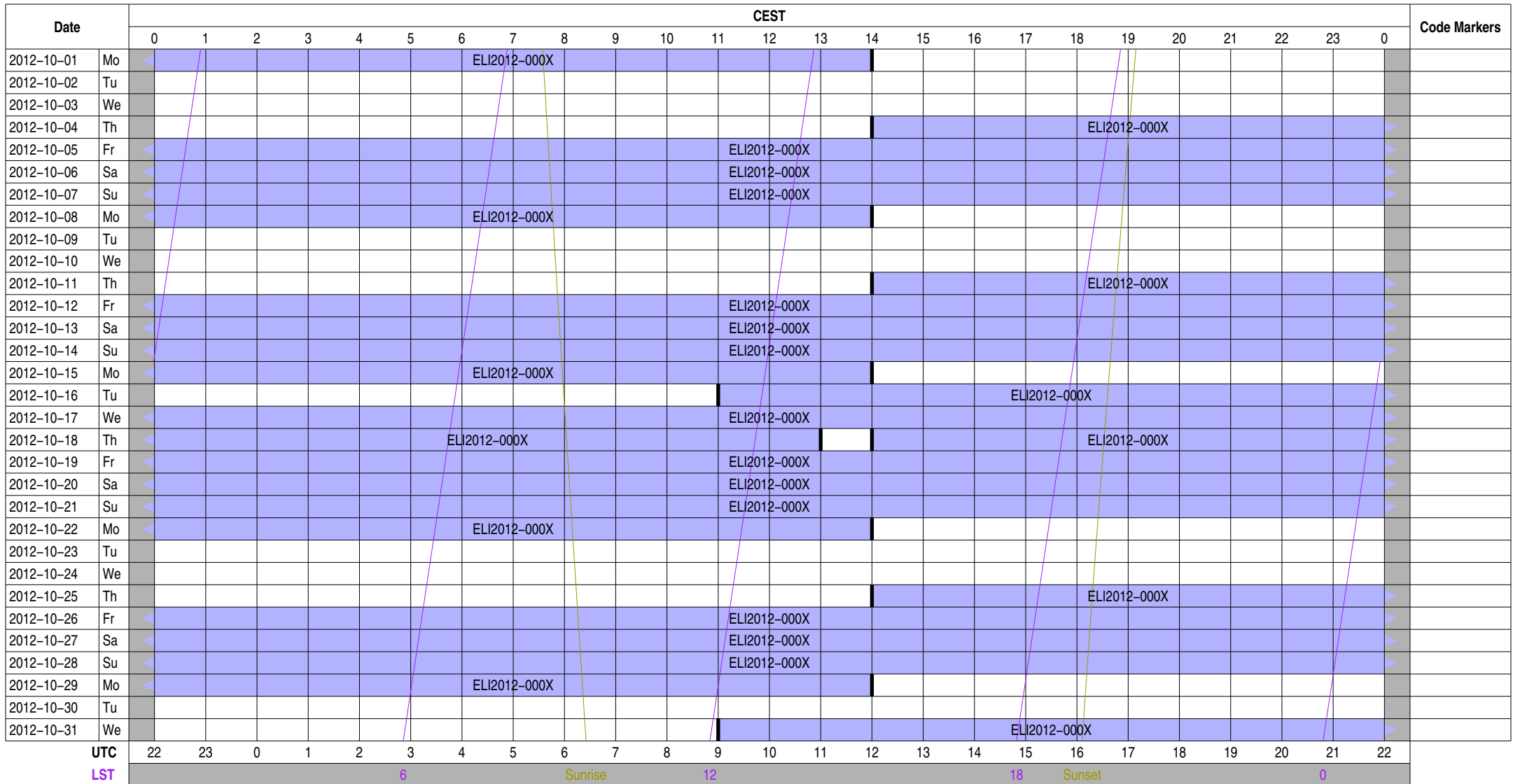
Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for Station Interferometer

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



**Normal Experiment Code Markers**

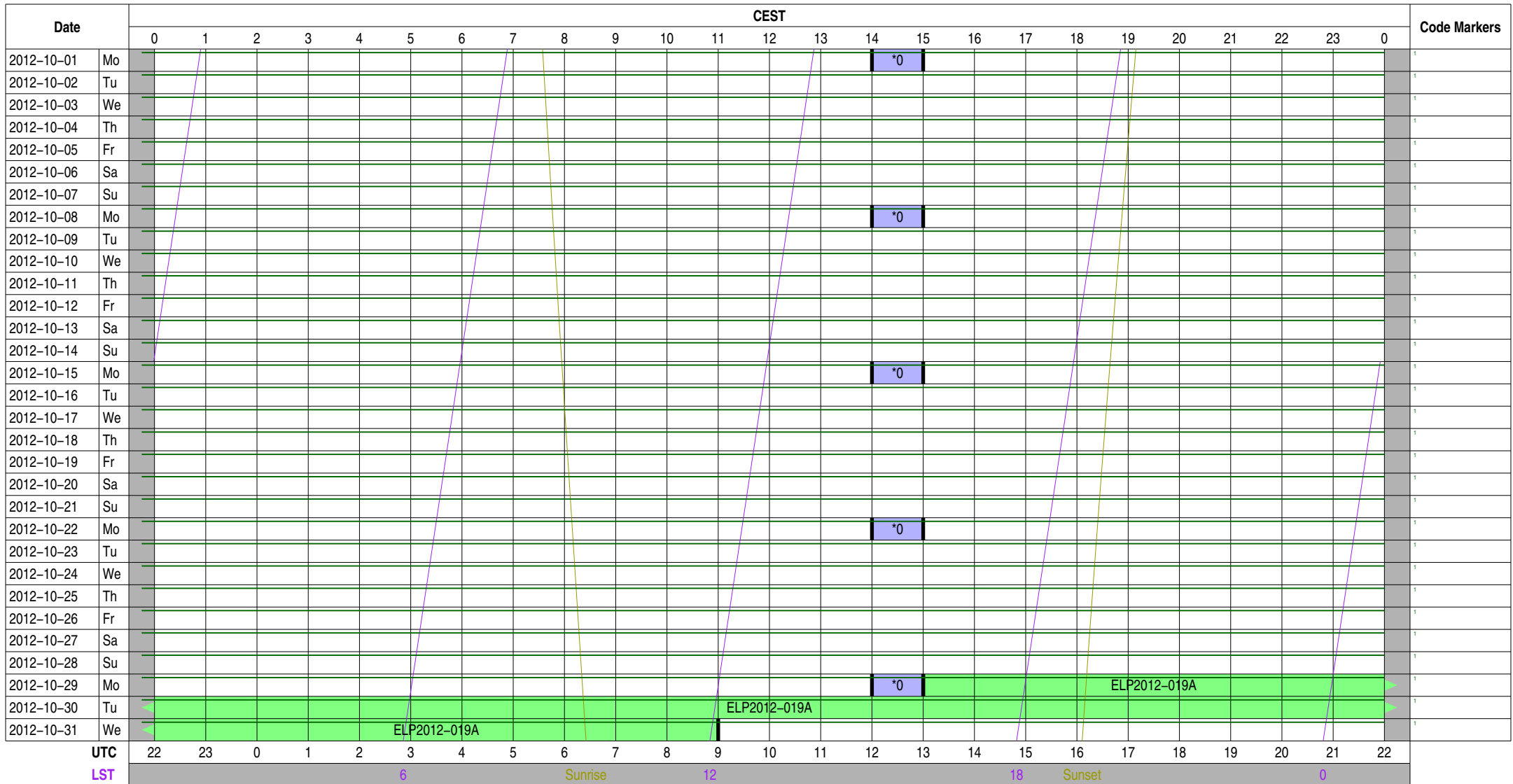
**Other Experiment Code Markers**

**Color Meanings**

- |                           |                          |                  |                           |
|---------------------------|--------------------------|------------------|---------------------------|
| Science A (Astrometry)    | Science N (AGN)          | Test Observation | Juelich Mode              |
| Science C (Cosmology)     | Science O (Other)        | Maintenance Mode | Piggyback Control         |
| Science E (Extragalactic) | Science P (Pulsar)       | ILT Mode         | Piggyback Without Control |
| Science G (Galactic)      | Science R (Cosmic Rays)  | Effelsberg Mode  | Experiment Warning        |
| Science H (Ionosphere)    | Science S (Solar System) | GLOW Mode        | Override Possible         |

