

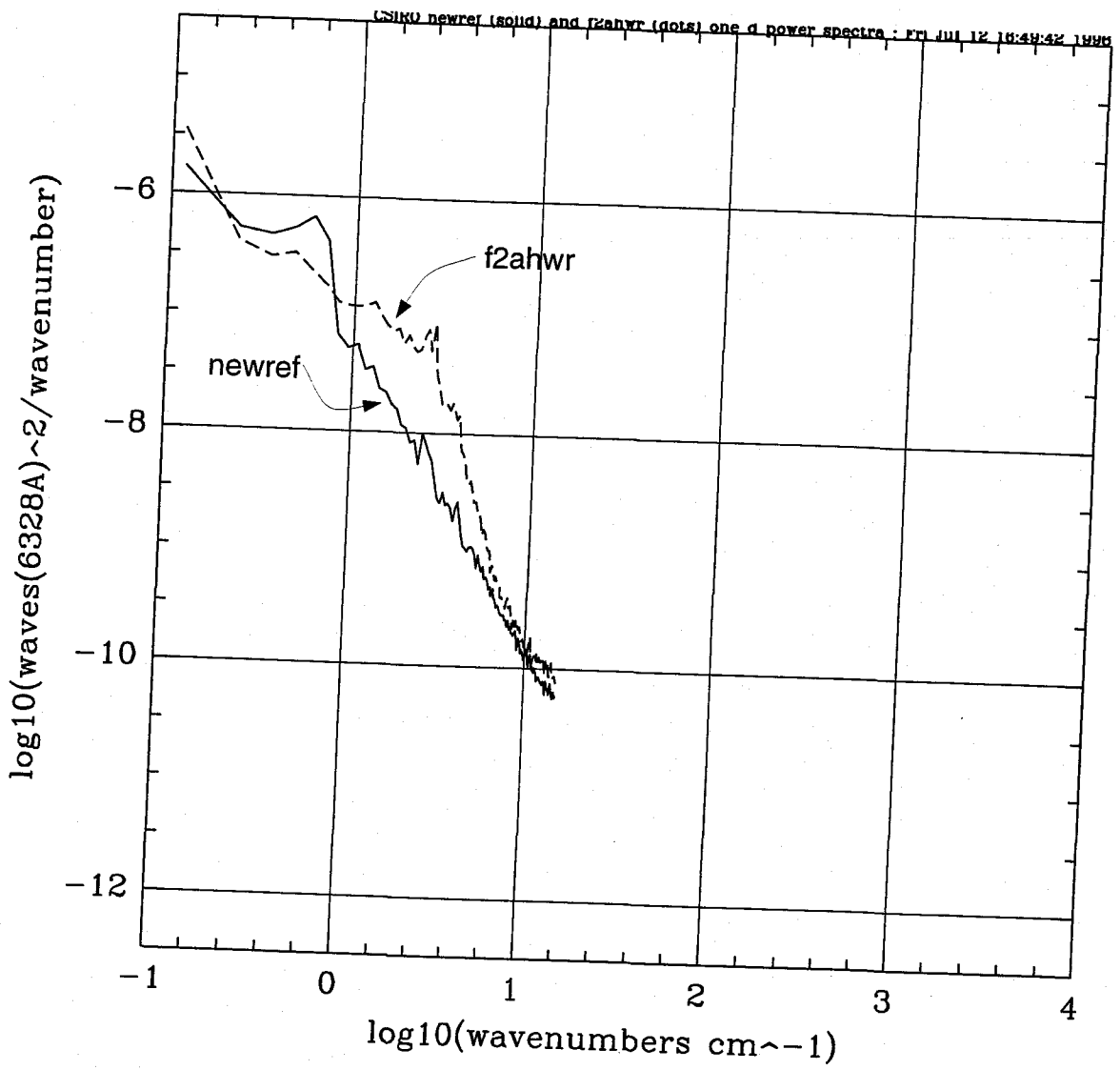
Phase maps have Z(0,0),Z(1,1),Z(2,0),Z(2,2) removed

Topo 3d maps have Z(0,0),Z(1,1) removed

c6: $\sigma(70 \text{ to } 4000\text{cm}^{-1}) = 3.69\text{A}$

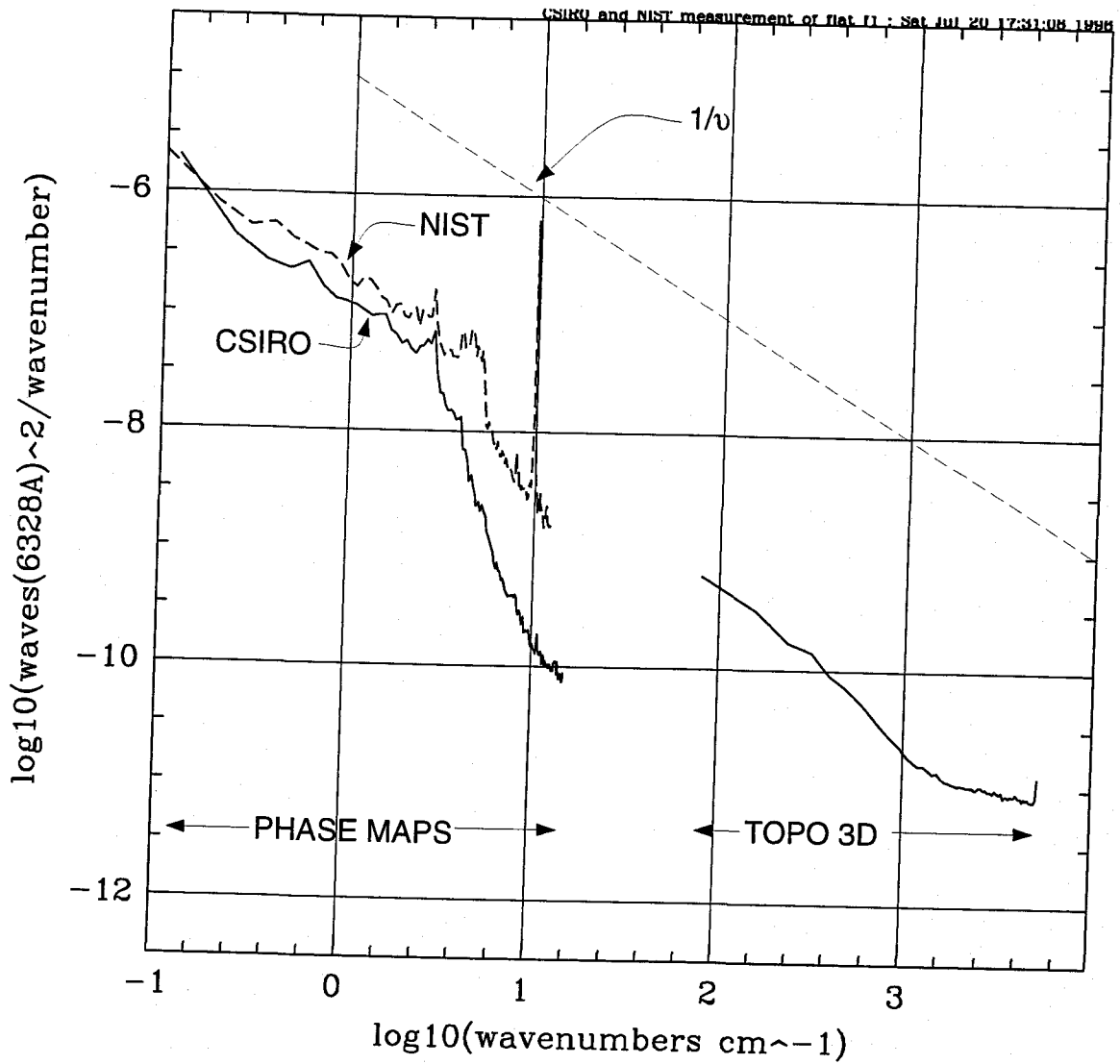
f2: $\sigma(70 \text{ to } 4000\text{cm}^{-1}) = 3.22\text{A}$

VG 1



CSIRO newref solid
 CSIRO f2ahwr dots

VG 2 CSIRO newref and f2 superposed.



