ROSES-15 Amendment 20: This amendment delays the due dates for proposals for program element **B.3 Heliophysics Technology and Instrument Development for Science (H-TIDeS)** and excludes the Exploration Mission 1 (EM-1) launch opportunity.

The H-TIDeS program combines technology elements previously separated within the old Solar, Heliosphere, and Geospace (Magnetosphere–Ionosphere-Thermosphere-Mesosphere Magnetosphere-Ionosphere-Thermosphere-Mesosphere Mag-ITM) Science Supporting Research and Technology programs. H-TIDeS seeks to investigate key Heliophysics science questions through three separate subelements. These subelements include:

- **Low-Cost Access to Space (LCAS):** science and/or technology investigations that can be carried out with instruments flown on suborbital sounding rockets, stratospheric balloons, CubeSats, suborbital reusable launch vehicles, or other platforms, collectively referred to as Low-Cost Access to Space
- **Instrument and Technology Development (ITD):** state-of-the-art instrument technology development for instruments that may be proposed as candidate experiments for future space flight opportunities, called Instrument and Technology Development which may be carried out in the laboratory and/or observatory
- **Laboratory Nuclear, Atomic, and Plasma Physics (LNAPP):** laboratory research designated as enabling Laboratory Nuclear, Atomic, and Plasma Physics studies.

This amendment makes two changes to this program element: First, it delays the due dates for proposals for this program element. Step-1 proposals are now due June 26, 2015, and Step-2 proposals are now due August 28, 2015. Second, this amendment excludes the EM-1 launch opportunity for CubeSats. Although this program element didn’t explicitly include the EM-1 launch opportunity, the ROSES 2015 Summary of Solicitation (Section (V) (b) (v), page 29) that "CubeSats are typically launched as secondary payloads to low-Earth orbit or from the International Space Station, but submissions to ROSES-2015 may also propose to launch on Exploration Mission 1 (EM-1) to achieve Earth-escape." Last year in ROSES-2014 the Exploration Mission 1 (EM-1) opportunity was part of the LCAS subsection of H-TIDeS. Therefore, no additional proposals targeting the EM-1 launch opportunity are solicited.


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