# Observing Plan for lofar1 Computer MPIfR Effelsberg LOFAR Station 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



### Normal Experiment Code Markers

0 ELP2012-003AT

### Other Experiment Code Markers

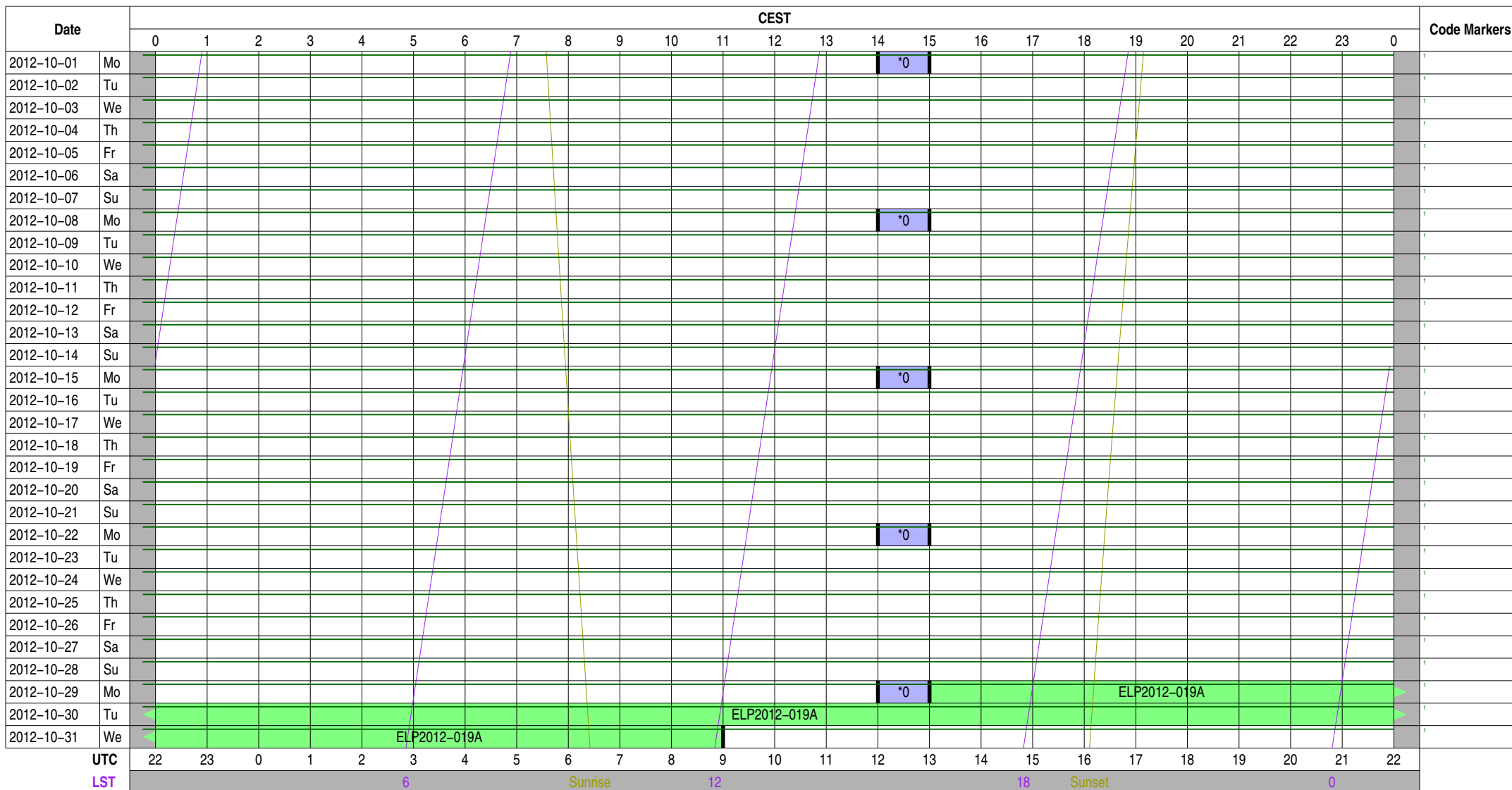
1 ELP2012-008

### Color Meanings

Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for lofar2 Computer MPIfR Effelsberg LOFAR Station 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



### Normal Experiment Code Markers

0 ELI2012-003AT

### Other Experiment Code Markers

1 ELP2012-008

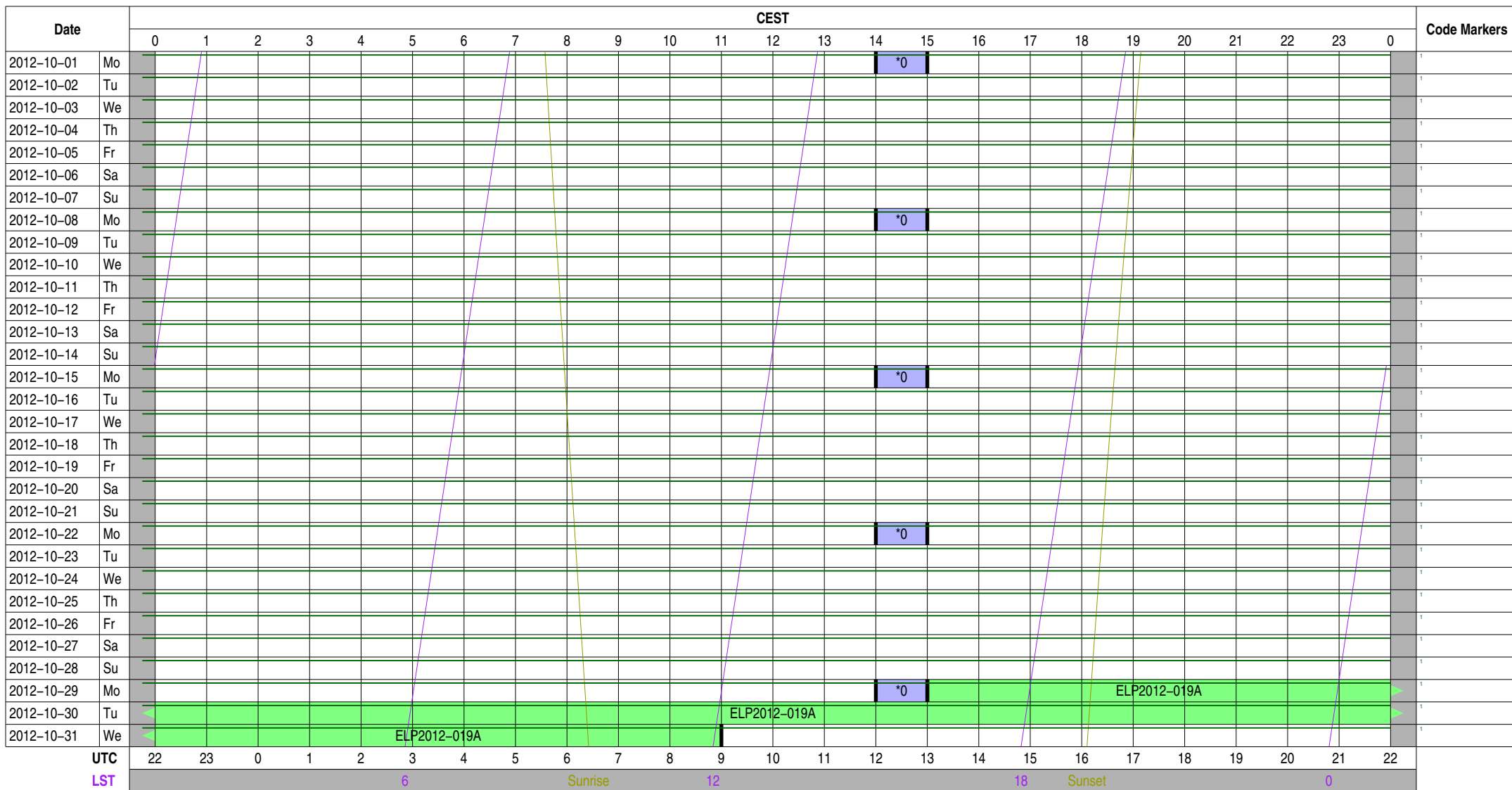
### Color Meanings

Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible



# Observing Plan for lofar3 Computer MPIfR Effelsberg LOFAR Station 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



