

Supplementary Material

Lung microbiota predict invasive pulmonary aspergillosis and its outcome in immunocompromised patients

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Supplementary Methods

BAL collection and processing

Neutropenic patients or patients that were otherwise immunosuppressed with fever not responding to 4-5 days of broad-spectrum antibiotics, or with an abnormal chest X-ray, or with signs and symptoms suggestive of fungal infection (e.g., dyspnea, hemoptysis, dry cough, pleuritic chest pain) or with a positive serum galactomannan index (≥ 0.5) underwent high resolution or spiral chest CT-scan. In case of abnormal radiological features, patients underwent bronchoscopy and BAL specimens were collected by instillation of a 0.9% sterile saline solution using a flexible fiberoptic bronchoscope following local anesthesia with 2% lidocaine (Xylocaine). The sampling area was determined based on the localization of lesions on chest imaging. BAL specimens with comparable recovery rates were used. Bacterial DNA was extracted, amplified, and sequenced according to previously published protocols ¹ at Microomics Systems, Spain. Sequencing was performed using the Illumina MiSeq platform.

Galactomannan testing

The Platelia *Aspergillus* EIA (Bio-Rad, Marnes-la-Coquette, France) was used during routine microbiological workup to detect the presence of galactomannan on uncentrifuged BAL specimens, as described previously ². The enzyme immunoassay data was expressed as galactomannan index.

ELISA

Cytokines were quantified in BAL samples using customized Human Premixed Multi-Analyte Kits (R&D Systems, MN, USA). All cytokine determinations were performed in duplicates, and concentrations were reported in pg/mL.

Sequencing quality control

Samples were filtered using the FastQ Toolkit utility using a threshold of PHRED quality q10, and the first 16 bases of all sequences were eliminated by removing the sequence homology of the

PCR primers described in the Illumina protocol. The sequencing reads assigned to each of the samples ranged between 5,766–348,106 useful sequences after filtering and quality trimming. The depth of sequencing achieved for each of the samples allowed to cover much of the species diversity and guaranteed the absence of bias in this regard, allowing establishing levels of alpha diversity (intragroup) and beta diversity (intergroup). These curves resulted in a typical plateau of metagenomes with optimal coverage levels, and a further increase in the number of sequences was not accompanied by an increase in the number of operational taxonomic units (OTUs)³. The sequencing depth level allowed covering not only the most represented taxa (core community), but also the less frequent. The quality level of the resulting reads allowed the identification of significant hits in more than 70% of cases at the genus level in the majority of the samples.

Pre-processing of 16S rRNA sequence reads

Raw sequence reads were processed by following the pipeline for the DADA2 R package (version 1.10.1)⁴ to obtain counts of amplicon sequence variants (ASVs). Sequence taxonomy was assigned using the DADA2-formatted database of sequences derived from the SILVA database version 132⁵. The resulting ASV counts were stored along with metadata for samples and analyzed using the Phyloseq R package (version 1.26.1)⁶. A phylogenetic tree of the organisms present in the dataset was approximated following a workflow⁷ which relies on the DECIPHER (version 2.10.2)⁸ and phangorn (version 2.5.5)⁹ R packages. Only samples with at least 1,000 total counts after processing with DADA2 were retained. ASV counts were normalized per sample to give the relative abundance of each taxon within a sample. Blank controls were treated as the other samples, but these failed to produce any amplicon band and library, and were not subsequently sequenced. As part of a quality control check, we also included four sequenced runs of mock communities, two with even mixtures of organisms (HM277D and HM782D), and two with staggered mixtures (HM278D and HM783D). A breakdown of the proportions of taxa that are expected in each sample, and the real abundances found in our sequencing runs is shown in supplementary file 1.

Diversity measures

The *estimate_richness* function from the *Phyloseq* package was used to calculate alpha diversity measures. For beta diversity, the *vegdist* function from the *vegan* R package (version 2.5-5) ¹⁰ was used to obtain both the Bray-Curtis and the Jaccard distances.

Identification of discriminant abundance profiles

The bacterial abundance profiles were calculated at taxonomic levels from phylum to genus using the linear discriminant analysis effect size (LEfSe) pipeline ¹¹. Biological consistency was investigated with a set of pairwise tests among subclasses using the unpaired Wilcoxon rank sum test. LDA was used to estimate the effect size of each differentially abundant trait (a threshold of 3.0 or -3.0 was used for logarithmic LDA scores).

Statistical analyses

Multiple versions of the linear model used to test the associations between variables and particular taxa were tested to check for potential confounding variables. Along with the four fixed effects mentioned (case/control, age, gender, and sequencing batch), models that also included antibiotic use, steroid use, lymphocyte counts, as well as a model with all seven variables together, were separately tested. None of these additional models indicated any batch effects, so the results presented are based on the original model. Model assumptions were checked for each reported model using the *plot* R function on the linear model object. The residuals vs fitted plot showed that the models held to the linearity and homoscedasticity assumptions. The QQ plot showed that the models held to the normality assumption. The scale-location plot further ensured homoscedasticity. The Cook's distance plot showed that there were no overly influential data points impacting the model. The results presented are based on the model including the variables case/control, gender, age, and sequencing date. The p-values from the model were adjusted using the "*fdr*" option in the *p.adjust* function from the *stats* R package (version 3.6.3) ¹². Figures were generated using the *ggplot2* R package (version 3.3.0) ¹³. For outcome analyses, hazard ratios were calculated using the *coxph* function from the *survival* R package (version 3.2-7) ¹⁴, which fits a Cox proportional hazards regression model to a survival object, created with the *Surv*

function from the same package. The survival object considers the time to date of last follow-up or death, along with the outcome, either alive or deceased.

References

1. Willis JR, Gonzalez-Torres P, Pittis AA, et al. Citizen science charts two major "stomatotypes" in the oral microbiome of adolescents and reveals links with habits and drinking water composition. *Microbiome* 2018;6(1):218. doi: 10.1186/s40168-018-0592-3
2. D'Haese J, Theunissen K, Vermeulen E, et al. Detection of galactomannan in bronchoalveolar lavage fluid samples of patients at risk for invasive pulmonary aspergillosis: analytical and clinical validity. *J Clin Microbiol* 2012;50(4):1258-63. doi: 10.1128/JCM.06423-11
3. Ercolini D. High-throughput sequencing and metagenomics: moving forward in the culture-independent analysis of food microbial ecology. *Appl Environ Microbiol* 2013;79(10):3148-55. doi: 10.1128/AEM.00256-13
4. Callahan BJ, McMurdie PJ, Rosen MJ, et al. DADA2: High-resolution sample inference from Illumina amplicon data. *Nat Methods* 2016;13(7):581-3. doi: 10.1038/nmeth.3869
5. Callahan B. Silva taxonomic training data formatted for DADA2 (Silva version 132). *Zenodo* 2018
6. McMurdie PJ, Holmes S. phyloseq: an R package for reproducible interactive analysis and graphics of microbiome census data. *PLoS One* 2013;8(4):e61217. doi: 10.1371/journal.pone.0061217
7. Callahan BJ, Sankaran K, Fukuyama JA, et al. Bioconductor Workflow for Microbiome Data Analysis: from raw reads to community analyses. *F1000Res* 2016;5:1492. doi: 10.12688/f1000research.8986.2
8. Wright ES. Using DECIPHER v2. 0 to analyze big biological sequence data in R. *R Journal* 2016;8(1)
9. Schliep KP. phangorn: phylogenetic analysis in R. *Bioinformatics* 2011;27(4):592-3. doi: 10.1093/bioinformatics/btq706
10. Oksanen J, Blanchet F, Friendly M, et al. vegan: Community Ecology Package (R package version 2.5–5); 2019, 2019.
11. Segata N, Izard J, Waldron L, et al. Metagenomic biomarker discovery and explanation. *Genome Biol* 2011;12(6):R60. doi: 10.1186/gb-2011-12-6-r60
12. Team R. A Language and Environment for Statistical Computing. 2006. Available at [www R-project.org](http://www.R-project.org) 2018

13. Wickham H. *ggplot2: elegant graphics for data analysis*: Springer 2016.
14. Therneau T. A Package for Survival Analysis in R. *R package version 32-7* 2020

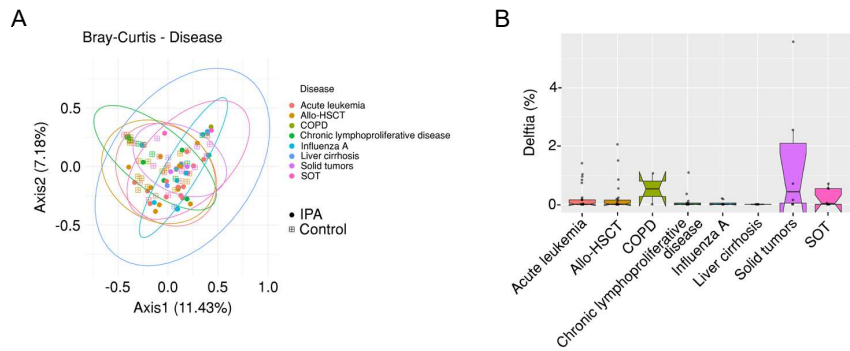


Figure S1. The underlying disease does not influence the lung microbiome. A) Principal coordinate analysis between cases of IPA and controls based on the Bray-Curtis dissimilarity metric according to the different underlying diseases in the cohort. Circles indicate cases of IPA and squares indicate controls, and the underlying diseases are identified by different colors. B) Relative abundance of *Delftia* (%) in the overall cohort grouped according to the underlying disease.

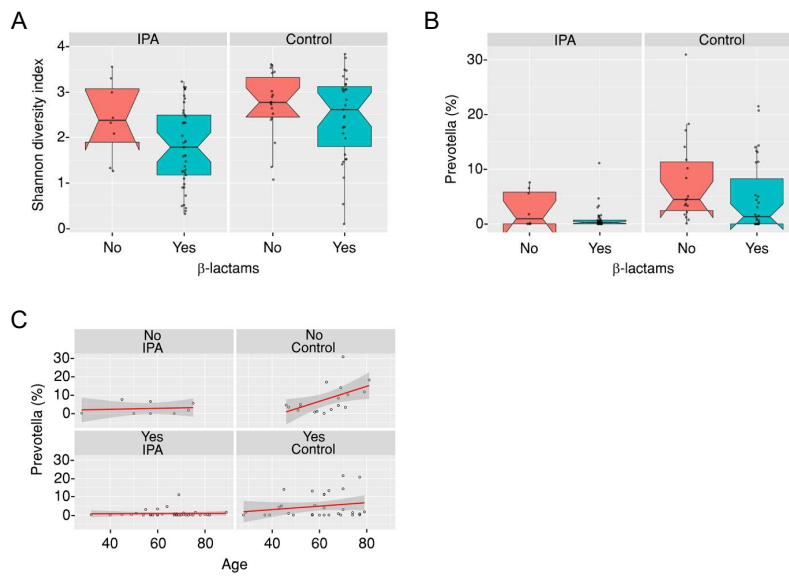


Figure S2. The microbiome in IPA is not affected by β -lactam antibiotics. Boxplots illustrating A) the alpha diversity (measured by the Shannon diversity index) of the lung microbiome and B) the relative abundance of *Prevotella* (%) among patients receiving (Yes) or not (No) β -lactams grouped according to the infection status (IPA and controls). Median values and interquartile ranges are indicated in the plots. C) Association analysis between the relative abundance of *Prevotella* (%) and the age of the patients in the overall cohort among patients receiving (Yes) or not (No) β -lactams grouped according to the infection status (IPA and controls).

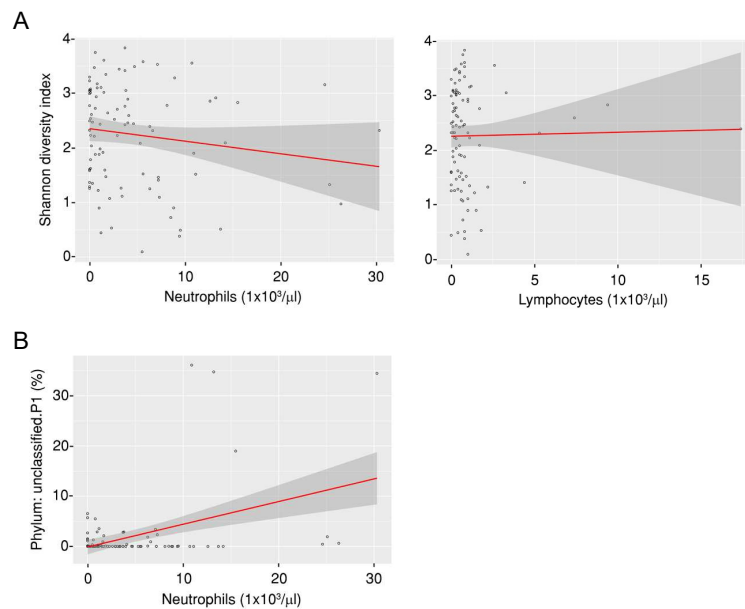


Figure S3. Immune cell counts are not associated with microbiome diversity. A) Association analysis between the alpha diversity (measured by the Shannon diversity index) of the lung microbiome and the number of neutrophils and lymphocytes (expressed as $1 \times 10^3/\mu\text{l}$) in BAL samples from the overall cohort. B) Association analysis between the relative abundance of unclassified taxa at the phylum level (%) with the number of neutrophils (expressed as $1 \times 10^3/\mu\text{l}$) in BAL samples from the overall cohort.

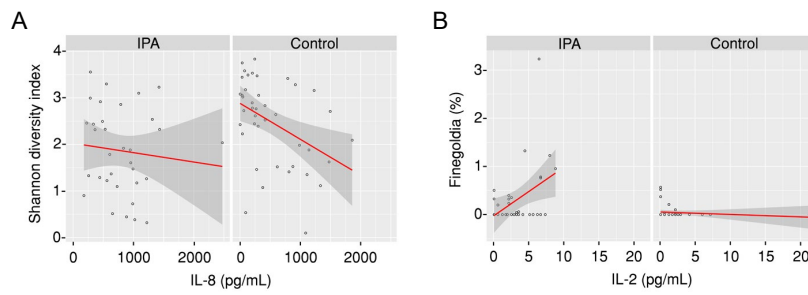


Figure S4. Alveolar cytokines promote IPA-specific effects on microbiome composition. A) Association analysis between the alpha diversity (measured by the Shannon diversity index) and the levels of IL-8 in BAL samples from cases of IPA and control patients. B) Association analysis between the abundance of *Fingoldia* (%) and the levels of IL-2 in BAL samples from cases of IPA and control patients.

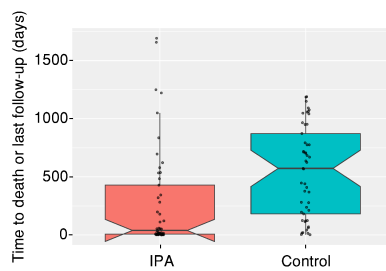


Figure S5. Time to death or last follow-up is shorter in IPA. Boxplot illustrating the time to death or date of last follow-up (days) among cases of IPA and control patients. Median values and interquartile ranges are indicated in the plots.

Table S1. Levels of alveolar cytokines and chemokines in cases of IPA and controls.

Analytes, mean (pg/mL, range)	IPA (n=38)	Controls (n=41)	P value
IL-1 α	12.2 (0.01-86.8)	2.9 (0.0-28.4)	<0.001
IL-1 β	266.2 (1.2-1270.0)	90.2 (1.5-854.6)	0.002
IL-1RA	15584.0 (33.1-96754.4)	16120.0 (344.6-136777.7)	0.78
IL-2	3.8 (0.1-8.8)	1.8 (0.1-21.3)	<0.001
IL-4	0.8 (0.01-11.6)	0.5 (0.01-5.9)	0.80
IL-5	4.1 (0.1-9.9)	2.5 (0.1-20.5)	<0.001
IL-6	1039.0 (4.7-4938.2)	264.2 (0.02-3851.4)	0.001
IL-7	3.3 (0.01-19.5)	1.4 (0.01-8.0)	0.03
IL-8	808.6 (179.0-2472.0)	511.9 (2.4-1859.2)	0.002
IL-9	0.7 (0.6-3.3)	0.7 (0.6-5.1)	0.83
IL-10	1.2 (0.04-7.0)	1.9 (0.1-27.8)	0.87
IL-12p70	1.0 (0.5-2.5)	1.0 (0.4-4.9)	0.09
IL-13	0.8 (0.10-3.4)	0.7 (0.1-3.8)	0.20
IL-15	0.9 (0.70-5.8)	1.0 (0.7-8.9)	0.67
IL-17A	2.5 (0.30-14.90)	0.5 (0.30-3.6)	<0.001
IL-18	36.5 (0.7-233.7)	65.4 (0.7-443.3)	0.30
IL-21	10.3 (0.10-58.3)	3.5 (0.10-65.9)	0.02
IL-22	4.9 (0.1-78.5)	2.4 (0.1-47.2)	0.05
IL-23	10.2 (0.1-74.4)	4.9 (0.2-13.9)	0.004
IL-27	8.2 (0.8-28.9)	4.51 (0.80-19.4)	0.16
IL-31	4.0 (0.30-17.3)	1.1 (0.30-11.5)	0.01
Eotaxin	26.0 (1.7-128.2)	11.6 (0.4-55.4)	0.004
GM-CSF	5.6 (0.20-124.0)	0.5 (0.20-8.6)	0.005
GRO.A	133.3 (0.6-351.8)	128.9 (0.0-271.2)	0.82
IFN- α	0.1 (0.10-0.3)	1.7 (0.10-58.50)	0.50
IFN- γ	14.9 (0.10-82.7)	41.9 (0.10-746.2)	0.23
IP10	320.1 (2.1-1863.3)	284.6 (0.99-2160.9)	0.55
MCP-1	842.3 (114.3-2207.0)	462.0 (23.3-1198.7)	<0.001
MCP-1A	62.5 (0.4-437.3)	39.8 (0.01-303.6)	0.10
MCP-1B	320.1 (19.7-2575.9)	305.3 (5.0-4439.5)	0.34
RANTES	13.8 (1.1-103.7)	6.0 (0.1-30.9)	0.004
SDF-1A	483.6 (31.5-1102.5)	469.5 (7.9-928.7)	0.82
TNF- α	21.5 (0.30-592.0)	2.0 (0.30-25.5)	0.05
TNF- β	4.9 (0.10-110.6)	3.7 (0.10-104.1)	0.76

IPA, invasive pulmonary aspergillosis; IL, interleukin; GM-CSF, granulocyte-macrophage colony-stimulating factor; GRO.A, human growth-regulated oncogene A; IFN, interferon; IP10, interferon gamma-induced protein 10; MCP, monocyte chemoattractant protein; RANTES, regulated on activation, normal T cell expressed and secreted; SDF-1A, stromal cell-derived factor 1A; TNF: tumor necrosis factor. P values were calculated by Mann-Whitney's test or Student's t-test.

Table S2. Significant associations between analytes and the abundance of bacterial taxa.

Analyte	Bacterial taxa	Association	P value
IL-1 β	<i>Staphylococcus</i>	Negative	0.05
IL-1RA	<i>Streptococcus</i>	Positive	0.01
	<i>Lactobacillales</i>	Positive	0.01
IL-2	<i>Bifidobacterium</i>	Positive	<0.001
	<i>Finegoldia</i>	Positive	0.04
	<i>Halomonas</i>	Positive	0.003
IL-5	<i>Bifidobacterium</i>	Positive	<0.001
	<i>Unclassified.P1</i>	Positive	0.006
IL-6	<i>Atopostipes</i>	Positive	0.001
	<i>Bifidobacterium</i>	Positive	<0.001
	<i>Curvibacter</i>	Positive	0.04
	<i>Finegoldia</i>	Positive	<0.001
	<i>Halomonas</i>	Positive	<0.001
	<i>Paraclostridium</i>	Positive	<0.001
	<i>Unclassified.P1</i>	Positive	<0.001
IL-7	<i>Staphylococcus</i>	Positive	0.002
	<i>Acetobacteraceae</i>	Positive	<0.001
	<i>Bacillales</i>	Positive	0.005
IL-8	<i>Acinetobacter</i>	Negative	0.004
	<i>Delftia</i>	Negative	0.03
	<i>Renibacterium</i>	Negative	0.009
	<i>Sphingomonas</i>	Negative	0.003
	<i>Alphaproteobacteria</i>	Negative	0.02
IL-10	<i>Bifidobacterium</i>	Positive	<0.001
IL-12p70	<i>Bifidobacterium</i>	Positive	<0.001
	<i>Sphingomonas</i>	Negative	0.008
	<i>Alphaproteobacteria</i>	Negative	0.006
	<i>Clostridia</i>	Negative	0.03
IL-13	<i>Bifidobacterium</i>	Positive	0.002
	<i>Capnocytophaga</i>	Positive	<0.001
	<i>Porphyromonas</i>	Positive	0.006
	<i>Sphingomonas</i>	Negative	0.01
IL-18	<i>Sphingomonas</i>	Negative	0.05
IL-22	<i>Corynebacterium</i>	Positive	<0.001
	<i>Corynebacteriaceae</i>	Positive	<0.001
IL-23	<i>Enterococcus</i>	Positive	<0.001
	<i>Actinobacteria</i>	Negative	0.04
IL-27	<i>Sphingomonas</i>	Negative	0.02

	<i>Actinobacteria</i>	Negative	0.005
	<i>Alphaproteobacteria</i>	Negative	0.01
Eotaxin	<i>Staphylococcus</i>	Positive	<0.001
	<i>Proteobacteria</i>	Negative	0.04
GRO.A	<i>Acinetobacter</i>	Negative	0.002
	<i>Delftia</i>	Negative	0.02
	<i>Sphingomonas</i>	Negative	0.02
	<i>Variovorax</i>	Negative	0.01
	<i>Alphaproteobacteria</i>	Negative	0.04
	<i>Patescibacteria</i>	Positive	0.005
MCP-1	<i>Anaerococcus</i>	Positive	0.003
	<i>Ferruginibacter</i>	Negative	0.003
	<i>Fingoldia</i>	Positive	0.003
	<i>Halomonas</i>	Positive	0.002
	<i>Sphingomonas</i>	Negative	0.02
MCP-1A	<i>Pseudomonas</i>	Positive	<0.001
	<i>Sphingomonadaceae</i>	Negative	0.05
MCP-1B	<i>Pseudomonas</i>	Positive	0.02
	<i>Streptococcus</i>	Positive	0.003
RANTES	<i>Escherichia</i>	Positive	0.002
	Unclassified.P1	Positive	0.01
SDF-1A	<i>Acinetobacter sp.</i>	Negative	0.001
	<i>Delftia sp.</i>	Negative	0.04
	<i>Renibacterium sp.</i>	Negative	0.004
	<i>Sphingomonas sp.</i>	Negative	0.009
	<i>Variovorax sp.</i>	Negative	0.01
	<i>Chitinophagaceae</i>	Negative	0.002
	<i>Rhizobiales</i>	Negative	0.02
	<i>Alphaproteobacteria</i>	Negative	0.02

IPA, invasive pulmonary aspergillosis; IL, interleukin; GRO.A, human growth-regulated oncogene A; MCP, monocyte chemoattractant protein; RANTES, regulated on activation, normal T cell expressed and secreted; SDF-1A, stromal cell-derived factor 1A.