CSIRO phase map f1avwr
 NIST phase map kvyp_d
 CSIRO topo 3d maps f6

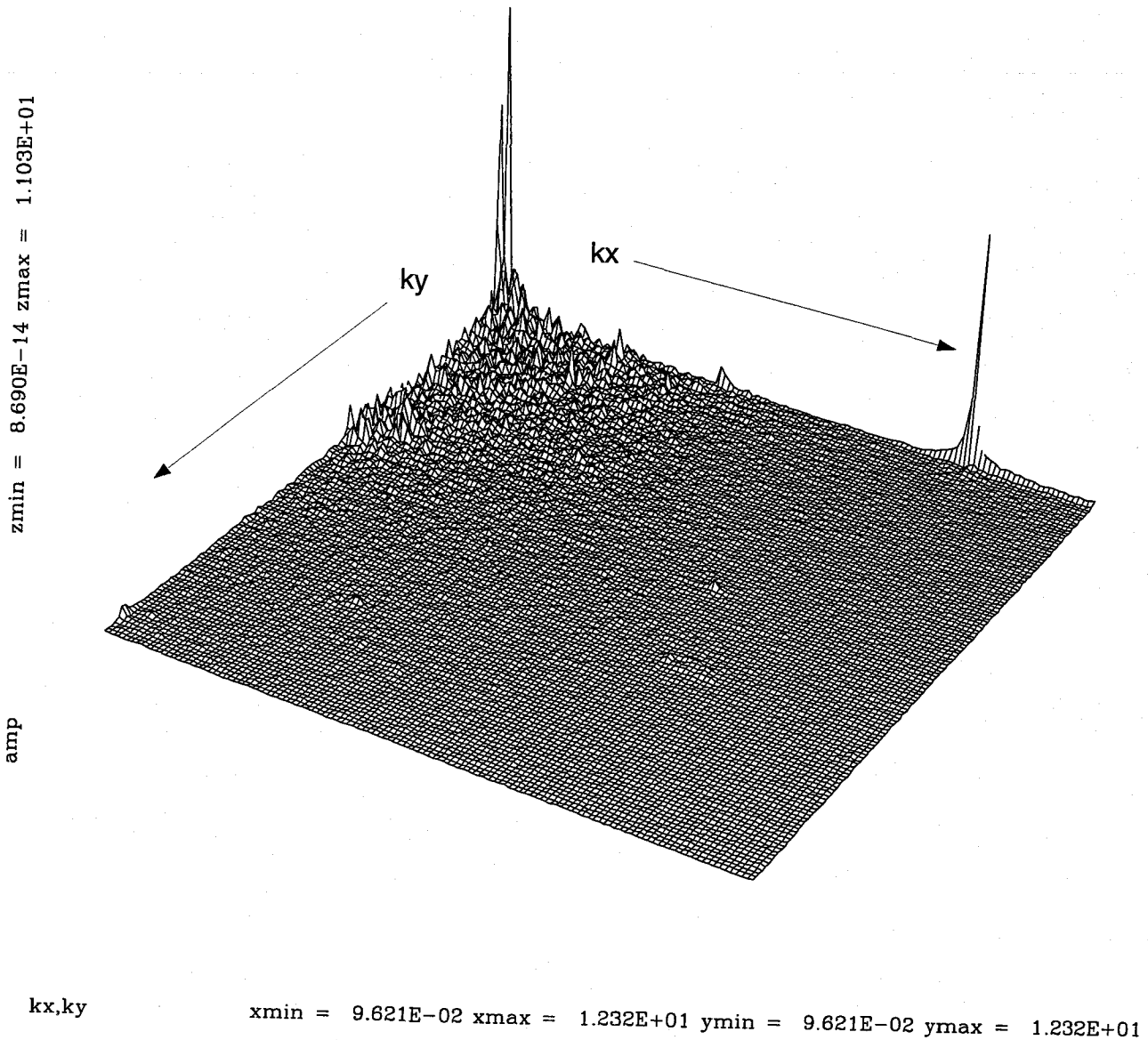
VG 3 CSIRO and NIST measurements superposed. Once again see the high frequency spatial filtering in the CSIRO phase map and the artifact spectral features in the NIST phase map at 10 and between 5 to 7 cm⁻¹.