### Normal Experiment Code Markers

0 ELP2012-003AT

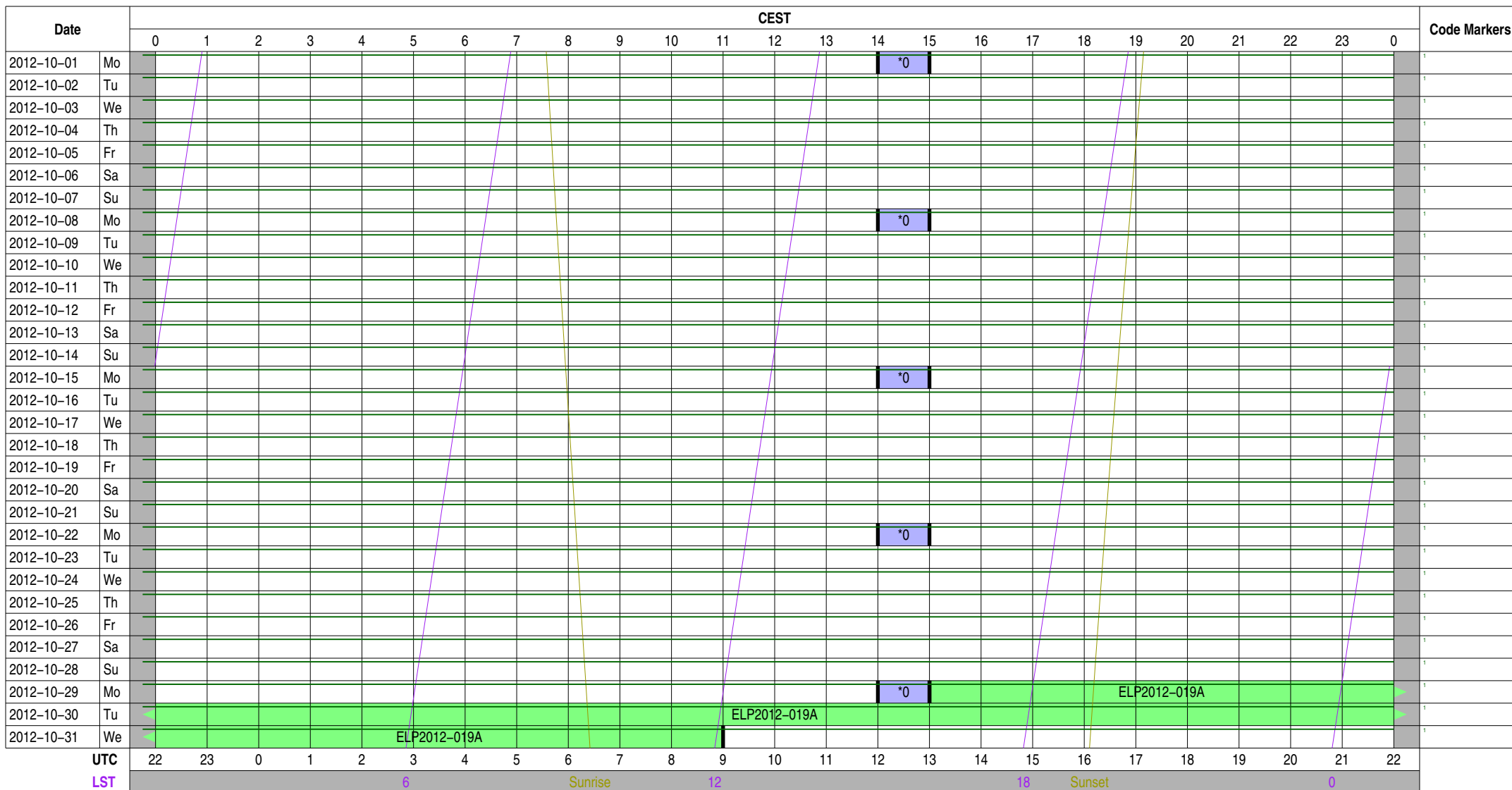
### Other Experiment Code Markers

1 ELP2012-008

### Color Meanings

Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for Iofar4 Computer MPIfR Effelsberg LOFAR Station 2012-10-01 through 2012-10-30



**Normal Experiment Code Markers**

0 ELP2012-003AT

**Other Experiment Code Markers**

1 ELP2012-008

**Color Meanings**

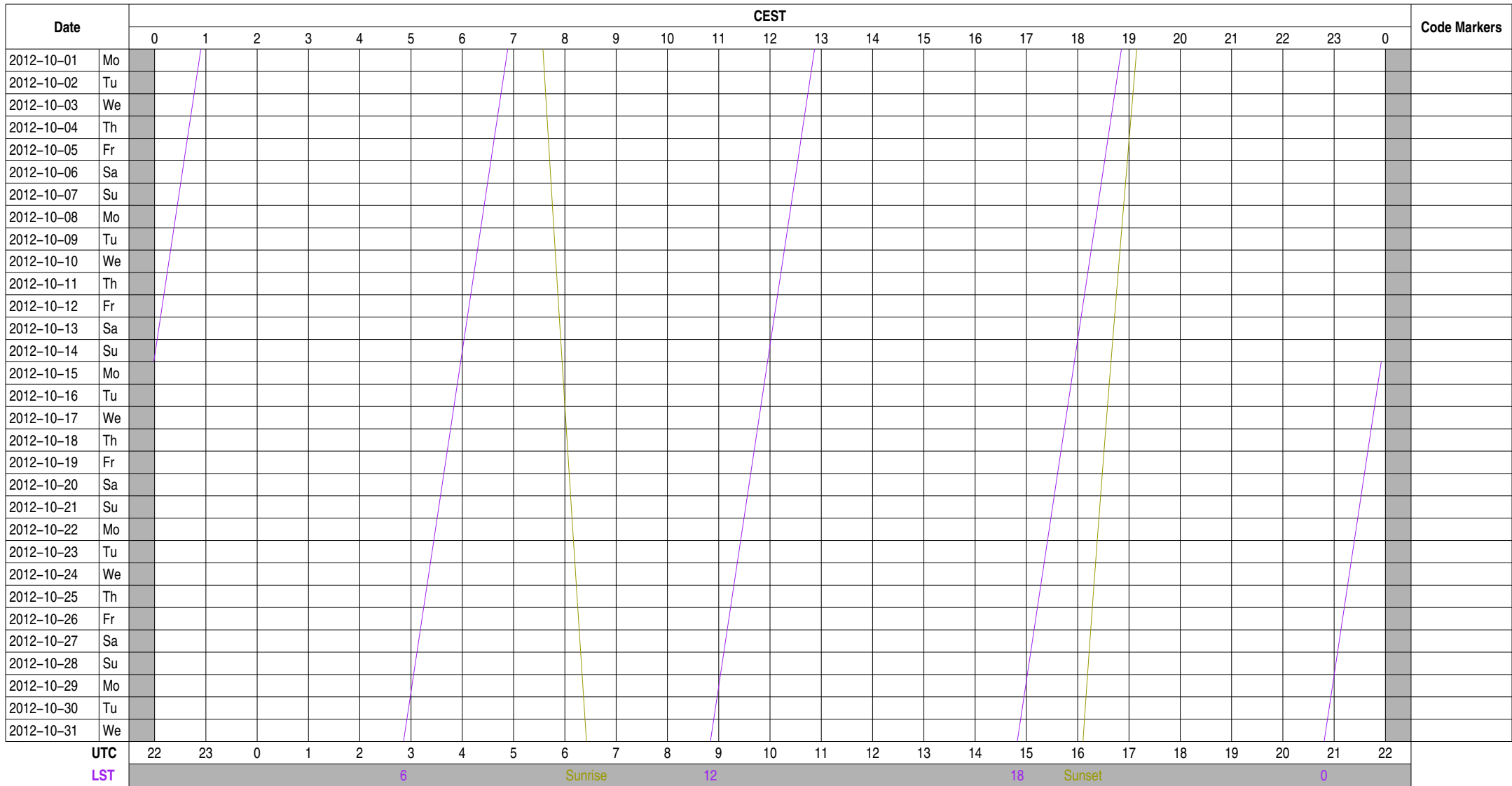
Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for Iofar1a Pulsar Computer