Supplementary File 1

	mock.genera.copies			
	Even	Staggered	Even	Staggered
Acinetobacter	5	0,22	HM277D	HM278D
Actinomyces	5	0,02	HM782D	HM783D
Bacillus	5	2,19		
Bacteroides	5	0,02		
Clostridium	5	2,19		
Deinococcus	5	0,02		
Enterococcus	5	0,02		
Escherichia	5	21,91		
Helicobacter	5	0,22		
Lactobacillus	5	0,22		
Listeria	5	0,22		
Neisseria	5	0,22		
Propionibacterium	5	0,22		
Pseudomonas	5	2,19		
Rhodobacter	5	21,91		
Staphylococcus	10	24,1		
Streptococcus	15	24,12		

mock_rel_abunds

	HM277D	HM278D	HM782D	HM783D	Even	Staggered
Acinetobacter	5,67893933	0,28665287	3,98827913	0,23108062	HM277D	HM278D
Actinomyces	1,83202721	0,01433264	2,01535381	0,01670462	HM782D	HM783D
Bacillus	5,30188772	2,23015932	4,64790973	2,41882945		
Bacteroides	8,8885603	0,06936999	8,14494637	0,05735254		
Bifidobacterium	0	0	0	0,00334092		
Brucella	0	0	0	0,00167046		
Clostridium	5,40884223	2,07422016	4,46626271	1,92381578		
Corynebacterium	0,00542166	0	0,00530356	0		
Cutibacterium	1,24402386	0,06535685	1,39815171	0,08686404		
Deinococcus	2,09719552	0,01261273	3,35118866	0,0295115		
Enterococcus	3,30080339	0,05790388	2,64051126	0,06514803		
Escherichia	6,16885997	22,243116	6,53200037	23,5301324		
Granulicatella	0	0,04299793	0	0		
Helicobacter	9,50268618	0,57674557	11,7951234	0,51060465		
Lactobacillus	6,31475184	0,32047791	5,22997574	0,34411524		
Leptotrichia	0	0	0	0,01503416		
Listeria	5,45024397	0,2098299	5,54288593	0,21326236		
Neisseria	7,36113165	0,3697822	9,0989247	0,39534275		
Paraclostridium	0	0	0	0,00501139		
Pseudomonas	1,87540046	0,81409415	4,30980761	1,48058644		
Rhodobacter	2,050865	8,17992627	2,54438419	9,87911421		
Rothia	0	0	0,0072924	0,0027841		
Serratia	0	0	0,16109572	0		
Staphylococcus	12,9454384	32,0477908	11,7467284	27,4401278		
Streptococcus	14,5729213	30,3341799	12,3294573	31,2911003		
unclassified.Bacteria.Firmicutes.Bacilli.Bacillales.unclassified	0	0,00057331	0	0		
Veillonella	0	0,0498776	0,04441734	0,05846618		

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	HM277D	HM278D	HM782D	HM783D
Acinetobacter	5,67893933	0,28665287	3,98827913	0,23108062
Actinomyces	1,83202721	0,01433264	2,01535381	0,01670462
Bacillus	5,30188772	2,23015932	4,64790973	2,41882945
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Staphylococcus	12,9454384	32,0477908	11,7467284	27,4401278
Streptococcus	14,5729213	30,3341799	12,3294573	31,2911003

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Streptococcus	14,5729213	30,3341799	12,3294573	31,2911003

Bad.mock.rel_abunds

	HM277D	HM278D	HM782D	HM783D	Even	Staggered
Bifidobacterium	0	0	0	0,00334092	HM277D	HM278D
Brucella	0	0	0	0,00167046	HM782D	HM783D
Corynebacterium	0,00542166	0	0,00530356	0		
Cutibacterium	1,24402386	0,06535685	1,39815171	0,08686404		
Granulicatella	0	0,04299793	0	0		
Leptotrichia	0	0	0	0,01503416		
Paraclostridium	0	0	0	0,00501139		
Rothia	0	0	0,0072924	0,0027841		
Serratia	0	0	0,16109572	0		
unclassified.Bacteria.Firmicutes.Bacilli.Bacillales.unclassified	0	0,00057331	0	0		
Veillonella	0	0,0498776	0,04441734	0,05846618		

mock.counts

	HM277D	HM278D	HM782D	HM783D	Even	Staggered
Acinetobacter	11522	500	6016	415	HM277D	HM278D
Actinomyces	3717	25	3040	30	HM782D	HM783D
Bacillus	10757	3890	7011	4344		
Bacteroides	18034	121	12286	103		
Bifidobacterium	0	0	0	6		
Brucella	0	0	0	3		
Clostridium	10974	3618	6737	3455		
Corynebacterium	11	0	8	0		
Cutibacterium	2524	114	2109	156		
Deinococcus	4255	22	5055	53		
Enterococcus	6697	101	3983	117		
Escherichia	12516	38798	9853	42258		
Granulicatella	0	75	0	0		
Helicobacter	19280	1006	17792	917		
Lactobacillus	12812	559	7889	618		
Leptotrichia	0	0	0	27		
Listeria	11058	366	8361	383		
Neisseria	14935	645	13725	710		
Paraclostridium	0	0	0	9		
Pseudomonas	3805	1420	6501	2659		
Rhodobacter	4161	14268	3838	17742		
Rothia	0	0	11	5		
Serratia	0	0	243	0		
Staphylococcus	26265	55900	17719	49280		
Streptococcus	29567	52911	18598	56196		
unclassified.Bacteria.Firmicutes.Bacilli.Bacillales.unclassified	0	1	0	0		
Veillonella	0	87	67	105		

Supplementary File 2

Figure	Variable	Df	Sum of Sqs	Mean Sqs	F model	R2	Pr(>F)
figure 1B (Bray-Curtis vs Case.control)	Case.Control	1	1.155	1.15548	2.9390	0.02996	0.001
	Sex	1	0.416	0.41584	1.0577	0.01078	0.319
	Age	1	0.436	0.43572	1.1083	0.01130	0.233
	Residuals	93	36.564	0.39316	0.094796		
	Total	96	38.571	1.00000			
figure 1B (Jaccard vs Case.control)	Case.Control	1	1.155	1.15548	2.9390	0.02996	0.001
	Sex	1	0.416	0.41584	1.0577	0.01078	0.322
	Age	1	0.436	0.43572	1.1083	0.01130	0.235
	Residuals	93	36.564	0.39316	0.94796		
	Total	96	38.571	1.00000			
figure 3A (Bray-Curtis vs Neutrophils) removing 4 outliers	Neutrophils	1	1.219	1.21935	3.2091	0.03399	0.001
	Case.Control	1	1.062	1.06153	2.7938	0.02959	0.001
	Sex	1	0.389	0.38921	1.0243	0.01085	0.407
	Age	1	0.526	0.52627	1.3850	0.01467	0.058
	Residuals	86	32.677	0.37996	0.91090		
Total	90	35.873	1.00000				
figure 3A (Jaccard vs Neutrophils) removing 4 outliers	Neutrophils	1	0.5692	0.56922	1.7115	0.01852	0.011
	Case.Control	1	0.7916	0.79159	2.3802	0.02575	0.001
	Sex	1	0.3952	0.39515	1.1882	0.01285	0.157
	Age	1	0.3838	0.38381	1.1541	0.01249	0.113
	Residuals	86	28.6016	0.33258	0.93039		
Total	90	30.7413	1.00000				
figure 3B (Bray-Curtis vs Lymphocytes) removing 1 outlier	Lymphocytes	1	0.400	0.40015	1.0202	0.01085	0.380
	Case.Control	1	1.054	1.05399	2.6873	0.02857	0.002
	Sex	1	0.507	0.50732	1.2935	0.01375	0.193
	Age	1	0.418	0.41796	1.0656	0.01133	0.305
	Residuals	88	34.515	0.39222	0.93551		
Total	92	36.894	1.00000				
figure 3B (Jaccard vs Lymphocytes) removing 1 outlier	Lymphocytes	1	0.4057	0.40570	1.2155	0.01289	0.072
	Case.Control	1	0.8561	0.85606	2.5649	0.02719	0.001
	Sex	1	0.4691	0.46910	1.4055	0.01490	0.059
	Age	1	0.3787	0.37872	1.1347	0.01203	0.153
	Residuals	88	29.3711	0.33376	0.93299		
Total	92	31.4807	1.00000				
figure S1A (Disease) removing 1 outlier	Disease	8	3.865	0.48308	1.2509	0.10152	0.077
	Case.Control	1	0.913	0.91350	2.3654	0.02400	0.002
	Sex	1	0.448	0.44801	1.1601	0.01177	0.213
	Age	1	0.402	0.40160	1.0399	0.01055	0.307
	Residuals	84	32.440	0.38619	0.85216		
Total	95	38.068	1.00000				

Figure	Variable	Estimate	CI (2.5)	CI (97.5)	Std Err	t value	Pr(> t)
figure 1C (Shannon vs Case.control)	Intercept	2.4556	1.5262	3.3851	0.4680	5.2473	0.0000
	Case.controlControl	0.6877	0.3349	1.0405	0.1776	3.8715	0.0002
	SexM	-0.1455	-0.5153	0.2243	0.1862	-0.7813	0.4366
	Age	-0.0052	-0.0188	0.0084	0.0068	-0.7587	0.4500
	Group_Batch1	-0.3557	-0.7060	-0.0053	0.1764	-2.0163	0.0467
figure 1C (Simpson vs Case.control)	Intercept	0.8057	0.5621	1.0493	0.1227	6.5692	0.0000
	Case.controlControl	0.1391	0.0466	0.2315	0.0466	2.9870	0.0036
	SexM	-0.0113	-0.1082	0.0856	0.0488	-0.2317	0.8173
	Age	-0.0017	-0.0053	0.0019	0.0018	-0.9458	0.3467
	Group_Batch1	-0.0748	-0.1666	0.0170	0.0462	-1.6178	0.1091
figure 1C (Species richness vs Case.control)	Intercept	62.6193	35.6817	89.5570	13.5632	4.6169	0.0000
	Case.controlControl	18.2759	8.0513	28.5005	5.1481	3.5500	0.0006
	SexM	-13.1676	-23.8850	-2.4502	5.3962	-2.4401	0.0166
	Age	0.0997	-0.2940	0.4935	0.1983	0.5031	0.6161
	Group_Batch1	-27.6323	-37.7854	-17.4791	5.1121	-5.4052	0.0000
figure 4A (Shannon vs IL- 8) removing 2 outliers	Intercept	3.0946	1.8914	4.2978	0.6027	5.1349	0.0000
	IL-8	-0.0007	-0.0012	-0.0002	0.0002	-2.8266	0.0062
	Case.controlControl	0.4124	-0.0230	0.8478	0.2181	1.8912	0.0630
	SexM	-0.1816	-0.6240	0.2609	0.2216	-0.8193	0.4156
	Age	-0.0050	-0.0222	0.0123	0.0087	-0.5731	0.5685
Group_Batch1	-0.4142	-0.8404	0.0119	0.2135	-1.9406	0.0566	
figure 4A (Shannon vs IL- 27)	Intercept	2.8463	1.7136	3.9790	0.5675	5.0157	0.0000
	IL-27	-0.0481	-0.0777	-0.0186	0.0148	-3.2565	0.0018
	Case.controlControl	0.3908	-0.0253	0.8069	0.2085	1.8749	0.0652
	SexM	-0.1100	-0.5405	0.3206	0.2157	-0.5098	0.6119
	Age	-0.0044	-0.0208	0.0120	0.0082	-0.5371	0.5930
Group_Batch1	-0.3134	-0.7295	0.1028	0.2085	-1.5031	0.1375	
figure 4C (Finegoldia vs IL- 2) removing 2 outliers	Intercept	0.3584	-0.0092	0.7260	0.1841	1.9467	0.0558
	IL-2	0.0363	0.0065	0.0661	0.0149	2.4289	0.0179
	Case.controlControl	-0.1285	-0.2685	0.0115	0.0701	-1.8328	0.0713
	SexM	0.0070	-0.1283	0.1422	0.0677	0.1027	0.9185
	Age	-0.0048	-0.0100	0.0004	0.0026	-1.8328	0.0713
Group_Batch1	0.0827	-0.0460	0.2114	0.0645	1.2824	0.2042	
figure 4C (Finegoldia vs IL- 6) removing 2 outliers	Intercept	0.3394	0.0250	0.6539	0.1575	2.1553	0.0348
	IL-6	0.0001	0.0000	0.0002	0.0000	2.4865	0.0154
	Case.controlControl	-0.1215	-0.2377	-0.0052	0.0582	-2.0867	0.0408
	SexM	-0.0046	-0.1233	0.1141	0.0595	-0.0772	0.9387
	Age	-0.0044	-0.0090	0.0001	0.0023	-1.9500	0.0554
Group_Batch1	0.1243	0.0105	0.2381	0.0570	2.1799	0.0328	
figure 5A (Shannon vs Outcome)	Intercept	2.6420	1.6641	3.6199	0.4923	5.3666	0.0000
	Non-survivor	-0.2470	-0.6580	0.1640	0.2069	-1.1939	0.2356
	Case.controlControl	0.6191	0.2491	0.9892	0.1863	3.3234	0.0013
	SexM	-0.1834	-0.5577	0.1910	0.1885	-0.9730	0.3331
	Age	-0.0043	-0.0180	0.0093	0.0069	-0.6314	0.5294
Group_Batch1	-0.3698	-0.7201	-0.0194	0.1764	-2.0965	0.0388	
figure S1B (Delftia vs disease) removing 1 outlier	Intercept	0.4254	-0.1040	0.9548	0.2662	1.5981	0.1138
	Disease_Allo-HSCT	-0.0214	-0.2594	0.2167	0.01197	-0.1787	0.8586
	Disease_COPD	0.1391	-0.4759	0.7541	0.3092	0.4498	0.6540
	Disease_Chronic lymph... disease	-0.0773	-0.3523	0.1977	0.1383	-0.5589	0.5778
	Disease_AML	-0.6013	-1.5066	0.3040	0.4552	-1.3212	0.1901
	Disease_Influenza	-0.0636	-0.4086	0.2814	0.1734	-0.3665	0.7149
	Disease_Cirrhosis	-0.3561	-0.7664	0.0542	0.2063	-1.7262	0.0880
	Disease_Solid tumor	0.2608	-0.1531	0.6747	0.2081	1.2532	0.2137

	Disease_SOT	-0.1163	-0.4612	0.2286	0.1734	-0.6707	0.5043
	Case.controlControl	0.0876	-0.0954	0.2707	0.0920	0.9521	0.3438
	SexM	0.0233	-0.1599	0.2065	0.0921	0.2532	0.8007
	Age	-0.0067	-0.0142	0.0008	0.0038	-1.7823	0.0784
	Group_Batch1	0.3634	0.1770	0.5498	0.0937	3.8773	0.0002
figure S2A (Shannon vs β.lactam)	Intercept	2.7828	1.8249	3.7407	0.4822	5.7706	0.0000
	β.lactamYes	-0.4431	-0.8445	-0.0418	0.2021	-2.1931	0.0309
	Case.controlControl	0.5989	0.2439	0.9539	0.1787	3.3509	0.0012
	SexM	-0.0911	-0.4568	0.2747	0.1841	-0.4945	0.6221
	Age	-0.0047	0.0181	0.0086	0.0067	-0.7076	0.4810
	Group_Batch1	-0.3999	-0.7456	-0.0543	0.1740	-2.2982	0.0238
figure S2B (Prevotella vs β- lactam)	Intercept	-1.4241	-7.2511	4.4029	2.9335	-0.4855	0.6285
	β.lactamYes	-2.7435	-5.1852	-0.3019	1.2292	-2.2320	0.0281
	Case.controlControl	4.6860	2.5266	6.8455	1.0871	4.3104	0.0000
	SexM	-0.9635	-3.1884	1.2615	1.1201	-0.8602	0.3920
	Age	0.0963	0.0152	0.1773	0.0408	2.3600	0.0204
	Group_Batch1	-1.5219	-3.6246	0.5809	1.0586	-1.4376	0.1540
figure S2C (Prevotella vs Age)	Intercept	-3.4495	-9.1086	2.2095	2.8493	-1.2106	0.2291
	Age	0.0935	0.0108	0.1762	0.0416	2.2455	0.0271
	Case.controlControl	5.2360	3.0881	7.3840	1.0815	4.8414	0.0000
	SexM	-1.3003	-3.5518	0.9512	1.1336	-1.1470	0.2543
	Group_Batch1	-1.2477	-3.3807	0.8852	1.0740	-1.1618	0.2483
figure S3A (Shannon vs Neutrophils)	Intercept	2.3540	1.4027	3.3052	0.4784	4.9203	0.0000
	Neutrophils	0.0000	-0.0001	0.0000	0.0000	-1.1187	0.2664
	Case.controlControl	0.6166	0.2522	0.9811	0.1833	3.3643	0.0012
	SexM	-0.1925	-0.5767	0.1916	0.1932	-0.9966	0.3218
	Age	-0.0010	-0.0154	0.0134	0.0073	-0.1375	0.8909
	Group_Batch1	-0.2994	-0.6657	0.0669	0.1842	-1.6251	0.1078
figure S3A (Shannon vs Lymphocytes)	Intercept	2.3778	1.4292	3.3264	0.4773	4.9821	0.0000
	Lymphocytes	0.0000	-0.0001	0.0001	0.0001	-0.1156	0.9083
	Case.controlControl	0.6376	0.2747	1.0006	0.1826	3.4916	0.0008
	SexM	-0.1900	-0.5780	0.1979	0.1952	-0.9736	0.3329
	Age	-0.0026	-0.0167	0.0116	0.0071	-0.3606	0.7193
	Group_Batch1	-0.3316	-0.6965	0.0333	0.1836	-1.8061	0.0744
figure S3B (unclassified.Phy vs Neutrophils)	Intercept	1.2573	-4.2322	6.7468	2.7610	0.4554	0.6500
	Neutrophils	0.0006	0.0003	0.0009	0.0001	4.1931	0.0001
	Case.controlControl	-1.8616	-3.9647	0.2415	1.0578	-1.7599	0.0820
	SexM	1.2640	-0.9529	3.4809	1.1150	1.1336	0.2601
	Age	-0.0016	-0.0849	0.0818	0.0419	-0.0377	0.9700
	Group_Batch1	-3.1424	-5.2563	-1.0284	1.0632	-2.9556	0.0040
figure S4 (See results for figure 4)							
Figure S5 (Time to death vs Case.control)	Intercept	489.1053	40.2535	937.9571	225.9981	2.1642	0.0330
	Case.controlControl	253.2282	82.8585	423.5970	85.7812	2.9520	0.0040
	SexM	71.1949	-107.385	249.7750	89.9156	0.7918	0.4305
	Age	-3.0868	-9.6476	3.4740	3.3034	-0.9344	0.3525
	Group_Batch1	-116.4242	-285.603	52.7542	85.1818	-1.3668	0.1750

Survival analyses	Hazard ratio	Estimate CI (2.5)	Estimate CI (97.5)	Pr(> z)
Cases_only.Shannon_range.Low_High	4.195	0.2921	2.5757	0.0138
Controls_only.Shannon_range.Low_High	1.2647	-0.8881	1.3578	0.6819