256x256 2d fft

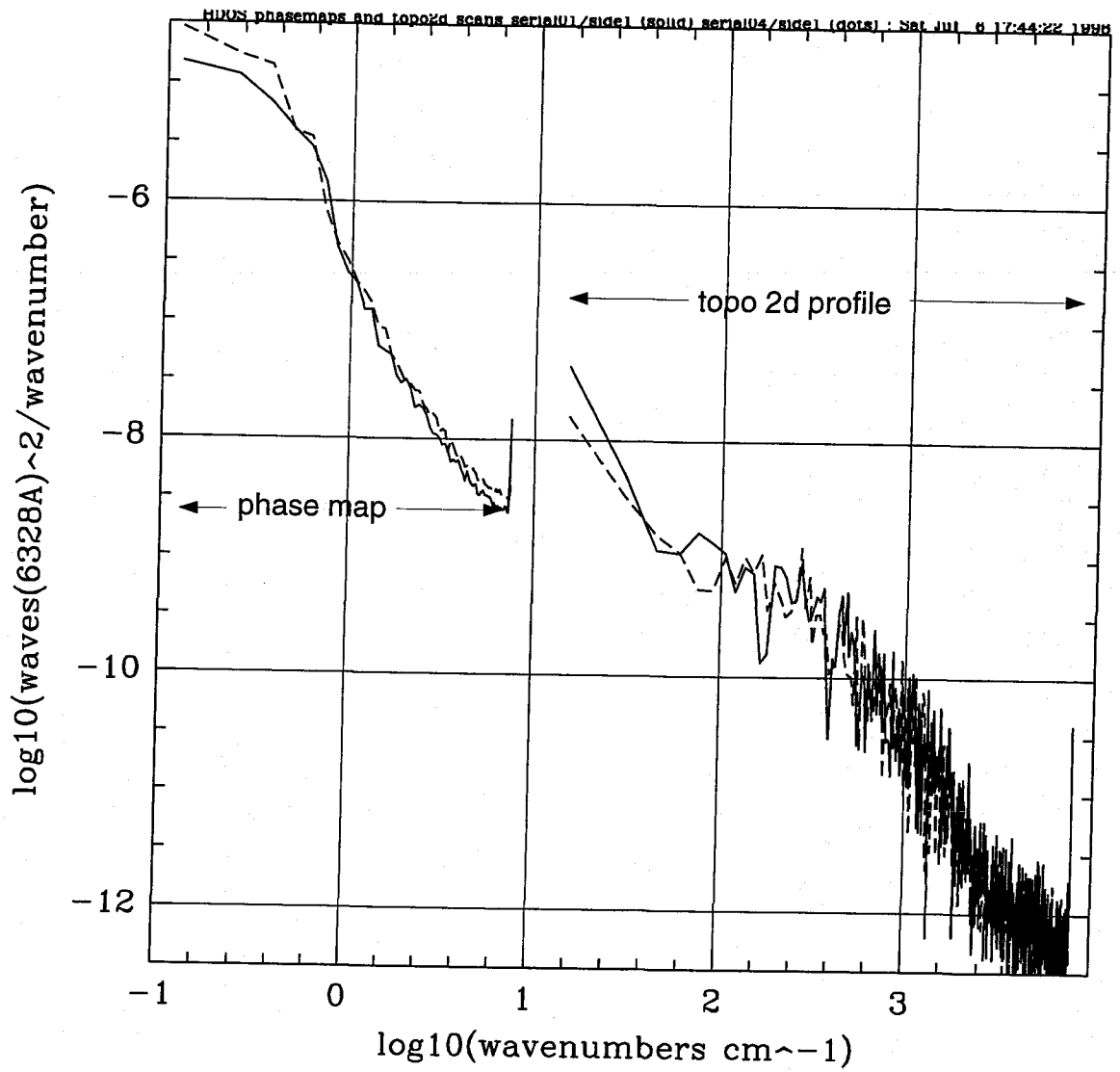
kvyp_d

Z(0,0),Z(1,1),Z(2,0),Z(2,2) removed

kvyp_2dff1 uplo and including Z(2,2) removed : Thu Aug 1 18:23:24 1996

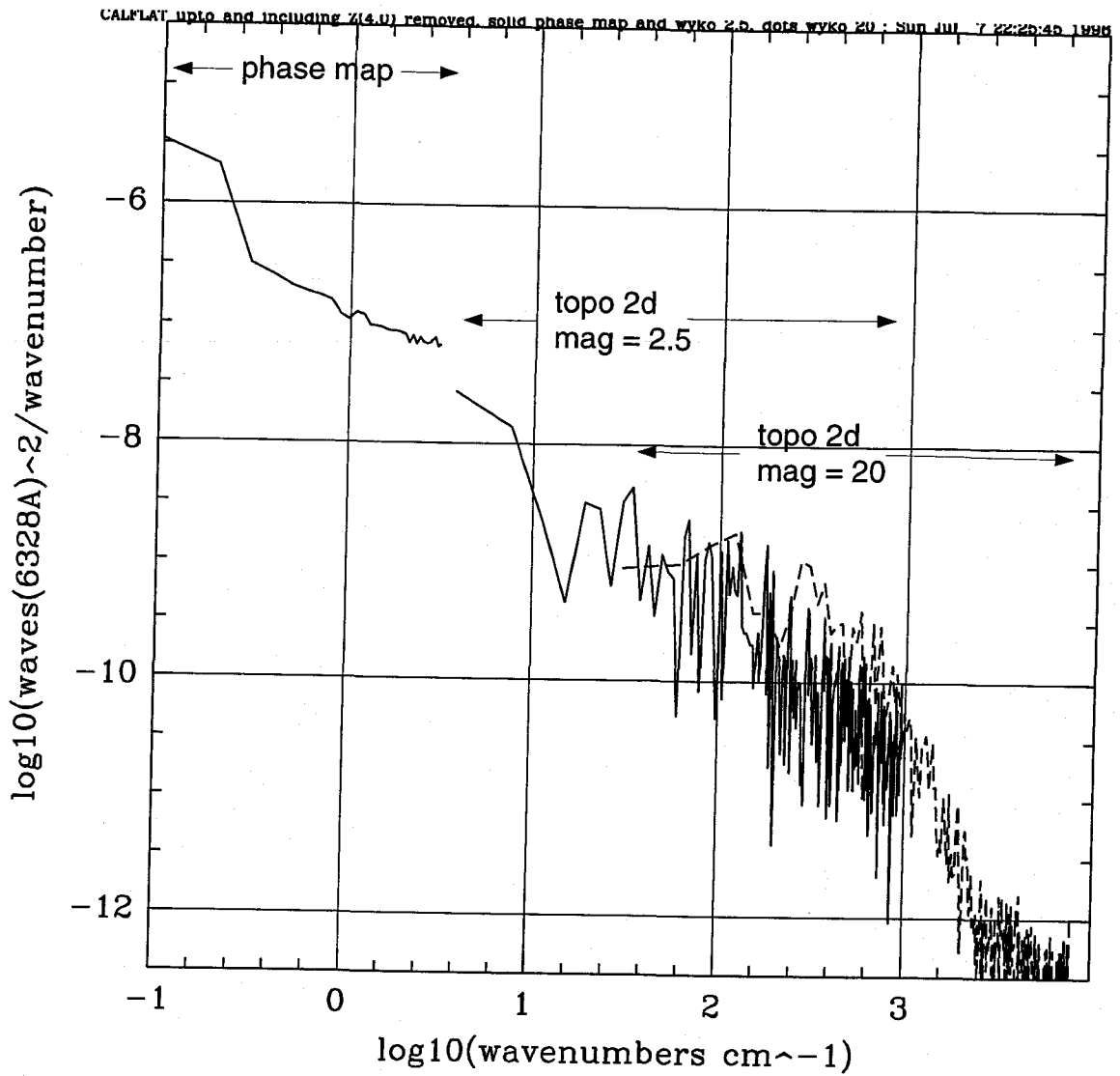


VG 4 Two dimensional fft of the kvyp_d.dat NIST phase map showing the spatial spectral feature at 10 cm^{-1} . It does look like the wave vector is along one of the spatial axes.