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



**Normal Experiment Code Markers**

**Other Experiment Code Markers**

**Color Meanings**

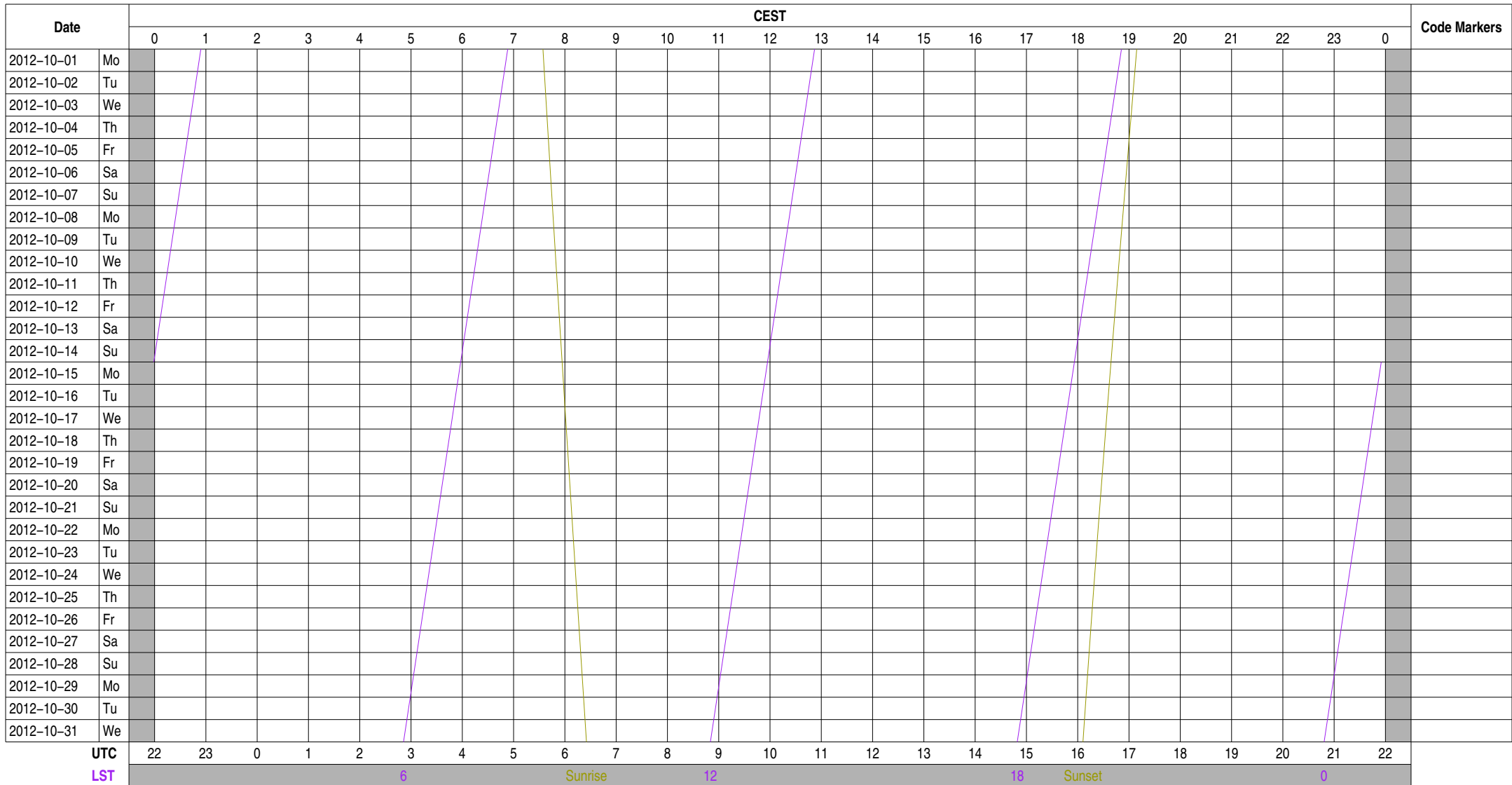
- |                           |                          |                  |                           |
|---------------------------|--------------------------|------------------|---------------------------|
| Science A (Astrometry)    | Science N (AGN)          | Test Observation | Juelich Mode              |
| Science C (Cosmology)     | Science O (Other)        | Maintenance Mode | Piggyback Control         |
| Science E (Extragalactic) | Science P (Pulsar)       | ILT Mode         | Piggyback Without Control |
| Science G (Galactic)      | Science R (Cosmic Rays)  | Effelsberg Mode  | Experiment Warning        |
| Science H (Ionosphere)    | Science S (Solar System) | GLOW Mode        | Override Possible         |

# Observing Plan for Iofar2a Pulsar Computer

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



**Normal Experiment Code Markers**

**Other Experiment Code Markers**

**Color Meanings**

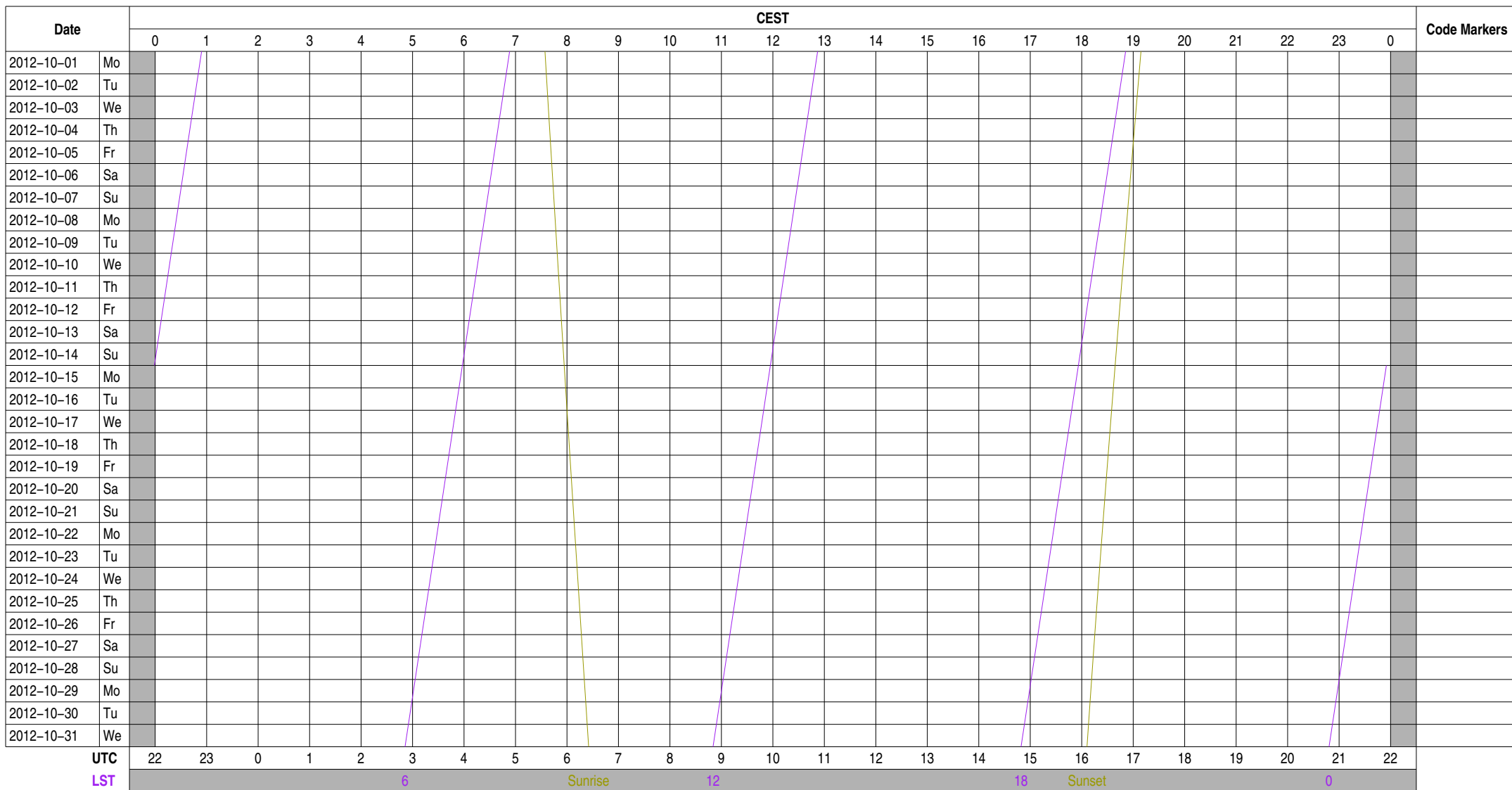
- |                           |                          |                  |                           |
|---------------------------|--------------------------|------------------|---------------------------|
| Science A (Astrometry)    | Science N (AGN)          | Test Observation | Juelich Mode              |
| Science C (Cosmology)     | Science O (Other)        | Maintenance Mode | Piggyback Control         |
| Science E (Extragalactic) | Science P (Pulsar)       | ILT Mode         | Piggyback Without Control |
| Science G (Galactic)      | Science R (Cosmic Rays)  | Effelsberg Mode  | Experiment Warning        |
| Science H (Ionosphere)    | Science S (Solar System) | GLOW Mode        | Override Possible         |

