



Osservatorio
Polifunzionale
Del Chianti

An emerging scientific reality

In the hearth of Chianti



Località Montecorboli

Close by San Donato in Poggio



The logo for the Osservatorio Polifunzionale del Chianti (OPCC) features the letters 'OPCC' in a white, sans-serif font, followed by a circular emblem containing a stylized white crescent moon.

Osservatorio Polifunzionale Del Chianti

Osservatorio Polifunzionale del Chianti Parco Botanico del Chianti

5 hectares of spontaneous and uncontaminated wooded area

Google

Public scientific site

Property of Comune di Barberino Tavarnelle
Managed by the Università di Firenze



The mission

Scientific research and teaching
open and accessible



The Site

484 m asl

Average background mag 21.7

Average Seeing < 2"



Osservatorio Polifunzionale Del Chianti

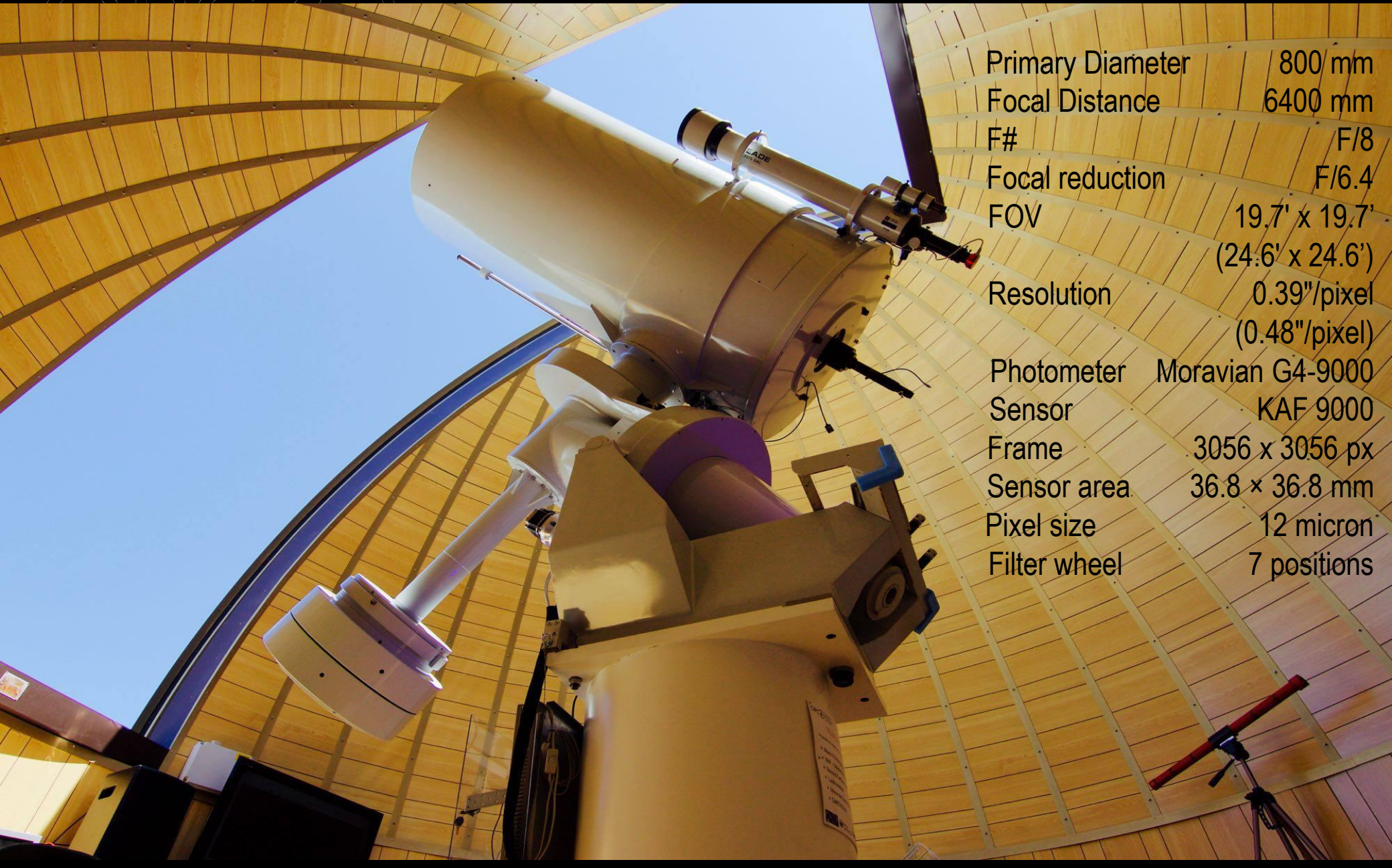
The dome

7-metre diameter

Computer controlled and
synchronized to the telescope



Ritchey-Chretien telescope

