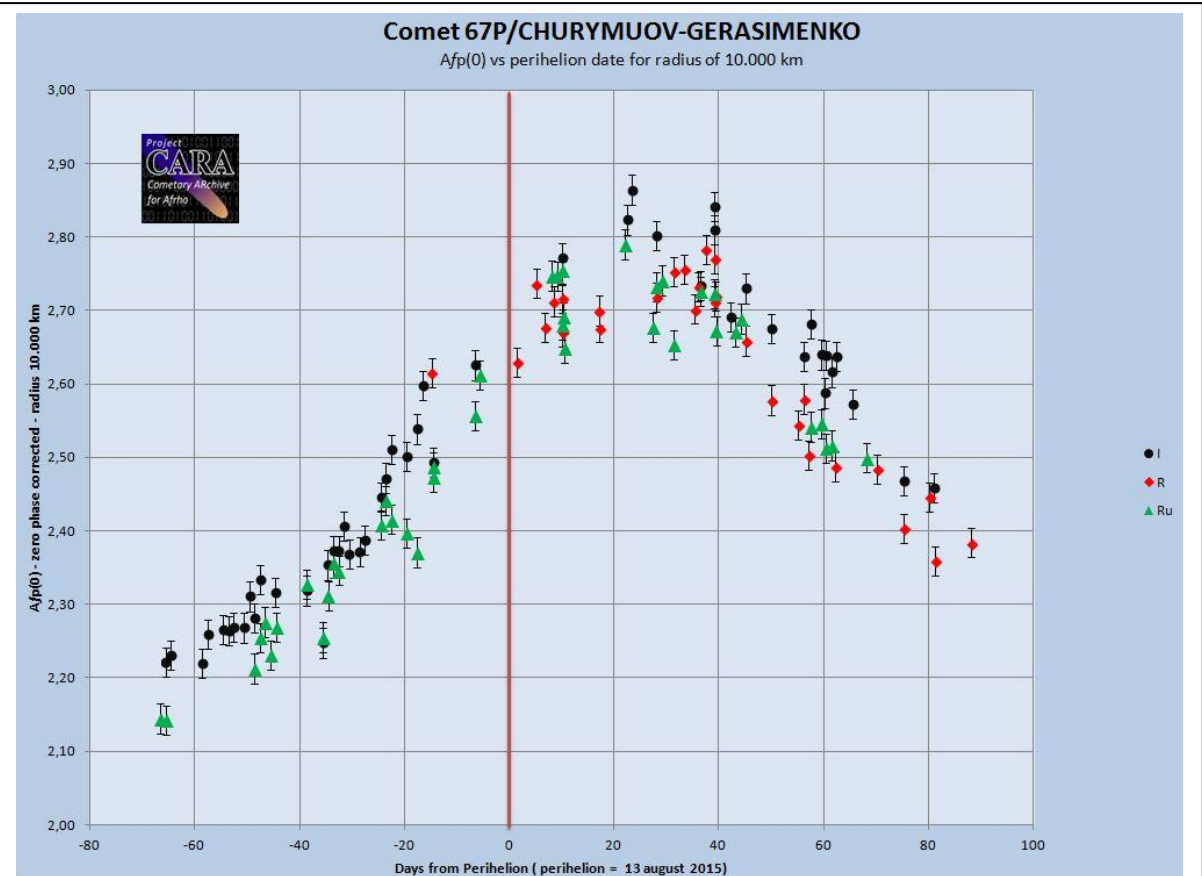




# 67P/CHUYUMOV-GERASIMENKO

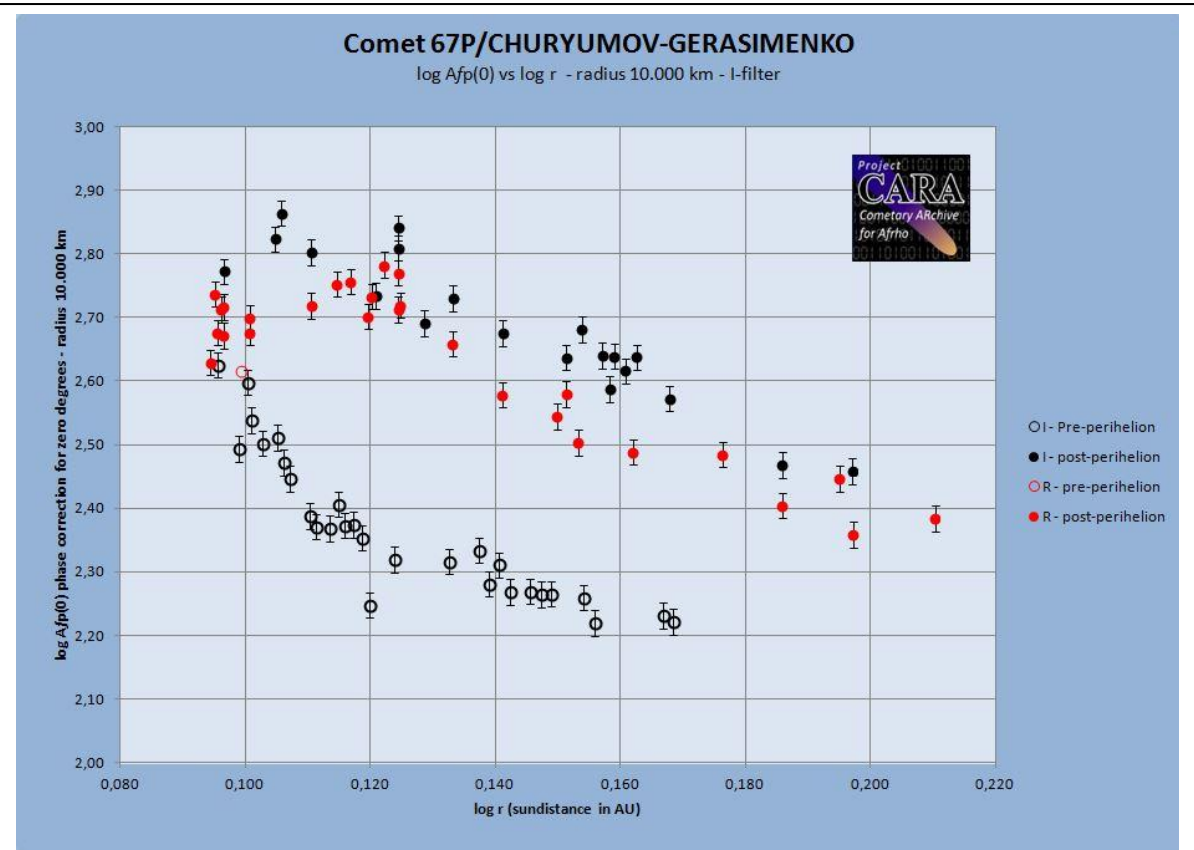
preliminary report – nov.2015

- **67P/CHURYUMOV-GERASIMENKO** was first observed on photographic plates in 1969 by Soviet astronomers Klim Ivanovich Churyumov and Svetlana Ivanovna Gerasimenko, it came to perihelion at 13 august 2015 at a sun distance of 1,25 AU
- The observations have been made from 26/04/2015 to 9/11/2015 when the comet was at an heliocentric distance between 1,77 AU and 1,25 AU (closest to sun).
- The  $A_{fp}$  value is in cm and is corrected for the solar phase angle and referred to a zero angle indicated as  $A_{fp}(0)$
- Some small outburst and increasing of the activity are seen on the graph. About 34, 23, 19 days before perihelion and just after perihelion. After perihelion we detect several small outburst, what give a more scattered graph.



*The observations (I- R - Ru Band data) were made by Erik Bryssinck, Mauro Facchini, Christina Feliciano-Rivera (SLOOH), Ernesto Guido, Franz-Josef Hamsch, Nick Howes, François Kügel, Rolando Ligustri, Giannantonio Milani, Joël Nicolas, Jean-François Soulier, Roberto Trabatti. (alph.order)- (graph by Erik Bryssinck & Giannantonio Milani)*

- on the graph  $A_{fp}$  vs. sun distance can you see a very clear difference in activity pre- and post perihelion which illustrates a clear seasonal effect.
- Only on a distance of 0.12 AU is an significant increase of the activity of the comet started.