# Observing Plan for Iofar3a Pulsar Computer

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



Normal Experiment Code Markers

Other Experiment Code Markers

Color Meanings

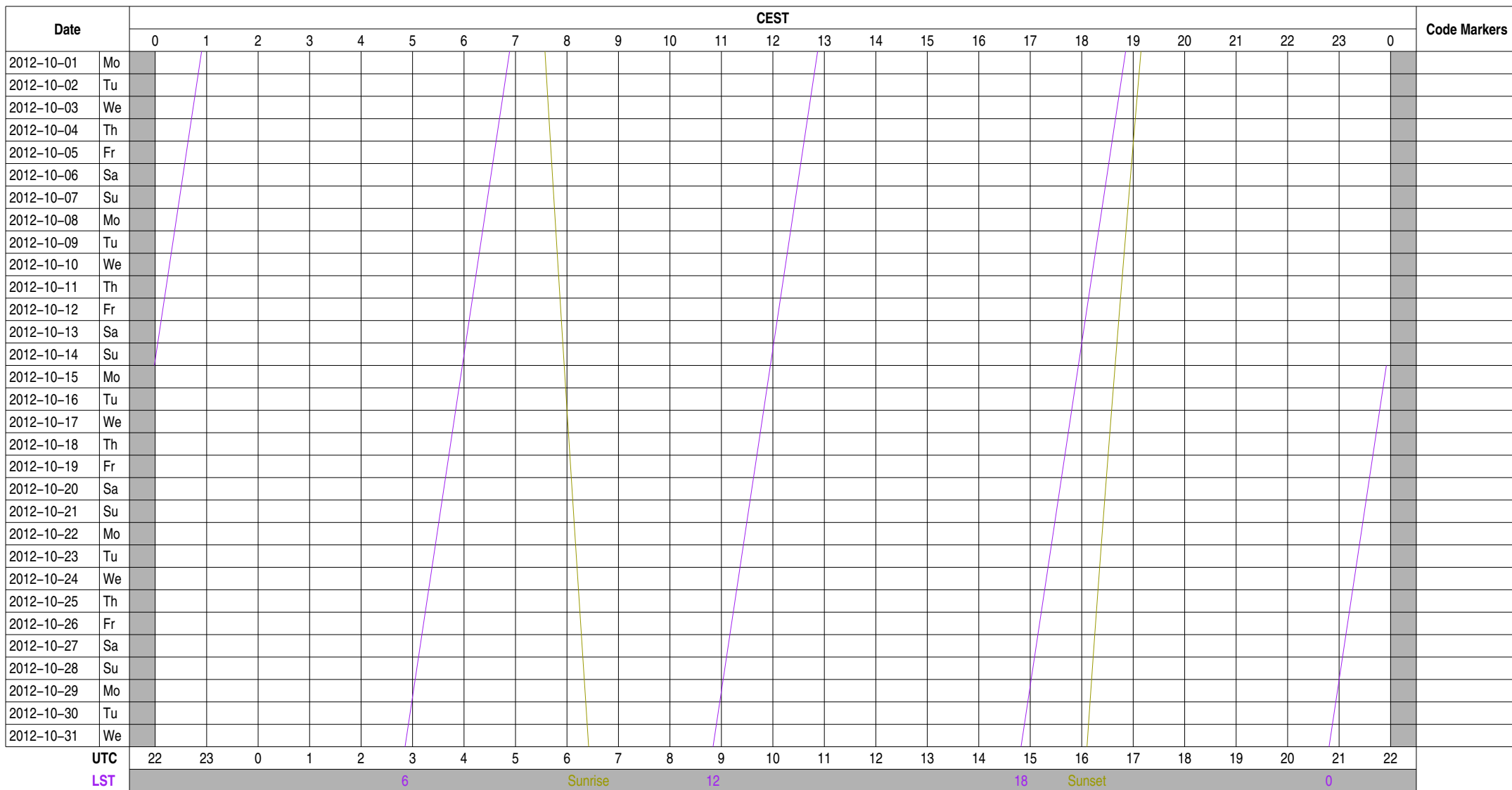
Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for Iofar4a Pulsar Computer

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



**Normal Experiment Code Markers**

**Other Experiment Code Markers**

**Color Meanings**

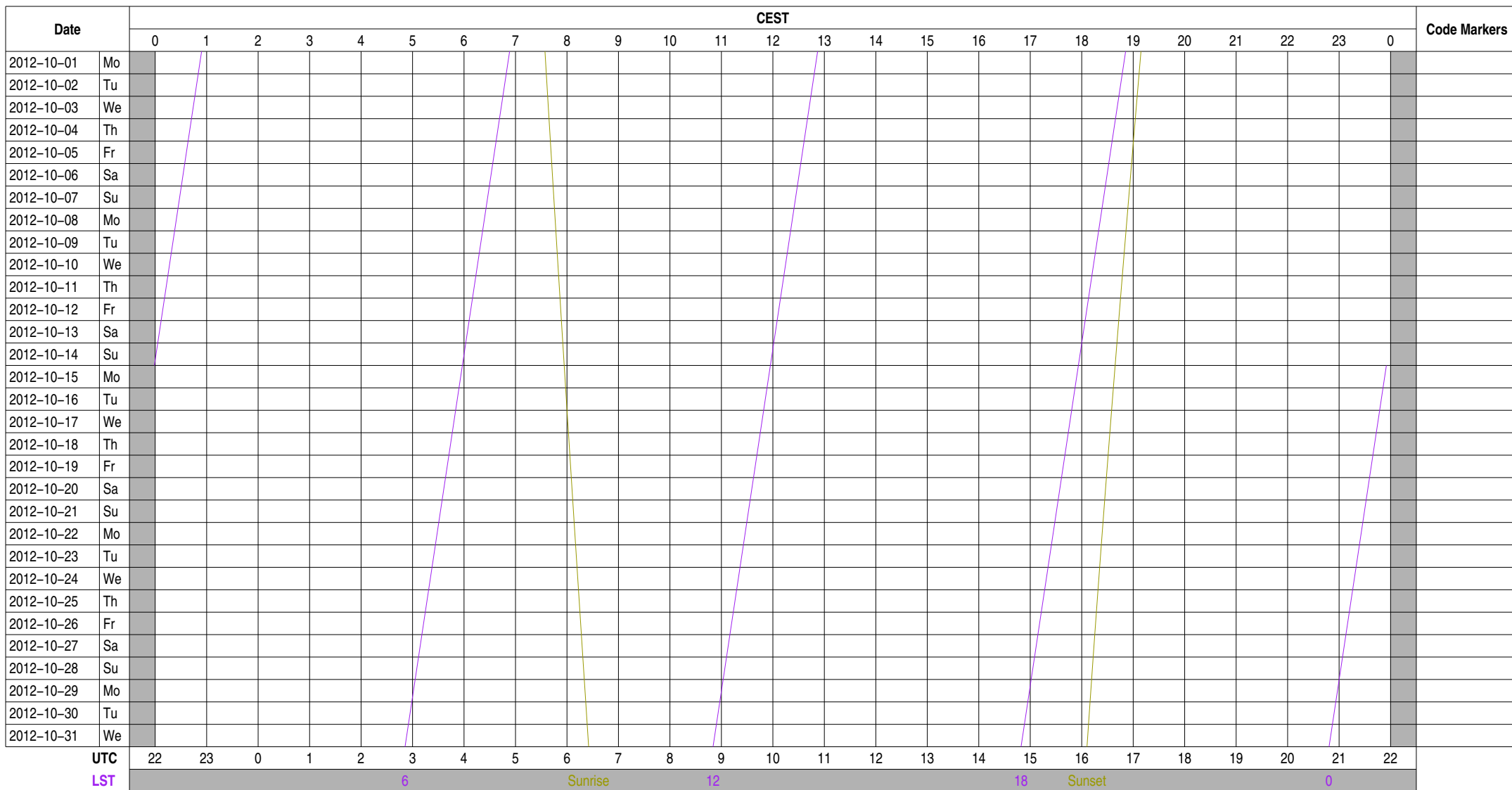
Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for Iofar1b Recording Computer

