

Reddish cloud blankets Pluto, photos reveal

Stretching 160 kilometres into the atmosphere, haze gives dwarf planet its colour

MARCIA DUNN
THE ASSOCIATED PRESS

CAPE CANAVERAL, FLA.—Pluto is hazier than scientists expected and appears to be covered with flowing ice.

The team responsible for the New Horizons fly-by of Pluto last week released new pictures Friday of the previously unexplored world on the edge of the solar system.

“If you’re seeing a cardiologist, you may want to leave the room,” principal scientist Alan Stern teased at the opening of the news conference at NASA headquarters. “There are some pretty mind-blowing discoveries.”

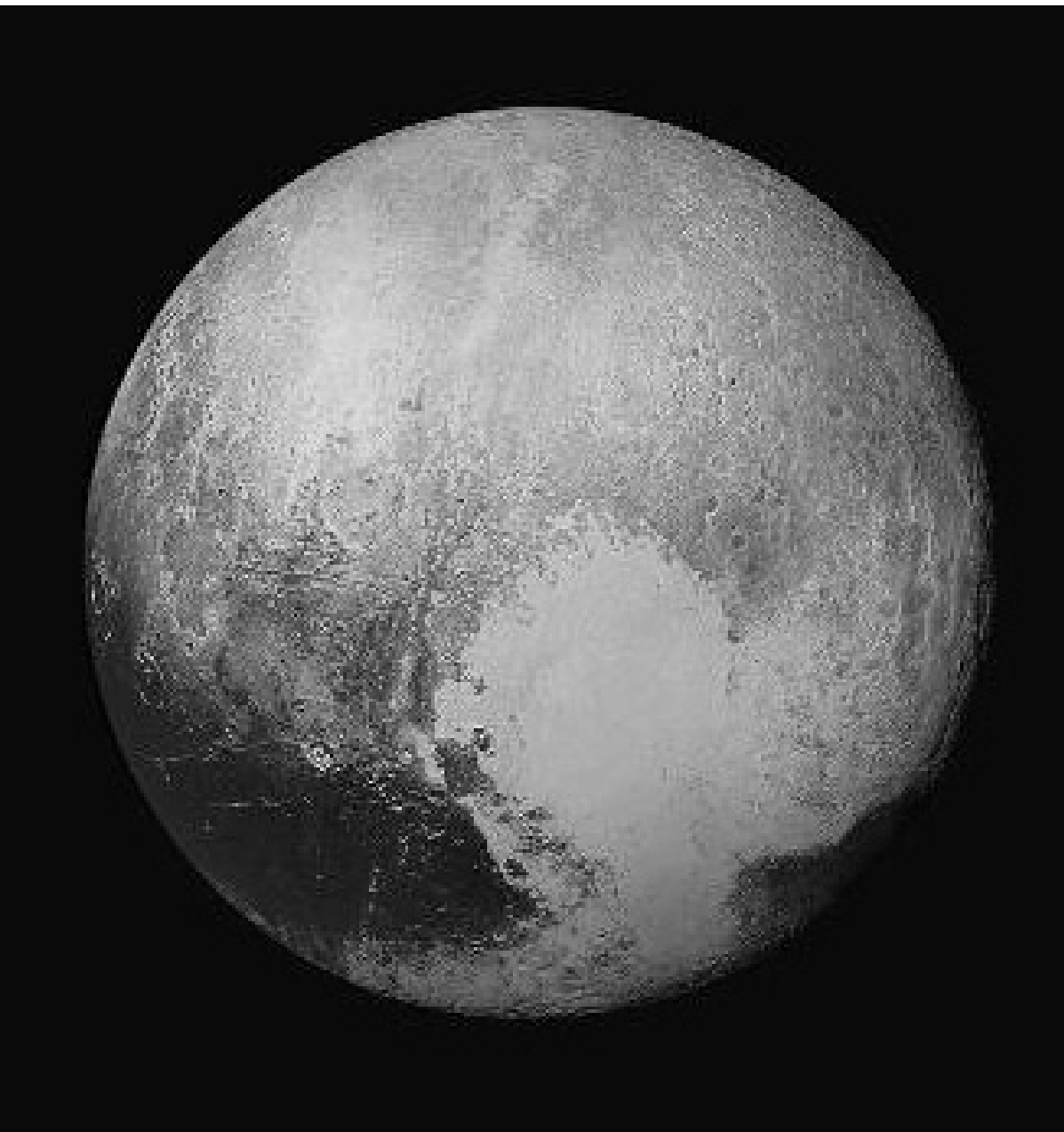
NASA’s New Horizons spacecraft, now 7.5 million kilometres beyond Pluto, has detected layers of haze stretching 160 kilometres into the atmosphere, much higher than anticipated. All this haze is believed to account for the dwarf planet’s reddish colour.

