





strongly emerging as new

favourites among tourists

cellations, tourists to Euro-

pe are taking precautions

in their own way. These in-

clude avoiding the exact

terror attack spots in cities

such as Paris, and using pri-

vate vehicles instead of

public transport among

kings in the Ahmedabad re-

gion have risen by around

15% compared to last year.

Close to 65% of family vaca-

tion tours happen in the

Anand, head, relations-

sed tour operator, the rush

for holidays in Europe is

such that visa processing

for countries like UK, Swit-

zerland, France and other

big destinations is taking

around 10-15 days.

According to a city-ba-

hips, Cox & Kings Ltd.

said Karan

"Family holiday boo-

other measures.

summer,"

Though there are no can-

to Europe," added Kale.

UNSHELTERED LABOURERS BECOME EASY TARGETS FOR LIONS, SAY FOREST OFFICIALS | 4

'BHARAT MATA KI JAI' SHOULD NOT BE FORCED **ON OTHERS: SADHGURU | 4**

Overall

Summer

Bookings Up

25% In 2016

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Ahmedabad: City-based

businessman Rishabh Ba-

gadia. 37. is set to embark

on a two-week Europe tour

along with his family and

friends in a few days. The

bookings were done in ad-

vance, with the children's

vacations in mind. The re-

mer holidays this year, with

Europe and then the USA

being the most preferred

impressive growth in boo-

kings of more than 26%

from the Gujarat region.

ak this year.

days.

Sunspots point to looming Declining Speckles On Sun Portend A **'LITTLE ICE AGE' Chilling Change**

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ur blazing sun has been eerily turning quiet and growing less active over the last two decades. Scientists and astronomers from Physical Research Laboratory in India and their counterparts in China and Japan are now relying on fresh evidence to indicate that we may be heading for another "little ice age" or even a more extended period of low solar activity — a Maunder Minimum — by 2020 as indicated by the lower than average sunspot number count.

The Maunder Minimum was a period between 1645 and 1715 AD when the sun was almost completely spotless and when Europe and much of the earth witnessed extremely harsh winters.

In a recently published research, 'A 20 year decline in solar photospheric magnetic field: Inner heliospheric signatures and possible implications' published in the Journal of Geophysical Research (JGR) recently, astronomers indicate that over the last 20 years there has been a steady decline in the sun's photospheric (sun's surface) and interplanetary or heliospheric magnetic fields. This is indicated by a drastic decline in the number of sun spots on its surface and a corresponding decrease in solar wind microturbulence in the Sun's last two 11-year solar cycles. We are currently in solar cycle 24, which is expected to end in 2020.

During peak solar cycle periods, the num ber of sunspots increase to 200. They dropped to as low as 50 during the solar cycle just preceding the Maunder Minimum. The research paper indicates that in solar cycle 23, there were a minimum average number of 75 sunspots towards the end of the cycle, while the peak number of sunspots in our current solar cycle 24 on November 2013 was 62, and this number has been steadily decreasing ever since.

"During Maunder Minimum, the Sun becomes quiet, indicated by the near disappearance of sunspots that are typically present. In the last 11,000 years, there have been 27 Maunder Minimums," says dean of Physical Research Laboratory P Janardhan. who is the lead author of the research paper along with six others which includes Susanta Kumar Bisoi of Chinese Academy of Sciences, Bei-

jing, K Fujiki and M Tokumaru of Nagova University Japan, L Jose and R Sridharan of PRL's space and atmospheric sciences division and S Ananthakrishnan of the depart-

ment of electronic sciences, Pune University. The Maunder Minimum condition is predicted to intensify beyond cycle 25, or between 2030 and 2040 during solar cycle 26.





