### The Artemis Program

Artemis is the twin sister of Apollo and goddess of the Moon in Greek mythology. Now, she personifies our path to the Moon as the name of NASA's program to return astronauts to the lunar surface.

When they land, Artemis astronauts will include the first woman and first person of color to step foot where no human has ever been before: the Moon's South Pole.

With the horizon goal of sending humans to Mars, <u>Artemis</u> begins the next era of exploration.



### Artemis I

<u>Artemis I</u> will be the first integrated flight test of NASA's deep space exploration system: the <u>Orion</u> spacecraft, <u>Space Launch</u> <u>System</u> (SLS) rocket, and the <u>ground systems</u> at <u>Kennedy</u> <u>Space Center</u>, Florida.

It is the first in a series of increasingly complex missions – Artemis I will be an uncrewed flight that will provide a foundation for deep space exploration and demonstrate NASA's commitment and capability to extend human existence to the Moon and someday, Mars.

SLS and Orion will launch from Pad 39B at Kennedy Space Center. From there, Orion will travel over 280,000 miles from home, thousands of miles beyond the Moon, going further than any spacecraft built for human spaceflight has ever flown.

Learn more about Artemis I.



# **ARTEMIS I**



## ARTEMIS I

### Artemis I

#### **Mission Facts:**

Launch date: November 16, 2022 Additional Attempts: November 19, 2022 Mission duration: 25 days, 11 hours, 36 minutes Total distance traveled: 1.3 million miles Re-entry speed: 24,500 mph (Mach 32) Splashdown: December 11, 2022

### **Mission Map**



Download Artemis I Mission Map



## Space Launch System (SLS)

#### America's Rocket for Deep Space Exploration

NASA's <u>Space Launch System</u>, or SLS, is a super heavy-lift launch vehicle that provides the foundation for human exploration beyond Earth's orbit. With its unprecedented power and capabilities, SLS is the only rocket that can send Orion, astronauts, and cargo to the Moon on a single mission.

Offering more payload mass, volume capability, and energy, SLS is designed to be flexible and evolvable and will open new possibilities for payloads, including robotic scientific missions to places like the Moon, Mars, Saturn, and Jupiter.

The SLS team is producing NASA's first deep space rocket built for human space travel since the Saturn V. The first SLS rocket is at NASA's Kennedy Space Center in Florida for its first launch on the Artemis I lunar mission.

#### The Power to Explore Beyond Earth's Orbit

To fulfill America's future needs for deep space missions, SLS will evolve into increasingly more powerful configurations. SLS is designed for deep space missions and will send Orion or other cargo to the Moon, which is nearly 1,000 times farther than where the space station resides in low-Earth orbit. The rocket will provide the power to help Orion reach a speed of 24,500 miles per hour; the speed needed to send it to the Moon.

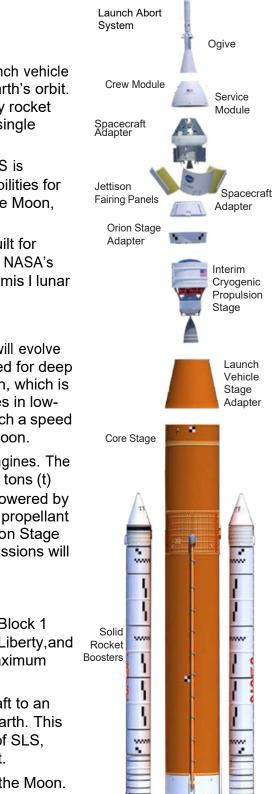
Every SLS configuration uses the core stage with four RS-25 engines. The first SLS vehicle, called Block 1, can send more than 27 metric tons (t) or 59,500 pounds (lbs.) to orbits beyond the Moon. It will be powered by twin five-segment solid rocket boosters and four RS-25 liquid propellant engines. After reaching space, the Interim Cryogenic Propulsion Stage (ICPS) sends Orion on to the Moon. The first three Artemis missions will use a Block 1 rocket with an ICPS.

#### **Space Launch System Missions**

Artemis I, the first integrated flight of SLS and Orion, uses the Block 1 configuration, which stands 322 feet, taller than the Statue of Liberty, and weighs 5.75 million lbs. SLS will produce 8.8 million lbs. of maximum <sup>E</sup> thrust, 15 percent more thrust than the Saturn V rocket.

For Artemis I, Block 1 will launch an uncrewed Orion spacecraft to an orbit 40,000 miles beyond the Moon, or 280,000 miles from Earth. This mission will demonstrate the integrated system performance of SLS, Orion, and Exploration Ground Systems prior to a crewed flight.

