

# C2114N,1 –(1) General Information

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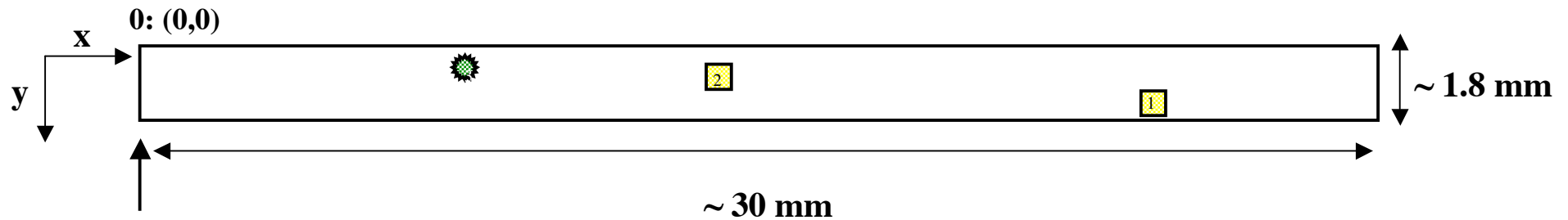
**(mapping and chemical analyses performed in February 2006)**

- **Dimensions of the foil:  $\sim 30 \times \sim 1.8 \text{ mm}^2$  ( $S \sim 54 \text{ mm}^2$ )**
- **SEM-FEG Hitachi S4700, equipped with an EDS system**
- **Search for craters at 20 kV, using the SE upper detector**
- **$I = 10 \text{ } \mu\text{A}$**
- **G x1000 for 2/3 of the sample, and 500 for the last 1/3, which showed a very bad surface state.**
- **The sample was held with 2 strips of carbon double tape**



## (2) Craters localization

	crat 1	crat2	crat3
x(mm)	24.25	13.73	7.57
y(mm)	1.1	0.45	0.22



A: (black dot on rear)

■ diameter  $1 < D \leq 1.5 \mu\text{m}$

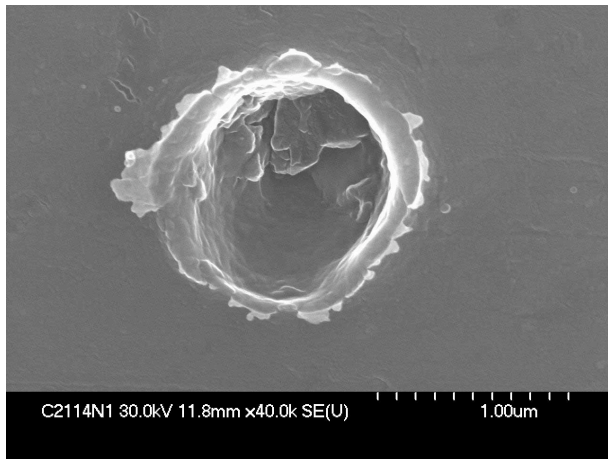
⊛ diameter  $1.5 < D \leq 2 \mu\text{m}$

### (3) Size distribution

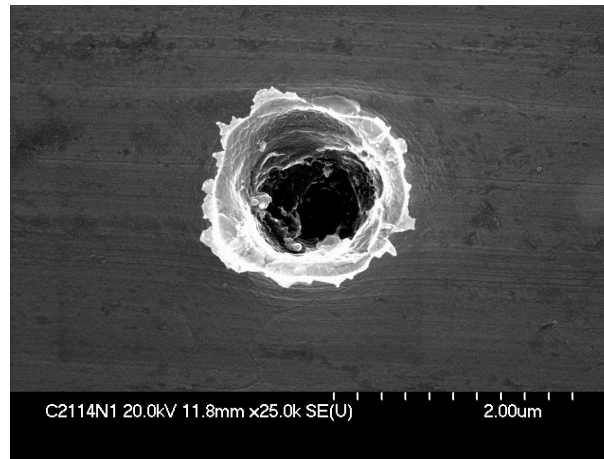
	crater 1	crater 2	crater 3
diameter (in $\mu\text{m}$ )	1.12	1.29	1.64