l1s1 solid
l4s1 dots

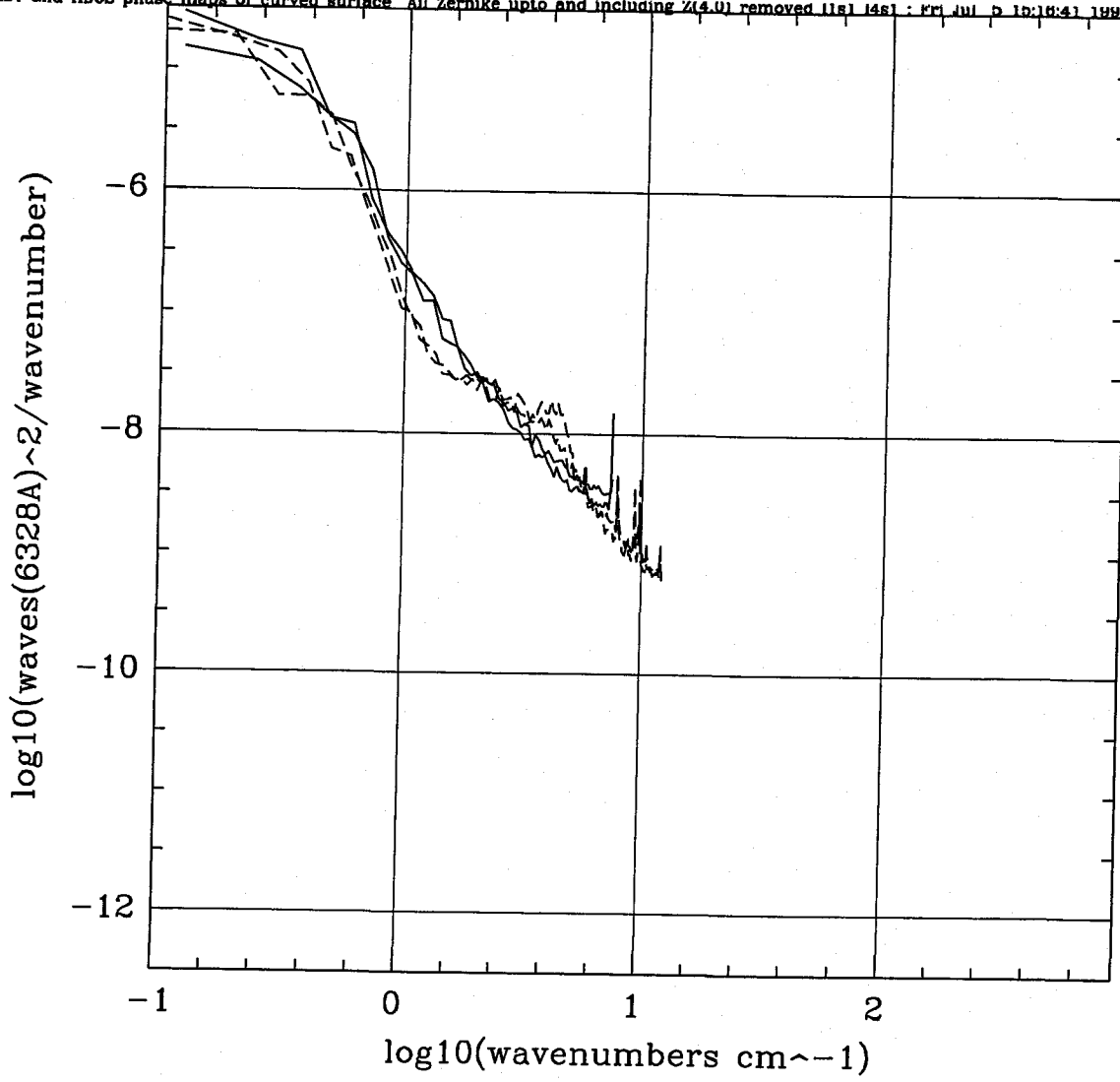
VG 5 HDOS FLATS



calflat with Z(0,0),Z(1,1),Z(2,0),Z(2,2),Z(3,1),Z(3,3),Z(4,0) removed

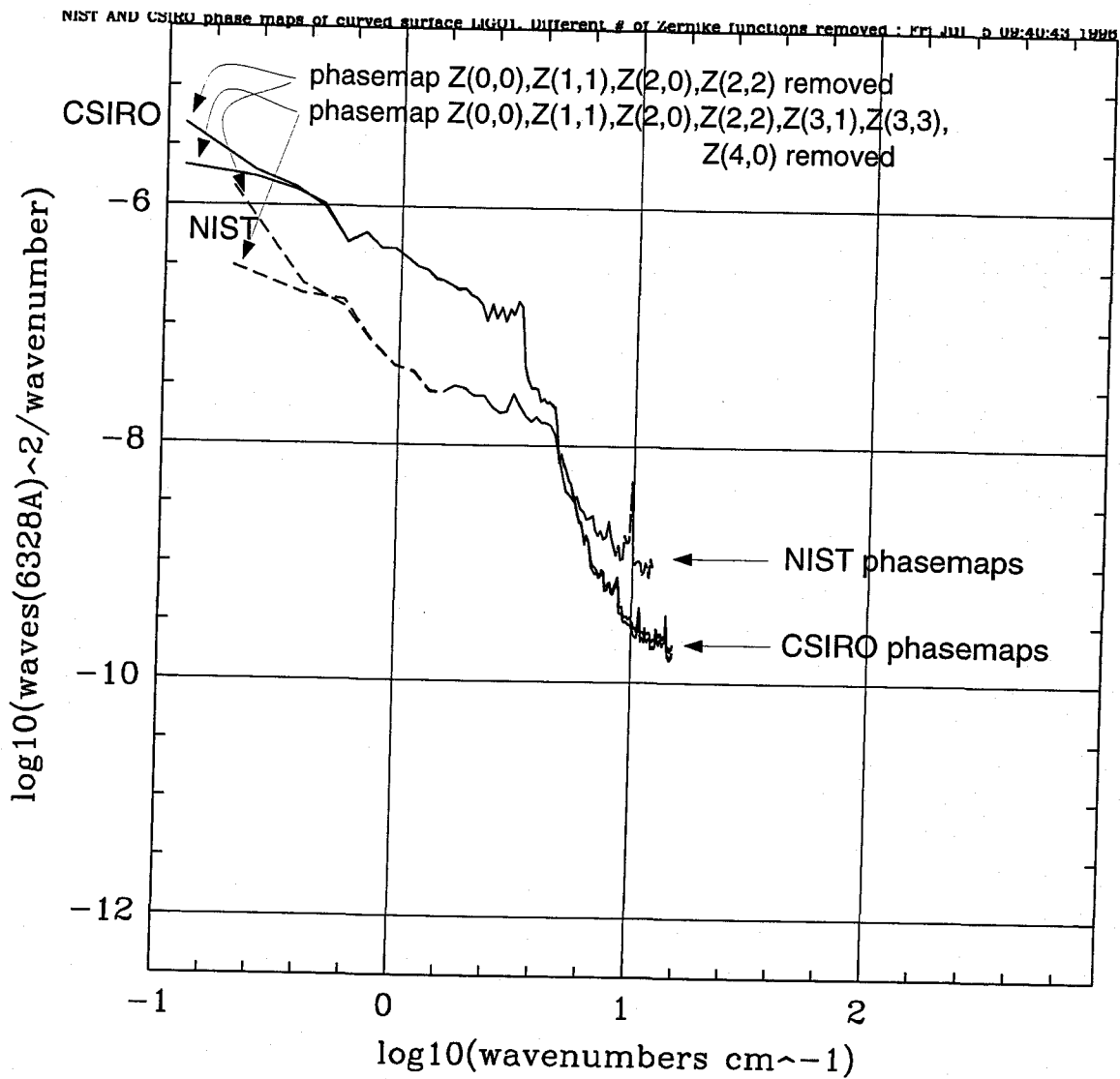
VG 6 Calflat prepared in the same manner as NIST data

NIST and HDOS phase maps of curved surface All Zernike upto and including Z(4,0) removed 11s1 14s1 : Fri Jul 5 10:16:41 1996



solid HDOS metrology of curved surfaces 11s1 and 14s1
dotted NIST metrology of same surfaces
All Zernike functions upto and including Z(4,0) removed from phase maps