Supplementary File 3

bray

	UZ.P066	UZ.P067	UZ.P068	UZ.P069	UZ.P070	UZ.P071	UZ.P072	UZ.P073
UZ.P066	NA							
UZ.P067	0.695134751	NA						
UZ.P068	0.959231664	0.986768614	NA					
UZ.P069	0.813583466			0.966559196	NA			
UZ.P070	0.750458136	0.573601544		0.992317686	0.948167785	NA		
UZ.P071	0.510407534	0.807498437		0.960992452	0.766610582	0.835533109	NA	
UZ.P072	0.868336868	0.945429904		0.981620633	0.91945174	0.960444635	0.833069086	NA
UZ.P073	0.62512177	0.749553843		0.921346051	0.836047624	0.787374191	0.464780934	0.842624534
UZ.P074	0.67449833	0.420844633		0.990349664	0.943430087	0.510827871	0.820396667	0.956623431
UZ.P056	0.886731722	0.930350627		0.961579105	0.912675675	0.958331983	0.722485186	0.90055898
UZ.P075	0.774736307	0.840865914		0.810874581	0.854314912	0.873100795	0.605913195	0.84345177
UZ.P076	0.621991295	0.904383256		0.610425311	0.812524467	0.92009105	0.584851858	0.876158774
UZ.P077	0.365612926	0.903674735		0.967918667	0.810833047	0.925598122	0.473185475	0.848298545
UZ.P079	0.862314461	0.949495139		0.994339524	0.971024502	0.947960012	0.871260178	0.959977929
UZ.P080	0.941800432	0.956625785		0.974306137	0.950919995	0.97955131	0.894703566	0.958735246
UZ.P081	0.439282758	0.89528576		0.967689969	0.819216782	0.910147337	0.451823947	0.869800049
UZ.P083	0.913880024	0.981367945		0.942918406	0.951280064	0.991658498	0.914142163	0.963468152
UZ.P084	0.911172363	0.96821244		0.59804297	0.925424164	0.980586096	0.845975282	0.945214841
UZ.P085	0.900885258	0.88370606		0.950852351	0.915477085	0.910183261	0.777746754	0.934015911
UZ.P057	0.698767078	0.619286725		0.812420584	0.925557433	0.724619666	0.822732849	0.955017059
UZ.P086	0.898004587	0.990795924		0.893732092	0.959754479	0.990627547	0.80768023	0.964876084
UZ.P087	0.938805056	0.864595034		0.99551072	0.95699413	0.900128202	0.919977713	0.918043391
UZ.P089	0.994670323	0.991185104		0.988520022	0.994151587	0.992432999	0.979828929	0.993634539
UZ.P091	0.994018607	0.991313409		0.992456444	0.994973231	0.992822377	0.986525505	0.993547888
UZ.P092	0.985219308	0.974316302		0.986534495	0.985804494	0.981863698	0.960523643	0.990135518
UZ.P093	0.474338343	0.702070233		0.953922237	0.793237748	0.730174043	0.502826623	0.825498821
UZ.P094	0.783525962	0.62778316		0.989255603	0.93844436	0.488733861	0.867766459	0.944934972
UZ.P095	0.859357828	0.855120787		0.968528305	0.917392259	0.902805219	0.819309789	0.906858298
UZ.P096	0.598386716	0.804687572		0.597582054	0.865785462	0.789152959	0.651976688	0.854834272
UZ.P097	0.633165731	0.825172174		0.958669605	0.820623325	0.816260725	0.562240867	0.838420545
UZ.P058	0.487738702	0.590275075		0.960804488	0.833996461	0.630179135	0.583863125	0.886047389
UZ.P098	0.88679452	0.998246772		0.948214884	0.977490935	0.997872094	0.865858172	0.967645402
UZ.P099	0.710387841	0.627867475		0.952430147	0.873935943	0.621848059	0.65448112	0.891148618
UZ.P100	0.694755202	0.855109765		0.977458106	0.892522895	0.885285898	0.663080081	0.879102933
UZ.P101	0.867569468	0.709423481		0.987634498	0.94081567	0.574879513	0.842770027	0.944672185
UZ.P102	0.939356313	0.86946312		0.989667021	0.958422122	0.858954462	0.918068833	0.958399676
UZ.P103	0.743867985	0.529952314		0.996346965	0.948659107	0.434611026	0.848225426	0.960852451
UZ.P104	0.601594487	0.734554132		0.972059813	0.862329345	0.721725537	0.626613119	0.849705988
UZ.P105	0.718007432	0.565202073		0.988158824	0.941108198	0.487403037	0.84628283	0.948135947
UZ.P106	0.574767226	0.705411171		0.979066654	0.872362822	0.701371746	0.574397801	0.869380966
UZ.P107	0.772180253	0.62847178		0.993852742	0.94995493	0.460928593	0.862125553	0.963593261
UZ.P108	0.699615997	0.579190316		0.996868911	0.951027107	0.40145991	0.845410226	0.965825838
UZ.P110	0.849430069	0.676952274		0.996200241	0.956358211	0.677671261	0.865836124	0.965067509
UZ.P111	0.682029693	0.428032407		0.99208117	0.941752482	0.485464666	0.847966069	0.953909167
UZ.P112	0.941356006	0.95160675		0.944493843	0.951131106	0.975138281	0.872633535	0.96371271
UZ.P113	0.688159237	0.609673469		0.994119885	0.952005431	0.636762557	0.866234738	0.963772797
UZ.P114	0.713458022	0.63853759		0.987970113	0.950894842	0.609646887	0.870519509	0.962332944
UZ.P065	0.960651331	0.961647984		0.956660526	0.966328261	0.978914367	0.882643462	0.967451568
UZ.P061	0.484519898	0.845722034		0.972215041	0.808734789	0.874317057	0.590230231	0.885571915
UZ.P063	0.976186007	0.973261441		0.966724365	0.977810536	0.988741443	0.914350431	0.978815887
UZ.P064	0.384017551	0.600161214		0.953417525	0.80532328	0.692858664	0.447337874	0.84851261
UZ.P124	0.797543851	0.930482172		0.912044008	0.965770822	0.976830592	0.739337859	0.960852091
UZ.P127	0.962803981	0.986422687		0.977259622	0.973880716	0.992982	0.947876489	0.985552764
UZ.P128	0.800509267	0.984139065		0.984300856	0.974954639	0.992960818	0.7097624	0.961555893
UZ.P129	0.993804848	0.99573321		0.992168164	0.994656774	0.997264398	0.985747659	0.995647329
UZ.P130	0.991639821	0.988795232		0.992850631	0.992445518	0.992632165	0.981440006	0.993311719
UZ.P131	0.962371548	0.993340359		0.85927683	0.969259662	0.99663806	0.965090815	0.991366877
UZ.P132	0.998281376	0.998210867		0.997197242	0.998461034	0.998166494	0.994762627	0.998382385
UZ.P133	0.839354473	0.905265471		0.918516742	0.881690183	0.979532723	0.715753092	0.815591313
UZ.P115	0.949250827	0.989320885		0.923174738	0.956206519	0.991588101	0.936484734	0.985073147
UZ.P134	0.916503125	0.896481874		0.973907342	0.940519797	0.935708335	0.869714572	0.955067602
UZ.P135	0.991609505	0.998168713		0.992961671	0.995709419	0.997060879	0.986629649	0.995563064
UZ.P136	0.797855488	0.67010731		0.979809818	0.945128583	0.703857029	0.79539405	0.964212645
UZ.P137	0.996264917	0.995031159		0.993381879	0.995752207	0.9968088	0.988526648	0.996571717
UZ.P138	0.929019877	0.922308979		0.971105031	0.97110228	0.868868585	0.912537453	0.973030122
UZ.P139	0.85772685	0.599059683		0.995145918	0.935948951	0.748715886	0.80347842	0.954017686
UZ.P140	0.864670615	0.641131203		0.993931259	0.936733847	0.709855556	0.796196943	0.955918983
UZ.P141	0.86714723	0.643864631		0.993062327	0.935105828	0.853390576	0.820868139	0.9534563
UZ.P142	0.871051956	0.870692753		0.974394147	0.926989325	0.884906644	0.811711412	0.81976687
UZ.P143	0.835126147	0.997611073		0.986559952	0.99018437	0.99684612	0.793524988	0.978160962
UZ.P116	0.911919203	0.981587539		0.377664743	0.959444575	0.994853787	0.921532341	0.960775198
UZ.P144	0.869852396	0.845216065		0.981053188	0.961385186	0.887428792	0.857918119	0.919962105
UZ.P145	0.914391775	0.988589757		0.933721923	0.956980044	0.998581858	0.896165232	0.970678733
UZ.P146	0.887845234	0.67398983		0.995992096	0.938450296	0.772832747	0.831127188	0.953885316
UZ.P147	0.958565485	0.962871578		0.996264274	0.975651145	0.968113144	0.941997509	0.979461451
UZ.P148	0.95300409	0.962201018		0.979752635	0.973998584	0.973148024	0.923412909	0.976823212
UZ.P149	0.95787772	0.97238252		0.990795228	0.977399177	0.977331734	0.948038168	0.976361601
UZ.P150	0.995084563	0.992706728		0.995560213	0.995158278	0.995108289	0.985707533	0.99618471
UZ.P151	0.982678303	0.994893774		0.983457557	0.989674596	0.994552627	0.958513661	0.987247202
UZ.P152	0.84340572	0.829614554		0.974186894	0.929525223	0.801044041	0.82767526	0.9393477
UZ.P153	0.920245822	0.974980787		0.987269958	0.96386675	0.98738643	0.898854046	0.976112758
UZ.P117	0.81916125	0.99082251		0.735574147	0.962499393	0.991646027	0.750873284	0.970496709
UZ.P154	0.886782898	0.80083292		0.884115808	0.938430424	0.885744606	0.88153547	0.965347013
UZ.P155	0.814727826	0.902935848		0.987265716	0.965359242	0.836718141	0.684238497	0.958982137
UZ.P156	0.708681255	0.632509945		0.967740523	0.93211972	0.689865377	0.759251915	0.906537114
UZ.P157	0.934950128	0.986742977		0.977193054	0.973652447	0.99361078	0.89580239	0.957361557
UZ.P158	0.938759946	0.990599226		0.962171133	0.971253597	0.994879967	0.926465215	0.709729327
UZ.P159	0.945861233	0.939214997		0.986295356	0.96442773	0.95751493	0.886371586	0.966120582
UZ.P160	0.929255806	0.853428545		0.987844539	0.957566886	0.894349208	0.902745989	0.961093263
UZ.P161	0.776240846	0.876152596		0.980181606	0.957060834	0.891869624	0.642341964	0.940272602
UZ.P162	0.852040624	0.69656997		0.830212066	0.917729794	0.783947657	0.7576269	0.951546981
UZ.P163	0.966275938	0.984572044		0.937572361	0.965612626	0.995320488	0.952333707	0.988044456
UZ.P164	0.946404611	0.915182664		0.981010674	0.954561165	0.945406259	0.908907576	0.976055863
UZ.P119	0.928479589	0.983513068		0.980662867	0.972561366	0.995724094	0.873264076	0.943349848
UZ.P120	0.914591585	0.930054615		0.801473003	0.944605981	0.938495392	0.854669677	0.873461376

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UZ.P083	UZ.P084	UZ.P085	UZ.P057	UZ.P086	UZ.P087	UZ.P089	UZ.P091
0.913880024	0.911172363	0.900885258	0.698767078	0.898004587	0.938805056	0.994670323	0.994018607
0.981367945	0.96821244	0.88370606	0.619286725	0.990795924	0.864595034	0.991185104	0.991313409
0.942918406	0.59804297	0.950852351	0.812420584	0.893732092	0.99551072	0.988520022	0.992456444
0.951280064	0.925424164	0.915477085	0.925557433	0.959754479	0.95699413	0.994151587	0.994973231
0.991658498	0.980586096	0.910183261	0.724619666	0.990627547	0.900128202	0.992432999	0.992822377
0.914142163	0.845975282	0.777746754	0.822732849	0.80768023	0.919977713	0.979828929	0.886525505
0.963468152	0.945214841	0.934015911	0.955017059	0.964876084	0.961669732	0.993634539	0.993547888
0.878040433	0.782104292	0.778054323	0.687649665	0.715968255	0.918043391	0.977340946	0.984789128
0.990129023	0.981172251	0.871255335	0.482809347	0.987519627	0.870228285	0.994312708	0.990397885
0.883372068	0.799834371	0.799834371	0.921561991	0.810918229	0.963241004	0.93449567	0.971035263
0.864801624	0.528914639	0.765124449	0.722327427	0.706887731	0.888719606	0.965885746	0.978355386
0.935678313	0.644429876	0.881922512	0.790175738	0.88475312	0.949059437	0.993874533	0.993993575
0.922908556	0.905459002	0.873238573	0.900436591	0.88982269	0.946310179	0.989310574	0.993853005
0.982068284	0.985669888	0.96323863	0.967126254	0.941919708	0.961003963	0.996710551	0.996688539
0.947270702	0.890874159	0.933984126	0.962458526	0.962597988	0.708331928	0.968502503	0.987381589
0.927929416	0.889994263	0.864794793	0.868703159	0.874632832	0.960200483	0.987368576	0.988702815
NA	0.897028834	0.928279001	0.931128926	0.874540665	0.995631369	0.97905548	0.987321073
NA	0.897028834	NA	0.694729269	0.741390001	0.98705748	0.956375261	0.979233658
NA	0.84192465	NA	0.827718592	0.826573818	0.902644264	0.89375112	0.921207979
NA	0.694729269	0.827718592	NA	0.869251326	0.949055181	0.980211112	0.989134396
NA	0.741390001	0.741390001	NA	0.869251326	0.991945811	0.996723102	0.947976879
NA	0.98705748	0.98705748	0.869251326	NA	0.994905181	0.996723102	0.99361921
NA	0.98705748	0.98705748	0.869251326	NA	0.991945811	0.996723102	0.99361921
NA	0.84192465	NA	0.827718592	0.826573818	0.902644264	0.89375112	0.921207979
NA	0.694729269	0.827718592	NA	0.869251326	0.949055181	0.980211112	0.989134396
NA	0.741390001	0.741390001	NA	0.869251326	0.991945811	0.996723102	0.947976879
NA	0.98705748	0.98705748	0.869251326	NA	0.994905181	0.996723102	0.99361921
NA	0.98705748	0.98705748	0.869251326	NA	0.991945811	0.996723102	0.99361921
NA	0.84192465	NA	0.827718592	0.826573818	0.902644264	0.89375112	0.921207979
NA	0.694729269	0.827718592	NA	0.869251326	0.949055181	0.980211112	0.989134396
NA	0.741390001	0.741390001	NA	0.869251326	0.991945811	0.996723102	0.947976879
NA	0.98705748	0.98705748	0.869251326	NA	0.994905181	0.996723102	0.99361921
NA	0.98705748	0.98705748	0.869251326	NA	0.991945811	0.996723102	0.99361921
0.981367945	0.96821244	0.88370606	0.619286725	0.990795924	0.864595034	0.991185104	0.991313409
0.942918406	0.59804297	0.950852351	0.812420584	0.893732092	0.99551072	0.988520022	0.992456444
0.951280064	0.925424164	0.915477085	0.925557433	0.959754479	0.95699413	0.994151587	0.994973231
0.991658498	0.980586096	0.910183261	0.724619666	0.990627547	0.900128202	0.992432999	0.992822377
0.914142163	0.845975282	0.777746754	0.822732849	0.80768023	0.919977713	0.979828929	0.886525505
0.963468152	0.945214841	0.934015911	0.955017059	0.964876084	0.961669732	0.993634539	0.993547888
0.878040433	0.782104292	0.778054323	0.687649665	0.715968255	0.918043391	0.977340946	0.984789128
0.990129023	0.981172251	0.871255335	0.482809347	0.987519627	0.870228285	0.994312708	0.990397885
0.883372068	0.799834371	0.799834371	0.921561991	0.810918229	0.963241004	0.93449567	0.971035263
0.864801624	0.528914639	0.765124449	0.722327427	0.706887731	0.888719606	0.965885746	0.978355386
0.935678313	0.644429876	0.881922512	0.790175738	0.88475312	0.949059437	0.993874533	0.993993575
0.922908556	0.905459002	0.873238573	0.900436591	0.88982269	0.946310179	0.989310574	0.993853005
0.982068284	0.985669888	0.96323863	0.967126254	0.941919708	0.961003963	0.996710551	0.996688539
0.947270702	0.890874159	0.933984126	0.962458526	0.962597988	0.708331928	0.968502503	0.987381589
0.927929416	0.889994263	0.864794793	0.868703159	0.874632832	0.960200483	0.987368576	0.988702815
NA	0.897028834	0.928279001	0.931128926	0.874540665	0.995631369	0.97905548	0.987321073
NA	0.897028834	NA	0.694729269	0.741390001	0.98705748	0.956375261	0.979233658
NA	0.84192465	NA	0.827718592	0.826573818	0.902644264	0.89375112	0.921207979
NA	0.694729269	0.827718592	NA	0.869251326	0.949055181	0.980211112	0.989134396
NA	0.741390001	0.741390001	NA	0.869251326	0.991945811	0.996723102	0.947976879
NA	0.98705748	0.98705748	0.869251326	NA	0.994905181	0.996723102	0.99361921
NA	0.98705748	0.98705748	0.869251326	NA	0.991945811	0.996723102	0.99361921
0.981367945	0.96821244	0.88370606	0.619286725	0.990795924	0.864595034	0.991185104	0.991313409
0.942918406	0.59804297	0.950852351	0.812420584	0.893732092	0.99551072	0.988520022	0.992456444
0.951280064	0.925424164	0.915477085	0.925557433	0.959754479	0.95699413	0.994151587	0.994973231
0.991658498	0.980586096	0.910183261	0.724619666	0.990627547	0.900128202	0.992432999	0.992822377
0.914142163	0.845975282	0.777746754	0.822732849	0.80768023	0.919977713	0.979828929	0.886525505
0.963468152	0.945214841	0.934015911	0.955017059	0.964876084	0.961669732	0.993634539	0.993547888
0.878040433	0.782104292	0.778054323	0.687649665	0.715968255	0.918043391	0.977340946	0.984789128
0.990129023	0.981172251	0.871255335	0.482809347	0.987519627	0.870228285	0.994312708	0.990397885
0.883372068	0.799834371	0.799834371	0.921561991	0.810918229	0.963241004	0.93449567	0.971035263
0.864801624	0.528914639	0.765124449	0.722327427	0.706887731	0.888719606	0.965885746	0.978355386
0.935678313	0.644429876	0.881922512	0.790175738	0.88475312	0.949059437	0.993874533	0.993993575
0.922908556	0.905459002	0.873238573	0.900436591	0.88982269	0.946310179	0.989310574	0.993853005
0.982068284	0.985669888	0.96323863	0.967126254	0.941919708	0.961003963	0.996710551	0.996688539
0.947270702	0.890874159	0.933984126	0.962458526	0.962597988	0.708331928	0.968502503	0.987381589
0.927929416	0.889994263	0.864794793	0.868703159	0.874632832	0.960200483	0.987368576	0.988702815
NA	0.897028834	0.928279001	0.931128926	0.874540665	0.995631369	0.97905548	0.987321073
NA	0.897028834	NA	0.694729269	0.741390001	0.98705748	0.956375261	0.979233658
NA	0.84192465	NA	0.827718592	0.826573818	0.902644264	0.89375112	0.921207979
NA	0.694729269	0.827718592	NA	0.869251326	0.949055181	0.980211112	0.989134396
NA	0.741390001	0.741390001	NA	0.869251326	0.991945811	0.996723102	0.947976879
NA	0.98705748	0.98705748	0.869251326	NA	0.994905181	0.996723102	0.99361921
NA	0.98705748	0.98705748	0.869251326	NA	0.991945811	0.996723102	0.99361921

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UZ.P061	UZ.P063	UZ.P064	UZ.P124	UZ.P127	UZ.P128	UZ.P129	UZ.P130
0.484519898	0.976186007	0.384017551	0.797543851	0.962803981	0.800509267	0.993804848	0.991639821
0.845722034	0.973261441	0.600161214	0.930482172	0.986422687	0.984139065	0.99573321	0.988795232
0.972215041	0.966724365	0.953417525	0.912044008	0.972759622	0.984300856	0.992168164	0.992850631
0.808734789	0.977810536	0.80532328	0.965770822	0.973880716	0.974954639	0.994656774	0.992445518
0.874317057	0.988741443	0.699285864	0.976830592	0.992982	0.992960818	0.997264398	0.992623106
0.580230231	0.914350431	0.447337874	0.739337859	0.947876489	0.7097624	0.985747659	0.981440065
0.885571915	0.978815887	0.84851261	0.960852091	0.985552764	0.961555893	0.995647329	0.993311719
0.648953429	0.899717428	0.899717428	0.543377539	0.779829192	0.933576961	0.836938556	0.980508944
0.852432614	0.990358757	0.569160674	0.976079691	0.989102483	0.991710436	0.994895555	0.989425178
0.836840217	0.738185224	0.798462808	0.888838642	0.799761146	0.800605347	0.971534301	0.966031449
0.752669083	0.856108988	0.703654727	0.791313081	0.925126246	0.884022954	0.981445937	0.976397057
0.642240144	0.969840183	0.634267286	0.884471502	0.970122292	0.931845818	0.992627643	0.98998576
0.490826272	0.952071525	0.600377725	0.725707231	0.961974738	0.675825645	0.992648888	0.989595247
0.944068308	0.990011325	0.902223573	0.82132825	0.996505891	0.794261574	0.998022781	0.996460526
0.910226321	0.880033571	0.941765044	0.988612205	0.9811713065	0.980899106	0.995498301	0.983785036
0.481610532	0.9542423	0.553096099	0.848936465	0.950659217	0.838506443	0.990201653	0.988200814
0.93147282	0.915967918	0.910506613	0.922852916	0.931259068	0.946636897	0.989963312	0.993090505
0.902144539	0.859438388	0.885149797	0.848643299	0.926020408	0.955844438	0.978928698	0.970935914
0.869491782	0.827796889	0.876620562	0.937539417	0.820577063	0.912126896	0.95670259	0.947986991
0.866057106	0.951329181	0.621126572	0.891021608	0.961411257	0.976232868	0.988283176	0.988055055
0.927492299	0.851529359	0.867807378	0.68671422	0.894932068	0.682523638	0.973221092	0.98125621
0.922251594	0.995865005	0.913983018	0.995756132	0.9938233	0.995180948	0.999549253	0.991694423
0.987793415	0.683463979	0.993339201	0.997453646	0.987955208	0.990495004	0.98887312	0.994894858
0.993026333	0.857142857	0.992545565	0.991141257	0.956452668	0.984858441	0.985527729	0.985699859
0.967872428	0.719410634	0.982895161	0.996298389	0.929478354	0.98234161	0.983949756	0.970141551
0.549980817	0.937845579	0.455816585	0.90390229	0.963503059	0.923109105	0.990184479	0.986951388
0.868778548	0.984076629	0.711440973	0.980534149	0.992853181	0.990550092	0.996860306	0.99400607
0.883988243	0.926924172	0.866952566	0.948783748	0.952024151	0.947547447	0.988897107	0.982789732
0.777606956	0.977527573	0.626854439	0.732430706	0.983641405	0.746773899	0.993795234	0.992391162
0.713295172	0.957027654	0.569803583	0.800009641	0.945009292	0.903215427	0.990620334	0.987923413
0.6954259	0.970759551	0.435162572	0.868825033	0.951870537	0.900034344	0.992592391	0.988859809
0.968645832	0.990368553	0.884977023	0.812162795	0.990258235	0.847035268	0.996300485	0.999165093
0.771040324	0.926452046	0.628679527	0.885611029	0.931988572	0.927273768	0.988865124	0.984139134
0.825157229	0.972201633	0.737690574	0.726921051	0.964108285	0.673958449	0.992150359	0.989678984
0.899733696	0.979486785	0.821035677	0.960502158	0.978072333	0.981739995	0.993713546	0.982097948
0.947743076	0.990498991	0.910997232	0.97924536	0.989080807	0.984900282	0.995920693	0.989466703
0.860752945	0.995427002	0.691919143	0.979228682	0.994796497	0.996759141	0.998582592	0.993055145
0.764399037	0.972269406	0.537854313	0.880623378	0.954610484	0.906328416	0.992513231	0.989305367
0.872831809	0.982456676	0.632550176	0.923814649	0.981618909	0.981767384	0.997238103	0.992635168
0.750375233	0.968687799	0.54490385	0.864469503	0.961984377	0.865587189	0.995596012	0.979166088
0.875262215	0.990718866	0.747519786	0.986549642	0.993572576	0.990523589	0.997099967	0.993166076
0.87084619	0.995280236	0.667435236	0.983321163	0.99429257	0.995967815	0.9978628	0.994061566
0.892617404	0.995234831	0.76793966	0.979742646	0.99365612	0.993250042	0.998032286	0.993050972
0.856386326	0.987644565	0.605417181	0.9741389	0.995203779	0.993386768	0.999499129	0.994193559
0.925989759	0.759423503	0.93163377	0.932460889	0.78729547	0.950912438	0.956986024	0.948866835
0.880776396	0.993805398	0.687080096	0.980123883	0.994947081	0.99438118	0.997778118	0.994025101
0.8811272	0.985086871	0.679256844	0.984957735	0.99617583	0.994233885	0.997849061	0.994532459
0.925855333	0.43653348	0.951517983	0.958290409	0.841070635	0.927960293	0.949671948	0.954775123
NA	0.948137506	0.676049591	0.942923876	0.958984436	0.941953883	0.991269989	0.98796643
0.948137506 NA	0.968812279 NA	0.968812279 NA	0.971472747 NA	0.971472747 NA	0.914235002 NA	0.940761195 NA	0.97519457 NA
0.676049591	0.968812279 NA	0.812380372 NA	0.971472747 NA	0.953583039 NA	0.838679372 NA	0.992820742 NA	0.990247684 NA
0.942923876	0.914235002 NA	0.953583039 NA	0.838679372 NA	0.855307553 NA	0.404451372 NA	0.912268646 NA	0.985341709 NA
0.958984436	0.940761195 NA	0.982207484 NA	0.982207484 NA	0.912268646 NA	0.920203477 NA	0.982860753 NA	0.93384818 NA
0.941953883	0.96877521 NA	0.990247684 NA	0.990247684 NA	0.912268646 NA	0.982860753 NA	0.208585008 NA	0.208585008 NA
0.991269989	0.979553037 NA	0.95145463 NA	0.841896711 NA	0.904784891 NA	0.986457318 NA	0.460706633 NA	0.550211864 NA
0.98796643	0.959240133 NA	0.996832418 NA	0.995421233 NA	0.91882331 NA	0.993764691 NA	0.459590494 NA	0.584843366 NA
0.980032837	0.882866159 NA	0.793611597 NA	0.791598896 NA	0.915245671 NA	0.937957443 NA	0.90228583 NA	0.930332075 NA
0.996307936	0.882842627 NA	0.942610574 NA	0.86735929 NA	0.728316208 NA	0.930338939 NA	0.741624117 NA	0.805384184 NA
0.852204685	0.935169928 NA	0.89103804 NA	0.932171095 NA	0.855494344 NA	0.930245136 NA	0.805389749 NA	0.818338119 NA
0.965910704	0.960405707 NA	0.988239042 NA	0.987629001 NA	0.974204947 NA	0.983625691 NA	0.740597831 NA	0.78293831 NA
0.909226868	0.97873968 NA	0.745900618 NA	0.965882283 NA	0.892450208 NA	0.979550102 NA	0.691436772 NA	0.720236223 NA
0.993464343	0.928170595 NA	0.995974147 NA	0.993106038 NA	0.917116168 NA	0.987607523 NA	0.651006711 NA	0.72943765 NA
0.949462527	0.954950538 NA	0.831117728 NA	0.950946256 NA	0.905713284 NA	0.95847083 NA	0.822714681 NA	0.855248537 NA
0.833464229	0.99872263 NA	0.816824452 NA	0.974310731 NA	0.992340734 NA	0.992834222 NA	0.999406739 NA	0.990191141 NA
0.849572816	0.994957872 NA	0.805811316 NA	0.964045527 NA	0.979530514 NA	0.987825913 NA	0.990709727 NA	0.980204735 NA
0.874777894	0.985956347 NA	0.830785509 NA	0.922563143 NA	0.960326516 NA	0.981912368 NA	0.987603854 NA	0.976823764 NA
0.890881016	0.985311305 NA	0.849983843 NA	0.839386151 NA	0.785260278 NA	0.958817104 NA	0.983276526 NA	0.980164282 NA
0.958416976	0.972267458 NA	0.877150139 NA	0.542033345 NA	0.980918413 NA	0.356406673 NA	0.985433103 NA	0.993951613 NA
0.957688887	0.989521284 NA	0.905377969 NA	0.870091748 NA	0.93937503 NA	0.972127766 NA	0.98585031 NA	0.991908488 NA
0.914701278	0.966790782 NA	0.862043736 NA	0.857908159 NA	0.934676859 NA	0.889881973 NA	0.982717317 NA	0.988186584 NA
0.96271992	0.980141919 NA	0.91015068 NA	0.79009956 NA	0.795338894 NA	0.921531356 NA	0.977971014 NA	0.981012769 NA
0.874278792	0.996725677 NA	0.841582735 NA	0.972827386 NA	0.968050117 NA	0.990369054 NA	0.91251636 NA	0.908496331 NA
0.960229096	0.995813734 NA	0.955911804 NA	0.66234661 NA	0.788209256 NA	0.958190319 NA	0.992696867 NA	0.982056028 NA
0.957652399	0.953119678 NA	0.965573981 NA	0.964899759 NA	0.911883718 NA	0.955193489 NA	0.742233794 NA	0.76810415 NA
0.960212147	0.984461428 NA	0.960353261 NA	0.987040175 NA	0.955010924 NA	0.973484799 NA	0.845730674 NA	0.856737993 NA
0.993106184	0.96100832 NA	0.992636514 NA	0.983724728 NA	0.867137067 NA	0.965713374 NA	0.721713442 NA	0.7800263 NA
0.973926331	0.815614773 NA	0.980009799 NA	0.919125831 NA	0.777624655 NA	0.868623653 NA	0.703206692 NA	0.772802985 NA
0.872269756	0.977670477 NA	0.838270899 NA	0.919165829 NA	0.837928762 NA	0.951468866 NA	0.928728308 NA	0.92791411 NA
0.95061784	0.978340941 NA	0.922438385 NA	0.926725776 NA	0.840902954 NA	0.938600496 NA	0.977420381 NA	0.966645788 NA
0.937097631	0.957675822 NA	0.830804825 NA	0.54018191 NA	0.931304105 NA	0.523787348 NA	0.867649804 NA	0.881429573 NA
0.900224939	0.990382346 NA	0.861637331 NA	0.848004047 NA	0.915638963 NA	0.989600895 NA	0.847160531 NA	0.860087563 NA
0.905963088	0.949301431 NA	0.824534732 NA	0.673654815 NA	0.928522077 NA	0.565826074 NA	0.888228448 NA	0.906998659 NA
0.85080765	0.983185531 NA	0.655171192 NA	0.883666807 NA	0.888372366 NA	0.94252538 NA	0.983186794 NA	0.980618883 NA
0.955195011	0.949152542 NA	0.926899962 NA	0.889954821 NA	0.726190871 NA	0.912831152 NA	0.888090432 NA	0.896926799 NA
0.972411459	0.990476048 NA	0.908764509 NA	0.827890801 NA	0.84129093 NA	0.956483016 NA	0.986447265 NA	0.983988321 NA
0.956330395	0.940180704 NA	0.937324222 NA	0.857332215 NA	0.547845232 NA	0.87945688 NA	0.926891956 NA	0.939659418 NA
0.921586203	0.993387215 NA	0.920150353 NA	0.756744289 NA	0.883507892 NA	0.972060461 NA	0.990142011 NA	0.984763467 NA
0.895606757	0.944242695 NA	0.772050678 NA	0.552448544 NA	0.931088222 NA	0.352414753 NA	0.958172927 NA	0.963171931 NA
0.8328684	0.993062126 NA	0.772870751 NA	0.842020561 NA	0.954182662 NA	0.993923319 NA	0.989998889 NA	0.985412295 NA
0.975956506	0.9						