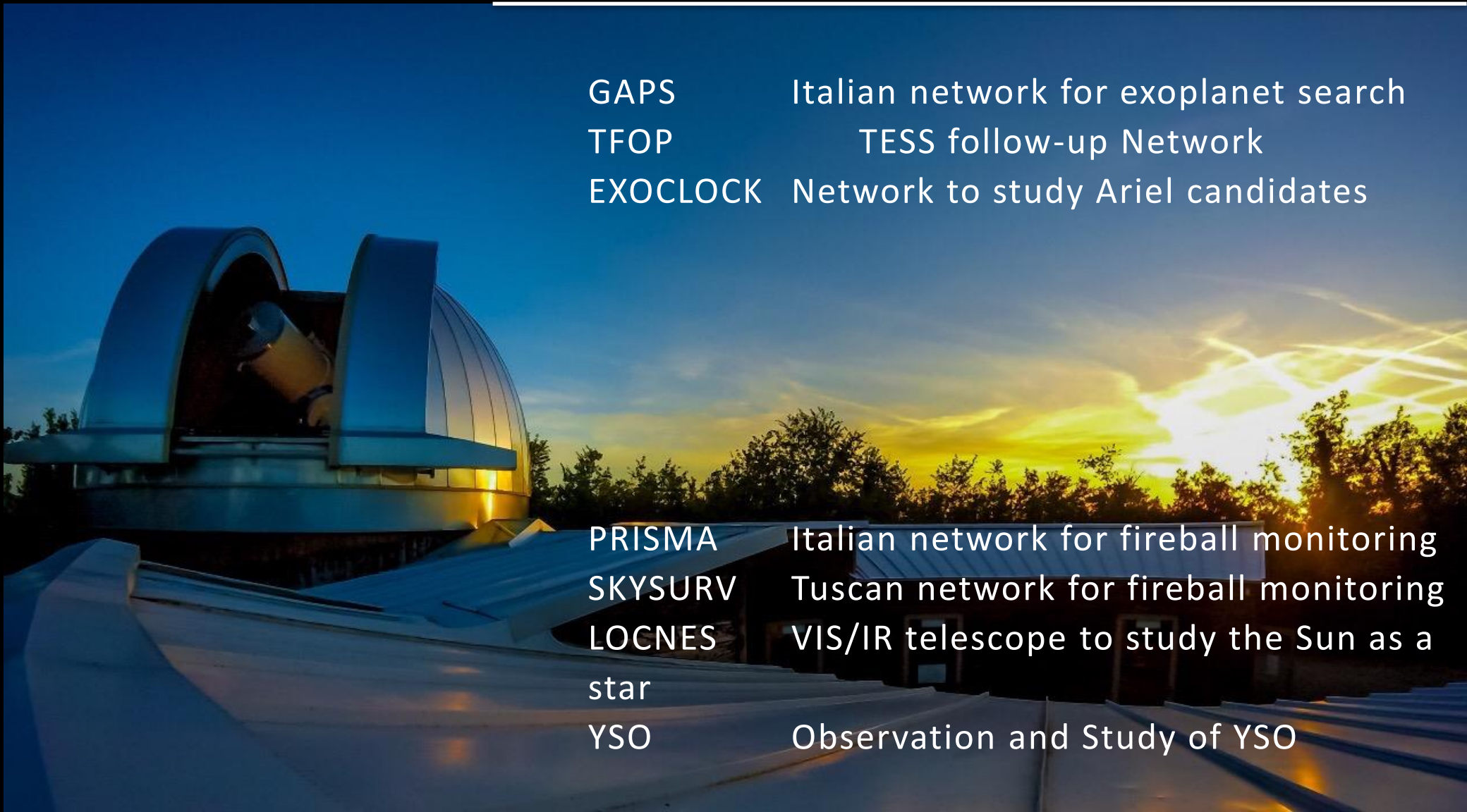


Primary Diameter	800 mm
Focal Distance	6400 mm
F#	F/8
Focal reduction	F/6.4
FOV	19.7' x 19.7' (24.6' x 24.6')
Resolution	0.39"/pixel (0.48"/pixel)
Photometer	Moravian G4-9000
Sensor	KAF 9000
Frame	3056 x 3056 px
Sensor area	36.8 x 36.8 mm
Pixel size	12 micron
Filter wheel	7 positions

Astronomy projects

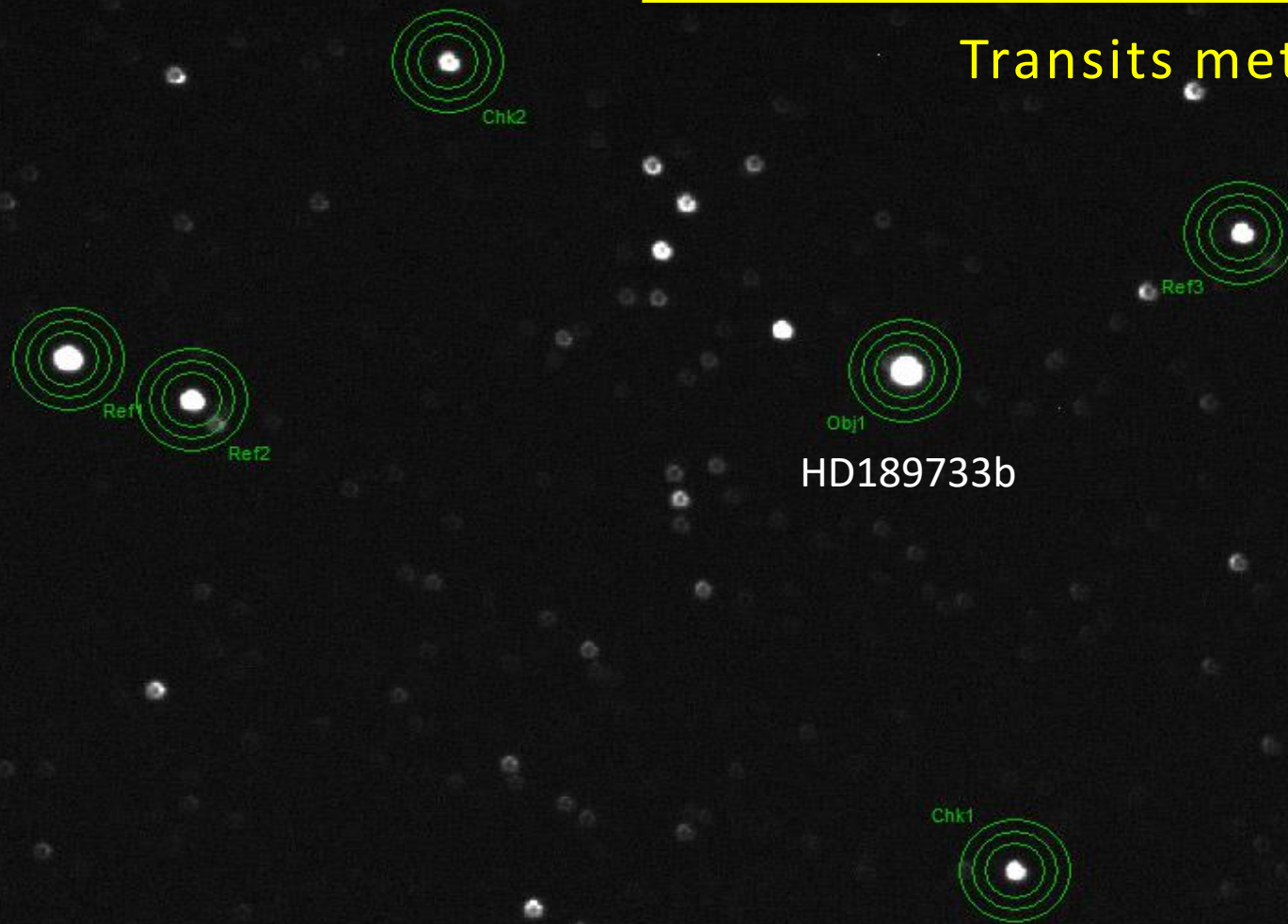
GAPS Italian network for exoplanet search
TFOP TESS follow-up Network
EXOCLOCK Network to study Ariel candidates