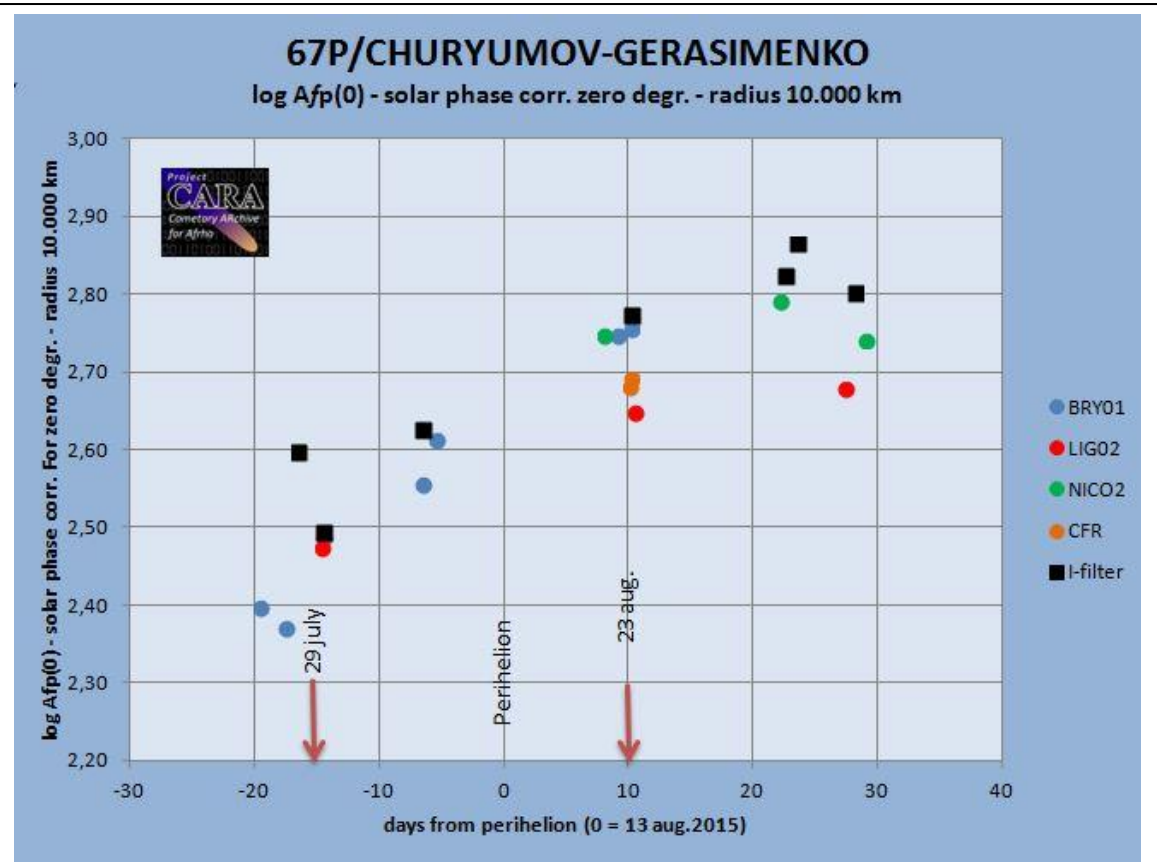


*The observations (I - R Band data) were made by Erik Bryssinck, Mauro Facchini, Christina Feliciano-Rivera (SLOOH), Ernesto Guido, Franz-Josef Hamsch, Nick Howes, François Kügel, Rolando Ligustri, Giannantonio Milani, Joël Nicolas, Jean-François Soulier, Roberto Trabatti. (alph.order)*

*Data obtained from CCD-images by use of Winafrho software (by Roberto Trabatti)*