WHAT IS A SOLAR CYCLE

he Sun, goes through phases of cycling between a violent (maximum phase) and a quiet (minimum phase) activity every 11 years. This is called one solar cycle. In this cycle, there are changes in the levels of solar radiation and the rate of ejection of solar material and changes in the number of sunspots, flares, and other manifestations.



rom 80 now to 62 or lower from around 77 years the year 2020 onwards



frozen river Thames which became a favourite venue for the 'Frost Festiva

WHAT IS A 'LITTLE ICE AGE'

he 'little ice age', began in 1300 and ended in 1870. It had intensified between 1645 and 1715, the period referred to as 'Maunder Minimum' corresponding with intense cold. This period proved distressing for humans across the planet, especially northern Europe, as it led to crop failures, intensifying diseases, unpredictable weather and ultimately socio-economic unrest. Average global temperatures dropped 1.5 degrees celsius, with greater seasonal variation

HIGHLIGHTS OF MAUNDER MINIMUM

Between 1645 and 1715, sunspots were absent. This led to a drop in Northern Hemisphere temperatures by 2 to 3 degrees ► Harsh winters and ber of sunspots on unsettled summers the Sun's surface will reduce will become more

frequent

peak sunspot number for cycle 24 at

62, with an error of 12 more or 12 less,

while the actual peak sunspot count

University, Japan indicated a similar

decline in solar wind microturbu-

lence levels in the inner heliosphere,

the region of space between the Sun

Yogesh Chawda

and the Earth.

The research paper relied on data

for cycle 24 was close to 80.

Recently, Sun stayed quieter for longer

approximately 50 gauss every year

since 1998. "If umbral magnetic field

strengths on the Sun's surface drop

to around 1.500 gauss, there will be

no difference in brightness between

cooler, dark sunspot regions and the

bright Sun's surface, causing sun-

spots to disappear from the Sun's

surface. We predict such a phenom-

enon by the end of the next solar

cvcle around 2030." claims the re-

search paper. The paper also men-

tions that in the solar cycle preceding

the Maunder Minimum, there were

only around 50 sun spots during peak

solar activity. Interestingly, the re-

search paper estimated the expected

TIMES NEWS NETWORK

sure sign indicating that we are probably on the verge of a "little ice age" came after astronomers found that our current solar cycle 24 was preceded by one of the deepest solar minima experienced in the last 100 years. MAUNDER

This caused the current solar cycle to start 1.3 years MINIMUM? later than expected. Another important in-

dication was when scientists found that the umbral magnetic fields of the sunspots—regions of intense magnetic fields— was declining by

► Continued from P1 from National Solar Observatory, US which showed a steady decline in t needs mention that seventh century solar photospheric magnetic fields starting from the early to mid 1990's. While the data from the solar wind observatory operating at radio wavelength of close to 1 metre, at Nagova

destinations.

Chinese traveller Hiuen-Tsang had men tioned 10 monasteries at Anandpur (present Vadnagar) housing 1,000 monks. Exca vation so far by the state archaeology department has revealed one monastery near Ghaskol Darwaja in the town even as further excavation by ASI is under way.

A bronze statue of Lord Buddha, with

Family holiday bookings in the Ahmedabad region have risen by around 15% compared to last year

cent terror attacks have not spurred any change in trabut equally in mini metros vel plans for Rishabh and of Vadodara, Surat and Rajhis friends. And Rishabh is kot. There is high demand not alone. Scores of Gujarafor countries like Switzerland, Germany, France, tis will be travelling to Eu-Spain and Italy," said Rajerope for their summer breev D Kale, president and co-According to tour operauntry head, leisure travel,

Europe terror attacks fail

to deter Gujarati tourists

tors and travel agencies, Thomas Cook India Ltd. the terror attacks in Brus-Summer tours to destinations like Europe and the sels and Paris have failed to dampen the spirit of Guja-USA are booked well in adrati tourists headed to Euvance, as early as January. rope for their summer holi-'Advance bookings were quite good and until now we The Scandinavian cohave not received many reuntries, beside Switzerland quests for cancellation or changes in plans by tourists and France, continue to be from Gujarat," said Sanjefirm favourites. Travel opeev Chhajer, vice-president, rators claim there is a 25%surge in bookings for sum-Cox & Kings Ltd.