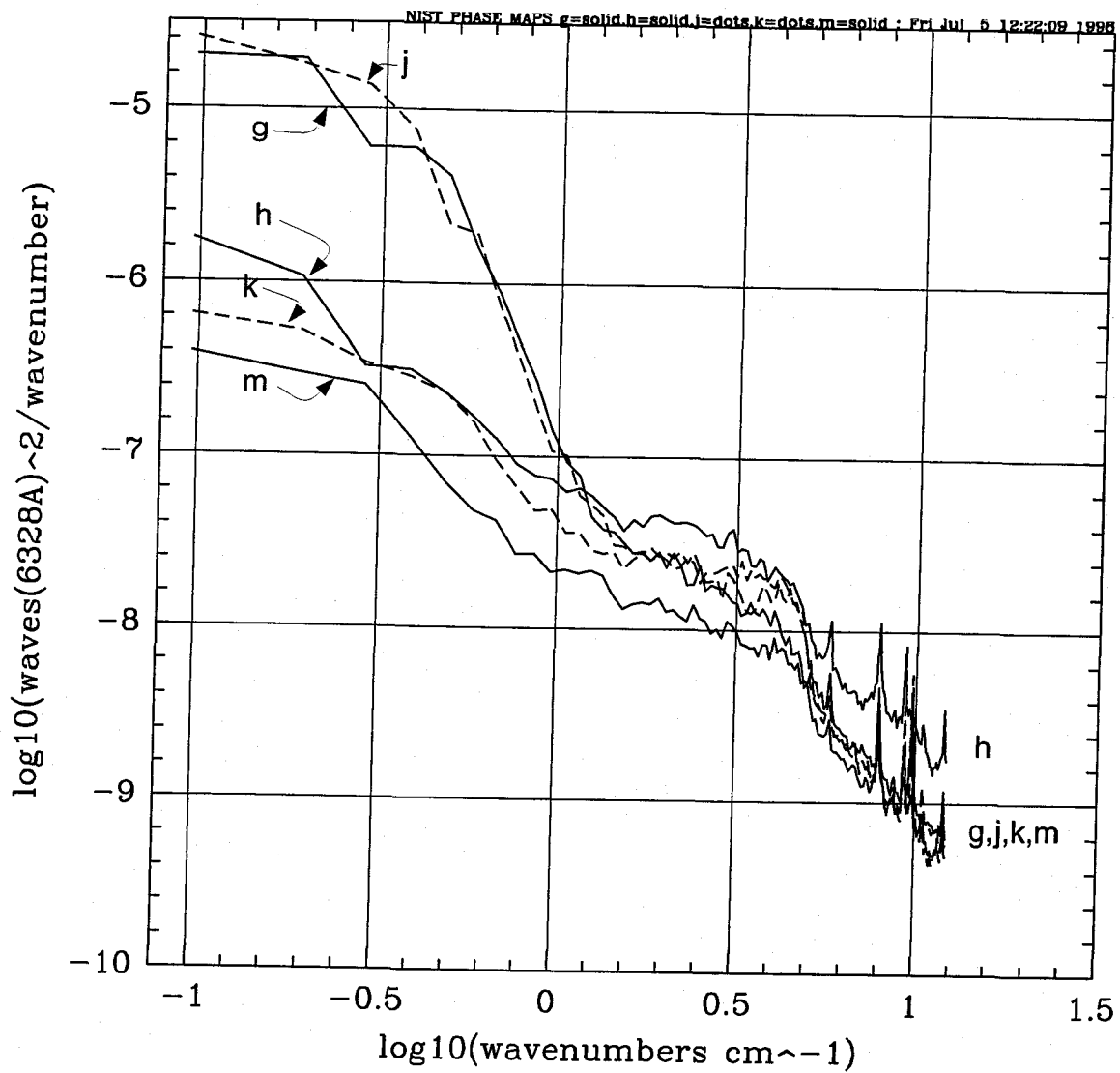
VG 7 HDOS and NIST



CSIRO phasemaps c1ahc convex vs concave

NIST phasemaps dkuyp_d converted to 6328A

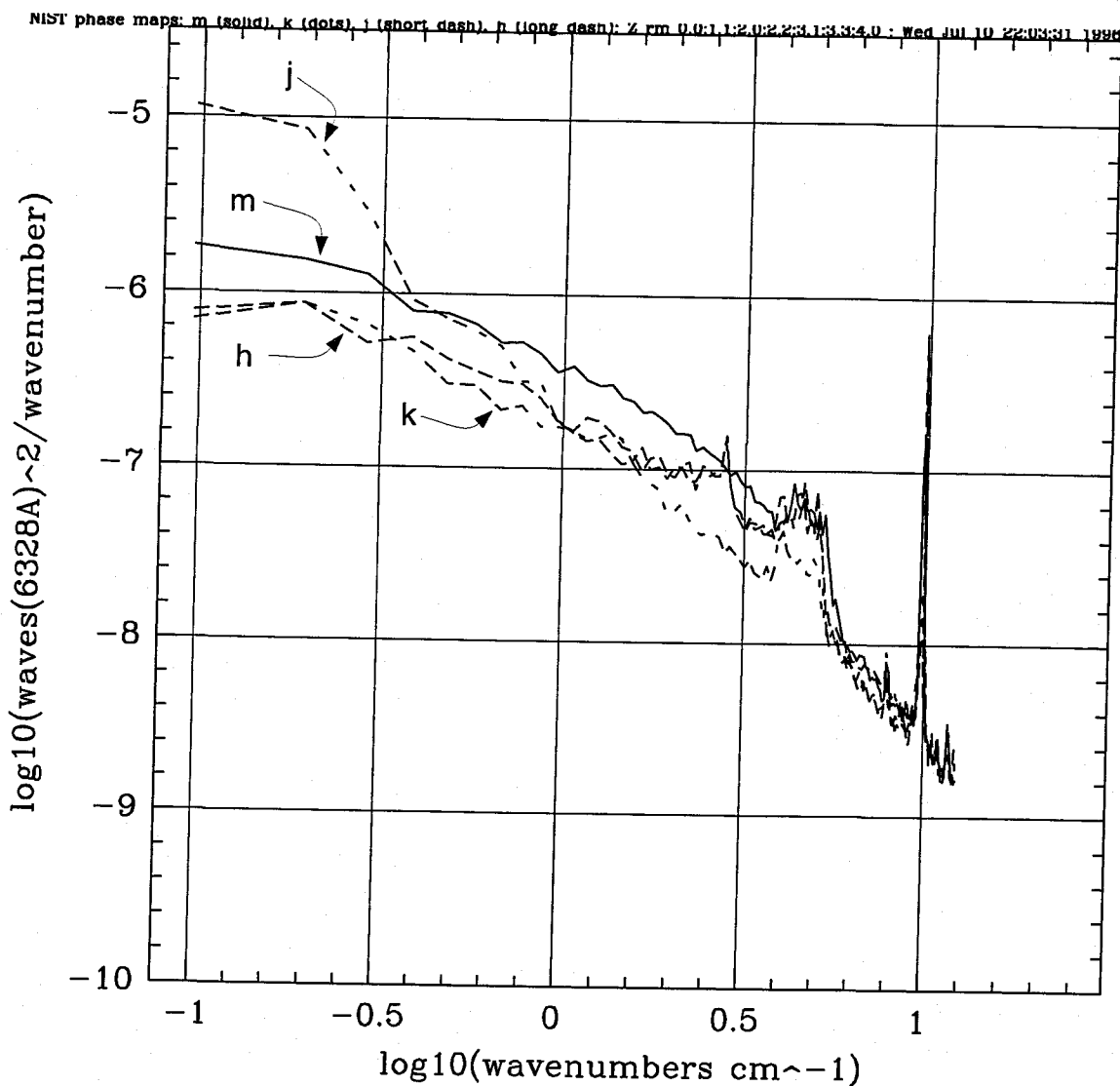
VG 8 CSIRO and NIST



One dimensional power spectra from NIST metrology of curved surfaces. Z(0,0),Z(1,1) Z(2,0),Z(2,2),Z(3,1),Z(3,3),Z(4,0) removed

g HDOS 001
 h CSIRO 002
 j HDOS 004
 k CSIRO 006
 m GEO

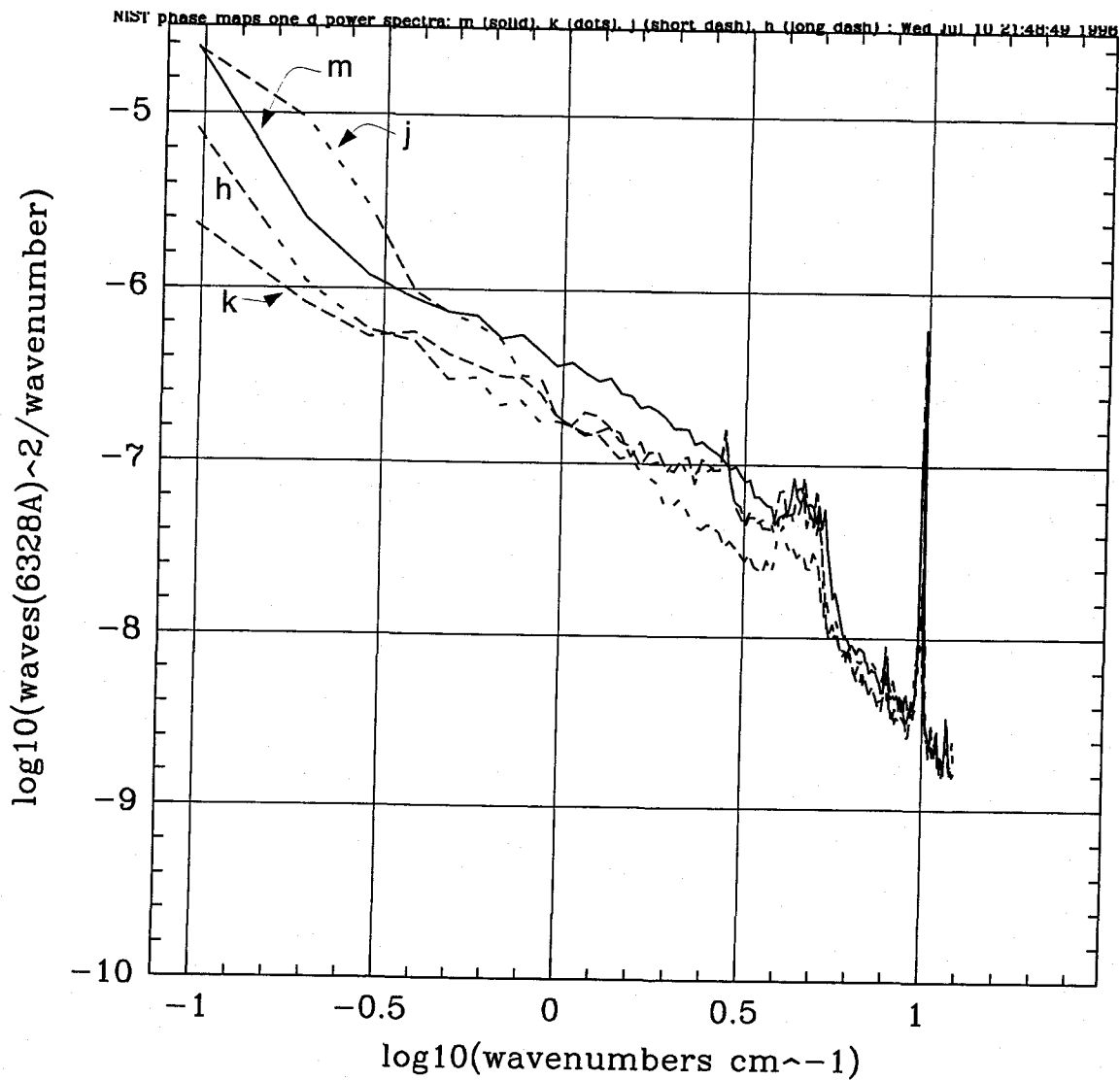
VG 9 Intercomparison of curved surfaces NIST maps



All spectra derived from phase maps with Z(0,0),Z(1,1),Z(2,0),Z(2,2),Z(3,1)
Z(3,3),Z(4,0) removed

h = long dash = CSIRO surface 2 #2
j = short dash = HDOS serial04 side 2
k = dots = CSIRO surface 2 #6
m = solid = GO