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UZ.P131	UZ.P132	UZ.P133	UZ.P115	UZ.P134	UZ.P135	UZ.P136	UZ.P137
0.962371548	0.998281376	0.839354473	0.949250827	0.916503125	0.991690505	0.797855468	0.996264917
0.993340359	0.998210867	0.905265471	0.989320885	0.896481874	0.998166713	0.67010731	0.995031159
0.85927683	0.997197242	0.918516742	0.923174738	0.973907342	0.992961671	0.979809818	0.993381879
0.969259562	0.998461034	0.881690183	0.956206519	0.940519797	0.995709419	0.945128583	0.995752207
0.99663806	0.998166494	0.979532723	0.991588101	0.935708335	0.997060879	0.703857029	0.9968088
0.965090815	0.994762627	0.715753092	0.936484734	0.869714572	0.986629649	0.79539405	0.988526648
0.991366877	0.998382385	0.915591313	0.985073147	0.950607602	0.995563064	0.964212645	0.996571717
0.897073703	0.995034437	0.644140421	0.886972107	0.874209335	0.988821538	0.650824582	0.9893038
0.993577239	0.997795795	0.955958664	0.989211003	0.888314011	0.998757877	0.591963609	0.994392847
0.966584967	0.984276613	0.754067971	0.868947087	0.84533818	0.97669466	0.906261654	0.970611645
0.73417487	0.990946825	0.582931855	0.841620339	0.811160286	0.981699175	0.884359304	0.983198947
0.868568575	0.996840228	0.831791692	0.944199079	0.932746657	0.984525183	0.906556695	0.994144982
0.976775032	0.996414679	0.84126885	0.964980788	0.912527933	0.993582366	0.907808842	0.993758567
0.998034941	0.999228256	0.981706345	0.993708268	0.966845696	0.996010886	0.972087961	0.997362394
0.995687206	0.996325173	0.904773535	0.970988104	0.957107469	0.986557285	0.978800334	0.988879804
0.974666886	0.996014778	0.840282094	0.957301009	0.899797062	0.980751316	0.855409071	0.993383163
0.935265872	0.995857646	0.908215165	0.902305424	0.947640068	0.989930423	0.973817286	0.989971816
0.601386427	0.988082598	0.778408671	0.811323677	0.915006676	0.983311978	0.946106149	0.979697164
0.894338056	0.974145548	0.894097667	0.809911845	0.800488879	0.987548282	0.711397513	0.942959586
0.835040138	0.995172295	0.886581219	0.877655641	0.927315029	0.992508486	0.5735914	0.989271003
0.70581713	0.987565183	0.727536092	0.659236545	0.894659992	0.969939933	0.939588607	0.962481265
0.997163024	0.999642495	0.994892614	0.993878954	0.931713988	0.999527606	0.930622627	0.997219949
0.994021049	0.986731654	0.974293237	0.968631105	0.992877734	0.986763365	0.996284794	0.935753846
0.988731474	0.979356568	0.977883751	0.94472323	0.979693141	0.992255107	0.988183161	0.956580071
0.992406759	0.964812367	0.970617355	0.92835704	0.962779878	0.98800578	0.977506775	0.938327658
0.960545045	0.995942868	0.768256276	0.944995981	0.876053847	0.992449469	0.680597221	0.992215681
0.996628468	0.998120502	0.99879965	0.991394309	0.952922869	0.996337874	0.83129702	0.997188689
0.973495351	0.995065085	0.898119122	0.952733167	0.874913216	0.990881872	0.953995464	0.99092907
0.892850342	0.998595352	0.817619938	0.957920495	0.922715434	0.996170699	0.818550859	0.997081964
0.962415763	0.996259207	0.719808777	0.94549498	0.864988624	0.993087502	0.884028578	0.993017822
0.970178415	0.997542771	0.814128226	0.951581972	0.896772976	0.992845675	0.743744793	0.996151748
0.937049512	0.999374722	0.924679106	0.95667554	0.979622725	0.995604247	0.988534778	0.998500963
0.958067161	0.994851651	0.859899661	0.935564953	0.836537982	0.991269329	0.811419877	0.990584737
0.983932148	0.997867242	0.904282614	0.973570082	0.911127666	0.992647917	0.895457626	0.993944344
0.992589314	0.995082822	0.968366764	0.978789259	0.894783574	0.99757071	0.907716133	0.992456377
0.996247156	0.996933345	0.979312117	0.986868678	0.935304538	0.995478453	0.941292039	0.985663432
0.997527681	0.999158111	0.984939977	0.995543763	0.940500458	0.998657924	0.731477449	0.996242915
0.976578876	0.9969989	0.805504699	0.96296746	0.859397629	0.995308609	0.75166448	0.995681202
0.99722055	0.997900288	0.914173544	0.987338667	0.911321251	0.995054035	0.749590257	0.997993705
0.99588498	0.998194059	0.827496011	0.985643744	0.899754707	0.994973511	0.808061602	0.997101538
0.997147906	0.998086682	0.986701261	0.989341881	0.936568204	0.994854996	0.718618484	0.99641357
0.998021479	0.999186212	0.995085038	0.995584156	0.939296237	0.998636437	0.708600747	0.99684896
0.995720639	0.999089369	0.973294307	0.994381297	0.925083031	0.99949759	0.781752015	0.996615274
0.996918854	0.999306381	0.968362941	0.995639805	0.930806258	0.999531561	0.744519701	0.997756009
0.866240707	0.968529769	0.816911803	0.721222612	0.878486593	0.993237532	0.916879178	0.94115937
0.997499103	0.999107241	0.953417158	0.993707582	0.941444924	0.998014143	0.758425784	0.996940625
0.997148777	0.998656567	0.982464713	0.992367871	0.955573422	0.995663905	0.780868145	0.996270771
0.948553459	0.971422767	0.887653469	0.845409674	0.878539859	0.967743914	0.947363389	0.935121888
0.980032837	0.996307936	0.852204685	0.965910704	0.909226868	0.993451797	0.850102658	0.993464343
0.979530307	0.959240133	0.882866159	0.882842627	0.935169928	0.960405702	0.97873968	0.928170595
0.95145463	0.996832418	0.793615974	0.94261055	0.90103804	0.988239042	0.745900618	0.995974147
0.841896711	0.995421233	0.791598896	0.86735929	0.932171095	0.987629001	0.965882283	0.993106038
0.904784891	0.91882331	0.915245671	0.728316208	0.855494344	0.974204947	0.892450208	0.917161168
0.986457318	0.993764691	0.937957443	0.930338939	0.930245136	0.983625691	0.979550102	0.987607523
0.460706633	0.459590494	0.90228583	0.741624117	0.805389749	0.740597831	0.691436772	0.651006711
0.550211864	0.584844366	0.930332075	0.805384184	0.818338119	0.78293831	0.720236223	0.72943765
NA	0.580672128	0.756183952	0.611785977	0.80756809	0.781873011	0.700063189	0.723208458
0.580672128	NA	0.895254731	0.461174789	0.777478712	0.661447313	0.685670648	0.392550143
0.756183952	0.895254731	NA	0.701227317	0.808776826	0.914861007	0.906670791	0.889424036
0.611785977	0.646174789	0.701227317	NA	0.786717284	0.786717284	0.812051254	0.777293538
0.80756809	0.777478712	0.808776826	0.786717284	NA	0.833602998	0.818641193	0.755795981
0.781873011	0.661447313	0.914861007	0.812051254	0.833602998	NA	0.818641193	0.739525717
0.700063189	0.685670648	0.906670791	0.777293538	0.755795981	0.818641193	0.789960175	0.789960175
0.723208458	0.392550143	0.889424036	0.652638191	0.794794145	0.739525717	0.789960175	NA
0.79141698	0.787144764	0.856958696	0.74991705	0.762152805	0.858619931	0.844028353	0.784989316
0.995871942	0.999378806	0.985386637	0.99544906	0.887855596	1	0.81200182	0.997111913
0.990876211	0.99226525	0.974557865	0.981832392	0.873178617	0.994212082	0.772763377	0.990897414
0.988606208	0.992352228	0.877775853	0.969862626	0.844683342	0.988115327	0.823244815	0.988824104
0.959305615	0.996467273	0.954294211	0.912113087	0.863826274	0.952366001	0.839247967	0.993811744
0.984164179	0.992786773	0.961789844	0.972246987	0.96184475	0.986372961	0.985556873	0.991973822
0.740373131	0.996004545	0.835717591	0.897550944	0.939900266	0.991402724	0.972955822	0.993863664
0.97731889	0.995641667	0.82564874	0.949818371	0.844933372	0.986492833	0.969833965	0.994165307
0.840187228	0.993265655	0.803244443	0.775088874	0.933561482	0.950765921	0.942180279	0.988750463
0.918454803	0.894437593	0.939783891	0.896572414	0.792496868	0.92458058	0.763570341	0.894149615
0.995967996	0.998191954	0.998057023	0.946758546	0.9178027	0.985724505	0.919783478	0.996313403
0.776734948	0.689304548	0.910861813	0.777677316	0.795118664	0.790262603	0.79302818	0.745935771
0.857347163	0.825727821	0.940851112	0.873084701	0.392427962	0.874302881	0.851715254	0.830451
0.782473999	0.440730086	0.876928927	0.583022987	0.825826614	0.799341163	0.826316356	0.462661738
0.780682887	0.486756268	0.834566241	0.516908213	0.773520961	0.766241413	0.810454888	0.508988263
0.906210641	0.934552136	0.89876553	0.864347942	0.766637143	0.937209431	0.850881068	0.930316873
0.971313894	0.991595893	0.982739592	0.905004327	0.916943145	1	0.937824515	0.984478165
0.546590142	0.861918416	0.803688454	0.748404648	0.847680101	0.887791717	0.873622445	0.860933679
0.595180996	0.818338715	0.757569423	0.672694787	0.716520651	0.880530397	0.803305234	0.8170908
0.860233066	0.875630163	0.855403015	0.803273398	0.825508857	0.901460509	0.890630292	0.872210428
0.948379542	0.994949962	0.861318091	0.873883849	0.90248101	0.99898547	0.434734886	0.990866051
0.878659966	0.874916438	0.755846624	0.743113606	0.846363934	0.926473544	0.864278703	0.871968191
0.933248112	0.99609531	0.848168407	0.882512414	0.960994918	0.994380222	0.957016777	0.9930902
0.937002531	0.918631965	0.955008886	0.815004294	0.916237166	0.969744206	0.930966021	0.920726447
0.982192056	0.996937244	0.974826564	0.954723663	0.917952975	0.988553563	0.920524263	0.994349072
0.954319255	0.965790726	0.897713476	0.922205037	0.830755674	0.966195463	0.854745504	0.962401141
0.750934854	0.997763627	0.859755933	0.868376332	0.855745419	0.999745082	0.727674713	0.993944265
0.634133746	0.691778367	0.70685032	0.381300144	0.840560708	0.872381911	0.81369155	

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UZ.P145	UZ.P146	UZ.P147	UZ.P148	UZ.P149	UZ.P150	UZ.P151	UZ.P152
0.914391775	0.887845234	0.958565485	0.95300409	0.95787772	0.995084563	0.982678303	0.84340572
0.988589757	0.67398983	0.962871578	0.962201018	0.97238252	0.992706728	0.994893774	0.829614554
0.933721923	0.995992096	0.996264274	0.979752635	0.990795228	0.99560213	0.983457557	0.974186894
0.956968044	0.938450296	0.975651145	0.973998584	0.977399177	0.995158278	0.989674596	0.929525223
0.998581858	0.772832747	0.968113144	0.973148024	0.977331734	0.995108289	0.994552627	0.801044041
0.896165232	0.831127188	0.941997509	0.923412909	0.948038168	0.985707533	0.958513661	0.82767526
0.970678733	0.953885316	0.979461451	0.976823212	0.976361601	0.99618471	0.987247202	0.9393477
0.850570456	0.846510139	0.936368904	0.94931007	0.949874895	0.988738794	0.953149663	0.843836272
0.994720285	0.681747097	0.956591871	0.960793676	0.965403971	0.991378922	0.996458784	0.823373074
0.882414912	0.932251024	0.879201392	0.90115778	0.929202764	0.962863811	0.825854365	0.88217202
0.826272128	0.811549567	0.926386628	0.922719204	0.940588019	0.977399914	0.940644587	0.759730659
0.92743642	0.916198722	0.962630743	0.967676503	0.973726316	0.993888911	0.977275679	0.911729081
0.945076409	0.909434366	0.969698898	0.95221367	0.962599774	0.992245615	0.97916117	0.897761591
0.991594408	0.941602213	0.963854383	0.985976787	0.986356896	0.996236801	0.988514838	0.947918997
0.992053587	0.949359391	0.980999596	0.974224915	0.981162246	0.992884415	0.975706083	0.96563493
0.947399446	0.924710776	0.948032163	0.969951746	0.949071493	0.996267091	0.974189335	0.905506808
0.924439723	0.996265158	0.990906954	0.804197564	0.987999303	0.994897314	0.964776086	0.924785128
0.868190216	0.979659262	0.980134942	0.943522381	0.967413787	0.985055351	0.94321986	0.930767126
0.867310909	0.780847145	0.884375227	0.866980166	0.913488548	0.941220477	0.934444653	0.782549399
0.905939935	0.899250267	0.956923951	0.968795514	0.971726764	0.984583227	0.985601152	0.921492966
0.807331228	0.987616325	0.990921148	0.954245682	0.97747317	0.951145572	0.84723415	0.936419663
0.999341806	0.846297866	0.963510444	0.97419545	0.972292669	0.994096438	0.999363494	0.884274979
0.99743515	0.996552783	0.998730872	0.980164372	0.996857065	0.977366703	0.968218875	0.995995014
0.990518846	0.991891956	0.989572929	0.975026806	0.989677595	0.934461341	0.956777459	0.982657662
0.996572082	0.967767857	0.987655458	0.951348932	0.982612447	0.933541607	0.958281702	0.948935608
0.895091832	0.876077888	0.950852322	0.914771805	0.935433518	0.990602011	0.970672776	0.868097543
0.996418378	0.796952878	0.979997224	0.970616793	0.981012022	0.996841467	0.993899619	0.866222698
0.941349891	0.836083307	0.955626485	0.904942995	0.94831851	0.987782844	0.976932186	0.837973562
0.935262961	0.909746341	0.970283834	0.966982798	0.965050001	0.995907262	0.98205574	0.875441388
0.853785961	0.879775157	0.93818303	0.941409041	0.944649346	0.991162266	0.972243481	0.80411176
0.930450846	0.839871744	0.960135876	0.951308151	0.97128945	0.993492599	0.976884486	0.802660537
0.944268225	0.999910588	1	0.904628224	0.996270612	0.997870109	0.984557213	0.984800386
0.908156301	0.705968649	0.943025998	0.924214777	0.943719714	0.988545644	0.965358544	0.670554277
0.945697007	0.834670635	0.964025889	0.946252902	0.969361899	0.992554205	0.976917934	0.844306016
0.974927135	0.672676404	0.944543624	0.94212905	0.951991496	0.985517179	0.990346983	0.692365854
0.98637096	0.878590481	0.964224648	0.837470999	0.97496472	0.989951795	0.9916547	0.916167508
0.998681292	0.718073217	0.970952345	0.98549657	0.968774031	0.99557783	0.998735927	0.839538824
0.898155688	0.904388938	0.952715423	0.939467411	0.910140844	0.992990492	0.977476502	0.849032246
0.974940439	0.855648119	0.962794245	0.971109259	0.977523868	0.993482503	0.990856825	0.875150755
0.895793801	0.827803988	0.948243993	0.918815503	0.960083886	0.99423768	0.976931637	0.780003817
0.998259102	0.787076147	0.969837887	0.965468338	0.977784416	0.994556804	0.99318543	0.87789349
0.999635374	0.812555404	0.968822825	0.974390083	0.9693942	0.994778881	0.998632518	0.837806464
0.996199034	0.815347722	0.973750096	0.988138034	0.981750588	0.993490543	0.998525449	0.895306443
0.996560437	0.693217742	0.972326322	0.968106799	0.970857703	0.992450262	0.999417318	0.81644625
0.835054398	0.941470434	0.938098188	0.853446229	0.944207467	0.936937596	0.9270431	0.849137267
0.998044358	0.840282263	0.976543773	0.982923434	0.977265442	0.996700214	0.996936466	0.907087997
0.997993891	0.841170031	0.976289704	0.977100729	0.973556595	0.996254171	0.994608132	0.892115971
0.930680483	0.963968311	0.966662531	0.888287592	0.940572052	0.931863727	0.836366124	0.908416193
0.96271992	0.874278792	0.960229096	0.957652399	0.960212147	0.993106184	0.973926331	0.872269756
0.980141919	0.996725677	0.995813734	0.953119678	0.984461428	0.96100832	0.815614773	0.977670477
0.91015068	0.841582735	0.955911804	0.965573981	0.960353261	0.992636514	0.980099799	0.838270899
0.79009956	0.972827386	0.66234661	0.964899759	0.987040175	0.983724728	0.919125831	0.919165829
0.795338894	0.968050117	0.788209256	0.911883718	0.955010924	0.867137067	0.777624655	0.837928762
0.921531356	0.990369054	0.958190319	0.955193483	0.973484799	0.965713374	0.868623653	0.951468666
0.977971014	0.91251636	0.992696867	0.742233794	0.845730674	0.721713442	0.703206692	0.928728308
0.981012769	0.908496331	0.982056028	0.76810415	0.856737993	0.7800263	0.772802985	0.92791411
0.840187228	0.918454803	0.995967996	0.776734948	0.857347163	0.782473999	0.780682887	0.906210641
0.993265655	0.894437593	0.998191954	0.689304548	0.825727821	0.440730086	0.486756268	0.934552136
0.803244443	0.939783891	0.989057023	0.910861813	0.940851112	0.876928927	0.834566241	0.89876553
0.775088874	0.896572414	0.946758546	0.776773716	0.873084701	0.583022987	0.516908213	0.864347942
0.933561482	0.974296868	0.9178027	0.795118664	0.392427962	0.825826614	0.773520961	0.766637143
0.950765921	0.924580058	0.985724505	0.790262803	0.874302881	0.799341163	0.766241413	0.937209431
0.942180279	0.763570341	0.919783478	0.79302818	0.851175254	0.826316356	0.850881068	0.850881068
0.988750463	0.894149615	0.996313403	0.745935771	0.830451	0.462661738	0.508988263	0.930316873
0.934554028	0.860411899	0.998321193	0.840074288	0.824399437	0.813742259	0.821240972	0.818795205
0.998653132	0.491698619	0.950500753	0.929886285	0.952791369	0.989475161	0.999133988	0.768796927
0.990229035	0.552478748	0.94077596	0.949934942	0.958580361	0.980950461	0.988483376	0.713785103
0.953086125	0.724291595	0.934936781	0.946654653	0.958303407	0.982511311	0.978697205	0.792537733
0.604750807	0.82116651	0.789820816	0.903237627	0.962004543	0.98561466	0.950831648	0.648282338
0.989095666	0.996404621	0.999242083	0.987274854	0.992184626	0.994906788	0.949014085	0.987538115
0.77816194	0.988857793	0.963950808	0.924307183	0.97794414	0.991461837	0.98481399	0.850827003
0.833622641	0.799857349	0.957670147	0.941980696	0.977615185	0.983923484	0.939360004	0.767562312
NA	0.997752899	0.838600221	0.873724427	0.873724427	0.972382111	0.919792166	0.707335063
0.997752899	NA	0.940387591	0.940387591	0.850974167	0.874311845	0.893394842	0.69185162
0.838600221	0.940387591	NA	0.95446915	0.941384172	0.983740954	0.937810408	0.876266873
0.873724427	0.850974167	0.95446915	NA	0.818081728	0.776734746	0.766898812	0.822658021
0.985848686	0.892153957	0.941384172	0.818081728	NA	0.866317619	0.866057468	0.883360639
0.972382111	0.874311845	0.983740954	0.776734746	0.866317619	NA	0.390253725	0.914513693
0.919792166	0.893394842	0.937810408	0.766898812	0.866057468	0.914513693	0.916500848	NA
0.707335063	0.69185162	0.876266873	0.822658021	0.883360639	0.967679505	0.929556533	0.659915589
0.600079055	0.964252472	0.866666667	0.8217725	0.933186376	0.883544007	0.817497125	0.915655594
0.877968687	0.933948912	0.979644463	0.865653061	0.902580125	0.81589352	0.820992313	0.738322341
0.870385692	0.648446206	0.93805297	0.834283224	0.843138338	0.85432375	0.798982458	0.749244713
0.954544753	0.727921597	0.996138456	0.867740739	0.907914365	0.978699786	0.951790867	0.781977972
0.685003374	0.873615101	0.869267382	0.90379741	0.957998266	0.825596002	0.771744408	0.778530644
0.700687094	0.937311166	0.863859667	0.815532174	0.907703947	0.98332981	0.954754022	0.874595279
0.744259493	0.991556393	0.846126857	0.922094	0.985938847	0.886888348	0.7912665	0.813205175
0.733540759	0.915488952	0.786999071	0.844209935	0.935510656	0.988741575	0.966813863	0.771323217
0.732913655	0.850164443	0.685219849	0.925068843	0.970916156	0.9558727	0.889906309	0.820229532
0.979150579	0.836275466	0.932085195	0.948850313	0.938048098	0.986952955	0.994868384	0.794543932
0.896847706	0.639830847	0.937719308	0.954241056	0.944492978	0.986952955	0.915997681	0.868622081
0.772819572	0.897297518	0.969666372	0.816564036	0.896182117	0.564336918	0.66470723	0

