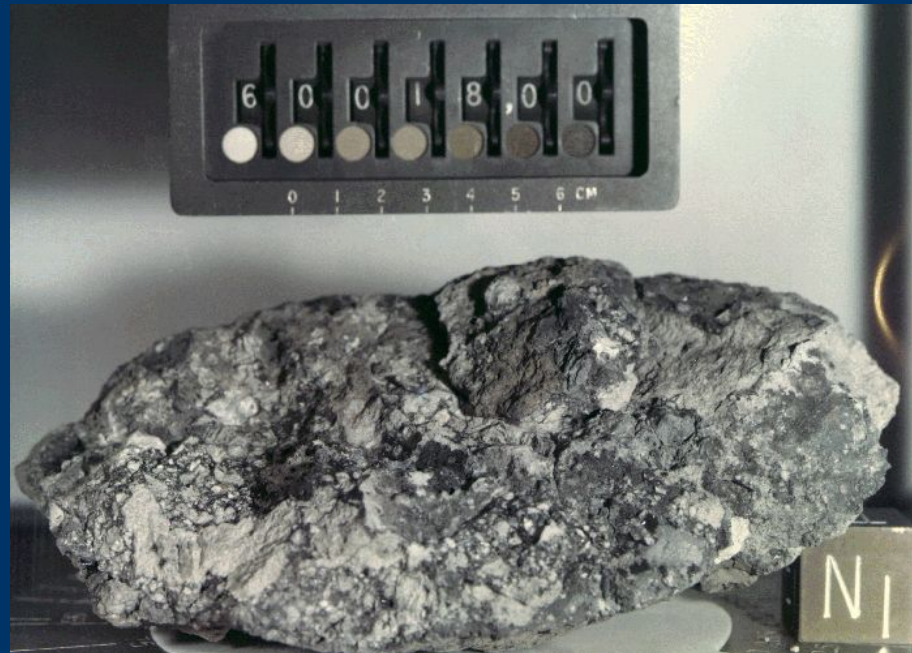


Testing the cataclysm: What samples do you want?

- Ages of pre-Nectarian basins
- Samples of basin melt sheet
 - Identify by similar ages, chemistry
 - Likely to have rocks from more recent basins mixed in
- No single "Genesis rock"
 - Need to understand diversity of site
- Need to avoid large young craters
 - Most samples in and around small impact not reset
 - Small (5-20 km?) craters may expose pristine melt rocks



Collection (by Charles Duke) and curatorial mug shot of Apollo 16 lunar impact melt breccia 60018 (NASA photos from R. Korotev's web page)



Finding the ages of pre-Nectarian basins: Where do you go?

- South Pole-Aitken
- Next oldest mostly Farside, near S. Pole
- Access to S. Pole, Farside highly desired

Pre-Nectarian basins (colored) on Nearside (left) and Farside (below), from Wilhelms (1987). The oldest are South Pole-Aitken and those in brown like Australe.

