

## Using World Maps to Support Global Thinking

2017  
The 2018 draft of this sketch is below.2017  
The 2018 draft of this sketch is below.67P/C-G MAPS WITH COMPLEMENTARY PERSPECTIVES  
ON SOUTH-TO-NORTH DUST TRANSPORT

OUTWARD INWARD ON THE MAP

SKETCHES: (1TOP)  
FIRST DRAFTS: (LOW)DISTORTION  
ELLIPSEafter Nicholas Auguste Tissot  
1824-1897size  
& shape  
@map  
edge

SCALE

EDGE

SUBDIVIDED  
DISTRICTWe learned that Ash  
receives material  
bidirectionally.YELLOW  
TREES BIND  
OPPOSITE MAPSIn Constant-Scale  
Natural Boundary  
mapping, interruption  
patterns, or 'trees,' define maps.In our search for trees to make clear the  
transport of dust on 67P, we saw that 'branches'  
in the comet's neck scrunched the maps' middles.  
So, we pruned the tree. While the scale increased  
in these areas, our problem of clarity was solved.Proportion *refined* these maps by  
modifying their trees. In such ways,  
CSNB radically reconceives projections.

Similar trees define these complementary Earth maps.

Their global clarity is *sensible*  
because the Ocean is  
uninterrupted and  
proportionate  
to itself  
and  
to land.

The 67P photomosaics (in 2020) will have similar clarity.

Proportion is controlled by  
cross-map distance ratios.  
We had to 'prune' the trees  
to optimize these ratios.  
EDGES ELIMINATED  
IN THE ABOVE MAPCROSS-MAP RATIO  
TYP. CALCS.

OBJECT	5:11 = 12.55"	8:1P = 12.2"	MAX shape distortion (SHEAR)
MAP	5:11 = 6.17"	8:1P = 7.82"	86%
MAP	5:11 = 7.22"	8:1P = 7.45"	97%
MAP	5:11 = 7.45"	8:1P = 7.00"	106%
MAX SIZE DISTORTION (REDUCTION)	12.55 + 12.2 = 24.77	7.45 + 7.00 = 14.45	1.7 times (58%)

SCRUNCHED  
DISTORTION  
ELLIPSECONTINENTAL DIVIDE  
AS MAP EDGE

Small Bodies: Missions and Comets

Abstract number 2936

DISTORTION ELLIPSE

Small Bodies: Missions and Comets

CONVENTIONAL MAPS  
OBSOLETE HATHORCSNB MAPS  
SHOW HATHORBut our 2016 map  
was no darn good for  
pondering airfall dust  
transport. So, in 2017,  
we changed the tree.

See sketches at top.

2016

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