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UZ.P122	UZ.P123
0,988423126	0,892726052
0,99012326	0,912120742
0,989461162	0,964902611
0,990397898	0,94517386
0,993630935	0,925782078
0,967674029	0,867771677
0,991113784	0,957247984
0,969478612	0,845709629
0,98882693	0,891742726
0,940575131	0,841714514
0,962039299	0,792565026
0,988489413	0,927725463
0,986362863	0,907050388
0,99459404	0,966603904
0,978985562	0,956307296
0,981642874	0,884206562
0,983755155	0,951756716
0,963650381	0,911349986
0,903006718	0,677575758
0,979220989	0,911441488
0,937300413	0,90113598
0,993592153	0,927990509
0,938262195	0,994175432
0,956646961	0,985615251
0,927539025	0,957961733
0,98178401	0,878455871
0,993787055	0,949068466
0,975904253	0,872652783
0,991253567	0,923862882
0,981829767	0,838606404
0,983886097	0,884562878
0,995546413	0,982587503
0,977051431	0,848055736
0,986519656	0,907886049
0,981085047	0,876942688
0,989279956	0,942667405
0,993573045	0,924418015
0,986705836	0,879060626
0,992185267	0,940129138
0,988785379	0,859541745
0,993652741	0,933772018
0,996498375	0,934485279
0,994377132	0,955312275
0,994605457	0,930962438
0,90168514	0,774127182
0,994726005	0,943567635
0,994395818	0,95001507
0,897761085	0,879553757
0,982007074	0,89465186
0,912172759	0,958736397
0,984969448	0,896266393
0,974306437	0,918469571
0,914953998	0,782875871
0,97378058	0,967448916
0,292387723	0,943234937
0,437007326	0,943171643
0,434944864	0,903876991
0,326688817	0,94566896
0,888733659	0,914468681
0,690380596	0,821568339
0,774301532	0,749964594
0,673113324	0,96119899
0,66229501	0,829622563
0,551822176	0,948616195
0,788476493	0,855813153
0,993432349	0,864080918
0,980603638	0,862637927
0,96945703	0,851047227
0,966522636	0,752785988
0,986701632	0,983883317
0,970334984	0,828128428
0,971857581	0,876982352
0,941840545	0,715605601
0,896365707	0,805827385
0,966279003	0,827896712
0,681204284	0,81975452
0,83582644	0,884670994
0,6170724	0,946383409
0,596359105	0,917439932
0,898103359	0,592718966
0,960482708	0,731244814
0,854254127	0,913713671
0,825771761	0,724158001
0,875656221	0,855196516
0,974506253	0,755889289
0,846846295	0,745451981
0,973886637	0,856871108
0,896150999	0,820408606
0,97460983	0,785880019
0,958172635	0,848482581
0,984785805	0,801240056
0,752501905	0,839166751
0,365668152	0,85817428
0,665505464	0,720727161
0,957662891	0,824904745
0,930408848	0,816397229
NA	0,902471805
0,902471805 NA	

Supplementary File 4

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	UZ.P066	UZ.P067	UZ.P068	UZ.P069	UZ.P070	UZ.P071	UZ.P072	UZ.P073
UZ.P066	NA							
UZ.P067	0.81884058	NA						
UZ.P068	0.795454545	0.90625	NA					
UZ.P069	0.616071429	0.737704918	0.756410256	NA				
UZ.P070	0.816793893	0.533333333	0.872093023	0.74137931	NA			
UZ.P071	0.626086957	0.792307692	0.795180723	0.657657658	0.758333333	NA		
UZ.P072	0.692307692	0.784	0.782051282	0.702702703	0.809917355	0.663636364	NA	
UZ.P073	0.654205607	0.837398374	0.788732394	0.689320388	0.805309735	0.591836735	0.642857143	NA
UZ.P074	0.831858407	0.621052632	0.825396825	0.794117647	0.602272727	0.8	0.825242718	0.857142857
UZ.P056	0.712962963	0.810344828	0.791044776	0.712871287	0.818181818	0.656565657	0.693877551	0.677777778
UZ.P075	0.723577236	0.7	0.821428571	0.642201835	0.701754386	0.709401709	0.730434783	0.719626168
UZ.P076	0.628865979	0.810810811	0.75	0.694736842	0.830188679	0.677083333	0.688172043	0.62195122
UZ.P077	0.625	0.816666667	0.75	0.673287327	0.824561404	0.63	0.639175258	0.677419355
UZ.P079	0.834782609	0.757009346	0.882352941	0.820754717	0.75	0.814814815	0.861111111	0.824742268
UZ.P080	0.744444444	0.857142857	0.720930233	0.731707317	0.804597701	0.770114943	0.8	0.708333333
UZ.P081	0.631067961	0.861788618	0.779411765	0.742857143	0.842105263	0.65	0.631578947	0.593023256
UZ.P083	0.68	0.860869565	0.724137931	0.71875	0.828571429	0.701030928	0.726315789	0.727272727
UZ.P084	0.76146789	0.824561404	0.737704918	0.714285714	0.788461538	0.722772277	0.708333333	0.662790689
UZ.P085	0.706422018	0.842975207	0.779411765	0.705882353	0.831858407	0.738317757	0.7	0.698924731
UZ.P057	0.717171717	0.864864865	0.745454545	0.744680851	0.843137255	0.75257732	0.739130435	0.770114943
UZ.P086	0.806818182	0.905263158	0.694444444	0.8	0.870588235	0.807228916	0.825	0.802816901
UZ.P087	0.862068966	0.649484536	0.911764706	0.77	0.648351648	0.844036697	0.858490566	0.88
UZ.P089	0.887640449	0.923076923	0.633333333	0.846153846	0.888888889	0.879518072	0.857142857	0.855072464
UZ.P091	0.829545455	0.903225806	0.783783784	0.825	0.880952381	0.872093023	0.805194805	0.797101449
UZ.P092	0.787878788	0.855769231	0.76	0.78021978	0.793478261	0.747252747	0.761363636	0.765432099
UZ.P093	0.678990983	0.734513274	0.71641791	0.59375	0.714285714	0.685714286	0.683168317	0.694736842
UZ.P094	0.792349727	0.543046358	0.883561644	0.74556213	0.623376623	0.778409091	0.779069767	0.781818182
UZ.P095	0.743421053	0.8125	0.853448276	0.77027027	0.802631579	0.75	0.767123288	0.760869565
UZ.P096	0.659574468	0.820754717	0.740740741	0.685393258	0.818181818	0.709677419	0.736263736	0.641025641
UZ.P097	0.651376147	0.822580645	0.780821918	0.633663366	0.789473684	0.603960396	0.67961165	0.556818182
UZ.P058	0.620689565	0.728	0.8	0.63963964	0.731092437	0.660869565	0.726495726	0.678899083
UZ.P098	0.929411765	0.953488372	0.777777778	0.891891892	0.962025316	0.9375	0.918918919	0.940298507
UZ.P099	0.698412698	0.606837607	0.76744186	0.616071429	0.663973103	0.64957265	0.692307692	0.678899083
UZ.P100	0.700854701	0.792	0.763157895	0.756521739	0.808333333	0.684684685	0.763157895	0.730769231
UZ.P101	0.787671233	0.545454545	0.866666667	0.727272727	0.564102564	0.751824818	0.751824818	0.782945736
UZ.P102	0.801980198	0.823529412	0.788461538	0.727272727	0.769230769	0.736263736	0.764044944	0.797619048
UZ.P103	0.8125	0.610294118	0.918032787	0.716312057	0.607692308	0.805194805	0.837662338	0.819444444
UZ.P104	0.705357143	0.809917355	0.791666667	0.740740741	0.807017544	0.663461538	0.735849057	0.697916667
UZ.P105	0.778688525	0.642201835	0.87654321	0.75	0.6	0.777777778	0.767857143	0.759615385
UZ.P106	0.704761905	0.805309735	0.741935484	0.663157895	0.79047619	0.686868687	0.670212766	0.666666667
UZ.P107	0.813333333	0.638461538	0.857142857	0.757352941	0.637096774	0.797202797	0.807142857	0.846715328
UZ.P108	0.849206349	0.654205607	0.898734177	0.763636364	0.568421053	0.801724138	0.86440678	0.831775701
UZ.P110	0.837837838	0.623655914	0.873015873	0.775510204	0.695652174	0.794117647	0.757894737	0.815217391
UZ.P111	0.867816092	0.537313433	0.938931298	0.839506173	0.607407407	0.869822485	0.858895706	0.872611465
UZ.P112	0.774774775	0.826086957	0.721311475	0.704081633	0.778846154	0.737864078	0.737373737	0.739130435
UZ.P113	0.824742268	0.77173913	0.782608696	0.75	0.75	0.786516854	0.816091954	0.794871795
UZ.P114	0.810606061	0.655172414	0.821428571	0.786885246	0.654545455	0.782258065	0.79338843	0.838983051
UZ.P060	0.741071429	0.803418803	0.742424242	0.718446602	0.8	0.714285714	0.7	0.698924731
UZ.P061	0.6	0.785714286	0.8	0.632075472	0.771186441	0.62962963	0.638095238	0.574468085
UZ.P063	0.772727273	0.885416667	0.717948718	0.746835443	0.887640449	0.771084337	0.772151899	0.705882353
UZ.P064	0.596330275	0.666666667	0.8125	0.615384615	0.736842105	0.586538462	0.621359223	0.628865979
UZ.P124	0.854166667	0.898989899	0.869565217	0.865168539	0.913978495	0.857142857	0.862689666	0.8575
UZ.P127	0.82	0.896226415	0.846153846	0.840425532	0.91	0.808510638	0.824175824	0.819277100
UZ.P128	0.776595745	0.871287129	0.787234043	0.76744186	0.872340426	0.73255814	0.804597701	0.733333333
UZ.P129	0.880434783	0.9375	0.902439024	0.853658537	0.931818182	0.885057471	0.891566265	0.893333333
UZ.P130	0.829787234	0.887755102	0.790697674	0.783132523	0.89010989	0.818181818	0.792682927	0.8
UZ.P131	0.822916667	0.901960784	0.829787234	0.818181818	0.893617021	0.824175824	0.827586207	0.8375
UZ.P132	0.896551724	0.956043956	0.774193548	0.884615385	0.925925926	0.875	0.881578947	0.865671642
UZ.P133	0.891304348	0.89010989	0.8	0.879518072	0.86583659	0.88372093	0.87654321	0.861111111
UZ.P115	0.768518519	0.871794872	0.790322581	0.734693878	0.872727273	0.690721649	0.755102041	0.730337079
UZ.P134	0.8125	0.742857143	0.880597015	0.747474747	0.784313725	0.778846154	0.826923077	0.822916667
UZ.P135	0.94047619	0.976744186	0.931034483	0.961038961	0.987341772	0.949367089	0.945945946	0.954545455
UZ.P136	0.821052632	0.878787879	0.85106383	0.759036145	0.904255319	0.835164835	0.852272727	0.835443038
UZ.P137	0.887640449	0.923076923	0.757575758	0.860759494	0.902439024	0.851851852	0.871794872	0.871428571
UZ.P138	0.857142857	0.855670103	0.875	0.788235294	0.773809524	0.781609195	0.865168539	0.773333333
UZ.P139	0.909090909	0.608333333	0.952380952	0.864285714	0.663865546	0.890410959	0.902097902	0.935251799
UZ.P140	0.848	0.598039216	0.76146789	0.598039216	0.62244898	0.810344828	0.863247863	0.862385321
UZ.P141	0.801724138	0.698113208	0.890410959	0.737864078	0.785046729	0.733333333	0.803738318	0.81
UZ.P142	0.80952381	0.862385321	0.883333333	0.851485149	0.873786408	0.785714286	0.882352941	0.846153846
UZ.P143	0.927710843	0.976744186	0.851851852	0.933333333	0.961038961	0.949367089	0.96	0.938461538
UZ.P116	0.752808989	0.910891089	0.847826087	0.813953488	0.926315789	0.779069767	0.823529412	0.802631579
UZ.P144	0.819047619	0.861111111	0.9	0.789473684	0.85	0.854368932	0.892156863	0.804597701
UZ.P145	0.841584158	0.945454545	0.865384615	0.826086957	0.961538462	0.878787879	0.872340426	0.897727273
UZ.P146	0.882352941	0.651785714	0.931818182	0.846771494	0.723214286	0.876923077	0.88976378	0.909090909
UZ.P147	0.886363636	0.956989247	0.956989247	0.918918919	0.901234568	0.952941176	0.917647059	0.9125
UZ.P148	0.782608696	0.863945578	0.842105263	0.776923077	0.856115108	0.763358779	0.819548872	0.834645669
UZ.P149	0.836538462	0.899082569	0.894736842	0.845360825	0.88	0.883495146	0.87755102	0.865168539
UZ.P150	0.891304348	0.89010989	0.842105263	0.851851852	0.905882353	0.857142857	0.890243902	0.891891892
UZ.P151	0.901098901	0.946808511	0.833333333	0.890243902	0.929411765	0.853658537	0.8875	0.873239437
UZ.P152	0.767241379	0.796610169	0.881578947	0.747663551	0.792792793	0.754545455	0.810810811	0.85046729
UZ.P153	0.849056604	0.947826087	0.877192982	0.835051546	0.943925234	0.873786408	0.900909099	0.879120879
UZ.P117	0.826086957	0.919191919	0.80952381	0.807228916	0.9	0.827586207	0.858823529	0.810810811
UZ.P154	0.91	0.744186047	0.9375	0.863636364	0.795180723	0.904255319	0.898876404	0.927710843
UZ.P155	0.89	0.804347826	0.918367347	0.840909091	0.756097561	0.858695652	0.888888889	0.903614458
UZ.P156	0.793814433	0.945454545	0.843137255	0.813186813	0.930693069	0.831578947	0.860215054	0.858823529
UZ.P157	0.833333333	0.936936937	0.849056604	0.829787234	0.942307692	0.835051546	0.863157895	0.835294118
UZ.P158	0.87254902	0.934579439	0.903846154	0.847826087	0.960784314	0.87628866	0.88172043	0.882352941
UZ.P159	0.8125	0.9	0.880597015	0.72277228	0.912280702	0.77846154	0.838095238	0.810526316
UZ.P160	0.858490566	0.823529412	0.875	0.821052632	0.833333333	0.838383838	0.854166667	0.865168539
UZ.P161	0.876404494	0.862068966	0.833333333	0.8625	0.848101266	0.853658537	0.8875	0.873239437
UZ.P162	0.88034188	0.631578947	0					

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Table with 10 columns labeled UZ.P074, UZ.P056, UZ.P075, UZ.P076, UZ.P077, UZ.P079, UZ.P080, and UZ.P081. Each cell contains a numerical value representing a jaccard index. The values range from approximately 0.625 to 0.999, with many values being 0.85 or higher. Some cells contain 'NA' (Not Available).

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UZ.P083	UZ.P084	UZ.P085	UZ.P057	UZ.P086	UZ.P087	UZ.P089	UZ.P091
0,68	0,76146789	0,706422018	0,717171717	0,806818182	0,862068966	0,887640449	0,829545455
0,860869565	0,824561404	0,842975207	0,864864865	0,905263158	0,649484536	0,923076923	0,903225806
0,724137931	0,737704918	0,779411765	0,745454545	0,694444444	0,911764706	0,633333333	0,783783784
0,71875	0,714285714	0,705882353	0,744680851	0,8	0,77	0,846153846	0,825
0,828571429	0,788461538	0,831858407	0,843137255	0,870588235	0,648351648	0,888888889	0,880952381
0,701030928	0,722727227	0,738317757	0,75257732	0,807228916	0,844036697	0,879518072	0,872039023
0,726315789	0,708333333	0,7	0,739130435	0,825	0,858490566	0,857142857	0,805194805
0,727272727	0,662790698	0,698924731	0,770114943	0,802816901	0,888	0,855072464	0,7971101449
0,863636364	0,842696629	0,802197802	0,8125	0,841269841	0,591549296	0,901639344	0,890625
0,811111111	0,735632184	0,698629213	0,725	0,823529412	0,896907216	0,861538462	0,885714286
0,724489796	0,732673267	0,759259259	0,8	0,804878049	0,762376238	0,85	0,843373494
0,768292883	0,649350649	0,69047619	0,72	0,786885246	0,902173913	0,847457627	0,838708677
0,678571429	0,719101124	0,666666667	0,722891566	0,782608696	0,867346939	0,818181818	0,845070423
0,853932584	0,846153846	0,819148936	0,7875	0,828125	0,756097561	0,85	0,876923077
0,753846154	0,727272727	0,783783784	0,711864407	0,714285714	0,85915493	0,769230769	0,844444444
0,670731707	0,712643675	0,744680851	0,716049383	0,828571429	0,931372549	0,865671642	0,805970149
NA	0,747126437	0,747126437	0,698630137	0,783333333	0,850574713	0,824561404	0,754385965
0,7125 NA	0,727272727	0,727272727	0,775	0,8125	0,892473118	0,833333333	0,825396825
0,747126437	0,727272727	0,666666667	0,666666667	0,757575758	0,827956989	0,793650794	0,75
0,698630137	0,775	0,666666667	NA	0,692307692	0,692307692	0,841463415	0,821428571
0,783333333	0,8125	0,757575758	0,692307692	0,757575758	NA	0,841269841	0,810810811
0,850574713	0,892473118	0,827956989	0,841463415	0,841269841	NA	0,919354839	0,890625
0,824561404	0,833333333	0,793650794	0,784313725	0,709677419	0,8125	0,919354839	0,8125
0,754385965	0,825396825	0,75	0,821428571	0,810810811	0,890625	0,8125 NA	0,843137255
0,794520548	0,77027027	0,756410256	0,779411765	0,755102041	0,794520548	0,829787234	0,843137255
0,727272727	0,722222222	0,67032967	0,755813953	0,802816901	0,782608696	0,855072464	0,814285714
0,847560976	0,807453416	0,835294118	0,864197531	0,890410959	0,714285714	0,916666667	0,904109589
0,776923077	0,808823529	0,782608696	0,80620155	0,871794872	0,839416058	0,913793103	0,898305085
0,746666667	0,706666667	0,743902439	0,763888889	0,759259259	0,86746988	0,849056604	0,796296296
0,722222222	0,674157303	0,708333333	0,720930233	0,777777778	0,87254902	0,828571429	0,853333333
0,72	0,798165138	0,70754717	0,731958763	0,797619048	0,757281553	0,869047619	0,835294118
0,886792453	0,931034483	0,885245902	0,826086957	0,769230769	0,964912281	0,818181818	0,846153846
0,777777778	0,663366367	0,694444444	0,778846154	0,820224719	0,754716981	0,875	0,855555556
0,695652174	0,71875	0,759615385	0,76344086	0,776315789	0,846153846	0,84	0,848101266
0,791666667	0,806451613	0,777777778	0,81359322	0,854368932	0,644859813	0,912621359	0,862745098
0,797297297	0,789473684	0,775	0,764705882	0,807692308	0,858974359	0,857142857	0,867924528
0,846715328	0,841726619	0,840277778	0,875	0,88034188	0,637931034	0,931623932	0,906779661
0,715909091	0,725274725	0,767676768	0,744186047	0,837837838	0,892156863	0,888888889	0,864864865
0,841584158	0,811881188	0,8	0,845380825	0,888888889	0,7	0,936708861	0,842105263
0,746987952	0,741176471	0,701149425	0,730769231	0,850746269	0,831460674	0,890625	0,80952381
0,841269841	0,826771654	0,843283582	0,853658537	0,855769231	0,684684685	0,902912621	0,906542056
0,846938776	0,84	0,838095238	0,863157895	0,868421053	0,62195122	0,888888889	0,864864865
0,845238095	0,837209302	0,822222222	0,820512821	0,852459016	0,689189189	0,915254237	0,885245902
0,907284768	0,894736842	0,87012987	0,904109589	0,904761905	0,68	0,952380952	0,929133858
0,7	0,741176471	0,701149425	0,7625	0,796875	0,818181818	0,85483871	0,770491803
0,811594203	0,866666667	0,786666667	0,833333333	0,777777778	0,633333333	0,804878049	0,822222222
0,798076923	0,79245283	0,792792797	0,823529412	0,847058824	0,655913978	0,87804878	0,857142857
0,73255814	0,697674419	0,717391304	0,683544304	0,757575758	0,815217391	0,848484848	0,873239437
0,70212766	0,711340206	0,635416667	0,714285714	0,8125	0,78	0,844155844	0,851851852
0,711864407	0,704918033	0,768115942	0,709090909	0,775	0,929577465	0,771428571	0,794871795
0,739583333	0,694736842	0,659793814	0,752688172	0,794871795	0,765306122	0,857142857	0,805194805
0,885714286	0,890410959	0,84	0,762711864	0,866666667	0,945945946	0,928571429	0,860465116
0,837837838	0,844155844	0,797468354	0,772727272	0,865384615	0,963855422	0,918367347	0,903846154
0,76119403	0,788732394	0,722222222	0,7	0,727272727	0,878378378	0,837209302	0,85106387
0,85483871	0,878787879	0,857142857	0,8	0,871794872	0,971014493	0,882352941	0,923076923
0,818181818	0,826086957	0,774647887	0,783333333	0,840909091	0,916666667	0,902439024	0,886363636
0,85915493	0,816901408	0,75	0,754098361	0,772727273	0,905405405	0,88372093	0,869565217
0,877192982	0,844827586	0,859375	0,82	0,766666667	0,984126984	0,851851852	0,90625
0,888888889	0,876923077	0,871428571	0,773584906	0,771428571	0,923076923	0,84375	0,891891892
0,705128205	0,761904762	0,791208791	0,666666667	0,786885246	0,902173913	0,866666667	0,875
0,852272727	0,844444444	0,764044944	0,784810127	0,825396825	0,78313253	0,885245902	0,875
0,944444444	0,947368421	0,935483871	0,893617021	0,888888889	0,982142857	0,909090909	0,923076923
0,805970149	0,847222222	0,797297297	0,728813559	0,795454545	0,888888889	0,880952381	0,866666667
0,803571429	0,813595322	0,830769231	0,807692308	0,787878788	0,936507937	0,785714286	0,882352941
0,823529412	0,797101449	0,797297297	0,790322581	0,76744186	0,769230769	0,880952381	0,866666667
0,929133858	0,946969697	0,901515152	0,926229508	0,920792079	0,64	0,948979592	0,940594059
0,891089109	0,883495146	0,847619048	0,824175824	0,851351351	0,682352941	0,946666667	0,878378378
0,849462366	0,865979381	0,791666667	0,8	0,84057971	0,797752809	0,927536232	0,916666667
0,851851852	0,870588235	0,866666667	0,826666667	0,862068966	0,892857143	0,928571429	0,915254237
0,924528302	0,888888889	0,918032787	0,869565217	0,846153846	0,982142857	0,909090909	0,88
0,820895522	0,876712329	0,794520548	0,745762712	0,790697674	0,960526316	0,930232558	0,863636364
0,835443038	0,895348837	0,852272727	0,791666667	0,859649123	0,891566265	0,964912281	0,894736842
0,881578947	0,913580247	0,880952381	0,84057971	0,862745098	0,988095238	0,916666667	0,923076923
0,909090909	0,901785714	0,868421053	0,883495146	0,879518072	0,651685393	0,951807229	0,941860465
0,935483871	0,938461538	0,928571429	0,849056604	0,916666667	0,952380952	0,935483871	0,878787879
0,763636364	0,801724138	0,81147541	0,764150943	0,87628866	0,866666667	0,880434783	0,885416667
0,844155844	0,864197531	0,833333333	0,782608696	0,807692308	0,873417722	0,923076923	0,888888889
0,870967742	0,859375	0,838235294	0,796296296	0,805555556	0,90625	0,878787879	0,948717949
0,866666667	0,85483871	0,867647059	0,833333333	0,861111111	0,985074627	0,870967742	0,885714286
0,819148936	0,824742268	0,8	0,738095238	0,849315068	0,793478261	0,916666667	0,861111111
0,875	0,905882353	0,862068966	0,819444444	0,875	0,953488372	0,924528302	0,890909091
0,8125	0,784615385	0,802816901	0,685185185	0,804878049	0,929577465	0,837837838	0,853658537
0,915492958	0,933333333	0,883116883	0,892307692	0,863636364	0,574074074	0,928829288	0,909090909
0,902777778	0,876712329	0,886075949	0,861538462	0,844444444	0,746031746	0,87804878	0,913043478
0,835616438	0,913580247	0,825	0,709677419	0,816326531	0,950617284	0,916666667	0,88
0,808219178	0,888888889	0,829268293	0,757575758	0,823529412	0,976470588	0,897959184	0,884615385
0,878378378	0,911392405	0,917647059	0,869565217	0,901960784	0,987804878	0,958333333	0,897959184
0,797619048	0,844444444	0,829878234	0,829268293	0,8787			

