# **LDT Site Information**

**Facility** 

**LDT Science** 

Schedule

LDT Staff

Telescope

Weather

Selected

Technical

**Publications** 

LDT

Site Information

Acknowledging

**Quick Links** 

**LDT Observer** 

Information Home

Instrumentation

**Observing Time** 

Observing Run

At the Telescope

First-Time Users

Logistics

(Printable Logsheets)

After Your Observing

**LDT Important Notes** 

**Planning** 

Applying for

Instruments

Instrumentation Mai n Page

Facility Instruments:

Large Monolithic Imager (LMI)

DeVeny Optical Spectrograph Observing Planning

NIR Spectrograph
(NIHTS) Applying for
Observing Time

Visitor / PI Planning Instruments: Checklist

Remote

Observing

**Target Lists** 

Logistics

First-Time Users

High-Res Spectrograph (EXPRES)

Speckle Imager (QWSSI)

High Speed Imager (POETS)

NIR Spectrograph (RIMAS)

User Manuals:

LMI Manual

DeVeny Manual

NIHTS Manual

At the Telescope

Observing Quick Links

Remote Observing

LDT Startup Procedures

Closure Conditions

Night Feedback Form

End of Night Tasks



#### Overview

The Lowell Discovery Telescope is near the village of Happy Jack, about 1 hour south of Flagstaff. This dark-sky site sits on the Coconino National forest at an altitude of 7,740 feet. The LDT enclosure and D. Blackett & R. Wachs Telescope Support Building sit atop an extinct cinder cone located on a 35-acre special use permit area of USFS land.

Site Characteristics:

- Good seeing
- Dark site
- Previously disturbed site as the cinder cone was mined for cinders. This is why the southern side below the observatory is so steep. The land is owned by the USFS and because it was already disturbed, this simplified the required environmental impact assessment.
- Proximity to road and power, and modest travel time to Flagstaff.

Site Survey Paper: Bida, T. A., et al. 2004, Proc. SPIE, 5489, 196

### Driving to LDT – Directions for how to get to the site

#### Lodging for LDT Observing Runs – Where to stay during your observing run

On-Site safety:

• Because of the altitude and low humidity of the LDT site, remember to drink plenty of water to avoid dehydration.

• If you have not been to the site before, please don't enter without a Lowell staffer, or someone who is familiar with the site. There is an alarm that needs to be dis-armed, and it is not always obvious how. Your lodging packet should include keys and written instructions about the gate and alarm codes.

## **Site Coordinates:**

Measured Coordinates	Encoded Coordinates
From the site GPS unit: (Symmetricom S250, WGS84)	Coded into the TCS:
Date: 2013-07-08 UT	Date: 2013-07-08 UT
Latitude: 34:44:39.498 N	Latitude: 34.7443 = 34:44:39.48 N
Longitude: 111:25:21.054 W	Longitude: 111.4223 = 111:25:20.28 W
Altitude: 2337 meters	Altitude: 2361 meters
From the POETS Green GPS: (Spectrum TM-4, WGS84)	Coded into the MCU:
Date: 2013-01-10 UT	Date: 2013-07-08 UT
Latitude: 34:44:39.60 N	Latitude: 34.7443 = 34:44:39.48 N
Longitude: 111:25:20.40 W	Longitude: 248.5774E = 360 - 248.5774 W = 111.4226 W = 111:25:21.36 W
Altitude: 2388 meters (on the El ring)	Altitude: 2336 meters
Date: 2013-03-05 UT	
Latitude: 34:44:39.60 N	
Longitude: 111:25:21.60 W	
Altitude: 2344 meters (on the El ring)	

Note: There is a slight degeneracy between latitude and elevation in GPS measurements, hence coordinates vary slightly.