$$S \sim 54 \text{ mm}^2 \Rightarrow \Phi \sim 5.6 \cdot 10^4/\text{m}^2$$

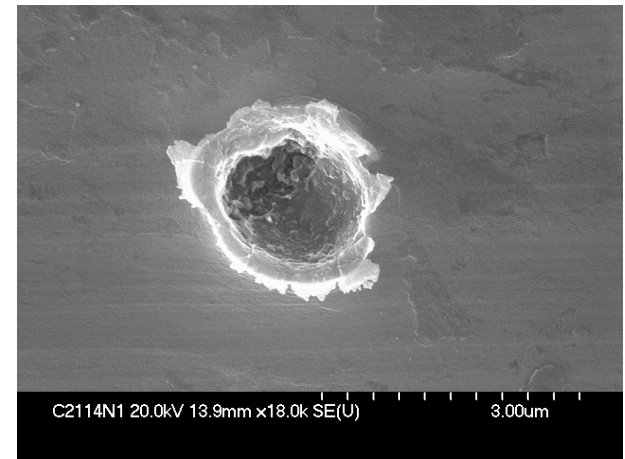
## (4) Images of craters



**crater 1**

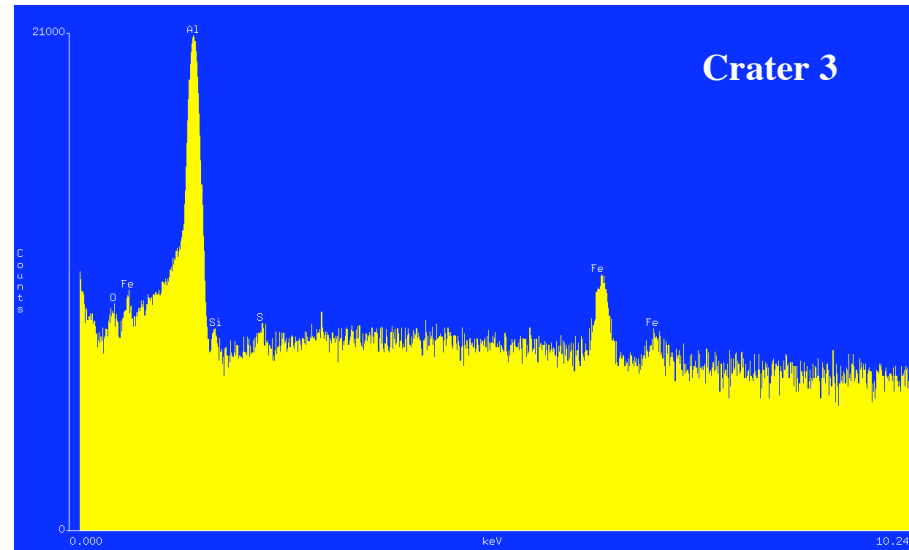
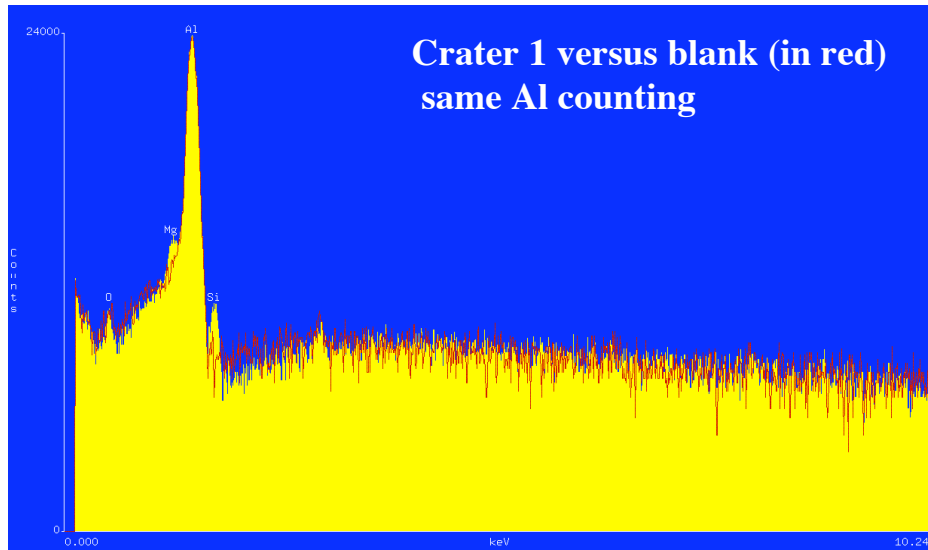


**crater 2**



**crater 3**

## (5) Composition data



ZAF Correction / Acc.Volt.= 20 kV

Crater 1: O, Mg and Si with  $0.5 \leq \text{Mg/Si} \leq 1.6$

Crater 2 : no residue detected

Crater 3: rich in Fe, some S, Mg and Si, with ratios :  
 $\text{Mg/Si} \sim 1$ ;  $\text{Fe/S} \sim 8$  and  $\text{Fe/Si} \sim 17$

## **(6) More ....**

**Stardust Al-Foil C2114N1, crater1:**

**FIB – TEM work described in report by Leroux and al.**