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UZ.P092	UZ.P093	UZ.P094	UZ.P095	UZ.P096	UZ.P097	UZ.P098	UZ.P098
0,787878788	0,678899083	0,792349727	0,743421053	0,659574468	0,651376147	0,620689655	0,929411765
0,855769231	0,734513274	0,543046358	0,8125	0,820754717	0,822580645	0,728	0,953488372
0,76	0,71641791	0,883561644	0,853448276	0,740740741	0,780821918	0,8	0,777777778
0,78021978	0,59375	0,74556213	0,77027027	0,685393258	0,633663366	0,63963964	0,891891892
0,793478261	0,714285714	0,623376623	0,802631579	0,818181818	0,789473684	0,731092437	0,962025316
0,747252747	0,685714286	0,778409091	0,75	0,709677419	0,603960396	0,660869565	0,9375
0,761363636	0,683168317	0,779069767	0,767123288	0,736263736	0,679611655	0,726495726	0,918918919
0,765432099	0,694736842	0,781818182	0,760869565	0,641025641	0,556818182	0,727272727	0,940298507
0,826666667	0,697674419	0,722972973	0,847826087	0,825	0,838383838	0,780952381	0,886792453
0,765233766	0,747368421	0,826347305	0,797101449	0,78313253	0,659340659	0,714285714	0,935483871
0,79787234	0,682692308	0,687116564	0,713286713	0,692307692	0,703703704	0,669565217	0,923076923
0,797297297	0,686046512	0,8125	0,787878788	0,602941176	0,696629213	0,683673469	0,888888889
0,730769231	0,633333333	0,795180723	0,740740741	0,670886076	0,584269663	0,650485437	0,90625
0,783783784	0,787234043	0,767741935	0,789473684	0,829268293	0,793814433	0,849557522	0,910714286
0,810344828	0,792207792	0,866666667	0,842975207	0,728813559	0,736842105	0,788888889	0,918918919
0,7875	0,726315789	0,842105263	0,8	0,728395062	0,606741573	0,731481481	0,9375
0,794520548	0,727272727	0,847560976	0,776923077	0,746666667	0,722222222	0,72	0,886792453
0,77027027	0,722222222	0,807453416	0,808823529	0,706666667	0,674157303	0,798165138	0,931034483
0,756410256	0,67032967	0,835294118	0,782608696	0,743902439	0,708333333	0,70754717	0,885245902
0,779411765	0,755813953	0,864197531	0,80620155	0,763888889	0,720930233	0,731958763	0,826086957
0,755102041	0,802816901	0,890410959	0,871794872	0,759259259	0,777777778	0,797619048	0,769230769
0,794520548	0,782608696	0,714285714	0,839416058	0,867469888	0,87254902	0,757281553	0,964912281
0,829787234	0,855072464	0,916666667	0,913793103	0,849056604	0,828571429	0,869047619	0,818181818
0,843137255	0,814285714	0,904109589	0,898305085	0,796296296	0,853333333	0,835294118	0,846153846
0,780487805	0,780487805	0,82871457	0,824	0,738461538	0,743902439	0,725274725	0,906976744
0,780487805	NA	0,711538462	0,760869565	0,675	0,704081633	0,666666667	0,907692308
0,82781457	0,711538462	NA	0,666666667	0,819354839	0,813953488	0,738372093	0,972222222
0,824	0,760869565	0,666666667	NA	0,756097561	0,756097561	0,739130435	0,946428571
0,738461538	0,675	0,819354839	0,756097561	NA	0,686746988	0,686746988	0,872340426
0,743902439	0,704081633	0,813953488	0,739130435	0,686746988	NA	0,723214286	0,927536232
0,725274725	0,666666667	0,738372093	0,761589404	0,688172043	0,723214286	NA	0,925925926
0,906976744	0,907692308	0,972222222	0,946428571	0,872340426	0,927536232	0,925925926	NA
0,775510204	0,56	0,692307692	0,775641026	0,714285714	0,699115044	0,67768595	0,916666667
0,744186047	0,754716981	0,69375	0,664179104	0,719101124	0,714285714	0,724137931	0,932432432
0,801801802	0,702479339	0,555555556	0,748466258	0,780701754	0,796992481	0,658914729	0,93877551
0,777777778	0,7375	0,828947368	0,834645669	0,76119403	0,746987952	0,741935484	0,88372093
0,81300813	0,721804511	0,538461538	0,74566474	0,839694656	0,838926174	0,776315789	0,982608696
0,797619048	0,711340206	0,797619048	0,735294118	0,679012346	0,652631579	0,694444444	0,909090909
0,806818182	0,670103093	0,662337662	0,802721088	0,793478261	0,788990826	0,705357143	0,944444444
0,789473684	0,681818182	0,81595092	0,81884058	0,638888889	0,692307692	0,718446602	0,913793103
0,781818182	0,785625	0,582822209	0,710691824	0,842975207	0,824817518	0,748201439	0,95
0,78313253	0,75	0,696774194	0,813793103	0,836965622	0,803738318	0,794871795	0,956521739
0,866666667	0,775280899	0,751677852	0,835820896	0,833333333	0,833333333	0,774509804	0,923076923
0,858208955	0,804054054	0,469879518	0,755555556	0,888111888	0,860759494	0,801242236	0,975206612
0,704225352	0,711111111	0,808641975	0,746153846	0,775	0,747368421	0,718446602	0,93220339
0,727272727	0,794871795	0,8125	0,853658537	0,830769231	0,7875	0,7875	0,891891892
0,810526316	0,719626168	0,636942675	0,765100671	0,833333333	0,803418803	0,776	0,923076923
0,756410256	0,712765957	0,8256108	0,717557252	0,743902439	0,734693878	0,719626168	0,920634921
0,720930233	0,723809524	0,758823529	0,725352113	0,681818182	0,587628866	0,660714286	0,934210526
0,836363636	0,777777778	0,89261745	0,855932203	0,75	0,7	0,804597701	0,870967742
0,747126437	0,6	0,734939759	0,75862069	0,662790698	0,612244898	0,62037037	0,933333333
0,918032787	0,831168831	0,922580645	0,904	0,857142857	0,8375	0,884210526	0,806451613
0,825396825	0,886363636	0,919753086	0,901515152	0,857142857	0,78313253	0,824742268	0,977272727
0,754385965	0,766233766	0,868421053	0,836065574	0,758064516	0,710526316	0,819149896	0,864864865
0,843137255	0,847222222	0,933333333	0,916666667	0,839285714	0,853333333	0,887640449	0,928571429
0,862089666	0,815789474	0,901315789	0,867768595	0,8	0,807692308	0,822222222	0,911764706
0,921875	0,8375	0,91025641	0,870967742	0,770491803	0,8	0,864583333	0,857142857
0,869565217	0,882352941	0,944827586	0,921052632	0,884615385	0,871428571	0,87804878	0,904761905
0,84	0,891891892	0,895833333	0,897435897	0,857142857	0,866666667	0,898876404	0,791666667
0,813333333	0,784946237	0,862275449	0,796992481	0,766233766	0,725274725	0,735294118	0,909090909
0,828947368	0,77173913	0,8125	0,84057971	0,8125	0,791666667	0,735294118	0,928571429
0,928571429	0,954545455	0,971830986	0,964285714	0,959183673	0,956521739	0,963414634	0,857142857
0,807017544	0,820512821	0,880794702	0,905511811	0,84375	0,797468354	0,8	0,885714286
0,804347826	0,855072464	0,931506849	0,913793103	0,87037037	0,845070423	0,895348837	0,869565217
0,716981132	0,789473684	0,850340136	0,879032258	0,825396825	0,797468354	0,838709677	0,945945946
0,882882883	0,84375	0,58490566	0,765822785	0,916666667	0,929078014	0,845070423	0,989361702
0,863636364	0,796116505	0,694805195	0,86	0,847826087	0,855855856	0,761061947	0,971014493
0,8125	0,833333333	0,804878049	0,839160839	0,865168539	0,767676768	0,794642857	0,952380952
0,875	0,846153846	0,883435583	0,857142857	0,824324324	0,826086957	0,836538462	0,96
0,928571429	0,938461538	0,971830986	0,954954955	0,9375	0,925373134	0,950617284	0,857142857
0,844827586	0,8625	0,901960784	0,87804878	0,822580645	0,794871795	0,824175824	0,848484848
0,888888889	0,844444444	0,86875	0,881481481	0,83787838	0,770114943	0,846153846	0,9375
0,971830986	0,885057471	0,93902439	0,892307692	0,887323944	0,837209302	0,913461538	0,9
0,838709677	0,821428571	0,633966928	0,790540541	0,893203883	0,902439024	0,825396825	0,987179487
0,981132075	0,931506849	0,945578231	0,940677966	0,909090909	0,890410959	0,931818182	1
0,830188679	0,825396825	0,783783784	0,75	0,818181818	0,811023622	0,802919708	0,93258427
0,884057971	0,83908046	0,866242038	0,84375	0,797101449	0,844444444	0,841584158	0,909090909
0,816326531	0,845070423	0,910958904	0,897435897	0,877192982	0,835616438	0,847058824	0,925925926
0,857142857	0,904109589	0,939189189	0,905172414	0,830188679	0,847222222	0,88372093	0,92
0,821428571	0,794117647	0,80952381	0,843537015	0,820224719	0,8	0,791304348	0,95523881
0,931506849	0,891304348	0,93452381	0,888059701	0,894736842	0,846153846	0,907407407	0,957446809
0,857142857	0,842105263	0,914473684	0,89342623	0,771292825	0,786666667	0,857142857	0,90625
0,839285714	0,844156844	0,839160839	0,876033058	0,907692308	0,904761905	0,833333333	0,971428571
0,824561404	0,818181818	0,833333333	0,896	0,876923077	0,880952381	0,861702128	0,914285714
0,910447761	0,845238095	0,93902439	0,892307692	0,855072464	0,80952381	0,87	0,871794872
0,897058824	0,862089666	0,926829268	0,868217054	0,890410959	0,8	0,85	0,930232558
0,924242424	0,895346837	0,938271605	0,916030534	0,884057971	0,860465116	0,89	0,95
0,8875	0,822916667	0,895348837	0,865248227	0,869047619	0,791666667	0,837837838	0,965517241
0,8	0,82581395	0,858974359	0,852713178	0,878378378	0,831460674	0,818181818	0,956521739
0,87012987	0,806451613	0,84057971	0,905172414	0,872727273	0,863013699	0,857142857	0,875
0,808823529	0,779069767	0,72972973	0,838235294	0,879518072	0,86	0,813084112	0,964285714
0,82276481	0,806122449	0,7875	0,845070423	0,821428571	0,762866598	0,768518519	0,950819672
0,830508475	0,851851852	0,924050633	0,861788618	0,828125	0,769230769	0,852631579	0,857142857
0,881355932	0,8	0,848275862	0,89516129	0,919672131	0,82278481	0,860215054	0,911764706
0,923076923	0,857142857	0,931972789	0,905172414	0,851851852	0,797101449	0,909090909	0,875
0,82758620							

UZ.P099	UZ.P100	UZ.P101	UZ.P102	UZ.P103	UZ.P104	UZ.P105	UZ.P106
0.698412698	0.700854701	0.787671233	0.801980198	0.8125	0.705357143	0.778688525	0.704761905
0.606837607	0.792	0.545454545	0.823529412	0.610294118	0.809917355	0.642201835	0.805309735
0.76744186	0.763157895	0.866666667	0.788461538	0.918032787	0.791666667	0.87654321	0.741935484
0.616071429	0.756521739	0.727272727	0.727272727	0.716312057	0.740740741	0.507	0.663157895
0.663793103	0.808333333	0.564102564	0.769230769	0.607692308	0.807017544	0.6	0.79047619
0.64957265	0.684684685	0.751824818	0.736263736	0.805194805	0.663461538	0.777777778	0.686868687
0.692307692	0.763157895	0.751879699	0.764044944	0.837662338	0.735849057	0.767857143	0.670212766
0.678899083	0.730769231	0.782945736	0.797619048	0.819444444	0.697916667	0.759615385	0.666666667
0.666666667	0.823529412	0.619047619	0.746478873	0.704918033	0.822916667	0.623529412	0.776470588
0.758928571	0.754901961	0.821705426	0.8	0.87755102	0.762886598	0.841121495	0.738636364
0.622807018	0.681818182	0.682170543	0.774193548	0.78807947	0.767857143	0.732142857	0.747572816
0.656565657	0.67032967	0.81300813	0.767123288	0.864285714	0.658823529	0.770833333	0.67086076
0.711711712	0.663265306	0.809160305	0.734177215	0.826388889	0.622222222	0.780952381	0.707865169
0.803571429	0.767676768	0.743589744	0.833333333	0.73015873	0.85	0.760416667	0.847826087
0.810526316	0.811764706	0.844036697	0.793103448	0.851239669	0.763157895	0.847058824	0.802816901
0.741071429	0.71	0.824427481	0.819277108	0.871621222	0.659340659	0.833333333	0.670588235
0.777777778	0.695652174	0.791666667	0.797297297	0.846715328	0.715909091	0.841584158	0.746987952
0.663366337	0.71875	0.806451613	0.789473684	0.841726619	0.725274725	0.811881188	0.741176471
0.694444444	0.759615385	0.777777778	0.775	0.840277778	0.767676768	0.8	0.701149425
0.778846154	0.76344086	0.813559322	0.764705882	0.875	0.744186047	0.845360825	0.730769231
0.820224719	0.776315789	0.854368932	0.807692308	0.88034188	0.837837838	0.888888889	0.850746269
0.754716981	0.846153846	0.644859813	0.858974359	0.637931034	0.892156663	0.7	0.831460674
0.875	0.84	0.912621359	0.857142857	0.931623932	0.888888889	0.936708861	0.890625
0.855555556	0.848101266	0.862745098	0.867924528	0.906779661	0.864864865	0.842105263	0.80952381
0.775510204	0.744186047	0.801801802	0.777777778	0.81300813	0.797619048	0.806818182	0.789473684
0.56	0.754716981	0.702479339	0.7375	0.721804511	0.711340206	0.670103093	0.681818182
0.692307692	0.69375	0.555555556	0.828947368	0.538461538	0.797619048	0.662337662	0.81595092
0.775641026	0.664179104	0.748466258	0.834645669	0.74566474	0.735294118	0.802721088	0.81884058
0.714285714	0.719101124	0.780701754	0.76119403	0.839694656	0.679012346	0.793478261	0.638888889
0.699115044	0.714285714	0.796992481	0.746987952	0.838926174	0.652631579	0.788990826	0.692307692
0.67768595	0.724137931	0.658914729	0.741935484	0.776315789	0.694444444	0.705357143	0.718446602
0.916666667	0.932432432	0.93877551	0.88372093	0.982608696	0.909090909	0.944444444	0.913793103
NA	0.700854701	0.700854701	0.659090909	0.739583333	0.661971831	0.669724771	0.583333333
0.700854701	NA	0.740458015	0.775280899	0.772413793	0.683168317	0.787234043	0.787610619
0.659090909	0.740458015	NA	0.803571429	0.58041958	0.804878049	0.775193798	0.615384615
0.739583333	0.775280899	0.803571429	NA	0.804878049	0.804878049	0.725	0.722891566
0.661971831	0.772413793	0.58041958	0.804878049	NA	0.787234043	0.787234043	0.674242424
0.669724771	0.683168317	0.775193798	0.725	0.787234043	NA	0.674242424	0.826086957
0.62037037	0.787610619	0.615384615	0.722891566	0.674242424	0.785046729	NA	0.785046729
0.583333333	0.747474747	0.726495726	0.743243243	0.826086957	0.685393258	0.726315789	NA
0.691176471	0.751879699	0.635714286	0.815789474	0.612244898	0.813432836	0.716535433	0.818897638
0.760683761	0.779816514	0.64957265	0.771084337	0.609756098	0.833333333	0.631578947	0.63
0.670103093	0.818181818	0.709090909	0.805555556	0.739837398	0.777777778	0.747252747	0.705128205
0.737179487	0.790849673	0.551724138	0.833333333	0.503355705	0.844155844	0.671532847	0.858108108
0.752293578	0.784313725	0.808	0.807692308	0.817518248	0.768421053	0.79	0.786516854
0.760689565	0.813953488	0.766990291	0.754389565	0.793103448	0.841463415	0.746835443	0.837837838
0.691666667	0.739130435	0.629032258	0.8	0.654411765	0.840336134	0.720720721	0.837837838
0.682242991	0.747572816	0.777777778	0.727272727	0.807142857	0.729166667	0.776699029	0.730337079
0.683760684	0.697247706	0.744360902	0.738636364	0.783783784	0.663366337	0.758928571	0.673684211
0.75862069	0.784810127	0.836538462	0.818181818	0.901639344	0.746478873	0.865853659	0.790677419
0.583333333	0.694444444	0.692913386	0.735632184	0.756944444	0.618556701	0.710280374	0.684210526
0.842105263	0.886363636	0.891891892	0.824561404	0.929133858	0.802631579	0.895348837	0.845070423
0.854368932	0.847826087	0.88034188	0.846153846	0.925373134	0.807228916	0.915789474	0.783783784
0.789473684	0.743902439	0.846846847	0.8	0.872	0.769230769	0.80952381	0.757142857
0.904255319	0.8625	0.925925926	0.823529412	0.925	0.849315068	0.926829268	0.897058824
0.829787234	0.833333333	0.817559633	0.781818182	0.903225806	0.802631579	0.855421687	0.776119403
0.846938776	0.83908046	0.884955752	0.852459016	0.92248062	0.825	0.898876404	0.819444444
0.88372093	0.88	0.898989899	0.847826087	0.957264957	0.850746269	0.934210526	0.866666667
0.866666667	0.846153846	0.883495146	0.843137255	0.924369748	0.907894737	0.884615385	0.895522388
0.790909091	0.777777778	0.822580645	0.815789474	0.888111888	0.747252747	0.865384615	0.779069767
0.779816514	0.779	0.773109244	0.767123288	0.830882353	0.848484848	0.783505155	0.793103448
0.965116279	0.930555556	0.96969697	0.954545455	0.99122807	0.970588235	0.972222222	0.966101695
0.845360825	0.823529412	0.831775701	0.810344828	0.887096774	0.82278481	0.885057471	0.8
0.862068966	0.824324324	0.912621359	0.808510638	0.913043478	0.873239437	0.923076923	0.873015873
0.782608696	0.80952381	0.80952381	0.810344828	0.810344828	0.851851852	0.817073171	0.849315068
0.791366906	0.818181818	0.649253731	0.883928571	0.633802817	0.920289855	0.714285714	0.888888889
0.690909091	0.788990826	0.634782609	0.825581395	0.721804511	0.853211009	0.696969697	0.791666667
0.769911504	0.801886792	0.774193548	0.814814815	0.795620438	0.811881188	0.807692308	0.78021978
0.831775701	0.810526316	0.859504132	0.828571429	0.889705882	0.860215054	0.829787234	0.817073171
0.952941176	0.930555556	0.948453608	0.904761905	0.982300885	0.920376923	0.957746479	0.929824561
0.878787879	0.807228916	0.892857143	0.807017544	0.9296875	0.820512821	0.88372093	0.847222222
0.807692308	0.808510638	0.858333333	0.791044776	0.872180451	0.793103448	0.815217391	0.8
0.875	0.870967742	0.925619835	0.878787879	0.963768116	0.819277108	0.9375	0.858974359
0.774193548	0.813559322	0.658536585	0.864583333	0.641221374	0.882352941	0.719626168	0.862385321
0.934782609	0.925	0.942857143	0.9	0.966666667	0.887323944	0.935897436	0.870967742
0.825174825	0.721311475	0.801324503	0.820754717	0.779874214	0.768595041	0.832061069	0.833333333
0.889908257	0.852631579	0.844827586	0.818181818	0.804878049	0.827586207	0.860215054	0.851851852
0.879120879	0.846153846	0.861386139	0.770833333	0.912524237	0.863013699	0.87012987	0.861538462
0.924731183	0.9	0.913461538	0.836734694	0.95	0.85915493	0.9375	0.875
0.745614035	0.775700935	0.752	0.795180723	0.818181818	0.796116505	0.79245283	0.736263736
0.920353982	0.87755102	0.92	0.838235294	0.942857143	0.842896629	0.983	0.853658537
0.85106383	0.829282829	0.87962963	0.839285714	0.928	0.797297297	0.892857143	0.805970149
0.852631579	0.897727273	0.815533981	0.842105263	0.805309735	0.941176471	0.794871795	0.875
0.831578947	0.848837209	0.796116505	0.827586207	0.798245614	0.904761905	0.829282829	0.893333333
0.86407767	0.858696562	0.898305085	0.825396825	0.932835821	0.790123457	0.891304348	0.780821918
0.898148148	0.824175624	0.9	0.865671642	0.933823529	0.795180723	0.927835052	0.8625
0.894230769	0.855555556	0.915254237	0.892307692	0.939849624	0.843373494	0.936170213	0.87012987
0.82300885	0.81372549	0.859375	0.831168831	0.895833333			