PRISMA Italian network for fireball monitoring
SKYSURV Tuscan network for fireball monitoring
LOCNES VIS/IR telescope to study the Sun as a star
YSO Observation and Study of YSO



Follow-up of exoplanets

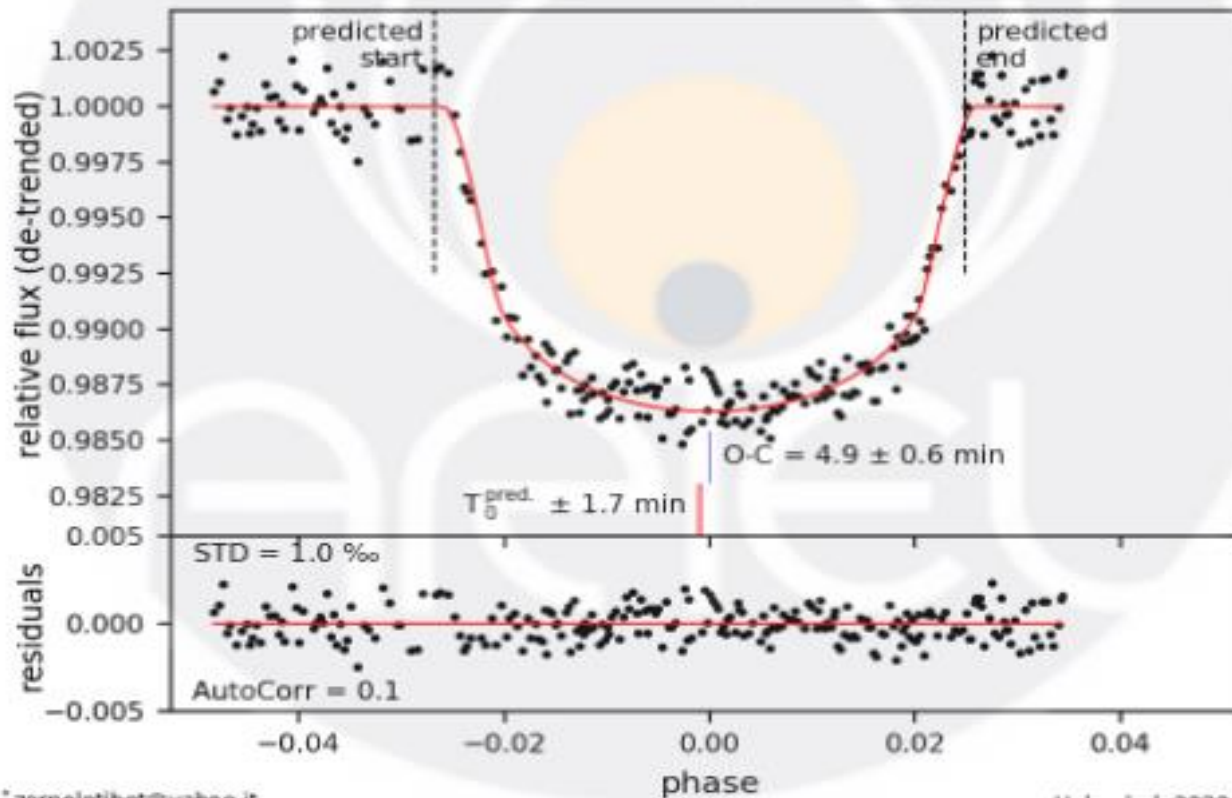
Transits method



HAT – P – 33b

2020-11-18

Lorenzo Betti* (University of Florence - Osservatorio Polifunzionale del Chianti), L.Naponiello, A.Biagini, R.Ciantini, M.Agostini, V.Noce, E.Pace (University of Florence - Osservatorio Polifunzionale del Chianti), E.Papini (University of Florence), R.Stanga, D. Trisciani (Osservatorio Polifunzionale del Chianti), M.Focardi, L.Fini, A.Tozzi (INAF - Osservatorio Astrofisico di Arcetri) Osservatorio Polifunzionale del Chianti / Telescope: Ritchey-Chretien (31.5") Camera: Moravian G4 - KAF 09000 / Filter: V / Exp.: 30.0 s