The Artemis II mission will send astronauts on a flight to orbit the Moon. These missions pave the way for landing astronauts on the Moon, during the Artemis III mission.





## **Orion Spacecraft**

For the first time in a generation, NASA is building a human spacecraft for deep-space missions that will usher in a new era of space exploration. A series of increasingly challenging missions awaits, and this new spacecraft will take us farther than we've gone before, including to the vicinity of the Moon and Mars. Named after one of the largest constellations in the night sky and drawing from more than 50 years of spaceflight research and development, the <u>Orion</u> spacecraft is designed to meet the evolving needs of our nation's deep space exploration program for decades to come. Orion deep space exploration missions, coupled with record levels of private investment in space, will help put NASA and America in a position to unlock the mysteries of space and to ensure this nation's world preeminence in exploring the cosmos.

Orion will serve as the exploration vehicle that will carry the crew to space, provide emergency abort capability, sustain astronauts during their missions and provide safe re-entry from deep space return velocities. Orion missions will launch from NASA's modernized spaceport at Kennedy Space Center in Florida on the agency's new, powerful heavy-lift rocket, the Space Launch System. On the first integrated mission, Artemis I, an uncrewed Orion will venture thousands of miles beyond the Moon over the course of about three weeks. The mission will pave the way for a series of missions that will take humans to deep space, and eventually to Mars.



Launch Abort System



Crew Module



Service Module



#### Transportation 2 Daytona **Air Travel** DAB Orlando International Airport 1 (195 Indian River Daytona Beach International Airport Merritt Island Atlantic Ocean US1) Wildlife Refuge 3 Orlando Sanford International Mims 40 Airport 3 4 Melbourne Orlando International Airport Titusville American Space Museum & Walk 5 For Business Jet Charters - Space of Fame John F. Kennedy Coast Regional Airport (KTIX is the Space Center identifier) in Titusville, FL 5 KSC Visitor Valiant Air + · There are two FBO's (Fixed Base Orlando nternational Airport Complex Operators), US Aviation Jet Center and ommand River Warbird Space Coast Executive Jet Center, where Cape Canaveral + Beach Line Space Force charter planes can arrange parking, fuel, - Orlando Ban Station and rental cars if desired. Merritt Island Port Canaveral Cape Canaveral Car rental 6 📕 Cocoa Beach Pier Cocoa 6 Hertz His Ron Jon Surf Shop Rockledge Cocoa Beach Surf Co Car rentals are available at all airports Cocoa Beach **Rideshare companies** Uber and Lyft Viera **Patrick Space Force Base** Zoo Satellite Indian Harbour Eau Gallie 518 Beach 4 TMLB Indialantic Melbourne 192 Historic D ntow Melbourne Day of launch Melbourne Beach Massive crowds will cause severe traffic congestion before, during and after launch time Pam Bay

*Commuting after shuttle launches could sometimes take up to 6 hours in traffic.* 



### Hotel & Lodging Accommodations

Surrounding areas closest to Kennedy Space Center offer modest accommodations

Cape Canaveral has about 11,000 hotel rooms, between 4,000 and 5,000 condominiums and another 35,000 campsites – all book up extremely fast as launch approaches

Accommodation options in the surrounding areas include:

### 1 Cocoa Beach

40 minutes south of Kennedy

### <u>Hotels</u>

- Hilton Garden Inn\*
- Hilton Cocoa Beach Oceanfront\*
- Hampton Inn Cocoa Beach
- Courtyard by Marriott
- Four Points by Sheraton
- The Inn at Cocoa Beach
- Best Western Cocoa Beach\*
- · Holiday Inn Express
- La Quinta Inn by Wyndham\*

#### Condos | Apartments

- The Resort on Cocoa Beach\*
- Discovery Beach Resort\*
- Spanish Main\*
- Sandcastles\*
- Cocoa Beach Towers\*
- Chateau by the Sea\*
- Westgate Cocoa Beach Resort
- Beach Place Guesthouses\*