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UZ.P107	UZ.P108	UZ.P110	UZ.P111	UZ.P112	UZ.P113	UZ.P114	UZ.P060
0,813333333	0,849206349	0,837837838	0,867816092	0,774774775	0,824742268	0,810606061	0,741071429
0,638461538	0,654205607	0,623655914	0,537313433	0,826086957	0,77173913	0,655172414	0,803418803
0,857142857	0,898734177	0,873015873	0,938931298	0,721311475	0,782608696	0,821428571	0,742424242
0,757352941	0,763636364	0,775510204	0,839506173	0,704081633	0,75	0,786885246	0,718446602
0,637096774	0,568421053	0,695652174	0,607407407	0,778846154	0,75	0,654545455	0,8
0,797202797	0,801724138	0,794117647	0,869822485	0,737864078	0,786516854	0,782258065	0,714285714
0,807142857	0,86440678	0,757894377	0,858895706	0,737373737	0,816091954	0,79338843	0,7
0,846715328	0,831775701	0,815217391	0,872611465	0,739130435	0,794871795	0,838983051	0,698924731
0,660550459	0,686046512	0,652777778	0,69047619	0,831460674	0,677419355	0,641304348	0,788888889
0,858208955	0,857142857	0,844444444	0,911392405	0,752808989	0,858974359	0,842105263	0,752688172
0,704545455	0,745454545	0,767676768	0,774193548	0,747572816	0,755813953	0,739495798	0,759259259
0,8515625	0,871287129	0,804878049	0,893333333	0,764705882	0,847222222	0,833333333	0,69047619
0,819548872	0,807692308	0,838709677	0,871794872	0,736263736	0,82278481	0,817391304	0,736842105
0,713043478	0,67816092	0,792682927	0,753731343	0,860215054	0,727272727	0,690721649	0,806451613
0,866071429	0,853658537	0,852941176	0,918518519	0,731343284	0,788461538	0,872340426	0,767123288
0,868613139	0,900909091	0,835164835	0,932515337	0,744444444	0,903614458	0,854700855	0,744680851
0,841269841	0,846938776	0,845238095	0,907284768	0,7	0,811594203	0,798076923	0,73255814
0,826771654	0,84	0,837209302	0,894736842	0,741176471	0,866666667	0,79245283	0,697674419
0,843283582	0,838095238	0,822222222	0,87012987	0,701149425	0,786666667	0,792792793	0,717391304
0,853658537	0,863157895	0,820512821	0,904109589	0,7625	0,833333333	0,823529412	0,683544304
0,855769231	0,868421053	0,852459016	0,904761905	0,796875	0,777777778	0,847058824	0,757575758
0,684684685	0,62195122	0,689189189	0,68	0,818181818	0,633333333	0,655913978	0,815217391
0,902912621	0,888888889	0,91254237	0,952380952	0,85483871	0,804878049	0,87804878	0,848484848
0,906542056	0,864848485	0,885245902	0,929133858	0,770491803	0,822222222	0,857142857	0,873239437
0,781818182	0,78313253	0,866666667	0,858208955	0,704225352	0,727272727	0,810526316	0,756410256
0,765625	0,75	0,775280899	0,804054054	0,711111111	0,794871795	0,719626168	0,712765957
0,558282209	0,696774194	0,751677852	0,469879518	0,808641975	0,8125	0,636942675	0,8
0,710691824	0,813793103	0,835820896	0,755555556	0,746153846	0,853658537	0,765100671	0,717557252
0,842975207	0,836956522	0,833333333	0,888111888	0,775	0,830769231	0,833333333	0,743902439
0,824817518	0,803738318	0,833333333	0,860759494	0,747368421	0,7875	0,803418803	0,734693878
0,748201439	0,794871795	0,774509804	0,801242236	0,718446602	0,777777778	0,776	0,719626168
0,95	0,956521739	0,923076923	0,975206612	0,93220339	0,891891952	0,923076923	0,920634921
0,691176471	0,780683761	0,670103093	0,737179487	0,752293578	0,760869565	0,691666667	0,682242991
0,751879699	0,779816514	0,818181818	0,790849673	0,784313725	0,813953488	0,739130435	0,747572816
0,635714286	0,64957265	0,709090909	0,551724138	0,808	0,766990291	0,629032258	0,777777778
0,815789474	0,771084337	0,805555556	0,833333333	0,807692308	0,754385965	0,8	0,727272727
0,612244898	0,609756098	0,739837398	0,503355705	0,817518248	0,793103448	0,654411765	0,807142857
0,813432836	0,833333333	0,777777778	0,844155844	0,768421053	0,841463415	0,840336134	0,729166667
0,716535433	0,631578947	0,747252747	0,671532847	0,79	0,746835443	0,720720721	0,776990291
0,818897638	0,83	0,705128205	0,858108108	0,786516854	0,837837838	0,837837838	0,730337079
NA	0,675	0,756521739	0,593333333	0,780487805	0,757281553	0,609756098	0,76
	0,675	0,630769231	0,630769231	0,630769231	0,806122449	0,606060606	0,792079208
		0,804347826	0,744186047	0,744186047	0,83908046	0,698630137	0,795454545
		NA	NA	NA	0,858108108	0,795081967	0,816326531
					0,788732394	0,788732394	0,701149425
					0,795081967	0,755813953	0,786666667
					0,783018868	NA	0,803571429
					0,701149425	0,786666667	0,754237288
					0,727272727	0,761904762	0,802816901
					0,84057971	0,862745098	0,877777778
					0,774509804	0,759036145	0,762711864
					0,932835821	0,909090909	0,892473118
					0,831168831	0,9375	0,952830189
					0,757142857	0,796296296	0,875
					0,863636364	0,94	0,945054945
					0,794117647	0,867924528	0,892473118
					0,894736842	0,907216495	0,860759494
					0,885245902	0,930232558	0,927710843
					0,911764706	0,844444444	0,895348837
					0,719512195	0,878378378	0,864848485
					0,779069767	0,779411765	0,822429907
					0,966101695	0,945945946	0,948717949
					0,864848485	0,892857143	0,894736842
					0,860465116	0,891566265	0,865671642
					0,875968992	0,734693878	0,793103448
					0,5	0,783505155	0,647058824
					0,816326531	0,810126582	0,754545455
					0,797202797	0,797297297	0,831858407
					0,845238095	0,880597015	0,897196262
					0,929824561	0,916666667	0,948717949
					0,779411765	0,910714286	0,893617021
					0,829268293	0,84375	0,885714286
					0,873417722	0,953125	0,942307692
					0,851851852	0,725	0,693693694
					0,888888889	0,956521739	0,954022989
					0,782608696	0,854368932	0,798507463
					0,8375	0,85483871	0,848484848
					0,825396825	0,893617021	0,908045977
					0,857142857	0,936170213	0,918604651
					0,81443299	0,792207792	0,796460177
					0,853658537	0,892307692	0,925233645
					0,823529412	0,862745098	0,913978495
					0,85915493	0,717391304	0,827586207
					0,878378378	0,755102041	0,804597701
					0,858974359	0,936507937	0,932038835
					0,833333333	0,938461538	0,933333333
					0,898734177	0,968253968	0,941176471
					0,793103448	0,878378378	0,904347826
					0,792207792	0,85483871	0,86
					0,75	0,851851852	0,850746208
					0,842696629	0,672131148	0,734693878
					0,817073171	0,863636364	0,82
					0,747126437	0,774647887	0,773584906
					0,942028986	0,894736842	0,907216495
					0,861111111	0,867924528	0,880434783
					0,857142857	0,913043478	0,943181818
					0,8	0,851851852	0,870967722
					0,835443038	0,90625	0,902912621

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UZ.P061	UZ.P063	UZ.P064	UZ.P124	UZ.P127	UZ.P128	UZ.P129	UZ.P130
	0,6	0,77272723	0,596330275	0,854166667	0,82	0,776595745	0,880434783
	0,785714286	0,885416667	0,666666667	0,898989899	0,896226415	0,871287129	0,9375
	0,8	0,717948718	0,8125	0,869565217	0,846153846	0,787234043	0,902439024
	0,632075472	0,746835443	0,615384615	0,865168539	0,840425532	0,767441186	0,853658537
	0,771186441	0,887640449	0,736842105	0,913978495	0,91	0,872340426	0,931818182
	0,62962963	0,771084337	0,586538462	0,857142857	0,808510638	0,73255814	0,885057471
	0,638095238	0,772151899	0,621359223	0,862068966	0,824175824	0,804597701	0,891566265
	0,574468085	0,705882353	0,628865979	0,875	0,819277108	0,733333333	0,893333333
	0,792079208	0,882352941	0,75257732	0,852941176	0,938271605	0,830895915	0,924242424
	0,65625	0,76119403	0,707070707	0,851351351	0,76	0,732394366	0,885714286
	0,699115044	0,78313253	0,648148148	0,855555556	0,855670103	0,8	0,88372093
	0,633333333	0,694915254	0,673913043	0,820895522	0,808219178	0,727272727	0,857142857
	0,614583333	0,757142857	0,625	0,858974359	0,772151899	0,746666667	0,845070423
	0,796116505	0,852941176	0,805825243	0,918918919	0,939759036	0,785714286	0,926470588
	0,696202532	0,674418605	0,771084337	0,907407407	0,86440678	0,79245283	0,893617021
	0,621052632	0,692307692	0,673469388	0,84	0,782051282	0,773333333	0,84057971
	0,70212766	0,711864407	0,739583333	0,885714286	0,837837838	0,76119403	0,85483871
	0,711340206	0,704918033	0,694736842	0,890410959	0,844155844	0,788732394	0,878787879
	0,635416667	0,768115942	0,659793814	0,84	0,797468354	0,722222222	0,857142857
	0,714285714	0,709090909	0,752688172	0,762711864	0,772727273	0,7	0,8
	0,8125	0,775	0,794871795	0,866666667	0,865384615	0,727272727	0,871794872
	0,78	0,929577465	0,765306122	0,945945946	0,963855422	0,878378378	0,971014493
	0,844155844	0,771428571	0,857142857	0,928571429	0,918367347	0,837209302	0,882352941
	0,851851852	0,794871795	0,805194805	0,860465116	0,903846154	0,85106383	0,923076923
	0,720930233	0,836363636	0,747126437	0,918032787	0,825396825	0,754385965	0,843137255
	0,723809524	0,777777778	0,6	0,831168831	0,886363636	0,766233766	0,847222222
	0,758823529	0,89261745	0,734939759	0,922580645	0,919753086	0,868421053	0,933333333
	0,725352113	0,855932203	0,75862069	0,904	0,901515152	0,836065574	0,916666667
	0,681818182	0,875	0,662790698	0,857142857	0,857142857	0,758064516	0,839285714
	0,587628866	0,7	0,612244898	0,8375	0,78313253	0,710526316	0,853333333
	0,660714286	0,804597701	0,62037037	0,884210526	0,824742268	0,819148936	0,887640449
	0,934210526	0,870967742	0,933333333	0,806451613	0,977272727	0,864864865	0,928571429
	0,683760684	0,75862069	0,583333333	0,842105263	0,854368932	0,789473684	0,904255319
	0,697247706	0,784810127	0,694444444	0,886363636	0,847826087	0,743902439	0,8625
	0,744369092	0,836538462	0,692913386	0,891891892	0,8034188	0,846846847	0,925925926
	0,738636364	0,818181818	0,735632184	0,824561404	0,846153846	0,8	0,823529412
	0,783783784	0,901639344	0,756944444	0,929133858	0,925373134	0,872	0,903225806
	0,663366337	0,746478873	0,618556701	0,802631579	0,807228916	0,769230769	0,802631579
	0,758928571	0,865853659	0,710280374	0,895348837	0,915789474	0,80952381	0,926829268
	0,673684211	0,709677419	0,684210526	0,845070423	0,783783784	0,757142857	0,897058824
	0,782608696	0,890909091	0,781021898	0,931034483	0,918032787	0,868421053	0,926605055
	0,783783784	0,8875	0,759259259	0,916666667	0,923913043	0,843373494	0,909090909
	0,760416667	0,841269841	0,688888889	0,880597015	0,863013699	0,805970149	0,920634921
	0,823899371	0,955555556	0,776315789	0,932835821	0,944055944	0,919708029	0,969696967
	0,727272727	0,84057971	0,774509804	0,876712329	0,831168831	0,757142857	0,863636364
	0,761904762	0,862745098	0,759036145	0,909090909	0,9375	0,796296296	0,94
	0,754237288	0,877777778	0,762711864	0,892473118	0,952830189	0,875	0,945054945
	0,702970297	0,802816901	0,686866867	0,898734177	0,8125	0,756756757	0,873239437
NA	0,759493671	0,759493671	0,584158416	0,863636364	0,813186813	0,764705882	0,865853659
	0,584158416	0,74025974	0,875	0,74025974	0,875	0,770833333	0,880952381
	0,863636364	NA	0,848837209	0,848837209	0,836956522	0,804597701	0,864197531
	0,813186813	0,784313725	0,836956522	0,79245283	NA	0,803921569	0,875
	0,764705882	0,770833333	0,804597701	0,803921569	0,767857143	NA	0,772727273
	0,865853659	0,880952381	0,864197531	0,775	0,8125	0,772727273	NA
	0,780487805	0,8	0,848837209	0,833333333	0,745098039	0,70212766	0,743589744
	0,829545455	0,8125	0,813953488	0,795918367	0,824561404	0,814814815	0,869565217
	0,868421053	0,75	0,866666667	0,833333333	0,780487805	0,880952381	0,833333333
	0,891566265	0,820512821	0,903614458	0,857142857	0,901960784	0,767441186	0,861111111
	0,744897959	0,716666667	0,767676768	0,803303030	0,720588235	0,746268657	0,77961017
	0,946666667	0,77	0,850746269	0,70212766	0,820895522	0,774647887	0,857142857
	0,8	0,782608696	0,9	0,96	0,870967742	0,976190476	0,888888889
	0,858974359	0,771428571	0,797619048	0,84	0,8754716981	0,714285714	0,785714286
	0,8	0,808510638	0,886075949	0,875	0,822222222	0,780487805	0,774193548
	0,863309353	0,990909091	0,78313253	0,884615385	0,842105263	0,74	0,840909091
	0,844827586	0,926829268	0,837037037	0,95412844	0,974789916	0,9375	0,980952381
	0,759615385	0,863013699	0,757009346	0,815789474	0,860465116	0,827160494	0,893333333
	0,87254902	0,868852459	0,693877551	0,75	0,726027397	0,75	0,852941176
	0,932432432	0,862068966	0,945945946	0,86	0,816666667	0,733333333	0,814814815
	0,78313253	0,829787234	0,80952381	0,733333333	0,897407742	0,918918919	0,833333333
	0,8125	0,885245902	0,79787234	0,75	0,818181818	0,75	0,788461538
	0,885416667	0,890909091	0,884210526	0,6	0,816666667	0,740740741	0,808510638
	0,816666667	0,978723404	0,825	0,934782609	0,918367347	0,892473118	0,941860465
	0,913580247	0,923076923	0,9125	0,705882353	0,761904762	0,833333333	0,84375
	0,746031746	0,88	0,819548872	0,848484848	0,849056604	0,797979798	0,873684211
	0,831578947	0,898305085	0,87755102	0,883333333	0,913043478	0,838709677	0,888888889
	0,864197531	0,85	0,848101266	0,857142857	0,755555556	0,707317073	0,828571429
	0,860759494	0,842105263	0,901234568	0,756756757	0,727272727	0,785714286	0,78125
	0,779816514	0,87012987	0,718446602	0,797297297	0,7875	0,746666667	0,811594203
	0,857142857	0,9	0,867346939	0,807017544	0,830769231	0,822580645	0,890909091
	0,804878049	0,761904762	0,831325301	0,8	0,807692308	0,744880851	0,694444444
	0,86268966	0,960784314	0,819277108	0,921568627	0,93220339	0,888888889	0,909090909
	0,877777778	0,9	0,876404494	0,882352941	0,951612903	0,851851852	0,913043478
	0,849462366	0,849056604	0,860215054	0,714285714	0,775862069	0,740740741	0,833333333
	0,815217391	0,788461538	0,85106383	0,75	0,74137931	0,75	0,773584906
	0,882978723	0,865384615	0,869565217	0,729166667	0,810344828	0,821428571	0,8
	0,817307692	0,833333333	0,833333333	0,803921569	0,765625	0,720588235	0,8
	0,831578947	0,916666667	0,842105263	0,735849057	0,828125	0,75862069	0,846153846
	0,875	0,871794872	0,858974359	0,820512821	0,85106383	0,756097561	0,818181818
	0,81372549	0,943661972	0,775510204	0,915492958	0,9375	0,876712329	0,955223881
	0,802083333	0,810344828	0,774193548	0,775862069	0,784615385	0,774193548	0,79245283
	0,754901961	0,875	0,752475248	0,863013699	0,833333333	0,842105263	0,882352941
	0,788235294	0,787234043	0,813953488	0,770833333	0,759259259	0,745098039	0,761904762
	0,850574713	0,8	0,848837209	0,782608696	0,836363636	0,729166667	0,775
	0,846153846	0,810810811	0,8875	0,647058824	0,8	0,756097561	0,78125
	0,8	0,782608696	0,78313253	0,765957447	0,842105263	0,74	0,725
	0,777777778	0,814814815	0,840425532	0,754716981	0,654545455	0,85483871	0,82

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UZ.P131	UZ.P132	UZ.P133	UZ.P115	UZ.P134	UZ.P135	UZ.P136	UZ.P137
0,822916667	0,896551724	0,891304348	0,768518519	0,8125	0,94047619	0,821052632	0,887640449
0,901960784	0,956043956	0,89010989	0,871794872	0,742857143	0,976474186	0,878787879	0,923076923
0,829787234	0,774193548	0,9	0,790322581	0,880597015	0,931034483	0,85106383	0,757575758
0,818181818	0,884615385	0,879518072	0,734693878	0,747474747	0,961038961	0,759036145	0,860759494
0,893617021	0,925925926	0,865853659	0,872727273	0,784313725	0,987341772	0,904255319	0,902439024
0,824175824	0,875	0,88372093	0,690721649	0,778846154	0,949367089	0,835164835	0,851851852
0,827586207	0,881578947	0,87654321	0,755102041	0,826923077	0,945945946	0,852272727	0,871794872
0,8375	0,865671642	0,861111111	0,730337079	0,822916667	0,954545455	0,835443038	0,871428571
0,875	0,933333333	0,888888889	0,877777778	0,768292683	0,963636364	0,873239437	0,901639344
0,842105263	0,873015873	0,867647059	0,729411765	0,786516854	0,933333333	0,757142857	0,84375
0,872340426	0,8875	0,841463415	0,788461538	0,752475248	0,935064935	0,833333333	0,864197531
0,794117647	0,839285714	0,873015873	0,725	0,771084337	0,945454545	0,791044776	0,827586207
0,789473684	0,828125	0,875	0,755555556	0,795698925	0,9375	0,77027027	0,818181818
0,907894737	0,952380952	0,857142857	0,880434783	0,880434783	0,946428571	0,876712329	0,904761905
0,830188679	0,846153846	0,866666667	0,757575758	0,811594203	0,944444444	0,826923077	0,829268293
0,8	0,859375	0,902777778	0,705882353	0,854166667	0,935483871	0,813333333	0,830769231
0,85915493	0,877192982	0,888888889	0,705128205	0,852272727	0,944444444	0,805970149	0,803571429
0,816901408	0,844827586	0,876923077	0,761904762	0,844444444	0,947368421	0,847222222	0,81359322
0,75	0,859375	0,871428571	0,791208791	0,764044944	0,935483871	0,797297297	0,830769231
0,754098361	0,82	0,773584906	0,666666667	0,784810127	0,893617021	0,728813559	0,807692308
0,772727273	0,766666667	0,771428571	0,786885246	0,825396825	0,888888889	0,795454545	0,787878788
0,905405405	0,984126984	0,923076923	0,902173913	0,78313253	0,982142857	0,888888889	0,936507937
0,88372093	0,851851852	0,84375	0,866666667	0,885245902	0,909090909	0,880952381	0,785714286
0,869565217	0,90625	0,891891892	0,875	0,875	0,923076923	0,866666667	0,882352941
0,921875	0,869565217	0,84	0,813333333	0,828947368	0,928571429	0,807017544	0,804347826
0,8375	0,882352941	0,891891892	0,784946237	0,77173913	0,954545455	0,820512821	0,85072464
0,91025641	0,944827586	0,895833333	0,862275449	0,8125	0,971830986	0,880794702	0,931506849
0,870967742	0,921052632	0,897435897	0,796992481	0,84057971	0,964285714	0,905511811	0,913793103
0,770491803	0,884615385	0,857142857	0,766233766	0,8125	0,959183673	0,857142857	0,87037037
0,8	0,871428571	0,866666667	0,725274725	0,791666667	0,965621739	0,797468354	0,845070423
0,864583333	0,87804878	0,898876404	0,735294118	0,735294118	0,963414634	0,8	0,895348837
0,857142857	0,904761905	0,791666667	0,909090909	0,928571429	0,857142857	0,885714286	0,869565217
0,846938776	0,88372093	0,866666667	0,790909091	0,779816514	0,965116279	0,845360825	0,862068966
0,83908046	0,88	0,846153846	0,777777778	0,79	0,930555556	0,823529412	0,824324324
0,884955752	0,898989899	0,883495146	0,822580645	0,773109244	0,96969697	0,831775701	0,812621359
0,852459016	0,847826087	0,843137255	0,815789474	0,767123288	0,954545455	0,810344828	0,808510638
0,92248062	0,957264957	0,924369748	0,888111888	0,830862353	0,99122807	0,887096774	0,913043478
0,825	0,850746269	0,907894737	0,747252747	0,848484848	0,970588235	0,82278481	0,873239437
0,898876404	0,934210526	0,884615385	0,865384615	0,783051055	0,972222222	0,885054741	0,923076923
0,819444444	0,866666667	0,895522388	0,779069767	0,793103448	0,966101695	0,8	0,873015873
0,923728814	0,921568627	0,895238095	0,8515625	0,795081967	0,97	0,875	0,913461538
0,931818182	0,945205479	0,878378378	0,882352941	0,774193548	0,970588235	0,892857143	0,888888889
0,852941176	0,948275862	0,919354839	0,860465116	0,775	0,981132075	0,850746269	0,915254237
0,918518519	0,959677419	0,928571429	0,929032258	0,814285714	0,991735537	0,901515152	0,952380952
0,819444444	0,885245902	0,911764706	0,719512195	0,779096976	0,966101695	0,864864865	0,836065574
0,894736842	0,930232558	0,844444444	0,878378378	0,779411765	0,945945946	0,892857143	0,860465116
0,907216495	0,927710843	0,895348837	0,864864865	0,822429907	0,948717949	0,894736842	0,891566265
0,860759494	0,876923077	0,871428571	0,720930233	0,777777778	0,96875	0,844155844	0,865671642
0,829545455	0,868421053	0,891566265	0,744897959	0,77	0,946666667	0,8	0,858974359
0,8125	0,75	0,820512821	0,716666667	0,850746269	0,9	0,782608696	0,771428571
0,813953488	0,866666667	0,903614458	0,767676768	0,70212766	0,96	0,797619048	0,886075949
0,795918367	0,833333333	0,857142857	0,803030303	0,820895522	0,870967742	0,84	0,875
0,824561404	0,780487805	0,901960784	0,720588235	0,774647887	0,976190476	0,754716981	0,822222222
0,814814815	0,880952381	0,76744186	0,746268657	0,782608696	0,888888889	0,714285714	0,780487805
0,869565217	0,833333333	0,861111111	0,779661017	0,857142857	0,88	0,785714286	0,774193548
0,795918367	0,8	0,88372093	0,746031746	0,746031746	0,939393939	0,816326531	0,815789474
0,783783784	0,783783784	0,840909091	0,757575758	0,811594203	0,944444444	0,803921569	0,8
0,840909091	0,866666667	0,866666667	0,796296296	0,859649123	0,95	0,742857143	0,652173913
0,757575758	0,98296296	0,836065574	0,836065574	0,836065574	0,772727273	0,837209302	0,806451613
0,811594203	0,859649123	0,836065574	0,756097561	0,756097561	0,905660377	0,753846154	0,807017544
0,944444444	0,95	0,772727273	0,905660377	0,925925926	0,925925926	0,753846154	0,874576227
0,803921569	0,742857143	0,837209302	0,753846154	0,753846154	0,911764706	0,911764706	0,857142857
0,8	0,652173913	0,806451613	0,807017544	0,847457627	0,857142857	0,729729723	0,794871795
0,87037037	0,842105263	0,80952381	0,791044776	0,791044776	0,911764706	0,775510204	0,794871795
0,955357143	0,979591837	0,94	0,962121212	0,829059829	1	0,935779817	0,97
0,879518072	0,914285714	0,891891892	0,835051546	0,715909091	0,954545455	0,820512821	0,902777778
0,857142857	0,85483871	0,884057971	0,772727273	0,65	0,915254237	0,774647887	0,861538462
0,911764706	0,924528302	0,894736842	0,763157895	0,712328767	0,936170213	0,841269841	0,909090909
0,882352941	0,764705882	0,875	0,905660377	0,905660377	0,833333333	0,84375	0,857142857
0,775510204	0,805555556	0,804878049	0,769230769	0,75	0,875	0,744680851	0,820512821
0,859375	0,901960784	0,872727273	0,82278481	0,76	0,934782609	0,819672131	0,886792453
0,821428571	0,886363636	0,921568627	0,837837838	0,853333333	0,923076923	0,796296296	0,893617021
0,913978495	0,95	0,941176471	0,9	0,777777778	0,968642105	0,850574713	0,93902439
0,880952381	0,928571429	0,971428571	0,824561404	0,901639344	0,954545455	0,85	0,935483871
0,885714286	0,913043478	0,895833333	0,798245614	0,787610619	0,9505618	0,828282828	0,868131868
0,833333333	0,895833333	0,907407407	0,888888889	0,846153846	0,930232558	0,830508475	0,857142857
0,813953488	0,785714286	0,857142857	0,796610169	0,775862069	0,92	0,684210526	0,766666667
0,860465116	0,769230769	0,882352941	0,767857143	0,85	0,863636364	0,8	0,75
0,789473684	0,863636364	0,875	0,697674419	0,65060241	0,9375	0,736111111	0,852941176
0,85483871	0,875	0,965517241	0,786666667	0,833333333	1	0,833333333	0,903846154
0,733333333	0,787878788	0,722222222	0,737704918	0,777777778	0,9	0,782608696	0,837837838
0,905660377	0,948717949	0,906976744	0,901408451	0,721311475	0,96969697	0,86	0,9
0,909090909	0,951219512	0,860465116	0,888888889	0,823529412	0,875	0,907407407	0,87804878
0,8	0,860465116	0,921568627	0,788732394	0,853333333	0,975609756	0,725490196	0,869565217
0,807017544	0,756097561	0,903846154	0,705882353	0,826666667	0,9	0,711538462	0,772727273
0,896551724	0,909697674	0,960784314	0,746268657	0,864864865	0,947368421	0,811320755	0,837209302
0,845070423	0,818181818	0,940298507	0,740740741	0,827586207	0,98245614	0,826086957	0,847457627
0,870967742	0,872340426	0,907407407	0,783783784	0,732394366	0,954545455	0,789473684	0,88
0,833333333	0,72	0,733333333	0,830508475	0,810344828	0,863636364	0,769230769	0,75
0,918918919	0,967213115	0,921875	0,913043478	0,765432099	0,981818182	0,887323944	0,918032787
0,806451613	0,8125	0,894736842	0,746666667	0,763157895	0,913043478	0,719298246	0,8
0,837837838	0,830508475	0,863636364	0,76744186	0,738095238	0,949152542	0,802816901	0,838709677
0,784313725	0,676470588	0,813953488	0,738461538	0,811594203	0,848484848	0,70212766	0,702702703
0,82	0,833333333	0,736842105	0,746031746	0,803030303	0,870967742	0,791666667	0,783783784
0,775	0,857142857	0,914285714	0,868852459	0,868852459	0,958333333	0,829268293	0,870967742
0,803921569	0,84						

