

# Prelim Bits 07-07-2018

## **NASA Solar Probe**

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• NASA plans to send its first robotic spacecraft "Parker Solar Probe" to the Sun.

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- It will travel directly into the sun's atmosphere about 4 million miles from the star's surface.
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- The mission is to study why the surface of the Sun, called the photosphere, is not as hot as its atmosphere, called the corona.  $\n$
- The surface temperature of the Sun is only about 5,500°C but the atmosphere above it is an over two million degrees Celsius.  $\n$
- The mission may also ascertain why the Sun occasionally emits high-energy particles that are a danger to unprotected astronauts and spacecraft.  $\n$
- Recent Development NASA's Parker Solar Probe has recently got its revolutionary heat shield permanently attached to the spacecraft.  $\n$
- The shield is made of superheated carbon composite material sprayed with a specifically formulated white coating on the sun facing side to reflect the sun's energy away from the spacecraft.  $\n$
- As the spacecraft approach the sun, temperatures on the heat shield will reach nearly 1,300  $^{^{0}}C$  but the spacecraft will be kept at about 30  $^{^{0}}C$ .  $_{n}$
- The shield will help the spacecraft remain safe as it collects data about the inner workings of the corona.  $\n$

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## **Temperature in the Sun's Atmosphere**

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• The sun's atmosphere corona is much hotter than its visible surface Photosphere.

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- $\bullet$  Normally, the layer closest to a source of heat, the Sun's surface, in this case, would have a higher temperature than the more distant atmosphere.  $\n$
- But the reason for the high temperature is the constant eruption of tiny solar flares in the solar atmosphere.  $\n$
- The solar flares produce hard X-rays, whose wavelengths are much shorter than the light humans can see and it is a signature of extremely hot solar material.

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## Mudumalai Tiger Reserve

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- Mudumalai Tiger Reserve is a critical part of the Nilgiris Biosphere Reserve.  $\n$
- The reserve, comprising the wildlife sanctuary and the national park, was declared a core tiger habitat in 2007.  $\nlambda{n}$
- It extends over a core area of 321 sq.km and buffer area of 367 sq.km.  $\nphin$
- Union Ministry of Environment has recently issued notification declaring 438 sq.km of area around the Mudumalai Tiger Reserve as an ecosensitive zone.

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- The notification followed a Supreme Court order calling for an eco-sensitive zone around all national parks
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- The declaration of an eco-sensitive zone would place restrictions on polluting industries but it would not stop agriculture activities in the area.  $\n$
- The following activities are restricted/prohibited in the eco-sensitive zone,  $\slash n$

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1. Commercial mining,

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- 2. Setting up of industries causing pollution, n
- 3. Establishment of major hydroelectric projects,
- 4. Use or production or processing of any hazardous substances,
- 5. Discharge of untreated effluents into natural water bodies or land area and n
- 6. Setting up of new saw mills or brick kilns. n

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• But resorts already present in the area would not be forced to stop functioning.

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## **Gaming University**

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• The UNESCO, specialised agency of United Nations, entered into an agreement with the Andhra Pradesh Economic Development Board for the establishment of a gaming digital learning hub.

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- Visakhapatnam will soon have a Design university for gaming.  $\slash n$
- The hub is seen as potential medium for creating around 50,000 jobs in 10 years.

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### **Common Service Centre**

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- The Common Service Center (CSC) Scheme is an integral part of "Digital India" initiative of Ministry of Electronics and Information Technology. \n
- CSCs are the access points for delivery of various electronic services to villages.

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• In addition to it, CSCs promote rural entrepreneurship, community

participation and collective action for social change.

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- CSC e-Governance Services India Limited is a Special Purpose Vehicle (CSC SPV) incorporated under the Companies Act, 1956 to monitor the implementation of the Common Services Centers Scheme.  $\n$
- Village Level Entrepreneur (VLE) under CSCs provide service to the rural consumer in villages.

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• **Recent development** - CSC SPV has entered into agreement with HDFC Bank.

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 This is to enable its three lakh Village Level Entrepreneurs (VLEs) managing the Common Services Centers operate as Banking Correspondents of HDFC Bank.

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- They will support the Government initiative to promote financial inclusion and make banking services more accessible in rural areas.  $\n$
- HDFC Bank will support CSC SPV in converting 1000 identified villages into Digital Villages within this financial year.  $\n$

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### **Stree Swabhiman**

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• Stree Swabhiman is an initiative under Ministry of Electronics and Information Technology for promoting women's menstrual health and hygiene.

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• Under this initiative, CSC SPV will provide access to affordable, reliable and modern (eco-friendly) sanitary napkins to adolescent girls and women in rural areas.

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- Under this initiative, semi-automatic and manual sanitary napkin manufacturing units will be set up at CSC for producing sanitary napkins.  $\n$
- HDFC Bank will also support CSC SPV by funding Stree Swabhiman Sanitary Napkin Manufacturing Units.
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### Adopt a Heritage Project

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- It is a key initiative of Ministry of Tourism in close collaboration with Ministry of Culture and Archeological Survey of India (ASI).  $\n$
- It aims to encourage public / private sector companies and corporate citizens / NGOs / individuals to take up the responsibility of development, operation and maintenance of State heritage and other important tourist sites in India.  $\n$
- They will be considered as "Monument Mitras" for the development of tourist amenities.
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- In April this year, Dalmia Bharat Group won a bid to take over the maintenance of 'Red Fort', after it signed a memorandum with the Government of India.
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- Recently, one of the heritage site in Delhi has got a monument mitra for its development.

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#### Source: The Hindu, PIB

