

# The Great Red Spot (GRS) on Jupiter and the big Dark Spots on Neptune are Impact-Sites of large Asteroid- or Comet Impacts !

A photograph from 1879 clearly shows how large the **Great Red Spot** of Jupiter was 140 years ago. It had a longish shape with a length of 40000 km ! Today it is only 15000 km long. **Since 1880 the GRS constantly shrank** from a long elliptical shape of 40000 km length to a short ellipse of 15000 km length. It's illusory to believe that a 40000km long storm can exist without a gigantic heat source on the 18000km deeper mantle surface. In all probability **the assumed heat source responsible for the GRS was caused by an impact** of a number of impactors, asteroid -or comet-fragments, on the same latitude of Jupiter, similar as it happened in 1994 when fragments of Comet Shoemaker-Levy-9 impacted on Jupiter ! But the Impact that caused the **GRS** was probably  $\geq 1000$  times more powerful and was caused by impactors in the  $\varnothing$  10– 30 km range. A similar impact occurred on Neptune just before 1989.

## Length of GRS in the past

1880	--	40,000 km
2003 Feb	--	18,420 km
2005 Apr	--	18,000 km
2010 Sep	--	17,624 km
2013 Jan	--	16,954 km
2013 Sep	--	15,894 km
2013 Dec	--	15,302 km

## The Great Red Spot (GRS) on Jupiter must be the result of a multiple Impact Event

Historical datas show that the **Great Red Spot** was nearly three times as long as it is today. It had a > 40000 km longish elliptical shape, which probably was the result of a number of impacts on the same latitude, caused e.g. by a collapsed comet, similar as it happened 1994 when the collapsed Shoemaker-Levy 9 comet impacted on Jupiter → see images below.

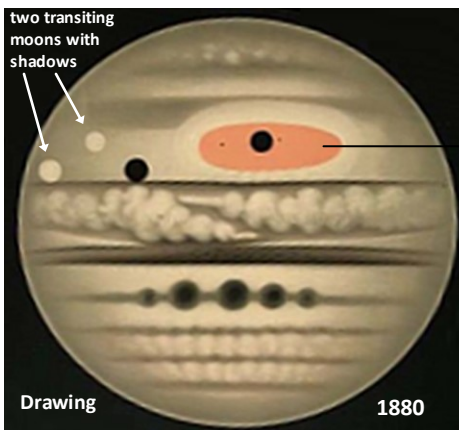
## Cassinis observation in 1665-1677 probably show a different spot caused by a different impact

All observations after 1880 when the gigantic spot was observed first, show a shrinking spot ! This is strong indication for a heat source (impact site) in the deeper mantle which is constantly shrinking ! A **photo from 1879** shows the gigantic longish GRS shortly after the Impact event !

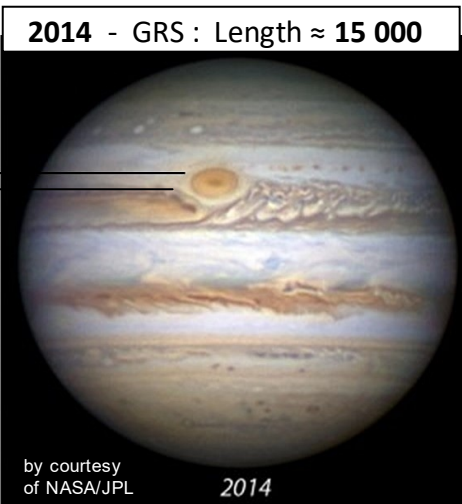
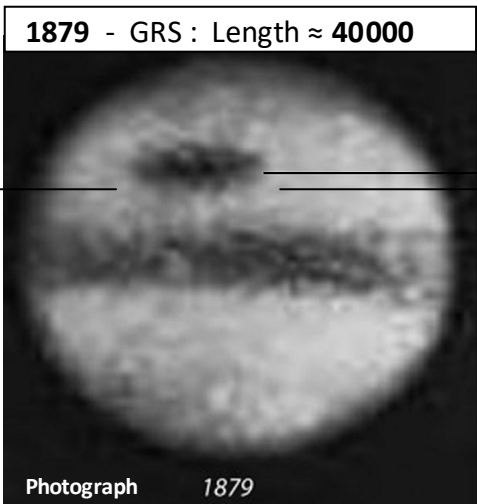
## The big Dark Spots on Neptune are Impact Sites !

The **Great Dark Spot** that was observed by spaceprobe **Voyager 2** in 1989 had a size of **13000 x 6600 km**.

The scientists believed that this spot (GDS-89) was just a hole in the methane cover of Neptune. But a close look at the spot shows that there were two rotating cloud systems side by side ! Only a physical reason like two strong heat sources on the deeper mantle surface caused by a double impact could cause such an impossible weather system. 2020 the Hubble Telescope observed **two spots**, which probably were also caused by a double Impact Event.



Drawing from E. Trouvelot 1880; A photo from 1879 of Jupiter from Anne Clerk's Book → see : [Weblink](#)



Fragments of **Comet Shoemaker-Levy 9** impacted on Jupiter in **July 1994**, 21 distinct impacts of comet fragments were observed. The largest G-Fragment  $\varnothing$  1 - 2 km caused a giant dark spot  $\varnothing$  12000 km and released an energy equivalent to 6,000,000 MT TNT ( 600 times the world's complete nuclear arsenal ! ) → see [weblink](#) : [Shoemaker-Levy-9](#) and some [movies](#) : [movie 01](#) , [movie 02](#) , [movie 03](#) , [movie 04](#)