VG 10 One d fft NIST phasemaps of flat surfaces



All spectra derived from phase maps with Z(0,0),Z(1,1),Z(2,0),Z(2,2) removed

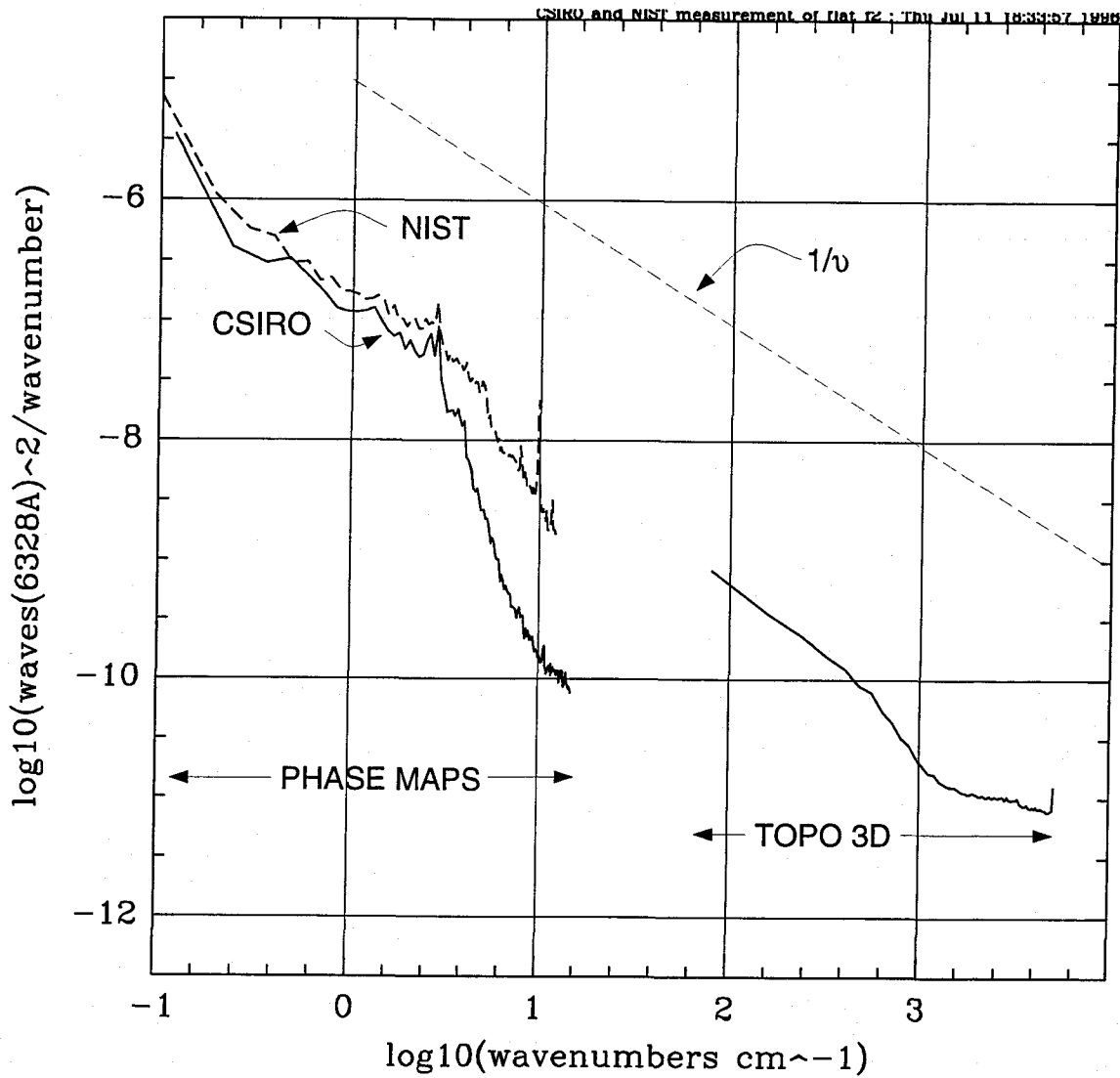
h = long dash = CSIRO surface 2 #2

j = short dash = HDOS serial04 side 2

k = dots = CSIRO surface 2 #6

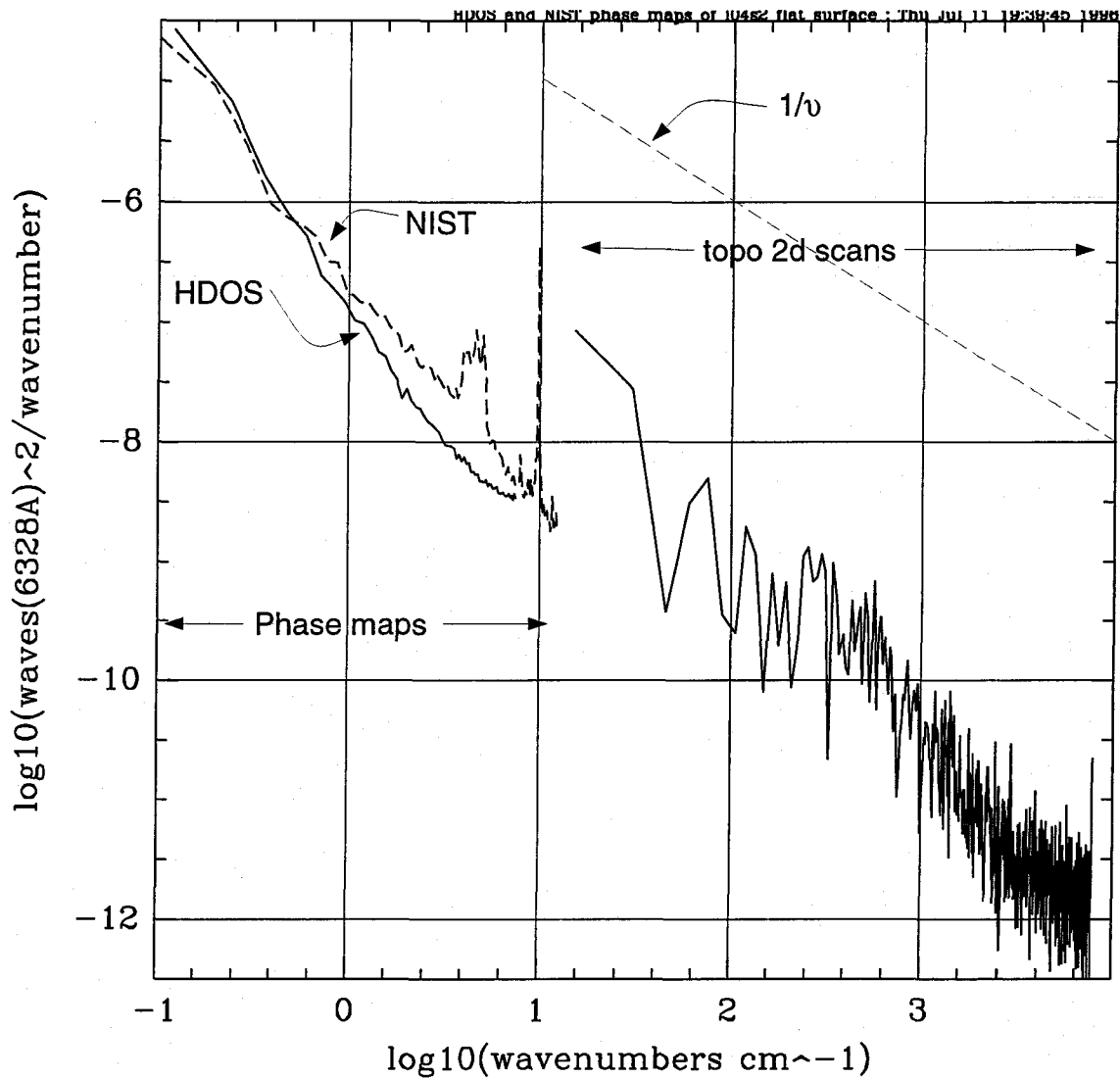
m = solid = GO

VG 11 One dimensional spectra derived from NIST phase maps of flat surfaces. These spectra to be compared with the Calflat from before which also had upto and including Z(2,2) removed/



