

VLBA ACQUISITION MEMO #335
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
HAYSTACK OBSERVATORY
WESTFORD, MASSACHUSETTS 01886

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Telephone: 508-692-4764
 Fax: 617-981-0590

To: VLBA Data Acquisition Group
 From: Alan E.E. Rogers
 Subject: Types of deposit and their dependence on humidity

The attached table is an attempt to categorize the various types of deposit which form in the vacuum columns. Most hard to remove deposits only form at moderate to high humidity (RH $\geq 40\%$).

Type of Deposit	Appearance	Region of Deposition	Dependence on RH	Ease of Removal	Comments
Light dust	Appears black or grey on Q-tip.	Areas of air leakage around loop.	Forms RH $\leq 50\%$.	Wipes away.	
Spray	Like spray paint - white or grey.	Areas of air leakage around loop.	Forms RH $\geq 50\%$.	Needs scraping.	Water is better solvent than alcohol.
Film	"Film-like" - blue, grey or light brown.	Localized to region just following edge contact.	Forms RH $\geq 40\%$ deposition rate increased rapidly with RH $\geq 50\%$.	Hard to remove.	Water is often a better solvent than alcohol.
Melt	Dark brown - plastic.	Localized to edge contact regions.	Forms more frequently at high RH.	Hard to remove - often needs scraping.	Forms more frequently at speeds ≥ 4 m/s.
Backcoat debris.	Grey or black.	On walls of E-casting	Forms more frequently at high RH.	Wipes away.	

TYPES OF DEPOSIT