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UZ.P138	UZ.P139	UZ.P140	UZ.P141	UZ.P142	UZ.P143	UZ.P116	UZ.P144
0,857142857	0,909090909	0,848	0,801724138	0,80952381	0,927710843	0,752808989	0,819047619
0,855670103	0,608333333	0,598039216	0,698113208	0,862385321	0,976744186	0,910891089	0,861111111
0,875	0,952380952	0,897435897	0,890410959	0,883333333	0,851851852	0,847826087	0,9
0,788235294	0,864285714	0,76146789	0,737864078	0,851485149	0,933333333	0,813953488	0,789473684
0,773809524	0,663865546	0,62244898	0,785046729	0,873786408	0,961038961	0,926315789	0,85
0,781609195	0,890410959	0,810344828	0,733333333	0,785714286	0,949367089	0,779069767	0,854368932
0,865168539	0,902097902	0,863247863	0,803738318	0,882352941	0,96	0,823529412	0,892156863
0,773333333	0,935251799	0,862385321	0,81	0,846153846	0,938461538	0,802631579	0,804597701
0,769230769	0,67961165	0,666666667	0,797752809	0,865853659	0,924528302	0,887323944	0,835443038
0,87012987	0,940740741	0,855769231	0,774193548	0,80952381	0,915254237	0,771428571	0,835294118
0,77969767	0,807407407	0,765765766	0,788990826	0,82	0,948717949	0,844444444	0,83
0,808823529	0,937984496	0,87	0,813186813	0,810126582	0,905660377	0,787878788	0,8375
0,818181818	0,911111111	0,871559633	0,795918367	0,831460674	0,920634921	0,783783784	0,829545455
0,738461538	0,778761062	0,836734694	0,864583333	0,895348837	0,946428571	0,934210526	0,894117647
0,849056604	0,955357143	0,892857143	0,842105263	0,878787879	0,882352941	0,823529412	0,841269941
0,858974359	0,978873239	0,9	0,828282828	0,853932584	0,918032787	0,777777778	0,852272727
0,823529412	0,929133858	0,891089109	0,849462366	0,851851852	0,924528302	0,820895522	0,835443038
0,797101449	0,946969697	0,883495146	0,865979381	0,870588235	0,888888889	0,876712329	0,895348837
0,797297297	0,901515152	0,847619048	0,791666667	0,866666667	0,918032787	0,794520548	0,852272727
0,790322581	0,92629508	0,824175824	0,8	0,826666667	0,869565217	0,745762712	0,791666667
0,76744186	0,920792079	0,851351351	0,84057971	0,862068966	0,846153846	0,790697674	0,859649123
0,769230769	0,64	0,682352941	0,797752809	0,892857143	0,982142857	0,960526316	0,891566626
0,880952381	0,948979592	0,946666667	0,927536232	0,928571429	0,909090909	0,930232558	0,964912281
0,866666667	0,940594059	0,878378378	0,916666667	0,915254237	0,88	0,863636364	0,894736842
0,716981132	0,882882883	0,863636364	0,8125	0,875	0,928571429	0,844827586	0,888888889
0,789473684	0,84375	0,796116505	0,833333333	0,846153846	0,938461538	0,8625	0,844444444
0,850340136	0,58490566	0,694805195	0,804878049	0,883435583	0,971830986	0,901960784	0,86875
0,879032258	0,765822785	0,86	0,839160839	0,857142857	0,954594955	0,87804878	0,881481481
0,825396825	0,916666667	0,847826087	0,865168539	0,824324324	0,9375	0,822580645	0,837837838
0,797468354	0,929078014	0,855858586	0,767676768	0,826086957	0,92573134	0,794871795	0,770114943
0,838709677	0,845070423	0,761061947	0,794642857	0,836538462	0,950617284	0,824175824	0,846153846
0,945945946	0,989361702	0,971014493	0,952380952	0,96	0,857142857	0,848484848	0,9375
0,782608696	0,791366906	0,690909091	0,769911504	0,831775701	0,952941176	0,878787879	0,807692308
0,80952381	0,818181818	0,788990826	0,801886792	0,810526316	0,930555556	0,807228916	0,808510638
0,80952381	0,649253731	0,634782609	0,774193548	0,859604132	0,948453608	0,892857143	0,858333333
0,810344828	0,883928571	0,825581395	0,814814815	0,828571429	0,904761905	0,807017544	0,791044776
0,810344828	0,633802817	0,721804511	0,795620438	0,889705882	0,982300885	0,9296875	0,872180451
0,851851852	0,920289855	0,853211009	0,811881188	0,860215054	0,923076923	0,820512821	0,793103448
0,817073171	0,714285714	0,696969697	0,807692308	0,829787234	0,957746479	0,88372093	0,815217391
0,849315068	0,888888889	0,791666667	0,78021978	0,817073171	0,929824561	0,847222222	0,8
0,822429907	0,610687023	0,694214876	0,840909091	0,879032258	0,97	0,913043478	0,859504132
0,792207792	0,657657658	0,711340206	0,787878788	0,860215054	0,970588235	0,917647059	0,833333333
0,777777778	0,757009346	0,717647059	0,731707317	0,902439024	0,961538462	0,914285714	0,828947368
0,875968992	0,5	0,698529412	0,797202797	0,917808219	0,991735537	0,933333333	0,862318841
0,816901408	0,88	0,816326531	0,793478261	0,845238095	0,929824561	0,779411765	0,829268293
0,734693878	0,783505155	0,810126582	0,797297297	0,880597015	0,916666667	0,910714286	0,84375
0,793103448	0,647058824	0,754545455	0,831858407	0,897196262	0,948717949	0,893617021	0,885714286
0,813333333	0,849206349	0,847619048	0,778947368	0,840909091	0,935483871	0,842105263	0,839080046
0,8	0,863309353	0,844827586	0,759615385	0,87254902	0,932432432	0,78313253	0,8125
0,808510638	0,990909091	0,926829268	0,863013699	0,868852459	0,862068966	0,829787234	0,885245902
0,78313253	0,837037037	0,757009346	0,693877551	0,86	0,945945946	0,80952381	0,79787725
0,884615385	0,95412844	0,815789474	0,75	0,816666667	0,870967742	0,733333333	0,839080046
0,842105263	0,974789916	0,860465116	0,726027397	0,765625	0,897435897	0,796296296	0,818181818
0,74	0,9375	0,827160494	0,75	0,733333333	0,918918919	0,76	0,75
0,840909091	0,980952381	0,893333333	0,852941176	0,814814815	0,833333333	0,780487805	0,788461538
0,791666667	0,95412844	0,831168831	0,802819310	0,796610169	0,870967742	0,760869565	0,793103448
0,87037037	0,955357143	0,879518072	0,857142857	0,911764706	0,882352941	0,775510204	0,859375
0,842105263	0,979591837	0,914285714	0,85483871	0,924528302	0,764705882	0,805555556	0,901960784
0,80952381	0,94	0,891891892	0,884057971	0,894736842	0,865	0,804878049	0,872727273
0,791044776	0,962121212	0,835051546	0,772727273	0,763157895	0,905660377	0,769230769	0,82278481
0,791044776	0,829059829	0,715909091	0,65	0,712328767	0,905660377	0,75	0,76
0,911764706	1	0,954545455	0,915254237	0,936170213	0,833333333	0,875	0,934782609
0,775510204	0,935779817	0,820512821	0,774647887	0,841269841	0,84375	0,744680851	0,819672131
0,794871795	0,97	0,902777778	0,861538462	0,909090909	0,857142857	0,820512821	0,866792453
	0,862745098	0,713043478	0,818181818	0,808219178	0,911764706	0,907407407	0,819672131
0,862745098	NA	0,713043478	NA	0,818181818	0,925	0,963963964	0,933333333
0,789473684	0,713043478	NA	0,720430108	0,734939759	0,734939759	0,848101266	0,746987952
0,808219178	0,818181818	0,720430108	NA	0,717948718	0,717948718	0,915254237	0,697368421
0,876923077	0,925	0,938461538	0,734939759	0,717948718	NA	0,8	0,712121212
0,911764706	1	0,848101266	0,915254237	0,735294118	0,913043478	0,875	0,911111111
0,907407407	0,963963964	0,848101266	0,735294118	0,8	0,8	0,875	0,732142857
0,819672131	0,933333333	0,746987952	0,697368421	0,712121212	0,911111111	0,732142857	NA
0,951612903	0,991666667	0,831325301	0,756756757	0,7	0,923076923	0,745098039	0,716666667
0,80952381	0,485436893	0,68	0,79047619	0,881188119	0,959459459	0,935483871	0,868666667
0,954545455	0,98	0,885714286	0,859375	0,82	0,904761905	0,815789474	0,84
0,862745098	0,813793103	0,816	0,818181818	0,805555556	0,931034483	0,802083333	0,79245283
0,810344828	0,831775701	0,902173913	0,88372093	0,906666667	0,904761905	0,885245902	0,875
0,80952381	0,918367347	0,845070423	0,796875	0,854545455	0,92	0,833333333	0,851851852
0,88372093	0,990291262	0,888888889	0,828125	0,849056604	0,80952381	0,763157895	0,867924528
0,753424658	0,8515625	0,663043478	0,659090909	0,716049383	0,920634921	0,767123288	0,7125
0,923076923	0,967213115	0,853932584	0,772151899	0,723076923	0,906976744	0,830508475	0,776119403
0,833333333	0,962962963	0,871794872	0,830985915	0,810344828	0,777777778	0,720930233	0,785714286
0,836734694	0,758241758	0,746478873	0,764705882	0,870967742	0,9375	0,943396226	0,887096774
0,744680851	0,81443299	0,786666667	0,853333333	0,892307692	0,909090909	0,905660377	0,836065574
0,879310345	0,983193277	0,817073171	0,805194805	0,721311475	0,923076923	0,769230769	0,716666667
0,86440678	0,983471074	0,792682927	0,72972973	0,823529412	0,9	0,705882353	0,784615385
0,913793103	0,991525424	0,827160494	0,763783784	0,711864407	0,947368421	0,807692308	0,728813559
0,85915493	0,946153846	0,810526316	0,698795181	0,72972973	0,925925926	0,787878788	0,76
0,904761905	0,883928571	0,721518987	0,608696562	0			

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Table with 9 columns: UZ.P145, UZ.P146, UZ.P147, UZ.P148, UZ.P149, UZ.P150, UZ.P151, UZ.P152. The table contains numerical data for each column across multiple rows. Some rows have 'NA' in the UZ.P145 column.

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Table with 10 columns (UZ.P153 to UZ.P159) and multiple rows of numerical data. Includes labels 'NA' in the first column for several rows.

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UZ.P122	UZ.P123
0,833333333	0,811881188
0,878787879	0,877358491
0,826086957	0,851851852
0,802325581	0,84375
0,868131868	0,878787879
0,795454545	0,871287129
0,825581395	0,852631579
0,820512821	0,823529412
0,805970149	0,9
0,808219178	0,797468354
0,833333333	0,87
0,826086957	0,813333333
0,802631579	0,792682927
0,861111111	0,941176471
0,755102041	0,810344828
0,813333333	0,817073171
0,823529412	0,857142857
0,830985915	0,87654321
0,763888889	0,831325301
0,728813559	0,814285714
0,795454545	0,890909091
0,857142857	0,913580247
0,853658537	0,921568627
0,866666667	0,927272727
0,827586207	0,882352941
0,805194805	0,876404494
0,865771812	0,89375
0,888	0,877862595
0,861538462	0,861111111
0,827160494	0,816091954
0,826086957	0,778947368
0,916666667	0,955555556
0,845368025	0,878504673
0,823529412	0,863157895
0,853211009	0,863247863
0,789473684	0,867647059
0,887096774	0,885496183
0,82278481	0,811764706
0,858823529	0,870967742
0,8	0,820512821
0,904347826	0,901639344
0,879518072	0,902173913
0,833333333	0,896103896
0,925925926	0,922535211
0,8	0,835443038
0,851851852	0,90625
0,870967742	0,902912621
0,844155844	0,858823529
0,8	0,777777778
0,782608696	0,814814815
0,78313253	0,840425532
0,765957447	0,754716981
0,842105263	0,654545455
0,74	0,85483871
0,725	0,82
0,739130435	0,754716981
0,803921569	0,85
0,842105263	0,761904762
0,80952381	0,925925926
0,772727273	0,728571429
0,734375	0,710144928
0,806451613	0,953488372
0,75	0,785714286
0,763157895	0,829787234
0,775510204	0,866666667
0,935779817	0,949152542
0,820512821	0,876404494
0,774647887	0,75
0,841269841	0,826086957
0,84375	0,902439024
0,688888889	0,759259259
0,819672131	0,787878788
0,839285714	0,822580645
0,901098901	0,909090909
0,789473684	0,8
0,84	0,862385321
0,904761905	0,867647059
0,80952381	0,884615385
0,736842105	0,755555556
0,77027027	0,7625
0,888888889	0,835820896
0,727272727	0,79245283
0,836734694	0,859649123
0,843137255	0,901639344
0,796296296	0,803278689
0,759259259	0,75
0,854545455	0,775862069
0,826086957	0,728571429
0,789473684	0,777777778
0,769230769	0,857142857
0,871428571	0,884615385
0,822580645	0,808823529
0,881578947	0,8375
0,729166667	0,722222222
0,681818182	0,821428571
0,8	0,808510638
NA	0,716981132
0,716981132 NA	

Supplementary File 5

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Sample code	Status	Shannon diversity	Simpson diversity
UZ.P066	Ctrl	3,040128549	0,88989411
UZ.P067	Ctrl	2,936797879	0,866697692
UZ.P068	IPA	0,443405778	0,168096743
UZ.P069	IPA	1,221306011	0,449344568
UZ.P070	IPA	2,537189327	0,867575066
UZ.P071	IPA	3,063380981	0,8974037
UZ.P072	IPA	1,257510951	0,436049813
UZ.P073	IPA	2,993308845	0,911929895
UZ.P074	IPA	2,08377	0,714794331
UZ.P056	IPA	3,100703343	0,922230217
UZ.P075	IPA	3,061881809	0,906431066
UZ.P076	IPA	2,322348401	0,844071018
UZ.P077	IPA	2,322699716	0,817056843
UZ.P079	IPA	0,491583674	0,156892725
UZ.P080	IPA	1,880596	0,797702528
UZ.P081	IPA	2,592708136	0,842672675
UZ.P083	IPA	1,250563779	0,59232225
UZ.P084	IPA	1,584026097	0,55441434
UZ.P085	IPA	3,107229386	0,882676825
UZ.P057	IPA	0,97275414	0,436626656
UZ.P086	IPA	1,471627498	0,694007507
UZ.P087	IPA	0,897568008	0,296347497
UZ.P089	IPA	1,903764972	0,777368322
UZ.P091	IPA	2,856775712	0,926328284
UZ.P092	Ctrl	2,831116944	0,899828544
UZ.P093	Ctrl	3,053066756	0,899365855
UZ.P094	Ctrl	3,490389615	0,941353464
UZ.P095	Ctrl	3,416688054	0,92462455
UZ.P096	Ctrl	2,471833297	0,860321121
UZ.P097	Ctrl	3,472649261	0,949109024
UZ.P058	IPA	2,775017666	0,819649258
UZ.P098	Ctrl	0,532200944	0,248205458
UZ.P099	Ctrl	3,751047314	0,962547828
UZ.P100	Ctrl	2,6399937	0,840780245
UZ.P101	Ctrl	3,174070093	0,916563768
UZ.P102	Ctrl	1,350104955	0,589114891
UZ.P103	Ctrl	3,011321619	0,912132314
UZ.P104	Ctrl	3,346697128	0,944058467
UZ.P105	Ctrl	2,212794373	0,736134765
UZ.P106	Ctrl	3,60711658	0,960014709
UZ.P107	Ctrl	2,441726502	0,878272261
UZ.P108	Ctrl	2,390890551	0,860316541
UZ.P110	Ctrl	2,230038305	0,855713542
UZ.P111	Ctrl	3,018391103	0,861229423
UZ.P112	Ctrl	3,530532086	0,945818431
UZ.P113	Ctrl	1,409423999	0,568408757
UZ.P114	Ctrl	2,22589473	0,802808535
UZ.P060	IPA	2,915713721	0,862307614
UZ.P061	IPA	1,593820547	0,51989304
UZ.P063	IPA	2,320498319	0,823266597
UZ.P064	IPA	3,229032527	0,91032557
UZ.P124	IPA	1,784265254	0,742695592
UZ.P127	IPA	2,324072479	0,789989734
UZ.P128	IPA	0,722987392	0,251944819

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UZ.P129	IPA	0,382282048	0,11469907
UZ.P130	IPA	0,511359484	0,173426778
UZ.P131	IPA	1,261266036	0,648385665
UZ.P132	IPA	0,318472874	0,099428115
UZ.P133	IPA	1,917789531	0,798826689
UZ.P115	IPA	2,433499171	0,829100727
UZ.P134	IPA	2,03537859	0,716255749
UZ.P135	IPA	1,171958933	0,65649438
UZ.P136	IPA	0,899827681	0,443285296
UZ.P137	IPA	1,326583561	0,619372946
UZ.P138	IPA	2,315339877	0,855188761
UZ.P139	IPA	3,555104921	0,94999995
UZ.P140	Ctrl	2,779846414	0,889801683
UZ.P141	Ctrl	2,892248994	0,916628909
UZ.P142	Ctrl	3,442783967	0,952697601
UZ.P143	Ctrl	0,095714675	0,028309326
UZ.P116	IPA	1,287662792	0,465836095
UZ.P144	Ctrl	2,724769445	0,901162636
UZ.P145	Ctrl	3,080267478	0,925943227
UZ.P146	Ctrl	3,283095225	0,937827528
UZ.P147	Ctrl	1,072540837	0,386290271
UZ.P148	Ctrl	3,15827751	0,879918307
UZ.P149	Ctrl	1,522953283	0,568496727
UZ.P150	Ctrl	1,112371278	0,419803791
UZ.P151	Ctrl	1,517480205	0,681352087
UZ.P152	Ctrl	3,580406763	0,957905766
UZ.P153	Ctrl	3,834298355	0,967861333
UZ.P117	IPA	1,365873168	0,671840487
UZ.P154	Ctrl	2,707923437	0,897713109
UZ.P155	Ctrl	1,880862556	0,745559473
UZ.P156	Ctrl	1,981861354	0,698898879
UZ.P157	Ctrl	2,612032242	0,852520178
UZ.P158	Ctrl	1,623136065	0,571247942
UZ.P159	Ctrl	3,054918635	0,902228311
UZ.P160	Ctrl	2,424074885	0,799069577
UZ.P161	Ctrl	1,460975909	0,60958694
UZ.P162	Ctrl	2,762609034	0,886582537
UZ.P163	Ctrl	2,091113685	0,755472809
UZ.P164	Ctrl	2,522668652	0,768102633
UZ.P119	IPA	2,492621939	0,858063563
UZ.P120	IPA	1,605307337	0,700729653
UZ.P121	IPA	2,457587409	0,868493931
UZ.P122	IPA	1,094647418	0,357732128
UZ.P123	IPA	3,298641201	0,942390091