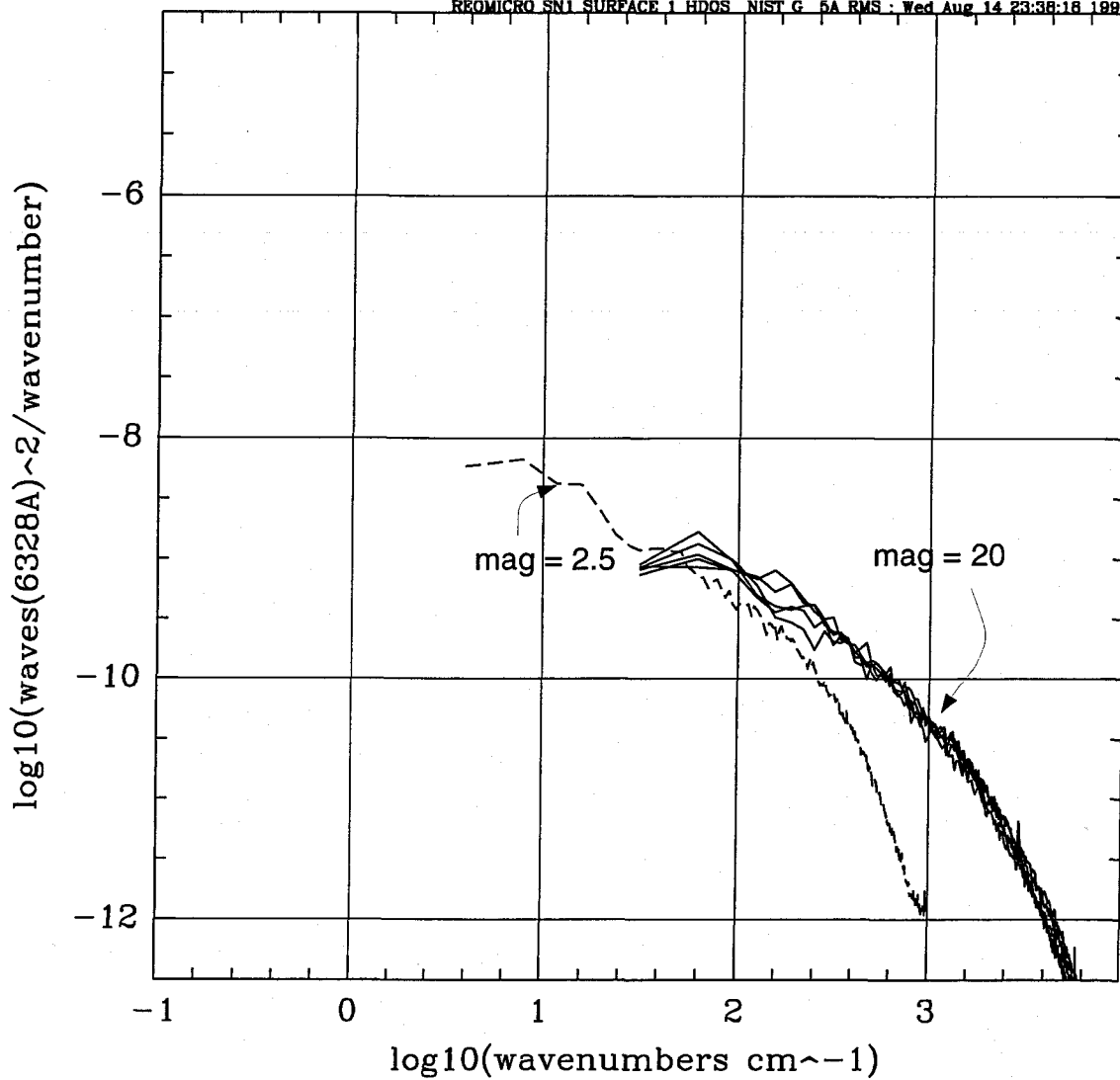
CSIRO phase map f2ahwr1
 NIST phase map hvyp_d
 CSIRO topo 3d maps f2

VG 12 CSIRO and NIST measurements superposed. Can again see the high spatial frequency filtering in the CSIRO measurements. CSIRO and NIST agree much better on the flats than on the curves below 3 cm^{-1} .



HDOS phase map l4s2flp
 HDOS topo 2d scan l04s21
 NIST phase map jvyp_d

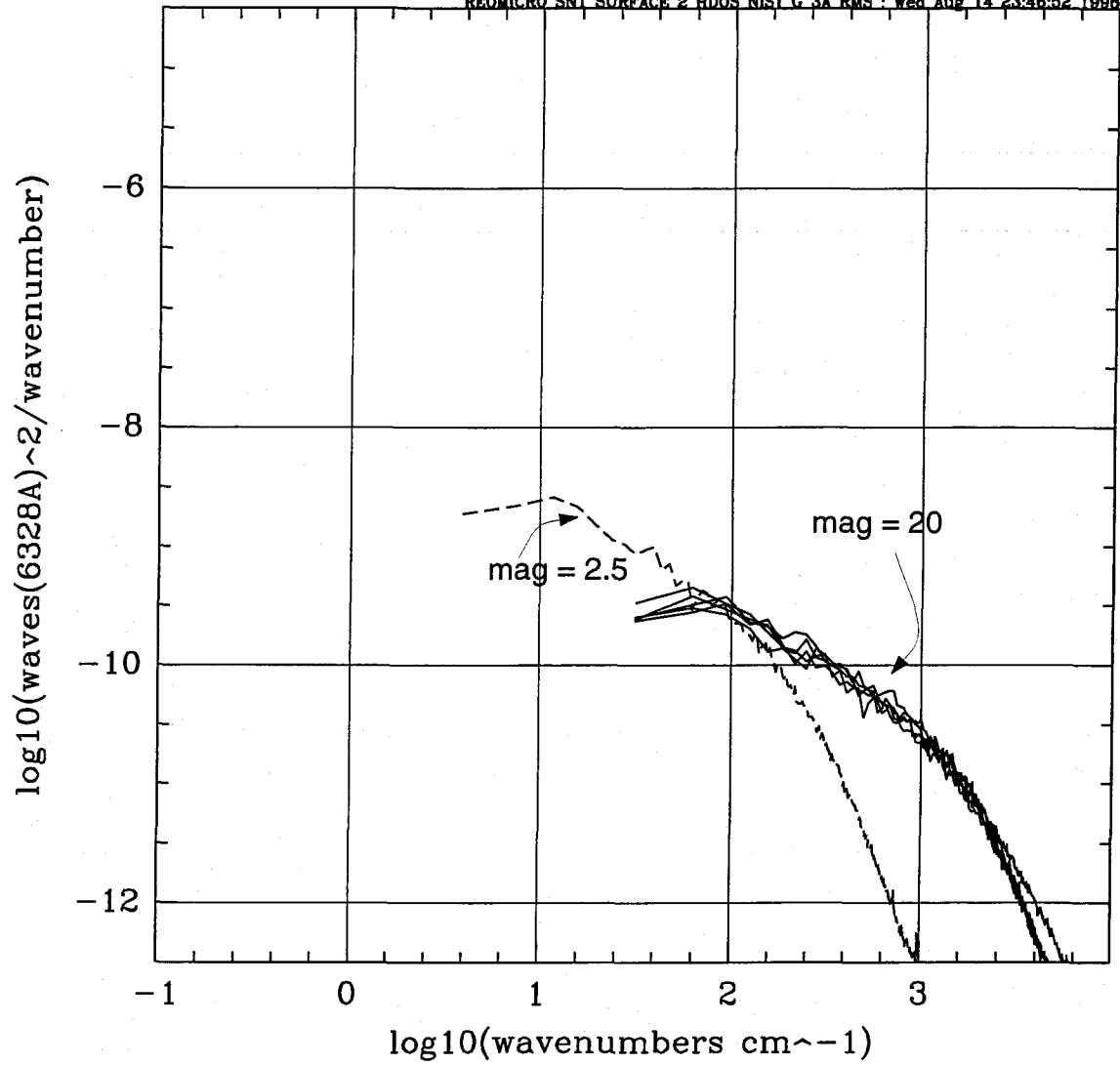
VG 13 HDOS and NIST measurements superposed. The artifacts at 5 to 6 and at 10 cm^{-1} in the one dimensional power spectrum derived from the NIST phase maps is easy to see here