*zernolotibet@yahoo.it

Uploaded: 2020-12-01

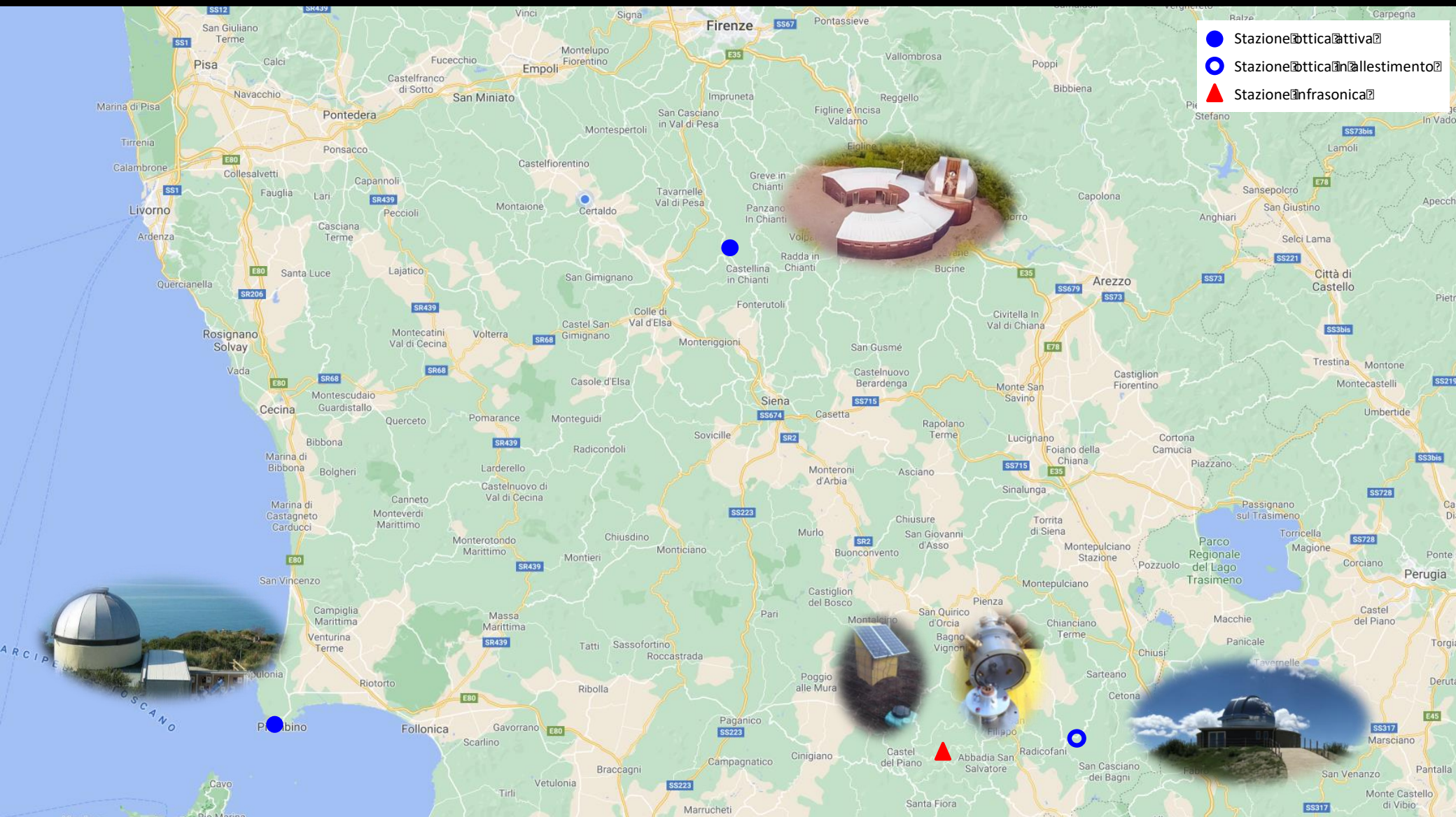
SKYSURV

Optical-infrasonic techniques
for fireball monitoring



The Sites