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



#### Normal Experiment Code Markers

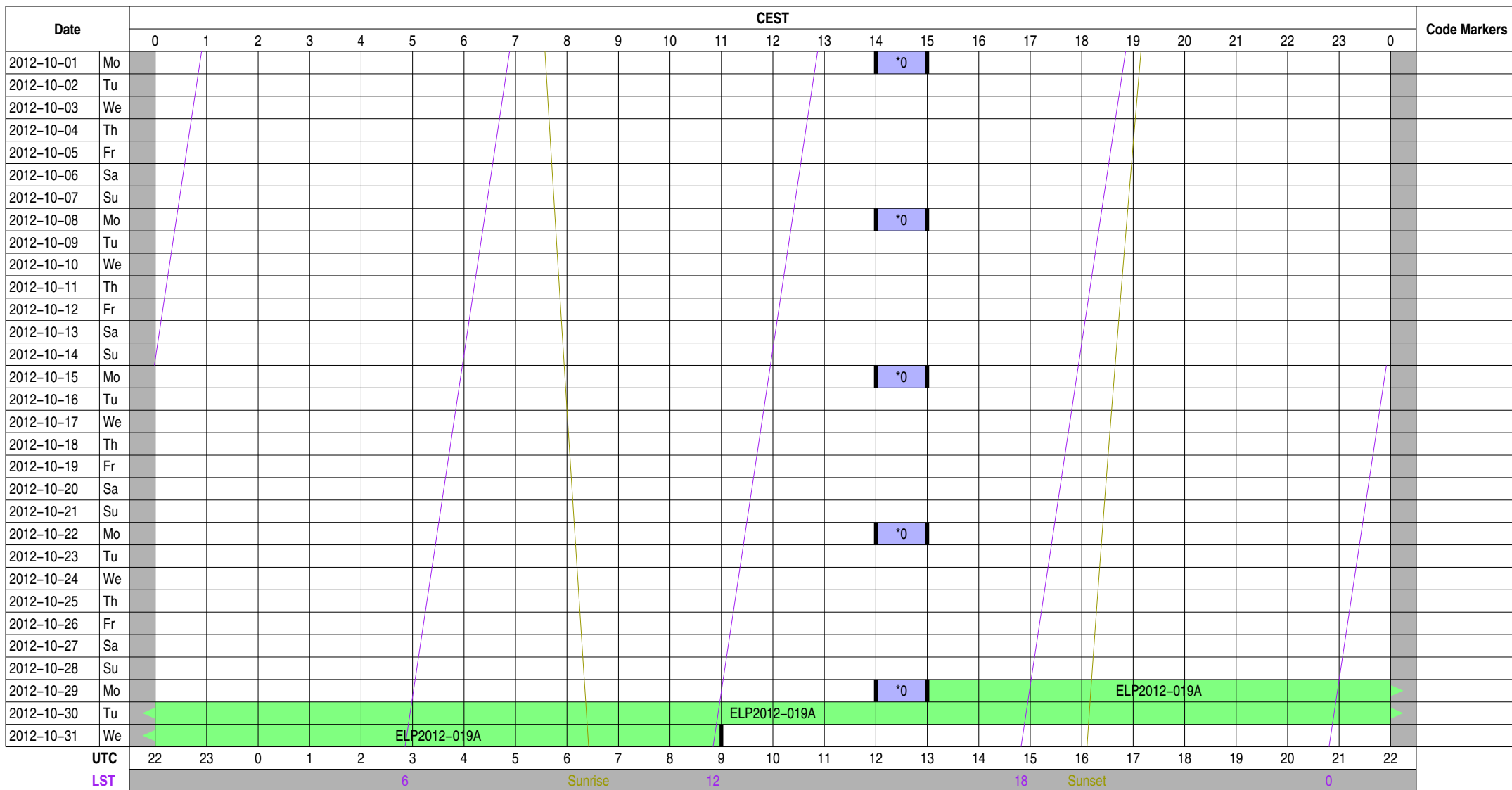
#### Other Experiment Code Markers

#### Color Meanings

Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for Iofarx Computer MPIfR Effelsberg LOFAR Station 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



**Normal Experiment Code Markers**

0 ELI2012-003AT

**Other Experiment Code Markers**

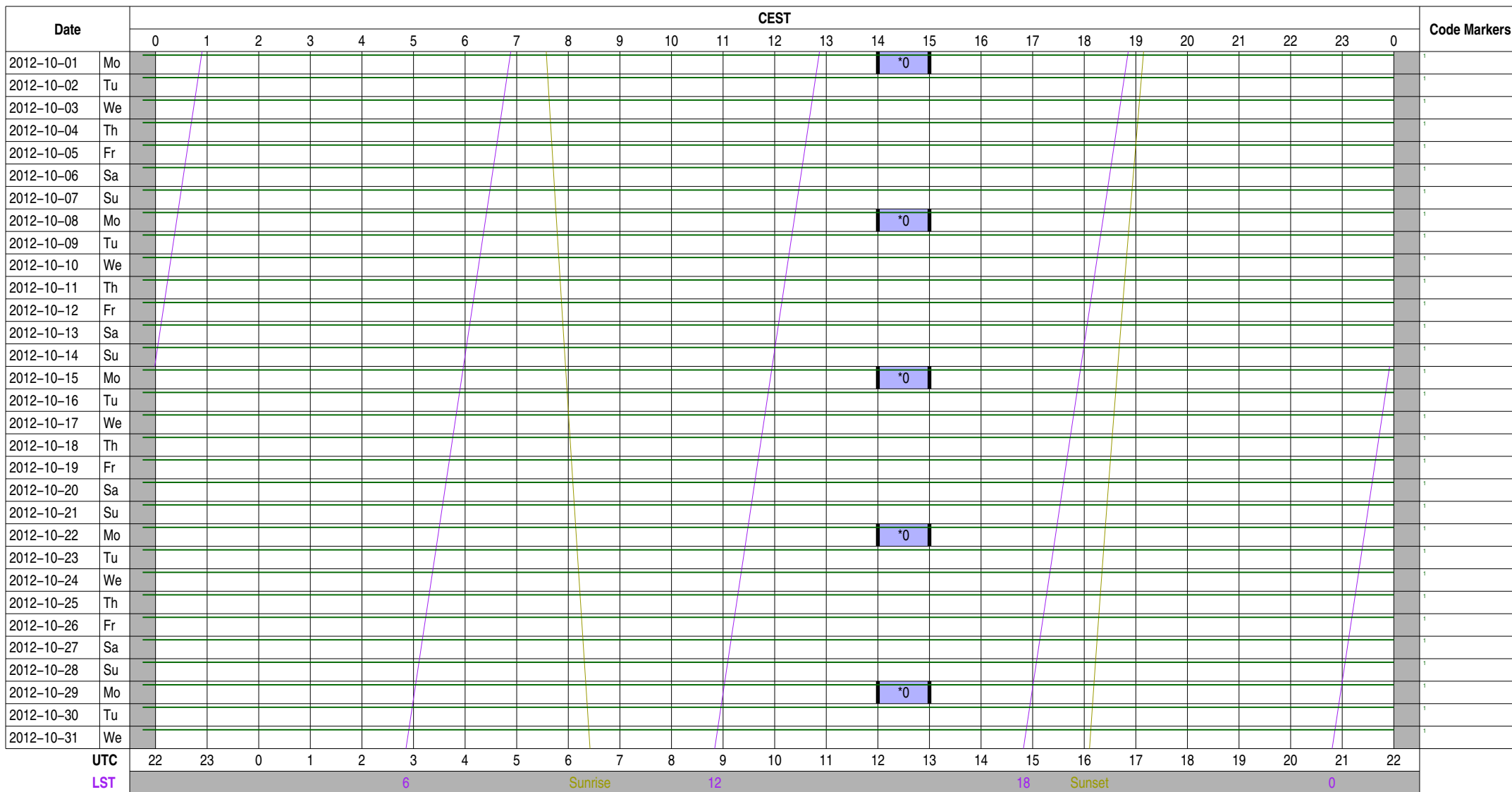
**Color Meanings**

- |                           |                          |                  |                           |
|---------------------------|--------------------------|------------------|---------------------------|
| Science A (Astrometry)    | Science N (AGN)          | Test Observation | Juelich Mode              |
| Science C (Cosmology)     | Science O (Other)        | Maintenance Mode | Piggyback Control         |
| Science E (Extragalactic) | Science P (Pulsar)       | ILT Mode         | Piggyback Without Control |
| Science G (Galactic)      | Science R (Cosmic Rays)  | Effelsberg Mode  | Experiment Warning        |
| Science H (Ionosphere)    | Science S (Solar System) | GLOW Mode        | Override Possible         |