FILES:
111,112,113,114,115,116

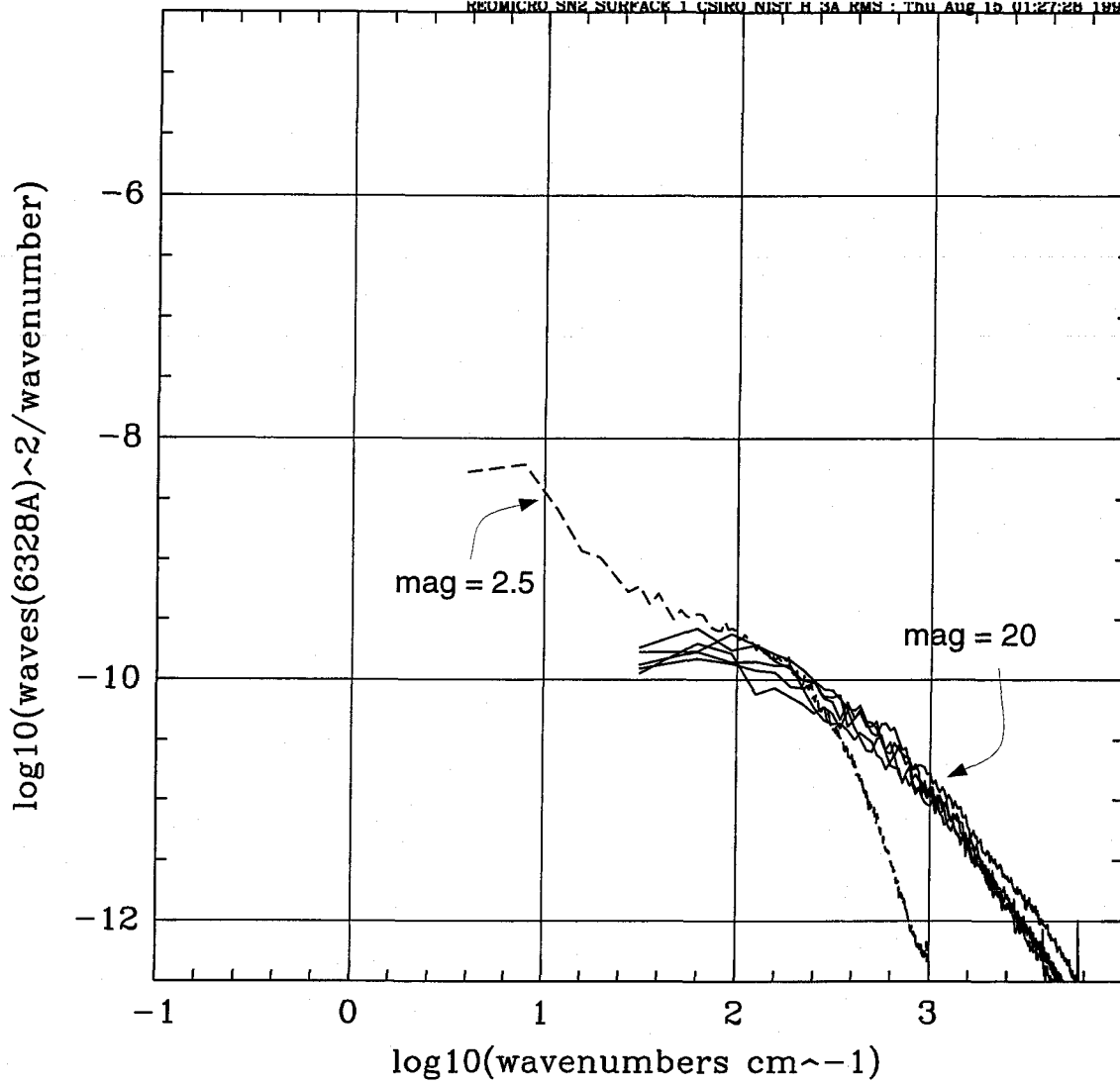
sn1 surface 1 HDOS NIST G 3A rms

VG 14 Reo micro



FILES:
121,122,123,124,125,126

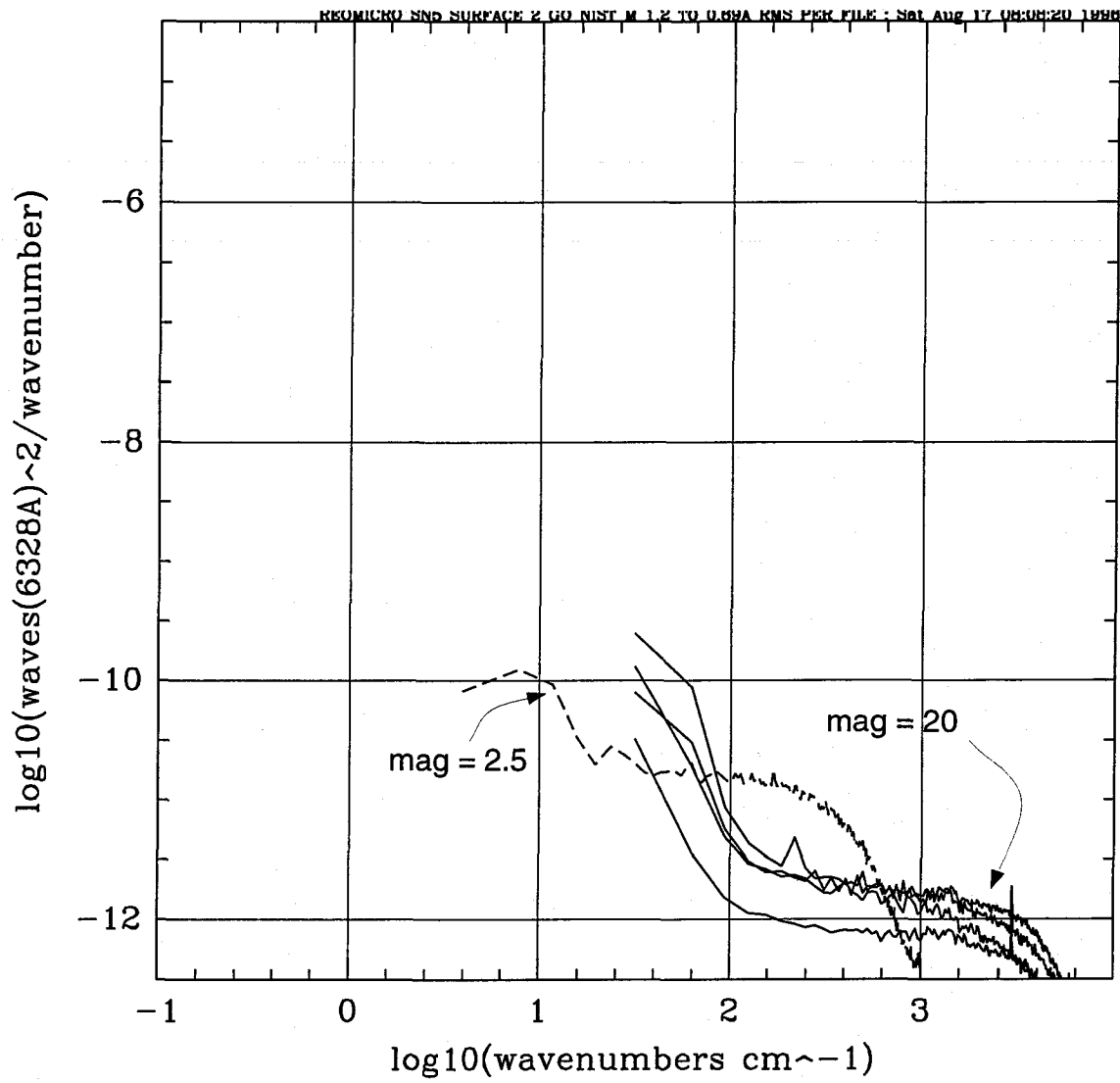
sn1 surface 2 HDOS NIST G 5A rms



FILES:
211,212,213,214,215,216

sn2 surface 2 CSIRO NIST H 3A rms

VG 16 Reo Micro



FILES:
521,522,523,524,525,526

sn5 surface 2 NIST M
1.2 to 0.7 A rms

VG 17 REO Micro