Tuscan Network



The sites

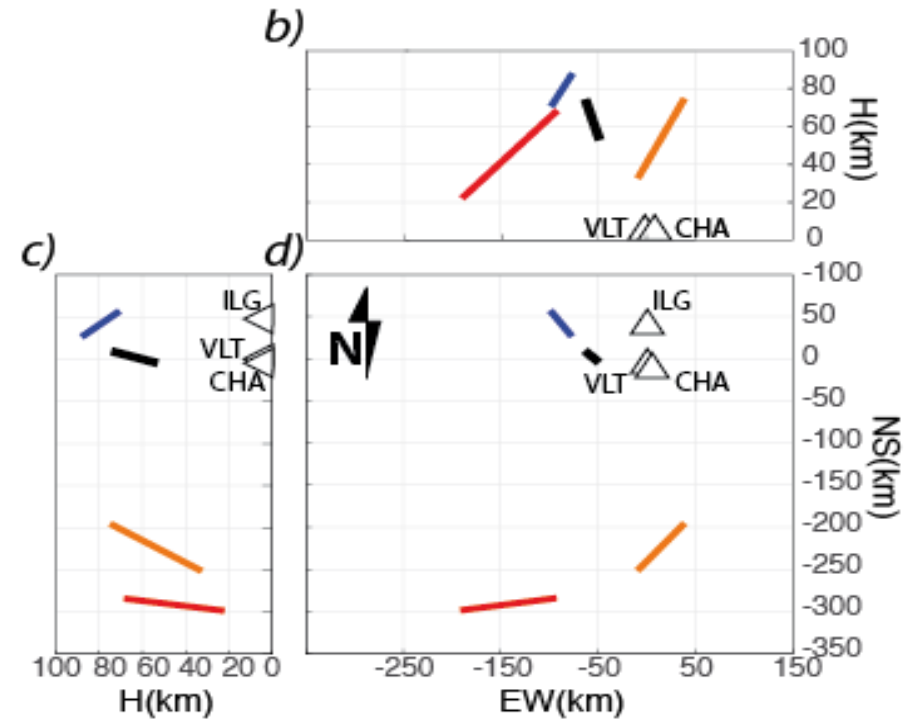
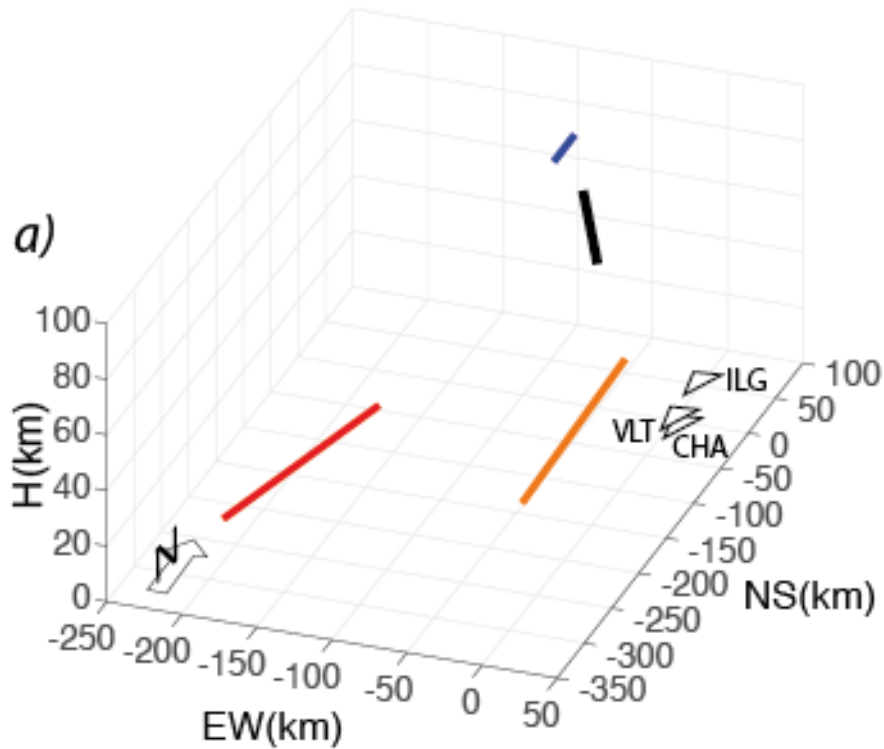
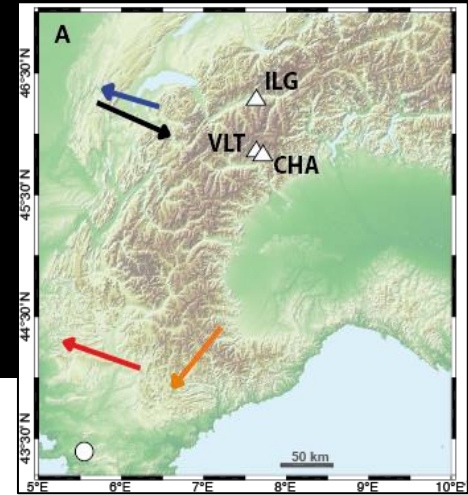
All-sky cameras