# Observing Plan for Iofarsrv Computer MPIfR Effelsberg LOFAR Station 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



### Normal Experiment Code Markers

0 ELI2012-003AT

### Other Experiment Code Markers

1 ELP2012-008

### Color Meanings

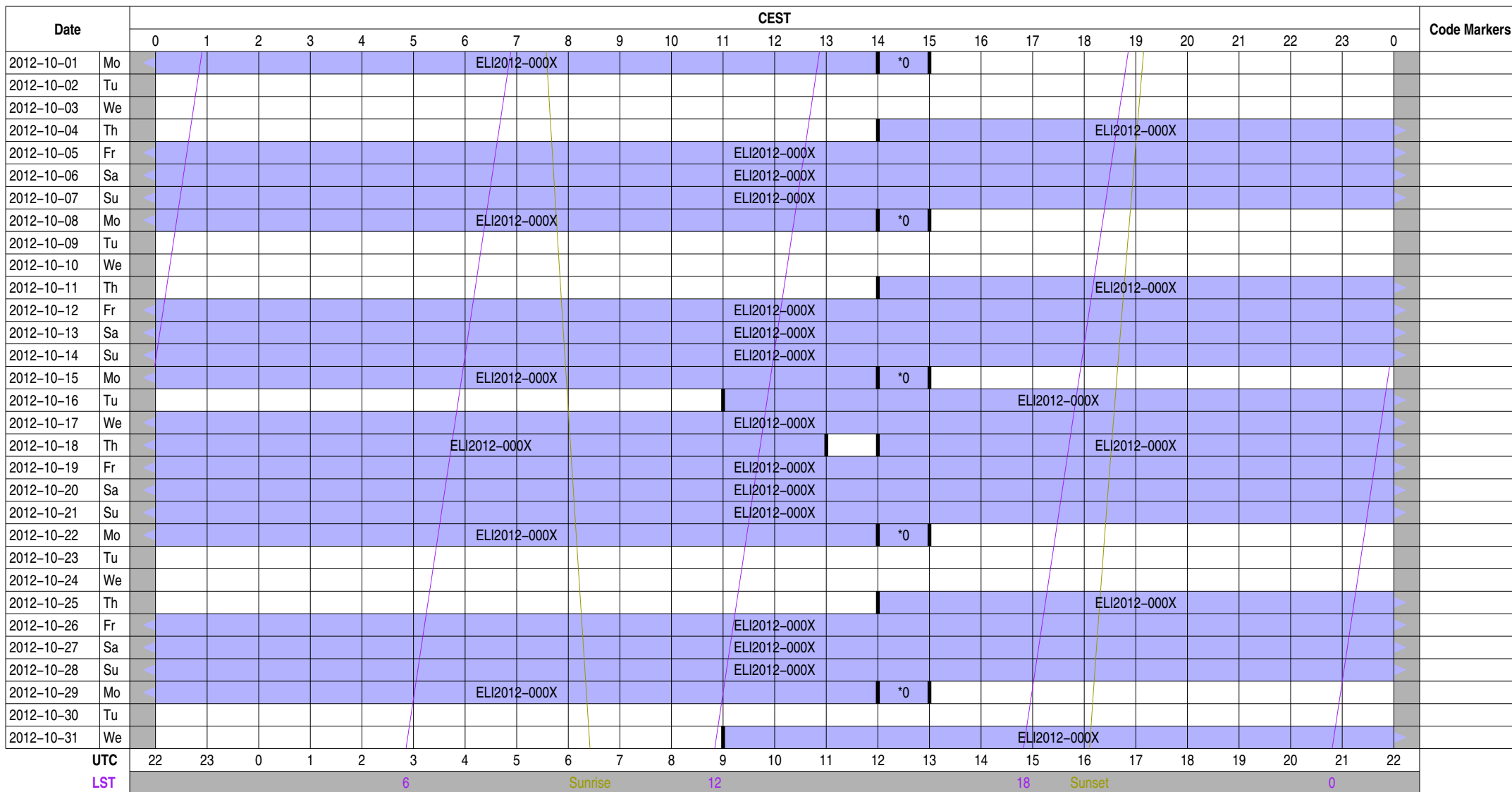
Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for LOFAR Fiber Connection

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30

For any publication based on observations with the Effelsberg LOFAR station, please use the following acknowledgment: "Based on observations made with the Effelsberg LOFAR station of the Max-Planck-Institut für Radioastronomie (MPIfR) at Effelsberg."



#### Normal Experiment Code Markers

0 ELI2012-003AT

#### Other Experiment Code Markers

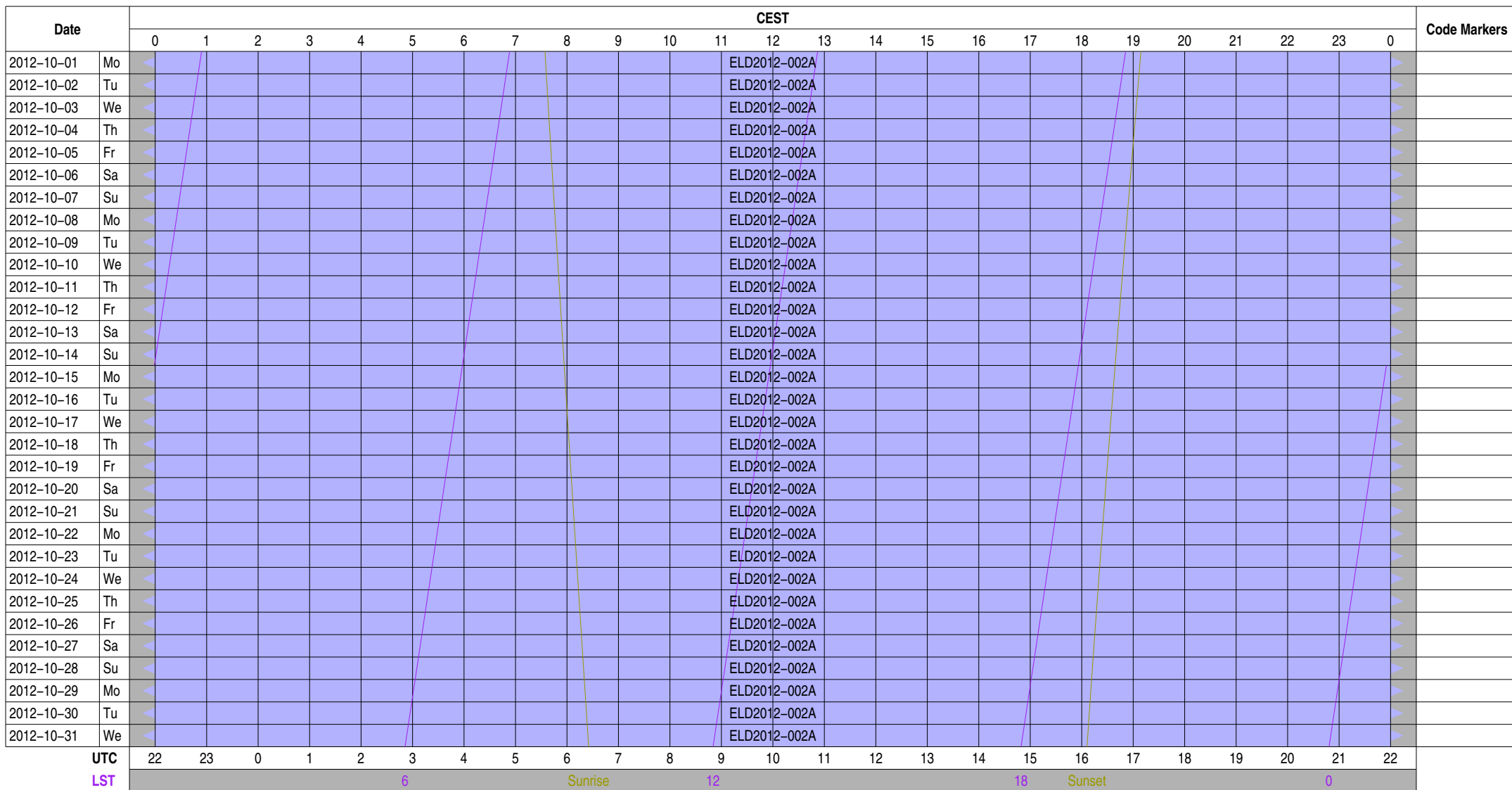
#### Color Meanings

Science A (Astrometry)	Science N (AGN)	Test Observation	Juelich Mode
Science C (Cosmology)	Science O (Other)	Maintenance Mode	Piggyback Control
Science E (Extragalactic)	Science P (Pulsar)	ILT Mode	Piggyback Without Control
Science G (Galactic)	Science R (Cosmic Rays)	Effelsberg Mode	Experiment Warning
Science H (Ionosphere)	Science S (Solar System)	GLOW Mode	Override Possible