"While we did receive queries from customers, we have got zero cancellations till date. Also, besides the "We have witnessed an traditional favourites, new destinations such as Flanders, Lucerne, Ireland, Vienna, Scandinavia and Not just from Ahmedabad, North France's Picardy are

Hiuen-Tsang noted 10 monasteries at Anandpur

inscription stating it as a gift from a Buddhistnun, is preserved in Kutch. Daddadevi, sister of Valabhi ruler Dhruvsen, had also made a number of donations specifically for nunneries in the 5th century. It is also believed that Therigatha, a collection of verses in Pali talking about the life and times of Gautam Buddha, is the world's first collection of writings by Buddhist nuns, some of whom belonged to coastal

RSU to launch free legal aid clinic

Parents of 11 RTE kids hold dharna



over rise in fatal collisions

GSRTC worried

Himanshu.Kaushik @timesgroup.com

Ahmedabad: At least four major accidents involving the GSRTC buses are reported every two days, and of these, at least one is fatal. The steep rise in the percentage of fatalities in major accidents has left GSRTC officials worried. In 2012-2013 there were only 130 fatal accidents among 734 major accidents. The number rose to 145 fatal accidents as against 588 major accidents in year 2014-15, said officials.

Officials in the department said that in 40% cases, the accidents were found to be due to negligence of the GSRTC bus driver, while another 30% were because of faulty road engineering, and the remaining were due to the third party or other reasons, when such accidents took place.

Internal survey of the department has also revealed that use of mobile phone while driving was one of the major cause of accidents, said GSRTC officials. Sources said that around 20% accidents happened from talking on mobile phones while driving.

Sources in the department said that the department has decided that all major accidents like that in Navsari will be investigated thoroughly by the technical team of the GSRTC to ascertain causes of the accidents.

D D Kapadiya, general ma-

Traffic to be diverted for BJP rally

Ahmedabad: Vehicular traffic from SP Stadium in Navrangpura to the Sardar Patel statue will be diverted from 3 pm to 6 pm on Wednesdayfor BJP's rally, a notification by city police commissioner said. "Diversions have been provided from Stadium crossroads to Commerce Six Roads to Navrang Circle and Sardar Patel statue to Usmanpura to Ashram Road. Usmanpura underpass has also been covered in the scheme as riders would be able to to towards Naranpura chowky to Ashram Road and Income Tax circle to Lakhudi circle," said a traffic branch official. тим

Drivers above 40 have spinal, blood pressure troubles

fficials said that during medical check-up it was revealed that drivers who were above 40 years of age had major spinal issues and blood pressure problems. The average age of drivers in GSRTC was around 45 years. The officials said that officers also found that drivers were

overworked and they were working for more than eight to nine hours. TNN

nager of GSRTC, said, "We have issued strict warnings to drivers instructing them not to use mobile phones while they are driving. We have also given WhatsApp number for passengers to inform authori-

ties if a driver was found misbehaving or was talking on the phone." Despite issuing strict instructions, officials found six drivers using phones while driving, he said.

Kapadiya further said that after the Navsari incident a massive drive has been undertaken, and every driver was being given training of behaviour, driving skills and road safety. He said that the GSRTC has around 8,000 buses on road which make 44,000 trips and have a daily passenger carrying capacity of 24 lakh.



PRAYERS FOR WELL-BEING

Devotees offer prayers on the last day of 557th Urs at Shah-e-Alam dargah in the city on Tuesday

Doctors said that

still hospitalized,

discharged after

five employees are

while the rest were

treatment. TCS has

ordered an inquiry

employee, the employees

fell ill after having lunch

in the canteen in IT Gari-

id, "Some of our employe-

soning. TCS immediately

brought in doctors and

medical help to make sure

that all them were given

medical help, treated qu-

ickly and put on a path to

recovery. We have set up a

team to investigate and

ascertain the exact cause

TCS is constructed on an

area of 25 acres, allotted

by the state government in

Gandhinagar and was

The IT Garima Park of

behind this outbreak."

TCS spokesperson sa-

into the incident

Chhole bhatoore fells 33 TCS staffers

TIMES NEWS NETWORK

Ahmedabad: As many as 33 employees of Tata Consultancy Services (TCS) fell ill after consuming 'chhole bhatoore' at their canteen on Tuesday and were rushed to a nearby private hospital in Gandhinagar.

Doctors said that five employees are still hospitalized, while the rest wema Park office of the comre discharged after treatpany in Gandhinagar. ment. TCS has ordered an inquiry into the incident. es suffered from food poi-

Dr Piyasha Nath, medical superintendent of Apollo Hospital, said that the employees were brought to the hospital at around 6.45pm on Tuesday. "All of them were complaining of food poisoning like symptoms like nausea and vomiting," she said.