Infrasound

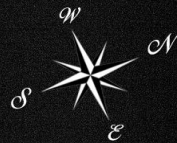
Fireball track reconstruction

G. Belli et al., submitted GJI, 2020



All-sky Cameras

Fireball track Imaging



Chianti

ITTO05

20/10/2020 22:48:07 UT

Durata Evento:

0.999999 sec.



Piombino

ITTO06

2020-10-20T224807 UTC

Durata Evento:

0.966657 sec.

Meteo Observatory

CEDaM

Projects

- Forecasting in Chianti
- Chianti Meteo Network
- Meteo Data Processing Center
- Chianti Meteo Sentinels
- Biodiversity mapping
- Astro-meteo
- Meteo by mobility



Meteo Observatory

Analysis & buletins

<http://www.osservatoriochianti.it/informazioni-meteo-chianti/>

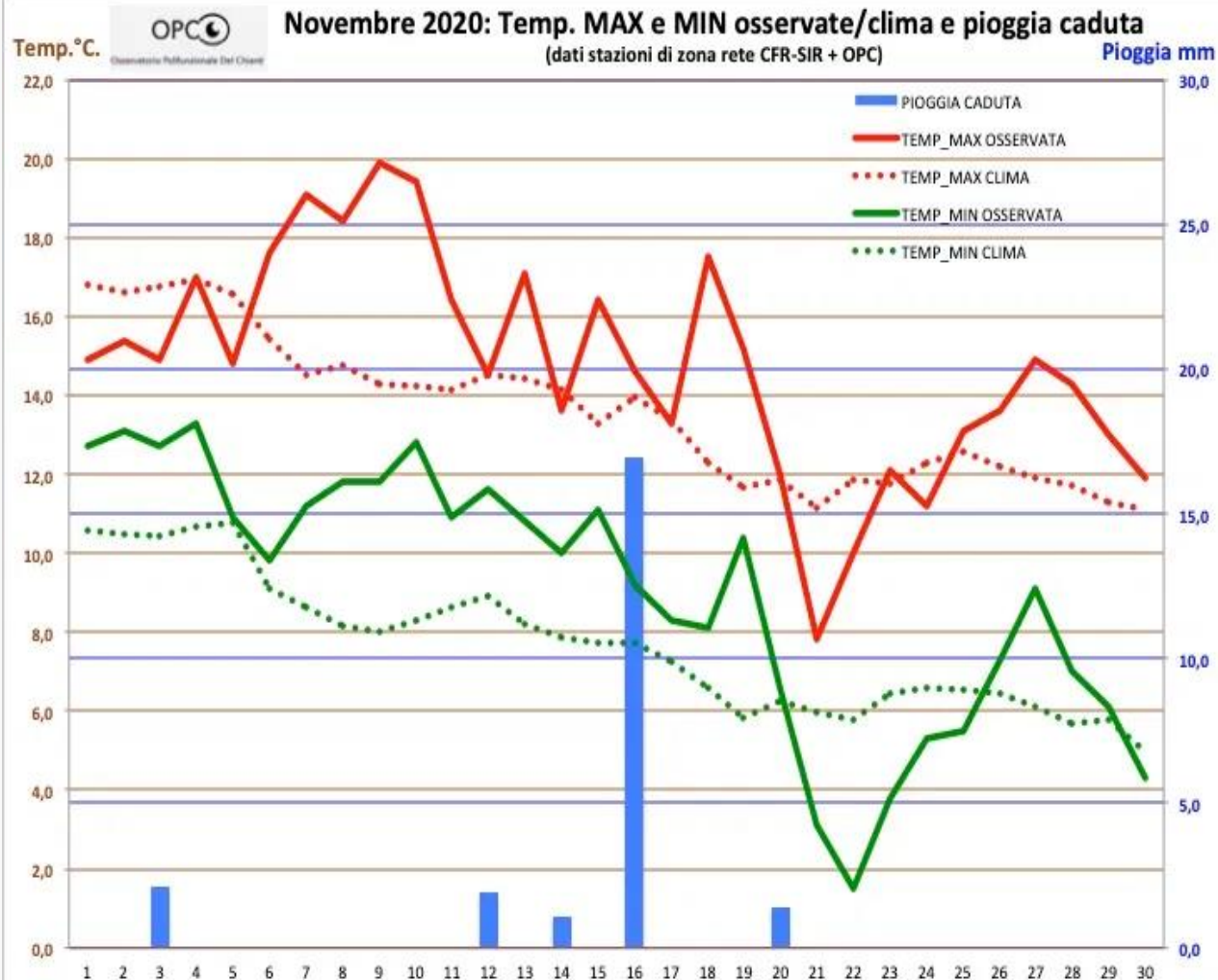
Bollettino Meteo Chianti g2



Tempo Tavarnelle Val di Pesa

43.56°N 11.17°E 366m slm

Mar 22/12	Mer 23/12	Gio 24/12	Ven 25/12	Sab 26/12	Dom 27/12	Lun 28/12
11 °C	12 °C	14 °C	11 °C	7 °C	7 °C	11 °C
10 °C	9 °C	11 °C	5 °C	2 °C	1 °C	5 °C
3 km/h	5 km/h	9 km/h	9 km/h	5 km/h	6 km/h	9 km/h
15 km/h	21 km/h	38 km/h	39 km/h	27 km/h	52 km/h	56 km/h
↑	↑	↑	↓	↓	↔	↔
		1/11UV	1/11UV	1/11UV	1/11UV	
88% rh	88% rh	84% rh	76% rh	69% rh	76% rh	82% rh
-	-	-	8mm	2mm	-	8mm
21%	20%	14%	63%	39%	20%	70%
1026hPa	1025hPa	1015hPa	1010hPa	1020hPa	1015hPa	999hPa



Environmental Observatory

Parco Botanico del Chianti

Projects

- Naturalistic park for the protection and enhancement of the endemic spontaneous flora of Chianti
- Coordination centre for the protected areas of Chianti
- Biodiversity mapping
- Census of wild orchids
- Pesa and Elsa river contracts



Geophysics Observatory

Earthquake monitoring

Projects

- INGV seismic monitoring station
- LGS – UNIFI (in prep.) seismic monitoring station
- INGV National Integrated GNSS Network
- SKYSURV: infrasonic array to monitor fireball entrance



Come in Chianti to join us!



<http://www.osservatoriochianti.it> - Osservatorio Polifunzionale del Chianti on Facebook