### 2 Cape Canaveral

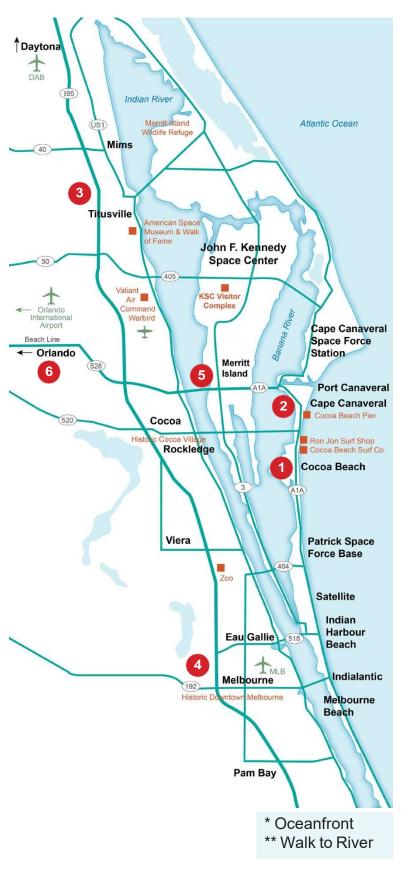
30 minutes south of Kennedy

#### <u>Hotels</u>

- · Home2 Suites by Hilton
- · Hampton Inn & Suites
- Homewood Suites by Hilton
- SpringHill Suites by Marriott
- Residence Inn by Marriott

#### Continued

ARTEMIS | MISSION | SLS | ORION | TRANSPORTATION | LODGING | TO DO | RESTAURANTS | VIEWING



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### Accommodations (continued)

#### Cape Canaveral continued

- Country Inn & Suites by Radisson
- Radisson Inn at the Port

#### Condos | Apartments (Oceanfront\*)

- Holiday Inn Club Vacations Beach Resort\*
- Cape Winds Resort\*
- Cape Canaveral Beach Resort\*

#### 3 Titusville

#### 20 minutes west of Kennedy

#### Hotels | Bed & Breakfasts

- Hyatt Place Titusville KSC
- TownePlace Suites by Marriott
- · Extended Stay America Premier Suites
- Hampton Inn Titusville/I-95 KSC
- Fairfield Inn and Suites by Marriott
- · Holiday Inn Titusville KSC
- Casa Coquina del Mar Bed & Breakfast\*\*
- Siesta Motor Inn\*
- Days Inn by Wyndham Titusville KSC
- Quality Inn Kennedy Space Center
- Best Western Space Shuttle Inn KSC
- The Wayward Traveler's Inn (B&B)

#### Condos | Apartments

- Vacation Villas Resort
- La Cita Country Club Haciendas
- · Airbnb or VRBO vacation rentals
- 4 Melbourne and Beach Communities 60 minutes south of Kennedy

#### Mainland Hotels

- Home2 Suites Melbourne Viera
- Hampton Inn Melbourne Viera
- Fairfield Inn & Suites Viera Town Center
- · Candlewood Suites Melbourne Viera
- Comfort Inn & Suites Melbourne Viera
- Holiday Inn Express Melbourne West
- Hampton Inn Melbourne
- Fairfield Inn & Suites Melbourne West
- Melbourne All Suites Inn

- Courtyard Melbourne West
- Hilton Melbourne
- · Extended Stay America Suites Airport
- Residence Inn Melbourne
- Hotel Melby Downtown

#### **Beachside Hotels**

- DoubleTree Suites Melbourne Beach\*
- Hilton Melbourne Beach Oceanfront\*
- Radisson Suite Hotel Oceanfront\*

#### Condos | Apartments

- Paradise Beach Club\*
- Oceanique Resort by Capital Vacations\*

### 5 Merritt Island

Cape Crossing Resort & Marina

#### Area Campgrounds (Brevard County)

- Jetty Park (Port Canaveral)
- KARS Park (Merritt Island)
- Manatee Hammock (Titusville)
- Indian River RV Park (Titusville)
- Great Outdoors Premier RV (Titusville)
- Titusville/KSC KOA Journey (Mims)
- Sonrise Palms RV Park (Cocoa)
- Joy RV Park (Cocoa)
- Palm Shores RV Park (Palm Shores)
- Wickham Park (Melbourne)
- Long Point Park (Melbourne Beach)

### 6 Orlando

60 minutes west of Kennedy (not including traffic)

A large variety of lodging is available throughout the Orlando area offering an array of options which includes access to theme parks, shopping, or downtown venues.

Traffic from Orlando to Cape Canaveral approaching launch day could make the commute challenging. Allow extra time.



