

Historical trend of participation of women scientists in ESA solar system missions

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A recent study by [1] analyzed the participation of women in US planetary science missions. Their analysis shows women scientists to be consistently under-represented in NASA's robotic planetary spacecraft missions. Here, we present a preliminary study of the participation of women scientists in ESA (European Space Agency) solar system missions and discuss how this trend changed over time.

We followed the same methodology described in [2,3], for consistency with their study. We therefore considered only the original team scientists from European institutions: engineers, members of project management, students and postdocs were not included.

For each team, we searched team web pages, published articles and when possible, we directly contacted the Principal Investigators and also project scientists. In order to determine gender we relied on personal knowledge, first name or photographs.

We counted the science team members of 10 ESA solar system missions over a period of 38 years and determined the percentage of women on each team. As preliminary result, we found that the participation of women in PI teams varied between 4 and 23%, with several missions with no women as PI. The percentage of women as Co-I is always less than 18%, although these numbers need still some refinement as the listings of team members of some missions are still partially incomplete.

As a first, unexpected result, we do not observe a steady rise in women's participation over the years. We will compare these numbers to the percentage of women in the field during the missions' selection year. To this aim, we will use statistics derived by the International Astronomical Union, as well as national research centers.

References:

[1] Rathbun, Julie A.: Participation of women in spacecraft science teams, Nature Astronomy, Volume 1, id. 0148 (2017).

[2] Rathbun, Julie A.; Dones, Luke; Gay, Pamela; Cohen, Barbara; Horst, Sarah; Lakdawalla, Emily; Spickard, James; Milazzo, Moses; Sayanagi, Kunio M.; Schug, Joanna: Historical trends of participation of women in robotic spacecraft missions, American Astronomical Society, DPS meeting #47, 2015.

[3] Rathbun, Julie A.; Castillo-Rogez, Julie; Diniega, Serina; Hurley, Dana; New, Michael; Pappalardo, Robert T.; Prockter, Louise; Sayanagi, Kunio M.; Schug, Joanna; Turtle, Elizabeth P.; Vasavada, Ashwin R.: Historical Trends of Participation of Women Scientists in Robotic Spacecraft Mission Science Teams: Effect of Participating Scientist Programs, American Astronomical Society, DPS meeting #48, 2016.