"We have kept five patients under observation and are waiting for their condition to stabilize," Nath said.

According to a TCS opened in November 2013.

Woman beats husband at family court

Ahmedabad: Security guards at the family court had to intervene when a woman started beating her husband just outside the courtroom on Tuesday afternoon.

The man, who was requesting his estranged wife to return home. refused to file a complaint with police against the woman. The incident happened when a diamond worker from Thakkarbapanagar came to court to attend procee ding at the family court near Income Tax Circle, because his wife filed a plea seeking maintenance for herself and a minor daughter. As soon as the husband approached the woman to request her not to drag him into litigation and return home, the latter got angry and started demanding a divorce and an alimony payment of Rs 10 lakh. When the man said that he was a diamond worker and couldn't manage such a huge sum, the woman went berserk and started slapping him and tore his clothes. The intervention of police officials was required to protect the

man from his wife. TNN

Ahmedabad: Meghaniagarbased Raksha Shakti University (RSU) would launch free legal aid clinic for economically backward sections of the society from April 11.

According to the university officials, the facility would be run by the faculties and students of law at RSU. "Introducing such clinic will enable the students and faculties to help needy people in getting right legal guidance free of cost and serve the mission of the university.

Students of LLM and other courses have good knowledge of various Indian laws for the purpose and would also provide them practical exposure of legal applications," said an RSU official.

The clinic would remain open from 10am to 5pm on working days, they added. TNN

TIMES NEWS NETWORK

began

card. A meeting of the management and the district educa-Ahmedabad: The parents of tion officer was held, where the 11 students admitted to Racha-DEO had asked the school to na School in Shahibaug resorpermit these 11 students to atted to a dharna after the school authorities decided to discontiday when the students went to nue their admission in the curthe school were turned away by rent academic session, which the management.

Gujarat.

in **RACHANA SCHOOL** April this ye-

ar. According to the school authorities, these 11 students do not have the required documents to meet the criteria for admission under RTE. The school says it suspected that the parents of these 11 students were not from poor backgrounds. There was a suspicion that these parents had bungalows and their electricity bills ranged between Rs 3,500 and Rs 4,000. According to the RTE norms, the family should

A complaint was lodged with the State Commission for Protection of Child Rights, of which Jagruti Pandya is chairperson. Pandya immediately called the DEO and the management and heard the matter. The DEO has given the school one week's time to the school management to admit the students failing which they will face legal action. However, the management remained adamant and is not willing to allow these stu-

tend classes. However, on Tues-

Withdraw excise duty on gems, jewellery: Ahmed Patel to Jaitley

have a Below Poverty Line

TIMES NEWS NETWORK

Gandhinagar: Ahmed Patel, political secretary to Sonia Gandhi, and Rajya Sabha MP from Gujarat has written a letter Union finance minister Arun Jaitley for withdrawal of Central excise duty on the gems & jewellerv industry

Patel wrote that imposition of central excise duty of 1%, or 12.5% with input credit on gems and jewellerv industry, is a massive disappointment for more than 1 crore artisans, karigars and goldsmiths whose livelihood is dependent on the industry. It is estimated that the jewellery industry is paying around Rs30,000 crore tax annually, and one crore people are directly and six crore people indirectly employed in this industry.

He said that it is surprising that the government, which is championing 'ease of doing business" and has launched programs like 'Make in India'



dents in.

Jewellers held a candlelight vigil at Manek Chowk on Tuesday

has chosen to increase red tape for this critical sector.

than 500 jewellers from the city

He said that he got several representations on the issue and requests immediate rollback of the excise duty on the sector. The indefinite strike by iewellers across Guiarat entered its 36th day on Tuesday as all jewellery shops remained shut throughout the state. At the same time. losses by jewellers have crossed Rs 10,000 crore mark. Meanwhile, more

held a candlelight vigil in Manek Chowk on Tuesday evening. Since March 2, more than 50.000 jewellers of the state have been protesting against the proposed 1% excise duty on non-silver jewellerv items as well as mandatory quoting of PAN by customers for transac tion of Rs 2 lakh and above.

The striking jewellers want complete rollback of excise duty and claim to continue their strike till their demands are met.