### Things to Do

#### Near Kennedy Space Center

- KSC Visitor Complex
- 2 Merritt Island National Refuge
- 3 Playalinda Beach on Canaveral National Seashore
- 4 Airboat Ride on the St. John's River
- 5 Jungle Adventures Animal Park
- 6 Brevard Zoo
- 7 Victory Casino Cruise
- 8 Port Canaveral fishing boat charters
- 9 Beaches of Cocoa Beach
- **10** Cocoa Beach Aerial Adventures
- 11 Golf N Gator Mini Golf
- 12 Lighthouse Cove Mini Golf

### **Orlando Area Attractions**

- · Walt Disney World Resort
- · Universal Orlando Resort
- SeaWorld Orlando
- Discovery Cove
- I-Drive Attractions
- Fun Spot America
- Water Parks (several options)
- Nona Adventure Park
- Andretti Indoor Karting & Games
- LEGOLAND Florida Resort
- · Safari Park at Wild Florida





### Local Restaurants

#### 1 Port Canaveral/Cocoa Beach

- · Grills Seafood Deck & Tiki Bar
- · Fishlips Waterfront Bar & Grill
- Rising Tide Tap & Table
- Rusty's Seafood & Oyster Bar
- Seafood Atlantic
- · Gator's Dockside
- Tonix Smokehouse
- Southern Charm Cafe
- Zarrella's Italian & Wood Fire Pizza
- Mangia & Bevi Pizzeria Napoletana
- PizzaVola
- Preacher Bar
- · Kelsey's Pizzeria
- Coasters Taphouse
- Sage Bistro
- Thai Thai III Sushi Bar
- Barkada Bowl
- Poke Fin
- Crackers Island Grille
- Vargas Café
- Kafé del Puerto
- Mexico's Grill
- Nosh Restaurant & Bar
- Nolan's Irish Pub
- Sandbar Sports Grill
- · Ellie Mae's Tiki Bar
- Florida's Fresh Grill
- Pompano Grill
- · Coconuts on the Beach
- The Fat Snook
- Taco City

#### 2 Merritt Island/Cocoa/Cocoa Village

- Pacific Rim
- El Tucan
- Sally O'Brien's
- Brasas Grill Brazilian Steak House
- Ryan's Pizza & Pub
- Café Margaux

Continued



## Restaurants (continued)

#### Merritt Island/Cocoa/Cocoa Village continued

- The Tulip
- Thai Thai Cocoa Village
- Papasan's Vietnamese Café
- Von Stephan Village Bier Garten
- · Villa Palma at the Village
- · Alfredo's Paradiso
- Bonefish Gill
- · Carrabba's Italian Gill
- Chili's
- El Tucan
- Dolphins Waterfront Bar & Grill

#### 3 Titusville

- Shiloh's Steak & Seafood
- Dixie Crossroads
- Vine & Olive
- The Space Bar (Courtyard Rooftop)
- · Pier 220 Seafood and Grill
- Victorio's Oyster Bar and Grille
- Playalinda Brewing Co. Brix Project
- El Leoncito Mexican & Cuban Restaurant
- · Hoffman's Table
- Valentino's Pizza & Italian of Garden St.
- Kelsey's Pizzeria & Eatery of Titusville
- Mamma Rosa's Pizza & Restaurant
- Third Culture Kitchen
- · Ako Sushi & Seafood
- · Honeysuckle
- MoonLight Drive-In
- Dogs R Us

#### 4

#### 4 Melbourne/Viera

- River Rocks
- Pineda Inn Bar & Grill
- Pineda Crossing Bar & Grill
- Grills Riverside Seafood Deck & Tiki Bar
- Amici's Italian Restaurant & Pizzeria
- Tuscany Grill
- Metro Diner
- Twisted Fin
- Eatz
- Thai Hana Restaurant & Sushi Bar
- 28 Nort Gastropub
- Pizza Gallery & Grill
- Island IX
- · Hemingway's Tavern
- The Dove III
- Crush XI
- Meg O'Malley's Restaurant & Irish Pub
- Matt's Casbah
- Icabod's Dockside Bar & Grill
- Skewers Mediterranean Grille
- Long Doggers
- Yellow Dog Cafe
- The Mansion of Melbourne
- The Chart House





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## **Virtual Viewing Opportunities**

NASA TV

**NASA Live** 

NASA Live YouTube



## Follow the Artemis I mission:

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#### Artemis



- NASA Artemis
- @NASAArtemis
- @NASArtemis

#### Space Launch System



@NASA SLS

### **Orion Spacecraft**



- NASA Orion
- @NASA Orion

### **Exploration Ground Systems**



**NASA Ground Systems** 

@NASAGroundSys

### NASA



https://www.northropgrumman.com/space/nasas-artemis-missions/

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