# Observing Plan for Operator On-Duty

## MPIfR Effelsberg LOFAR Station

### 2012-10-01 through 2012-10-30



**Normal Experiment Code Markers**

**Other Experiment Code Markers**

**Color Meanings**

- 100 m Operator
- Anderson
- Kuniyoshi
- Homeffer
- Other
- Unknown

## Experiment Information for Normal Observations

<b>ELI2012-000</b>	<b>Anderson, ILT Operations</b>	<b>observer@astron.nl</b>	<b>+31 521 595 777</b>	<b>Main ILT Observations, ILT Operations only on-duty 9--17, M</b>
ELI2012-000	Anderson, ILT Operations	observer@astron.nl	+31 521 595 777	Main ILT Observations, ILT Operations only on-duty 9--17, M
ELI2012-000	Anderson, ILT Operations	observer@astron.nl	+31 521 595 777	Main ILT Observations, ILT Operations only on-duty 9--17, M
ELI2012-000	Anderson, ILT Operations	observer@astron.nl	+31 521 595 777	Main ILT Observations, ILT Operations only on-duty 9--17, M
ELI2012-000	Anderson, ILT Operations	observer@astron.nl	+31 521 595 777	Main ILT Observations, ILT Operations only on-duty 9--17, M
ELI2012-000	Anderson, ILT Operations	observer@astron.nl	+31 521 595 777	Main ILT Observations, ILT Operations only on-duty 9--17, M
ELI2012-000	Anderson, ILT Operations	observer@astron.nl	+31 521 595 777	Main ILT Observations, ILT Operations only on-duty 9--17, M
<b>ELI2012-003</b>	<b>Anderson, Kuniyoshi, Horneffer</b>	<b>lofar-ops@mpi-fr-bonn.mpg.de</b>	<b>+49 228 525 356</b>	<b>Handover operations for local to ILT mode</b>
ELI2012-003	Anderson, Kuniyoshi, Horneffer	lofar-ops@mpi-fr-bonn.mpg.de	+49 228 525 356	Handover operations for local to ILT mode
ELI2012-003	Anderson, Kuniyoshi, Horneffer	lofar-ops@mpi-fr-bonn.mpg.de	+49 228 525 356	Handover operations for local to ILT mode
ELI2012-003	Anderson, Kuniyoshi, Horneffer	lofar-ops@mpi-fr-bonn.mpg.de	+49 228 525 356	Handover operations for local to ILT mode
ELI2012-003	Anderson, Kuniyoshi, Horneffer	lofar-ops@mpi-fr-bonn.mpg.de	+49 228 525 356	Handover operations for local to ILT mode
ELI2012-003	Anderson, Kuniyoshi, Horneffer	lofar-ops@mpi-fr-bonn.mpg.de	+49 228 525 356	Handover operations for local to ILT mode
ELI2012-003	Anderson, Kuniyoshi, Horneffer	lofar-ops@mpi-fr-bonn.mpg.de	+49 228 525 356	Handover operations for local to ILT mode
ELI2012-003	Anderson, Kuniyoshi, Horneffer	lofar-ops@mpi-fr-bonn.mpg.de	+49 228 525 356	Handover operations for local to ILT mode
ELI2012-003	Anderson, Kuniyoshi, Horneffer	lofar-ops@mpi-fr-bonn.mpg.de	+49 228 525 356	Handover operations for local to ILT mode
<b>ELP2012-019</b>	<b>Kuniyoshi, Verbiest</b>	<b>mkuniyos@mpi-fr-bonn.mpg.de</b>	<b>+49 228 525 505</b>	<b>pulsar timing and DM</b>
ELP2012-019	Kuniyoshi, Verbiest	mkuniyos@mpi-fr-bonn.mpg.de	+49 228 525 505	pulsar timing and DM

## Experiment Information for Other Actions

ELP2012-008	Kuniyoshi	mkuniyos@mpifr-bonn.mpg.de	+49 228 525 505	development of software and data analysis
ELP2012-008	Kuniyoshi	mkuniyos@mpifr-bonn.mpg.de	+49 228 525 505	development of software and data analysis

# Experiment Information for Operator On-Duty Schedule

ELD2012-002	Kuniyoshi	mkuniyos@mpifr-bonn.mpg.de	+49 228 525 505	Project Scheduler
ELD2012-002	Kuniyoshi	mkuniyos@mpifr-bonn.mpg.de	+49 228 525 505	Project Scheduler

## Time Usage [hours] for Normal Observations

Experiment Code	station	TBB	HBA	LBH	LBL	interfe	lofar1	lofar2	lofar3	lofar4	lofar1a	lofar2a	lofar3a	lofar4a	lofar1b	lofarx	lofarsr	fiber	duty
<b>ELI2012-000</b>	<b>461.00</b>	<b>461.00</b>	<b>461.00</b>	<b>461.00</b>	<b>461.00</b>	<b>461.00</b>												<b>461.00</b>	
ELI2012-000 X	14.00	14.00	14.00	14.00	14.00	14.00												14.00	
ELI2012-000 X	96.00	96.00	96.00	96.00	96.00	96.00												96.00	
ELI2012-000 X	96.00	96.00	96.00	96.00	96.00	96.00												96.00	
ELI2012-000 X	50.00	50.00	50.00	50.00	50.00	50.00												50.00	
ELI2012-000 X	96.00	96.00	96.00	96.00	96.00	96.00												96.00	
ELI2012-000 X	96.00	96.00	96.00	96.00	96.00	96.00												96.00	
ELI2012-000 X	13.00	13.00	13.00	13.00	13.00	13.00												13.00	
<b>ELI2012-003</b>	<b>9.00</b>		<b>5.00</b>	<b>5.00</b>			<b>5.00</b>	<b>5.00</b>	<b>5.00</b>	<b>5.00</b>						<b>5.00</b>	<b>5.00</b>	<b>5.00</b>	
ELI2012-003 AS	1.00																		
ELI2012-003 AS	1.00																		
ELI2012-003 AS	1.00																		
ELI2012-003 AS	1.00																		
ELI2012-003 AT	1.00		1.00	1.00			1.00	1.00	1.00	1.00						1.00	1.00	1.00	
ELI2012-003 AT	1.00		1.00	1.00			1.00	1.00	1.00	1.00						1.00	1.00	1.00	
ELI2012-003 AT	1.00		1.00	1.00			1.00	1.00	1.00	1.00						1.00	1.00	1.00	
ELI2012-003 AT	1.00		1.00	1.00			1.00	1.00	1.00	1.00						1.00	1.00	1.00	
ELI2012-003 AT	1.00		1.00	1.00			1.00	1.00	1.00	1.00						1.00	1.00	1.00	
<b>ELP2012-019</b>	<b>44.00</b>		<b>44.00</b>				<b>44.00</b>	<b>44.00</b>	<b>44.00</b>	<b>44.00</b>						<b>44.00</b>			
ELP2012-019 A	44.00		44.00				44.00	44.00	44.00	44.00						44.00			

## Time Usage [hours] for Other Actions

Experiment Code	station	TBB	HBA	LBH	LBL	interfe	lofar1	lofar2	lofar3	lofar4	lofar1a	lofar2a	lofar3a	lofar4a	lofar1b	lofarx	lofarsr	fiber	duty
ELP2012-008							744.00	744.00	744.00	744.00							744.00		
ELP2012-008							744.00	744.00	744.00	744.00							744.00		