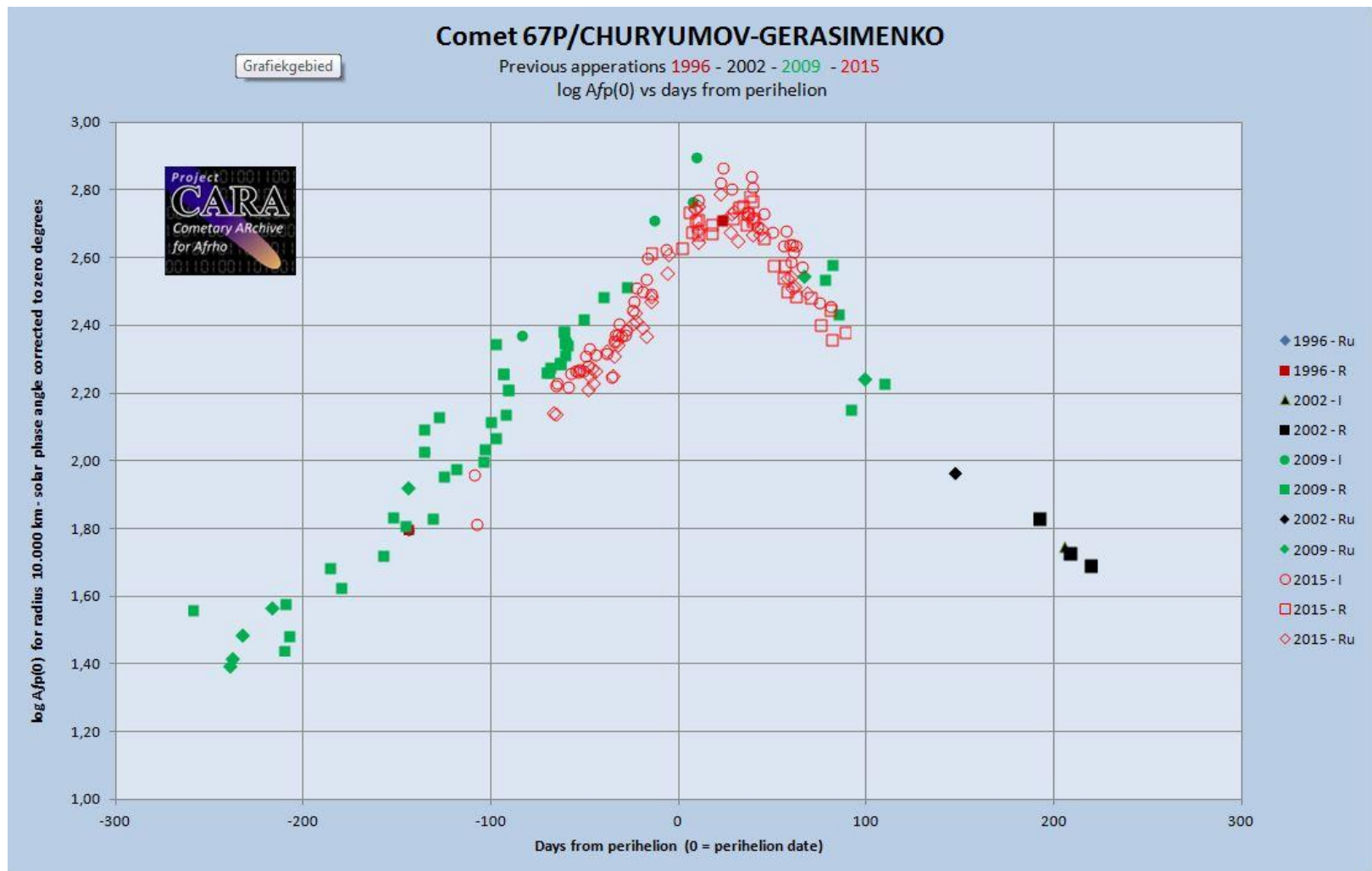
*(graph by Erik Bryssinck & Giannantonio Milani)*

- Detail of groundbased- observations in relation of outbursts detected in-situ by the ROSETTA satellite on 29 July and 23 August



*The observations (I - R Band data) for this particular graph, were made by Erik Bryssinck, Christina Feliciano-Rivera (SLOOH), Rolando Ligustri, Joël Nicolas, (alph.order) (graph by Erik Bryssinck & Giannantonio Milani)*

*Data obtained from CCD-images by use of Winafrho software (by Roberto Trabatti)*



**Afp -data of four different apperations with different filters, by CARA**