If you were standing on Pluto and looking up, you probably wouldn’t notice the haze, said Michael Summers of George Mason University in Virginia. In fact, New Horizons had to wait until after its closest approach on July 14, so the sun would silhouette Pluto and the atmosphere could be measured by means of the scattered sunlight.

As for the ice flows, they appear to be relatively recent: no more than a few tens of millions of years, according to William McKinnon of Washington University in St. Louis. That compares with the 4.5-billion-year age of Pluto and the rest of the solar system.

To see evidence of such recent activity, he said, is “simply a dream come true.”

Temperatures on Pluto are -229 C, Oso water ice would not move any-



NASA/THE ASSOCIATED PRESS

This image of Pluto was made by combining several images from two cameras on the New Horizons spacecraft.

where in such extreme cold. But McKinnon said the nitrogen and other ices believed to be on Pluto would be geologically soft and therefore able to flow like glaciers on

Earth. Some of that plutonian ice seems to have emptied into impact craters, creating ponds of frozen nitrogen. One of those semi-filled craters is about the size of metropolitan

Washington, D.C., McKinnon said. These latest findings support the theory that an underground ocean might exist deep beneath Pluto’s icy crust, he said.

“The sky will be raining presents with data . . . It’s going to be quite a ride.”

ALAN STERN
PRINCIPAL SCIENTIST

These ice flows — which might still be active — are found on Pluto’s vast icy plain, now called Sputnik Planum after Earth’s first man-made satellite.

The plain is about the size of Texas and occupies the left side of Pluto’s bright, heart-shaped feature, named Tombaugh Regio after the late astronomer who discovered Pluto in 1930, Clyde Tombaugh.

It’s evident now that the two “lobes” of the heart are quite different; Stern speculated that nitrogen snow could possibly be blowing from the brighter left, or western, side to the right.

One of Pluto’s newly discovered mountain ranges now bears the name of Sir Edmund Hillary, who along with Sherpa guide Tenzing Norgay conquered Mount Everest in 1953. The New Horizons team already had named another series of mountains after Norgay.

The spacecraft travelled three billion miles over nine and a half years to get the first close-up look of Pluto. The New Horizons team stressed that most of the collected data are still aboard the spacecraft and will take more than a year to obtain.

Over the next several weeks, much of the incoming transmissions will consist of engineering or other technical data — and only a few images.

But starting in mid-September, “the spigot opens again,” promised Stern, a scientist at the Southwest Research Institute in San Antonio, Texas. From then until fall 2016, “The sky will be raining presents with data from the Pluto system. It’s going to be quite a ride.”



ROBYN DOOLITTLE/TORONTO STAR FILE PHOTO

Toronto Community Housing Corp. wants to have the power to ban evicted tenants for two years.

‘You can’t just do a blanket fix-all’

TCHC from A1

The way the law is written now, anyone evicted can immediately apply to return.

➤ Give TCHC’s community patrol officers the authority to kick out problem interlopers. Currently, a tenant can decide if unwanted guests stay or go.

➤ Where there is suspected illegal activity, allow TCHC and Toronto police to work more closely and exchange more information.

➤ And the task force is also calling on TCHC to beef up its Community Safety Unit, which currently has 81 officers compared to 153 officers on the ground prior to funding cuts in 2004, and accelerate a plan to install or upgrade 571 high-resolution security cameras in complexes across the city.

The proposals come from the social housing agency, which presented them to members of the task force as part of a consultation process. TCHC executives will provide a “status” update on implementation at Tuesday’s board meeting. The legislative “changes would improve greatly TCHC’s ability to first remove people involved in serious illegal activity from TCHC property and then keep them out,” said TCHC spokeswoman Lisa Murray.

TCHC currently applies for an eviction to the Landlord and Tenant Board, which holds a hearing to decide whether or not to grant an eviction order. The housing agency is Canada’s largest landlord, managing more than 2,200 properties.

“These amendments would not only benefit TCHC, but all municipal

social housing agencies across Ontario,” Murray said.

Murray added that TCHC is also taking measures to help stop criminal and gang activity, such as running a youth jobs program and a baseball day camp with the Toronto Blue Jays/Jays Care Foundation. Crime has been a persistent problem at some TCHC buildings. Just two weeks ago, 14-year-old Lecent Ross died after being shot with an illegal handgun at a Jamestown public-housing complex in Rexdale. Police are still investigating the circumstances of her death.

The mayor admitted the task force goal of eliminating drug dealing on TCHC properties by the end of the year is likely impossible. Nonetheless Tory described it as “an ultimate goal that you would have.”

“If we don’t do anything and we don’t get some legislative changes, and we don’t have the will to decide to make it better, then you can be quite certain that drug dealing will not be reduced,” Tory said when the report was released.

Social housing activist Susan Gupka said she’s disappointed the city appears set on taking a “dumb on drugs” approach.

“We seem to find money for security, for more enforcement or more police or more cameras so easily. So every dollar that goes into enforcement and cameras, is money not spent on prevention and promotion of mental health and addiction supports.”

But Gupka, a longtime TCHC resident, also knows first hand what it’s like living close to a unit where illegal drugs are sold. She used to live in a

building with a drug-addicted tenant whose dealer set up shop. Customers, some of them obnoxious and loud, came and went at all hours, disrupting life for other residents.

That tenant was arrested, but returned and still lives there, and “that is a little mind-boggling. On the other hand, this person probably wouldn’t be alive if she was evicted. Where do they go?” Gupka said. “I don’t know what the answer is.”

One place the task force looked for answers was Manitoba. Kevin Gamble, Manitoba Housing’s director of security from 2009-13, said when he took over, he hired 22 new security officers and spread the word about “what the expectations are, what is acceptable behaviour and what is not.

“We explained to them that they are responsible for their guests while they’re on the property, and if there’s any criminal activity, they will be held accountable as well as the individuals.”

But the new security operation also engaged the community, sponsored youth soccer days and barbecues, and eventually that led to “getting more information about who is in the community, and they started telling us where people committing criminal offences were.”

The housing agency also had more powers to evict drug dealers once they’ve been arrested. If they’re shown to be a “safety impairment,” Gamble says, “they can be removed immediately.” Still, Gamble stresses there must be “buy-in” from the community.

“You just can’t do a blanket fix-all. It doesn’t work that way.”

ONTARIO ENERGY BOARD NOTICE TO CUSTOMERS OF UNION GAS LIMITED

Union Gas Limited has applied for pre-approval of costs to construct facilities along its Dawn to Parkway gas transmission system.

Learn more. Have your say.

Union Gas Limited has applied for pre-approval of the cost consequences to install three new compressors and associated facilities along the Dawn-Parkway transmission system. The total estimated cost of the project is \$622.5 million.

An average residential customer would see the following annual bill impact starting in 2018:

Residential Customer – Service Area	Approximate Bill Impact
Southern Ontario (Windsor to Hamilton)	Decrease of \$6.50
All other areas served by Union Gas Limited	Decrease of \$8.25

Other customers in Union Gas Limited’s service area, including businesses, may also be affected.

The cost of the project is expected to increase M12 rates that apply to customers moving gas through Union Gas Limited’s transportation system to areas outside Union Gas Limited’s service area.

THE ONTARIO ENERGY BOARD IS HOLDING A PUBLIC HEARING

The Ontario Energy Board (OEB) will hold a public hearing to consider the application filed by Union Gas. We will question Union Gas on the case. We will also hear arguments from individuals and from groups that represent the customers of Union Gas. At the end of this hearing, the OEB will decide whether to pre-approve the costs as requested in this application.

The OEB is an independent and impartial public agency. We make decisions that serve the public interest. Our goal is to promote a financially viable and efficient energy sector that provides you with reliable energy services at a reasonable cost.

BE INFORMED AND HAVE YOUR SAY

You have the right to information regarding this application and to be involved in the process.

- You can review the application filed by Union Gas on the OEB’s website now.
- You can file a letter with your comments, which will be considered during the hearing.
- You can become an active participant (called an intervenor). Apply by **August 4, 2015** or the hearing will go ahead without you and you will not receive any further notice of the proceeding.
- At the end of the process, you can review the OEB’s decision and its reasons on our website.

LEARN MORE

Our file number for this case is **EB-2015-0200**. To learn more about this hearing, find instructions on how to file letters or become an intervenor, or to access any document related to this case, please select the file number **EB-2015-0200** from the list on the OEB website: www.ontarioenergyboard.ca/notice. You can also phone our Consumer Relations Centre at 1-877-632-2727 with any questions.

ORAL VS. WRITTEN HEARINGS

There are two types of OEB hearings – oral and written. The OEB will determine at a later date whether to proceed by way of a written or oral hearing. If you think an oral hearing is needed, you can write to the OEB to explain why by **August 4, 2015**.

PRIVACY

If you write a letter of comment, your name and the content of your letter will be put on the public record and the OEB website. However, your personal telephone number, home address and e-mail address will be removed. If you are a business, all your information will remain public. If you apply to become an intervenor, all information will be public.

This hearing will be held under section 36 of the Ontario Energy Board Act, 1998, S.O. 1998 c.15 (Schedule B).

